

报告编号：201715031

论文收录引用检索证明报告

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作者单位	河北科技师范学院						
检索条件	<table><thead><tr><th>数据库</th><th>检索年限</th><th>检索式</th></tr></thead><tbody><tr><td>EI Compendex (网络版)</td><td>2003-2017</td><td>((hebei ONEAR/0 normal ONEAR/0 university ONEAR/0 science ONEAR/1 technology) WN AF) OR ((hebei ONEAR/0 normal ONEAR/0 university ONEAR/0 of ONEAR/0 science ONEAR/1 technology) WN AF))</td></tr></tbody></table>	数据库	检索年限	检索式	EI Compendex (网络版)	2003-2017	((hebei ONEAR/0 normal ONEAR/0 university ONEAR/0 science ONEAR/1 technology) WN AF) OR ((hebei ONEAR/0 normal ONEAR/0 university ONEAR/0 of ONEAR/0 science ONEAR/1 technology) WN AF))
数据库	检索年限	检索式					
EI Compendex (网络版)	2003-2017	((hebei ONEAR/0 normal ONEAR/0 university ONEAR/0 science ONEAR/1 technology) WN AF) OR ((hebei ONEAR/0 normal ONEAR/0 university ONEAR/0 of ONEAR/0 science ONEAR/1 technology) WN AF))					
检索结果	<p>经检索相关数据库：</p> <p>1) EI 收录：有 1172 篇被收录。</p> <p>(详细结果见附件)</p> <p>特此证明！</p>						
委托人声明	<p>委托人已对本证明所列论文逐篇核对，确认无误，如有不实，由委托人承担全部责任。</p> <p style="text-align: right;">委托人签字：</p>						
检索机构	教育部科技查新工作站 G11	燕山大学图书馆					
检索时间	2017 年 6 月 2 日	检索员	(签字)				

一、 被 EI 收录的论文题录

1.

Accession number: 20151700775867

Title: 3-SPS+RRS+PS mechanism analysis and hessian matrix solution

Authors: Zhang-Yuan1, 2 ; Wangzhen3 ; Guoansong4 ; Guoi-Juan1 ; Xi, Feng-Feng5

Author affiliation:

1 Key Laboratory for Computer Virtual Technology and System Integration of Hebei Province, Yanshan University, Qinhuangdao, China

2 Hebei Normal University of Science and Technology, Qinhuangdao Hebei, China

3 Force Equipment Research Institute Airlines, Beijing, China

4 China National Heavy Machinery Research Institute, Xian, China

5 Department of Aerospace Engineering, Ryerson University, Toronto, Canada

Source title: International Conference on Logistics, Engineering, Management and Computer Science, LEMCS 2014

Abbreviated source title: Int. Conf. Logist., Eng., Manag. Comput. Sci., LEMCS

Part number: 1 of 1

Issue date: 2014

Publication year: 2014

Pages: 1030-1036

Language: English

ISBN-13: 9789462520103

Document type: Conference article (CA)

Conference name: 2014 International Conference on Logistics Engineering, Management and Computer Science, LEMCS 2014

Conference date: December 21, 2013

Conference location: Shenyang, China

Conference code: 111673

Sponsor: North China Institute of Technology of Shenyang Aerospace

Publisher: Atlantis Press

Abstract: 3-SPS+RRS+PS is a new type of mechanism. There is good application prospect in the field of aerospace. Especially some key kinetic characteristic calculation algorithms are implemented, which makes its calculation mechanized, thus it will contribute to make the dynamics performance of this mechanism optimized and ascended. In the paper, firstly, the degree of freedom is calculated and freedom nature is analyzed. Then the reverse solution is calculated, started with the nature of degree of freedom. And the mechanism velocity and acceleration inverse solutions are calculated in the direct derivation method. Although there are shortcomings that calculation process is complicated in direct derivation method, its calculation process is easy to realize mechanization. Then a kind of fast numerical calculation algorithm is given and MATLAB program is implemented. The algorithm has universal applicability to the mechanism of continuous differentiable inverse equation, and can be applied to general parallel mechanism. © 2014. The authors - Published by Atlantis Press.

Number of references: 25

Main heading: Degrees of freedom (mechanics)

Controlled terms: Machinery - MATLAB - Mechanisms

Uncontrolled terms: Application prospect - Degree of freedom (dof) - Dynamics performance - Inverse solution - Kinetic characteristics - Numerical calculation - Parallel mechanisms - Position inverse solution

Classification code: 601 Mechanical Design - 601.3 Mechanisms - 731.5 Robotics - 921 Mathematics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

2.

Accession number: 20152801019653

Title: Quantum Transition of an Electron in an Asymmetric Quantum Dot

Authors: Li, Zhi-Xin¹

Author affiliation:

¹ Department of physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Li, Zhi-Xin

Source title: Journal of Low Temperature Physics

Abbreviated source title: J. Low Temp. Phys.

Volume: 181

Issue: 1-2

Issue date: July 8, 2015

Publication year: 2015

Pages: 30-37

Language: English

ISSN: 00222291

E-ISSN: 15737357

CODEN: JLTPAC

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: We have studied the transition probability of an electron in an asymmetric quantum dot (AQD). The energy levels and the wave functions of the ground and the first excited states of an electron in a static electric field have been calculated by using a variational method of Pekar type. And the eigen energies of the ground and the first excited states in this system may be used as a two-level qubit. We assume the electron to be in system's ground state in the initial time, the electron transits from the ground state to the excited state in presence of the external electric field F along the z axis. Numerical calculation results show that the transition probability of the electron increases with increasing the transverse confinement length and the longitudinal confinement length of AQD and decreases with increasing the electron-phonon coupling strength. The transition probability of the electron is an increasing function of the electric field strength. © 2015, Springer Science+Business Media New York.

Number of references: 21

Main heading: Excited states

Controlled terms: Electric fields - Electron-phonon interactions - Electrons - Ground state - Phonons - Probability - Quantum interference devices - Quantum optics - Semiconductor quantum dots - Wave functions

Uncontrolled terms: Asymmetric quantum dot - Electric field strength - Electron-phonon

coupling strengths - External electric field - Quantum Information - Quantum transitions - Static electric fields - Transition probabilities

DOI: 10.1007/s10909-015-1323-9

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

3.

Accession number: 20150200409449

Title: Multimodal discourse analysis of interactive meaning of food advertisement printed in English

Authors: Wang, Jing¹ ; Dai, Yanli² ; Jiang, Lan¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

2 Hebei Institute of Foreign Languages, Qinhuangdao, Hebei, China

Corresponding author: Wang, Jing

Source title: Carpathian Journal of Food Science and Technology

Abbreviated source title: Carpathian J. Sci. Technol. Food

Volume: 6

Issue: 2

Issue date: 2014

Publication year: 2014

Pages: 9-15

Language: English

ISSN: 20666845

Document type: Journal article (JA)

Publisher: North University of Baia Mare, 62A DR. VICTOR BABES STREET, , 430083, Romania

Abstract: Analysis of traditional advertisement printed in English basically focuses on language rather functions of non-linguistic symbol resources play in discourse meaning construction. The latter emerging multimodal discourse analysis breaks this limitation to a large extent. This paper analyzed a piece of multimodal advertisement discourse with system-functional linguistics of Hal Hday and visual grammar of Kress and Van Ixeuwen as theoretical framework. It is found that, language and image, the two symbol resources, form join forces by mutual strengthening and supplement, with their own unique means, jointly create overall meaning of discourse and achieve the best persuasion effect.

Number of references: 12

Main heading: Computational linguistics

Controlled terms: Linguistics - Semantics

Uncontrolled terms: Advertisement - Linguistic symbols - Multi-modal - Multimodal discourse analysis - Theoretical framework - Visual grammar

Classification code: 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 903.2 Information Dissemination

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

4.

Accession number: 20141017417949

Title: Influence of magnetic field and lo phonon effects on the spin polarization state energy of strong-coupling bipolaron in a quantum dot

Authors: Eerdunchaolu1 ; Han, Chao1 ; Xin, Wei1 ; Wuyunqimuge2

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao 028043, China

Corresponding author: Xin, W. (xinweigood@hotmail.com)

Source title: Journal of Low Temperature Physics

Abbreviated source title: J. Low Temp. Phys.

Volume: 174

Issue: 5-6

Issue date: March 2014

Publication year: 2014

Pages: 301-310

Language: English

ISSN: 00222291

E-ISSN: 15737357

CODEN: JLTPAC

Document type: Journal article (JA)

Publisher: Springer New York, 233 Spring Street, New York, NY 10013-1578, United States

Abstract: On the basis of Lee-Low-Pines unitary transformation, the influence of magnetic field and LO phonon effects on the energy of spin polarization states of strong-coupling bipolarons in a quantum dot (QD) is studied by using the variational method of Pekar type. The variations of the ground state energy E_0 and the first excited state the energy E_1 of bipolarons in a two-dimensional QD with the confinement strength of QDs ω_0 , dielectric constant ratio η , electron-phonon coupling strength α and cyclotron resonance frequency of the magnetic field ω_c are derived when the influence of the spin and external magnetic field is taken into account. The results show that both energies of the ground and first excited states (E_0 and E_1) consist of four parts: the single-particle energy of electrons E_e , Coulomb interaction energy between two electrons E_c , interaction energy between the electron spin and magnetic field E_S and interaction energy between the electron and phonon E_{e-ph} ; the energy level of the first excited state E_1 splits into two lines as $E_1(1+1)$ and $E_1(1-1)$ due to the interaction between the single-particle "orbital" motion and magnetic field, and each energy level of the ground and first excited states splits into three "fine structures" caused by the interaction between the electron spin and magnetic field; the value of E_{e-ph} is always less than zero and its absolute value increases with increasing ω_0 , α and ω_c ; the effect of the interaction between the electron and phonon is favorable to forming the binding bipolaron, but the existence of the confinement potential and Coulomb repulsive energy between electrons goes against that; the bipolaron with energy $E_1(1-1)$ is easier and more stable in the binding state than that with $E_1(1+1)$. © 2013 Springer Science+Business Media New York.

Number of references: 19

Main heading: Binding energy

Controlled terms: Electron-phonon interactions - Electrons - Excited states - Magnetic fields - Magnetic moments - Semiconductor quantum dots - Spin dynamics - Spin polarization

Uncontrolled terms: Bipolaron - Coulomb interaction energy - Cyclotron resonance frequencies - Electron-phonon coupling strengths - Influence of magnetic field - LO phonons - Polarization state - Quantum dot

Classification code: 933 Solid State Physics - 932.1 High Energy Physics - 931.3 Atomic and Molecular Physics - 801.4 Physical Chemistry - 714.2 Semiconductor Devices and Integrated Circuits - 701.2 Magnetism: Basic Concepts and Phenomena - 701.1 Electricity: Basic Concepts and Phenomena

DOI: 10.1007/s10909-013-1035-y

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

5.

Accession number: 20140917382776

Title: Properties of the internal excited state of the strong-coupling magneto-bipolaron in a parabolic quantum dot

Authors: Eerdunchaolu¹ ; Bai, Xu-Fang² ; Han, Chao¹

Author affiliation:

1 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao 028043, China

Corresponding author: Eerdunchaolu (eerdunchaolu@163.com)

Source title: Wuli Xuebao/Acta Physica Sinica

Abbreviated source title: Wuli Xuebao

Volume: 63

Issue: 2

Issue date: January 20, 2014

Publication year: 2014

Article number: 027501

Language: Chinese

ISSN: 10003290

CODEN: WLHPAR

Document type: Journal article (JA)

Publisher: Institute of Physics, Chinese Academy of Sciences, P.O. Box 603, Beijing, 100190, China

Abstract: The properties of the internal excited state of the strong coupling magneto-bipolarons in a parabolic quantum dot are studied by using the variational method of Pekar type based on the Lee-Low-Pines' unitary transformation. With the influences of the electronic spin and the external magnetic field taken into consideration, the change law of ground state energy E_0 , the average number of phonon N_0^- , the first excited state energy E_1 and the average number of phonon N_1^- of the magneto-bipolarons with the confinement strength ω_0 , the dielectric constant ratio η , the electron-phonon coupling α , and the cyclotron frequency ω_c are derived in two-dimensional quantum dot. Numerical results indicate that the ground state energy E_0 and the first excited state energy E_1 consist of four parts: the single-article energy E_e of two electrons, the Coulomb interaction energy E_C between two electrons, the interaction energy E_s between the electronic spin and the external magnetic field, and the interaction energy E_{e-ph} of the electron with the longitudinal optical phonons. The energy E_1 of the first excited state splits into two lines, i.e., $E_1(1+1)$ and $E_1(1-1)$ due to the interaction between the "orbital" motion of the single-particle and the magnetic field, and each level of the ground-state energy and the first excited state energies set produces three "fine structures" due to the interaction between the electronic spin and the magnetic field. N_0^- and N_1^- increase with ω_0 , α and ω_c increasing; E_{e-ph} is always less than zero, and absolute value $|E_{e-ph}|$ increases with ω_0 , α and ω_c increasing. The electron-phonon interaction has an important influence on the formation of bound state of the magneto-bipolaron; but the confinement potential and coulomb repulsive energy between electrons are unfavorable for the formation of magneto-bipolaron in the bound state. © Chinese Physical Society.

Number of references: 25

Main heading: Excited states

Controlled terms: Electron-phonon interactions - Electrons - Ground state - Magnetic fields - Magnetos - Semiconductor quantum dots

Uncontrolled terms: Confinement potential - Coulomb interaction energy - Electron phonon couplings - External magnetic field - Ground-state energies - Magneto-bipolaron - Quantum dot - Unitary transformations

Classification code: 933 Solid State Physics - 932 High Energy Physics; Nuclear Physics; Plasma

Physics - 931.3 Atomic and Molecular Physics - 714.2 Semiconductor Devices and Integrated Circuits - 708.4
Magnetic Materials - 701.2 Magnetism: Basic Concepts and Phenomena - 701.1 Electricity: Basic Concepts and
Phenomena

DOI: 10.7498/aps.63.027501

Database: Compendex

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6.

Accession number: 20160601905776

Title: Research on the computer music production technology system under the digital background

Authors: Li, Yong Mei¹ ; Liu, Jingqiu¹ ; Zhang, Yi Wen¹ ; Chen, Chen¹ ; Guan, Xuan¹

Author affiliation:

1 Art institute, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 10

Issue: 11

Issue date: 2015

Publication year: 2015

Pages: 21-32

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Computer music, as an important product of the information and digital age, belongs to the

systems engineering combining the musical discipline with computer information control technology science. Through the applied research on digitalized acoustical signals, characteristic analysis of computer music, computer MIDI production technology, digital audio technology and computer music production software, this paper builds up a set of computer music production technology system based on a digital, informational and modernized background, and proves by experiments that this system makes the computer music production technology represent effects of simple and convenient usage, high-degree simulation and efficient extraction. © 2015 SERSC.

Number of references: 19

Main heading: Computer control systems

Controlled terms: Audio acoustics - Computer music - Computer software - Computers

Uncontrolled terms: Acoustical signals - Audio - Characteristic analysis - Digital background - Information control - MIDI - Music production - Production technology

Classification code: 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 751.1 Acoustic Waves

DOI: 10.14257/ijmue.2015.10.11.03

Database: Compendex

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7.

Accession number: 20114814559558

Title: Design and implementation on teaching information management system of adult education based on service-oriented architecture

Authors: Li, Guolin¹ ; Xue, Zhimei¹ ; Zhu, Yulian¹ ; Li, Qiang¹ ; Liu, Jiping¹

Author affiliation:

¹ Education Department, Hebei Normal University of Science and Technology, Hebei str. 360, Qinhuangdao, Hebei 066004, China

Corresponding author: Li, G.

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 154 LNEE

Monograph title: Information Engineering and Applications - International Conference on Information Engineering and Applications, IEA 2011

Issue date: 2012

Publication year: 2012

Pages: 1167-1175

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9781447123859

Document type: Conference article (CA)

Conference name: International Conference on Information Engineering and Applications, IEA 2011

Conference date: October 21, 2011 - October 23, 2011

Conference location: Chongqing, China

Conference code: 87425

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Lifelong education is a kind of educational thought that influences broad. But adult education is a new type of education system in the development of traditional campus education into lifelong education, which is an important part of the education system in China and has an important role to constantly enhance the whole nation's cultural quality and promote the development of social economy. In order to meet the rapid change of social demand, the informationization and automation of teaching management of adult education in our higher school experienced a process from scratch, simple to complex and single processing system to complicated integrated management system. © 2012 Springer-Verlag London Limited.

Number of references: 5

Main heading: Information management

Controlled terms: Economic and social effects - Education - Information services - Service oriented architecture (SOA) - Technical presentations

Uncontrolled terms: Adult education - Education systems - Higher School - Information management systems - Informationization - Integrated management systems - Processing systems - Rapid changes - Service Oriented - Social economy

Classification code: 722.4 Digital Computers and Systems - 901.2 Education - 903.2 Information Dissemination - 903.4 Information Services - 971 Social Sciences

DOI: 10.1007/978-1-4471-2386-6_154

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

8.

Accession number: 20132716467628

Title: First-principles investigations on physical properties of NdN under high pressure

Authors: Hao, Aimin¹ ; Yang, Xiaocui² ; Zhang, Lixin³ ; Zhu, Yan^{3, 4}

Author affiliation:

1 School of Resources and Materials, Northeastern University at Qinhuangdao, Qinhuangdao 066004, China

2 College of Physics, Baicheng Normal University, Baicheng 137000, China

3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

4 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

Corresponding author: Hao, A. (aiminhao1991@yahoo.com.cn)

Source title: Journal of Physics and Chemistry of Solids

Abbreviated source title: J Phys Chem Solids

Volume: 74

Issue: 10

Issue date: October 2013

Publication year: 2013

Pages: 1504-1508

Language: English

ISSN: 00223697

CODEN: JPCSAW

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: An investigation of electronic, structural and optical properties of NdN under ambient and high pressures has been conducted using first-principles calculations based on density functional theory (DFT). NdN is predicted to undergo a phase transition from NaCl-type structure (B1) to CsCl-type structure (B2) under high pressure. The predicted transition pressure is 52.7 GPa. The pressure effect on the optical properties is discussed. And the elastic constants as a function of pressure are presented for the first time. © 2013 Elsevier Ltd.

Number of references: 27

Main heading: Calculations

Controlled terms: Electronic structure - Optical properties

Uncontrolled terms: Ab initio calculations - Elastic properties - First-principles calculation - First-principles investigations - Function of pressure - High pressure - Structural and optical properties - Transition pressure

Classification code: 721 Computer Circuits and Logic Elements - 723 Computer Software, Data Handling and Applications - 741.1 Light/Optics - 921 Mathematics - 931.1 Mechanics

Numerical data indexing: Pressure 5.27e+10Pa

DOI: 10.1016/j.jpcs.2013.05.019

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20132916505186

Title: Effect of equal channel angular pressing and annealing on corrosion resistance of Cu-Zn alloy

Authors: Fang, D.R.1 ; Liu, F.F.1 ; Liu, C.2

Author affiliation:

1 School of Materials and metallurgy, Northeastern University, Shenyang 110819, China

2 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 706-708

Monograph title: Mechatronics and Intelligent Materials III

Issue date: 2013

Publication year: 2013

Pages: 78-81

Language: English

ISSN: 10226680

ISBN-13: 9783037857106

Document type: Conference article (CA)

Conference name: 2013 3rd International Conference on Mechatronics and Intelligent Materials, MIM 2013

Conference date: May 18, 2013 - May 19, 2013

Conference location: XiShuangBanNa, China

Conference code: 97695

Sponsor: Hong Kong Control Engin. and Inform.; Science Research Assoc. (CEIS); Internat. Frontiers of science and; technol. Research Assoc. (IFST); Integrated Research Center for Green Living Techniques; National Chin-Yi University of Technology

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Cu-32wt.%Zn alloy was subjected to equal channel angular pressing (ECAP) and subsequent low temperature annealing treatment, and the corrosion resistance of the samples was investigated by potentiodynamic polarization measurements in 3.5% NaCl solution. The results show that the corrosion rate of the ultrafine-grained alloy decreases, in comparison with the coarse-grained alloy. Meanwhile, it is noted that the corrosion resistance of the sample subjected to ECAP can be further improved by relief annealing. © (2013) Trans Tech Publications, Switzerland.

Number of references: 25

Main heading: Equal channel angular pressing

Controlled terms: Annealing - Corrosion resistance - Intelligent materials - Zinc - Zinc alloys

Uncontrolled terms: 3.5% nacl solutions - Coarse-grained - Cu-Zn alloy - Low temperature annealing - Potentiodynamic polarization measurements - Ultra-fine-grained - Zn alloys

Classification code: 415 Metals, Plastics, Wood and Other Structural Materials - 421 Strength of Building Materials; Mechanical Properties - 537.1 Heat Treatment Processes - 539.1 Metals Corrosion - 546.3 Zinc and Alloys

Numerical data indexing: Percentage 3.50e+00%

DOI: 10.4028/www.scientific.net/AMR.706-708.78

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

10.

Accession number: 20133816760776

Title: Fast synthesis of DNA-assisted flower-like ZnO superstructures with improved photocatalytic and antibacterial performances

Authors: Cai, Aijun^{1, 2}; Guo, Aiyong²; Chang, Yongfang³; Sun, Yanfeng⁴; Xing, Shengtao¹; Ma, Zichuan¹

Author affiliation:

1 College of Chemistry and Material Sciences, Hebei Normal University, Shijiazhuang 050016, China

2 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

3 College of Chemical Technology, Shijiazhuang University, Shijiazhuang 050035, China

4 Ocean College of Hebei Agricultural University, Qinhuangdao 066003, China

Corresponding author: Ma, Z. (mazc@vip.163.com)

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 111

Issue date: 2013

Publication year: 2013

Pages: 158-160

Language: English

ISSN: 0167577X

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: Flower-like ZnO superstructures were synthesized using DNA as a crystal growth modifier. By employing various techniques such as X-ray diffraction (XRD), field emission scanning electron microscopy (FESEM) and transmission electron microscopy (TEM), the structures and phases of the products were established. On the basis of the time-dependent experiments, a formation model of the products was presented. Photocatalytic experiments show that the products presented a higher photocatalytic performance than the commercial ZnO nanoparticles (ZnO NPs) with an average size of 33 nm. The antibacterial experiments were also carried out through determining the minimal inhibition concentration (MIC) and the minimum bactericidal concentration (MBC). Compared with commercial ZnO NPs, the products exhibited enhanced antibacterial ability against *Escherichia coli* and *Staphylococcus aureus*. © 2013 Elsevier B.V.

Number of references: 11

Main heading: Zinc oxide

Controlled terms: Bacteria - Crystal structure - *Escherichia coli* - Experiments - Field emission microscopes - Semiconductor materials - Transmission electron microscopy - X ray diffraction

Uncontrolled terms: Anti-bacterial activity - Anti-bacterial performance - Field emission scanning electron microscopy - Inhibition concentrations - Minimum bactericidal concentration (MBC) -

Photocatalytic activities - Photocatalytic performance - ZnO

Classification code: 931.3 Atomic and Molecular Physics - 901.3 Engineering Research - 804.2 Inorganic Compounds - 801.4 Physical Chemistry - 741.3 Optical Devices and Systems - 712.1 Semiconducting Materials - 461.9 Biology

Numerical data indexing: Size 3.30e-08m

DOI: 10.1016/j.matlet.2013.08.085

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

11.

Accession number: 20134416915093

Title: Influence on red long-lasting phosphorescence due to different doping concentrations of ZnGa₂O₄:Cr³⁺

Authors: Zhong, Rui Xia¹ ; Liu, Zi Ran² ; Qiu, Qing¹ ; Qi, Jian Quan¹ ; Zhang, Xiao Yan¹

Author affiliation:

1 School of Resources and Materials, Northeastern University at Qinhuangdao, Qinhuangdao 066004, China

2 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhong, R. X. (zhongruixialiu@aliyun.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 423-426

Monograph title: Applied Materials and Technologies for Modern Manufacturing

Issue date: 2013

Publication year: 2013

Pages: 411-414

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037858882

Document type: Conference article (CA)

Conference name: 3rd International Conference on Applied Mechanics, Materials and Manufacturing, ICAMMM 2013

Conference date: August 24, 2013 - August 25, 2013

Conference location: Dalian, China

Conference code: 100385

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: High temperature solid state reaction has been used to prepare the new red long-lasting phosphorescence (LLP) material $\text{ZnGa}_2\text{O}_4:\text{Cr}^{3++}$ with different doping concentration. The afterglow properties of the samples have been investigated. Our study has shown that ZnGa_2O_4 samples without Cr^{3++} doping have blue-green afterglow. While the blue-green afterglow has disappeared and the red long-lasting phosphorescence according to the Cr^{3++} luminescence center covering 650 nm-750 nm has been observed when Cr^{3++} has been doped. In terms of brightness and decay time of the afterglow, the red afterglow and the blue-green afterglow have been entirely different. In this article the influence on LLP due to different doping concentrations of $\text{ZnGa}_2\text{O}_4:\text{Cr}^{3++}$ has been discussed and the possible LLP mechanism has been proposed. © (2013) Trans Tech Publications, Switzerland.

Number of references: 14

Main heading: Light emission

Controlled terms: High temperature applications - Manufacture - Phosphorescence - Solid state reactions

Uncontrolled terms: Afterglow property - Decay time - Doping concentration - High temperature solid-state reaction - Long-lasting phosphorescence - Luminescence centers - Red afterglow - ZnGa_2O_4

Classification code: 537.1 Heat Treatment Processes - 708.3.1 High Temperature Superconducting Materials - 741.1 Light/Optics - 802.2 Chemical Reactions

Numerical data indexing: Size 6.50e-07m to 7.50e-07m

DOI: 10.4028/www.scientific.net/AMM.423-426.411

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

12.

Accession number: 20120414712573

Title: Selective facial expression recognition using fastICA

Authors: Zhang, Xiaohua¹ ; Liu, Zhifei² ; Guo, Yajun¹ ; Zhao, Liqiang¹

Author affiliation:

1 College of Mathematics and Information Science, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Division of Personnel Affairs, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, X. (Zhang.xiaohua@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 433-440

Monograph title: Materials Science and Information Technology, MSIT2011

Issue date: 2012

Publication year: 2012

Pages: 2755-2761

Language: English

ISSN: 10226680

ISBN-13: 9783037853191

Document type: Conference article (CA)

Conference name: 2011 International Conference on Material Science and Information Technology, MSIT2011

Conference date: September 16, 2011 - September 18, 2011

Conference location: Singapore, Singapore

Conference code: 88150

Sponsor: Singapore Institute of Electronics

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: This paper proposes a facial expression recognition approach based on the combination of fastICA method and neural network classifiers. First we get some special facial expression regions, including eyebrows, eyes and mouth, in which wavelet transform is done to reduce the dimension. Then the fastICA method is used to extract these three facial features. Finally, BP neural network classifier is adopted to recognize facial expression. Experimental on the JAFFE database results show that the method is effective for both dimension reduction and recognition performance in comparison with traditional PCA and ICA method. We have obtained recognition rates as high as 93.33% in categorizing the facial expressions neutral, anger, or sadness. The best average recognition rate achieves 90.48%. © (2012) Trans Tech Publications, Switzerland.

Number of references: 13

Main heading: Face recognition

Controlled terms: Feature extraction - Gesture recognition - Independent component analysis - Information technology - Materials science - Neural networks - Wavelet transforms

Uncontrolled terms: BP neural network classifier - Dimension reduction - Facial expression recognition - Facial Expressions - Facial feature - FastICA - Neural classifiers - Neural network classifier - Recognition performance - Recognition rates

Classification code: 716 Telecommunication; Radar, Radio and Television - 723.4 Artificial Intelligence - 903 Information Science - 921.3 Mathematical Transformations - 951 Materials Science

Numerical data indexing: Percentage 9.05e+01%, Percentage 9.33e+01%

DOI: 10.4028/www.scientific.net/AMR.433-440.2755

Database: Compendex

13.

Accession number: 20114614523856

Title: Microstructure evolution and thermal expansion of Cu-Zn alloy after high pressure heat treatment

Authors: Chen, Yan^{1, 2} ; Liu, Lin³ ; Wang, Yue-Hui⁴ ; Liu, Jian-Hua¹ ; Zhang, Rui-Jun¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 Department of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao 066004, China

3 Department of Basic Medical, Tangshan Vocational Technology College, Tangshan 063000, China

4 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhang, R.-J. (Zhangrj@ysu.edu.cn)

Source title: Transactions of Nonferrous Metals Society of China (English Edition)

Abbreviated source title: Trans Nonferrous Met Soc China

Volume: 21

Issue: 10

Issue date: October 2011

Publication year: 2011

Pages: 2205-2209

Language: English

ISSN: 10036326

CODEN: TNMCEW

Document type: Journal article (JA)

Publisher: Nonferrous Metals Society of China, B12 Fuxing Road, Beijing, 100814, China

Abstract: The thermal expansion coefficients of Cu-Zn alloy before and after high pressure treatment were measured by thermal expansion instrument in the temperature range of 25-700 °C, and the microstructure and phase transformation of the alloy were examined by optical microscope, X-ray diffractometer (XRD) and

differential scanning calorimeter (DSC). Based on the experimental results, the effects of high pressure treatment on the microstructure and thermal expansion of Cu-Zn alloy were investigated. The results show that the high pressure treatment can refine the grain and increase the thermal expansion coefficient of the Cu-Zn alloy, resulting in that the thermal expansion coefficient exhibits a high peak value on the α -T curve, and the peak value decreases with increasing the pressure. © 2011 The Nonferrous Metals Society of China.

Number of references: 18

Main heading: Thermal expansion

Controlled terms: Alloys - Copper alloys - Differential scanning calorimetry - Expansion
- Heat treatment - High pressure effects - Microstructure - Zinc - Zinc alloys

Uncontrolled terms: Cu-Zn alloy - Differential scanning calorimeters - High pressure -
High pressure treatments - Microstructure evolutions - Optical microscopes - Peak values - Phase
transformation - Temperature range - thermal expansion coefficient - Thermal expansion coefficients
- X ray diffractometers

Classification code: 951 Materials Science - 931.2 Physical Properties of Gases, Liquids and Solids -
801 Chemistry - 546.3 Zinc and Alloys - 544.2 Copper Alloys - 537.1 Heat Treatment Processes - 531.1
Metallurgy

Numerical data indexing: Temperature 2.98e+02K to 9.73e+02K

DOI: 10.1016/S1003-6326(11)60996-5

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

14.

Accession number: 20120514731093

Title: Design and implementation of the system used to evaluate and manage the overall quality of
university students

Authors: Du, Maobao1 ; Qiu, Fengxia1 ; Lu, Yajun1

Author affiliation:

1 Institute of Finance and Economics, Hebei Normal University of Science and Technology, Qinhuangdao,
China

Corresponding author: Du, M. (dulalalala@yeah.net)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 114

Monograph title: Software Engineering and Knowledge Engineering: Theory and Practice: Volume 1

Issue date: 2012

Publication year: 2012

Pages: 139-145

Language: English

ISSN: 18675662

ISBN-13: 9783642037177

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: This paper aims to provide a system platform to evaluate and manage the overall quality of university students, which is comprehensive, objective, fair, impartial and efficient, for Universities and education authorities at all levels. In this system, B/S three-tier structure is used, the information center acts as the core of the overall framework, and functional modules are designed based on J2EE+Struts and Oracle 10g database. Finally, the concept of the database, logic and physical structure is designed. All in all, running results show that the system reaches the intended design requirements. © Springer-Verlag Berlin Heidelberg 2012.

Number of references: 5

Main heading: Quality control

Controlled terms: Education - Knowledge engineering - Software engineering

Uncontrolled terms: B/S structure - Design requirements - Functional modules - Information center - Overall quality - Physical structures - System platforms - University students

Classification code: 723.1 Computer Programming - 723.4 Artificial Intelligence - 901.2 Education - 913.3 Quality Assurance and Control

Numerical data indexing: Mass 1.00e-02kg

DOI: 10.1007/978-3-642-03718-4_18

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

15.

Accession number: 20110313595724

Title: RETRACTED ARTICLE: CMC/PDM capsule immobilize catalase

Authors: Hou, Wenlong¹ ; Zhang, Zhiwei¹ ; Niu, Shaoli¹ ; Yang, Yuedong¹ ; Duan, Zhiqing¹ ; Liu, Xiaomin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Yang, Y.

Source title: 2010 International Conference on Future Information Technology and Management Engineering, FITME 2010

Abbreviated source title: Int. Conf. Future Inf. Technol. Manage. Eng., FITME

Volume: 2

Monograph title: 2010 International Conference on Future Information Technology and Management Engineering, FITME 2010

Issue date: 2010

Publication year: 2010

Pages: 139-142

Article number: 5654870

Language: English

ISBN-13: 9781424490882

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: The nature of catalase, immobilized in sodium carboxymethyl cellulose(CMC) and poly(n, n-dimethylaminoethyl methacrylate)(PDM)), were primarily studied. The results showed that the CMC/PDM capsules, which were made by 2.0% of mass concentration of CMC and 25% of mass concentration of PDM, were the smoothest, the hardest, and the most effective. The optimum pH and temperature were 7.0 and 40°C respectively for immobilized catalase, while the optimum pH and temperature were 7.0 and 35 °C respectively for dissociative sucrase. So, the range of applying of pH of immobilized catalase was more extensive. The immobilized catalase has 66% activity when it was stored 16d at 35°C and has 17% activity when it was repeated used five times at 40°C. © 2010 IEEE.

Number of references: 10

Main heading: Information technology

Controlled terms: Sodium

Uncontrolled terms: Capsule - Catalase - Immobilization - Mass concentration - Optimum pH - Poly(N,N-dimethylaminoethyl methacrylate) - Sodium carboxymethyl cellulose

Classification code: 549.1 Alkali Metals - 903 Information Science

Numerical data indexing: Percentage 1.70e+01%, Percentage 2.00e+00%, Percentage 2.50e+01%, Percentage 6.60e+01%, Temperature 3.08e+02K, Temperature 3.13e+02K

DOI: 10.1109/FITME.2010.5654870

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

16.

Accession number: 20120714767977

Title: Study on the influencing factors of Trichoderma quantities in protected vegetable soils

Authors: He, Zidian1 ; Gao, Yufeng2

Author affiliation:

- 1 College of Life Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Continuing Education College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: He, Z. (zidianhe1972@163.com)

Source title: ITME 2011 - Proceedings: 2011 IEEE International Symposium on IT in Medicine and Education

Abbreviated source title: ITME - Proc.: IEEE Int. Symp. IT Med. Educ.

Volume: 2

Part number: 2 of 2

Monograph title: ITME 2011 - Proceedings: 2011 IEEE International Symposium on IT in Medicine and Education

Issue date: 2011

Publication year: 2011

Pages: 533-536

Article number: 6132166

Language: English

ISBN-13: 9781612847023

Document type: Conference article (CA)

Conference name: 2011 IEEE International Symposium on IT in Medicine and Education, ITME 2011

Conference date: December 9, 2011 - December 11, 2011

Conference location: Guangzhou, China

Conference code: 88392

Sponsor: IEEE Sapporo Section; Lanzhou University (LZU); Henan University of Technology (HAUT); Wuhan University of Technology (WHUT); East China Normal University (ECNU)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Soil texture, cultivating ages, vegetable species, and crop rotation system can influence the quantity and distribution of Trichoderma, which mainly distributes in neutral loam and light loam are humid, rich in organic matters, and have good aeration; the quantity of Trichoderma has a close relationship with cultivating ages and the planting structure of vegetables. In continuous cultivation, when the cultivating ages is more than 10 years, the quantity of Trichoderma decreases; compared with continuous cropping field, even though the number

in rotation land decreases, its proportion shows increasing tendency in fungi; the quantity of Trichoderma in the fields planting vegetables like onions and garlic is more than that in fields planting cucumbers. In soil factors, the content of soil organic matters has the most important influence on the quantity of Trichoderma, which show the most significant level, with the regressive equation being $Y = 0.13x1.07$. © 2011 IEEE.

Number of references: 8

Main heading: Soils

Controlled terms: Agriculture - Biogeochemistry - Biological materials - Organic compounds - Vegetables

Uncontrolled terms: Continuous cultivation - Crop rotation system - Cropping field - In-field - Influencing factor - Protected Field - Regressive equation - Soil factors - Soil organic matters - Soil textures - Trichoderma - Vegetable soil

Classification code: 461.2 Biological Materials and Tissue Engineering - 481.2 Geochemistry - 483.1 Soils and Soil Mechanics - 804.1 Organic Compounds - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 821.4 Agricultural Products

Numerical data indexing: Age 1.00e+01yr

DOI: 10.1109/ITiME.2011.6132166

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

17.

Accession number: 20134917058303

Title: Quality analysis and antioxidant research of dietary fiber from asparagus

Authors: Yang, Xiaokuan¹ ; Li, Hanchen¹ ; Zhang, Jiancai¹ ; Wu, Mengshuang¹ ; Chang, Xuedong¹

Author affiliation:

¹ Institute of Food Science and Technology of Hebei Normal University of Science and Technology, Qinhuangdao 066004, Hebei, China

Corresponding author: Chang, X.

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 13

Issue: 10

Issue date: October 2013

Publication year: 2013

Pages: 205-212

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology, 3 Floor, Qingyuan Mansion, No. 6 Beisan Street., Fucheng Road, Haidian District, Beijing, 100048, China

Abstract: Through the enzyme alkaline extraction of dietary fiber from old stalk of asparagus, including soluble dietary fibre (SDF), insoluble dietary fibers (IDF) and total dietary fiber (SDF:IDF=1:2) General chemical composition, water holding capacity, expansion of power, holding oil power, cation exchange capacity, cholesterol absorption capacity, the capacity of nitrite ions absorption and determination of antioxidant research, and three groups of data analysis of the results of the determination of dietary fiber each index, compares three different characteristics of dietary fiber, found three groups of physical and chemical properties of dietary fiber, as well as there are significant differences in oxidation resistance, oil holding capacity and water holding capacity of the order from high to low is IDF, TDF, SDF. IDF and SDF oil holding capacity of up to 5.59 g/g and 2.05 g/g respectively, IDF and SDF water holding capacity of up to 8.80 g/g and 3.47 g/g respectively. The swelling capacity, cation exchange capacity, adsorptive cholesterol adsorption capacity and the nitrite ion content from high to low order SDF, TDF, IDF. SDF and IDF swelling power of 4.56 mL/g and 3.40 mL/g respectively, SDF and IDF cation exchange capacity of 0.77 mmol/g and 0.27 mmol/g respectively, SDF and IDF cholesterol adsorption capacity of 20.71 mg/g and 15.69 mg/g respectively, the adsorption of SDF and IDF nitrite amounted to 7.14 mg/g and 3.80 mg/g respectively. The antioxidant capacity of the order from high to low order of SDF, TDF, IDF. SDF hydroxyl radical (-OH) scavenging capacity, DPPH radical scavenging capacity, H₂O₂ radical scavenging ability, the metal chelating capacity, reducing power, total antioxidant capacity were 93.33%, 14.23%, 68.34%, 90.11%, 91.56%, 93.33% , and through the analysis of the quality index found that enzyme alkaline extraction of dietary fiber from old stalk of asparagus with excellent characteristics of dietary fiber in producing high quality products, but also suitable as a health snack food additives.

Number of references: 29

Main heading: Quality control

Controlled terms: Adsorption isotherms - Antioxidants - Enzymes - Extraction - Fibers

- Oils and fats - Positive ions - Water absorption

Uncontrolled terms: Asparagus - Cation exchange capacities - Dietary fibers - Dpph radical scavenging capacities - Enzyme-alkali method - Insoluble dietary fibers - Physical and chemical properties - Total antioxidant capacity

Classification code: 817 Plastics and Other Polymers: Products and Applications - 812 Ceramics, Refractories and Glass - 804.1 Organic Compounds - 913.3 Quality Assurance and Control - 804 Chemical Products Generally - 802.3 Chemical Operations - 801 Chemistry - 803 Chemical Agents and Basic Industrial Chemicals

Numerical data indexing: Molality 2.70e-01mol/kg, Molality 7.70e-01mol/kg, Percentage 1.42e+01%, Percentage 6.83e+01%, Percentage 9.01e+01%, Percentage 9.16e+01%, Percentage 9.33e+01%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

18.

Accession number: 20110713658026

Title: Encapsulation of Bifidobacterium bifidum in improved alginate microcapsules to prolonging viability

Authors: Zhang, Fan^{1, 2}; Zhao, Min¹; Wang, Wei¹; Hu, Tiefeng²

Author affiliation:

1 Northeast Forestry University, Harbin, Heilongjiang province, China

2 Hebei Normal University of Science and Technology, Hebei province, China

Corresponding author: Zhang, F. (hljszf@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 183-185

Monograph title: Environmental Biotechnology and Materials Engineering

Issue date: 2011

Publication year: 2011

Pages: 1481-1485

Language: English

ISSN: 10226680

ISBN-13: 9783037850220

Document type: Conference article (CA)

Conference name: 2011 International Conference on Environmental Biotechnology and Materials Engineering, EBME 2011

Conference date: March 26, 2011 - March 28, 2011

Conference location: Harbin, China

Conference code: 83740

Sponsor: Harbin University of Commerce; Heilongjiang Province Institute of Food Science and Technology

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Bifidobacterium bifidum were encapsulated as fresh cultures in water insoluble food grade microcapsules by emulsification-internal gelation technique, using gelatin, pectin, alginate and chitose as immobilization material. The optical photomicroscope photograph and laser scanning confocal microscope photograph shows that the microcapsules obtained by this method has narrow size distribution (10-20 μm). Survival of Bifidobacterium bifidum in microcapsules was 109cfu·g⁻¹, and the embedding ratio was 72.32%. The survival was remaining more than 108cfu·g⁻¹ after exposure to gastric acid and bile acid, which implies that the microcapsules expressed superior acid resistance. These microcapsules were disaggregation subtotal after 15 min in simulated intestinal juices, and the release rate was 96%. The survival was 108 cfu·g⁻¹ at room temperature after 1 year by classic accelerated test. The results indicate that encapsulation of Bifidobacterium bifidum in alginate microcapsules is a good approach to prolonging viability. © (2011) Trans Tech Publications.

Number of references: 11

Main heading: Encapsulation

Controlled terms: Acid resistance - Alginate - Biotechnology - Coagulation - Emulsification - Gelation - Hydrochloric acid - Photography

Uncontrolled terms: Accelerated tests - Alginate microcapsules - Bifidobacterium bifidum - Bile acid - Disaggregation - Food grade - Gastric acid - Internal gelation - Laser scanning confocal microscopes - Microcapsule - Microcapsules - Narrow size distributions - Release rate

- Room temperature - Viable count

Classification code: 804.1 Organic Compounds - 803 Chemical Agents and Basic Industrial Chemicals - 802.3 Chemical Operations - 802.2 Chemical Reactions - 746 Imaging Techniques - 461.8 Biotechnology - 461.6 Medicine and Pharmacology

Numerical data indexing: Percentage 7.23e+01%, Percentage 9.60e+01%, Size 1.00e-05m to 2.00e-05m, Time 9.00e+02s

DOI: 10.4028/www.scientific.net/AMR.183-185.1481

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

19.

Accession number: 20134416933714

Title: University library lending prediction model based on linear regression analysis

Authors: Su, Xuemei

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, Hebei, China

Corresponding author: Su, X. (suxuemei@cscsi.info)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 227 LNEE

Part number: 5 of 5

Issue: VOL. 5

Monograph title: Proceedings of the 2nd International Conference on Green Communications and Networks 2012, GCN 2012

Issue date: 2013

Publication year: 2013

Pages: 657-666

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783642353970

Document type: Conference article (CA)

Conference name: 2nd International Conference on Green Communications and Networks, GCN 2012

Conference date: December 12, 2012 - December 14, 2012

Conference location: Chongqing, China

Conference code: 95479

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University; Nanyang Technological University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The library borrowing prediction will play a key role in library management. Most library management work pay more and more attention to the library borrowing, which are often mentioned in their annual report. The library borrowing predictions may also have great influence on most of the library, and the annual plan. It is found by the author, according to the data of the lending and number of library reader for simple linear regression model. Two methods of tests, such as coefficient simple determination and T-test to prove that a strong linear relationship between lending, and number of the library readers. T-test result is obtained through the operation function of data analysis and regression of Microsoft Excel. On this basis, according to the theory of simple linear regression analysis, obtained the prediction equations. The author introduces the calculating method of comparative and confidence interval mean library loans and prediction intervals of a single library borrowing in the upcoming year. © 2013 Springer-Verlag.

Number of references: 3

Main heading: Linear regression

Controlled terms: Forecasting - Libraries - Mathematical models

Uncontrolled terms: Calculating methods - Confidence interval - Linear relationships - Prediction equations - Prediction model - Simple linear regression - Simple linear regression analysis - University libraries

Classification code: 402.2 Public Buildings - 921 Mathematics - 922.2 Mathematical Statistics

DOI: 10.1007/978-3-642-35398-7_82

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

20.

Accession number: 20105113494380

Title: The application of Virtual Reality in the practice course of physical education

Authors: Liu, Daduo¹ ; Sun, Zhanfeng² ; Li, Rongwei³ ; Liu, Ji'an⁴ ; Chen, Chao¹

Author affiliation:

1 Physical Education College, Jilin Normal University, Siping, China

2 Aviation University of Air Force, Changchun, China

3 Department of Physical Education, Hebei Normal University of Science and Technology, Qin Huangdao, China

4 Jilin Institute of Physical Education, Changchun, China

Corresponding author: Liu, D. (liu_daduo@sina.com)

Source title: ICDLE 2010 - 2010 4th International Conference on Distance Learning and Education, Proceedings

Abbreviated source title: ICDLE - Int. Conf. Distance Learn. Educ., Proc.

Monograph title: ICDLE 2010 - 2010 4th International Conference on Distance Learning and Education, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 78-80

Article number: 5606035

Language: English

ISBN-13: 9781424487509

Document type: Conference article (CA)

Conference name: 2010 4th International Conference on Distance Learning and Education, ICDLE 2010

Conference date: October 3, 2010 - October 5, 2010

Conference location: San Juan, PR, United states

Conference code: 82742

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT); Polytechnic University of Puerto Rico

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: As new means of teaching in which the technique will be constantly perfected, the Virtual Reality (VR) will play a more and more important role in the physical education teaching. Based on literature research and experience summary, the paper researches and analyses the function of VR in physical education aims to looks into the distance to the application of VR in physical education. © 2010 IEEE.

Number of references: 5

Main heading: Teaching

Controlled terms: Distance education - Virtual reality

Uncontrolled terms: Paper research - Physical education - Physical education teachings - VR Education

Classification code: 723 Computer Software, Data Handling and Applications - 901.2 Education

DOI: 10.1109/ICDLE.2010.5606035

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

21.

Accession number: 20113514288322

Title: RETRACTED ARTICLE: Taoist Enlightenment on the socialist moral construction

Authors: Fang, Li Jian1 ; Shu, Yao Jian1

Author affiliation:

1 Department of Arts and Humanities, E and A College of Hebei Normal, University of Science and Technology, Qin Huangdao, 066004, China

Corresponding author: Fang, L.J.

Source title: BMEI 2011 - Proceedings 2011 International Conference on Business Management and Electronic Information

Abbreviated source title: BMEI - Proc. Int. Conf. Bus. Manage. Electron. Inf.

Volume: 3

Monograph title: BMEI 2011 - Proceedings 2011 International Conference on Business Management and Electronic Information

Issue date: 2011

Publication year: 2011

Pages: 426-429

Article number: 5920485

Language: English

ISBN-13: 9781612841069

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: Taoist culture consists of the way and harmony, and is cored by no action. It deeply discusses the moral of behaving, the political and health promotion. In a specific saying, the Taoist excoriates the hypocrisy and pursue the state of moral values like the good is like water and the true; advocates the strong life character of telling the truth, and all things begin with the first step; and holds the political cultivation of The Way takes no action, but leaves nothing undone contains the deep solicitude sprit of not to object kinds, and giving life forget themselves in the shadows. © 2011 IEEE.

Number of references: 7

Uncontrolled terms: Health promotion - moral - socialist - Taoist Enlightenment

DOI: 10.1109/ICBMEI.2011.5920485

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

22.

Accession number: 20132916504563

Title: Step-like contrast structure for class of nonlinear singularly perturbed optimal control problem

Authors: Wu, Li-Meng^{1, 2}; Ni, Ming-Kang^{2, 3}; Lu, Hai-Bo²

Author affiliation:

1 School of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, Hebei Province, China

2 Department of Mathematics, East China Normal University, Shanghai 200241, China

3 Division of Computational Science, E-Institute of Shanghai Universities, Shanghai Jiao Tong University, Shanghai 200240, China

Corresponding author: Wu, L.-M. (neamou123@163.com)

Source title: Applied Mathematics and Mechanics (English Edition)

Abbreviated source title: Appl. Math. Mech. Engl. Ed.

Volume: 34

Issue: 7

Issue date: July 2013

Publication year: 2013

Pages: 875-888

Language: English

ISSN: 02534827

CODEN: AMMEEQ

Document type: Journal article (JA)

Publisher: Springer Netherlands, Van Godewijkstraat 30, Dordrecht, 3311 GZ, Netherlands

Abstract: The step-like contrast structure for a class of nonlinear singularly perturbed optimal control problems is considered. The existence of the step-like contrast structure for the singularly perturbed optimal control problem is proved by equivalence, which is based on the necessary conditions. The authors not only give the conditions under which there exists a step-like contrast structure, but also determine where the internal transition time is. Meanwhile, the uniformly valid asymptotic expansion of the step-like contrast structure solution is constructed by the direct scheme method. Finally, an example is presented to show the result. © 2013 Shanghai University and Springer-Verlag Berlin Heidelberg.

Number of references: 17

Main heading: Perturbation techniques

Controlled terms: Optimal control systems

Uncontrolled terms: Asymptotic expansion - Internal transitions - Optimal control problem
- Optimal controls - Singular perturbations - Singularly perturbed - Structure solutions

Classification code: 921 Mathematics - 921.5 Optimization Techniques

DOI: 10.1007/s10483-013-1714-8

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

23.

Accession number: 20124715676388

Title: Tuned morphologies of DNA-assisted ZnO struggling against pH

Authors: Cai, Ai-Jun^{1, 2}; Wang, Ya-Lan¹; Xing, Sheng-Tao¹; Du, Li-Qiang²; Ma, Zi-Chuan¹

Author affiliation:

1 College of Chemistry and Material Sciences, Hebei Normal University, Shijiazhuang 050016, China

2 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Ma, Z.-C. (ma_zichuan@163.com)

Source title: Ceramics International

Abbreviated source title: Ceram Int

Volume: 39

Issue: 1

Issue date: January 2013

Publication year: 2013

Pages: 605-609

Language: English

ISSN: 02728842

CODEN: CINNDH

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: In this paper, we utilize DNA as a structure-directing agent to produce a series of novel ZnO structures at pH<7. With decreasing solution pH values, various three-dimensional ZnO superstructures are formed. Furthermore, all products are well crystalline obtained with DNA, compared with blank samples. At last, a growth process of as-synthesized ZnO is thus proposed. © 2012 Elsevier Ltd and Techna Group S.r.l.

Number of references: 15

Main heading: DNA

Controlled terms: Transition metals - Zinc oxide

Uncontrolled terms: Growth process - Powders: chemical preparations - Solution pH - Structure directing agents - Transition-metal oxides - ZnO - ZnO structures

Classification code: 461.2 Biological Materials and Tissue Engineering - 531 Metallurgy and Metallography - 804.2 Inorganic Compounds

DOI: 10.1016/j.ceramint.2012.06.071

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

24.

Accession number: 20112013986300

Title: Research on exact Minkowski Sum Algorithm of convex polyhedron based on direct mapping

Authors: Geng, Qingjia^{1, 2}; Guo, Xijuan¹; Zhang, Ya¹

Author affiliation:

1 Department of Computer Science and Technology, Yanshan University, Qinhuangdao, China

2 Department of Computer Science, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Geng, Q. (gengqingjia@yahoo.cn)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 225-226

Monograph title: Advanced Research on Automation, Communication, Architectonics and Materials

Issue date: 2011

Publication year: 2011

Pages: 377-380

Language: English

ISSN: 10226680

ISBN-13: 9783037851036

Document type: Conference article (CA)

Conference name: 2011 International Conference on Automation, Communication, Architectonics and Materials, ACAM2011

Conference date: June 18, 2011 - June 19, 2011

Conference location: Wuhan, China

Conference code: 84812

Sponsor: International Science and Education Researcher Association (ISER); Yellow River Conservancy Technical Institute; Beijing Gireida Education Co.Ltd.; Beijing Gireida Education Research Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Minkowski sum has become an effective method in collision detection problem, which is a branch of computation geometry. Separated from the previous algorithm based on the traditional Gaussian Map, a new algorithm of computing exact Minkowski sum of convex polyhedron is proposed based on direct mapping method in the paper, and the correctness of direct mapping method is testified. The algorithm mapping the convex polyhedron into the bottom of regular tetrahedron according to the definition of Regular Tetrahedron Mapping and Point Projection, so the problem become form 3D to 2D. Comparing with the previous algorithm, the algorithm posed in the paper establishes mapping from 3D to 2D directivity, and only compute the overlay of one pair of planar subdivision. So, the algorithm's executing efficiency has been improved in compare with the previous algorithm. © (2011) Trans Tech Publications.

Number of references: 7

Main heading: Algorithms

Controlled terms: Computational mechanics - Geometry - Mapping - Three dimensional

Uncontrolled terms: Convex polyhedrons - Minkowski sum - Overlay algorithm - Point projection - Regular tetrahedron mapping

Classification code: 902.1 Engineering Graphics - 921 Mathematics

DOI: 10.4028/www.scientific.net/AMR.225-226.377

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

25.

Accession number: 20130616000924

Title: First-principle study of Structural and Electronic properties of Ti-doped SnO₂

Authors: Yang, Jing-Kai¹ ; Zhao, Hong-Li¹ ; Zhu, Yan^{1, 2} ; Zhao, Li-Ping¹ ; Li, Jian¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, College of Materials Science and

Engineering, Yanshan University, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Yang, J.-K. (yangjkysu@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 634-638

Issue: 1

Monograph title: Advances in Chemical, Material and Metallurgical Engineering

Issue date: 2013

Publication year: 2013

Pages: 2545-2549

Language: English

ISSN: 10226680

ISBN-13: 9783037855898

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Chemical, Material and Metallurgical Engineering, ICCMME 2012

Conference date: December 15, 2012 - December 16, 2012

Conference location: Kunming, China

Conference code: 95231

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The structural and electronic properties of Ti-doped SnO₂ with 6.25 at.% are investigated with the first principle calculations based on the density functional theory within the generalized gradient approximation. The calculation results indicate that the crystal structure of Sn_{0.9375}Ti_{0.0625}O₂ possesses a smaller volume; the bond length of Ti-O is shorter than that of Sn-O; the relative angle θ change value of Sn-O-Sn \rightarrow Ti-O-Ti is about 1.07%. Ti-O bond possesses more covalent ingredient and stronger bond energy

than Sn-O bond. After the replacement of one Ti atom, O atom bonded with Ti atom possessed fewer electrons, the ratio of charges possessed by Ti atom and O atom dose not agree with the stoichiometry of compound, create more holes at the top of VB of Sn_{0.9375}Ti_{0.0625}O₂, and lead to the increase of the conductivity. © (2013) Trans Tech Publications, Switzerland.

Number of references: 24

Main heading: Electronic properties

Controlled terms: Atoms - Chemical bonds - Density functional theory - Electronic structure - Lead compounds - Metallurgical engineering - Stoichiometry - Tin

Uncontrolled terms: Bond energies - First principle calculations - First-principle study - Generalized gradient approximations - Population - Ti atoms - Ti-doped SnO₂ - Ti-O bonds

Classification code: 531 Metallurgy and Metallography - 546.2 Tin and Alloys - 801.4 Physical Chemistry - 804.1 Organic Compounds - 931.2 Physical Properties of Gases, Liquids and Solids - 931.3 Atomic and Molecular Physics

Numerical data indexing: Percentage 1.07e+00%

DOI: 10.4028/www.scientific.net/AMR.634-638.2545

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

26.

Accession number: 20140417238680

Title: Option valuation based on fuzzy theory in risk management

Authors: Liu, Shuxia¹ ; Xu, Weili¹ ; Hou, Jinzhu¹ ; Zhao, Min¹ ; Sun, Qinghong¹

Author affiliation:

¹ School of Business Administration, Hebei Normal University of Science and Technology, QinHuangDao 066000, Hebei, China

Source title: International Journal of Applied Mathematics and Statistics

Abbreviated source title: Int. J. Appl. Math. Stat.

Volume: 48

Issue: 18

Issue date: 2013

Publication year: 2013

Pages: 414-422

Language: English

ISSN: 09731377

E-ISSN: 09737545

Document type: Journal article (JA)

Publisher: CESER Publications, Post Box No. 113, Roorkee, 247667, India

Abstract: Evaluation of the option is considerable importance in risk management. This paper shows that options can be valued based on fuzzy theory, where the volatility is depicted as a simple fuzzy variable. And then a random fuzzy option pricing model with fuzzy volatility and the fuzzy intensity is proposed. In addition, the methods of how to derive the expected value of fuzzy option price are discussed. Finally, numerical examples are given to demonstrate the idea in the fuzzy option pricing models. © 2013 by CESER Publications.

Number of references: 16

Main heading: Risk management

Controlled terms: Investments

Uncontrolled terms: Black-Scholes model - European option - Fuzzy theory - Fuzzy variable - Option pricing

Classification code: 911.2 Industrial Economics - 922.1 Probability Theory

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

27.

Accession number: 20124815718390

Title: Discussion on cost control of low-rent housing projects

Authors: Gao, Xiuqing¹ ; Wang, Honghai¹ ; Sui, Fengtao¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Corresponding author: Gao, X. (gjssc2005@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 209-211

Monograph title: Sustainable Cities Development and Environment

Issue date: 2012

Publication year: 2012

Pages: 1531-1534

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037854853

Document type: Conference article (CA)

Conference name: 2012 International Conference on Civil, Architectural and Hydraulic Engineering, ICCAHE 2012

Conference date: August 10, 2012 - August 12, 2012

Conference location: Zhangjiajie, China

Conference code: 93984

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: This paper proceeds from the cost problems in low-rent housing projects and proposes that the cost control of such programs consist of subjective control and objective control. With analysis on subjective and

objective controls, it gives the government detailed suggestions for cost control in low-rent housing program, specifically developing policies and regulations for cost control and introducing non-governmental funds into the program. © (2012) Trans Tech Publications, Switzerland.

Number of references: 5

Main heading: Cost benefit analysis

Controlled terms: Cost effectiveness - Fluid mechanics - Housing - Shore protection - Sustainable development

Uncontrolled terms: Cost controls - Cost problems - Housing programs - Housing projects - Measures

Classification code: 403.1 Urban Planning and Development - 407.1 Maritime Structures - 911 Cost and Value Engineering; Industrial Economics - 911.2 Industrial Economics - 931.1 Mechanics

DOI: 10.4028/www.scientific.net/AMM.209-211.1531

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

28.

Accession number: 20120314698840

Title: Parallel FDTD simulation using NUMA acceleration technique

Authors: Guo, X.-M.1 ; Guo, Q.-X.1 ; Zhao, W.2 ; Yu, W.-H.3

Author affiliation:

- 1 School of Information Engineering, Communication University of China, Beijing 100024, China
- 2 School of Maths and Information Engineering, Hebei Normal University of Science and Technology, Hebei 066000, China
- 3 Electromagnetic Communication Laboratory, Pennsylvania State University, University Park, PA 16802, United States

Corresponding author: Guo, X.-M. (gxmqin@163.com)

Source title: Progress in Electromagnetics Research Letters

Abbreviated source title: Prog. Electromagn. Res. Lett.

Volume: 28

Issue date: 2012

Publication year: 2012

Pages: 1-8

Language: English

ISSN: 19376480

Document type: Journal article (JA)

Publisher: Electromagnetics Academy, 77 Massachusetts Avenue, Room 26-305, Cambridge, MA 02139, United States

Abstract: In this paper, we introduce a new non-uniform memory access (NUMA) acceleration algorithm for parallel finite-difference time-domain (FDTD) method on NUMA architecture workstation. We compare the performance of parallel FDTD method with and without the NUMA acceleration technique. An ideal test case and an engineering example show that the NUMA acceleration technique can efficiently improve the computing performance of FDTD parallel applications.

Number of references: 11

Main heading: Time domain analysis

Controlled terms: Finite difference time domain method - Memory architecture

Uncontrolled terms: Acceleration algorithm - Acceleration technique - Computing performance - FDTD method - FDTD simulations - Non uniform memory access - Parallel application - Test case

Classification code: 722 Computer Systems and Equipment - 921 Mathematics

DOI: 10.2528/PIERL11101706

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20130415932750

Title: A class of partial differential equations based on the mean filter used for image zooming

Authors: Wang, Gang¹ ; Li, Yuerong¹ ; Song, Jinling¹ ; Han, Kun¹ ; Fu, Changqing¹

Author affiliation:

1 College of mathematics and information technology, HeBei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Wang, G. (wgvincent@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 263-266

Issue: PART 1

Monograph title: Information Technology Applications in Industry

Issue date: 2013

Publication year: 2013

Pages: 2435-2438

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037855744

Document type: Conference article (CA)

Conference name: 2012 International Conference on Information Technology and Management Innovation, ICITMI 2012

Conference date: November 10, 2012 - November 11, 2012

Conference location: Guangzhou, China

Conference code: 95052

Sponsor: Information Science School of Guangdong; University of Business Studies

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: By studying the principles of the mean filter, we obtain a class of partial differential equations based on mean filter, which used for image zooming. Experimental results show that our method is feasible. It also confirmed the importance of the partial differential equations in image processing. © (2013) Trans Tech Publications, Switzerland.

Number of references: 4

Main heading: Partial differential equations

Controlled terms: Image processing - Information technology

Uncontrolled terms: Continuous models - Heat conduction equations - Image zooming - Mean filter

Classification code: 741 Light, Optics and Optical Devices - 903 Information Science - 921.2 Calculus

DOI: 10.4028/www.scientific.net/AMM.263-266.2435

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

30.

Accession number: 20132616450083

Title: Resource discovery algorithm based on multilayer overlay network

Authors: Cao, Lijun1 ; Liu, Xiyin1 ; Zhang, Zhongping2

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

2 College of Information Science and Engineering, Yanshan University, Qinhuangdao, China

Source title: Journal of Networks

Abbreviated source title: J. Netw.

Volume: 8

Issue: 6

Issue date: 2013

Publication year: 2013

Pages: 1357-1363

Language: English

ISSN: 17962056

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40,, OULU, 90571, Finland

Abstract: In this article, firstly the principles of resource discovery mechanism and the techniques involved in Multi- Layer Overlay Network (MLON) based grid resource discovery mechanism are introduced; then, using Euclidean space distance and Top-K technique, the resource matching strategy and the transformation of queries in multidimensional attribute space are discussed in detail, and a resource discovery algorithm MLON-RSA (MLON-based Resource discovery Algorithm) is proposed and theoretically analyzed; at last, the feasibility, high efficiency, and high user satisfaction of the proposed algorithm are demonstrated through simulation tests. © 2013 ACADEMY PUBLISHER.

Number of references: 16

Main heading: Algorithms

Controlled terms: Overlay networks

Uncontrolled terms: Grid - Grid resource discovery - Multidimensional attributes - Number of hops - Resource discovery - Resource matching - Simulation tests - User satisfaction

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 921 Mathematics

DOI: 10.4304/jnw.8.6.1357-1363

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20112514075615

Title: Ohba's conjecture is true for graphs $K_{6,3^*t,2^*(k-2t-4),1^*(t+3)}$

Authors: Zheng, Guoping^{1, 2}; Tang, Qing³; Shen, Yufa^{1, 2}; Guo, Jun³; Cui, Yu¹

Author affiliation:

1 Department of Mathematics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Center for Mathematics of Hebei Province, Hebei Normal University, Shijiazhuang 050016, China

3 Applied Mathematics Institute, Hebei Normal University, Tianjin 300401, China

Corresponding author: Shen, Y. (syf030514@163.com)

Source title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Abbreviated source title: Proc. - ACIS Int. Symp. Cryptography, Netw. Secur., Data Min. Knowl. Discov., E-Commer. Its Appl., Embedded Syst., CDEE

Monograph title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Issue date: 2011

Publication year: 2011

Pages: 63-66

Article number: 5759370

Language: English

ISBN-13: 9780769543321

Document type: Conference article (CA)

Conference name: 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Conference date: October 23, 2010 - October 24, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 84956

Sponsor: Int. Assoc. Comput. Inf. Sci. (ACIS)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: A graph G is called chromatic-choosable if $ch(G)=x(G)$. Ohba's conjecture states that every graph G with $2x(G)+1$ or fewer vertices is chromatic-choosable. In this paper we show that Ohba's conjecture is true for complete multipartite graphs $K_{6,3^*t,2^*(k-2t-4),1^*(t+3)}$ and its all k -chromatic sub graphs for all integers $t \geq 0$ and $k \geq 2t+4$, that is, $ch(K_{6,3^*t,2^*(k-2t-4),1^*(t+3)})=k$, which extends the result $ch(K_{6,3^*t,2^*(k-6),1^*4})=k$ given by Shen et al. [J. of Mathematical Research and Exposition, 27(2)(2007) 264-272]. © 2010 IEEE.

Number of references: 13

Main heading: Graphic methods

Controlled terms: Cryptography - Data mining - Electronic commerce - Embedded systems
- Network security

Uncontrolled terms: Chromatic-choosable graphs - Complete multipartite graph - Graph G
- List coloring - Mathematical research - Ohba's conjecture - Subgraphs

Classification code: 723 Computer Software, Data Handling and Applications

DOI: 10.1109/CDEE.2010.22

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

32.

Accession number: 20113814353110

Title: The research of long-range dependent linear process under the supersmooth case

Authors: Zhang, Yunxia^{1, 2}; Song, Xiangdong¹

Author affiliation:

1 College of Science, Yanshan University, Qinhuangdao 066004, China

2 E and A College of Hebei Normal, University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhang, Y. (xyz4418@sina.com)

Source title: 2011 International Conference on Multimedia Technology, ICMT 2011

Abbreviated source title: Int. Conf. Multimedia Technol., ICMT

Monograph title: 2011 International Conference on Multimedia Technology, ICMT 2011

Issue date: 2011

Publication year: 2011

Pages: 2727-2729

Article number: 6002492

Language: English

ISBN-13: 9781612847740

Document type: Conference article (CA)

Conference name: 2nd International Conference on Multimedia Technology, ICMT 2011

Conference date: July 26, 2011 - July 28, 2011

Conference location: Hangzhou, China

Conference code: 86512

Sponsor: University of Louisville; Ningbo University; Zhejiang Sci-Tech University; Communication University of China; Georgia State University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper give some certain assumptions at first,then present the important conclusions of long-range dependent linear process,and carry through a detailed argument finally under the supersmooth case and considering non-parametric regression model for dependent data. © 2011 IEEE.

Number of references: 9

Main heading: Regression analysis

Uncontrolled terms: Linear process - Long range dependent - Non-parametric regression - Smooth

Classification code: 922.2 Mathematical Statistics

DOI: 10.1109/ICMT.2011.6002492

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

33.

Accession number: 20115014601459

Title: Research on construction proof of the contains and repel principle

Authors: Liu, Shan¹ ; Liu, Mao Hua¹ ; Cao, Li Jun¹ ; Yang, Yan Ping¹ ; Liu, Jing Hui¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Collage of Mathematics and Information Technology, Hebei QinHuangdao 066004, China

Corresponding author: Liu, S. (ls3252003@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 403-408

Monograph title: MEMS, NANO and Smart Systems

Issue date: 2012

Publication year: 2012

Pages: 1315-1318

Language: English

ISSN: 10226680

ISBN-13: 9783037853122

Document type: Conference article (CA)

Conference name: 2011 7th International Conference on MEMS, NANO and Smart Systems, ICMENS 2011

Conference date: November 4, 2011 - November 6, 2011

Conference location: Kuala Lumpur, Malaysia

Conference code: 87709

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol.; Singapore Institute of Electronics

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Contains and repel principle is a famous theorem in the combinatorial mathematics, base on the study of the principle and its proof before, this paper presents a construction proof which is more intuitive and easier to understand to the common proof of mathematical introduction. © (2012) Trans Tech Publications, Switzerland.

Number of references: 11

Main heading: Theorem proving

Controlled terms: Combinatorial mathematics - Construction

Uncontrolled terms: Contains and repel principle

Classification code: 405 Construction Equipment and Methods; Surveying - 921 Mathematics - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.4028/www.scientific.net/AMR.403-408.1315

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

34.

Accession number: 20130415926220

Title: Education of business managers in the background of internalization

Authors: Shaofu, Song1

Author affiliation:

1 President's Office, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Shaofu, S. (ssfqhd@163.com)

Source title: Proceedings of the 2012 2nd International Conference on Business Computing and Global Informatization, BCGIN 2012

Abbreviated source title: Proc. Int. Conf. Bus. Comput. Global Informatization, BCGIN

Monograph title: Proceedings of the 2012 2nd International Conference on Business Computing and Global Informatization, BCGIN 2012

Issue date: 2012

Publication year: 2012

Pages: 350-353

Article number: 6382538

Language: English

ISBN-13: 9780769548548

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Business Computing and Global Informatization, BCGIN 2012

Conference date: October 12, 2012 - October 14, 2012

Conference location: Shanghai, China

Conference code: 94966

Sponsor: Shanghai University; Shanghai University of Engineering Sciences; University of Kentucky

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: In the background of Internalization, business management shows the following four important features: standardization, internationalization, and modernization of management, with knowledge becoming the core asset of enterprises, with information becoming the core strategy, and the increase of comprehensiveness of business management. In this consideration', 'multiple qualities are necessary to business people, such as national sentiment and international attitude', 'national culture and international capabilities,

universalism of professional skill, and the capacity of innovation and development. Regarding the main problems in current business talent education, based on concepts of general education and overall capability, this paper proposes three training models, i.e., integration of classroom instruction and international contents, integration of practice education and international characteristics, and cultivation of innovation and development-oriented talents. © 2012 IEEE.

Number of references: 4

Main heading: Education

Uncontrolled terms: Business management - Business managers - Classroom instruction - Core asset - Core strategy - General education - internalization background - Multiple quality - National cultures - Professional skills - Training model

Classification code: 901.2 Education

DOI: 10.1109/BCGIN.2012.97

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

35.

Accession number: 20112614105180

Title: Analysis and suggestion on emergency evacuation refuge planning status in Qinhuangdao

Authors: Dong, Yanying¹ ; Zhang, Lishan¹ ; Xing, Yan¹ ; Xu, Shuyuan¹

Author affiliation:

1 Urban Construction College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Dong, Y. (dongyanying9436@163.com)

Source title: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011 - Proceedings

Abbreviated source title: Int. Conf. Electr. Technol. Civ. Eng., ICETCE - Proc.

Monograph title: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 4784-4786

Article number: 5776143

Language: Chinese

ISBN-13: 9781457702907

Document type: Conference article (CA)

Conference name: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011

Conference date: April 22, 2011 - April 24, 2011

Conference location: Lushan, China

Conference code: 85256

Sponsor: IEEE Beijing Section ED Chapter

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Construction of emergency evacuation refuge is a victims resettlement measures that the international community deal with emergency. In modern cities it is a safety shelter that people avoid major natural disasters and accidents such as earthquake, flood, fire, explosion etc. The post-disaster asylum action in Tangshan Earthquake, Wenchuan Earthquake and Yushu Earthquake show that the city must planning and construction evacuation refuge. The status of park and green space was investigated as major emergency evacuation refuge in Qinhuangdao. The problem in the emergency evacuation refuge planning process was analyzed. The suggestion to strengthen emergency evacuation refuge planning was put forward. © 2011 IEEE.

Number of references: 6

Main heading: Disaster prevention

Controlled terms: Civil engineering - Disasters - Earthquakes - Parks

Uncontrolled terms: Analysis and suggestions - Emergency evacuation - Green spaces - International community - Natural disasters - Refuge planning - status - suggestion - Wenchuan Earthquake

Classification code: 403.2 Regional Planning and Development - 409 Civil Engineering, General - 484

Seismology - 914.1 Accidents and Accident Prevention

DOI: 10.1109/ICETCE.2011.5776143

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

36.

Accession number: 20120914821822

Title: Application fuzzy simulation to evaluate option

Authors: Liu, Shu Xia¹ ; Chai, Zhao Hua¹ ; Hu, Jian Sheng¹ ; Zhao, Zhuo¹

Author affiliation:

1 Hebei Normal University of Science and Technology, QinHuangDao, China

Corresponding author: Liu, S.X. (xxglliushuxia@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 461

Monograph title: Advanced Building Materials and Structural Engineering

Issue date: 2012

Publication year: 2012

Pages: 802-805

Language: English

ISSN: 10226680

ISBN-13: 9783037853603

Document type: Conference article (CA)

Conference name: 2012 International Conference on Building Materials and Structural Engineering,

BMSE2012

Conference date: March 19, 2012 - March 20, 2012

Conference location: Wuhan, China

Conference code: 88731

Sponsor: Wuhan Institute of Technology; Beijing Material Research Center; International Material Research Society

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The current work attempts to evaluate the option from a novel perspective, fuzzy simulation technique, one of the evolutionary computational approaches. This paper proposes a random fuzzy jump-diffusion option pricing model, where the volatility and the jumps intensity are depicted as fuzzy variables, respectively. Fuzzy simulation technique is designed to estimate the membership degree and the expected value of the option. The rough figures of the expected value of option can be obtained. Finally, the application of the methodology is demonstrated by a numerical example. © (2012) Trans Tech Publications, Switzerland.

Number of references: 8

Main heading: Structural design

Controlled terms: Building materials

Uncontrolled terms: Computational approach - Expected values - Fuzzy simulation - Fuzzy variable - Jump-diffusion - Membership degrees - Numerical example - Option pricing - Option pricing models - Random fuzzy variable

Classification code: 408.1 Structural Design, General - 411 Bituminous Materials - 412 Concrete - 413 Insulating Materials - 414 Masonry Materials - 415 Metals, Plastics, Wood and Other Structural Materials

DOI: 10.4028/www.scientific.net/AMR.461.802

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

37.

Accession number: 20103313150232

Title: First-principles study of structural stabilities, electronic and elastic properties of BaF₂ under

high pressure

Authors: Yang, Xiaocui¹ ; Hao, Aimin^{2, 3} ; Wang, Xiaoming³ ; Liu, Xin³ ; Zhu, Yan^{2, 3}

Author affiliation:

1 Department of Physics, Baicheng Normal College, Baicheng 137000, China

2 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Hao, A. (aiminhao1991@yahoo.com.cn)

Source title: Computational Materials Science

Abbreviated source title: Comput Mater Sci

Volume: 49

Issue: 3

Issue date: September 2010

Publication year: 2010

Pages: 530-534

Language: English

ISSN: 09270256

CODEN: CMMSEM

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: A theoretical investigation on the structural stabilities, electronic and elastic properties of BaF₂ under high pressure is conducted using first-principles calculations based on density functional theory (DFT) with the plane wave basis set as implemented in the CASTEP code. Our results demonstrate that the sequence of the pressure-induced structure transition of BaF₂ is from the fluorite (β) structure to the PbCl₂-type (α) structure, to the Ni₂In-type (γ) structure. The transition pressures are 2.83 and 12.7 GPa, respectively. The energy gap increases with pressure in β and α structures, then begin to decrease in γ structure above 60 GPa. The band gap overlap metallization, however, does not occur up to 210 GPa. The pressure effect on the elastic properties of β -BaF₂ is investigated. © 2010 Elsevier B.V. All rights reserved.

Number of references: 28

Main heading: Structural properties

Controlled terms: Barium compounds - Density functional theory - Elasticity - Energy gap
- Organic polymers - Pressure effects - Stability

Uncontrolled terms: Band gaps - Elastic properties - First-principles calculation -
First-principles study - High pressure - High-pressure structures - Metallizations - Plane-wave basis
set - Pressure-induced structures - Structural stabilities - Theoretical investigations - Transition
pressure

Classification code: 931 Classical Physics; Quantum Theory; Relativity - 931.1 Mechanics - 931.3
Atomic and Molecular Physics - 922.1 Probability Theory - 931.4 Quantum Theory; Quantum Mechanics - 951
Materials Science - 961 Systems Science - 933.3 Electronic Structure of Solids - 815.1.1 Organic Polymers - 421
Strength of Building Materials; Mechanical Properties - 422 Strength of Building Materials; Test Equipment and
Methods - 712.1 Semiconducting Materials - 408 Structural Design - 731.4 System Stability - 804.1 Organic
Compounds - 804.2 Inorganic Compounds - 801 Chemistry

DOI: 10.1016/j.commatsci.2010.05.045

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

38.

Accession number: 20104313316840

Title: A property management system using WebGIS

Authors: Li, Yuxiang¹ ; Cao, Lijun¹ ; Qian, Ying¹ ; Shi, Wenchong¹ ; Liu, Aiyong¹

Author affiliation:

1 Department of Computer, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, Y. (lyx20040205@163.com)

Source title: ICCET 2010 - 2010 International Conference on Computer Engineering and Technology,
Proceedings

Abbreviated source title: ICCET - Int. Conf. Comput. Eng. Technol., Proc.

Volume: 2

Part number: 2 of 7

Monograph title: ICCET 2010 - 2010 International Conference on Computer Engineering and Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: V2683-V2685

Article number: 5485699

Language: English

ISBN-13: 9781424463503

Document type: Conference article (CA)

Conference name: 2010 2nd International Conference on Computer Engineering and Technology, ICCET 2010

Conference date: April 16, 2010 - April 18, 2010

Conference location: Chengdu, China

Conference code: 81865

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: With the help of WebGIS, through the analysis of design and implementation process in a practical property management information system, the implementation of real-time video monitoring, sensor monitoring alarming, multimedia network transmission technologies and the new development method of modern property management information system as well as the new integrated technology about its interface, function and complex data are systematically discussed and researched. This new development technology and method is created and applied, making the new realized system in holding the traditional property management functions, and also achieving expansions with new functions which a real-time monitoring, geographical data processing, security alarm etc. It is featured by advancement, practicality, visualization and automation. © 2010 IEEE.

Number of references: 15

Main heading: Management

Controlled terms: Data handling - Data visualization - Information systems - Knowledge

management - Management information systems - Network architecture - Software architecture -
Technology - Visualization

Uncontrolled terms: Data integration - MapX - MapXtreme - Property management -
Web-GIS

Classification code: 722 Computer Systems and Equipment - 723 Computer Software, Data Handling
and Applications - 901 Engineering Profession - 902.1 Engineering Graphics - 903.2 Information Dissemination -
912.2 Management

DOI: 10.1109/ICCET.2010.5485699

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

39.

Accession number: 20121114859267

Title: The application of cell material in tendon injuries for exercise training with biological
materials

Authors: Zhao, Hua En¹ ; Shen, Fei¹

Author affiliation:

1 Hebei Normal University of Science and Technology, China

Corresponding author: Zhao, H.E. (zhaohuaen@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 485

Monograph title: Advanced Research on Material Engineering and Its Application

Issue date: 2012

Publication year: 2012

Pages: 558-561

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037853740

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Information Science, Automation and Material System, ISAM 2012

Conference date: April 21, 2012 - April 22, 2012

Conference location: Changsha, China

Conference code: 88945

Sponsor: International Science and Education Researcher Association (ISER); Beijing Gireida Education Research Center; VIP-Information Conference Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Traditional tendon repair methods mainly used autogenous tendon transplantation and autogenous tendon transfer, but the development of two repair methods may be greatly limited due to the limited donor site and the added trauma. At the present time, the research on tissue-engineered tendon has made significant progress. The sources of seed cells for tendon repair cannot be limited to the autogenous tendon cells; we should make gene transformation to mechanocyte through gene chips method in order to resolve the problems related with sources of seed cells of tissue engineered tendon. The well-balanced mechanical stimulation is very important in tendon regeneration process. This stimulation on realignment of neonatal tendon collagen fibers and improve mechanical strength is necessary, which can guarantee implementation of early functional exercise, reducing tendon adhesion, and make tendon repair process into a virtuous circle. © (2012) Trans Tech Publications, Switzerland.

Number of references: 4

Main heading: Tendons

Controlled terms: Adhesion - Biological materials - Cell engineering - Cells - Cytology - Genes - Repair

Uncontrolled terms: Cell materials - Collagen fiber - Exercise injuries - Exercise training - Gene transformation - Genechips - Mechanical stimulation - Repair methods - Repair process - Seed cells - Tendon injuries - Tendon regeneration - Tendon tissue repair - Tendon transfer

Classification code: 461.1 Biomedical Engineering - 461.2 Biological Materials and Tissue Engineering
- 801 Chemistry - 913.5 Maintenance - 951 Materials Science

DOI: 10.4028/www.scientific.net/AMR.485.558

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

40.

Accession number: 20144900282517

Title: Evaluation and mechanism of antifungal effects of carbon nanomaterials in controlling plant fungal pathogen

Authors: Wang, Xiuping^{1, 2}; Liu, Xueqin¹; Chen, Juanni¹; Han, Heyou¹; Yuan, Zhaodong¹

Author affiliation:

1 State Key Laboratory of Agricultural Microbiology, College of Science, Huazhong Agricultural University, Wuhan, China

2 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Han, Heyou

Source title: Carbon

Abbreviated source title: Carbon

Volume: 68

Issue date: 2013

Publication year: 2013

Pages: 798-806

Language: English

ISSN: 00086223

CODEN: CRBNAH

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: The antifungal activity of six carbon nanomaterials (CNMs, single-walled carbon nanotubes (SWCNTs), multi-walled carbon nanotubes (MWCNTs), graphene oxide (GO), reduced graphene oxide (rGO), fullerene (C60) and activated carbon (AC)) against two important plant pathogenic fungi (*Fusarium graminearum* (*F. graminearum*) and *Fusarium poae* (*F. poae*)) was evaluated. SWCNTs were found to show the strongest antifungal activity, followed by MWCNTs, GO, and rGO, while C60 and AC showed no significant antifungal activity. The antifungal mechanism of CNMs was deduced to target the spores in three steps: (i) depositing on the surface of the spores, (ii) inhibiting water uptake and (iii) inducing plasmolysis.

Number of references: 34

Main heading: Single-walled carbon nanotubes (SWCN)

Controlled terms: Activated carbon - Fungi - Graphene - Multiwalled carbon nanotubes (MWCN) - Nanostructured materials - Yarn

Uncontrolled terms: Anti-fungal activity - Antifungal effect - Carbon nano-materials - *Fusarium graminearum* - Graphene oxides - Plant pathogenic fungus - Reduced graphene oxides (RGO) - Single-walled carbon nanotube (SWCNTs)

Classification code: 461.9 Biology - 761 Nanotechnology - 804 Chemical Products Generally - 819.4 Fiber Products

DOI: 10.1016/j.carbon.2013.11.072

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

41.

Accession number: 20104813422813

Title: Exploring node context meaning in XML keyword query

Authors: Zhang, Shuai1 ; Pei, Caiyan1 ; Zeng, Xiaoning1 ; Lin, Xudong2

Author affiliation:

- 1 Department of Computer, Hebei Normal University of Science and Technology, Qinhuangdao Hebei, China
- 2 School of Computer and Information Technology, Beijing Jiaotong University, Beijing, China

Corresponding author: Zhang, S.

Source title: Proceedings - 2010 7th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2010

Abbreviated source title: Proc. - Int. Conf. Fuzzy Syst. Knowl. Discov., FSKD

Volume: 5

Part number: 5 of 6

Monograph title: Proceedings - 2010 7th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2010

Issue date: 2010

Publication year: 2010

Pages: 2004-2007

Article number: 5569652

Language: English

ISBN-13: 9781424459346

Document type: Conference article (CA)

Conference name: 2010 7th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2010

Conference date: August 10, 2010 - August 12, 2010

Conference location: Yantai, Shandong, China

Conference code: 82352

Sponsor: Yantai University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: As a practical and efficient technique to access XML data, keyword query approaches should address two main problems: enable users to express their query intentions accurately and provide matching algorithms to realize users' query intentions faithfully. Most of the existing researches concentrate on the second problem and the first one is always neglected. In this paper, we propose a novel XML keyword query algorithm.

In the first phase of the algorithm, users can select the suitable context meanings of the keyword matching nodes to match their query intentions, and the eligible keyword matching nodes will be found in the second phase to return more accurate query results. ©2010 IEEE.

Number of references: 10

Main heading: XML

Controlled terms: Algorithms - Fuzzy sets - Query processing

Uncontrolled terms: Context meaning - Key word matching - Keyword queries -
Matching algorithm - Query results - Second phase - XML data

Classification code: 723 Computer Software, Data Handling and Applications - 921 Mathematics

DOI: 10.1109/FSKD.2010.5569652

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

42.

Accession number: 20113514288333

Title: RETRACTED ARTICLE: Thinking of teaching dialectical materialism in the ideological and political theory courses

Authors: Liu, Yandong¹ ; Yao, Jian-Shu¹ ; Heng, Shi¹

Author affiliation:

¹ Department of Arts and Humanities, E and A College, Hebei Normal University of Science and Technology, Qin Huang Dao, China

Corresponding author: Liu, Y.

Source title: BMEI 2011 - Proceedings 2011 International Conference on Business Management and Electronic Information

Abbreviated source title: BMEI - Proc. Int. Conf. Bus. Manage. Electron. Inf.

Volume: 3

Monograph title: BMEI 2011 - Proceedings 2011 International Conference on Business Management

and Electronic Information

Issue date: 2011

Publication year: 2011

Pages: 470-472

Article number: 5920496

Language: English

ISBN-13: 9781612841069

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: Dialectical materialism is a kind of science about the common rule that nature, society and thoughts of human beings develop, and is the fundamental method for people understand the world and change it. It is urgent for the college education in ideology and politics to use the method to solve some related questions. Dialectical materialism has methodological significance to college education in ideology and politics. This paper made a brief analysis on the application of dialectical materialism in teaching in college education in ideology and politics. © 2011 IEEE.

Number of references: 6

Main heading: Teaching

Uncontrolled terms: College education - Dialectical materialism - dialectics - Human being - ideology and political education

Classification code: 901.2 Education

DOI: 10.1109/ICBMEI.2011.5920496

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

43.

Accession number: 20113814340170

Title: Undergraduate accounting major's main curriculum's situation survey

Authors: Huixin, Jin1 ; Rui, Zhao1 ; Yanzhen, Guo1 ; Guohong, Li1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Huixin, J. (inword20@163.com)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 231 CCIS

Part number: 1 of 6

Issue: PART 1

Monograph title: Innovative Computing and Information - International Conference, ICCIC 2011, Proceedings

Issue date: 2011

Publication year: 2011

Pages: 248-254

Language: English

ISSN: 18650929

ISBN-13: 9783642239922

Document type: Conference article (CA)

Conference name: 2011 International Conference on Computing, Information and Control, ICCIC 2011

Conference date: September 17, 2011 - September 18, 2011

Conference location: Wuhan, China

Conference code: 86451

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Through investigation in our country's undergraduate accounting major's main curriculum and lessons time arrangement's status, we have a better understanding on undergraduate accounting major's main curriculum and lessons time arrangement's status as well as problems. On this basis, we make an effective analysis on current our country's undergraduate accounting major's main curriculum and lessons time. © 2011 Springer-Verlag.

Number of references: 3

Main heading: Curricula

Uncontrolled terms: Effective analysis - experimental hours - On currents

Classification code: 901.2 Education

DOI: 10.1007/978-3-642-23993-9_37

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

44.

Accession number: 20122615179813

Title: Design of performance appraisal system for the branch of commercial bank

Authors: Guo, Yanzheng¹ ; Zhao, Rui¹

Author affiliation:

¹ Hebei Normal University of Science and Technology, 066004 Qinhuangdao, China

Corresponding author: Guo, Y. (yanzhengguo123@126.com)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 4

Issue: 10

Issue date: June 2012

Publication year: 2012

Pages: 75-83

Language: English

ISSN: 19763700

E-ISSN: 22339345

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: According to the study of performance management systems in domestic and foreign commercial banks and application status and development trends of this system, combined with the actual demand of a certain branch of the commercial bank, the writer has analyzed of the feasibility and necessity of the design of performance appraisal management system. Focus on the design of architecture and functional module design of the performance appraisal system. The construction of the Performance appraisal system of commercial banks uses the internal network as a platform, achieves the combination of the organizations networks and information networks, and the combination of advanced and practical, to establish a head office production system to collect data as data sources, through the branch performance appraisal system drill the derived indicators, data imputation, etc., to determine primary assessment data of the whole performance management, so that performance evaluation of bank staffs would has a scientific and reliable foundation.

Number of references: 8

Main heading: Information management

Controlled terms: Commerce - Design - Information services - Office buildings

Uncontrolled terms: Application status - Commercial bank - Data imputation - Data source - Development trends - Functional module design - Information networks - Internal network - Management systems - Performance appraisal - Performance appraisal system - Performance evaluation - Performance management - Performance management systems - Production system

Classification code: 402.2 Public Buildings - 408 Structural Design - 903.2 Information Dissemination - 903.4 Information Services - 911.2 Industrial Economics

DOI: 10.4156/AISS.vol4.issue10.10

Database: Compendex

45.

Accession number: 20103513191058

Title: Laminar cooling model of hot rolled based on taylor formula

Authors: Wang, Haifang¹ ; Rong, Yu¹ ; Cui, Jinhua¹ ; Liu, Shengtao¹

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Qinhuangdao, China

Corresponding author: Wang, H. (hfwang0335@126.com)

Source title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Abbreviated source title: Int. Conf. Comput. Des. Appl., ICCDA

Volume: 4

Part number: 4 of 5

Monograph title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Issue date: 2010

Publication year: 2010

Pages: V45-V48

Article number: 5541396

Language: English

ISBN-13: 9781424471638

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Conference date: June 25, 2010 - June 27, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 81482

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT); Institute of Electrical and Electronics Engineers (IEEE); Northeastern University at Qinhuangdao (NEUQ); Dalian University of Technology; National Natural Science Foundation of China (NSFC)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Laminar cooling is one important part of control cooling in hot rolling mill, and coiling temperature is one important parameter of performance of hot strip. Aim of laminar cooling is to make hot rolled strip from high finishing roll temperature to requested coiling temperature. The linear analytical model is kernel in the general laminar cooling control. It presents laminar cooling system and its original mathematic model of someone rolling mill. A one-time analytical laminar cooling control model is built based on the Taylor formula on consideration of its accuracy shortcomings, and its feed-backward and self-learning model are brought forward too. The offline simulation results show this model meeting field requirements. © 2010 IEEE.

Number of references: 7

Main heading: Mathematical models

Controlled terms: Computer simulation - Cooling - Hot rolling - Hot rolling mills - Metal working - Milling machines

Uncontrolled terms: Coiling temperature - Hot-rolled - Laminar cooling - Mathematics model - Taylor formula

Classification code: 535 Rolling, Forging and Forming - 603.1 Machine Tools, General - 641.2 Heat Transfer - 723.5 Computer Applications - 921 Mathematics

DOI: 10.1109/ICCDA.2010.5541396

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

46.

Accession number: 20122115051020

Title: Research on the science and technology innovation ability of undergraduates based on the fuzzy evaluation approach

Authors: Lidong, Chen1 ; Ma, Shuying1 ; Lei, Shi1 ; Feng, Lizhen1 ; Zheng, Lixin1 ; Li, Guofang1 ; Zhang, Liang1

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Ma, S. (lfdj175@sogou.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 116 AISC

Issue: VOL. 1

Monograph title: Advanced Technology in Teaching - Proceedings of the 2009 3rd International Conference on Teaching and Computational Science, WTCS 2009

Issue date: 2012

Publication year: 2012

Pages: 505-512

Language: English

ISSN: 18675662

ISBN-13: 9783642112751

Document type: Conference article (CA)

Conference name: 2009 3rd International Conference on Teaching and Computational Science, WTCS 2009

Conference date: December 19, 2009 - December 20, 2009

Conference location: Shenzhen, China

Conference code: 89727

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Based on establishing scientific and rational science and technology innovation ability evaluating index system of the university student, a fuzzy comprehensive evaluation approach of the university student innovation ability synthetic evaluation has been established through establishing and weighing the

evaluation index set, the index weight, the reviews set, the membership matrix and fuzzy comprehensive evaluation vectors. The method has overcome the shortcoming which the sole assessment method exists. And verifies through example, we provided one kind of newly and feasible method for synthetic evaluating innovation ability of university students. © 2012 Springer-Verlag Berlin Heidelberg.

Number of references: 6

Main heading: Innovation

Controlled terms: Fuzzy set theory - Students - Technology

Uncontrolled terms: Assessment methods - Evaluating index system - Evaluation index - Evaluation Method - Fuzzy comprehensive evaluation - Fuzzy evaluation - Index weight - Innovation abilities - Membership matrix - Science and Technology - Synthetic evaluation - undergraduates - University students

Classification code: 901 Engineering Profession - 901.2 Education - 912 Industrial Engineering and Management - 912.4 Personnel - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.1007/978-3-642-11276-8_66

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

47.

Accession number: 20141017420621

Title: The application of face recognition method in the cartoon industry based on sensor technology

Authors: Jing, Cao¹ ; Lijun, Cao¹ ; Min, Liu¹

Author affiliation:

¹ Mathematics and Information of Science and Technology, Hebei Normal University of Science and Technology, 360 Hebei Street (W), Haigang District, Qin Huangdao, China

Source title: Sensors and Transducers

Abbreviated source title: Sensors Transducers

Volume: 161

Issue: 12

Issue date: 2013

Publication year: 2013

Pages: 631-637

Language: English

E-ISSN: 17265479

Document type: Journal article (JA)

Publisher: International Frequency Sensor Association, 46 Thorny Vineway, Toronto, ON M2J 4J2, Canada

Abstract: The artistic style drawing research of face image is an important task in portrait processing field, which has an important scientific significance and practical value. This paper proposes several face recognition stylize methods based on sensor technology. It starts from multi-sensor image fusion technology, the face recognition method based on decision-based fusion of CCD image and red holograms; using correlative image sensor to build three-dimensional face imaging system; the face recognition based on sensor technology and ASM algorithm, as well as the combination of ODVS and several PTZ devices to realize face recognition methods, which getting widely used on the aspect of cartoon image making and animation style design. © 2013 IFSA.

Number of references: 6

Main heading: Face recognition

Controlled terms: Animation - Sensors - Technology

Uncontrolled terms: Cartoon images - Decision-based - Face images - Face recognition methods - Industry based - Multi sensor images - Sensor technologies - Style designs

Classification code: 716 Telecommunication; Radar, Radio and Television - 723.5 Computer Applications - 801 Chemistry - 901 Engineering Profession

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20110413620814

Title: Magnetic fields and temperature dependences of ground state energy of magnetopolaron in quantum rod

Authors: Eerdunchaolu1 ; Wuyunqimuge2 ; Baorima3

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao 028043, China

3 Department of Mathematics and Physics, China University of Petroleum, Beijing 102249, China

Corresponding author: Eerdunchaolu

Source title: Zhongguo Shiyou Daxue Xuebao (Ziran Kexue Ban)/Journal of China University of Petroleum (Edition of Natural Science)

Abbreviated source title: Zhongguo Shiyou Daxue Xuebao (Ziran Kexue Ban)

Volume: 34

Issue: 6

Issue date: December 2010

Publication year: 2010

Pages: 177-180

Language: Chinese

ISSN: 16735005

Document type: Journal article (JA)

Publisher: University of Petroleum, China, Shandong, Dongying 257061, 257062, China

Abstract: Magnetic fields and temperature dependences of the ground state energy of the magnetopolaron in a quantum rod were studied based on Huybrechts-Lee-Low Pines variational method. The results show that the absolute value of the ground state energy of the magnetopolaron increases with the temperature parameter and the strength of the electron-phonon coupling increasing, but decreases with the cyclotron frequency of the magnetic fields and the effective confinement strength of the quantum rod increasing. The dependence of the ground state energy of the magnetopolaron on the aspect ratio of the quantum rod shows a v-shaped curve, and is greatly influenced by temperature.

Number of references: 18

Main heading: Quantum theory

Controlled terms: Aspect ratio - Ground state - Magnetic fields - Ordinary differential equations - Phonons - Temperature distribution

Uncontrolled terms: Absolute values - Confinement strength - Cyclotron frequency - Electron phonon couplings - Ground-state energies - Magnetopolarons - Quantum rod - Temperature dependence - Temperature parameters - V-shaped curve - Variational methods

Classification code: 933 Solid State Physics - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 931.4 Quantum Theory; Quantum Mechanics - 943 Mechanical and Miscellaneous Measuring Instruments - 931.3 Atomic and Molecular Physics - 701.2 Magnetism: Basic Concepts and Phenomena - 641.1 Thermodynamics - 921.2 Calculus

DOI: 10.3969/j.issn.1673-5005.2010.06.034

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

49.

Accession number: 20122115054821

Title: The information interaction platform development of sports teaching theory course based on internet

Authors: Wang, Yukuo¹ ; Ji, Yapin² ; Dong, Lishu¹

Author affiliation:

1 Department of Physical Education, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Department of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Wang, Y. (wyk3003@126.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 133 AISC

Monograph title: Frontiers in Computer Education

Issue date: 2012

Publication year: 2012

Pages: 145-150

Language: English

ISSN: 18675662

ISBN-13: 9783642275517

Document type: Conference article (CA)

Conference name: 2011 International Conference on Frontiers in Computer Education, ICFCE 2011

Conference date: December 1, 2011 - December 2, 2011

Conference location: Macao, China

Conference code: 89871

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: In order to realize the information-based teaching of sports teaching theory course, improve the teaching quality and reform the traditional teaching mode, this essay proposes to set up the information interaction platform, which contains the details that the WEB solution provided by IIS (Internet Information Serv2er) of Windows XP is taken as the developing environment, various materials required by the system are collected, dynamic internet developing tools such as Dreamweaver, Flash, ASP etc. are used to integrate all kinds of sports teaching theory course material systems according to the requirements, dynamic hypertext format is taken as information platform basis, and the sports teaching theory course information is provided to the users by the way of Internet information interaction. The study shows that the data of sports teaching theory course information interaction platform have the features of integration, control and interaction, and this platform has the functions of knowledge diagnosis, online interaction, dynamic management, aided teaching and network distance teaching. The study finds out that the design scheme of the information interaction platform of sports teaching theory course based on Internet could effectively realize the interconnection, interworking and sharing of educational resources and meet the demands of education informalization development. © 2012 Springer-Verlag GmbH Berlin Heidelberg.

Number of references: 6

Main heading: Information management

Controlled terms: Curricula - Distance education - Internet - Multimedia systems - Networks (circuits) - SportS

Uncontrolled terms: Course information - Course material - Design scheme - Dynamic hypertext - Dynamic management - Educational resource - Information interaction - Information platform - Internet information - Interworking - Multimedia technologies - Network distance - Online interaction - Teaching quality - Web solutions - Windows XP

Classification code: 901.2 Education - 723.5 Computer Applications - 723 Computer Software, Data Handling and Applications - 903.2 Information Dissemination - 718 Telephone Systems and Related Technologies; Line Communications - 716 Telecommunication; Radar, Radio and Television - 703.1 Electric Networks - 717 Optical Communication

DOI: 10.1007/978-3-642-27552-4_23

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

50.

Accession number: 20112914158539

Title: Development of optimization design software for bevel gear based on integer serial number encoding genetic algorithm

Authors: Zhang, Xiaoqin¹ ; Rong, Yu¹ ; Yu, Jingjing¹ ; Zhang, Liling¹ ; Cui, Lina¹

Author affiliation:

¹ Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, X. (zxqwlc@163.com)

Source title: Journal of Software

Abbreviated source title: J. Softw.

Volume: 6

Issue: 5

Issue date: 2011

Publication year: 2011

Pages: 915-922

Language: English

ISSN: 1796217X

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40, FIN-90571, OULU, 90571, Finland

Abstract: Bevel gear drive is widely used, quality of which not only affects its own transmission performance, size and weight, but also has some impact on the machine's performance. This paper introduces optimization design software for bevel gear, in which automatic optimization design is realized. In the paper mathematical model, programming of design data and realization of optimization design based on genetic algorithm are described in detail. The paper proposed integer serial number encoding genetic algorithm, which effectively deals with continuous and discrete variable optimization problem and reduces the code length of the string to improve the encoding and decoding efficiency, no invalid solution or duplicate solutions. © 2011 ACADEMY PUBLISHER.

Number of references: 10

Main heading: Software design

Controlled terms: Bevel gears - Design - Encoding (symbols) - Genetic algorithms - Mathematical models - Mathematical programming

Uncontrolled terms: Automatic optimization - Code length - Design data - Discrete variables - Encoding and decoding - Optimization design - Optimization problems - Penalty function - Serial number - Transmission performance

Classification code: 408 Structural Design - 601.2 Machine Components - 723 Computer Software, Data Handling and Applications - 921 Mathematics - 922 Statistical Methods

DOI: 10.4304/jsw.6.5.915-922

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20110313602497

Title: The problems and the countermeasures of college English writing teaching

Authors: Yapin, Ji1 ; Haiying, Cui1 ; Yukuo, Wang2

Author affiliation:

1 Foreign Language College, Hebei Normal University of Science and Technology, Qinhuangdao City, Hebei Province, China

2 PE Department, Hebei Normal University of Science and Technology, Qinhuangdao City, Hebei Province, China

Corresponding author: Yapin, J. (alicejyp@163.com)

Source title: ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings

Abbreviated source title: ICEMT - Int. Conf. Educ. Manage. Technol., Proc.

Monograph title: ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 574-577

Article number: 5657591

Language: English

ISBN-13: 9781424486175

Document type: Conference article (CA)

Conference name: 2010 International Conference on Education and Management Technology, ICEMT 2010

Conference date: November 2, 2010 - November 4, 2010

Conference location: Cairo, Egypt

Conference code: 83348

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: English writing is one basic skill of English learning and teachers always pay much attention to it, but there are still a lot of problems existing in students' writing. They always commit many mistakes without enough awareness. This paper aims to find out students' typical mistakes and identify the main reasons of problems in their writing and then find out the countermeasures to help them improve their writing. As a college English teacher, the author made adequate researches among 124 freshmen and sophomores from four different classes, and collected 124 writings submitted by them, then analyzed their mistakes to identify the specific problems in writing by using the methods of documentary and mathematical statistics. After analyzing, the author found out that there were mainly four kinds of mistakes in their papers: morphology mistakes, syntax mistakes, stylistic mistakes and structure mistakes. To these four key mistakes, the author presents four kinds of countermeasures respectively as the result: strengthening their word basis, stressing grammar training, giving them enough stylistic knowledge and having outline training in writing class. Since the papers coming from 124 students from different majors and different grades, these mistakes are representatives, so the countermeasures could basically solve the problems in college English writing, and appropriately applying these measures in English teaching classes will effectively improve students' writing abilities. © 2010 IEEE.

Number of references: 5

Main heading: Students

Controlled terms: Problem solving - Statistics - Teaching

Uncontrolled terms: Analysis - College English writing - Countermeasures - English Learning - English teaching - Mathematical statistics - Problems - Specific problems - Writing abilities

Classification code: 901.2 Education - 921 Mathematics - 922.2 Mathematical Statistics

DOI: 10.1109/ICEMT.2010.5657591

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

52.

Accession number: 20104813441556

Title: Nonconforming finite element method for nonlinear parabolic equations

Authors: Yin, Hongwu1 ; Zhang, Buying2 ; Liu, Qiumei3

Author affiliation:

- 1 Math and Information College, Hebei Normal University of Science and Technology, Hebei, Qinhuangdao, 066004, China
- 2 E and A College, Hebei Normal University of Science and Technology, Hebei, Qinhuangdao, 066004, China
- 3 College of Science, Hebei Polytechnic University, Hebei, Tangshan, 063009, China

Corresponding author: Yin, H. (yin_hongwu2007@163.com)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 106 CCIS

Part number: 2 of 2

Issue: PART 2

Monograph title: Information Computing and Applications - International Conference, ICICA 2010, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 491-498

Language: English

ISSN: 18650929

ISBN-10: 3642163386

ISBN-13: 9783642163388

Document type: Conference article (CA)

Conference name: International Conference on Information Computing and Applications, ICICA 2010

Conference date: October 15, 2010 - October 18, 2010

Conference location: Tangshan, China

Conference code: 82500

Sponsor: National Science Foundation of China; Hunan Institute of Engineering

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: In this paper, we consider a nonconforming finite element method for the nonlinear parabolic equations which has the superiority in computation compared with the conforming ones. The convergence analysis is discussed by making use of the particular characteristics of the finite element and the interpolation theorem, without recurring to the Ritz projection technique which can be explained as the main way of dealing with the convergence analysis for nonlinear parabolic equations. The optimal error estimates in $L^2(\Omega)$ and $L^2(\cdot|\cdot|_1, h)$ are obtained, where $|\cdot|_1, h$ is a norm on the discrete space. © 2010 Springer-Verlag.

Number of references: 15

Main heading: Nonlinear equations

Controlled terms: Finite element method - Optimization - Partial differential equations

Uncontrolled terms: Convergence analysis - Discrete spaces - Finite Element - Nonconforming finite element - Nonconforming finite element method - Nonlinear parabolic equations - optimal error estimate - Ritz projection

Classification code: 921 Mathematics

DOI: 10.1007/978-3-642-16339-5_65

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

53.

Accession number: 20130716024290

Title: A MPF based distributed method for mobile robot and wireless sensor nodes simultaneous localization

Authors: Kong, Liang1, 2, 3 ; Kong, Lingfu2 ; Wu, Peiliang2 ; Li, Yuerong1

Author affiliation:

1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Information Science and Engineering, Yanshan University, Qinhuangdao 066004, China

3 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Kong, L. (kongliangouc@yahoo.com.cn)

Source title: Chinese Control Conference, CCC

Abbreviated source title: Chinese Control Conf., CCC

Monograph title: Proceedings of the 31st Chinese Control Conference, CCC 2012

Issue date: 2012

Publication year: 2012

Pages: 4895-4899

Article number: 6390789

Language: Chinese

ISSN: 19341768

E-ISSN: 21612927

ISBN-13: 9789881563811

Document type: Conference article (CA)

Conference name: 31st Chinese Control Conference, CCC 2012

Conference date: July 25, 2012 - July 27, 2012

Conference location: Hefei, China

Conference code: 95448

Sponsor: Technical Committee on Control Theory, CAA; Systems Engineering Society of China; University of Science and Technology of China; Academy of Mathematics and Systems Science, CAS; China Society for Industrial and Applied Mathematics

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: A MPF based distributed method for mobile robot and wireless sensor nodes simultaneous localization is proposed to solve the problem that localization based on the simple particle filter suffers from severe sample degeneracy. In the proposed method, the proposal distribution of each particle is estimated by UKF, and the observations between wireless sensor nodes are used to estimate a sensor node's location. Simulation

results show that the proposed method can increase the sample variety and reduce sample degeneracy, and is much more accurate, compared with distributed localization based on the simple particle filter. Moreover, the estimation accuracy of the proposed method is still good with few sample. Therefore, it is feasible to improve the computational efficiency by reducing the number of particles. © 2012 Chinese Assoc of Automati.

Number of references: 7

Main heading: Sensor nodes

Controlled terms: Mobile robots - Monte Carlo methods - Target tracking

Uncontrolled terms: Distributed localization - Distributed methods - Marginal particle filter
- Particle filter - Proposal distribution - Simultaneous Localization - Unscented Kalman Filter -
Wireless sensor node

Classification code: 716.2 Radar Systems and Equipment - 722 Computer Systems and Equipment -
731.5 Robotics - 922.2 Mathematical Statistics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

54.

Accession number: 20133616687721

Title: A game model of knowledge sharing in logistic alliance

Authors: Zhang, Xiangdong¹ ; Hu, Jiansheng¹

Author affiliation:

¹ School of Business Management, HeBei Normal University of Science and Technology, Hebei Qinhuangdao
066004, China

Corresponding author: Zhang, X. (zhangxd452@163.com)

Source title: LISS 2012 - Proceedings of 2nd International Conference on Logistics, Informatics and
Service Science

Abbreviated source title: LISS - Proc. Int. Conf. Logist., Informatics Serv. Sci.

Monograph title: LISS 2012 - Proceedings of 2nd International Conference on Logistics, Informatics
and Service Science

Issue date: 2013

Publication year: 2013

Pages: 771-776

Language: English

ISBN-13: 9783642320538

Document type: Conference article (CA)

Conference name: 2nd International Conference on Logistics, Informatics and Service Science, LISS 2012

Conference date: July 12, 2012 - July 15, 2012

Conference location: Beijing, China

Conference code: 98629

Sponsor: National Natural Science Foundation of China (NSFC); K.C. Wong Education Foundation; Springer; The University of Reading

Publisher: Springer Netherlands, Van Godewijkstraat 30, Dordrecht, 3311 GZ, Netherlands

Abstract: Knowledge sharing as an important mechanism in logistic alliance, has become a main reason to acquire strong competitive ability and a key factor to success for logistic alliance. This paper presents a game-theoretic method for analyzing the knowledge sharing behaviors of enterprises in logistic alliance. Firstly, the related researches are reviewed. Then two main repeated models under the condition of perfect information and imperfect information are established to analyze the mechanism of knowledge sharing in logistic alliance. Finally, we get some conclusions, and some suggestions are proposed. © Springer-Verlag Berlin Heidelberg 2013.

Number of references: 9

Main heading: Knowledge management

Controlled terms: Information science

Uncontrolled terms: Competitive ability - Game models - Game-theoretic - Imperfect information - Key factors - Knowledge-sharing - Perfect informations - Repeated games

Classification code: 903 Information Science - 903.3 Information Retrieval and Use

DOI: 10.1007/978-3-642-32054-5_108

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

55.

Accession number: 20120914817690

Title: Design strategy of coal mine gas sensor

Authors: Zhuang, Cheng¹ ; Fu, Changqing¹ ; Wang, Hongyan¹ ; Li, Liyan² ; Zhuang, Siming³

Author affiliation:

1 Hebei Normal University of Science and Technology, China

2 Qinhuangdao Institute of Technology, China

3 Harbin Power Plant Equipment Corporation (Qinhuangdao) Heavy Equipment Co., Ltd., China

Corresponding author: Zhuang, C. (chengz2004@126.com)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 4

Issue: 2

Issue date: February 2012

Publication year: 2012

Pages: 16-23

Language: English

ISSN: 19763700

E-ISSN: 22339345

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: In this paper we analyze the detection principle and formation of coal mine gas sensor currently used in China by focusing on carrier catalysis type gas detector, which probably leads to high temperature sintering when detecting high concentrated gas. In this case the sensitivity of the sensor and the accuracy of measurement will decrease. This article presents a new detecting method, which use constant pressure test and the built-in CAN(Control Area Network) controller for High-Speed Microcontroller P87C591 to realize stable detection and effective data transmission. The new gas detector has advantages of low energy consumption, high sensitivity, and high accuracy. It also has large signals output and good linearity, which benefits the signal processing and display, as well as simplifies the structure of circuit and instrument. This gas detector can reduce the influence of variance of temperature and carbon dioxide range in the measuring environment, and solve the existed issues in the traditional gas detector fundamentally.

Number of references: 9

Main heading: Gas detectors

Controlled terms: Carbon dioxide - Carrier communication - Catalysis - Coal mines - Data communication systems - Energy utilization - Signal processing

Uncontrolled terms: CAN bus - Constant pressures - Control area network - Design strategies - Detecting methods - Gas sensor - High sensitivity - High-speed - High-temperature sintering - Large-signals - Low energy consumption - Mine gas

Classification code: 804.2 Inorganic Compounds - 802.2 Chemical Reactions - 801 Chemistry - 723 Computer Software, Data Handling and Applications - 718 Telephone Systems and Related Technologies; Line Communications - 717 Optical Communication - 716.1 Information Theory and Signal Processing - 716 Telecommunication; Radar, Radio and Television - 525.3 Energy Utilization - 522 Gas Fuels - 503.1 Coal Mines

DOI: 10.4156/AISS.vol4.issue2.3

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

56.

Accession number: 20105013482596

Title: RETRACTED ARTICLE: Research for rhymnastics gymnastics education theory

Authors: Li, Rongwei¹ ; Zhang, Xuyao¹ ; Liu, Daduo² ; Li, Shugang¹ ; Zhang, Xianhui¹

Author affiliation:

¹ Department of Physical Education, Hebei Normal University of Science and Technology, Qin Huangdao, China

2 Physical Education College, Jilin Normal University, Siping, China

Corresponding author: Li, R. (sunny8026@sohu.com)

Source title: ICEIT 2010 - 2010 International Conference on Educational and Information Technology, Proceedings

Abbreviated source title: ICEIT - Int. Conf. Educ. Inf. Technol., Proc.

Volume: 2

Monograph title: ICEIT 2010 - 2010 International Conference on Educational and Information Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: V2117-V2120

Article number: 5607511

Language: English

ISBN-13: 9781424480340

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: This paper describes a method of documentation, aiming at the trend of rhythmic gymnastics education which pays more attention to exercise rather than education, the authors discussed the ideology, theory, and mode of rhythmic gymnastics education. Rhythmic gymnastics proposed future educational system is the study of humanities and science education in fusion theory, the idea of artistic gymnastics and cultural composition, which behaves humanity and science to blend constitutes its theories system to provide a theories basis. © 2010 IEEE.

Number of references: 7

Main heading: Education

Controlled terms: Information technology

Uncontrolled terms: Educational systems - Fusion theory - Gymnastics education - Humanity - Rhythmic gymnastics - Science - Science education

Classification code: 901.2 Education - 903 Information Science

DOI: 10.1109/ICEIT.2010.5607511

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

57.

Accession number: 20124615665184

Title: Ge adsorption on Ag(111): A density-functional theory investigation

Authors: Zhu, Y.1, 2 ; Zhang, X.Y.1 ; Zhang, S.H.1 ; Yang, J.K.1 ; Han, C.2 ; Hao, A.M.2 ; Liu, R.P.1

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, HeBei Street, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, R.P. (riping@ysu.edu.cn)

Source title: Solid State Sciences

Abbreviated source title: Solid State Sci.

Volume: 14

Issue: 10

Issue date: October 2012

Publication year: 2012

Pages: 1480-1485

Language: English

ISSN: 12932558

CODEN: SSSCFJ

Document type: Journal article (JA)

Publisher: Elsevier Masson SAS, 62 rue Camille Desmoulins, Issy les Moulineaux Cedex, 92442, France

Abstract: First-principles density-functional theory has been used to investigate the adsorptions of Ge on Ag(111) surfaces for a wide range of coverage. Preferred adsorption sites, adsorption energies, surface structures, and the electronic properties are studied. Our results show that adsorption on the surface in fcc-sites is energetically favorable. The adsorption energies decrease as increasing Ge atoms, while the work functions of Ag surface decrease. The contour maps of the difference charge show that there exists covalent bonding in lower coverage systems to some extent for Ge on Ag(111) surface, and the interaction of Ge and Ag atoms becomes weaker with the increase of adsorption degree. The calculated density of states indicates that the adsorption structures have metallic character, while the number of electron transition is small and the interaction is not strong between Ge and Ag atoms. © 2012 Elsevier Masson SAS. All rights reserved.

Number of references: 28

Main heading: Adsorption

Controlled terms: Atoms - Calculations - Carrier concentration - Density functional theory - Electron transitions - Electronic properties - Germanium - Silver - Work function

Uncontrolled terms: Adsorption energies - Adsorption site - Adsorption structures - Ag atoms - Ag(111) surface - Contour map - Covalent bonding - Density of state - First-principles calculation - Ge atom

Classification code: 931.2 Physical Properties of Gases, Liquids and Solids - 921 Mathematics - 804 Chemical Products Generally - 931.3 Atomic and Molecular Physics - 802.3 Chemical Operations - 721 Computer Circuits and Logic Elements - 547.1 Precious Metals - 723 Computer Software, Data Handling and Applications

DOI: 10.1016/j.solidstatesciences.2012.08.021

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

58.

Accession number: 20111013723054

Title: Hot strip laminar cooling control based on rough set

Authors: Wang, Haifang¹ ; Cui, Jinhua¹ ; Liu, Shengtao¹

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Qinhuangdao, China

Corresponding author: Wang, H. (hfwang0335@126.com)

Source title: Proceedings - International Conference on Electrical and Control Engineering, ICECE 2010

Abbreviated source title: Proc. - Int. Conf. Electr. Control Eng., ICECE

Monograph title: Proceedings - International Conference on Electrical and Control Engineering, ICECE 2010

Issue date: 2010

Publication year: 2010

Pages: 5246-5249

Article number: 5631338

Language: Chinese

ISBN-13: 9780769540313

Document type: Conference article (CA)

Conference name: International Conference on Electrical and Control Engineering, ICECE 2010

Conference date: June 26, 2010 - June 28, 2010

Conference location: Wuhan, China

Conference code: 84009

Sponsor: IEEE IAS Society; Huazhong University of Science and Technology; Wuhan University of Science and Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: On the basis of the datum of laminar cooling, rough control on laminar cooling process is brought forward. By the rough set theory, the decision-making table, which includes the diagnostic state and the corresponding control strategy of operator in the laminar cooling control of hot rolling, is reduced. And the rough control rules on the laminar cooling are get. The simulation shows the rules can apply on the laminar cooling

control, and the application of the rough set can get fast the feedforward control number of water section (number of water valve) in the laminar cooling. © 2010 IEEE.

Number of references: 5

Main heading: Process control

Controlled terms: Cooling - Decision making - Decision tables - Decision theory - Electrical engineering - Feedforward control - Hot rolling - Metal working - Rough set theory

Uncontrolled terms: Control rules - Control strategies - Hot strips - Laminar cooling - Laminar cooling process - Rough control - Rough set

Classification code: 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 921 Mathematics - 912.2 Management - 731 Automatic Control Principles and Applications - 961 Systems Science - 723.1 Computer Programming - 641.2 Heat Transfer - 535.2.2 Metal Forming Practice - 535.1.2 Rolling Mill Practice - 709 Electrical Engineering, General

DOI: 10.1109/ICECE.2010.1273

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

59.

Accession number: 20121114853161

Title: Isomorphism identification of kinematic chain topology embryonic graphs

Authors: Ding, Ling¹ ; Lu, Yi² ; Cui, Wei³

Author affiliation:

- 1 College of Information Science and Engineering, Yanshan University, Qinhuangdao 066004, China
- 2 College of Mechanical Engineering, Yanshan University, Qinhuangdao 066004, China
- 3 IT Department of E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Ding, L. (dl197139@yahoo.com.cn)

Source title: Jixie Gongcheng Xuebao/Journal of Mechanical Engineering

Abbreviated source title: Jixie Gongcheng Xuebao

Volume: 48

Issue: 3

Issue date: February 5, 2012

Publication year: 2012

Pages: 70-74

Language: Chinese

ISSN: 05776686

CODEN: CHHKA2

Document type: Journal article (JA)

Publisher: Editorial Office of Chinese Journal of Mechanical, 22 Baiwanzhuang Dajie, Beijing, 100037, China

Abstract: Isomorphism identification of topology embryonic graphs is a key link in plane parallel mechanism synthesis methods based on embryonic graph. Aiming at kinematic chains topology embryonic graph without binary links, the problem of isomorphism identification among them is solved. Topology embryonic graph has unique feature against topology graph. Because there aren't binary vertices in limbs of topology embryonic graph, relation among vertices are largely relative position among them. According to the feature of topology embryonic graph, the matrix of path number among any vertices of topology embryonic graph is set up from the classical theory of adjacency matrix about graph. The items of the path number matrix are arranged into path array according to certain rule. The isomorphic condition for topology embryonic graphs is demonstrated. Topology embryonic graphs are identified if they are isomorphic by second order path array when degree sequence and first order path array are same. Examples are given to illustrate identification procedure and specific application. Solution to the problem of isomorphism identification of topology embryonic graph not only lays the foundation for type synthesis based on embryonic graph, but also there is universal significance for isomorphism identification of some kinematic chain topology graphs. © 2012 Journal of Mechanical Engineering.

Number of references: 10

Main heading: Graph theory

Controlled terms: Graphic methods - Kinematics - Matrix algebra - Mechanisms - Set theory

Uncontrolled terms: Adjacency matrices - Binary links - Certain rule - Classical theory - Degree sequence - First order - Identification procedure - Isomorphism identification - Key links - Kinematic chain - Parallel mechanisms - Path array - Relative positions - Second orders - Type synthesis - Unique features

Classification code: 601.3 Mechanisms - 902.1 Engineering Graphics - 921.1 Algebra - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 931.1 Mechanics

DOI: 10.3901/JME.2012.03.070

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

60.

Accession number: 20124615658126

Title: The design and development of the basketball course CAI based on web

Authors: Fang, Qinghua1 ; Wang, Yukuo2

Author affiliation:

1 Department of Physical Education, Jiangsu Jianzhu Institute, Xuzhou 221116, China

2 Department of Physical Education, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Fang, Q. (daoshi2008@126.com)

Source title: Proceedings - 4th International Conference on Computational and Information Sciences, ICCIS 2012

Abbreviated source title: Proc. - Int. Conf. Comput. Inf. Sci., ICCIS

Monograph title: Proceedings - 4th International Conference on Computational and Information Sciences, ICCIS 2012

Issue date: 2012

Publication year: 2012

Pages: 764-766

Article number: 6300733

Language: English

ISBN-13: 9780769547893

Document type: Conference article (CA)

Conference name: 4th International Conference on Computational and Information Sciences, ICCIS 2012

Conference date: August 17, 2012 - August 19, 2012

Conference location: Chongqing, China

Conference code: 93469

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: In order to solve the problems such as low teaching efficiency and backward teaching method of basketball course in higher vocational colleges, and realize the interworking and sharing of basketball course teaching resources, a basketball course CAI teaching platform based on Web is designed. The design of this platform, combining subject characteristics of basketball course, uses Windows NT 4/2000Server as operating system platform, Microsoft SQL Server 7.0 as RDBMS, NAS for data storage and flow technology for video service. The basketball course CAI teaching platform based on Web Service can realize the dynamic integration of basketball course teaching resources and it has good integration, openness and encapsulation. The design scheme of basketball course CAI teaching platform based on Web Service can effectively solve and help the interconnection, interworking of basketball course PE teaching resources and adapt to the informatization development demands of PE teaching. © 2012 IEEE.

Number of references: 9

Main heading: Curricula

Controlled terms: Computer aided instruction - Design - Information science - SportS - Web services - Websites

Uncontrolled terms: basketball course - Data storage - Design and Development - Design scheme - Flow technology - Informatization - Interworking - Microsoft SQL Server - Teaching methods - Teaching platform - Teaching resources - Video services - Windows NT

Classification code: 903 Information Science - 901.2 Education - 723 Computer Software, Data Handling and Applications - 718 Telephone Systems and Related Technologies; Line Communications - 717 Optical Communication - 716 Telecommunication; Radar, Radio and Television - 408 Structural Design

DOI: 10.1109/ICCIS.2012.324

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

61.

Accession number: 20101612871182

Title: A review of non-destructive detection for fruit quality

Authors: Gao, Haisheng1 ; Zhu, Fengmei1 ; Cai, Jinxing1

Author affiliation:

1 Department of Food Engineering, Hebei Normal University of Science Technology, Changli, Qinhuangdao, Hebei Province 066600, China

Corresponding author: Gao, H.

Source title: IFIP Advances in Information and Communication Technology

Abbreviated source title: IFIP Advances in Information and Communication Technology

Volume: 317

Monograph title: Computer and Computing Technologies in Agriculture III: Third IFIP TC 12 International Conference, CCTA 2009, Beijing, China, October 14-17, 2009, Revised Selected Papers

Issue date: 2010

Publication year: 2010

Pages: 133-140

Language: English

ISSN: 18684238

ISBN-13: 9783642122194

Document type: Conference article (CA)

Publisher: Springer New York, 233 Springer Street, New York, 10013-1578, United States

Abstract: An overview of non-destructive detection in quality of post-harvest fruit was presented in this paper, and the research and application were discussed. This paper elaborated the fruit quality detection methods which were based on one of the following properties: optical properties, sonic vibration, machine vision technique, nuclear magnetic resonance (NMR), electronic noses, electrical properties, computed tomography. At last, the

main problems of non-destructive detection in application were also explained. © 2010 IFIP International Federation for Information Processing.

Number of references: 21

Main heading: Electric properties

Controlled terms: Artificial organs - Computer vision - Computerized tomography - Nuclear magnetic resonance - Nuclear magnetic resonance spectroscopy - Optical properties - Research - Resonance

Uncontrolled terms: Computed Tomography - Electrical property - Electronic NOSE - Fruit quality - Machine vision - Nondestructive detection - Postharvest - Research and application

Classification code: 741.2 Vision - 751.1 Acoustic Waves - 801 Chemistry - 932.2 Nuclear Physics - 901.3 Engineering Research - 931.2 Physical Properties of Gases, Liquids and Solids - 931.3 Atomic and Molecular Physics - 931.1 Mechanics - 741.1 Light/Optics - 731.6 Robot Applications - 461.1 Biomedical Engineering - 462.4 Prosthetics - 531 Metallurgy and Metallography - 701 Electricity and Magnetism - 701.1 Electricity: Basic Concepts and Phenomena - 723.5 Computer Applications

DOI: 10.1007/978-3-642-12220-0_21

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

62.

Accession number: 20110913704960

Title: Design of optimal stack filters using QPSO

Authors: Kang, Yan1 ; Yang, Hongwei2 ; Feng, Jiayin1

Author affiliation:

1 Department of Computer Science, Hebei Normal University of Science and technology, Hebei, 066004, China

2 Institute of Information Technology, Qinhuangdao institute of technology, Hebei, 066004, China

Corresponding author: Kang, Y.

Source title: 2nd International Conference on Information Science and Engineering, ICISE2010 - Proceedings

Abbreviated source title: Int. Conf. Inf. Sci. Eng., ICISE - Proc.

Monograph title: 2nd International Conference on Information Science and Engineering, ICISE2010 - Proceedings

Issue date: 2010

Publication year: 2010

Pages: 3639-3643

Article number: 5690487

Language: English

ISBN-13: 9781424480968

Document type: Conference article (CA)

Conference name: 2nd International Conference on Information Science and Engineering, ICISE2010

Conference date: December 4, 2010 - December 6, 2010

Conference location: Hangzhou, China

Conference code: 83809

Sponsor: Hangzhou Dianzi University; United Nations Educational Scientific and Cultural Organization; Nanjing University of Information Science and Technology; Georgia State University; Anhui University of Science and Technology; College of Computer and Information of Hohai University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Stack filters are a class of slip window nonlinear digital filters that satisfy a weak superposition property known as the threshold decomposition and stacking property. They are suitable to parallel processing. Stack filters include many kinds of nonlinear filters in theory, being an important tool for nonlinear research. Beginning with stack filters's fundamental theory, optimization algorithms and their application in image processing of stack filters are studied in this paper. Experimental results show that optimal stack filters based on MAE criteria, which are found by Binary QPSO (BQPSO) algorithms preserve details of images perfectly and suppress noise passably. © 2010 IEEE.

Number of references: 8

Main heading: Digital filters

Controlled terms: Algorithms - Image processing - Information science - Optimization

Uncontrolled terms: BQPSO - Fundamental theory - MAE criteria - Nonlinear digital filters - Nonlinear filter - Optimization algorithms - Parallel processing - Slip window - Stack filters - Threshold decomposition

Classification code: 703.2 Electric Filters - 723 Computer Software, Data Handling and Applications - 741 Light, Optics and Optical Devices - 903 Information Science - 921 Mathematics - 921.5 Optimization Techniques

DOI: 10.1109/ICISE.2010.5690487

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

63.

Accession number: 20122115044086

Title: Research on quality control system construction of distance network education

Authors: Qin, Wen1 ; Li, Hai-Ying2 ; Qin, Wu3

Author affiliation:

- 1 Organization Department, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 College of Humanities and Law, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 Tianjin Railway Technical and Vocational College, Tianjin, China

Corresponding author: Qin, W. (qinwen003@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 146 AISC

Monograph title: Emerging Computation and Information Technologies for Education - Proceeding of 2012 International Conference on Emerging Computation and Information Technologies for Education, ECICE 2012

Issue date: 2012

Publication year: 2012

Pages: 549-555

Language: English

ISSN: 18675662

ISBN-13: 9783642284656

Document type: Conference article (CA)

Conference name: 2012 International Conference on Emerging Computation and Information Technologies for Education, ECICE 2012

Conference date: January 15, 2012 - January 16, 2012

Conference location: Hangzhou, China

Conference code: 89818

Sponsor: Institute of Electronic and Information Technology; Zhejiang Economic and Trade Polytechnic

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Computer-based distance education network provides new approach for service learning and real-time learning, which also accelerates practice of lifelong education and lifelong learning. However, the quality of distance network education has been a focus of attention by people. Based on problem analysis on network education status as well as standard management and quality control problems faced by distance network education, the paper revealed existing quality problem of network education and proposed relative measures to construct complete network education quality control system, namely aims at Total Quality Management (TQM) of distance education based on building complete distance network education quality monitor system as well as quality evaluation system, so as to improve education quality. © 2012 Springer-Verlag GmbH.

Number of references: 4

Main heading: Quality control

Controlled terms: Control systems - Distance education - Information technology - Quality assurance - Total quality management

Uncontrolled terms: Complete networks - Control problems - Education quality - Focus of Attention - Life long learning - Monitor system - Network education - Problem analysis - Quality evaluation - Quality evaluation system - Quality problems - Real-time learning - Service learning

Classification code: 731.1 Control Systems - 901.2 Education - 903 Information Science - 913.3 Quality Assurance and Control

DOI: 10.1007/978-3-642-28466-3_74

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

64.

Accession number: 20140317215459

Title: Research on digital library personalized information service model based on agent model

Authors: Cao, Jing¹ ; Liu, Min¹ ; Cao, Lijun¹

Author affiliation:

1 Hebei Normal University of Science and Technology, China

Corresponding author: Cao, J. (caojing_edu@163.com)

Source title: Journal of Digital Information Management

Abbreviated source title: J. Digit. Inf. Manage.

Volume: 11

Issue: 6

Issue date: December 2013

Publication year: 2013

Pages: 418-422

Language: English

ISSN: 09727272

Document type: Journal article (JA)

Publisher: Digital Information Research Foundation

Abstract: Taking the personalized information needs of users as the research object, this article introduced the individualized service process of digital library, established the Agent model, built multivariate function by combining with the user preference model, and expounded the process of personalized information acquisition, analysis and push. We could conclude that digital library personalized information service system operated coordinately between each module, and had a complete chain of relationships. It could discovery and track information resources independently, effectively solve the problem of information overload, and realize the optimization of user information needs.

Number of references: 10

Main heading: Digital libraries

Controlled terms: Information services

Uncontrolled terms: Information overloads - Information resource - Multivariate function - Personalized information - Personalized information services - Service process - User information need - User preference modeling

Classification code: 903.4 Information Services - 903.4.1 Libraries

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

65.

Accession number: 20121814985394

Title: Synthesis and electrochemical characterizations of Mg-doped LiFePO₄/C by carbothermal reduction

Authors: Song, Shi-Tao¹ ; Wu, Su-Xia¹ ; Zheng, Xue-Fang¹ ; Peng, You-Shun¹ ; Lian, Qi¹ ; Wang, Yue-Hui¹

Author affiliation:

¹ College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Wu, S.-X.

Source title: Gongneng Cailiao/Journal of Functional Materials

Abbreviated source title: Gongneng Cailiao

Volume: 43

Issue: 5

Issue date: March 15, 2012

Publication year: 2012

Pages: 660-664

Language: Chinese

ISSN: 10019731

CODEN: GOCAEA

Document type: Journal article (JA)

Publisher: Journal of Functional Materials, P.O. Box 1512, Chongqing, 630700, China

Abstract: Composites $\text{Li}_{1-x}\text{Mg}_x\text{FePO}_4/\text{C}$ ($x=0.00, 0.01, 0.02, 0.03, 0.04, 0.05, 0.1$) were synthesized by carbothermal reduction method. The samples were characterized by X-ray diffraction (XRD) and scanning electron microscope (SEM), and their electrochemical performances were investigated by analyses of cyclic voltammetry (CV), electrochemical impedance spectra (EIS) and constant current charge-discharge experiment. The results indicate that the low concentration Mg dopant does not affect the structure of LiFePO_4 but considerably improves its electrochemical performances. The $\text{Li}_{0.98}\text{Mg}_{0.02}\text{FePO}_4/\text{C}$ materials showed better electrochemical performances than LiFePO_4 . At 0.1C discharging rate, it is capable of delivering reversible specific capacity of 165.2 mAh/g, with fairly stable cycleability. In addition, FT-IR spectroscopic studies for these materials were carried out and the vibrational bands were assigned.

Number of references: 14

Main heading: Characterization

Controlled terms: Carbothermal reduction - Cathodes - Cyclic voltammetry - Doping (additives) - Lithium alloys - Lithium compounds - Scanning electron microscopy - Spectroscopic analysis - X ray diffraction

Uncontrolled terms: Carbothermal reduction method - Cathode materials - Constant current charge-discharge experiment - Cycleability - Electrochemical characterizations - Electrochemical impedance spectra - Electrochemical performance - Ion doping - LiFePO_4 - Lithium iron phosphates - Low concentrations - Mg-doped - Reversible specific capacity - Spectroscopic studies - Vibrational bands

Classification code: 951 Materials Science - 931.3 Atomic and Molecular Physics - 804.1 Organic Compounds - 802.3 Chemical Operations - 801.4.1 Electrochemistry - 801 Chemistry - 741.1 Light/Optics - 704.1

Electric Components - 549.1 Alkali Metals

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

66.

Accession number: 20122415106461

Title: Research of review and development of the construction of china's university teachers since reform and opening

Authors: Meng, Lingchen1 ; Meng, Qingdong1

Author affiliation:

1 Department of Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Meng, L. (m_lch@126.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 165 AISC

Monograph title: Advances in Technology and Management - Proceedings of the 2012 International Conference on Technology and Management, ICTAM 2012

Issue date: 2012

Publication year: 2012

Pages: 601-608

Language: English

ISSN: 18675662

ISBN-13: 9783642296369

Document type: Conference article (CA)

Conference name: 2012 International Conference on Technology and Management, ICTAM 2012

Conference date: June 12, 2012 - June 13, 2012

Conference location: Jeju, Jeju-Island, Korea, Republic of

Conference code: 90107

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: This article reviewed the historical development process of the construction of china's university teachers since reform and opening and analyzed the achievement and existing problems of itself, on which basis the new measures for university teachers were raised. © 2012 Springer-Verlag GmbH Berlin Heidelberg.

Number of references: 3

Main heading: Software engineering

Controlled terms: Soft computing

Uncontrolled terms: Existing problems - Historical development

Classification code: 723 Computer Software, Data Handling and Applications - 723.1 Computer Programming

DOI: 10.1007/978-3-642-29637-6_80

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

67.

Accession number: 20130515974880

Title: Preparation of porous carbon material by carbonizing polyacrylonitrile microspheres

Authors: Rong, Yunlong¹ ; Wang, Shaofei¹ ; Jia, Dandan¹ ; Liu, Chun¹ ; Cao, Lei¹ ; Tian, Hongyan¹ ; Zheng, Xuefang¹ ; Liu, Lu¹ ; Wang, Dongjun¹

Author affiliation:

¹ College of PhysicoChemical, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Wang, D. (wdj9999@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 253-255

Issue: PART 1

Monograph title: Sustainable Development of Urban Infrastructure

Issue date: 2013

Publication year: 2013

Pages: 884-887

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037855645

Document type: Conference article (CA)

Conference name: 2nd International Conference on Civil Engineering and Transportation, ICCET 2012

Conference date: October 27, 2012 - October 28, 2012

Conference location: Guilin, China

Conference code: 95112

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: PAN microspheres were crosslinked with divinyl benzene (DVB) and styrene (St), and then pre-oxidized under atmospheric pressure, porous carbon microspheres were produced by carbonizing the pretreated microspheres under nitrogen protection. Morphology and structure characterizations of the materials were performed by employing scanning electron microscopy (SEM), transmission electron microscopy (TEM), nitrogen adsorption test, etc. The results show that the primitive PAN microspheres display flower-like structures, while the carbonized pretreated PAN microspheres exhibit a high porosity as well as specific surface area and have a good adsorption of methylene blue (MeB) dye. © (2013) Trans Tech Publications, Switzerland.

Number of references: 10

Main heading: Microspheres

Controlled terms: Adsorption - Aromatic compounds - Atmospheric pressure - Benzene - Butadiene - Carbon - Carbonization - Civil engineering - Scanning electron microscopy - Styrene - Transmission electron microscopy

Uncontrolled terms: Carbon material - Crosslinked - Crosslinks - Divinyl benzenes - High porosity - Methylene Blue - Nitrogen adsorption - Porous carbon materials - Porous carbon microspheres - Pre-oxidation - Pre-oxidized - Structure characterization - Transmission electron microscopy tem

Classification code: 818 Rubber and Elastomers - 804.1 Organic Compounds - 804 Chemical Products Generally - 802.3 Chemical Operations - 802.2 Chemical Reactions - 741.3 Optical Devices and Systems - 741.1 Light/Optics - 443.1 Atmospheric Properties - 409 Civil Engineering, General

DOI: 10.4028/www.scientific.net/AMM.253-255.884

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

68.

Accession number: 20111113748677

Title: Visual tracking via online manifold regularization

Authors: Xu, Nan¹ ; Wang, Zhenyu²

Author affiliation:

- 1 Department of Information Engineering, Qinhuangdao Institute of Technology, China
- 2 Hebei Normal University of Science and Technology, China

Corresponding author: Xu, N. (xunanit@163.com)

Source title: Proceedings of the 2nd International Conference on Internet Multimedia Computing and Service, ICIMCS'10

Abbreviated source title: Proc. Int. Conf. Internet Multimedia Comput. Serv., ICIMCS

Monograph title: Proceedings of the 2nd International Conference on Internet Multimedia Computing

and Service, ICIMCS'10

Issue date: 2010

Publication year: 2010

Pages: 203-206

Language: English

ISBN-13: 9781450304603

Document type: Conference article (CA)

Conference name: 2nd International Conference on Internet Multimedia Computing and Service, ICIMCS 2010

Conference date: December 30, 2010 - December 31, 2010

Conference location: Harbin, China

Conference code: 84092

Publisher: Association for Computing Machinery, 1515 Broadway, 17th Floor, New York, NY 10036-5701, United States

Abstract: In recent years, online building an adaptive target appearance model has been investigated for robust visual tracking in a dynamic environment. However one inherent problem of adaptive appearance trackers is drift, a gradual adaptation of the tracker to non-targets. To alleviate this problem, we consider visual tracking in a novel online manifold regularization (Online-MR) setting where labeled and unlabeled data arrive sequentially in large volume for tracker update. A discriminative target appearance model based on Haar wavelet is learned at each frame and its output score is used as the input sample feature for Online-MR tracker learning. Such a combination of Online-MR semi-supervised learning and online appearance model adaptation results in a robust tracking scheme that can prevent the tracker from drifting while retain its adaptation to appearance changing. Experimental results demonstrate the effectiveness of the proposed method from comparisons with adaptive appearance model based trackers on several challenging video sequences. Copyright 2010 ACM.

Number of references: 19

Main heading: Target tracking

Controlled terms: E-learning - Internet - Supervised learning - Telecommunication networks

Uncontrolled terms: Adaptive appearance models - Appearance models - Dynamic environments - Haar wavelets - Input sample - Labeled and unlabeled data - Manifold

regularization - Online learning - Robust tracking - Semi-supervised learning - Video sequences
- Visual tracking

Classification code: 716 Telecommunication; Radar, Radio and Television - 716.2 Radar Systems and Equipment - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723 Computer Software, Data Handling and Applications

DOI: 10.1145/1937728.1937776

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

69.

Accession number: 20124215573022

Title: First-principles investigations on electronic, elastic and thermodynamic properties of VN under high pressure

Authors: Hao, Aimin¹ ; Yang, Xiaocui² ; Zhang, Lixin³ ; Zhang, Qizhou³

Author affiliation:

- 1 Department of Materials Science and Engineering, Northeastern University, Qinhuangdao, China
- 2 Department of Physics, Baicheng Normal College, China
- 3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, China

Corresponding author: Hao, A. (aiminhao1991@yahoo.com.cn)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 550-553

Monograph title: Advances in Chemical Engineering II

Issue date: 2012

Publication year: 2012

Pages: 2805-2809

Language: English

ISSN: 10226680

ISBN-13: 9783037854556

Document type: Conference article (CA)

Conference name: 2nd International Conference on Chemical Engineering and Advanced Materials, CEAM 2012

Conference date: July 13, 2012 - July 15, 2012

Conference location: Guangzhou, China

Conference code: 92757

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: An investigation on electronic, elastic and thermodynamic properties of VN under high pressure has been conducted using first-principles calculations based on density functional theory (DFT) with the plane wave basis set as implemented in the CASTEP code. At elevated pressures VN is predicted to undergo a structural phase transition from the relatively open NaCl-type structure into the denser CsCl-type atomic arrangement. The predicted transition pressure is 189 GPa. The elastic constants, Debye temperature as a function of pressure and temperature of VN are presented. © (2012) Trans Tech Publications, Switzerland.

Number of references: 20

Main heading: Calculations

Controlled terms: Chemical engineering - Debye temperature - Density functional theory - Sodium chloride - Thermodynamic properties

Uncontrolled terms: Ab initio calculations - Atomic arrangement - Density functional theories (DFT) - Elastic properties - Elevated pressure - First-principles calculation - First-principles investigations - Function of pressure - High pressure - Plane-wave basis set - Structural phase transition - Structure transformations - Transition pressure

Classification code: 922.1 Probability Theory - 921 Mathematics - 805.1 Chemical Engineering - 804.2 Inorganic Compounds - 723 Computer Software, Data Handling and Applications - 721 Computer Circuits and Logic Elements - 641.1 Thermodynamics

Numerical data indexing: Pressure 1.89e+11Pa

DOI: 10.4028/www.scientific.net/AMR.550-553.2805

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

70.

Accession number: 20124915768284

Title: Fabrication of SiC nanowire thin-film transistors using dielectrophoresis

Authors: Dai, Zhenqing^{1, 2}; Zhang, Liying¹; Chen, Changxin¹; Qian, Bingjian¹; Xu, Dong¹; Chen, Haiyan¹; Wei, Liangming¹; Zhang, Yafei¹

Author affiliation:

1 Key Laboratory for Thin Film and Microfabrication of the Ministry of Education, Research Institute of Micro and Nano Science and Technology, Shanghai Jiao Tong University, Shanghai 200240, China

2 Department of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhang, Y. (yfzhang@sjtu.edu.cn)

Source title: Journal of Semiconductors

Abbreviated source title: J. Semicond.

Volume: 33

Issue: 11

Issue date: November 2012

Publication year: 2012

Article number: 114001

Language: English

ISSN: 16744926

Document type: Journal article (JA)

Publisher: Institute of Physics Publishing, Temple Circus, Temple Way, Bristol, BS1 6BE, United Kingdom

Abstract: The selection of solvents for SiC nanowires (NWs) in a dielectrophoretic process is discussed

theoretically and experimentally. From the viewpoints of dielectrophoresis force and torque, volatility, as well as toxicity, isopropanol (IPA) is considered as a proper candidate. By using the dielectrophoretic process, SiC NWs are aligned and NW thin films are prepared. The densities of the aligned SiC NWs are 2 μm^{-1} , 4 μm^{-1} , 6 μm^{-1} , which corresponds to SiC NW concentrations of 0.1 $\mu\text{g}/\mu\text{L}$, 0.3 $\mu\text{g}/\mu\text{L}$ and 0.5 $\mu\text{g}/\mu\text{L}$, respectively. Thin-film transistors are fabricated based on the aligned SiC NWs of 6 μm^{-1} . The mobility of a typical device is estimated to be 13.4 $\text{cm}^2/(\text{V}\cdot\text{s})$. © 2012 Chinese Institute of Electronics.

Number of references: 50

Main heading: Silicon carbide

Controlled terms: Dielectric devices - Electrophoresis - Nanowires - Thin film transistors

Uncontrolled terms: Dielectrophoresis force - Dielectrophoretic - Iso-propanols - SiC nanowire

Classification code: 933 Solid State Physics - 804.2 Inorganic Compounds - 801.3 Colloid Chemistry - 761 Nanotechnology - 714.2 Semiconductor Devices and Integrated Circuits - 714 Electronic Components and Tubes - 704 Electric Components and Equipment

Numerical data indexing: Mass_Density 1.00e-01kg/m3, Mass_Density 3.00e-01kg/m3, Mass_Density 5.00e-01kg/m3

DOI: 10.1088/1674-4926/33/11/114001

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

71.

Accession number: 20140817345239

Title: Preparation, separation and antioxidant activity of peptides derived from silk sericin

Authors: Fan, Jinbo¹ ; Zhou, Suzhen¹ ; Ren, Fazheng³ ; Zheng, Lihong² ; Jiang, Lu³ ; Feng, Xuqiao¹

Author affiliation:

1 College of Chemistry, Chemical Engineering and Food Safety, Bohai University, Jinzhou 121013, Liaoning, China

2 Department of Food Engineering, Hebei Normal University of Science and Technology, Changli 066600, Hebei, China

3 College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China

Corresponding author: Feng, X.

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 13

Issue: 12

Issue date: December 2013

Publication year: 2013

Pages: 46-51

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology, 3 Floor, Qingyuan Mansion, No. 6 Beisan Street., Fucheng Road, Haidian District, Beijing, 100048, China

Abstract: The objectives of this study were to prepare silk sericin hydrolysates (SSH) from sericin of silkworm (*Bombyx mori*) by Alcalase enzymatic hydrolysis, separation and isolation of the activity peptides from the hydrolysate by a series of separation and analysis technology, including ultrafiltration, gel filtration chromatography and ion-exchange chromatography. The antioxidant activities of hydrolysates was evaluated in vitro. The hydrolysates were separated by Ultrafiltration and collected to make four groups according to molecular weight, P4 (Mw < 3ku) exhibited the highest free radical scavenging activity ($P < 0.05$), IC₅₀ value was 29.30 mg trolox eq/g. Group P4 was further separated by gel filtration chromatography and ion-exchange chromatography, which produced two major fractions: SP2 SP3. Their IC₅₀ value of ABTS cation radical scavenging activity were 156.25 mg trolox eq/g and 144.23 mg trolox eq/g, respectively. The work will be a base for development of antioxidative functional food production and provide a method for potential exploitation and utilization of silk sericin.

Number of references: 17

Main heading: Separation

Controlled terms: Animals - Antioxidants - Chromatography - Enzymatic hydrolysis - Gel permeation chromatography - Peptides - Silk - Ultrafiltration

Uncontrolled terms: Anti-oxidant activities - Cation-radicals - Enzymolysis - Free radical scavenging activity - Functional foods - Gel-filtration chromatography - Ion-exchange

chromatography - Silk sericin

Classification code: 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 819.1 Natural Fibers - 814 Leather and Tanning - 804.1 Organic Compounds - 804 Chemical Products Generally - 822 Food Technology - 803 Chemical Agents and Basic Industrial Chemicals - 802.2 Chemical Reactions - 471 Marine Science and Oceanography - 461.9 Biology - 461 Bioengineering and Biology - 802.3 Chemical Operations

Numerical data indexing: Mass 1.44e-04kg, Mass 1.56e-04kg, Mass 2.93e-05kg

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

72.

Accession number: 20130215876908

Title: Fluorescence of chemically derived graphene: Effect of self-rolling up and aggregation

Authors: Zhang, Xian-Fu^{1, 2}; Liu, Suping¹; Shao, Xiaona¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Chemistry Department, 360 Hebeidajixiduan, Qinhuangdao, Hebei Province 066004, China

2 MPC Technologies, Hamilton, ON, L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Luminescence

Abbreviated source title: J Lumin

Volume: 136

Issue date: 2013

Publication year: 2013

Pages: 32-37

Language: English

ISSN: 00222313

CODEN: JLUMA8

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: The aggregation (inter-layer π - π interaction) and self-rolling up (intra-layer π - π interaction) of chemically derived graphene (CDG) sheets in aqueous dispersion were evidenced by spectral and TEM methods. Their effects on optical properties were studied by UV-vis-NIR absorption spectra, fluorescence emission spectra and fluorescence lifetime measurements under various CDG concentrations. At pH 8.3, CDG sheets formed carbon nanoscrolls by self-rolling up when its concentration is lower than 10 $\mu\text{g/mL}$. When the concentration is higher than that, CDG sheets aggregated. Upon aggregation, CDG exhibited the decrease of absorptivity, the change of band shape and the deviation from Lambert-Beer law due to inter-layer π - π interaction. The aggregation effect on CDG fluorescence includes the decrease of emission efficiency, the shortening of fluorescence lifetime and the relative increase of the contribution from short-lived emitting species. On the other hand, CDG self-rolling up caused the occurrence of new absorptions (500 and 960 nm) and new emission (after 500 nm), the decrease of fluorescence quantum yield and shortening of fluorescence lifetime. © 2012 Elsevier B.V. All rights reserved.

Number of references: 43

Main heading: Fluorescence

Controlled terms: Absorption - Agglomeration - Emission spectroscopy - Graphene - Optical properties - Quantum yield

Uncontrolled terms: Absorptivities - Aqueous dispersions - Band shapes - Carbon nanoscrolls - Emission efficiencies - Emitting species - Fluorescence emission spectra - Fluorescence lifetime measurements - Fluorescence lifetimes - Fluorescence quantum yield - Intra-layer - Lambert-Beer law - Self-rolling up - TEM method - UV-Vis-NIR absorption

Classification code: 741.1 Light/Optics - 761 Nanotechnology - 802.2 Chemical Reactions - 802.3 Chemical Operations - 804 Chemical Products Generally

Numerical data indexing: Mass_Density 1.00e-02kg/m³, Size 5.00e-07m, Size 9.60e-07m

DOI: 10.1016/j.jlumin.2012.11.001

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20131516186893

Title: Effect of high pressure heat treatment on microstructure and thermal expansion coefficients of CuAl alloy

Authors: Ma, Yu-Quan1

Author affiliation:

1 Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Ma, Y.-Q.

Source title: Materials Transactions

Abbreviated source title: Mater. Trans.

Volume: 54

Issue: 4

Issue date: 2013

Publication year: 2013

Pages: 540-543

Language: English

ISSN: 13459678

CODEN: MTARCE

Document type: Journal article (JA)

Publisher: Japan Institute of Metals (JIM), 1-14-32 Ichibancho, Aoba-ku, Sendai, 980-8544, Japan

Abstract: With different high pressure heat treatments on CuAl alloy, the effects on microstructure and thermal expansion coefficients of CuAl alloy are studied in the paper by optical microscopy, scanning electron microscopy, transmission electron microscopy and expansion instrument etc. The experimental results show that after heat treatment, the structure of CuAl alloy was refined obviously and the compactness increased. The grain refinement effect increases at first and then decreases when pressure is increased. When the pressure is 3 GPa, the most obvious is the thinning grain effect. In addition, the high pressure heat treatment can increase CuAl alloy thermal coefficient of expansion, when the CuAl alloy is treated by 3 GPa pressure and is at 596.37° C. Thermal expansion coefficient is the biggest, $3.1187 \times 10^{-5} \text{C}^{-1}$, than that of the same temperature cast state samples increase 99.34%. © 2013 The Japan Institute of Metals.

Number of references: 13

Main heading: Heat treatment

Controlled terms: Alloys - Cerium alloys - Grain refinement - High pressure effects - Microstructure - Optical microscopy - Scanning electron microscopy - Thermal expansion - Transmission electron microscopy

Uncontrolled terms: After-heat treatment - Copper-aluminum alloys - Effect of high pressure - Grain refinement effects - High pressure - Scanning electrons - Thermal coefficient of expansion - Thermal expansion coefficients

Classification code: 931.2 Physical Properties of Gases, Liquids and Solids - 741.3 Optical Devices and Systems - 547.2 Rare Earth Metals - 951 Materials Science - 537.1 Heat Treatment Processes - 531.1 Metallurgy - 421 Strength of Building Materials; Mechanical Properties - 531.2 Metallography

Numerical data indexing: Percentage 9.93e+01%, Pressure 3.00e+09Pa, Temperature 8.70e+02K

DOI: 10.2320/matertrans.M2012358

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

74.

Accession number: 20105013487022

Title: Approaches for preserving FDs in K-anonymization

Authors: Song, Jinling^{1, 2}; Zhang, Guangbin²; Huang, Liming²; Liu, Xingshun²; Wang, Danli¹

Author affiliation:

1 Department of Computer, Yanshan University, Qinhuangdao 066004, China

2 HeBei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Song, J. (Songjinling99@126.com)

Source title: 2010 International Conference on Computer, Mechatronics, Control and Electronic Engineering, CMCE 2010

Abbreviated source title: Int. Conf. Comput., Mechatronics, Control Electron. Eng., CMCE

Volume: 6

Part number: 6 of 6

Monograph title: 2010 International Conference on Computer, Mechatronics, Control and Electronic Engineering, CMCE 2010

Issue date: 2010

Publication year: 2010

Pages: 334-337

Article number: 5609827

Language: English

ISBN-13: 9781424479566

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer, Mechatronics, Control and Electronic Engineering, CMCE 2010

Conference date: August 24, 2010 - August 26, 2010

Conference location: Changchun, China

Conference code: 82724

Sponsor: IEEE Industrial Electronics Society Beijing (Shenzhen) Chapter; Changchun University of Technology; Intelligent Inf. Technol. Appl. Res. Assoc. (IITA Assoc.)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: K-anonymization essentially is some update operations over the original dataset. So, to guarantee the integrity of the dataset, it's necessary to preserve the functional dependencies (FDs) in k-anonymization. We present several approaches to maintain FDs in k-anonymization. One is detecting FDs violation constantly while k-anonymizing, which can be merged to numerous previous k-anonymized algorithms. Another is based on clusters combination, which is suit for k-anonymized algorithms using clustering or microaggregation. The third is a more directly and valid approach based on K-MSD and associated generalization, which focuses on preserving FDs as well as higher data precision and increases the utility of the anonymized dataset effectively. © 2010 IEEE.

Number of references: 16

Main heading: Data privacy

Controlled terms: Clustering algorithms - Mechatronics

Uncontrolled terms: Associated generalization - Clusters combination - FDs - FDs violation - K-Anonymity - K-MSD

Classification code: 608 Mechanical Engineering, General - 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 721 Computer Circuits and Logic Elements

DOI: 10.1109/CMCE.2010.5609827

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

75.

Accession number: 20110813673603

Title: RETRACTED ARTICLE: Based on integrated adaptive fuzzy neural network tolerance analog circuit fault diagnosis

Authors: Qin, Xuefeng¹ ; Han, Baoru¹ ; Chen, Shuang²

Author affiliation:

1 Department of Electronic Engineering, Hainan Software Profession Institute, Qionghai, 571400, China

2 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Han, B. (6183191@163.com)

Source title: 2nd International Conference on Information Engineering and Computer Science - Proceedings, ICIECS 2010

Abbreviated source title: Int. Conf. Inf. Eng. Comput. Sci. - Proc., ICIECS

Monograph title: 2nd International Conference on Information Engineering and Computer Science - Proceedings, ICIECS 2010

Issue date: 2010

Publication year: 2010

Article number: 5677750

Language: English

ISBN-13: 9781424479412

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: Based on multiple input single output of adaptive fuzzy neural network, this paper design the integrated adaptive fuzzy neural network based on the Takagi-Sugeno type fuzzy rules, adopt a hybrid learning algorithm to train the network connection weights,optimize membership function. Simulation results verified the effectiveness and feasibility of this method. ©2010 IEEE.

Number of references: 10

Main heading: Adaptive algorithms

Controlled terms: Analog circuits - Computer science - Fault tolerance - Fuzzy neural networks - Learning algorithms - Membership functions - Quality assurance

Uncontrolled terms: Adaptive fuzzy neural network - Circuit faults - Fault diagnosis - Hybrid algorithms - Hybrid learning algorithm - Multiple input single outputs - Network connection - Simulation result - Takagi-sugeno

Classification code: 713 Electronic Circuits - 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 913.3 Quality Assurance and Control - 921 Mathematics

DOI: 10.1109/ICIECS.2010.5677750

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

76.

Accession number: 20102413005026

Title: A novel XML keyword query approach using entity subtree

Authors: Lin, Xudong1 ; Wang, Ning1 ; Xu, De1 ; Zeng, Xiaoning2

Author affiliation:

1 School of Computer and Information Technology, Beijing Jiaotong University, No. 3 Shang Yuan Cun, Hai Dian District, Beijing 100044, China

2 Department of Computer, Hebei Normal University of Science and Technology, No. 360 West Hebei Street, Hai Gang Dist., Qinhuangdao, Hebei, China

Corresponding author: Lin, X. (06112076@bjtu.edu.cn)

Source title: Journal of Systems and Software

Abbreviated source title: J Syst Software

Volume: 83

Issue: 6

Issue date: June 2010

Publication year: 2010

Pages: 990-1003

Language: English

ISSN: 01641212

CODEN: JSSODM

Document type: Journal article (JA)

Publisher: Elsevier Inc., 360 Park Avenue South, New York, NY 10010, United States

Abstract: Keyword query is an important means to find object information in XML document. Most of the existing keyword query approaches adopt the subtrees rooted at the smallest lowest common ancestors of the keyword matching nodes as the basic result units. The structural relationships among XML nodes are excessively emphasized but the semantic relevance is not fully exploited. To change this situation, we propose the concept of entity subtree and emphasize the semantic relevance among different nodes as querying information from XML. In our approach, keyword query cases are improved to a new keyword-based query language, Grouping and Categorization Keyword Expression (GCKE) and the core query algorithm, finding entity subtrees (FEST) is proposed to return high quality results by fully using the keyword semantic meanings exposed by GCKE. We demonstrate the effectiveness and the efficiency of our approach through extensive experiments. © 2009 Elsevier Inc. All rights reserved.

Number of references: 32

Main heading: Markup languages

Controlled terms: Query languages - Semantics - XML

Uncontrolled terms: Basic results - High quality - Key word matching - Keyword queries - Keyword query - Lowest common ancestors - Object information - Query algorithms - Semantic relevance - Structural relationship - Subtrees

Classification code: 723 Computer Software, Data Handling and Applications - 723.1.1 Computer Programming Languages - 723.3 Database Systems - 903.2 Information Dissemination

DOI: 10.1016/j.jss.2009.12.024

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

77.

Accession number: 20124515649785

Title: Frame of a new video monitoring system for home safety

Authors: Shi, Wen-Chong¹ ; Liu, Mao-Hua¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Tangshan, China

Corresponding author: Shi, W.-C.

Source title: Advances in Intelligent Systems and Computing

Abbreviated source title: Adv. Intell. Sys. Comput.

Volume: 181 AISC

Monograph title: Proceedings of the 2012 International Conference on Communication, Electronics and Automation Engineering

Issue date: 2013

Publication year: 2013

Pages: 293-298

Language: English

ISSN: 21945357

ISBN-13: 9783642316975

Document type: Conference article (CA)

Conference name: International Conference on Communication, Electronics, and Automation Engineering, 2012

Conference location: Xi'an, China

Conference code: 93498

Sponsor: 'Xi'an Technological University'; Shaanxi New Network and Monitoring Control Engineering Laboratory

Publisher: Springer Verlag

Abstract: The paper is intended to propose a practical solution for home video monitoring system, and focus on describing the structure of the system framework. It set out the present situation of domestic related products in the field of home safety, analyzed the lacks of some current video monitoring systems and products. The author thinks at present it is necessary to develop a video monitoring system for home safety in the type of short-range wireless communication +3G. The author built the framework of a home video monitoring system in the pattern of 3G mobile phone+3G network+Wi-Fi+NVS+IP Camera, proposed the developing idea of the system, described the development tasks of the system and made some important technical choices, selected Wi-Fi for short range wireless communication, h.264 for video compression. This innovative and unique feature is its simple and practical system structure, is ideal for residents use. © 2013 Springer-Verlag.

Number of references: 4

Main heading: Safety engineering

Controlled terms: Communication - Image compression - Monitoring - Wi-Fi - Wireless telecommunication systems

Uncontrolled terms: 3G - Development tasks - G-networks - Home videos - IP camera - Practical solutions - Practical systems - Present situation - Related products - Short-range wireless communications - System framework - Unique features - Video monitoring - Video monitoring systems

Classification code: 716 Telecommunication; Radar, Radio and Television - 723 Computer Software, Data Handling and Applications - 741 Light, Optics and Optical Devices - 914 Safety Engineering - 941

Acoustical and Optical Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 943
Mechanical and Miscellaneous Measuring Instruments - 944 Moisture, Pressure and Temperature, and Radiation
Measuring Instruments

DOI: 10.1007/978-3-642-31698-2_42

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

78.

Accession number: 20122615181555

Title: Reform of and research based on the higher vocational education of "database principles"
teaching

Authors: Liu, Shan1 ; Cao, Lijun1

Author affiliation:

1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology,
Qinhuangdao, China

Corresponding author: Liu, S. (ls3252003@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 144 AISC

Part number: 1 of 2

Issue: VOL. 1

Monograph title: Proceedings of the 2011 2nd International Congress on Computer Applications and
Computational Science

Issue date: 2012

Publication year: 2012

Pages: 459-464

Language: English

ISSN: 18675662

ISBN-13: 9783642283130

Document type: Conference article (CA)

Conference name: 2011 2nd International Congress on Computer Applications and Computational Science, CACS 2011

Conference date: November 15, 2011 - November 17, 2011

Conference location: Bali, Indonesia

Conference code: 90300

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: In the database principles course teaching reform, we should determine teaching mode and training target according to the professional requirements and the course property, and in the reform of teaching contents and practice, we should pay attention to the integration and refining of theoretical knowledge and practical skills . Through letting the student write demand analysis report, complete database conceptual model, a logical model, the physical model design, the implementation of database, make the students master the practical skills, In the teaching process of mastering of using comprehensive assessment of the way to complete the course teaching. © 2012 Springer-Verlag GmbH.

Number of references: 6

Main heading: Database systems

Controlled terms: Computer applications - Curricula - Students

Uncontrolled terms: Comprehensive assessment - Conceptual model - Demand analysis - Higher vocational educations - Logical models - Physical model - Practical skill - Teaching contents - Teaching process

Classification code: 723.3 Database Systems - 723.5 Computer Applications - 901.2 Education

DOI: 10.1007/978-3-642-28314-7_61

Database: Compendex

79.

Accession number: 20142517836175

Title: Option evaluation approach with continuous fuzzy volatility variable in risk management

Authors: Liu, Shuxia¹ ; Xu, Weili¹ ; Chai, Zhaohua¹ ; Liu, Haibin¹ ; Wang, Jing¹

Author affiliation:

1 School of Business Administration, Hebei Normal University of Science and Technology, QinHuangDao 066000, Hebei, China

Source title: International Journal of Applied Mathematics and Statistics

Abbreviated source title: Int. J. Appl. Math. Stat.

Volume: 51

Issue: 23

Issue date: 2013

Publication year: 2013

Pages: 229-236

Language: English

ISSN: 09731377

E-ISSN: 09737545

Document type: Journal article (JA)

Publisher: CESER Publications, Post Box No. 113, Roorkee, 247667, India

Abstract: This paper aim is to formulate a random fuzz process for the fuzzy volatility and evaluate options by fuzzy simulation. Some basic definitions of fuzzy variable and random fuzzy differential equation are reviewed. Option pricing formula for fuzzy financial markets based on Liu fuzzy theory is given. Fuzzy simulation technique is designed to estimate the membership degree and the expected value of the option. The rough figures of the expected value of option can be obtained. The fuzzy put-call parity relationship is proposed in this paper. Finally, the application of the methodology is demonstrated by a numerical example. © 2013 by CESER Publications.

Number of references: 20

Main heading: Economic and social effects

Controlled terms: Differential equations - Investments - Risk management

Uncontrolled terms: Black-Scholes model - Fuzzy theory - Fuzzy variable - Fuzzy volatility - Option pricing

Classification code: 911.2 Industrial Economics - 921.2 Calculus - 922.1 Probability Theory

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

80.

Accession number: 20120614742671

Title: An approach to evaluating the foreign trade competitiveness with interval grey linguistic variables

Authors: Liu, Xuehual

Author affiliation:

1 School of Finance and Economics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Liu, X. (lxhddd@126.com)

Source title: International Journal of Digital Content Technology and its Applications

Abbreviated source title: Int. J. Digit. Content Technol. Appl.

Volume: 5

Issue: 12

Issue date: December 2011

Publication year: 2011

Pages: 51-57

Language: English

ISSN: 19759339

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: In this paper, we investigate the multiple attribute decision making (MADM) problems for for evaluating the foreign trade competitiveness with interval grey linguistic variables. We utilize the interval grey linguistic variables weighted aggregation (IGLWA) operator to aggregate the interval grey linguistic variables corresponding to each alternative and get the overall value of the alternatives, then rank the alternatives and select the most desirable one(s). Finally, an illustrative example is given.

Number of references: 20

Main heading: Linguistics

Controlled terms: Competition - Decision making - International trade

Uncontrolled terms: Illustrative examples - Interval grey linguistic variables - Linguistic variable - Multiple Attribute Decision Making - Multiple attributes

Classification code: 903.2 Information Dissemination - 911.2 Industrial Economics - 911.4 Marketing - 912.2 Management

DOI: 10.4156/jdcta.vol5.issue12.7

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

81.

Accession number: 20124815717299

Title: The problems and countermeasures of the low carbon economy development and the ecological tourist city treatment in Qihuangdao City

Authors: Ma, Xiuli1 ; Chen, Yanli1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 050000, China

Corresponding author: Ma, X. (sagez@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 573-574

Monograph title: Environment Science and Materials Engineering

Issue date: 2012

Publication year: 2012

Pages: 864-868

Language: English

ISSN: 10226680

ISBN-13: 9783037854952

Document type: Conference article (CA)

Conference name: 2012 International Conference on Environment Materials and Environment Management, EMEM 2012

Conference date: August 4, 2012 - August 4, 2012

Conference location: Wuhan, China

Conference code: 93578

Sponsor: Information Technology and Industrial Engineering Research Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: After establishing the goal of ecotourism city based on the natural and geographic environment, there are some practical problems in the aspects of achieving low-carbon idea, creating a low carbon city, developing low carbon economy and industries in Qinhuangdao city. For example, the feature and main brand of tourism are not standing out, the aim of tourism is obscure, the overall planning and consciousness of scientific management are not strong, and lack of professional talents of ecotourism. These obstacles can be overcome by highlighting own characteristics, establishing the whole plan, strengthening the consciousness of brand and sustainable utilization of tourism resources, improving the quality of personnel engaged in tourism and so on. All these measures can realize the goal of ecotourism city. © (2012) Trans Tech Publications, Switzerland.

Number of references: 7

Main heading: Environmental management

Controlled terms: Ecology - Renewable energy resources

Uncontrolled terms: Countermeasure - Eco-tourisms - Low carbon economy - Low-carbon - Practical problems - Scientific management - Sustainable utilization

Classification code: 454 Environmental Engineering - 525.1 Energy Resources and Renewable Energy Issues

DOI: 10.4028/www.scientific.net/AMR.573-574.864

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

82.

Accession number: 20134716999046

Title: An idea of the topological inductive logic under the inadequate-cognition-oriented

Authors: Liu, Bang Fan¹ ; Xu, Shui² ; Ma, Xiu Li³ ; Ke, Xu²

Author affiliation:

- 1 Humanities-law College Yanshan University, Qinhuangdao, 066004, China
- 2 Qinhuangdao Vocational and Technical College, Qinhuangdao, 066004, China
- 3 Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 433-435

Monograph title: Advances in Mechatronics and Control Engineering II

Issue date: 2013

Publication year: 2013

Pages: 570-573

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037858943

Document type: Conference article (CA)

Conference name: 2013 2nd International Conference on Mechatronics and Control Engineering, ICMCE 2013

Conference date: August 28, 2013 - August 29, 2013

Conference location: Dalian, China

Conference code: 100758

Sponsor: Queensland University of Technology; Korea Maritime University; Hong Kong Industrial Technology Research Centre; Inha University

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Most of the imperfect inductive inferences are under the condition of inadequate cognition, so is the universe and black hole oriented topological inductive logic. When a cognition is not very clear, what we need is Lee Smolin's "logic existing for working cosmography", which is called Topos Theory. We human cognition has another big loophole, i. e., our inner black hole, which is our wisdom itself. The wisdom that we human have is another unclear world similar to universe. So the understanding of human wisdom and its cognitive process needs to construct topos logic. © (2013) Trans Tech Publications, Switzerland.

Number of references: 12

Main heading: Cognitive systems

Controlled terms: Control theory - Gravitation - Stars - Topology

Uncontrolled terms: Black holes - Cognitive process - Human cognition - Inadequate cognitive - Inductive inference - Inductive logic - Topos theory

Classification code: 657.2 Extraterrestrial Physics and Stellar Phenomena - 731.1 Control Systems - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 931.5 Gravitation, Relativity and String Theory

DOI: 10.4028/www.scientific.net/AMM.433-435.570

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

83.

Accession number: 20110313595623

Title: Study on the construction of China national experimental chemistry teaching demonstration centres

Authors: Hou, Wenlong¹ ; Wang, Ruiyun¹ ; Zhang, Zhiwei¹ ; Wang, Yawei¹ ; Shen, Xihai¹ ; Yang, Yuedong¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Hou, W.

Source title: 2010 International Conference on Future Information Technology and Management Engineering, FITME 2010

Abbreviated source title: Int. Conf. Future Inf. Technol. Manage. Eng., FITME

Volume: 1

Part number: 1 of 3

Monograph title: 2010 International Conference on Future Information Technology and Management Engineering, FITME 2010

Issue date: 2010

Publication year: 2010

Pages: 532-535

Article number: 5655813

Language: English

ISBN-13: 9781424490882

Document type: Conference article (CA)

Conference name: 2010 International Conference on Future Information Technology and Management Engineering, FITME 2010

Conference date: October 9, 2010 - October 10, 2010

Conference location: Changzhou, China

Conference code: 83350

Sponsor: Jiangsu Teachers University of Technology; Intelligent Inf. Technol. Appl. Res. Assoc. (IITA); IEEE Communications Society Beijing (Changsha) Chapter

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper aims to provide valuable experience to the laboratory of university by studying on the construction of China national teaching demonstration centre for chemistry experiment. This paper introduced experiment teaching, experiment management, experiment technician, experiment environment, and demonstration and diathermaney of demonstration centre. For construction of China national teaching demonstration centre, the goal is to cultivate students' innovative ability in practice. Hence, the overall planning is necessary. At the same time, it is very important to prove the views above. © 2010 IEEE.

Number of references: 18

Main heading: Experiments

Controlled terms: Astatine - Demonstrations - Environmental management - Information technology - Teaching

Uncontrolled terms: Chemistry experiments - Chemistry teaching - China national experimental chemistry teaching demonstration centres - Experiment management - Innovative ability

Classification code: 454.1 Environmental Engineering, General - 804 Chemical Products Generally - 901.2 Education - 901.3 Engineering Research - 903 Information Science

DOI: 10.1109/FITME.2010.5655813

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20121214876958

Title: The research progress of soccer learning mechanisms for robot

Authors: Wang, Shuang1 ; Hou, Ya Li2 ; Wang, Hai Jun1

Author affiliation:

1 Hebei Normal University of Science and Technology, China

2 Qinhuangdao Insititute of Technology, China

Corresponding author: Wang, S. (wangshuang333@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 476-478

Monograph title: New Materials and Processes

Issue date: 2012

Publication year: 2012

Pages: 886-889

Language: English

ISSN: 10226680

ISBN-13: 9783037853719

Document type: Conference article (CA)

Conference name: 3rd International Conference on Manufacturing Science and Engineering, ICMSE
2012

Conference date: March 27, 2012 - March 29, 2012

Conference location: Xiamen, China

Conference code: 89008

Sponsor: Fujian University of Technology; Xiamen University; Fuzhou University; Huaqiao University;
University of Wollongong

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: This study makes a review of learning theories, methods, technologies and applications about robot soccer player's behavior how to implement complex tasks. And pointed out that the limitations of its existence, as well as learning strategies of robot soccer. As a test bed of multi-agent system research of robot soccer system, many researchers conducted a study on the technology from different sides, and have achieved some success. The study indicated that researches currently on robot soccer system includes soccer robot architecture, collaboration, under the dynamic environment of a robot, sensor data fusion, complex reasoning and action learning in task, opponent modeling, and more. © (2012) Trans Tech Publications.

Number of references: 4

Main heading: Industrial research

Controlled terms: Equipment testing - Multi agent systems - Robot applications - Sensor data fusion

Uncontrolled terms: Action learning - Complex task - Dynamic environments - Learning mechanism - Learning strategy - Learning Theory - Multi agent system (MAS) - Opponent modeling - Progress - Research progress - Robot soccer - Robot Soccer system - Soccer robot

Classification code: 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 901.3 Engineering Research - 723.5 Computer Applications - 723.2 Data Processing and Image Processing - 731.6 Robot Applications

DOI: 10.4028/www.scientific.net/AMR.476-478.886

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

85.

Accession number: 20112414060248

Title: Research of data mining in electronic commerce

Authors: Yu, HongKui1 ; Cao, Lijun1 ; Li, Yuxiang1 ; Yang, YanPing1

Author affiliation:

1 Dept. of Computer Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Yu, H. (Rscyhk@126.com)

Source title: 2011 International Conference on Consumer Electronics, Communications and Networks, CECNet 2011 - Proceedings

Abbreviated source title: Int. Conf. Consum. Electron., Commun. Networks, CECNet - Proc.

Monograph title: 2011 International Conference on Consumer Electronics, Communications and Networks, CECNet 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 4323-4326

Article number: 5768320

Language: English

ISBN-13: 9781612844572

Document type: Conference article (CA)

Conference name: 2011 International Conference on Consumer Electronics, Communications and Networks, CECNet 2011

Conference date: April 16, 2011 - April 18, 2011

Conference location: XianNing, China

Conference code: 85030

Sponsor: IEEE Consumer Electronics Society

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Electronic commerce and data mining are being payed maximum attention. Apply data mining to electronic commerce become a hot issue among businesses. This paper introduces the concepts and classifications of the Web mining. It takes the mining form Web logs as an ensample to discusses the methods and process of Web mining. At last, it presents its applications in Electronic commerce. © 2011 IEEE.

Number of references: 15

Main heading: Electronic commerce

Controlled terms: Consumer electronics - Data mining - User interfaces

Uncontrolled terms: Web Log - Web Mining - Weblogs

Classification code: 715 Electronic Equipment, General Purpose and Industrial - 722.2 Computer Peripheral Equipment - 723.3 Database Systems - 911.2 Industrial Economics - 913 Production Planning and Control; Manufacturing

DOI: 10.1109/CECNET.2011.5768320

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

86.

Accession number: 20102813070505

Title: The analysis of several common easily confused basic concepts in unary function calculus

Authors: Zhao, Chen Xia1 ; Yu, Ying2 ; Xiao, Cui Yu3 ; Chen, Wei Li2

Author affiliation:

1 College of Light Industry, Hebei Polytechnic University, Tangshan Hebei 063009, China

2 LiRen College, YanShan University, Qinhuangdao HeBei 066004, China

3 Hebei Normal University of Science and Technology, Qinhuangdao,066004, China

Corresponding author: Zhao, C. X. (xinqing2228@163.com)

Source title: APWCS 2010 - 2010 Asia-Pacific Conference on Wearable Computing Systems

Abbreviated source title: APWCS - Asia-Pac. Conf. Wearable Comput. Syst.

Monograph title: APWCS 2010 - 2010 Asia-Pacific Conference on Wearable Computing Systems

Issue date: 2010

Publication year: 2010

Pages: 291-294

Article number: 5481131

Language: English

ISBN-13: 9780769540030

Document type: Conference article (CA)

Conference name: 2010 Asia-Pacific Conference on Wearable Computing Systems, APWCS 2010

Conference date: April 17, 2010 - April 18, 2010

Conference location: Shenzhen, China

Conference code: 80933

Sponsor: Intelligent Information Technology Application; Research Association

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper, some counter-examples are given to analyze deeply several common easily confused basic concepts and theories in unary function calculus .Through the examples, xamples, it can seen that we must truly understand the basic concepts of advanced mathematics mathematics. In order to learn higher mathematics better; it needs us to have a deep understanding about the concept in unary function calculus. In this paper, a number of counter-examples are given to intensify these basic concepts and theories, and the author authors gives some explanations for the concept of several common mistakes. © 2010 IEEE.

Number of references: 5

Main heading: Functions

Controlled terms: Calculations - Wearable computers

Uncontrolled terms: Basic concepts - Unary functions

Classification code: 721 Computer Circuits and Logic Elements - 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 921 Mathematics

DOI: 10.1109/APWCS.2010.80

Database: Compendex

87.

Accession number: 20120114657903

Title: Design and verification of hybrid dynamic worm detection system

Authors: Wang, Hongyan¹ ; Tang, Xiaoguang¹ ; Zhuang, Cheng¹ ; Fu, Changqin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Wang, H. (wanghy63@163.com)

Source title: International Journal of Advancements in Computing Technology

Abbreviated source title: Intl. J. Adv. Comput. Technol.

Volume: 3

Issue: 11

Issue date: December 2011

Publication year: 2011

Pages: 80-87

Language: English

ISSN: 20058039

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: This paper proposes a new design scheme for hybrid dynamic worm detection system. In the proposed scheme, the features of matching detection method based on protocol analysis, Bayesian detection method based on probability, and honeypot-based detection method are integrated for a relative complemented function to develop the advantages and avoid the disadvantages of each detection method. The designed hybrid dynamic worm detection system can be used for effective detection of abnormal data behavior of the hosts attacked by worms, and it also serves for dynamic real-time update of the rule base. Then a preliminary functional verification is performed on this system.

Number of references: 10

Main heading: Computer worms

Controlled terms: Feature extraction

Uncontrolled terms: Abnormal data - Bayesian detection - Detection methods -
Functional verification - Honeypots - Hybrid dynamics - New design - Protocol analysis -
Real-time updates - Rule base - Worm detection system

Classification code: 716 Telecommunication; Radar, Radio and Television - 723 Computer Software,
Data Handling and Applications

DOI: 10.4156/ijact.vol3.issue11.11

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

88.

Accession number: 20113814353608

Title: The application of multimedia technique in college aerobics teaching

Authors: Zhao, Xiaohong1 ; Liu, Xinhong2 ; Zhang, Yuhong3

Author affiliation:

- 1 Physical Education Department, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 College of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhao, X. (zixuan200054321@163.com)

Source title: 2011 International Conference on Multimedia Technology, ICMT 2011

Abbreviated source title: Int. Conf. Multimedia Technol., ICMT

Monograph title: 2011 International Conference on Multimedia Technology, ICMT 2011

Issue date: 2011

Publication year: 2011

Pages: 6085-6086

Article number: 6002990

Language: English

ISBN-13: 9781612847740

Document type: Conference article (CA)

Conference name: 2nd International Conference on Multimedia Technology, ICMT 2011

Conference date: July 26, 2011 - July 28, 2011

Conference location: Hangzhou, China

Conference code: 86512

Sponsor: University of Louisville; Ningbo University; Zhejiang Sci-Tech University; Communication University of China; Georgia State University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Multimedia technique provides new teaching method and effective condition for improving the width and depth of teaching. In physical education, multimedia-assisted teaching can stimulate students' creative thinking and leading role, with the characteristics of both group and individual considered. The advantages of multimedia technique in aerobics teaching are discussed, and some suggestions are proposed in the specific application according to the present situation. © 2011 IEEE.

Number of references: 5

Main heading: Teaching

Controlled terms: Applications - Information technology

Uncontrolled terms: Creative thinking - Multimedia - Multimedia techniques - New teaching - Physical education - Present situation

Classification code: 451.2 Air Pollution Control - 901.2 Education - 903 Information Science

DOI: 10.1109/ICMT.2011.6002990

Database: Compendex

89.

Accession number: 20113214226929

Title: Influence of carbon sources on the electrochemical performance of LiFePO₄/C composite cathode materialAuthors: Qin, Xiujuan¹ ; Shao, Guangjie¹ ; Wu, Honglian²

Author affiliation:

1 Yanshan University, Qinhuangdao 066004, China

2 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Qin, X. (qinxj@ysu.edu.cn)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 287-290

Monograph title: Applications of Engineering Materials

Issue date: 2011

Publication year: 2011

Pages: 1322-1326

Language: English

ISSN: 10226680

ISBN-13: 9783037851920

Document type: Conference article (CA)

Conference name: 2011 International Conference on Advanced Engineering Materials and Technology, AEMT 2011

Conference date: July 29, 2011 - July 31, 2011

Conference location: Sanya, China

Conference code: 85968

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: LiFePO₄/C cathode material with different carbon sources was synthesized by using a two-step carbothermal reduction method. The structure and electrochemical properties of the samples were characterized by XRD, SEM and galvanostatic charge-discharge method. The effect of different carbon sources on the structure, morphology and its electrochemical properties of the LiFePO₄/C composite materials were investigated. The results showed that the properties of the samples depended on carbon sources, significantly. The sample synthesized by citric acid as carbon source had the best electrochemical performance. The reason of performance difference of the LiFePO₄/C composite materials caused by carbon source was discussed. © (2011) Trans Tech Publications.

Number of references: 10

Main heading: Electrochemical properties

Controlled terms: Carbothermal reduction - Cathodes - Citric acid - Composite materials
- Electric discharges - Lithium alloys

Uncontrolled terms: Carbon source - Carbothermal reduction method - Cathode materials -
Charge-discharge - Composite cathode material - Electrochemical performance - LiFePO₄ -
TG-DTA analysis - XRD

Classification code: 951 Materials Science - 822 Food Technology - 811 Cellulose, Paper and Wood
Products - 802.3 Chemical Operations - 801.4.1 Electrochemistry - 704.1 Electric Components - 701.1 Electricity:
Basic Concepts and Phenomena - 549.1 Alkali Metals - 415 Metals, Plastics, Wood and Other Structural Materials

DOI: 10.4028/www.scientific.net/AMR.287-290.1322

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

90.

Accession number: 20132916521012

Title: The research of oil pressure fluctuation influence to rolling mill control precision

Authors: Chen, Chun Ming¹ ; Liu, Ya Jun² ; Zhang, Yun Xia¹ ; Guo, Dan Xia¹

Author affiliation:

1 E and A College of Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Qinhuangdao Institution of Beris Engineering and Research Corporation, Qinhuangdao, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 330

Monograph title: Materials Engineering and Automatic Control II

Issue date: 2013

Publication year: 2013

Pages: 624-628

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037857250

Document type: Conference article (CA)

Conference name: 2nd International Conference on Materials Engineering and Automatic Control, ICMEAC 2013

Conference date: May 18, 2013 - May 19, 2013

Conference location: Shandong, China

Conference code: 97847

Sponsor: Shandong Jianzhu University; Shandong University; China University of Petroleum; Shandong University of Science and Technology; University of Jinan; et al

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Oil source made up of constant pressure variable displacement pump, accumulator, and pipeline is widely used to provide stable pressure for electro-hydraulic control system in practical engineering. Based on the experiment, the relationship between initial charging pressure & volume of the accumulator at inlet of the servo valve and control precision is analyzed in detail, and coupling rules between the load variation and the pressure fluctuations of oil-source are obtained, the rules can give reference for selecting initial charging pressure & volume of the accumulator according to the requirement of system control precision, which can further improve control precision and product quality by optimizing equipment parameters. © (2013) Trans Tech

Publications, Switzerland.

Number of references: 9

Main heading: Pneumatic control equipment

Controlled terms: Automation - Control - Oil wells - Process control

Uncontrolled terms: Accumulator - Control precision - Electro-hydraulic control systems - Equipment parameters - Oil-source - Practical engineering - Pressure fluctuation - Rolling mill control

Classification code: 512.1.1 Oil Fields - 731 Automatic Control Principles and Applications - 732.1 Control Equipment

DOI: 10.4028/www.scientific.net/AMM.330.624

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

91.

Accession number: 20112714114068

Title: Research on public participation in urban planning

Authors: Xing, Yan1 ; Liu, Jingwen2 ; Li, Bingxin1 ; Zhang, Ming2 ; Meng, Deguang2

Author affiliation:

1 College of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao Hebei, 066004, China

2 College of Business Administration, Hebei Normal University of Science and Technology, Qinhuangdao Hebei, 066004, China

Corresponding author: Xing, Y. (xingyanqq@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 255-260

Monograph title: Advances in Civil Engineering

Issue date: 2011

Publication year: 2011

Pages: 1333-1337

Language: English

ISSN: 10226680

ISBN-13: 9783037851395

Document type: Conference article (CA)

Conference name: 2011 International Conference on Civil Engineering and Building Materials, CEBM 2011

Conference date: July 29, 2011 - July 31, 2011

Conference location: Kunming, China

Conference code: 85320

Sponsor: Kunming University of Science and Technology; International Association for Scientific and High Technology

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Public participation is an effective way in promoting the administration of urban planning. Currently, some existing problems of public participation in urban planning can be seen including weak awareness of participation, passive and monotonous ways of participation, limited participating content, and so on. This article aims at boosting the process of public participation in urban planning by putting forward a three-step strategy in the method of raising, analyzing and solving problems. © (2011) Trans Tech Publications, Switzerland.

Number of references: 8

Main heading: Urban planning

Controlled terms: Building materials - Construction equipment

Uncontrolled terms: Democratic supervision - Existing problems - Information feedback - Public participation

Classification code: 415 Metals, Plastics, Wood and Other Structural Materials - 414 Masonry Materials - 413 Insulating Materials - 412 Concrete - 411 Bituminous Materials - 405.1 Construction Equipment - 403.1

Urban Planning and Development

DOI: 10.4028/www.scientific.net/AMR.255-260.1333

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

92.

Accession number: 20133516682196

Title: Design of intelligent green power management system

Authors: Du, Yong Sheng¹ ; Yu, Zhang Hong² ; Jian, Yu Qing²

Author affiliation:

1 Department of Computer Science, Jinning University, Qufu 273155, China

2 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 340

Monograph title: Green Manufacturing, Mechanical and Automation Engineering

Issue date: 2013

Publication year: 2013

Pages: 984-987

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037857489

Document type: Conference article (CA)

Conference name: 3rd International Conference on Mechanical Engineering and Green Manufacturing 2013, MEGM 2013

Conference date: March 22, 2013 - March 24, 2013

Conference location: Chongqing, China

Conference code: 99012

Sponsor: National Natural Science Foundation of China (NSFC)

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Intelligent power management system can detect and control the electricity consumption of electrical equipment of family and office automatically, to achieve the purpose of saving energy consumption. The monitoring server is the control center of the whole system, it can real-time monitor the energy consumption data of inserting the electric apparatus, and it can also control the power on and off automatically through remote operation of the client or using strategies. The monitoring server uses embedded Linux platform based on arm architecture, software development mainly uses C Language. This paper introduces the software design of monitoring server, and also in detail describes the design of the driver and communication protocol. © (2013) Trans Tech Publications Switzerland.

Number of references: 6

Main heading: Software design

Controlled terms: C (programming language) - Computer operating systems - Energy utilization - Manufacture - Monitoring - Network protocols

Uncontrolled terms: Driver - Electric apparatus - Electrical equipment - Electricity-consumption - Energy consumption datum - Intelligent power - Intelligent power management system - Real-time monitor

Classification code: 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 723 Computer Software, Data Handling and Applications - 537.1 Heat Treatment Processes - 525.3 Energy Utilization

DOI: 10.4028/www.scientific.net/AMM.340.984

Database: Compendex

93.

Accession number: 20121714971677

Title: The construction of the secondary vocational teachers training system based on 'cooperation between school and enterprise'

Authors: Chen, Lidong¹ ; Ma, Shuying¹ ; Shi, Lei¹ ; Li, Guofang¹ ; Zhang, Liang¹ ; Zheng, Lixin¹

Author affiliation:

¹ College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Chen, L. (chentian-940308@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 135

Monograph title: Knowledge Discovery and Data Mining

Issue date: 2012

Publication year: 2012

Pages: 573-578

Language: English

ISSN: 18675662

ISBN-13: 9783642277078

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Vocational education teachers' training is important for vocational education development. Although China' secondary vocational education teachers' training system has been set up and made considerable progress, there are some problems that can not be neglected during the teachers training. In this paper, the existing problems of the secondary vocational teachers' training are introduced, and a new training system for the secondary vocational teachers based on 'Cooperation between School and Enterprise' is put forward. The system consists of three training levels of 'teacher's professional qualifications training', 'teacher improving training' and

'the backbone teacher's training'. The training system emphasizes the training methods of the three trainings. The system accords with the current vocational education development situation, and it is helpful for sending the teachers' comprehensive ability. © 2012 Springer-Verlag GmbH Berlin Heidelberg.

Number of references: 5

Main heading: Personnel training

Controlled terms: Apprentices - Industry

Uncontrolled terms: Existing problems - Professional qualifications - Teacher training - Training methods - Training Systems - Vocational education

Classification code: 911 Cost and Value Engineering; Industrial Economics - 912 Industrial Engineering and Management - 912.4 Personnel - 913 Production Planning and Control; Manufacturing

DOI: 10.1007/978-3-642-27708-5_79

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

94.

Accession number: 20110313602508

Title: The orientation of teaching management reform of higher education in the context of innovative education

Authors: Ma, Ai-Lin¹ ; Ning, Yong-Hong¹ ; Su, Zhen-Li¹

Author affiliation:

¹ Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Ma, A.-L. (malqhd@139.com)

Source title: ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings

Abbreviated source title: ICEMT - Int. Conf. Educ. Manage. Technol., Proc.

Monograph title: ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 517-519

Article number: 5657602

Language: English

ISBN-13: 9781424486175

Document type: Conference article (CA)

Conference name: 2010 International Conference on Education and Management Technology, ICEMT 2010

Conference date: November 2, 2010 - November 4, 2010

Conference location: Cairo, Egypt

Conference code: 83348

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The cultivation of high-quality innovative talents is the needs of the times. It will definitely push the teaching management, which is also an important part of college management, to reform the traditional mode of teaching management, constantly upgrading educational thinking, deepen the reform of education management system, and optimize the teaching process control, so as to maximize the enthusiasm of both teachers' teaching and students' learning, and improve the level of teaching management and teaching efficiency. © 2010 IEEE.

Number of references: 4

Main heading: Teaching

Controlled terms: Innovation - Management - Students

Uncontrolled terms: Education management - Educational thinking - High quality - Higher education - Innovative education - Innovative talents - Personality development - Teaching process

Classification code: 901.2 Education - 912 Industrial Engineering and Management - 912.2 Management

DOI: 10.1109/ICEMT.2010.5657602

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

95.

Accession number: 20134116828777

Title: Analog circuit fault diagnosis based on particle swarm optimization algorithm and adaptive learning rate algorithm

Authors: Han, Bao Ru1 ; Chen, Shuang2 ; Wu, Heng Yu1

Author affiliation:

1 Department of Electrical Engineering, Hainan Software Profession Institute, Qionghai, China

2 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 380-384

Monograph title: Vehicle, Mechatronics and Information Technologies

Issue date: 2013

Publication year: 2013

Pages: 983-986

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037858202

Document type: Conference article (CA)

Conference name: 2013 International Conference on Vehicle and Mechanical Engineering and Information Technology, VMEIT 2013

Conference date: August 17, 2013 - August 18, 2013

Conference location: Zhengzhou, Henan, China

Conference code: 99783

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: BP neural network is widely used as a multilayer feed forward neural network model. The paper puts forward a kind of adaptive learning rate algorithm and particle swarm optimization algorithm hybrid algorithm combining in order to solve the traditional BP algorithm is easy to fall into local extremum problem. So that the particle swarm optimization algorithm and adaptive learning rate algorithm are complementary. The hybrid algorithm has extensive mapping ability of neural networks and particle swarm rapid, global convergence characteristics. The simulation shows that the hybrid algorithm realizes the detection and location of analog circuit fault avoidance, has satisfied effect. © (2013) Trans Tech Publications, Switzerland.

Number of references: 8

Main heading: Learning algorithms

Controlled terms: Analog circuits - Failure analysis - Fault detection - Information technology - Neural networks - Particle swarm optimization (PSO)

Uncontrolled terms: Adaptive learning rates - Analog circuit fault diagnosis - BP neural networks - Global convergence - Hybrid algorithms - Multi-layer feed forward - Particle swarm - Particle swarm optimization algorithm

Classification code: 921 Mathematics - 903 Information Science - 723.4 Artificial Intelligence - 723 Computer Software, Data Handling and Applications - 713 Electronic Circuits - 422 Strength of Building Materials; Test Equipment and Methods - 421 Strength of Building Materials; Mechanical Properties

DOI: 10.4028/www.scientific.net/AMM.380-384.983

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20125215834710

Title: Research on energy saving supervision system of colleges and universities heating based on control theory of time & temperature sharing

Authors: Yang, Hongqing1 ; Xi, Fei2 ; Zhang, Huagang1 ; Li, Hui1

Author affiliation:

1 HeBei Normal University of Science and Technology, Qinhuangdao, China

2 WENYI Autocontrol Technology Co.Ltd, Qinhuangdao, China

Corresponding author: Yang, H. (Yang_hongqing@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 226-228

Monograph title: Vibration, Structural Engineering and Measurement II

Issue date: 2012

Publication year: 2012

Pages: 2398-2401

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037855072

Document type: Conference article (CA)

Conference name: 2012 International Conference on Vibration, Structural Engineering and Measurement, ICVSEM 2012

Conference date: October 19, 2012 - October 21, 2012

Conference location: Shanghai, China

Conference code: 94580

Sponsor: Guangzhou University; Cleveland State University; Xi'an Jiaotong University; Tongji

University; The Hong Kong Polytechnic University; et al

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: According to the spirit of relative documents issued by Ministry of Housing and Urban Rural Development and by Ministry of Education, and combined with the intermittent use features of public constructions in colleges and universities, Energy saving supervision system of colleges and universities is established by using automation control technology and content networking technology. By means of installing wireless temperature sensors, time & temperature sharing controllers and electric control valves, scientific management mode of remote temperature monitoring, time & temperature sharing controlling, and on-demand heating is achieved. © (2012) Trans Tech Publications, Switzerland.

Number of references: 5

Main heading: Societies and institutions

Controlled terms: Education - Energy conservation - Energy utilization - Regional planning
- Structural design

Uncontrolled terms: Automation controls - Building energy consumption - Colleges and universities - Electric control - Ministry of Education - Networking technology - Remote temperature monitoring - Scientific management - Supervision systems - Urban-rural

Classification code: 403.2 Regional Planning and Development - 408.1 Structural Design, General - 525.2 Energy Conservation - 525.3 Energy Utilization - 901.1.1 Societies and Institutions - 901.2 Education

DOI: 10.4028/www.scientific.net/AMM.226-228.2398

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

97.

Accession number: 20123415365756

Title: Multi-attribute group decision-making method based on triangular intuitionistic fuzzy number and 2-tuple linguistic information

Authors: Yue, Xiaoyun1 ; Xia, Guo Kun2 ; Li, Yanpo1

Author affiliation:

1 Institution of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Science, Tianjin University of Science and Technology, Tianjin 300457, China

Corresponding author: Yue, X. (yuexiaoyun888@sohu.com)

Source title: Journal of Software

Abbreviated source title: J. Softw.

Volume: 7

Issue: 7

Issue date: 2012

Publication year: 2012

Pages: 1546-1553

Language: English

ISSN: 1796217X

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40,, OULU, 90571, Finland

Abstract: For multiple attribute group decision-making problems, in which the attribute values are triangular intuitionistic fuzzy numbers and the attribute weight information is the linguistic evaluation, a multiple attribute group decision-making method is proposed. In the method, first, to transform the 2-tuple linguistic attribute weights to the real numbers. Then, to aggregate the experts' preferences with triangular intuitionistic fuzzy number by the extended aggregation operators, the group overall evaluation values of the alternatives were obtained. The ranking could be present according to the weighted average area. Triangular intuitionistic fuzzy number and 2-tuple linguistic information are easier to deal with the fuzzy and the uncertain information of different decision makers. Finally, a numerical example was used to illustrate the proposed method. The result shows the approach is simple, effective, and easy to calculate. © 2012 ACADEMY PUBLISHER.

Number of references: 24

Main heading: Decision making

Controlled terms: Fuzzy rules - Linguistics - Mathematical operators

Uncontrolled terms: 2-Tuple - 2-tuple linguistic informations - Aggregation operator - Attribute values - Attribute weight - Decision makers - Intuitionistic Fuzzy number - Linguistic attributes - Multi-attribute group decision-making - Multiple attribute group decision makings (MAGDM) - Numerical example - Real number - Uncertain informations - Weighted averages

Classification code: 903.2 Information Dissemination - 912.2 Management - 921 Mathematics - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.4304/jsw.7.7.1546-1553

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

98.

Accession number: 20120914816455

Title: Construction of enterprises' financial knowledge management system (EFKMS)

Authors: Du, Maobao¹ ; Qiu, Fengxia¹ ; Xu, Wenjing¹

Author affiliation:

¹ Institute of Finance and Economic, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Du, M. (jmdmb@126.com)

Source title: Procedia Environmental Sciences

Abbreviated source title: Procedia Environ. Sci.

Volume: 11

Part number: 3 of 3

Issue: PART C

Monograph title: 2011 2nd International Conference on Challenges in Environmental Science and Computer Engineering, CESCE 2011

Issue date: 2011

Publication year: 2011

Pages: 1240-1244

Language: English

E-ISSN: 18780296

Document type: Conference article (CA)

Conference name: 2011 2nd International Conference on Challenges in Environmental Science and Computer Engineering, CESCE 2011

Conference date: December 14, 2011 - December 15, 2011

Conference location: Haikou, China

Conference code: 88756

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: Financial management, the backbone of the enterprise management, is a linkage of the economic activities in an enterprise. In this paper, to meet the needs of knowledge management, theories and methods of knowledge management are introduced into the financial management, and financial knowledge management system in an enterprise is constructed. In this system there are six main functions, such as financial knowledge acquisition, storage, dissemination, use, innovation and evaluation. All in all, this model can lead the financial management to adapt to the knowledge management. © 2011 Published by Elsevier Ltd.

Number of references: 4

Main heading: Finance

Controlled terms: Construction - Economics - Environmental engineering - Industry - Knowledge acquisition - Knowledge based systems - Knowledge management

Uncontrolled terms: Construction of enterprise - Economic activities - Enterprise IS - Enterprise management - Financial knowledge management system - Financial managements - Knowledge management system

Classification code: 971 Social Sciences - 913 Production Planning and Control; Manufacturing - 912 Industrial Engineering and Management - 911 Cost and Value Engineering; Industrial Economics - 723 Computer Software, Data Handling and Applications - 454 Environmental Engineering - 405 Construction Equipment and Methods; Surveying

DOI: 10.1016/j.proenv.2011.12.186

Database: Compendex

99.

Accession number: 20111013722729

Title: Design and implementation of wireless FAEM system based on the ZigBee and GPRS

Authors: Xue, Yan Ru1 ; Liu, Min2

Author affiliation:

1 Mechanical and Electrical Engineering College, HeBei Normal University of Science and Technology, QinHuangDao, China

2 Department of Computer Science, HeBei Normal University of Science and Technology, QinHuangDao, China

Corresponding author: Xue, Y. R. (yr_x@yeah.net)

Source title: Proceedings - International Conference on Electrical and Control Engineering, ICECE 2010

Abbreviated source title: Proc. - Int. Conf. Electr. Control Eng., ICECE

Monograph title: Proceedings - International Conference on Electrical and Control Engineering, ICECE 2010

Issue date: 2010

Publication year: 2010

Pages: 2726-2728

Article number: 5630580

Language: English

ISBN-13: 9780769540313

Document type: Conference article (CA)

Conference name: International Conference on Electrical and Control Engineering, ICECE 2010

Conference date: June 26, 2010 - June 28, 2010

Conference location: Wuhan, China

Conference code: 84009

Sponsor: IEEE IAS Society; Huazhong University of Science and Technology; Wuhan University of Science and Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: A wireless FAEM (facility agriculture environmental monitoring) system is presented by using ZigBee and GPRS technology, and the hardware realization and software flow are given too. By means of ZigBee wireless sensor module, the method can get together much information on soil humidity, Carbon dioxide, temperature, humidity and so on. Then such information is delivered to the remote control center through GPRS. Two kinds of internet technology can complement each other. During the latter part of the test, the wireless system can achieve the required operational performance: reliable data transmission as well as higher real-time system, and also reduce power consumption and overall system cost. © 2010 IEEE.

Number of references: 5

Main heading: Electrical engineering

Controlled terms: Carbon dioxide - Real time systems

Uncontrolled terms: Environmental Monitoring - FAEM system - GPRS - GPRS technologies - Hardware realization - Internet technology - Operational performance - Power Consumption - Reliable data transmission - Soil humidity - System costs - System-based - Wireless sensor - Wireless systems - ZigBee

Classification code: 709 Electrical Engineering, General - 722.4 Digital Computers and Systems - 804.2 Inorganic Compounds

DOI: 10.1109/iCECE.2010.665

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

100.

Accession number: 20122415108149

Title: Modeling and implementation of the experiment of spectrometer

Authors: Wang, Hongyan¹ ; Tang, Xiaoguang¹ ; Zhuang, Cheng¹ ; Wang, Jixia¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Wang, H. (wanghy63@163.com)

Source title: Journal of Convergence Information Technology

Abbreviated source title: J. Convergence Inf. Technol.

Volume: 7

Issue: 8

Issue date: May 2012

Publication year: 2012

Pages: 254-261

Language: English

ISSN: 19759320

E-ISSN: 22339299

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: Spectrometer is a measuring device with a complex structure and high sensitivity to the operation; therefore it is relatively difficult to master it. The virtual experiment equipment and lab environment modeled by computer can provide a method for the students to practice it effectively before entering the real laboratory. By this method, students can get a preliminary understanding of the experiment method and operation. This article shows the simulation of spectrometer using computer software such as 3D MAX, flash and VRP. In this simulation system, different parts of spectrometer are linked smoothly, as well as the content of spectrometer experiment is implemented. This simulation system shows the experiment principle vividly, which enables the students to operate the system for different purpose and to understand its structure and functions comprehensively. The simulation of the experiment is realistic and smooth, with the ability of turning the sight view for 360 degrees freely. The effects of adjustment and measurement are very clear and robust. This system can serve as a good tool for the students to prepare for the physics experiment class, so that a better teaching result is achieved.

Number of references: 8

Main heading: Spectrometry

Controlled terms: Experiments - Measurements - Spectrometers - Students - Three

dimensional - Three dimensional computer graphics - Virtual reality

Uncontrolled terms: 3D Max - Adjustment - Flash - Simulation - VR-Platform

Classification code: 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 901.3 Engineering Research - 801 Chemistry - 723 Computer Software, Data Handling and Applications - 901.2 Education

DOI: 10.4156/jcit.vol7.issue8.29

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

101.

Accession number: 20145200362147

Title: Optimization of construction scheme and supporting technology for HJS soft rock tunnel

Authors: Wang, Shuren^{1, 2}; Li, Chunliu^{1, 3}; Liu, Zhaowei⁴; Fang, Junbo⁴

Author affiliation:

1 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao, China

2 Opening Laboratory for Deep Mine Construction, Henan Polytechnic University, Jiaozuo, China

3 Institute of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao, China

4 China Railway Tunnel Group Co., Ltd., Luoyang, China

Corresponding author: Wang, Shuren

Source title: International Journal of Mining Science and Technology

Abbreviated source title: Int. J. Min. Sci. Technol.

Volume: 24

Issue: 6

Issue date: November 1, 2014

Publication year: 2014

Pages: 847-852

Language: English

ISSN: 20952686

Document type: Journal article (JA)

Publisher: China University of Mining and Technology

Abstract: For a soft rock tunnel under high stress in jointed and swell soft rock (HJS), two construction schemes pilot-tunneling enlarging excavation and step-by-step excavation were optimized using FLAC2D, and the deformation effects of the two construction schemes were verified by field tests. Based on engineering geological investigation and mechanical analysis of large deformations, the complex deformation mechanisms of stress expansion and structural deformation of the soft rock tunnel were confirmed, and support countermeasures from the complex deformation mechanism converted to a single type were proposed, and the support parameters were optimized by field tests. These technologies were proved by engineering practice, which produced significant technical and economic benefits.

Number of references: 16

Main heading: Tunnels

Controlled terms: Deformation - Hip prostheses - Mechanisms - Optimization - Rocks - Stresses - Tunneling (excavation)

Uncontrolled terms: Deformation mechanism - Engineering geological investigations - High stress - Optimization of construction schemes - Soft rock tunnel - Structural deformation - Support parameters - Supporting technology

Classification code: 401.2 Tunnels and Tunneling - 421 Strength of Building Materials; Mechanical Properties - 422 Strength of Building Materials; Test Equipment and Methods - 462.4 Prosthetics - 481.1 Geology - 601.3 Mechanisms - 921.5 Optimization Techniques

DOI: 10.1016/j.ijmst.2014.10.018

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

102.

Accession number: 20140817358774

Title: Effect of vibration characteristics for carbon fiber composite materials on musical instruments

making

Authors: Lv, Min1 ; Sun, Ji Li1

Author affiliation:

1 College of Art and Music, Hebei Normal University of Science and Technology, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 508

Monograph title: Research on Energy Material, Chemical Engineering and Mining Engineering II

Issue date: 2014

Publication year: 2014

Pages: 66-69

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783038350163

Document type: Conference article (CA)

Conference name: 2014 2nd International Conference on Energy Material, Chemical Engineering and Mining Engineering, EMCEM 2014

Conference date: January 12, 2014 - January 13, 2014

Conference location: Wuhan, China

Conference code: 102767

Sponsor: Wuhan institute of technology; Beijing Material Research Center; International Material Research Society, Hong Kong

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Carbon fiber and its composite materials have a series of excellent properties such as high

specific strength, high specific modulus, high temperature resistance, corrosion resistance, fatigue resistance and small thermal expansion coefficient, which can be widely applied to musical instrument manufacturing field. This paper introduces the structure and performance of carbon fiber, and mainly introduces the latest application of carbon fiber composite material, and the effect of vibration characteristics on musical performance. This paper also puts forward that for instrument design material substitutes the use of carbon fiber composite material structure of 2 layers and 3 layers structure should be considered, and the single layer structure is not feasible. © (2014) Trans Tech Publications, Switzerland.

Number of references: 4

Main heading: Strength of materials

Controlled terms: Acoustic wave absorption - Carbon fibers - Chemical engineering - Composite materials - Corrosion resistance - Mining engineering - Musical instruments - Vibration analysis

Uncontrolled terms: Carbon fiber composite materials - High specific strength - High temperature resistance - Instrument manufacturing - Single-layer structure - Structure and performance - Thermal expansion coefficients - Vibration characteristics

Classification code: 943.2 Mechanical Variables Measurements - 811 Cellulose, Paper and Wood Products - 805.1 Chemical Engineering - 804 Chemical Products Generally - 752.4 Acoustic Generators - 951 Materials Science - 751.1 Acoustic Waves - 506 Mining Engineering, General - 422 Strength of Building Materials; Test Equipment and Methods - 421 Strength of Building Materials; Mechanical Properties - 415 Metals, Plastics, Wood and Other Structural Materials - 539.1 Metals Corrosion

DOI: 10.4028/www.scientific.net/AMM.508.66

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

103.

Accession number: 20142417818345

Title: Analysis and countermeasure research on electronic resources utilization in Vocational College

Authors: Chen, Lixue¹ ; Ding, Nan¹ ; Gao, Yabin² ; Wu, Zhiqiang³

Author affiliation:

1 Hebei Vocational and Technical College of Building Materials, Qinhuangdao 066004, Hebei, China

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Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 9

Issue: 5

Issue date: 2014

Publication year: 2014

Pages: 223-229

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Based on the library questionnaires of Hebei Vocational & Technical College of Building Materials in 2013, this paper analyzes the status and causes of electronic resources utilization. After the analysis, this paper puts forward the corresponding countermeasure on how to improve the utilization of electronic resources in vocational colleges in an attempt to push on the promotion and utilization of electronic resources. © 2014 SERSC.

Number of references: 13

Main heading: Digital libraries

Controlled terms: Surveys - Waste utilization

Uncontrolled terms: Countermeasure researches - Electronic resources - Technical college
- Vocational colleges

Classification code: 405.3 Surveying - 452.3 Industrial Wastes - 723.5 Computer Applications

DOI: 10.14257/ijmue.2014.9.5.22

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

104.

Accession number: 20141317521032

Title: Analysis on the evolution of marine innovation collaboration Networks

Authors: Qiu, F.X.1, 2

Author affiliation:

1 Hebei University of Technology, Tianjin, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Qiu, F.X.

Source title: Computer, Intelligent Computing and Education Technology - Selected Peer Reviewed Papers From 2014 International Conference on Computer, Intelligent Computing and Education Technology, CICET 2014

Abbreviated source title: Comput., Intell. Comput. Educ. Technol. - Sel. Peer Rev. Pap. Int. Conf. Comput., Intell. Comput. Educ. Technol., CICET

Volume: 1

Part number: 1 of 2

Monograph title: Computer, Intelligent Computing and Education Technology - Selected Peer Reviewed Papers From 2014 International Conference on Computer, Intelligent Computing and Education Technology, CICET 2014

Issue date: 2014

Publication year: 2014

Pages: 489-492

Language: English

ISBN-13: 9781138026391

Document type: Conference article (CA)

Conference name: 2014 International Conference on Computer, Intelligent Computing and Education Technology, CICET 2014

Conference date: March 27, 2014 - March 28, 2014

Conference location: Hong Kong, Hong kong

Conference code: 103312

Sponsor: International Frontiers of Science and; Technology Research Association; Control Engineering and Information Science; Research Association

Publisher: Taylor & Francis - Balkema, P.O. Box 447, Leiden, 2300 AK, Netherlands

Abstract: In this paper, the cooperation networks of marine innovation are drew, which include two stages. Overall, along with evolution of cooperation networks, which scales have expanding continually, the proportions of cooperation innovation have increased, and core nodes have growing up and there exist larger cohesive subgroups in the whole network. Secondly, by using the density, degree, centrality, the networks are analyzed meticulously, and the correlations between the indicators are explored. The aims of the paper are to make the cooperation network for marine innovation in China clear, and provide ideas for further optimization of networks. © 2014 Taylor & Francis Group, London, UK.

Number of references: 6

Main heading: Intelligent computing

Controlled terms: Education - Innovation - Networks (circuits)

Uncontrolled terms: Collaboration network - Cooperation - Cooperation networks - Core nodes - Evolution - Evolution of cooperation - Marine - Optimization of network

Classification code: 703.1 Electric Networks - 723.4 Artificial Intelligence - 901.2 Education - 912 Industrial Engineering and Management

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

105.

Accession number: 20151500737077

Title: The influence of social culture on literary translation

Authors: Bian, Fenglian1 ; Chen, Qianqian1 ; Zhao, Xinbo2

Author affiliation:

- 1 Foreign language college, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 2 Liren College of Yanshan University, Qinhuangdao, Hebei, China

Source title: BioTechnology: An Indian Journal

Abbreviated source title: Biotechnol. An Indian J.

Volume: 10

Issue: 8

Issue date: 2014

Publication year: 2014

Pages: 2799-2805

Language: English

ISSN: 09747435

Document type: Journal article (JA)

Publisher: Trade Science Inc, 126,Prasheel Park,Sanjay Raj Farm House,Nr. Saurashtra Unive, Rajkot, Gujarat, 360 005, India

Abstract: Social culture has virtually inseparable relation on literary translation, and they are influencing each other. This paper studies the impact of social culture on literature translation from the perspective of social culture. The article analysis and indicates the influence of indicators on literature translation through in-depth study of the social and culture indicators by expert interviews. © Trade Science Inc.

Number of references: 8

Main heading: Translation (languages)

Controlled terms: Economic and social effects

Uncontrolled terms: Fuzzy mathematics - Hierarchical analysis - In-depth study - Influence - Social culture

Classification code: 723.5 Computer Applications - 971 Social Sciences

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

106.

Accession number: 20140817357796

Title: Evolution of innovation cooperation networks in the marine industry

Authors: Qiu, Feng-Xia^{1, 2}

Author affiliation:

1 Hebei University of Technology, Tianjin, China

2 Hebei normal University of science and Technology, Qinhuangdao, China

Corresponding author: Qiu, F. X. (qfx301@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 496-500

Monograph title: Frontiers of Manufacturing and Design Science IV

Issue date: 2014

Publication year: 2014

Pages: 2884-2887

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037859926

Document type: Conference article (CA)

Conference name: 4th International Conference on Frontiers of Manufacturing and Design Science, ICFMD 2013

Conference date: September 10, 2013 - September 12, 2013

Conference location: Hong Kong, China

Conference code: 102765

Sponsor: Contr. Eng. and Info. Sci. Res. Assoc.(CEIS); Intl. Frontiers of Sci. and Technol. Res. Assoc. (IFST); National Chin-Yi University of Technology; Trans tech publications inc

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: This study aims to obtain the evolution of innovation cooperation by constructing and analysing patent cooperation networks for the field of Chinese marine industry. Total patents with universities, industries and research institutes are retrieved from SIPO patent database and patent networks are established by using social network analysis. Effects are found that firm-university-research institution innovation cooperation in the industry has been formed, but nodes have different cooperation preferences. © (2014) Trans Tech Publications, Switzerland.

Number of references: 5

Main heading: Patents and inventions

Controlled terms: Design - Innovation - Manufacture - Networks (circuits) - Social networking (online) - Societies and institutions

Uncontrolled terms: Chinese Marines - Cooperation - Cooperation networks - Institution innovation - Marine industry - Multi agent - Patent database - Research institutes

Classification code: 912 Industrial Engineering and Management - 901.3 Engineering Research - 901.1.1 Societies and Institutions - 723 Computer Software, Data Handling and Applications - 703.1 Electric Networks - 537.1 Heat Treatment Processes - 408 Structural Design

DOI: 10.4028/www.scientific.net/AMM.496-500.2884

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

107.

Accession number: 20143418080587

Title: Glycine-assisted synthesis of mesoporous TiO₂ nanostructures with improved photocatalytic activity

Authors: Chang, Yongfang^{1, 2}; Liu, Xixi¹; Cai, Aijun³; Xing, Shengtao¹; Ma, Zichuan¹

Author affiliation:

- 1 College of Chemistry and Material Sciences, Hebei Normal University, Shijiazhuang 050024, China
- 2 College of Chemical Technology, Shijiazhuang University, Shijiazhuang 050035, China
- 3 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Ma, Z. (mazc@vip.163.com)

Source title: Ceramics International

Abbreviated source title: Ceram Int

Volume: 40

Issue: 9 PART B

Issue date: 2014

Publication year: 2014

Pages: 14765-14768

Language: English

ISSN: 02728842

CODEN: CINNDH

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Glycine modified TiO₂ nanostructures (G-TiO₂) were synthesized by a simple glycine-assisted hydrothermal post-treatment of titanate nanotubes. The as-prepared products were characterized by scanning electron microscopy (SEM), transmission electron microscopy (TEM), X-ray diffraction (XRD) and N₂ adsorption-desorption measurement. The results showed that G-TiO₂ nanostructures were anatase crystalline phase and were composed of lots of nanorods and nanoparticles with small diameters. Nitrogen sorption analysis revealed that the obtained G-TiO₂ nanostructures exhibited a big pore size. Moreover, the products expressed high photocatalytic performance for degradation of Naphthol Blue Black. © 2014 Elsevier Ltd and Techna Group S.r.l.

Number of references: 13

Main heading: Titanium dioxide

Controlled terms: Amino acids - Nanorods - Photocatalysis - Scanning electron microscopy

- Transmission electron microscopy - X ray diffraction

Uncontrolled terms: Adsorption-desorption measurements - Crystalline phase - Mesoporous TiO₂ - Nitrogen sorption - Photocatalytic activities - Photocatalytic performance - TiO₂ - Titanate nanotubes

Classification code: 461 Bioengineering and Biology - 741.1 Light/Optics - 741.3 Optical Devices and Systems - 761 Nanotechnology - 804.2 Inorganic Compounds - 933 Solid State Physics - 933.1.1 Crystal Lattice

DOI: 10.1016/j.ceramint.2014.06.066

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

108.

Accession number: 20154201388998

Title: Mining weighted frequent traversal pattern from software executing graph

Authors: He, Haitao^{1, 2}; Yin, Tengteng^{1, 2}; Pei, Caiyan³; Wu, Hongfei^{1, 2}; Ren, Jiadong^{1, 2}

Author affiliation:

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3 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, No. 360, West Hebei Street, Qinhuangdao, China

Corresponding author: Yin, Tengteng

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 9

Issue: 11

Issue date: November 1, 2015

Publication year: 2015

Pages: 2893-2900

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: Mining important patterns in complex software executing network plays an important role in analyzing software security. The general sequential pattern mining algorithms may lead to poor performance due to the lack of consideration on the continuous property of software path traversals and the different importance of functions. To address the issue, a novel approach called weighted frequent traversal pattern miner (WFTPMiner) to mine weighted frequent traversal pattern from software executing graph is presented in this paper. In WFTPMiner, weighted software executing graph (WSEG) is modeled firstly. Secondly, software path traversals are extracted from WSEG by depthfirst- search (DFS) strategy. Thirdly, according to continuity characteristics of software path traversals, a potential frequent suffix sequence tree (PFSS-Tree) is defined to store the potential weighted frequent traversal patterns. A pruning strategy is adopted by PFSSTree. The pruning strategy can prune infrequent patterns effectively. The experimental results show that WFTPMiner has better efficiency compared with some previous algorithms. © 2015 ICIC International.

Number of references: 12

Main heading: Trees (mathematics)

Controlled terms: Algorithms - Complex networks - Forestry

Uncontrolled terms: Depth-First-Search (DFS) - Infrequent patterns - Path traversals - Sequential pattern mining algorithm - Software security - Suffix-trees - Traversal patterns - Weighted software executing graph

Classification code: 722 Computer Systems and Equipment - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

109.

Accession number: 20143218021645

Title: Spin polarization ground state of quasi-2D magneto-bipolarons in the strong-coupling limit

Authors: Zhao, Yuwei¹ ; Han, Chao¹ ; Xin, Wei¹ ; Eerdunchaolu¹

Author affiliation:

¹ Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Zhao, Y. (zhaoyuwei2003@163.com)

Source title: Superlattices and Microstructures

Abbreviated source title: Superlattices Microstruct

Volume: 74

Issue date: October 2014

Publication year: 2014

Pages: 198-205

Language: English

ISSN: 07496036

E-ISSN: 10963677

CODEN: SUMIEK

Document type: Journal article (JA)

Publisher: Academic Press

Abstract: Based on Lee-Low-Pines unitary transformation, characteristics of spin polarization ground state of quasi-2D magneto-bipolarons in the strong-coupling limit have been investigated by using the variational method of Pekar type. The changes law of the ground state energy E_0 and the mean number of phonon N^- with the confinement strength ω_0 , permittivity ratio η , strength of electron-phonon coupling α , and cyclotron resonance frequency of magnetic field ω_c have been derived. The results show that mean number phonons N^- of magnetic bipolarons increased with increment of α , ω_0 , and ω_c . The energy of ground state of magneto-bipolarons is consisted of single-particle energy of two electrons E_e , Coulomb interaction energy between two electrons E_c , interaction energy of electron spin and magnetic field E_S , and interaction energy between electrons and phonons E_{e-ph} . The energy E_{e-ph} was always less than zero, and the absolute value increases with increasing of α , ω_0 , and ω_c , which is the favorable factor in the formation of bound state magneto-bipolarons. The Coulomb repulsive energy between restriction and electrons is against to the formation of bound state magneto-bipolarons, and the fine structure of ground state manifold is caused by interaction between the electron spin and magnetic field. © 2014 Elsevier Ltd. All rights reserved.

Number of references: 12

Main heading: Ground state

Controlled terms: Electron-phonon interactions - Electrons - Magnetic fields - Magnetic moments - Spin dynamics - Spin polarization

Uncontrolled terms: Coulomb interaction energy - Cyclotron resonance frequencies - Electron phonon couplings - Energy - Magneto-bipolaron - Quantum dot - Single-particle energy - Unitary transformations

Classification code: 701.1 Electricity: Basic Concepts and Phenomena - 701.2 Magnetism: Basic Concepts and Phenomena - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 932.1 High Energy Physics - 933 Solid State Physics

DOI: 10.1016/j.spmi.2014.06.019

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

110.

Accession number: 20150800560627

Title: Construction and operation of regional logistics public information platform based on cloud computing

Authors: Li, Changming¹ ; Zhang, Xiangdong¹ ; Li, Lijie¹

Author affiliation:

¹ College of Business and Administration, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei Prov, China

Corresponding author: Li, Changming

Source title: Open Cybernetics and Systemics Journal

Abbreviated source title: Open. Cybern. Syst. J.

Volume: 8

Issue: 1

Issue date: 2014

Publication year: 2014

Pages: 22-28

Language: English

E-ISSN: 1874110X

Document type: Journal article (JA)

Publisher: Bentham Science Publishers B.V., P.O. Box 294, Bussum, 1400 AG, Netherlands

Abstract: In order to realize the social logistics resource integration and provide customized logistics services to the customers, this paper presents a regional logistics public information platform construction scheme based on analyzing the conception and characteristics of cloud computing. A system configuration model of regional logistics public information platform is advanced on the basis of analysis. Technical scheme and system configuration model can be widely used in the construction of regional logistics information system. Finally, a proposal to adopting the mode of Cooperative operation leading by the enterprise is provided combining the development situation of cloud computing and logistics information public platform in china. This paper examines recent patents that awarded from The United States Patent and Trademark Office (USPTO) and State Intellectual Property Office of the P.R.C. The main methodologies used in logistics information public platform have been reviewed in this paper. The following techniques have been covered: (i) Cloud computing system, (ii) logistics information platform, and (iii) operation mode based on Cloud Computing. The qualitative analysis of the work done by various authors has been presented based on (a) public cloud, (b) private cloud, (c) hybrid cloud. © Li et al.; Licensee Bentham Open.

Number of references: 19

Main heading: Distributed computer systems

Controlled terms: Cloud computing - Patents and inventions

Uncontrolled terms: Cooperative operation - Development situations - Logistics information - Logistics resources - Operation mode - Qualitative analysis - System configurations - United States Patent and Trademark Office

Classification code: 722.4 Digital Computers and Systems - 901.3 Engineering Research

Database: Compendex

111.

Accession number: 20153501225801

Title: Effect of cold storage and ethylene regulation on sugar metabolism and its key gene expression in post-harvest apple fruit

Authors: Qi, Xiu-Dong¹ ; Wei, Jian-Mei²

Author affiliation:

1 School of Continuing Education, Hebei Normal University of Science & Technology, Qinhuangdao, China

2 Department of Ecology, Environmental Management College of China, Qinhuangdao, China

Corresponding author: Wei, Jian-Mei

Source title: Modern Food Science and Technology

Abbreviated source title: Mod. Food Sci. Technol.

Volume: 31

Issue: 7

Issue date: July 15, 2015

Publication year: 2015

Pages: 137-145

Language: Chinese

ISSN: 16739078

Document type: Journal article (JA)

Publisher: South China University of Technology

Abstract: 'Fuji' and 'Golden Delicious' apple fruits were taken as material to study the sugar metabolism and the key enzyme gene expression during fruit softening and how they were affected by cold storage or ethylene treatment. The results indicated that the starch content and amylase (AM) activity showed the most significant changes between 'Fuji' and 'Golden Delicious' and were dramatically regulated by low temperature and ethylene. Accordingly, the expression of MdAM was significantly promoted by the treatment of 2 mL/L ethephon while inhibited by 0.5 μ L/L 1-MCP treatment at the late stage of storage in 'Fuji' fruit or at the early stage of storage in 'Golden Delicious' fruit. Meanwhile the expression of MdAM was significantly inhibited under 0 storage in both cultivars. This suggest that post-harvest starch degradation involved in apple fruit softening and are significantly

affected by cold storage and ethylene treatment. Among the soluble sugars, the sucrose content increased clearly and was significantly subjected to the regulation by ethylene and low temperature, and the SPS had much stronger effect on sugar metabolism in post-harvest apple fruit than those of SS and AI. The SPS activity and the expression of MdSPS were significantly promoted by ethephon treatment and inhibited by 1-MCP treatment in 'Golden Delicious' fruit. This phenomenon was stronger than that in 'Fuji' fruit during storage. Less variation was observed on the fruit sugars content and the enzyme activity under cold storage, and the expression of MdSPS was significantly inhibited. These indicated that sucrose accumulation and SPS may have more close correlation with fruit softening among the regulation of sugar metabolism. ©, 2015, South China University of Technology. All right reserved.

Number of references: 18

Main heading: Gene expression regulation

Controlled terms: Cold storage - Enzyme activity - Enzymes - Ethylene - Food storage - Fruits - Gene expression - Genes - Gold - Harvesting - Metabolism - Physiology - Starch - Storage (materials) - Sugar (sucrose) - Sugars - Temperature

Uncontrolled terms: Ethylene regulation - Ethylene treatment - Fruit softening - Low temperatures - *Malus domestica* Borkh - Starch degradation - Sucrose accumulation - Sugar metabolism

Classification code: 461 Bioengineering and Biology - 547.1 Precious Metals - 641.1 Thermodynamics - 694.4 Storage - 804.1 Organic Compounds - 821.3 Agricultural Methods - 821.4 Agricultural Products - 822.3 Food Products

DOI: 10.13982/j.mfst.1673-9078.2015.7.023

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

112.

Accession number: 20150600490891

Title: Cctlh: A new histogram-based cardinality estimate approach

Authors: Lin, Xudong¹ ; Zeng, Xiaoning² ; Pu, Xiaowei¹

Author affiliation:

1 Department of Information Engineering, Environmental Management College of China, No. 73, West Hebei Avenue, Qinhuangdao, China

2 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology,

No. 360, West Hebei Avenue, Qinhuangdao, China

Corresponding author: Lin, Xudong

Source title: International Journal of Innovative Computing, Information and Control

Abbreviated source title: Int. J. Innov. Comput. Inf. Control

Volume: 11

Issue: 1

Issue date: January 1, 2015

Publication year: 2015

Pages: 123-135

Language: English

ISSN: 13494198

Document type: Journal article (JA)

Publisher: IJICIC Editorial Office

Abstract: For the mainstream relational database management systems, histograms play important roles in cardinality estimate. The main histogram-based cardinality estimate approaches can be classified into two categories: the proactive approach and the reactive approach. For the former, histograms are constructed and updated by periodical data scans. Data updates can not be incorporated into a histogram in real time, so between two data scans, large errors of cardinality estimate will occur. For the latter, data scans are avoided, as an alternative, query feedback records (QFRs) are collected to construct and update histograms. Although data updates can be incorporated into a histogram by replacing stale QFRs in real time, the cost of time is very expensive. For each histogram reconstruction, all buckets in the histogram will be recalculated and the large amount of computation leads to the inefficiency of the reactive approach. In this paper, we propose a novel QFR-based cardinality estimate approach which can balance the efficiency issue and the data update issue: on the one hand, it can improve the efficiency of QFR-based cardinality estimate to a practical level; on the other hand, it can incorporate data updates into a histogram in real time to fully ensure the accuracy of cardinality estimate. In our approach, a serial of small second-level histograms covering different parts of the whole value range of an attribute will be constructed. These second-level histograms can be updated independently over time to ensure the performance of the approach. As the update of each second-level histogram, QFRs still play their important roles in incorporating data updates into the histogram in real time. Extensive comparison experiments fully demonstrate the advantages of our approach in performance and accuracy. © 2015 ICIC International.

Number of references: 15

Main heading: Statistical methods

Controlled terms: Graphic methods - Query processing - Relational database systems

Uncontrolled terms: Cardinality estimates - Histogram - Pro-active approach - Query feedback record - Reactive approach

Classification code: 723.3 Database Systems - 723.5 Computer Applications - 922.2 Mathematical Statistics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

113.

Accession number: 20135117103513

Title: Preparation and investigation of $\text{Ca}_{2.96}(\text{P}_{0.99}\text{B}_{0.01}\text{O}_4)_2:0.04\text{Dy}^{3+}$ single-phase full-color phosphor

Authors: Zhang, Zhi-Wei¹ ; Shen, Xi-Hai¹ ; Peng, You-Shun¹ ; Wu, Ya-Nan¹ ; Mao, Zhi-Yong² ; Zhang, Wei-Guo¹ ; Wang, Dong-Jun¹

Author affiliation:

1 Physical-Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

2 Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai 200050, China

Corresponding author: Zhang, Z.-W. (zhangzhiweia@sina.cn)

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 117

Issue date: February 15, 2014

Publication year: 2014

Pages: 14-16

Language: English

ISSN: 0167577X

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: Novel single-phased white-light-emitting $\text{Ca}_{2.96}(\text{P}_{0.99}\text{B}_{0.01}\text{O}_4)_2:0.04\text{Dy}^{3+}$ phosphors for light-emitting diode (LED) applications were synthesized by conventional solid-state reactions. The phases and luminescent properties of the obtained $\text{Ca}_{2.96}(\text{P}_{0.99}\text{B}_{0.01}\text{O}_4)_2:0.04\text{Dy}^{3+}$ phosphors were well characterized. The results show that the excited bands of $\text{Ca}_{2.96}(\text{P}_{0.99}\text{B}_{0.01}\text{O}_4)_2:0.04\text{Dy}^{3+}$ phosphor centered at wavelengths of 324 nm ($6\text{H}_{15/2} \rightarrow 4\text{M}_{17/2}$), 350 nm ($6\text{H}_{15/2} \rightarrow 4\text{M}_{15/2}$, $6\text{P}_{7/2}$), 366 nm ($6\text{H}_{15/2} \rightarrow 4\text{I}_{11/2}$), 387 nm ($6\text{H}_{15/2} \rightarrow 4\text{I}_{13/2}$, $4\text{F}_{7/2}$), 427 nm ($6\text{H}_{15/2} \rightarrow 4\text{G}_{11/2}$), and 448 nm ($6\text{H}_{15/2} \rightarrow 4\text{I}_{15/2}$). On excitation at 350 nm, the emission transitions of Dy^{3+} consisted of double emission bands, which can be assigned to the transition emissions of $4\text{F}_{9/2} \rightarrow 6\text{H}_{15/2}$ (480 nm) and $4\text{F}_{9/2} \rightarrow 6\text{H}_{13/2}$ (572 nm). One mol% B^{3+} dopant improved the luminescence intensity of $\text{Ca}_{2.96}(\text{PO}_4)_2:0.04\text{Dy}^{3+}$ phosphor, and the reason was proposed. The developed phosphor has great potential as a single-component white-light-emitting phosphor for UV-light-emitting diodes. © 2013 Published by Elsevier B.V.

Number of references: 13

Main heading: Light emitting diodes

Controlled terms: Calcium - Luminescence - Phosphors - Solid state reactions

Uncontrolled terms: Emission bands - Emission transition - Full color - Luminescence intensity - Luminescent property - Single-phase - White LED

Classification code: 549.2 Alkaline Earth Metals - 741.1 Light/Optics - 802.2 Chemical Reactions

Numerical data indexing: Size 3.24e-07m, Size 3.50e-07m, Size 3.66e-07m, Size 3.87e-07m, Size 4.27e-07m, Size 4.48e-07m, Size 4.80e-07m, Size 5.72e-07m

DOI: 10.1016/j.matlet.2013.11.077

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20162702567643

Title: Reflections on college students' energy security awareness education in the new era of innovation research and analysis

Authors: Zhang, Xiaojun¹ ; Zhang, Hongxin¹ ; Jiao, Honglei¹

Author affiliation:

1 Hebei Normal University of Science & Technology, Qin Huang Dao; Hebei; 066004, China

Corresponding author: Zhang, Xiaojun

Source title: Open Cybernetics and Systemics Journal

Abbreviated source title: Open. Cybern. Syst. J.

Volume: 9

Issue date: 2015

Publication year: 2015

Pages: 2582-2586

Language: English

E-ISSN: 1874110X

Document type: Journal article (JA)

Publisher: Bentham Science Publishers B.V., P.O. Box 294, Bussum, 1400 AG, Netherlands

Abstract: Nowadays, the concept and connotation of energy security has also undergone major changes. Traditionally, the energy security refers to the paid sufficient energy supply for affordable price. Considering the new situation of the changes of energy security, energy security includes the following six aspects. First, the material security; second, energy access is the key, whether it is physical, or the contract, or commercial development and the ability to obtain the energy supply; third, energy security is a system or system by the national policy and the international mechanism, maintain the stability of energy supply; fourth, energy security is closely related with the safety investment, the need for adequate policy support and safe business environment; fifth, energy security and climate change and environmental safety issues closely related; sixth, energy security is not limited to oil supply and oil security. Energy security is an important guarantee of national economic security, directly affect the national security, social stability and the sustainable development. This paper analyzes many problems with the new era of college students the importance of the issue of energy security energy security concept of education, and the concept of energy security problems of education, expounds the necessity and urgency of strengthening energy security education, combined with the actual source of College Students' safety education, put forward the energy security education. Combined with the education of Ideological and political education, professional education, humanistic spirit and scientific spirit education combining the specific

countermeasures of innovation of College Students' education on the concept of energy security. © Zhang et al.

Number of references: 8

Main heading: Energy security

Controlled terms: Climate change - Education - Energy policy - Energy resources - Investments - National security - Students - Sustainable development

Uncontrolled terms: Business environments - College students - Commercial development - Environmental safety - Ideological and political educations - Innovation research - National economic securities - Professional education

Classification code: 404.1 Military Engineering - 443.1 Atmospheric Properties - 525.1 Energy Resources and Renewable Energy Issues - 525.6 Energy Policy

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

115.

Accession number: 20162202430238

Title: Analysis of effects of vertical earthquake on building-cultural relics system of frame structure museum

Authors: Yu, Jian Jun^{1, 2}; Bai, Guoliang¹; Zhang, Lixin²; Geng, Jiannuan³

Author affiliation:

- 1 College of Civil Engineering, Xi'an University of Architecture and Technology, Xi'an; Shaanxi, China
- 2 Hebei Normal University of Science and Technology, Qinhuangdao; Hebei, China
- 3 Environmental Management College of China, Qinhuangdao; Hebei, China

Source title: International Journal of Simulation: Systems, Science and Technology

Abbreviated source title: Int. J. Simul. Syst. Sci. Technol.

Volume: 16

Issue: 3B

Issue date: June 2015

Publication year: 2015

Pages: 16.1-16.7

Language: English

ISSN: 14738031

E-ISSN: 1473804X

Document type: Journal article (JA)

Publisher: UK Simulation Society, Clifton Lane, Nottingham, NG11 8NS, United Kingdom

Abstract: To study the high intensity seismic action of the vertical component effects of the museum building structure - cultural system, three-dimensional entity model is set up, the eight layer frame building without large span and the towering structures are input 7 degree earthquake action and the influence of vertical seismic action on the system is studied. The dynamic characteristics of the structure form of the structure-cultural are researched through inputting the wave of El-Centro to the system under the two conditions of the short edge direction and the horizontal-vertical directions. Based on the earthquake safety in cultural relics, with the time-history analysis method on earthquake, the vertical seismic action on different floors node displacement and acceleration, and the acceleration response in the same floor node and the acceleration response of the structure under different damping ratio are studied. Through comparative analysis, the results show that the vertical seismic action to more than three layers framework structure and floor has a great effect on vertical seismic response, and several conditions may appear, such as increased peak, peak merger, peak advance, and multiple peak points. So, the design and verification of system shockproof should pay attention to the role of vertical seismic impact, and the period of system of cultural relics should avoid the vibration period of main structure. © 2015, UK Simulation Society. All rights reserved.

Number of references: 8

Main heading: Earthquakes

Controlled terms: Floors - Geophysics - History - Museums - Seismic design - Seismic response - Seismology - Structural frames

Uncontrolled terms: Acceleration response - Cultural relics - Dynamic characteristics - Frame structure - Framework structures - Three-dimensional entity models - Time history analysis method - Vertical seismic

Classification code: 402 Buildings and Towers - 402.2 Public Buildings - 408 Structural Design - 408.2 Structural Members and Shapes - 481.3 Geophysics - 484 Seismology - 971 Social Sciences

DOI: 10.5013/IJSSST.a.16.3B.16

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

116.

Accession number: 20151100630398

Title: Based on hot embossing lithography preparation of high-precision micron-level pattern

Authors: Jia, Sumei¹ ; Li, Yan¹ ; Wang, Feng² ; Guo, Hongjun¹

Author affiliation:

1 College of Information Engineering, Handan College, Unit 2, Block 5, Tongren Garden, Hanshan District, Handan City, Hebei Province, China

2 E&A College, Hebei Normal University of Science & Technology, Qinhuangdao, China

Corresponding author: Jia, Sumei

Source title: Sensors and Transducers

Abbreviated source title: Sensors Transducers

Volume: 166

Issue: 3

Issue date: January 1, 2014

Publication year: 2014

Pages: 224-228

Language: English

E-ISSN: 17265479

Document type: Journal article (JA)

Publisher: International Frequency Sensor Association

Abstract: Compared with UV embossing and micro-contact imprinting, hot embossing technology is the first to be used in nano-imprint lithography, and is access to copying the parallel structure in micro-nano-scale at low cost and relatively faster speed. This paper explores which factors influence some pattern transferring accuracy appearing in the experiment: the adhesion between mold and polymethyl methacrylate, the main factors

of affecting embossing plastic flow including imprinting pressure, temperature, time and the plastic filling effect affected by mold pattern, the effect on the viscosity of embossing adhesive by temperature and the effect on the viscosity of embossing adhesive by embossing pressure and time. The parameters affecting the accuracy of pattern transfer are optimized via the IntelliSuite simulation designed specifically for Micro-electro-mechanical systems. A micro-level pattern with high-precision by the use of nano-imprint Obduct machine is eventually made. © 2014 IFSA Publishing, S. L.

Number of references: 6

Main heading: Nanoimprint lithography

Controlled terms: Lithography - MEMS - Molds - Nanotechnology - Polymethyl methacrylates - Viscosity

Uncontrolled terms: Hot embossing lithography - Intellisuite - Micro electro mechanical system - Micro-contact imprinting - Micro-scale patter - Parallel structures - Pattern transferring - Pattern transfers

Classification code: 631.1 Fluid Flow, General - 704.2 Electric Equipment - 714.2 Semiconductor Devices and Integrated Circuits - 761 Nanotechnology - 815.1.1 Organic Polymers - 816.2 Plants and Machinery for Plastics and Other Polymers - 933 Solid State Physics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

117.

Accession number: 20155101695829

Title: Techniques optimization of ferment soybean by lactobacillus and Rhizopus oligosporus saito processing the snack food

Authors: Cui, Ruijing¹ ; Liu, Suwen¹ ; Kang, Weimin¹

Author affiliation:

¹ College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei, China

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 15

Issue: 9

Issue date: September 30, 2015

Publication year: 2015

Pages: 127-133

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology

Abstract: Finishing soy *Rhizopus* fermentation by lactic acid bacteria and spores less than dipping seasonings, the microwave baking production of whole soybean snack foods. Through single factor and orthogonal experiments to explore the whole soybean fermentation of lactic acid bacteria and spores less root fungal fermentation process conditions. The results show that soak through the soy-based compound plus 2% sucrose and 4% glucose, lactic acid bacteria, inoculated with 5% controlled fermentation temperature of 42 for 24 h, and then inoculated 6% less spore *Rhizopus* 37 fermentation for 42 h. Fermented soy seasoned liquid impregnation at 110 bake 14min, microwave products golden color, crisp taste and aroma. The product development, opening up new horizons for the deep processing of soybean, while rich snack food market. ©, 2015, Chinese Institute of Food Science and Technology. All right reserved.

Number of references: 4

Main heading: Fermentation

Controlled terms: Bacteria - Bakeries - Lactic acid - Product development

Uncontrolled terms: Lactobacillus - Microwave baking - *Rhizopus oligosporus* - Snack food - Soybean

Classification code: 804.1 Organic Compounds - 822.1 Food Products Plants and Equipment - 913.6 Product Development; Concurrent Engineering

Numerical data indexing: Percentage 2.00e+00%, Percentage 4.00e+00%, Percentage 5.00e+00%, Percentage 6.00e+00%, Time 1.51e+05s, Time 8.40e+02s, Time 8.64e+04s

DOI: 10.16429/j.1009-7848.2015.09.017

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

118.

Accession number: 20142217775162

Title: The effects of cultivar type on the quality characteristics of Chinese chestnuts (*Castanea mollissima*) canned in sugar syrup

Authors: Liu, Su-Wen¹ ; Liu, Chang¹ ; Chang, Xue-Dong¹ ; Wang, Tong-Kun¹

Author affiliation:

¹ Department of Food Science and Technology, Hebei Normal University of Science and Technology, Qin Huangdao, Hebei Province 066004, China

Corresponding author: Chang, X.-D.

Source title: Advance Journal of Food Science and Technology

Abbreviated source title: Adv. J. Food Sci. Technol.

Volume: 6

Issue: 4

Issue date: 2014

Publication year: 2014

Pages: 506-511

Language: English

ISSN: 20424868

E-ISSN: 20424876

Document type: Journal article (JA)

Publisher: Maxwell Science Publications, 74, Kenelm Road,, B10, 9AJ, Birmingham, Small Heath, United Kingdom

Abstract: This study compared the single grain weight, the carbohydrate composition (starch, amylose, total sugar, reducing sugar, pectin, fibre) and moisture, protein, fat and ash contents of four Chinese chestnut

cultivars (Banhong, Yankui, Yanlong and Zaofeng) from the Yan mountain range of China. Results showed that the tannin content of the pellicle of the chestnuts and the rate of its loss during the canning heat treatment had a significant effect on pellicle removal ($p < 0.05$). Analysis of the canned chestnuts after storage at room temperature ($25 \pm 2^\circ\text{C}$) suggested that Banhong was most preferred with a sensory score of 6.15 after 7 days and 5.79 after 180 days of storage. No significant quality differences were observed between the Zaofeng and Banhong cultivars, while the quality of the Yanlong and Yankui cultivars was significantly lower ($p < 0.05$). We have obtained some dependence between the chestnuts' physicochemical components and the overall acceptability of the canned chestnuts. © Maxwell Scientific Organization, 2014.

Number of references: 30

Main heading: Fruits

Controlled terms: Chemistry - Correlation methods - Food technology

Uncontrolled terms: Carbohydrate compositions - Castanea mollissima - Cultivars - Overall acceptability - Physico-chemical composition - Quality characteristic - Sensory qualities - Sugar syrups

Classification code: 801 Chemistry - 821.4 Agricultural Products - 822 Food Technology - 922.2 Mathematical Statistics

Numerical data indexing: Age 1.92e-02yr, Age 4.93e-01yr

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

119.

Accession number: 20140817359843

Title: Tennis computer-assisted teaching effects experimental research based on SPSS statistics analysis

Authors: Zhang, Dezhi1 ; Wang, Shuang2

Author affiliation:

- 1 Physical Education Department, Xi'an University of Architecture and Technology, Xi'an, China
- 2 Physical Education Department, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, D.

Source title: Journal of Chemical and Pharmaceutical Research

Abbreviated source title: J. Chem. Pharm. Res.

Volume: 6

Issue: 1

Issue date: 2014

Publication year: 2014

Pages: 129-136

Language: English

E-ISSN: 09757384

Document type: Journal article (JA)

Publisher: Journal of Chemical and Pharmaceutical Research, 3/668 Malviya Nagar, Jaipur, Rajasthan, India

Abstract: Modern teaching theory has already penetrated into each discipline teaching, many physical education teachers also take it as guidance; while computer-assisted teaching possesses interesting features with its own special functions, and it has great worth in concentrating students' attentions and stimulating their motions. In order to improve tennis teaching quality and propel tennis education reform, this paper designs 3 months total 24 courses computer-assisted teaching experiments according to tennis teaching features and objectives so as to explore computer-assisted teaching advantages which over that of traditional teaching through data generated before and after experiment as well as during experiment process, and provide theoretical basis for tennis education reform. In this paper, firstly state modern physical education objects transferring direction and tennis education features, then analyze tennis forehand strokes technical features, finally verify such teaching method advantages by comparing with traditional teaching through computer-assisted teaching experiment design, experimental data and experimental result based on SPSS statistic analysis.

Number of references: 5

Main heading: E-learning

Controlled terms: Computer aided analysis - Computer aided instruction - Experiments - Normal distribution - SportS - Teaching

Uncontrolled terms: Computer assisted - Experimental research - Physical education - Statistic analysis - Statistics analysis - Statistics software - Teaching experiment designs - Technical features

Classification code: 461.3 Biomechanics, Bionics and Biomimetics - 723.5 Computer Applications -

901.2 Education - 901.3 Engineering Research - 922.1 Probability Theory

Numerical data indexing: Age 2.50e-01yr

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

120.

Accession number: 20141517560257

Title: Soluble dietary fibers from old stalk of asparagus study on decoloration process optimization and quality

Authors: Yang, Xiaokuan¹ ; Chang, Xuedong¹ ; Fan, Guowei¹

Author affiliation:

¹ Institute of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, Hebei, China

Corresponding author: Chang, X.

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 14

Issue: 1

Issue date: January 2014

Publication year: 2014

Pages: 95-103

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology

Abstract: For the study of microwave assisted hydrogen peroxide decoloration on old stalk of asparagus soluble dietary fiber (SDF) decolorization efficiency and quality influence, in the decolorization of pH, hydrogen peroxide concentration, microwave power, reaction time, ratio of material to solvent and so on the basis of single factor experiment, using Box-Behnken central composite design and response surface analysis on decoloration technology optimization. The test results showed that, the microwave assisted old stalk of asparagus SDF decolorization decolorizing optimum conditions were: pH value was 12, the concentration of hydrogen peroxide was 9.5%, the microwave power was 460 W, reaction time 2.5 min, ratio of material to solvent 1:30. Under these conditions, SDF chroma was 68.29%, with the model predictions agree. Simultaneous decolorization of the optimum process conditions for SDF quality had important influence on. The results showed that: in addition to hold water and cholesterol absorption ability declined slightly, decolorization of SDF swelling of 7.70 mL/g, holders of oil of 2.03 g/g, cation exchange capacity of 0.56 mmol/g, nitrite adsorption capacity of 10.00 mg/g, SDF increased significantly than those of decolorization.

Number of references: 28

Main heading: Dyes

Controlled terms: Bleaching - Hydrogen peroxide - Image quality - Microwave generation - Microwave power transmission - Microwaves - Optimization - Peroxides - Surface analysis - Water absorption

Uncontrolled terms: Asparagus old stems - Cation exchange capacities - Central composite designs - Dietary fibers - Hydrogen peroxide concentration - Optimum process conditions - Response surface - Single-factor experiments

Classification code: 423 Non Mechanical Properties and Tests of Building Materials - 706.1.1 Electric Power Transmission - 711 Electromagnetic Waves - 714.2 Semiconductor Devices and Integrated Circuits - 741 Light, Optics and Optical Devices - 802.2 Chemical Reactions - 802.3 Chemical Operations - 803 Chemical Agents and Basic Industrial Chemicals - 804.2 Inorganic Compounds - 921.5 Optimization Techniques - 951 Materials Science

Numerical data indexing: Molality 5.60e-01mol/kg, Percentage 6.83e+01%, Percentage 9.50e+00%, Power 4.60e+02W, Time 1.50e+02s

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

121.

Accession number: 20151100619653

Title: Wide-band excited LaBMoO₆:Eu³⁺ red phosphor for white-light-emitting diode

Authors: Zhang, Z.W.1, 2 ; Ma, D.Q.1 ; Yue, Y.1 ; Ma, M.Z.1 ; Liu, R.P.1

Author affiliation:

- 1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, China
- 2 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Ma, M.Z.

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 636

Issue date: July 5, 2015

Publication year: 2015

Pages: 113-116

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: A novel high-efficiency near-UV light-emitting diode (LED)-based color-conversion phosphor, red-emitting LaBMoO₆:Eu³⁺, was synthesized by solid-state reaction for the first time, and its photoluminescence (PL) properties were investigated for application in white-light-emitting diodes (W-LEDs). The as-synthesized phosphors were characterized by X-ray powder diffraction, photoluminescence excitation (PLE), and PL emission spectra. The PLE and PL emission spectra revealed that when $x \leq 0.05$, all the charge-transfer states centered at 350 nm, and LaBMoO₆:Eu³⁺ phosphor emitted bright red light under 350 nm excitation. The CIE (Commission Internationale de l'Eclairage) chromaticity coordinates for LaBMoO₆:Eu³⁺ red phosphor were simulated and located in the red region. All the results indicate that the developed LaBMoO₆:Eu³⁺ phosphor could be potentially used as W-LEDs. © 2015 Elsevier B.V. All rights reserved.

Number of references: 9

Main heading: Light emitting diodes

Controlled terms: Charge transfer - Diodes - Emission spectroscopy - Europium - Light emission - Phosphors - Photoluminescence - Solid state reactions - X ray powder diffraction

Uncontrolled terms: Charge transfer state - Chromaticity coordinates - LaBMoO6:Eu³⁺ - Photoluminescence excitation - Photoluminescence properties - Red phosphors - White light emitting diodes - Wide-band

Classification code: 547.2 Rare Earth Metals - 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics

Numerical data indexing: Size 3.50e-07m

DOI: 10.1016/j.jallcom.2015.01.134

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

122.

Accession number: 20141317526862

Title: A novel white emission in Ca₈MgBi(PO₄)₇:Dy³⁺ single-phase full-color phosphor

Authors: Zhang, Z.W.1, 2 ; Song, A.J.2 ; Ma, M.Z.1 ; Zhang, X.Y.1 ; Yue, Y.1 ; Liu, R.P.1

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Ma, M.Z. (mz550509@ysu.edu.cn)

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 601

Issue date: July 15, 2014

Publication year: 2014

Pages: 231-233

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier BV

Abstract: Novel single-phase white-light-emitting $\text{Ca}_8\text{MgBi}(\text{PO}_4)_7:\text{xDy}^{3+}$ ($x = 0.02, 0.04, 0.06, 0.08, 0.12, 0.20,$ and 0.30) phosphors for light-emitting diode (LED) applications were synthesized by conventional solid-state reactions, and the phases and luminescent properties were well characterized. The results show that the excited bands of the phosphor are centered at 324 nm ($6\text{H } 15/2 \rightarrow 4\text{M}17/2$), 350 nm ($6\text{H } 15/2 \rightarrow 4\text{M}15/2, 6\text{P } 7/2$), 366 nm ($6\text{H}15/2 \rightarrow 4\text{I } 11/2$), 387 nm ($6\text{H}15/2 \rightarrow 4\text{I } 13/2, 4\text{F}7/2$), 427 nm ($6\text{H } 15/2 \rightarrow 4\text{G}11/2$), and 448 nm ($6\text{H}15/2 \rightarrow 4\text{I}15/2$) wavelengths. On excitation at 350 nm, the emission transitions of Dy^{3+} ions consisted of double emission bands, which can be attributed to the $4\text{F}9/2 \rightarrow 6\text{H}15/2$ (480 nm) and $4\text{F}9/2 \rightarrow 6\text{H}13/2$ (572 nm) transition emissions. The phosphor developed in this study has great potential as a single-component white-light-emitting phosphor for UV-LEDs. © 2014 Elsevier B.V. All rights reserved.

Number of references: 12

Main heading: Light emitting diodes

Controlled terms: Calcium - Light emission - Phosphors - Solid state reactions

Uncontrolled terms: Emission bands - Emission transition - Full color - Luminescent property - White emissions - White light emitting diodes

Classification code: 549.2 Alkaline Earth Metals - 741.1 Light/Optics - 802.2 Chemical Reactions

Numerical data indexing: Size 3.24e-07m, Size 3.50e-07m, Size 3.66e-07m, Size 3.87e-07m, Size 4.27e-07m, Size 4.48e-07m, Size 4.80e-07m, Size 5.72e-07m

DOI: 10.1016/j.jallcom.2014.02.165

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20144600200060

Title: Optimization of preparation process of new sweetpotato-residue powder

Authors: Yang, Xiaokuan¹ ; Liang, Jianlan¹ ; Meng, Jun¹ ; Liu, Suwen¹ ; Song, Xin¹ ; Chang, Xuedong¹

Author affiliation:

1 Institute of Food Science and Technology Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Chang, Xuedong

Source title: Journal of the Chinese Cereals and Oils Association

Abbreviated source title: J. Chin. Cereals Oils Assoc.

Volume: 29

Issue: 10

Issue date: October 25, 2014

Publication year: 2014

Pages: 100-105

Language: Chinese

ISSN: 10030174

Document type: Journal article (JA)

Publisher: Editorial Department, Chinese Cereals and Oils Association, China

Abstract: In order to improve the quality of sweetpotato powder, with adopting sweetpotato residue as raw material, the research has used quaternary secondary orthogonal revolving design research of sweetpotato slag grinding fineness, Na₂S₂O₄ concentration, drying temperature, tunnel drying device load, the influence of 4 factors on potato slag comprehensive score for whiteness and moisture content, the regression equation was obtained by using DPS7.05 software analysis. The results showed that for the new sweetpotato slag powder, the optimum condition was: the grinding fineness of 60 orders, Na₂S₂O₄ concentration 0.9%, drying temperature 80, load 64.5%. On the condition, a new sweetpotato slag powder white degree was 75.10%, water content 2.027%, the comprehensive score of 99.84, water holding capacity 35.60 g/g, oil holding capacity 7.77 g/g, swelling was up to 119 mL/g, optimization of sweetpotato slag powder are of higher physicochemical and functional properties partial, the whiteness, oil holding capacity improved significantly, suitable for application to deep fried food, muffins, bread and other food products.

Number of references: 5

Main heading: Drying

Controlled terms: Food products - Grinding (machining) - Moisture - Oil shale - Oils and fats - Optimization - Slags - Sodium

Uncontrolled terms: Chroma - Functional properties - Oil holding capacities - Orthogonal rotations - Preparation - Preparation process - Sweet potato - Water holding capacity

Classification code: 406 Highway Engineering - 412 Concrete - 413 Insulating Materials - 512.1 Petroleum Deposits - 549.1 Alkali Metals - 606.2 Abrasive Devices and Processes - 642.1 Process Heating - 801.4 Physical Chemistry - 822.3 Food Products - 921.5 Optimization Techniques

Numerical data indexing: Percentage 2.03e+00%, Percentage 6.45e+01%, Percentage 7.51e+01%, Percentage 9.00e-01%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

124.

Accession number: 20143718154605

Title: Effects of high pressure treatment on the hardness and electrical resistivity of CuW alloy

Authors: Ma, Yu-Quan¹ ; Liu, Rong-Chang¹ ; Ma, Ji-Wei¹

Author affiliation:

1 Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, No. 360, West Hebei St., Qinhuangdao City, Hebei Province, 066004, China

Corresponding author: Ma, Y.-Q. (mayuquan2004@126.com)

Source title: Recent Patents on Materials Science

Abbreviated source title: Recent Pat. Mater. Sci.

Volume: 7

Issue: 2

Issue date: 2014

Publication year: 2014

Pages: 164-168

Language: English

ISSN: 18744648

E-ISSN: 18744656

Document type: Journal article (JA)

Abstract: The hardness and electrical resistivity of CuW alloy before and after high pressure heat treatment were tested, its microstructure was also analyzed by metallurgical microscope, scanning electron microscope and transmission electron microscopy, and the effect of high pressure treatment on hardness and electrical resistivity properties of CuW alloy was discussed. It showed that high pressure could increase hardness and room-temperature electrical resistivity of CuW alloy, which was 155HB and $3.5974 \times 10^{-6} \Omega \cdot \text{cm}$ after 1 GPa pressure heat treatment at 900°C lasting for 20 minutes respectively, increasing by 27.05% and 6.30% as against the infiltrated CuW alloy. But the variation of the hardness and roomtemperature electrical resistivity is not obvious with increasing pressure in the range of 1-6GPa. It is mainly because the high pressure heat treatment can increase the compactness and internal dislocation density of CuW alloy. The paper is based on the following patents: US20140093420 (2014), US20130142687 (2013), CN2012102773462 (2012), CN2012102127627 (2012), CN2008101307419 (2008), CN2012102168235 (2012), CN2010101914739 (2010), CN2012102660717 (2012).
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Number of references: 24

Main heading: Heat treatment

Controlled terms: Alloys - Electric conductivity - Hardness - High pressure effects - Scanning electron microscopy - Transmission electron microscopy

Uncontrolled terms: Compactness - Dislocation densities - Effect of high pressure - High pressure - High pressure treatments - Metallurgical microscope - Room temperature

Classification code: 421 Strength of Building Materials; Mechanical Properties - 531.1 Metallurgy - 537.1 Heat Treatment Processes - 701.1 Electricity: Basic Concepts and Phenomena - 741.3 Optical Devices and Systems - 931.2 Physical Properties of Gases, Liquids and Solids - 951 Materials Science

Numerical data indexing: Percentage 2.71e+01%, Percentage 6.30e+00%, Pressure 1.00e+09Pa, Pressure 1.00e+09Pa to 6.00e+09Pa, Temperature 1.17e+03K, Time 1.20e+03s

DOI: 10.2174/1874464807666140701190609

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

125.

Accession number: 20153501222265

Title: High-brightness Eu³⁺-doped
La_{0.67}Mg_{0.5}W_{0.5}O₃ red phosphor for NUV light-emitting diodes
application

Authors: Zhang, Zhi-Wei¹ ; Wang, Li-Jiang¹ ; Han, Lu¹ ; Han, Fei¹ ; Ma, Xiao-Xue¹ ; Li, Xiao-Qing¹ ;
Wang, Dong-Jun¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhi-Wei

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 160

Issue date: December 1, 2015

Publication year: 2015

Pages: 302-304

Language: English

ISSN: 0167577X

E-ISSN: 18734979

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: A novel red-emitting phosphor $\text{La}_{0.67}\text{Mg}_{0.5}\text{W}_{0.5}\text{O}_3:\text{Eu}^{3+}$ has been synthesized by a high-temperature solid-state reaction. X-ray powder diffraction (XRD) analysis confirmed the phase formation of $\text{La}_{0.67}\text{Mg}_{0.5}\text{W}_{0.5}\text{O}_3$ materials. The photoluminescence excitation and emission spectra, the concentration dependence of the emission intensity, and decay curves of the phosphor were investigated. The results showed that the phosphor could be efficiently excited by the near ultraviolet (NUV) light and blue light, and it exhibited red light emission. The decay time was also determined for various concentrations of Eu^{3+} in $\text{La}_{0.67}\text{Mg}_{0.5}\text{W}_{0.5}\text{O}_3$. The calculated color coordinates lies in the red region. Therefore, these obtained results suggest that the prepared phosphors exhibit great potential for use as red emitting phosphor for near ultraviolet white light emitting diodes (NUV WLEDs) © 2015 Elsevier B.V. All rights reserved.

Number of references: 8

Main heading: Light emitting diodes

Controlled terms: Diodes - Emission spectroscopy - Europium - High temperature applications - Light emission - Phosphors - Photoluminescence - Solid state reactions - X ray powder diffraction

Uncontrolled terms: Color coordinates - Concentration dependence - Emission intensity - High temperature solid-state reaction - Photo-luminescence excitation - Red emitting phosphor - Red-light emission - White light emitting diodes

Classification code: 547.2 Rare Earth Metals - 708.3.1 High Temperature Superconducting Materials - 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics

DOI: 10.1016/j.matlet.2015.07.155

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

126.

Accession number: 20152100863962

Title: A multilevel fuzzy analysis model of higher education teaching quality

Authors: Xiaofang, Hao¹ ; Yuhong, Zhang¹ ; Guolin, Li¹

Author affiliation:

1 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Xiaofang, Hao

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 12

Issue date: 2014

Publication year: 2014

Pages: 1219-1225

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: To improve the overall quality of teachers and enhance the teaching ability as well as the teaching quality of institutes of higher learning for the purpose of nurturing high-tech talents, this paper proposes a multilevel fuzzy analysis model of higher education teaching quality based on fuzzy system theory. It constructs a multilevel evaluation system and acquires the fuzzy evaluation set of teaching quality and fuzzy value of a quantity. Through calculation we can get the fuzzy membership between teaching quality and fuzzy evaluation set. Fuzzy membership is applied to standardization according to different types and scales of indicators to get the integrated weighted fuzzy membership. This will realize the evaluation on teaching quality of institutes of higher learning and helps to increase the overall quality of teachers. A case study is introduced to prove the efficacy of the model and the algorithm.

Number of references: 13

Main heading: Quality control

Controlled terms: Decision making - Education - Scales (weighing instruments) - Teaching

Uncontrolled terms: Evaluation modeling - Fuzzy analysis - Higher education - Multiple attribute decision making - Teaching quality

Classification code: 901.2 Education - 912.2 Management - 913.3 Quality Assurance and Control - 943.3
Special Purpose Instruments

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

127.

Accession number: 20145100351786

Title: A novel white emission in Ba₁₀F₂(PO₄)₆:Dy³⁺ single-phase full-color phosphor

Authors: Zhang, Zhiwei¹ ; Song, Aijun¹ ; Shen, Xihai¹ ; Lian, Qi¹ ; Zheng, Xuefang¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhiwei

Source title: Materials Chemistry and Physics

Abbreviated source title: Mater Chem Phys

Volume: 151

Issue date: February 1, 2015

Publication year: 2015

Pages: 345-350

Language: English

ISSN: 02540584

CODEN: MCHPDR

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: A novel single-composition white-emitting phosphor Ba₁₀F₂(PO₄)₆:Dy³⁺ was synthesized

by a high-temperature solid-state reaction. X-ray powder diffraction and Fourier transform infrared spectroscopic analyses confirmed the phase formation of $\text{Ba}_{10}\text{F}_2(\text{PO}_4)_6:\text{Dy}^{3+}$. The luminescence properties show that the phosphor can be effectively excited by UV light (348 nm) and exhibits bright white-light emission centered at 479 and 574 nm, attributed to the $4\text{F}_9/2 \rightarrow 6\text{H}_{15/2}$ and $4\text{F}_9/2 \rightarrow 6\text{H}_{13/2}$ transitions of Dy^{3+} ions, respectively. The luminescence intensity of $\text{Ba}_{10-x}\text{F}_2(\text{PO}_4)_6:x\text{Dy}^{3+}$ phosphor first increased and then decreased with increasing Dy^{3+} concentration, reaching the maximum at $x = 0.35$. The UV-visible diffuse reflectance spectra indicate that the optical band gap energy (E_g) values of $\text{Ba}_{10}\text{F}_2(\text{PO}_4)_6$ and $\text{Ba}_{9.65}\text{F}_2(\text{PO}_4)_6:0.35\text{Dy}^{3+}$ are ~ 2.71 and 3.04 eV, respectively. The decay time was also determined for various concentrations of Dy^{3+} in $\text{Ba}_{10}\text{F}_2(\text{PO}_4)_6$. The decay time analysis indicates that the Dy^{3+} ions occupied two lattice sites in $\text{Ba}_{10}\text{F}_2(\text{PO}_4)_6$ host and the interactions or energy transfer/migration exists between the Dy^{3+} ions. The chromaticity coordinates were calculated and analyzed; the Commission International de l'Éclairage color coordinates fall in the white-light region. The results indicate that the white $\text{Ba}_{10}\text{F}_2(\text{PO}_4)_6:\text{Dy}^{3+}$ phosphor can serve as a key material for phosphor-converted light-emitting diode. © 2014 Elsevier B.V. All rights reserved.

Number of references: 34

Main heading: Light

Controlled terms: Energy gap - Energy transfer - High temperature applications - Ions - Light emitting diodes - Luminescence - Phosphors - Photoluminescence spectroscopy - Sintering - Solid state reactions - Spectroscopic analysis - X ray powder diffraction

Uncontrolled terms: Ceramics - Chromaticity coordinates - Diffuse reflectance spectrum - Fourier transform infra reds - High temperature solid-state reaction - Luminescence intensity - Luminescence properties - Optical band gap energy

Numerical data indexing: Electron_Volt 3.04e+00eV, Size 3.48e-07m, Size 5.74e-07m

DOI: 10.1016/j.matchemphys.2014.12.002

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

128.

Accession number: 20152500946273

Title: Analysis on driving characteristics of a robot shoulder joint based on parallel mechanism

Authors: Zhang, Liang^{1, 2}; Jin, Zhenlin¹; Shuzhen, S.²

Author affiliation:

1 Yanshan University, College of Mechanical Engineering, Qinhuangdao, China

2 Hebei Normal University of Science and Technology, College of Mechanical and Electronic Engineering, Qinhuangdao, China

Corresponding author: Zhang, Liang

Source title: Energy Education Science and Technology Part A: Energy Science and Research

Abbreviated source title: Energy Educ. Sct. Technol. Part A. Energy Sci. Res.

Volume: 32

Issue: 6

Issue date: 2014

Publication year: 2014

Pages: 5073-5080

Language: English

ISSN: 1308772X

Document type: Journal article (JA)

Publisher: Sila Science, University Mah Mekan Sok, No 24, Trabzon, Turkey

Abstract: A novel 3-DOF robot shoulder joint was proposed, and its driving characteristics were studied. The Jacobian matrix for the mechanism was derived based on kinematics equation. The method that the velocity Jacobian matrix was combined with virtual displacement principle was used to analyze the driving characteristics of the mechanism. The driving characteristics evaluation indices were defined, and their distributions in task space were analyzed. Research results show that the mechanism has good driving force transmission performance, good output torque stability and operational performance, so the mechanism has good driving characteristics in the work space. The study provides theoretical basis for the further research and practical application of the shoulder joint. © Sila Science. All Rights Reserved.

Number of references: 11

Main heading: Jacobian matrices

Controlled terms: Mechanisms

Uncontrolled terms: Driving characteristics - Kinematics equation - Operational performance - Parallel mechanisms - Performance indices - Research results - Shoulder joints - Virtual-displacement principle

Classification code: 601.3 Mechanisms - 921.1 Algebra

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

129.

Accession number: 20152000852261

Title: Design of decision-making system of emergency logistics information system based on data mining

Authors: Li, Changming¹ ; Guo, Lihong¹ ; Li, Zhixin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei, China

Source title: Journal of Digital Information Management

Abbreviated source title: J. Digit. Inf. Manage.

Volume: 12

Issue: 6

Issue date: December 1, 2014

Publication year: 2014

Pages: 383-386

Language: English

ISSN: 09727272

Document type: Journal article (JA)

Publisher: Digital Information Research Foundation

Abstract: Emergency logistics system is mainly composed of emergency command center, emergency logistics center, and emergency logistics information system. Among them, emergency logistics information system is a very important part of the emergency logistics throughout the whole emergency logistics rescue process, which is consisted of early-warning, reserve and distribution, monitoring, decision-making and

evaluation six subsystems. This paper discussed the data mining technology applied to the construction process of emergency logistics information system, used data mining to find valuable potential information and provided it to each subsystem of emergency logistics information system, in order to support emergency decision-making.

Number of references: 13

Main heading: Data mining

Controlled terms: Decision making - Information systems - Logistics

Uncontrolled terms: Construction process - Data mining technology - Decision-making systems - Emergency decision makings - Emergency logistics - Emergency logistics systems - Logistics information systems - Rescue process

Classification code: 723.3 Database Systems - 903.2 Information Dissemination - 912 Industrial Engineering and Management - 912.2 Management - 913 Production Planning and Control; Manufacturing

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

130.

Accession number: 20140117150554

Title: Effect of ultrafine grinding on physicochemical and antioxidant properties of dietary fiber from wine grape pomace

Authors: Zhu, Feng-Mei¹ ; Du, Bin² ; Li, Jun¹

Author affiliation:

1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Analysis and Testing Center, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhu, F.-M. (fmzhu@yahoo.com.cn)

Source title: Food Science and Technology International

Abbreviated source title: Food Sci. Technol. Int.

Volume: 20

Issue: 1

Issue date: January 2014

Publication year: 2014

Pages: 55-62

Language: English

ISSN: 10820132

E-ISSN: 15321738

Document type: Journal article (JA)

Publisher: SAGE Publications Inc., 2455 Teller Road, Thousand Oaks, CA 91320, United States

Abstract: Wine grape pomace dietary fiber powders were prepared by superfine grinding, whose effects were investigated on the composition, functional and antioxidant properties of the wine grape pomace dietary fiber products. The results showed that superfine grinding could effectively pulverize the fiber particles to submicron scale. As particle size decrease, the functional properties (water-holding capacity, water-retention capacity, swelling capacity, oil-binding capacity, and nitrite ion absorption capacity) of wine grape pomace dietary fiber were significantly ($p < 0.05$) decreased and a redistribution of fiber components from insoluble to soluble fractions was observed. The antioxidant activities of wine grape pomace and dietary fiber before and after grinding were in terms of DPPH radical scavenging activity, ABTS diammonium salt radical scavenging activity, ferric reducing antioxidant power, and total phenolic content. Compared with dietary fiber before and after grinding, micronized insoluble dietary fiber showed increased ABTS radical scavenging activity, ferric reducing antioxidant power, and total phenolic content yet decreased DPPH radical scavenging activity. Positive correlations were detected between ABTS radical scavenging activity, ferric reducing antioxidant power, and total phenolic content. © 2012 The Author(s).

Number of references: 27

Main heading: Fibers

Controlled terms: Antioxidants - Food processing - Grinding (machining) - Water absorption - Wine

Uncontrolled terms: Antioxidant properties - Dietary fibers - Functional properties - Grape pomace - Superfine grinding

Classification code: 822.2 Food Processing Operations - 817 Plastics and Other Polymers: Products and Applications - 812 Ceramics, Refractories and Glass - 822.3 Food Products - 804 Chemical Products Generally - 802.3 Chemical Operations - 606.2 Abrasive Devices and Processes - 803 Chemical Agents and Basic Industrial Chemicals

DOI: 10.1177/1082013212469619

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

131.

Accession number: 20155101706651

Title: Method of periodic dynamic pattern mining based on complex network

Authors: Wang, Lei^{1, 2, 3}; Jiang, Liya^{1, 2}; Dong, Jun^{1, 2}; Huang, Guoyan^{1, 2}; Ren, Jiadong^{1, 2}

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao, China

2 The Key Laboratory for Computer Virtual Technology and System Integration of Hebei Province, Qinhuangdao, China

3 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Wang, Lei (wangl216@163.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 11

Issue: 21

Issue date: November 1, 2015

Publication year: 2015

Pages: 7849-7856

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: Traditionally, analysis of dynamic network has been focused only on a single snapshot or integrated network obtained over a period of time. However, the temporal feature in dynamic network has been ignored. In this paper, periodic dynamic pattern (PDP) mining method is proposed to discover the dynamic evolution rule of social networks. We define a periodic dynamic pattern based on complex network, and construct matrix of graph (MG) to present the evolution of complex network over time. Moreover, a regular edge pattern searching (REPS) algorithm based on MG is designed. It is used to select frequent and regular edge existence sequence (EES) in MG with progressive scan. To improve efficiency of the algorithm, sequences according with frequency threshold and REP should be transformed to decimal integer. Then, depth-first search method is used to mine PDP, which owns the same REP in dynamic network. So, we can predict future network evolution and control its behavior. Experimental results demonstrate that our method is an effective periodic dynamic pattern mining. Copyright © 2015 Binary Information Press.

Number of references: 9

Main heading: Complex networks

Controlled terms: Data mining

Uncontrolled terms: Depth first search - Dynamic evolution rules - Dynamic patterns - Frequency threshold - Frequent subgraphs - Integrated networks - Periodic dynamic patterns - Sequential patterns

Classification code: 722 Computer Systems and Equipment - 723.2 Data Processing and Image Processing

DOI: 10.12733/jcis16028

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

132.

Accession number: 20155101698288

Title: Efficient strong designated verifier proxy signature scheme with low cost

Authors: Liu, Yan1 ; Hu, Xiaoming1 ; Zhang, Xiaojun2 ; Wang, Jian1 ; Yang, Yinchun1

Author affiliation:

- 1 School of Computer and Information Engineering, Shanghai Second Polytechnic University, Shanghai, China
- 2 Hebei Normal University of Science and Technology, Hebei, China

Source title: International Conference on Advanced Communication Technology, ICACT

Abbreviated source title: Int. Conf. Adv. Commun. Technol. ICACT

Volume: 2015-August

Monograph title: IEEE 17th International Conference on Advanced Communications Technology:
Named Data Networking - A Future Internet Architecture, ICACT 2015 - Proceeding

Issue date: August 25, 2015

Publication year: 2015

Pages: 568-572

Article number: 7224860

Language: English

ISSN: 17389445

ISBN-13: 9788996865056

Document type: Conference article (CA)

Conference name: 17th IEEE International Conference on Advanced Communications Technology,
ICACT 2015

Conference date: July 1, 2015 - July 3, 2015

Conference location: PyeonhChang, Korea, Republic of

Conference code: 117002

Sponsor: Electronics and Telecommunications Research Institute (ETRI); et al.; Gangwon Convention and Visitors Bureau; IEEE Communication Society (IEEE ComSOc); Korean Institute of Communication Sciences (KICS); National Information Society Agency (NIA)

Publisher: Institute of Electrical and Electronics Engineers Inc.

Abstract: Designated verifier proxy signature is a special proxy signature where only the designated verifier can verify the validity. So far, numerous strong designated verifier proxy signature (DVPST) schemes have been proposed. However, many of them have been pointed out to be vulnerable to the forgery attack or have high computational cost. In 2012, Lin et al. proposed a highly efficient and strong DVPST scheme in the random oracle model. However, in this paper, we address that Lin et al.'s strong DVPST scheme does not satisfy the unforgeability. In order to overcome this problem, based on the hardness of discrete logarithm problem, we

present a new strong DVPST scheme. We also make a detail analysis and comparison on the security and efficiency with other related schemes including Lin et al.'s scheme. The analysis shows that our scheme not only has excellent performance in terms of computation cost and communication cost but also possesses unforgeability, non-transferability and privacy of signer's identity. © 2015 Global IT Research Institute (GiRI).

Number of references: 23

Main heading: Electronic document identification systems

Controlled terms: Aluminum - Cost benefit analysis - Costs - Security of data

Uncontrolled terms: Computational costs - Designated verifiers - Designated-verifier proxy signatures - Discrete logarithm problems - Non-transferability - Proxy signatures - Random Oracle model - Strong designated verifier signatures

Classification code: 541.1 Aluminum - 723.2 Data Processing and Image Processing - 723.5 Computer Applications - 911 Cost and Value Engineering; Industrial Economics

DOI: 10.1109/ICACT.2015.7224860

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

133.

Accession number: 20140517245430

Title: Study on smart materials of library buildings

Authors: Su, Xue Mei¹ ; He, Gui Xin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 484-485

Monograph title: Green Power, Materials and Manufacturing Technology and Applications III

Issue date: 2014

Publication year: 2014

Pages: 691-694

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037859865

Document type: Conference article (CA)

Conference name: 3rd International Conference on Green Power, Materials and Manufacturing Technology and Applications, GPMMTA 2013

Conference date: December 27, 2013 - December 30, 2013

Conference location: Wuhan, China

Conference code: 102250

Sponsor: National Natural Science Foundation of China (NSFC); Provincial Natural Science Foundation of Hunan; Provincial Science and Technology plan project of Hunan

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: With the human society stepping into modern civilized information age, libraries which are continuously profound in their modernization, respect readers first, in order to "meet human's demand, realize their value and pursuit their development" which has become the goal to libraries for their development and value achievement. Gradually the concept of people-oriented is increasingly blended in library construction, document information service, business workflow and personnel management work. In the library construction work, it is significant to embody the humanistic care in the smart materials of library buildings and concern about the different reader groups' physical and psychological requirements. © (2014) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Intelligent materials

Controlled terms: Information services - Libraries - Manufacture

Uncontrolled terms: Business workflow - College - Construction works - Human society
- Humanistic cares - Information age - Library buildings - Personnel management

Classification code: 415 Metals, Plastics, Wood and Other Structural Materials - 537.1 Heat Treatment Processes - 903.4 Information Services - 903.4.1 Libraries

DOI: 10.4028/www.scientific.net/AMM.484-485.691

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

134.

Accession number: 20151700790436

Title: Research on the electronic commerce market survey based on normalization kernel principal component analysis

Authors: Lijun, Cao¹ ; Xiyin, Liu¹

Author affiliation:

1 Hebei Normal University of Science and Technology, China

Source title: International Journal of Smart Home

Abbreviated source title: Int. J. Smart Home

Volume: 9

Issue: 2

Issue date: 2015

Publication year: 2015

Pages: 159-168

Language: English

ISSN: 19754094

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: As a new kind of consumption mode, the online group buying is familiar to consumers and

many consumers adopt this new consumption mode. We can conclude online consumption as one of the electronic commerce. Electronic commerce is known as utilization of computer technique, network technique and telecommunication technique to achieve the entire electronic commerce (business transactions) process electronically, digitally and networked. From the view of the consumption patterns, the online group buying (so called electronic commerce) can be divided into the simple online shopping mode and the mode which combine the online shopping and the entity shopping (that is, O2O mode). Though the domestic E-commerce industry starts later, it develops very quickly. However, the unbalanced development among the different regions results the imbalance of the online group buying market development. Therefore, it is necessary to survey the online group buying market. In this paper, we put forward an improved principal component analysis method- normalization principal component analysis method. This method transforms the negative index and the neutral index into the positive index. And it also transforms the positive index that the index value exists negative values into the index value that the positive indexes are all the positive values. Then it can score these indexes. The experimental results show that the method is feasible and effective. © 2015 SERSC.

Number of references: 16

Main heading: Principal component analysis

Controlled terms: Commerce - Electronic commerce - Social networking (online) - Surveys

Uncontrolled terms: Business transaction - Computer techniques - Consumption patterns - Kernel principal component analyses (KPCA) - O2O - On-line group buying - Online buying - Principal component analysis method

Classification code: 405.3 Surveying - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 911.2 Industrial Economics - 922.2 Mathematical Statistics

DOI: 10.14257/ijsh.2015.9.2.15

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

135.

Accession number: 20142917946978

Title: Robust fast tracking control of moving platform of PSS 3-2-1 orthogonal parallel mechanism

Authors: Wang, Hong-Rui^{1, 2}; Yang, Yi^{1, 3}; Li, Zhi-Qiang⁴; Wang, Yue-Ling¹; Wang, Hong-Bin¹

Author affiliation:

1 Key Lab. of Industrial Computer Control Engineering of Hebei Province, Yanshan University, Qinhuangdao, Hebei 066004, China

- 2 College of Electronic and Information Engineering, Hebei University, Baoding, Hebei 071000, China
- 3 Tianjin Great Realistic Power Technology Co. Ltd., Tianjin 300384, China
- 4 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Wang, H.-R. (1006300202@qq.com)

Source title: Tien Tzu Hsueh Pao/Acta Electronica Sinica

Abbreviated source title: Tien Tzu Hsueh Pao

Volume: 42

Issue: 3

Issue date: March 2014

Publication year: 2014

Pages: 517-522

Language: Chinese

ISSN: 03722112

CODEN: TTHPAG

Document type: Journal article (JA)

Publisher: Chinese Institute of Electronics

Abstract: According to a novel 6-DOF moving platform of orthogonal parallel mechanism, a control algorithm, which is aimed at the robustness of the closed loop system, is proposed to apply to that moving platform of PSS 3-2-1 orthogonal parallel mechanism. The platform can keep up with an independent dynamic equilibrium when it suffers the interference in a certain degree, and this algorithm is focused on being in real time. With the mentioned algorithm we tried to track and controll the track of the moving platform, the simulation experimental results certify that the presented algorithm has good inhibitory effect on the impact of inaccurate model and the external interference of this moving platform, and it has much more responsive and better robustness on tracking the track of PSS 3-2-1 moving platform of orthogonal parallel mechanism.

Number of references: 13

Main heading: Mechanisms

Controlled terms: Algorithms - Closed loop systems - Computer simulation - Convergence of numerical methods - Robust control

Uncontrolled terms: Dynamic equilibria - Dynamics modeling - External interference - Fast tracking control - Inhibitory effect - Moving platform - Parallel mechanisms - Trajectory tracking

Classification code: 601.3 Mechanisms - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 731 Automatic Control Principles and Applications - 921 Mathematics - 921.6 Numerical Methods - 961 Systems Science

DOI: 10.3969/j.issn.0372-2112.2014.03.015

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

136.

Accession number: 20152801023871

Title: Integration design of temperature sensor and double rfid tag

Authors: Zhang, Xiangdong¹ ; Li, Changming¹ ; Gao, Xiaoqiu¹ ; Li, Lijie¹

Author affiliation:

1 College of Business Administration, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, Lijie

Source title: Open Electrical and Electronic Engineering Journal

Abbreviated source title: Open Electr. Electron. Eng. J.

Volume: 8

Issue: 1

Issue date: 2014

Publication year: 2014

Pages: 111-117

Language: English

E-ISSN: 18741290

Document type: Journal article (JA)

Publisher: Bentham Science Publishers B.V., P.O. Box 294, Bussum, 1400 AG, Netherlands

Abstract: A new design about the integration of temperature sensor and RFID tag is provided. This is a dual-tag design, in which the temperature element is connected to one of the RFID tag antennas to form a parallel structure. In this design, some of the functions of the sensor are transferred to the RFID reader so that some components of the sensor can be cut, reducing the production costs of existing design. By defining the signal strength of the first tag as a reference value, the problem of setting a standard is solved in the temperature detection process. RF module can be used to make the energy transformation without requiring the entire design to have an external continuous power source to provide energy. In addition, experimental data proves the feasibility of this design. © Zhang et al.; Licensee Bentham Open.

Number of references: 19

Main heading: Radio frequency identification (RFID)

Controlled terms: Design - Mobile antennas - Sensors - Temperature sensors

Uncontrolled terms: Dual-tag - Energy transformation - Integration design - Parallel structures - RFID tag antennas - Signal strengths - Temperature detection - Temperature sensitive

Classification code: 408 Structural Design - 716 Telecommunication; Radar, Radio and Television - 716.3 Radio Systems and Equipment - 732 Control Devices - 801 Chemistry

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

137.

Accession number: 20142717903657

Title: Numerical computation method in solving hyper-singular integral equation by using Chebyshev wavelets

Authors: Liu, Jianping¹ ; Li, Xia¹ ; Mao, Xuezhi¹ ; Li, Lijuan¹

Author affiliation:

¹ Department of Mathematics and Information Science, Hebei Normal University of Science and Technology, No. 360, West Hebei St., Qinhuangdao 066004, China

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 8

Issue: 8

Issue date: August 2014

Publication year: 2014

Pages: 2149-2156

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: This paper presents a numerical computation method for solving hypersingular integral combining with the definition of Hadamard finite part integral and properties of Chebyshev wavelets. For the advantages of the Chebyshev wavelets, the paper converts the singular point inside the interval to the endpoint of interval, and then transforms Hyper-singular integral problem into Cauchy principal value improper integral problem. Convergence analysis and numerical examples have been carried out to verify the calculation method. © 2014 ICIC International.

Number of references: 13

Main heading: Numerical methods

Controlled terms: Computer science - Technology

Uncontrolled terms: Cauchy principal value - Chebyshev - Convergence - Convergence analysis - Finite part integrals - Hyper-singular integral - Hypersingular integral equation - Numerical computations

Classification code: 721 Computer Circuits and Logic Elements - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 901 Engineering Profession - 921.6 Numerical Methods

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

138.

Accession number: 20142517852163

Title: Colloidal gold immunochromatography assay for simultaneous detection of sulphonamides residue in pork

Authors: Du, Lianqi ; Zhu, Fengmei ; Li, Nan1

Author affiliation:

1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Changli 066600, Hebei, China

Corresponding author: Du, L.

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 14

Issue: 3

Issue date: March 2014

Publication year: 2014

Pages: 151-160

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology

Abstract: An colloidal gold immunochromatography assay was developed for simultaneous detection of sulfadimethox-ine(SDM), sulfadiazine (SD), sulfamethazine (SM2) residue in pork. It is to coat colloidal gold labeled SM2 monoclonal antibody in gold standard pad, SM2-ovalbumin (OVA) and Goat anti-mouse secondary antibodies in nitrocellulose membrane (NC) as test line (T line) and the control line (C lines) so that made of immunochromatographic rapid detection reagent which is used to rapidly detect residues of sulphonamides (SAs) in tissue samples. T line and SAs contained in the sample competitively coupled with colloidal gold labeled

monoclonal antibody of SM2 and then test results by direct observation of colloidal gold color. When we are detecting negative samples, we can see red bands in C line and T line. The established gold immunochromatography assay is simple, quick, and has the ability to simultaneously detect three drugs. Drug cross reaction is good so that it is used for residues and has wide prospects for development.

Number of references: 11

Main heading: Gold

Controlled terms: Amides - Chemical detection - Colloids - Drug products - Meats -
Monoclonal antibodies

Uncontrolled terms: Immunochromatography assays - Pork - Sulfadiazine (SD) -
Sulfadimethoxine - Sulfamethazine

Classification code: 461.9.1 Immunology - 547.1 Precious Metals - 801 Chemistry - 801.3 Colloid
Chemistry - 804.1 Organic Compounds - 822.3 Food Products

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

139.

Accession number: 20153001073952

Title: Correlation of fruit texture development and softening with cell wall degradation and related
gene expression in gala apples

Authors: Qi, Xiu-Dong¹ ; Wei, Jian-Mei² ; Zhao, Ling-Li³

Author affiliation:

- 1 School of Continuing Education, Hebei Normal University of Science & Technology, Qinhuangdao, China
- 2 Environmental Management College of China, Qinhuangdao, China
- 3 Agricultural Information Institute, Chinese Academy of Agricultural Sciences, Beijing, China

Corresponding author: Wei, Jian-Mei

Source title: Modern Food Science and Technology

Abbreviated source title: Mod. Food Sci. Technol.

Volume: 31

Issue: 6

Issue date: June 15, 2015

Publication year: 2015

Pages: 91-96

Language: English

ISSN: 16739078

Document type: Journal article (JA)

Publisher: South China University of Technology

Abstract: Changes in cell wall composition, enzyme activity, and gene expression during development and softening of Gala apples was investigated to identify correlations. The results indicated that the content and composition of cell wall material (CWM) showed a dynamic trend during development. Covalent soluble pectin (CSP) showed the highest content among the three pectins assessed and cellulose content was always significantly higher than that of hemicellulose. Firmness correlated significantly with CSP and hemicellulose content. Additionally, changes were noted in the activity and gene expression of cell wall enzymes during this stage, showing that cell wall degradation was involved in the physiological process of fruit development. After harvest, CSP content decreased rapidly with softening, water soluble pectin (WSP) content began to increase, while cellulose and hemicellulose contents decreased, all of which, correlated significantly with firmness loss. Among the cell wall enzymes, β -galactosidase (β -Gal) activity and MdGal gene expression increased most rapidly, followed by that of α -Arabinofuranosidase (α -Af) and PG polygalacturonase (PG), while pectin methylesterase (PME) activity and MdPME increased at a later stage. Moreover, correlation with firmness and cell wall components was stronger for β -Gal and α -Af than that for PG and PME. PG activity correlated strongly with CSP and hemicellulose content, while PME activity showed the least correlation with changes in cell wall components. This indicated that cell wall metabolism had a close relationship with texture softening of 'Gala' apple, and both, β -Gal and α -Af may play relatively more important roles in fruit softening. ©, 2015, South China University of Technology. All right reserved.

Number of references: 18

Main heading: Gene expression

Controlled terms: Cells - Cellulose - Cytology - Enzyme activity - Enzymes - Fruits
- Genes - Waterworks

Uncontrolled terms: Cell wall composition - Cell wall degradation - Cell walls -
Cell-wall components - Cellulose and hemicellulose - Fruit development - Gala apple -
Physiological process

Classification code: 446 Waterworks - 461.2 Biological Materials and Tissue Engineering - 461.9

Biology - 815.1.1 Organic Polymers - 821.4 Agricultural Products

DOI: 10.13982/j.mfst.1673-9078.2015.6.015

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

140.

Accession number: 20141817645131

Title: Mechanical and electronic properties of Rh and Rh3Zr from first-principles calculation

Authors: Zhang, Suhong^{1, 2}; Zhang, Xinyu¹; Zhu, Yan^{1, 3}; Sun, Na¹; Qin, Jiaqian⁴; Liu, Riping¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Science, Yanshan University, Qinhuangdao 066004, China

3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

4 Metallurgy and Materials Science Research Institute, Chulalongkorn University, Bangkok 10330, Thailand

Corresponding author: Zhang, X. (xyzhang@ysu.edu.cn)

Source title: Solid State Communications

Abbreviated source title: Solid State Commun

Volume: 189

Issue date: July 2014

Publication year: 2014

Pages: 43-46

Language: English

ISSN: 00381098

CODEN: SSCOAA

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: To give insight on developing Rh-based superalloys, systematic investigations on mechanical and electronic properties of fcc Rh and L1₂ Rh₃Zr are conducted by first-principles calculation. Basic mechanical parameters including bulk modulus, elastic constants, shear modulus, Young's modulus, Poisson's ratio, and elastic anisotropy are calculated. Additionally, the ideal strengths are investigated under tensile and shear loading. Our results reveal that L1₂ Rh₃Zr has lower mechanical strength but higher ductility than fcc Rh. The analysis of density of states reveals that the Rh-d electrons in L1₂ Rh₃Zr become more localized, whereas the Zr-d electrons become more delocalized, than in pure bulk, due to the interaction of Rh and Zr. © 2014 Elsevier Ltd.

Number of references: 41

Main heading: Rhodium

Controlled terms: Calculations - Elastic moduli - Electronic properties - Electronic structure - Loading - Zirconium

Uncontrolled terms: Density of state - E. First-principles - Elastic anisotropy - First-principles calculation - Mechanical and electronic properties - Mechanical parameters - Poisson's ratio - Young's Modulus

Classification code: 421 Strength of Building Materials; Mechanical Properties - 547.1 Precious Metals - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 672 Naval Vessels - 701.1 Electricity: Basic Concepts and Phenomena - 721 Computer Circuits and Logic Elements - 723 Computer Software, Data Handling and Applications - 921 Mathematics - 931.1 Mechanics - 951 Materials Science

DOI: 10.1016/j.ssc.2014.03.012

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

141.

Accession number: 20140817345520

Title: Detecting human head and shoulders trajectory in a smart classroom

Authors: Chunyan, Li¹ ; Yulian, Zhu¹ ; Zhimei, Xue¹

Author affiliation:

1 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004,

China

Source title: International Journal of Smart Home

Abbreviated source title: Int. J. Smart Home

Volume: 8

Issue: 1

Issue date: 2014

Publication year: 2014

Pages: 293-302

Language: English

ISSN: 19754094

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society, 20 Virginia Court, Sandy Bay, Tasmania, Australia

Abstract: With the development of multimedia technology, intelligent monitoring systems, etc. smart classrooms emerged, people want to get involved through multimedia and smart technology, and thus the teachers with intelligent monitoring can get the students' attention time, points of interest, attendance, and exam invigilation and other activities more effectively, through the student movement of the head shoulder trajectory tracking and judgment and improve the efficiency of the teacher's work and strengthen the interaction between teachers and students to improve students' learning efficiency. In this paper, we use the multimedia technology on the student's head and shoulders trajectory tracking and analysis, so as to solve the above problems, mainly divided into three phases: firstly is human face recognition, using Ababoost; secondly is to get the head and shoulders' pose, analysis to determine the effective head and shoulder trajectory; analysis and judgment on the results after using Camshift for tracking. The experimental results show that this method has strong real-time, when the head with a partially occluded or background interference it still can get better target trajectory and movement direction for us to make better judgment and analysis. © 2014 SERSC.

Number of references: 17

Main heading: Teaching

Controlled terms: Face recognition - Multimedia systems - Students

Uncontrolled terms: Ababoost - CamShift - Human face recognition - Intelligent monitoring - Intelligent monitoring systems - Multimedia - Multimedia technologies - Pose

analysis

Classification code: 723.5 Computer Applications - 901.2 Education

DOI: 10.14257/ijsh.2014.8.1.30

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

142.

Accession number: 20150400441156

Title: Grid chaotic attractors based on arc tangent and its secure communication

Authors: Mao, Xue-Zhi^{1, 2}; Xu, Yong³; Liu, Jian-Ping¹; Ma, Hui-Quan¹

Author affiliation:

- 1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China
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- 3 School of Science, Hebei University of Technology, Tianjin, China

Source title: Tongxin Xuebao/Journal on Communications

Abbreviated source title: Tongxin Xuebao

Volume: 35

Issue: 12

Issue date: December 1, 2014

Publication year: 2014

Pages: 106-115

Language: Chinese

ISSN: 1000436X

Document type: Journal article (JA)

Publisher: Editorial Board of Journal on Communications

Abstract: A smooth arc tangent function series approach for creating multi-directional multi-scroll grid chaotic attractors was proposed, including one-directional n-scroll, two-directional $n \times m$ -grid scroll, and three-directional $n \times m \times l$ -grid scroll chaotic attractors. The chaotic properties were studied by equilibrium points analysis, numerical simulation, Lyapunov exponents spectrum, bifurcation diagrams and Poincaré section diagrams. Synchronize the two grid multi-scroll chaotic systems with same structure by designing simple linear feedback control laws, which is applied to secure communication. The effectiveness of this method has been verified by simple analysis and numerical simulation.

Number of references: 16

Main heading: Secure communication

Controlled terms: Chaotic systems - Dynamical systems - Functions - Lyapunov methods
- Numerical methods - Numerical models

Uncontrolled terms: Arc tangent functions - Bifurcation diagram - Chaos synchronization -
Chaotic attractors - Equilibrium point - Linear feedback control - Lyapunov exponents spectrum -
Multiscroll chaotic attractor

Classification code: 921 Mathematics - 921.6 Numerical Methods

DOI: 10.3969/j.issn.1000-436x.2014.12.013

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

143.

Accession number: 20152801020470

Title: Modeling server load balance in cloud clusters based on multi-objective particle swarm optimization

Authors: Cao, Lijun¹ ; Liu, Xiyin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao; Hebei Province, China

Source title: International Journal of Grid and Distributed Computing

Abbreviated source title: Int. J. Grid Distrib. Comput.

Volume: 8

Issue: 3

Issue date: June 1, 2015

Publication year: 2015

Pages: 87-96

Language: English

ISSN: 20054262

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Load balancing is one of the hotspots in cloud computing research. Typically, the objective of workload balance in cloud environment is to assign tasks to proper virtual machines and physical servers with consideration of computing capability and communication cost. In this work, we propose to leverage PSO based algorithm to dynamically balance the workload of physical cloud servers. The problem is formulated as an optimization of the best solution of task assignment with the objectives of minimizing the average workload of all servers in cloud clusters, the deviation of the workload, and the migration cost between servers. Moreover, in order to avoid the low diversity of particles searching and low convergence speed, we employ a multi-swarm PSO method and introduce communication between swarms by random restructuring. Our extensive experiments show that our modified PSO method is efficient in balancing the workload of cloud servers. © 2015 SERSC.

Number of references: 28

Main heading: Particle swarm optimization (PSO)

Controlled terms: Cloud computing - Multiobjective optimization - Network management - Program compilers - Resource allocation - Servers

Uncontrolled terms: Cloud environments - Communication cost - Computing capability - Convergence speed - Migration costs - Multi objective particle swarm optimization - Virtual machines - Workload balance

Classification code: 722 Computer Systems and Equipment - 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 723.1 Computer Programming - 912.3 Operations Research - 921.5 Optimization Techniques

DOI: 10.14257/ijgdc.2015.8.3.09

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

144.

Accession number: 20151600746540

Title: Algebraic method for computing Minkowski sum of mechanical virtual assembly parts

Authors: Zhang, Buyong^{1, 2}; Guo, Xijuan¹; Liu, Yuanfeng¹

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao, China

2 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Guo, Xijuan

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 11

Issue: 3

Issue date: February 1, 2015

Publication year: 2015

Pages: 1005-1012

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: Minkowski sum is an efficient implementation to determine the relative position of two geometries, and it is used in many domains such as computer-aided design, robotics, spatial planning,

mathematical morphology, and image processing etc. In this paper, we propose an algebraic method for computing the Minkowski sum (AMMS) of a simple concave polyhedron and a simple convex polyhedron, which represent a special pair of assembly models, aiming at detecting the accurate relative position between mechanical assembly parts. The AMMS algorithm reduces the two time-consuming processes of traditional algorithms of polyhedral (involving at least one concave polyhedron): decomposing the concave polyhedron into convex pieces and performing the union of the pairwise Minkowski sums, and exploits the algebraic structure, a groupoid which is designed by a set (composed by some discrete geometric sense from the geometric object) and an operator defined on it, of each geometric model to obtain their Minkowski sum directly. Thus, the AMMS algorithm is of higher efficiency. The validity of the AMMS algorithm is verified by strict theoretical derivation and the experiments. ©, 2015, Binary Information Press. All right reserved.

Number of references: 17

Main heading: Algebra

Controlled terms: Algorithms - Computer aided design - Geometry - Image processing - Mathematical morphology - Robot programming

Uncontrolled terms: Algebraic structures - Convex polyhedrons - Efficient implementation - Geometric modeling - Mechanical assembly - Minkowski sum - Simple concave polyhedron - Theoretical derivations

Classification code: 723.1 Computer Programming - 723.5 Computer Applications - 741 Light, Optics and Optical Devices - 921 Mathematics - 921.1 Algebra

DOI: 10.12733/jcis13156

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

145.

Accession number: 20151100630408

Title: Research progress of microfluidic chips preparation and its optical element

Authors: Wang, Feng^{1, 2}; Bi, Wei Hong¹; Sun, Qiu Hong^{1, 3}

Author affiliation:

- 1 School of Information Science and Engineering, Yanshan University, Qinhuangdao, China
- 2 E&A College, Hebei Normal University of Science & Technology, Qinhuangdao, China
- 3 Hebei University of Science & Technology, Shijiazhuang, China

Source title: Sensors and Transducers

Abbreviated source title: Sensors Transducers

Volume: 166

Issue: 3

Issue date: January 1, 2014

Publication year: 2014

Pages: 29-38

Language: English

E-ISSN: 17265479

Document type: Journal article (JA)

Publisher: International Frequency Sensor Association

Abstract: Microfluidic technology is the emerging technologies in researching fluid channel and related applications in the micro and nano-scale space. Microfluidic chip is a new miniaturized rapid analysis platform by microfluidic technology, it has many characteristics such as liquid flow control, minimal reagent consumption, rapid analysis, which is widely used in physics, chemistry, biology, and engineering science and other fields, it has strong interdisciplinary. This paper mainly discusses research progress of materials used for microfluidic chips and the devices based on microfluidic technology, including microfluidic chip, microfluidic optical devices, microfluidic laser preparation, microfluidic chip applications, focusing on the quasi-molecular laser processing technology and femtosecond laser processing technology in the microfluidic devices preparation, and make development prospects for it. ©, International Frequency Sensor Association (IFSA) Publishing, S. L. All rights reserved.

Number of references: 62

Main heading: Microfluidics

Controlled terms: Chemical analysis - Fluidic devices - Laser applications - Laser materials processing - Microprocessor chips - Nanotechnology - Optical devices

Uncontrolled terms: Development prospects - Emerging technologies - Femtosecond laser processing - Liquid flow controls - Micro-fluidic devices - Microfluidic chip - Microfluidic lasers - Microfluidic technologies

Classification code: 631 Fluid Flow - 721 Computer Circuits and Logic Elements - 722 Computer Systems and Equipment - 732.1 Control Equipment - 741.3 Optical Devices and Systems - 744.9 Laser

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

146.

Accession number: 20151000619300

Title: An anomalous behavior detection method using system call sequences for distributed applications

Authors: Ma, Chuan1 ; Shen, Limin1 ; Wang, Tao1, 2, 3

Author affiliation:

1 School of Information Science and Engineering, Yanshan University, Qinhuangdao, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, China

3 The Key Laboratory for Computer Virtual Technology and System Integration of Hebei Province, Qinhuangdao, China

Corresponding author: Ma, Chuan

Source title: KSII Transactions on Internet and Information Systems

Abbreviated source title: KSII Trans. Internet Inf. Syst.

Volume: 9

Issue: 2

Issue date: February 28, 2015

Publication year: 2015

Pages: 659-679

Language: English

ISSN: 19767277

E-ISSN: 22881468

Document type: Journal article (JA)

Publisher: Korean Society for Internet Information, 4th Floor, Unsan Building,, 646-6 Yeoksam 1-Dong, Gangnam-Gu,, 135-911, Korea, Republic of

Abstract: Distributed applications are composed of multiple nodes, which exchange information with individual nodes through message passing. Compared with traditional applications, distributed applications have more complex behavior patterns because a large number of interactions and concurrent behaviors exist among their distributed nodes. Thus, it is difficult to detect anomalous behaviors and determine the location and scope of abnormal nodes, and some attacks and misuse cannot be detected. To address this problem, we introduce a method for detecting anomalous behaviors based on process algebra. We specify the architecture of the behavior detection model and the detection algorithm. The anomalous behavior detection and analysis demonstrate that our method is a good discriminator between normal and anomalous behavior characteristics of distributed applications. Performance evaluation shows that the proposed method enhances efficiency without security degradation. © 2015 KSII.

Number of references: 30

Main heading: Algebra

Controlled terms: Message passing

Uncontrolled terms: Anomalous behavior - Behavior detection - Distributed applications - Process algebras - System calls

Classification code: 723.1 Computer Programming - 921.1 Algebra

DOI: 10.3837/tiis.2015.02.010

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

147.

Accession number: 20154701593638

Title: A metadata-based method for sharing multiply heterogeneous information

Authors: Li, Xiaotao¹ ; Hu, Xiaohui¹ ; Lu, Weina^{1, 2} ; Liu, Xi¹

Author affiliation:

1 Department of Automation and Electrical Engineering, Beijing University of Aeronautics and Astronautics, Beijing, China

2 Department of Mechanics and Electronics, Hebei Normal University of Science and Technology, Changli,

Hebei, China

Corresponding author: Li, Xiaotao (taosmall@163.com)

Source title: International Journal of Database Theory and Application

Abbreviated source title: Int. J. Database Theory Appl.

Volume: 8

Issue: 3

Issue date: 2015

Publication year: 2015

Pages: 155-166

Language: English

ISSN: 20054270

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: As users' requirements for information integration enhance increasingly, how to integrate multiply heterogeneous data in a global sharing system has especially been a challenge for its large scale and diverse formats. To address the above problem, this paper proposes an information sharing approach for multiply heterogeneous data based on a two-layer metadata. Firstly, the architecture of the two-layer metadata is introduced. Secondly, the synchronization between different users for distributed heterogeneous data is realized by sharing table structures. Finally, Lucene search engine combined with the element GM-description of the two-layer metadata is presented to retrieve metadata, which reduces the response time compared to other retrieval methods. The experiment results illustrate the effectiveness of our approach and the conclusion is given. © 2015 SERSC.

Number of references: 15

Main heading: Information dissemination

Controlled terms: Information analysis - Information retrieval - Metadata - Search engines
- Synchronization

Uncontrolled terms: Distributed heterogeneous datum - GM-description - Heterogeneous data - Heterogeneous information - Information integration - Information sharing - Retrieval methods - Sharing systems

Classification code: 723 Computer Software, Data Handling and Applications - 903 Information Science
- 961 Systems Science

DOI: 10.14257/ijdta.2015.8.3.13

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

148.

Accession number: 20150500474196

Title: The study of communication fibre amplifier based on doped nano-scale semiconductor materials

Authors: Xue, Yanru¹ ; Yao, Yinghua¹ ; Liu, Min¹ ; Wang, Feng¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei, China

Corresponding author: Xue, Yanru

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 12

Issue date: 2014

Publication year: 2014

Pages: 529-536

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute

Abstract: This paper firstly describes the development of communication fibre with InP-doped nano-scale semiconductor materials in detail, and then discusses its important dispersion characteristics, starting from the definition of fibre materials dispersion to explore the affected factors of dispersion, different dispersions on fibre as well as the dispersion features of single mode fibre. From the perspectives of experimental and theoretical calculations, it analyses the dispersion characteristics of drawing and doped nano-scale fibre. Thus, it will have much broader prospects for sano-scale semiconductor materials as doping fibre amplifier in communication.

Number of references: 11

Main heading: Dispersions

Controlled terms: Fiber amplifiers - Fibers - Nanostructured materials - Nanotechnology - Optical communication - Optical fibers - Semiconductor doping - Semiconductor materials - Single mode fibers

Uncontrolled terms: Affected factors - As doping - Dispersion characteristics - Dispersion features - InP - Nano scale - Theoretical calculations

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

149.

Accession number: 20152300903966

Title: Synthesis and photophysics of BF₂-rigidified partially closed chain bromotetrapyrroles: Near infrared emitters and photosensitizers

Authors: Dai, En1 ; Pang, Weidong1 ; Zhang, Xian-Fu2 ; Yang, Xudong2 ; Jiang, Ting1 ; Zhang, Ping1 ; Yu, Changjiang1 ; Hao, Erhong1 ; Wei, Yun1 ; Mu, Xiaolong1 ; Jiao, Lijuan1

Author affiliation:

1 Key Laboratory of Functional Molecular Solids, School of Chemistry and Materials Science, Anhui Normal University, Wuhu, China

2 Chemistry Department, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Hao, Erhong

Source title: Chemistry - An Asian Journal

Abbreviated source title: Chem. Asian J.

Volume: 10

Issue: 6

Issue date: June 1, 2015

Publication year: 2015

Pages: 1327-1334

Language: English

ISSN: 18614728

E-ISSN: 1861471X

CODEN: CAAJBI

Document type: Journal article (JA)

Publisher: John Wiley and Sons Ltd, Southern Gate, Chichester, West Sussex, PO19 8SQ, United Kingdom

Abstract: We report the synthesis, crystallographic, optical, and triplet and singlet oxygen generation properties of a series of BF₂-rigidified partially closed chain bromotetrapyrroles as near infrared emitters and photosensitizers. These novel dyes were efficiently synthesized from a nucleophilic substitution reaction between pyrroles and the 3,5-bromo-substituents on the tetra- and hexabromoBODIPYs and absorb in the near-infrared region (681-754 nm) with high molar extinction coefficients. Their fluorescent emission (708-818 nm) and singlet oxygen generation properties are significantly affected by alkyl substitutions on the two uncoordinated pyrrole units of these dyes and the polarity of solvents. Among them, dyes 4-ca and 4-da show good singlet oxygen generation efficiency and good NIR fluorescence emission (fluorescence quantum yields of 0.14-0.43 in different solvents studied). Don't be so rigid: A novel type of NIR BF₂-rigidified open-chain bromotetrapyrrole dyes has been developed, which show variable singlet oxygen generation properties depending on the alkyl substitutions on the two uncoordinated pyrrole units of these dyes. © 2015 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim.

Number of references: 103

Main heading: Gas generators

Controlled terms: Aromatic compounds - Chains - Fluorescence - Infrared devices - Oxygen - Photosensitizers - Potassium compounds - Substitution reactions

Uncontrolled terms: BODIPY - Dyes/pigments - Fluorescence quantum yield - Molar extinction coefficient - Nucleophilic substitution reactions - Singlet oxygen - Singlet oxygen generation - Tetrapyrroles

Classification code: 522 Gas Fuels - 602.1 Mechanical Drives - 741.1 Light/Optics - 741.3 Optical Devices and Systems - 802.2 Chemical Reactions - 804 Chemical Products Generally - 804.1 Organic Compounds

Numerical data indexing: Size 6.81e-07m to 7.54e-07m, Size 7.08e-07m to 8.18e-07m

DOI: 10.1002/asia.201500118

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

150.

Accession number: 20150400457596

Title: Effect of high temperature and high pressure on thermal diffusivity coefficient and resistivity of as-cast Cu-38.13Zn-0.21Al alloy

Authors: Ma, Yu-Quan¹ ; Liu, Rong-Chang¹ ; Zhang, Li-Hong¹

Author affiliation:

¹ College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Cailiao Rechuli Xuebao/Transactions of Materials and Heat Treatment

Abbreviated source title: Cailiao Rechuli Xuebao

Volume: 35

Issue date: December 30, 2014

Publication year: 2014

Pages: 24-28

Language: Chinese

ISSN: 10096264

CODEN: JRXUDO

Document type: Journal article (JA)

Publisher: Editorial Office of Transactions of Materials and Heat Treatment

Abstract: The effects of high temperature of 1-5 GPa and high pressure of 720 treatment on thermal diffusion coefficient and resistivity of as-cast Cu-38.13Zn-0.21Al alloy were measured by thermal constant tester and seebeck resistivity tester. The microstructure of Cu-38.13Zn-0.21Al alloy before and after high temperature and higher pressure heat treatment was observed by optical microscope and transmission electronic microscope. The experimental results show that after high temperature and high pressure treatment, the structure of Cu-38.13Zn-0.21Al alloy is refined obviously and the dislocation density within grains increases, which leads to the decrease of thermal diffusion coefficient and the increase of resistivity. When the pressure is 3 GPa, the thermal diffusion coefficient reaches minimum value of $0.3024 \text{ cm}^2 \cdot \text{s}^{-1}$, and the resistivity reaches maximum value of $7657 \times 10^{-8} \Omega \cdot \text{m}^{-1}$, the thermal diffusion coefficient decreases by 14.79%, and the resistivity increases by 7.48% compared with the as-cast alloy. ©, 2014, Editorial Office of Transactions of Materials and Heat Treatment. All right reserved.

Number of references: 21

Main heading: Diffusion

Controlled terms: Alloys - Aluminum - Electric conductivity - Heat treatment - High pressure effects - Light transmission - Thermal diffusion - Zinc

Uncontrolled terms: After high temperature - Al-alloy - Dislocation densities - Electronic microscopes - High temperature - High temperature and high pressure - Thermal constant - Thermal diffusivity coefficient

Classification code: 531.1 Metallurgy - 537.1 Heat Treatment Processes - 541.1 Aluminum - 546.3 Zinc and Alloys - 701.1 Electricity: Basic Concepts and Phenomena - 741.1 Light/Optics - 931.1 Mechanics - 931.2 Physical Properties of Gases, Liquids and Solids

Numerical data indexing: Percentage $1.48 \times 10^1\%$, Percentage $7.48 \times 10^0\%$, Pressure $1.00 \times 10^9 \text{ Pa}$ to $5.00 \times 10^9 \text{ Pa}$, Pressure $3.00 \times 10^9 \text{ Pa}$

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

151.

Accession number: 20153201107535

Title: An switching local evolutionary PSO method for art object detection and estimation

Authors: Hu, Jiaying¹ ; Xiao, Yiqun² ; Xue, Chunxia¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Hebei Vocational & Technical College of Building Materials, Qinhuangdao, China

Corresponding author: Hu, Jiaying

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 11

Issue: 12

Issue date: June 15, 2015

Publication year: 2015

Pages: 4497-4503

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: In this paper, an switching local evolutionary PSO method is applied for art object detection and estimation. RBF neural network is used as a classifier. An switching local evolutionary PSO method (SLEPSO) is used to optimize the parameters of RBF neural network. The testing results show that the mean estimation error of switching local evolutionary particle swarm optimization-RBF neural network is only 10%, the mean estimation error of particle swarm optimization-RBF neural network is 17.5%, the mean estimation error of genetic algorithm-RBF neural network is 32.5%, and the mean estimation error of RBF neural network is 45%. It can be seen that art estimation accuracy of switching local evolutionary particle swarm optimization-RBF neural network is better than that of particle swarm optimization-RBF neural network, genetic algorithm-RBF neural network and conventional RBF neural network. ©, 2015, Binary Information Press. All right reserved.

Number of references: 10

Main heading: Particle swarm optimization (PSO)

Controlled terms: Arts computing - Errors - Estimation - Evolutionary algorithms - Genetic algorithms - Object detection - Object recognition - Radial basis function networks - Switching

Uncontrolled terms: Detection and estimation - Estimation errors - Estimation methods - Evolutionary particle swarm optimizations - Local evolutionary PSO - RBF Neural Network

Classification code: 716 Telecommunication; Radar, Radio and Television - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 723 Computer Software, Data Handling and Applications - 921 Mathematics

Numerical data indexing: Percentage 1.00e+01%, Percentage 1.75e+01%, Percentage 3.25e+01%, Percentage 4.50e+01%

DOI: 10.12733/jcis14743

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

152.

Accession number: 20144900301067

Title: Elastic and thermodynamic properties of Rh and Rh₃Zr under pressure from first-principles calculation

Authors: Zhang, Suhong^{1, 2}; Zhang, Xinyu¹; Zhu, Yan^{1, 3}; Ma, Mingzhen¹; Qin, Jiaqian⁴; Liu, Riping¹

Author affiliation:

- 1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, China
- 2 College of Science, Yanshan University, Qinhuangdao, China
- 3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 4 Metallurgy and Materials Science Research Institute, Chulalongkorn University, Bangkok, Thailand

Corresponding author: Zhang, Xinyu

Source title: Materials Chemistry and Physics

Abbreviated source title: Mater Chem Phys

Volume: 149

Issue date: January 15, 2015

Publication year: 2015

Pages: 553-558

Language: English

ISSN: 02540584

CODEN: MCHPDR

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: To give guidance for developing Rh-based superalloys, systematic investigations on structural, elastic and thermodynamic properties of Rh and Rh₃Zr are conducted by first-principles calculations. The pressure dependence of the basic mechanical parameters is presented covering elastic constants, bulk modulus, shear modulus, Young's modulus, Poisson's ratio, aggregate sound velocities and elastic anisotropy. Additionally, the mechanical stability and ductility/brittleness are also assessed. Compared with Rh, it is found that Rh₃Zr has higher ductility but lower elastic moduli, lower aggregate sound velocities and higher elastic anisotropy. The variations of the thermal properties including the normalized volume, bulk modulus, thermal expansion coefficient and heat capacity of Rh and Rh₃Zr in wide pressure (0-40 GPa) and temperature (0-2200 K) ranges are also predicted and analyzed, and a remarkable consistency with experimental results is obtained. © 2014 Elsevier B.V. All rights reserved.

Number of references: 35

Main heading: Rhodium

Controlled terms: Acoustic wave velocity - Aggregates - Anisotropy - Calculations - Ductility - Elastic moduli - Intermetallics - Mechanical stability - Shear flow - Specific heat - Thermal expansion - Thermodynamic properties - Thermodynamics - Zirconium

Uncontrolled terms: Ab initio calculations - Elastic anisotropy - Elastic properties - First-principles calculation - Mechanical parameters - Pressure dependence - Thermal expansion coefficients - Young's Modulus

Classification code: 406 Highway Engineering - 421 Strength of Building Materials; Mechanical Properties - 531.1 Metallurgy - 547.1 Precious Metals - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 641.1 Thermodynamics - 721 Computer Circuits and Logic Elements - 723 Computer Software, Data Handling and Applications - 751.1 Acoustic Waves - 921 Mathematics - 931.2 Physical Properties of Gases, Liquids and Solids - 951 Materials Science

Numerical data indexing: Pressure 0.00e+00Pa to 4.00e+10Pa, Temperature 0.00e+00K to 2.20e+03K

DOI: 10.1016/j.matchemphys.2014.11.005

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

153.

Accession number: 20145300384010

Title: Spectroscopic insights on selfassembly and excited state interactions between rhodamine and phthalocyanine molecules

Authors: Geng, Hao¹ ; Zhang, Xian-Fu^{1, 2}

Author affiliation:

- 1 Institute of Applied Photochemistry, Center of Analysis and Measurements, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China
- 2 MPC Technologies, Hamilton; ON, Canada

Corresponding author: Zhang, Xian-Fu

Source title: Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy

Abbreviated source title: Spectrochim. Acta Part A Mol. Biomol. Spectrosc.

Volume: 139

Issue date: March 15, 2015

Publication year: 2015

Pages: 13-19

Language: English

ISSN: 13861425

CODEN: SAMCAS

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: The absorption and fluorescence spectra as well as fluorescence lifetimes of tetrasulfonated zinc phthalocyanine $\text{ZnPc}(\text{SO}_3\text{Na})_4$ were measured in the absence and presence of four rhodamine dyes, Rhodamine B (RB), Ethyl rhodamine B (ERB), Rhodamine 6G (R6G), Rhodamine 110 (R110), and Pyronine B (PYB). The ground state complexes of phthalocyanine-(Rhodamine)₂ were observed which exhibit new absorption bands. The binding constants are all very large (0.86×10^5 - $0.22 \times 10^8 \text{ M}^{-1}$), suggesting rhodamine-phthalocyanine pairs are very good combinations for efficient selfassembly. Both the fluorescence intensity and the lifetime values of $\text{ZnPc}(\text{SO}_3\text{Na})_4$ were decreased by the presence of rhodamines. The structural effect of rhodamines on selfassembly is significant. The ground state binding and dynamic quenching capability is $\text{PYB} > \text{R6G} > \text{ERB} > \text{RB} > \text{R110}$. The dynamic fluorescence quenching is due to the photoinduced electron transfer (PET). The PET rate constant is very large and in the order of $10^{13} \text{ M}^{-1} \text{ s}^{-1}$, much greater than k_f and k_{ic} (in the order of $10^8 \text{ M}^{-1} \text{ s}^{-1}$), which means that the PET efficiency is almost 100%. Therefore the non-covalent Pc-rhodamine is a very good pair of donor/acceptor for potential efficient solar energy conversion.

Number of references: 49

Main heading: Excited states

Controlled terms: Absorption spectra - Benchmarking - Binding energy - Fluorescence - Ground state - Nitrogen compounds - Quenching - Rate constants - Self assembly - Sodium - Solar energy - Zinc compounds

Uncontrolled terms: Absorption and fluorescence spectra - Fluorescence intensities - Fluorescence lifetimes - Fluorescence quenching - Photo-induced electron transfer - Phthalocyanine - Phthalocyanine molecules - Rhodamine

Classification code: 537.1 Heat Treatment Processes - 549.1 Alkali Metals - 615.2 Solar Power - 741.1 Light/Optics - 801 Chemistry - 801.4 Physical Chemistry - 804.1 Organic Compounds - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing - 931.3 Atomic and Molecular Physics - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 933 Solid State Physics - 951 Materials Science

Numerical data indexing: Percentage 1.00e+02%

DOI: 10.1016/j.saa.2014.12.010

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20143017971270

Title: Microstructure evolution and thermal physical properties of CuCr alloy after high pressure treatment

Authors: Ma, Yu-Quan¹ ; Lin, Hong-Ju¹ ; Song, Dong-Dong¹

Author affiliation:

¹ Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Ma, Y.-Q. (mayuquan2004@126.com)

Source title: Rare Metals

Abbreviated source title: Rare Met

Volume: 33

Issue: 3

Issue date: June 2014

Publication year: 2014

Pages: 293-298

Language: English

ISSN: 10010521

E-ISSN: 18677185

CODEN: RARME8

Document type: Journal article (JA)

Publisher: University of Science and Technology Beijing

Abstract: The thermal diffusion coefficient, thermal conductivity, and thermal expansion coefficient of CuCr alloy prepared by infiltration were measured by thermal constant tester and dilatometer before and after high pressure heat treatment, at the same time, the effect of high pressure treatment on the thermal physical properties of CuCr alloy was discussed by the analysis of its microstructure. The experimental results show that high pressure heat treatment can increase the thermal diffusion coefficient and thermal conductivity of CuCr alloy, but it changes slightly in the pressure range of 1-6 GPa. As for thermal expansion coefficient, when the temperature is

higher than 130 °C, it is obviously higher than that of the alloy without high pressure treatment after 1 GPa pressure treatment, and the higher the temperature is, the larger their differences are. © 2014 The Nonferrous Metals Society of China and Springer-Verlag Berlin Heidelberg.

Number of references: 20

Main heading: Thermal conductivity of solids

Controlled terms: Alloys - Chromium compounds - Heat treatment - Microstructure - Physical properties - Thermal conductivity - Thermal diffusion

Uncontrolled terms: CuCr alloy - Effect of high pressure - High pressure treatments - Micro-structure evolutions - Pressure treatments - Thermal constant - Thermal expansion coefficients - Thermal-physical property

Classification code: 531.1 Metallurgy - 537.1 Heat Treatment Processes - 804.1 Organic Compounds - 931.2 Physical Properties of Gases, Liquids and Solids - 933 Solid State Physics - 951 Materials Science

Numerical data indexing: Pressure 1.00e+09Pa, Pressure 1.00e+09Pa to 6.00e+09Pa, Temperature 4.03e+02K

DOI: 10.1007/s12598-014-0269-4

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

155.

Accession number: 20160601888368

Title: Preparation and characterization of Zn²⁺-doped nano SiC coating

Authors: Lu, Liu¹ ; Zhao, Zhiling¹ ; Ying, Xie¹ ; Tian, Hongyan¹ ; Song, Shitao¹

Author affiliation:

1 College of Chemical Engineering, Hebei Normal University of Science and Technology, Hebei, China

Corresponding author: Lu, Liu (13633336800@163.com)

Source title: Chemical Engineering Transactions

Abbreviated source title: Chem. Eng. Trans.

Volume: 46

Issue date: December 2015

Publication year: 2015

Pages: 55-60

Language: English

E-ISSN: 22839216

ISBN-13: 9788895608372

Document type: Journal article (JA)

Publisher: Italian Association of Chemical Engineering - AIDIC

Abstract: Gasification of glycerol for hydrogen production in supercritical water was studied in a fluidisation bed system with the presence of Na₂CO₃ and ZnCl₂. The experiment results show that temperature is the key factor and pressure has a minor effect on glycerol gasification. Higher temperature and pressure are in favor of glycerol gasification. Gasification performance of glycerol decreases with the increasing concentration, and 35wt. % glycerol was gasified stably during long time operations. Gasification efficiency increases and molar fraction of CO decreases with Na₂CO₃ addition. ZnCl₂ addition has no significant effect on the gasification efficiency, but it improves the selectivity of hydrogen in gas product. It is implied that the supercritical water fluidisation bed system is effective for hydrogen production by biomass gasification. Copyright © 2015, AIDIC Servizi S.r.l.

Number of references: 15

Main heading: Gasification

Controlled terms: Efficiency - Fluidization - Glycerol - Hydrogen production - Silicon carbide - Sodium

Uncontrolled terms: Biomass Gasification - Gas product - Gasification efficiency - Key factors - Long-time operation - Molar fractions - Supercritical water - Temperature and pressures

Classification code: 522 Gas Fuels - 549.1 Alkali Metals - 802.3 Chemical Operations - 804.1 Organic Compounds - 804.2 Inorganic Compounds - 913.1 Production Engineering

DOI: 10.3303/CET1546010

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

156.

Accession number: 20142817929939

Title: Constructing Digital library information platform based on cloud computing

Authors: Wang, Yubin¹ ; Bo, Jingyi¹ ; Xu, Weili²

Author affiliation:

1 College of Math and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 The College of Business Administration, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of Future Generation Communication and Networking

Abbreviated source title: Int. J. Future Gener. Commun. Networking

Volume: 7

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 117-128

Language: English

ISSN: 22337857

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: With the development of cloud computing, more and more fields are leveraging it for application revolution. As the information resources of university libraries are becoming digital and networked, the portal of university libraries is now the important source of information and services. However, the access of information and services becomes harder because of the massive data resources and services. Besides, the cost on collection expenditure, network devices and resources integration is also increasing. To this end, we propose to construct a digital library information platform using cloud computing technique. Specifically, in his paper, we propose a reference architecture of a cloud based digital library information platform, and then focus on the

resource allocation component. In our experiment, we evaluate the efficiency of our resource allocation algorithm.
© 2014 SERSC.

Number of references: 28

Main heading: Cloud computing

Controlled terms: Digital libraries - Resource allocation

Uncontrolled terms: Computing techniques - Information platform - Information resource
- Network devices - Reference architecture - Resource allocation algorithms - Resources integrations
- University libraries

Classification code: 722.4 Digital Computers and Systems - 723.5 Computer Applications - 912.3
Operations Research

DOI: 10.14257/ijfgcn.2014.7.3.11

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

157.

Accession number: 20142417813331

Title: Art design teaching assessment based on improved fuzzy robust wavelet RVM algorithm

Authors: Li, Jie1 ; Hu, Jiaying1 ; Jia, Hui2

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Qinhuangdao 066000, China
- 2 Haigangou Teacher Training School, Qinhuangdao 066000, China

Corresponding author: Li, J. (lijieel@163.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 10

Issue: 7

Issue date: April 1, 2014

Publication year: 2014

Pages: 2693-2699

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: An improved fuzzy robust wavelet relevance vector machine can be proposed and applied to art design teaching assessment in this study. Relevance vector machine is a Bayesian extension of the SVM, which can solve the over-fitting of artificial neural networks, and triangular fuzzy, robust loss function and Morlet wavelet function can be used to construct a novel relevance vector machine. In order to testify that the improved fuzzy wavelet relevance vector machine has higher prediction performance than traditional relevance vector machine, the testing case is applied to show the superiority of the improved fuzzy wavelet relevance vector machine compared with traditional relevance vector machine. The comparison of mean assessment error between improved fuzzy robust wavelet RVM and classical RVM is given in the experiment. It can be seen that mean assessment error of improved fuzzy robust wavelet RVM is lower than classical RVM. Thus, we can conclude that mean assessment ability of improved fuzzy robust wavelet RVM is better than that of classical RVM. © 2014 Binary Information Press.

Number of references: 15

Main heading: Vectors

Controlled terms: Algorithms - Neural networks

Uncontrolled terms: Assessment ability - Bayesian - Fuzzy robust - Loss functions - Morlet wavelet function - Nonlinear unit - Prediction performance - Relevance Vector Machine

Classification code: 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 921 Mathematics - 921.1 Algebra

DOI: 10.12733/jcis9340

Database: Compendex

158.

Accession number: 20143900076044

Title: Kinematics analysis and design of a novel spherical orthogonal 3-RRR parallel mechanism

Authors: Zhang, Liang^{1, 2}; Jin, Zhenlin¹; Li, Shuzhen²

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao, China

2 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Liang

Source title: Journal of Chemical and Pharmaceutical Research

Abbreviated source title: J. Chem. Pharm. Res.

Volume: 6

Issue: 7

Issue date: 2014

Publication year: 2014

Pages: 2470-2476

Language: English

E-ISSN: 09757384

Document type: Journal article (JA)

Publisher: Journal of Chemical and Pharmaceutical Research, 3/668 Malviya Nagar, Jaipur, Rajasthan, India

Abstract: A new orthogonal spherical three degrees of freedom (3-DOF) parallel mechanism was presented, and its kinematics performance was analyzed. The position equations and kinematics transmission equations were given by the relation of geometry. Based on the Lagrange method, the evaluation indices of the velocity performance and isotropy performance were defined. The motion characteristics of the mechanism were analyzed, and the distribution of performance indices of the mechanism in task space was studied. The results show that, in the workspace, the range of the velocity performance index is from 0.69157 to 0.96569, the range of isotropic index is from 0.44710 to 0.91281, and the variations of two kinematics transmission performance indices in the working space are small and uniform distribution, so the performance stability of the mechanism within the

workspace is good, and the mechanism has good kinematics transmission performance and isotropy performance. With the mechanism for the prototype, a shoulder joint of humanoid robot is developed. It has the advantages of simple and compact structure, easy manufacturing, and lower motion inertia, etc. It is an ideal shoulder joint configuration for the humanoid robot. © 2014, Journal of Chemical and Pharmaceutical Research. All rights reserved.

Number of references: 9

Main heading: Kinematics

Controlled terms: Anthropomorphic robots - Degrees of freedom (mechanics) - Mechanisms
- Optimal systems

Uncontrolled terms: Isotropy - Kinematics performance - Motion characteristics -
Parallel mechanisms - Performance indices - Performance stability - Three degrees of freedom -
Transmission performance

Classification code: 601.3 Mechanisms - 731.5 Robotics - 931.1 Mechanics - 961 Systems Science

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

159.

Accession number: 20152100863747

Title: An information content model of teachers' teaching ability improvement in higher school based on information axiom

Authors: Yuhong, Zhang¹ ; Qiuxiang, Shi² ; Xiaofang, Hao³

Author affiliation:

- 1 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 2 Department of education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 3 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Yuhong, Zhang

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 12

Issue date: 2014

Publication year: 2014

Pages: 1144-1150

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: One way to ensure the teaching quality of institutes of higher learning is by improving university teachers' teaching ability is an important approach to. This paper proposes an information content model of teachers' teaching ability improvement based on information axiom. Accurate and reliable, this paper analyses factors than influence the teaching ability and constructs an evaluation indicator system by Analytical Hierarchy Process. It works out the calculation model of information content targeting at different indicators with the help of fuzzy theory and information axiom. After weight is taken into account, it acquires the comprehensive information content model and measures teachers' teaching ability. Case study proves that the model and the algorithm are effective.

Number of references: 13

Main heading: Teaching

Controlled terms: Education

Uncontrolled terms: Analytical Hierarchy Process - Comprehensive information - Evaluation indicator system - Evaluation modeling - Higher education - Information axiom - Information contents - University teachers

Classification code: 901.2 Education

Database: Compendex

160.

Accession number: 20154901638461

Title: Tuning plasmonic and chemical enhancement for SERS detection on graphene-based Au hybrids

Authors: Liang, Xiu¹ ; Liang, Benliang¹ ; Pan, Zhenghui² ; Lang, Xiufeng³ ; Zhang, Yuegang² ; Wang, Guangsheng¹ ; Yin, Penggang¹ ; Guo, Lin¹

Author affiliation:

1 Key Laboratory of Bio-inspired Smart Interfacial Science and Technology, Ministry of Education, School of Chemistry and Environment, Beihang University, Beijing, China

2 Bi-Lab, Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, Suzhou Jiangsu, China

3 Department of Physics, Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Wang, Guangsheng (wanggsh@buaa.edu.cn)

Source title: Nanoscale

Abbreviated source title: Nanoscale

Volume: 7

Issue: 47

Issue date: December 21, 2015

Publication year: 2015

Pages: 20188-20196

Language: English

ISSN: 20403364

E-ISSN: 20403372

Document type: Journal article (JA)

Publisher: Royal Society of Chemistry

Abstract: Various graphene-based Au nanocomposites have been developed as surface-enhanced Raman scattering (SERS) substrates recently. However, efficient use of SERS has been impeded by the difficulty of tuning SERS enhancement effects induced from chemical and plasmonic enhancement by different preparation

methods of graphene. Herein, we developed graphene-based Au hybrids through physical sputtering gold NPs on monolayer graphene prepared by chemical vapor deposition (CVD) as a CVD-G/Au hybrid, as well as graphene oxide-gold (GO/Au) and reduced-graphene oxide (rGO/Au) hybrids prepared using the chemical in situ crystallization growth method. Plasmonic and chemical enhancements were tuned effectively by simple methods in these as-prepared graphene-based Au systems. SERS performances of CVD-G/Au, rGO/Au and GO/Au showed a gradually monotonic increasing tendency of enhancement factors (EFs) for adsorbed Rhodamine 6G (R6G) molecules, which show clear dependence on chemical bonds between graphene and Au, indicating that the chemical enhancement can be steadily controlled by chemical groups in a graphene-based Au hybrid system. Most notably, we demonstrate that the optimized GO/Au was able to detect biomolecules of adenine, which displayed high sensitivity with a detection limit of 10^{-7} M as well as good reproducibility and uniformity. © 2015 The Royal Society of Chemistry.

Number of references: 53

Main heading: Graphene

Controlled terms: Bond strength (chemical) - Chemical detection - Chemical vapor deposition
- Gold - Hybrid systems - Plasmons - Raman scattering - Substrates - Surface scattering

Uncontrolled terms: Chemical enhancements - Chemical vapor depositions (CVD) -
Enhancement factor - In-situ crystallization - Physical sputtering - Preparation method - Reduced
graphene oxides - Surface enhanced Raman Scattering (SERS)

Classification code: 547.1 Precious Metals - 741.1 Light/Optics - 761 Nanotechnology - 801 Chemistry -
801.4 Physical Chemistry - 802.2 Chemical Reactions - 804 Chemical Products Generally - 921 Mathematics -
931 Classical Physics; Quantum Theory; Relativity - 931.3 Atomic and Molecular Physics

DOI: 10.1039/c5nr06010a

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

161.

Accession number: 20153201107537

Title: Entropy-based active learning SVM for arts multiclass evaluation

Authors: Chen, Zhuo1 ; Wang, Wenjing1 ; Wang, Chuxin2

Author affiliation:

1 Hebei Normal University of Science & Technology, Qinhuangdao, China

2 Environmental Management College of China, Qinhuangdao, China

Corresponding author: Wang, Chuxin

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 11

Issue: 12

Issue date: June 15, 2015

Publication year: 2015

Pages: 4517-4522

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: Entropy-based active learning SVM for arts multiclass evaluation is presented in this paper. Active learning can be used to solve unlabeled binary classification problems. SVM is a popular intelligent machine learning method, which can effectively solve pattern recognition and regression problems, and the key of SVM active learning is designing the most excellent sample feature extraction technique. The testing results show that the multiclass evaluation ability of entropy-based active learning SVM is better than that of SVM and ANN. Entropy-based active learning SVM is more suitable for arts multiclass evaluation than SVM and ANN. ©, 2015, Binary Information Press. All right reserved.

Number of references: 11

Main heading: Artificial intelligence

Controlled terms: Ability testing - Classification (of information) - Entropy - Extraction - Feature extraction - Learning systems - Pattern recognition

Uncontrolled terms: Active Learning - Arts - Binary classification problems - Evaluation ability - Intelligent machine - Multiclass evaluation - Regression problem - Sample features

Classification code: 641.1 Thermodynamics - 716 Telecommunication; Radar, Radio and Television - 716.1 Information Theory and Signal Processing - 723.4 Artificial Intelligence - 802.3 Chemical Operations - 912.4 Personnel

DOI: 10.12733/jcis14752

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

162.

Accession number: 20151600746542

Title: A new three-dimensional autonomous chaotic system

Authors: Liu, Jianping¹ ; Shen, Yufa¹ ; Li, Xia¹

Author affiliation:

1 Department of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Liu, Jianping

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 11

Issue: 3

Issue date: February 1, 2015

Publication year: 2015

Pages: 1021-1028

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: This paper constructs a novel chaotic system, which is topologically non-equivalent with

Chen system, Lorenz system and other kinds of classical chaotic systems. The system balance, dissipation, Lyapunov index and dimension are analyzed. In order to verify the chaotic property of the system, diagrams of numerical simulation, time domain waveform, Lyapunov exponent spectrum, power spectrum, bifurcation and Poincaré section are provided. Finally, the influence of system parameters on system dynamic behavior is investigated. ©, 2015, Binary Information Press. All right reserved.

Number of references: 13

Main heading: Chaotic systems

Controlled terms: Bifurcation (mathematics) - Differential equations - Lyapunov functions - Lyapunov methods - Power spectrum

Uncontrolled terms: Bifurcation diagram - Chaotic properties - Classical chaotic systems - Lyapunov exponent spectrum - Lyapunov exponents spectrum - Lyapunov index - System Dynamics - Time-domain waveforms

Classification code: 921 Mathematics - 921.2 Calculus

DOI: 10.12733/jcis13173

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

163.

Accession number: 20153101105212

Title: Effectiveness of simulated annealing- based BP neural network in dynamic safety evaluation and prediction

Authors: Shi, Huawang^{1, 2}; Liang, Jinlei¹; Gao, Ruizhen¹; Shen, Nan^{2, 3}

Author affiliation:

1 Hebei University of Engineering, No. 199 Guangming Street of Handan, China

2 Hebei University of Technology, Tianjin, China

3 Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: International Journal of Earth Sciences and Engineering

Abbreviated source title: Intl. J. Earth Sci. Eng.

Volume: 7

Issue: 6

Issue date: 2014

Publication year: 2014

Pages: 2209-2214

Language: English

ISSN: 09745904

Document type: Journal article (JA)

Publisher: CAFET INNOVA Technical Society, 1-2-18/103, Mohini Mansion, Gagan Mahal Road,, Domalguda, Hyderabad, 500029, India

Abstract: This article proposed the dynamic safety evaluation and safety prediction models of coalmine. Combining the simulated annealing with BP Neural Network, the problems of coal mine safety management was analyzed. Based on the man-machine-environment system theory and the analysis of coal mine accident, the hidden dangers that effect the realization of coal mine safety were obtained. While training neural network, the BP algorithm has good local performance but it is easy to fall into local minimum, and the simulated annealing algorithm has good global performance, so the following combinatorial method is put forward. Then, the neural network is trained based on simulated annealing algorithm (SABP algorithm) in global space- the parameters of neural network is trained using simulated annealing algorithm in local space. At last, a case study was carried out on the dynamic safety evaluation and prediction using this model. And the results show that the SABP neural networks are feasibility and validity in dynamic safety evaluation and safety prediction. It gives a new approach and new way to the evaluation and prediction in coal mine. © 2014 CAFET-INNOVA TECHNICAL SOCIETY. All rights reserved.

Number of references: 20

Main heading: Coal mines

Controlled terms: Algorithms - Coal - Forecasting - Man machine systems - Neural networks - Simulated annealing

Uncontrolled terms: Coal mine accidents - Combinatorial method - Dynamic safety evaluation - Evaluation and predictions - Global performance - Man-machine-environment systems - Safety prediction - Simulated annealing algorithms

Classification code: 503.1 Coal Mines - 524 Solid Fuels - 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 921 Mathematics - 961 Systems Science

Database: Compendex

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164.

Accession number: 20151100635779

Title: Study on the method of association rules mining based on genetic algorithm and application in analysis of seawater samples

Authors: Sun, Qihong^{1, 2} ; Bi, Weihong¹ ; Wang, Feng^{1, 3}

Author affiliation:

1 YanShan University, Qinhuangdao, China

2 Hebei University of Science and Technology, Shijiazhuang, China

3 EandA College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Sensors and Transducers

Abbreviated source title: Sensors Transducers

Volume: 168

Issue: 4

Issue date: January 1, 2014

Publication year: 2014

Pages: 53-60

Language: English

E-ISSN: 17265479

Document type: Journal article (JA)

Publisher: International Frequency Sensor Association

Abstract: Based on the data mining research, the data mining based on genetic algorithm method, the genetic algorithm is briefly introduced, while the genetic algorithm based on two important theories and theoretical templates principle implicit parallelism is also discussed. Focuses on the application of genetic algorithms for association rule mining method based on association rule mining, this paper proposes a genetic algorithm fitness function structure, data encoding, such as the title of the improvement program, in particular

through the early issues study, proposed the improved adaptive Pc, Pm algorithm is applied to the genetic algorithm, thereby improving efficiency of the algorithm. Finally, a genetic algorithm based association rule mining algorithm, and be applied in sea water samples database in data mining and prove its effective. © 2014. IFSA Publishing, S. L.

Number of references: 5

Main heading: Algorithms

Controlled terms: Application programs - Association rules - Data mining - Genetic algorithms - Seawater

Uncontrolled terms: Association rule mining methods - Association rules mining - Effective - Fitness functions - Implicit parallelisms - Improving efficiency - Rule mining algorithms - Seawater samples

Classification code: 471.4 Seawater, Tides and Waves - 723 Computer Software, Data Handling and Applications - 903.1 Information Sources and Analysis

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

165.

Accession number: 20150700533435

Title: Distribution of phenolic compounds in seed coat and cotyledon, and their contribution to antioxidant capacities of red and black seed coat peanuts (*Arachis hypogaea* L.)

Authors: Attree, Roopam^{1, 2}; Du, Bin^{1, 3}; Xu, Baojun¹

Author affiliation:

1 Food Science and Technology Program, Beijing Normal University-Hong Kong Baptist University, United International College, Zhuhai, Guangdong, China

2 Agricultural and Food Engineering Department, Indian Institute of Technology, Kharagpur, West Bengal, India

3 Analysis and Testing Center, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Xu, Baojun

Source title: Industrial Crops and Products

Abbreviated source title: Ind. Crops Prod.

Volume: 67

Issue date: May 01, 2015

Publication year: 2015

Pages: 448-456

Language: English

ISSN: 09266690

CODEN: ICRDEW

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: Four varieties of black and two varieties of red seed coat peanuts of different Chinese origins were examined for their total phenolic content (TPC), total flavonoid content (TFC), condensed tannin content (CTC) and monomeric anthocyanin content (MAC) in whole kernel, seed coat and cotyledon using colorimetric methods. Antioxidant activity of the separated components for each variety was determined utilizing DPPH scavenging capacity and ferric reducing antioxidant power (FRAP) assay. Contribution rates of the separated components were calculated for each parameter. It was observed that in all the six varieties, most of the phytochemicals and antioxidant activities were predominantly contributed by the seed coat followed by the whole kernel and then cotyledon. Boiling led to significant ($p < 0.05$) losses in the phytochemical content and antioxidant capacity. The average MAC value for the black seed coat was significantly ($p < 0.05$) higher than that observed for the red seed coat. © 2015 Elsevier B.V.

Number of references: 34

Main heading: Antioxidants

Controlled terms: Agents - Anthocyanins

Uncontrolled terms: Anti-oxidant activities - *Arachis hypogaea* L - Cotyledon - Ferric reducing antioxidant power (FRAP) assays - Peanut seeds - Phenolics - Total flavonoid contents - Total phenolic content

Classification code: 804.1 Organic Compounds

DOI: 10.1016/j.indcrop.2015.01.080

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

166.

Accession number: 20150200411848

Title: Analysis of arching mechanism and evolution characteristics of tunnel pressure arch

Authors: Yang, J.H.1 ; Wang, S.R.2, 4 ; Wang, Y.G.2 ; Li, C.L.2, 3

Author affiliation:

- 1 School of Civil Engineering and Architecture, Zhejiang University of Science and Technology, Hangzhou, China
- 2 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao, China
- 3 Institute of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 4 Opening Project of Key Laboratory of Deep Mine Construction, Henan Polytechnic University, Jiaozuo, China

Corresponding author: Wang, S.R.

Source title: Jordan Journal of Civil Engineering

Abbreviated source title: Jordan J. Civil Eng.

Volume: 9

Issue: 1

Issue date: 2015

Publication year: 2015

Pages: 125-132

Language: English

ISSN: 19930461

E-ISSN: 2225157X

Document type: Journal article (JA)

Publisher: Jordan University of Science and Technology

Abstract: Key and difficult problems are the arching mechanism and the evolution characteristics of the pressure arch in the surrounding rock after the tunnel excavation. Regarding a practical engineering as background, the definition of pressure arch of a highway tunnel was given and the boundary parameters of the pressure arch were determined by using the combination methods of theoretical analysis and numerical calculation. Considering the size of the highway tunnel excavation, the strength variation of the surrounding rock, the stress state of the highway tunnel, the geometry of the pressure arch and its mechanical evolution characteristics were revealed. Then, the engineering mechanical models were built through fitting the pressure arch centroid lines, and the mechanical stability of the pressure arch and the instability failure modes were also analyzed. The results provide a theoretical basis for the construction and reinforcing design of highway tunnels.

Number of references: 21

Main heading: Tunnels

Controlled terms: Arches - Excavation - Highway planning - Mechanical stability - Numerical analysis - Numerical methods - Plasma stability - Stresses - Transportation

Uncontrolled terms: Boundary parameters - Evolution characteristics - Highway tunnel - Numerical calculation - Practical engineering - Pressure arches - Reinforcing designs - Surrounding rock

Classification code: 401.1 Bridges - 401.2 Tunnels and Tunneling - 421 Strength of Building Materials; Mechanical Properties - 422 Strength of Building Materials; Test Equipment and Methods - 431 Air Transportation - 432 Highway Transportation - 432.1 Highway Transportation, General - 433 Railroad Transportation - 434 Waterway Transportation - 502.1 Mine and Quarry Operations - 921.6 Numerical Methods - 932.3 Plasma Physics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

167.

Accession number: 20150800540273

Title: The survey and analysis of sports'influence on teenagers' bone mineral density and bone metabolism

Authors: Zhao, Xiaohong¹ ; Yue, Zhirong¹ ; Tian, Yuan¹

Author affiliation:

¹ Department of Physical Education, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhao, Xiaohong

Source title: BioTechnology: An Indian Journal

Abbreviated source title: Biotechnol. An Indian J.

Volume: 10

Issue: 9

Issue date: November 1, 2014

Publication year: 2014

Pages: 3711-3716

Language: English

ISSN: 09747435

Document type: Journal article (JA)

Publisher: Trade Science Inc, 126,Prasheel Park,Sanjay Raj Farm House,Nr. Saurashtra Unive, Rajkot, Gujarat, 360 005, India

Abstract: Learning about the influence of sports on the teenagers'bone mineral density and bone metabolism and providing more reliable theories for reducing the possibility of suffering from the Osteoporosis Disease by measuring and comparing indexes relative to the bone mineral density and bone metabolism of two groups of teenagers. One group of teenagers do regular exercise and others do a little. The method: Based on the principal of randomization, choosing forty students from universities in Beijing,twenty of whom are major in PE and do regular exercise but others are not PE majors and just do a little exercise, to measure their bone mineral content, bone mineral density and projection area of the different parts in their waists and hips, and also their biochemical indexes reflecting the bone metabolism,such as T, ALP, U-HOP, U-Ca, U-Cr and so on. The result: The bone mineral content and bone density of the teenagers who do regular exercise are higher than those of students who are not in PE major, and especially the T of the former is distinctly higher than that of the latter; Although other biochemical measurements of the two groups of teenagers are low and without distinct differences, the ALP of the teenagers who do regular exercise is higher than that of ones who do a little. The conclusion: Doing regular exercise makes a positive effect on teenagers'bone health because that is helpful to increase their bone mineral density and bone mineral content by influencing their bone metabolism. So doing regular exercise can make a solid healthy bone foundation for teenagers and reduce the possibility of they suffering from the Osteoporosis Disease as they grow older. © Trade Science Inc.

Number of references: 10

Main heading: Bone

Controlled terms: Diseases - Metabolism - Minerals - Physiology - Sports

Uncontrolled terms: Bone metabolism - Bone mineral content - Bone mineral density -
Measurements of - Osteoporosis disease - Projection area - Survey and analysis - Teenagers

Classification code: 461 Bioengineering and Biology - 482.2 Minerals

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

168.

Accession number: 20143118005887

Title: A nonlinear error compensation method for art design evaluation

Authors: Hu, Jiaying¹ ; Li, Jie² ; Xi, Shuang²

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066000, China

2 Qinhuangdao Haigangou Teacher Training School, Qinhuangdao 066000, China

Corresponding author: Hu, J. (h1jiaying@163.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 10

Issue: 11

Issue date: June 1, 2014

Publication year: 2014

Pages: 4629-4636

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: In order to solve the shortcomings of traditional multi-dimensional particle swarm optimization algorithm, this paper is to propose a multi-dimensional stochastic approximation driven particle swarm optimization algorithm and study its application in art design evaluation. In this study, multi-dimensional stochastic approximation driven particle swarm optimization algorithm is applied to art design evaluation. And regression algorithm is optimized by multi-dimensional stochastic approximation driven particle swarm optimization algorithm and traditional multi-dimensional particle swarm optimization algorithm respectively to show the superiority of multi-dimensional stochastic approximation driven particle swarm optimization algorithm to traditional multi-dimensional particle swarm optimization algorithm in art design evaluation. The experimental results show that the optimal ability of multi-dimensional stochastic approximation driven particle swarm optimization algorithm is better than that of traditional multi-dimensional particle swarm optimization algorithm. In addition, we can conclude that art design evaluation based on multi-dimensional stochastic approximation driven particle swarm optimization-regression algorithm is feasible. © 2014 Binary Information Press.

Number of references: 11

Main heading: Algorithms

Controlled terms: Approximation theory - Design - Particle swarm optimization (PSO) - Regression analysis

Uncontrolled terms: Art design - ITS applications - Multi-dimensional particle swarm optimizations - Non-linear error - Particle swarm - Particle swarm optimization algorithm - Regression algorithms - Stochastic approximations

Classification code: 408 Structural Design - 723 Computer Software, Data Handling and Applications - 921 Mathematics - 921.6 Numerical Methods - 922.2 Mathematical Statistics

DOI: 10.12733/jcis10242

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

169.

Accession number: 20152500946133

Title: Research on the optimal performance of recycled concrete

Authors: Song, Zhibin1 ; Xing, Yan1 ; Liu, Shurong2 ; Dong, Yanying1

Author affiliation:

1 City Construction College of Hebei Normal University of Science and Technology, China

2 Mathematics and Information Technology College of Hebei Normal University of Science and Technology, China

Corresponding author: Song, Zhibin

Source title: Energy Education Science and Technology Part A: Energy Science and Research

Abbreviated source title: Energy Educ. Sci. Technol. Part A. Energy Sci. Res.

Volume: 32

Issue: 6

Issue date: 2014

Publication year: 2014

Pages: 7381-7386

Language: English

ISSN: 1308772X

Document type: Journal article (JA)

Publisher: Sila Science, University Mah Mekan Sok, No 24, Trabzon, Turkey

Abstract: Recycled concrete is a kind of green concrete with low consumption, low energy consumption, no pollution, which can be recycled for reuse. It has been used in practical engineering and more and more attention have been put on the recycled aggregate, recycled concrete performance and application research. This paper first introduces the recycled concrete production and then introduces the basic composition and characteristics; finally it makes some analysis of recycled concrete. © Sila Science. All Rights Reserved.

Number of references: 2

Main heading: Recycling

Controlled terms: Concretes - Energy utilization - Optimization

Uncontrolled terms: Basic composition - Low consumption - Low energy consumption - Optimal performance - Performance - Practical engineering - Recycled aggregates - Recycled concretes

Classification code: 412 Concrete - 452.3 Industrial Wastes - 525.3 Energy Utilization - 921.5 Optimization Techniques

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

170.

Accession number: 20153401186925

Title: Binary organogels via some aminobenzimidazole/benzothiazole compounds and fatty acids with different alkyl lengths: Self-assembly and drug release properties

Authors: Ma, Keren¹ ; Jiao, Tifeng¹ ; Shen, Xihai² ; Zhang, Qingrui¹ ; Li, Xiujin¹ ; Gao, Faming¹

Author affiliation:

1 Hebei Key Laboratory of Applied Chemistry, School of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao, China

2 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Jiao, Tifeng

Source title: Integrated Ferroelectrics

Abbreviated source title: Integr Ferroelectr

Volume: 160

Issue: 1

Issue date: February 12, 2015

Publication year: 2015

Pages: 38-48

Language: English

ISSN: 10584587

E-ISSN: 16078489

CODEN: IFEREU

Document type: Conference article (CA)

Publisher: Taylor and Francis Ltd.

Abstract: In this paper the gelation behaviors of binary organogels composed of aminobenzimidazole/benzothiazole compounds and fatty acids with different alkyl lengths in various organic solvents were designed and investigated. Their gelation behaviors in 20 solvents were tested as new binary organic gelators. It showed that the length of alkyl substituent chains and benzimidazole/benzothiazole segment have played a crucial role in the gelation behavior of all gelator mixtures in various organic solvents. The lengths of alkyl substituent chains have also played an important role in changing the gelation behaviors and assembly states. Morphological studies revealed that the gelator molecules self-assemble into different aggregates from wrinkle, lamella, belt, to dot with change of solvents. Spectral studies indicated that there existed different H-bond formation and hydrophobic force, depending on benzimidazole/benzothiazole segment and alkyl substituent chains in molecular skeletons. The present work may give new clues for designing new binary organogelators and soft materials. © 2015 Taylor & Francis Group, LLC.

Number of references: 38

Main heading: Fatty acids

Controlled terms: Chains - Gelation - Nanostructures - Organic solvents - Self assembly - Solvents - Spectroscopic analysis

Uncontrolled terms: Binary organogels - Drug release - Drug release properties - Gelator molecules - Hydrophobic forces - Molecular skeleton - Morphological study - Organogels

Classification code: 602.1 Mechanical Drives - 761 Nanotechnology - 801 Chemistry - 802.3 Chemical Operations - 804.1 Organic Compounds - 933 Solid State Physics

DOI: 10.1080/10584587.2015.1033371

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

171.

Accession number: 20151200674102

Title: Preparation and luminescence properties of Sr⁷⁺Zr(PO₄)₆:Dy³⁺ single-phase full-color phosphor

Authors: Zhang, Zhi-Wei1 ; Liu, Lu1 ; Wang, Yue-Hui1 ; Song, Shi-Tao1 ; Wang, Dong-Jun1

Author affiliation:

1 Physical-Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhi-Wei

Source title: Journal of Materials Science: Materials in Electronics

Abbreviated source title: J Mater Sci Mater Electron

Volume: 26

Issue: 6

Issue date: June 1, 2015

Publication year: 2015

Pages: 4202-4206

Language: English

ISSN: 09574522

E-ISSN: 1573482X

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: Novel single-phase white-light-emitting $\text{Sr}_{7-x}\text{Zr}(\text{PO}_4)_6\text{Dy}^{3+}$ phosphors for light-emitting diode (LED) applications were synthesized by conventional solid-state reactions. The phases and luminescent properties of the obtained $\text{Sr}_{7-x}\text{Zr}(\text{PO}_4)_6\text{Dy}^{3+}$ phosphors were characterized. The results show that the luminescence spectra excited by 350 nm consist of two characteristic blue and yellow bands, corresponding to the ${}^4\text{F}_{9/2} \rightarrow {}^6\text{H}_{15/2}$ and ${}^4\text{F}_{9/2} \rightarrow {}^6\text{H}_{13/2}$ transitions of Dy^{3+} , respectively. When $x > 0.02$, the concentration quenching effect occurred, and the critical transfer distance (R_c) was $\sim 19.247 \text{ \AA}$. The energy transfer of the Dy^{3+} ions is the electric dipole–dipole interaction mechanism. The International Commission on Illumination chromaticity coordinates for $\text{Sr}_{7-x}\text{Zr}(\text{PO}_4)_6\text{Dy}^{3+}$ phosphors were located in the white region. The developed phosphor has great potential as a single-component white-light-emitting phosphor for UV-LEDs. © 2015, Springer Science+Business Media New York.

Number of references: 26

Main heading: Light emitting diodes

Controlled terms: Energy transfer - Light - Light emission - Luminescence - Phosphors
- Solid state reactions - Zirconium

Uncontrolled terms: Chromaticity coordinates - Concentration quenching effect - Dipole
interaction - International Commission - Luminescence properties - Luminescence spectrum -
Luminescent property - White light-emitting

DOI: 10.1007/s10854-015-2967-6

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

172.

Accession number: 20142717909362

Title: Research on the model of agricultural products distribution optimization under electronic
commerce

Authors: Li, Xiuli¹ ; Liu, Zhaohui² ; Xu, Zhikun¹

Author affiliation:

1 College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004,
China

2 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 9

Issue: 6

Issue date: 2014

Publication year: 2014

Pages: 315-327

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Recently, people pay more and more attention to the healthy lifestyles. And there is an increasing demand for the green agricultural products in real life. With the rapid development of the computer network technology and the electronic commerce, the emergence of e-business provides a new idea to promote the service of agricultural products. A huge supply chain network is established by the new idea and the technology. More and more agricultural products firms establish the electronic sale channel and get great profits. Firstly, we analyze the status of the agricultural products logistics distribution in both traditional sale channel and electronic sale channel in this paper. Then, we summarize the problems appeared in e-commerce channel. To solve these problems, we build an optimization model of the agricultural products distribution in e-commerce channel. © 2014 SERSC.

Number of references: 13

Main heading: Agricultural products

Controlled terms: Electronic commerce - Optimization - Supply chains

Uncontrolled terms: Agricultural products logistics - Computer network technology - E-commerces - Healthy lifestyles - Logistics distribution - Optimization modeling - Products distributions - Supply chain network

Classification code: 821.4 Agricultural Products - 911.2 Industrial Economics - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing - 921.5 Optimization Techniques

DOI: 10.14257/ijmue.2014.9.6.30

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

173.

Accession number: 20142717909340

Title: Application of an optimized SVR model of machine learning

Authors: Xu, Zhikun1 ; Gao, Yabin1 ; Jin, Yingying1

Author affiliation:

1 College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 9

Issue: 6

Issue date: 2014

Publication year: 2014

Pages: 67-79

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Machine learning is the core of artificial intelligence. It is a fundamental way to the computer intelligence. Support vector machine is one of the important methods in the field of machine learning. It has the advantages of global optimization and strong generalization ability. It has been successfully applied to face recognition, fault diagnosis, financial forecasting and other fields. In this paper, a novel SVR model is proposed to forecast GDP. In the model, The neighborhood rough set (NRS) is used to reduce the index set and the chaotic genetic algorithm (CGA) is adopted to parameters searching in SVR model. Then the novel model NRS-CGA-SVR is established to predict GDP of Anhui province. The results show that the proposed model is better than the other models presented in this paper on forecasting GDP. © 2014 SERSC.

Number of references: 29

Main heading: Artificial intelligence

Controlled terms: Face recognition - Forecasting - Gallium - Genetic algorithms - Global optimization - Learning systems - Rough set theory

Uncontrolled terms: Anhui province - Chaotic genetic algorithms (CGA) - Chaotic sequence - Computer intelligences - Financial forecasting - Generalization ability - Neighborhood rough sets

- SVR

Classification code: 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 716 Telecommunication; Radar, Radio and Television - 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 921 Mathematics

DOI: 10.14257/ijmue.2014.9.6.08

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

174.

Accession number: 20152600975817

Title: Effect of the introduction of chrysanthemum on the nutritional and sensory properties of cabernet sauvignon red wine

Authors: Liu, Jun^{1, 2} ; Li, Feng Ying¹ ; Li, Jing Chuan^{1, 2} ; Sun, Yan Xiang³ ; Han, Rui Feng^{1, 2} ; Gong, Ying Zhen^{1, 2}

Author affiliation:

1 Hebei Academy of Forestry Science, 75 Xuefu Road, Shijiazhuang, Hebei, China

2 College of Food Science and Technology, Hebei Normal University of Science Technology, 360 Hebei Street West Section, Qinhuangdao, Hebei, China

3 Institute of Genetics and Breeding, Langfang Teachers University, 100 Aiminxi Road, Langfang, Hebei, China

Corresponding author: Liu, Jun

Source title: International Journal Bioautomation

Abbreviated source title: Int. J. Bioautomotion

Volume: 19

Issue: 1

Issue date: 2015

Publication year: 2015

Pages: 61-68

Language: English

ISSN: 13141902

E-ISSN: 13142321

Document type: Journal article (JA)

Publisher: Institute of Biophysics and Biomedical Engineering

Abstract: In this paper we propose a new wine technology where dried chrysanthemum is introduced during the process of fermentation of wine. This technology sets an example of a blend between exotic wine culture and traditional Chinese tea culture. The influence on the chemical and sensory properties of wine due to the addition of different amounts of chrysanthemum at different fermentation periods was studied. In all the wine with added chrysanthemum the content of both polyphenols and flavones obviously increased. The wine of T1 and T2 had a higher content of polyphenols and flavones than others, due to thermomaceration, whereas those in the wine of T2 were the highest, due to the technique of squeezing juice. The sensory quality of T3, without the techniques of thermomaceration and squeezing juice, was optimal, with characteristics such as a ruby color, fuller aroma, and a lighter flowery texture. Therefore, T3 was defined as the optimum of chrysanthemum adding procedures. With the increase of chrysanthemum addition, both flavones content and polyphenols content of the obtained wine first increased, and then decreased.

Number of references: 18

Main heading: Wine

Controlled terms: Blending - Fermentation - Flavonoids - Sensory perception

Uncontrolled terms: Cabernet-Sauvignon - Chrysanthemum - Fermentation periods - Polyphenols - Red wine - Sensory properties - Sensory qualities

Classification code: 461.4 Ergonomics and Human Factors Engineering - 461.8 Biotechnology - 802.2 Chemical Reactions - 802.3 Chemical Operations - 804.1 Organic Compounds - 822.3 Food Products

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

175.

Accession number: 20145100348062

Title: Variance analysis on Chinese tourism food economy

Authors: Zhang, Jifei¹ ; Yi, Lanlan¹ ; Liu, Yanfang¹

Author affiliation:

1 School of Business and Management, Hebei Normal University of Science and Technology, China

Source title: BioTechnology: An Indian Journal

Abbreviated source title: Biotechnol. An Indian J.

Volume: 10

Issue: 8

Issue date: 2014

Publication year: 2014

Pages: 2910-2915

Language: English

ISSN: 09747435

Document type: Journal article (JA)

Publisher: Trade Science Inc, 126,Prasheel Park,Sanjay Raj Farm House,Nr. Saurashtra Unive, Rajkot, Gujarat, 360 005, India

Abstract: With the rapid development of Chinese tourism, it not only can drive the rapid growth of China's economy, but also start the title of "beautiful China" at home and abroad. But in the tourism industry, food economy plays a crucial role, it can measure the tourism quality of a scenic spot, an area and a country, and it is also the important manifestation of stable tourism economy. This paper analyzed the Chinese tourism food economy, expounded the current situation and countermeasure of Chinese tourism food safety management, explored the food economy from the region and food species, and analyzed the differences, so as to seek the better development in the future tourism food economy.

Number of references: 8

Main heading: Food safety

Uncontrolled terms: Current situation - Food safety management - Green foods - Rapid growth - Scenic spot - Tourism industry - Variance analysis

Classification code: 461.6 Medicine and Pharmacology

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

176.

Accession number: 20143318053899

Title: Biopolymer-assisted in situ route toward Cu hollow spheres as antibacterial materials

Authors: Cai, Aijun¹ ; Sun, Yanfeng² ; Chang, Yongfang³ ; Guo, Aiying¹ ; Du, Liqiang¹

Author affiliation:

- 1 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China
- 2 Ocean College of Hebei Agricultural University, Qinhuangdao 066003, China
- 3 College of Chemical Technology, Shijiazhuang University, Shijiazhuang 050035, China

Corresponding author: Chang, Y. (changyongfang@126.com)

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 134

Issue date: November 1, 2014

Publication year: 2014

Pages: 214-217

Language: English

ISSN: 0167577X

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: Cu hollow structures (Cu HSs) were synthesized using gelatin B as a crystal growth modifier. The structures, phases and formation of Cu HSs were investigated by employing various techniques such as X-ray

diffraction (XRD), field emission scanning electron microscopy (FESEM), transmission electron microscopy (TEM) and thermogravimetric analysis (TGA). The Cu HSs had good antibacterial effects on Escherichia coli (E. coli) and Staphylococcus aureus (S. aureus). The products had different effects on the membrane of E. coli and S. aureus. © 2014 Elsevier B.V.

Number of references: 14

Main heading: Thermogravimetric analysis

Controlled terms: Bacteria - Copper - Crystal structure - Escherichia coli - Field emission microscopes - Transmission electron microscopy - X ray diffraction

Uncontrolled terms: Anti-bacterial agents - Antibacterial materials - Crystal growth modifier - Escherichia coli (E. coli) - Field emission scanning electron microscopy - Functional - Gelatin - Hollow sphere

Classification code: 544.1 Copper - 741.3 Optical Devices and Systems - 801 Chemistry - 931.3 Atomic and Molecular Physics

DOI: 10.1016/j.matlet.2014.07.088

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

177.

Accession number: 20142917941857

Title: Spectroscopic insights on imidazole substituted phthalocyanine photosensitizers: Fluorescence properties, triplet state and singlet oxygen generation

Authors: Zhang, Xian-Fu^{1, 2}; Lin, Yong¹; Guo, Wenfeng¹; Zhu, Jingzhong¹

Author affiliation:

1 Institute of Applied Photochemistry, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province 066004, China

2 MPC Technology, Hamilton, ON L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy

Abbreviated source title: Spectrochim. Acta Part A Mol. Biomol. Spectrosc.

Volume: 133

Issue date: December 10, 2014

Publication year: 2014

Pages: 752-758

Language: English

ISSN: 13861425

CODEN: SAMCAS

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: Imidazole substituted metal phthalocyanine (Pc) complexes were synthesized. UV-vis absorption, steady state and time-resolved fluorescence, as well as laser flash photolysis were used to measure the photophysical and photosensitizing properties. All the imidazole-phthalocyanine conjugates show high Φ_T (quantum yield of excited triplet formation), high $\Phi\Delta$ (singlet oxygen formation yield, >0.50) and good fluorescence properties (quantum yield $\Phi_f > 0.20$ and lifetime $\tau_f > 3.0$ ns). Compared to the unsubstituted Pc, both α - and β -imidazole substitutions result in the remarkable decrease in Φ_f and τ_f , but the α -substitution is stronger. The imidazole substitution, on the other hand, causes the increase of Φ_T , τ_T , and $\Phi\Delta$ values. Magnesium phthalocyanine (MgPc) is more susceptible to the substitution than zinc phthalocyanine (ZnPc). The mechanism responsible for the result is suggested based on the involvement of intramolecular photoinduced electron transfer. The high $\Phi\Delta$ and appropriate fluorescence properties make the Pcs good candidate for PDT photosensitizers. © 2014 Elsevier B.V. All rights reserved.

Number of references: 37

Main heading: Nitrogen compounds

Controlled terms: Fluorescence - Microcomputers - Oxygen - Photodynamic therapy - Photosensitizers - Quantum yield - Synthesis (chemical) - Zinc compounds

Uncontrolled terms: Imidazole - Photo-induced electron transfer - Phthalocyanine - Singlet oxygen - Singlet oxygen generation - Substituted metal phthalocyanines - Time-resolved fluorescence - Triplet state

Classification code: 722.4 Digital Computers and Systems - 741.1 Light/Optics - 802.2 Chemical Reactions - 804 Chemical Products Generally

Numerical data indexing: Time 3.00e-09s

DOI: 10.1016/j.saa.2014.06.063

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

178.

Accession number: 20151100648233

Title: Research on evaluation marketing website based on the buyer's point of view

Authors: Qi, Zhaochuan¹ ; Dong, Shuoling¹ ; Li, Qianghua¹

Author affiliation:

1 Hebei Normal University of Science and Technology, China

Corresponding author: Qi, Zhaochuan

Source title: Journal of Chemical and Pharmaceutical Research

Abbreviated source title: J. Chem. Pharm. Res.

Volume: 6

Issue: 6

Issue date: 2014

Publication year: 2014

Pages: 414-418

Language: English

E-ISSN: 09757384

Document type: Journal article (JA)

Publisher: Journal of Chemical and Pharmaceutical Research, 3/668 Malviya Nagar, Jaipur, Rajasthan, India

Abstract: Which elements that make the marketing website to be more approbated by buyers marketing

website as information releasing and sales channels for an E-commerce enterprise should have? Through literature analysis this paper summarizes the basic elements of the marketing website, using exploratory factor analysis and confirmatory analysis theory, based on the buyer's survey, and creates the necessity factor model of a marketing website by the means of the statistical analysis software spss19.0, and provides empirical validation of the model by means of a secondary survey methodology and analysis software, and at last gives some guiding recommendations for e-commerce enterprises building a marketing-based website. © 2014, Journal of Chemical and Pharmaceutical Research. All rights reserved.

Number of references: 9

Main heading: Factor analysis

Controlled terms: Commerce - Electronic commerce - Marketing - Multivariant analysis - Sales - Surveys - Websites

Uncontrolled terms: Analysis softwares - Buyer's point of view - Confirmatory analysis - E-commerce enterprise - Empirical validation - Evaluation - Exploratory factor analysis - Literature analysis

Classification code: 405.3 Surveying - 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723 Computer Software, Data Handling and Applications - 911.4 Marketing - 922 Statistical Methods - 922.2 Mathematical Statistics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

179.

Accession number: 20162102422836

Title: Research on structural dynamic characteristics of construction machinery arm system

Authors: Chen, Chunming¹ ; Yang, Yang¹

Author affiliation:

1 Hebei Normal University of Science & Technology, Hebei, China

Corresponding author: Chen, Chunming

Source title: International Journal of Simulation: Systems, Science and Technology

Abbreviated source title: Int. J. Simul. Syst. Sci. Technol.

Volume: 16

Issue: 2B

Issue date: April 2015

Publication year: 2015

Pages: 12.1-12.6

Language: English

ISSN: 14738031

E-ISSN: 1473804X

Document type: Journal article (JA)

Publisher: UK Simulation Society, Clifton Lane, Nottingham, NG11 8NS, United Kingdom

Abstract: Objective: This paper studies the application of construction mechanical arm system in dynamics of multibody system. Method: Several dynamic theoretical equations and methods of establishing the mechanical arm model are introduced in the paper. Process: This paper introduced the concept of manipulator system structure and dynamics of multibody system, and introduced the research status in this area at home and abroad, then expounded the establishment method of dynamic model of the manipulator arm system based on Lagrange equation. Result & Analysis: The paper used the powerful NASTRAN to establish the viscous damping simulation model of the manipulator arm system and analyzed data of the structure of the manipulator arm. Result: For the application of manipulator arm system, it's very necessary to do more study about the characteristics of the dynamics of multibody system. © 2016, UK Simulation Society. All rights reserved.

Number of references: 14

Main heading: Dynamics

Controlled terms: Construction equipment - Equations of motion - Machinery - Manipulators - Robotic arms - Structural dynamics

Uncontrolled terms: Construction machinery - Dynamic characteristics - Dynamics of multibody systems - Manipulator systems - Mechanical arm - Mechanical arm systems - Multi Body Systems - Theoretical equation

Classification code: 405.1 Construction Equipment - 408 Structural Design - 731.5 Robotics - 921.2 Calculus

DOI: 10.5013/IJSSST.a.16.2B.12

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

180.

Accession number: 20134616969811

Title: Synthesis and electrochemical properties of $\text{LiFe}(\text{PO}_4)_{1-x/3}\text{Fx/C}$ as a cathode material

Authors: Song, Shi Tao¹ ; Wu, Su Xia¹ ; Zhang, Zhi Wei¹ ; Peng, You Shun¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066600, China

Corresponding author: Wu, S. X. (suxiauwu@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 827

Monograph title: Solar Energy Materials and Energy Engineering

Issue date: 2014

Publication year: 2014

Pages: 16-19

Language: English

ISSN: 10226680

ISBN-13: 9783037859001

Document type: Conference article (CA)

Conference name: 2013 International Conference on Solar Energy Materials and Energy Engineering, SEMEE 2013

Conference date: September 1, 2013 - September 2, 2013

Conference location: Hong Kong, China

Conference code: 100755

Sponsor: Singapore Management and Sports Science Institute

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Ion doping is an effective means to improve the performance of LiFePO₄ material. In the present study, composites LiFe(PO₄)(1-x/3)F_x/C (x=0.00,0.02,0.04,0.06,0.08,0.10) were synthesized by carbothermal reduction method. The as-synthesized samples were characterized by X-ray diffraction and scanning electron microscope, and their electrochemical performances were investigated by constant current charge-discharge experiment. The results indicated that the low concentration F dopant did not affect the structure of LiFePO₄ but considerable improved its electrochemical performances. The LiFe(PO₄)_{0.98}F_{0.06}/C materials showed better electrochemical performances than LiFePO₄/C. At 0.2 C discharging rate, the LiFe(PO₄)_{0.98}F_{0.06}/C materials was capable of delivering reversible specific capacity of 165.1 mAh/g, with fairly stable cycleability. The excellent performance indicates that this mix-doped composite was a very promising cathode material for lithium ion batteries. © (2014) Trans Tech Publications, Switzerland.

Number of references: 7

Main heading: Cathodes

Controlled terms: Doping (additives) - Electric properties - Lithium alloys - Lithium compounds - Materials - Scanning electron microscopy - Solar energy - X ray diffraction

Uncontrolled terms: Carbothermal reduction method - Cath-ode materials - Constant current charge-discharge experiment - Electrochemical performance - Ion doping - LiFE(PO₄)(1-x/3)F_x/C - Lithium-ion battery - Reversible specific capacity

Classification code: 951 Materials Science - 931.3 Atomic and Molecular Physics - 804.1 Organic Compounds - 801 Chemistry - 741.1 Light/Optics - 704.1 Electric Components - 701.1 Electricity: Basic Concepts and Phenomena - 615.2 Solar Power - 549.1 Alkali Metals

DOI: 10.4028/www.scientific.net/AMR.827.16

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20153701263181

Title: Characteristics of strong-coupling bipolaron qubit in two-dimensional quantum dot in electric field

Authors: Zhang, Ying¹ ; Han, Chao¹ ; Eerdunchaolu¹

Author affiliation:

1 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Ying

Source title: Optoelectronics Letters

Abbreviated source title: Optoelectron. Lett.

Volume: 11

Issue: 5

Issue date: September 10, 2015

Publication year: 2015

Pages: 386-389

Language: English

ISSN: 16731905

Document type: Journal article (JA)

Publisher: Springer Verlag

Abstract: Based on Lee-Low-Pines (LLP) unitary transformation, this article adopts the variational method of the Pekar type and gets the energy and wave functions of the ground state and the first excited state of strong-coupling bipolaron in two-dimensional quantum dot in electric field, thus constructs a bipolaron qubit. The numerical results represent that the time oscillation period $T_{>0}</math> of probability density of the two electrons in qubit decreases with the increasing electric field intensity F and dielectric constant ratio of the medium η ; the probability density Q of the two electrons in qubit oscillates periodically with the increasing time t ; the probability of electron appearing near the center of the quantum dot is larger, while that appearing away from the center of the quantum dot is much smaller. © 2015, Tianjin University of Technology and Springer-Verlag Berlin Heidelberg.$

Number of references: 14

Main heading: Semiconductor quantum dots

Controlled terms: Electric fields - Excited states - Ground state - Nanocrystals - Probability - Probability density function - Quantum computers - Quantum theory - Wave functions

Uncontrolled terms: Electric field intensities - Energy and wave functions - First excited state - Numerical results - Probability densities - Time oscillation - Unitary transformations - Variational methods

Classification code: 701.1 Electricity: Basic Concepts and Phenomena - 711 Electromagnetic Waves - 714.2 Semiconductor Devices and Integrated Circuits - 761 Nanotechnology - 921 Mathematics - 922.1 Probability Theory - 931 Classical Physics; Quantum Theory; Relativity - 931.4 Quantum Theory; Quantum Mechanics - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 933 Solid State Physics

DOI: 10.1007/s11801-015-5135-6

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

182.

Accession number: 20160801972542

Title: A Multi-Task combinatorial optimization model based on genetic algorithm and its application in college education curriculum planning

Authors: Li, Jianying¹ ; Zhou, Zhe¹ ; Wang, Liying¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Source title: International Journal of Emerging Technologies in Learning

Abbreviated source title: Int. J. Emerg. Technol. Learn.

Volume: 10

Issue: 8

Issue date: 2015

Publication year: 2015

Pages: 38-41

Language: English

ISSN: 18688799

E-ISSN: 18630383

Document type: Journal article (JA)

Publisher: Kassel University Press GmbH, Diagonale 10, Kassel, 34127, Germany

Abstract: Multi-Task combinatorial optimization of a complex system is an important aspect of Multi-Task planning. To address the existing defects and limitations of the existing Multi-Task combinatorial optimization methods, the paper proposes a Multi-Task combinatorial model based on genetic algorithm. As a complex Multi-Task combinatorial optimization, the curriculum planning for higher education applies to itself the Multi-Task combinatorial model, which is based on genetic algorithm. Having fully considered such factors as teaching resources distribution, students' intention and teachers' intention, the paper designs a more efficient fitness function that has flexibly distributed courses and time in curriculum planning to meet the need of teaching in higher schools. Meanwhile, the paper utilizes specific cases of higher education to verify and analyze the algorithm, and also carries out a simulation test under the Matlab environment. the result indicates that the Multi-Task combinatorial optimization model based on genetic algorithm can relatively significantly optimize curriculum planning of higher education.

Number of references: 13

Main heading: Combinatorial mathematics

Controlled terms: Algorithms - Combinatorial optimization - Curricula - Education - Education computing - Genetic algorithms - MATLAB - Optimization - Planning - Teaching

Uncontrolled terms: College education - Combinatorial modeling - Fitness functions - Higher education - ITS applications - MATLAB environment - Simulation tests - Teaching resources

Classification code: 901.2 Education - 912.2 Management - 921 Mathematics

DOI: 10.3991/ijet.v10i8.5218

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20141317524470

Title: Phenolic profile and antioxidant capacity of ten dry red wines from two major wine-producing regions in China

Authors: Zhu, Feng-Mei¹ ; Du, Bin² ; Shi, Peng-Bao¹ ; Li, Feng-Ying¹

Author affiliation:

1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066600, Hebei, China

2 Analysis and Testing Center, Hebei Normal University of Science and Technology, Qinhuangdao 066600, Hebei, China

Corresponding author: Zhu, F.-M.

Source title: Advance Journal of Food Science and Technology

Abbreviated source title: Adv. J. Food Sci. Technol.

Volume: 6

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 344-349

Language: English

ISSN: 20424868

E-ISSN: 20424876

Document type: Journal article (JA)

Publisher: Maxwell Science Publications, 74, Kenelm Road., B10, 9AJ, Birmingham, Small Heath, United Kingdom

Abstract: Ten dry red wines, produced two major wine-producing regions from China-Changli in Hebei Province and Yantai in Shandong Province, were examined in this study. The antioxidant activities of wines were measured by different analytical methods: 2, 2-Diphenyl-1-Picrylhydrazyl (DPPH) radical scavenging activity, 2, 2-azino-di-(3-ethylbenzothiazine-sulphonic acid) (ABTS) radical scavenging activity and Ferric Reducing Antioxidant Power (FRAP). Furthermore, total phenols, total flavonoids and seven individual phenolic compounds (Gallic acid; Catechin; Chlorogenic acid; Caffeic acid; Ferulic acid; Rutin and Morin) of wines were

also determined. The results showed that sample 9 (College dry red wine, Cabernet Sauvignon, 2011) contained the highest total phenol content, up to 2131 mg/L; sample 7 (Great Wall dry red wine, Cabernet Sauvignon, Yantai) contained the highest total flavonoids, up to 1282 mg/L. Seven individual phenolics in wine samples were detected by Reverse Phase High Performance Liquid Chromatography (RP-HPLC). Different types of dry red wine polyphenols on DPPH scavenging rate from 78.88 to 98.55%, the highest FRAP scavenging activity was up to 222.66 $\mu\text{mol/L}$, the lowest was 189.51 $\mu\text{mol/L}$, different types of wine polyphenols have high ABTS scavenging activity. The current findings will provide useful information for evaluating the wine quality and for educating consumers to choose specific dry wine for specific health-promoting effects. © Maxwell Scientific Organization, 2014.

Number of references: 19

Main heading: Wine

Controlled terms: Flavonoids - High performance liquid chromatography - Phenols - Scavenging

Uncontrolled terms: DPPH - FRAP - HPLC - Major wine-producing regions from china - Phenolic compounds - Red wine - TPC

Classification code: 612.1 Internal Combustion Engines, General - 801 Chemistry - 804.1 Organic Compounds - 822.3 Food Products

Numerical data indexing: Mass_Density 1.28e+00kg/m³, Molar_Concentration 1.90e-01mol/m³, Molar_Concentration 2.23e-01mol/m³, Percentage 7.89e+01% to 9.85e+01%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

184.

Accession number: 20140917366840

Title: Purification and characterization of cholinesterase from duck plasma

Authors: Liu, Chang^{1, 2}; Chen, Fusheng³

Author affiliation:

1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

2 Key Laboratory of Food Nutrition and Safety, Ministry of Education of China, Tianjin University of Science and Technology, Tianjin 300308, China

3 College of Food Science and Technology, Huazhong Agriculture University, Wuhan 430070, China

Corresponding author: Liu, C. (liuchang20@sina.com)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 251 LNEE

Part number: 3 of 3

Issue: VOL. 3

Monograph title: Proceedings of the 2012 International Conference on Applied Biotechnology, ICAB 2012

Issue date: 2014

Publication year: 2014

Pages: 1759-1769

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783642379246

Document type: Conference article (CA)

Conference name: 2012 International Conference on Applied Biotechnology, ICAB 2012

Conference date: October 18, 2012 - October 19, 2012

Conference location: Tianjin, China

Conference code: 102586

Sponsor: Chinese Society of Biotechnology

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Cholinesterase from duck plasma was isolated and purified to electro-phoretic homogeneity by salting out, ion-exchange chromatography on DEAE-cellulose, and gel filtration on Sephadex G-200. The

enzyme was purified 278.5-fold and 17.8% activity was recovered. Studies on the properties of the Cholinesterase showed that the optimum temperature was 37 °C and the optimum pH was 7.5-8.0. The value of K_m was 2.4×10^{-5} M and the enzyme was not inhibited by excess bcetylthiocholine iodide. The presence of Ca^{2+} , Mg^{2+} , and Mn^{2+} increase the enzyme activity at a concentration of 5 mM. The study showed that this cholinesterase was a valuable alternative for detecting organophosphate and carbamate pesticides of vegetables and fruits. © Springer-Verlag Berlin Heidelberg 2014.

Number of references: 20

Main heading: Purification

Controlled terms: Biotechnology - Enzymes - Ion exchange - Plasmas

Uncontrolled terms: Carbamate pesticides - Cholinesterase - Gel filtration - Ion-exchange chromatography - Optimum temperature - Properties - Sensitivities - Vegetables and fruits

Classification code: 461.2 Biological Materials and Tissue Engineering - 461.8 Biotechnology - 802.2 Chemical Reactions - 802.3 Chemical Operations - 932.3 Plasma Physics

Numerical data indexing: Percentage 1.78e+01%, Temperature 3.10e+02K

DOI: 10.1007/978-3-642-37925-3_189

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

185.

Accession number: 20154201407679

Title: Preparation and adsorption properties of magnetic $CoFe_2O_4$ -chitosan composite microspheres

Authors: Lian, Qi1 ; Zheng, Xue-Fang1 ; Hu, Tie-Feng2

Author affiliation:

- 1 College of Chemistry and Chemical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Department of Research, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Russian Journal of Physical Chemistry A

Abbreviated source title: Russ. J. Phys. Chem. A

Volume: 89

Issue: 11

Issue date: November 1, 2015

Publication year: 2015

Pages: 2132-2136

Language: English

ISSN: 00360244

CODEN: RJPCBS

Document type: Journal article (JA)

Publisher: Maik Nauka-Interperiodica Publishing

Abstract: Magnetic chitosan microspheres made from novel polymer materials show outstanding applied characteristics. Magnetic chitosan microspheres are rather cheap, non-toxic, tasteless, alkali resistant, corrosion resistant, easily degradable, easily recyclable, and so on. It can be widely used in many fields. In this paper, magnetic CoFe₂O₄/chitosan core-shell microspheres are prepared by means of emulsification cross-linking technique using CoFe₂O₄ as core and glutaric dialdehyde as crosslinking agent. The results demonstrated that the different calcining temperature of magnetic (CoFe₂O₄) particles, CoFe₂O₄/chitosan ratio and stirring time of the suspension medium are the most effective parameters that control the size, size distribution, morphology and magnetism of the described microspheres. Finally, the size, morphology and chemical structure of the prepared materials are studied by different methods. The results show that the optimal calcination temperature of magnetic particles is 700°C, the optimal ratio of CoFe₂O₄/chitosan is 1: 1, ultrasonic dispersion time is 30 min. The prepared chitosan magnetic microspheres have small size and are well dispersed when the stirring time is 3 h. The prepared magnetic chitosan microspheres are well shaped spheres with a diameter from 1 to 50 μm, in which CoFe₂O₄ particles are dispersed uniformly. The magnetic chitosan microspheres show excellent magnetic response and have good adsorption characteristics. © 2015 Pleiades Publishing, Ltd.

Number of references: 33

Main heading: Magnetic bubbles

Controlled terms: Adsorption - Calcination - Chitin - Chitosan - Corrosion resistance - Crosslinking - Dispersions - Emulsification - Magnetism - Microspheres - Suspensions (fluids) - Ultrasonic applications

Uncontrolled terms: Adsorption characteristic - Adsorption properties - Calcining temperature - Chitosan magnetic microspheres - Core-shell microspheres - Cross-linking techniques -

Magnetic chitosan microspheres - Magnetic response

Classification code: 539.1 Metals Corrosion - 701.2 Magnetism: Basic Concepts and Phenomena - 753.3 Ultrasonic Applications - 802.2 Chemical Reactions - 802.3 Chemical Operations - 804 Chemical Products Generally - 804.1 Organic Compounds - 951 Materials Science

Numerical data indexing: Size 1.00e-06m to 5.00e-05m, Temperature 9.73e+02K, Time 1.08e+04s, Time 1.80e+03s

DOI: 10.1134/S0036024415110096

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

186.

Accession number: 20142117743924

Title: Art design course evaluation based on multi-weight vector projection primal support vector networks

Authors: Hu, Jiaying¹ ; Li, Jie¹ ; Xi, Shuang²

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066000, China

2 Haigangou Teacher Training School, Qinhuangdao 066000, China

Corresponding author: Hu, J. (hujiaiy2009@163.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 10

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 993-1000

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: In order to this shortcoming of support vector networks, multi-weight vector projection primal support vector networks is presented and applied to art design course evaluation in this paper. In multi-weight vector projection primal support vector networks, the equality constraints are substituted into the objective function, which has a better generalization capability than support vector networks. The experimental results show that the evaluation accuracy of art design course by using multi-weight vector projection primal support vector networks is 96.7%; the evaluation accuracy of art design course by using primal support vector networks is 92.5%; and the evaluation accuracy of art design course by using support vector networks is 85.8%. It is indicated that the evaluation ability of art design course by multi-weight vector projection primal support vector networks is more excellent than by primal support vector networks or support vector networks. © 2014 Binary Information Press.

Number of references: 12

Main heading: Curricula

Controlled terms: Design - Vectors

Uncontrolled terms: Art design - Equality constraints - Evaluation ability - Evaluation accuracy - Generalization capability - Objective functions - Support vector networks - Vector projection

Classification code: 408 Structural Design - 901.2 Education - 921.1 Algebra

Numerical data indexing: Percentage 8.58e+01%

DOI: 10.12733/jcis9233

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

187.

Accession number: 20153401201316

Title: Minimum fluidization velocity experimental research based on biomass internal circulation fluidized bed

Authors: Hongju, Lin^{1, 2} ; Dezhong, Zheng¹

Author affiliation:

1 Key Laboratory of Measurement Technology and Instrumentation of Hebei Province, Yanshan University, Qinhuangdao, China

2 Hebei Normal University of Science & Technology, Qinhuangdao, China

Corresponding author: Hongju, Lin

Source title: Recent Patents on Engineering

Abbreviated source title: Recent Pat. Eng.

Volume: 9

Issue: 2

Issue date: August 1, 2015

Publication year: 2015

Pages: 142-147

Language: English

ISSN: 18722121

Document type: Journal article (JA)

Publisher: Bentham Science Publishers B.V., P.O. Box 294, Bussum, 1400 AG, Netherlands

Abstract: Based on cold experiment device of biomass internal circulation fluidized bed, different sizes of silica sand and bed material heights experiments were done under normal temperature and pressure respectively, influences of particle sizes and heights of the bed material on minimum fluidization velocity were analyzed from the relationship diagram between differential pressure and air velocity. The results show that minimum fluidization velocity increases as particle diameters increases; and it is independent from bed material height. A thorough literature survey on the calculation correlations of minimum fluidization velocity was conducted, which revealed that the relative errors between values predicted by the calculation correlations and the experimental values were huge. The calculation method of minimum fluidization velocity was given based on modified Ergun equation and minimum fluidization voidage estimation calculation, the predicted values of the method are in good agreement with the experimental values, the relative error is less than 10%, and it provides a reliable reference basis for internal circulation fluidized bed structure optimization, amplification design and operation. Here, we also discussed few related patents. © 2015 Bentham Science Publishers.

Number of references: 24

Main heading: Fluidized beds

Controlled terms: Air - Fluidization - Particle size - Silica sand - Structural optimization - Velocity

Uncontrolled terms: Bed materials - Cold experiments - Internal circulations - Minimum fluidization velocity - Particle diameters

Classification code: 483 Soil Mechanics and Foundations - 802.1 Chemical Plants and Equipment - 802.3 Chemical Operations - 804 Chemical Products Generally - 812 Ceramics, Refractories and Glass - 921.5 Optimization Techniques - 931.1 Mechanics - 931.2 Physical Properties of Gases, Liquids and Solids

Numerical data indexing: Percentage 1.00e+01%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

188.

Accession number: 20150500465772

Title: Synthesis of nitrogen-doped carbon cellular foam with ultra-high rate capability for supercapacitors

Authors: Du, Zhiling^{1, 2} ; Peng, Youshun³ ; Ma, Zhipeng² ; Li, Chunying² ; Yang, Jing² ; Qin, Xiujian^{1, 2} ; Shao, Guangjie^{1, 2}

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, China

2 Hebei Key Laboratory of Applied Chemistry, College of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao, China

3 School of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Qin, Xiujian

Source title: RSC Advances

Abbreviated source title: RSC Adv.

Volume: 5

Issue: 14

Issue date: 2015

Publication year: 2015

Pages: 10296-10303

Language: English

E-ISSN: 20462069

CODEN: RSCACL

Document type: Journal article (JA)

Publisher: Royal Society of Chemistry

Abstract: Three-dimensional (3D) interconnected N-doped porous carbons (NPCs) with different levels of pore structure are synthesized by a template method using MnOx as template and N-enriched pyrrole as carbon source. The fabricated materials show favorable pore size distribution in the range about 3-4 nm and moderate nitrogen content changing from 0.94 to 1.63 at%. Used as electrode material, the NPC originated from the optimum pyrolysis temperature of 750°C demonstrates the best capacitance performance with a high specific capacitance of about 239.30 F g⁻¹ at 0.5 A g⁻¹. Moreover, it reveals an outstanding rate capability and the specific capacitance reaches 212.90 F g⁻¹ at 10.0 A g⁻¹ (up to 88.97% capacitance retention), as well as excellent cycling stability (~10% capacitance loss after 5000 cycles) tested in 6 M KOH aqueous solution. Such exquisite performance may be ascribed to a unique combination of high specific surface area, suitable pore size distribution and introduction of nitrogen atoms. © The Royal Society of Chemistry 2015.

Number of references: 33

Main heading: Doping (additives)

Controlled terms: Capacitance - Carbon - Foams - Nitrogen - Pore size - Porous materials - Size distribution

Uncontrolled terms: Capacitance performance - Capacitance retention - High specific capacitances - High specific surface area - Nitrogen-doped carbons - Pyrolysis temperature - Specific capacitance - Threedimensional (3-d)

Classification code: 423 Non Mechanical Properties and Tests of Building Materials - 701.1 Electricity: Basic Concepts and Phenomena - 801 Chemistry - 804 Chemical Products Generally - 951 Materials Science

Numerical data indexing: Percentage 8.90e+01%, Size 3.00e-09m to 4.00e-09m, Temperature 1.02e+03K

DOI: 10.1039/c4ra14395g

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

189.

Accession number: 20150400449934

Title: Synthesis and luminescence properties of novel $\text{KSrPO}_4:\text{Dy}^{3+}$ phosphor

Authors: Zhang, Zhi-Wei¹ ; Song, Ai-Jun¹ ; Song, Shi-Tao¹ ; Zhang, Jian-Ping¹ ; Zhang, Wei-Guo¹ ; Wang, Dong-Jun¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhi-Wei

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 629

Issue date: April 25, 2015

Publication year: 2015

Pages: 32-35

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: A novel single-phase full-color phosphor $\text{KSrPO}_4:\text{Dy}^{3+}$ was synthesized by a high-temperature solid-state reaction. X-ray powder diffraction analysis confirmed the phase formation of

KSrPO₄:Dy³⁺ materials. The photoluminescence excitation and emission spectra and the concentration dependence of the emission intensity of the phosphor were investigated. The results show that the phosphor could be efficiently excited by the near-UV (NUV) light ranging from 340 to 440 nm, thus exhibiting blue (487 nm) and yellow (577 nm) light emissions corresponding to 4F_{9/2} → 6H_{15/2} and 4F_{9/2} → 6H_{13/2} transitions, respectively. The luminescence intensity of KSr_{1-x}PO₄:xDy³⁺ phosphor first increased and then decreased with increasing Dy³⁺ concentration and reached the maximum intensity at x = 0.05. The calculated color coordinates lie in the blue white region. Thus, the prepared phosphors exhibit great potential for use as single-phase full-color phosphor for NUV white-light-emitting diodes. © 2014 Elsevier B.V. All rights reserved.

Number of references: 20

Main heading: Light emission

Controlled terms: Color - Emission spectroscopy - High temperature applications - Light
- Light emitting diodes - Luminescence - Phosphors - Solid state reactions - Synthesis (chemical)
- X ray powder diffraction

Uncontrolled terms: Concentration dependence - Full color - High temperature solid-state
reaction - KSrPO₄:Dy³⁺ - Luminescence intensity - Luminescence properties -
Photo-luminescence excitation - White light emitting diodes

Classification code: 708.3.1 High Temperature Superconducting Materials - 741.1 Light/Optics - 802.2
Chemical Reactions - 931.3 Atomic and Molecular Physics

Numerical data indexing: Size 3.40e-07m to 4.40e-07m, Size 4.87e-07m, Size 5.77e-07m

DOI: 10.1016/j.jallcom.2014.12.066

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

190.

Accession number: 20152100864030

Title: Operational risk quantification for loss frequency using fuzzy simulation

Authors: Liu, Shuxia1 ; Mi, Haijie2

Author affiliation:

1 School of Business Administration, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Chinese Unicom, Shijiazhuang Branch, Shijiazhuang, China

Corresponding author: Liu, Shuxia

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 12

Issue date: 2014

Publication year: 2014

Pages: 577-581

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: The estimation of the frequency parameter of operational risk quantification has received increased attention under the new Basel proposal. This paper proposes an advanced measurement approach using fuzzy point estimation. In this approach, prior membership function could be obtained through fuzzy maximum entropy rule. When operational risk loss data is given, posterior membership function can be easily calculated by using fuzzy point theorem. After posterior mean is exploited as fuzzy point estimate, loss frequency distribution is gotten. Finally, an empirical analysis on this model is conducted based historical data obtained from a Chinese commercial bank. The result shows that economical can reduce the complexity and communication cost.

Number of references: 39

Main heading: Risk perception

Controlled terms: Frequency estimation - Membership functions - Risk assessment

Uncontrolled terms: Advanced measurement approaches - Communication cost - Empirical analysis - Frequency parameters - Fuzzy point - Fuzzy simulation - Fuzzy variable - Operational risks

Classification code: 751 Acoustics, Noise. Sound - 921 Mathematics - 922.1 Probability Theory

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

191.

Accession number: 20163902849276

Title: Integration design of temperature sensor and double RFID tag

Authors: Zhang, Xiangdong¹ ; Li, Changming¹ ; Gao, Xiaoqiu¹ ; Li, Lijie¹

Author affiliation:

1 College of Business Administration, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

Corresponding author: Li, Lijie

Source title: Open Electrical and Electronic Engineering Journal

Abbreviated source title: Open Electr. Electron. Eng. J.

Volume: 8

Issue: 1

Issue date: 2014

Publication year: 2014

Pages: 111-117

Language: English

E-ISSN: 18741290

Document type: Journal article (JA)

Publisher: Bentham Science Publishers B.V., P.O. Box 294, Bussum, 1400 AG, Netherlands

Abstract: A new design about the integration of temperature sensor and RFID tag is provided. This is a dual-tag design, in which the temperature element is connected to one of the RFID tag antennas to form a parallel structure. In this design, some of the functions of the sensor are transferred to the RFID reader so that some

components of the sensor can be cut, reducing the production costs of existing design. By defining the signal strength of the first tag as a reference value, the problem of setting a standard is solved in the temperature detection process. RF module can be used to make the energy transformation without requiring the entire design to have an external continuous power source to provide energy. In addition, experimental data proves the feasibility of this design. © Zhang et al.

Number of references: 19

Main heading: Radio frequency identification (RFID)

Controlled terms: Mobile antennas - Sensors - Temperature sensors

Uncontrolled terms: Dual-tag - Energy transformation - Integration design - Parallel structures - Reference values - RFID tag antennas - Temperature detection - Temperature sensitive

Classification code: 716.3 Radio Systems and Equipment - 944.5 Temperature Measuring Instruments

DOI: 10.2174/1874129001408010111

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

192.

Accession number: 20144200100343

Title: Experimental study on shear performance of bolt in roadway supporting

Authors: Li, D.J.1, 2 ; Ding, Z.L.2 ; Li, C.L.3, 4 ; Chen, J.H.5

Author affiliation:

- 1 State Key Laboratory for Geo Mechanics and Deep Underground Engineering, Beijing; 100083, China
- 2 School of Mechanical and Civil Engineering, China University of Mining and Technology, Beijing; 100083, China
- 3 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao; 066004, China
- 4 Institute of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China
- 5 School of Mining Engineering, University of New South Wales, Sydney; 2052, Australia

Corresponding author: Li, D.J.

Source title: Journal of Engineering Science and Technology Review

Abbreviated source title: J. Eng. Sci. Technol. Rev.

Volume: 7

Issue: 4

Issue date: 2014

Publication year: 2014

Pages: 79-83

Language: English

E-ISSN: 17912377

Document type: Journal article (JA)

Publisher: Technological Education Institute of Kavala

Abstract: The corner bolt is proved to be effective in the control of floor deformation of roadway, and the relevant studies on bolting mechanisms are of great significance in improving roadway stability. In this paper, two types of shear tests on six forms of bolts are performed by using self-designed shear test device, the electro-hydraulic servo triaxial testing system. The shear characteristics of different types of bolts are obtained. The results show that different bolt rods or different internal filling conditions result in large differences in shear resistance and different deformation adaptability. We find that the filling materials added can improve the shear performance of bolt significantly, and the bolt with steel not only can improve the strength of bolt body, but also has the bimodal characteristic that makes the bolt have the secondary bearing capacity and withstand larger deformation range during the process of shear, and shows a better support performance. Hoping to provide the experiment basis for support design and field application in the future. © 2014 Kavala Institute of Technology.

Number of references: 14

Main heading: Bolts

Controlled terms: Bridge decks - Deformation - Strength of materials - Supports

Uncontrolled terms: Deformation mechanism - Electrohydraulic servos - Filling conditions
- Larger deformations - Roadway - Shear characteristics - Shear performance - Shear tests

Classification code: 401.1 Bridges - 421 Strength of Building Materials; Mechanical Properties - 422 Strength of Building Materials; Test Equipment and Methods - 605 Small Tools and Hardware - 951 Materials Science

Funding Details: Number; Acronym; Sponsor: 51074140; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51310105020; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51474188; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

193.

Accession number: 20152801020485

Title: Research on cloud manufacturing resource allocation in distributed computing environment

Authors: Wang, Yubin1 ; Bo, Jingyi1 ; Li, Guolin2

Author affiliation:

1 College of Math and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei, China

2 The College of Education, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei, China

Source title: International Journal of Grid and Distributed Computing

Abbreviated source title: Int. J. Grid Distrib. Comput.

Volume: 8

Issue: 3

Issue date: June 1, 2015

Publication year: 2015

Pages: 245-256

Language: English

ISSN: 20054262

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: With the rapid development of network information technology, manufacturing presents a development trend of networking, virtualization, intelligence and servitization. Cloud manufacturing (CMg) with a new type of service-oriented manufacturing model is put forward and excellently satisfies the development requirements of modern manufacturing enterprises. With considering the complex characteristics of cloud manufacturing, firstly, we construct Cloud manufacturing resource scheduling system architecture to schedule service task and allocate manufacturing resource, which includes user requirements, task plan, global task scheduling, service collaboration allocation, virtualization and cloud manufacturing resource. Secondly, we propose a comprehensive resource allocation model based on auctions theory to satisfy different users' request, and then the greedy method is used to search the optimal bid in the bid set. Finally, we implement some simulation experiments, and simulation results show that the solution algorithm of CARA's winner determination problem gets the same solution as the M-HEU algorithm with less time complexity, and it is more applicable, efficient and effective for online multi-resource allocation. © 2015 SERSC.

Number of references: 26

Main heading: Industrial research

Controlled terms: Complex networks - Computer aided manufacturing - Distributed computer systems - Manufacture - Resource allocation - Scheduling - Statistical mechanics - Virtual reality

Uncontrolled terms: Cloud manufacturing resources - Distributed computing environment - Network information technology - Non-equilibrium statistical mechanics - Performance evaluation - Resource allocation model - Winner determination problem - WSNs

Classification code: 537.1 Heat Treatment Processes - 722 Computer Systems and Equipment - 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 912.1 Industrial Engineering - 912.2 Management - 931.1 Mechanics

DOI: 10.14257/ijgdc.2015.8.3.24

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

194.

Accession number: 20153701263160

Title: Miniature Fabry-Perot interferometric sensor for temperature measurement based on photonic crystal fiber

Authors: Fu, Xing-hu1, 2 ; Xie, Hai-yang1 ; Wang, Feng1, 3 ; Jiang, Peng1, 3 ; Fu, Guang-wei1, 2 ; Bi, Wei-hong1, 2

Author affiliation:

- 1 School of Information Science and Engineering, Yanshan University, Qinhuangdao, China
- 2 The Key Laboratory for Special Fiber and Fiber Sensor of Hebei Province, Qinhuangdao, China
- 3 College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Fu, Xing-hu

Source title: Optoelectronics Letters

Abbreviated source title: Optoelectron. Lett.

Volume: 11

Issue: 5

Issue date: September 10, 2015

Publication year: 2015

Pages: 382-385

Language: English

ISSN: 16731905

Document type: Journal article (JA)

Publisher: Springer Verlag

Abstract: A novel miniature Fabry-Perot interferometric (FPI) temperature sensor is proposed and demonstrated experimentally. The modal interferometer is fabricated by just splicing a section of photonic crystal fiber (PCF) with a single-mode fiber (SMF). The air holes of the PCF are fully collapsed by the discharge arc during the splicing procedure to enhance the reflection coefficient of the splicing point. The transmission spectra with different temperatures are measured, and the experimental results show that the linear response of 11.12 pm/°C in the range of 30–80 °C is obtained. This sensor has potential applications in temperature measurement field. © 2015, Tianjin University of Technology and Springer-Verlag Berlin Heidelberg.

Number of references: 19

Main heading: Photonic crystal fibers

Controlled terms: Crystal whiskers - Fabry-Perot interferometers - Interferometry - Nonlinear optics - Optical fiber fabrication - Single mode fibers - Temperature measurement

Uncontrolled terms: Air holes - Discharge arc - Fabry-Perot - Fabry-Perot interferometric sensors - Linear response - Modal interferometers - Transmission spectrums

Classification code: 741.1.1 Nonlinear Optics - 741.1.2 Fiber Optics - 801.4 Physical Chemistry - 941.3 Optical Instruments - 941.4 Optical Variables Measurements - 944.6 Temperature Measurements

DOI: 10.1007/s11801-015-5131-x

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

195.

Accession number: 20150700508290

Title: Novel nitrogen-doped hierarchically porous coralloid carbon materials as host matrixes for lithium-sulfur batteries

Authors: Yang, Jing^{1, 2}; Wang, Shuyuan³; Ma, Zhipeng^{1, 2}; Du, Zhiling^{1, 2}; Li, Chunying^{1, 2}; Song, Jianjun^{1, 2}; Wang, Guiling^{1, 2}; Shao, Guangjie^{1, 2}

Author affiliation:

- 1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, China
- 2 Hebei Province Key Laboratory of Applied Chemistry, College of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao, China
- 3 School of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Shao, Guangjie

Source title: Electrochimica Acta

Abbreviated source title: Electrochim Acta

Volume: 159

Issue date: March 20, 2015

Publication year: 2015

Pages: 8-15

Language: English

ISSN: 00134686

CODEN: ELCAAV

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Nitrogen-doped hierarchically porous coralloid carbon/sulfur composites (N-HPCC/S) served as attractive cathode materials for lithium-sulfur (Li-S) batteries were fabricated for the first time. The nitrogen-doped hierarchically porous coralloid carbon (N-HPCC) with an appropriate nitrogen content (1.29 wt%) was synthesized via a facile hydrothermal approach, combined with subsequent carbonization-activation. The N-HPCC/S composites prepared by a simple melt-diffusion method displayed an excellent electrochemical performance. With a high sulfur content (58 wt%) in the total electrode weight, the N-HPCC/S cathode delivered a high initial discharge capacity of 1626.8 mA h g⁻¹ and remained high up to 1086.3 mA h g⁻¹ after 50 cycles at 100 mA g⁻¹, which is about 1.86 times as that of activated carbon. Particularly, the reversible discharge capacity still maintained 607.2 mA h g⁻¹ after 200 cycles even at a higher rate of 800 mA g⁻¹. The enhanced electrochemical performance was attributed to the synergetic effect between the intriguing hierarchically porous coralloid structure and appropriate nitrogen doping, which could effectively trap polysulfides, alleviate the volume expansion, enhance the electronic conductivity and improve the surface interaction between the carbon matrix and polysulfides. © 2015 Elsevier Ltd. All rights reserved.

Number of references: 36

Main heading: Lithium batteries

Controlled terms: Activated carbon - Carbon - Carbonization - Cathodes - Doping (additives) - Electric batteries - Electric discharges - Electrodes - Lithium - Nitrogen - Polysulfides - Sulfur

Uncontrolled terms: Cath-ode materials - Discharge capacities - Electrochemical performance - Electronic conductivity - Hierarchically porous - High sulfur contents - Initial discharge capacities - Lithium sulfur batteries

Classification code: 445.1 Water Treatment Techniques - 549.1 Alkali Metals - 701.1 Electricity: Basic Concepts and Phenomena - 702.1 Electric Batteries - 702.1.1 Primary Batteries - 704.1 Electric Components - 801 Chemistry - 804 Chemical Products Generally - 815.1.1 Organic Polymers

DOI: 10.1016/j.electacta.2015.01.187

Database: Compendex

196.

Accession number: 20150900564993

Title: Three-dimensional crisscross porous manganese oxide/carbon composite networks for high performance supercapacitor electrodes

Authors: Li, Chunying^{1, 2}; Wang, Shuyuan³; Zhang, Guowei²; Du, Zhiling²; Wang, Guiling²; Yang, Jing²; Qin, Xiujuan^{1, 2}; Shao, Guangjie^{1, 2}

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, China

2 Hebei Key Laboratory of Applied Chemistry, College of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao, China

3 School of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Qin, Xiujuan

Source title: Electrochimica Acta

Abbreviated source title: Electrochim Acta

Volume: 161

Issue date: April 10, 2015

Publication year: 2015

Pages: 32-39

Language: English

ISSN: 00134686

CODEN: ELCAAV

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Manganese oxide/carbon (MnO_x/C) composites have been successfully prepared via a high temperature heat treatment method followed by the electrochemical oxidation. The presence of carbon not only enhances the electronic conductivity of manganese oxides (MnO_x), but also provides more active sites for the transformation of manganese monoxide (MnO) during the galvanostatic charge-discharge process. Simultaneity,

the interconnected porous structures of MnOx/C samples are believed to provide a continuous channel for the diffusion of electrolyte ion and shorten the diffusion length of ions involved in the charge/discharge cycling processes. Consequently, these advantages endow the MnOx/C electrode a better capacitance performance, a superior long-term cyclic stability and outstanding rate capability compared with pristine MnOx. More importantly, the composites show a fascinating capacitance of 807 F g⁻¹ at 1 A g⁻¹, which is much higher than the reported hydrous RuO2 electrodes. It can be easily speculated that MnOx/C composites will act as a promising electrode materials for designing high-performance supercapacitors. © 2015 Elsevier Ltd. All rights reserved.

Number of references: 44

Main heading: Manganese oxide

Controlled terms: Capacitance - Capacitors - Electric conductivity - Electric discharges - Electrochemical oxidation - Electrodes - Electrolytic capacitors - Manganese - Oxides

Uncontrolled terms: Charge/discharge cycling - Electrochemical performance - Electronic conductivity - Galvanostatic charge discharges - High temperature heat treatment - Interconnected porous structure - Porous networks - Supercapacitor electrodes

Classification code: 543.2 Manganese and Alloys - 701.1 Electricity: Basic Concepts and Phenomena - 704.1 Electric Components - 802.2 Chemical Reactions - 804 Chemical Products Generally

DOI: 10.1016/j.electacta.2015.02.097

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

197.

Accession number: 20152600980278

Title: The research on the sports biomechanics analysis of the basic movement in dance

Authors: XiaoXi, Guo1

Author affiliation:

1 College of the Arts, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: XiaoXi, Guo

Source title: BioTechnology: An Indian Journal

Abbreviated source title: Biotechnol. An Indian J.

Volume: 10

Issue: 12

Issue date: November 1, 2014

Publication year: 2014

Pages: 6864-6869

Language: English

ISSN: 09747435

Document type: Journal article (JA)

Publisher: Trade Science Inc, 126,Prasheel Park,Sanjay Raj Farm House,Nr. Saurashtra Unive, Rajkot, Gujarat, 360 005, India

Abstract: Sports biomechanics has become an important branch of biomechanics, which is mainly applied by mechanics principle and approach in order to research the structure and function of biological systems. Sports dance is through the body dynamics, the change of amplitude, velocity and attitude model, show the body beauty and natural beauty of the movement. In the current paper, the sports biomechanics analysis of the basic movement in dance has been researched in detail. By means of test approach, six ballet students are chosen as the object to test their basic motion of dancing. This paper presents the biomechanics theory advance in dance. The objective of this research can deal with the detailed mechanical analysis of sports dance process for dancer and coach to avoid the happening of the injury or accident. According to the force of research, the height and speed of jumping for every tested person are recorded and mainly discuss the influence of the center of gravity and speed. The analysis results indicate that the two factors are of utmost significance in practical training. © Trade Science Inc.

Number of references: 7

Main heading: Sports

Controlled terms: Biomechanics - Biophysics

Uncontrolled terms: Basic movements - Body dynamics - Center of gravity - Mechanical analysis - Natural beauty - Practical training

Classification code: 461.3 Biomechanics, Bionics and Biomimetics - 701 Electricity and Magnetism - 931 Classical Physics; Quantum Theory; Relativity

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

198.

Accession number: 20150500477828

Title: Design and application of iterative Monte Carlo localization for mobile wireless sensor networks based on MCL

Authors: Cao, Jing¹ ; Xing, Xuefeng² ; Liu, Shan¹

Author affiliation:

1 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, Hebei, China

2 Northeast Petroleum University, Qinhuangdao, Hebei, China

Corresponding author: Cao, Jing

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 11

Issue date: 2014

Publication year: 2014

Pages: 253-258

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: In recent years, wireless sensor network had been more and more widely used in our daily life, and with the propose of Monte Carlo localization (MCL) algorithm, node localization of the mobile wireless

sensor network had been solved effectively. But it needed to have a large number of samples if it used the Monte Carlo localization algorithm to obtain a high positioning accuracy. This paper proposed a new improved algorithm (iterative Monte Carlo localization algorithm) based on the Monte Carlo localization algorithm. In iterative Monte Carlo localization (IMCL) algorithm, each anchor node location information was forwarded by its neighbour nodes only once and preserved by the receiving node in each period. Then the next period, merge it and the sent/forwarding information into a packet and forward. Make sure that points have more observations for estimating previous location sets. IMCL, meanwhile, also can make full use of observation to filter out some samples that were far from the real position of node, so as to improve the accuracy of node localization. We finally confirmed by experiment: IMCL algorithm had higher positioning accuracy compared with other algorithm.

Number of references: 5

Main heading: Sensor nodes

Controlled terms: Algorithms - Genetic algorithms - Iterative methods - Monte Carlo methods - Wireless sensor networks

Uncontrolled terms: Design and application - IMCL - Immune genetic algorithms - Improve the accuracy of localization - Mobile wireless sensor network - Monte Carlo localization - Number of samples - Positioning accuracy

Classification code: 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 732 Control Devices - 921 Mathematics - 921.6 Numerical Methods - 922.2 Mathematical Statistics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

199.

Accession number: 20142317782864

Title: Investigation of orderly nanostructures and assembly modes of binary organogels via glutamic acid amino derivative and different fatty acids

Authors: Jiao, Tifeng^{1, 2} ; Xing, Ruirui¹ ; Shen, Xihai^{1, 3} ; Zhang, Qingrui¹ ; Zhou, Jingxin¹ ; Gao, Faming¹

Author affiliation:

1 Hebei Key Laboratory of Applied Chemistry, School of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao 066004, China

2 State Key Laboratory of Solid Lubrication, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, China

3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Jiao, T. (tfjiao@ysu.edu.cn)

Source title: Integrated Ferroelectrics

Abbreviated source title: Integr Ferroelectr

Volume: 151

Issue: 1

Issue date: February 12, 2014

Publication year: 2014

Pages: 31-41

Language: English

ISSN: 10584587

E-ISSN: 16078489

CODEN: IFEREU

Document type: Conference article (CA)

Publisher: Taylor and Francis Inc., 325 Chestnut St, Suite 800, Philadelphia, PA 19106, United States

Abstract: In this paper the gelation behaviors of binary fatty acids with different length of alkyl chains and glutamic acid amino derivative in various organic solvents were designed and investigated. Their gelation behaviors in 20 solvents were tested as new binary organic gelators. The results showed that the length of alkyl chains has played a crucial role in the gelation behavior of all gelator mixtures in various organic solvents. Longer alkyl chains in molecular skeletons in present gelators are favorable for the gelation of organic solvents. Morphological studies revealed that the gelator molecules self-assemble into different aggregates, such as lamella, rod, belt, and fiber with change of solvents. Spectral studies indicated that there existed different H-bond formation and hydrophobic force, depending on imide segment and alkyl substituent chains in molecular skeletons. In addition, the used solvents had great effect on the assembly modes and stacking units of these binary gelators. The present work may also give new clues for designing new binary organogelators and soft materials. © 2014 Taylor & Francis Group, LLC.

Number of references: 28

Main heading: Gelation

Controlled terms: Amino acids - Fatty acids - Musculoskeletal system - Nanostructures - Organic solvents - Solvents - Spectroscopic analysis

Uncontrolled terms: Binary organogels - Gelator molecules - Glutamic acid - Hydrophobic forces - Molecular skeleton - Morphological study - Organogels - Supramolecular assemblies

Classification code: 461.3 Biomechanics, Bionics and Biomimetics - 761 Nanotechnology - 801 Chemistry - 802.3 Chemical Operations - 804.1 Organic Compounds - 933 Solid State Physics

DOI: 10.1080/10584587.2014.899020

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

200.

Accession number: 20134016795056

Title: Stability, elastic and electronic properties of the Rh-Zr compounds from first-principles calculations

Authors: Zhang, Suhong^{1, 2}; Zhang, Xinyu¹; Zhu, Yan^{1, 3}; Zhang, Shiliang¹; Qi, Li¹; Liu, Riping¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Science, Yanshan University, Qinhuangdao 066004, China

3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhang, X. (xyzhang@ysu.edu.cn)

Source title: Intermetallics

Abbreviated source title: Intermet

Volume: 44

Issue date: 2014

Publication year: 2014

Pages: 31-36

Language: English

ISSN: 09669795

CODEN: IERME5

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: A systematic investigation on structural, elastic and electronic properties of Rh-Zr intermetallic compounds is conducted using first-principles electronic structure total energy calculations. The equilibrium lattice parameters, enthalpies of formation (E_{for}), cohesive energies (E_{coh}) and elastic constants are presented. Of the eleven considered candidate structures, Rh₄Zr₃ is most stable with the lowest E_{for} . The two orthogonal-type, relative to the CsCl-type, are the competing ground-state structures of RhZr. The result is in agreement with the experimental reports in the literature. The analysis of E_{for} and mechanical stability excludes the presence of Rh₂Zr and RhZr₄ at low temperature mentioned by Curtarolo et al. [Calphad 29, 163 (2005)]. It is found that the bulk modulus B increases monotonously with Rh concentration, whereas all other quantities (shear modulus G , Young's modulus E , Poisson's ratio σ and ductility measured by B/G) show nonmonotonic variation. RhZr₂ exhibits the smallest shear/Young's modulus, the largest Poisson's ratio and ductility. Our results also indicate that all the Rh-Zr compounds considered are ductile. Furthermore, the detailed electronic structure analysis is implemented to understand the essence of stability. © 2013 Elsevier Ltd. All rights reserved.

Number of references: 49

Main heading: Rhodium compounds

Controlled terms: Calculations - Ductility - Elastic moduli - Electronic properties - Electronic structure - Metallurgy - Poisson ratio - Rhodium - Zirconium

Uncontrolled terms: E. Ab-initio calculations - E. Mechanical properties - E. phase stability, predictions - Elastic properties - Electronic structure of metals and alloys

Classification code: 951 Materials Science - 931.1 Mechanics - 921 Mathematics - 804.1 Organic Compounds - 723 Computer Software, Data Handling and Applications - 721 Computer Circuits and Logic Elements - 701.1 Electricity: Basic Concepts and Phenomena - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 547.1 Precious Metals - 531.1 Metallurgy - 421 Strength of Building Materials; Mechanical Properties

DOI: 10.1016/j.intermet.2013.08.011

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

201.

Accession number: 20154501505393

Title: DNA computing algorithm to solve the least maximal matching problem

Authors: Zhang, Lingmin¹ ; Huang, Dongmei² ; Wang, Zhaocai² ; Ji, Zuwen³

Author affiliation:

1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 College of Information, Shanghai Ocean University, Shanghai, China

3 State Key Laboratory of Simulation and Regulation of River Basin Water Cycle, China Institute of Water Resources and Hydropower Research, Beijing, China

Corresponding author: Wang, Zhaocai

Source title: Journal of Computational and Theoretical Nanoscience

Abbreviated source title: J. Comput. Theor. Nanosci.

Volume: 12

Issue: 9

Issue date: September 2015

Publication year: 2015

Pages: 2348-2351

Language: English

ISSN: 15461955

E-ISSN: 15461963

Document type: Journal article (JA)

Publisher: American Scientific Publishers

Abstract: DNA computing has natural advantage to solve complex NP problem. In this paper, a DNA parallel algorithm is introduced to solve the least maximal matching problem using DNA molecular operations in $O(n^2)$ time complexity. We reduce the complexity of the computation and theoretically prove the correctness of the algorithm. © 2015 American Scientific Publishers All rights reserved.

Number of references: 16

Main heading: Problem solving

Controlled terms: Algorithms - Bioinformatics - Calculations - Computational complexity - DNA

Uncontrolled terms: DNA-computing - Maximal matchings - Molecular operations - NP problems - Time complexity

Classification code: 461.2 Biological Materials and Tissue Engineering - 461.8.2 Bioinformatics - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 921 Mathematics

DOI: 10.1166/jctn.2015.4031

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

202.

Accession number: 20150900581883

Title: Formation mechanism of gaps and ribs around anodic TiO₂ nanotubes and method to avoid formation of ribs

Authors: Chong, Bin^{1, 2}; Yu, Dong-Liang^{1, 2}; Gao, Ming-Qi³; Fan, Hao-Wen^{1, 2}; Yang, Chun-Yan^{1, 2}; Ma, Wei-Hua²; Zhang, Shao-Yu¹; Zhu, Xu-Fei¹

Author affiliation:

- 1 School of Chemical Engineering, Nanjing University of Science and Technology, Nanjing, China
- 2 Key Laboratory of Soft Chemistry and Functional Materials of Education Ministry, Nanjing University of Science and Technology, Nanjing, China
- 3 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Journal of the Electrochemical Society

Abbreviated source title: J Electrochem Soc

Volume: 162

Issue: 4

Issue date: 2015

Publication year: 2015

Pages: H244-H250

Language: English

ISSN: 00134651

E-ISSN: 19457111

CODEN: JESOAN

Document type: Journal article (JA)

Publisher: Electrochemical Society Inc.

Abstract: Anodic TiO₂ nanotubes (ATNTs) have been studied extensively for many years. However, their mysterious formation mechanism still remains unclear. The formation of gaps and ribs around the nanotubes has not been elucidated. Here, various surface and cross-section morphologies of ATNTs obtained under different anodizing conditions and their evolution process have been investigated in detail. Based on many experimental facts, new explanations for the gaps and ribs are presented. An entire surface layer covered on the nanotubes plays a primary role on the formation of gaps and ribs. The gaps result from the radial distribution of the electric field at the pore bottom. No newly-formed oxide will exist along the gap direction, because the electric field along the gap is the minimum. The ribs result from the electrolyte entering into the wider gaps among the ATNTs due to the rupture of the entire surface layer. The rings or ribs on the outer wall of ATNTs are formed at the electrolyte/Ti interface due to the discontinuous existence of a small amount of electrolyte within the gap base. The present viewpoint was demonstrated by an original micro-dam, which can block the electrolyte entering into the gaps and avoid the formation of ribs. © The Author(s) 2015. Published by ECS.

Number of references: 55

Main heading: Nanotubes

Controlled terms: Electric fields - Electrolytes - Titanium dioxide - Yarn

Uncontrolled terms: Cross-section morphology - Electric field - Evolution process - Formation mechanism - Radial distributions - Surface layers - TiO

Classification code: 701.1 Electricity: Basic Concepts and Phenomena - 702 Electric Batteries and Fuel

Cells - 761 Nanotechnology - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally - 804.2 Inorganic Compounds - 819.4 Fiber Products

DOI: 10.1149/2.0721504jes

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

203.

Accession number: 20141117465470

Title: The application of GMKL algorithm to fault diagnosis of local area network

Authors: Li, Yuxiang¹ ; Ren, Changquan¹ ; Bo, Jingyi¹ ; Cai, Qianying¹ ; Dong, Yanrong¹

Author affiliation:

1 College of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, 066004, China

Source title: Journal of Networks

Abbreviated source title: J. Netw.

Volume: 9

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 747-753

Language: English

ISSN: 17962056

Document type: Journal article (JA)

Publisher: Academy Publisher

Abstract: Based on the existing methods in the study of local area network in the fault diagnosis, this

paper proposed the GMKL algorithm in the fault diagnosis application. In the GMKL training process, first of all, it should give the transformation and normalization of the collected data characteristics; It tried to use different kernel function combination methods in order to get the Multiplekernel function comparing results, so choose a good many kernel function. The experimental results showed that: GMKL method in feature extraction, multiple targets detection and pattern recognition and other fields to machine learning provides a wide range of application prospects and rich design ideas. The generalized multikernel learning method can be well applied in the data that has large scale sample, dimension complex and contains a large number of heterogeneous information, and so on.
© 2014 ACADEMY PUBLISHER.

Number of references: 16

Main heading: Learning algorithms

Controlled terms: Failure analysis - Feature extraction - Learning systems - Local area networks - Metadata

Uncontrolled terms: Application prospect - Combination method - Data characteristics - Fault diagnosis applications - Heterogeneous information - Multi-kernel learning - Multiple targets - Training process

Classification code: 421 Strength of Building Materials; Mechanical Properties - 716 Telecommunication; Radar, Radio and Television - 723 Computer Software, Data Handling and Applications - 921 Mathematics

DOI: 10.4304/jnw.9.3.747-753

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

204.

Accession number: 20154601536282

Title: Properties of cellulase as template molecule on chitosan - Methyl methacrylate membrane

Authors: Lian, Qi 1 ; Zheng, Xuefang 1 ; Wu, Haixia 2 ; Song, Shitao 1 ; Wang, Dongjun 3

Author affiliation:

1 College of Chemical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Chemical and Pharmaceutical Engineering, Hebei University of Science and Technology, Shijiazhuang, China

3 Analysis and Testing Center, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Russian Journal of Physical Chemistry A

Abbreviated source title: Russ. J. Phys. Chem. A

Volume: 89

Issue: 12

Issue date: December 1, 2015

Publication year: 2015

Pages: 2294-2297

Language: English

ISSN: 00360244

CODEN: RJPCBS

Document type: Journal article (JA)

Publisher: Maik Nauka-Interperiodica Publishing

Abstract: In this study, a novel molecular imprinting membrane made of chitosan and methyl methacrylate (MMA) was fabricated with cellulase as template molecule and the thermal response to cellulase was characterized. The film was characterized by infrared spectroscopy (IR), X-ray diffraction (XRD), scanning electron microscopy (SEM) and the permeation experiment. The results showed that the space structure of the film was as similar as the cellulase. Moreover, the membrane had advanced molecular imprinting capability to cellulase comparing to pepsin and pectinase at any temperature and the film had excellent ability to identify specific template molecule (cellulase) at the synthesis temperature compared to other temperatures. © 2015 Pleiades Publishing, Ltd.

Number of references: 12

Main heading: Thin films

Controlled terms: Acrylic monomers - Biosynthesis - Chitin - Chitosan - Esters - Infrared spectroscopy - Molecular modeling - Molecules - Polymerization - Polymers - Scanning electron microscopy - Synthesis (chemical) - X ray diffraction

Uncontrolled terms: functional - Methyl methacrylates - Molecular imprinting - Permeation experiments - structural - Synthesis temperatures - Template molecules - Thermal response

Classification code: 802.2 Chemical Reactions - 804.1 Organic Compounds - 815.1 Polymeric Materials

- 815.2 Polymerization - 931.3 Atomic and Molecular Physics

DOI: 10.1134/S0036024415120249

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

205.

Accession number: 20151400720269

Title: Study on design of music player based on fuzzy synthetic evaluation model

Authors: Guo, Xiaoxi¹ ; Sun, Shuo¹ ; Sun, Jili¹

Author affiliation:

1 Art institute, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: International Journal of Signal Processing, Image Processing and Pattern Recognition

Abbreviated source title: Int. J. Signal Process. Image Process. Pattern Recogn.

Volume: 8

Issue: 3

Issue date: 2015

Publication year: 2015

Pages: 75-86

Language: English

ISSN: 20054254

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Concerning of the impression of uncertainty and fuzziness that consumers have on product appearance, a synthetic evaluation model of music electronic equipment that meets the modern aesthetic needs is built in order to change the randomness and uncertainty of traditional product design. Through analyzing the three

basic factors and several evaluation indexes in music player design, the weight of each evaluation index is determined by the application of Analytic Hierarchy Process (hereinafter referred to as AHP), and a two-level fuzzy synthetic evaluation model is built by using fuzzy mathematics. Finally, it is verified in experiment that the uncertainty in product design can be effectively improved, which at the same time increases the satisfaction rate and success rate of product design. © 2015 SERSC.

Number of references: 10

Main heading: Product design

Controlled terms: Design - Electronic equipment - Fuzzy set theory - Hierarchical systems
- Oscillators (electronic)

Uncontrolled terms: AHP - Evaluation index - Fuzzy evaluation - Fuzzy synthetic
evaluation models - Music players - Satisfaction rates - Synthetic evaluation - Traditional products

Classification code: 408 Structural Design - 713.2 Oscillators - 715 Electronic Equipment, General
Purpose and Industrial - 913.1 Production Engineering - 921.4 Combinatorial Mathematics, Includes Graph
Theory, Set Theory - 961 Systems Science

DOI: 10.14257/ijcip.2015.8.3.07

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

206.

Accession number: 20141117457713

Title: Evolution of the complicated innovation networks with multi-agent

Authors: Qiu, Feng Xia^{1, 2}

Author affiliation:

1 Hebei University of Technology, Tianjin, China

2 Hebei normal University of science and Technology, Qinhuangdao, China

Corresponding author: Qiu, F. X. (qfx301@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 513-517

Monograph title: Applied Science, Materials Science and Information Technologies in Industry

Issue date: 2014

Publication year: 2014

Pages: 841-844

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783038350125

Document type: Conference article (CA)

Conference name: 2014 International Conference on Advances in Materials Science and Information Technologies in Industry, AMSITI 2014

Conference date: January 11, 2014 - January 12, 2014

Conference location: Xian, China

Conference code: 102941

Sponsor: Engineering Village; INTIEA; ISI Proceedings; Scientific.Net; Trans Tech Publications inc.

Publisher: Trans Tech Publications

Abstract: Using the patents with multi-agent, we provide detailed insights into the cooperation of the marine industry, which is also a complicated innovation network with different agents, such as universities, research institutes, companies. Patent applications and publications are used as measures for the innovation output of the industry. We find that the cooperation in the four different stages is getting more and more intent, and companies are the biggest nodes in the networks. Effects are found that the nodes with more independent innovation would cooperate more with other nodes. Company nodes also tend to seek more partners in the interior, and have more cooperation with partners. But the internal cooperation is a little in the universities and research institutes. © (2014) Trans Tech Publications, Switzerland.

Number of references: 10

Main heading: Patents and inventions

Controlled terms: Industry - Information technology - Innovation - Materials science

Uncontrolled terms: Cooperation - Different stages - Independent innovation - Innovation network - Internal cooperation - Multi-agent - Patent applications - Research institutes

Classification code: 901.3 Engineering Research - 903 Information Science - 912 Industrial Engineering and Management - 951 Materials Science

DOI: 10.4028/www.scientific.net/AMM.513-517.841

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

207.

Accession number: 20141217497706

Title: Effect of equal channel angular pressing on microstructure and recrystallization temperature of Al-Cu alloy

Authors: Fang, Da Ran^{1, 3} ; Liu, Chun² ; Liu, Feng Fang³ ; Quan, Li Wei³ ; Li, Jia Jun¹ ; Zhao, Nai Qin¹

Author affiliation:

1 School of Materials Science and Engineering, Tianjin University, 92 Weijin Road, Tianjin 300072, China

2 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

3 School of Resources and Materials, Northeastern University at Qinhuangdao, 143 Taishan Road, Qinhuangdao 066004, China

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 875-877

Monograph title: Material Research and Applications

Issue date: 2014

Publication year: 2014

Pages: 1581-1584

Language: English

ISSN: 10226680

ISBN-13: 9783037859933

Document type: Conference article (CA)

Conference name: 2012 International Conference on Advanced Material and Manufacturing Science, ICAMMS 2012

Conference date: December 20, 2012 - December 21, 2012

Conference location: Beijing, China

Conference code: 103206

Sponsor: and Computer Science; Beijing Xinyongshun Academic-Exchange LTD; International Research Association of Information; Science Technology Press, China

Publisher: Trans Tech Publications

Abstract: Al-0.6%Cu alloy processed by equal channel angular pressing (ECAP) was investigated in this study. The samples processed with 1, 2 and 4 ECAP passes were annealed at different temperatures. And the microstructures of the Al-0.63%Cu alloy samples were observed. The results show that the grains of the alloy are refined to sub-micron level after multipass ECAP. Moreover, it is found that the recrystallization temperature of the Al-0.6%Cu alloy samples decreases with increasing the number of ECAP passes. Based on the study above, effect of cold rolling reduction and ECAP passes on recrystallization temperature of materials should be further investigated. © (2014) Trans Tech Publications, Switzerland.

Number of references: 16

Main heading: Equal channel angular pressing

Controlled terms: Aluminum - Annealing - Cold rolling - Copper alloys - Crystal microstructure - Recrystallization (metallurgy)

Uncontrolled terms: Al-Cu alloys - Cold rolling reduction - Cu alloy - Multi-pass - Recrystallization temperatures - Submicron

Classification code: 421 Strength of Building Materials; Mechanical Properties - 531.1 Metallurgy - 535.1.2 Rolling Mill Practice - 537.1 Heat Treatment Processes - 541.1 Aluminum - 544.2 Copper Alloys - 933.1.1 Crystal Lattice

DOI: 10.4028/www.scientific.net/AMR.875-877.1581

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

208.

Accession number: 20151900837150

Title: Effects of dry-, wet-and freeze-grinding pretreatment methods on the physicochemical properties of maitake mushroom (*Grifola frondosa*) superfine powders

Authors: Liu, Su-Wen¹ ; Guo, Shuo¹ ; Xia, Xiao-Yu¹ ; Chang, Xue-Dong¹

Author affiliation:

1 Department of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Chang, Xue-Dong

Source title: Advance Journal of Food Science and Technology

Abbreviated source title: Adv. J. Food Sci. Technol.

Volume: 7

Issue: 9

Issue date: 2015

Publication year: 2015

Pages: 730-738

Language: English

ISSN: 20424868

E-ISSN: 20424876

Document type: Journal article (JA)

Publisher: Maxwell Science Publications

Abstract: The dendritic caps and stipes of maitake mushrooms (*Grifola frondosa*) were pretreated by

dry-, wet-, or freeze-grinding followed by jet milling to produce superfine powders. The effects of the pretreatment grinding conditions on the physicochemical properties of these powders were investigated. Compared to the dry and wet processes, the freeze-grinding pretreatment effectively reduced particle sizes (cap, 6.75 μm ; stipe, 5.76 μm) and produced narrow and uniform particle size distributions. For cap or stipe, For the same material (cap or stipe), powders from the freeze-grinding pretreatment exhibited higher values of specific surface area, bulk density, water holding capacity, but worse color values than the dry-and wet-ground powders. For the same grinding pretreatment method, cap powders exhibited higher values for the water solubility index and mobility than stipe powders. For the same environmental humidity, the Halsey model showed the best goodness-of-fit for the moisture sorption isotherms of the superfine powders. © Maxwell Scientific Organization, 2015.

Number of references: 31

Main heading: Powders

Controlled terms: Grinding (machining) - Mathematical models - Microstructure - Particle size - Shotcreting

Uncontrolled terms: Environmental humidities - Grifola frondosa - Micronizations - Moisture sorption isotherms - Physicochemical property - Pretreatment methods - Water holding capacity - Water solubility index

Classification code: 412 Concrete - 536 Powder Metallurgy - 606.2 Abrasive Devices and Processes - 804 Chemical Products Generally - 921 Mathematics - 933 Solid State Physics - 943.2 Mechanical Variables Measurements - 951 Materials Science

Numerical data indexing: Size 5.76e-06m

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

209.

Accession number: 20143618138293

Title: Preparation and investigation of $\text{CaZr}_4(\text{PO}_4)_6:\text{Dy}^{3+}$ single-phase full-color phosphor

Authors: Zhang, Zhi-Wei¹ ; Liu, Lu¹ ; Zhang, Xian-Fu¹ ; Zhang, Jian-Ping¹ ; Zhang, Wei-Guo¹ ; Wang, Dong-Jun¹

Author affiliation:

¹ Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Zhang, W.-G. (zhangzhiweia@sina.cn)

Source title: Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy

Abbreviated source title: Spectrochim. Acta Part A Mol. Biomol. Spectrosc.

Volume: 137

Issue date: February 25, 2015

Publication year: 2015

Pages: 1-6

Language: English

ISSN: 13861425

CODEN: SAMCAS

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: A novel single-phase full-color phosphor $\text{CaZr}_4(\text{PO}_4)_6\text{Dy}^{3+}$ has been synthesized by a high-temperature solid-state reaction. X-ray powder diffraction (XRD) analysis and FT-IR spectra confirmed the phase formation of $\text{CaZr}_4(\text{PO}_4)_6\text{Dy}^{3+}$ materials. The photoluminescence excitation and emission spectra, the concentration dependence of the emission intensity, decay curves, ultraviolet-visible absorption spectroscopy and Commission International de l'Eclairage (CIE) of the phosphor were investigated. The results showed that the phosphor could be efficiently excited by the near ultraviolet (NUV) light region from 340 to 440 nm, and it exhibited blue (487 nm) and yellow (577 nm) emission corresponding to $4\text{F}_{9/2} \rightarrow 6\text{H}_{15/2}$ transitions and $4\text{F}_{9/2} \rightarrow 6\text{H}_{13/2}$ transitions, respectively. The luminescence intensity of $\text{Ca}_{1-x}\text{Zr}_4(\text{PO}_4)_6\text{x}\text{Dy}^{3+}$ phosphor firstly increased and then decreased with increasing Dy^{3+} concentration, and reached the maximum at $x = 0.04$. The band gap energy of $\text{CaZr}_4(\text{PO}_4)_6$ and $\text{Ca}_{0.96}\text{Zr}_4(\text{PO}_4)_6\text{:}0.04\text{Dy}^{3+}$ are about 4.184 eV from the diffuse reflection spectrum. The decay time was also determined for various concentrations of Dy^{3+} in $\text{CaZr}_4(\text{PO}_4)_6$. The calculated color coordinates lies in the blue white region. Therefore, these obtained results suggest that the prepared phosphors exhibit great potential for use as single-phase full-color phosphor for near ultraviolet white light emitting diodes (NUV WLEDs). © 2014 Elsevier B.V. All rights reserved.

Number of references: 27

Main heading: Phosphors

Controlled terms: Calcium - Color - Emission spectroscopy - Light emitting diodes - Luminescence - X ray powder diffraction - Zirconium

Uncontrolled terms: Concentration dependence - Diffuse reflection spectra - Full color - High temperature solid-state reaction - Photo-luminescence excitation - Ultraviolet-visible absorption spectroscopy - White light emitting diodes

Classification code: 549.2 Alkaline Earth Metals - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 741.1 Light/Optics - 931.3 Atomic and Molecular Physics

Numerical data indexing: Electron_Volt 4.18e+00eV, Size 3.40e-07m to 4.40e-07m, Size 4.87e-07m, Size 5.77e-07m

DOI: 10.1016/j.saa.2014.07.052

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

210.

Accession number: 20140617268647

Title: Enhanced novel orange red emission in $\text{LiSr}_{4-x}(\text{BO}_3)_3:\text{xSm}^{3+}$ by K^+

Authors: Zhang, Zhi-Wei¹ ; Peng, You-Shun¹ ; Shen, Xi-Hai¹ ; Zhang, Jian-Ping¹ ; Song, Shi-Tao¹ ; Lian, Qi¹

Author affiliation:

¹ Physical-Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Zhang, Z.-W. (zhangzhiweia@163.com)

Source title: Journal of Materials Science

Abbreviated source title: J Mater Sci

Volume: 49

Issue: 6

Issue date: March 2014

Publication year: 2014

Pages: 2534-2541

Language: English

ISSN: 00222461

E-ISSN: 15734803

CODEN: JMTSAS

Document type: Journal article (JA)

Publisher: Springer Netherlands, Van Godewijkstraat 30, Dordrecht, 3311 GZ, Netherlands

Abstract: $\text{LiSr}_{4-x}(\text{BO}_3)_3:\text{xSm}^{3+}$ and $\text{LiSr}_{3.985-x}(\text{BO}_3)_3:0.015\text{Sm}^{3+}, \text{xK}^+$ phosphors were prepared by solid-state reactions. The phases and luminescent properties of the obtained phosphors were characterized. The results demonstrate that the phosphors particles emit an intensive reddish orange light emission under excitation at 403 nm. $\text{LiSr}_{4-x}(\text{BO}_3)_3:\text{xSm}^{3+}$ phosphor can be efficiently excited by ultraviolet and blue light, and the emission spectrum consists of three emission peaks at 564, 601 and 647 nm. The introduction of the charge compensator K^+ into the $\text{LiSr}_{4-x}(\text{BO}_3)_3:\text{xSm}^{3+}$ phosphor matrix promotes the increase of the emission intensity, as well as the decrease of the E_g value. Results suggest that $\text{LiSr}_{3.97}(\text{BO}_3)_3:0.015\text{Sm}^{3+}, 0.015 \text{K}^+$ is a promising orange-red emitting phosphor for UV LED applications. © 2013 Springer Science+Business Media New York.

Number of references: 41

Main heading: Light emission

Controlled terms: Citrus fruits - Emission spectroscopy - Phosphors - Solid state reactions

Uncontrolled terms: Charge compensators - Emission intensity - Emission peaks - Emission spectrums - Luminescent property - Orange-red - Orange-red emitting - Phosphor matrix

Classification code: 741.1 Light/Optics - 802.2 Chemical Reactions - 821.4 Agricultural Products

Numerical data indexing: Size 4.03e-07m, Size 6.47e-07m

DOI: 10.1007/s10853-013-7948-7

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20144100087592

Title: Protection effect of antioxidant peptides derived from silk sericin on ECV-304 cell damage induced by H₂O₂

Authors: Fan, Jinbo¹ ; Zhou, Suzhen¹ ; Zheng, Lihong² ; Lv, Changxin¹ ; Feng, Xuqiao¹ ; Ren, Fazheng³

Author affiliation:

- 1 College of Chemistry, Chemical Engineering and Food Safety, Bohai University, Jinzhou ; Liaoning, China
- 2 Department of Food Engineering, Hebei Normal University of Science And Technology, Changli; Hebei, China
- 3 College of Food Science and Nutritional Engineering, China Agricultural University, Beijing , China

Corresponding author: Feng, Xuqiao

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 14

Issue: 8

Issue date: August 1, 2014

Publication year: 2014

Pages: 47-53

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology

Abstract: The model of ECV-304 cell damage induced by H₂O₂ was established. The effect on inhibiting ECV-304 cell damage of three dose treatment groups (50, 100, 200 µg/mL) of SP2 and SP3 were explored. The results indicated that treatment groups (100, 200 µg/mL) of SP2 and SP3 increased activities of SOD, CAT, GSH-Px of cell (P<0.05) and the level of NO (P<0.05) and T-AOC of cell (P<0.05), decreased the level of MDA (P<0.05). The results indicated that peptides SP2 and SP3 can protect ECV-304 cell damage induced by H₂O₂ and the effect depends on dose. The work will be a base for development of antioxidative functional food production and provide a method for potential exploitation and utilization of silk sericin.

Number of references: 14

Main heading: Cells

Controlled terms: Antioxidants - Cytology - Peptides - Silk

Uncontrolled terms: Antioxidant peptides - Antioxidative - Cell damage - Functional foods - H₂O₂ - Protection effect - Silk sericin - Treatment group

Classification code: 461.2 Biological Materials and Tissue Engineering - 461.9 Biology - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally - 819.1 Natural Fibers

Numerical data indexing: Mass_Density 2.00e-01kg/m³

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

212.

Accession number: 20142217756254

Title: First-principles investigations on thermodynamic properties of the ordered and disordered Si_{0.5}Ge_{0.5} alloys

Authors: Zhu, Yan^{1, 2}; Zhang, Xinyu¹; Zhang, Suhong¹; Sun, Xiaowei¹; Wang, Limin¹; Ma, Mingzhen¹; Liu, Riping¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhang, X. (xyzhang@ysu.edu.cn)

Source title: Applied Physics A: Materials Science and Processing

Abbreviated source title: Appl Phys A

Volume: 115

Issue: 2

Monograph title: Metamaterials, Photonic Crystals and Plasmonics

Issue date: May 2014

Publication year: 2014

Pages: 667-670

Language: English

ISSN: 09478396

E-ISSN: 14320630

CODEN: APAMFC

Document type: Journal article (JA)

Publisher: Springer Heidelberg

Abstract: The structure, formation energy, and thermodynamic properties of Si_{0.5}Ge_{0.5} alloys are investigated through first-principles method. The ordered and disordered structures of Si_{0.5}Ge_{0.5} compounds are considered. Our results show that thermodynamic instabilities of Si_{0.5}Ge_{0.5} alloys at 0 K can be judged from the calculated formation energy. However, the alloy might be prepared at specified environment owing to the entropy effects considered. Moreover, the temperature dependence of the heat capacity, Debye temperature and thermal expansion coefficient of ordered and disordered structures are discussed. © 2013 Springer-Verlag Berlin Heidelberg.

Number of references: 28

Main heading: Germanium

Controlled terms: Alloys - Silicon - Thermodynamic properties

Uncontrolled terms: Disordered structures - Entropy effects - First principles method - First-principles investigations - Formation energies - Temperature dependence - Thermal expansion coefficients - Thermodynamic instability

Classification code: 531.1 Metallurgy - 641.1 Thermodynamics - 712.1.1 Single Element Semiconducting Materials - 804 Chemical Products Generally

Numerical data indexing: Temperature 0.00e+00K

DOI: 10.1007/s00339-013-7847-4

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

213.

Accession number: 20151000612059

Title: The superconvergence analysis of the nonconforming mixed finite element method for quasilinear viscoelasticity equations

Authors: Lv, Jinfeng¹ ; Hu, Guijiang² ; Kong, Liang¹ ; Ren, Yunli¹

Author affiliation:

1 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, No. 360, West Hebei Street, Qinhuangdao, China

2 Qinhuangdao Branch, China Unicom, Qinhuangdao, China

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 9

Issue: 3

Issue date: 2015

Publication year: 2015

Pages: 855-860

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: The quasilinear viscoelasticity equation plays an important role in the field of seismic survey. In this paper, we establish a new stable nonconforming mixed finite element scheme for it, in which a new nonconforming rectangular element and the bilinear finite element are taken as the approximate spaces, respectively. The superconvergence analysis of both approximations in L2 norm is obtained using the construction

properties of the elements and a special elliptic projection. © 2015, ICIC International.

Number of references: 12

Main heading: Finite element method

Controlled terms: Viscoelasticity

Uncontrolled terms: Elliptic projection - Mixed finite element methods - Mixed finite elements - Quasi-linear viscoelasticity - Seismic surveys - Super-convergence

Classification code: 421 Strength of Building Materials; Mechanical Properties - 921.6 Numerical Methods

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

214.

Accession number: 20160601905892

Title: Investigation on art image recognition with the combined methods

Authors: Han, Bo¹ ; Hao, Jianbin² ; Song, Cong¹

Author affiliation:

- 1 Art institute, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 College of Art and Design, Yanshan University, Qinhuangdao, China

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 10

Issue: 12

Issue date: 2015

Publication year: 2015

Pages: 413-424

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Chinese ancient art is extremely developed, and includes many kinds with different development levels, varieties. Due to the long time passed since the make time, many art products become blurred. Then, how to repair and processing them is a very important work. With the development of computer technology, the researchers conducted in-depth investigation on image recognition technology, and a lot of technologies have been developed, which can be used in the image processing. In this paper, a new combined recognition method for artistic image has been developed. Template matching method is used to match and correct the art image. This method can process the fuzzy art image into clear images. According to the practical verification, the validity of the method has been proven. © 2015 SERSC.

Number of references: 25

Main heading: Image matching

Controlled terms: Image processing - Image recognition - Template matching

Uncontrolled terms: Art image - Combination - Computer technology - Gray matching
- Image recognition technology - Recognition - Recognition methods - Template matching method

Classification code: 723 Computer Software, Data Handling and Applications

DOI: 10.14257/ijmue.2015.10.12.39

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

215.

Accession number: 20150400443958

Title: Hierarchical porous Co₃O₄@Co_xFe_{3-x}O₄ film as an advanced electrocatalyst for oxygen evolution reaction

Authors: Gu, Yaohang¹ ; Jia, Dandan¹ ; Peng, Youshun¹ ; Song, Shitao¹ ; Zhao, Yongguang¹ ; Zhang, Jianping¹ ; Wang, Dongjun²

Author affiliation:

- 1 Department of Chemical Engineering, Hebei Normal University of Science and Technology, West Hebei Street, Qin Huangdao, China
- 2 Department of Instruments and Analysis, Hebei Normal University of Science and Technology, West Hebei Street, Qin Huangdao, China

Corresponding author: Gu, Yaohang

Source title: RSC Advances

Abbreviated source title: RSC Adv.

Volume: 5

Issue: 12

Issue date: 2015

Publication year: 2015

Pages: 8882-8886

Language: English

E-ISSN: 20462069

CODEN: RSCACL

Document type: Journal article (JA)

Publisher: Royal Society of Chemistry

Abstract: Fabricating a delicate structure for water oxidation is critical for developing highly efficient electrocatalysts, which hold significant promise for energy conversion devices. Herein, we show an effective approach for constructing a $\text{Co}_3\text{O}_4@\text{Co}_x\text{Fe}_{3-x}\text{O}_4$ hierarchical nanostructure with obviously improved electrocatalytic activity relative to $\text{Co}_x\text{Fe}_{3-x}\text{O}_4$ nanoplate and Co_3O_4 nanowire films. The enhancement is attributed to the formation of secondary $\text{Co}_x\text{Fe}_{3-x}\text{O}_4$ nanoplates outside of the Co_3O_4 nanowires, leading to a fantastic porous architecture that results in a more active electrocatalyst. © The Royal Society of Chemistry 2015.

Number of references: 41

Main heading: Cobalt

Controlled terms: Electrocatalysts - Nanostructures - Nanowires

Uncontrolled terms: Effective approaches - Electrocatalytic activity - Energy conversion

devices - Hierarchical Nanostructures - Hierarchical porous - Oxygen evolution reaction - Porous architectures - Water oxidation

Classification code: 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 761 Nanotechnology - 803 Chemical Agents and Basic Industrial Chemicals - 933 Solid State Physics

DOI: 10.1039/c4ra13122c

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

216.

Accession number: 20151600746701

Title: Electron transport properties of Mg₂Si under hydrostatic pressures

Authors: Zhu, Yan^{1, 2}; Zhang, Xin-Yu¹; Zhang, Su-Hong¹; Ma, Ming-Zhen¹; Liu, Ri-Ping¹; Tian, Hong-Yan²

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, China

2 The Department of Physics, Hebei Normal University of Science & Technology, Qinhuangdao, China

Corresponding author: Zhang, Xin-Yu

Source title: Wuli Xuebao/Acta Physica Sinica

Abbreviated source title: Wuli Xuebao

Volume: 64

Issue: 7

Issue date: April 5, 2015

Publication year: 2015

Article number: 077103

Language: Chinese

ISSN: 10003290

CODEN: WLHPAR

Document type: Journal article (JA)

Publisher: Institute of Physics, Chinese Academy of Sciences

Abstract: The electronic and thermoelectric properties of Mg₂Si under hydrostatic pressures have been investigated using the first principles calculations with general potential linearized augmented plane-wave method and the semiclassical Boltzmann theory with the rigid band approach and the constant scattering time relaxation approximation. In this work, the hydrostatic pressure is simulated by applying equiaxial strain method for the cubic anti-fluorite structure of Mg₂Si in space group Fm $\bar{3}$ m. The strain values ranging from -0.03 to 0.03 describe the compressive and tensile Processes under pressure. The band structure, electrical conductivity, Seebeck coefficient and power factor have been calculated and analyzed in detail. From the band structure in Mg₂Si one can see that the bottom of the conduction band shows significant changes under strains. Especially, when the strain is up to 0.02, there are two twofold-degeneracy states occurring at the center of the Brillouin zone. The top of the valence band shows a slight change due to the strain effect. For the unstrained structure, our calculated thermoelectric data are in accordance with other reports. Moreover, the results indicate that when the value of strain is up to 0.02, the transport properties get an optimal functioning of Mg₂Si due to electron doping. At 300 K, the Seebeck coefficient improves obviously and comes up to 126%. And the power factor is up to 47% (45%) at T = 300 K (700 K). Consequently, the thermoelectric properties can be improved through applying negative pressures to the Mg₂Si crystal. For the case of hole doping, the transport parameters change obviously at a small strain value, and change gently at a high strain values. When the strain is up to 0.01, the Seebeck coefficient reaches the maximum value 439 μ V/K-1. But, the power factor only increases 0.9%-2%. Hence, we can conclude that the hydrostatic pressures have a slight influence on the thermoelectric properties of hole-doped materials. ©, 2015 Chinese Physical Society.

Number of references: 21

Page count: 6

Main heading: Structural properties

Controlled terms: Band structure - Calculations - Electric power factor - Electron transport properties - Hydraulics - Hydrostatic pressure - Seebeck coefficient - Silicon - Strain - Thermoelectric equipment - Thermoelectricity - Transport properties

Uncontrolled terms: Electrical conductivity - First principles - First-principles calculation - Fluorite structure - Negative pressures - Potential linearized augmented plane waves - Thermoelectric properties - Transport parameters

Classification code: 408 Structural Design - 421 Strength of Building Materials; Mechanical Properties - 615.4 Thermoelectric Energy - 631.1.1 Liquid Dynamics - 632.1 Hydraulics - 701.1 Electricity: Basic Concepts and Phenomena - 706 Electric Transmission and Distribution - 712.1.1 Single Element Semiconducting Materials - 721 Computer Circuits and Logic Elements - 723 Computer Software, Data Handling and Applications - 921

Mathematics - 931.2 Physical Properties of Gases, Liquids and Solids - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 933 Solid State Physics - 951 Materials Science

Numerical data indexing: Percentage 1.26e+02%, Percentage 4.70e+01%, Percentage 9.00e-01% to 2.00e+00%, Temperature 3.00e+02K

DOI: 10.7498/aps.64.077103

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

217.

Accession number: 20153301179908

Title: White light emission from $\text{CaBi}(\text{PO})_7$: Dy^{3+} single-phase phosphors for light-emitting diodes

Authors: Zhang, Z.W.1, 2 ; Song, A.J.2 ; Yue, Y.1 ; Zhong, H.1 ; Zhang, X.Y.1 ; Ma, M.Z.1, 2 ; Liu, R.P.1

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, China

2 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Ma, M.Z.

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 650

Issue date: August 17, 2015

Publication year: 2015

Pages: 410-414

Article number: 34709

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Abstract A novel single-phase full-color phosphor $\text{Ca}_9\text{Bi}(\text{PO}_4)_7\text{Dy}_3$ was synthesized by a high-temperature solid-state reaction. X-ray powder diffraction analysis confirmed the phase formation of $\text{Ca}_9\text{Bi}(\text{PO}_4)_7\text{Dy}_3$ material. The photoluminescence (PL) excitation and emission spectra and the concentration dependence of the emission intensity of the phosphor were investigated. The results show that the phosphor could be efficiently excited by near-UV (NUV) light (340-440 nm), exhibiting blue (487 nm) and yellow (577 nm) emissions corresponding to the $^4\text{F}_{9/2} \rightarrow ^6\text{H}_{15/2}$ and $^4\text{F}_{9/2} \rightarrow ^6\text{H}_{13/2}$ transitions, respectively. The luminescence intensity of $\text{Ca}_9\text{Bi}_{1-x}(\text{PO}_4)_7\text{Dy}_3$ phosphor first increased and then decreased with increasing Dy_3 concentration and reached the maximum value at $x = 0.20$. The effect of Mg_2 co-doping concentration on the PL intensity of the as-prepared samples was also investigated. The calculated color coordinates lie in the white region. Therefore, the obtained results suggest that the prepared phosphors have great potential for use as single-phase full-color phosphors for NUV white-light-emitting diodes. © 2015 Elsevier B.V.

Number of references: 18

Main heading: Light emission

Controlled terms: Calcium - Color - Emission spectroscopy - High temperature applications - Light - Light emitting diodes - Luminescence - Phosphors - Solid state reactions - X ray powder diffraction

Uncontrolled terms: Concentration dependence - Emission intensity - Excitation and emission spectra - Full color - High temperature solid-state reaction - Luminescence intensity - White light emission - White light emitting diodes

Classification code: 549.2 Alkaline Earth Metals - 708.3.1 High Temperature Superconducting Materials - 741.1 Light/Optics - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics

Numerical data indexing: Size 3.40e-07m to 4.40e-07m, Size 4.87e-07m, Size 5.77e-07m

DOI: 10.1016/j.jallcom.2015.07.020

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

218.

Accession number: 20143518121541

Title: Preparation, characterization and physical properties of polyvinyl alcohol-layered clay nanocomposites

Authors: Tian, Hong Yan¹ ; Wang, Yue Hui¹ ; Liu, Chun¹ ; Niu, Kui¹

Author affiliation:

¹ Institute of chemical engineering, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 997

Monograph title: Frontiers of Chemical Engineering, Metallurgical Engineering and Materials III

Issue date: 2014

Publication year: 2014

Pages: 433-437

Language: English

ISSN: 10226680

E-ISSN: 16628985

ISBN-13: 9783038351900

Document type: Conference article (CA)

Conference name: 3rd International Conference on Chemical Engineering, Metallurgical Engineering and Metallic Materials, CMMM 2014

Conference date: June 20, 2014 - June 21, 2014

Conference location: Guilin, China

Conference code: 107133

Sponsor: HongKong Control Engineering and Information; International Frontiers of science and; Science Research Association; technology Research Association

Publisher: Trans Tech Publications Ltd

Abstract: This work focused on the preparation of poly (vinyl alcohol) (PVA)/layered double hydroxide (LDH) and LDHSA nanocomposites by casting method. The morphology and interlayer spacing of the composites were characterized. The mechanical properties and the photochemical stability of the film of PVA, PVA/LDH and PVA/LDHSAs have been studied and compared with PVA/MMT nanocomposites reported in previously. The results indicated that the thermal stability and dynamic mechanical properties of the PVA matrix in the PVA/LDH films and PVA/MMT films was enhanced. PVA/LDH films and PVA/OMMT films were shown stable photochemically more than those of pure PVA. © (2014) Trans Tech Publications, Switzerland.

Number of references: 7

Main heading: Nanocomposite films

Controlled terms: Film preparation - Hydrogen bonds - Mechanical properties - Metallurgical engineering - Nanocomposites - Polyvinyl alcohols

Uncontrolled terms: Casting method - Clay nanocomposites - Double hydroxides - Dynamic mechanical property - Interlayer spacings - Layered double hydroxides - Photochemical stability - Poly (vinyl alcohol) (PVA)

Classification code: 531 Metallurgy and Metallography - 712.1 Semiconducting Materials - 761 Nanotechnology - 801.4 Physical Chemistry - 815.1.1 Organic Polymers - 933 Solid State Physics - 951 Materials Science

DOI: 10.4028/www.scientific.net/AMR.997.433

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

219.

Accession number: 20142917946137

Title: Vehicle travel time predication based on multiple kernel regression

Authors: Xu, Wenjing1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Xu, W.

Source title: Journal of Networks

Abbreviated source title: J. Netw.

Volume: 9

Issue: 7

Issue date: 2014

Publication year: 2014

Pages: 1921-1926

Language: English

ISSN: 17962056

Document type: Journal article (JA)

Publisher: Academy Publisher

Abstract: With the rapid development of transportation and logistics economy, the vehicle travel time prediction and planning become an important topic in logistics. Travel time prediction, which is indispensable for traffic guidance, has become a key issue for researchers in this field. At present, the prediction of travel time is mainly short term prediction, and the predication methods include artificial neural network, Kaman filter and support vector regression (SVR) method etc. However, these algorithms still have some shortcomings, such as highcomputationcomplexity, slow convergence rate etc. This paper exploits the learning ability of multiple kernel learning regression (MKLR) in nonlinear prediction processing characteristics, logistics planning based on MKLR for vehicle travel time prediction. The method for Vehicle travel time prediction includes the following steps: (1) preprocessing historical data; (2) selecting appropriate kernel function, training the historical data and performing analysis;(3) predicting the vehicle travel time based on the trained model. The experimental results show that, through the analysis of using different methods for prediction, the vehicle travel time prediction method proposed in this paper, archives higher accuracy than other methods. It also illustrates the feasibility and effectiveness of the proposed prediction method. © 2014 ACADEMY PUBLISHER.

Number of references: 15

Main heading: Vehicles

Controlled terms: Forecasting - Logistics - Neural networks - Regression analysis - Time varying control systems - Transportation - Travel time

Uncontrolled terms: Multiple Kernel Learning - Non-linear predictions - Predication methods - Short term prediction - Support vector regression (SVR) - SVR - Travel time prediction - Vehicle travel time prediction

Classification code: 432 Highway Transportation - 723.4 Artificial Intelligence - 731.1 Control Systems - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing - 922.2 Mathematical Statistics

DOI: 10.4304/jnw.9.7.1921-1926

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

220.

Accession number: 20150500473790

Title: Development and research on remote online education information system based on web

Authors: Liu, Min¹ ; Cao, Jing¹ ; Xue, Yanru¹ ; Yao, Yinghua¹ ; Zhao, Xuezu¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei, China

Corresponding author: Liu, Min

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 12

Issue date: 2014

Publication year: 2014

Pages: 312-318

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: Remote education is a way of developing education-teaching activities, which transmits outstanding teaching resources to massive students scattered in different time and space by the Internet, satellite and other methods of communication technologies. The Internet is the most convenient way to participate in distance learning. This paper applies B/S three-layer architecture and ADO data access technology to complete the design of the remote online education information system based on Web. The system according to the actual business needs of remote education, carry on the design based on the role of application and division of the task, and it composed of modules of courseware on demand, online management, online examination, online exercise, teacher management, student management, etc.

Number of references: 9

Main heading: E-learning

Controlled terms: Curricula - Distance education - Education - Engineering education - Information systems - Internet - Social networking (online) - Students - Teaching - Web Design

Uncontrolled terms: Communication technologies - On-line education - On-line examinations - Remote education - Student management - Teaching activities - Teaching resources - Threelayer architecture

Classification code: 723 Computer Software, Data Handling and Applications - 901.2 Education - 903.2 Information Dissemination

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

221.

Accession number: 20152100863580

Title: Development and research on remote online education information system based on web

Authors: Liu, Min¹ ; Cao, Jing¹ ; Xue, Yanru¹ ; Yao, Yinghua¹ ; Zhao, Xuezu¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei, China

Corresponding author: Yao, Yinghua

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 12

Issue date: 2014

Publication year: 2014

Pages: 650-656

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: Remote education is a way of developing education teaching activities which transmits outstanding teaching resources to massive students scattered in different time and space by the Internet, satellite and other methods of communication technologies. The Internet is the most convenient way to participate in distance learning. This paper applies B/S three layer architecture and ADO data access technology to complete the design of the remote online education information system based on Web. The system according to the actual business needs of remote education, carry on the design based on the role of application and division of the task, and it composed of modules of courseware on demand, online management, online examination, online exercise, teacher management, student management, etc.

Number of references: 10

Main heading: E-learning

Controlled terms: Curricula - Distance education - Education - Engineering education -

Information systems - Internet - Social networking (online) - Students - Teaching

Uncontrolled terms: Communication technologies - On-line education - On-line examinations - Remote education - Student management - Teaching activities - Teaching resources - Threelayer architecture

Classification code: 723 Computer Software, Data Handling and Applications - 901.2 Education - 903.2 Information Dissemination

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

222.

Accession number: 20151500737095

Title: The shallows of the grasp of the tendency of the development of art education and the countermeasures to the construction of art curriculum

Authors: Ma, Haimin1 ; Wang, Yang1 ; Li, Jie1 ; Song, Yanru2

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 2 Hebei Vocational and Technical College Of Building Materials, Qinhuangdao, Hebei, China

Source title: BioTechnology: An Indian Journal

Abbreviated source title: Biotechnol. An Indian J.

Volume: 10

Issue: 8

Issue date: 2014

Publication year: 2014

Pages: 2822-2830

Language: English

ISSN: 09747435

Document type: Journal article (JA)

Publisher: Trade Science Inc, 126,Prasheel Park,Sanjay Raj Farm House,Nr. Saurashtra Unive, Rajkot, Gujarat, 360 005, India

Abstract: Art education is one of the most indispensably important branches of education. Since the 21st century, education has developed quickly. And as the enrollment increases, the development of art education profession quickens rapidly. However, many problems have risen at the same time. By the analysis of the current situation of art education, this paper will figure out the tendency of its development and according to the tendency, we will try to establish the art curriculum. After the calculation of Analytical Hierarchy Process, we will find out the countermeasures and give advice on the curriculum based on the calculation of the summarizing of the countermeasures. © Trade Science Inc.

Number of references: 9

Main heading: Education

Controlled terms: Curricula

Uncontrolled terms: AHP - Analytical Hierarchy Process - Art curriculums - Art educations - Current situation - Development tendency

Classification code: 901.2 Education

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

223.

Accession number: 20145100345814

Title: Boundary detection method for large-scale coverage holes in wireless sensor network based on minimum critical threshold constraint

Authors: Jing, Rong¹ ; Kong, Lingfu¹ ; Kong, Liang²

Author affiliation:

1 School of Information Science and Engineering, Yanshan University, Hebei, China

2 School of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Hebei, China

Corresponding author: Jing, Rong

Source title: Journal of Sensors

Abbreviated source title: J. Sensors

Volume: 2014

Issue date: 2014

Publication year: 2014

Article number: 985854

Language: English

ISSN: 1687725X

E-ISSN: 16877268

Document type: Journal article (JA)

Publisher: Hindawi Publishing Corporation, 410 Park Avenue, 15th Floor, 287 pmb, New York, NY 10022, United States

Abstract: The existing coverage hole boundary detection methods cannot detect large-scale coverage hole boundary in wireless sensor network quickly and efficiently. Aiming at this problem, a boundary detection method for large-scale coverage holes in wireless sensor network based on minimum critical threshold constraint is proposed. Firstly, the optimization problem of minimum critical threshold is highlighted, and its formulaic description is constructed according to probabilistic sensing model. On the basis of this, the distributed gradient information is used to approximately solve the optimization problem. After that, local-scale rough boundary detection algorithm incorporating the minimum critical threshold and its iterative thinning algorithm are proposed according to blocking flow theory. The experimental results show that the proposed method has low computational complexity and network overhead when detecting large-scale coverage hole boundary in wireless sensor network.

Number of references: 22

Main heading: Wireless sensor networks

Controlled terms: Complex networks - Computational complexity - Iterative methods - Optimization - Problem solving

Uncontrolled terms: Boundary detection method - Critical threshold - Gradient informations - Low computational complexity - Network overhead - Optimization problems - Probabilistic sensing models - Thinning algorithm

Classification code: 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 722 Computer Systems and Equipment - 732 Control Devices - 921 Mathematics

DOI: 10.1155/2014/985854

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

224.

Accession number: 20141517567697

Title: Study on packaging design positioning and methods based on design accuracy

Authors: Li, Ying¹ ; Yao, Kun² ; Song, Cong³

Author affiliation:

- 1 College of Arts, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Art Department, ABa Teachers College, Wenchuan, China
- 3 College of Arts, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Journal of Chemical and Pharmaceutical Research

Abbreviated source title: J. Chem. Pharm. Res.

Volume: 6

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 885-889

Language: English

E-ISSN: 09757384

Document type: Journal article (JA)

Publisher: Journal of Chemical and Pharmaceutical Research, 3/668 Malviya Nagar, Jaipur, Rajasthan, India

Abstract: Packaging industry has a very scientific and rigorous design positioning in the process of

production and manufacturing in order to meet the needs of consumer groups for goods packaging. This article, starting from the basic procedure of package design, focuses on the application and methods of brand positioning, product positioning and consumer positioning in packaging design positioning, enabling designers to design product packaging solutions that meet the market needs more, greatly reducing the package designing time, as well as improving the accuracy, economy and scientificity of package design.

Number of references: 7

Main heading: Packaging

Controlled terms: Product design

Uncontrolled terms: Accuracy - Basic procedure - Design products - Market needs -
Package designs - Packaging designs - Packaging industry - Product positioning

Classification code: 694.1 Packaging, General - 913.1 Production Engineering

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

225.

Accession number: 20151800805438

Title: The orientation-distance based collision detection algorithm of convex polygons

Authors: Zhang, Buying^{1, 2}; Guo, Xijuan¹; Shu, Li³; Liu, Yuanfeng¹

Author affiliation:

- 1 Information Science and Engineering, Yanshan University, No. 438, Hebei Avenue, Qinhuangdao, China
- 2 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, No. 360, West Hebei Street, Qinhuangdao, China
- 3 School of Foreign Languages, Yanshan University, No. 438, Hebei Avenue, Qinhuangdao, China

Corresponding author: Guo, Xijuan

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 9

Issue: 5

Issue date: January 1, 2015

Publication year: 2015

Pages: 1389-1392

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: Fast and accurate collision detection technology has a broad application prospect in the field of path planning of mobile robot, virtual assembly simulation, computer aided design and so on. Minkowski sum is an effective method for accurate collision detection, which detects collision between two geometries through judging the relative location of the origin and their Minkowski sum. In this paper, we put forward a novel collision detection algorithm for two convex polygons, which is based on the concept of orientation-distance and their Minkowski sum. The final experiment results show that the algorithm is effective and robust. © ICIC International

Number of references: 8

Main heading: Algorithms

Controlled terms: Computer aided design - Geometry - Machine design - Motion planning
- Robot programming - Signal detection

Uncontrolled terms: Broad application - Collision detection - Collision detection algorithm
- Convex polygon - Distance-based - Minkowski sum - Relative location - Virtual assembly simulations

Classification code: 601 Mechanical Design - 716.1 Information Theory and Signal Processing - 723 Computer Software, Data Handling and Applications - 921 Mathematics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

226.

Accession number: 20150800553727

Title: Study on optimal design of digital music player based on human-computer interaction

Authors: Chen, Yan1 ; Lv, Min1 ; Guo, Liwei1

Author affiliation:

1 Art Institute, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: International Journal of Signal Processing, Image Processing and Pattern Recognition

Abbreviated source title: Int. J. Signal Process. Image Process. Pattern Recogn.

Volume: 8

Issue: 1

Issue date: 2015

Publication year: 2015

Pages: 135-146

Language: English

ISSN: 20054254

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Through the application of theories and principles of human-computer interaction design system, deficiencies on interaction of digital music player are analyzed; and through the analysis on cognitive features for interaction, hierarchy of needs, and emotional information of target users, the key factors and the relevant data that influence the objective of interaction design are researched, thus facilitating the modern digital music products design to follow up users' physical and mental requirements, balancing the interaction design between human, computer and environment, bringing users more convenient and effective operation and experience, and providing more important theoretical thought and implementation process for humanized design.
© 2015 SERSC

Number of references: 13

Main heading: Human computer interaction

Controlled terms: Design - Optimization - Product design

Uncontrolled terms: Digital - Digital music player - Emotional information - Human computer interaction design - Implementation process - Interaction design - Music players -

Optimal design

Classification code: 408 Structural Design - 461.4 Ergonomics and Human Factors Engineering - 913.1
Production Engineering - 921.5 Optimization Techniques

DOI: 10.14257/ijcip.2015.8.1.14

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

227.

Accession number: 20144500173285

Title: An insight into anti-inflammatory effects of fungal beta-glucans

Authors: Du, Bin^{1, 2, 3}; Lin, Chengyuan¹; Bian, Zhaoxiang¹; Xu, Baojun³

Author affiliation:

- 1 School of Chinese Medicine, Hong Kong Baptist University, Hong Kong, China
- 2 Analysis and Testing Center, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 3 Food Science and Technology Program, Beijing Normal Univ, Hong Kong Baptist Univ. United International College, Zhuhai, Guangdong, China

Corresponding author: Bian, Zhaoxiang

Source title: Trends in Food Science and Technology

Abbreviated source title: Trends Food Sci. Technol.

Volume: 41

Issue: 1

Issue date: January 1, 2015

Publication year: 2015

Pages: 49-59

Language: English

ISSN: 09242244

CODEN: TFTEEH

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: β -Glucans from fungi exhibit a broad spectrum of biological activities including anti-tumor, immune-modulating and anti-inflammatory properties. The anti-inflammatory effect is mediated through the regulation of various inflammatory cytokines, such as nitric oxide (NO), interleukins (ILs), tumor necrosis factor alpha (TNF)- α , interferon gamma (INF)- γ as well as non-cytokine mediator, prostaglandin E2 (PGE2). Up to now, the anti-inflammatory activity of β -glucans has received little attention. It is worthwhile to investigate the anti-inflammatory properties of fungal β -glucans in a separate review, discussing invitro studies, animal studies and human studies on anti-inflammation effects of fungal β -glucans, as well as the structure-anti-inflammatory activity relationships. © 2014 Elsevier Ltd.

Number of references: 69

Main heading: Polysaccharides

Controlled terms: Fungi - Glycoproteins - Nitric oxide - Tumors

Uncontrolled terms: Anti-inflammation - Anti-inflammatories - Anti-inflammatory activity - Anti-inflammatory effects - Broad spectrum - Inflammatory cytokines - Interferon-gamma - Tumor necrosis factor alpha

Classification code: 461.2 Biological Materials and Tissue Engineering - 461.9 Biology - 804.1 Organic Compounds

DOI: 10.1016/j.tifs.2014.09.002

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

228.

Accession number: 20142417813380

Title: A RVR optimized by TSUP-ACO for construction final account prediction

Authors: Wang, Lihuan1 ; Jia, Hui3 ; Xin, Guoming1 ; Ye, Long2

Author affiliation:

- 1 Collage of Horticulture, Shanxi Agricultural University, Taigu 030801, China
- 2 Sculpture Department, Central Academy of Fine Arts, Beijing 100005, China
- 3 Hebei Normal University of Science and Technology, Qinhuangdao 066001, China

Corresponding author: Wang, L. (wanglihuanwlh@163.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 10

Issue: 8

Issue date: April 15, 2014

Publication year: 2014

Pages: 3147-3154

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: A novel construction final account prediction method based on relevance vector regression algorithm (RVR) optimized by ant colony optimization (ACO) with two-stage updating pheromone is presented in this paper, the ACO algorithm has been used to find global minimum, modifications based on the pheromone trail are then applied to each vector. RVR optimized by ACO with two-stage updating pheromone has more robust than classical relevance vector regression algorithm. The experimental results show that the prediction performance for construction final account of the prediction models trained by the training sample sets with 4 dimensional input vector than that of the prediction models trained by the training sample sets with other dimensional input vector, and the prediction performance for construction final account of TSUPACO-RVR than that of classical RVR regardless of dimensions of input vector in the training sample sets. © 2014 Binary Information Press.

Number of references: 13

Main heading: Algorithms

Controlled terms: Ant colony optimization - Artificial intelligence - Forecasting -
Mathematical models - Sampling - Vectors

Uncontrolled terms: ACO - Ant Colony Optimization (ACO) - Classical RVR - Novel construction - Prediction methods - Prediction performance - Regression algorithms - TSUP

Classification code: 723.4 Artificial Intelligence - 801 Chemistry - 921 Mathematics

DOI: 10.12733/jcis9437

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

229.

Accession number: 20152200883693

Title: Influence of ultrafine grinding treatment on the physicochemical and antioxidant properties of Chinese ginger (*Zingiber officinale* Roscoe) dietary fibre

Authors: Zhu, Fengmei¹; He, Baojiang²; Zhao, Xiyan¹; Du, Bin³; Liu, Shaojun¹

Author affiliation:

1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Zhengzhou Tobacco Research Institute of China, National Tobacco Corporation, Zhengzhou, China

3 Analysis and Testing Centre, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Liu, Shaojun

Source title: Agro Food Industry Hi-Tech

Abbreviated source title: Agro Food Ind. Hi-Tech

Volume: 26

Issue: 2

Issue date: March 1, 2015

Publication year: 2015

Pages: 42-45

Language: English

ISSN: 17226996

E-ISSN: 20354606

Document type: Journal article (JA)

Publisher: TeknoScienze, Viale Brianza,22, Milano, 20127, Italy

Abstract: Chinese ginger (*Zingiber officinale* Roscoe) DF powder was obtained by regular grinding and then by ultrafine grinding, whose effects were investigated on the composition, functional and antioxidant properties of Chinese ginger DF products. The results indicated that ultrafine grinding could effectively pulverize the fibre particles to micro-scale. With particle size decrease, the water holding capacity (WHC) and oil binding capacity (OBC) of Chinese ginger DF were significantly ($p < 0.05$) decreased and the water retention (WRC) capacity, swelling capacity and nitrite ion absorption capacity were increased. The antioxidant activities of ginger and DF before and after grinding were in terms of ABTS radical scavenging activity, DPPH radical scavenging activity, ferric reducing antioxidant power (FRAP), oxygen radical absorbance capacity (ORAC) and total phenolic content (TPC). Micronized insoluble DF showed increased ORAC and TPC yet decreased ABTS radical scavenging activity. DPPH and FRAP had no significant change in this paper. One kind of health beneficial DF was obtained with higher soluble DF content, WRC, swelling capacity, nitrite ion absorption capacity and antioxidant activity (ORAC, FRAP and TPC) by ultrafine grinding. This study could be useful for the application of ultrafine grinding technology in food industry.

Number of references: 25

Main heading: Grinding (machining)

Controlled terms: Antioxidants - Food additives - Food processing - Free radicals - Oils and fats - Particle size - Water absorption

Uncontrolled terms: Dietary fibre - FRAP - Ginger - Physicochemical property - Superfine grinding - TPC

Classification code: 606.2 Abrasive Devices and Processes - 802.3 Chemical Operations - 804 Chemical Products Generally - 804.1 Organic Compounds - 822.2 Food Processing Operations - 822.3 Food Products - 943.2 Mechanical Variables Measurements

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

230.

Accession number: 20161702279087

Title: The research of multi-wavelength fiber laser mode competition suppression technology

Authors: Wang, Feng^{1, 2}; Bi, Weihong¹; Fu, Xinghu¹; Jiang, Peng¹; Wu, Yang¹

Author affiliation:

1 School of Information Science and Engineering, Yanshan University, Qinhuangdao, China

2 College of Mechanical Electrical and Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Proceedings of SPIE - The International Society for Optical Engineering

Abbreviated source title: Proc SPIE Int Soc Opt Eng

Volume: 9795

Monograph title: Selected Papers of the Photoelectronic Technology Committee Conferences held June-July 2015

Issue date: 2015

Publication year: 2015

Article number: 97953M

Language: English

ISSN: 0277786X

E-ISSN: 1996756X

CODEN: PSISDG

ISBN-13: 9781628418804

Document type: Conference article (CA)

Conference name: International Conference on Frontiers in International Conference on Frontiers in Terahertz Technology and Applications, and the International Symposium on Surface Topography and Optical Microscopy

Conference date: July 23, 2015 - July 25, 2015

Conference location: Harbin, China

Conference code: 117486

Sponsor: Chinese Academy of Engineering; Chinese Society for Optical Engineering; Harbin Institute of Technology; National Natural Science Foundation of China

Publisher: SPIE

Abstract: Multi-wavelength fiber laser has received more and more attention due to its high quality output laser, good heat dissipation, compact structure, strong resistance to electromagnetic interference. The key of multi-wavelength fiber laser is the suppression of mode competition. In this paper, multi-wavelength fiber laser mode competition suppression technologies have been studied and analyzed. © 2015 SPIE.

Number of references: 16

Main heading: Fibers

Controlled terms: Electromagnetic pulse - Fiber lasers - Heat resistance - Laser modes - Lasers - Surface topography

Uncontrolled terms: Compact structures - Fiber gratings - High quality - Mode competition - Multi wavelength fiber laser - Multi-wavelengths

Classification code: 701 Electricity and Magnetism - 744.1 Lasers, General - 744.4 Solid State Lasers - 931.2 Physical Properties of Gases, Liquids and Solids

DOI: 10.1117/12.2216804

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

231.

Accession number: 20145100345977

Title: A systematic, comparative study on the beneficial health components and antioxidant activities of commercially fermented soy products marketed in China

Authors: Xu, Lu1 ; Du, Bin2 ; Xu, Baojun1

Author affiliation:

1 Food Science and Technology Program, Beijing Normal University-Hong Kong Baptist University United International College, Zhuhai; Guangdong, China

2 Analysis and Testing Center, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei, China

Corresponding author: Xu, Baojun

Source title: Food Chemistry

Abbreviated source title: Food Chem.

Volume: 174

Issue date: May 1, 2015

Publication year: 2015

Pages: 202-213

Language: English

ISSN: 03088146

E-ISSN: 18737072

CODEN: FOCHDJ

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: The objectives of this study are to systematically assess the bioactive substances and overall antioxidant capacities of commercially fermented soy products and to find the relationships between the presence of beneficial components in different types of soybean fermented products. The results show that phenolic profiles increased significantly after fermentation as compared with raw yellow soybeans. Among all the samples, the douchi and fermented black bean sauce had the highest detected antioxidant profiles. Even though the total isoflavone content was reduced in fermented soybean products (794.84 $\mu\text{g/g}$ on average) as compared with raw yellow soybeans (3477.6 $\mu\text{g/g}$), there was an obvious trend of conversion of the glucoside form in raw soybeans into the aglycone-form isoflavones in the fermented soybean products. The highest daidzein and genistein values were found in the "Yangfan" black bean douchi, i.e. 860.3 $\mu\text{g/g}$ and 1025.9 $\mu\text{g/g}$, respectively. The amounts of essential amino acids also were improved in most fermented soybean products. The douchi and black bean fermented products are recommended for consumption due to their abundant bioactive substances.

Number of references: 35

Main heading: Antioxidants

Controlled terms: Amino acids - Flavonoids

Uncontrolled terms: Aglycones - Fermented soy product - Free amino acids - Isoflavones - Phenolics

Classification code: 804.1 Organic Compounds

DOI: 10.1016/j.foodchem.2014.11.014

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

232.

Accession number: 20154801626725

Title: A multi-wavelength fiber laser based on superimposed fiber grating and chirp fiber Bragg grating for wavelength selection

Authors: Wang, Feng^{1, 2}; Bi, Wei-hong^{2, 3}; Fu, Xing-hu^{2, 3}; Jiang, Peng²; Wu, Yang²

Author affiliation:

- 1 College of Mechanical and Electrical Engineering, Hebei Normal University of Science & Technology, Qinhuangdao, China
- 2 School of Information Science and Engineering, Yanshan University, Qinhuangdao, China
- 3 The Key Laboratory for Special Fiber and Fiber Sensor of Heibei Province, Qinhuangdao, China

Corresponding author: Bi, Wei-hong (whbi@ysu.edu.cn)

Source title: Optoelectronics Letters

Abbreviated source title: Optoelectron. Lett.

Volume: 11

Issue: 6

Issue date: November 1, 2015

Publication year: 2015

Pages: 418-420

Language: English

ISSN: 16731905

Document type: Journal article (JA)

Publisher: Springer Verlag

Abstract: In this paper, a new type of multi-wavelength fiber laser is proposed and demonstrated experimentally. Superimposed fiber grating (SIFG) and chirp fiber Bragg grating (CFBG) are used for wavelength selection. Based on gain equalization technology, by finely adjusting the stress device in the cavity, the gain and loss are equal, so as to suppress the modal competition and achieve multi-wavelength lasing at room temperature. The experimental results show that the laser can output stable multi-wavelength lasers simultaneously. The laser coupling loss is small, the structure is simple, and it is convenient for integration, so it can be widely used in dense wavelength division multiplexing (DWDM) system and optical fiber sensors. © 2015, Tianjin University of Technology and Springer-Verlag Berlin Heidelberg.

Number of references: 15

Main heading: Dense wavelength division multiplexing

Controlled terms: Arsenic - Bragg gratings - Fiber Bragg gratings - Fiber lasers - Fibers - Light transmission - Optical data storage - Optical fiber coupling - Optical fibers - Wavelength division multiplexing

Uncontrolled terms: Chirp fiber Bragg grating - Dense wavelength division multiplexing systems - Gain equalization - Multi wavelength fiber laser - Multi-wavelength lasers - Multiwavelength lasing - Super-imposed fiber gratings - Wavelength selection

Classification code: 722.1 Data Storage, Equipment and Techniques - 741 Light, Optics and Optical Devices - 744.4 Solid State Lasers - 804 Chemical Products Generally

DOI: 10.1007/s11801-015-5189-5

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

233.

Accession number: 20141117443757

Title: Proxy caching algorithm based on segment group popularity for streaming media

Authors: Wang, Yubin¹ ; Zhang, Yuhong² ; Gu, Liwei²

Author affiliation:

1 College of Math and Information Science and Technology, Hebei Normal University of Science and

Technology, Qinhuangdao, Hebei, 066004, China

2 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 9

Issue: 2

Issue date: 2014

Publication year: 2014

Pages: 297-308

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Multi-media is more and more popular in all levels of education for its vivid picture and video. Due to the increasing number of videos and pictures in school server, how terminal computers in classrooms access multimedia at low cost is an important problem to solve. A novel dynamic scheduling algorithm of PCASGP (Proxy caching algorithm based on segment group popularity for streaming media). Based on the popularity of the segment group, content of proxy caching would be replaced and data size would in proportion of segment popularity. The cache window size would be updated dynamically with the access time based on the algorithm. Results of simulation shows that the algorithm is quite adaptable and can gain more average number of streaming media objects with less delayed access ratio. © 2014 SERSC.

Number of references: 31

Main heading: Algorithms

Controlled terms: Artificial intelligence - Engineering - Industrial engineering -
Multimedia systems

Uncontrolled terms: Average numbers - Caching algorithm - Computers in classrooms -
Dynamic scheduling algorithms - Education systems - Proxy caching - Proxy caching algorithms -
Segment group popularity

Classification code: 723 Computer Software, Data Handling and Applications - 901 Engineering Profession - 912.1 Industrial Engineering - 921 Mathematics

DOI: 10.14257/ijmue.2014.9.2.30

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

234.

Accession number: 20160201788080

Title: Pile foundation settlement algorithm based on fixed load

Authors: Li, Chunliu^{1, 2}; Lu, Qiang³; Jiang, Mingyue¹

Author affiliation:

1 Institute of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 School of Civil Engineering and Mechanics, Yanshan University, China

3 Environmental Management College of China, China

Source title: International Journal of Earth Sciences and Engineering

Abbreviated source title: Intl. J. Earth Sci. Eng.

Volume: 8

Issue: 4

Issue date: 2015

Publication year: 2015

Pages: 1950-1956

Language: English

ISSN: 09745904

Document type: Journal article (JA)

Publisher: CAFET INNOVA Technical Society, 1-2-18/103, Mohini Mansion, Gagan Mahal Road,, Domalguda, Hyderabad, 500029, India

Abstract: Bridges play an important role in the construction of high-speed rail in China. Along with the leaping development of China's high-speed railway construction, major bridges, even high-speed rail overpasses appear more and more. How to provide the quality of bridges is a key problem to solve in front of scientific and engineering personnel. In a number of key design, foundation settlement is a classic topics in soil mechanics, and it is also a difficult point to control. This paper presents a new method to calculate Foundation settlement. The method is based on amendments and one-way compression layered approach. In the algorithm, Foundation settlement is initially calculated first and then different correction factors under different condition are used to adjust the initial results. Case study indicates that the method is an effective method. © 2015 CAFET-INNOVA TECHNICAL SOCIETY. All rights reserved.

Number of references: 25

Main heading: Piles

Controlled terms: Algorithms - Bridges - Foundations - Railroad engineering - Railroad plant and structures - Railroad transportation - Settlement of structures - Soil mechanics

Uncontrolled terms: Correction factors - Engineering personnels - Foundation settlement - High - speed railways - High speed rail - Layered approaches - Major bridges - Pile foundation settlements

Classification code: 401.1 Bridges - 408.2 Structural Members and Shapes - 433.1 Railroad Transportation, General - 483.1 Soils and Soil Mechanics - 483.2 Foundations - 681 Railway Plant and Structures - 681.1 Railway Plant and Structures, General - 682 Railroad Rolling Stock

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

235.

Accession number: 20142217769521

Title: Design on multifunctional water-saving mulch planter

Authors: Chen, Li Dong¹ ; Du, Feng Yong² ; Du, Feng Bao³ ; Wang, Wei Zhi⁴

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

2 Hebei Yongfa Hong Tian Machinery Manufacturing Co. Ltd, Tangshan, 063500, China

3 Luannan County Productivity Promotion Center, Tangshan, 063500, China

4 Qinhuangdao Shougang Changbai Jixie Co.Ltd, Qinhuangdao, 066311, China

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 912-914

Monograph title: Frontiers of Advanced Materials and Engineering Technology II

Issue date: 2014

Publication year: 2014

Pages: 628-632

Language: English

ISSN: 10226680

ISBN-13: 9783038350774

Document type: Conference article (CA)

Conference name: 2014 International Conference on Frontiers of Advanced Materials and Engineering Technology, FAMET 2014

Conference date: March 28, 2014 - March 29, 2014

Conference location: Hong kong

Conference code: 105247

Sponsor: HongKong Control Engineering and Information; International Frontiers of science and; Science Research Association; technology Research Association; YaoWenli, Chongqing Xueya Conferences Co.,Ltd (China)

Publisher: Trans Tech Publications

Abstract: In order to improve the seeding efficiency and quality of water-saving mulch planters, a kind of multifunction mulch planter with laying irrigation tape was designed based on duckbill type precision seed metering device. It broke the pattern of single planting machine and realized duplex joint seeding operations. The seeding and film mulching performance were also improved by optimizing the seed metering device and film laying device. The planter has the characteristics of simple operation, less investment, reliable performance and good film-mulching result. The result of field test showed that: the average seed space is 150mm; the working speed is 4.3km/h; the pass rate of grain distance is 96.7%; the vacancy rate is 0.8%, the pass rate of seed number is 99.2%. So the sowing quality of the planter is well. © (2014) Trans Tech Publications, Switzerland.

Number of references: 4

Main heading: Seed

Controlled terms: Engineering technology - Water conservation - Water quality

Uncontrolled terms: Metering devices - Mulch planter - Multifunction - Plastic film mulching - Water - savings

Classification code: 444 Water Resources - 453.2 Water Pollution Control - 821.4 Agricultural Products - 901 Engineering Profession - 902 Engineering Graphics; Engineering Standards; Patents

Numerical data indexing: Percentage 8.00e-01%, Percentage 9.92e+01%

DOI: 10.4028/www.scientific.net/AMR.912-914.628

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

236.

Accession number: 20154101376840

Title: Dual-wavelength fiber laser based on the superimposed fiber grating and chirp grating

Authors: Wang, Feng^{1, 3}; Bi, Wei-Hong^{1, 2}; Jiang, Peng^{1, 2}; Wu, Yang¹; Fu, Xing-Hu^{1, 2}

Author affiliation:

1 School of Information Science and Engineering, Yanshan University, Qinhuangdao, China

2 Key Laboratory for Special Fiber and Fiber Sensor of Heibei Province, Yanshan University, Qinhuangdao, China

3 College of Mechanical Electrical and Engineering, Hebei Normal University of Science & Technology, Qinhuangdao, China

Corresponding author: Bi, Wei-Hong

Source title: Guangdianzi Jiguang/Journal of Optoelectronics Laser

Abbreviated source title: Guangdianzi Jiguang

Volume: 26

Issue: 8

Issue date: August 15, 2015

Publication year: 2015

Pages: 1435-1440

Language: Chinese

ISSN: 10050086

CODEN: GUJIE9

Document type: Journal article (JA)

Publisher: Board of Optronics Lasers

Abstract: A new type of dual-wavelength linear cavity fiber laser based on the superimposed fiber grating and chirp fiber Bragg grating (CFBG) is proposed. The fiber laser adopts the superimposed fiber grating whose reflectivity is above 99% and the chirp grating whose reflectivity has sunk place for wavelength selection, and the erbium-doped fiber is used for the gain medium. Based on gain equalization technology, by adjusting the weights on two ends of CFBG, the gain and loss are equal at two wavelengths in the cavity, so as to suppress mode competition and realize double wavelengths lasing at room temperature. The experimental results show that the laser can output stable 1 556.852 nm and 1 557.680 nm dual-wavelength lasers at the same time, the line width is less than 0.1 nm, side mode suppression ratio (SMSR) of the output laser reaches 15 dB, and the stabilities of wavelength and power are very good. The laser coupling loss is small, structure is simple, integration is convenient, so it can be widely used in dense wavelength division multiplexing (DWDM) system and optical fiber sensors. ©, 2015, Board of Optronics Lasers. All right reserved.

Number of references: 17

Main heading: Optical fiber coupling

Controlled terms: Bragg gratings - Dense wavelength division multiplexing - Fiber Bragg gratings - Fiber lasers - Fibers - Light transmission - Optical fibers - Optical waveguides - Reflection - Wavelength division multiplexing

Uncontrolled terms: Chirp fiber Bragg grating - Dense wavelength division multiplexing systems - Dual wavelength - Dual wavelength fiber lasers - Dual wavelength laser - Side mode suppression ratios - Super-imposed fiber gratings - Wavelength selection

Classification code: 741 Light, Optics and Optical Devices - 744.4 Solid State Lasers

Numerical data indexing: Decibel 1.50e+01dB, Percentage 9.90e+01%, Size 1.00e-10m, Size 5.57e-07m, Size 5.58e-07m

DOI: 10.16136/j.joel.2015.08.0348

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

237.

Accession number: 20152600975974

Title: A new method to diagnose defects of cast-in-place concrete piles based on wavelet neural network

Authors: Zhang, Lixin¹ ; Song, Zhibin¹ ; Li, Huijian² ; Yu, Jianjun¹

Author affiliation:

1 College of Urban Construction, Hebei Normal University of Science & Technology, No. 360 West Hebei Street, Qinhuangdao, China

2 School of Civil Engineering and Mechanics, Yanshan University, No. 438 West Hebei Street, Qinhuangdao, China

Source title: ICIC Express Letters, Part B: Applications

Abbreviated source title: ICIC Express Lett Part B Appl.

Volume: 6

Issue: 7

Issue date: June 1, 2015

Publication year: 2015

Pages: 1887-1893

Language: English

ISSN: 21852766

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: To enhance the low accuracy and reliability of conventional stress wave method in the field of cast-in-place concrete pile defect diagnosis, a new method, i.e., Synthesis Energy Method (SEM), is proposed with the use of wavelet neural network (WNN). In this method, first, a WNN is built with the combination of discrete wavelet transform (DWT) and BP neural network (BP-NN), in which the DWT is employed to extract energy spectrums and the BP-NN to train and identify. In particular, to enhance identification effects, each energy spectrum is then employed to construct the synthesis energy vector, in addition with each wave total energy and each defect-amplitude (the amplitude pulsed by the defect in the stress wave); then, stress wave signals (acquired from practical inspection projects) are inputted in the WNN to realize energy spectrum exaction and defect identification; finally, these diagnosis results are valuated by being compared with those of conventional manual method (CMM). Experimental results show that the recognition rates of SEM and CMM are 95.3% and 84.0% respectively, which shows that the accuracy and reliability of SEM enhance greatly compared with CMM. © 2015, ICIC Express Letters Office. All rights reserved.

Number of references: 9

Main heading: Cast in place concrete

Controlled terms: Concretes - Defects - Discrete wavelet transforms - Elastic waves - Neural networks - Pile foundations - Piles - Spectroscopy - Wavelet transforms

Uncontrolled terms: DWT - Energy method - Pile defects - Stress wave - WNN

Classification code: 408.2 Structural Members and Shapes - 412 Concrete - 423 Non Mechanical Properties and Tests of Building Materials - 483.2 Foundations - 723.4 Artificial Intelligence - 751.1 Acoustic Waves - 801 Chemistry - 921.3 Mathematical Transformations - 951 Materials Science

Numerical data indexing: Percentage 8.40e+01%, Percentage 9.53e+01%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

238.

Accession number: 20142117743848

Title: The nonconforming mixed finite element method for a class of nonlinear hyperbolic equations

Authors: Zhang, Buying1 ; Chen, Shaochun2 ; Wang, Jing1

Author affiliation:

1 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Department of Mathematics, Zhengzhou University, Zhengzhou 450052, China

Corresponding author: Zhang, B. (zhang_buying@126.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 10

Issue: 5

Issue date: 2014

Publication year: 2014

Pages: 2043-2050

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: The nonlinear hyperbolic equations can arise from many physical processes and are widely used in practice, such as nuclear reaction dynamics, viscoelastic mechanics, biomechanics and so on. In this paper, we establish a new stable nonconforming mixed finite element scheme for the nonlinear hyperbolic equations, in which a new low order Crouzeix-Raviart type nonconforming rectangular element and the piecewise constant element are taken as the approximate spaces, respectively. The convergence analysis is discussed through a special technology, and the optimal error estimates of both approximations in L2 norm are obtained. © 2014 Binary Information Press.

Number of references: 17

Main heading: Viscoelasticity

Controlled terms: Finite element method - Partial differential equations

Uncontrolled terms: Convergence analysis - Mixed finite element methods - Mixed finite elements - Non-linear hyperbolic equations - Optimal error estimate - Physical process - Piece-wise constants - Reaction dynamics

Classification code: 421 Strength of Building Materials; Mechanical Properties - 921.2 Calculus - 921.6 Numerical Methods

DOI: 10.12733/jcis9394

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

239.

Accession number: 20150500473794

Title: Research on grey correlation analysis model of enterprise human resources competitiveness

Authors: Li, Xiuli1 ; Zhang, Yuhong2 ; Zhao, Sujuan1

Author affiliation:

1 College of finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

2 College of education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Li, Xiuli

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 9

Issue date: 2014

Publication year: 2014

Pages: 339-344

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: Human resources is one of the key indexes in measuring the competitiveness of an enterprise. However, evaluation of enterprise human resource competitiveness, evaluation index system and evaluation model remain a problem in academic and practice. Nowadays, key factors in evaluation of enterprise human resources competitiveness and evaluation index are incomplete and imperfect, and processing methods of corresponding evaluation index is not scientific. Thus, studies on analysis model of enterprise human resource are of great importance. In this paper, an improved grey correlation analysis model of human resource competitiveness was put forward. This model provides relative restrictive factors in analysis of enterprise resource competitiveness, and analysed enterprise competitiveness from the aspects of human resource quality competitiveness, market development competitiveness, management quality competitiveness, etc. and evaluation analysis based on improved grey correlation analysis method was conducted. Its evaluation result can be a basis of selection of human resource developing strategies for direction and of frame of decision-making. Finally, the model and algorithm was proved feasible by implementation of actual case.

Number of references: 14

Main heading: Quality control

Controlled terms: Competition - Correlation methods - Decision making - Enterprise resource management - Human resource management - Models - Personnel

Uncontrolled terms: Competitiveness - Enterprise human resource - Enterprise resources - Evaluating indicators - Evaluation index system - Grey correlation analysis - Improved grey correlation analysis - Model and algorithms

Classification code: 902.1 Engineering Graphics - 911.2 Industrial Economics - 912.2 Management - 912.4 Personnel - 913.3 Quality Assurance and Control - 922.2 Mathematical Statistics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

240.

Accession number: 20143600031532

Title: The effect of process parameters and microstructural changes on a new convenience food – quick-frozen paste-coated mushrooms (*Agaricus bisporus*)

Authors: Liu, Su-Wen¹ ; Chang, Xue-Dong¹ ; Liu, Xiu-Feng¹ ; Jiang, Wen-Hong² ; Ma, Xiao-Feng¹

Author affiliation:

1 Department of Food Engineering, Hebei Normal University of Science and Technology, Qin huangdao; Hebei Province, China

2 Huaxia Greatwall wine co.,Ltd, China Oil & Foodstuffs Corporation (COFCO), Changli; Hebei Province,

China

Corresponding author: Chang, Xue-Dong

Source title: Journal of Food Science and Technology

Abbreviated source title: J Food Sci Technol

Volume: 52

Issue: 3

Issue date: 2015

Publication year: 2015

Pages: 1304-1315

Language: English

ISSN: 00221155

E-ISSN: 09758402

CODEN: JFSTAB

Document type: Journal article (JA)

Publisher: Springer India

Abstract: The technology of quick-freezing paste-coated mushrooms (*Agaricus bisporus*) was studied and optimized. The best microwave pretreatment condition for 1 cm slices, regarding color protection, was 5.4 W/g, for 55, 55–60 and 60 s for mushrooms with 3, 4 and 5 cm diameter caps respectively. For a batch of paste (668.2–1034.6 g), the process parameters considered were oil content (46.6–63.4 g), water content (381–562.6 g) and flour content (166–334 g) with a constant additional content of 30 g starch, 9 g baking powder, 2.6 g carrageenan, 30 g salt and 3 g pepper. These parameters were investigated using response surface methodology (RSM) with a central composite design. The optimal levels of the major paste components were 300 g flour, 432.5 g water and 50 g oil. The freezing time and sensory acceptability for paste-coated *Agaricus bisporus*(PCAB) under the optimized conditions were 7.49 min and 6.2 respectively. The freezing curves of PCAB were established at different temperatures and the freezing rates were calculated to find the freezing characteristics. In addition, the cell structure of PCAB, frozen at $-75\text{ }^{\circ}\text{C}$, the lowest freezing temperature, and studied using transmission electron microscopy, was similar in quality to that of fresh *Agaricus bisporus*. The results suggested that *Agaricus bisporus* can be quick-frozen with a paste coating to produce an acceptable and nutritious convenience food. © 2013, Association of Food Scientists & Technologists (India).

Number of references: 31

Main heading: Fungi

Controlled terms: Coatings - Freezing - Microstructure - Microwaves - Oil shale - Oils and fats - Processed foods - Surface properties - Transmission electron microscopy

Uncontrolled terms: Agaricus bisporus - Central composite designs - Freezing temperatures - Microstructural changes - Microwave pretreatment - Paste coatings - Response surface methodology - Sensory acceptabilities

Classification code: 461.9 Biology - 512.1 Petroleum Deposits - 539 Metals Corrosion and Protection; Metal Plating - 711 Electromagnetic Waves - 741.3 Optical Devices and Systems - 822.2 Food Processing Operations - 822.3 Food Products - 933 Solid State Physics - 951 Materials Science

DOI: 10.1007/s13197-013-1116-6

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

241.

Accession number: 20151700794918

Title: Dimensional synthesis and design of a shoulder joint for fruit and vegetable harvesting manipulator

Authors: Zhang, Liang^{1, 2}; Jin, Zhenlin¹; Li, Shuzhen²

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao, China

2 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Liang

Source title: Journal of Software Engineering

Abbreviated source title: J. Softw. Eng.

Volume: 9

Issue: 2

Issue date: 2015

Publication year: 2015

Pages: 392-400

Language: English

ISSN: 18194311

E-ISSN: 21520941

Document type: Journal article (JA)

Publisher: Academic Journals Inc.

Abstract: In order to improve the performance of a novel shoulder joint for fruit and vegetable harvesting robot, parameter optimization was presented. On the basis of the Jacobian matrix of the parallel mechanism, the global dexterity index and driving performance index which met the workspace requirements and the constrained conditions were used as the optimal objective and the optimization model of the shoulder structure parameters was established. The ant colony algorithm was used to optimize the structure parameters of the mechanism, dimensional synthesis of the shoulder was carried out and the optimal scale parameter values were given. With the mechanism for the prototype, a shoulder joint of humanoid robot is designed. It has the advantages of compact structure, easy manufacturing, strong carrying capacity and lower motion inertia, etc. © 2015 Academic Journals Inc.

Number of references: 17

Main heading: Constrained optimization

Controlled terms: Algorithms - Ant colony optimization - Anthropomorphic robots - Automobile drivers - Fruits - Jacobian matrices - Mechanisms - Optimization - Vegetables

Uncontrolled terms: Ant colony algorithms - Constrained conditions - Dimensional synthesis - Fruit and vegetables - Optimization modeling - Parameter optimization - Performance indices - Shoulder joints

Classification code: 432 Highway Transportation - 601.3 Mechanisms - 723 Computer Software, Data Handling and Applications - 731.5 Robotics - 821.4 Agricultural Products - 921 Mathematics - 961 Systems Science

DOI: 10.3923/jse.2015.392.400

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

242.

Accession number: 20150800540425

Title: The equivalent study of the English translation in information technology according to the perspective of functional translation

Authors: Fan, Rongping1

Author affiliation:

1 College of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Fan, Rongping

Source title: BioTechnology: An Indian Journal

Abbreviated source title: Biotechnol. An Indian J.

Volume: 10

Issue: 11

Issue date: November 1, 2014

Publication year: 2014

Pages: 5235-5243

Language: English

ISSN: 09747435

Document type: Journal article (JA)

Publisher: Trade Science Inc, 126,Prasheel Park,Sanjay Raj Farm House,Nr. Saurashtra Unive, Rajkot, Gujarat, 360 005, India

Abstract: With the fast development of the globalization of science and technology, the connection between China and foreign countries are becoming closer so that the English translation in information technology comes into being and it is widely used as a tool of communication in all the fields. The English translation in information technology according to the perspective of functional translation now has become an important part in the field of scitech English translation and it carries the tough mission of the information communication

technology. This passage explains the related history and the different phases of functional translation. It also introduces the principle of translation and uses principal component analysis to analyze the subjective and objective factor in the English translation in information technology according to the perspective of functional translation. The result of the analysis shows that the main component of the subjective reason that influences the English translation in information technology according to the perspective of functional translation is history and custom cultures. The component of the objective reason that influences the English translation in information technology according to the perspective of functional translation is the language and custom factors. But we need to point out that this passage of the equivalent study of the English translation in information technology according to the perspective of functional translation is not deep enough, and we hope this research can make some promotion for the development of the relative fields. © Trade Science Inc.

Number of references: 8

Main heading: Translation (languages)

Controlled terms: Information technology - Mathematical models - Principal component analysis

Uncontrolled terms: Equivalent study - Foreign countries - Information communication technology - Is history - Science and Technology

Classification code: 903 Information Science - 903.1 Information Sources and Analysis - 921 Mathematics - 922.2 Mathematical Statistics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

243.

Accession number: 20141217483607

Title: Benefits of Chinese electronic waste recycling

Authors: Liu, Bangfan¹ ; Xu, Shui² ; Ma, Xiuli³

Author affiliation:

- 1 Humanities-Law College Yanshan University, Qinhuangdao, China
- 2 Qinhuangdao Vocational and Technical College, Qinhuangdao, China
- 3 Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: WIT Transactions on Engineering Sciences

Abbreviated source title: WIT Trans. Eng. Sci.

Volume: 88

Monograph title: Future Energy, Environment and Materials

Issue date: 2014

Publication year: 2014

Pages: 451-456

Language: English

ISSN: 17433533

ISBN-13: 9781845648572

Document type: Conference article (CA)

Conference name: 2013 International Conference on Future Energy, Environment, and Materials, FEEM 2013

Conference date: December 24, 2013 - December 25, 2013

Conference location: Hong Kong, China

Conference code: 103188

Sponsor: WIT Transactions on Engineering Sciences

Publisher: WITPress

Abstract: With characteristics of abundant, hazard, high potent value and difficult recovery, the electronic waste recycling not only has direct economic benefits but also has important social and environmental values. However, the cost of recycling electronic waste is very high and its impact factors are too many, which led to China's electronic waste recycling process to have been slow. But the benefits of recycling electric waste include: sales revenue of materials produced in the process of electronic waste recycling, heat energy produced in the recycling process. Therefore, China needs to strengthen the recycling of electronic waste utilization not only because of environmental factors but also because of the economic factors. © 2014 WIT Press.

Number of references: 10

Main heading: Recycling

Controlled terms: Economics - Wastes

Uncontrolled terms: Benefits - Economic benefits - Economic factors - Electronic waste
- Electronic waste recycling - Environmental factors - Recycling process - Social and environmental

Classification code: 452.3 Industrial Wastes - 971 Social Sciences

DOI: 10.2495/FEEM20130531

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

244.

Accession number: 20141117443729

Title: Research of proxy cache algorithm in multi-media education system

Authors: Yuhong, Zhang¹ ; Liwei, Gu¹ ; Yubin, Wang²

Author affiliation:

1 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei,066004, China

2 College of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei,066004, China

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 9

Issue: 2

Issue date: 2014

Publication year: 2014

Pages: 15-26

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Multi-media education system is more and more widely used in all levels of education. In order to decrease cost of multi-media system and keep efficiency with increasing multi-media materials, proxy cache algorithm has been widely studied. Based on analysis of existing research of proxy cache results, an improved proxy coaching strategy of prefix cache and postfix merging is proposed. The strategy can dynamically adjust prefix cache size with the object access change. A more effective method of steaming merging has been proposed with multicast used in postfix portion. The results show that the improved strategy can effectively utilize proxy cache resource, shorten time delay and save band width. © 2014 SERSC.

Number of references: 25

Main heading: Proxy caches

Controlled terms: Algorithms - Education - Merging

Uncontrolled terms: Cache algorithms - Education systems - Multi-Media - Prefix caches - Stream merging

Classification code: 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 901.2 Education - 921 Mathematics

DOI: 10.14257/ijmue.2014.9.2.02

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

245.

Accession number: 20152500949813

Title: Influence of Electron Velocity and Hydrogenic Impurity on the Properties of the Bound Magnetopolarons in Quantum Disks in a Magnetic Field

Authors: Zhang, Ying¹ ; Han, Chao¹ ; Xin, Wei¹ ; Eerdunchaolu¹

Author affiliation:

¹ Institute of Condensed Matter Physics, Hebei Normal University of Science & Technology, Qinhuangdao, China

Corresponding author: Zhang, Ying

Source title: Journal of Low Temperature Physics

Abbreviated source title: J. Low Temp. Phys.

Volume: 180

Issue: 5-6

Issue date: June 17, 2015

Publication year: 2015

Pages: 330-341

Language: English

ISSN: 00222291

E-ISSN: 15737357

CODEN: JLTPAC

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: In this article, the influence of the electron velocity, the hydrogenic impurity, and the temperature on the properties of bound magnetopolarons in quantum disks in a magnetic field is studied by using the Lee-Low-Pines-Takda transformation. The results of the numerical calculation indicate that the vibration frequency of bound magnetopolarons λ increases with the increasing resonant frequency of the magnetic field ω_c , the electron-LO phonon coupling strength α , the electron velocity u , and the dielectric constant ratio η ; and decreases with the increasing temperature T and the quantum disks thickness L . The Rashba spin splitting energy of the magnetopolarons $E_{\text{R}}(\pm)$ is composed of the Rashba spin splitting energy of the electron in zero magnetic field $E_{\text{SO}}(\pm)$ and the additional energy $\Delta E_{\text{R-ph}}$ caused by LO phonon effect. The bound magnetopolarons interaction energy $E_{\text{e-ph}}$ is composed of the electron-LO phonon interaction energy (Formula presented.), the additional energy (Formula presented.) caused by the electron velocity, and the additional energy (Formula presented.) caused by hydrogenic impurity. The absolute values of the (Formula presented.), and (Formula presented.) increase with the increasing resonant frequency of the external magnetic field ω_c , the electron-LO phonon coupling strength α , the electron velocity u , and the dielectric constant ratio η ; and decrease with the increasing temperature T and the quantum disks thickness L . The influences of the electron-LO phonon interaction and the Rashba spin-orbit coupling effect cannot be ignored when studying bound magnetopolarons in quantum disks. The electron-LO phonon interaction is greatly influenced by the electron velocity u , the dielectric constant ratio η , the temperature T , and the quantum disks thickness L . But the Rashba spin-orbit interaction of polarons mainly depends on the electron velocity u and the Rashba spin-orbit coupling strength αR . © 2015, Springer Science+Business Media New York.

Number of references: 24

Main heading: Electrons

Controlled terms: Magnetic fields - Magnetism - Natural frequencies - Phonons -
Temperature distribution - Velocity

Uncontrolled terms: Electron velocity - Hydrogenic impurities - Orbit coupling -
Quantum disks - Quantum size effects - Temperature dependence

DOI: 10.1007/s10909-015-1317-7

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

246.

Accession number: 20142017721001

Title: The integration of supply chain under the environment of E-commerce based on the deteriorating inventory model

Authors: Liu, Zhaohui1 ; Li, Xiuli2 ; Xu, Zhiku2

Author affiliation:

1 Pupillary workroom Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of u- and e- Service, Science and Technology

Abbreviated source title: Int. J. u e Serv. Sci. Technol.

Volume: 7

Issue: 2

Issue date: 2014

Publication year: 2014

Pages: 51-62

Language: English

ISSN: 20054246

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: As the industrial environment becomes more competitive, supply chain management has become essential. The objective of this research is to develop a multi-echelon inventory model for a deteriorating item and to derive an optimal joint total cost. Inventory models for the manufacturer and the retailer were developed when deteriorating rates were constant, and demand rate of customer decreased linearly with time and depended on retailers' current inventory level. The objective was to develop an optimal ordering strategy for retailers to minimize the average total cost of this inventory system. This paper establishes an inventory model of manufacturers and retailers, and gives the optimal production time algorithm. Then, we will carry out simulation test for example. We calculate the system of minimum average total cost that respectively from producers, retailers and integration. Thus, it confirms that the average total cost which from the supply chain integration is lower than from the manufacturer or retailer alone. © 2014 SERSC.

Number of references: 24

Main heading: Inventory control

Controlled terms: Costs - Deterioration - Electronic commerce - Integration -
Manufacture - Optimization - Sales - Supply chain management

Uncontrolled terms: Deteriorating items - Industrial environments - Inventory modeling -
Inventory systems - Multi-echelon inventory - Optimal ordering - Optimal production -
Supply-chain integration

Classification code: 537.1 Heat Treatment Processes - 911 Cost and Value Engineering; Industrial
Economics - 921.2 Calculus - 921.5 Optimization Techniques - 951 Materials Science

DOI: 10.14257/ijunesst.2014.7.2.05

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

247.

Accession number: 20140817345510

Title: A falling detection system with wireless sensor for the elderly people based on ergonomics

Authors: Ye, Zhenhe¹ ; Li, Ying² ; Zhao, Qiaoxiang² ; Liu, Xue³

Author affiliation:

1 College of Mechanical and Electrical Engineering, Agricultural University of HeBei, Baoding, HeBei, 071000, China

2 College of Arts, Hebei Normal University of Science and Technology, Qinhuangdao, 066000, China

3 School of Computer Science, Harbin University of Science and Technology, Harbin, HeiLongJiang, 150080, China

Source title: International Journal of Smart Home

Abbreviated source title: Int. J. Smart Home

Volume: 8

Issue: 1

Issue date: 2014

Publication year: 2014

Pages: 187-196

Language: English

ISSN: 19754094

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society, 20 Virginia Court, Sandy Bay, Tasmania, Australia

Abstract: Fall detection is an important problem in the application research of wireless sensor. The paper presents wireless sensor architecture based human falling detection system especially for elderly people. The falling detection system is implemented using 3-axis acceleration sensor to measures and collects the elderly people activities acceleration and transfer data by zigbee-3G network to remote medical monitoring system platform, which makes a pre-processing method that suspected data is acquired based on one -class SVM classification algorithm. The algorithm analyzed different action which expended different threshold ranges of energy to judgment, and then analyzed the special temporal speed, displacement and angle as an auxiliary criterion for judgment. The experiments show that the application can offer a new guarantee for the elderly health.

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Number of references: 17

Main heading: Sensors

Controlled terms: Algorithms - Zigbee

Uncontrolled terms: 3-axis acceleration - Application research - Fall detection - Monitoring system - One class-SVM - Pre-processing method - SVM classification - Triaxial accelerometer

Classification code: 722.3 Data Communication, Equipment and Techniques - 723 Computer Software, Data Handling and Applications - 801 Chemistry - 921 Mathematics

DOI: 10.14257/ijsh.2014.8.1.20

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

248.

Accession number: 20151700789994

Title: Influence of thickener on the quality of fermentation sour soybean milk

Authors: Cui, Ruijing¹ ; Li, Runfeng¹ ; Liu, Suwen¹

Author affiliation:

¹ College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Journal of the Chinese Cereals and Oils Association

Abbreviated source title: J. Chin. Cereals Oils Assoc.

Volume: 30

Issue: 2

Issue date: February 25, 2015

Publication year: 2015

Pages: 86-91

Language: Chinese

ISSN: 10030174

Document type: Journal article (JA)

Publisher: Editorial Department, Chinese Cereals and Oils Association, China

Abstract: Sour soybean milk as a plant-based protein food more and more get the welcome of consumer. In order to improve the fermented soymilk defects such as bleeding or rarefaction, ensure the stability of sour soybean milk, with its excellent quality to cater to the needs of the people. In this paper, the effect of several commonly used thickener on quality of fermented sour soybean milk is systematically researched. This experiment adopts the single factor of xanthan gum, gelatin, sodium carboxymethyl cellulose (CMC) and carrageenan to study the influence of sour soybean milk quality. On this basis, adopts {3, 2} simplicity form grid method is used for gelatin, sodium carboxymethyl cellulose (CMC), xanthan gum three thickener blends with experiment. By testing the hardness, stickness, water holding ratio and sensory evaluation, get a better ratio of thickener. Results showed that the three kinds of thickener adding amount was 0.4%, the quality of the gelatin, CMC, and xanthan gum ratio of 1:0.89:1.06, sour soybean milk quality is best. The research results showed that the thickener compound plays an important part in improving the stability of fermented sour soybean milk. ©, 2015, Editorial Department, Chinese Cereals and Oils Association. All right reserved.

Number of references: 7

Main heading: Xanthan gum

Controlled terms: Cellulose - Fermentation - Fermented milk - Image quality - Sodium
- Water quality

Uncontrolled terms: Compound - Fermented soymilk - Research results - Sensory
evaluation - Sodium carboxymethyl cellulose - Soybean milks - Thickener - Water holding

Classification code: 453.2 Water Pollution Control - 549.1 Alkali Metals - 741 Light, Optics and Optical
Devices - 802.2 Chemical Reactions - 804.1 Organic Compounds - 815.1.1 Organic Polymers - 822.3 Food
Products

Numerical data indexing: Percentage 4.00e-01%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

249.

Accession number: 20153701264995

Title: Potential applications of Ni_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticles as a drug delivery system

Authors: Lian, Qi¹ ; Zheng, Xue-Fang¹ ; Yang, Hua²

Author affiliation:

1 School of Chemical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Chemistry and Chemical Engineering School, Guangxi University, Nanning, China

Source title: Russian Journal of Physical Chemistry A

Abbreviated source title: Russ. J. Phys. Chem. A

Volume: 89

Issue: 10

Issue date: October 10, 2015

Publication year: 2015

Pages: 1891-1895

Language: English

ISSN: 00360244

CODEN: RJPCBS

Document type: Journal article (JA)

Publisher: Maik Nauka-Interperiodica Publishing

Abstract: Chitosan nanoparticles with magnetic properties can be potentially used in drug delivery systems. Different from the traditional surfactants, the novel magnetic Ni_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticles has the advantage of excellent biodegradation and a high level of controllability. The Ni_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticles with a core-shell structure were prepared successfully. The transmission and scanning electron microscopy images showed that the cubic-shape magnetic Ni_{0.5}Mn_{0.5}Fe₂O₄ particles were encapsulated by the spherical chitosan nanoparticles. The size of the Ni_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticles were all below 100 nm. The saturated magnetization of the Ni_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticles could reach 80 emu/g and showed the characteristics of superparamagnetism at the same time. The amount of bovine serum albumin (BSA) released from the particles at different time intervals was estimated by

the UV spectrophotometric method. The dissolution profile and in vitro release kinetics showed that Ni_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticles were promising for controlled delivery of the drug. © 2015 Pleiades Publishing, Ltd.

Number of references: 25

Main heading: Manganese

Controlled terms: Biodegradation - Body fluids - Chitin - Chitosan - Controlled drug delivery - Drug delivery - Magnetism - Mammals - Nanomagnetism - Nanoparticles - Nickel - Scanning electron microscopy - Superparamagnetism - Surface plasmon resonance

Uncontrolled terms: Bovine serum albumins - Chitosan nanoparticles - Core shell structure - Dissolution profiles - Drug delivery system - Magnetic nano-particles - Saturated magnetization - Scanning electron microscopy image

Classification code: 461 Bioengineering and Biology - 543.2 Manganese and Alloys - 548.1 Nickel - 701.2 Magnetism: Basic Concepts and Phenomena - 708 Electric and Magnetic Materials - 711 Electromagnetic Waves - 741.1 Light/Optics - 761 Nanotechnology - 804.1 Organic Compounds - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 933 Solid State Physics

Numerical data indexing: Size 1.00e-07m

DOI: 10.1134/S0036024415100258

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

250.

Accession number: 20152400941362

Title: Preparation process optimization of asparagus dietary fiber complex using uniform design method

Authors: Yang, Xiaokuan¹ ; Chang, Xuedong¹ ; Li, Yunpeng¹

Author affiliation:

¹ Institute of Food Science and Technology of Hebei Normal University of Science and Technology, Qinhuangdao; Hebei, China

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 15

Issue: 3

Issue date: March 31, 2015

Publication year: 2015

Pages: 89-96

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology

Abstract: In order to improve the asparagus dietary fiber complex (DFC) physiological effects, asparagus dietary fiber (DF) yield and the rate of asparagus DFC cholesterol and nitrite ion adsorption rate of comprehensive score which is indicators of technics on the enzyme alkali method asparagus DFC system to optimize the preparation process, significant factors such as enzyme additive amount, enzymolysis time, enzymolysis temperature, enzymolysis pH value, alkaline hydrolysis time and alkaline hydrolysis temperature influence comprehensive score which was investigated respectively, on the basis of that, uniform design is applied to optimize the preparation conditions and get the regression model. The test results show that, regression model can predict the relationship between the comprehensive score with the 6 factors above, the optimal process conditions are: alpha amylase addition 1.5%, enzymolysis time 81 min, enzymolysis temperature 41, enzymatic pH4.5, alkaline hydrolysis time 185 min, alkaline hydrolysis temperature 69. Under these conditions the asparagus yield of DF was 74.69%, DFC cholesterol absorption rate was 24.25 mg·g⁻¹, the nitrite ion adsorption rate of 5.35 mg·g⁻¹, the comprehensive score of 96.22. ©, 2015, Chinese Institute of Food Science and Technology. All right reserved.

Number of references: 7

Main heading: Alkalinity

Controlled terms: Cholesterol - Enzymes - Fibers - Hydrolysis - Optimization - Physiological models - Regression analysis

Uncontrolled terms: Asparagus - Cholesterol absorption - Comprehensive score - Dietary fibers - Physiological effects - Preparation conditions - Temperature influence - Uniform design

Classification code: 461.1 Biomedical Engineering - 461.2 Biological Materials and Tissue Engineering

- 801.1 Chemistry, General - 801.2 Biochemistry - 802.2 Chemical Reactions - 812 Ceramics, Refractories and Glass - 817 Plastics and Other Polymers: Products and Applications - 921.5 Optimization Techniques - 922.2 Mathematical Statistics

Numerical data indexing: Percentage 1.50e+00%, Percentage 7.47e+01%, Time 1.11e+04s, Time 4.86e+03s

DOI: 10.16429/j.1009-7848.2015.03.012

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

251.

Accession number: 20152600971892

Title: Tribological behaviors of Zr-based bulk metallic glass versus Zr-based bulk metallic glass under relative heavy loads

Authors: Zhong, Hua¹ ; Chen, Jun¹ ; Dai, Luanyue¹ ; Yue, Yun¹ ; Zhang, Zhiwei^{1, 2} ; Zhang, Xinyu¹ ; Ma, Mingzhen¹ ; Liu, Riping¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, China

2 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Ma, Mingzhen

Source title: Intermetallics

Abbreviated source title: Internet

Volume: 65

Issue date: June 23, 2015

Publication year: 2015

Pages: 88-93

Language: English

ISSN: 09669795

CODEN: IERME5

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: As a novel engineering material, bulk metallic glass (BMG) has received much attention. However, the knowledge concerning the tribological behavior of BMG versus BMG under relatively heavy loads is still insufficient. In this study, $Zr_{41}Ti_{14}Cu_{12.5}Ni_{10}Be_{22.5}$ metallic glass pins and discs were prepared by copper-mold suction casting. The dry sliding friction and the wear characteristics of the as-cast Zr-based BMG versus Zr-based BMG were tested under loads of 100, 125 and 150 N, respectively, using a pin-on-disc tribological apparatus at room temperature. The worn surfaces were studied by scanning electron microscopy in order to identify the wear mechanisms. The results showed that both the coefficient of friction and the wear rate increased with both the normal load and the rotational sliding velocity. X-ray diffraction patterns recorded after the tribological experiments indicated that no sliding-induced crystallization occurred. Transmission electron microscopy was also used to confirm the amorphous of the BMGs after sliding tests. In addition, the wear mechanisms changed with the experimental conditions. For a normal load of 100 N, the main mechanisms were abrasive wear, slight grooves and micro-cracks. For higher loads, adhesive wear was predominant, accompanied by abrasive wear and deeper grooves and more micro-cracks. When the rotational sliding velocity was increased, the dominant wear changed from slight grooves to viscous flow and adhesive wear. © 2015 Elsevier Ltd.

Number of references: 46

Main heading: Metallic glass

Controlled terms: Abrasion - Abrasives - Cracks - Electron microscopy - Friction - Glass - Metals - Scanning electron microscopy - Surface properties - Transmission electron microscopy - Tribology - Wear of materials - X ray diffraction - Zirconium

Uncontrolled terms: Coefficient of frictions - Experimental conditions - Induced crystallization - Tribological behaviors - Tribological experiments - Tribological properties - Wear resistant - Zr based bulk metallic glass

Classification code: 421 Strength of Building Materials; Mechanical Properties - 531 Metallurgy and Metallography - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 606.1 Abrasive Materials - 741.1 Light/Optics - 741.3 Optical Devices and Systems - 812.3 Glass - 931 Classical Physics; Quantum Theory; Relativity - 933 Solid State Physics - 933.1.1 Crystal Lattice - 951 Materials Science

Numerical data indexing: Force 1.00e+02N, Force 1.50e+02N

DOI: 10.1016/j.intermet.2015.06.002

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

252.

Accession number: 20150300423343

Title: A novel red-emitting phosphor $\text{Ca}_9\text{Bi}(\text{PO}_4)_7:\text{Eu}^{3+}$ for near ultraviolet white light-emitting diodes

Authors: Zhang, Zhi-Wei¹ ; Liu, Lu¹ ; Song, Shi-Tao¹ ; Zhang, Jian-Ping¹ ; Wang, Dong-Jun¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhi-Wei

Source title: Current Applied Physics

Abbreviated source title: Curr. Appl. Phys.

Volume: 15

Issue: 3

Issue date: March 2015

Publication year: 2015

Pages: 248-252

Language: English

ISSN: 15671739

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: Red phosphors $\text{Ca}_9\text{Bi}_{1-x}(\text{PO}_4)_7:\text{xEu}^{3+}$ ($x = 0.06, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80$ and 1.00) were synthesized by a conventional solid-state reaction (SSR) route. The X-ray diffraction patterns, photoluminescence spectra, ultraviolet-visible reflection spectroscopy, decay time and the International Commission on Illumination (CIE) chromaticity coordinates of these compounds were characterized and analyzed.

The Eu-doped Ca₉Bi(PO₄)₇ phosphors exhibited strong red luminescence which peaks located at 615 nm due to the 5D₀→7F₂ electric dipole transition of Eu³⁺ ions after excitation at 393 nm. Ultraviolet-visible spectra indicated that the band-gap of Ca₉Bi_{0.30}(PO₄)₇:0.70Eu³⁺ is larger than that of Ca₉Bi(PO₄)₇. The results indicate that the phosphor Ca₉Bi_{0.30}(PO₄)₇:0.70Eu³⁺ can be a suitable red-emitting phosphor candidate for LEDs.

Number of references: 31

Main heading: Light emitting diodes

Controlled terms: Calcium - Electric excitation - Energy gap - Europium - Gadolinium compounds - Light - Light emission - Phosphors - Photoluminescence - Solid state reactions - X ray diffraction

Uncontrolled terms: Chromaticity coordinates - Electric dipole transition - International Commission - Photoluminescence spectrum - Red emitting phosphor - Reflection spectroscopy - Ultraviolet-visible spectra - White light emitting diodes

Classification code: 547.2 Rare Earth Metals - 549.2 Alkaline Earth Metals - 701.1 Electricity: Basic Concepts and Phenomena - 741.1 Light/Optics - 802.2 Chemical Reactions - 804.1 Organic Compounds - 931.3 Atomic and Molecular Physics

Numerical data indexing: Size 3.93e-07m, Size 6.15e-07m

DOI: 10.1016/j.cap.2014.12.014

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

253.

Accession number: 20151600764781

Title: Effects of characterization of stipe and cap powders of mushroom (*hypsizygus marmoreus*) prepared by shear and milling superfine grinding methods

Authors: Liu, Suwen¹ ; Zhao, Xiyan¹ ; Chang, Xuedong¹ ; Liu, Xuejiao¹

Author affiliation:

¹ Department of Food Engineering, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei, China

Corresponding author: Chang, Xuedong

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 15

Issue: 1

Issue date: January 31, 2015

Publication year: 2015

Pages: 99-107

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology

Abstract: The powers of dried mushroom (*Hypsizygus marmoreus*) cap and stipe were obtained through mechanically milling and shearing pulverization. Effect of physico-chemical properties for four powers was investigated. The experiments showed that the smaller superfine particle dimension, the higher the fluidity, the water holding capacity and dissolution of soluble protein. Therefore, the nutritive components can be better absorbed by human body. Cap powers possessed higher values in protein, fat and ash content. Compared to shear pulverization, mechanical millings effectively reduced particle size and brought about a narrow and uniform particle size distribution. With the same material, powders from mechanical millings had higher values in specific surface area (cap), the angles of slide, water soluble index, water holding and Protein solubility (55.67%), but lower values in tbulk density and swelling capacities than shear pulverized powder. With the same grinding method, cap powders possessed higher values in water soluble index, swelling capacity, bulk density, protein than stipe powders. Under the same humidity environment, the water activity value of shear pulverization powder is less than the mechanical millings powder. ©, 2015, Chinese Institute of Food Science and Technology. All right reserved.

Number of references: 26

Main heading: Milling (machining)

Controlled terms: Chemical properties - Comminution - Grinding (machining) - Mechanical alloying - Particle size - Particle size analysis - Powders - Proteins - Shear flow

Uncontrolled terms: Micronizations - Mushroom (*Hypsizygus marmoreus*) - Nonlinear

fitting - Physicochemical property - Power

Classification code: 421 Strength of Building Materials; Mechanical Properties - 423 Non Mechanical Properties and Tests of Building Materials - 483 Soil Mechanics and Foundations - 531 Metallurgy and Metallography - 536 Powder Metallurgy - 604.2 Machining Operations - 801 Chemistry - 804 Chemical Products Generally - 804.1 Organic Compounds - 943.2 Mechanical Variables Measurements - 951 Materials Science

Numerical data indexing: Percentage 5.57e+01%

DOI: 10.16429/j.1009-7848.2015.01.016

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

254.

Accession number: 20144900289231

Title: Strong work-hardening behavior induced by the solid solution strengthening of dendrites in TiZr-based bulk metallic glass matrix composites

Authors: Ma, D.Q.1 ; Jiao, W.T.2 ; Zhang, Y.F.1, 3 ; Wang, B.A.1 ; Li, J.1 ; Zhang, X.Y.1 ; Ma, M.Z.1 ; Liu, R.P.1

Author affiliation:

- 1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, China
- 2 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 Hebei Vocational and Technical College of Building Materials, Qinhuangdao, China

Corresponding author: Ma, M.Z.

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 624

Issue date: March 5, 2015

Publication year: 2015

Pages: 9-16

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: A series of TiZr-based bulk metallic glass matrix composites (BMGMCs) with distinguished mechanical properties are successfully fabricated by adding different volume fractions of Ta (Ti_{38.8}Zr_{28.8}Cu_{6.2}Be_{16.2}Nb₁₀ as the basic composition, denoted as Ta_{0.0}-Ta_{8.0}). Along with the growth of precipitated phase, typical dendritic morphology is fully developed in the TiZr-based BMGMCs of Ta_{8.0}. Energy-dispersive spectrometry analysis of the dendrites and glass matrix indicates that the metallic elements of Nb and Ta should preferentially form solid solution into dendrites. The chaotic structure of high-temperature precipitate phase is trapped down by the rapid cooling of the copper-mould. The detected lattice distortions in the dendrites are attributed to the strong solid solution strengthening of the metallic elements of Ti, Zr, Nb, and Ta. These lattice distortions increase the resistance of the dislocation motion and pin the dislocations, thus the strength and hardness of dendrite increase. Dendrites create a strong barrier for the shear band propagation and generate multiple shear bands after solid solution strengthening, thereby providing the TiZr-based BMGMCs with greatly improved capacity to sustain plastic deformation and resistance to brittle fracture. Thus, the TiZr-based BMGMCs possess distinguished work-hardening capability. Among these TiZr-based BMGMCs, the sample Ta_{0.5} possesses the largest plastic strain (E_p) at 20.3% and ultimate strength (σ_{max}) of 2613 MPa during compressive loading. In addition, the sample of Ta_{0.5} exhibits work-hardening up to an ultrahigh tensile strength of 1680 MPa during the tensile process, and then progressively softens until it fractures at a strain of 10.2%.

Number of references: 33

Main heading: Solid solutions

Controlled terms: Brittle fracture - Glass - Mechanical properties - Metallic compounds - Metallic glass - Metallic matrix composites - Microstructure - Plastic deformation - Shear bands - Strain hardening - Tensile strength - Titanium - Zirconium

Uncontrolled terms: Bulk metallic glass composites - Bulk metallic glass matrix composite - Dendritic morphology - Hardening capability - Lattice distortions - Multiple shear bands - Shear band propagation - Solid solution strengthening

Classification code: 421 Strength of Building Materials; Mechanical Properties - 531 Metallurgy and Metallography - 537.1 Heat Treatment Processes - 542.3 Titanium and Alloys - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 804.1 Organic Compounds - 812.3 Glass - 933 Solid State Physics - 951 Materials Science

Numerical data indexing: Percentage 1.02e+01%, Percentage 2.03e+01%, Pressure 1.68e+09Pa,

Pressure 2.61e+09Pa

DOI: 10.1016/j.jallcom.2014.11.099

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

255.

Accession number: 20143618131702

Title: A new method to identify concrete crack depth based on DWT and RBF neural network

Authors: Zhang, Lixin¹ ; Li, Huijian² ; Meng, Deliang² ; Jin, Xiping¹

Author affiliation:

1 College of Urban Construction, Hebei Normal University of Science and Technology, No. 360, West Hebei Street, Qinhuangdao 066004, China

2 School of Civil Engineering and Mechanics, Yanshan University, No. 438, West Hebei Street, Qinhuangdao 066004, China

Source title: ICIC Express Letters, Part B: Applications

Abbreviated source title: ICIC Express Lett Part B Appl.

Volume: 5

Issue: 5

Issue date: October 2014

Publication year: 2014

Pages: 1497-1504

Language: English

ISSN: 21852766

Document type: Journal article (JA)

Abstract: To solve the low accuracy and poor reliability of conventional testing methods in the field of concrete crack depth detection, a new method, i.e., Frequency Energy Method (FEM) is proposed based on energy

attenuation. In this method, firstly, energy spectrums of ultrasonic signals acquired from two specimens are extracted with the use of Discrete Wavelet Transform (DWT); secondly, feature vectors are constructed with these energy spectrums and the corresponding ultrasonic propagation times; then a Radial Basis Function (RBF) neural network is built to train and identify these feature vectors; at last, detection results are valuated by comparing with the detection results of the conventional ultrasonic Time Velocity Method (TVM). In order to estimate the accuracy and reliability of these methods, the average relative errors of TVM and FEM are also defined as ARET and AREF. Experimental results show: in the case of no connected points existing the crack region, the ARET and AREF are 4.9% and 2.8% respectively, i.e., TVM and FEM are both valid and FEM has better accuracy and reliability; in the case of some connected points existing in the crack region, the ARET and AREF are 33.8% and 3.5% respectively, that is to say, FEM is satisfied, but TVM is invalid in this case. © 2014 ICIC International.

Number of references: 10

Main heading: Cracks

Controlled terms: Composite bridges - Concretes - Crack propagation - Discrete wavelet transforms - Radial basis function networks - Reliability - Testing - Ultrasonic testing

Uncontrolled terms: Concrete cracks - DWT - Frequency energy - RBF Neural Network - Ultrasonic detection

Classification code: 412 Concrete - 415 Metals, Plastics, Wood and Other Structural Materials - 421 Strength of Building Materials; Mechanical Properties - 423.2 Non Mechanical Properties of Building Materials: Test Methods - 723.4 Artificial Intelligence - 921.3 Mathematical Transformations

Numerical data indexing: Percentage 2.80e+00%, Percentage 3.38e+01%, Percentage 3.50e+00%, Percentage 4.90e+00%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

256.

Accession number: 20144700233801

Title: Alkyl pectin: Hydrophobic matrices for controlled drug release

Authors: Zheng, Xue-Fang¹ ; Lian, Qi¹ ; Yang, Hua² ; Zhu, Hong³

Author affiliation:

1 College of Chemistry and Chemical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 College of Chemistry and Chemical Engineering, Guangxi University, Nanning, China

3 School of Science, Beijing University of Chemical Technology, Beijing, China

Corresponding author: Lian, Qi

Source title: Journal of Applied Polymer Science

Abbreviated source title: J. Appl. Polym. Sci.

Volume: 132

Issue: 3

Issue date: January 1, 2015

Publication year: 2015

Article number: 41302

Language: English

ISSN: 00218995

E-ISSN: 10974628

CODEN: JAPNAB

Document type: Journal article (JA)

Publisher: John Wiley and Sons Inc., P.O.Box 18667, Newark, NJ 07191-8667, United States

Abstract: Alkyl pectin with various fatty acid (C4-C16) bromides increased its hydrophobic characteristic and made important changes in its structural features. Unmodified pectin exhibited a low degree of order (DO) and a weak tablet-crushing strength. Pectin alkylated with a short chain length (C4) possessed similar properties but exhibited significant swelling. Alkylation with longer side chains (C8-C16) resulted in a higher DO and crushing strength but a lower swelling. The best mechanical characteristics and drug-release properties were found for octanoyl pectin (OP; degree of substitution = 7.06-15.41%) tablets with 20% bovine serum albumin as a tracer. The high stability of these monolithic tablets appeared to be due to hydrophobic interactions between side chains, as shown by a more organized structure. IR spectroscopy and differential scanning calorimetry analyses of OP were consistent with a hydrophobic self-assembling model. The drug dissolution kinetics showed longer release times for higher degrees of functionalization, that is, 35 h (for 10.88% substitution) and 80 h (for 15.41% substitution); this suggested OP excipients as interesting candidates for oral and subdermal pharmaceutical applications.

Number of references: 36

Main heading: Hydrophobicity

Controlled terms: Biological materials - Biomaterials - Body fluids - Chains - Composite materials - Compressive strength - Crushing - Differential scanning calorimetry - Drug products - Fatty acids

Uncontrolled terms: Bovine serum albumins - Controlled drug release - Degree of substitution - Hydrophobic interactions - Mechanical characteristics - Organized structure - Pharmaceutical applications - Short chain lengths

Classification code: 415 Metals, Plastics, Wood and Other Structural Materials - 421 Strength of Building Materials; Mechanical Properties - 461.2 Biological Materials and Tissue Engineering - 462.5 Biomaterials (including synthetics) - 602.1 Mechanical Drives - 801 Chemistry - 802.3 Chemical Operations - 804.1 Organic Compounds - 811 Cellulose, Paper and Wood Products - 931.2 Physical Properties of Gases, Liquids and Solids - 951 Materials Science

Numerical data indexing: Percentage 1.09e+01%, Percentage 1.54e+01%, Percentage 2.00e+01%, Time 1.26e+05s, Time 2.88e+05s

DOI: 10.1002/app.41302

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

257.

Accession number: 20163902848845

Title: Construction and operation of regional logistics public information platform based on cloud computing

Authors: Li, Changming¹ ; Zhang, Xiangdong¹ ; Li, Lijie¹

Author affiliation:

¹ College of Business and Administration, Hebei Normal University of Science & Technology, Qinhuangdao; Hebei Prov, China

Corresponding author: Li, Lijie

Source title: Open Cybernetics and Systemics Journal

Abbreviated source title: Open. Cybern. Syst. J.

Volume: 8

Issue: 1

Issue date: 2014

Publication year: 2014

Pages: 22-28

Language: English

E-ISSN: 1874110X

Document type: Journal article (JA)

Publisher: Bentham Science Publishers B.V., P.O. Box 294, Bussum, 1400 AG, Netherlands

Abstract: In order to realize the social logistics resource integration and provide customized logistics services to the customers, this paper presents a regional logistics public information platform construction scheme based on analyzing the conception and characteristics of cloud computing. A system configuration model of regional logistics public information platform is advanced on the basis of analysis. Technical scheme and system configuration model can be widely used in the construction of regional logistics information system. Finally, a proposal to adopting the mode of Cooperative operation leading by the enterprise is provided combining the development situation of cloud computing and logistics information public platform in china. This paper examines recent patents that awarded from The United States Patent and Trademark Office (USPTO) and State Intellectual Property Office of the P.R.C. The main methodologies used in logistics information public platform have been reviewed in this paper. The following techniques have been covered: (i) Cloud computing system, (ii) logistics information platform, and (iii) operation mode based on Cloud Computing. The qualitative analysis of the work done by various authors has been presented based on (a) public cloud, (b) private cloud, (c) hybrid cloud. © Li et al.

Number of references: 19

Main heading: Distributed computer systems

Controlled terms: Cloud computing - Patents and inventions

Uncontrolled terms: Cooperative operation - Development situations - Logistics information - Logistics resources - Operation mode - Qualitative analysis - System configurations - United States Patent and Trademark Office

Classification code: 722.4 Digital Computers and Systems

DOI: 10.2174/1874110X01408010022

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

258.

Accession number: 20145200379246

Title: Spin Relaxation of an Impurity Polaron in a Parabolic Quantum Dot

Authors: Li, Zhi-Xin¹

Author affiliation:

1 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei, China

Corresponding author: Li, Zhi-Xin

Source title: Journal of Low Temperature Physics

Abbreviated source title: J. Low Temp. Phys.

Volume: 178

Issue: 1-2

Issue date: 2015

Publication year: 2015

Pages: 53-60

Language: English

ISSN: 00222291

E-ISSN: 15737357

CODEN: JLTPAC

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: We have studied theoretically the spin relaxation of an impurity polaron, which arises from the

electron interactions with the longitudinal optical phonon between the sublevel Zeeman splitting of the ground-state, by employing a variational method for a parabolic quantum dot (QD). In fact, this process occurs by the absorption of a deformation potential acoustic phonon. With Rashba spin-orbit coupling, the expression of the spin relaxation rate of an impurity polaron as functions of the radius of QD, the Lande factor parameter, the magnetic field adjusting length has been derived. Results of the numerical calculation show that the spin relaxation rate decreases with increasing the radius of QD and enlarges with increasing the magnetic field adjusting length when the magnetic field adjusting length (Formula presented) $R_b < 0.7 r_0$ (Formula presented). In addition, we find that the spin relaxation rate is an increasing function of the Lande factor parameter. © 2014, Springer Science+Business Media New York.

Number of references: 14

Main heading: Semiconductor quantum dots

Controlled terms: Ground state - Magnetic fields - Phonons - Polarons - Quantum theory - Superconducting films

Uncontrolled terms: Deformation potential - Increasing functions - Longitudinal optical phonons - Numerical calculation - Parabolic quantum dot - Rashba spin-orbit coupling - Spin relaxation - Spin-relaxation rates

Classification code: 701.2 Magnetism: Basic Concepts and Phenomena - 708.3 Superconducting Materials - 714.2 Semiconductor Devices and Integrated Circuits - 931.3 Atomic and Molecular Physics - 931.4 Quantum Theory; Quantum Mechanics - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 933 Solid State Physics - 933.1.1 Crystal Lattice

DOI: 10.1007/s10909-014-1222-5

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

259.

Accession number: 20162102423113

Title: Research on fault diagnosis technology of rotating machinery based on SVM method

Authors: Chen, Chunming¹ ; Yang, Yang¹

Author affiliation:

¹ Hebei Normal University of Science & Technology, Hebei, China

Corresponding author: Chen, Chunming

Source title: International Journal of Simulation: Systems, Science and Technology

Abbreviated source title: Int. J. Simul. Syst. Sci. Technol.

Volume: 16

Issue: 3A

Issue date: June 2015

Publication year: 2015

Pages: 3.1-3.5

Language: English

ISSN: 14738031

E-ISSN: 1473804X

Document type: Journal article (JA)

Publisher: UK Simulation Society, Clifton Lane, Nottingham, NG11 8NS, United Kingdom

Abstract: The occurrence of mechanical failure caused great loss of life and property, the purpose of this paper is to use SVM method to determine the type of mechanical failure, so as to simplify the maintenance process of large equipment. In this paper, we use the nonlinear method of SVM high dimensional space to detect and diagnose the fault. A function is established by using the relationship between the SVM rotating machinery fault and its characteristics, and the type of fault is analysed by function. Different motions of a mechanical fault is demonstrated for different motion characteristics. Through analysing the movement of the volatility and the standard sample chart, then we can determine the fault types, at the same time, it provides a reference for determining the future test optional mechanical failure. © 2015, UK Simulation Society. All rights reserved.

Number of references: 12

Main heading: Fault detection

Controlled terms: Failure (mechanical) - Failure analysis - Machinery - Rotating machinery

Uncontrolled terms: Fault diagnosis technology - High dimensional spaces - Maintenance process - Mechanical failures - Mechanical faults - Motion characteristics - Non-linear methods - Standard samples

Classification code: 601.1 Mechanical Devices

DOI: 10.2013/IJSSST.a.16.3A.03

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

260.

Accession number: 20155101706510

Title: A novel evaluation algorithm based on dynamic-context cooperative quantum-behaved PSO

Authors: Hu, Jiaying¹ ; Wang, Lingyue¹ ; Xiao, Yiqun²

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Hebei Vocational and Technical College of Building Materials, Qinhuangdao, China

Corresponding author: Hu, Jiaying (hujiaiy2009@163.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 11

Issue: 20

Issue date: October 15, 2015

Publication year: 2015

Pages: 7287-7293

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: In dynamic-context cooperative quantum-behaved PSO, the best of these measurement vectors is selected, and set as the context vector. This context vector remains constant throughout the cooperation

procedure. This dynamic update procedure makes best use of new information, which can accelerate the rate of convergence. Dynamic-context cooperative quantum-behaved PSO is applied for art evaluation, and the DCQPSOSVR model is established to perform the art evaluation. The PSOSVR model and the GASVR model can be used to compare with the DCQPSOSVR model. The comparison of the mean evaluation errors among the DCQPSOSVR model, the PSOSVR model and the GASVR model indicates that the mean evaluation error of the DCQPSOSVR model is smaller than that of the PSOSVR model and the GASVR model. Therefore, the DCQPSOSVR model is very suitable for art evaluation. Copyright © 2015 Binary Information Press.

Number of references: 11

Main heading: Vectors

Controlled terms: Algorithms

Uncontrolled terms: Art evaluation - Context vector - Dynamic contexts - Dynamic update - Evaluation algorithm - ON dynamics - PSO - Rate of convergence

Classification code: 921.1 Algebra

DOI: 10.12733/jcis15478

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

261.

Accession number: 20142717896724

Title: Signal measurement error analysis of the bayesian network of mechanical fault detection

Authors: Zhang, Yun Xia¹ ; Lan, Ling¹ ; Wang, Xiao Hui¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Zhang, Y. X. (xyz4418@sina.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 945-949

Monograph title: Advances in Manufacturing Science and Engineering V

Issue date: 2014

Publication year: 2014

Pages: 2183-2186

Language: English

ISSN: 10226680

E-ISSN: 16628985

ISBN-13: 9783038351221

Document type: Conference article (CA)

Publisher: Trans Tech Publications Ltd

Abstract: Based on measurement error of observation nodes is common in mechanical system fault detection, but the traditional denoising method has many shortcomings. This paper introduce the Gibbs sampling method, which can be used to denoise and eliminate measurement error for node discreted information. We discuss it, and expect some promotion in practical application. © (2014) Trans Tech Publications, Switzerland.

Number of references: 4

Main heading: Fault detection

Controlled terms: Bayesian networks - Manufacture - Measurement errors

Uncontrolled terms: De-Noise - De-noising - Denoising methods - Gibbs sampling - Gibbs sampling methods - Mechanical faults - Mechanical systems - Signal measurement

Classification code: 422 Strength of Building Materials; Test Equipment and Methods - 537.1 Heat Treatment Processes - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 922 Statistical Methods

DOI: 10.4028/www.scientific.net/AMR.945-949.2183

Database: Compendex

262.

Accession number: 20145100332176

Title: Erratum: Synthesis of chitosan-gelatin molecularly imprinted membranes for extraction of l-tyrosine (RSC Advances (2014) 4 (42478-42485))

Authors: Zheng, Xue-Fang¹ ; Lian, Qi¹ ; Yang, Hua²

Author affiliation:

1 College of Chemical Engineering, Hebei Normal University of Science and Technology, China

2 College of Chemistry and Chemical Engineering, Guangxi University, Nanning, China

Corresponding author: Yang, Hua

Source title: RSC Advances

Abbreviated source title: RSC Adv.

Volume: 5

Issue: 3

Issue date: 2015

Publication year: 2015

Pages: 2038

Language: English

E-ISSN: 20462069

CODEN: RSCACL

Document type: Journal article (JA)

Publisher: Royal Society of Chemistry

DOI: 10.1039/c4ra90051k

Database: Compendex

263.

Accession number: 20161902347204

Title: The Application of Minimal Set Algorithms Based on Orthogonal Array to the Reliability Testing

Authors: Meng, Qingchuan1 ; Wang, Xizhong1 ; Chen, Xiaoming2 ; Cai, Ning3 ; Li, Zhigang1

Author affiliation:

1 Heilongjiang Province Electronic Information Products, Supervision and Inspection Institute, Harbin, China

2 College of Computer Science and Technology, Harbin Engineering University, Harbin, China

3 College of Foreign Languages Hebei, Normal University of Science and Technology, Qinhuangdao, China

Source title: Proceedings - 2015 International Conference on Network and Information Systems for Computers, ICNISC 2015

Abbreviated source title: Proc. - Int. Conf. Netw. Inf. Syst. Comput., ICNISC

Monograph title: Proceedings - 2015 International Conference on Network and Information Systems for Computers, ICNISC 2015

Issue date: October 28, 2015

Publication year: 2015

Pages: 175-179

Article number: 7311862

Language: English

ISBN-13: 9781479918423

Document type: Conference article (CA)

Conference name: International Conference on Network and Information Systems for Computers, ICNISC 2015

Conference date: January 23, 2015 - January 25, 2015

Conference location: Wuhan, Hubei, China

Conference code: 119025

Publisher: Institute of Electrical and Electronics Engineers Inc.

Abstract: Software testing is an important means to maintain software quality. The issue that how to use the fewest test cases to verify the correctness and reliability of the software is to be considered when designing a test suite. This paper proposes a minimal set algorithm based on orthogonal table (MSABOT). Compared with other algorithms, the MSABOT has the feature that, when used in fast solving for the minimal set, it does not need to be converted into an integer specification and has higher efficiency. The algorithm has been validated in software reliability testing. © 2015 IEEE.

Number of references: 12

Main heading: Software reliability

Controlled terms: Algorithms - Computer networks - Computer software - Computer software selection and evaluation - Information systems - Reliability - Software testing

Uncontrolled terms: Higher efficiency - minimal set - Orthogonal array - Orthogonal table - Reliability testing - Set algorithm - Software Quality - Software reliability testing

Classification code: 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 903.2 Information Dissemination

DOI: 10.1109/ICNISC.2015.112

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

264.

Accession number: 20152600976449

Title: Study on architecture and implementation of port logistics information service platform based on cloud computing

Authors: Li, Changming¹ ; Shen, Jie¹ ; Liu, Yanfang¹

Author affiliation:

¹ College of Business and Administration, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei Prov, China

Source title: International Journal of Future Generation Communication and Networking

Abbreviated source title: Int. J. Future Gener. Commun. Networking

Volume: 8

Issue: 2

Issue date: 2015

Publication year: 2015

Pages: 331-342

Language: English

ISSN: 22337857

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: This paper analyses service objects and functional positioning of port logistics information service platform firstly. The architecture of port logistics information service platform upon cloud computing is proposed Based on the research of the concept and service mode of cloud computing. The system configuration and function implementation on the basis of Windows Azure Platform is further discussed in detail. © 2015 SERSC.

Number of references: 16

Main heading: Computer architecture

Controlled terms: Cloud computing - Information services - Ports and harbors - Windows operating system

Uncontrolled terms: Information service platforms - Paper analysis - Port logistics - Service mode - Service objects - System configurations - Windows azures

Classification code: 407.1 Maritime Structures - 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 903.4 Information Services

DOI: 10.14257/ijfgcn.2015.8.2.27

Database: Compendex

265.

Accession number: 20141517555119

Title: Dynamic scheduling algorithms for streaming media based on proxy caching in education system

Authors: Zhang, Yuhong¹ ; Xu, Zhikun² ; Gao, Yabin²

Author affiliation:

1 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 9

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 85-96

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: With development of digital multimedia, many applications, such as VoD, remote education, and so on, becomes a reality. Multimedia resource in education system becomes very rich. With the increasing number of multimedia files in school server, how terminal computers in classrooms fetch multimedia at fast speed and low cost is an important problem to solve. Multimedia used in education system has a long history. In order to decrease bandwidth consumption, a new method of dynamic schedule algorithm based on patching prefetching and proxy prefetching has been proposed. Proxy cache first use unicast to get data from server, and then, data sending to each terminal computer would adopt multicast. Proxy server pre-fetches the patching data for the subsequent request from the ongoing entire stream and caches them at the buffer. Simulation results show that the algorithm can effectively decrease bandwidth without add space of cache. © 2014 SERSC.

Number of references: 28

Main heading: Multimedia systems

Controlled terms: Bandwidth - Multimedia services - Scheduling algorithms

Uncontrolled terms: Bandwidth consumption - Computers in classrooms - Digital multimedia - Dynamic scheduling algorithms - Education systems - Multimedia resources - Prefix caching - Streaming multimedia

Classification code: 716 Telecommunication; Radar, Radio and Television - 716.1 Information Theory and Signal Processing - 717 Optical Communication - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 921 Mathematics

DOI: 10.14257/ijmue.2014.9.3.09

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

266.

Accession number: 20142717903726

Title: The superconvergence analysis of a nonconforming mixed finite element method for semilinear Sobolev equations

Authors: Zhang, Buyin¹ ; Zhang, Hongwei² ; Li, Na²

Author affiliation:

1 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, No. 360, West Hebei Street, Qinhuangdao 066004, China

2 E and A College, Hebei Normal University of Science and Technology, No. 360, West Hebei Street, Qinhuangdao 066004, China

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 8

Issue: 7

Issue date: July 2014

Publication year: 2014

Pages: 2013-2018

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: The mixed finite element method is an efficient numerical method for solving the Partial Differential Equations. Compared with the standard finite element method, the mixed finite element method can reduce the smooth requirement of approximate solution. In this paper, we establish a new stable nonconforming mixed finite element scheme for a class of semilinear Sobolev equations, in which, a new nonconforming rectangular element and the bilinear element are taken as the discrete spaces, respectively. The superconvergence of both approximations in L2 norm are obtained using the construction properties of the finite elements and a special elliptic projection. © 2014 ISSN 1881-803X.

Number of references: 11

Main heading: Finite element method

Controlled terms: Sobolev spaces

Uncontrolled terms: Approximate solution - Efficient numerical method - Elliptic projection
- Mixed finite element methods - Mixed finite elements - Sobolev equations - Standard finite element
- Super-convergence

Classification code: 921 Mathematics - 921.6 Numerical Methods

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

267.

Accession number: 20153301161986

Title: Distribution characteristics analysis of pressure-arch in horizontal stratified rocks under coal mining conditions

Title of translation: Analiza karakteristika raspodjele tlaka stropa u horizontalno slojevitim stijinama u uvjetima iskapanja ugljena

Authors: Wang, Shu-Ren^{1, 2} ; Li, Ning² ; Li, Chun-Liu^{2, 3} ; Cao, Chen⁴

Author affiliation:

1 Opening Laboratory for Deep Mine Construction, Henan Polytechnic University, 2001 Century Avenue, Jiaozuo; Henan Province, China

2 School of Civil Engineering and Mechanics, Yanshan University, No. 438 Hebei West Street, Haigang District, Qinhuangdao, China

3 Institute of Urban Construction, Hebei Normal University of Science and Technology, No. 360 Hebei West Street, Haigang District, Qinhuangdao, China

4 University of Wollongong, NSW, Australia

Corresponding author: Wang, Shu-Ren

Source title: Tehnicki Vjesnik

Abbreviated source title: Teh. Vjesn.

Volume: 22

Issue: 4

Issue date: August 1, 2015

Publication year: 2015

Pages: 997-1004

Language: English

ISSN: 13303651

Document type: Journal article (JA)

Publisher: Strojarski Facultet

Abstract: The criteria of separation and dislocation of the layered roof in mining are put forward through the simplified mechanical model with weak inter-layers. Considering five different variables, namely the number of layers, the distance from the weak inter-layers to the mine opening, the thickness of the weak inter-layers, the lateral pressure coefficient and the spacing of the bedding planes, the distribution characteristics of the pressure-arch in the horizontal stratified rocks are analyzed during coal mining using FLAC3D. The results show that the newly appeared pressure-arch is composed of the original pressure-arch in each layer and the pressure-arch shape being affected by the weak layer in the surrounding rock of the mine opening. As the distance

between the inter-layers and the coal seam increases, the effect on the pressure-arch is reduced gradually. The thinner inter-layers produce greater impact on the pressure-arch. The lateral pressure coefficient has a great influence on the pressure-arch and a stable pressure-arch could only be formed when the lateral pressure coefficient is in a suitable range. © 2015, Strojariski Facultet. All rights reserved.

Number of references: 16

Main heading: Arches

Controlled terms: Coal - Coal deposits - Coal mines - Numerical analysis - Rocks

Uncontrolled terms: Distribution characteristics - Inter-layers - Lateral pressure coefficient
- Mechanical model - Number of layers - Pressure arches - Stratified rocks - Surrounding rock

Classification code: 408.2 Structural Members and Shapes - 481.1 Geology - 482 Mineralogy - 503
Mines and Mining, Coal - 503.1 Coal Mines - 524 Solid Fuels - 921.6 Numerical Methods

DOI: 10.17559/TV-20141207160855

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

268.

Accession number: 20141117443913

Title: Optional insurance compensation rate selection and evaluation in financial institutions

Authors: Zhikun, Xu1 ; Yanwen, Wang1 ; Zhaohui, Liu2

Author affiliation:

1 College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of u- and e- Service, Science and Technology

Abbreviated source title: Int. J. u e Serv. Sci. Technol.

Volume: 7

Issue: 1

Issue date: 2014

Publication year: 2014

Pages: 233-241

Language: English

ISSN: 20054246

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: With the change of market environment, most enterprises have realized the importance of customer resource. In this paper, we use data mining technology to analyze the influence factor of insurance settlement. First, we establish a customer segmentation structure model, and then use decision tree to find out the main factors that affect the amount of settlement and analyze the customer records. According to the result, we can find that the amount of settlement is mainly influenced by the driving experience and the purpose of using. Based on the analysis, the using of the data-mining tech would improve the work efficiency and the consumer management in insurance institutions, and insurance companies can also formulate the corresponding compensation rate. © 2014 SERSC.

Number of references: 20

Main heading: Data mining

Controlled terms: Decision trees - Insurance - Neural networks - Sales - Software engineering

Uncontrolled terms: Clementine - Consumer management - Customer segmentation - Data mining methods - Data mining technology - Driving experiences - Financial institution - Selection and evaluations

Classification code: 723 Computer Software, Data Handling and Applications - 911.1 Cost Accounting - 911.4 Marketing - 922 Statistical Methods - 961 Systems Science

DOI: 10.14257/ijunesst.2014.7.1.21

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20155101706897

Title: Frequent jump pattern mining based on complex network

Authors: Wang, Lei^{1, 2, 3}; Jiang, Liya^{1, 2}; Dong, Jun^{1, 2}; Huang, Guoyan^{1, 2}; Ren, Jiadong^{1, 2}

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao, China

2 The Key Laboratory for Computer Virtual Technology and System Integration of Hebei Province, Qinhuangdao, China

3 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Wang, Lei (wangl216@163.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 11

Issue: 17

Issue date: September 1, 2015

Publication year: 2015

Pages: 6451-6458

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: Many researchers are devoted to find frequent pattern in static network. Due to these frequent patterns are usually defined as frequent existence patterns which satisfy given support threshold in network. However, the temporal feature in dynamic network is ignored. In this paper, frequent jump pattern (FJP) is proposed, it not only represents frequent pattern but also can show regular behavior in evolving social network. Furthermore, jump patterns are robust against noise in the analysis of dynamical process. We construct matrix of directed graph (MDG) to present the evolution of complex directed network over time. Moreover, a frequent jump pattern searching algorithm (FJPSA) based on MDG is proposed to find dynamic evolution rule of social network. FJP mining is a technique which can be used in many application fields, such as explaining biological evolution and mining customer behavior regularity in social network. Experimental results demonstrate that our method

could effectively mining FJP-graph. © 2015, by Binary Information Press

Number of references: 12

Main heading: Complex networks

Controlled terms: Biology - Directed graphs

Uncontrolled terms: Application fields - Biological evolution - Customer behavior - Dynamic evolution rules - Dynamic patterns - Searching algorithms - Sequential patterns - Support threshold

Classification code: 461.9 Biology - 722 Computer Systems and Equipment - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.12733/jcis15535

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

270.

Accession number: 20142017714581

Title: Model research of p2p VoD system based on fluency

Authors: Wang, Yubin¹ ; Bo, Jingyi¹ ; Xu, Weili²

Author affiliation:

1 College of Math and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

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Source title: International Journal of Signal Processing, Image Processing and Pattern Recognition

Abbreviated source title: Int. J. Signal Process. Image Process. Pattern Recogn.

Volume: 7

Issue: 2

Issue date: 2014

Publication year: 2014

Pages: 153-164

Language: English

ISSN: 20054254

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: In the peer to peer (p2p) VoD system, there are many factors to influence the fluency of video, such as watching behavior, distribution of segments, download rates, data transmission, and so on. Most research concentrates on single factor without considering the interrelation of all the factors. In the paper, factors would be researched separately to find the relation with fluency of video playing. The mechanism can improve the download ratio with condition of keep watching smoothly. The model proposes a precision method to understand users' watching behavior and can help to optimize design in other kinds of p2p application. © 2014 SERSC.

Number of references: 25

Main heading: Peer to peer networks

Controlled terms: Models - Research - Video on demand

Uncontrolled terms: Fluency - Optimize design - P2P applications - P2p vod systems - Peer to peer - VoD

Classification code: 716.4 Television Systems and Equipment - 722 Computer Systems and Equipment - 901.3 Engineering Research - 902.1 Engineering Graphics

DOI: 10.14257/ijcip.2014.7.2.15

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

271.

Accession number: 20143718145846

Title: First-principles study of methanol oxidation into methyl formate on rutile TiO₂(110)

Authors: Lang, Xiufeng^{1, 4}; Wen, Bo^{1, 3}; Zhou, Chuanyao²; Ren, Zefeng³; Liu, Li-Min¹

Author affiliation:

- 1 Beijing Computational Science Research Center, Beijing, 100084, China
- 2 State Key Laboratory of Molecular Reaction Dynamics, Dalian Institute of Chemical Physics, Chinese Academy of Science, 457 Zhongshan Road, Dalian, 116023 Liaoning, China
- 3 International Center for Quantum Materials (ICQM), School of Physics, Peking University, Beijing, 100871, China
- 4 Department of Physics, Hebei Normal University of Science and Technology, Qinghuangdao, 066004, China

Corresponding author: Liu, L.-M. (limin.liu@csrc.ac.cn)

Source title: Journal of Physical Chemistry C

Abbreviated source title: J. Phys. Chem. C

Volume: 118

Issue: 34

Issue date: August 28, 2014

Publication year: 2014

Pages: 19859-19868

Language: English

ISSN: 19327447

E-ISSN: 19327455

Document type: Journal article (JA)

Publisher: American Chemical Society

Abstract: The detailed oxidation of methanol into methyl formate on perfect and defect rutile TiO₂(110) surfaces was explored based on first-principles calculations. Based on the calculated energy barriers of elementary steps, a pathway was identified for methanol oxidation on both surfaces. The reaction proceeds through a direct coupling of methoxy and formaldehyde to produce the intermediate hemiacetal, which leads to methyl formate. Kinetics of elementary steps further shows that methanol dissociation at surface oxygen vacancy greatly changes the reaction rates of the sequential reaction steps on the defect surface, making them quite different from those occurring at the Ti5c sites on both surfaces. In addition, small diffusion barriers of formaldehyde demonstrate that it can move freely from the adsorption sites to the reactive sites on the surfaces to produce the hemiacetal. These findings may provide insights into the complete oxidation mechanism for methanol on TiO₂, and demonstrate a green and benign route for the synthesis of ester directly from alcohols or from alcohols and aldehydes. © 2014

American Chemical Society.

Number of references: 47

Main heading: Surface reactions

Controlled terms: Calculations - Formaldehyde - Methanol - Oxidation - Oxide minerals - Reaction intermediates - Reaction kinetics - Surface defects - Titanium - Titanium dioxide

Uncontrolled terms: Complete oxidation - First-principles calculation - First-principles study - Methanol dissociation - Methanol Oxidation - Oxidation of methanol - Sequential reaction - Surface oxygen vacancies

Classification code: 421 Strength of Building Materials; Mechanical Properties - 542.3 Titanium and Alloys - 721 Computer Circuits and Logic Elements - 723 Computer Software, Data Handling and Applications - 802.2 Chemical Reactions - 804 Chemical Products Generally - 921 Mathematics - 951 Materials Science

DOI: 10.1021/jp505674g

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

272.

Accession number: 20160801983039

Title: Nutrient components analysis of three genotypes Chinese dwarf cherry (*Prunus humilis*) fruits

Authors: Ren, Yan-Jun1 ; Ma, Jian-Jun1

Author affiliation:

1 Analysis and Testing Centre, HeBei Normal University of Science and Technology, Qinhuangdao City, China

Corresponding author: Ma, Jian-Jun

Source title: Advance Journal of Food Science and Technology

Abbreviated source title: Adv. J. Food Sci. Technol.

Volume: 9

Issue: 8

Issue date: 2015

Publication year: 2015

Pages: 603-605

Language: English

ISSN: 20424868

E-ISSN: 20424876

Document type: Journal article (JA)

Publisher: Maxwell Science Publications

Abstract: Taking three genotypes (small-fruit-type, medial-fruit-type and big-fruit-type) Chinese wild dwarf cherry (*Prunus humilis*) which living in the same circumstances as tested materials, the mineral nutrient components and amino acid contents were determined, to provide the basis for wild dwarf cherry germplasm resources development and effective component utilization. The results showed that, Chinese wild dwarf cherry fruits were rich in mineral nutrient and amino acid and the contents were different within three genotypes. The mineral nutrient contents of small-fruit-type fruits were higher than that of big-fruit-type, especially calcium element was most obvious, the maximum was 6751.07 mg/kg and minimum was 581.07 mg/kg. The total amino acid content, essential amino acids content for big-fruit-type higher than the small-fruit-type. Maximum content were respectively 7648.60 mg/100 g and 1307.72 mg/100 g, the essential amino acid content accounted for 19.75~22.83% of total amino acid. The studies suggested that Chinese wild dwarf cherry was a natural and effective calcium and amino acid supplement to people. © Maxwell Scientific Organization, 2015.

Number of references: 10

Main heading: Fruits

Controlled terms: Amino acids - Calcium - Conservation - Mineral resources - Minerals - Nutrients

Uncontrolled terms: Chinese dwarf cherry (*Prunus humilis*) - Component analysis - Component utilization - Essential amino acids - ICP-OES - Mineral nutrients - Nutrient components - Total amino acid contents

Classification code: 482.2 Minerals - 549.2 Alkaline Earth Metals - 804.1 Organic Compounds - 821.4 Agricultural Products

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

273.

Accession number: 20142417818332

Title: Multi hop mechanism used in energy saving for multimedia file transfer in school education system

Authors: Zhou, Zhe1 ; Li, Jianying1 ; Chen, Shuang1

Author affiliation:

1 Colloge of Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 9

Issue: 5

Issue date: 2014

Publication year: 2014

Pages: 93-105

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Multimedia in the network has been fully developed. It used in education also has a long history and resources in education network system become very rich. Now, number of multimedia files in school server is still increasing now. How terminal computers in each place in school get multimedia files at fast speed with low energy consumption is a problem worthy to solve. In order to solve the problem, a new method of dynamic algorithm based on PSO (Particle Swarm Optimization) and ACO (ant colony optimization) method has been developed. This method is based on peer to peer mechanism and can be used in school with different network speed area. In the algorithm, the whole network is firstly divided into several subsystems. Each subsystem would be composed of computers with different network speed. One terminal computer would get

multimedia files through computers with high network speed. This method can get high speed in fetching multimedia files and decrease energy consumption. The method would be firstly used in the education system then popularize into other systems. © 2014 SERSC.

Number of references: 25

Main heading: Peer to peer networks

Controlled terms: Algorithms - Artificial intelligence - Energy utilization - Particle swarm optimization (PSO) - Speed

Uncontrolled terms: ACO - Education networks - Multihop - PSO - Streaming multimedia

Classification code: 525.3 Energy Utilization - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 921 Mathematics - 931.1 Mechanics

DOI: 10.14257/ijmue.2014.9.5.09

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

274.

Accession number: 20152000840252

Title: Synthesis, characterization, and crystal structure of a novel cyanide-bridged heteronuclear Co(III)-Mn(III) complex derived from N,N'-ethylene-bis(chlorosalicylideneimine)

Authors: Shen, X.H.1 ; Zhang, Z.W.1 ; Shao, L.J.1 ; Lian, Q.1 ; Liu, C.1

Author affiliation:

1 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya

Abbreviated source title: Russ. J. Coord. Chem.

Volume: 41

Issue: 5

Issue date: May 1, 2015

Publication year: 2015

Pages: 316-320

Language: English

ISSN: 10703284

CODEN: RJCCEY

Document type: Journal article (JA)

Publisher: Maik Nauka Publishing / Springer SBM

Abstract: With a bis-Schiff base N,N' -ethylene-bis(5-chlorosalicylideneimine) ($H_{2}L$) and $K_{3}[Co(CN)_{6}]$, a novel cyanide-bridged heteronuclear Co(III)-Mn(III) complex was prepared and characterized by elemental analysis, IR spectroscopy and X-ray structure determination (CIF file CCDC no. 1029225). The complex crystallizes in the monoclinic space group $P2_{1}/c$ with unit cell dimensions $a = 10.741(2)$, $b = 14.015(3)$, $c = 15.074(3)$ Å, $\beta = 94.237(2)^{\circ}$, $V = 2263.0(8)$ Å³, $Z = 2$, $R = 0.0441$, and $wR = 0.0999$. Single crystal X-ray diffraction analysis reveals that two $[Mn(L)(OH)_{2}]^{+}$ units are linked through a $[Co(CN)_{6}]^{3-}$ bridge, forming a trinuclear Mn-Co-Mn moiety. The Mn-Co-Mn moieties are further linked through K atoms to form a 1D chain. The chains are stacked through π - π interactions. The Mn and Co atoms are in octahedral coordination, and the K atom is in square planar geometry. © 2015 Pleiades Publishing, Ltd.

Number of references: 23

Main heading: Manganese

Controlled terms: Atoms - Chains - Cobalt - Cobalt compounds - Crystal structure - Cyanides - Ethylene - Functional groups - Geometry - Single crystals - X ray diffraction analysis

Uncontrolled terms: Cyanide-bridged - Monoclinic space groups - Octahedral coordination - Pi interactions - Single crystal X-ray diffraction analysis - Square planar geometry - Unit-cell dimensions - X-ray structure determinations

Classification code: 543.2 Manganese and Alloys - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 602.1 Mechanical Drives - 804.1 Organic Compounds - 804.2 Inorganic Compounds - 921 Mathematics - 931.3 Atomic and Molecular Physics - 933.1 Crystalline Solids - 933.1.1 Crystal Lattice

DOI: 10.1134/S1070328415040077

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

275.

Accession number: 20160601905923

Title: The study of XML functional dependency and multi-valued dependency and inference rules set

Authors: Xiyin, Liu¹ ; Lijun, Cao¹ ; Zhang, Zhongping²

Author affiliation:

1 Hebei Normal University of Science and Technology, China

2 College of Information Science and Engineering, Yanshan University, China

Source title: International Journal of Database Theory and Application

Abbreviated source title: Int. J. Database Theory Appl.

Volume: 8

Issue: 6

Issue date: 2015

Publication year: 2015

Pages: 343-354

Language: English

ISSN: 20054270

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: This paper discusses and defines XML functional dependency and XML multi-valued dependency, making the formal definition of XML functional dependency and XML multivalued dependency and further defines the XML-trivial functional dependency and multivalued dependency. It defines the logical implication, base closures and minimal dependence and gives the set of inference rules that effectiveness and completeness are proved when functional dependency and multi-valued dependency exist simultaneously. © 2015 SERSC.

Number of references: 12

Main heading: XML

Controlled terms: Database systems

Uncontrolled terms: Formal definition - Functional dependency - Inference rules -
Logical implications - Multi-valued - XML functional dependency - XML multivalued dependencies

Classification code: 723.3 Database Systems

DOI: 10.14257/ijdt.2015.8.6.31

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

276.

Accession number: 20152600975245

Title: A grey relational analysis model of scientific research ability on music based on AHP and its realization

Authors: Xiaoxi, Guo¹ ; Yan, Ni² ; Wangjia³

Author affiliation:

- 1 Hebei Normal University of Science and Technology, China
- 2 Science College of the PLA University of Technology, China
- 3 Jincheng Colleges, Nanjing University of Aeronautics and Astronautics, China

Source title: International Journal of Signal Processing, Image Processing and Pattern Recognition

Abbreviated source title: Int. J. Signal Process. Image Process. Pattern Recogn.

Volume: 8

Issue: 5

Issue date: 2015

Publication year: 2015

Pages: 211-222

Language: English

ISSN: 20054254

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: In the process of analyzing scientific research ability on music, many problems present, including that indicators are not comprehensive enough, the model has much subjectivity, the evaluation results are not reliable or the value of quantity of indicators has errors. Thus, this paper proposes a grey relational analysis model of scientific research ability on music based on AHP. It selects out dominant indicators and recessive indicators to evaluate software features and hardware features. A multi-layer evaluation index system for scientific research ability on music is established. AHP is introduced to compute the weight of indicators. After standardization of indicators, a multi-scheme grey relational coefficient model and a grey relational degree model are established according to grey theory to evaluate the level of scientific research ability on music. Proved effective by the case study, this model can realize the evaluation of scientific research ability on music on the computer. © 2015 SERSC.

Number of references: 8

Main heading: Hierarchical systems

Controlled terms: Pattern recognition - Signal processing - Software engineering

Uncontrolled terms: AHP - Evaluation index system - Evaluation results - Grey relational analysis - Grey relational coefficient - Grey relational degree - Grey theory - Scientific researches

Classification code: 716 Telecommunication; Radar, Radio and Television - 716.1 Information Theory and Signal Processing - 723.1 Computer Programming - 961 Systems Science

DOI: 10.14257/ijcip.2015.8.5.22

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

277.

Accession number: 20150500474052

Title: Semantic integrity and K-anonymity

Authors: Huang, Liming¹ ; Song, Jinling¹ ; Gao, Yan² ; Cai, Qianying¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Liaoning Institute of Science and Technology, Benxi, China

Corresponding author: Huang, Liming

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 12

Issue date: 2014

Publication year: 2014

Pages: 282-288

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: The dataset in database have certain semantic commonly, and the semantic need to be satisfied with the form of some constrains, such as functional dependencies (FDs) and multivalued dependencies (MVDs). Nevertheless, the k-anonymity model may be destroyed the semantic integrity in the process of k-anonymization because of the incontinent generalizations. So, in this paper we address the issue of how to preserve the semantic integrity of dataset in the k-anonymization process. We define a new data dependency named k-multiset dependency (K-MSD), which can ensure a dataset satisfies k-anonymity constraint. In addition, we propose K-MSD algorithm to realize k-anonymization through constructing K-MSD between attributes, and propose K-MSD-AG algorithm to preserves FDs or MVDs as while as constructing K-MSD.

Number of references: 16

Main heading: Data privacy

Controlled terms: Semantics

Uncontrolled terms: Data dependencies - FDs - Functional dependency -
K-anonymization - Msd algorithms - Multiset - MVDs - Semantic integrity

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication
- 718 Telephone Systems and Related Technologies; Line Communications - 903.2 Information Dissemination

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

278.

Accession number: 20142917945878

Title: Study on the science and engineering course contribution of employment based on FNN

Authors: Shi, Qiuxiang¹ ; Zhang, Yuhong¹ ; Wang, Liying¹

Author affiliation:

¹ Department of education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Source title: International Journal of u- and e- Service, Science and Technology

Abbreviated source title: Int. J. u e Serv. Sci. Technol.

Volume: 7

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 1-14

Language: English

ISSN: 20054246

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: With the accelerate pace of the reform of higher education, Chinese higher education has been from the "elite education" to "popular education", which brought a series of changes to the object of education, the way of education, educational purpose. While employment of students as an important measure of the effect of our country's higher education, there are more and more domestic universities have taken it to be the ultimate test goal. In this process, how to set up the course system to keep pace with the times has become a hot issue in educational research. In this paper, take salary as an important index to measure the students' employment ability, and through the method of fuzzy neural network for machine learning to construct the model of school courses, professional courses and elective courses contribution degree to employment to study the role of science and engineering courses in the science and engineering graduates employment, hoping to be able to promote the universities curriculum reform, and improve students' learning initiative. © 2014 SERSC.

Number of references: 23

Main heading: Students

Controlled terms: Artificial intelligence - Compensation (personnel) - Curricula - Education computing - Employment - Fuzzy neural networks - Learning systems - Professional aspects - Technical presentations

Uncontrolled terms: Contribution - Contribution degree - Educational research - Employment abilities - FNN - Learning initiatives - Popular educations - Science and engineering

Classification code: 723.4 Artificial Intelligence - 901.1 Engineering Professional Aspects - 901.2 Education - 912 Industrial Engineering and Management - 912.4 Personnel - 913 Production Planning and Control; Manufacturing

DOI: 10.14257/ijunesst.2014.7.3.01

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

279.

Accession number: 20150700512675

Title: Enhancement of electrochemical performance for LiFePO₄cathodes via hybrid coating with electron conductor carbon and lithium ion conductor LaPO₄

Authors: Ma, Zhipeng^{1, 2} ; Peng, Youshun³ ; Wang, Guiling^{1, 2} ; Fan, Yuqian^{1, 2} ; Song, Jianjun^{1, 2} ; Liu, Tingting^{1, 2} ; Qin, Xiujuan^{1, 2} ; Shao, Guangjie^{1, 2}

Author affiliation:

- 1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, China
- 2 Hebei Key Laboratory of Applied Chemistry, College of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao, China
- 3 School of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Qin, Xiujuan

Source title: Electrochimica Acta

Abbreviated source title: Electrochim Acta

Volume: 156

Issue date: February 20, 2015

Publication year: 2015

Pages: 77-85

Language: English

ISSN: 00134686

CODEN: ELCAAV

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: A novel lanthanum phosphate and carbon co-coated LiFePO₄ cathode material successfully prepared via liquid-phase precipitation reaction combined with carbothermal reduction method has been studied in Li⁺ ion batteries. The LiFePO₄ electrode modified by carbon layer deposited with appropriate amount of lanthanum phosphate shows higher reversible capacity and stable cycle performance compared with the LiFePO₄/C electrode. These superior performances are owing to the good conductivity and stability of the hybrid coating layer which enhances the electron and Li⁺ ion transport on the surface of the LiFePO₄ material, thus elevates the transfer kinetics of the electrode. The LiFePO₄/C-LaPO₄(4.0 mol%) electrode showed a stable cyclability and the highest capacity among all the LiFePO₄/C-xLaPO₄ samples. The initial discharge capacity of the LiFePO₄/C-LaPO₄(4.0 mol%) electrode was 150.7, 142.3, 116.6 and 80.3 mA h g⁻¹ at 1, 2, 5 and 10 C rates, respectively. © 2015 Elsevier Ltd. All rights reserved.

Number of references: 49

Main heading: Lithium compounds

Controlled terms: Carbon - Carbothermal reduction - Cathodes - Coatings - Electric discharges - Electrodes - Ions - Lanthanum - Lithium - Lithium alloys

Uncontrolled terms: Carbothermal reduction method - Electrochemical performance - High-rate performance - Hybrid coating - Initial discharge capacities - Lanthanum phosphate - Liquid phase precipitation - Lithium iron phosphates

Classification code: 539 Metals Corrosion and Protection; Metal Plating - 547.2 Rare Earth Metals - 549.1 Alkali Metals - 701.1 Electricity: Basic Concepts and Phenomena - 704.1 Electric Components - 802.3 Chemical Operations - 804 Chemical Products Generally

DOI: 10.1016/j.electacta.2015.01.015

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

280.

Accession number: 20163802829728

Title: Analysis on the evolution of marine innovation collaboration networks

Authors: Qiu, F.X.1, 2

Author affiliation:

1 Hebei University of Technology, Tianjin, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Qiu, F.X.

Source title: Computer, Intelligent Computing and Education Technology - Selected Peer Reviewed Papers From 2014 International Conference on Computer, Intelligent Computing and Education Technology, CICET 2014

Abbreviated source title: Comput., Intell. Comput. Educ. Technol. - Sel. Peer Rev. Pap. Int. Conf. Comput., Intell. Comput. Educ. Technol., CICET

Volume: 1

Volume title: Selected Peer Reviewed Papers from 2014 International Conference on Computer, Intelligent Computing and Education Technology, CICET 2014

Part number: 1 of 2

Issue date: 2014

Publication year: 2014

Pages: 489-492

Language: English

ISBN-13: 9781138026391

Document type: Conference article (CA)

Conference name: International Conference on Computer, Intelligent Computing and Education Technology, CICET 2014

Conference date: March 27, 2014 - March 28, 2014

Conference location: Hong Kong, China

Conference code: 160029

Publisher: CRC Press/Balkema

Abstract: In this paper, the cooperation networks of marine innovation are drew, which include two stages. Overall, along with evolution of cooperation networks, which scales have expanding continually, the proportions of cooperation innovation have increased, and core nodes have growing up and there exist larger cohesive subgroups in the whole network. Secondly, by using the density, degree, centrality, the networks are analyzed meticulously, and the correlations between the indicators are explored. The aims of the paper are to make the cooperation network for marine innovation in China clear, and provide ideas for further optimization of networks. © 2014 Taylor & Francis Group, London.

Number of references: 6

Main heading: Intelligent computing

Controlled terms: Education - Engineering education - Innovation - Networks (circuits)

Uncontrolled terms: Collaboration network - Cooperation - Cooperation networks - Core nodes - Evolution - Evolution of cooperation - Marine - Optimization of network

Classification code: 703.1 Electric Networks - 723.4 Artificial Intelligence - 901.2 Education - 912 Industrial Engineering and Management

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

281.

Accession number: 20143418080567

Title: Origin of dielectric anomaly in double perovskite Ba₂CoNbO₆

Authors: Wang, G.J.1, 2 ; Wang, C.C.1 ; Huang, S.G.1 ; Wang, J.1 ; Liu, L.N.1

Author affiliation:

1 Laboratory of Dielectric Functional Materials, School of Physics and Material Science, Anhui University, Hefei 230601, China

2 College of Physics, Hebei Normal University of Science and Technology, Qinghuangdao 066004, China

Corresponding author: Wang, G.J. (guojingwang111@yahoo.com)

Source title: Ceramics International

Abbreviated source title: Ceram Int

Volume: 40

Issue: 9 PART B

Issue date: 2014

Publication year: 2014

Pages: 14607-14612

Language: English

ISSN: 02728842

CODEN: CINNDH

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: The dielectric properties of Ba₂CoNbO₆ were investigated in the frequency range of 100 Hz to 10 MHz and temperature range of 300-600 K. Two relaxations and a dielectric anomaly were observed. The

low-temperature relaxation is a Maxwell-Wagner relaxation caused by the surface-layer effect; the high-temperature relaxation is attributed to the hopping of oxygen vacancies. The dielectric anomaly located at 485 K is an artificial effect caused by negative capacitance associated with the transition of carriers from localized to free states. © 2014 Elsevier Ltd and Techna Group S.r.l.

Number of references: 48

Main heading: Dielectric properties

Controlled terms: Solid state reactions

Uncontrolled terms: Dielectric anomaly - Double perovskites - High temperature - Low temperatures - Maxwell-Wagner relaxation - Negative capacitance - Powders: solid state reactions - Temperature range

Classification code: 701 Electricity and Magnetism - 802.2 Chemical Reactions

Numerical data indexing: Frequency 1.00e+02Hz to 1.00e+07Hz, Temperature 3.00e+02K to 6.00e+02K, Temperature 4.85e+02K

DOI: 10.1016/j.ceramint.2014.06.046

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

282.

Accession number: 20153501225715

Title: Photocatalytic property of nanostructured s doped TiO₂ films prepared by the micro plasma method

Authors: Yu, Zhongchen¹ ; Wang, Song¹ ; Han, Lu² ; Li, Zhuan¹ ; Niu, Yuanlin¹

Author affiliation:

- 1 School of Civil Engineering & Architecture, Northeastern Petroleum University, Daqing, China
- 2 Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Yu, Zhongchen

Source title: Xiyou Jinshu Cailiao Yu Gongcheng/Rare Metal Materials and Engineering

Abbreviated source title: Xiyou Jinshu Cailiao Yu Gongcheng

Volume: 44

Issue: 7

Issue date: July 1, 2015

Publication year: 2015

Pages: 1629-1632

Language: English

ISSN: 1002185X

CODEN: XJCGEA

Document type: Journal article (JA)

Publisher: Rare Metals Materials and Engineering Press

Abstract: Mesoporous titanium dioxide thin films were prepared on titanium plates within a short time by a micro-plasma oxidation method. The films were used to degrade Rhodamine B, a textile industry pollutant. To increase the photocatalytic activity, different concentrations of $\text{CH}_4/\text{N}_2/\text{S}$ were added into an H_2SO_4 electrolyte solution to make the doped S enter the films. X-ray diffraction and scanning electron microscopy were used to characterize the surface morphology, the composition, the crystal structure and microstructure of the modified films. Results show that the modified films are porous with different sizes of pores. The $\text{CH}_4/\text{N}_2/\text{S}$ concentration in the electrolyte solution has a greater influence on the micropore density and the pore size of the film. S-doping can increase micropore density and specific surface area of the film, somewhat alters its crystal lattice parameter, but affects its crystal structure only a little. The photo-catalytic activity will be enhanced effectively by S-doping, for example, when the $\text{CH}_4/\text{N}_2/\text{S}$ concentration in the electrolyte solution is 6.0 g/L, the photocatalytic degradation of Rhodamine B with the initial concentration of 10 mg/L by TiO_2 thin films reaches 98% within 120 min, showing the maximum photocatalytic degradation of TiO_2 films. Copyright © 2015, Northwest Institute for Nonferrous Metal Research. Published by Elsevier BV. All rights reserved.

Number of references: 14

Main heading: Thin films

Controlled terms: Catalyst activity - Crystal microstructure - Crystal structure - Doping (additives) - Electrolytes - Film preparation - Microporosity - Photocatalysis - Pore size - Scanning electron microscopy - Semiconductor doping - Textile industry - Titanium - X ray diffraction

Uncontrolled terms: Initial concentration - Mesoporous titanium dioxide - Micro-plasma

oxidation method - Photo catalytic degradation - Photocatalytic activities - Photocatalytic property - Structure and microstructures - TiO

Classification code: 542.3 Titanium and Alloys - 702 Electric Batteries and Fuel Cells - 712.1 Semiconducting Materials - 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally - 819.6 Textile Mills, Machinery and Equipment - 931.2 Physical Properties of Gases, Liquids and Solids - 933.1.1 Crystal Lattice

Numerical data indexing: Mass_Density 6.00e+00kg/m3, Percentage 9.80e+01%, Time 7.20e+03s

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

283.

Accession number: 20153901314815

Title: Changes in C₆ volatile aldehyde and alcohol components of nectarine fruits analyzed by headspace solid-phase microextraction-gas chromatography/mass spectrometry

Authors: Qin, Ling¹; Kang, Wen-Huai²; Zhang, Zhi-Wen¹; Guo, Ai-Ying¹

Author affiliation:

- 1 Hebei Normal University of Science & Technology, Qinhuangdao, China
- 2 Hebei University of Science and Technology, Shijiazhuang, China

Corresponding author: Kang, Wen-Huai

Source title: Modern Food Science and Technology

Abbreviated source title: Mod. Food Sci. Technol.

Volume: 31

Issue: 8

Issue date: August 15, 2015

Publication year: 2015

Pages: 301-307

Language: Chinese

ISSN: 16739078

Document type: Journal article (JA)

Publisher: South China University of Technology

Abstract: The fruits of three precocious peach cultivars, 'Chunguang', 'Yanguang', and 'Qiannianhong' were used to study changes in the content of C₆ alcohols and aldehydes during coloring and maturity periods. Headspace solid-phase microextraction (HS-SPME) and gas chromatography/mass spectrometry (GC/MS) were used to determine the content of C₆ alcohols and aldehydes in the nectarine fruits. The results showed that the main C₆ volatile compounds included hexanal, trans-2-hexenal, hexanol, trans-2-hexen-1-ol, and cis-3-hexen-1-ol. Additionally, the content of C₆ volatile compounds in nectarine fruits were significantly different during different stages of maturity. The content of trans-2-hexenal was the highest, averaging 331.0 and 231.6 µg/L during the coloring and maturity periods, respectively. On the other hand, the content of cis-3-hexen-1-ol was the lowest, averaging 11.1 and 5.5 µg/L during the coloring and maturity periods, respectively. 'Qiannianhong' contained relatively high levels of hexanal, trans-2-hexenal, and hexanol, which were significantly higher than those in 'Chunguang' and 'Yanguang'. The C₆ aldehydes showed relatively high odor activity values (OAVs) during the two periods, contributing greatly to the aroma of nectarine fruits. On the other hand, the OAVs of C₆ alcohols were relatively low, showing less contribution to the aroma. Thus, the content of C₆ volatile compounds in nectarine fruits significantly decreased during the maturity period and also differed between different cultivars and different stages of development. ©, 2015, South China University of Technology. All right reserved.

Number of references: 13

Main heading: Gas chromatography

Controlled terms: Alcohols - Aldehydes - Chromatography - Extraction - Fruits - Ionization of gases - Odors - Spectrometry - Volatile organic compounds

Uncontrolled terms: Aromatic components - Different stages - Gas chromatography/Mass spectrometry - Head-space solid-phase microextraction - Nectarine - Odor activity values - Volatile aldehydes - Volatile compounds

Classification code: 451.1 Air Pollution Sources - 801 Chemistry - 802.2 Chemical Reactions - 802.3 Chemical Operations - 804.1 Organic Compounds - 821.4 Agricultural Products

Numerical data indexing: Mass_Density 2.32e-04kg/m³, Mass_Density 5.50e-06kg/m³

DOI: 10.13982/j.mfst.1673-9078.2015.8.047

Database: Compendex

284.

Accession number: 20161302149454

Title: Photonic crystal fiber laser properties influenced by fiber Bragg grating length

Authors: Feng, Wang^{1, 2}; Weihong, Bi¹; Peng, Jiang¹; Yang, Wu¹; Ying, Wang¹

Author affiliation:

1 School of Information Science and Engineering Yanshan University, Qinhuangdao, China

2 College of Mechanical Electrical and Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: 2015 Optoelectronics Global Conference, OGC 2015

Abbreviated source title: Optoelectron. Glob. Conf., OGC

Monograph title: 2015 Optoelectronics Global Conference, OGC 2015

Issue date: November 24, 2015

Publication year: 2015

Article number: 7336872

Language: English

ISBN-13: 9781467377324

Document type: Conference article (CA)

Conference name: Optoelectronics Global Conference, OGC 2015

Conference date: August 29, 2015 - August 31, 2015

Conference location: Shenzhen, China

Conference code: 118363

Publisher: Institute of Electrical and Electronics Engineers Inc.

Abstract: A simple linear cavity erbium-doped photonic crystal fiber laser is designed and analyzed. Fiber bragg gratings are used for laser wavelength selection device, erbium-doped photonic crystal fiber is used as gain fiber. Laser performance with different lengths of fiber bragg gratings are demonstrated. Experimental results

showed that when the fiber bragg grating length is 4 mm, the output spectrum lines are not good, with serious laser bounce. When the fiber bragg grating length is 40 mm, the threshold power is lower, output laser is stable, but the 3dB bandwidth is about 0.04 nm. © 2015 IEEE.

Number of references: 14

Main heading: Photonic crystal fibers

Controlled terms: Bragg gratings - Crystal whiskers - Erbium - Fiber Bragg gratings - Fiber lasers - Fibers - Lasers - Optoelectronic devices

Uncontrolled terms: 3 dB bandwidth - Erbium-doped photonic crystal fibers - Gain fibers - Laser performance - Laser wavelength - Linear cavity - Output spectrum - Threshold power

Classification code: 547.2 Rare Earth Metals - 741.3 Optical Devices and Systems - 744.1 Lasers, General - 744.4 Solid State Lasers - 933.1.1 Crystal Lattice - 951 Materials Science

Numerical data indexing: Size 4.00e-02m, Size 4.00e-03m, Size 4.00e-11m

DOI: 10.1109/OGC.2015.7336872

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

285.

Accession number: 20141317510732

Title: Enhanced novel orange red emission in Ca₃(PO₄)₂:Sm³⁺ by charge compensation

Authors: Zhang, Zhi-Wei¹ ; Wu, Ya-Nan¹ ; Shen, Xi-Hai¹ ; Ren, Yan-Jun¹ ; Zhang, Wei-Guo¹ ; Wang, Dong-Jun¹

Author affiliation:

¹ Physics and Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Zhang, Z.-W. (zhangzhiweia@163.com)

Source title: Optics and Laser Technology

Abbreviated source title: Opt Laser Technol

Volume: 62

Issue date: October 2014

Publication year: 2014

Pages: 63-68

Language: English

ISSN: 00303992

CODEN: OLTCAS

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Sm³⁺ doped β -Ca₃(PO₄)₂ without or with different charge compensation approaches (co-doping Li⁺, Na⁺, K⁺ and Si⁴⁺) were prepared by solid state reaction. The phases and luminescent properties of the obtained phosphors were characterized. The results demonstrate that the phosphors particles emit an intensive reddish orange light under excitation at 403 nm. Ca_{3-x}(PO₄)₂:xSm³⁺ phosphor can be efficiently excited by ultraviolet and blue light, and the emission spectrum consists of three emission peaks at 564, 601 and 647 nm. By introducing the charge compensator R⁺ (R=Li, Na, and K) and Si⁴⁺ into the Ca_{3-x}(PO₄)₂:xSm³⁺ phosphor, its emission intensity can be enhanced. The results suggest that Ca_{2.97}(P_{0.985}Si_{0.015}O₄)₂:0.03Sm³⁺ is a promising orange red-emitting phosphor for UV LED applications. © 2014 Elsevier Ltd.

Number of references: 34

Main heading: Calcium

Controlled terms: Citrus fruits - Emission spectroscopy - Light emission - Lithium - Phosphors - Silicon - Sodium - Solid state reactions

Uncontrolled terms: Charge compensation - Charge compensators - Emission intensity - Emission peaks - Emission spectrums - Luminescent property - Orange-red - Red emitting phosphor

Classification code: 549 Nonferrous Metals and Alloys - 741.1 Light/Optics - 802.2 Chemical Reactions - 821.4 Agricultural Products

Numerical data indexing: Size 4.03e-07m, Size 6.47e-07m

DOI: 10.1016/j.optlastec.2014.02.014

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

286.

Accession number: 20154201381194

Title: Effect of MIG1 gene deletion on lactose utilization in Lac+saccharomyces cerevisiae engineering strains

Authors: Zou, Jing^{1, 2}; Gu, Xuewu¹; Dong, Jian¹; Zhang, Cuiying¹; Xiao, Dongguang¹

Author affiliation:

1 Key Laboratory of Industrial Fermentation Microbiology, Ministry of Education, Tianjin Industrial Microbiology Key Laboratory, College of Biotechnology, Tianjin University of Science and Technology, Tianjin, China

2 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Xiao, Dongguang

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 333

Monograph title: Advances in Applied Biotechnology - Proceedings of the 2nd International Conference on Applied Biotechnology, ICAB 2014

Issue date: 2015

Publication year: 2015

Pages: 143-151

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783662463178

Document type: Conference article (CA)

Conference name: 2nd International Conference on Applied Biotechnology, ICAB 2014

Conference date: November 28, 2014 - November 30, 2014

Conference location: Tianjin, China

Conference code: 125949

Publisher: Springer Verlag

Abstract: A lactose-consuming *Saccharomyces cerevisiae* strain EY-510 was constructed by expressing LAC4 and LAC12 gene of *Kluyveromyces marxianus* in the host strain AY-5. Mig1 is a zinc finger DNA-binding protein that plays a critical role on glucose repression in *S. cerevisiae*. In order to study in anaerobic condition the degree of glucose repressing galactose metabolism, a deletion fragment MIG1A-KanMX-MIG1B was transformed into AY-5, resulting a Δ mig1 strain DY-510. In order to study whether the presence of glucose inhibits the consumption of lactose, a Lac⁺ Δ mig1 strain RY-510 was constructed by transforming the deletion fragment into EY-510. Galactose consumption was initiated at higher glucose concentrations in the MIG1 deletion strain RY-510 and DY-510 than in the corresponding wild-type strain AY-5 and EY-510, wherein galactose was consumed until glucose was completely depleted in the mixture. On lactose medium, the duration of fermentation for RY-510 was 168 h, whereas the duration for EY-510 was 252 h. The lactose uptake rate was 0.357 g/L/h for RY-510 and that was 0.238 g/L/h for EY-510. The ethanol productivity of RY-510 was 0.127 g/L/h and that was 0.085 g/L/h for EY-510. And in cheese whey powder solution medium, RY-510 was able to produce 30.25 g/L ethanol from 76.8 g/L initial lactose in 190 h, during which EY-510 was able to consume 70.8% of the initial lactose and produced 24.14 g/L ethanol. Therefore, relieving glucose control provides an approach for constructing lactose-consuming *S. cerevisiae*. © Springer-Verlag Berlin Heidelberg 2015.

Number of references: 8

Main heading: Sugars

Controlled terms: Biotechnology - Ethanol - Genes - Glucose - Yeast

Uncontrolled terms: Anaerobic conditions - Ethanol productivity - Glucose concentration - Glucose repression - *Kluyveromyces marxianus* - MIG1 - *S.cerevisiae* - *Saccharomyces cerevisiae* strains

Classification code: 461.2 Biological Materials and Tissue Engineering - 461.8 Biotechnology - 804.1 Organic Compounds - 822.3 Food Products

Numerical data indexing: Mass_Density 2.41e+01kg/m³, Mass_Density 3.02e+01kg/m³, Mass_Density 7.68e+01kg/m³, Percentage 7.08e+01%, Time 6.05e+05s, Time 6.84e+05s, Time 9.07e+05s

DOI: 10.1007/978-3-662-46318-5_16

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

287.

Accession number: 20142217758120

Title: Sintering characteristics and grain growth behavior of MgO nanopowders by spark plasma sintering

Authors: Zhang, Yongfen^{1, 2} ; Song, Aijun³ ; Ma, Deqiang¹ ; Zhang, Xinyu¹ ; Ma, Mingzhen¹ ; Liu, Riping¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 Hebei Vocational and Technical College of Building Materials, Qinhuangdao 066004, China

3 Physical-Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Ma, M. (mz550509@ysu.edu.cn)

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 608

Issue date: September 25, 2014

Publication year: 2014

Pages: 304-310

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: The densification of nanocrystalline MgO powders with average particle size of 60 nm by spark plasma sintering (SPS) was investigated within the temperature range of 900-1420 °C, an applied pressure of 30 MPa, and duration ranges of 3-8 min. The relative density of these sintered specimens continuously increased with increasing sintering temperature, and the value reached an asymptote at 1420 °C. The grain size slowly increased at low sintering temperatures (900-1200 °C) and rapidly increased at high sintering temperatures (1200-1420 °C). The grain growth of the MgO nanopowders during SPS was investigated based on classical phenomenological kinetic theory. The analysis of the grain growth kinetics showed that the grain growth exponent varied at different sintering temperatures, whereas the activation energy for grain growth at low sintering temperatures was smaller than that at high sintering temperatures, and the maximum value was achieved at 1200 °C. The microhardness of the sintered specimens at different temperatures was tested and the results were discussed according to the microstructure characteristics analysis of the sintered specimens at different temperatures. © 2014 Elsevier B.V. All rights reserved.

Number of references: 38

Main heading: Grain growth

Controlled terms: Activation energy - Magnesia - Microhardness - Microstructure - Nanostructured materials - Spark plasma sintering

Uncontrolled terms: Average particle size - Grain growth exponent - High sintering temperatures - Low sintering temperature - Magnesia ceramics - Microstructure characteristics - Sintering characteristics - Sintering temperatures

Classification code: 421 Strength of Building Materials; Mechanical Properties - 761 Nanotechnology - 801.4 Physical Chemistry - 804.2 Inorganic Compounds - 933 Solid State Physics - 951 Materials Science

Numerical data indexing: Pressure 3.00e+07Pa, Temperature 1.17e+03K to 1.47e+03K, Temperature 1.17e+03K to 1.69e+03K, Temperature 1.47e+03K, Temperature 1.47e+03K to 1.69e+03K, Temperature 1.69e+03K, Time 1.80e+02s to 4.80e+02s

DOI: 10.1016/j.jallcom.2014.04.148

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

288.

Accession number: 20155301741832

Title: Study on luminescent properties of SrIn₂O₄:Eu³⁺, Sm³⁺-red-emitting phosphor for white light-emitting diodes

Authors: Gong, Wen-Li1 ; Zhong, Rui-Xia1, 2 ; Qi, Jian-Quan1 ; Liu, Zi-Ran3 ; Zhang, Xiao-Yan1

Author affiliation:

1 School of Resources and Materials, Northeastern University at Qinhuangdao, Qinhuangdao, China

2 Hebei Province Key Laboratory of Dielectric and Electrolyte, Northeastern University at Qinhuangdao, Qinhuangdao, China

3 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhong, Rui-Xia (zhongruixialiu@aliyun.com.cn)

Source title: Rengong Jingti Xuebao/Journal of Synthetic Crystals

Abbreviated source title: Rengong Jingti Xuebao

Volume: 44

Issue: 11

Issue date: November 1, 2015

Publication year: 2015

Pages: 3280-3283 and 3291

Language: Chinese

ISSN: 1000985X

CODEN: RJXUEN

Document type: Journal article (JA)

Publisher: Chinese Ceramic Society

Abstract: The SrIn₂O₄ with Eu³⁺ or Sm³⁺ singly doped and co-doped were prepared by high temperature solid state reaction. All the samples were characterized by XRD, emission spectra and excitation spectra. The results show that the sample SrIn₂O₄:Eu³⁺ can be excited by 395 nm to give 616 nm red emission. The sample SrIn₂O₄:Sm³⁺ can be excited by 407 nm to give 607 nm red emission. In the system of SrIn₂O₄:Eu³⁺, Sm³⁺, the energy transfer between Sm³⁺ and Eu³⁺ were discovered and investigated. The energy transfer leads the sample SrIn₂O₄:Eu³⁺, Sm³⁺ to be more suitable for the 390-410 nm UV LED. © 2015, Chinese Ceramic Society. All right reserved.

Number of references: 12

Main heading: Light emitting diodes

Controlled terms: Emission spectroscopy - Energy transfer - Europium - High temperature applications - Light emission - Phosphors - Solid state reactions

Uncontrolled terms: Excitation spectrum - High temperature solid-state reaction - Luminescent property - Red emitting phosphor - Red phosphors - SrIn₂O₄:Eu³⁺, Sm³⁺ - TNUV excited - White light emitting diodes

Classification code: 547.2 Rare Earth Metals - 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 802.2 Chemical Reactions

Numerical data indexing: Size 6.07e-07m, Size 6.16e-07m

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

289.

Accession number: 20150500473162

Title: The cultivation of application talent in the Information Management and Information System major by long-term university-enterprise cooperation

Authors: Liu, Shuxia¹ ; Hou, Jinzhu¹ ; Liu, Enfeng¹ ; Jin, Qinjuan¹ ; Liu, Haibin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Source title: World Transactions on Engineering and Technology Education

Abbreviated source title: World Trans. Eng. Technol. Edu.

Volume: 12

Issue: 4

Issue date: 2014

Publication year: 2014

Pages: 784-788

Language: English

ISSN: 14462257

Document type: Journal article (JA)

Publisher: World Institute for Engineering and Technology Education, 34 Hampshire Road, Glen Waverley, Melbourne, VIC 3150, Australia

Abstract: To analyse the current employment status and problems of students in the Information Management and Information System (IMIS) major, the authors have developed a model of long-term university-enterprise cooperation so as to develop talent in IMIS applications. A specific pattern on how to adapt to the training requirements for IMIS talents was proposed, and a new approach to improving the teaching model, the course system, special teaching, resources and the establishment of high-quality teacher group were considered. In the article, it is demonstrated that university-enterprise cooperation is a win-win mechanism that has a great benefiting effect for both the universities and the enterprises. © 2014 WIETE.

Number of references: 12

Main heading: Information management

Controlled terms: Information systems - Personnel training - Teaching

Uncontrolled terms: Employment status - High quality - New approaches - Teaching model - Training requirement - University-enterprise cooperations - Win-win mechanisms

Classification code: 901.2 Education - 903.2 Information Dissemination

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

290.

Accession number: 20152000839270

Title: Nanoscaled rhodamine dyes with 4.5-fold longer fluorescence lifetimes and 150 nm red shifted fluorescence spectra: Preparation, size tuning and optical properties

Authors: Zhang, Xian-Fu^{1, 2}; Zhang, Ya-Kui¹

Author affiliation:

¹ Institute of Applied Photochemistry and Center of Analysis and Measurements, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

2 MPC Technologies, Hamilton; ON, Canada

Corresponding author: Zhang, Xian-Fu

Source title: Dyes and Pigments

Abbreviated source title: Dyes Pigm.

Volume: 120

Issue date: April 30, 2015

Publication year: 2015

Pages: 265-270

Language: English

ISSN: 01437208

E-ISSN: 18733743

CODEN: DYPIDX

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Nanoscaled rhodamine (NSR) dyes were prepared by reprecipitation method and characterized by TEM and laser diffraction analysis. The optical properties of nano wired rhodamine dyes were studied by UV-vis absorption and steady state/time resolved fluorescence. The size of NSR dyes is tunable by varying the concentration of rhodamine or surfactant additive. Compared to corresponding molecular rhodamine, the fluorescence lifetime of NSR dyes is 4.5-fold longer, while the emission maximum can be 150 nm larger. Although the increase in size of NSR dyes leads to large red shifts in optical absorption and fluorescence spectra, it does not affect the fluorescence quantum yield and lifetime. On the other hand, the presence of a surfactant (sodium dodecyl benzene sulfonate) not only causes the increase in fluorescence quantum yield, but also greatly extends the fluorescence lifetime of NSR dyes from 1.51 ns to 7.07 ns. © 2015 Elsevier Ltd. All rights reserved.

Number of references: 28

Main heading: Fluorescence

Controlled terms: Absorption - Electromagnetic wave absorption - Light absorption - Nanoparticles - Optical properties - Quantum yield - Surface active agents

Uncontrolled terms: Absorption and fluorescence spectra - Bulky solids - Fluorescence

quantum yield - Nanosize effects - Red-shifted fluorescence - Reprecipitation methods - Rhodamine - Sodium dodecylbenzene sulfonate

Classification code: 708 Electric and Magnetic Materials - 711 Electromagnetic Waves - 741.1 Light/Optics - 761 Nanotechnology - 801.4 Physical Chemistry - 803 Chemical Agents and Basic Industrial Chemicals - 931.2 Physical Properties of Gases, Liquids and Solids - 933 Solid State Physics

Numerical data indexing: Size 1.50e-07m, Time 1.51e-09s to 7.07e-09s

DOI: 10.1016/j.dyepig.2015.04.025

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

291.

Accession number: 20152500948848

Title: Long-lived and largely red-shifted photoluminescence of solid-state rhodamine dyes: Molecular exciton coupling and structural effect

Authors: Zhang, Xian-Fu^{1, 2}; Zhang, Ya-Kui¹

Author affiliation:

1 Institute of Applied Photochemistry and Center of Analysis and Measurements, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei Province, China

2 MPC Technologies, Hamilton; ON, Canada

Corresponding author: Zhang, Xian-Fu

Source title: Journal of Luminescence

Abbreviated source title: J Lumin

Volume: 166

Issue date: June 18, 2015

Publication year: 2015

Pages: 215-221

Language: English

ISSN: 00222313

CODEN: JLUMA8

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: The optical absorption and fluorescence properties of five rhodamine dyes in solid-state are measured and show large difference from that in their gas phase or liquid solvents. All solid-state rhodamine dyes strongly absorb all light in UV and visible region, but emit only red and NIR fluorescence (680-800 nm, >100 nm red-shifted from that in solution). Further more, the absorption maxima of a solid-state rhodamine show a large red-shifted band (~100 nm) and blue-shifted peak (~125 nm) compared to that in solutions, indicating a strong molecular exciton coupling between molecules. All solid-state rhodamines still show reasonably good fluorescence quantum yield (Φ_f). In particular, solid-state Rhodamine B butyl ester and sulfonyl Rhodamine B showed a much longer emission lifetime (τ_f) than that of the corresponding molecular rhodamine, i.e. 4.12 and 4.14 ns in solid state compared to 1.61 and 2.47 ns in solution. The chemical structure of a rhodamine molecule showed dramatic effect on Φ_f and τ_f values for solid state rhodamine. The larger substituent in the benzene moiety favors higher Φ_f and τ_f values of rhodamine solids. These effects can be elucidated by the relation between structure-molecular distance and molecular exciton couplings. © 2015 Elsevier B.V. All rights reserved.

Number of references: 33

Main heading: Quantum theory

Controlled terms: Absorption - Dyes - Electromagnetic wave absorption - Excitons - Fluorescence - Light absorption - Molecules

Uncontrolled terms: Emission lifetime - Exciton coupling - Fluorescence properties - Fluorescence quantum yield - J aggregates - Molecular distances - Molecular excitons - NIR fluorescences

Classification code: 711 Electromagnetic Waves - 741.1 Light/Optics - 803 Chemical Agents and Basic Industrial Chemicals - 931 Classical Physics; Quantum Theory; Relativity

Numerical data indexing: Size 6.80e-07m to 8.00e-07m, Time 2.47e-09s, Time 4.14e-09s

DOI: 10.1016/j.jlumin.2015.05.048

Database: Compendex

292.

Accession number: 20141117443734

Title: Appearance design evaluation on CNC machine tools based on fuzzy synthetic evaluation model

Authors: Ye, Zhenhe¹ ; Li, Ying² ; Han, Bo²

Author affiliation:

1 College of Mechanical and Electrical Engineering, Agricultural University of HeBei, Baoding, HeBei, 071000, China

2 College of Arts, Hebei Normal University of Science and Technology, Qinhuangdao, 066000, China

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 9

Issue: 2

Issue date: 2014

Publication year: 2014

Pages: 65-76

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: In order to guarantee the preciseness and scientific nature of Computerized Numerical Control (CNC) machine tools appearance design, appearance design evaluation has to be made on CNC machine tools so as to change the randomness and uncertainty existed in traditional appearance design, and to establish a scientific method for CNC machine tools appearance design that meets the modern aesthetic needs. The evaluation index of hierarchical structure has been set up from four aspects as stylization, form-orientation, colorization and agreeableness that may influence the appearance design, adopting both qualitative and quantitative methods; weight for each evaluation index has been determined in accordance with Analytic Hierarchy Process; and a two-level fuzzy synthetic evaluation model for CNC machine tools appearance design evaluation has been made and a comprehensive evaluation has been conducted through fuzzy mathematical method. By analyzing the

appearance design of 2MKM95 series CNC precision vertical universal machine tools determined by Tianjin No.2 Machine Tool Corporation, this paper illustrates the preciseness and scientific nature of fuzzy synthetic evaluation model. © 2014 SERSC.

Number of references: 17

Main heading: Clustering algorithms

Controlled terms: Analytic hierarchy process - Computer control systems - Design - Fuzzy set theory - Machine tools

Uncontrolled terms: Appearance design - CNC machine tools - Comprehensive evaluation - Computerized numerical control machines - Fuzzy evaluation - Fuzzy synthetic evaluation models - Hierarchical structures - Quantitative method

Classification code: 408 Structural Design - 603.1 Machine Tools, General - 721 Computer Circuits and Logic Elements - 731.1 Control Systems - 921 Mathematics - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 961 Systems Science

DOI: 10.14257/ijmue.2014.9.2.07

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

293.

Accession number: 20160501885713

Title: Dynamic modeling and analysis of a novel 3-RRR parallel shoulder

Authors: Zhang, Liang^{1, 2}; Jin, Zhenlin¹; Li, Shuzhen²

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao, China

2 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Jin, Zhenlin

Source title: Journal of Software Engineering

Abbreviated source title: J. Softw. Eng.

Volume: 9

Issue: 4

Issue date: 2015

Publication year: 2015

Pages: 773-784

Language: English

ISSN: 18194311

E-ISSN: 21520941

Document type: Journal article (JA)

Publisher: Academic Journals Inc.

Abstract: The dynamic analysis of a novel 3-DOF robot shoulder joint based on orthogonal spherical 3-RRR parallel mechanism was presented. The kinematics constraint equation of this mechanism was established based on the geometric structure and the kinematics model of moving platform was derived. The dynamics model was established based on Lagrange method and the effective inertia, coupling inertia and driving torque of the shoulder joint were analyzed. The variation of the dynamics parameters with the change of the mechanism was hscussed and the dynamic coupling relationship between branches was analyzed. The analysis results show that the posture change of the mechanism has a great influence on the dynamics parameters in the process of movement. The results will be useful to improve the control scheme of this mechanism and the selection of servo motor. © 2015 Academic Journals Inc.

Number of references: 13

Main heading: Dynamics

Controlled terms: Dynamic models - Kinematics - Mechanisms - Shoulders (road)

Uncontrolled terms: Constraint equation - Dynamic couplings - Dynamics parameters - Geometric structure - Kinematics modeling - Model and analysis - Parallel mechanisms - Virtual work principle

Classification code: 406.2 Roads and Streets - 601.3 Mechanisms - 921 Mathematics - 931.1 Mechanics

DOI: 10.3923/jse.2015.773.784

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

294.

Accession number: 20140917375799

Title: Research of library book recommendation system based on cloud computing

Authors: Ma, Yan-Ge1

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei 066004, China

Corresponding author: Ma, Y.-G. (yangsemay@yeah.net)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 270 LNEE

Part number: 1 of 4

Issue: VOL. 1

Monograph title: Proceedings of the 9th International Symposium on Linear Drives for Industry Applications, LDIA 2013

Issue date: 2014

Publication year: 2014

Pages: 549-555

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783642406171

Document type: Conference article (CA)

Conference name: 9th International Symposium on Linear Drives for Industry Applications, LDIA 2013

Conference date: July 7, 2013 - July 10, 2013

Conference location: Hangzhou, China

Conference code: 100437

Sponsor: Institute of Electrical Engineering of Chinese Academy of Science; Linear Machines Institute of China Electrotechnical Society (CES); Zhejiang University

Publisher: Springer Verlag

Abstract: By studying and analyzing the traditional recommendation system and cloud computing system, this paper proposes a library book recommendation system based on cloud computing with Hardtop and Mahout. And the paper also proposes a recommendation algorithm which takes the interconnected characteristic of books by content similarity into account, and considers the attributes information of one book as a structured document, and then uses the similarity between documents to examine the similarity between books, and finally chooses the most similar books as the recommendation of this book. © Springer-Verlag Berlin Heidelberg 2014.

Number of references: 7

Main heading: Computer systems

Controlled terms: Algorithms - Cloud computing - Industrial applications - Recommender systems

Uncontrolled terms: Computing system - Content similarity - Hardtop - Recommendation - Recommendation algorithms - Structured document - System

Classification code: 722 Computer Systems and Equipment - 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 913 Production Planning and Control; Manufacturing - 921 Mathematics

DOI: 10.1007/978-3-642-40618-8_72

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20152300919221

Title: Synthesis, crystal structure, and catalytic property of a vanadium(V) complex with mixed ligands

Authors: Shen, X.H.1 ; Zhang, Z.W.1 ; Shao, L.J.1 ; Lian, Q.1 ; Liu, C.1

Author affiliation:

1 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya

Abbreviated source title: Russ. J. Coord. Chem.

Volume: 41

Issue: 6

Issue date: June 5, 2015

Publication year: 2015

Pages: 372-375

Language: English

ISSN: 10703284

CODEN: RJCCEY

Document type: Journal article (JA)

Publisher: Maik Nauka Publishing / Springer SBM

Abstract: With a tridentate hydrazone ligand N'-(3-bromo-2-hydroxybenzylidene)-2-methylbenzohy-drazide (H_2L) and a bidentate ligand benzohydroxamic acid (HL') with $VO(Acac)_2$, a mononuclear vanadium(V) complex was prepared and characterized by elemental analysis, IR spectroscopy and X-ray structure determination (CIF file CCDC no. 1029909). The complex crystallizes in the monoclinic space group $C2/c$ with unit cell dimensions $a = 27.870(2)$, $b = 11.4893(5)$, $c = 18.467(2)$ Å, $\beta = 131.444(1)^\circ$, $V = 4432.6(6)$ Å³, $Z = 8$, $R_1 = 0.0350$, and $wR_2 = 0.0749$. Single crystal X-ray diffraction analysis reveals that the V atom is coordinated by the phenolate O, imino N and enolate O atoms of the hydrazone ligand, and the carbonyl O and hydroxy O atoms of benzohydroxamate ligand, and one oxo O group, in an octahedral coordination. Catalytic oxidation of the complex on some olefins was performed. © 2015 Pleiades Publishing, Ltd.

Number of references: 23

Main heading: Crystal structure

Controlled terms: Atoms - Catalytic oxidation - Chelation - Ligands - Olefins -
Single crystals - Vanadium compounds - X ray diffraction analysis

Uncontrolled terms: Benzohydroxamic acid - Catalytic properties - Hydrazone ligands -
Monoclinic space groups - Octahedral coordination - Single crystal X-ray diffraction analysis -
Unit-cell dimensions - X-ray structure determinations

Classification code: 454 Environmental Engineering - 801.4 Physical Chemistry - 802.2 Chemical
Reactions - 803 Chemical Agents and Basic Industrial Chemicals - 804.1 Organic Compounds - 931.3 Atomic and
Molecular Physics - 933.1 Crystalline Solids - 933.1.1 Crystal Lattice

DOI: 10.1134/S1070328415050061

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

296.

Accession number: 20140217178200

Title: Evaluation and mechanism of antifungal effects of carbon nanomaterials in controlling plant
fungal pathogen

Authors: Wang, Xiuping^{1, 2}; Liu, Xueqin¹; Chen, Juanni¹; Han, Heyou¹; Yuan, Zhaodong¹

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Wuhan 430070, China

2 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao
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Corresponding author: Han, H. (hyhan@mail.hzau.edu.cn)

Source title: Carbon

Abbreviated source title: Carbon

Volume: 68

Issue date: March 2014

Publication year: 2014

Pages: 798-806

Language: English

ISSN: 00086223

CODEN: CRBNAH

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: The antifungal activity of six carbon nanomaterials (CNMs, single-walled carbon nanotubes (SWCNTs), multi-walled carbon nanotubes (MWCNTs), graphene oxide (GO), reduced graphene oxide (rGO), fullerene (C60) and activated carbon (AC)) against two important plant pathogenic fungi (*Fusarium graminearum* (*F. graminearum*) and *Fusarium poae* (*F. poae*)) was evaluated. SWCNTs were found to show the strongest antifungal activity, followed by MWCNTs, GO, and rGO, while C60 and AC showed no significant antifungal activity. The antifungal mechanism of CNMs was deduced to target the spores in three steps: (i) depositing on the surface of the spores, (ii) inhibiting water uptake and (iii) inducing plasmolysis. © 2013 Elsevier Ltd. All rights reserved.

Number of references: 34

Main heading: Fungi

Controlled terms: Activated carbon - Graphene - Nanostructured materials - Single-walled carbon nanotubes (SWCN)

Uncontrolled terms: Anti-fungal activity - Antifungal effect - Carbon nano-materials - *Fusarium graminearum* - Graphene oxides - Plant pathogenic fungus - Reduced graphene oxides (RGO) - Single-walled carbon nanotube (SWCNTs)

Classification code: 461.9 Biology - 761 Nanotechnology - 804 Chemical Products Generally

DOI: 10.1016/j.carbon.2013.11.072

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20150600484953

Title: The effect of the Rashba spin-orbit coupling on the ground-state energy of polaron in a parabolic quantum dot

Authors: Li, Zhi-Xin¹ ; Wang, Ji-Xia¹ ; Wang, Li-Kun¹

Author affiliation:

¹ College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Li, Zhi-Xin

Source title: Physica B: Condensed Matter

Abbreviated source title: Phys B Condens Matter

Volume: 462

Issue date: April 1, 2015

Publication year: 2015

Pages: 76-79

Language: English

ISSN: 09214526

CODEN: PHYBE3

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: We using a variational method of Pekar type to study the effect of the spin on the ground-state energy of a polaron in a parabolic quantum dot (QD). Under the influences of the Rashba spin-orbit (RSO) coupling and the Zeeman energy level splitting are taken into account, the expression of the ground-state energy of a polaron as functions of the radius of QD, the coupling constant and the magnetic field adjusting length was derived. We found that the ground-state energy and the spin-up (spin-down) ground-state splitting energy decrease with increasing the radius of QD. The absolute ratios of the Zeeman energy and RSO coupling energy to the ground-state energy are a decreasing function of the magnetic field adjusting length, respectively. The above results can be attributed to the interesting quantum size confining and spin effects. © 2015 Published by Elsevier B.V.

Number of references: 15

Main heading: Ground state

Controlled terms: Magnetic fields - Magnetoelectronics - Nanocrystals - Ordinary differential equations - Polarons - Quantum theory - Semiconductor quantum dots

Uncontrolled terms: Ground-state energies - Pekar type - Quantum dot - Rashba spin-orbit coupling - Variational methods

Classification code: 701.2 Magnetism: Basic Concepts and Phenomena - 714.2 Semiconductor Devices and Integrated Circuits - 761 Nanotechnology - 921.2 Calculus - 931.4 Quantum Theory; Quantum Mechanics - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 933 Solid State Physics - 933.1.1 Crystal Lattice

DOI: 10.1016/j.physb.2015.01.027

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

298.

Accession number: 20142917945181

Title: Fluorescence properties of twenty fluorescein derivatives: Lifetime, quantum yield, absorption and emission spectra

Authors: Zhang, Xian-Fu^{1, 2}; Zhang, Jianlong¹; Liu, Limin¹

Author affiliation:

1 Institute of Applied Photochemistry, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province 066004, China

2 MPC Technologies, Hamilton, ON L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Fluorescence

Abbreviated source title: J Fluoresc

Volume: 24

Issue: 3

Issue date: May 2014

Publication year: 2014

Pages: 819-826

Language: English

ISSN: 10530509

CODEN: JOFLEN

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: The fluorescence lifetime (τ_f), emission quantum yield (Φ_f), absorption and emission spectral data of 20 fluorescein derivatives were measured under the same conditions by using time-correlated single photon counting, steady state fluorescence and absorption methods to get comparable data. Based on the results, the factors and mechanism that control the fluorescence properties of the fluorescein dyes are discussed. Both Φ_f and τ_f are remarkably dependent on the substitution on either xanthene or phenyl rings, but their ratio (Φ_f/τ_f), i.e. rate constant of radiation process, is a constant value ($0.20 \times 10^9 \text{ s}^{-1}$). The rate constant of nonradiation process, on the other hand, is varied with both the structure and the solvent used. © 2014 Springer Science+Business Media New York.

Number of references: 25

Main heading: Fluorescence

Controlled terms: Dyes - Emission spectroscopy - Quantum yield - Rate constants

Uncontrolled terms: Eosin - Fluorescein - Fluorescence lifetimes - Fluorescence quantum yield - Rose Bengal

Classification code: 741.1 Light/Optics - 801.4 Physical Chemistry - 803 Chemical Agents and Basic Industrial Chemicals

DOI: 10.1007/s10895-014-1356-5

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20142817917381

Title: Automatic head pose estimation with synchronized sub manifold embedding and random regression forests

Authors: Zhu, Yulian1 ; Xue, Zhimei1 ; Li, Chunyan1

Author affiliation:

1 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of Signal Processing, Image Processing and Pattern Recognition

Abbreviated source title: Int. J. Signal Process. Image Process. Pattern Recogn.

Volume: 7

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 123-133

Language: English

ISSN: 20054254

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Head pose can indicate the eye-gaze direction and face toward which is an important part of human motion estimation and understanding. Due to physical factors of the camera, shooting environment, as well as the appearance change of humanity, the head pose estimation becomes a challenging task. Synchronization sub manifold embedding can find the internal structure of nonlinear data for nonlinear dimensionality reduction and random regression forests can make the nonlinear function mapping for getting the right head pose. In this paper, the advantages of these two algorithms are combined with a method for solving the head pose estimation. Data collection step, the depth data come from the 3D sensor; and training data step, the data is using the local linear structure for label and using a statistical model for synchronization pose samples. Meanwhile the experimental results on a publicly available database prove that the proposed algorithm can achieve state-of-the-art performance while the current estimate has a faster speed and higher robustness when large range of pose changes and outperforms existing. © 2014 SERSC.

Number of references: 29

Main heading: Image recognition

Controlled terms: Forestry - Motion estimation - Regression analysis - Synchronization

Uncontrolled terms: Head Pose Estimation - Human motion estimation - Nonlinear dimensionality reduction - Nonlinear functions - Regression forests - State-of-the-art performance - Statistical modeling - Sub manifolds

Classification code: 716 Telecommunication; Radar, Radio and Television - 716.1 Information Theory and Signal Processing - 821.0 Woodlands and Forestry - 922.2 Mathematical Statistics - 961 Systems Science

DOI: 10.14257/ijcip.2014.7.3.11

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

300.

Accession number: 20160501861637

Title: Kelp-inspired N-I-doped ZnO photocatalysts with highly efficient catalytic activity

Authors: Cai, Aijun¹ ; Du, Liqiang¹ ; Wang, Qian² ; Chang, Yongfang³ ; Wang, Xiuping¹ ; Guo, Xuemin¹

Author affiliation:

1 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Beijing University of Chinese Medicine Dongfang College, Langfang, China

3 College of Chemical Technology, Shijiazhuang University, Shijiazhuang, China

Corresponding author: Chang, Yongfang (changyongfang@126.com)

Source title: Materials Science in Semiconductor Processing

Abbreviated source title: Mater Sci Semicond Process

Volume: 43

Issue date: March 1, 2016

Publication year: 2016

Pages: 25-33

Language: English

ISSN: 13698001

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Efficient N-I-doped ZnO photocatalysts with hierarchical structures are fabricated with kelp as the template. Abundant nitrogen and iodine are successfully simultaneously introduced into the bulk ZnO crystals through calcination under high temperature (600°C). The morphology, structure, composition, and optical absorption properties of the kelp-templated ZnO are characterized by X-ray diffraction (XRD), field-emission scanning microscopy (FESEM), transmission electron microscopy (TEM), and diffuse reflectance spectra (DRS), respectively. The band gap of the kelp-templated ZnO is narrowed by the N-I doping. The photocatalytic activity under UV-irradiation of the kelp-templated ZnO is about 23.1 times and 1.1 times that of common ZnO and P25, respectively. In addition, no obvious activity of the kelp-templated ZnO is decreased, during five cycle runs. The efficient photocatalytic activity of the kelp-templated ZnO is attributed to the sufficient UV-light utilization and efficient separation of electron-hole pairs. © 2015 Elsevier Ltd. All rights reserved.

Number of references: 45

Main heading: Zinc oxide

Controlled terms: Catalyst activity - Electromagnetic wave absorption - Energy gap - High resolution transmission electron microscopy - Light absorption - Optical properties - Photocatalysis - Photocatalysts - Scanning electron microscopy - Transmission electron microscopy - X ray diffraction

Uncontrolled terms: Diffuse reflectance spectrum - Field emission scanning - Hierarchical structures - Kelp - Optical absorption properties - Photocatalytic activities - Template - ZnO

Classification code: 711 Electromagnetic Waves - 741.1 Light/Optics - 741.3 Optical Devices and Systems - 803 Chemical Agents and Basic Industrial Chemicals - 804.2 Inorganic Compounds

Numerical data indexing: Temperature 8.73e+02K

DOI: 10.1016/j.mssp.2015.11.017

Database: Compendex

301.

Accession number: 20154001330929

Title: High-brightness Sm^{3+} -doped $\text{La}_{0.67}\text{Mg}_{0.5}\text{W}_{0.5}\text{O}_3$ red phosphor for NUV light-emitting diodes application

Authors: Zhang, Zhi-Wei¹ ; Li, Chun-Hui¹ ; Han, Cui-Lian¹ ; Li, Jian-Ping¹ ; Jia, Ye¹ ; Wang, Dong-Jun¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhi-Wei

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 654

Issue date: January 5, 2016

Publication year: 2016

Pages: 146-150

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Red Sm^{3+} phosphors $\text{La}_{0.67(1-x)}\text{Mg}_{0.5}\text{W}_{0.5}\text{O}_3:\text{xSm}^{3+}$ ($x = 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, \text{ and } 0.07$) were synthesized by a conventional solid-state reaction (SSR) route. The X-ray diffraction (XRD) patterns, photoluminescence spectra, ultraviolet-visible reflection spectroscopy, decay time and the International Commission on Illumination (CIE) chromaticity coordinates of these compounds were characterized and analyzed. The emission spectra of the $\text{La}_{0.67(1-x)}\text{Mg}_{0.5}\text{W}_{0.5}\text{O}_3:\text{xSm}^{3+}$ phosphors consisted of some sharp emission peaks of Sm^{3+} ions centered at 563 nm, 601 nm, 646 nm. The

strongest one is located at 646 nm due to $G_{4/5/2}H_{9/2}$ transition of Sm^{3+} , generating bright red light. The optimum dopant concentration of Sm^{3+} ions in $La_{0.67(1-x)}Mg_{0.5}W_{0.5}O_3 \cdot xSm^{3+}$ is 2 mol%. The CIE chromaticity coordinates of the $La_{0.67(1-x)}Mg_{0.5}W_{0.5}O_3 \cdot xSm^{3+}$ phosphors were located in the red region. The $La_{0.67(1-x)}Mg_{0.5}W_{0.5}O_3 \cdot xSm^{3+}$ phosphors may be potentially used as red phosphors for white light-emitting diodes. © 2015 Elsevier B.V.

Number of references: 27

Main heading: Light emitting diodes

Controlled terms: Diodes - Doping (additives) - Emission spectroscopy - Light emission - Phosphors - Photoluminescence - Solid state reactions - X ray diffraction

Uncontrolled terms: Chromaticity coordinates - Dopant concentrations - Emission spectrums - International Commission - Photoluminescence spectrum - Red phosphors - Reflection spectroscopy - White light emitting diodes

Classification code: 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 802.2 Chemical Reactions

Numerical data indexing: Size 5.63e-07m, Size 6.01e-07m, Size 6.46e-07m

DOI: 10.1016/j.jallcom.2015.09.054

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

302.

Accession number: 20162402490251

Title: Effects of high hydrostatic pressure on physicochemical properties, enzymes activity, and antioxidant capacities of anthocyanins extracts of wild *Lonicera caerulea* berry

Authors: Liu, Suwen^{1, 2}; Xu, Qian²; Li, Xinyuan¹; Wang, Yuehua¹; Zhu, Jinyan^{1, 3}; Ning, Chong¹; Chang, Xuedong²; Meng, Xianjun¹

Author affiliation:

1 College of Food Science, Shenyang Agricultural University, Shenyang, Liaoning; 110866, China

2 Collage of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei; 066004, China

3 Food Inspection Monitoring Center of Zhuanghe, Dalian, Liaoning; 116400, China

Corresponding author: Meng, Xianjun (mengxjsy@126.com)

Source title: Innovative Food Science and Emerging Technologies

Abbreviated source title: Innovative Food Sci. Emerg. Technol.

Volume: 36

Issue date: August 1, 2016

Publication year: 2016

Pages: 48-58

Language: English

ISSN: 14668564

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Wild *Lonicera caerulea* berries were subjected to five different high hydrostatic pressure (HHP) treatments (which resemble the conditions of active component extraction and commercial sterilization). The content of anthocyanins and total phenolics increased by 6.84% and 14.35% ($p < 0.05$), respectively after treatment at 200 MPa for 5 and 10 min. As HHP increased, a higher loss of active component was observed. The total phenolic contents did not differ significantly between the control and the 400 MPa/20 min treated group ($p > 0.05$); HHP processing demonstrated better sterilization effect but severely destroyed enzymes. Polyphenol oxidase (PPO) and peroxidase (POD) activity were activated at lower HHP, such as 200 MPa, and decreased at 400-600 MPa. Superoxide dismutase (SOD) maintained good stability under HHP processing. The antioxidant capacities of anthocyanins extracts of wild *L. caerulea* berry were evaluated by 3 different methods (DPPH assay, oxygen radical absorbance capacity assay, and cellular antioxidant activity assay). Industrial Relevance Factors such as color, luster, and nutrition often affect consumer choice in food. However, the color and nutrition of foods tend to be destroyed during processing and storage. The demand for healthier and more nutritious food while retaining the color and flavor after processing highlights the need to develop novel and gentler technologies for fruit processing. Recently, high hydrostatic pressure (HHP) technologies have been used in different branches of the food industry. In the present study, the content of active component in blue honeysuckle fruit pulps such as anthocyanins and polyphenols showed tendency to increase and then decrease with increasing pressure at room temperature. Five different HHP treatment groups (resembling the conditions of active component extraction conditions and commercial sterilization) were compared to the control (fresh fruit) and heat-treated group to determine the effects of HHP processing on *L. caerulea* berry pulps. The aim of this study was to investigate the changes in active component particularly the content and composition of anthocyanins under different

high-pressure treatment at room temperature; the color and physicochemical indexes were also analyzed at the same conditions. Low HHP for a long period of time (400 MPa/20 min) demonstrated better results than that with high HHP for a short time (600 MPa/10 min), as indicated by the higher contents of anthocyanins and phenols and stronger antioxidant capacities. Therefore, Low HHP conditions can be used as an auxiliary means of active component extraction. The conditions of HHP processing at low HHP for a long period of time (400 MPa/20 min) can be altered to retain active components during food processing. © 2016 Elsevier Ltd. All rights reserved.

Number of references: 52

Main heading: Anthocyanins

Controlled terms: Antioxidants - Color - Enzymes - Extraction - Food processing - Fruits - Hydraulics - Hydrostatic pressure - Nutrition - Oxygen - Sterilization (cleaning)

Uncontrolled terms: Antioxidant capacity - Cellular antioxidant activities - Enzymes activity - High hydrostatic pressure - High pressure treatments - Oxygen radical absorbance capacities - Physicochemical property - Total phenolic content

Classification code: 461.7 Health Care - 631.1.1 Liquid Dynamics - 632.1 Hydraulics - 741.1 Light/Optics - 802.3 Chemical Operations - 804 Chemical Products Generally - 804.1 Organic Compounds - 821.4 Agricultural Products - 822.2 Food Processing Operations

Numerical data indexing: Time 6.00e+02s

DOI: 10.1016/j.ifset.2016.06.001

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

303.

Accession number: 20163902832202

Title: Optimizing the schedule of dispatching construction machines through artificial intelligence

Authors: Xing, Yan¹ ; Song, Zhibin¹ ; Deng, Xilu¹

Author affiliation:

1 College of Urban Construction, Hebei Normal University of Science and Technology, Qin Huangdao, Hebei; 066400, China

Corresponding author: Xing, Yan (xingyanqq@163.com)

Source title: Chemical Engineering Transactions

Abbreviated source title: Chem. Eng. Trans.

Volume: 51

Issue date: 2016

Publication year: 2016

Pages: 493-498

Language: English

E-ISSN: 22839216

Document type: Journal article (JA)

Publisher: Italian Association of Chemical Engineering - AIDIC

Abstract: Most construction projects involve use of construction machines, construction plant manager has to consider both timeliness and flexibility to develop an efficient schedule of dispatching construction machines, which can balance the operations at different construction sites. In this paper, we constructed an optimization model with multi-target as construction quality, time limit, efficiency and cost. The model consists of a database, a rule-based system and multi-target decision making modules. The database includes detailed data about construction machine types and their properties. The rule-based system module provides rules, which are utilized by inference engine for determining the most proper construction machine type. Ultimately, a final decision is made for the most proper construction machine among the alternatives of the same type using the information axiom of axiomatic design principles. In order to verify the validity of the model, evaluation of alternatives is made for the cases of both complete and incomplete information. Copyright © 2016, AIDIC Servizi S.r.l.

Number of references: 8

Main heading: Project management

Controlled terms: Artificial intelligence - Decision making - Optimization

Uncontrolled terms: Construction machines - Construction plants - Construction projects - Construction quality - Construction sites - Incomplete information - Multi-target decision makings - Optimization modeling

Classification code: 723.4 Artificial Intelligence - 912.2 Management - 921.5 Optimization Techniques

DOI: 10.3303/CET1651083

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

304.

Accession number: 20160101767991

Title: A hybrid algorithm based on teaching-learning-based optimization and newton method for solving nonlinear equations

Authors: Li, Xia1, 2 ; Niu, Peifeng1 ; Zhao, Litong2 ; Li, Guoqiang1 ; Liu, Jianping2

Author affiliation:

1 Key Lab of Industrial Computer Control Engineering of Hebei Province, Yanshan University, No. 438, West Hebei Avenue, Qinhuangdao, China

2 Department of Mathematics and Information Science, Hebei Normal University of Science and Technology, No. 360, West Hebei Avenue, Qinhuangdao, China

Corresponding author: Niu, Peifeng (niupeifeng2014@163.com)

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 10

Issue: 1

Issue date: January 1, 2016

Publication year: 2016

Pages: 103-109

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: Solving nonlinear equations is an important problem in engineering field. Therefore, the study of efficient algorithm is of great significance. Teaching-LearningBased Optimization (TLBO) has the advantages of simple algorithm, less parameters, strong global convergence ability and insensitivity to initial point, but it is weak at local optimization and slow later convergence. On the other hand, Newton method has the advantage of local deep search and fast convergence rate, but it is sensitive to the initial point. Therefore, considering advantages and disadvantages of two methods above, this paper proposes a hybrid algorithm (TNHA) based on the TLBO and Newton method for solving nonlinear equations. The hybrid algorithm both combines all these merits of the TLBO and Newton method but does not have the defects. Finally, numerical examples verify the efficiency of the TNHA. © 2016 ICIC International.

Number of references: 17

Main heading: Nonlinear equations

Controlled terms: Algorithms - Learning algorithms - Newton-Raphson method - Optimization

Uncontrolled terms: Fast convergence rate - Global convergence ability - Hybrid algorithms - Initial point - Local optimizations - SIMPLE algorithm - Solving nonlinear equations - Teaching-learning-based optimizations

Classification code: 921.5 Optimization Techniques - 921.6 Numerical Methods

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

305.

Accession number: 20160801986656

Title: Synthesis of liginosulfonate-assisted flower-like titanate nanostructures and their excellent performance for heavy metal removal

Authors: Chang, Yongfang¹ ; Han, Wei¹ ; Cai, Aijun² ; Wang, Huiying¹

Author affiliation:

1 College of Chemical Technology, Shijiazhuang University, Shijiazhuang, China

2 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Chang, Yongfang (changyongfang@126.com)

Source title: Ceramics International

Abbreviated source title: Ceram Int

Volume: 42

Issue: 7

Issue date: May 15, 2016

Publication year: 2016

Pages: 8645-8649

Language: English

ISSN: 02728842

CODEN: CINNDH

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Lignosulfonate-assisted titanate nanoflowers (L-TNFs) were synthesized by a simple solvothermal method. The structure, morphology and adsorption capacity of the product were investigated. The characterization results confirm that L-TNFs are amorphous materials with mesoporous structure. In comparison with common TNFs, L-TNFs enhance their adsorption capacity for heavy metal ions. The adsorption isotherms are well fitted to a Langmuir adsorption model, and the maximal adsorption capacities of Pb(II), Cu(II) and Cd(II) on L-TNFs are 586.2, 166.5 and 175.9 mg g⁻¹, respectively. The results suggest that L-TNFs are a promising adsorbent for the removal of heavy metals from aqueous solution. © 2016 Elsevier Ltd and Techna Group S.r.l. All rights reserved

Number of references: 14

Main heading: Adsorption

Controlled terms: Amorphous materials - Chemicals removal (water treatment) - Heavy metals - Lead - Mesoporous materials - Metal ions - Metals - Solutions - Titanium compounds

Uncontrolled terms: Adsorption capacities - Heavy metal removal - Hierarchical structures - Langmuir adsorption model - Lignosulfonates - Mesoporous structures - Titanate - Titanate nanoflowers

DOI: 10.1016/j.ceramint.2016.02.096

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

306.

Accession number: 20170503309001

Title: Study on designated verifier proxy signature schemes with provable security

Authors: Hu, Xiaoming¹ ; Yang, Yinchun¹ ; Zhang, Xiaojun² ; Xu, Huajie³ ; Wang, Jian¹

Author affiliation:

1 College of Computer and Information Engineering, Shanghai Polytechnic University, Shanghai, China

2 E and A College, Hebei Normal University of Science and Technology, Hebei, China

3 School of Computer and Electronic Information, Guangxi University, Nanning, China

Source title: Proceedings of 2016 2nd International Conference on Control Science and Systems Engineering, ICCSSE 2016

Abbreviated source title: Proc. Int. Conf. Control Sci. Syst. Eng., ICCSSE

Monograph title: Proceedings of 2016 2nd International Conference on Control Science and Systems Engineering, ICCSSE 2016

Issue date: December 14, 2016

Publication year: 2016

Pages: 5-9

Article number: 7784341

Language: English

ISBN-13: 9781467398725

Document type: Conference article (CA)

Conference name: 2nd International Conference on Control Science and Systems Engineering, ICCSSE 2016

Conference date: July 27, 2016 - July 29, 2016

Conference location: Singapore, Singapore

Conference code: 125425

Publisher: Institute of Electrical and Electronics Engineers Inc.

Abstract: This Proxy signature has been one of the hot spot in cryptography research as it can delegate the signing right of the original signer to the proxy signer. Therefore, it is applied in many areas such as mobile networks, distributed systems, control systems and other some information systems. Recently, many proxy signature schemes with special properties have been proposed. However, most of them is been proved to be insecure or inefficient. In this paper, we study two efficient proxy signature schemes proposed recently with special property, i.e. blind property and designated verifier property respectively. We point out that there exist some security drawbacks in the both schemes, including the replace problem of delegation warrant, the forgeability problem from the proxy signer and the forgability problem from the normal user. In order to overcome these problems, we propose a solution method for each scheme. Thus, these both improved schemes are securer than original both schemes, which makes them more suitable for applying. © 2016 IEEE.

Number of references: 15

Main heading: Electronic document identification systems

Controlled terms: Authentication - Information science - Information systems - Network security - Systems engineering

Uncontrolled terms: Designated verifier signatures - Information system security - Proxy blind signature - Proxy signatures - Unforgeability

Classification code: 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 903.2 Information Dissemination - 961 Systems Science

DOI: 10.1109/CCSSE.2016.7784341

Funding Details: Number; Acronym; Sponsor: 61103213; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

307.

Accession number: 20162502527889

Title: Effects of mixed rare earth fertilizer on yield and nutrient quality of leafy vegetables during different seasons

Authors: Ren, Yanjun1 ; Ren, Xuejun1 ; Ma, Jianjun1 ; Yan, Lijing1

Author affiliation:

1 Analysis and Testing Centre, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

Corresponding author: Ma, Jianjun (kycmj@163.com)

Source title: Journal of Rare Earths

Abbreviated source title: J Rare Earth

Volume: 34

Issue: 6

Issue date: June 1, 2016

Publication year: 2016

Pages: 638-643

Language: English

ISSN: 10020721

CODEN: JREAE6

Document type: Journal article (JA)

Publisher: Chinese Society of Rare Earths

Abstract: Using Chinese cabbage and rape as test material and examining the same soil conditions at different seasons (spring and autumn), the effects of mixed rare earth fertilizer on the yield and nutrient quality of leafy vegetables were studied to provide a theoretical basis for the application of mixed rare earth fertilizer in agriculture. Results showed a seasonal difference in the nutrient quality of Chinese cabbage and rape. For crops planted in autumn, the soluble sugar and Vitamin C content were higher, the titratable acid and nitrate content were lower, and the sugar acid ratio was higher relative to crops planted in spring. Mixed rare earth treatments promoted growth of both crops during both seasons. The plot yield, stem and leaf fresh and dry matter weight, and dry and fresh ratio increased. These increases for Chinese cabbage were greater in autumn than in spring while for rape, the increases were greater in spring than autumn. The soluble sugar content, titratable acid content and sugar acid ratio were increased and the nitrate content decreased, in autumn the effects were more obvious than in spring. In spring, the Vitamin C content was increased, and the increase was greater for Chinese cabbage than rape. In

autumn, the Vitamin C content decreased, and the decrease was greater for rape than Chinese cabbage. At the same time, the content of heavy metals such as Cu, Zn, Cd, Pb and Ni in stems and leaves decreased. This decrease was greater in spring for Chinese cabbage and in autumn for rape. © 2016 The Chinese Society of Rare Earths.

Number of references: 33

Main heading: Rare earths

Controlled terms: Cadmium - Copper - Crops - Fertilizers - Heavy metals - Lead - Nitrates - Nutrients - Vegetables

Uncontrolled terms: Chinese cabbage - Mixed rare earth - rape - seasons - yield

Classification code: 531 Metallurgy and Metallography - 544.1 Copper - 546.1 Lead and Alloys - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 804 Chemical Products Generally - 804.2 Inorganic Compounds - 821.4 Agricultural Products

DOI: 10.1016/S1002-0721(16)60073-X

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

308.

Accession number: 20162502522317

Title: Study on nonlinear spectral properties of photonic crystal fiber in theory and experiment

Authors: Zhao, Xing-Tao¹ ; Wang, Shu-Tao¹ ; Liu, Xiao-Xu^{1, 2} ; Han, Ying¹ ; Zhao, Yuan-Yuan¹ ; Li, Shu-Guang¹ ; Hou, Lan-Tian¹

Author affiliation:

1 Measurement Technology and Instrumentation Key Lab of Hebei Province, State Key Lab of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao; 066004, China

2 Department of Physics, Hebei Normal University of Science & Technology, Qinhuangdao; 066004, China

Corresponding author: Wang, Shu-Tao (wangshutao@ysu.edu.cn)

Source title: Guang Pu Xue Yu Guang Pu Fen Xi/Spectroscopy and Spectral Analysis

Abbreviated source title: Guang Pu Xue Yu Guang Pu Fen Xi

Volume: 36

Issue: 6

Issue date: June 1, 2016

Publication year: 2016

Pages: 1650-1655

Language: Chinese

ISSN: 10000593

CODEN: GYGFED

Document type: Journal article (JA)

Publisher: Science Press

Abstract: Photonic crystal fiber can generate particular dispersion properties and highly nonlinear, because of the special guiding mechanism and the adjustable structure parameters, which provides new conditions for the study of nonlinear fiber optics. There are rich nonlinear spectral properties produced by a variety of nonlinear physical effect, under different pump light pulse parameters in photonic crystal fibers with different structure and transmission properties. At present many papers have reported the experimental results of nonlinear optical properties in photonic crystal fiber, but there is little theoretical analysis about the produced mechanism and the change rule of the nonlinear spectrum. In the paper, solving nonlinear Schrodinger equation with split-step Fourier method, transmission process of femtosecond laser pulse in photonic crystal fiber is simulated. The relationship between the output spectrum and incident light pulse parameters (the peak power of pump light P , the wavelength of pump light λ , the shape of light pulse, the width of light pulse TFWHM), the structure parameters of optical fiber (the pitch Λ , the hole-to-pitch ratio d/Λ , the length of fiber), the transmission characteristics (the dispersion properties, the nonlinear coefficient) is obtained. The spectral characteristics produced by nonlinear effects of the Raman soliton, dispersive wave, self-phase modulation are analyzed. The nonlinear optical spectrum of cladding mode in photonic crystal fiber is studied in experiments, the broadband spectrum of soliton wave and dispersive wave is obtained. There are blue-shift dispersive wave near the wavelength of $0.5 \mu\text{m}$, residual pump light near the wavelength of $0.82 \mu\text{m}$, soliton wave near the wavelength of $1.1 \mu\text{m}$, red-shift broadband dispersion wave near the wavelength of $2 \mu\text{m}$ in the spectrum obtained both in theory and experiment. The numerical simulation is confirmed through experimental observation. The physics principle of the nonlinear spectrum in photonic crystal fiber is revealed. These are useful and practical to realize the controllable output of broadband spectrum. These provide guidance for the structure design, fabrication, applied research of high nonlinear photonic crystal fiber. © 2016, Peking University Press. All right reserved.

Number of references: 12

Main heading: Nonlinear optics

Controlled terms: Control nonlinearities - Crystal structure - Crystal whiskers - Dispersion (waves) - Fibers - Laser pulses - Light - Light transmission - Nonlinear equations - Optical fiber fabrication - Optical fibers - Optical properties - Optical pumping - Phase modulation - Photonic crystal fibers - Photonic crystals - Plasma diagnostics - Schrodinger equation - Self phase modulation - Solitons - Structural properties - Ultrafast lasers - Ultrashort pulses

Uncontrolled terms: Dispersive waves - Non-linear optical properties - Nonlinear - Photonics crystal fibers - Soliton waves - Spectral characteristics - Split step Fourier method - Transmission characteristics

Classification code: 408 Structural Design - 731.1 Control Systems - 741 Light, Optics and Optical Devices - 744.1 Lasers, General - 921 Mathematics - 932.3 Plasma Physics - 933.1.1 Crystal Lattice - 951 Materials Science

Numerical data indexing: Size 1.10e-06m, Size 2.00e-06m, Size 5.00e-07m, Size 8.20e-07m

DOI: 10.3964/j.issn.1000-0593(2016)06-1650-06

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

309.

Accession number: 20162902608136

Title: Properties of strong-coupling magneto-bipolaron qubit in quantum dot under magnetic field

Authors: Bai, Xu-Fang¹ ; Zhang, Ying² ; Wuyunqimuge¹ ; Eerdunchaolu²

Author affiliation:

1 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao; 028043, China

2 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

Corresponding author: Eerdunchaolu (eerdunchaolu@163.com)

Source title: Chinese Physics B

Abbreviated source title: Chin. Phys.

Volume: 25

Issue: 7

Issue date: July 2016

Publication year: 2016

Article number: 077804

Language: English

ISSN: 16741056

Document type: Journal article (JA)

Publisher: Institute of Physics Publishing

Abstract: Based on the variational method of Pekar type, we study the energies and the wave-functions of the ground and the first-excited states of magneto-bipolaron, which is strongly coupled to the LO phonon in a parabolic potential quantum dot under an applied magnetic field, thus built up a quantum dot magneto-bipolaron qubit. The results show that the oscillation period of the probability density of the two electrons in the qubit decreases with increasing electron-phonon coupling strength, resonant frequency of the magnetic field ω_c , confinement strength of the quantum dot ω_0 , and dielectric constant ratio of the medium η ; the probability density of the two electrons in the qubit oscillates periodically with increasing time t , angular coordinate θ , and dielectric constant ratio of the medium η ; the probability of electron appearing near the center of the quantum dot is larger, and the probability of electron appearing away from the center of the quantum dot is much smaller. © 2016 Chinese Physical Society and IOP Publishing Ltd.

Number of references: 24

Main heading: Semiconductor quantum dots

Controlled terms: Electron-phonon interactions - Electrons - Magnetic fields - Magnetism - Nanocrystals - Natural frequencies - Ordinary differential equations - Phonons - Probability - Probability density function - Quantum computers - Quantum theory - Wave functions

Uncontrolled terms: Angular coordinates - Applied magnetic fields - Confinement strength - Electron-phonon coupling strengths - Parabolic potential - Probability densities - qubit - Variational methods

Classification code: 701.2 Magnetism: Basic Concepts and Phenomena - 714.2 Semiconductor Devices and Integrated Circuits - 722 Computer Systems and Equipment - 761 Nanotechnology - 921 Mathematics - 921.2 Calculus - 922.1 Probability Theory - 931.4 Quantum Theory; Quantum Mechanics

DOI: 10.1088/1674-1056/25/7/077804

Database: Compendex

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310.

Accession number: 20161202135846

Title: Investigation of luminescence properties and the energy transfer mechanism of LiSrBO₃:Ce³⁺, Tb³⁺+phosphors

Authors: Zhang, Zhi-wei¹ ; Lv, Rui-jiao¹ ; Zhu, Xiao-yan¹ ; Qi, Hong-xia¹ ; Yang, Fang¹ ; Hou, Jian-wei¹ ; Li, Jing¹ ; Wang, Dong-jun¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

Corresponding author: Zhang, Zhi-wei (zhangzhiweia@163.com)

Source title: Journal of Materials Science: Materials in Electronics

Abbreviated source title: J Mater Sci Mater Electron

Volume: 27

Issue: 7

Issue date: July 1, 2016

Publication year: 2016

Pages: 6925-6931

Language: English

ISSN: 09574522

E-ISSN: 1573482X

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: A series of LiSrBO₃:Ce³⁺, Tb³⁺+phosphors have been prepared via a high-temperature

solid-state reaction process. X-ray diffraction (XRD), scanning electric microscopy (SEM), photoluminescence (PL) spectra, and the diffuse reflection spectra were utilized to characterize the samples. The luminescence properties of LiSrBO₃:Ce³⁺, Tb³⁺-phosphors have been discussed. The energy transfer process from Ce³⁺ to Tb³⁺ has been demonstrated to be a resonant type via the dipole-dipole interaction mechanism. The emissive colors of LiSrBO₃:Ce³⁺, Tb³⁺-samples can be adjusted from blue to yellowish-green by the energy transfer of Ce³⁺ and Tb³⁺, respectively. The results suggest the present phosphors can be potentially applied as a candidate of green-light phosphor for UV-pumped W-LED. © 2016, Springer Science+Business Media New York.

Number of references: 22

Main heading: Light emission

Controlled terms: Energy transfer - High temperature applications - Light emitting diodes - Luminescence - Luminescence of inorganic solids - Phosphors - Solid state reactions - X ray diffraction

Uncontrolled terms: Diffuse reflection spectra - Dipole interaction - Energy transfer mechanisms - Energy transfer process - Green light - High temperature solid-state reaction - Luminescence properties - Photoluminescence spectrum

DOI: 10.1007/s10854-016-4646-7

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

311.

Accession number: 20154501523133

Title: Comparison of polyphenol, anthocyanin and antioxidant capacity in four varieties of *Lonicera caerulea* berry extracts

Authors: Wang, Yuehua¹ ; Zhu, Jinyan^{1, 2} ; Meng, Xianjun¹ ; Liu, Suwen^{1, 3} ; Mu, Jingjing¹ ; Ning, Chong¹

Author affiliation:

1 College of Food Science, Shenyang Agricultural University, Shenyang, Liaoning, China

2 Food Inspection Monitoring Center of Zhuanghe, Dalian, Liaoning, China

3 Department of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Meng, Xianjun

Source title: Food Chemistry

Abbreviated source title: Food Chem.

Volume: 197

Issue date: April 15, 2016

Publication year: 2016

Pages: 522-529

Language: English

ISSN: 03088146

E-ISSN: 18737072

CODEN: FOCHDJ

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Four varieties of *Lonicera caerulea* berries - 'Wild', 'Beilei', 'No. 1', and 'No. 2' - were compared with respect to extraction yield, fruit weight, total soluble solids, polyphenol and anthocyanin contents, oxygen radical absorbance capacity (ORAC), and anthocyanin composition. Sixteen individual anthocyanins were identified in the selected varieties. Acylated anthocyanins, cyanidin 3-acetylhexoside and peonidin 3-acetylhexoside, were identified in *L. caerulea* berries for the first time. Cyanidin-3-glucoside was the most prominent anthocyanin in all four tested varieties. Wild type of *L. caerulea* fruit ('Wild'), with the highest polyphenol content, contained 14 anthocyanins and the highest ORAC value. Eleven anthocyanins were found in 'Beilei' berries, which had a higher ORAC value than 'No. 1' and 'No. 2'. The highest total soluble solid content and extraction yield were found in 'No. 2' and 'Wild' berries, respectively. © 2015 Elsevier Ltd. All rights reserved.

Number of references: 44

Main heading: Anthocyanins

Controlled terms: Agents - Antioxidants - Extraction - Fruits - Identification (control systems)

Uncontrolled terms: Anthocyanin content - Anti-oxidant activities - Antioxidant capacity - Individual anthocyanins - *Lonicera caerulea* berries - Oxygen radical absorbance capacities - Polyphenols - Total soluble solids

Classification code: 731.1 Control Systems - 802.3 Chemical Operations - 803 Chemical Agents and

Basic Industrial Chemicals - 804.1 Organic Compounds - 821.4 Agricultural Products

DOI: 10.1016/j.foodchem.2015.11.006

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

312.

Accession number: 20160902043461

Title: Efficient fabrication of high-capacity immobilized metal ion affinity chromatographic media:
The role of the dextran-grafting process and its manipulation

Authors: Zhao, Lan¹ ; Zhang, Jingfei^{1, 2} ; Huang, Yongdong¹ ; Li, Qiang¹ ; Zhang, Rongyue³ ; Zhu, Kai^{1, 4} ; Suo, Jia³ ; Su, Zhiguo¹ ; Zhang, Zhigang² ; Ma, Guanghui¹

Author affiliation:

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- 2 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 3 Department of Chemical Engineering, Beijing Institute of Petro-chemical Technology, Beijing, China
- 4 School of Chemical and Environmental Engineering, China University of Mining and Technology, Beijing, China

Corresponding author: Huang, Yongdong (yduhuang@ipe.ac.cn)

Source title: Journal of Separation Science

Abbreviated source title: J. Sep. Sci.

Volume: 39

Issue: 6

Issue date: March 1, 2016

Publication year: 2016

Pages: 1130-1136

Language: English

ISSN: 16159306

E-ISSN: 16159314

CODEN: JSSCCJ

Document type: Journal article (JA)

Publisher: Wiley-VCH Verlag

Abstract: Novel high-capacity Ni²⁺-immobilized metal ion affinity chromatographic media were prepared through the dextran-grafting process. Dextran was grafted to an allyl-activated agarose-based matrix followed by functionalization for the immobilized metal ion affinity chromatographic media. With elaborate regulation of the allylation degree, dextran was completely or partly grafted to agarose microspheres, namely, completely dextran-grafted agarose microspheres and partly dextran-grafted ones, respectively. Confocal laser scanning microscope results demonstrated that a good adjustment of dextran-grafting degree was achieved, and dextran was distributed uniformly in whole completely dextran-grafted microspheres, while just distributed around the outside of the partly dextran-grafted ones. Flow hydrodynamic properties were improved greatly after the dextran-grafting process, and the flow velocity increased by about 30% compared with that of a commercial chromatographic medium (Ni Sepharose FF). A significant improvement of protein binding performance was also achieved by the dextran-grafting process, and partly dextran-grafted Ni²⁺-chelating medium had a maximum binding capacity for His-tagged lactate dehydrogenase about 2.5 times higher than that of Ni Sepharose FF. The results indicated that this novel chromatographic medium is promising for applications in high-efficiency and large-scale protein purification. © 2016 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim.

Number of references: 25

Main heading: Grafting (chemical)

Controlled terms: Affinity chromatography - Bins - Biochemistry - Chromatography - Dextran - Flow velocity - Ion chromatography - Metal ions - Metals - Microspheres - Nickel - Proteins - Purification

Uncontrolled terms: Chromatographic media - Confocal laser scanning microscope - Dextran-grafted agarose - Flow hydrodynamics - Immobilized metal ion affinity chromatographies - Lactate dehydrogenase - Large scale proteins - Protein purification

DOI: 10.1002/jssc.201501291

Funding Details: Acronym; Sponsor: CAS; Chinese Academy of Sciences

Number; Acronym; Sponsor: 2013BAB01B03; MOST; Ministry of Science and Technology

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

313.

Accession number: 20154301433495

Title: Influence of foliage-sprayed zinc sulfate on grape quality and wine aroma characteristics of Merlot

Authors: Song, Chang-Zheng¹ ; Liu, Mei-Ying¹ ; Meng, Jiang-Fei¹ ; Shi, Peng-Bao^{1, 2} ; Zhang, Zhen-Wen^{1, 3} ; Xi, Zhu-Mei^{1, 3}

Author affiliation:

1 College of Enology, Northwest A&F University, No. 22 Xinong Road, Yangling; Shaanxi, China

2 College of Food Science Technology, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei, China

3 Shaanxi Engineering Research Center for Viti-Viniculture, Yangling; Shaanxi, China

Corresponding author: Song, Chang-Zheng (scz0809@sina.com)

Source title: European Food Research and Technology

Abbreviated source title: Eur. Food Res. Technol.

Volume: 242

Issue: 4

Issue date: April 1, 2016

Publication year: 2016

Pages: 609-623

Language: English

ISSN: 14382377

E-ISSN: 14382385

Document type: Journal article (JA)

Publisher: Springer Verlag

Abstract: Three concentrations of zinc sulfate were foliage-sprayed in *Vitis vinifera* cv. Merlot growing on Zn-deficient soils over successive years, 2013 and 2014, to investigate the effect on grape quality and wine aroma characteristics. Headspace solid-phase microextraction with gas chromatography–mass spectrometry (HS-SPME-GC/MS) was used for qualitative and quantitative analysis of aroma compounds. Zinc sulfate treatments significantly increased the concentrations of total soluble solids, total phenols, flavonoids, flavanols, tannins and anthocyanins in matured berry. A total of 53 compounds were identified and quantified from all the eight wines of the 2 years. Zinc sulfate treatments increased the variety of volatile compounds in wines, especially in the aged wines of 2013. Besides, total concentration of the volatile compounds was also enhanced by treatment of 4.0 g/L ZnSO₄·7H₂O in both years. Principal component analysis indicated that 1-nonanol, 1-butanol-3-methyl acetate, ethyl hexanoate, ethyl phenylacetate, ethyl benzoate, ethyl palmitate, p-hydroxyl ethyl cinnamate and β-damascenone were the eight most characteristic components of Zn-treated wines in both 2013 and 2014. Among those, β-damascenone and ethyl hexanoate were also two of the most odor-active compounds. Moreover, among the nine described aroma categories in the sensory analysis, intensities of fruity, vegetative, spicy, nuts and toasty were influenced by Zn treatment. © 2015, Springer-Verlag Berlin Heidelberg.

Number of references: 60

Main heading: Principal component analysis

Controlled terms: Anthocyanins - Chemical analysis - Drug products - Flavonoids - Gas chromatography - Mass spectrometry - Odor removal - Odors - Palmitic acid - Sensory analysis - Sulfur compounds - Volatile organic compounds - Wine - Zinc

Uncontrolled terms: Aroma characteristics - Aroma compounds - Ethyl hexanoate - Head-space solid-phase microextraction - Odor-active compound - Qualitative and quantitative analysis - Total soluble solids - Volatile compounds

DOI: 10.1007/s00217-015-2570-3

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

314.

Accession number: 20151400709466

Title: Preparation of self-supporting graphene on flexible graphite sheet and electrodeposition of polyaniline for supercapacitor

Authors: Xin, Guoxiang¹ ; Wang, Yanhui¹ ; Liu, Xiaoxu^{1, 2} ; Zhang, Jinhui¹ ; Wang, Yafei¹ ; Huang, Junjie¹ ; Zang, Jianbing¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, College of Materials Science and Engineering, Yanshan University, Qinhuangdao, China

2 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zang, Jianbing

Source title: Electrochimica Acta

Abbreviated source title: Electrochim Acta

Volume: 167

Issue date: June 10, 2015

Publication year: 2015

Pages: 254-261

Language: English

ISSN: 00134686

CODEN: ELCAAV

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: A graphene-based composite was prepared by the in-situ growth of a self-supporting graphene (SSG) on a flexible graphite sheet (FGS) via electrochemical intercalation of FGS and then the electrodeposition of a thin, homogeneous, and conformal polyaniline (PANI) film. The maximum areal capacitance of 1.36 F cm⁻² and specific capacitance based on PANI of 491.3 F g⁻¹ were achieved for the prepared FGS-SSG/PANI composite. The good cycling stability of FGS-SSG/PANI was proved by cyclic voltammetry at a scan rate of 50 mV s⁻¹ for 3000 cycles. The symmetric supercapacitor device assembled using FGS-SSG/PANI composite electrodes exhibited a high energy density of 46 W h kg⁻¹ at a power density of 275 W kg⁻¹ on the basis of the total mass of PANI (~ 10% of the total mass of the flexible electrodes). The good electrochemical properties indicate that the FGS-SSG/PANI is a promising flexible electrode for supercapacitors. ©2015 Elsevier Ltd. All rights reserved.

Number of references: 40

Main heading: Electrochemical electrodes

Controlled terms: Capacitance - Capacitors - Cyclic voltammetry - Electrodeposition - Electrodes - Electrolytic capacitors - Film growth - Graphene - Graphite - Polyaniline

Uncontrolled terms: Composite electrode - Electrochemical intercalations - Flexible

electrodes - Graphene-based composites - High energy densities - PANI - Specific capacitance - Super capacitor

Classification code: 701.1 Electricity: Basic Concepts and Phenomena - 704.1 Electric Components - 712.1 Semiconducting Materials - 761 Nanotechnology - 804 Chemical Products Generally - 813.1 Coating Techniques - 815.1.1 Organic Polymers - 942.2 Electric Variables Measurements

Numerical data indexing: Percentage 1.00e+01%

DOI: 10.1016/j.electacta.2015.03.181

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

315.

Accession number: 20150800539879

Title: Ferromagnetic interactions and slow magnetic relaxation behaviors of two lanthanide coordination polymers bridged by 2,6-naphthalenedicarboxylate ligand

Authors: Fang, Ming¹ ; Li, Xiuhua³ ; Cui, Ping² ; Zhao, Bin²

Author affiliation:

- 1 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei Province, China
- 2 Department of Chemistry, Ministry of Education, Nankai University, Tianjin, China
- 3 Department of Chemistry, Chifeng College, Inner Mongolia, China

Corresponding author: Zhao, Bin

Source title: Journal of Solid State Chemistry

Abbreviated source title: J. Solid State Chem.

Volume: 223

Issue date: March 2015

Publication year: 2015

Pages: 138-143

Language: English

ISSN: 00224596

E-ISSN: 1095726X

CODEN: JSSCBI

Document type: Journal article (JA)

Publisher: Academic Press Inc.

Abstract: Two lanthanide-based frameworks: $\{\text{Ln}(\text{phen})(\text{NDA})1.5(\text{H}_2\text{O})\}_n$ ($\text{Ln}=\text{Gd}(1)$, $\text{NDA}=2,6\text{-naphthalenedicarboxylate anion}$, $\text{phen}=1,10\text{-phenanthroline}$), and $\{[\text{Dy}(\text{phen})(\text{NDA})1.5]\cdot 0.5\text{H}_2\text{NDA}\}_n$ (2) were structurally and magnetically characterized. Compound 1 exhibits 2D layer structure, belonging to the triclinic system with space group P-1, while compound 2 features a 3D framework with space group P-1. The magnetic studies revealed that ferromagnetic coupling existed between adjacent lanthanide ions in 1 and 2, and frequency-dependence out-of-phase signals in the measurement of alternate-current susceptibilities were observed for 2, albeit without reaching the characteristic maxima above 2 K, implying slow magnetic relaxation behavior in 2. After the application of a dc field, good peak shapes of ac signal were obtained and got the energy barrier $\Delta E/k_B=29$ K and the pre-exponential factor $\tau_0=4.47\times 10^{-7}$ s at 2000 Oe field; and when the dc field was in 5000 Oe, giving $\Delta E/k_B=40$ K and $\tau_0=2.82\times 10^{-6}$. © 2014 Elsevier Inc. All rights reserved.

Number of references: 61

Main heading: Polymers

Controlled terms: D region - Ferromagnetic materials - Ferromagnetism - Magnetic properties - Magnetic relaxation - Rare earth elements

Uncontrolled terms: 1,10-phenanthroline - 2,6-Naphthalenedicarboxylate - Coordination Polymers - Ferro-magnetic interactions - Ferromagnetic coupling - Lanthanide - Lanthanide coordination polymer - Slow magnetic relaxations

Classification code: 443 Meteorology - 547.2 Rare Earth Metals - 701.2 Magnetism: Basic Concepts and Phenomena - 708.4 Magnetic Materials - 815.1 Polymeric Materials

Numerical data indexing: Temperature 2.00e+00K

DOI: 10.1016/j.jssc.2014.07.020

Database: Compendex

316.

Accession number: 20143900070307

Title: Preparation and investigation of $\text{CaZr}_4(\text{PO}_4)_6:\text{Dy}^{3+}$ single-phase full-color phosphorAuthors: Zhang, Zhi-Wei¹ ; Liu, Lu¹ ; Zhang, Xian-Fu¹ ; Zhang, Jian-Ping¹ ; Zhang, Wei-Guo¹ ; Wang, Dong-Jun¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Wei-Guo

Source title: Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy

Abbreviated source title: Spectrochim. Acta Part A Mol. Biomol. Spectrosc.

Volume: 137

Issue date: February 25, 2015

Publication year: 2014

Pages: 1-6

Language: English

ISSN: 13861425

CODEN: SAMCAS

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: A novel single-phase full-color phosphor $\text{CaZr}_4(\text{PO}_4)_6:\text{Dy}^{3+}$ has been synthesized by a high-temperature solid-state reaction. X-ray powder diffraction (XRD) analysis and FT-IR spectra confirmed the phase formation of $\text{CaZr}_4(\text{PO}_4)_6:\text{Dy}^{3+}$ materials. The photoluminescence excitation and emission spectra, the concentration dependence of the emission intensity, decay curves, ultraviolet-visible absorption spectroscopy and Commission International de l'Éclairage (CIE) of the phosphor were investigated. The results showed that the phosphor could be efficiently excited by the near ultraviolet (NUV) light region from 340 to 440 nm, and it exhibited blue (487 nm) and yellow (577 nm) emission corresponding to $4\text{F}_9/2 \rightarrow 6\text{H}_{15/2}$ transitions and $4\text{F}_9/2 \rightarrow 6\text{H}_{13/2}$ transitions, respectively. The luminescence intensity of $\text{Ca}_{1-x}\text{Zr}_4(\text{PO}_4)_6:\text{x}\text{Dy}^{3+}$ phosphor firstly increased and then decreased with increasing Dy^{3+} concentration, and reached the maximum at $x = 0.04$. The band gap

energy of $\text{CaZr}_4(\text{PO}_4)_6$ and $\text{Ca}_{0.96}\text{Zr}_4(\text{PO}_4)_6:0.04\text{Dy}^{3+}$ are about 4.184 eV from the diffuse reflection spectrum. The decay time was also determined for various concentrations of Dy^{3+} in $\text{CaZr}_4(\text{PO}_4)_6$. The calculated color coordinates lies in the blue white region. Therefore, these obtained results suggest that the prepared phosphors exhibit great potential for use as single-phase full-color phosphor for near ultraviolet white light emitting diodes (NUV WLEDs). © 2014 Elsevier B.V. All rights reserved.

Number of references: 27

Main heading: Phosphors

Controlled terms: Absorption spectroscopy - Calcium - Color - Emission spectroscopy - Energy gap - High temperature applications - Light - Light emitting diodes - Luminescence - Solid state reactions - X ray powder diffraction - Zirconium

Uncontrolled terms: $\text{CaZr}_4(\text{PO}_4)_6:\text{Dy}^{3+}$ - Concentration dependence - Diffuse reflection spectra - Full color - High temperature solid-state reaction - Photo-luminescence excitation - Ultraviolet-visible absorption spectroscopy - White light emitting diodes

Classification code: 549.2 Alkaline Earth Metals - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 708.3.1 High Temperature Superconducting Materials - 741 Light, Optics and Optical Devices - 741.1 Light/Optics - 801 Chemistry - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics

Numerical data indexing: Electron_Volt 4.18e+00eV, Size 3.40e-07m to 4.40e-07m, Size 4.87e-07m, Size 5.77e-07m

DOI: 10.1016/j.saa.2014.07.052

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

317.

Accession number: 20143518103406

Title: Optimising pulsed microwave-vacuum puffing for Shiitake mushroom (*Lentinula edodes*) caps and comparison of characteristics obtained using three puffing methods

Authors: Liu, Su-Wen¹ ; Liu, Li-Jie¹ ; Shi, Peng-Bao¹ ; Chang, Xue-Dong¹

Author affiliation:

¹ Department of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Chang, X.-D. (scicxd@gmail.com)

Source title: International Journal of Food Science and Technology

Abbreviated source title: Int. J. Food Sci. Technol.

Volume: 49

Issue: 9

Issue date: September 2014

Publication year: 2014

Pages: 2111-2119

Language: English

ISSN: 09505423

E-ISSN: 13652621

Document type: Journal article (JA)

Publisher: Blackwell Publishing Ltd

Abstract: Shiitake mushroom (*Lentinula edodes*) caps were puffed using pulsed microwave-vacuum puffing (PMVP), microwave-vacuum puffing (MVP) and microwave puffing (MP). The response surface method was used to optimise the process parameters for using PMVP to puff mushroom caps. The experiments were conducted using a central composite design to determine the visual appearance and initial moisture content (30-50%) of the mushroom caps. The initial moisture content and microwave power intensity showed highly significant linear relations with the expansion ratio and sensory evaluation. The optimal conditions for puffing mushroom caps were initial moisture content, microwave intensity, vacuum pressure and pulse ratio of 35%, 40 W g⁻¹, 77.5 ± 1.5 kPa and 1.35, which resulted in an optimal expansion ratio and sensory score of 163.2% and 6.83, respectively. The caps puffed using PMVP showed better textures, sensory scores and microstructures than those puffed using either MP or MVP. © 2014 Institute of Food Science and Technology.

Number of references: 27

Main heading: Microwaves

Controlled terms: Surface properties

Uncontrolled terms: Characteristic - *Lentinula edodes* - Puffing - Pulsed microwaves - Response surface methodology

Classification code: 711 Electromagnetic Waves - 951 Materials Science

Numerical data indexing: Percentage 1.63e+02%, Percentage 3.00e+01% to 5.00e+01%, Percentage 3.50e+01%, Pressure 1.50e+03Pa

DOI: 10.1111/ijfs.12509

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

318.

Accession number: 20143900076914

Title: Enhanced red emission in Ca_{2.96}Eu_{0.04}(PO₄)₂ phosphor by charge compensation

Authors: Zhang, Zhi-Wei¹ ; Wang, Xiao-Juan¹ ; Ren, Yan-Jun¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhi-Wei

Source title: Faguang Xuebao/Chinese Journal of Luminescence

Abbreviated source title: Faguang Xuebao

Volume: 35

Issue: 9

Issue date: September 1, 2014

Publication year: 2014

Pages: 1071-1075

Language: Chinese

ISSN: 10007032

CODEN: FAXUEW

Document type: Journal article (JA)

Publisher: Chines Academy of Sciences

Abstract: Novel Li⁺, Na⁺, K⁺, and Si⁴⁺-doped Ca_{2.96}Eu_{0.04}(PO₄)₂ red phosphors were synthesized using a conventional solid-state reaction route. The effects of codoping of charge compensatory ions on the phase and luminescent properties of Ca_{2.96}Eu_{0.04}(PO₄)₂ red phosphors were investigated by X-ray diffraction and photoluminescence spectra. The excitation spectra include both broad band (200-310 nm) and sharp peaks (310-500 nm). From emission spectra, it is observed that these phosphors exhibit two dominating bands situated at 593 and 616 nm, originating from the 5D₀→7F₁ and 5D₀→7F₂ transition of the Eu³⁺ ion, respectively. The luminescence of Ca_{2.96}Eu_{0.04}(PO₄)₂ can be enhanced by the incorporation of Li⁺, Na⁺, K⁺, and Si⁴⁺. Furthermore, the charge compensation mechanism was discussed. The charge compensatory additives have little influence on the decay times and CIE of all the phosphors. The CIE chromaticity coordinates of these phosphors all locate in the red region. It implies that Ca_{2.96}Eu_{0.04}(PO₄)₂ is a good candidate as a red-emitting phosphor pumped by near-ultraviolet (NUV) InGaN chip for fabricating white light-emitting diodes (wLEDs).

Number of references: 14

Main heading: Phosphors

Controlled terms: Calcium - Emission spectroscopy - Europium - Light emitting diodes - Lithium - Photoluminescence - Silicon - Solid state reactions - X ray diffraction

Uncontrolled terms: Charge compensation mechanism - Charge compensatory - Excitation spectrum - Luminescent property - Photoluminescence spectrum - Red emitting phosphor - Red phosphors - White lightemitting diodes (WLEDs)

Classification code: 547.2 Rare Earth Metals - 549 Nonferrous Metals and Alloys - 741.1 Light/Optics - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics

Numerical data indexing: Size 2.00e-07m to 3.10e-07m, Size 3.10e-07m to 5.00e-07m, Size 6.16e-07m

DOI: 10.3788/fgxb20143509.1071

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

319.

Accession number: 20141517567698

Title: The study of information products art design of deaf children based on matrix analysis method

Authors: Chen, Zhuo1 ; Gong, Fei Fei2 ; Li, Yong Mei1 ; Ma, Jin Xiang3

Author affiliation:

- 1 Art Institute, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Art Design Department, Gengdan Institute, Beijing University of Technology, Beijing, China
- 3 Art Design Institute, Environmental Management College of China, Qinhuangdao, China

Source title: Journal of Chemical and Pharmaceutical Research

Abbreviated source title: J. Chem. Pharm. Res.

Volume: 6

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 890-894

Language: English

E-ISSN: 09757384

Document type: Journal article (JA)

Publisher: Journal of Chemical and Pharmaceutical Research, 3/668 Malviya Nagar, Jaipur, Rajasthan, India

Abstract: The research showed that "matrix analysis method" for deaf children is very useful and valid in the design practice of communication products by the analysis of the questionnaire and the confirmation of practical investigation. "Matrix analysis method" fulfils the needs of deaf children with informational communication of the assistive devices in the terms of physiology and psychology, which showed the humane care of modern product design of family intelligent.

Number of references: 7

Main heading: Product design

Controlled terms: Communication

Uncontrolled terms: Assistive devices - Communication products - Deaf children - Design practice - Information design - Information products - Matrix analysis - Practical investigations

Classification code: 716 Telecommunication; Radar, Radio and Television - 913.1 Production Engineering

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

320.

Accession number: 20144200108374

Title: Synthesis of chitosan-gelatin molecularly imprinted membranes for extraction of l-tyrosine

Authors: Zheng, Xue-Fang¹ ; Lian, Qi¹ ; Yang, Hua²

Author affiliation:

- 1 College of Chemical Engineering, Hebei Normal University of Science and Technology, China
- 2 College of Chemistry and Chemical Engineering, Guangxi University, Nanning, China

Corresponding author: Lian, Qi

Source title: RSC Advances

Abbreviated source title: RSC Adv.

Volume: 4

Issue: 80

Issue date: 2014

Publication year: 2014

Pages: 42478-42485

Language: English

E-ISSN: 20462069

CODEN: RSCACL

Document type: Journal article (JA)

Publisher: Royal Society of Chemistry

Abstract: In this work, chitosan-gelatine-l-tyrosine (CS-GEL-l-tyr) molecularly imprinted membranes (MIMs) were prepared in an aqueous phase using CS and GEL as the functional polymers, l-tyrosine as an imprinting molecule, and polyethylene glycol (PEG) as a porogen. Removal of the template molecule l-tyrosine from the MIMs revealed binding sites that were complementary in size, shape and functional group to the template molecule l-tyrosine, which were investigated using SEM, FTIR and XRD. The effect of various significant parameters such crosslinking agent, PEG concentration and imprinting molecule content were examined and the results indicated that the obtained MIMs have special selectivity to template molecules l-tyrosine, the molecularly imprinted membrane can effectively separate l-tyrosine from other substances in the water phase, and the permeability rate of l-tyrosine was 13.42%. © 2014 the Partner Organisations.

Number of references: 47

Main heading: Amino acids

Controlled terms: Binding sites - Chitosan - Functional groups - Molecules

Uncontrolled terms: Aqueous phase - Chitosan gelatins - Cross linking agents -
Molecularly imprinted membranes - PEG concentration - Permeability rate - Special selectivity -
Template molecules

Classification code: 801.2 Biochemistry - 804.1 Organic Compounds - 931.3 Atomic and Molecular
Physics

Numerical data indexing: Percentage 1.34e+01%

DOI: 10.1039/c4ra05740f

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

321.

Accession number: 20163502757767

Title: Spatial effects of lateral deformations of supporting structure of deep excavation

Authors: Li, C.L.1, 2 ; Feng, Y.M.3 ; Yang, F.1 ; Hagan, P.4

Author affiliation:

1 Institute of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao; 066004,
China

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- 2 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao; 066004, China
3 Business department, Qinhuangdao Port Co., Lt., Qinhuangdao; 066004, China
4 School of Mining Engineering, University of New South Walse, Sydney; 2052, Australia

Corresponding author: Li, C.L. (lclcc_010@163.com)

Source title: Journal of Engineering Science and Technology Review

Abbreviated source title: J. Eng. Sci. Technol. Rev.

Volume: 8

Issue: 3

Issue date: 2015

Publication year: 2015

Pages: 71-77

Language: English

E-ISSN: 17912377

Document type: Journal article (JA)

Publisher: Technological Education Institute of Kavala

Abstract: In order to improve the design theories of the supporting structure, based on a deep excavation project, FLAC3D was used to simulate the spatial effects of the lateral deformation happened in the process of the deep excavation for the diaphragm wall. The results showed that there would produce the spatial effects in both the horizontal and depth directions; the spatial effects of the lateral deformations were different for the long and short sides; and the spatial effects of the lateral deformation were only obvious in a certain distance from the bottom to the top of the deep excavation. The nonuniformity coefficients of the lateral deformations were modified, and according to the supporting forms and supporting parameters this study provided some theory basis for the supporting design of the deep excavation. © 2015 Kavala Institute of Technology.

Number of references: 13

Main heading: Deformation

Controlled terms: Diaphragms - Excavation

Uncontrolled terms: Deep excavation - Lateral deformation - Non-uniformities - Spatial effect - Underground diaphragm wall

Classification code: 601.2 Machine Components

Funding Details: Number; Acronym; Sponsor: 51074140; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51474097; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51474188; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

322.

Accession number: 20143900071421

Title: Study of the properties of strong-coupling magnetopolaron in quantum disks induced by the Rashba spin-orbit interaction

Authors: Bai, Xu-Fang¹ ; Wuyunqimuge¹ ; Xin, Wei² ; Eerdunchaolu²

Author affiliation:

1 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao , China

2 Department of Physics, Hebei Normal University of Science & Technology, Qinhuangdao , China

Corresponding author: Eerdunchaolu

Source title: Wuli Xuebao/Acta Physica Sinica

Abbreviated source title: Wuli Xuebao

Volume: 63

Issue: 17

Issue date: September 5, 2014

Publication year: 2014

Article number: 177803

Language: Chinese

ISSN: 10003290

CODEN: WLHPAR

Document type: Journal article (JA)

Publisher: Institute of Physics, Chinese Academy of Sciences

Abstract: On the basis of Lee-Low-Pines unitary transformation, the properties of strong-coupling magnetopolarons in quantum disks (QDs) induced by the Rashba spin-orbit interaction are studied using the Tokuda improved linearly combined operator method. Results show that the state properties of magnetopolarons are closely linked with the sign of the interaction energy E_{int} , and the E_{int} of magnetopolarons changes with the transverse confinement strength ω_0 , the cyclotron frequency of the external magnetic field ω_c , the electron-LO phonon coupling strength α , and the thickness L of QDs. The average number N^- of phonons increases with increasing ω_c , ω_0 and α , but the oscillation decreases with increasing thickness L of QDs. The effective mass m_0^* of magnetopolarons splits into two (m_+^* and m_-^*), induced by the Rashba spin-orbit interaction, and the values of them increase with increasing ω_c , ω_0 and α , but the oscillation decreases with increasing thickness L of QDs. For the ground state of magnetopolarons in QDs, the electron-LO phonon interaction plays a significant role, meanwhile, the Rashba spin-orbit coupling effect cannot be ignored. Only for the lower velocity of the electrons, can the polaron effect and the Rashba spin-orbit interaction effect on the magnetopolaron be obvious. © 2014 Chinese Physical Society

Number of references: 27

Main heading: Semiconductor quantum dots

Controlled terms: Ground state - Linear transformations - Mathematical transformations - Phonons

Uncontrolled terms: External magnetic field - Interaction energies - Magnetopolarons - Quantum disks - Rashba spin orbit interaction - Rashba spin-orbit coupling - Transverse confinement - Unitary transformations

Classification code: 714.2 Semiconductor Devices and Integrated Circuits - 751.1 Acoustic Waves - 921.3 Mathematical Transformations - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 933 Solid State Physics

DOI: 10.7498/aps.63.177803

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20154201416263

Title: Physicochemical properties and in vitro digestibility of starches from field peas grown in China

Authors: Liu, Chang^{1, 2}; Wang, Shujun¹; Copeland, Les³; Wang, Shuo¹

Author affiliation:

1 Key Laboratory of Food Nutrition and Safety, Ministry of Education, Tianjin University of Science and Technology, Tianjin, China

2 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao City, China

3 Faculty of Agriculture and Environment, The University of Sydney, NSW, Australia

Corresponding author: Wang, Shujun

Source title: LWT - Food Science and Technology

Abbreviated source title: LWT - Food Sci. Technol.

Volume: 64

Issue: 2

Issue date: 2015

Publication year: 2015

Pages: 829-836

Language: English

ISSN: 00236438

CODEN: LBWTAP

Document type: Journal article (JA)

Publisher: Academic Press

Abstract: The physicochemical and in vitro digestibility properties of starches isolated from four varieties of field peas grown in China were determined. Field pea starch granules were oval, round, even though there were many irregularly shaped granules with sizes between 21.5 and 23.9 μm . Zhongwan-6 showed the highest amylose content (36.0%), whereas Baofeng-3 showed the lowest amylose content (33.2%). All starches exhibited a C-type X-ray diffraction pattern, with relative crystallinity ranging between 27.0 and 30.2%.

Zhongwan-6 had the highest relative crystallinity and the value of 1047/1022 cm⁻¹. Baofeng-3 exhibited the highest swelling power (10.30 g/g) and Cai exhibited the lowest swelling power (8.45 g/g). Ma had the highest Toand Tp, but the lowest δH and narrowest R, whereas Zhongwan-6 showed the lowest Toand Tp, but the highest δH . Zhongwan-6 and Ma starches showed the lowest and highest pasting viscosities. The gel of Zhongwan-6 was the hardest and Baofeng-3 was the softest. The in vitro digestibility studies showed that Baofeng-3 starch may be more effective than other starches in moderating post-prandial blood glucose levels. © Elsevier Ltd.

Number of references: 40

Main heading: Starch

Controlled terms: Cyclodextrins - Granulation - Morphology - Structure (composition) - X ray diffraction

Uncontrolled terms: Amylose content - Blood glucose level - Field pea - Functional properties - Pasting viscosities - Physicochemical property - Relative crystallinity - Swelling power

Classification code: 802.3 Chemical Operations - 804.1 Organic Compounds - 951 Materials Science

Numerical data indexing: Percentage 3.02e+01%, Percentage 3.32e+01%, Percentage 3.60e+01%, Size 2.39e-05m

DOI: 10.1016/j.lwt.2015.06.060

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

324.

Accession number: 20142717892998

Title: Effects of 4 GPa pressure heat treatment on micro-mechanical properties of brass by nanoindentation

Authors: Yu-quan, Ma¹ ; Ji-meng, Li² ; Hong-ju, Lin¹

Author affiliation:

1 Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Materials Science and Engineering, YanShan University, Qinhuangdao 066004, China

Corresponding author: Yu-quan, M. (mayuquan2004@126.com)

Source title: Materials Transactions

Abbreviated source title: Mater. Trans.

Volume: 55

Issue: 7

Issue date: 2014

Publication year: 2014

Pages: 1065-1068

Language: English

ISSN: 13459678

CODEN: MTARCE

Document type: Journal article (JA)

Publisher: Japan Institute of Metals (JIM)

Abstract: Brass was treated after 4 GPa high pressure heat treatment at 700°C insulated for 15 min, and the effects of 4 GPa high pressure heat treatment on micro-mechanical properties of the brass were discussed by optical microscope, transmission electron microscopy, scanning electron microscope and nanoindenter. The results showed that 4 GPa high pressure heat treatment could increase the hardness, elastic modulus and elastic recovery coefficient, and decrease its friction coefficient. They were attributed to the microstructure of brass that became finer and more uniform compact after 4 GPa high pressure heat treatment. © 2014 The Japanese Society for Non-Destructive Inspection.

Number of references: 17

Main heading: Heat treatment

Controlled terms: Brass - High pressure effects - Mechanical properties - Nanoindentation - Scanning electron microscopy - Transmission electron microscopy

Uncontrolled terms: Elastic recovery - Friction coefficients - High pressure - Micro-mechanical - Nanoindenters - Transmission electron

Classification code: 423 Non Mechanical Properties and Tests of Building Materials - 537.1 Heat Treatment Processes - 546.3 Zinc and Alloys - 712 Electronic and Thermionic Materials - 741.3 Optical Devices and Systems - 761 Nanotechnology - 931.2 Physical Properties of Gases, Liquids and Solids - 951 Materials Science

Numerical data indexing: Pressure 4.00e+09Pa, Temperature 9.73e+02K, Time 9.00e+02s

DOI: 10.2320/matertrans.M2013446

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

325.

Accession number: 20143600027439

Title: Photoluminescence properties of a novel red emitting
Sr⁷Zr(PO₄)₆:Eu³⁺ phosphor

Authors: Zhang, Zhi-Wei¹ ; Shen, Peng-Xin¹ ; Wu, Ya-Nan¹ ; Zhang, Xian-Fu¹ ; Zhang, Jian-Ping¹ ;
Zhang, Wei-Guo¹ ; Wang, Dong-Jun¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhi-Wei

Source title: Optical Materials

Abbreviated source title: Opt Mater

Volume: 37

Issue: C

Issue date: 2014

Publication year: 2014

Pages: 866-869

Language: English

ISSN: 09253467

CODEN: OMATET

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: A novel red-emitting phosphor $\text{Sr}_7\text{Zr}(\text{PO}_4)_6\text{Eu}^{3+}$ has been synthesised by a high-temperature solid-state reaction. X-ray powder diffraction (XRD) analysis and FT-IR spectra confirmed the phase formation of $\text{Sr}_7\text{Zr}(\text{PO}_4)_6\text{Eu}^{3+}$ materials. The photoluminescence excitation and emission spectra, the concentration dependence of the emission intensity, decay curves, and ultraviolet - visible absorption spectroscopy of the phosphor were investigated. The results showed that the phosphor could be efficiently excited by the near ultraviolet (NUV) light region from 350 to 450 nm, and it exhibited red light emission. The decay time was also determined for various concentrations of Eu^{3+} in $\text{Sr}_7\text{Zr}(\text{PO}_4)_6$. The calculated color coordinates lies in the red region. Therefore, these obtained results suggest that the prepared phosphors exhibit great potential for use as red emitting phosphor for near ultraviolet white light emitting diodes (NUV WLEDs). © 2014 Elsevier B.V. All rights reserved.

Number of references: 23

Main heading: Light emission

Controlled terms: Absorption spectroscopy - Emission spectroscopy - Europium - High temperature applications - Light - Light emitting diodes - Luminescence - Phosphors - Photoluminescence - Solid state reactions - X ray powder diffraction - Zirconium

Uncontrolled terms: Concentration dependence - High temperature solid-state reaction - Photo-luminescence excitation - Photoluminescence properties - Red emitting phosphor - Red-light emission - Ultraviolet-visible absorption spectroscopy - White light emitting diodes

Classification code: 547.2 Rare Earth Metals - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 708.3.1 High Temperature Superconducting Materials - 741 Light, Optics and Optical Devices - 741.1 Light/Optics - 801 Chemistry - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics

Numerical data indexing: Size 3.50e-07m to 4.50e-07m

DOI: 10.1016/j.optmat.2014.05.029

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20152500957773

Title: Improving the activity of Lycium barbarum polysaccharide on sub-health mice

Authors: Zhao, Rui¹ ; Cai, Yaping¹ ; Shao, Xingyue² ; Ma, Baoling³

Author affiliation:

1 Department of Pharmaceutical Engineering, College of Life Science and Biotechnology, Heilongjiang Bayi Agricultural University Daqing, High-Tech Industrial Development Zone, China

2 Department of Gynaecology and Obstetrics, Daqing Oilfield Hospital, Daqing, China

3 Department of Physical Education, Hebei Normal University of Science and Technology, 360 Hebei Street, Qinhuangdao, China

Corresponding author: Zhao, Rui

Source title: Food and Function

Abbreviated source title: Food. Funct.

Volume: 6

Issue: 6

Issue date: June 1, 2015

Publication year: 2015

Pages: 2033-2040

Language: English

ISSN: 20426496

E-ISSN: 2042650X

Document type: Journal article (JA)

Publisher: Royal Society of Chemistry

Abstract: Sub-health has been described as a chronic condition of unexplained deteriorated physiological function, which falls between health and illness and includes fatigue as one of its principal manifestations. Mitochondrial dysfunctions have been discovered in fatigue-type sub-health such as impaired oxidative phosphorylation and mitochondrial damage. In the present study, we evaluated the effects of Lycium barbarum polysaccharide (LBP-4a), a polysaccharide fraction purified from Lycium barbarum, on anti-fatigue in sub-health mice, and the relevant mechanisms were studied. Forty mice were divided into control, model, LBP-4a(L) and LBP-4a(H) groups. Model mice were prepared through compound factors, including forced swim tests, sleep deprivation and wrapping restraint stress tests. After LBP-4a treatment for 4 weeks, the gastrocnemius

muscles were obtained for morphological observation and the activities of SOD, GSH-Px and MDA content were detected. Furthermore, mitochondrial membrane potential and Ca^{2+} content were measured in isolated skeletal muscle mitochondria. The results showed that LBP-4a could reduce skeletal muscle damage and MDA levels and enhance of SOD and GSH-Px activities compared with the model group. The levels of mitochondrial membrane potential and Ca^{2+} were increased in LBP-4a-treated skeletal muscle mitochondria; moreover, the high-dosage group was better than that of the low dosage. In conclusion, LBP-4a exhibited anti-fatigue activity on sub-health mice, and the mechanism was closely correlated with a reduction in lipid peroxidation levels and an increase in antioxidant enzyme activities in skeletal muscle tissue, improving the intracellular calcium homeostasis imbalance and increasing mitochondrial membrane potential. These observations provided the background for the further development of LBP-4a as a type of anti-fatigue therapy used in sub-health treatment. © 2015 The Royal Society of Chemistry.

Number of references: 29

Main heading: Mitochondria

Controlled terms: Calcium - Cell membranes - Enzyme activity - Fatigue damage - Health - Magnesium printing plates - Mammals - Muscle - Musculoskeletal system - Physiology - Tissue homeostasis

Uncontrolled terms: Antioxidant enzyme activity - Intracellular calcium - Lipid peroxidation levels - Mitochondrial dysfunction - Mitochondrial membrane potential - Morphological observations - Oxidative phosphorylation - Physiological functions

Classification code: 421 Strength of Building Materials; Mechanical Properties - 461 Bioengineering and Biology - 549.2 Alkaline Earth Metals - 951 Materials Science

Numerical data indexing: Age 7.67e-02yr

DOI: 10.1039/c4fo01108b

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

327.

Accession number: 20150600488555

Title: The analysis for the nutritional ingredient of wild edible fungus in tourist attraction-taking Yunnan province as an example

Authors: Yi, Lanlan¹ ; Zhang, Jifei¹ ; Xue, Yajuan¹ ; Wang, Ying¹ ; Lu, Yanli¹ ; Liu, Yanfang¹

Author affiliation:

1 College of Business Administration, Hebei Normal University of Science and Technology, Hebei, China

Corresponding author: Yi, Lanlan

Source title: Advance Journal of Food Science and Technology

Abbreviated source title: Adv. J. Food Sci. Technol.

Volume: 6

Issue: 11

Issue date: 2014

Publication year: 2014

Pages: 1272-1276

Language: English

ISSN: 20424868

E-ISSN: 20424876

Document type: Journal article (JA)

Publisher: Maxwell Science Publications

Abstract: This study is to provide new thinking for the local tourism by understanding of nutritional ingredient in wild edible fungus in tourist attraction, thus the nutrient value and medical value of edible fungus can be converted to economic value preferably. Taking several common wild edible fungus in Yunnan tourist attraction as an example, this paper analyzes the nutritional ingredient such as amino acid, vitamin, inorganic salt, carbohydrate, fat, etc., according to the detection method of food nutrient content. It aims to provide scientific basis for the development and utilization of wild fungus and attract more tourists to drive local economic development at the same time. © Maxwell Scientific Organization, 2014.

Number of references: 10

Main heading: Economics

Controlled terms: Amino acids - Nutrients

Uncontrolled terms: Detection methods - Development and utilizations - Edible fungus - Local economic development - Nutrient contents - Nutritional ingredients - Scenic areas - Tourist attractions

Classification code: 461 Bioengineering and Biology - 461.9 Biology - 971 Social Sciences

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

328.

Accession number: 20160601888389

Title: The K-anonymization method satisfying personalized privacy preservation

Authors: Song, Jinling¹ ; Huang, Liming¹ ; Wang, Gang¹ ; Kang, Yan¹ ; Liu, Haibin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Song, Jinling (songjinling99@126.com)

Source title: Chemical Engineering Transactions

Abbreviated source title: Chem. Eng. Trans.

Volume: 46

Issue date: December 2015

Publication year: 2015

Pages: 181-186

Language: English

E-ISSN: 22839216

ISBN-13: 9788895608372

Document type: Journal article (JA)

Publisher: Italian Association of Chemical Engineering - AIDIC

Abstract: Even if K-anonymity model can prevent publishing data from disclosing privacy effectively and efficiently, due to the uneven distribution of the sensitive data, ordinary K-anonymization method cannot

guarantee each tuple satisfying the personalized privacy requirement of its data owner although the publishing table has been satisfied K-anonymity constraint. The reason which K-anonymity table fails to satisfy personalized privacy requirement is analyzed firstly, then Correlate degree of Sensitive Values, Leakage Collection, privacy disclosure metric and data quality metric are presented. At last an anonymization method satisfying personalized privacy requirements is presented, in which a utility-driven adaptive clustering method is proposed to partition tuples with similar best data quality. Copyright © 2015, AIDIC Servizi S.r.l.

Number of references: 15

Main heading: Data privacy

Controlled terms: Chemical engineering - Chemical operations

Uncontrolled terms: Adaptive clustering - Anonymization - Data quality metric - K-anonymization - Privacy disclosures - Privacy preservation - Privacy requirements - Sensitive datas

Classification code: 802.3 Chemical Operations - 805.1 Chemical Engineering

DOI: 10.3303/CET1546031

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

329.

Accession number: 20141217498311

Title: Fast roaming algorithm based on complex scenes

Authors: Xiao, Juan¹ ; Wei, Yu Qing¹ ; Yan, Zhong Wen¹

Author affiliation:

¹ College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 530-531

Monograph title: Advances in Measurements and Information Technologies

Issue date: 2014

Publication year: 2014

Pages: 785-788

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783038350392

Document type: Conference article (CA)

Conference name: 2014 International Conference on Sensors Instrument and Information Technology, ICSIIT 2014

Conference date: January 18, 2014 - January 19, 2014

Conference location: Guangzhou, China

Conference code: 103218

Publisher: Trans Tech Publications

Abstract: The system quickly build virtual scene and the scene of several aspects like transport, application layer interaction techniques were studied in this paper, to build an easy development and deployment, scalability, easy maintenance, based on experience and strong Internet roaming online interactive virtual reality systems. Rapid method for constructing virtual scene scene WebVR transport mechanisms and interactive virtual scene surface were studied, research has better practical value. © (2014) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Information technology

Controlled terms: Online systems - Virtual reality

Uncontrolled terms: Application layers - Complex scenes - Interactive virtual reality - Rapid method - Roaming algorithms - Roaming systems - Transport mechanism - Virtual scenes

Classification code: 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 903 Information Science

DOI: 10.4028/www.scientific.net/AMM.530-531.785

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

330.

Accession number: 20150500477650

Title: Research on the performance measurement model of knowledge management based on grey relational analysis

Authors: Yang, Liming¹ ; Wang, Yanwen¹ ; Gao, Xiuju¹

Author affiliation:

1 College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Wang, Yanwen

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 11

Issue date: 2014

Publication year: 2014

Pages: 682-688

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: Performance measurement of knowledge management is a decision-making analysis project that involves multiple complex factors, levels and fuzzy uncertain information. On the basis of analysis of influence factors of knowledge management performance measurement, the study established an evaluation index system of enterprise knowledge management performance. Meanwhile, by combining grey relational analysis method and Euclidean distance measurement, a performance measurement model of knowledge measurement was established. Via standardization of different types of evaluation indexes of knowledge management performance, Euclidean distances of standardized evaluation indexes of knowledge management performance and the grey relational coefficients based on Euclidean distances were established respectively. Then the weighted grey correlations of evaluation indexes of knowledge management performance were obtained. In this way, evaluation analysis of enterprise knowledge management performance was realized. Finally, the model and algorithm was tested with a case study. The result proves that the method of combining grey relational analysis and Euclidean distance is efficient and has its application value in performance evaluation of knowledge management.

Number of references: 11

Main heading: Decision making

Controlled terms: Factor analysis - Knowledge management - Models

Uncontrolled terms: Analysis of influence factors - Decision making analysis - Enterprise knowledge management - Euclidean distance - Evaluation of knowledge - Grey relational analysis - Grey relational coefficient - Performance measurements

Classification code: 723.5 Computer Applications - 902.1 Engineering Graphics - 912.2 Management - 922.2 Mathematical Statistics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

331.

Accession number: 20153501218006

Title: A cardinality estimation approach based on two level histograms

Authors: Lin, Xudong¹ ; Zeng, Xiaoning² ; Pu, Xiaowei¹ ; Sun, Yanyan¹

Author affiliation:

¹ Department of Information Engineering, Environmental Management College of China, Qinhuangdao, Hebei, China

² College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Source title: Journal of Information Science and Engineering

Abbreviated source title: J. Inf. Sci. Eng.

Volume: 31

Issue: 5

Issue date: September 1, 2015

Publication year: 2015

Pages: 1733-1756

Language: English

ISSN: 10162364

CODEN: JINEEY

Document type: Journal article (JA)

Publisher: Institute of Information Science

Abstract: For the mainstream relational database management systems, histograms play important roles in cardinality estimation. The main histogram-based cardinality estimation approaches can be classified into two categories: proactive approaches and reactive approaches. For the former, histograms are constructed and updated by periodical data scan which is also the essential reason affecting the accuracy and performance of this kind of approaches. Data scan is avoided in the latter, as an alternative, query feedback records (QFRs) are collected to construct and update histograms. But some time-consuming algorithms such as the effective QFR set calculation, the hole drilling algorithm and the iterative scaling algorithm are used by reactive approaches, which makes it inefficient. In this paper, we propose a novel cardinality estimation approach by combining proactive approach with QFRs. In our approach, data scan will be executed only once to construct the initial first-level histogram. And then, corresponding to all buckets of the first-level histogram, second-level histograms will be constructed and updated based on QFRs. The existence of second-level histograms and the elaborated mechanism dealing with the data update problem can improve the accuracy of cardinality estimation remarkably. Different from the traditional histogram-based approaches, we do not construct only one big histogram covering the whole value range of an attribute, but construct a serials of small second-level histograms covering different parts of the whole value range. These second-level histograms can be constructed and updated independently over time to ensure the performance of the approach. Extensive comparison experiments fully demonstrate the advantages of our approach in accuracy and performance.

Number of references: 32

Main heading: Graphic methods

Controlled terms: Algorithms - Iterative methods - Query processing - Relational database systems

Uncontrolled terms: Cardinality estimations - Histogram - Pro-active approach - Query feedback record - Reactive approach

Classification code: 723 Computer Software, Data Handling and Applications - 921 Mathematics - 921.6 Numerical Methods

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

332.

Accession number: 20152600980284

Title: Analysis and construction of dance system for strength training

Authors: Yan, Chen1

Author affiliation:

1 College of the Arts, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Yan, Chen

Source title: BioTechnology: An Indian Journal

Abbreviated source title: Biotechnol. An Indian J.

Volume: 10

Issue: 12

Issue date: November 1, 2014

Publication year: 2014

Pages: 6851-6857

Language: English

ISSN: 09747435

Document type: Journal article (JA)

Publisher: Trade Science Inc, 126,Prasheel Park,Sanjay Raj Farm House,Nr. Saurashtra Unive, Rajkot, Gujarat, 360 005, India

Abstract: Dance is to technology as the core, power quality assurance skill showing category sports. Strength quality is the physical construction of dance sport guarantee is beautiful, complete set of action is the material foundation, quality is the core of the Dance physical quality. The power of good quality can not only avoid the dancers were injured in the movement, the movement to extend the life, but also can promote the dancer faster learning, to master the correct dance techniques and bring into full play the technical level in the game. Dance in sports training, strength training, whether it should focus on the training of high level athletes, or general player. This paper, through access to a large number of dance sports books and special strength quality training content and other related research results and literature material, on the domestic and foreign research present situation of Dance training has an overall understanding of. Especially in reference to China's Dance college teaching syllabus and dance training details, and combining the research of Dance most, certain induction, summary and analysis. © Trade Science Inc.

Number of references: 12

Main heading: Quality control

Controlled terms: Personnel training - Power quality - Quality assurance - Sports - Strength of materials

Uncontrolled terms: Dance - High-level athletes - Physical quality - Present situation - Research and analysis - Research results - Strength trainings - Theory

Classification code: 421 Strength of Building Materials; Mechanical Properties - 422 Strength of Building Materials; Test Equipment and Methods - 461.3 Biomechanics, Bionics and Biomimetics - 706.1.2 Electric Power Distribution - 901.2 Education - 913.3 Quality Assurance and Control - 951 Materials Science

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

333.

Accession number: 20152100863181

Title: Exploration on the construction and management of laboratory for hotel management major

Authors: Liu, Yanfang1

Author affiliation:

1 School of Business and Management, Hebei Normal University of Science and Technology, Hebei, China

Corresponding author: Liu, Yanfang

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 12

Issue date: 2014

Publication year: 2014

Pages: 719-722

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: Higher education aims to develop the practical abilities for students, while the practical teaching is an important way to help enhance their abilities. Teaching practice is directly related to whether school can meet the needs of society, develop its own characteristics and reach a high level. This paper based on analyzing and exploring the present problems in the lab construction and management for hotel management major, raised some measures for improvement accordingly.

Number of references: 9

Main heading: Hotels

Controlled terms: Education

Uncontrolled terms: Higher education - Hotel managements - Lab management - Practical teachings - Teaching practices

Classification code: 402.2 Public Buildings - 901.2 Education

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

334.

Accession number: 20150100399364

Title: Biopolymer-assisted in situ route toward Cu hollow spheres as antibacterial materials

Authors: Cai, Aijun¹ ; Sun, Yanfeng² ; Chang, Yongfang³ ; Guo, Aiying¹ ; Du, Liqiang¹

Author affiliation:

- 1 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Ocean College of Hebei Agricultural University, Qinhuangdao, China
- 3 College of Chemical Technology, Shijiazhuang University, Shijiazhuang, China

Corresponding author: Chang, Yongfang

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 134

Issue date: November 1, 2014

Publication year: 2015

Pages: 214-217

Language: English

ISSN: 0167577X

E-ISSN: 18734979

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: Cu hollow structures (Cu HSs) were synthesized using gelatin B as a crystal growth modifier. The structures, phases and formation of Cu HSs were investigated by employing various techniques such as X-ray diffraction (XRD), field emission scanning electron microscopy (FESEM), transmission electron microscopy (TEM) and thermogravimetric analysis (TGA). The Cu HSs had good antibacterial effects on Escherichia coli (E. coli) and Staphylococcus aureus (S. aureus). The products had different effects on the membrane of E. coli and S. aureus.

Number of references: 14

Main heading: Thermogravimetric analysis

Controlled terms: Bacteria - Crystal structure - Escherichia coli - Field emission microscopes - Scanning electron microscopy - Transmission electron microscopy - X ray diffraction

Uncontrolled terms: Anti-bacterial agents - Antibacterial effects - Antibacterial materials - Crystal growth modifier - Escherichia coli (E. coli) - Field emission scanning electron microscopy - Functional - Hollow sphere

Classification code: 741.1 Light/Optics - 741.3 Optical Devices and Systems - 801 Chemistry - 931.3 Atomic and Molecular Physics

DOI: 10.1016/j.matlet.2014.07.088

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

335.

Accession number: 20150500477622

Title: Exploratory development of ancient village based on the low carbon travel development model

Authors: Zhang, Jifei1

Author affiliation:

1 School of Business and Management, Hebei Normal University of Science and Technology, Hebei, China

Corresponding author: Zhang, Jifei

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 11

Issue date: 2014

Publication year: 2014

Pages: 1346-1349

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: This paper summarized basic theory of low carbon travel and the functional mechanism of the low carbon economy to improve the village tourism development by analyzing its conception, and development status and existing problem of the ancient village tourism in the low-carbon tourism development mode of our country nowadays is put forwarded. Combining with actual situation, this paper aims to propose the emission reduction countermeasures in allusion to these problems above, in order to provide certain reference to the development of ancient villages low carbon tourism.

Number of references: 7

Main heading: Carbon

Controlled terms: Emission control - Renewable energy resources - Rural areas

Uncontrolled terms: Ancient village travel - Development status - Emission reduction - Functional mechanisms - Low carbon - Low-carbon concepts - Low-carbon tourisms - Tourism development

Classification code: 451.2 Air Pollution Control - 525.1 Energy Resources and Renewable Energy Issues - 804 Chemical Products Generally - 821 Agricultural Equipment and Methods; Vegetation and Pest Control

Database: Compendex

336.

Accession number: 20140517245334

Title: Study of cloud computing and advanced manufacturing technology under information technology development

Authors: Zhou, Guo Hong 1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Zhou, G. H.

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 484-485

Monograph title: Green Power, Materials and Manufacturing Technology and Applications III

Issue date: 2014

Publication year: 2014

Pages: 227-230

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037859865

Document type: Conference article (CA)

Conference name: 3rd International Conference on Green Power, Materials and Manufacturing Technology and Applications, GPMMTA 2013

Conference date: December 27, 2013 - December 30, 2013

Conference location: Wuhan, China

Conference code: 102250

Sponsor: National Natural Science Foundation of China (NSFC); Provincial Natural Science Foundation of Hunan; Provincial Science and Technology plan project of Hunan

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Cloud computing can be regarded as the integration of grid computing and virtualization technology: namely the use of grid distributed computing processing power of IT resources and build into a resource pool, plus on a mature server virtualization, storage virtualization technology make users can real-time monitoring and deployment of resources. Cloud computing and advanced manufacturing technology is facing many challenges during the process of development in the future, including security and privacy will become a primary issue. This study focused on relations with the important areas of emerging industries, the fast scheduling network resources in the cloud computing and advanced manufacturing technology key issues, as well as cloud computing security management issues related to cloud computing and advanced manufacturing technology. © (2014) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Information technology

Controlled terms: Cloud computing - Grid computing - Manufacture - Virtual reality - Virtual storage

Uncontrolled terms: Advanced manufacturing technologies - Cloud computing securities - Real time monitoring - Scheduling network resources - Security and privacy - Server Virtualization - Storage virtualization - Virtualization technologies

Classification code: 537.1 Heat Treatment Processes - 722.1 Data Storage, Equipment and Techniques - 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 903 Information Science

DOI: 10.4028/www.scientific.net/AMM.484-485.227

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

337.

Accession number: 20141917700767

Title: Research on comparative analysis of regional logistics information platform operation mode based on cloud computing

Authors: Li, Changming1 ; Zhang, Xiangdong1 ; Li, Lijie1

Author affiliation:

1 College of Business and Administration, Hebei Normal University of Science and Technology, Qinhuangdao Hebei Prov. 066004, China

Source title: International Journal of Future Generation Communication and Networking

Abbreviated source title: Int. J. Future Gener. Commun. Networking

Volume: 7

Issue: 2

Issue date: 2014

Publication year: 2014

Pages: 73-80

Language: English

ISSN: 22337857

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: In order to realize integration of the social logistics resource and provide customized logistics services to the customers, this paper presents a regional logistics platform architecture based on cloud computing through systems analysis. Subsequently, a suggestion about adopting the mode of cooperative operation leading by the enterprise is provided combining the development situation of cloud computing and logistics information public platform in china on the basis of comparative analysis of three kind of operation mode. © 2014 SERSC.

Number of references: 11

Main heading: Cloud computing

Controlled terms: Systems analysis

Uncontrolled terms: Comparative analysis - Cooperative operation - Development situations - Logistics information - Logistics resources - Logistics services - Operation mode - Regional logistics

Classification code: 722.4 Digital Computers and Systems - 961 Systems Science

DOI: 10.14257/ijfgcn.2014.7.2.08

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

338.

Accession number: 20150500474070

Title: Symbiosis model of rural tourist attraction based on sustainable development

Authors: Yi, Lanlan¹

Author affiliation:

1 School of Business and Management, Hebei Normal University of Science and Technology, China

Corresponding author: Yi, Lanlan

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 12

Issue date: 2014

Publication year: 2014

Pages: 283-286

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: Through the analysis on the concept of rural tourism sustainable development, this paper summarized the tourist content based on sustainable development, and pointed out the existing problems of current sustainable development in China. Combined with practical development situation, this paper put forward the countryside-scenic spot symbiosis model under sustainable environment. It elaborated from its model connotation, framework, operation and economic efficiency, with the hope of playing a good reference for the development of rural tourism.

Number of references: 7

Main heading: Sustainable development

Controlled terms: Planning

Uncontrolled terms: Content-based - Development situations - Economic efficiency - Existing problems - Rural tourisms - Scenic spot - Sustainable environment - Tourist attractions

Classification code: 403 Urban and Regional Planning and Development - 911.2 Industrial Economics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

339.

Accession number: 20150500473781

Title: Logistics outsourcing and selecting of logistics service provider of the e-commerce companies:
A fuzzy TOPSIS approach

Authors: Wang, Yanwen¹ ; Gao, Xiuju¹ ; Yang, Liming¹

Author affiliation:

1 College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Wang, Yanwen

Source title: Computer Modelling and New Technologies

Abbreviated source title: Comput. Model. New Technol.

Volume: 18

Issue: 9

Issue date: 2014

Publication year: 2014

Pages: 249-255

Language: English

ISSN: 14075806

E-ISSN: 14075814

Document type: Journal article (JA)

Publisher: Transport and Telecommunication Institute, Lomonosova street 1, Riga, LV-1019, Latvia

Abstract: Logistics outsourcing has become the development trend of enterprise logistics operations. A good logistics service provider can improve the customer satisfaction, as also as reducing the cost of the whole supply chain, so it is very important to evaluate the logistics outsourcing service for the corn companies in the supply chain. This paper is an attempt to identify the main factors of selecting satisfactory logistics service provider of the electronic commerce (e-commerce) companies in China. GRA and Fuzzy TOPSIS are employed to evaluate the service of the logistics companies. The managerial implications are also discussed in the last section.

Number of references: 29

Main heading: Electronic commerce

Controlled terms: Chains - Commerce - Customer satisfaction - Logistics - Outsourcing
- Supply chains

Uncontrolled terms: Development trends - Enterprise logistics - Evaluation - FUZZY TOPSIS - Logistics company - Logistics outsourcing - Logistics service provider - Managerial implications

Classification code: 602.1 Mechanical Drives - 911.2 Industrial Economics - 912 Industrial Engineering and Management - 912.2 Management

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20133716735399

Title: Fluorescence lifetimes and quantum yields of ten rhodamine derivatives: Structural effect on emission mechanism in different solvents

Authors: Zhang, Xian-Fu^{1, 2} ; Zhang, Yakui¹ ; Liu, Limin¹

Author affiliation:

1 Chemistry Department, Hebei Normal University of Science and Technology, Qinhuangdao 066004, Hebei Province, China

2 MPC Technologies, Hamilton, ON L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Luminescence

Abbreviated source title: J Lumin

Volume: 145

Issue date: 2014

Publication year: 2014

Pages: 448-453

Language: English

ISSN: 00222313

CODEN: JLUMA8

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: To get consistent data for ten rhodamine dyes, the fluorescence lifetime, fluorescence quantum yield and spectral properties were measured under the same conditions in four typical solvents by using time-correlated single photon counting and steady state fluorometer. The comparable data make it possible to discuss the mechanism that controls the fluorescence properties of the rhodamine dyes. The data showed that the molecular structure and solvent have remarkable effects. The second alkyl and the rigidity of the alkyls on N atoms are the determining factors for fluorescence lifetime and quantum yields, whereas the substitution on phenyls has little influence. The increase of the solvent polarity decreases both the fluorescence lifetime and fluorescence quantum yield. These results support that the intra-molecular photoinduced electron transfer (PET) may occur from the xanthene moiety to the linked phenyl. The rate constant of radiation process, however, shows no dependence on both the chemical structure and solvents but a constant value ($0.21 \times 10^9 \text{ s}^{-1}$). The rate constant of nonradiation process, on the other hand, is varied with both the structure and the solvent used. © 2013 Elsevier

B.V.

Number of references: 64

Main heading: Fluorescence

Controlled terms: Molecular structure - Quantum yield - Rate constants - Solvents

Uncontrolled terms: Fluorescence lifetimes - Fluorescence properties - Fluorescence quantum yield - Nonradiation process - Photo-induced electron transfer - Rhodamine - Spectral properties - Time-correlated single photon counting

Classification code: 741.1 Light/Optics - 801.4 Physical Chemistry - 803 Chemical Agents and Basic Industrial Chemicals

DOI: 10.1016/j.jlumin.2013.07.066

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

341.

Accession number: 20161002052816

Title: Research of solid particles circulation based on a new feedback valve of internal circulating fluidized bed

Authors: Hongju, Lin^{1, 2}; Dezhong, Zheng¹

Author affiliation:

1 Key Laboratory of Measurement Technology and Instrumentation of Hebei Province, Yanshan University, Qinhuangdao, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Hongju, Lin (lph900@hotmail.com)

Source title: Recent Innovations in Chemical Engineering

Abbreviated source title: Recent Innov. Chem. Eng.

Volume: 8

Issue: 1

Issue date: April 1, 2015

Publication year: 2015

Pages: 57-66

Language: English

ISSN: 24055204

E-ISSN: 24055212

Document type: Journal article (JA)

Publisher: Bentham Science Publishers B.V., P.O. Box 294, Bussum, 1400 AG, Netherlands

Abstract: Theory calculation method and cold experiment are introduced based on a new J-type Loop Seal of two chambers internal circulating fluidized bed in the paper. Theory calculation includes equivalent model based on J-type Loop Seal experimental device and setting up correlations of solid particles circulation. Cold experiment includes building the experimental device and measuring related parameters. And relationships between lateral blow and three key parameters determining solid particle circulation are discussed on emphasis in cold experiment. The experimental results show that when the left or right lateral blow is fixed, the height difference of two chambers under operation is in linear relationship with another lateral blow. The dynamic head of feedback valve under operation is only in linear relationship with the left lateral blow, and is hardly affected by the right lateral blow; the resistance coefficient in the feedback valve is in linear relationship with reciprocal of right lateral blow. Experimental values are in good agreement with the theory calculation values for solid particle circulation, with the relative error less than 10%. Thus the theory calculation method and cold experiment provide a reliable reference basis for operation and hot experiment of feedback valve of internal circulating fluidized bed. What's more, we also discussed few related patents. © 2015 Bentham Science Publishers.

Number of references: 15

Main heading: Fluidized beds

Controlled terms: Fluidized bed process - Models

Uncontrolled terms: Circulating fluidized bed - Cold experiments - Key parameters - Loop seal - Solid particles

Database: Compendex

342.

Accession number: 20141517560295

Title: Complex enzyme and microwave assisted extraction technology of total flavonoids from *Begonia fimbristipula* Hance leaves

Authors: Cui, Ruijing¹ ; Shen, Shuqi² ; Guo, Shuo¹

Author affiliation:

1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, Hebei, China

2 Ocean College of Hebei Agricultural University, Qinhuangdao 066003, Hebei, China

Corresponding author: Cui, R.

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 14

Issue: 2

Issue date: February 2014

Publication year: 2014

Pages: 72-77

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology

Abstract: Objective: With the *Gynura bicolor* leaves as raw material, to study on the composite enzyme (cellulose enzyme and pectinase) collaborative microwave processing to extract flavonoids from *Gynura bicolor* leaves, and the process conditions of flavonoids from leaves of different leaf in each period. Method: Using single factor and orthogonal test to contrast the effect of microwave extraction of flavonoids after composite enzyme hydrolysis and microwave extraction of total flavonoids directly. Results: The content of total flavonoids in leaching liquid increased about 30% than the direct microwave treatment as the condition of *Gynura bicolor* leaves in 50°C drying, smashing through a 80 mesh sieve, the ratio of material to water 1:15 (W:V), adding 0.2% pectinase and 0.05% cellulose, hydrolyzing 40 min in 55°C, then add 60% ethanol as extracting agent, the ratio of

material to liquid is 1:30, microwave power of 360 W, treatment of 20 min in 70°C. The content of total flavonoids in *Gynura bicolor* leaves is higher in expanded leaves and mature leaves, less in young leaves, and the lowest in the old leaves. Conclusion: The optimized process is simple and feasible, and has high extraction efficiency, it provides a theoretical basis for the extraction process of flavonoids in *Gynura bicolor* for industrialization.

Number of references: 14

Main heading: Flavonoids

Controlled terms: Cellulose - Enzymes - Extraction - Hydrolysis - Liquids - Microwaves

Uncontrolled terms: *Begonia fimbristipula* Hance leaves - Complex enzymes - Extraction efficiencies - Microwave extraction - Microwave processing - Microwave treatment - Microwave-assisted extraction - Total flavonoids

Classification code: 711 Electromagnetic Waves - 802.2 Chemical Reactions - 802.3 Chemical Operations - 804.1 Organic Compounds - 815.1.1 Organic Polymers - 931.2 Physical Properties of Gases, Liquids and Solids

Numerical data indexing: Percentage 2.00e-01%, Percentage 3.00e+01%, Percentage 5.00e-02%, Percentage 6.00e+01%, Power 3.60e+02W, Temperature 3.23e+02K, Temperature 3.28e+02K, Temperature 3.43e+02K, Time 1.20e+03s, Time 2.40e+03s

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

343.

Accession number: 20154201387280

Title: Optimization of microwave-assisted extraction of phenolic compounds from anli pear (*pyrus ussuriensis maxim*)

Authors: Peng, Fei¹ ; Cheng, Caihong¹ ; Xie, Ying¹ ; Yang, Yuedong¹

Author affiliation:

¹ Analysis and Testing Center, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Yang, Yuedong

Source title: Food Science and Technology Research

Abbreviated source title: Food Sci. Technol. Res.

Volume: 21

Issue: 3

Issue date: 2015

Publication year: 2015

Pages: 463-471

Language: English

ISSN: 13446606

Document type: Journal article (JA)

Publisher: Japanese Society for Food Science and Technology

Abstract: Response surface methodology was used to optimize the microwave-assisted extraction process of phenolic compounds from Anli pear. Under the optimized conditions, antioxidant activities of phenolics from Anli pear were evaluated in vitro by scavenging capabilities of DPPH radical and the composition of phenolic compounds was performed by LC-MS. The optimal microwave-assisted extraction processing parameters were extraction time 124 s, microwave power 408 W, ethanol concentration 56% (v/v), and solvent/solid ratio 45:1, with an extraction yield of 9.801 mgGAE/gdm. The total phenolics have significant antioxidant activities, which can be used as a source of potential antioxidant. LC-MS analysis revealed that the phenolic compounds in the extract of Anli pear were mainly catechin, chlorogenic acid, quercetin glycosides, and isorhamnetin glycosides. Copyright © 2015, Japanese Society for Food Science and Technology.

Number of references: 31

Main heading: Phenols

Controlled terms: Antioxidants - Extraction - Flavonoids - Fruits - Microwaves - Optimization - Organic solvents - Sugars - Surface properties

Uncontrolled terms: Anli pear - Anti-oxidant activities - Ethanol concentrations - Microwave-assisted extraction - Microwave-assisted extraction process - Optimized conditions - Phenolics - Response surface methodology

Classification code: 711 Electromagnetic Waves - 802.3 Chemical Operations - 804.1 Organic Compounds - 821.4 Agricultural Products - 921.5 Optimization Techniques - 951 Materials Science

Numerical data indexing: Percentage 5.60e+01%, Power 4.08e+02W, Time 1.24e+02s

DOI: 10.3136/fstr.21.463

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

344.

Accession number: 20152100866953

Title: Hierarchical Ag₂O-ZnO-Fe₃O₄ composites with enhanced visible-light photocatalytic activity

Authors: Cai, Aijun¹ ; Sun, Yanfeng² ; Du, Liqiang¹ ; Wang, Xiuping¹

Author affiliation:

1 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Ocean College of Hebei Agricultural University, Qinhuangdao, China

Corresponding author: Wang, Xiuping

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 644

Issue date: May 17, 2015

Publication year: 2015

Pages: 334-340

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Efficient visible-light-driven $\text{Ag}_2\text{O-ZnO-Fe}_3\text{O}_4$ photocatalysts with hierarchical structures are synthesized. The as-prepared products are characterized by X-ray diffraction (XRD), transmission electron microscope (TEM), X-ray photoelectron spectroscopy (XPS), and diffuse reflectance spectra (DRS). XRD and XPS confirm the presence of Ag_2O . DRS reveals that the adsorption edge of the $\text{Ag}_2\text{O-ZnO-Fe}_3\text{O}_4$ photocatalysts is redshifted as compared with that of the $\text{ZnO-Fe}_3\text{O}_4$. Visible-light photocatalytic experiments are also conducted. By coupling with Ag_2O , ZnO became responsive to visible light. The results show that the photocatalytic activity of the products is closely related to the mass ratio of Ag_2O and ZnO, which is tunable and controlled by the amount of AgNO_3 added during the fabrication process. The highest photocatalytic activity of the $\text{Ag}_2\text{O-ZnO-Fe}_3\text{O}_4$ composites is achieved by adding 1.2 mol of AgNO_3 . The enhancement of photocatalytic activity can be attributed to the inhibition of electron-hole recombination. Furthermore, the as-prepared products can be easily attracted by an external magnetic field, which makes the composites recyclable. © 2015 Elsevier Inc. All rights reserved.

Number of references: 33

Main heading: X ray photoelectron spectroscopy

Controlled terms: Complexation - Composite materials - Light - Photocatalysis - Photocatalysts - Photoelectron spectroscopy - Silver - Structure (composition) - Transmission electron microscopy - X ray diffraction - Zinc oxide

Uncontrolled terms: Diffuse reflectance spectrum - Electron-hole recombination - External magnetic field - Hierarchical structures - Photocatalytic activities - Visible light photocatalytic activity - Visible-light-driven - ZnO

Classification code: 547.1 Precious Metals - 741.1 Light/Optics - 741.3 Optical Devices and Systems - 801 Chemistry - 802.2 Chemical Reactions - 804.2 Inorganic Compounds - 931.3 Atomic and Molecular Physics - 951 Materials Science

Numerical data indexing: Amount_Of_Substance 1.20e+00mol

DOI: 10.1016/j.jallcom.2015.03.236

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

345.

Accession number: 20163802814223

Title: Spatial effects of lateral deformations of supporting structure of deep excavation

Authors: Li, C.L.1, 2 ; Feng, Y.M.3 ; Yang, F.1 ; Hagan, P.4

Author affiliation:

- 1 Institute of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China
- 2 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao; 066004, China
- 3 Business department, Qinhuangdao Port Co., Lt., Qinhuangdao; 066004, China
- 4 School of Mining Engineering, University of New South Walse, Sydney; 2052, Australia

Corresponding author: Li, C.L. (lclcc_010@163.com)

Source title: Journal of Engineering Science and Technology Review

Abbreviated source title: J. Eng. Sci. Technol. Rev.

Volume: 8

Issue: 3

Issue date: 2015

Publication year: 2015

Pages: 71-77

Language: English

ISSN: 17919320

E-ISSN: 17912377

Document type: Journal article (JA)

Publisher: Technological Education Institute of Kavala

Abstract: In order to improve the design theories of the supporting structure, based on a deep excavation project, FLAC3D was used to simulate the spatial effects of the lateral deformation happened in the process of the deep excavation for the diaphragm wall. The results showed that there would produce the spatial effects in both the horizontal and depth directions; the spatial effects of the lateral deformations were different for the long and short sides; and the spatial effects of the lateral deformation were only obvious in a certain distance from the bottom to the top of the deep excavation. The nonuniformity coefficients of the lateral deformations were modified, and according to the supporting forms and supporting parameters this study provided some theory basis for the supporting design of the deep excavation. © 2015 Kavala Institute of Technology.

Number of references: 13

Main heading: Deformation

Controlled terms: Diaphragms - Excavation

Uncontrolled terms: Deep excavation - Lateral deformation - Non-uniformities - Spatial effect - Underground diaphragm wall

Classification code: 601.2 Machine Components

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

346.

Accession number: 20152200882507

Title: The Research of Passive Wake-Up Technology Based on the Microwave Power Transmission

Authors: Liu, Maohua¹ ; Liu, Shan¹ ; Qian, Kefeng² ; Ma, Jianguo²

Author affiliation:

1 School of Mathematics and Information Science & Technology, Hebei Normal University of Science and Technology, Hebei, China

2 School of Electronic Information Engineering, Tianjin University, Tianjin, China

Corresponding author: Liu, Maohua (ytulmh@163.com)

Source title: Wireless Personal Communications

Abbreviated source title: Wireless Pers Commun

Volume: 84

Issue: 2

Issue date: September 1, 2015

Publication year: 2015

Pages: 1039-1050

Language: English

ISSN: 09296212

E-ISSN: 1572834X

CODEN: WPCOFW

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: In order to eliminate the stand-by power of various remote-control device, the paper proposes an innovative way of passive wake-up to power-off device based on microwave power transmission (MPT). The experimental results show that MPT not only can achieve the goal of passive wake-up, but also can reach further remote-control range than the traditional way of power recovery. © 2015, Springer Science+Business Media New York.

Number of references: 13

Main heading: Microwave power transmission

Controlled terms: Microwave generation - Plasma jets - Power transmission - Remote control - Wakes

Uncontrolled terms: MPT - Power recovery - Technology-based - Wake up

DOI: 10.1007/s11277-015-2674-x

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

347.

Accession number: 20144800260667

Title: Effect of microstructure and Ag₃Sn intermetallic compounds on corrosion behavior of Sn-3.0Ag-0.5Cu lead-free solder

Authors: Wang, Mingna¹ ; Wang, Jianqiu² ; Ke, Wei²

Author affiliation:

1 Department of Physics, Hebei Normal University of Science & Technology, 360, West Hebei Street,

Qinhuangdao, China

2 State Key Lab of Corrosion and Protection, Institute of Metal Research, Chinese Academy of Sciences, 62, Wencui Road, Shenhe District, Shenyang, China

Corresponding author: Wang, Mingna

Source title: Journal of Materials Science: Materials in Electronics

Abbreviated source title: J Mater Sci Mater Electron

Volume: 25

Issue: 12

Issue date: November 6, 2014

Publication year: 2014

Pages: 5269-5276

Language: English

ISSN: 09574522

E-ISSN: 1573482X

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: In this paper, the effects of microstructure on the corrosion behavior of Sn-3.0Ag-0.5Cu (SAC305) lead-free solder were investigated by potentiodynamic polarization and atmospheric corrosion test. Scanning electron microscopy and X-ray diffraction were used to characterize the samples after the electrochemical and atmospheric corrosion tests. Results showed that commercial SAC305 solder exhibits better corrosion resistance than air-cooled and furnace-cooled SAC305 solders both in 3.5 wt% NaCl solution and at 60 °C/100 % relative humidity condition.

Number of references: 28

Main heading: Tin

Controlled terms: Atmospheric corrosion - Atmospheric humidity - Corrosion resistance - Corrosive effects - Intermetallics - Lead-free solders - Microstructure - Scanning electron microscopy - X ray diffraction

Uncontrolled terms: Atmospheric corrosion test - Corrosion behavior - Humidity conditions

- NaCl solution

Classification code: 443.1 Atmospheric Properties - 531.1 Metallurgy - 539.1 Metals Corrosion - 546.2 Tin and Alloys - 741.1 Light/Optics - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally - 933 Solid State Physics - 933.1.1 Crystal Lattice - 951 Materials Science

DOI: 10.1007/s10854-014-2300-9

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

348.

Accession number: 20152701005400

Title: Research on the distribution and self-similarity characteristic of end-to-end network delay

Authors: Liu, Min¹ ; Xue, Yanru¹ ; Zhao, Yang² ; Guo, Huiling³

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Department of Electronic and Information Technology, Jiangmen Polytechnic, Jiangmen, China
- 3 College of Computer Science and Technology, Zhoukou Normal University, Henan, China

Corresponding author: Zhao, Yang

Source title: International Journal of Future Generation Communication and Networking

Abbreviated source title: Int. J. Future Gener. Commun. Networking

Volume: 8

Issue: 3

Issue date: July 3, 2015

Publication year: 2015

Pages: 291-302

Language: English

ISSN: 22337857

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: As an important indicator of evaluating network performance, network delay can reflect the transmission performance of the current path and also the service level provided by the opposite terminal host. In the paper, analysis is first conducted on the composition of network delay; besides, through Ping measuring method, Ping measuring network delay experiment is conducted on different destination hosts of local area network (LAN) and wide area network (WAN). Besides, the distribution features of network delay as time changes is analyzed, while the influence of data package (in terms of the size) on network delay will be explored in the paper. After the process, the definition, along with the distinguishing method of the self-similarity process is introduced, and self-similarity distinguishing is rendered on network delay through the variance-time plot. According to analysis result, network delay is featured by strong nonlinearity and self-similarity. Compared with LAN, WAN is endowed with higher long-range dependency. © 2015 SERSC.

Number of references: 17

Main heading: Wide area networks

Controlled terms: Local area networks - Measurements - Time delay

Uncontrolled terms: Distribution features - Local area networks (LAN) - Long-range dependencies - Network time delay - RTT - S-Ping - Self-similarities - Transmission performance

Classification code: 713 Electronic Circuits - 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 722.3 Data Communication, Equipment and Techniques - 723 Computer Software, Data Handling and Applications - 731 Automatic Control Principles and Applications - 941 Acoustical and Optical Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments

DOI: 10.14257/ijfgcn.2015.8.3.28

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

349.

Accession number: 20142817937070

Title: Application of data mining in network instructional platform of "modern educational

technology" for different teaching

Authors: Shi, Qiuxiang¹ ; Li, Jianying¹ ; Wang, Liying¹

Author affiliation:

1 Department of education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Shi, Q. (26870628@qq.com)

Source title: International Journal of Database Theory and Application

Abbreviated source title: Int. J. Database Theory Appl.

Volume: 7

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 143-158

Language: English

ISSN: 20054270

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: The problem of difference teaching is solved by that the data mining is used in network instructional platform of "Modern Educational Technology". This paper introduces difference teaching and data mining, analyzes learning elements and data in network instructional platform, elaborate the realization of the difference teaching by the application of data mining. Practice shows that the application of the data mining in network instructional platform of "Modern Educational Technology" which pays attention to the difference between learners, provides different resources and interactive strategy from curriculum resources recommended and assisting teachers to make decision, promotes each student's full development. © 2014 SERSC.

Number of references: 16

Main heading: Data mining

Controlled terms: Curricula - Educational technology

Uncontrolled terms: Curriculum resource - In networks - Interactive strategy - Modern

educational technologies

Classification code: 723.3 Database Systems - 901.2 Education

DOI: 10.14257/ijdt.2014.7.3.14

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

350.

Accession number: 20141917700783

Title: Regional GDP prediction based on improved BP neural network model

Authors: Xu, Zhikun¹ ; Wang, Xiaodong¹ ; Jin, Yingying¹

Author affiliation:

¹ College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 9

Issue: 4

Issue date: 2014

Publication year: 2014

Pages: 51-62

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: In this paper, an improved BP neural network model is proposed. In the model, the momentum factor can improve the training speed and avoid falling into local minimum. Steepness factor and adaptive learning rate can improve the convergence speed. The genetic algorithm is used to solve the problem of low training speed, low accuracy of prediction and easy to fall into local minimum of BP neural network. Then the improved BP neural network model is established to predict GDP of Anhui province. The result shows that it is better than the other models which are presented in this paper on forecasting GDP of Anhui province. © 2014 SERSC.

Number of references: 29

Main heading: Forecasting

Controlled terms: Gallium - Learning algorithms - Momentum - Neural networks

Uncontrolled terms: Adaptive learning rates - BP neural networks - Convergence speed - GDP - Improved BP neural network - Momentum factor - Prediction-based - Steepness

Classification code: 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 921 Mathematics - 931.1 Mechanics

DOI: 10.14257/ijmue.2014.9.4.06

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

351.

Accession number: 20142017714305

Title: Research on evaluating B2C shopping platform

Authors: Qi, Zhaochuan¹ ; Dong, Shuoling¹ ; Li, Qianghua¹ ; Ren, Miaomiao¹ ; Wang, Jianmei²

Author affiliation:

1 Institute of Finance and Economics, Hebei Normal University of Science and Technology, Qin huang dao, He bei, China

2 Department of Tourism, Qinhuangdao Institute of Technology, Qin huang dao, He bei, China

Source title: Journal of Chemical and Pharmaceutical Research

Abbreviated source title: J. Chem. Pharm. Res.

Volume: 6

Issue: 4

Issue date: 2014

Publication year: 2014

Pages: 474-480

Language: English

E-ISSN: 09757384

Document type: Journal article (JA)

Publisher: Journal of Chemical and Pharmaceutical Research, 3/668 Malviya Nagar, Jaipur, Rajasthan, India

Abstract: In recent years B2C E-commerce has been developed greatly with the fantastic development of the internet. The paper based on user experience theory utilizing the method of content analysis, analytic hierarchy process and multi-level fuzzy comprehensive evaluation method tries to construct the evaluation index system of B2C enterprises and to help consumers make decisions. Firstly, the paper constructs the evaluation index system for B2C Ecommerce platform after analyzing selected samples, computing index weight in AHP method and consistency testing. Thereafter, the paper compares and evaluates synthesized competitiveness of Z website and D website by demonstration analysis.

Number of references: 9

Main heading: Analytic hierarchy process

Controlled terms: Electronic commerce - Hierarchical systems - Websites

Uncontrolled terms: AHP method - B2C - Content analysis - Demonstration analysis - Evaluation index - Evaluation index system - Multi-level fuzzy comprehensive evaluations - User experience

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 921 Mathematics - 961 Systems Science

Database: Compendex

352.

Accession number: 20143600028426

Title: Advance on the bioactivity and potential applications of dietary fibre from grape pomace

Authors: Zhu, Fengmei1 ; Du, Bin1 ; Zheng, Lihong1 ; Li, Jun1

Author affiliation:

1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, Jun

Source title: Food Chemistry

Abbreviated source title: Food Chem.

Volume: 186

Issue date: November 1, 2015

Publication year: 2015

Pages: 207-212

Language: English

ISSN: 03088146

E-ISSN: 18737072

CODEN: FOCHDJ

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: The winemaking grape pomaces are rich in bioactive phytochemicals and dietary fibre (DF). DFs are phenolic-rich DF matrix and are dietary supplement with benefits on human health. As a result of the increased attention to sustainability of winemaking by-products, efforts have been made to use grape pomace in different bio-industries. In this review, we summarize the existing knowledge on the bioactivity and potential applications of DF from grape pomace, as well as the chemical compositions of DF. Furthermore, the biological activities of DF such as, anti-cancer activity, antibacterial activity, anti-inflammatory activity, antioxidant activity, improving gastrointestinal health activity, anti-apoptotic activity, preventing cardiovascular disease activity,

anti-hypercholesterolemic activity, are discussed. Finally, the possible applications and future prospects of grape pomace DF in various fields are also summarised. © 2014 Elsevier Ltd. All rights reserved.

Number of references: 48

Main heading: Dietary supplements

Controlled terms: Antioxidants - Bioactivity - Cardiology - Diseases - Fibers - Flavonoids - Plants (botany)

Uncontrolled terms: 2 ,2-diphenyl-1-picrylhydrazyl - Cardio-vascular disease - Dietary fibre - Dry matters - Ferric reducing antioxidant power - Grape seed extract - Inflammatory bowel disease - Inhibition concentrations - Low density lipoproteins - Proanthocyanidins - Soluble dietary fibre - Wine grapes

Classification code: 461.6 Medicine and Pharmacology - 461.9 Biology - 804.1 Organic Compounds - 812 Ceramics, Refractories and Glass - 817 Plastics and Other Polymers: Products and Applications - 822.3 Food Products

DOI: 10.1016/j.foodchem.2014.07.057

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

353.

Accession number: 20143017985564

Title: Education management system based on Web 2.0

Authors: Rongping, Fan¹ ; Heping, Wu¹ ; Cuili, Luo¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei Qinhuangdao, China

Source title: WIT Transactions on Information and Communication Technologies

Abbreviated source title: WIT Trans. Inf. Commun. Technol.

Volume: 54 VOLUME 1

Monograph title: Green Communications and Networks

Issue date: 2014

Publication year: 2014

Pages: 39-44

Language: English

ISSN: 17433517

ISBN-13: 9781845648732

Document type: Conference article (CA)

Conference name: 3rd International Conference on Green Communications and Networks, GCN 2013

Conference date: December 12, 2013 - December 14, 2013

Conference location: Chongqing, China

Conference code: 106475

Sponsor: WIT Transactions on Information and Communication Technologies

Abstract: The design and development of Web 2.0-based education management system will satisfy the school education management of informationization, scientific and modernized request, the auxiliary education superintendent carries out the correct decision-making, enhance the education management working efficiency. This system has used the quite mature development technology at present, and the implemented function is more perfect and usable. The man-machine interaction is friendly and operates easily. Its application enhanced the administrator and teacher's working efficiency greatly, reduces the working strength, simultaneously has also provided the better education condition for the student. With the rapid development of network, education management system will be more widespread in the education of education application, it will create a new situation of the education management, bring a brighter prospect of the application. © 2014 WIT Press.

Number of references: 4

Main heading: Information management

Controlled terms: Design - Education - World Wide Web

Uncontrolled terms: Design and Development - Development technology - Education management - Informationization - Man-machine interaction - School education - Web 2.0 - Working efficiency

Classification code: 408 Structural Design - 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723

DOI: 10.2495/GCN130061

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

354.

Accession number: 20151300697131

Title: Theoretical derivation of anodizing current and comparison between fitted curves and measured curves under different conditions

Authors: Chong, Bin¹ ; Yu, Dongliang^{1, 2} ; Jin, Rong^{1, 2} ; Wang, Yang¹ ; Li, Dongdong² ; Song, Ye¹ ; Gao, Mingqi³ ; Zhu, Xufei¹

Author affiliation:

1 Key Laboratory of Soft Chemistry and Functional Materials, Education Ministry, Nanjing University of Science and Technology, Nanjing, China

2 Shanghai Advanced Research Institute, Chinese Academy of Sciences, Shanghai, China

3 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Nanotechnology

Abbreviated source title: Nanotechnology

Volume: 26

Issue: 14

Issue date: April 10, 2015

Publication year: 2015

Article number: 145603

Language: English

ISSN: 09574484

E-ISSN: 13616528

CODEN: NNOTER

Document type: Journal article (JA)

Publisher: Institute of Physics Publishing

Abstract: Anodic TiO₂nanotubes have been studied extensively for many years. However, the growth kinetics still remains unclear. The systematic study of the current transient under constant anodizing voltage has not been mentioned in the original literature. Here, a derivation and its corresponding theoretical formula are proposed to overcome this challenge. In this paper, the theoretical expressions for the time dependent ionic current and electronic current are derived to explore the anodizing process of Ti. The anodizing current-time curves under different anodizing voltages and different temperatures are experimentally investigated in the anodization of Ti. Furthermore, the quantitative relationship between the thickness of the barrier layer and anodizing time, and the relationships between the ionic/electronic current and temperatures are proposed in this paper. All of the current-transient plots can be fitted consistently by the proposed theoretical expressions. Additionally, it is the first time that the coefficient A of the exponential relationship (ionic current $j_{ion} = A \exp(BE)$) has been determined under various temperatures and voltages. And the results indicate that as temperature and voltage increase, ionic current and electronic current both increase. The temperature has a larger effect on electronic current than ionic current. These results can promote the research of kinetics from a qualitative to quantitative level. © 2015 IOP Publishing Ltd.

Number of references: 53

Main heading: Power quality

Controlled terms: Anodic oxidation - Growth kinetics - Kinetics - Nanotubes - Titanium dioxide - Yarn

Uncontrolled terms: Anodizations - Current-time curves - Electronic current - Quantitative level - Theoretical derivations - Theoretical expression - Theoretical formula - TiO

Classification code: 461.2 Biological Materials and Tissue Engineering - 706.1.2 Electric Power Distribution - 761 Nanotechnology - 802.2 Chemical Reactions - 804.2 Inorganic Compounds - 819.4 Fiber Products - 931 Classical Physics; Quantum Theory; Relativity

DOI: 10.1088/0957-4484/26/14/145603

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20142417819486

Title: Theoretical study of the phase transformation of ZnSe_{0.5}Te_{0.5} alloy under pressure

Authors: Zhu, Yan^{1, 2}; Zhang, Xinyu¹; Zhang, Suhong¹; Jing, Qin¹; Ma, Mingzhen¹; Liu, Riping¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhang, X. (xyzhang@ysu.edu.cn)

Source title: Physica B: Condensed Matter

Abbreviated source title: Phys B Condens Matter

Volume: 449

Issue date: September 15, 2014

Publication year: 2014

Pages: 1-4

Language: English

ISSN: 09214526

CODEN: PHYBE3

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: The structural properties and pressure-induced solid-solid phase transitions of ternary alloy ZnSe_{0.5}Te_{0.5} have been investigated using first principles calculations. The sequence of the phase transition, structural parameters, relative volume changes, formation energies and electronic properties have been analyzed in detail. The results indicate that the cation-anion interaction plays an important role in the process of structural transition. Zn-Se bonds are more subject to applied pressure than Zn-Te bonds in the alloy. The different orders of phase transition between of ZnSe and ZnTe are caused mainly by the electronegativity difference of Se and Te. © 2014 Elsevier B.V.

Number of references: 19

Main heading: Zinc alloys

Controlled terms: Alloys - Chemical bonds - Electronegativity - Electronic properties - Phase transitions - Zinc - Zinc compounds

Uncontrolled terms: Cation-anion interactions - Electronegativity difference - First principles - First-principles calculation - Formation energies - Solid-solid phase transitions - Structural parameter - Structural transitions

Classification code: 531.1 Metallurgy - 546.3 Zinc and Alloys - 701.1 Electricity: Basic Concepts and Phenomena - 801.4 Physical Chemistry - 801.4.1 Electrochemistry - 804.1 Organic Compounds

DOI: 10.1016/j.physb.2014.04.077

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

356.

Accession number: 20162002375326

Title: Analysis and improvement of certificateless signature and proxy re-signature schemes

Authors: Hu, Xiaoming¹ ; Liu, Yan¹ ; Xu, Huajie² ; Wang, Jian¹ ; Zhang, Xiaojun³

Author affiliation:

- 1 College of Computer and Information Engineering, Shanghai Second Polytechnic University, Shanghai; 201209, China
- 2 School of Computer and Electronic Information, Guangxi University, Nanning; 530004, China
- 3 E and A College, Hebei Normal University of Science and Technology, Hebei; 066004, China

Source title: Proceedings of 2015 IEEE Advanced Information Technology, Electronic and Automation Control Conference, IAEAC 2015

Abbreviated source title: Proc. IEEE Adv. Inf. Technol., Electron. Autom. Control Conf., IAEAC

Monograph title: Proceedings of 2015 IEEE Advanced Information Technology, Electronic and Automation Control Conference, IAEAC 2015

Issue date: March 7, 2016

Publication year: 2015

Pages: 166-170

Article number: 7428540

Language: English

ISBN-13: 9781479919796

Document type: Conference article (CA)

Conference name: IEEE Advanced Information Technology, Electronic and Automation Control Conference, IAEAC 2015

Conference date: December 19, 2015 - December 20, 2015

Conference location: Chongqing, China

Conference code: 119925

Sponsor: Chongqing Global Union Academy of Science and Technology; Global Union Academy of Science and Technology; IEEE Beijing Section

Publisher: Institute of Electrical and Electronics Engineers Inc.

Abstract: Certificateless cryptography avoids the key escrow problem in identity-based cryptosystems and certificate management in traditional public-key cryptosystems, it has been researched by many scholars and many certificateless signature schemes have been proposed. However, most of them exist some security drawbacks and are insecure for some kinds of attacks. In this paper, we analyze two certificateless signature schemes and one proxy re-signature scheme proposed by some scholars recently. And we show that these schemes are insecure and also present the detailed attack steps. In order to overcome this problem, we also address some improved schemes which have the same or better performance than the original schemes. © 2015 IEEE.

Number of references: 15

Main heading: Authentication

Controlled terms: Security of data

Uncontrolled terms: Aggregate signature - Certificate management - Certificateless cryptographies - Certificateless signature - Certificateless signature schemes - proxy re-signature - Security analysis - Signature Scheme

Classification code: 723 Computer Software, Data Handling and Applications - 723.2 Data Processing and Image Processing

DOI: 10.1109/IAEAC.2015.7428540

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

357.

Accession number: 20152400928046

Title: A heterogeneous data sharing approach based on ontology and metadata

Authors: Li, Xiaotao¹ ; Hu, Xiaohui¹ ; Lu, Weina^{1, 2} ; Liu, Xi¹

Author affiliation:

1 Institute of Automation, Beijing University of Aeronautics and Astronautics, Beijing, China

2 Department of Mechanics and Electronics, Hebei Normal University of Science and Technology, Changli, China

Corresponding author: Li, Xiaotao

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 11

Issue: 8

Issue date: April 15, 2015

Publication year: 2015

Pages: 2709-2719

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: To overcome the problem of sharing multi-sourced, multi-class, heterogeneous data, an information sharing solution is proposed based on ontology and a two-layer metadata standard. Firstly, the framework of the information sharing system is presented. Secondly, the architecture of the two-layer metadata is

introduced. Finally, with the lack of semantic information, an ontology layer is built on the metadata layer for describing metadata and reasoning. In the aspect of information retrieval, an improved method combining Lucene full-text search engine with SPARQL query is proposed, which improves the recall rate and optimizes the retrieval time. The experiment results illustrate the effectiveness of the approach and the conclusion is given. ©, 2015, Binary Information Press. All right reserved.

Number of references: 16

Main heading: Search engines

Controlled terms: Information analysis - Information dissemination - Metadata - Ontology
- Semantics

Uncontrolled terms: Full-text search engines - Heterogeneous data - Information sharing -
Information sharing systems - Metadata Standards - Retrieval time - Semantic information - Sparql
queries

Classification code: 723 Computer Software, Data Handling and Applications - 903.1 Information
Sources and Analysis - 903.2 Information Dissemination

DOI: 10.12733/jcis12958

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

358.

Accession number: 20151700777766

Title: Intracellular modulation of excited-state dynamics in a chromophore dyad: Differential
enhancement of photocytotoxicity targeting cancer cells

Authors: Kolemen, Safacan¹ ; Ilk, M.1, 2 ; Kim, Gyoung Mi³ ; Kim, Dabin³ ; Geng, Hao⁴ ;
Buyuktemiz, Muhammed⁵ ; Karatas, Tugce⁶ ; Zhang, Xian-Fu⁴ ; Dede, Yavuz⁵ ; Yoon, Juyoung³ ; Akkaya,
Engin U.1

Author affiliation:

- 1 UNAM-Institute of Material Science and Nanotechnology, Bilkent University, Ankara, Turkey
- 2 Department of Metallurgical and Materials Engineering, Bingol University, Bingol, Turkey
- 3 Department of Chemistry and NanoScience, Ewha Womans University, Seoul, Korea, Republic of
- 4 Department of Chemistry, Center of Instrumental Analysis, Hebei Normal University of Science and
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Corresponding author: Yoon, Juyoung

Source title: Angewandte Chemie - International Edition

Abbreviated source title: Angew. Chem. Int. Ed.

Volume: 54

Issue: 18

Issue date: April 27, 2015

Publication year: 2015

Pages: 5340-5344

Language: English

ISSN: 14337851

E-ISSN: 15213773

CODEN: ACIEF5

Document type: Journal article (JA)

Publisher: Wiley-VCH Verlag

Abstract: The photosensitized generation of reactive oxygen species, and particularly of singlet oxygen [$O(^1\Delta_g)$], is the essence of photodynamic action exploited in photodynamic therapy. The ability to switch singlet oxygen generation on/off would be highly valuable, especially when it is linked to a cancer-related cellular parameter. Building on recent findings related to intersystem crossing efficiency, we designed a dimeric BODIPY dye with reduced symmetry, which is ineffective as a photosensitizer unless it is activated by a reaction with intracellular glutathione (GSH). The reaction alters the properties of both the ground and excited states, consequently enabling the efficient generation of singlet oxygen. Remarkably, the designed photosensitizer can discriminate between different concentrations of GSH in normal and cancer cells and thus remains inefficient as a photosensitizer inside a normal cell while being transformed into a lethal singlet oxygen source in cancer cells. This is the first demonstration of such a difference in the intracellular activity of a photosensitizer. © 2015 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim.

Number of references: 33

Main heading: Photodynamic therapy

Controlled terms: Cells - Chromophores - Cytology - Diseases - Enzyme activity -
Excited states - Gas generators - Mobile security - Oxygen - Photochemical reactions -
Photosensitizers

Uncontrolled terms: Bodipy dyes - Cellular parameters - Excited-state dynamics -
Inter-system crossings - Photodynamic action - Reactive oxygen species - Singlet oxygen - Singlet
oxygen generation

Classification code: 461 Bioengineering and Biology - 522 Gas Fuels - 741.1 Light/Optics - 804
Chemical Products Generally - 804.1 Organic Compounds - 931.3 Atomic and Molecular Physics

DOI: 10.1002/anie.201411962

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

359.

Accession number: 20143800066295

Title: Analysis of science and engineering graduates employment ability factors based on FAHP

Authors: Gu, Liwei¹ ; Wang, Yubin² ; Zhang, Yuhong³

Author affiliation:

- 1 College of Education, Hebei Normal University of Science & Technology Qinhuangdao, Hebei, China
- 2 College of Math and Information Science & Technology, Hebei Normal University of Science & Technology Qinhuangdao, Hebei, China
- 3 College of Education, Hebei Normal University of Science & Technology Qinhuangdao, Hebei, China

Corresponding author: Gu, Liwei

Source title: International Journal of u- and e- Service, Science and Technology

Abbreviated source title: Int. J. u e Serv. Sci. Technol.

Volume: 7

Issue: 4

Issue date: 2014

Publication year: 2014

Pages: 187-200

Language: English

ISSN: 20054246

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: While employment ability is part of the core factors affecting the employment of College students, science and engineering graduates` employment has its own specialty, social demands, and it has many differences between other subjects. In hope of playing a promoting role on the using of employment ability theory, this paper use FAHP method to data mining the data of science and engineering employment, and obtained the employment ability factors model of students of science and engineering. Compares to other subjects, this article pays greater attention to use computer software to reduce the mathematical method complexity, and then get the science and engineering graduates` employment ability model. © 2014 SERSC.

Number of references: 25

Main heading: Engineering education

Controlled terms: Data mining - Employment - Students

Uncontrolled terms: College students - Core factors - Employment abilities - FAHP - Mathematical method - Promoting role - Science and engineering

Classification code: 723.3 Database Systems - 901.2 Education - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing

DOI: 10.14257/ijunnesst.2014.7.4.18

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

360.

Accession number: 20154201389116

Title: Occlusion avoidance approach based on depth image of visual object

Authors: Zhang, Shihui^{1, 2} ; Sang, Yu¹ ; Zhang, Xiaojun³

Author affiliation:

- 1 School of Information Science and Engineering, Yanshan University, No. 438, Hebei Avenue, Qinhuangdao, China
- 2 The Key Laboratory for Computer Virtual Technology and System Integration of Hebei Province, No. 438, Hebei Avenue, Qinhuangdao, China
- 3 E and A College, Hebei Normal University of Science and Technology, No. 360, West Hebei Street, Qinhuangdao, China

Source title: ICIC Express Letters, Part B: Applications

Abbreviated source title: ICIC Express Lett Part B Appl.

Volume: 6

Issue: 11

Issue date: November 1, 2015

Publication year: 2015

Pages: 3103-3108

Language: English

ISSN: 21852766

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: Occlusion avoidance is a more challenging problem in visual field. An occlusion avoidance approach based on depth image of visual object is proposed in this paper. Firstly, the occlusion detection is implemented for the depth image of visual object in current view, and then the occlusion boundary and nether adjacent boundary are obtained to construct occlusion region. Secondly, the occlusion region is segmented into several sub-regions by connecting the corner of occlusion boundary with its nether adjacent boundary point, and the triangular mesh model of each sub-region is established. Thirdly, the candidate observation direction set is determined by utilizing the normal vector of each triangle in triangular mesh model. Finally, the next best view is confirmed based on the candidate observation direction set to realize the occlusion avoidance function. Compared with the existing methods, the proposed approach does not need the priori knowledge of visual object or limit the camera position on a fixed surface. Experimental results demonstrate its feasibility and effectiveness. © 2015 ICIC International.

Number of references: 11

Main heading: Mesh generation

Controlled terms: Surface measurement

Uncontrolled terms: Corner - Depth image - Next best view - Occlusion avoidance - Visual objects

Classification code: 723.5 Computer Applications - 943.2 Mechanical Variables Measurements

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

361.

Accession number: 20150100393224

Title: Enhanced novel white emission in $\text{Ca}_3(\text{PO}_4)_2:\text{Dy}^{3+}$ single-phase full-color phosphor by charge compensation

Authors: Zhang, Zhiwei¹ ; Han, Cong-lin¹ ; Shi, Wei-wei¹ ; Kang, Yan-yan¹ ; Wang, Yan-su¹ ; Zhang, Wei-guo¹ ; Wang, Dong-jun¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhiwei

Source title: Journal of Materials Science: Materials in Electronics

Abbreviated source title: J Mater Sci Mater Electron

Volume: 26

Issue: 3

Issue date: 2015

Publication year: 2015

Pages: 1923-1931

Language: English

ISSN: 09574522

E-ISSN: 1573482X

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: A novel single-composition white-emitting phosphor $\text{Ca}_3(\text{PO}_4)_2:\text{Dy}^{3+}$ has been synthesized by a high-temperature solid-state reaction. The effect of charge compensators on luminescent properties of $\text{Ca}_3(\text{PO}_4)_2:\text{Dy}^{3+}$ is systematically investigated by the X-ray powder diffraction, UV-Vis diffuse reflectivity, photoluminescence (PL) properties and lifetime. It is observed that the PL intensity of Dy^{3+} under 350 nm excitation increases in the order of $\text{Ca}_{2.95}(\text{PO}_4)_2:0.05\text{Dy}^{3+}$, $\text{Ca}_{2.90}\text{K}_{0.05}(\text{PO}_4)_2:0.05\text{Dy}^{3+}$, $\text{Ca}_{2.90}\text{Na}_{0.05}(\text{PO}_4)_2:0.05\text{Dy}^{3+}$, $\text{Ca}_{2.90}\text{Li}_{0.05}(\text{PO}_4)_2:0.05\text{Dy}^{3+}$, and $\text{Ca}_{2.95}(\text{P}_{0.95}\text{Si}_{0.05}\text{O}_4)_2:0.05\text{Dy}^{3+}$. The lifetimes of Dy^{3+} are 605.00, 604.67, 615.01, 645.64 and 621.26 μs , respectively. A charge compensation model is proposed to explain the changes in the emission intensity and lifetime of Dy^{3+} in $\text{Ca}_3(\text{PO}_4)_2$ with different compensation methods. A white light-emitting diode (LED) was fabricated by using the white-emitting single-composition $\text{Ca}_{2.95}(\text{P}_{0.95}\text{Si}_{0.05}\text{O}_4)_2:0.05\text{Dy}^{3+}$ pumped by a 365 nm UV-chip. Our results indicated that the CIE chromaticity coordinates, color rendering index and correlated color temperature for white UV-LEDs were (0.302, 0.324), 83, and 6947 K, respectively. Therefore, our novel white $\text{Ca}_{2.95}(\text{P}_{0.95}\text{Si}_{0.05}\text{O}_4)_2:0.05\text{Dy}^{3+}$ can serve as a key material for phosphor-converted white-light UV-LEDs. © 2014, Springer Science+Business Media New York.

Number of references: 38

Main heading: Light emitting diodes

Controlled terms: Calcium - Color - High temperature applications - Light emission - Phosphors - Silicon - Solid state reactions - X ray powder diffraction

Uncontrolled terms: Color rendering index - Compensation method - Correlated color temperature - Diffuse reflectivity - High temperature solid-state reaction - Luminescent property - Photoluminescence properties - White light emitting diodes

DOI: 10.1007/s10854-014-2631-6

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

362.

Accession number: 20142517840497

Title: Kinematic transmission analysis of a novel spherical 3-RRR parallel manipulator

Authors: Zhang, Liang^{1, 2}; Jin, Zhen Lin¹

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao 066004, China

2 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 926-930

Monograph title: Progress in Applied Sciences, Engineering and Technology

Issue date: 2014

Publication year: 2014

Pages: 3513-3516

Language: English

ISSN: 10226680

ISBN-13: 9783038350996

Document type: Conference article (CA)

Conference name: 2014 International Conference on Materials Science and Computational Engineering, ICMSCE 2014

Conference date: May 20, 2014 - May 21, 2014

Conference location: Qingdao, China

Conference code: 105668

Sponsor: Engineering of Qingdao University; et al; Institute for Computational Science and; Laboratory of Qingdao University; New fiber materials and modern textile State Key

Publisher: Trans Tech Publications Ltd

Abstract: The kinematic transmission property and distributions in workspace of a novel spherical 3-RRR parallel mechanism are given. The orthogonal layout feature of the parallel mechanism is described. The

equations for inverse displacement and kinematic transmission property are derived by the relation of geometry. The kinematic transmission evaluation index of a spherical 3-RRR parallel mechanism is defined. Finally, the distribution of the index in workspace was given, which can provide theoretical basis for the application of the spherical mechanism. © (2014) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Kinematics

Controlled terms: Mechanisms - Spheres

Uncontrolled terms: Conditioning numbers - Evaluation index - Inverse displacements - Kinematic transmissions - Parallel manipulators - Parallel mechanisms - Spherical mechanisms - Spherical parallel mechanism

Classification code: 601.3 Mechanisms - 631 Fluid Flow - 931.1 Mechanics

DOI: 10.4028/www.scientific.net/AMR.926-930.3513

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

363.

Accession number: 20154201389008

Title: Algebraic method for computing the minkowski sum of convex polyhedra

Authors: Zhang, Buying^{1, 2} ; Guo, Xijuan¹ ; Liu, Yuanfeng¹

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, No. 438, West Hebei Avenue, Qinhuangdao, China

2 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, No. 360, West Hebei Avenue, Qinhuangdao, China

Corresponding author: Guo, Xijuan

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 9

Issue: 11

Issue date: November 1, 2015

Publication year: 2015

Pages: 2919-2923

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: Minkowski sum is an important implementation of computational geometry. It has been widely used in the fields of computer aided design and manufacturing, robot motion planning, mechanical virtual assembly, etc. In this paper, we propose an algebraic method to compute the Minkowski sum of two convex polyhedra. The algorithm brings forward algebraic structure of convex polyhedron firstly, and based on the algebraic structure of each convex polyhedron, gives a more direct method to translate the facets of each polyhedron to their Minkowski sum boundary and a more rapid way to mend the holes among the translated facets. The final two groups of experiments prove that the algorithm is precise and efficient. © 2015 ICIC International.

Number of references: 12

Main heading: Algebra

Controlled terms: Computational geometry - Computer aided design - Geometry - Machine design - Motion planning - Robot programming

Uncontrolled terms: Algebraic method - Algebraic structures - Convex polyhedrons - Direct method - Minkowski sum - Robot motion planning - Virtual assembly

Classification code: 601 Mechanical Design - 723.1 Computer Programming - 723.5 Computer Applications - 921 Mathematics - 921.1 Algebra

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20151800809909

Title: Method for behavior conformance checking based on artifact snapshot sequences

Authors: Liu, Hai-Bin¹ ; Liu, Guo-Hua² ; Huang, Li-Ming¹ ; Song, Jin-Ling¹

Author affiliation:

1 School of Business Administration, Hebei Normal University of Science & Technology, Qinhuangdao, China

2 School of Computer Science and Technology, Donghua University, Shanghai, China

Corresponding author: Liu, Hai-Bin

Source title: Ruan Jian Xue Bao/Journal of Software

Abbreviated source title: Ruan Jian Xue Bao

Volume: 26

Issue: 3

Issue date: March 1, 2015

Publication year: 2015

Pages: 491-508

Language: Chinese

ISSN: 10009825

CODEN: RUXUEW

Document type: Journal article (JA)

Publisher: Chinese Academy of Sciences

Abstract: Behavior conformance checking is a critical issue after process modeling and process running to ensure the correctness and stability of artifact-centric business process model. With the popularization of data-centric design, researches on checking data manipulation of business process becomes more important. This paper proposes a method for checking behavior conformance according to the lifecycle of artifact. First, the artifact behavior can be defined as the total order artifact snapshot sequences. The total order artifact snapshot sequences not only reflect the path of services, but also describe the change of attribute assignment states of the artifact. Next, the problem for behavior conformance checking is proved to be decidable by transforming the problem into the decidability problem of language. A Turing machine is designed as verification model. The model not only measures conformance of service path in the lifecycle, but also evaluates the correctness of attribute assignment of artifact. Further, the calculation method of fitness metric utilizing equivalent conversion of

service-snapshot correlation matrix is presented. Lastly, the instantiation analysis and experiments demonstrate the correctness and validity of this method. © 2015, Institute of Software, the Chinese Academy of Sciences. All right reserved.

Number of references: 23

Main heading: Turing machines

Controlled terms: Administrative data processing - Computability and decidability - Enterprise resource management - Life cycle - Machinery - Mobile telecommunication systems - Petri nets

Uncontrolled terms: Artifact behavioral conformance - Business process management - Business process model - Conformance checking - Correlation matrix - Data manipulations - Decidability problems - Verification model

Classification code: 601 Mechanical Design - 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 912.2 Management - 913.1 Production Engineering - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.13328/j.cnki.jos.004764

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

365.

Accession number: 20150300436105

Title: Multi-objective optimization of K in K-anonymity model

Authors: Song, Jinling¹ ; Huang, Liming¹ ; Zhang, Chao² ; Zhang, Guangbin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao , China

2 Environment Management College of China, Qinhuangdao , China

Corresponding author: Song, Jinling

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 10

Issue: 22

Issue date: November 15, 2014

Publication year: 2014

Pages: 9759-9770

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: The drawback of k-anonymity is that generalization will result in considerable loss of information. Further, under limited information loss an exhaustive analysis is required to determine a k value based on the privacy requirement by data publisher. Studies in this context have so far focused on minimizing the information loss for some given value of k, how to optimize k value that fits the specified data quality and privacy requirement is sparse. In this paper, we formulate a multi-objective optimization problem of k to illustrate that the decision of k can be much more flexible. At first, one k bound is analyzed basing on the privacy disclosure, and another k bound is analyzed basing on the data quality metric. Then, the optimal k-value is gained by intersecting the two bounds. At last, an algorithm is employed to provide multi-objective optimization of k that is win-win on privacy requirement and data quality.

Number of references: 11

Main heading: Multiobjective optimization

Controlled terms: Data privacy - Data reduction - Optimization

Uncontrolled terms: Data quality - Data quality metric - K-Anonymity - Limited information - Multi objective - Multi-objective optimization problem - Privacy disclosures - Privacy requirements

Classification code: 723.2 Data Processing and Image Processing - 921.5 Optimization Techniques

DOI: 10.12733/jcis13119

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

366.

Accession number: 20153301168461

Title: The Fluorescence Properties of Three Rhodamine Dye Analogues: Acridine Red, Pyronin Y and Pyronin B

Authors: Zhang, Xian-Fu^{1, 2}; Zhang, Jianlong¹; Lu, Xulin¹

Author affiliation:

1 Institute of Applied Photochemistry, Center of Analysis and Measurements, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei Province, China

2 MPC Technologies, Hamilton; ON, Canada

Corresponding author: Zhang, Xian-Fu

Source title: Journal of Fluorescence

Abbreviated source title: J Fluoresc

Volume: 25

Issue: 4

Issue date: July 13, 2015

Publication year: 2015

Pages: 1151-1158

Language: English

ISSN: 10530509

CODEN: JOFLEN

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: The fluorescence spectra, fluorescence quantum yield, and fluorescence lifetime of Acridine Red (AR), Pyronin Y (PYY), and Pyronin B (PYB) in aqueous and organic solvents were measured by steady state fluorescence, time-correlated single photon counting, and electronic absorption methods. The rate constants

of radiation and non radiation process (k_f and k_{ic}) were calculated to elucidate the structural effect on the fluorescence mechanism. The data for each compound are compared with that of the corresponding rhodamine dye. AR showed significant longer lifetime and higher quantum yield than PYY and PYB, because the alkyls on N atom enhance the internal conversion (IC), the longer the alkyl the faster the IC. However, the structural variation does not alter the rate constant of radiation process (k_f) but does change k_{ic} significantly. The phenyl in Rhodamine B or Rhodamine 6G shows only a slight effect on the fluorescence properties. Ethanol is the solvent in which all five compounds exhibit longest lifetime and highest fluorescence quantum yield. © 2015 Springer Science+Business Media.

Number of references: 48

Main heading: Fluorescence

Controlled terms: Organic solvents - Particle beams - Quantum theory - Quantum yield - Rate constants - Solvents

Uncontrolled terms: Acridine red - Fluorescence properties - Fluorescence quantum yield - Pyronine - Rhodamine - Solvent effects - Steady state fluorescences - Time-correlated single photon counting

Classification code: 741.1 Light/Optics - 801.4 Physical Chemistry - 803 Chemical Agents and Basic Industrial Chemicals - 931.4 Quantum Theory; Quantum Mechanics - 932.1 High Energy Physics

DOI: 10.1007/s10895-015-1610-5

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

367.

Accession number: 20152500946490

Title: Kinematics and velocity index analysis of a novel spherical 3-DOF parallel manipulator

Authors: Zhang, Liang^{1, 2}; Jin, Zhenlin¹; Li, Shuzhen²

Author affiliation:

1 Yanshan University, College of Mechanical Engineering, Qinhuangdao, China

2 Hebei Normal University of Science and Technology, College of Mechanical and Electronic Engineering, Qinhuangdao, China

Corresponding author: Zhang, Liang

Source title: Energy Education Science and Technology Part A: Energy Science and Research

Abbreviated source title: Energy Educ. Sct. Technol. Part A. Energy Sci. Res.

Volume: 32

Issue: 6

Issue date: 2014

Publication year: 2014

Pages: 6703-6710

Language: English

ISSN: 1308772X

Document type: Journal article (JA)

Publisher: Sila Science, University Mah Mekan Sok, No 24, Trabzon, Turkey

Abstract: A new spherical three degrees of freedom (3-DOF) parallel manipulator was put forward, and its kinematics and velocity index were analyzed. The evaluation indices of the velocity performance and isotropy performance were defined. The motion characteristics of the mechanism were analyzed by constructing Lagrange equation, and the distribution of performance indices of the mechanism in workspace was studied. The results show that, in the workspace, the range of the velocity index is from 0.69157 to 0.96569, the range of isotropic index is from 0.44710 to 0.91281, and the variations of two kinematics performance indices in the working space are small and uniform distribution, so the performance stability of the mechanism within the workspace is good, and the mechanism has good kinematics transmission performance and isotropy performance. With the mechanism for the prototype, a shoulder joint of humanoid robot is developed. © Sila Science. All Rights Reserved.

Number of references: 13

Main heading: Manipulators

Controlled terms: Anthropomorphic robots - Degrees of freedom (mechanics) - Design - Equations of motion - Kinematics - Optimal systems - Velocity

Uncontrolled terms: 3-DOF - Kinematics performance - Motion characteristics - Parallel manipulators - Performance stability - Three degrees of freedom - Transmission performance - Uniform distribution

Classification code: 408 Structural Design - 731.5 Robotics - 931.1 Mechanics - 961 Systems Science

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

368.

Accession number: 20143017985690

Title: Design and implementation of computerized accounting system

Authors: Mao, Jiuzhi1 ; Li, Yingwei1 ; Liu, Xingshun1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: WIT Transactions on Information and Communication Technologies

Abbreviated source title: WIT Trans. Inf. Commun. Technol.

Volume: 54 VOLUME 1

Monograph title: Green Communications and Networks

Issue date: 2014

Publication year: 2014

Pages: 995-1004

Language: English

ISSN: 17433517

ISBN-13: 9781845648732

Document type: Conference article (CA)

Conference name: 3rd International Conference on Green Communications and Networks, GCN 2013

Conference date: December 12, 2013 - December 14, 2013

Conference location: Chongqing, China

Conference code: 106475

Sponsor: WIT Transactions on Information and Communication Technologies

Abstract: The rapid development of the networks and computer industry has changed and improved the ways people work in. Computerized accounting system has already become an important component of the enterprise information management systems. There are many different types of common financial software in the market currently, and they are also rich enough in functionality to meet the needs of most companies. However, they are really too expensive for some enterprises, especially SMEs (Small and Medium Enterprises). Also, the unique industry natures and operational processes make the common financial software not strong in the practice to meet the requirements of SMEs. Therefore, the development of the small-scale financial processing software which is functional enough and user-friendly is feasible and very necessary. © 2014 WIT Press.

Number of references: 10

Main heading: Industry

Controlled terms: Information management - Nuclear fuel accounting

Uncontrolled terms: Computerization - Computerized accountings - Design and implementations - Enterprise information management - Operational process - Processing software - Small and medium enterprise - System

Classification code: 911 Cost and Value Engineering; Industrial Economics - 911.3 Inventory Control - 912 Industrial Engineering and Management - 912.2 Management - 913 Production Planning and Control; Manufacturing

DOI: 10.2495/GCN131332

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

369.

Accession number: 20154801625714

Title: Experimental study on shear behaviour of recycled concrete hollow block masonry

Authors: Yu, J.1, 2 ; Zhang, F.3 ; Bai, G.1

Author affiliation:

1 College of Civil Engineering, Xi'an University of Architecture and Technology, Xi'an, Shaanxi, China

2 College of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

3 Henan University of Urban Construction, Pingdingshan, China

Corresponding author: Yu, J. (yujj1@163.com)

Source title: Materials Research Innovations

Abbreviated source title: Mater. Res. Innov.

Volume: 19

Issue date: November 2015

Publication year: 2015

Pages: 579-583

Language: English

ISSN: 14328917

E-ISSN: 1433075X

Document type: Journal article (JA)

Publisher: Maney Publishing

Abstract: To study the shear behavior of recycled concrete block masonry with three rows of holes, the experiments were carried out on the type 240 specimens. The results showed that the shear damage mode of recycled concrete block masonry was brittle failure; the majority of destroy was double shear; the shear pin could greatly improve the shear strength; the influences of block type and intensity level on shear strength were small; the shear strength was mainly determined by the strength of mortar, and the shear strength increased with the increasing of the strength of mortar. The influence of difference of block material on the shear strength coefficient of variation was small, but the coefficient of variation was easily influenced by the water absorption, the construction quality. Considering the influence of the construction quality, the expressions on shear strength average value, standard value and design value were modified. © W. S. Maney & Son Ltd 2015.

Number of references: 12

Main heading: Strength of materials

Controlled terms: Concrete blocks - Concretes - Masonry materials - Mortar - Recycling - Water absorption

Uncontrolled terms: Block masonry - Model experiments - Recycled concretes - Shear behaviour - Strength calculation

Classification code: 412 Concrete - 414 Masonry Materials - 414.3 Mortar (Before 1993, use code 412) - 452.3 Industrial Wastes - 802.3 Chemical Operations - 951 Materials Science

DOI: 10.1179/1432891715Z.0000000001752

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

370.

Accession number: 20151400720291

Title: Innovative design on family exercise equipment for dancing leg stretching based on TRIZ

Authors: Li, Yong Mei¹ ; Liu, Zhong Qiang¹ ; Guo, Li Wei¹ ; Tian, Xiaoge¹

Author affiliation:

1 Art institute, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

Source title: International Journal of Signal Processing, Image Processing and Pattern Recognition

Abbreviated source title: Int. J. Signal Process. Image Process. Pattern Recogn.

Volume: 8

Issue: 3

Issue date: 2015

Publication year: 2015

Pages: 313-324

Language: English

ISSN: 20054254

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Based on the basic theory, instrumental effect, main methods and knowledge database on TRIZ, this paper explores the application principles, effectiveness and innovative design along with the

experimental methods of TRIZ in field of family exercise equipment. And through the innovative design example of leg stretching equipment, the experimental methods are verified for its effectiveness, which provides an important reference for the application of TRIZ in exercise equipment field. © 2015 SERSC.

Number of references: 20

Main heading: Design

Controlled terms: Equipment - Experiments - Problem solving

Uncontrolled terms: Basic theory - Experimental methods - In-field - Innovative design
- Knowledge database - Stretching equipment - TRIZ

Classification code: 408 Structural Design - 901 Engineering Profession - 901.3 Engineering Research -
921 Mathematics

DOI: 10.14257/ijcip.2015.8.3.29

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

371.

Accession number: 20151200649344

Title: Photoluminescence properties of a novel red emitting Ba₁₀F₂(PO₄)₆:Eu³⁺ phosphor

Authors: Peng, You-Shun¹ ; Shi, Wei-Wei¹ ; Han, Cong-Lin¹ ; Kang, Yan-Yan¹ ; Wang, Yan-Su¹ ;
Zhang, Zhi-Wei¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhi-Wei

Source title: Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy

Abbreviated source title: Spectrochim. Acta Part A Mol. Biomol. Spectrosc.

Volume: 145

Issue date: June 15, 2015

Publication year: 2015

Pages: 194-197

Language: English

ISSN: 13861425

CODEN: SAMCAS

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: A novel red-emitting phosphor Ba₁₀F₂(PO₄)₆:Eu³⁺ is synthesized by a high-temperature solid-state reaction. X-ray powder diffraction (XRD) analysis confirms the phase formation of Ba₁₀F₂(PO₄)₆:Eu³⁺ materials. The photoluminescence excitation (PLE) and emission (PL) spectra, the concentration dependence of the emission intensity, decay curves and Commission International de l'Eclairage (CIE) of the phosphors are investigated. It is observed that Ba₁₀F₂(PO₄)₆:Eu³⁺ phosphors exhibit two dominating bands situated at 591 and 616 nm, originating from the 5D₀ → 7F₁ and 5D₀ → 7F₂ transition of the Eu³⁺ ion, respectively. The decay time is also determined for various concentrations of Eu³⁺ in Ba₁₀F₂(PO₄)₆:Eu³⁺. Crystal lattice, PL spectra and decay time analysis indicate there exist two isolated Eu³⁺ crystallography sites in Ba₁₀F₂(PO₄)₆. The calculated color coordinates lie in the red region. Therefore, Ba₁₀F₂(PO₄)₆:Eu³⁺ phosphors may be good candidates for red components in near-UV (NUV) white LEDs. © 2015 Elsevier B.V. All rights reserved.

Number of references: 23

Main heading: Europium

Controlled terms: High temperature applications - Light emission - Luminescence - Phosphors - Photoluminescence - Solid state reactions - X ray crystallography - X ray powder diffraction

Uncontrolled terms: Color coordinates - Concentration dependence - Emission intensity - High temperature solid-state reaction - Phase formations - Photoluminescence excitation - Photoluminescence properties - Red emitting phosphor

Classification code: 547.2 Rare Earth Metals - 708.3.1 High Temperature Superconducting Materials - 741.1 Light/Optics - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics - 933.1.1 Crystal Lattice

Numerical data indexing: Size 6.16e-07m

DOI: 10.1016/j.saa.2015.03.029

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

372.

Accession number: 20151000599290

Title: Ginsenosides and amino acids in flavored ginseng chips as affected by food formulation and processing technology

Authors: Chen, Jiali¹ ; Du, Bin² ; Cai, Weixi¹ ; Xu, Baojun¹

Author affiliation:

1 Food Science and Technology Program, Beijing Normal University-Hong Kong Baptist University United International College, Zhuhai, Guangdong, China

2 Analysis and Testing Center, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Xu, Baojun

Source title: LWT - Food Science and Technology

Abbreviated source title: LWT - Food Sci. Technol.

Volume: 62

Issue: 1

Issue date: June 1, 2015

Publication year: 2015

Pages: 517-524

Language: English

ISSN: 00236438

CODEN: LBWTAP

Document type: Journal article (JA)

Publisher: Academic Press

Abstract: The objective of this study was to develop a novel product for ready-to-eat (RTE) ginseng chips with distinctive flavors through food processing (soaking with different media, pre-heating, steaming, freezing and freeze-drying). Changes in total saponin contents, ginsenosides and amino acid contents of ginseng product were investigated. Results showed that ginseng treated with most of the soaking media obtained changes in saponin content significantly ($p < 0.05$). Surprisingly, ginseng treated with sugar type soaking media obtained significant ($p < 0.05$) increases in content of ginsenoside Rg3. Ginseng chips soaked with glucose solution, sucrose-vinegar solution, and sucrose solution increased ginsenoside Rg3 31%, 36%, and 64%, respectively. All soaking media showed a descending trend in amino acids content. In conclusion, soaking with sucrose solution is proposed as optimal processing conditions to yield end-product with high bioactive components and favorable taste. Industrial relevance: This research would have practical applications in providing value-added novel food products derived from ginseng. Presented information will provide useful reference for the food industry to develop new ready-to-eat ginseng food products with specific flavor and texture. The changes in total ginseng saponin, individual ginsenosides and free amino acids in different novel ginseng products may provide manufacturer information to produce desired products with targeted components. © 2014 Elsevier Ltd.

Number of references: 31

Main heading: Thermal processing (foods)

Controlled terms: Amino acids - Food processing - Food products - Industrial research - Metabolites - Pharmacodynamics - Sugar (sucrose)

Uncontrolled terms: Bioactive components - Ginsenosides - Glucose solution - Optimal processing - Processing technologies - Ready-to-eat - Saponin - Sucrose solution

Numerical data indexing: Percentage 3.10e+01%, Percentage 3.60e+01%, Percentage 6.40e+01%

DOI: 10.1016/j.lwt.2014.10.047

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

373.

Accession number: 20152400929057

Title: Measurement and analysis of calcium content in wild Chinese dwarf cherry (*Prunus humilis*) fruits by inductively coupled plasma-optical emission spectrometer

Authors: Ma, Jian-Jun1 ; Ren, Yan-Jun1

Author affiliation:

1 Analysis and Testing Centre, Hebei Normal University of Science and Technology, Qinhuangdao City, Hebei

Province, China

Corresponding author: Ren, Yan-Jun

Source title: Advance Journal of Food Science and Technology

Abbreviated source title: Adv. J. Food Sci. Technol.

Volume: 8

Issue: 4

Issue date: 2015

Publication year: 2015

Pages: 242-245

Language: English

ISSN: 20424868

E-ISSN: 20424876

Document type: Journal article (JA)

Publisher: Maxwell Science Publications

Abstract: Different forms of calcium in wild Chinese dwarf cherry (*Prunus humilis*) fruits (two genotypes, small-fruit-type and big-fruit-type) were sequentially extracted and measured by Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES). The calcium content variation after postharvest storage was also studied, to provide the theory basis for the active nutritional ingredient evaluation of Chinese dwarf cherry (*Prunus humilis*). The results showed that, wild Chinese dwarf cherry (*Prunus humilis*) fruits in mature stage were rich in calcium nutrition element and mainly composed by water soluble calcium and calcium phosphate which absorbable to human. Absorbable calcium (including water soluble calcium and calcium phosphate) content in small-fruit-type (63.79%) was significantly higher than that of big-fruit-type (54.97%). After postharvest storage, the water soluble calcium content was increased while the calcium pectate and calcium oxalate content dropped. Especially to the big-fruit-type, the absorbable calcium content increased to 75.49% compared with just picking 54.97% (small-fruit-type increased from 63.79% to 68.86%). The study suggested that Chinese dwarf cherry (*Prunus humilis*) was a natural and biological calcium supplement to people; meanwhile, small-fruit-type was more suitable, especially after postharvest storage. © Maxwell Scientific Organization, 2015.

Number of references: 11

Main heading: Calcium phosphate

Controlled terms: Calcium - Food storage - Fruits - Inductively coupled plasma - Light emission - Nutrition - Plasma torches - Pollution detection - Spectrometers

Uncontrolled terms: Calcium content - Calcium oxalates - Chinese dwarf cherry (*Prunus humilis*) - ICP-OES - Inductively coupled plasma optical emission spectrometer - Measurement and analysis - Nutritional ingredients - Post-harvest storage

Classification code: 454.2 Environmental Impact and Protection - 461.7 Health Care - 549.2 Alkaline Earth Metals - 741.1 Light/Optics - 801 Chemistry - 821.2 Agricultural Chemicals - 821.4 Agricultural Products - 822.1 Food Products Plants and Equipment - 932.3 Plasma Physics

Numerical data indexing: Percentage 5.50e+01%, Percentage 6.38e+01%, Percentage 6.38e+01% to 6.89e+01%, Percentage 7.55e+01%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

374.

Accession number: 20151200671392

Title: Effect of surface structure on the photoreactivity of TiO₂

Authors: Mao, Xinchun¹ ; Wang, Zhiqiang¹ ; Lang, Xiufeng^{2, 4} ; Hao, Qunqing¹ ; Wen, Bo^{2, 3} ; Dai, Dongxu¹ ; Zhou, Chuanyao¹ ; Liu, Li-Min² ; Yang, Xueming¹

Author affiliation:

1 State Key Laboratory of Molecular Reaction Dynamics, Dalian Institute of Chemical Physics, Chinese Academy of Science, 457 Zhongshan Road, Dalian, Liaoning, China

2 Beijing Computational Science Research Center, Beijing, China

3 International Center for Quantum Materials (ICQM), School of Physics, Peking University, Beijing, China

4 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Zhou, Chuanyao

Source title: Journal of Physical Chemistry C

Abbreviated source title: J. Phys. Chem. C

Volume: 119

Issue: 11

Issue date: March 19, 2015

Publication year: 2015

Pages: 6121-6127

Language: English

ISSN: 19327447

E-ISSN: 19327455

Document type: Journal article (JA)

Publisher: American Chemical Society

Abstract: Although it has been widely accepted that the crystal phase, morphology, and facet significantly influence the catalytic and photocatalytic activity of TiO₂, establishing the correlation between structure and activity of heterogeneous reactions is very difficult because of the complexity of the structure. Utilizing ultrahigh vacuum (UHV) based temperature-programmed desorption (TPD) and density functional theory (DFT) calculations, we have successfully assessed the photoreactivity of two well characterized rutile surfaces ((011)-(2×1) and (110)-(1×1)) through examining the photocatalyzed oxidation of methanol. The photocatalytic products, such as formaldehyde and methyl formate, are the same on both surfaces under UV illumination. However, the reaction rate on (011)-(2×1) is only 42% of that on (110)-(1×1), which contradicts previous reports in aqueous environments where characterization of TiO₂ structure is difficult. The discrepancy probably comes from the differences of the TiO₂ structure in these studies. Our DFT calculations reveal that the rate-determining step of methanol dissociation on both surfaces is C-H scission; however, the barrier of this elementary step on (011)-(2×1) is about 0.2 eV higher than that on (110)-(1×1) because of their distinct surface atomic configurations. The present work not only demonstrates the importance of surface structure in the photoreactivity of TiO₂, but also provides an example for building the correlation between structure and activity using surface science techniques and DFT calculations. © 2015 American Chemical Society.

Number of references: 51

Main heading: Crystal structure

Controlled terms: Catalyst activity - Density functional theory - Methanol - Oxide minerals
- Photoreactivity - Surface structure - Temperature programmed desorption - Titanium dioxide

Uncontrolled terms: Atomic configuration - Heterogeneous reactions - Methanol dissociation - Oxidation of methanol - Photocatalytic activities - Rate determining step - Structure and activities - Surface science techniques

Classification code: 741.1 Light/Optics - 801.4 Physical Chemistry - 802.3 Chemical Operations - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally - 922.1 Probability Theory -

951 Materials Science

Numerical data indexing: Electron_Volt 2.00e-01eV, Percentage 4.20e+01%

DOI: 10.1021/acs.jpcc.5b00503

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

375.

Accession number: 20152901043673

Title: Metal-free phthalocyanine aggregation and binding with amines: Specific and general solvent effects on absorption and fluorescence properties

Authors: Wang, Tao¹ ; Zhang, Xian-Fu^{1, 2} ; Lu, Xulin¹

Author affiliation:

- 1 Institute of Applied Photochemistry, Center of Analysis and Measurements, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China
- 2 MPC Technologies, Hamilton; ON, Canada

Corresponding author: Zhang, Xian-Fu

Source title: Journal of Molecular Structure

Abbreviated source title: J. Mol. Struct.

Volume: 1084

Issue date: March 15, 2015

Publication year: 2015

Pages: 319-325

Language: English

ISSN: 00222860

CODEN: JMOSB4

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: The fluorescence and absorption properties of a metal-free phthalocyanine (Pc) H_2PcR_4 and its zinc-centered complex $ZnPcR_4$ (R is the isopropoxy at the β -position of a Pc ring) were measured and compared in protic and aprotic solvents. H_2PcR_4 shows strong bonding interaction with amines and aggregation in alcohols in addition to the general solvent effect in aprotic solvents due to polarity change. The specific solvent effect leads to substantial changes in its spectra, fluorescence quantum yield (Φ_f) and fluorescence lifetime (τ_f) values. In contrast, $ZnPcR_4$ does not show the specific effects due to the presence of a central element in a Pc cavity. For H_2PcR_4 the change of solvents caused a large variation of Φ_f (0.050-0.48) and τ_f (3.45-6.88 ns), in contrast to the slight changes for $ZnPcR_4$. On the other hand, the general solvent effect of H_2PcR_4 due to polarity is also more significant than that of $ZnPcR_4$. The increase of solvent polarity decreases both Φ_f and τ_f , but increases the Stoke's shift. © 2014 Elsevier B.V. All rights reserved.

Number of references: 43

Main heading: Solvents

Controlled terms: Absorption - Agglomeration - Amines - Fluorescence - Nitrogen compounds

Uncontrolled terms: Absorption property - Bonding interactions - Fluorescence lifetimes - Fluorescence properties - Fluorescence quantum yield - Metal-free phthalocyanine - Phthalocyanine - Solvent effects

Classification code: 741.1 Light/Optics - 802.3 Chemical Operations - 804.1 Organic Compounds

Numerical data indexing: Time 3.45e-09s to 6.88e-09s

DOI: 10.1016/j.molstruc.2014.11.073

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

376.

Accession number: 20142917960438

Title: Effect of stabilizers on textural properties of sour soybean milk

Authors: Cui, Ruijing1 ; Shi, Pengbao1 ; Kang, Weimin1

Author affiliation:

1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Kang, W.

Source title: Journal of the Chinese Cereals and Oils Association

Abbreviated source title: J. Chin. Cereals Oils Assoc.

Volume: 29

Issue: 6

Issue date: June 2014

Publication year: 2014

Pages: 87-92

Language: Chinese

ISSN: 10030174

Document type: Journal article (JA)

Publisher: Editorial Department, Chinese Cereals and Oils Association, China

Abstract: To improve textural properties of solidified sour soymilk as well as to improve their own shortcomings in water holding capacity, sensory reference index, the sour soymilk has been studied by gelatin, sodium carboxymethyl cellulose (CMC). Carrageenan acid quality of milk and textural analysis has been carried out finally. A single factor adopted based on a {3, 2} simplex lattice design method gelatin, CMC, carrageenan complex three stable test agent by detecting its hardness, viscosity, water holding ratio and senses for optimal stability mixture ratio. The result showed 0.4% addition level, gelatin, CMC, and the mass ratio of 1:0.75:1.36 carrageenan, the acid milk could reach the optimum sensory evaluation.

Number of references: 14

Main heading: Water quality

Controlled terms: Empennages - Food technology

Uncontrolled terms: Compound - Optimal stability - Sensory evaluation - Simplex-lattice design - Sodium carboxymethyl cellulose - Soybean milks - Textural properties -

Water holding capacity

Classification code: 453.2 Water Pollution Control - 652.1 Aircraft, General - 822 Food Technology

Numerical data indexing: Percentage 4.00e-01%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

377.

Accession number: 20134216864300

Title: Influence of Al³⁺ ions on the enhancement of the fluorescence in the CaMoO₄:Sm³⁺ phosphor

Authors: Zhang, Zhi-Wei¹ ; Shen, Xi-Hai¹ ; Ren, Yan-Jun¹ ; Hou, Wen-Long¹ ; Zhang, Wei-Guo¹ ; Wang, Dong-Jun¹

Author affiliation:

1 Physical-Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Zhang, Z.-W. (zhangzhiweia@163.com)

Source title: Optics and Laser Technology

Abbreviated source title: Opt Laser Technol

Volume: 56

Issue date: 2014

Publication year: 2014

Pages: 348-353

Language: English

ISSN: 00303992

CODEN: OLTCAS

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: A series of novel orange red emitting $\text{Ca}_{1-x}\text{MoO}_4:\text{xSm}^{3+}$ ($0 < x \leq 0.03$) and $\text{Ca}_{0.99}\text{Mo}_{1-y}\text{Al}_y\text{O}_4:\text{0.01Sm}^{3+}$ ($0 \leq y \leq 0.1$) phosphors were prepared by the high temperature solid state method. The phases and luminescent properties of the obtained $\text{Ca}_{1-x}\text{MoO}_4:\text{xSm}^{3+}$ ($0 < x \leq 0.03$) and $\text{Ca}_{0.99}\text{Mo}_{1-y}\text{Al}_y\text{O}_4:\text{0.01Sm}^{3+}$ phosphors were characterized. Results demonstrate that the phosphors particles emit an intensive reddish orange light emission under excitation at 403 nm. Emission bands of $4\text{G}_5/2 \rightarrow 6\text{H}_5/2$ (564 nm), $4\text{G}_5/2 \rightarrow 6\text{H}_7/2$ (599 nm), and $4\text{G}_5/2 \rightarrow 6\text{H}_9/2$ (646 nm) for the Sm^{3+} , with an excitation at $6\text{H}_5/2 \rightarrow 4\text{F}_7/2$ (402 nm) have been recorded. Of them, $4\text{G}_5/2 \rightarrow 6\text{H}_7/2$ (598 nm) has shown a bright orange emission. Additionally, the effect of Al^{3+} incorporation concentration on the luminescent properties of $\text{Ca}_{0.99}\text{MoO}_4:\text{0.01Sm}^{3+}$ was investigated. Results suggest that $\text{Ca}_{0.99}\text{Mo}_{1-y}\text{Al}_y\text{O}_4:\text{0.01Sm}^{3+}$ is a promising orange red-emitting phosphor for UV LED applications. © 2013 Elsevier Ltd.

Number of references: 31

Main heading: Phosphors

Controlled terms: Aluminum - Calcium - Citrus fruits - Luminescence

Uncontrolled terms: Emission bands - High temperature solid state methods - Luminescent property - Orange emissions - Orange-red emitting - Red emitting phosphor

Classification code: 541.1 Aluminum - 549.2 Alkaline Earth Metals - 741.1 Light/Optics - 821.4 Agricultural Products

Numerical data indexing: Size 4.02e-07m, Size 4.03e-07m, Size 5.64e-07m, Size 5.98e-07m, Size 5.99e-07m, Size 6.46e-07m

DOI: 10.1016/j.optlastec.2013.09.006

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

378.

Accession number: 20163902849228

Title: Reflections on college students' energy security awareness education in the new era of innovation research and analysis

Authors: Zhang, Xiaojun1 ; Zhang, Hongxin1 ; Jiao, Honglei1

Author affiliation:

1 Hebei Normal University of Science & Technology, Qin Huang Dao; Hebei; 066004, China

Corresponding author: Zhang, Xiaojun

Source title: Open Cybernetics and Systemics Journal

Abbreviated source title: Open. Cybern. Syst. J.

Volume: 9

Issue: 1

Issue date: 2015

Publication year: 2015

Pages: 2582-2586

Language: English

E-ISSN: 1874110X

Document type: Journal article (JA)

Publisher: Bentham Science Publishers B.V., P.O. Box 294, Bussum, 1400 AG, Netherlands

Abstract: Nowadays, the concept and connotation of energy security has also undergone major changes. Traditionally, the energy security refers to the paid sufficient energy supply for affordable price. Considering the new situation of the changes of energy security, energy security includes the following six aspects. First, the material security; second, energy access is the key, whether it is physical, or the contract, or commercial development and the ability to obtain the energy supply; third, energy security is a system or system by the national policy and the international mechanism, maintain the stability of energy supply; fourth, energy security is closely related with the safety investment, the need for adequate policy support and safe business environment; fifth, energy security and climate change and environmental safety issues closely related; sixth, energy security is not limited to oil supply and oil security. Energy security is an important guarantee of national economic security, directly affect the national security, social stability and the sustainable development. This paper analyzes many problems with the new era of college students the importance of the issue of energy security energy security concept of education, and the concept of energy security problems of education, expounds the necessity and urgency of strengthening energy security education, combined with the actual source of College Students' safety education, put forward the energy security education. Combined with the education of Ideological and political education, professional education, humanistic spirit and scientific spirit education combining the specific countermeasures of innovation of College Students' education on the concept of energy security. © Zhang et al.

Number of references: 8

Main heading: Energy security

Controlled terms: Climate change - Education - Energy policy - Energy resources - Investments - National security - Students - Sustainable development

Uncontrolled terms: Business environments - College students - Commercial development - Environmental safety - Ideological and political educations - Innovation research - National economic securities - Professional education

Classification code: 404.1 Military Engineering - 443.1 Atmospheric Properties - 525.1 Energy Resources and Renewable Energy Issues - 525.6 Energy Policy

DOI: 10.2174/1874110X01509012582

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

379.

Accession number: 20144200100337

Title: Mechanics evolution characteristics analysis of pressure-arch in fully-mechanized mining field

Authors: Wang, S.R.1, 3 ; Li, N.1 ; Li, C.L.1, 2 ; Hagan, P.4

Author affiliation:

- 1 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao; 066004, China
- 2 Institute of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China
- 3 Opening Laboratory for Deep Mine Construction, Henan Polytechnic University, Jiaozuo; 454003, China
- 4 School of Mining Engineering, University of New South Wales, Sydney; 2052, Australia

Corresponding author: Wang, S.R.

Source title: Journal of Engineering Science and Technology Review

Abbreviated source title: J. Eng. Sci. Technol. Rev.

Volume: 7

Issue: 4

Issue date: 2014

Publication year: 2014

Pages: 40-45

Language: English

E-ISSN: 17912377

Document type: Journal article (JA)

Publisher: Technological Education Institute of Kavala

Abstract: Based on a practical engineering, the three-dimension computational model was built using FLAC3D under the fully mechanized mining condition. Considering four variation factors, such as the distance of mining advancing, the strength of the surrounding rock, the speed of mining advancing and the dip angle of the coal seam, the mechanics evolution characteristics of the pressure-arch were analyzed. The result showed that for the horizontal seam, the geometric shape of the pressure-arch varied from flat arch to round arch gradually and the height and thickness of the pressure-arch also increased; the maximum principal stress in the skewback also increased with the working face advancing. With the strength of the surrounding rock from soft to hard, the arch thickness reduced, and the arch loading decreased. To improve the mining speed can do some contributions to the stability of the pressure-arch in the mining field. With the increase of dip angle of the seam, the pressure-arch displayed an asymmetric shape, the vault was tilted and moved to the upward direction. At the same time, the thickness of the pressure-arch increased, and the stress concentration in the skewback tended to be further intensified. © 2014 Kavala Institute of Technology.

Number of references: 12

Main heading: Arches

Controlled terms: Coal deposits - Loading - Numerical analysis - Pressure

Uncontrolled terms: Computational model - Evolution characteristics - Fully-mechanized mining - Maximum principal stress - Practical engineering - Surrounding rock - Three-dimension - Variation factor

Classification code: 408.2 Structural Members and Shapes - 482 Mineralogy - 503 Mines and Mining, Coal - 672 Naval Vessels - 921.6 Numerical Methods - 931.1 Mechanics

Funding Details: Number; Acronym; Sponsor: 51074140; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51474188; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

380.

Accession number: 20155101708451

Title: Assembly of single molecular magnets from dinuclear to 2D Dy-compounds with significant change of relaxation energy barriers

Authors: Chen, Zhi1 ; Fang, Ming2 ; Kang, Xiao-Min1 ; Hou, Yin-Ling1 ; Zhao, Bin1

Author affiliation:

1 Department of Chemistry, Key Laboratory of Advanced Energy Material Chemistry, MOE, Collaborative Innovation Center of Chemical Science and Engineering (Tianjin), Nankai University, Tianjin, China

2 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei province, China

Corresponding author: Zhao, Bin

Source title: Dalton Transactions

Abbreviated source title: Dalton Trans.

Volume: 45

Issue: 1

Issue date: November 13, 2015

Publication year: 2015

Pages: 85-88

Language: English

ISSN: 14779226

E-ISSN: 14779234

CODEN: DTARAF

Document type: Journal article (JA)

Publisher: Royal Society of Chemistry

Abstract: A dinuclear Dy(iii) compound (1) was structurally and magnetically characterized, displaying a single-molecule magnet (SMM) behavior with a relaxation energy barrier of 21(1) K. Interestingly, by only adding a suitable substituent on the ligand in 1, 1 as an SMM building unit, can be further assembled into a two-dimensional (2D) framework (2), which possesses a typical SMM behavior and a high relaxation energy barrier of 68(2) K. The result implied that the assembly of an SMM can effectively tune the energy barrier. To our knowledge, a cluster-based SMM assembled into a new 2D framework with SMM behavior is seldom reported. © The Royal Society of Chemistry.

Number of references: 37

Main heading: Dysprosium compounds

Controlled terms: Energy barriers - Magnets - Relaxation processes

Uncontrolled terms: Building units - Cluster-based - Dinuclear - Relaxation energies - Single molecular magnets - Single-molecule magnet - Two Dimensional (2 D)

Classification code: 641.1 Thermodynamics - 931.1 Mechanics

DOI: 10.1039/c5dt02444g

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

381.

Accession number: 20144500149162

Title: The effect of Web2.0 on learning management system

Authors: Chunyan, L.1 ; Haitao, Cui2 ; Guolin, L.1

Author affiliation:

- 1 Colloge of Education, Hebei Normal University of Science and Technology Qinhuangdao, Hebei, China
- 2 Center for Educational Technology, Qinhuangdao No.1 Senior School Qinhuangdao, Hebei, China

Corresponding author: Chunyan, L.

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 9

Issue: 10

Issue date: 2014

Publication year: 2014

Pages: 67-78

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: With the development of online education, online teaching and online learning are playing an increasingly important role in modern teaching. Learning management system (LMS) is basic environment of developing online learning. It has offered a network environment of study and work for teachers and students, it is a conservative technology for managing group, providing tools, and delivering content. Media coverage of Web 2.0 concentrates on the common applications/services such as blogs, video sharing, social networking and podcasting—a more socially connected Web in which people can contribute as much as they can consume. web2.0 created enormous challenges to LMS. According to a literature search and empirical investigation, this study describes the effect of Web2.0 on LMS. The first is integrating Web 2.0 Features into a Learning Management System, using edu2.0 as an example. The second is using web2.0 applications as an LMS. The main advantages of choosing web2.0 as LMS and a case are showed. At last, it tells us how to choose between the LMS and the web2.0. © 2014 SERSC.

Number of references: 13

Main heading: E-learning

Controlled terms: Social networking (online) - Teaching - Web services

Uncontrolled terms: Conservative technologies - Empirical investigation - Learning management system - Literature search - LMS - Network environments - On-line education - Web2.0

Classification code: 723 Computer Software, Data Handling and Applications - 901.2 Education

DOI: 10.14257/ijmue.2014.9.10.07

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

382.

Accession number: 20142417813424

Title: Construction final account prediction scheme based on normal least squares support vector regression network

Authors: Jia, Hui1 ; Li, Jie1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066001, China

Corresponding author: Jia, H. (18603367765@wo.com.cn)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 10

Issue: 9

Issue date: May 1, 2014

Publication year: 2014

Pages: 3561-3567

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press

Abstract: This paper is to present a novel construction final account prediction method based on normal least squares support vector regression network. Normal least squares support vector regression network has more robust than least squares support vector regression network. In the study, we will testify the feasibility of

construction final account prediction based on normal least squares support vector regression network by the cases. The testing results show that the construction final account prediction error of normal least squares support vector regression network is smaller than that of support vector regression network. Therefore, we can conclude that the forecasting ability for construction final account of normal least squares support vector regression network is more excellent than that of traditional support vector regression network. © 2014 Binary Information Press.

Number of references: 9

Main heading: Least squares approximations

Controlled terms: Forecasting - Regression analysis - Vectors

Uncontrolled terms: Forecasting ability - Least Square - Least squares support vector regression - Normal direction - Novel construction - Prediction methods - Prediction schemes - Support vector regression (SVR)

Classification code: 921.1 Algebra - 921.6 Numerical Methods - 922.2 Mathematical Statistics

DOI: 10.12733/jcis7881

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

383.

Accession number: 20141317508118

Title: Binary organogels based on glutamic acid derivatives and different acids: Solvent effect and molecular skeletons on self-assembly and nanostructures

Authors: Guo, Haiying¹ ; Jiao, Tifeng^{1, 2} ; Shen, Xihai^{1, 3} ; Zhang, Qingrui¹ ; Li, Adan¹ ; Zhou, Jingxin¹ ; Gao, Faming¹

Author affiliation:

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3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Jiao, T. (tfjiao@ysu.edu.cn)

Source title: Colloids and Surfaces A: Physicochemical and Engineering Aspects

Abbreviated source title: Colloids Surf. A Physicochem. Eng. Asp.

Volume: 447

Issue date: April 5, 2014

Publication year: 2014

Pages: 88-96

Language: English

ISSN: 09277757

E-ISSN: 18734359

CODEN: CPEAEH

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: In this paper new binary organogels based on glutamic acid derivatives and acids with different molecular skeletons were designed and prepared. Their gelation behaviors in single or mixed solvents were tested as novel low-molecular-mass organic gelators. The experimental data showed that the solvents and molecular skeletons played a crucial role in regulating the gelation behaviors and fabrication of nanostructures. Suitable single solvents or volume ratios in ethanol/water mixed solvents seemed more favorable for the formation of supramolecular gels due to cooperation of multi-intermolecular weak forces. Rational assembly modes in organogels were proposed and discussed. The present work may give some insight to design and character new versatile organogelators and soft materials with special molecular structures. © 2014 Elsevier B.V.

Number of references: 49

Main heading: Solvents

Controlled terms: Amino acids - Gelation - Musculoskeletal system - Nanostructures - Self assembly

Uncontrolled terms: Binary organogels - Gelation behavior - Glutamic acid - Low-molecular-mass organic gelators - Molecular skeleton - Organogels - Solvent effects - Supramolecular gels

Classification code: 461 Bioengineering and Biology - 461.3 Biomechanics, Bionics and Biomimetics - 761 Nanotechnology - 801 Chemistry - 802.3 Chemical Operations - 803 Chemical Agents and Basic Industrial

Chemicals - 933 Solid State Physics - 951 Materials Science

DOI: 10.1016/j.colsurfa.2014.01.059

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

384.

Accession number: 20152300914523

Title: A query feedback-based histogram maintenance approach

Authors: Lin, Xudong¹ ; Zeng, Xiaoning²

Author affiliation:

1 Department of Information Engineering, Environmental Management College of China, No. 73, West Hebei Avenue, Qinhuangdao, China

2 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, No. 360, West Hebei Avenue, Qinhuangdao, China

Source title: ICIC Express Letters, Part B: Applications

Abbreviated source title: ICIC Express Lett Part B Appl.

Volume: 6

Issue: 6

Issue date: January 1, 2015

Publication year: 2015

Pages: 1541-1546

Language: English

ISSN: 21852766

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: Although histogram has been introduced into the optimizer of the relational database to assist cardinality estimate for more than thirty years, the issue of histogram maintenance is not addressed well. The application of the query feedback information provides a new way of thinking for the histogram maintenance. However, it is not mature until now and inefficiency is the main problem. In this paper, an efficient query feedbackbased histogram maintenance approach is proposed. By gathering the statistics about the query range of each predicate, the frequently queried buckets of a histogram can be located and updated rapidly. © 2015 ISSN.

Number of references: 9

Main heading: Graphic methods

Controlled terms: Maintenance - Query processing

Uncontrolled terms: Candidate maintenance unit - Cardinality estimates - Feed back information - Feed-back based - Histogram - Maintenance approaches - Optimizers - Relational Database

Classification code: 723.3 Database Systems - 902.1 Engineering Graphics - 913.5 Maintenance

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

385.

Accession number: 20145200364324

Title: Cardinality estimation based on logical possible worlds

Authors: Lin, Xudong¹ ; Zeng, Xiaoning²

Author affiliation:

1 Department of Information Engineering, Environmental Management College of China, No. 73, West Hebei Avenue, Qinhuangdao, China

2 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, No. 360, West Hebei Avenue, Qinhuangdao, China

Corresponding author: Lin, Xudong

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 8

Issue: 11

Issue date: December 1, 2014

Publication year: 2014

Pages: 3215-3220

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: Cardinality estimation is an important problem in query optimizations. In this paper, we propose the concept of logical possible world and estimate cardinality based on a probability space over the set of logical possible worlds. Statistical information will be considered as the common features of logical possible worlds but not the averages of all database instances under certain probability distribution. Based on the statistical information of a database, logical possible worlds can filter out impossible database instances and reflect the reality of the underlying database more rationally. Estimating cardinalities based on logical possible worlds, the calculation difficulty can be decreased and the practicability can be improved reasonably.

Number of references: 9

Main heading: Query processing

Controlled terms: Database systems - Maximum entropy methods - Probability distributions - Statistics

Uncontrolled terms: Cardinalities - Cardinality estimations - Common features - Possible worlds - Probability spaces - Query optimization - Statistical information

Classification code: 716.1 Information Theory and Signal Processing - 723.3 Database Systems - 922.1 Probability Theory - 922.2 Mathematical Statistics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20141217498428

Title: The application research of painting style based on image digitization technology process

Authors: Ma, Chun-Xing1 ; Wang, Wei2 ; Sun, Li-Wei3

Author affiliation:

1 College of Arts, Hebei Normal University of Science and Technology, Qinhuangdao, 066000, China

2 No.4 Middle School of Qinhuangdao, Qinhuangdao, 066000, China

3 College of Architecture and Art Design, Hebei University of Technology, Tianjin 300401, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 533

Monograph title: Modern Tendencies in Engineering Sciences

Issue date: 2014

Publication year: 2014

Pages: 230-233

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783038350453

Document type: Conference article (CA)

Conference name: 2014 International Forum on Materials Processing Technology, IFMPT 2014 and 2014 International Conference on Sensors, Instrument and Information Technology, ICSIIT 2014

Conference date: January 18, 2014 - January 19, 2014

Conference location: Guangzhou, China

Conference code: 103220

Publisher: Trans Tech Publications

Abstract: One of the function of digital painting images is to let the image simulation the painting style of artist, while to generate artistic image which has a vivid artistic effect. However, the manipulation process is complicated, cumbersome and means of a single. It can not let the non-professional personnel to master simply and easily. This article embarks from the common painting style technique and theory, using the photoshop, Illustrator CS4 software to process the paths, color gradation and the lightness, using the image color statistics and transformation simulation, and through the way of copying images to identify four different application techniques of painting style. Experiments prove that the methods and means can be simple, rapid, realistic to achieve the painting art effect. © (2014) Trans Tech Publications, Switzerland.

Number of references: 5

Main heading: Painting

Controlled terms: Application programs - Information technology

Uncontrolled terms: Application research - Artistic effects - Color-gradation - Digital painting - Image color - Image digitization - Image simulations - Software simulation

Classification code: 723 Computer Software, Data Handling and Applications - 813.1 Coating Techniques - 903 Information Science

DOI: 10.4028/www.scientific.net/AMM.533.230

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

387.

Accession number: 20141117465534

Title: Evaluation of food logistics system based on generalized regression neural network

Authors: Li, Changming¹ ; Guo, Lihong¹

Author affiliation:

¹ Hebei Normal University of Science and Technology, China

Source title: Journal of Chemical and Pharmaceutical Research

Abbreviated source title: J. Chem. Pharm. Res.

Volume: 6

Issue: 2

Issue date: 2014

Publication year: 2014

Pages: 245-249

Language: English

E-ISSN: 09757384

Document type: Journal article (JA)

Publisher: Journal of Chemical and Pharmaceutical Research

Abstract: This paper constructs a food logistics system evaluation model based on generalized regression neural network. It first establishes an evaluation index system for food logistics system and studies the standardization of relevant indexes; then it explores related theories of generalized regression neural network and establishes a food logistics system evaluation model based on generalized regression neural network; finally a fairly satisfying test result is acquired through numerical example examination. The test result shows: the evaluation model proves to be simple and practicable and is effective in evaluating food logistics system. This paper provides food producers with an effective tool to select evaluate and manage food logistics system.

Number of references: 10

Main heading: Neural networks

Controlled terms: Medicine - Pharmacodynamics

Uncontrolled terms: Effective tool - Evaluation index system - Evaluation modeling - Food logistics - Food producers - Generalized regression neural networks - Index systems

Classification code: 461.1 Biomedical Engineering - 461.6 Medicine and Pharmacology

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

388.

Accession number: 20141017427269

Title: Corrosion behavior of Sn-3.0Ag-0.5Cu solder under high-temperature and high-humidity

condition

Authors: Wang, Mingna1 ; Wang, Jianqiu2 ; Ke, Wei2

Author affiliation:

1 Department of Physics, Hebei Normal University of Science and Technology, 360, West Hebei Street, Qinhuangdao 066004, China

2 State Key Lab of Corrosion and Protection, Institute of Metal Research, Chinese Academy of Sciences, 62, Wencui Road, Shenhe District, Shenyang 110016, China

Corresponding author: Wang, M. (mnwang@alum.imr.ac.cn)

Source title: Journal of Materials Science: Materials in Electronics

Abbreviated source title: J Mater Sci Mater Electron

Volume: 25

Issue: 3

Issue date: March 2014

Publication year: 2014

Pages: 1228-1236

Language: English

ISSN: 09574522

E-ISSN: 1573482X

Document type: Journal article (JA)

Publisher: Springer New York, 233 Spring Street, New York, NY 10013-1578, United States

Abstract: The aim of this study is to evaluate the corrosion behavior of Sn-3.0Ag-0.5Cu (SAC305) solder alloy under high-temperature and high-humidity condition. The corrosion of SAC305 alloy was attributed to the oxidation of Sn, which formed SnO₂ and SnO, and SnO₂ existed on the outer layer of the oxide film. After a period exposure, a stable and dense protective oxide film formed on the specimen surfaces, and the specimen which exposed at 75 C had the thickset oxide film. © 2014 Springer Science+Business Media New York.

Number of references: 30

Main heading: Tin

Controlled terms: Corrosive effects - Oxide films - Silver - Soldering alloys

Uncontrolled terms: Corrosion behavior - High temperature - Outer layer - Protective oxide films - Sn-3.0Ag-0.5Cu - Sn-3.0ag-0.5cu solders - Solder alloys - Specimen surfaces

Classification code: 538.1.1 Soldering - 546.2 Tin and Alloys - 547.1 Precious Metals - 712.1.2 Compound Semiconducting Materials - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally

DOI: 10.1007/s10854-014-1714-8

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

389.

Accession number: 20142817937069

Title: Regional economic evaluation based on a novel fuzzy clustering method in big data

Authors: Zhaohui, Liu¹ ; Liyan, Li² ; Wenjing, Xu³

Author affiliation:

- 1 Enrollment and employment, Hebei Normal University of Science and Technology Qinhuangdao, Hebei, China
- 2 Department of Economics, Hebei Qinhuangdao Institute of Technology Qinhuangdao, Hebei 066100, China
- 3 College of Finance, Hebei Normal University of Science and Technology Qinhuangdao, Hebei, China

Source title: International Journal of Database Theory and Application

Abbreviated source title: Int. J. Database Theory Appl.

Volume: 7

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 131-142

Language: English

ISSN: 20054270

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Cloud computing, Internet of things, social networks and other new services make human society's data type and size increase at unprecedented rates. In order to analyze and make use of the huge data resources, the effective data analysis technique needed to be used. Thus, an optimized fuzzy clustering method GAPSO-FCM is proposed in this paper. The GA and PSO algorithm is adopted in order to overcome FCM be sensitive to initial value and noise problems and easy to fall into local minimum value. The combination of PSO and GA algorithm can partly solve the problem that is easy to appear premature phenomenon to PSO algorithm. It improves the global search ability by combining GAPSO algorithm and FCM algorithm. At last, the algorithm is used to analyze the comprehensive economic strength of cities in the Yangtze River Delta. © 2014 SERSC.

Number of references: 27

Main heading: Genetic algorithms

Controlled terms: Algorithms - Big data - Fuzzy clustering - Fuzzy systems - Gallium
- Regional planning

Uncontrolled terms: Data analysis techniques - Evaluation - FCM - Fuzzy clustering
method - Global search ability - PSO - Regional economy - Yangtze river delta

Classification code: 403.2 Regional Planning and Development - 549.3 Nonferrous Metals and Alloys
excluding Alkali and Alkaline Earth Metals - 723 Computer Software, Data Handling and Applications - 961
Systems Science

DOI: 10.14257/ijcta.2014.7.3.13

Database: Compendex

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390.

Accession number: 20150800543582

Title: Growth of anodic TiO₂ nanotubes in mixed electrolytes and novel method to extend nanotube
diameter

Authors: Zhang, Yulian^{1, 2} ; Yu, Dongliang^{1, 2} ; Gao, Mingqi³ ; Li, Dongdong² ; Song, Ye¹ ; Jin,

Rong1 ; Ma, Weihua1 ; Zhu, Xufei1

Author affiliation:

- 1 Key Laboratory of Soft Chemistry and Functional Materials of Education Ministry, Nanjing University of Science and Technology, Nanjing, China
- 2 Shanghai Advanced Research Institute, China Academy of Sciences, Shanghai, China
- 3 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, Dongdong

Source title: Electrochimica Acta

Abbreviated source title: Electrochim Acta

Volume: 160

Issue date: April 1, 2015

Publication year: 2015

Pages: 33-42

Language: English

ISSN: 00134686

CODEN: ELCAAV

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: It is well known anodic TiO₂ nanotubes (ATNTs) can be obtained by the anodization of Ti foils in fluoride-containing solutions, and the nanotube diameter is proportional to the applied voltages. However, the growth kinetics of ATNTs and the relationship between structural features and anodizing parameters still remain unclear. Challenges always remain in the fabrication of ATNTs with large diameters due to the undesired breakdown event under the high voltage in NH₄F solutions. Here, an interesting approach is first proposed to overcome these particular challenges. A series of constant current anodizing processes in fluoride-free H₃PO₄ solutions, NH₄F solutions of different concentrations (0.7 wt%, 0.5 wt% and 0.2 wt%), and different mixed electrolytes containing both NH₄F and H₃PO₄, have been compared in detail. And we mainly focused on the influence of the different ratios of NH₄F and H₃PO₄ on the outer diameters of ATNTs and the correlation between two types of films. The interesting results show that the nanotube diameter greatly increases with H₃PO₄ amount in the solutions with a given concentration of NH₄F. In contrast, the nanotube length decreases with the increase of H₃PO₄ amount in the solutions with a given concentration of NH₄F. The experimental findings and the undesired breakdown phenomenon can be elucidated by the theory of the electronic current and ionic current rather than by the field-assisted dissolution. © 2015 Elsevier Ltd. All rights reserved.

Number of references: 58

Main heading: Nanotubes

Controlled terms: Anodic oxidation - Electrolytes - Fluorine compounds - Growth kinetics
- Titanium dioxide - Yarn

Uncontrolled terms: Anodizations - Breakdown phenomena - Constant current -
Electronic current - Mixed electrolyte - Nanotube diameters - Structural feature - TiO

Classification code: 461.2 Biological Materials and Tissue Engineering - 702 Electric Batteries and Fuel
Cells - 761 Nanotechnology - 802.2 Chemical Reactions - 803 Chemical Agents and Basic Industrial Chemicals -
804 Chemical Products Generally - 804.2 Inorganic Compounds - 819.4 Fiber Products

DOI: 10.1016/j.electacta.2015.02.058

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

391.

Accession number: 20143700064504

Title: Global dynamic service composition based on randomness of QoS data and trust evaluation

Authors: Lu, Wei-Na^{1, 2}; Hu, Xiao-Hui¹; Wang, Shang-Guang³; Li, Xiao-Tao¹

Author affiliation:

1 School of Automation Science and Electrical Engineering, Beihang University, Beijing, China

2 School of Mechanics and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao, China

3 State Key Laboratory of Networking and Switching Technology, Beijing University of Posts and Telecommunications, Beijing, China

Corresponding author: Lu, Wei-Na

Source title: Kongzhi yu Juece/Control and Decision

Abbreviated source title: Kongzhi yu Juece Control Decis

Volume: 29

Issue: 8

Issue date: August 1, 2014

Publication year: 2014

Pages: 1379-1386

Language: Chinese

ISSN: 10010920

CODEN: KYJUEF

Document type: Journal article (JA)

Publisher: Northeast University

Abstract: In an open and dynamic Internet environment, the randomness of Web services with unreliable quality leads to low accuracy of optimization in service composition. Therefore, a global dynamic service composition approach is proposed based on randomness of QoS data and trust evaluation. Firstly, the uncertain outliers which lead to unstable objective QoS are removed, and the true values of objective QoS are estimated. Then, the credibility of the evaluation data from the providers and customers are analyzed to obtain the subjective QoS evaluation of current service. Finally, with the objective and subjective QoS data, the global dynamic service composition model is constructed and the optimal result is calculated. Experiment results with real and simulated data show that the proposed approach significantly improves the stability and accuracy of service composition.

Number of references: 29

Main heading: Quality of service

Controlled terms: Quality control - Random processes - Web services

Uncontrolled terms: Global dynamics - Internet environment - Optimal results - QoS evaluation - Service compositions - Trust evaluation

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723 Computer Software, Data Handling and Applications - 913.3 Quality Assurance and Control - 922.1 Probability Theory

DOI: 10.13195/j.kzyjc.2013.0693

Database: Compendex

392.

Accession number: 20142817913819

Title: Preparation and characterization of binary organogels via some azobenzene amino derivatives and different fatty acids: Self-assembly and nanostructures

Authors: Guo, Haiying¹ ; Jiao, Tifeng¹ ; Shen, Xihai² ; Zhang, Qingrui¹ ; Li, Adan¹ ; Gao, Faming¹

Author affiliation:

1 Hebei Key Laboratory of Applied Chemistry, School of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao 066004, China

2 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Jiao, T. (tfjiao@ysu.edu.cn)

Source title: Journal of Spectroscopy

Abbreviated source title: J. Spectroscopy

Volume: 2014

Issue date: 2014

Publication year: 2014

Article number: 758765

Language: English

ISSN: 23144920

E-ISSN: 23144939

Document type: Journal article (JA)

Publisher: Hindawi Publishing Corporation, 410 Park Avenue, 15th Floor, 287 pmb, New York, NY 10022, United States

Abstract: In present work the gelation behaviors of binary organogels composed of azobenzene amino derivatives and fatty acids with different alkyl chains in various organic solvents were designed and investigated. Their gelation behaviors in 20 solvents were tested as new binary organic gelators. It showed that the length of alkyl substituent chains and azobenzene segment have played a crucial role in the gelation behavior of all gelator mixtures in various organic solvents. Longer alkyl chains in molecular skeletons in present gelators are favorable

for the gelation of organic solvents. Morphological studies revealed that the gelator molecules self-assemble into different aggregates from lamella, wrinkle, to belt with change of solvents. Spectral studies indicated that there existed different H-bond formation and hydrophobic force, depending on different substituent chains in molecular skeletons. The present work may also give new perspectives for designing new binary organogelators and soft materials. © 2014 Haiying Guo et al.

Number of references: 31

Main heading: Gelation

Controlled terms: Azobenzene - Fatty acids - Musculoskeletal system - Organic solvents
- Spectroscopic analysis

Uncontrolled terms: Alkyl substituent - Binary organogels - Gelation behavior - Gelator molecules - Hydrophobic forces - Molecular skeleton - Morphological study - Spectral studies

Classification code: 461.3 Biomechanics, Bionics and Biomimetics - 801 Chemistry - 802.3 Chemical Operations - 804.1 Organic Compounds

DOI: 10.1155/2014/758765

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

393.

Accession number: 20152100871012

Title: Behavior analysis and detection method for distributed systems

Authors: Wang, Tao^{1, 2}; Ma, Chuan¹; Shen, Limin¹

Author affiliation:

1 School of Information Science and Engineering, Yanshan University, Qinhuangdao; Hebei, China

2 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei, China

Corresponding author: Wang, Tao

Source title: Huazhong Keji Daxue Xuebao (Ziran Kexue Ban)/Journal of Huazhong University of Science and Technology (Natural Science Edition)

Abbreviated source title: Huazhong Ligong Daxue Xuebao

Volume: 42

Issue: 11

Issue date: November 23, 2014

Publication year: 2014

Pages: 128-132

Language: Chinese

ISSN: 16714512

Document type: Journal article (JA)

Publisher: Huazhong University of Science and Technology

Abstract: A method for behavior analysis and detection was proposed based on process algebra. Control flow graphs of a distributed system were generated by static binary code analysis, and were transformed into process expressions. The process expressions were rewritten by eliminating the non determinism, adding concurrency operation and reduction combine. The concurrency operators in process expressions were eliminated by concurrent laws. Finally, the behavior detection model for distributed systems was constructed and behavior detection methods were given. Experiments demonstrate that this method reduces the complexity of behavior analysis and detection, moreover, this method has high precision in analyzing control flow. ©, 2014, Huazhong University of Science and Technology. All right reserved.

Number of references: 13

Main heading: Process control

Controlled terms: Algebra - Flow graphs - Intrusion detection - Network security

Uncontrolled terms: Behavior detection - Binary code analysis - Concurrency operators - Control flow graphs - Distributed systems - Process algebras - Process expression - System calls

Classification code: 723 Computer Software, Data Handling and Applications - 731 Automatic Control Principles and Applications - 921.1 Algebra - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.13245/j.hust.141124

Database: Compendex

394.

Accession number: 20151700775830

Title: Study on the infringement of copyright of micro-blog

Authors: Zhou, Jianhong¹ ; Pei, Guanggang²

Author affiliation:

1 College of Humanities and Law, Hebei Normal University of Science and Technology, Qinhuangdao Hebei, China

2 Foreign Language College, Shandong Normal University, Jinan, Shandong, China

Source title: International Conference on Logistics, Engineering, Management and Computer Science, LEMCS 2014

Abbreviated source title: Int. Conf. Logist., Eng., Manag. Comput. Sci., LEMCS

Part number: 1 of 1

Issue date: 2014

Publication year: 2014

Pages: 404-409

Language: English

ISBN-13: 9789462520103

Document type: Conference article (CA)

Conference name: 2014 International Conference on Logistics Engineering, Management and Computer Science, LEMCS 2014

Conference date: December 21, 2013

Conference location: Shenyang, China

Conference code: 111673

Sponsor: North China Institute of Technology of Shenyang Aerospace

Publisher: Atlantis Press

Abstract: Micro-blog articles should be protected by Chinese Copyright Law so long as they are original works. The infringement of copyright may be means of copying, digitizing, retweeting works, and setting the hyperlinks in micro-blog. Bloggers need to bear legal liability for their infringement of copyright if knowingly. "Notifying" and "knowing" rules could be applied for micro-blog service provider's legal liability of infringement of copyright without considering the order. It's better for us to build a kind of Internet copyright license contract system in order to solve the problems of authorization in micro-blog © 2014. The authors - Published by Atlantis Press.

Number of references: 10

Main heading: Copyrights

Controlled terms: Blogs - Hypertext systems - Internet - Social networking (online)

Uncontrolled terms: Bloggers - Copyright law - Hyperlinks - Knowing rules - Legal liability - Micro-blog - Notifying rules - Service provider

Classification code: 723 Computer Software, Data Handling and Applications - 903 Information Science

Database: Compendex

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395.

Accession number: 20152000851706

Title: Analysis on the function management and utilization rate of the tourism hospitality management laboratory

Authors: Liu, Yanfang¹ ; Zhang, Jifei¹ ; Yi, Lanlan¹ ; Li, Xinna¹

Author affiliation:

1 School of Business and Management, Hebei Normal University of Science and Technology, China

Source title: Journal of Digital Information Management

Abbreviated source title: J. Digit. Inf. Manage.

Volume: 12

Issue: 6

Issue date: December 1, 2014

Publication year: 2014

Pages: 379-382

Language: English

ISSN: 09727272

Document type: Journal article (JA)

Publisher: Digital Information Research Foundation

Abstract: This paper aims at finding out the problem in the tourism hospitality management laboratory by analyzing the concept of the tourism hospitality management laboratory and summarizing the basic theory of the tourism hospitality management laboratory. We should consider the actual development situation, and put forward the construction project from its necessity, feasibility, target decision, planning design and guarantee mechanism, etc, and analyze the specific operation condition, which give references to the establishment of the hotel management specialty laboratory.

Number of references: 6

Main heading: Project management

Controlled terms: Laboratories

Uncontrolled terms: Basic theory - Construction projects - Development situations - Hotel managements - Laboratory management - Management and utilization - Operation conditions - Planning designs

Classification code: 801 Chemistry - 912.2 Management

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

396.

Accession number: 20144200110798

Title: Synthesis and Evaluation of CoFe₂O₄-Chitosan Nanoparticles in Enhanced Oil Recovery

Authors: Zheng, Xue Fang¹ ; Lian, Qi¹

Author affiliation:

- 1 School of Chemical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Lian, Qi

Source title: Journal of Dispersion Science and Technology

Abbreviated source title: J. Dispersion Sci. Technol.

Volume: 36

Issue: 2

Issue date: February 1, 2015

Publication year: 2015

Pages: 245-251

Language: English

ISSN: 01932691

E-ISSN: 15322351

Document type: Journal article (JA)

Publisher: Taylor and Francis Inc., 325 Chestnut St, Suite 800, Philadelphia, PA 19106, United States

Abstract: Chitosan nanoparticles with magnetic properties can be potentially used as separation materials in the adsorption of oil for enhanced oil recovery. Different from traditional surfactants, the novel magnetic CoFe₂O₄-chitosan nanoparticles have the advantages of excellent biodegradation and a high level of controllability. The CoFe₂O₄-chitosan nanoparticles with core-shell structure were prepared successfully. The images of transmission electron microscopy and scanning electron microscopy showed that the cube-shaped magnetic CoFe₂O₄ particles were encapsulated by the spherical chitosan nanoparticles. The sizes of the CoFe₂O₄-chitosan nanoparticles were all below 100 nm. The saturated magnetization of the CoFe₂O₄-chitosan nanoparticles could reach 80 emu/g and showed the characteristics of superparamagnetism at the same time. The evaluation of the interfacial properties of the product showed that the interfacial tension between crude oil and water could be reduced to ultra-low values—as low as 10⁻³ mN/m—when magnetic CoFe₂O₄-chitosan nanoparticle was used in several blocks in the Shengli Oilfield without other additives. Meanwhile, the magnetic CoFe₂O₄-chitosan nanoparticles possessed good salt-resisting capacity. © 2015, Copyright Taylor & Francis Group, LLC.

Number of references: 24

Main heading: Enhanced recovery

Controlled terms: Biodegradation - Chitosan - Crude oil - Nanomagnetism - Nanoparticles - Oil fields - Oil shale - Scanning electron microscopy - Superparamagnetism - Surface active agents - Surface tension - Transmission electron microscopy

Uncontrolled terms: Chitosan nanoparticles - Enhanced oil recovery - Interfacial property - Magnetic nano-particles - Saturated magnetization - Separation materials - Shell structure - Shengli Oilfield

Classification code: 511 Oil Field Equipment and Production Operations - 511.1 Oil Field Production Operations - 512.1 Petroleum Deposits - 523 Liquid Fuels - 701.2 Magnetism: Basic Concepts and Phenomena - 708 Electric and Magnetic Materials - 741.3 Optical Devices and Systems - 761 Nanotechnology - 801.2 Biochemistry - 804.1 Organic Compounds - 931.2 Physical Properties of Gases, Liquids and Solids - 933 Solid State Physics

DOI: 10.1080/01932691.2014.904794

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

397.

Accession number: 20143017985668

Title: Research of small and medium enterprises based on international e-commerce trade

Authors: Li, Yingwei¹ ; Mao, Jiuzhi¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: WIT Transactions on Information and Communication Technologies

Abbreviated source title: WIT Trans. Inf. Commun. Technol.

Volume: 54 VOLUME 1

Monograph title: Green Communications and Networks

Issue date: 2014

Publication year: 2014

Pages: 827-833

Language: English

ISSN: 17433517

ISBN-13: 9781845648732

Document type: Conference article (CA)

Conference name: 3rd International Conference on Green Communications and Networks, GCN 2013

Conference date: December 12, 2013 - December 14, 2013

Conference location: Chongqing, China

Conference code: 106475

Sponsor: WIT Transactions on Information and Communication Technologies

Abstract: At present, Chinese small and medium enterprises (SMEs) are not only firming the domestic market, but also actively exploring the international market. International e-commerce plays an active and important role on SMEs by reducing operating costs, expanding sale channels and controlling of the dynamics of the market. For the intense competitions in the global economy environment, it has become a necessity for SMEs to use e-commerce to keep fast, stable, and healthy development. Combining the international e-commerce with Chinese traditional industries, cab provide a powerful weapon for SME's in our country on the strong advocacy of products, the discovery of the exact business opportunities as well as the improvement of the international competitiveness. © 2014 WIT Press.

Number of references: 10

Main heading: Industry

Controlled terms: Competition - Electronic commerce - International trade

Uncontrolled terms: Business opportunities - Domestic markets - Global economies - International competitiveness - International markets - Small and medium enterprise - Traditional industry

Classification code: 911 Cost and Value Engineering; Industrial Economics - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing

DOI: 10.2495/GCN131112

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

398.

Accession number: 20141017436999

Title: A multi-criteria QoS-aware trust service composition algorithm in cloud computing environments

Authors: Lu, Weina^{1, 2}; Hu, Xiaohui¹; Wang, Shangguang³; Li, Xiaotao¹

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2 Department of Mechanics and Electronics, Hebei Normal University of Science and Technology, Changli, Hebei, 066600, China

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Source title: International Journal of Grid and Distributed Computing

Abbreviated source title: Int. J. Grid Distrib. Comput.

Volume: 7

Issue: 1

Issue date: 2014

Publication year: 2014

Pages: 77-87

Language: English

ISSN: 20054262

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: In an open and dynamic cloud computing environment, the randomness of cloud services with unreliable quality leads to low accuracy in service composition. To address the above problem, this paper proposes

a global trust service composition approach based on random QoS and trust evaluation, considering the multi-criteria assessment of service quality. Firstly, statistical test is employed to remove the uncertain outliers and to estimate the ideal value of the collected objective QoS data. Secondly, subjective QoS evaluations of providers and users are aggregated according to direct trust and recommended trust. Finally, services are composed through global QoS optimization. Experiments for each stage show that the approach improves the accuracy and precision of service composition. © 2014 SERSC.

Number of references: 22

Main heading: Quality of service

Controlled terms: Cloud computing - Computer systems - Global optimization - Statistical tests

Uncontrolled terms: Accuracy and precision - Cloud computing environments - Hypothesis tests - Multi-criteria - Multi-criteria assessment - QoS optimization - Service compositions - Trust evaluation

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 722 Computer Systems and Equipment - 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 921.5 Optimization Techniques - 922.2 Mathematical Statistics

DOI: 10.14257/ijgdc.2014.7.1.08

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

399.

Accession number: 20141517555423

Title: A process algebra-based detection model for multithreaded programs in communication system

Authors: Wang, Tao^{1, 2, 3}; Shen, Limin^{1, 3}; Ma, Chuan^{1, 3}

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao, 066004, China

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Corresponding author: Wang, T.

Source title: KSII Transactions on Internet and Information Systems

Abbreviated source title: KSII Trans. Internet Inf. Syst.

Volume: 8

Issue: 3

Issue date: 2014

Publication year: 2014

Pages: 965-983

Language: English

ISSN: 19767277

E-ISSN: 22881468

Document type: Journal article (JA)

Publisher: Korean Society for Internet Information

Abstract: Concurrent behaviors of multithreaded programs cannot be described effectively by automata-based models. Thus, concurrent program intrusion attempts cannot be detected. To address this problem, we proposed the process algebra-based detection model for multithreaded programs (PADMP). We generate process expressions by static binary code analysis. We then add concurrency operators to process expressions and propose a model construction algorithm based on process algebra. We also present a definition of process equivalence and behavior detection rules. Experiments demonstrate that the proposed method can accurately detect errors in multithreaded programs and has linear space-time complexity. The proposed method provides effective support for concurrent behavior modeling and detection. © 2014 KSII.

Number of references: 28

Main heading: Algebra

Controlled terms: Automata theory - Intrusion detection - Static analysis

Uncontrolled terms: Automata-based model - Binary code analysis - Concurrency operators
- Concurrent behavior - Multi-threaded programs - Process algebras - Space-time complexity -
System calls

Classification code: 723 Computer Software, Data Handling and Applications - 921.1 Algebra

DOI: 10.3837/tiis.2014.03.014

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

400.

Accession number: 20171803629676

Title: Morphology evolution of TiO₂nanotubes by a slow anodization in mixed electrolytes

Authors: Chen, Shiyi¹ ; Chen, Qun¹ ; Gao, Mingqi² ; Yan, Shuo¹ ; Jin, Rong¹ ; Zhu, Xufei¹

Author affiliation:

1 Key Laboratory of Soft Chemistry and Functional Materials of Education Ministry, Nanjing University of Science and Technology, Nanjing; 210094, China

2 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

Corresponding author: Zhu, Xufei (xfzhu@njust.edu.cn)

Source title: Surface and Coatings Technology

Abbreviated source title: Surf. Coat. Technol.

Volume: 321

Issue date: July 15, 2017

Publication year: 2017

Pages: 257-264

Language: English

ISSN: 02578972

Document type: Journal article (JA)

Publisher: Elsevier B.V.

Abstract: Investigations of anodic TiO₂nanotubes (ATNTs) are generally based on NH₄F electrolytes rather than mixed electrolytes and nanotube embryos are hardly derived by direct in situ methods. Herein, the

morphology evolution of ATNTs grown by a slow anodization in mixed $\text{NH}_4\text{F}/\text{H}_3\text{PO}_4$ electrolytes was studied. And the total anodizing current was quantitatively separated into ionic current and electronic current by a novel method. The addition of H_3PO_4 was found to extend the current increase stage but defer the quasi-equilibrium stage during anodization, which help to extend the formation process of nanotube embryos and explore it. H_3PO_4 addition decreased the nanotube length but increased the nanotube diameter. The relationship between current-time curves and nanotube geometry parameters (length and diameter) can be clarified based on the electronic current and oxygen bubble mould combined with oxide flow model. In mixed electrolytes, PO_4^{3-} anions hinder the migration of F^- anions and cause the decrease of electronic current. Furthermore, PO_4^{3-} anions hinder the migration of O_2^- and Ti^{4+} ions, increase the thickness of barrier oxide, and further cause the decrease of ionic current and oxide growth rate. It is the first time to observe the existence of distinctive upper layer in mixed electrolytes, leading to no apparent ribs and high stability of nanotubes. © 2017 Elsevier B.V.

Number of references: 52

Main heading: Nanotubes

Controlled terms: Anodic oxidation - Electrolytes - Ions - Titanium dioxide - Titanium oxides - Yarn

Uncontrolled terms: Anodizations - Current-time curves - Electronic current - Formation process - Ionic current - Morphology evolution - Nanotube diameters - Nanotube geometry

Classification code: 539.2.1 Protection Methods - 702 Electric Batteries and Fuel Cells - 761 Nanotechnology - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally - 804.2 Inorganic Compounds - 819.4 Fiber Products

DOI: 10.1016/j.surfcoat.2017.04.067

Funding Details: Number; Acronym; Sponsor: 21276127; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51577093; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 61171043; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: NJST20150328; NUST; Nanjing University of Science and Technology

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

401.

Accession number: 20170403278832

Title: Combined effect of ultrasound, heat, and pressure on *Escherichia coli* O157:H7, polyphenol oxidase activity, and anthocyanins in blueberry (*Vaccinium corymbosum*) juice

Authors: Zhu, Jinyan^{1, 2}; Wang, Yuehua¹; Li, Xinghe¹; Li, Bin¹; Liu, Suwen^{1, 3}; Chang, Nan⁴; Jie, Ding⁵; Ning, Chong¹; Gao, Haiyan⁶; Meng, Xianjun¹

Author affiliation:

- 1 College of Food Science, Shenyang Agricultural University, Shenyang; Liaoning; 110866, China
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- 3 Department of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei; 066004, China
- 4 Food Safety Institute, Shenyang Product Quality Supervision and Inspection Institute, Shenyang; Liaoning; 110022, China
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Corresponding author: Gao, Haiyan (304901035@qq.com)

Source title: Ultrasonics Sonochemistry

Abbreviated source title: Ultrason. Sonochem.

Volume: 37

Issue date: July 1, 2017

Publication year: 2017

Pages: 251-259

Language: English

ISSN: 13504177

E-ISSN: 18732828

CODEN: ULSOER

Document type: Journal article (JA)

Publisher: Elsevier B.V.

Abstract: The objective of this study was to evaluate the effect of different treatments—heat treatment (HT), sonication (SC), thermosonication (TS), manosonication (MS), manothermal (MT), and manothermosonication (MTS) on *Escherichia coli* O157:H7, polyphenol oxidase (PPO), and anthocyanin content in blueberry juice. First, samples were treated at different temperatures (30, 40, 50, 60, 70, and 80 °C) and power

intensities (280, 420, 560, and 700 W) for 10 min. Subsequently, samples were treated using combinations of power intensity and mild temperature for 10 min. For further study, samples were treated using HT (80 °C), TS (40 °C, 560 W), MT (350 MPa, 40 °C), MS (560 W, 5 min/350 MPa), or MTS (560 W, 5 min, 40 °C/350 MPa, 40 °C) for 5, 10, 15, 20 min for each treatment, and the results compared between treatments. HT significantly reduced PPO activation (2.05% residual activity after only 5 min), and resulted in a 2.00-log reduction in *E. coli* O157:H7 and an 85.25% retention of anthocyanin. *Escherichia coli* O157:H7 was slightly inactivated by TS after 5 min (0.17-log reduction), while residual PPO activity was 23.36% and anthocyanin retention was 98.48%. However, *Escherichia coli* O157:H7 was rapidly inactivated by MTS (5.85-log reduction) after 5 min, while anthocyanin retention was 97.49% and residual PPO activity dropped to 10.91%. The destruction of *E. coli* cells as a result of these treatments were confirmed using SEM and TEM. Therefore, a combination of sonication, high pressure, and mild heat allows the safety of blueberry juice to be maintained without compromising the retention of desirable antioxidant compounds. © 2017 Elsevier B.V.

Number of references: 55

Main heading: *Escherichia coli*

Controlled terms: Anthocyanins - Polyphenylene oxides - Radioactivity logging - Sonication - Ultrasonics

Uncontrolled terms: Anthocyanin content - Antioxidant compounds - Different treatments - *Escherichia coli* O157:H7 - High pressure - Mild heats - Thermo sonications - *Vaccinium corymbosum*

Classification code: 481.4 Geophysical Prospecting - 751.1 Acoustic Waves - 753.1 Ultrasonic Waves - 804.1 Organic Compounds - 815.1.1 Organic Polymers

Numerical data indexing: Percentage 1.09e+01%, Percentage 2.05e+00%, Percentage 2.34e+01%, Percentage 8.52e+01%, Percentage 9.75e+01%, Percentage 9.85e+01%, Power 5.60e+02W, Power 7.00e+02W, Pressure 3.50e+08Pa, Temperature 3.13e+02K, Temperature 3.53e+02K, Time 1.20e+03s, Time 3.00e+02s, Time 6.00e+02s

DOI: 10.1016/j.ultsonch.2017.01.017

Funding Details: Number; Acronym; Sponsor: 31671863; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20171903657136

Title: Duplex PCR Distinction of Food Ingredients Derived from *Alopex lagopus* and *Nyctereutes procyonoides*

Authors: Du, Liqiang¹ ; Zhang, Jingjing² ; Zhang, Tao² ; Qi, Yanling¹ ; Li, Shunca¹ ; Li, Yan² ; Zhou, Wei² ; Zhang, Yan²

Author affiliation:

1 Life Science and Technology Institute, Hebei Normal University of Science and Technology, Changli; 066604, China

2 Hebei Food Safety Key Laboratory, Hebei Food Inspection and Research Institute, Shijiazhuang; 050071, China

Corresponding author: Zhou, Wei (zhouwei0311@163.com)

Source title: Shipin Kexue/Food Science

Abbreviated source title: Shipin Kexue/Food Sc.

Volume: 38

Issue: 8

Issue date: April 25, 2017

Publication year: 2017

Pages: 303-307

Language: Chinese

ISSN: 10026630

Document type: Journal article (JA)

Publisher: Chinese Chamber of Commerce

Abstract: Two sets of specific primers were designed based on the conserved mitochondrial gene sequences of *Alopex lagopus* and *Nyctereutes procyonoides* and used to establish a PCR method to detect ingredients derived from *A. lagopus* and *N. procyonoides* in commercial meat products. Regular and clear *A. lagopus*- and *N. procyonoides*-specific bands were amplified simultaneously by duplex PCR. The sensitivities of the *A. lagopus* and *N. procyonoides* primers were respectively 10 pg and 1 pg in separate polymerase chain reactions, respectively. By contrast, the sensitivities of the *A. lagopus* and *N. procyonoides* primers were respectively 100 pg and 10 pg in duplex PCR due to the competition of two sets of primers. © 2017, China Food

Publishing Company. All right reserved.

Number of references: 16

Main heading: Polymerase chain reaction

Uncontrolled terms: Alopex lagopus - Duplex PCR - Food ingredients - Meat products
- Mitochondrial genes - Nyctereutes procyonoides - PCR method - Specific primers

Classification code: 801.2 Biochemistry

Numerical data indexing: Mass 1.00e-13kg, Mass 1.00e-14kg, Mass 1.00e-15kg

DOI: 10.7506/spkx1002-6630-201708047

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

403.

Accession number: 20171903657053

Title: Prediction of Active Site and Thermostability-Associated Structure of β -Glucosidase from *Aspergillus niger*

Authors: Yan, Qing¹ ; Zhu, Fengmei¹ ; Peng, Lisha¹ ; Wang, Xiang¹ ; Zhang, Yongxiang¹ ; Li, Jun¹

Author affiliation:

¹ College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao; 066000, China

Corresponding author: Li, Jun (spgcx@163.com)

Source title: Shipin Kexue/Food Science

Abbreviated source title: Shipin Kexue/Food Sc.

Volume: 38

Issue: 6

Issue date: March 25, 2017

Publication year: 2017

Pages: 81-87

Language: Chinese

ISSN: 10026630

Document type: Journal article (JA)

Publisher: Chinese Chamber of Commerce

Abstract: The genomic DNA extracted from *Aspergillus niger* 3.316 was used as template to amplify the β -glucosidase gene *bgl* by PCR to obtain a 2080-bp amplicon. Bioinformatic analysis showed that the encoded protein was predicted to contain 860 amino acid residues with 4 major hydrophobic regions. Its secondary structures might contain 63.26% random coils, 20.58% α -helix, and 16.16% β -sheet. The protein consisted of (β/α)8TIM barrel domain, (β/α)6sandwich domain, and fibronectin III-like domain. The active site and heat tolerance mechanism were predicted to be located in the active center of the enzyme. Its active sites might be Asp280 of (β/α)8TIM barrel domain and Glu509 of (β/α)6sandwich domain. The thermal stability of the glucosidase might be related to the presence of 211 amino acid residues in the hydrophobic region, 48 proline residues and α -helix. © 2017, China Food Publishing Company. All right reserved.

Number of references: 13

Main heading: *Aspergillus*

Controlled terms: Amino acids - Hydrophobicity - Polymerase chain reaction - Proteins - Stability - Thermodynamic stability

Uncontrolled terms: Active site - Amino acid residues - *Aspergillus niger* - Bioinformatic analysis - Encoded proteins - Glucosidase - Hydrophobic regions - Secondary structures

Classification code: 461.9 Biology - 641.1 Thermodynamics - 801.2 Biochemistry - 804.1 Organic Compounds - 931.2 Physical Properties of Gases, Liquids and Solids

Numerical data indexing: Percentage 1.62e+01%, Percentage 2.06e+01%, Percentage 6.33e+01%

DOI: 10.7506/spkx1002-6630-201706013

Database: Compendex

404.

Accession number: 20171303499259

Title: A microwave-assisted synthesis of CoO@Co core-shell structures coupled with N-doped reduced graphene oxide used as a superior multi-functional electrocatalyst for hydrogen evolution, oxygen reduction and oxygen evolution reactions

Authors: Liu, X.X.1, 2 ; Zang, J.B.1 ; Chen, L.2 ; Chen, L.B.1 ; Chen, X.1 ; Wu, P.1 ; Zhou, S.Y.1 ; Wang, Y.H.1

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, College of Materials Science and Engineering, Yanshan University, Qinhuangdao; 066004, China

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Corresponding author: Wang, Y.H. (diamond_wangyanhui@163.com)

Source title: Journal of Materials Chemistry A

Abbreviated source title: J. Mater. Chem. A

Volume: 5

Issue: 12

Issue date: 2017

Publication year: 2017

Pages: 5865-5872

Language: English

ISSN: 20507488

E-ISSN: 20507496

CODEN: JMCAET

Document type: Journal article (JA)

Publisher: Royal Society of Chemistry

Abstract: A novel electrochemical catalyst comprising CoO@Co nanoparticles with a core-shell structure immobilized on N-doped reduced graphene oxide (rGO) (CoO@Co/N-rGO) has been synthesized using

a convenient and controllable technique — combining a rapid microwave-polyol method with a vacuum thermal treatment. Excellent features including the Co/N-doping effect, introduction of CoO@Co particles with a core-shell structure and good contact between the CoO@Co particles and N-doped graphene result in a highly multi-functional catalytic efficiency. The catalyst exhibits remarkable catalytic activity and superior stability towards the hydrogen evolution reaction, offering a low overpotential of 140 mV for 10 mA cm⁻² in 0.5 M H₂SO₄ and 237 mV in 0.1 M KOH. The catalyst also shows excellent oxygen reduction reaction activity in 0.1 M KOH, a similar four-electron pathway, which is comparable to that of a commercial Pt/C catalyst, and superior stability. In addition, a good electrochemical performance towards the oxygen evolution reaction was observed for the catalyst, achieving a current density of 10 mA cm⁻² with a small overpotential of 1.67 V in 0.1 M KOH, which is comparable to that of a commercial RuO₂ catalyst. The unusual catalytic activities arise from the synergetic chemical coupling effects of metallic Co, cobalt oxides and Co/N-doped graphene. This study provides a new attractive multi-functional catalyst material for unitized regenerative fuel cells and overall water splitting technologies. © The Royal Society of Chemistry.

Number of references: 46

Main heading: Catalyst activity

Controlled terms: Catalysts - Cobalt compounds - Doping (additives) - Electrocatalysts - Electrolytic reduction - Fuel cells - Graphene - Metallic compounds - Oxygen - Reduction - Regenerative fuel cells - Shells (structures) - Synthesis (chemical)

Uncontrolled terms: Electrochemical catalyst - Electrochemical performance - Hydrogen evolution reactions - Microwave assisted synthesis - Oxygen evolution reaction - Oxygen reduction reaction - Reduced graphene oxides - Reduced graphene oxides (RGO)

Classification code: 408.2 Structural Members and Shapes - 702.2 Fuel Cells - 802.2 Chemical Reactions - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally

Numerical data indexing: Current_Density 1.00e+02A/m², Voltage 1.40e-01V, Voltage 1.67e+00V, Voltage 2.37e-01V

DOI: 10.1039/c6ta10591b

Funding Details: Number; Acronym; Sponsor: 51272226; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20171403541099

Title: A designated verifier signature scheme with undeniable property in the random oracle

Authors: Hu, Xiaoming¹ ; Zhang, Xiaojun¹ ; Ma, Chuang² ; Xu, Huajie³ ; Wang, Jian¹ ; Tan, Wenan¹

Author affiliation:

- 1 College of Computer and Information Engineering, Shanghai Polytechnic University, China
- 2 E and A College, Hebei Normal University of Science and Technology, 066004, China
- 3 School of Computer and Electronic Information, Guangxi University, Nanning; 530004, China

Source title: Proceedings of the IEEE International Conference on Software Engineering and Service Sciences, ICSESS

Abbreviated source title: Proc.IEEE Int. Conf. Software Eng. Serv. Sci., ICSESS

Monograph title: ICSESS 2016 - Proceedings of 2016 IEEE 7th International Conference on Software Engineering and Service Science

Issue date: March 20, 2017

Publication year: 2017

Pages: 960-963

Article number: 7883225

Language: English

ISSN: 23270586

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ISBN-13: 9781467399036

Document type: Conference article (CA)

Conference name: 7th IEEE International Conference on Software Engineering and Service Science, ICSESS 2016

Conference date: August 26, 2016 - August 28, 2016

Conference location: Beijing, China

Conference code: 126924

Sponsor: IEEE Beijing Section; The Institute of Electrical and Electronics Engineers

Publisher: IEEE Computer Society

Abstract: In designated verifier signature, only the designated verifier can confirm the validity of a signature and it is applied widely in many environments such as electronic voting. However, most of designated verifier signature schemes cannot distinguish the real signer when the signer and the designated verifier arises a dispute on a signature. In other words, most of existing designated verifier signature schemes have not the undeniable property, namely the signer can deny a generated signature or the designated verifier can deny a simulating signature. In this paper, two designated verifier signature schemes with undeniable property are proposed. The first designated verifier signature scheme with undeniable property is called DVSSWUP-1 and another is called DVSSWUP-2. The both schemes satisfy the unforgeability and non-Transferability. What's more, when the signer or the designated verifier denies the signature, a third party can distinguish the signature. Therefore, the proposed two designated verifier signature schemes not only protect the privacy of the signer but also keep the undeniable property of the traditional digital signature schemes. © 2016 IEEE.

Number of references: 15

Main heading: Electronic document identification systems

Controlled terms: Authentication - Security of data - Software engineering

Uncontrolled terms: Designated verifier signature scheme - Designated verifier signatures - Designated verifiers - Digital signature schemes - Non-transferability - Random Oracle model - Security analysis - undeniable property

Classification code: 723 Computer Software, Data Handling and Applications

DOI: 10.1109/ICSESS.2016.7883225

Funding Details: Number; Acronym; Sponsor: 6110 3213; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

406.

Accession number: 20171503556004

Title: Antitumor activity and safety evaluation of nanoparticle-based delivery of quercetin through intravenous administration in mice

Authors: Li, Jian^{1, 2}; Shi, Ming^{1, 2}; Ma, Baoling³; Niu, Ruixu^{1, 2}; Zhang, Haizhao^{1, 2}; Kun, Li^{1, 2}

Author affiliation:

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Corresponding author: Li, Jian (Lijianbio@ysu.edu.cn)

Source title: Materials Science and Engineering C

Abbreviated source title: Mater. Sci. Eng. C

Volume: 77

Issue date: August 1, 2017

Publication year: 2017

Pages: 803-810

Language: English

ISSN: 09284931

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: The present study focused on the inhibition effects and the safety evaluation of the quercetin when it was loaded into the nanoliposomes on cervical cancer in vitro and in vivo. Quercetin loaded nanoliposomes (Que-NLs) were first prepared by thin film hydration method and the characterizations of Que-NLs were measured with TEM and dynamic light scattering (DLS) techniques. Then the anti-cervical cancer efficiencies were evaluated by MTT and U14 tumor-bearing mice models in vitro and in vivo respectively. The body changes, organ index, biochemical criterions and histopathological of livers and kidneys in tumor-bearing mice were further assayed to evaluate the safety of Que-NLs. In vitro results showed that Que-NLs have a low IC₅₀ value compared with free-Que, thus leading to the stronger antitumor efficacy to Hela cells. In vivo results further demonstrated that the Que-NLs display a higher inhibition effect on U14 cervical cancer compared with free-Que caused no obvious hepatic toxicity or kidney dysfunction in Balb/c mice. So we concluded that Que-NLs possess effective anti-cervical cancer properties and does not exhibit the notable adverse effects associated with

cervical cancer. © 2017 Elsevier B.V.

Number of references: 36

Main heading: Diseases

Controlled terms: Drug products - Dynamic light scattering - Flavonoids - Hydration - Light scattering - Mammals - Phenols - Thin films - Tumors

Uncontrolled terms: Cervical cancers - Hydration method - Nanoliposomes - Quercetin - Safety evaluations

Classification code: 461.2 Biological Materials and Tissue Engineering - 741.1 Light/Optics - 804.1 Organic Compounds

DOI: 10.1016/j.msec.2017.03.191

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

407.

Accession number: 20171003408300

Title: Fixing inconsistencies of fuzzy spatiotemporal XML data

Authors: Bai, Luyi1 ; Shao, Zhulei1 ; Lin, Zhuo2 ; Cheng, Shaohui1

Author affiliation:

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2 College of Mathematics and Information Technology, Hebei Normal University of Science & Technology, Qinhuangdao; 066004, China

Corresponding author: Bai, Luyi (baily@neuq.edu.cn)

Source title: Applied Intelligence

Abbreviated source title: Appl Intell

Issue date: March 2, 2017

Publication year: 2017

Pages: 1-19

Language: English

ISSN: 0924669X

E-ISSN: 15737497

CODEN: APITE4

Document type: Article in Press

Publisher: Springer New York LLC

Abstract: Fuzzy spatiotemporal data models have been used to support spatial and temporal knowledge representation and reasoning in the presence of fuzziness. In the meantime, XML is expected to become the next generation standard language for exchanging data over the Internet, which will become a trend to represent fuzzy spatiotemporal data based on XML. However, fuzzy spatiotemporal XML documents may contain inconsistencies violating predefined spatial and temporal constraints, which cause the data inconsistency problems. Although those consistency problems in XML documents have been widely studied, their studies only take the general data into account, and the studies on consistencies of fuzzy spatiotemporal data are still open issues. In this paper we put forward solutions to the problems of inconsistencies in fuzzy spatiotemporal XML documents. We also analyze inconsistent states which are named discontinuity overlap or cycle of the temporal labels of some incoming edges. Then, we put forward the corresponding approaches to checking and fixing fuzzy spatiotemporal XML documents according to the inconsistent states. Finally, the experimental results show that our proposed algorithms can fix inconsistencies of fuzzy spatiotemporal XML documents significantly. © 2017 Springer Science+Business Media New York

Main heading: XML

Controlled terms: Knowledge representation

Uncontrolled terms: Consistency - Consistency problems - Data inconsistencies - Fuzzy spatiotemporal - Next generation standards - Temporal constraints - Temporal knowledge representation - XML data

Classification code: 723.4 Artificial Intelligence

DOI: 10.1007/s10489-016-0888-6

Database: Compendex

408.

Accession number: 20170403286295

Title: Multi-layer dextran-decorated poly(glycidyl methacrylate)-co-divinyl benzene copolymer matrices enabling efficient protein chromatographic separation

Authors: Zhang, Kun^{1, 2}; Li, Qiang^{2, 4}; Fan, Hong³; Li, Suning³; Su, Yue³; Zhao, Lan²; Huang, Yongdong²; Wang, Dan⁵; Zhang, Zhigang¹; Su, Zhiguo²; Ma, Guanghui^{2, 4}

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2 National Key Lab of Biochemical Engineering, Institute of Process Engineering, Chinese Academy of Sciences, Beijing; 100190, China

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Corresponding author: Li, Qiang (qiangli@ipe.ac.cn)

Source title: Reactive and Functional Polymers

Abbreviated source title: React Funct Polym

Volume: 112

Issue date: March 1, 2017

Publication year: 2017

Pages: 45-52

Language: English

ISSN: 13815148

CODEN: RFPOF6

Document type: Journal article (JA)

Publisher: Elsevier B.V.

Abstract: A strategy to prepare natural polysaccharide-decorated pGMA-DVB by grafting dextran groups was proposed for the development of efficient protein chromatographic separation. Prepared pGMA-DVB microspheres were covalently decorated with dextran through a three-step scheme. Firstly, residual vinyl groups

on polymer particles were converted to epoxy groups. Secondly, one layer of dextran was covalently coupled on the microspheres by reacting with epoxy groups in solvent. Thirdly, multi-layer dextran was grafted to microspheres in alkali aqueous solutions. The dextran-decorated microspheres named pGMA-DVB-Dextran were characterized by Fourier transform infrared spectra, scanning electron microscope, atomic force microscopy, laser scanning confocal microscope, and protein adsorption experiment. Consequently, compared to several commercial hydrophilic beads such as Sepharose® 4FF and POROS® OH, the permeability and hydrophilicity of the modified microspheres were improved, the contact angle decreased from 153° to 0°, and nonspecific adsorption of proteins was decreased to zero. The covalently drafting amount of dextran onto pGMA-DVB was increased to 241.86 mg/mL microspheres, and the dextran layers were stable after washing with 1 M HCL/NaOH solutions. Functional ligands such as Protein A or DEAE coupled to pGMA-DVB-Dextran can be conveniently used to separation model protein, IgG or BSA, with > 99.5% recovery yield and high dynamic binding capacity, respectively. © 2017 Elsevier B.V.

Number of references: 37

Main heading: Dextran

Controlled terms: Acrylic monomers - Atomic force microscopy - Chromatography - Grafting (chemical) - High performance liquid chromatography - Hydrophilicity - Liquid chromatography - Microspheres - Proteins - Scanning electron microscopy - Separation - Solutions

Uncontrolled terms: Chromatographic separations - Covalently decorating - Fourier transform infrared spectra - Hydrophilization - Laser scanning confocal microscopes - Nonspecific adsorption - Poly(glycidyl methacrylate) - Protein separations

Classification code: 741.3 Optical Devices and Systems - 802.2 Chemical Reactions - 802.3 Chemical Operations - 804.1 Organic Compounds

Numerical data indexing: Mass_Density 2.42e+02kg/m3, Percentage 9.95e+01%

DOI: 10.1016/j.reactfunctpolym.2017.01.003

Funding Details: Number; Acronym; Sponsor: 2009YB004; HNUST; Hebei Normal University of Science and Technology

Number; Acronym; Sponsor: 2013BAB01B03; MOST; Ministry of Science and Technology

Number; Acronym; Sponsor: 21206175; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 21306206; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 21476241; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51103158; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

409.

Accession number: 20172003677612

Title: Design of FIR filter using distributed algorithm based on FPGA

Authors: Tian, Ying¹ ; Liu, Aiyong²

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Source title: C e Ca

Abbreviated source title: C e Ca

Volume: 42

Issue: 1

Issue date: 2017

Publication year: 2017

Pages: 313-316

Language: English

ISSN: 00456152

Document type: Journal article (JA)

Publisher: Techna Group S.r.l.

Abstract: This paper improves the common method for finite impulse response by applying distributed algorithm in the FPGA. After the application of the algorithm, some special designs are made to meet the specific requirement of this design. The result shows that the method fully satisfies the function requirement and basically meet the performance requirement. The performance of proposed filter is much better than the performance achieved by the DSP device and traditional method. After verifying DA algorithm, it is possible to adopt a better CSD coding method in the future to further understand coding method and lay a good foundation for front end

design of ASIC.

Number of references: 7

Main heading: FIR filters

Controlled terms: Bandpass filters - Field programmable gate arrays (FPGA) - Impulse response - Integrated circuit design - Parallel algorithms

Uncontrolled terms: Coding methods - Finite-impulse response - Front-end design - Function requirements - Performance requirements

Classification code: 703.2 Electric Filters - 714.2 Semiconductor Devices and Integrated Circuits - 721.2 Logic Elements

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

410.

Accession number: 20171203474487

Title: Synthesis and luminescence properties of La_{0.67}Mg_{0.5}W_{0.5}O₃:Tb³⁺+green phosphors

Authors: Wang, Shuyuan¹ ; Li, Xiao-jing² ; Zhang, Zhi-wei¹

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Corresponding author: Zhang, Zhi-wei (zhangzhiweia@163.com)

Source title: Journal of Materials Science: Materials in Electronics

Abbreviated source title: J Mater Sci Mater Electron

Issue date: March 17, 2017

Publication year: 2017

Pages: 1-6

Language: English

ISSN: 09574522

E-ISSN: 1573482X

Document type: Article in Press

Publisher: Springer New York LLC

Abstract: La_{0.67}Mg_{0.5}W_{0.5}O₃:Tb³⁺(LMWO:Tb³⁺) green phosphors with multiple-cell perovskite-structure were prepared by the high temperature solid state reaction. The phase, morphology and luminescent properties of (LMWO:Tb³⁺) green phosphors were investigated by X-ray diffraction, scanning electron microscopy, and photoluminescence spectra. The excitation spectra vary with the Tb³⁺-concentration and consist of an intense charge transfer bands of O₂--Tb³⁺(240–300 nm), O₂--W⁶⁺(290–340 nm) and weak intra-4f⁸transition absorption peaks of Tb³⁺ions (340–400 nm). Among them, O₂--W⁶⁺-charge transfer band centered at 310 nm exhibits the strongest. WO₆-group of LMWO can efficiently absorb ultraviolet light and transfer the energy to the Tb³⁺. The photoluminescence spectra, excited at the peak wavelengths of O₂--W⁶⁺-charge transfer bands, consist of the characteristic Tb³⁺-emission transitions from ⁵D₃ and ⁵D₄ excited levels to ⁷F_J (J = 3–6) levels. The CIE chromaticity coordinates for these phosphors were located in the green region. The phosphor could act as a candidate for the potential application in UV excited white-LEDs lighting. © 2017 Springer Science+Business Media New York

Main heading: Light emission

Controlled terms: Charge transfer - Excited states - High temperature applications - Light emitting diodes - Luminescence - Phosphors - Photoluminescence - Scanning electron microscopy - Solid state reactions - X ray diffraction

Uncontrolled terms: Charge transfer bands - Excitation spectrum - High temperature solid-state reaction - Luminescence properties - Luminescent property - Perovskite structures - Photoluminescence spectrum - Transition absorption

Classification code: 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics

Numerical data indexing: Size 3.10e-07m

DOI: 10.1007/s10854-017-6733-9

Database: Compendex

411.

Accession number: 20171403527876

Title: An Adaptive Extreme Learning Machine for Modeling NO_x Emission of a 300 MW Circulating Fluidized Bed BoilerAuthors: Li, Xia^{1, 2}; Niu, Peifeng¹; Li, Guoqiang¹; Liu, Jianping²

Author affiliation:

1 School of Electrical Engineering, Yanshan University, Qinhuangdao; 066004, China

2 Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

Corresponding author: Niu, Peifeng (niupeifeng2014@163.com)

Source title: Neural Processing Letters

Abbreviated source title: Neural Process Letters

Issue date: March 31, 2017

Publication year: 2017

Pages: 1-20

Language: English

ISSN: 13704621

E-ISSN: 1573773X

CODEN: NPLEFG

Document type: Article in Press

Publisher: Springer New York LLC

Abstract: Extreme learning machine (ELM) provides high learning speed, but generalization performance needs to be further improved. Therefore, we propose an adaptive ELM with a relaxation factor (Formula presented.) (A-ELM). In A-ELM, according to the nonlinear degree of actual data, the output layer obtains adaptively (Formula presented.) rate information through the hidden layer and (Formula presented.) rate information through the input layer. Since the relaxation factor (Formula presented.) is bound up with the input weights and hidden biases of A-ELM, in order to obtain the optimal (Formula presented.), (Formula presented.), input weights and hidden biases are obtained together by teaching-learning-based optimization (A-ELM-TLBO). Then, 15 benchmark regression data sets verify the performance of A-ELM-TLBO. Finally, A-ELM-TLBO is applied to set up the mapping relation between NO_x emission and operational conditions of a 300 MW circulating

fluidized bed (CFB) boiler. Compared with six other models, experimental results show that A-ELM-TLBO has good approximation ability and generalization performance. So, A-ELM-TLBO provides a good basis for tuning CFB boiler operating parameters to reduce NO_x emission. © 2017 Springer Science+Business Media New York

Main heading: Fluidized beds

Controlled terms: Benchmarking - Boilers - Fluidized bed process - Knowledge acquisition
- Learning systems - Nitrogen oxides - Pulverized fuel fired boilers

Uncontrolled terms: Approximation ability - Circulating fluidized bed boiler - Extreme learning machine - Generalization performance - NO_x emissions - Operating parameters - Operational conditions - Relaxation factors

Classification code: 614 Steam Power Plants - 723.4 Artificial Intelligence - 804.2 Inorganic Compounds

Numerical data indexing: Power 3.00e+08W

DOI: 10.1007/s11063-017-9611-9

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

412.

Accession number: 20170203229633

Title: High-brightness Ca₉NaGd_{0.667}(1-x)(PO₄)₇:xEu³⁺+red phosphor for NUV light-emitting diodes application

Authors: Zhang, Zhi-wei¹ ; Wang, Li-jiang¹ ; Chu, Xiu-juan¹ ; Zhang, Ping¹ ; Cao, Ya-jie¹ ; Xi, Yan-ru¹ ; Chen, Wei-guang¹ ; Wang, Dong-jun¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

Corresponding author: Zhang, Zhi-wei (zhangzhiweia@163.com)

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 695

Issue date: 2017

Publication year: 2017

Pages: 3220-3224

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: A novel red-emitting phosphor $\text{Ca}_9\text{Na}_{0.667}\text{Gd}(\text{PO}_4)_7:\text{Eu}^{3+}$ has been synthesized by a high-temperature solid-state reaction. X-ray powder diffraction (XRD) analysis confirmed the phase formation of $\text{Ca}_9\text{Na}_{0.667}\text{Gd}(\text{PO}_4)_7:\text{Eu}^{3+}$ materials. The photoluminescence excitation (PLE) and emission (PL) spectra were investigated. The results showed that the phosphor could be efficiently excited by the near ultraviolet (NUV) light and blue light, and it exhibited red light emission. The calculated color coordinates lies in the red region. All the obtained results suggest that the prepared phosphors exhibit great potential application as red emitting phosphor for near ultraviolet white light emitting diodes (NUV WLEDs). © 2016 Elsevier B.V.

Number of references: 16

Main heading: Light emitting diodes

Controlled terms: Calcium - Diodes - Europium - High temperature applications - Light - Light emission - Luminescence - Phosphors - Photoluminescence - Sodium - Solid state reactions - X ray powder diffraction

Uncontrolled terms: Color coordinates - High temperature solid-state reaction - Near ultraviolet - Phase formations - Photoluminescence excitation - Red emitting phosphor - Red-light emission - White light emitting diodes

DOI: 10.1016/j.jallcom.2016.11.297

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20171003409417

Title: Comparative effects of ultra-high pressure and ultrasonic treatment on the extraction and antioxidant activity of polyphenols from *Lonicera caerulea* Fruits

Authors: Li, Xinyuan¹ ; Li, Bin¹ ; Yan, Tingcai¹ ; Liu, Sunwen² ; Sun, Xiyun¹ ; Shi, Yimo¹ ; Zhang, Qi¹ ; Meng, Xianjun¹

Author affiliation:

1 College of Food Science, Shenyang Agricultural University, Shenyang; 110866, China

2 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

Corresponding author: Meng, Xianjun (mengxjsy@126.com)

Source title: Shipin Kexue/Food Science

Abbreviated source title: Shipin Kexue/Food Sc.

Volume: 38

Issue: 2

Issue date: January 25, 2017

Publication year: 2017

Pages: 271-277

Language: Chinese

ISSN: 10026630

Document type: Journal article (JA)

Publisher: Chinese Chamber of Commerce

Abstract: In the present study, response surface methodology was used to optimize the conditions for ultra-high pressure (UHP) extraction of polyphenols from *Lonicera caerulea* fruits and a comparison was performed with ultrasonic-assisted extraction (UAE) with respect to extraction efficiency, processing conditions and antioxidant activity of polyphenols. The results showed that the optimal conditions for UHP-assisted extraction that provided the maximum yield of polyphenols of (778.23±3.45) mg/100 g berries were determined as follows: 50% ethanol as the extraction solvent, a solid-to-liquid ratio of 1:19 (g/mL), an extraction temperature of 30°C, an extraction pressure of 406 MPa, and an extraction time of 11.5 min. The optimal conditions for ultrasonic-assisted extraction that gave the maximum yield of polyphenols of (785.74±3.89) mg/100 g berries

were determined to be 50% ethanol as the extraction solvent, a solid-to-liquid ratio of 1:25 (g/mL), an extraction temperature of 40°C, an ultrasonic power of 500 W, and an extraction time of 90 min. Antioxidant test results showed that the antioxidant activity of polyphenols from ultra-high pressure extraction was significantly higher in terms of 2,2'-azinobis(3-ethylbenzothiazoline-6-sulfonic acid) diammonium salt radical (ABTS⁺) scavenging capacity, ferric reducing antioxidant power (FRAP), and 1,1-diphenyl-2-picrylhydrazyl (DPPH) radical scavenging capacity when compared with those from ultrasonic extraction and VC at the same concentration levels. Although the ultra-high pressure extraction took a shorter time and yielded polyphenols with higher antioxidant activity, its efficiency in large-scale extraction of polyphenols was not as good as that of the ultrasonic-assisted extraction due to the limitation in the size of the container used. Therefore, considering extraction yield and extraction efficiency, the ultrasonic-assisted extraction was better than the ultra-high pressure extraction for *Lonicera caerulea* fruit polyphenols. © 2017, China Food Publishing Company. All right reserved.

Number of references: 12

Main heading: Extraction

Controlled terms: Antioxidants - Efficiency - Ethanol - Free radicals - Fruits - High pressure effects - Organic solvents - Solvent extraction

Uncontrolled terms: 1,1Diphenyl-2-picrylhydrazyl (DPPH) radicals - Anti-oxidant activities - Ferric reducing antioxidant power - Polyphenols - Response surface methodology - Ultra high pressure (UHP) - Ultra-high pressure extractions - Ultrasonic-assisted extractions

Classification code: 802.3 Chemical Operations - 804.1 Organic Compounds - 821.4 Agricultural Products - 913.1 Production Engineering

Numerical data indexing: Percentage 5.00e+01%, Power 5.00e+02W, Pressure 4.06e+08Pa, Time 5.40e+03s, Time 6.90e+02s

DOI: 10.7506/spkx1002-6630-201702042

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

414.

Accession number: 20171303513431

Title: Photoluminescence of a novel red emitting phosphor LiLaMgWO₆: Eu³⁺

Authors: Zhang, Zhi-Wei¹ ; Qi, Hong-Xia¹ ; Zhu, Xiao-Yan¹ ; Lv, Rui-Jiao¹ ; Hou, Jian-Wei¹ ; Li, Jing¹ ; Wang, Dong-Jun¹

Author affiliation:

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Corresponding author: Zhang, Zhi-Wei (zhangzhiweia@163.com)

Source title: Russian Journal of Physical Chemistry A

Abbreviated source title: Russ. J. Phys. Chem. A

Volume: 91

Issue: 4

Issue date: April 1, 2017

Publication year: 2017

Pages: 785-790

Language: English

ISSN: 00360244

CODEN: RJPCBS

Document type: Journal article (JA)

Publisher: Maik Nauka-Interperiodica Publishing

Abstract: A novel red-emitting phosphor $\text{LiLaMgWO}_6: \text{Eu}^{3+}$ has been synthesized by a high-temperature solid-state reaction. X-ray powder diffraction (XRD) analysis and FT-IR spectra confirmed the formation of $\text{LiLaMgWO}_6: \text{Eu}^{3+}$ phase. The photoluminescence excitation and emission spectra, the concentration dependence of the emission intensity, decay curves, and UV-Vis absorption spectra of the phosphor were obtained. The phosphor could be efficiently excited by the near ultraviolet (NUV) and blue light, exhibiting red light emission. The decay time was also determined for various Eu^{3+} concentrations in LiLaMgWO_6 . The calculated color coordinates of the emitted light lie in the red region. Therefore, the obtained results suggest that the prepared phosphors exhibit great potential for use as red emitting phosphor for white light emitting diodes. © 2017, Pleiades Publishing, Ltd.

Number of references: 23

Main heading: Light emission

Controlled terms: Emission spectroscopy - Europium - High temperature applications - Light - Light emitting diodes - Luminescence - Phosphors - Photoluminescence - Solid state

reactions - X ray powder diffraction

Uncontrolled terms: Concentration dependence - Emission intensity - High temperature solid-state reaction - LiLaMgWO₆: Eu³⁺ - Photo-luminescence excitation - Red emitting phosphor - Red-light emission - White light emitting diodes

Classification code: 547.2 Rare Earth Metals - 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 802.2 Chemical Reactions

DOI: 10.1134/S0036024417040331

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

415.

Accession number: 20171803626851

Title: Comparison of volatile compounds in 'Fuji' apples in the different regions in China

Authors: Qin, Ling¹ ; Wei, Qin-Ping² ; Kang, Wen-Huai³ ; Zhang, Qiang² ; Sun, Jian² ; Liu, Song-Zhong²

Author affiliation:

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Corresponding author: Wei, Qin-Ping (qpwei@sina.com)

Source title: Food Science and Technology Research

Abbreviated source title: Food Sci. Technol. Res.

Volume: 23

Issue: 1

Issue date: 2017

Publication year: 2017

Pages: 79-89

Language: English

ISSN: 13446606

Document type: Journal article (JA)

Publisher: Japanese Society for Food Science and Technology

Abstract: The characteristics of the volatiles from 43 'Fuji' apples representing 14 different apple production regions in China were investigated using headspace-solid phase micro-extraction (HS-SPME) combined with gas chromatography-mass spectrometry (GC-MS). The results obtained from this experiment showed that sixtyfour volatile compounds were identified in 'Fuji' apples collected from 43 counties in China. The major volatile compounds were identified as 2-methyl butyl acetate and hexyl acetate. The composition of volatiles and their contents in 'Fuji' apples varied in different regions. All of the 'Fuji' apple samples could be classified into the following groups using a principal component analysis of the volatiles: (1) apples with high concentrations of hexyl acetate and (Z)-3-hexenyl acetate, which were collected in Shandong (Qixia, Wendeng, Penglai, Zhaoyuan, Jiaonan and Yishui), Shanxi (Wanrong, Ruicheng and Linyi), and Gansu Ninglang, (2) apples with high contents of 2-methyl butyl acetate and 1-hexanol, which mainly came from North Shaanxi, Henan Sanmenxia, Liaoning Wafangdian and Liaoning Suizhong, (3) apples with high contents of hexyl butanoate, butyl acetate and hexyl 2-methyl butyrate, which were mainly collected in Gansu (excluding Ninglang), and (4) apples without any characteristic volatile composition. In addition, it was found that mean annual temperature was significant correlated with 2-methyl butyl acetate, butyl 2-methyl butanoate, hexyl acetate, and (E)-2-hexenyl acetate. Longitude was significantly correlated with butyl acetate, (Z)-3-hexenyl acetate, and ethyl hexanoate. Copyright © 2017, Japanese Society for Food Science and Technology.

Number of references: 27

Main heading: Fruits

Controlled terms: Chromatography - Drug products - Essential oils - Extraction - Gas chromatography - Mass spectrometry - Principal component analysis - Spectrometry - Volatile fatty acids - Volatile organic compounds

Uncontrolled terms: Aroma compounds - Gas chromatography-mass spectrometries (GC-MS) - Gas chromatography-mass spectrometry - Head-space solid-phase microextraction - Headspace solid phase micro extractions - Malus domestica - Mean annual temperatures - Volatile composition

Classification code: 801 Chemistry - 802.3 Chemical Operations - 804.1 Organic Compounds - 821.4 Agricultural Products - 922.2 Mathematical Statistics - 941.4 Optical Variables Measurements

DOI: 10.3136/fstr.23.79

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

416.

Accession number: 20171903645809

Title: Electromagnetic Field Dependence of Quantum Dot Qubit with The Thickness of Quantum Dot

Authors: Wuyunqimuge1 ; Yin, Hong-Wu2 ; Su, Du3 ; Eerdunchaolu2

Author affiliation:

1 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao; 028043, China

2 Department of Physics, Hebei Normal University of Science & Technology, Qinhuangdao; 066004, China

3 College of Chemical Science and Engineering, China University of Petroleum-Beijing, Beijing; 102249, China

Corresponding author: Eerdunchaolu (eerdunchaolu@163.com)

Source title: Faguang Xuebao/Chinese Journal of Luminescence

Abbreviated source title: Faguang Xuebao

Volume: 38

Issue: 4

Issue date: April 1, 2017

Publication year: 2017

Pages: 552-559

Language: Chinese

ISSN: 10007032

CODEN: FAXUEW

Document type: Journal article (JA)

Publisher: Chines Academy of Sciences

Abstract: Based on the Lee-Low-Pines unitary transformation, the electromagnetic-field dependence of the eigenenergy, the eigenfunctions, and the mean number of phonons of both the ground-state and the first excited-state of the strong-coupling polaron in the quantum dot with the thickness were studied by using the Pekar variational method. On this basis, the quantum dot qubit was formed by means of the two-level structure of the polaron as the carrier. The results of numerical calculation indicate that the oscillation period T_0 of the qubit increases with the increasing of the thickness L of the quantum disk, but decreases with the increasing of the cyclotron frequency ω_c of the magnetic field, electric-field strength F and electron-phonon coupling strength α . The probability density $|\Psi(\rho, z, t)|^2$ of the qubit presents the normal distribution with the variation of the electronic transverse coordinate ρ . It is significantly influenced by the thickness L and effective radius R_0 of the quantum disk and shows the periodic oscillation with the variation of the electronic longitudinal coordinate z , polar angle φ and time t . The decoherence time τ increases with the increasing of the cyclotron frequency ω_c of the magnetic field, dispersion coefficient η and electron-phonon coupling strength α , but decreases with the increasing of the electric-field strength F , thickness L and effective radius R_0 of the quantum disk. The thickness of the quantum dot is an important parameter of the qubit. Theoretically, the target of regulating the oscillation period, decoherence time and quality factor of the free rotation of the qubit can be achieved by designing the different thickness of the quantum disk and regulating the strength of the electromagnetic field. © 2017, Science Press. All right reserved.

Number of references: 22

Main heading: Semiconductor quantum dots

Controlled terms: Cyclotron resonance - Cyclotrons - Eigenvalues and eigenfunctions - Electric fields - Electromagnetic fields - Electron correlations - Electron-phonon interactions - Excited states - Ground state - Magnetic fields - Nanocrystals - Normal distribution - Phonons - Polarons - Probability density function - Probability distributions - Quantum computers - Quantum optics - Quantum theory

Uncontrolled terms: Dispersion coefficient - Electric field strength - Electron-phonon coupling strengths - Numerical calculation - Probability densities - Qubit - Strong-coupling polaron - Unitary transformations

Classification code: 701 Electricity and Magnetism - 714.2 Semiconductor Devices and Integrated Circuits - 722 Computer Systems and Equipment - 761 Nanotechnology - 922.1 Probability Theory - 931.3 Atomic and Molecular Physics - 931.4 Quantum Theory; Quantum Mechanics - 932.1.1 Particle Accelerators - 933.1.1 Crystal Lattice

DOI: 10.3788/fgxb20173804.0552

Funding Details: Number; Sponsor: E2013407119; Natural Science Foundation of Hebei Province

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

417.

Accession number: 20172103696766

Title: Immobilization of TiO₂nanoparticles on chlorella pyrenoidosa cells for enhanced visible-light-driven photocatalysis

Authors: Cai, Aijun^{1, 2} ; Guo, Aiyin¹ ; Ma, Zichuan²

Author affiliation:

1 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

2 College of Chemistry and Material Sciences, Hebei Normal University, Shijiazhuang; 050016, China

Corresponding author: Ma, Zichuan (mazc@hebtu.edu.cn)

Source title: Materials

Abbreviated source title: Mater.

Volume: 10

Issue: 5

Issue date: May 17, 2017

Publication year: 2017

Article number: 541

Language: English

E-ISSN: 19961944

Document type: Journal article (JA)

Publisher: MDPI AG, Postfach, Basel, CH-4005, Switzerland

Abstract: TiO₂nanoparticles are immobilized on chlorella cells using the hydrothermal method. The morphology, structure, and the visible-light-driven photocatalytic activity of the prepared chlorella/TiO₂composite are investigated by various methods. The chlorella/TiO₂composite is found to exhibit larger average sizes and higher visible-light intensities. The sensitization of the photosynthesis pigment originating from chlorella cells

provides the anatase TiO₂ with higher photocatalytic activities under the visible-light irradiation. The latter is linked to the highly efficient charge separation of the electron/hole pairs. The results also suggest that the photocatalytic activity of the composite remains substantial after four cycles, suggesting a good stability. © 2017 by the authors.

Number of references: 34

Main heading: Light

Controlled terms: Catalysis - Complexation - Nanoparticles - Photocatalysis - Titanium dioxide

Uncontrolled terms: Charge separations - Chlorella pyrenoidosa - Hydrothermal methods - Photocatalytic activities - Photosynthesis pigments - Visible light - Visible-light irradiation - Visible-light-driven

Classification code: 741.1 Light/Optics - 761 Nanotechnology - 802.2 Chemical Reactions - 804.2 Inorganic Compounds - 933 Solid State Physics

DOI: 10.3390/ma10050541

Funding Details: Number; Acronym; Sponsor: 21677046; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51402087; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

418.

Accession number: 20172003674902

Title: The distribution of excess carriers and their effects on water dissociation on rutile (110) surface

Authors: Wen, Bo^{1, 2}; Zhang, Le²; Wang, Da²; Lang, Xiufeng³

Author affiliation:

1 International Center for Quantum Materials (ICQM) and School of Physics, Peking University, Beijing; 100871, China

2 Beijing Computational Science Research Center, Beijing; 100193, China

3 Department of Physics, Hebei Normal University of Science & Technology, Qinhuangdao; 066004, China

Corresponding author: Wang, Da (wander0826@hotmail.com)

Source title: Computational Materials Science

Abbreviated source title: Comput Mater Sci

Volume: 136

Issue date: August 1, 2017

Publication year: 2017

Pages: 150-156

Language: English

ISSN: 09270256

CODEN: CMMSEM

Document type: Journal article (JA)

Publisher: Elsevier B.V.

Abstract: The excess carrier widely exists in the metal oxides, while its effect on the water splitting is still unclear. Here, the first-principle calculations were carried out to investigate how the effects of excess carriers affect the water dissociation on rutile (110). The result shows that the excess electron and hole play different roles in the reactions because of the distinct behaviors. The excess electron is easily to be trapped in the lattice Ti atom, and the trapped electron slightly changes the reaction barrier of water dissociation. However, the excess hole prefers to stick with the hydroxyl radical, which can obviously lower the energy barrier of water dissociation from 0.39 eV to 0.24 eV. The results further show that the dissimilar behaviors of excess electron and hole mainly come from their abilities of trapping and distinct interaction with proton in rutile TiO₂. Such work helps to understand carrier's distribution and its effect on water splitting, which should help to reveal the role of excess electron and hole in TiO₂. © 2017

Number of references: 48

Main heading: Electrons

Controlled terms: Dissociation - Oxide minerals - Titanium dioxide

Uncontrolled terms: Excess carriers - Excess electrons - First principle calculations - Hybrid functional - Hydroxyl radicals - Reaction barriers - Trapped electrons - Water dissociation

Classification code: 482.2 Minerals - 802.2 Chemical Reactions - 804.2 Inorganic Compounds

DOI: 10.1016/j.commat.2017.04.037

Funding Details: Number; Sponsor: 2016M590034; China Postdoctoral Science Foundation
Number; Acronym; Sponsor: 21303006; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

419.

Accession number: 20171303502888

Title: Large area flexible polymer solar cells with high efficiency enabled by imprinted Ag grid and modified buffer layer

Authors: Lu, Shudi^{1, 2}; Lin, Jie³; Liu, Kong¹; Yue, Shizhong¹; Ren, Kuankuan¹; Tan, Furui⁴; Wang, Zhijie¹; Jin, Peng³; Qu, Shengchun¹; Wang, Zhanguo¹

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Corresponding author: Wang, Zhijie (wangzj@semi.ac.cn)

Source title: Acta Materialia

Abbreviated source title: Acta Mater

Volume: 130

Issue date: May 15, 2017

Publication year: 2017

Pages: 208-214

Language: English

ISSN: 13596454

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: To take a full advantage of polymer semiconductors on realization of large-area flexible photovoltaic devices, herein, we fabricate polymer solar cells on the basis of polyethylene terephthalate (PET) with imprinted Ag grid as transparent electrode. The key fabrication procedure is the adoption of a modified PEDOT:PSS (PH1000) solution for spin-coating the buffer layer to form a compact contact with the substrate. In comparison with the devices with intrinsic PEDOT:PSS buffer layer, the advanced devices present a much higher efficiency of 6.51%, even in a large device area of 2.25 cm². Subsequent characterizations reveal that such devices show an impressive performance stability as the bending angle is enlarged to 180° and bending time is up to 1000 cycles. Not only providing a general methodology to construct high efficient and flexible polymer solar cells, this paper also involves deep insights on device working mechanism in bending conditions. © 2017 Acta Materialia Inc.

Number of references: 37

Main heading: Solar cells

Controlled terms: Buffer layers - Conducting polymers - Convergence of numerical methods - Efficiency - Plastic bottles - Polyethylene terephthalates - Polymer solar cells - Polymers - Silver - Solar power generation - Substrates

Uncontrolled terms: Fabrication procedure - Flexibility - General methodologies - Large area - Performance stability - Polyethylene terephthalates (PET) - Polymer semiconductors - Transparent electrode

Classification code: 547.1 Precious Metals - 615.2 Solar Power - 694.2 Packaging Materials - 702.3 Solar Cells - 815.1 Polymeric Materials - 815.1.1 Organic Polymers - 913.1 Production Engineering - 921.6 Numerical Methods - 933.1 Crystalline Solids

Numerical data indexing: Percentage 6.51e+00%

DOI: 10.1016/j.actamat.2017.03.050

Funding Details: Number; Acronym; Sponsor: 21503209; NSFC; National Natural Science Foundation of China

Number; Sponsor: 2162042; Natural Science Foundation of Beijing Municipality

Number; Acronym; Sponsor: 61504134; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 61674141; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

420.

Accession number: 20171103441472

Title: Tunable luminescence and energy transfer properties of $\text{Ca}_{19}\text{Mg}_2(\text{PO}_4)_{14}:\text{Ce}^{3+}$, Tb^{3+} , Mn^{2+} phosphors

Authors: Zhang, Z.W.1, 2 ; Zhong, H.2 ; Yang, S.S.1 ; Chu, X.J.1

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

2 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao; 066600, China

Corresponding author: Zhang, Z.W. (zhangzhiweia@163.com)

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 708

Issue date: 2017

Publication year: 2017

Pages: 671-677

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: A series of single-composition phosphors $\text{Ca}_{19}\text{Mg}_2(\text{PO}_4)_{14}(\text{CMPO})\text{:Ce}^{3+}$, Tb^{3+} , Mn^{2+} have been prepared via a high-temperature solid-state reaction process. X-ray diffraction (XRD), scanning electric microscopy (SEM), and photoluminescence (PL) spectra were utilized to characterize the samples. The luminescence properties of Ce^{3+} in CMPO have been discussed. Both of energy transfers (ETs) processes from Ce^{3+} to $\text{Tb}^{3+}/\text{Mn}^{2+}$ have been demonstrated to be a resonant type via the dipole-quadrupole interaction mechanism, respectively. The emissive colors of $\text{CMPO}:\text{Ce}^{3+}$, Tb^{3+} , Mn^{2+} samples can be adjusted from purplish blue to green/red by the ETs of $\text{Ce}^{3+} \rightarrow \text{Tb}^{3+}/\text{Mn}^{2+}$, respectively. More importantly, white light emission has been obtained through adjusting the relative concentrations of Ce^{3+} , Tb^{3+} and Mn^{2+} ions in the CMPO host under UV. The results suggest the present phosphors can be potentially applied as a candidate of single-component white-light phosphor for UV-pumped w-LED. © 2017 Elsevier B.V.

Number of references: 23

Main heading: Manganese

Controlled terms: Calcium - Energy transfer - High temperature applications - Light - Light emission - Light emitting diodes - Luminescence - Phosphors - Solid state reactions - X ray diffraction

Uncontrolled terms: Full color - High temperature solid-state reaction - Luminescence properties - Photoluminescence spectrum - Relative concentration - Tunable luminescences - White light emission - White light phosphors

Classification code: 543.2 Manganese and Alloys - 549.2 Alkaline Earth Metals - 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 802.2 Chemical Reactions

DOI: 10.1016/j.jallcom.2017.03.068

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

421.

Accession number: 20162802588343

Title: Hierarchical ZnO/S,N:GQD composites: Biotemplated synthesis and enhanced visible-light-driven photocatalytic activity

Authors: Cai, Aijun^{1, 2}; Wang, Xiuping¹; Qi, Yanling¹; Ma, Zichuan²

Author affiliation:

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Corresponding author: Ma, Zichuan (mazc@vip.163.com)

Source title: Applied Surface Science

Abbreviated source title: Appl Surf Sci

Volume: 391

Issue date: January 1, 2017

Publication year: 2017

Pages: 484-490

Language: English

ISSN: 01694332

CODEN: ASUSEE

Document type: Journal article (JA)

Publisher: Elsevier B.V.

Abstract: Graphene quantum dots co-doped with sulfur and nitrogen (S,N:GQDs) are successfully combined with leaf-templated ZnO nanoparticles (L-ZnO) to obtain hierarchical L-ZnO/S,N:GQD composites exhibiting highly surface area. The morphology, structure, and the visible-light-driven photocatalytic activity are investigated. Compared with non-templated ZnO/S,N:GQDs, L-ZnO/S,N:GQD composites exhibit higher photocatalytic activity for the degradation of rhodamine B under visible light irradiation. Such elevated photocatalytic activity results from two main effects: one is the highly effective charge separation in L-ZnO/S,N:GQD composites; the other is the high surface area, allowing for efficient capture of the visible light.
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Number of references: 48

Main heading: Light

Controlled terms: Complexation - Graphene - Nanocomposites - Nanocrystals - Photocatalysis - Photodegradation - Semiconductor quantum dots - Zinc oxide

Uncontrolled terms: Biotemplated synthesis - Effective charge - High surface area - Photocatalytic activities - Visible light - Visible-light irradiation - Visible-light-driven - ZnO

nanoparticles

DOI: 10.1016/j.apsusc.2016.06.113

Funding Details: Number; Acronym; Sponsor: 51402087; NSFC; National Natural Science Foundation of China

Number; Sponsor: C2014407008; Natural Science Foundation of Hebei Province

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

422.

Accession number: 20170703340547

Title: Weed identification based on K-means feature learning combined with convolutional neural network

Authors: Tang, JingLei^{1, 3}; Wang, Dong¹; Zhang, ZhiGuang²; He, LiJun¹; Xin, Jing³; Xu, Yang¹

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Corresponding author: Tang, JingLei (tangjinglei@nwsuaf.edu.cn)

Source title: Computers and Electronics in Agriculture

Abbreviated source title: Comput. Electron. Agric.

Volume: 135

Issue date: April 1, 2017

Publication year: 2017

Pages: 63-70

Language: English

ISSN: 01681699

CODEN: CEAGE6

Document type: Journal article (JA)

Publisher: Elsevier B.V.

Abstract: Aiming at the problem that unstable identification results and weak generalization ability in feature extraction based on manual design features in weed identification, this paper take the soybean seedlings and its associated weeds as the research object, and construct a weed identification model based on K-means feature learning combined with Convolutional neural network. Combining advantages of multilayer and fine-tuning of parameters of the convolutional neural network, this paper set k-means unsupervised feature learning as pre-training process, and replaced the random initialization weights of traditional CNN parameters. This method make the parameters can be obtained more reasonable values before optimization to gain higher weed identification accuracy. The experimental results show that this method with K-means pre-training achieved 92.89% accuracy, beyond 1.82% than convolutional neural network with random initialization and 6.01% than the two layer network without fine-tuning. Our results suggest that identification accuracy might be improved by fine-tuning of parameters. © 2017 Elsevier B.V.

Number of references: 19

Main heading: Parameter estimation

Controlled terms: Convolution - Feature extraction - Network layers - Neural networks

Uncontrolled terms: Convolutional neural network - K-means clustering - Pre-processing - Pre-training - Weed identification

Classification code: 716.1 Information Theory and Signal Processing - 723 Computer Software, Data Handling and Applications

Numerical data indexing: Percentage 1.82e+00%, Percentage 6.01e+00%, Percentage 9.29e+01%

DOI: 10.1016/j.compag.2017.01.001

Funding Details: Number; Sponsor: 2015JQ6246; Natural Science Foundation of Shaanxi Province

Database: Compendex

423.

Accession number: 20172203701169

Title: Molecular weight and helix conformation determine intestinal anti-inflammatory effects of exopolysaccharide from *Schizophyllum commune*Authors: Du, Bin¹ ; Yang, Yuedong¹ ; Bian, Zhaoxiang² ; Xu, Baojun³

Author affiliation:

1 Hebei Chestnut Engineering Technology Research Center, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

2 School of Chinese Medicine, Hong Kong Baptist University, China

3 Food Science and Technology Program, Beijing Normal University–Hong Kong Baptist University United International College, Zhuhai; 519085, China

Corresponding author: Bian, Zhaoxiang (bianzxiang@gmail.com)

Source title: Carbohydrate Polymers

Abbreviated source title: Carbohydr Polym

Volume: 172

Issue date: September 15, 2017

Publication year: 2017

Pages: 68-77

Language: English

ISSN: 01448617

CODEN: CAPOD8

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Intestinal anti-inflammatory activities of exopolysaccharide from *S. commune* were assessed using dextran sulfate sodium (DSS)-induced colitis in mice model. The changes of molecular weight (MW), atomic force microscope morphology, X-ray diffraction, particle size distribution, and viscosity were recorded after sonication treatment. The results indicated that the triple helical structure of exopolysaccharide was

dissociated into single helical structure and random coiled structure by ultrasonication via breaking of inter- and intramolecular hydrogen bonds. The medium (936 kDa) and high MW (1437 kDa) exopolysaccharide had the mixture of triple helix and single helix conformation, while the low MW (197 kDa) exopolysaccharide exhibit random coiled conformation. The intestinal anti-inflammatory activity study showed that oral administration of medium and high MW (1437 kDa) exopolysaccharide significantly recovered DSS-induced colitis in inflamed tissues and reduced inflammation induced infiltration of macrophages. These results showed that medium (936 kDa) and high MW (1437 kDa) exopolysaccharide had intestinal anti-inflammatory activity. The intestinal anti-inflammatory activity of exopolysaccharide was related to helical structure and molecular weight. © 2017 Elsevier Ltd

Number of references: 45

Main heading: Metabolites

Controlled terms: Atomic force microscopy - Conformations - Diseases - Hydrogen bonds
- Molecular weight - Particle size - Particle size analysis - Sodium sulfate - X ray diffraction

Uncontrolled terms: Anti-inflammatory activity - Anti-inflammatory effects - Dextran sulfate sodium (DSS) induced colitis - Exopolysaccharides - Intra-molecular hydrogen bonds - Schizophyllum commune - Single helical structures - Triple helical structures

Classification code: 741.3 Optical Devices and Systems - 801.4 Physical Chemistry - 804.2 Inorganic Compounds - 931.3 Atomic and Molecular Physics - 951 Materials Science

DOI: 10.1016/j.carbpol.2017.05.032

Funding Details: Number; Acronym; Sponsor: 201624; UIC; University of Illinois at Chicago
Number; Acronym; Sponsor: 201627; UIC; University of Illinois at Chicago

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

424.

Accession number: 20171403515383

Title: Synthesis and characterizations of novel Ba₂La₈(SiO₄)₆O₂: Eu³⁺oxyapatite phosphors

Authors: Zhang, Zhi-wei¹ ; Wang, Li-jiang¹ ; Yang, Sha-sha¹ ; Chen, Wei-guang¹ ; Chu, Xiu-juan¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

Corresponding author: Zhang, Zhi-wei (zhangzhiweia@163.com)

Source title: Dyes and Pigments

Abbreviated source title: Dyes Pigm.

Volume: 142

Issue date: July 1, 2017

Publication year: 2017

Pages: 272-276

Language: English

ISSN: 01437208

E-ISSN: 18733743

CODEN: DYPIDX

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: A novel red-emitting phosphor $\text{Ba}_2\text{La}_8(\text{SiO}_4)_6\text{O}_2:\text{Eu}^{3+}$ has been synthesized by a high-temperature solid-state reaction. X-ray powder diffraction (XRD) analysis confirmed the phase formation of $\text{Ba}_2\text{La}_8(\text{SiO}_4)_6\text{O}_2:\text{Eu}^{3+}$ materials. The photoluminescence excitation and emission spectra, and the concentration dependence of the emission intensity of the phosphor were investigated. The results showed that the phosphor could be efficiently excited by the near ultraviolet (NUV) light and blue light, and it exhibited red light emission. The fundamental band gap energy (absorption edge) of $\text{Ba}_2\text{La}_8(\text{SiO}_4)_6\text{O}_2$, $\text{Ba}_2\text{La}_4.8(\text{SiO}_4)_6\text{O}_2:3.2\text{Eu}^{3+}$ and $\text{Ba}_2\text{Eu}_8(\text{SiO}_4)_6\text{O}_2$ to be approximately 4.05 eV, 3.60 eV and 3.54 eV. The calculated color coordinates lies in the red region. Therefore, these obtained results suggest that the prepared phosphors exhibit great potential for use as red emitting phosphor for near ultraviolet white light emitting diodes (NUV WLEDs). © 2017 Elsevier Ltd

Number of references: 23

Main heading: Light emission

Controlled terms: Emission spectroscopy - Energy gap - Europium - High temperature applications - Light - Light emitting diodes - Luminescence - Phosphors - Photoluminescence - Solid state reactions - X ray powder diffraction

Uncontrolled terms: Concentration dependence - Emission intensity - Fundamental band gap
- High temperature solid-state reaction - Photo-luminescence excitation - Red emitting phosphor -
Synthesis and characterizations - White light emitting diodes

Classification code: 547.2 Rare Earth Metals - 714.2 Semiconductor Devices and Integrated Circuits -
741.1 Light/Optics - 802.2 Chemical Reactions

DOI: 10.1016/j.dyepig.2017.03.048

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

425.

Accession number: 20171803623739

Title: Calculation method and experimental study of coulomb friction coefficient in sheet metal
forming

Authors: Wang, Chung^{1, 2}; Ma, Rui^{1, 2}; Zhao, Juan³; Zhao, Jun^{1, 2}

Author affiliation:

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of Education of China, Qinhuangdao City; 066004, China

2 College of Mechanical Engineering, Yanshan University, Qinhuangdao City; 066004, China

3 Library, Hebei Normal University of Science & Technology, Qinhuangdao City; 066004, China

Corresponding author: Ma, Rui

Source title: Journal of Manufacturing Processes

Abbreviated source title: J. Manuf. Processes

Volume: 27

Issue date: June 1, 2017

Publication year: 2017

Pages: 126-137

Language: English

ISSN: 15266125

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Friction is one of the important factors influencing the formability of sheet metal and improving the forming quality. According to the relationship between the drawing force and the stroke, the linear fitting algorithm of the friction coefficient is given based on the least squares method. Based on the drawing die of the cylindrical parts, a friction coefficient measuring apparatus is developed, which has fixed calculation program. Through a series of deep drawing tests, the friction coefficients and force-stroke curves are measured for different combinations of sheet metal and lubricant. What's more, the drawing process of the cylindrical part with different specifications is carried out to examine the application of the measured friction coefficient. The results show that the friction coefficient calculated by the linear fitting algorithm can accurately reflect the friction state of the whole drawing process; the measurement of the friction coefficient is not limited by the size of the mould; the established test system, can be used for the measurement of friction coefficient in sheet metal forming. © 2017 The Society of Manufacturing Engineers

Number of references: 22

Main heading: Friction

Controlled terms: Drawing (forming) - Least squares approximations - Metal drawing - Metal forming - Metal testing - Metals - Sheet metal - Tribology

Uncontrolled terms: Calculation programs - Coulomb friction coefficient - Deep drawing tests - Friction coefficients - Least squares methods - Linear fitting - Measurement of friction - Testing systems

Classification code: 535.2 Metal Forming - 921.6 Numerical Methods - 931 Classical Physics; Quantum Theory; Relativity

DOI: 10.1016/j.jmapro.2017.02.016

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

426.

Accession number: 20171403538436

Title: The design and development of an ASP.NET platform based integration management system

of construction engineering projects

Authors: Xing, Yan1 ; Deng, Xilu1 ; Qu, Mengke1

Author affiliation:

1 College of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao; 066400, China

Source title: Revista de la Facultad de Ingenieria

Abbreviated source title: Rev. Fac. Ing.

Volume: 32

Issue: 1

Issue date: 2017

Publication year: 2017

Pages: 22-31

Language: English

ISSN: 07984065

CODEN: RFIVFQ

Document type: Journal article (JA)

Publisher: Universidad Central de Venezuela

Abstract: With the rapid development of China's economy, significant changes have occurred in such construction enterprise links as construction organization, capital management and project operations, which bring new challenges and opportunities to project management. This paper elaborated the development of a more cost-effective and efficient construction engineering management system based on ASP.NET platform development. What is more, we analyzed and optimized the engineering management procedure, resulting in the operation of five independent function modules (engineering project management, equipment management, supplier management, financial management and system management) that improves system integrity. Finally, we tested the management system and validated its significant role in enhancing the management efficiency of construction projects.

Number of references: 19

Main heading: Project management

Controlled terms: Cost effectiveness - Cost engineering - Highway bridges - Management

Uncontrolled terms: ASP.NEt - B/S mode - Building construction - Construction engineering - Construction enterprise - Construction organizations - Efficient construction - Integration management system

Classification code: 401.1 Bridges - 911 Cost and Value Engineering; Industrial Economics - 911.2 Industrial Economics - 912.2 Management

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

427.

Accession number: 20172103695846

Title: Stability analysis of golden-section adaptive control systems based on the characteristic model

Authors: Sun, Duoqing^{1, 2}

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1 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

2 Beijing Institute of Control Engineering, China Academy of Space Technology, Beijing; 100190, China

Corresponding author: Sun, Duoqing (sun_duoqing@126.com)

Source title: Science China Information Sciences

Abbreviated source title: Sci. China Inf. Sci.

Volume: 60

Issue: 9

Issue date: September 1, 2017

Publication year: 2017

Article number: 092205

Language: English

ISSN: 1674733X

E-ISSN: 18691919

Document type: Journal article (JA)

Publisher: Science in China Press

Abstract: All-coefficient adaptive control theory and method based on characteristic models have already been applied successfully in the fields of astronautics and industry. However, the stability analysis of the characteristic model-based golden-section adaptive control systems is still an open question in both theory and practice. To investigate such stability issues, the author first provides a method for choosing initial parameter values and new performances for a projection algorithm with dead zone for adaptive parameter estimation, and develops some properties of time-varying matrices by utilizing some algebraic techniques. And then a new Lyapunov function with logarithmic form for time-varying discrete systems is constructed. Finally, the author transforms the characteristic models of some multi-input and multi-output (MIMO) controlled systems into their equivalent form, and proves the stability of the closed-loop systems formed by the golden-section adaptive control law based on the characteristic model using mathematical techniques. © 2017, Science China Press and Springer-Verlag Berlin Heidelberg.

Number of references: 25

Main heading: Control system stability

Controlled terms: Adaptive control systems - Algebra - Closed loop control systems - Closed loop systems - Control system analysis - Control systems - Control theory - Convergence of numerical methods - Gold - Lyapunov functions - Mathematical transformations - Nonlinear systems - Stability - System stability - Time varying systems

Uncontrolled terms: Adaptive control law - Adaptive parameter estimation - All-coefficient adaptive controls - Characteristic model - Golden section - Multi input and multi outputs - Projection algorithms - Time varying matrices

Classification code: 547.1 Precious Metals - 731.1 Control Systems - 731.4 System Stability - 921 Mathematics - 961 Systems Science

DOI: 10.1007/s11432-016-9005-2

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20171703601745

Title: Effect of ultra high pressure processing on yield and antioxidant activity of *Lonicera caerulea* extracts

Authors: Li, Xinyuan¹ ; Yan, Tingcai¹ ; Li, Bin¹ ; Liu, Sunwen² ; Sun, Xiyun¹ ; Wang, Yanqun¹ ; Zhang, Qi¹ ; Huo, Junwei³ ; Meng, Xianjun¹

Author affiliation:

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Corresponding author: Meng, Xianjun (mengxjsy@126.com)

Source title: Shipin Kexue/Food Science

Abbreviated source title: Shipin Kexue/Food Sc.

Volume: 38

Issue: 3

Issue date: February 15, 2017

Publication year: 2017

Pages: 119-124

Language: Chinese

ISSN: 10026630

Document type: Journal article (JA)

Publisher: Chinese Chamber of Commerce

Abstract: This experiment studied the effect of ultra high pressure treatment on the yields of total antioxidants, phenol, anthocyanins and VC extracted from *Lonicera caerulea* fruits and the total antioxidant activity of *Lonicera caerulea* extracts, and also explored the relationship between cellular microstructure and the extraction yield of total antioxidants. Our results showed that the highest yield of total antioxidants of 85.20 mg/g fresh fruit weight was obtained using an extraction pressure of 300 MPa. The lyophilized extracts obtained at 300, 400 and 0 MPa had the highest contents of total phenols, anthocyanins and VC, which were 136.48, 4.12 and 27.14 $\mu\text{g}/\text{mg}$, respectively. The total antioxidants extracted at 400 MPa possessed the highest antioxidant capacity as indicated by the highest 2,2'-azino-bis(3-ethylbenzothiazoline-6-sulfonic acid) diammonium salt radical

(ABTS⁺) scavenging capacity (0.37 mmol/L), ferric reducing ability of plasma (FRAP, 0.84 mmol/L) and 1,1-diphenyl-2-picrylhydrazyl radical (DPPH) scavenging capacity (91.5%). Transmission electron microscopy images showed that 400 MPa treatment caused huge damage to the cellular structure of *Lonicera caerulea*, which could be helpful for the extraction of antioxidants. Significant differences in anthocyanins and VC were observed among some of the groups tested but not among the others. This experiment has proved that ultrahigh pressure processing can promote disruption of *Lonicera caerulea* fruit cells, being helpful for enhanced solvent extraction and activity of antioxidants. © 2017, China Food Publishing Company. All right reserved.

Number of references: 11

Main heading: Extraction

Controlled terms: Agents - Anthocyanins - Antioxidants - Cellular automata - Fruits - High pressure effects - High resolution transmission electron microscopy - Phenols - Pressure effects - Solvent extraction - Transmission electron microscopy

Uncontrolled terms: 1 ,1Diphenyl-2-picrylhydrazyl (DPPH) radicals - Cellular structure - Ferric reducing ability of plasmas - *Lonicera caerulea* - Transmission electron microscopy images - Ultra-high pressure processing - Ultra-high pressure treatment - Ultrahigh pressure

Classification code: 723 Computer Software, Data Handling and Applications - 741.3 Optical Devices and Systems - 802.3 Chemical Operations - 803 Chemical Agents and Basic Industrial Chemicals - 804.1 Organic Compounds - 821.4 Agricultural Products - 921 Mathematics - 931.1 Mechanics

Numerical data indexing: Molar_Concentration 3.70e-01mol/m³, Molar_Concentration 8.40e-01mol/m³, Percentage 9.15e+01%, Pressure 3.00e+08Pa, Pressure 4.00e+08Pa

DOI: 10.7506/spkx1002-6630-201703020

Database: Compendex

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429.

Accession number: 20164002858808

Title: Influence of the Rashba Effect on the Ground-State Properties of the Fröhlich Bipolaron in a Quantum Dot

Authors: Wuyunqimuge1 ; Zhang, Ying2 ; Yin, Hong-Wu2 ; Han, Chao2 ; Eerdunchaolu2

Author affiliation:

1 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao;

028043, China

2 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao;
066004, China

Corresponding author: Eerdunchaolu (eerdunchaolu@163.com)

Source title: Journal of Low Temperature Physics

Abbreviated source title: J. Low Temp. Phys.

Volume: 187

Issue: 3-4

Issue date: May 1, 2017

Publication year: 2017

Pages: 221-231

Language: English

ISSN: 00222291

E-ISSN: 15737357

CODEN: JLTPAC

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: The influence of the Rashba effect on the ground-state properties of the Fröhlich bipolaron in a quantum dot is first studied using the variational method of Pekar type based on the Lee–Low–Pines unitary transformation. The results indicate that, under the condition of strong electron–phonon coupling (coupling strength $\alpha > 6$), the condition of forming bipolaron in a quantum dot (binding energy $E_b > 0$) is naturally met; the bipolaron binding energy E_b increases with increasing confinement strength of the quantum dot ω_0 , dielectric constant ratio of medium ω_0 and electron–phonon coupling strength α and increases or decreases linearly with increasing Rashba spin–orbit coupling strength αR . The bipolaron in quantum dot is in a bound state, and the contribution of the Rashba effect to the ground-state energy consists of $E(\uparrow \uparrow)$, $E(\downarrow \downarrow)$ and $E(\uparrow \downarrow)$, corresponding to three spin states of two electrons as follows, spin-parallel and antiparallel; the absolute value of the ground-state energy increases with increasing η and α and increases or decreases linearly with increasing αR ; in the interaction energy E_{int} of the ground-state bipolaron, the electron–phonon coupling energy E_e - obviously takes a larger ratio than the Rashba spin–orbit coupling energy E_{SO} , but the electron–phonon coupling and the Rashba spin–orbit coupling influence and infiltrate each other. © 2016, Springer Science+Business Media New York.

Number of references: 23

Main heading: Quantum theory

Controlled terms: Binding energy - Bins - Electrons - Ground state - Nanocrystals - Phonons - Semiconductor quantum dots

Uncontrolled terms: Confinement strength - Coupling strengths - Ground state properties - Ground-state energies - Interaction energies - Orbit coupling - Unitary transformations - Variational methods

DOI: 10.1007/s10909-016-1663-0

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

430.

Accession number: 20171003409399

Title: Analysis of volatile compounds in roasted peanut shell and peanut cakes by HS-SPME-GC-MS

Authors: Liu, Yunhua^{1, 2}; Hu, Hui¹; Liu, Hongzhi¹; Li, Jun²; Yang, Ying¹; Shi, Aimin¹; Liu, Li¹; Wang, Qiang¹

Author affiliation:

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2 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

Corresponding author: Wang, Qiang (wangqiang06@caas.cn)

Source title: Shipin Kexue/Food Science

Abbreviated source title: Shipin Kexue/Food Sc.

Volume: 38

Issue: 2

Issue date: January 25, 2017

Publication year: 2017

Pages: 146-153

Language: Chinese

ISSN: 10026630

Document type: Journal article (JA)

Publisher: Chinese Chamber of Commerce

Abstract: The volatile compounds in roasted peanut shell and peanut meals were investigated using headspace solid phase micro-extraction (HS-SPME) and gas chromatography-mass spectrometry (GC-MS). Principal component analysis (PCA) was performed on the relative concentration data. The results showed that a total of 119 volatile compounds were identified in roasted peanut shell and peanut cakes. They were grouped into 9 categories including aldehydes, ketones, hydrocarbons, pyrazines, furans, pyrroles, pyridines, amines and other compounds. The main volatile compounds in peanut cakes were Nand O-heterocyclic compounds, including pyrazines, pyrroles, furans and pyridines while furans and aldehydes are the main volatile compounds found in peanut shells. By PCA, 2,5-dimethyl pyrazine, methyl pyrazine, 2-acetyl-3-methyl pyrazine, 2-ethyl-3-methyl-pyrazine and N-methyl pyrrole were found to be the main volatile compounds in roasted peanut cakes while 2-pentyl furan, nonanal, 5-methyl furan aldehydes, n-hexanal and decanal were the main volatile compounds in roasted peanut shell. © 2017, China Food Publishing Company. All right reserved.

Number of references: 16

Main heading: Principal component analysis

Controlled terms: Aldehydes - Aromatic compounds - Calcination - Drug products - Essential oils - Gas chromatography - Ketones - Mass spectrometry - Oilseeds - Organic pollutants - Potassium compounds - Pyridine - Shells (structures) - Volatile organic compounds

Uncontrolled terms: Gas chromatography-mass spectrometries (GC-MS) - Headspace solid phase micro extractions - Heterocyclic compound - Peanut cake - Peanut shells - Relative concentration - Roasted - Volatile compounds

Classification code: 408.2 Structural Members and Shapes - 801 Chemistry - 802.3 Chemical Operations - 804.1 Organic Compounds - 821.4 Agricultural Products - 922.2 Mathematical Statistics

DOI: 10.7506/spkx1002-6630-201702024

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

431.

Accession number: 20171003416670

Title: An english learning method based on computer-assisted system

Authors: Bo, Jingyi¹ ; Wang, Yubin¹ ; Han, Kun¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Source title: International Journal of Emerging Technologies in Learning

Abbreviated source title: Int. J. Emerg. Technol. Learn.

Volume: 12

Issue: 2

Issue date: 2017

Publication year: 2017

Pages: 66-77

Language: English

ISSN: 18688799

E-ISSN: 18630383

Document type: Journal article (JA)

Publisher: Kassel University Press GmbH, Diagonale 10, Kassel, 34127, Germany

Abstract: Computer terminology is studied by unit, professional computer knowledge and lexical features, etc. in this paper. An effective game-based learning pattern is generated combined with the characteristics of computer English terms. The computer-assisted English learning system is studied to help students memorize terminology. This learning system could also examine the learning effect after study. The relevant question bank is available to users for game-based examination. The examination result and the statistic score could be kept in the question bank for analysis of the learning effect.

Number of references: 20

Main heading: Computer games

Controlled terms: Computer aided instruction - E-learning - Learning systems - Software design - Software engineering - Terminology

Uncontrolled terms: Computer assistant - Computer assisted - Computer knowledge - Computer technology - Computer-assisted system - English Learning - Game-based Learning - Lexical features

Classification code: 723.1 Computer Programming - 723.5 Computer Applications

DOI: 10.3991/ijet.v12i02.6045

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

432.

Accession number: 20170703350262

Title: Method based on sparse signal decomposition for harmonic and inter-harmonic analysis of power system

Authors: Chen, Lei¹ ; Zheng, Dezhong² ; Chen, Shuang³ ; Han, Baoru⁴

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1 Dept. of Electrical and information Engineering, Northeast Petroleum University, Qinhuangdao, China

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Source title: Journal of Electrical Engineering and Technology

Abbreviated source title: J. Electr. Eng. Technol.

Volume: 12

Issue: 2

Issue date: March 2017

Publication year: 2017

Pages: 559-568

Language: English

ISSN: 19750102

E-ISSN: 20937423

Document type: Journal article (JA)

Publisher: Korean Institute of Electrical Engineers

Abstract: Harmonic/inter-harmonic detection and analysis is an important issue in power system signal processing. This paper proposes a fast algorithm based on matching pursuit (MP) sparse signal decomposition, which can be employed to extract the harmonic or inter-harmonic components of a distorted electric voltage/current signal. In the MP iterations, the method extracts harmonic/inter-harmonic components in order according to the spectrum peak. The Fast Fourier Transform (FFT) and nonlinear optimization techniques are used in the decomposition to realize fast and accurate estimation of the parameters. First, the frequency estimation value corresponding to the maxim spectrum peak in the present residual is obtained, and the phase corresponding to this frequency is searched in discrete sinusoids dictionary. Then the frequency and phase estimations are taken as initial values of the unknown parameters for Nelder-Mead to acquire the optimized parameters. Finally, the duration time of the disturbance is determined by comparing the inner products, and the amplitude is achieved according to the matching expression of the harmonic or inter-harmonic. Simulations and actual signal tests are performed to illustrate the effectiveness and feasibility of the proposed method. © The Korean Institute of Electrical Engineers.

Number of references: 22

Main heading: Signal processing

Controlled terms: Fast Fourier transforms - Frequency estimation - Harmonic analysis - Mathematical transformations - Nonlinear programming - Optimization - Parameter estimation - Signal distortion

Uncontrolled terms: Harmonic - Inter-harmonics - Matching pursuit algorithms - Optimal computation - Sparse decomposition

Classification code: 716.1 Information Theory and Signal Processing - 921 Mathematics

DOI: 10.5370/JEET.2017.12.2.559

Funding Details: Number; Sponsor: 20166227; Natural Science Foundation of Hainan Province

Database: Compendex

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433.

Accession number: 20163902834604

Title: Graphitic carbon nitride decorated with S,N co-doped graphene quantum dots for enhanced visible-light-driven photocatalysis

Authors: Cai, Aijun¹ ; Wang, Qian² ; Chang, Yongfang³ ; Wang, Xiuping¹

Author affiliation:

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2 Langfang Teachers University, Langfang; 065000, China

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Corresponding author: Chang, Yongfang (changyongfang@126.com)

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 692

Issue date: 2017

Publication year: 2017

Pages: 183-189

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: S,N co-doped graphene quantum dots (S,N-GQDs) were successfully combined with graphitic carbon nitride (g-C₃N₄) in a facile manner by a physical method. The as-prepared g-C₃N₄/S,N:GQD composites were characterized by X-ray diffraction, high-resolution field-emission scanning electron microscopy, Fourier transform infrared spectroscopy, diffuse-reflectance spectroscopy, photoluminescence spectroscopy, X-ray photoelectron spectroscopy, and other techniques. The g-C₃N₄/S,N:GQD composites exhibit higher photocatalytic performance for degrading Rhodamine B (RhB) under visible-light irradiation than the pure g-C₃N₄. The enhancement of photodegradation activity is attributed to the efficient separation of photogenerated electrons and holes. Moreover, these composites can be reused for the degradation of RhB during nine cycles, without a significant decrease in the photocatalytic activity. Finally, a possible charge separation mechanism was proposed. © 2016 Elsevier B.V.

Number of references: 48

Main heading: X ray photoelectron spectroscopy

Controlled terms: Carbon nitride - Field emission microscopes - Fourier transform infrared spectroscopy - Graphene - Light - Mechanisms - Nanocrystals - Nitrides - Photocatalysis - Photodegradation - Photoluminescence spectroscopy - Scanning electron microscopy - Semiconductor quantum dots - X ray diffraction

Uncontrolled terms: Charge separation mechanism - Diffuse reflectance spectroscopy - Graphitic carbon nitrides - Photocatalytic activities - Photocatalytic performance - Photodegradation activity - Visible light - Visible-light irradiation

Classification code: 601.3 Mechanisms - 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 741.3 Optical Devices and Systems - 761 Nanotechnology - 801 Chemistry - 804 Chemical Products Generally - 804.2 Inorganic Compounds

DOI: 10.1016/j.jallcom.2016.09.030

Funding Details: Number; Acronym; Sponsor: 51402087; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20164002877968

Title: Characteristic analysis of pressure-arch of a double-arch tunnel in water-rich strata evolution

Authors: Li, C.L.1, 2 ; Wang, S.R.1, 3 ; Zou, Z.S.3 ; Liu, X.L.3 ; Li, D.Q.4

Author affiliation:

1 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao; 066004, China

2 Institute of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

3 Opening Project of Key Laboratory of Deep Mine Construction, Henan Polytechnic University, Jiaozuo; 454003, China

4 School of Mining Engineering, University of New South Wales, NSW; 2502, Australia

Corresponding author: Li, C.L. (lclcc_010@163.com)

Source title: Journal of Engineering Science and Technology Review

Abbreviated source title: J. Eng. Sci. Technol. Rev.

Volume: 9

Issue: 1

Issue date: 2016

Publication year: 2016

Pages: 44-51

Language: English

ISSN: 17919320

E-ISSN: 17912377

Document type: Journal article (JA)

Publisher: Technological Education Institute of Kavala

Abstract: It is of importance to analyze the morphological characterization, the evolution process and the skewed effect of pressure-arch of a double-arch tunnel in the water-rich strata. Taking a buried depth 80 m double-arch tunnel as an example, a computational model of the double-arch tunnel was built by using FLAC3D technique. Then considering some aspects including groundwater conditions, tunnel depth, construction sequences and permeability coefficients, the coupling effect of stress field and seepage field in the pressure-arch of the double-arch tunnel was analyzed. The results show that the thickness of the pressure-arch induced by step-by-step

excavation and display a step-descent skewed distribution from the left to the right of the double-arch tunnel. The permeability coefficient has a significant influence on the shape and the skewed effect of the pressure arch. The excavation of the bench method has a better arching condition than that of the expanding method. The obtained results provide a basic reference for the rock reinforcement design and safety construction of double-arch tunnels in the water-rich strata. © 2016 Eastern Macedonia and Thrace Institute of Technology. All rights reserved.

Number of references: 15

Main heading: Arches

Controlled terms: Computer simulation - Excavation - Groundwater - Hydraulic conductivity - Pressure effects - Tunnels

Uncontrolled terms: Characteristic analysis - Computational model - Construction sequence - Double arch tunnel - Fluid-solid coupling - Groundwater conditions - Morphological characterization - Pressure arches

Classification code: 401.2 Tunnels and Tunneling - 408.2 Structural Members and Shapes - 444.2 Groundwater - 632.1 Hydraulics - 723.5 Computer Applications - 931.1 Mechanics

Numerical data indexing: Size 8.00e+01m

Funding Details: Number; Acronym; Sponsor: 51074140; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51310105020; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51474188; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

435.

Accession number: 20164302952445

Title: A new variety of Robinia pseudoacacia 'Beilinhuai 3'

Authors: Zhang, Guojun^{1, 2}; Sun, Yuhan¹; Li, Yun¹

Author affiliation:

¹ National Engineering Laboratory for Tree Breeding, College of Biological Sciences and Technology, Beijing Forestry University, Beijing; 100083, China

2 College of Horticulture Science and Technology, Hebei Normal University of Science & Technology, Changli; 066600, China

Corresponding author: Li, Yun

Source title: Linye Kexue/Scientia Silvae Sinicae

Abbreviated source title: Linye Kexue/Sci. Silvae Sinicae

Volume: 52

Issue: 9

Issue date: September 1, 2016

Publication year: 2016

Pages: 155

Language: Chinese

ISSN: 10017488

Document type: Journal article (JA)

Publisher: Chinese Society of Forestry

Abstract: Robinia pseudoacacia 'Beilinhui 3' is a new variety selected from one mutation of Robinia pseudoacacia K1. It grows rapidly, longer and wider thorn (14.55 mm), longer drooping compound leaves (28.8 cm), lanceolate in leaf shape, lower contents of tannin (0.69%) compared with the normal R. pseudoacacia and K1. It can be easy to propagate and afforest, so it is an excellent multi-purpose new variety. © 2016, Editorial Department of Scientia Silvae Sinicae. All right reserved.

Uncontrolled terms: Leaf shape - Multi-purpose - New variety - Robinia pseudo-acacia

Numerical data indexing: Percentage 6.90e-01%, Size 1.46e-02m, Size 2.88e-01m

DOI: 10.11707/j.1001-7488.20160920

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20164002874415

Title: Research of particle diameter influences on flow characteristics based on feedback valve of internal circulating fluidized bed

Authors: Hongju, Lin^{1, 2} ; Dezhong, Zheng² ; Wenzhe, Liao³

Author affiliation:

1 Key Laboratory of Measurement Technology and Instrumentation of Hebei Province, Yanshan University, Qinhuangdao, China

2 Hebei Normal University of Science & Technology, Qinhuangdao, China

3 School of Control Science and Engineering, Hebei University of Technology, Tianjin, China

Corresponding author: Hongju, Lin (lph900@hotmail.com)

Source title: Recent Patents on Engineering

Abbreviated source title: Recent Pat. Eng.

Volume: 10

Issue: 1

Issue date: April 1, 2016

Publication year: 2016

Pages: 77-84

Language: English

ISSN: 18722121

Document type: Journal article (JA)

Publisher: Bentham Science Publishers B.V., P.O. Box 294, Bussum, 1400 AG, Netherlands

Abstract: Background: Loop Seal is a key component in circulating fluidized bed. It is necessary to study its internal flow rules. Diameter of solid particle in Loop Seal is too large or small can produce bigger effects for fluidized bed operation. Objective: We will study internal flow rules in Loop Seal, and look for relationship between the key parameters of solid particle circulation and particle diameter by cold experiment. Method: The cold experiment method is introduced based on a new J-type Loop Seal of three chambers internal circulating fluidized bed for different particle diameters silica sand in the paper. It includes building the experimental device and measuring related parameters. The equivalent model and theory formula of solid particles circulation are provided. The influences of particle diameter on three key parameters of the solid particles

circulation are discussed on emphasis. Results: The experiment results show that on the same conditions the height difference of two chambers in running increases as the particle diameter increasing. The dynamic head of feedback valve in running is not affected by the right lateral blow nearly, but is linear relationship with the left lateral blow, relationship between their slope coefficients and intercepts and relative value of particle diameter both are linear nearly; the resistance coefficient in the feedback valve is power exponent relationship with right lateral blow, and particle diameters have almost nothing to do with it. Conclusion: The method provides references for particle diameter selection and usage, design and operation for feedback valve of internal circulating fluidized bed. Here, we also discussed few related patents. © 2016 Bentham Science Publishers.

Number of references: 16

Main heading: Fluidized beds

Controlled terms: Fluidized bed process - Models - Particle size - Silica sand

Uncontrolled terms: Circulating fluidized bed - Cold experiments - Loop seal - Particle diameters - Solid particles

DOI: 10.2174/1872212109666150707183309

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

437.

Accession number: 20160401851997

Title: The Synthesis and Martensitic Transformation of the $\text{Co}_2\text{TiSb}_{1-x}\text{Sn}_x$ ($x = 0, 0.25, 0.5$) Heusler Alloys

Authors: Wang, L.Y.1 ; Wang, X.T.2 ; Chen, L.3 ; Zhang, Y.2 ; Xia, Q.L.2 ; Liu, G.D.2

Author affiliation:

- 1 Department of Physics, Tianjin University, Tianjin, China
- 2 School of Material Science and Engineering, Hebei University of Technology, Tianjin, China
- 3 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Liu, G.D. (gdlu1978@126.com)

Source title: Journal of Superconductivity and Novel Magnetism

Abbreviated source title: J Supercond Novel Magn

Volume: 29

Issue: 4

Issue date: April 1, 2016

Publication year: 2016

Pages: 995-1000

Language: English

ISSN: 15571939

E-ISSN: 15571947

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: The phase component of $\text{Co}_2\text{TiSb}_{1-x}\text{Sn}_x$ is strongly dependent on the preparation method. The L21-type $\text{Co}_2\text{TiSb}_{1-x}\text{Sn}_x$ ($x = 0.25, 0.5$) alloys are successfully synthesized by the melt-spun method. And the microstructural properties of these ingots indicate that the $\text{Co}_2\text{TiSb}_{0.75}\text{Sn}_{0.25}$ and $\text{Co}_2\text{TiSb}_{0.75}\text{Sn}_{0.25}$ melt-spun samples exhibit the pure L21 phase. The thermal-elastic martensitic transformation has been experimentally observed in $\text{Co}_2\text{TiSb}_{0.75}\text{Sn}_{0.25}$ alloy. © 2016, Springer Science+Business Media New York.

Number of references: 25

Main heading: Tin alloys

Controlled terms: Carbon dioxide - Ferromagnetic materials - Martensitic transformations - Melt spinning - Metal castings - Microstructure - Shape memory effect - Single crystals - Tin

Uncontrolled terms: Ferromagnetic shape memory alloy - Heusler alloys - Melt-spun - Melt-spun methods - Micro-structural properties - Phase component - Preparation method

DOI: 10.1007/s10948-016-3371-z

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20171103449258

Title: Multiple sleep mode analysis for energy conservation in green Cognitive Radio Networks

Authors: Liu, Jianping1 ; Jin, Shunfu1 ; Yue, Wuyi2

Author affiliation:

- 1 School of Information Science and Engineering, Yanshan University, Hebei Normal University of Science and Technology, Qinhuangdao City, China
- 2 Department of Intelligence and Informatics, Konan University, Kobe; 658-8501, Japan

Source title: ACM International Conference Proceeding Series

Abbreviated source title: ACM Int. Conf. Proc. Ser.

Monograph title: Proceedings of the 11th International Conference on Queueing Theory and Network Applications, QTNA 2016

Issue date: December 13, 2016

Publication year: 2016

Article number: a9

Language: English

ISBN-13: 9781450348423

Document type: Conference article (CA)

Conference name: 11th International Conference on Queueing Theory and Network Applications, QTNA 2016

Conference date: December 13, 2016 - December 15, 2016

Conference location: Wellington, New Zealand

Conference code: 126327

Sponsor: ACM Special Interest Group on Measurement and Evaluation (SIGMETRICS); Victoria University of Wellington (VUW)

Publisher: Association for Computing Machinery

Abstract: In this paper, we examine the key issue of how to conserve the energy of base stations (BSs)

in "green" Cognitive Radio Networks (CRNs). In order to meet the demand for more sustainable green communication, we introduce a multiple sleep mode for licensed channels in CRNs. Based on a dynamic spectrum access strategy with a proposed multiple sleep mode, we establish a continuous-time Markov Chain model to capture the stochastic behavior of secondary user (SU) and primary user (PU) packets. By using the matrix geometric solution method, we obtain the steady-state probability distribution for the system model. This document also presents analysis for performance evaluation in terms of the average latency of SU packets and the energy saving rate of the system. © 2016 ACM.

Number of references: 14

Main heading: Cognitive radio

Controlled terms: Behavioral research - Continuous time systems - Energy conservation - Markov processes - Probability distributions - Queueing networks - Queueing theory - Radio - Radio systems - Sleep research - Stochastic models - Stochastic systems

Uncontrolled terms: Cognitive radio network - Cognitive radio networks (CRNs) - Continuous time Markov chain - Dynamic spectrum access - Matrix-geometric solutions - Performance measure - SLEEP mode - Steady-state probability distributions

Classification code: 461.4 Ergonomics and Human Factors Engineering - 525.2 Energy Conservation - 716.3 Radio Systems and Equipment - 922.1 Probability Theory - 961 Systems Science

DOI: 10.1145/3016032.3016039

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

439.

Accession number: 20161102099735

Title: Functional hydrophilic polystyrene beads with uniformly size and high cross-linking degree facilitated rapid separation of exenatide

Authors: Li, Qiang¹ ; Zhao, Lan¹ ; Zhang, Rongyue² ; Huang, Yongdong¹ ; Zhang, Yan¹ ; Zhang, Kun^{1, 3} ; Wu, Xuexing¹ ; Zhang, Zhigang³ ; Gong, Fangling¹ ; Su, Zhiguo¹ ; Ma, Guanghui¹

Author affiliation:

1 National Key Lab of Biochemical Engineering, Institute of Process Engineering, Chinese Academy of Sciences, Beijing; 100190, China

2 Department of Chemical Engineering, Beijing Institute of Petro-chemical Technology, Beijing; 102617,

China

3 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei; 066004, China

Corresponding author: Ma, Guanghui (ghma@ipe.ac.cn)

Source title: Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences

Abbreviated source title: J. Chromatogr. B Anal. Technol. Biomed. Life Sci.

Volume: 1017-1018

Issue date: April 01, 2016

Publication year: 2016

Pages: 129-135

Language: English

ISSN: 15700232

E-ISSN: 1873376X

CODEN: JCBAAI

Document type: Journal article (JA)

Publisher: Elsevier B.V.

Abstract: A high cross-linking polystyrene(PSt)-based anion-exchange material with uniformly size, high ion exchange capacity, and high hydrophilicity was synthesized by a novel surface functionalization approach in this study. Uniformly sized PSt microspheres were prepared by the membrane emulsion polymerization strategy, and then modified by (1) conversing residual surface vinyl groups to epoxy groups followed by quaternization, and (2) decorating aromatic ring matrix including nitration, reduction and attachment of glycidyltrimethylammonium chloride. The 3-D morphology and porous features of microspheres were observed by scanning electron microscopy (SEM) and atomic force microscopy (AFM). The surface of the modified PSt became roughness but the particle size remained same. Meanwhile, FT-IR spectra and laser scanning confocal microscope (LCSM) indicated that the modification groups had been successfully covalently coated onto the PSt microspheres. Modified PSt microspheres showed greatly improved hydrophilicity and biocompatibility with 0.387 mmol/mL ion exchange capacity (IEC). In the application evaluation procedure, exenatide can be purified from 42.9% (peptide crudes) to 88.6% by modified PSt column with 97.1% recovery yield. This modified PSt microspheres had a large potential in application for efficient separation of peptides. © 2016 Elsevier B.V.

Number of references: 25

Main heading: Ion exchange

Controlled terms: Atomic force microscopy - Biocompatibility - Emulsification - Emulsion polymerization - Hydrophilicity - Ions - Microspheres - Particle size - Peptides - Polystyrenes - Scanning electron microscopy - Separation

Uncontrolled terms: Anion exchange - Anion exchange material - Cross-linking degree - Ion exchange capacity - Laser scanning confocal microscopes - Peptide separation - Polystyrene beads - Polystyrene micro-sphere

Classification code: 461.9 Biology - 461.9.1 Immunology - 741.3 Optical Devices and Systems - 802.2 Chemical Reactions - 802.3 Chemical Operations - 815.1.1 Organic Polymers - 815.2 Polymerization

DOI: 10.1016/j.jchromb.2016.02.044

Funding Details: Number; Acronym; Sponsor: 21206175; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 21306206; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 21306207; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 21476241; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51103158; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51403213; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

440.

Accession number: 20170403272621

Title: The assessment of cloud computing service under intuitionistic fuzzy environment

Authors: Bo, Jingyi¹; Wang, Yubin¹; Liu, Min¹

Author affiliation:

¹ College of Math. and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei; 066004, China

Corresponding author: Bo, Jingyi (qhdbjy@126.com)

Source title: Chemical Engineering Transactions

Abbreviated source title: Chem. Eng. Trans.

Volume: 51

Issue date: 2016

Publication year: 2016

Pages: 613-618

Language: English

E-ISSN: 22839216

ISBN-13: 9788895608433

Document type: Journal article (JA)

Publisher: Italian Association of Chemical Engineering - AIDIC

Abstract: With the rapid development of advanced technology, cloud computing technology has appeared and attracted much attention in academia and the business community. In cloud computing technology, cloud computing service is a very important issue. Up to now, although cloud computing service achieved some success with the development to the deepening of the application, owing to security, technology, management, and other constraints, not all businesses are suitable for the use of this service model, so the business need consider their own actual situation and select a method to make effective evaluation of the comprehensive capacity of the cloud computing services. Thus, according to these characteristics, in this paper, we analysis cloud computing service from security and risk, data, services, resources, economic dimensions and then introduce a new multiple attribute decision making method to assess cloud computing service where a cloud computing service adaptability evaluation system is constructed. Finally, the proposed method is applied in an illustrative example to demonstrate its applicability and validity. Copyright © 2016, AIDIC Servizi S.r.l.

Number of references: 14

Main heading: Distributed computer systems

Controlled terms: Cloud computing - Decision making - Fuzzy sets - Risk assessment

Uncontrolled terms: Advanced technology - Business community - Business needs - Cloud computing services - Cloud computing technologies - Intuitionistic fuzzy - Multiple attribute decision making - Service Model

Classification code: 722.4 Digital Computers and Systems - 912.2 Management - 914.1 Accidents and Accident Prevention

DOI: 10.3303/CET1651103

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

441.

Accession number: 20164502977113

Title: Critical node measuring method improved based on pagerank and betweenness

Authors: Wang, Lei^{1, 2, 3}; Dong, Jun^{1, 2}; Ren, Jiadong^{1, 2}

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, No. 438, Hebei Ave., Qinhuangdao; 066004, China

2 The Key Laboratory for Computer Virtual Technology and System Integration of Hebei Province, No. 438, Hebei Ave., Qinhuangdao; 066004, China

3 E&A College, Hebei Normal University of Science and Technology, No. 360, Hebei Ave., Qinhuangdao; 066004, China

Corresponding author: Wang, Lei (wangl216@163.com)

Source title: ICIC Express Letters, Part B: Applications

Abbreviated source title: ICIC Express Lett Part B Appl.

Volume: 7

Issue: 11

Issue date: November 1, 2016

Publication year: 2016

Pages: 2381-2387

Language: English

ISSN: 21852766

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: In software execution network, PageRank and betweenness methods are used to determine the importance of nodes. The experiment results show that the differences between nodes are not strong and cannot reflect the software nodes' importance degree. In order to solve this problem, this paper adds the entropy weight method to the calculation of node weights, and puts the weights of nodes into the computing of two measuring methods above. Finally, we get the ranking result of nodes' importance which means we can find out the critical nodes from top ones. Experimental results indicate that the method is efficient for critical node measuring. © 2016 ICIC International.

Number of references: 11

Main heading: Computer science

Controlled terms: Surveying

Uncontrolled terms: Betweenness - Critical node - Entropy weight method - Importance degrees - Measuring method - nocv1 - PageRank - Software execution

Classification code: 405.3 Surveying

Funding Details: Number; Sponsor: F2014203152; Natural Science Foundation of Hebei Province
Number; Sponsor: F2015203326; Natural Science Foundation of Hebei Province

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

442.

Accession number: 20161802316892

Title: Dual-wavelength fiber laser based on Er³⁺-doped superimposed fiber gratings

Authors: Wang, Feng^{1, 2}; Bi, Weihong¹; Fu, Xinghu¹; Jiang, Peng¹; Wu, Yang¹

Author affiliation:

1 Hebei Provincial Key Laboratory of Special Fiber and Fiber Sensor, School of Information Science and Engineering, Yanshan University, Qinhuangdao; Hebei, China

2 College of Mechanical Electrical and Engineering, Hebei Normal University of Science & Technology, Qinhuangdao; Hebei, China

Source title: Zhongguo Jiguang/Chinese Journal of Lasers

Abbreviated source title: Zhongguo Jiguang

Volume: 43

Issue: 4

Issue date: April 10, 2016

Publication year: 2016

Article number: 0402002

Language: Chinese

ISSN: 02587025

CODEN: ZHJIDO

Document type: Journal article (JA)

Publisher: Science Press

Abstract: Based on gain homogeneity technology, a new type of dual-wavelength fiber laser is proposed and demonstrated. Linear cavity structure is used in the fiber laser, two Er³⁺-doped superimposed fiber gratings with reflectivity above 99% are used for wavelength selection, and Er³⁺-doped fiber is used as the gain medium. The experimental results show that precise adjustment of the mechanical stress at two ends of the superimposed fiber gratings can regulate the reflectivity (or transmissivity) of cavity lenses at the output end at wavelengths of λ_1 and λ_2 , i.e. regulate the laser loss, which makes the gain and loss at two wavelengths in the resonance cavity match well, inhibits mode competition in the resonance cavity, and achieves stable simultaneous dual-wavelength laser emission with wavelength interval of 0.932 nm. The threshold power of the proposed laser is 4 mW, the 3 dB band width is 0.02 nm, the 30 dB band width is less than 0.2 nm, and the side mode suppression ratio is 51.96 dB. This laser has advantages such as simple structure, stable output at room temperature, narrow band width and low threshold. © 2016, Chinese Lasers Press. All right reserved.

Number of references: 14

Page count: 7

Main heading: Fibers

Controlled terms: Cavity resonators - Fiber lasers - Lasers - Reflection - Stresses

Uncontrolled terms: Doped fiber - Dual wavelength fiber lasers - Dual wavelength laser - Resonance cavities - Side mode suppression ratios - Super-imposed fiber gratings - Superimposed

gratings - Wavelength selection

Classification code: 744.1 Lasers, General - 744.4 Solid State Lasers

Numerical data indexing: Power 4.00e-03W, Size 2.00e-10m, Size 2.00e-11m, Size 9.32e-10m

DOI: 10.3788/CJL201643.0402002

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

443.

Accession number: 20163702806481

Title: Properties of the ground state of two-dimensional bipolaron with Rashba spin-orbit coupling

Authors: Wuyunqimuge1 ; Xin, Wei2 ; Eerdunchaolu2

Author affiliation:

1 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao; 028043, China

2 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

Corresponding author: Eerdunchaolu (eerdunchaolu@163.com)

Source title: Wuli Xuebao/Acta Physica Sinica

Abbreviated source title: Wuli Xuebao

Volume: 65

Issue: 17

Issue date: September 5, 2016

Publication year: 2016

Article number: 177801

Language: Chinese

ISSN: 10003290

CODEN: WLHPAR

Document type: Journal article (JA)

Publisher: Institute of Physics, Chinese Academy of Sciences

Abstract: In this paper, based on the Lee-Low-Pines transformation, the ground-state properties of the bipolaron with the Rashba spin-orbit coupling effect in the quantum dot are studied by using the Pekar variational method. The expressions for the ground-state interaction energy E_{int} and binding energy E_b of the bipolaron are derived. The results show that E_{int} is composed of four parts: the electron-longitudinal optical (LO) phonon coupling energy E_{e-ph} , confinement potential of the quantum dot E_{conf} , Coulomb energy between two electrons E_{coul} and additional term in the Rashba spin splitting energy E_{R-ph} originating from the LO phonon, where E_{conf} and E_{coul} are positive definite. These indicate that E_{conf} and E_{coul} are the repulsive potential of the bipolaron. Generally, it is unable to form the electron-electron coupling structure in the quantum dot because two electrons repel each other by means of the screened Coulomb potential and confinement potential of the quantum dot. However, the numerical results show that the ground-state binding energy of the bipolaron E_b is greater than zero under the condition of the electron-phonon strong coupling (coupling strength $\alpha > 6$), so the condition of forming the steady bipolaron structure in quantum dots is naturally met (binding energy $E_b > 0$). In addition, the ground-state energy of the bipolaron E is always less than zero, thus the ground-state bipolaron in the quantum dot is in the steady bound state. This can be explained by the physical mechanism. Firstly, the electron-LO phonon coupling energy E_{e-ph} in the ground-state interaction energy of the bipolaron is always negative. Secondly, the electron-LO phonon coupling interaction in the low-dimensional structures of II-VI semiconductors is great enough (generally $\alpha > 6.0$) so that the electron-LO phonon coupling energy E_{e-ph} is dominant in the ground-state energy E and, therefore the screened Coulomb potential and confinement potential of the quantum dot can be overcome and a steady electron-electron structure can be formed. The numerical results also indicate that the binding energy of the bipolaron E_b increases with increasing the confinement strength of quantum dot ω_0 , dielectric constant ratio of medium η and electron-phonon coupling strength α , but it shows the direct opposite cases from linear increase to decrease with increasing the Rashba spin-orbit coupling strength αR ; the ground-state energy of the bipolaron splits into three energy levels due to the Rashba effect: $E(\uparrow\uparrow)$, $E(\downarrow\downarrow)$ and $E(\uparrow\downarrow)$, which correspond to spin orientations of two electrons respectively: "up", "down" and "antiparallel"; the absolute value of ground-state energy $|E|$ increases with increasing η and α , but it shows the direct opposite cases from linear increase to decrease with increasing the Rashba spin-orbit coupling strength αR ; the electron-phonon coupling energy obviously accounts for a larger proportion than that of the Rashba spin-orbit coupling energy in the ground-state energy of the bipolaron, but the electron-phonon coupling and Rashba spin-orbit coupling infiltrate each other and influence each other significantly. In short, the electron in narrow-gap II-VI heterojunctions have higher Rashba spin splitting energy and larger application range. For these quantum dot structures, it is impossible and unnecessary to inhibit the formation of bipolarons. It is more accurate that the bipolaron is chosen as the elementary excitation than the single polaron when investigating the electron-phonon interaction and Rashba spin-orbit coupling, and the bipolaron has more practical significances and potential application values. © 2016 Chinese Physical Society.

Number of references: 27

Page count: 8

Main heading: Binding energy

Controlled terms: Bins - Coulomb blockade - Electric fields - Electron correlations - Electron-phonon interactions - Electrons - Ground state - Heterojunctions - Nanocrystals - Narrow band gap semiconductors - Phonons - Quantum theory - Semiconductor quantum dots

Uncontrolled terms: Bipolaron - Electron-phonon coupling strengths - Ground-state energies - Longitudinal optical phonons - Narrow gap - Rashba spin - Rashba spin-orbit coupling - Screened Coulomb potentials

Classification code: 694.4 Storage - 701.1 Electricity: Basic Concepts and Phenomena - 714.2 Semiconductor Devices and Integrated Circuits - 761 Nanotechnology - 801.4 Physical Chemistry - 931.3 Atomic and Molecular Physics - 931.4 Quantum Theory; Quantum Mechanics

DOI: 10.7498/aps.65.177801

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Database: Compendex

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444.

Accession number: 20163902832858

Title: The assessment of cloud computing service under intuitionistic fuzzy environment

Authors: Bo, Jingyi¹ ; Wang, Yubin¹ ; Liu, Min¹

Author affiliation:

¹ College of Math and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei; 066004, China

Corresponding author: Bo, Jingyi (qhdbjy@126.com)

Source title: Chemical Engineering Transactions

Abbreviated source title: Chem. Eng. Trans.

Volume: 51

Issue date: 2016

Publication year: 2016

Pages: 613-618

Language: English

E-ISSN: 22839216

Document type: Journal article (JA)

Publisher: Italian Association of Chemical Engineering - AIDIC

Abstract: With the rapid development of advanced technology, cloud computing technology has appeared and attracted much attention in academia and the business community. In cloud computing technology, cloud computing service is a very important issue. Up to now, although cloud computing service achieved some success with the development to the deepening of the application, owing to security, technology, management, and other constraints, not all businesses are suitable for the use of this service model, so the business need consider their own actual situation and select a method to make effective evaluation of the comprehensive capacity of the cloud computing services. Thus, according to these characteristics, in this paper, we analysis cloud computing service from security and risk, data, services, resources, economic dimensions and then introduce a new multiple attribute decision making method to assess cloud computing service where a cloud computing service adaptability evaluation system is constructed. Finally, the proposed method is applied in an illustrative example to demonstrate its applicability and validity. Copyright © 2016, AIDIC Servizi S.r.l.

Number of references: 14

Main heading: Distributed computer systems

Controlled terms: Cloud computing - Decision making - Fuzzy sets - Risk assessment

Uncontrolled terms: Advanced technology - Business community - Business needs - Cloud computing services - Cloud computing technologies - Intuitionistic fuzzy - Multiple attribute decision making - Service Model

Classification code: 722.4 Digital Computers and Systems - 912.2 Management - 914.1 Accidents and Accident Prevention

DOI: 10.3303/CET1651103

Database: Compendex

445.

Accession number: 20162502514494

Title: Effects of pretreatments on anthocyanin composition, phenolics contents and antioxidant capacities during fermentation of hawthorn (*Crataegus pinnatifida*) drinkAuthors: Liu, Suwen¹ ; Chang, Xuedong¹ ; Liu, Xiufeng¹ ; Shen, Zhanwei¹

Author affiliation:

¹ College of Food Science and Technology, Hebei Normal University of Science and Technology, Qin Huangdao, Hebei Province; 066004, China

Corresponding author: Liu, Suwen (liusuwenyy@163.com)

Source title: Food Chemistry

Abbreviated source title: Food Chem.

Volume: 212

Issue date: December 1, 2016

Publication year: 2016

Pages: 87-95

Language: English

ISSN: 03088146

E-ISSN: 18737072

CODEN: FOCHDJ

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: The effect of microwave and heat pretreatment on the content and composition of anthocyanins, phenolics, and the antioxidant capacity of hawthorn drink were studied. Nine anthocyanins were isolated by chromatographic separation from the Zirou hawthorn source and their structure identified using HPLC-DAD-ESI/MS analysis. Heat and microwave pretreatments had a significant impact on the relative contents of hawthorn anthocyanins, such as cyanidin-3-galactoside (82.9% and 76.9%, respectively) and

cyanidin-3-glucoside (9.2% and 11.5%, respectively). Pretreatment had no significant effect on pH, total soluble solid or total acid. More anthocyanins remained after heat treatment than after microwaving (0.745 mg/100 mL), and were 52.4% higher than the control group after storage for 7 days. The colour density of the heat treated group was higher than the control group (24.5%) after 12 days of fermentation. The main antioxidant capacities of the hawthorn drinks came from total polyphenolics rather than total anthocyanins or total flavonoids. © 2016 Elsevier Ltd.

Number of references: 40

Main heading: Anthocyanins

Controlled terms: Agents - Antioxidants - Beverages - Fermentation - High performance liquid chromatography - Liquid chromatography - Source separation

Uncontrolled terms: After-heat treatment - Anti-oxidant activities - Antioxidant capacity - Chromatographic separations - Hawthorn (*Crataegus pinnatifida*) drink - Phenolics content - Pre-Treatment - Total soluble solids

Classification code: 716.1 Information Theory and Signal Processing - 803 Chemical Agents and Basic Industrial Chemicals - 804.1 Organic Compounds - 822.3 Food Products

DOI: 10.1016/j.foodchem.2016.05.146

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

446.

Accession number: 20161402175773

Title: Mining method for service composition patterns based on artifact-aware

Authors: Liu, Haibin¹ ; Liu, Guohua² ; Huang, Liming¹ ; Wang, Ying³

Author affiliation:

- 1 School of Business Administration, Hebei Normal University of Science & Technology, Qinhuangdao, China
- 2 School of Computer Science and Technology, Donghua University, Shanghai, China
- 3 School of Information Science and Engineering, Yanshan University, Qinhuangdao, China

Source title: Jisuanji Jicheng Zhizao Xitong/Computer Integrated Manufacturing Systems, CIMS

Abbreviated source title: Jisuanji Jicheng Zhizao Xitong

Volume: 22

Issue: 2

Issue date: February 1, 2016

Publication year: 2016

Pages: 312-323

Language: Chinese

ISSN: 10065911

CODEN: JJZXFN

Document type: Journal article (JA)

Publisher: CIMS

Abstract: To improve the mining quality of service composition, according to the correlation between services and artifacts, a new approach for mining service composition patterns based on artifact-aware aspect was presented. In this method, the frequent service execution patterns were mined with AprioriTid algorithm. The service composition patterns were obtained according to the complete business processes in the discovery service execution models of artifact lifecycle. The experimental results showed the effectiveness of the proposed method. © 2016, CIMS. All right reserved.

Number of references: 27

Main heading: Service oriented architecture (SOA)

Controlled terms: Administrative data processing - Enterprise resource management - Information services - Life cycle - Mining - Quality of service

Uncontrolled terms: Aprioritid algorithm - Business Process - Business process management - Mining services - Service composition patterns - Service compositions - Service execution - Service frequent pattern

Classification code: 502.1 Mine and Quarry Operations - 722.4 Digital Computers and Systems - 723.2 Data Processing and Image Processing - 903.4 Information Services - 912.2 Management

DOI: 10.13196/j.cims.2016.02.004

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

447.

Accession number: 20163302706361

Title: Error model and verification of three degrees of freedom parallel mechanical leg on hexapod drilling robot

Authors: Rong, Yu^{1, 2}; Liu, Shuangyong²; Han, Yong²; Lin, Feng²; Li, Kai²

Author affiliation:

1 College of Mechanical Dlectronical and Engineering, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

2 CiTiC Dicastal Wheel Manufacturing Co., Ltd., Qinhuangdao; 066004, China

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 32

Issue: 15

Issue date: August 1, 2016

Publication year: 2016

Pages: 18-25

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering

Abstract: In the process of large passenger aircraft manufacturing and assembly, a lot of drilling and milling work needs to be done. Due to the limitation of the structure, the traditional drilling and milling machines can't be used in the drilling and milling work of large passenger aircraft. The hexapod robot with motorized spindle on its trunk is very suitable for the drilling and milling work. The hexapod robot can crawl on the aircraft's

exterior surface through suckers on its foot. So the hexapod robot can do the drilling and milling work by the motorized spindle on its trunk. For the hexapod drilling robot, a new type of 3-DOF (3 degrees of freedom) mechanical leg based on (U+UPS)P+UPS parallel mechanism is presented (U, P and S represent universal pair, prismatic pair and spherical joint, respectively). The decoupling performance of the mechanical leg's motions is very good, and its 2 rotational motions are completely decoupled. Its control algorithm is very simple, so it can be real-time controlled very easily. In order to improve the accuracy of the hexapod drilling robot, the error modeling and evaluation method of the mechanical leg is established. The prototype is manufactured by precision design, and the error calibration experiment is done. First, using the vector chain method, the error vector constraint equation is established and the error propagation model is obtained. Using the error model, the mechanical leg's output errors with a given set of error sources can be calculated. Also, the mechanical leg's tolerance allocation with a given set of output errors can be calculated too. In order to evaluate the error transfer performance of the mechanical leg, a set of error sensitivity evaluation indices are defined, and the distribution of error sensitivity evaluation indices in the mechanical leg's workspace is drawn. It reveals that the error transfer characteristics of the mechanical leg are good in the central area of the workspace. Based on the set of indices, the error sensitivity of the mechanical leg is evaluated. Based on the comprehensive consideration of various performance indices of the mechanical leg, the structure parameters are designed by Monte Carlo method. The parameters are as follows: the distance between the universal joints which are connected to the fixed platform is 200 mm, the length of the middle connecting rod is 70 mm, the length of the end connecting rod is 50 mm, and the distance between the middle connecting rod and the main branch's universal joint is 450 mm. Based on this set of structural parameters, the mechanical leg's prototype is manufactured. Finally, using high precision robot calibration system, the error calibration experiment of mechanical leg is done, and the error characteristics of the mechanical leg's prototype are obtained. Experimental results indicate that the deviations between the measured and the theoretical position error are less than 0.003 mm, the deviations between the measured and the theoretical attitude error are less than 0.05°, and the deviations between the measured and the theoretical error sensitivity evaluation index are less than 0.05. So, the error of mechanical leg's prototype is in reasonable range, and the structure and parameters of the mechanical leg have been proved to be reasonable. © 2016, Editorial Department of the Transactions of the Chinese Society of Agricultural Engineering. All right reserved.

Number of references: 24

Main heading: Errors

Controlled terms: Calibration - Connecting rods - Degrees of freedom (mechanics) - Error analysis - Experiments - Fighter aircraft - Fixed platforms - Machine tools - Mechanics - Mechanisms - Milling (machining) - Models - Monte Carlo methods - Offshore oil wells - Robots - Transportation - Universal joints

Uncontrolled terms: Error characteristics - Error propagation model - High Precision Robot - Parallel mechanical legs - Sensibility - Three degrees of freedom - Tolerance allocation - Transfer characteristics

Classification code: 511.2 Oil Field Equipment - 512.1.1 Oil Fields - 601.2 Machine Components - 601.3 Mechanisms - 603.1 Machine Tools, General - 604.2 Machining Operations - 652.1.2 Military Aircraft - 731.5 Robotics - 901.3 Engineering Research - 922.2 Mathematical Statistics - 931.1 Mechanics

Numerical data indexing: Size 2.00e-01m, Size 3.00e-06m, Size 4.50e-01m, Size 5.00e-02m, Size

7.00e-02m

DOI: 10.11975/j.issn.1002-6819.2016.15.003

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

448.

Accession number: 20155101680542

Title: Synthesis and application of magnetic chitosan nanoparticles in oilfield

Authors: Lian, Qi1 ; Zheng, Xuefang1

Author affiliation:

1 College of Chemical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Russian Journal of Physical Chemistry A

Abbreviated source title: Russ. J. Phys. Chem. A

Volume: 90

Issue: 1

Issue date: January 1, 2016

Publication year: 2016

Pages: 158-165

Language: English

ISSN: 00360244

CODEN: RJPCBS

Document type: Journal article (JA)

Publisher: Maik Nauka-Interperiodica Publishing

Abstract: The novel magnetic Co_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticles has the advantage of excellent

biodegradation and a high level of controllability. The Co_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticles was prepared successfully. The size of the Co_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticles were all below 100 nm. The saturated magnetization of the Co_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticles could reach 80 emu/g and showed the characteristics of superparamagnetism at the same time. The image of TEM and SEM electron microscopy showed that the cubic-shape magnetic Co_{0.5}Mn_{0.5}Fe₂O₄particles were encapsulated by the spherical chitosan nanoparticles. The evaluation on the interfacial properties of the product showed that the interfacial tension between crude oil and water could be reduce to ultra-low values as low as 10-3mN/m when the magnetic Co_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticle was used in several blocks in Shengli Oilfield without other additives. Meanwhile, the magnetic Co_{0.5}Mn_{0.5}Fe₂O₄-chitosan nanoparticles possessed good salt-resisting capacity. © 2016 Pleiades Publishing, Ltd.

Number of references: 24

Main heading: Nanomagnetism

Controlled terms: Biodegradation - Chitin - Chitosan - Crude oil - Magnetism - Manganese - Manganese removal (water treatment) - Nanoparticles - Oil fields - Oil well flooding - Superparamagnetism - Surface active agents - Surface tension - Synthesis (chemical)

Uncontrolled terms: Chitosan nanoparticles - Cubic shape - Interfacial property - Magnetic chitosan - Magnetic nano-particles - Saturated magnetization - Shengli Oilfield

Classification code: 445.1 Water Treatment Techniques - 461.8 Biotechnology - 511.1 Oil Field Production Operations - 512.1 Petroleum Deposits - 512.1.1 Oil Fields - 543.2 Manganese and Alloys - 701.2 Magnetism: Basic Concepts and Phenomena - 761 Nanotechnology - 802.2 Chemical Reactions - 803 Chemical Agents and Basic Industrial Chemicals - 804.1 Organic Compounds - 931.2 Physical Properties of Gases, Liquids and Solids - 933 Solid State Physics

Numerical data indexing: Size 1.00e-07m

DOI: 10.1134/S0036024415120237

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

449.

Accession number: 20160101768002

Title: A novel ultrasonic method of large-diameter piles defect type detection based on WPD and PNN

Authors: Zhang, Lixin¹ ; Li, Huijian² ; Wang, He¹ ; Song, Zhibin¹

Author affiliation:

- 1 Institute of Urban Construction, Hebei Normal University of Science & Technology, No. 360, West Hebei Street, Qinhuangdao, China
- 2 School of Civil Engineering and Mechanics, Yanshan University, No. 438, West Hebei Street, Qinhuangdao, China

Corresponding author: Li, Huijian (ysulhj@163.com)

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 10

Issue: 1

Issue date: January 1, 2016

Publication year: 2016

Pages: 177-184

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: In this paper, a new method, i.e., Velocity Amplitude Energy Method (VAEM) is proposed to overcome the low accuracy and reliability of Traditional Velocity Amplitude Method (TVAM) in the field of defect type detection of large-diameter concrete piles. In the proposed method, an ultrasonic transmission signal is decomposed into a series of sub-signals with the use of Wavelet Packet Decomposition (WPD). Then, a series of energies of these sub-signals, i.e., the energy spectrum of the original signal, is calculated. To enhance achievements, a comprehensive energy vector (CEV) is constructed with the use of its energy spectrum, velocity and average amplitude, which will be acted as the input vector of neural networks. Finally, Probabilistic Neural Networks (PNN) are built to train and identify. To validate achievements of TVAM and VAEM, a number of practical inspection signals from practical projects are employed. Experimental results show that the average identification rates (AIRs) of TVAM and VAEM are 55% and 79% respectively, which indicates that the proposed method achieves much better performances on accuracy and reliability. © 2016 ICIC International.

Number of references: 8

Main heading: Ultrasonic applications

Controlled terms: Concretes - Defects - Neural networks - Piles - Signal detection - Signal processing - Spectroscopy - Ultrasonic transmission - Velocity - Wavelet analysis - Wavelet decomposition

Uncontrolled terms: Defect type - Energy method - Large diameter - PNN - Ultrasonic transmission methods - Wavelet Packet Decomposition

Classification code: 408.2 Structural Members and Shapes - 412 Concrete - 716.1 Information Theory and Signal Processing - 753.1 Ultrasonic Waves - 753.3 Ultrasonic Applications - 921 Mathematics - 921.3 Mathematical Transformations - 951 Materials Science

Numerical data indexing: Percentage 5.50e+01%, Percentage 7.90e+01%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

450.

Accession number: 20163702788340

Title: Mining critical nodes in software execution network based on complex network

Authors: Wang, Lei^{1, 2, 3}; Dong, Jun^{1, 3}; Ren, Jiadong^{1, 3}

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, No. 360, Hebei Ave, Qinhuangdao; 066004, China

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3 The Key Laboratory for Computer Virtual Technology and System Integration of Hebei Province, No. 438, Hebei Ave, Qinhuangdao; 066004, China

Corresponding author: Wang, Lei (wangl216@163.com)

Source title: ICIC Express Letters, Part B: Applications

Abbreviated source title: ICIC Express Lett Part B Appl.

Volume: 7

Issue: 9

Issue date: September 1, 2016

Publication year: 2016

Pages: 1879-1884

Language: English

ISSN: 21852766

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: It is significant for measuring the importance of nodes accurately to improve software stability and robustness in software network. A software execution directed network takes function as a node and relationship of function as an edge in this paper. To find the critical nodes in the network, a novel method is proposed to measure the nodes' importance by means of depth search mining in software execution. According to the principle of cascading failure, a novel critical nodes metrics FID is defined for nodes measuring and sorting. Critical nodes mining (CNM) algorithm is put forward for calculating FID value of each node and sorting. We choose top-ranking nodes as critical nodes which play an important role in software execution process. Experimental results show that CNM algorithm can measure the critical nodes accurately in software network. © 2016 ICIC International.

Number of references: 12

Main heading: Complex networks

Controlled terms: Computer science - Surveying

Uncontrolled terms: Cascading failures - Critical node - Depth search - Directed network
- Network-based - Software execution - Software network - Software stabilities

Classification code: 405.3 Surveying - 722 Computer Systems and Equipment

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

451.

Accession number: 20163402725411

Title: Investigation on the storage method of blurred art image with retrieval and processing

Authors: Bo, Jingyi¹ ; Wang, Yubin¹ ; Li, Yu Xiang¹

Author affiliation:

¹ College of Math and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei; 066004, China

Corresponding author: Bo, Jingyi (qhdbjy@126.com)

Source title: International Journal of Database Theory and Application

Abbreviated source title: Int. J. Database Theory Appl.

Volume: 9

Issue: 7

Issue date: 2016

Publication year: 2016

Pages: 19-30

Language: English

ISSN: 20054270

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: For the Chinese ancient art, stone carving experiences the etching of the natural environment and become blurred. How to process and store their images becomes a quite important problem. In this paper, an image process and storage method have been proposed. In this method, the blurred image will be firstly pretreated. Then, relative images which have high similarity with the blurred image will be retrieved in the database. Thirdly, blurred images are processed with template matching method to improve the clarity. Finally, processed images and the original images are stored in the dataset with classification. A blurred art image is used as the example to verify the validity of the method. The blurred image contains a person and a door. The query method is proposed with higher speed and precision, which is due to the pretreatment and mixed subgraph method. The pretreatment can improve the precision of the query content, while the mixed subgraph method can provide the completeness of the query content. Both the mechanism improves the retrieval precision. The blurred images excavated in the soil are often with pitting and rust, which is corresponding to the noise in the image process. In the image process step, the image is fixed up when the blurry points are big enough. The verification confirms the validity of the method.
© 2016 SERSC.

Number of references: 25

Main heading: Image matching

Controlled terms: Classification (of information) - Energy storage - Image processing - Image retrieval - Query processing - Template matching

Uncontrolled terms: Art image - Blurred image - Image pretreatment - Natural environments - Original images - Processed images - Query methods - Template matching method

Classification code: 525.7 Energy Storage - 716.1 Information Theory and Signal Processing - 723 Computer Software, Data Handling and Applications

DOI: 10.14257/ijda.2016.9.7.03

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

452.

Accession number: 20161602275617

Title: Top-k algorithm for user preferences based on selection strategy

Authors: Song, Jin-ling¹ ; Liu, Guo-hua² ; Liu, Hai-bin¹ ; Huang, Li-ming¹ ; Wu, Yun-long²

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

2 College of Computer Science and Technology, Donghua University, Shanghai, China

Corresponding author: Song, Jin-ling (Songjinling99@126.com)

Source title: International Journal of Database Theory and Application

Abbreviated source title: Int. J. Database Theory Appl.

Volume: 9

Issue: 3

Issue date: 2016

Publication year: 2016

Pages: 181-190

Language: English

ISSN: 20054270

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: In order to deal with multiple user preferences and improve query efficiency, selection strategy is adopted for top-k query to depress the compare operations. Firstly, the kth order statistics are selected randomly along with partitioning the data set basing on it, and the top-k result set can be received after several recursive partitions. Secondly, to select the kth order statistics accurately, the approximate kth order statistics is choose as threshold according to the similarity of user preference and system preference, and the top-k query result set can be accessed through simple comparison. Finally, the time complexities of presented algorithms are analyzed and their correctness and completeness are proved respectively. The experimental results show that our algorithms improve the efficiency of top-k query greatly. © 2016 SERSC.

Number of references: 19

Main heading: Information retrieval

Controlled terms: Algorithms - Efficiency - Regression analysis

Uncontrolled terms: Approximate selection - Order statistics - Query efficiency - Random selection - Recursive partition - Time complexity - Top-k query - User preferences

Classification code: 903.3 Information Retrieval and Use - 913.1 Production Engineering - 922.2 Mathematical Statistics

DOI: 10.14257/ijdta.2016.9.3.18

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

453.

Accession number: 20160601904793

Title: The research on the influence of computer music perceived value on music perception for colleges under different backgrounds based on SPSS and regression analysis

Authors: Cui, Lin1 ; Chen, Yan1 ; Li, Yang1

Author affiliation:

1 Art institute, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: International Journal of Multimedia and Ubiquitous Engineering

Abbreviated source title: Int. J. Multimedia Ubiquitous Eng.

Volume: 11

Issue: 1

Issue date: 2016

Publication year: 2016

Pages: 363-374

Language: English

ISSN: 19750080

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: The music is an art which reflects the reality emotion for the human. The music has a great influence on the life of the college students. According to listening to the music, the college students can obtain the perceived value. In this paper, we apply the regression analysis method to study whether the perceived value that the college students obtain by listening music can influence the music preference. According to investigating the college students in different backgrounds, we establish various hypotheses. Then we test these hypotheses by the data analysis and SPSS to achieve our purpose. Through the research results, we can guide better the college students to form the correct outlook of life and the values. This paper can also provide an effective reference for the subsequent researches. It has a certain theoretical value and practical significance. © 2016 SERSC.

Number of references: 18

Main heading: Students

Controlled terms: Computer music - Data handling - Data reduction - Education - Information analysis - Regression analysis

Uncontrolled terms: College students - Music perception - Music preferences - Perceived value - Regression analysis methods - Research results - SPSS - Theoretical values

Classification code: 723.2 Data Processing and Image Processing - 723.5 Computer Applications - 903.1 Information Sources and Analysis - 922.2 Mathematical Statistics

DOI: 10.14257/ijmue.2016.11.1.35

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

454.

Accession number: 20161302150036

Title: A new side-hole acoustic method to identify cast-in-situ piles defect types based on W-PNN

Authors: Li, Bingxin1 ; Li, Huijian2 ; Zhang, Lixin1 ; Zhang, Chen1

Author affiliation:

1 Institute of Urban Construction, Hebei Normal University of Science and Technology, No. 360, Hebei Avenue, Qinhuangdao, China

2 School of Civil Engineering and Mechanics, Yanshan University, No. 438, Hebei Avenue, Qinhuangdao, China

Corresponding author: Li, Huijian (ysulhj@163.com)

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 10

Issue: 4

Issue date: April 1, 2016

Publication year: 2016

Pages: 903-908

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: In the field of identifying cast-in-situ pile defect types, a new method, i.e., optimized energy method (OEM) is proposed to overcome the low accuracy and reliability of traditional method. In OEM, wavelet transform (WT) and probabilistic neural network (PNN) are combined and used to build wavelet PNN (W-PNN), which is adopted to extract the feature energy spectrum and classify defect types, respectively. Moreover, to achieve a higher accuracy, optimized energy vector (OEV) of each signal is constructed by its energy spectrum, first amplitude and velocity. As the validation of OEM, a number of inspection signals from practical projects are applied. Experimental results indicate that the proposed method can achieve much higher identification rate (IR) than traditional method, and the increase of IR is nearly 20%. © 2016, ICIC International.

Number of references: 6

Main heading: Piles

Controlled terms: Defects - Neural networks - Spectroscopy - Wavelet transforms

Uncontrolled terms: Acoustic method - Acoustic transmission - Cast-in-situ pile - Defect type - Energy method - Identification rates - Practical projects - Probabilistic neural networks

Classification code: 408.2 Structural Members and Shapes - 921.3 Mathematical Transformations - 951 Materials Science

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

455.

Accession number: 20153901303218

Title: Efficient encapsulation of LaCoO_3 perovskite in mesoporous silica induced by a chelating template

Authors: Niu, Kui¹; Liang, Liman¹; Li, Jingshi¹; Zhang, Fan¹

Author affiliation:

¹ Chemistry Department, Life Science and Technology Institute, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Niu, Kui

Source title: Microporous and Mesoporous Materials

Abbreviated source title: Microporous Mesoporous Mater.

Volume: 220

Issue date: January 15, 2016

Publication year: 2016

Pages: 220-224

Language: English

ISSN: 13871811

CODEN: MIMMFJ

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: A novel and facile chelating-template route for encapsulation of nanosized LaCoO_3 into mesoporous silica has been investigated. An amphipathic triprotic acid, which has capability to prepare perovskite LaCoO_3 powder through Pechini-type method, directs the construction of silica host and thereby fabricates LaCoO_3 /mesoporous silica composites. Powder X-ray diffraction and X-ray photoelectron spectroscopy analyses were undertaken to determine the formation of the perovskite crystalline phase. Electron microscope and nitrogen adsorption-desorption analyses were carried out to elucidate the structural features of the host-guest composites. It was demonstrated that ultrafine guest LaCoO_3 nanoparticles with perovskite rhombohedral phase were formed after calcination, and the host silica skeleton remained short-range ordered mesoporous feature after implantation. This study therefore presents a potential simple approach to encapsulating well-dispersed composite metal oxide in mesoporous silica.
© 2015 Published by Elsevier Inc.

Number of references: 20

Main heading: X ray photoelectron spectroscopy

Controlled terms: Chelation - Gas adsorption - Mesoporous materials - Metallic compounds - Metals - Perovskite - Powder metals - Silica - X ray diffraction

Uncontrolled terms: Composite metal oxides - Mesoporous Silica - Metal oxides - Nitrogen adsorption desorption - Powder X ray diffraction - Rhombohedral phase - Short-range ordered - Structural feature

Classification code: 531 Metallurgy and Metallography - 536 Powder Metallurgy - 801 Chemistry - 802.2 Chemical Reactions - 804.1 Organic Compounds - 812 Ceramics, Refractories and Glass - 812.1 Ceramics -

931.2 Physical Properties of Gases, Liquids and Solids - 931.3 Atomic and Molecular Physics

DOI: 10.1016/j.micromeso.2015.09.007

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

456.

Accession number: 20161902360213

Title: Design of query reformulation engine in data access and integration system

Authors: Liu, Xiyin^{1, 2}; Cao, Lijun^{1, 2}; Zhang, Zhongping^{1, 2}

Author affiliation:

1 Hebei Normal University of Science and Technology, China

2 College of Information Science and Engineering, Yanshan University, China

Corresponding author: Liu, Xiyin (liuxiyin2003@sina.com)

Source title: International Journal of Database Theory and Application

Abbreviated source title: Int. J. Database Theory Appl.

Volume: 9

Issue: 4

Issue date: 2016

Publication year: 2016

Pages: 277-288

Language: English

ISSN: 20054270

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: This paper introduces three core modules of query reformulation engine, mapping document, query reformulation module, and statement conversion module. Mapping document is an XML document that keeps the mapping information between local data source and related data sources; using mapping document, applications could find data sources that have mapping relationship with its local data source. The query reformulation module reformulates the query statements submitted by users to local data resource to query statements to all data sources that have mapping relationship with local data resource. The statement conversion module converts XPath statements to OQL statements that are supported by OGSA-DQP; through OGSA-EDAI in the bottom layer, the access result to the data sources could be obtained. When a user submits an XPath statement to OGSA-DQP, it calls the query reformulation module, which first checks the mapping document to find information of other data sources, then expands and reformulates this XPath statement into query statements that are suitable for the mapped data sources. Afterward, the statement conversion module converts the reformulated XPath statements into OQL statements and returns to OGSA-DQP, which then performs the query operation. © 2016 SERSC.

Number of references: 9

Main heading: Search engines

Controlled terms: Engines - Mapping

Uncontrolled terms: Integrated - Integration systems - Mapping information - Mapping relationships - Query engines - Query reformulation - Reformulation - Schema mappings

Classification code: 405.3 Surveying - 723 Computer Software, Data Handling and Applications

DOI: 10.14257/ijdt.2016.9.4.26

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

457.

Accession number: 20154301437824

Title: Photoluminescence properties of a novel red emitting NaLaTi₂O₆:Eu³⁺-phosphor

Authors: Zhang, Zhi-wei¹ ; Zhang, He¹ ; Xu, Meng-na¹ ; Zong, Xue-nan¹ ; Han, Fei¹ ; Ma, Xiao-xue¹ ; Li, Xiao-qing¹ ; Wang, Dong-jun¹

Author affiliation:

¹ Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhi-wei (zhangzhiweia@163.com)

Source title: Journal of Materials Science: Materials in Electronics

Abbreviated source title: J Mater Sci Mater Electron

Volume: 27

Issue: 1

Issue date: January 1, 2016

Publication year: 2016

Pages: 724-729

Language: English

ISSN: 09574522

E-ISSN: 1573482X

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: A novel red-emitting phosphor NaLaTi₂O₆:Eu³⁺ has been synthesized by a high-temperature solid-state reaction. X-ray powder diffraction analysis and FT-IR spectra confirmed the phase formation of NaLaTi₂O₆:Eu³⁺ materials. The photoluminescence excitation and emission spectra, the concentration dependence of the emission intensity, decay curves, and ultraviolet–visible absorption spectroscopy of the phosphor were investigated. The results showed that the phosphor could be efficiently excited by the near ultraviolet light region from 350 to 450 nm, and it exhibited red light emission. The decay time was also determined for various concentrations of Eu³⁺ in NaLaTi₂O₆. The calculated color coordinates lies in the red region. Therefore, these obtained results suggest that the prepared phosphors exhibit great potential for use as red emitting phosphor for near ultraviolet white light emitting diodes. © 2015, Springer Science+Business Media New York.

Number of references: 27

Main heading: Light emission

Controlled terms: Absorption spectroscopy - Emission spectroscopy - Europium - High temperature applications - Light emitting diodes - Phosphors - Photoluminescence - Solid state reactions - X ray powder diffraction

Uncontrolled terms: Concentration dependence - Emission intensity - High temperature solid-state reaction - Photo-luminescence excitation - Photoluminescence properties - Red emitting

phosphor - Visible absorption spectroscopy - White light emitting diodes

DOI: 10.1007/s10854-015-3809-2

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

458.

Accession number: 20151900816803

Title: Study on Flammulina Velutipes Ready-to-Eat Snacks Prepared by Microwave Vacuum Osmotic Dehydration Combined with Hot-Air Drying

Authors: Liu, Su-Wen¹ ; Chang, Xue-Dong¹ ; Song, Zi-Zi¹

Author affiliation:

¹ Department of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei Province; 066004, China

Corresponding author: Chang, Xue-Dong (scicxd@gmail.com)

Source title: Journal of Food Process Engineering

Abbreviated source title: J Food Process Eng

Volume: 39

Issue: 4

Issue date: August 1, 2016

Publication year: 2016

Pages: 357-365

Language: English

ISSN: 01458876

E-ISSN: 17454530

CODEN: JFPEDM

Document type: Journal article (JA)

Publisher: Blackwell Publishing Inc.

Abstract: Flammulina velutipes ready-to-eat snacks are not commonly known. Response surface methodology was employed to optimize the process parameters in making ready-to-eat snacks. The optimum dehydration condition was found at a sucrose concentration of 30%, a vacuum pressure of -40 ± 1.5 kPa, an osmotic time of 165 s and a microwave intensity of 65 W/g. These parameters resulted in water loss, solid gain and sensory evaluation values of 39.15%, 6.96% and 7.87, respectively. The water diffusion rate and solid gain diffusion rate were 1.55×10^{-9} and 1.29×10^{-9} m²/s, respectively, when employing the optimum microwave vacuum osmotic dehydration (MVOD) parameters. When *F. velutipes* mushrooms were dried for 180 min by hot-air drying, the water content of the ready-to-eat snack was $9.8 \pm 0.5\%$ and the water diffusion rate was 1.14×10^{-11} m²/s. Both the MVOD and the hot-air drying stages were consistent with the Page model. **Practical Applications:** Osmotic dehydration technology combined with other drying technologies, such as hot air, can improve the use value and economic benefits of fruits and vegetables. The two correlations developed by modifying second-order polynomial equations were adequate to predict the responses for the *Flammulina velutipes* samples. The water and solid effective diffusion rates were calculated at different microwave vacuum osmotic dehydration times and different hot-air drying times for *F. velutipes* mushrooms. The Page model could be used to illustrate the water loss and solid gain for these two drying stages. The *F. velutipes* mushroom snacks made using these conditions had good color, high gloss and a moderately soft texture, with a sweet and sour flavor. The developed mathematical models can be considered precise for the prediction and optimization of process parameters in experimental and industrial applications. © 2015 Wiley Periodicals, Inc.

Number of references: 30

Main heading: Dehydration

Controlled terms: Diffusion - Diffusion in liquids - Drying - Fungi - Microwaves - Osmosis - Polynomials - Solar dryers - Thermal processing (foods) - Water quality

Uncontrolled terms: Flammulina velutipes - Fruits and vegetables - Microwave intensity - Optimization of process parameters - Optimum dehydration conditions - Response surface methodology - Second-order polynomial equations - Sucrose concentration

Numerical data indexing: Percentage 3.00e+01%, Percentage 3.91e+01%, Percentage 6.96e+00%, Time 1.65e+02s

DOI: 10.1111/jfpe.12228

Database: Compendex

459.

Accession number: 20164903091429

Title: Preparation and characterization of temperature-memory nanoparticles of MIP-CS-: G-PMMA

Authors: Zheng, Xue-Fang¹ ; Lian, Qi¹ ; Yang, Hua² ; Wu, Hai-Xia³ ; Cheng, Caihong⁴ ; Yin, Gengwen⁵ ; Zhang, Weiguo⁶

Author affiliation:

1 College of Chemical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

2 School of Chemistry and Chemical Engineering, Guangxi University, Nanning; 530004, China

3 Chemical and Pharmaceutical Engineering, Hebei University of Science and Technology, Shijiazhuang; 050018, China

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6 College of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

Corresponding author: Lian, Qi (lianqilianqi517@163.com)

Source title: RSC Advances

Abbreviated source title: RSC Adv.

Volume: 6

Issue: 112

Issue date: 2016

Publication year: 2016

Pages: 110722-110732

Language: English

E-ISSN: 20462069

CODEN: RSCACL

Document type: Journal article (JA)

Publisher: Royal Society of Chemistry

Abstract: A molecular imprinted graft copolymer of chitosan with methyl methacrylate (MIP-CS-g-PMMA) was prepared by free radical polymerization with aspirin as the template molecule and ammonium persulfate as the initiator. The molecular imprinted polymers (MIPs) were characterized by FTIR, X-ray diffraction, thermo-gravimetric analysis, ¹H NMR, TEM and SEM. The mechanism of graft copolymerization and factors affecting the graft reaction were studied in detail, and the optimum reaction conditions (to the highest % G and % E as the standard) were obtained at a methylmethacrylate concentration of 1.2 mol L⁻¹, chitosan concentration of 16.67 mol L⁻¹, initiator concentration of 0.0062 mol L⁻¹, temperature of 60 °C and reaction time of 7 h. MIP-CS-g-PMMA had not only the properties of high efficiency selective recognition adsorption to the template molecules, but also of temperature memory, which was a new type of functional polymer material. © 2016 The Royal Society of Chemistry.

Number of references: 38

Main heading: Free radical polymerization

Controlled terms: Acrylic monomers - Ammonium persulfate - Bioelectric phenomena - Chitin - Chitosan - Copolymerization - Esters - Free radicals - Grafting (chemical) - Gravimetric analysis - Molecules - Thermogravimetric analysis - X ray diffraction

Uncontrolled terms: Chitosan concentration - Graft co polymerizations - Initiator concentration - Methyl methacrylates - Molecular imprinted polymers - Optimum reaction conditions - Selective recognition - Template molecules

Classification code: 461.1 Biomedical Engineering - 801 Chemistry - 802.2 Chemical Reactions - 804 Chemical Products Generally - 804.1 Organic Compounds - 815.2 Polymerization - 931.3 Atomic and Molecular Physics

Numerical data indexing: Molar_Concentration 1.20e+03mol/m³, Molar_Concentration 1.67e+04mol/m³, Molar_Concentration 6.20e+00mol/m³, Temperature 3.33e+02K, Time 2.52e+04s

DOI: 10.1039/c6ra22730a

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

460.

Accession number: 20163002641858

Title: Secure and pairing-free identity-based batch verification scheme in vehicle Ad-hoc networks

Authors: Hu, Xiaoming1 ; Wang, Jian1 ; Xu, Huajie2 ; Liu, Yan1 ; Zhang, Xiaojun3

Author affiliation:

- 1 College of Computer and Information Engineering, Shanghai Polytechnic University, Shanghai; 201209, China
- 2 School of Computer and Electronic Information, Guangxi University, Nanning; 530004, China
- 3 E & A College, Hebei Normal University of Science and Technology, Hebei; 066004, China

Corresponding author: Hu, Xiaoming (xmhu@sspu.edu.cn)

Source title: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)

Abbreviated source title: Lect. Notes Comput. Sci.

Volume: 9773

Monograph title: Intelligent Computing Methodologies - 12th International Conference, ICIC 2016, Proceedings

Issue date: 2016

Publication year: 2016

Pages: 11-20

Language: English

ISSN: 03029743

E-ISSN: 16113349

ISBN-13: 9783319422961

Document type: Conference article (CA)

Conference name: 12th International Conference on Intelligent Computing Methodologies, ICIC 2016

Conference date: August 2, 2016 - August 5, 2016

Conference location: Lanzhou, China

Conference code: 178639

Publisher: Springer Verlag

Abstract: Identity-based batch verification (IBBV) scheme is very desirable to solve efficiency, security and privacy preservation issues for vehicular ad hoc network (VANET). In 2015, Tzeng et al. proposed an IBBV scheme which was published in IEEE Transaction on Vehicular Technology. Their scheme has superior performance than other existing similar schemes in terms of security, computation cost and transmission overhead by performance evaluations. However, one time signature verification of their scheme needs two bilinear pairing operations. As it is well known, bilinear pairing is one of the most time-consuming operation in modern cryptography. Therefore, some efforts can be made to prevent the appearance of pairing and obtain better efficiency. In this paper, we propose an improved scheme of Tzeng et al.'s IBBV. Our improved IBBV scheme needs not use bilinear pairing without the lack of security and privacy-preserving. The total computation cost for signing and verifying is the constant 1.2 ms for single message and n messages respectively, which is far better performance than Tzeng et al. scheme and other similar schemes. So our improved IBBV scheme is more suitable for practical use. Finally, we apply the recovering technology of the vehicle's real identity of Tzeng et al.'s IBBV scheme to a public key authentication scheme for mobile Ad-hoc networks to address an improved pairing-free authentication scheme. © Springer International Publishing Switzerland 2016.

Number of references: 19

Main heading: Vehicular ad hoc networks

Controlled terms: Ad hoc networks - Aluminum - Authentication - Data privacy - Efficiency - Intelligent computing - Mobile ad hoc networks - Network security - Public key cryptography - Security of data - Telecommunication networks

Uncontrolled terms: Authentication scheme - Batch verification - Diffie Hellman - Public key authentication - Security and privacy - Transmission overheads - Vehicle ad-hoc networks - Vehicular technologies

Classification code: 541.1 Aluminum - 723 Computer Software, Data Handling and Applications - 913.1 Production Engineering

Numerical data indexing: Time 1.20e+00m/s

DOI: 10.1007/978-3-319-42297-8_2

Funding Details: Number; Sponsor: 2014GXNSFAA11838-2; Natural Science Foundation of Guangxi Province

Number; Acronym; Sponsor: 61103213; NSFC; National Natural Science Foundation of China

Database: Compendex

461.

Accession number: 20163102667418

Title: Silicon Carbide-Derived Carbon Prepared by Fused Salt Electrolysis and Electrochemical Performance

Authors: Wang, Shuyuan1 ; Shao, Guangjie2

Author affiliation:

1 School of Chemical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

2 State key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao; 066004, China

Corresponding author: Shao, Guangjie (shaogj@ysu.edu.cn)

Source title: Journal of Nanomaterials

Abbreviated source title: J. Nanomater.

Volume: 2016

Issue date: 2016

Publication year: 2016

Article number: 7090473

Language: English

ISSN: 16874110

E-ISSN: 16874129

Document type: Journal article (JA)

Publisher: Hindawi Publishing Corporation, 410 Park Avenue, 15th Floor, 287 pmb, New York, NY 10022, United States

Abstract: A number of carbide-derived carbon (CDC) samples were successfully synthesized by the electrolysis of SiC powder in molten CaCl₂. The electrolysis was conducted at different temperatures (850, 900, and 950°C) for 48 h in argon at an applied constant voltage of 3.1 V. The structure of the resulting carbon is characterized by X-ray diffraction, Raman spectroscopy, and transmission electron microscope techniques. Cyclic voltammetry and galvanostatic charge/discharge measurements are applied to investigate electrochemical performances of the SiC-CDC material. It can be seen that the degree of order of the SiC-CDC increases

monotonically along with elevation of reaction temperature, while the highest specific surface area 1137.74 m²/g together with a specific capacitance of 161.27 F/g at a current density 300 mA/g was achieved from sample synthesized at 900°C. © 2016 Shuyuan Wang and Guangjie Shao.

Number of references: 21

Main heading: Electrolysis

Controlled terms: Capacitance - Cyclic voltammetry - Silicon carbide - Transmission electron microscopy - X ray diffraction

Uncontrolled terms: Carbide derived carbon - Constant voltage - Degree of order - Electrochemical performance - Fused salt electrolysis - Galvanostatic charge/discharge - Reaction temperature - Specific capacitance

Classification code: 701.1 Electricity: Basic Concepts and Phenomena - 801.4.1 Electrochemistry - 804.2 Inorganic Compounds

Numerical data indexing: Specific_Surface_Area 1.14e+06m²/kg, Temperature 1.17e+03K, Temperature 1.22e+03K, Time 1.73e+05s, Voltage 3.10e+00V

DOI: 10.1155/2016/7090473

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

462.

Accession number: 20163602781105

Title: A novel face recognition algorithm based on improved retinex and sparse representation

Authors: Bo, Jingyi1 ; Wang, Yubin1 ; Lin, Zhuo1

Author affiliation:

1 College of Math and Information Science & Technology, Hebei Normal University of Science & Technology Qinhuangdao, Hebei; 066004, China

Source title: International Journal of Signal Processing, Image Processing and Pattern Recognition

Abbreviated source title: Int. J. Signal Process. Image Process. Pattern Recogn.

Volume: 9

Issue: 8

Issue date: 2016

Publication year: 2016

Pages: 233-242

Language: English

ISSN: 20054254

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: In recent years, face recognition technology has been widely used as a kind of important modern biological recognition technology. As one of the main factors that affect the recognition rate, the illumination variation has attracted the attention of many researchers. In order to improve the face recognition under illumination variation condition, a novel face recognition algorithm based on improved Retinex and sparse representation is proposed in this paper. Retinex algorithm can be used to solve the problem of face illumination variation in face recognition, but it is easy to produce 'halo' phenomenon. In order to improve the face recognition rate under the change of illumination condition. In this paper, firstly, in order to eliminate the interference of illumination on face recognition, we apply the Retinex that is improved by partial differential equations to face image processing. Then, sparse representation is used to extract face feature vector, and the voting method is used to realize the face recognition. Finally, the performance of the algorithm is tested by 3 standard face databases. The results show that the proposed algorithm can improve the face recognition rate under different illumination conditions, and has good robustness to illumination. © 2016 SERSC.

Number of references: 20

Main heading: Face recognition

Controlled terms: Algorithms - Image processing

Uncontrolled terms: Biological recognition - Face recognition algorithms - Face recognition rates - Face recognition technologies - Illumination conditions - Illumination variation - Retinex algorithms - Sparse representation

DOI: 10.14257/ijssip.2016.9.8.20

Database: Compendex

463.

Accession number: 20162802581856

Title: A new variety of *Robinia pseudoacacia* 'Beilinhuai 1'Authors: Zhang, Guojun^{1, 2}; Sun, Yuhai¹; Li, Yun¹

Author affiliation:

1 National Engineering Laboratory for Tree Breeding College of Biological Sciences and Technology, Beijing Forestry University, Beijing; 100083, China

2 College of Horticulture Science and Technology, Hebei Normal University of Science & Technology, Changli; 066600, China

Corresponding author: Li, Yun

Source title: *Linye Kexue/Scientia Silvae Sinicae*Abbreviated source title: *Linye Kexue/Sci. Silvae Sinicae*

Volume: 52

Issue: 6

Issue date: June 1, 2016

Publication year: 2016

Pages: 163

Language: Chinese

ISSN: 10017488

Document type: Journal article (JA)

Publisher: Chinese Society of Forestry

Abstract: *Robinia pseudoacacia* 'Beilinhuai 1' is a new variety selected from one mutation of *R. pseudoacacia* K5. It grows rapidly with fewer lateral branches on the trunk, shorter and finer thorn, longer leaflet, heavier dry weight of 100 leaflets, lower contents of acid detergent fiber compared with the normal *R. pseudoacacia* and K5. Thus, the new variety is an excellent multi-purpose variety. The variety can be easy to be propagated and afforested. © 2016, Editorial Department of *Scientia Silvae Sinicae*. All right reserved.

Uncontrolled terms: Acid detergent fiber - Dry weight - Multi-purpose - New variety -
Robinia pseudo-acacia

DOI: 10.11707/j.1001-7488.20160620

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

464.

Accession number: 20162202445905

Title: A recommendation method basing on synthetic strategy for agricultural science and
technology information

Authors: Song, Jinling¹ ; Huang, Liming¹ ; Gao, Yan² ; Liu, Aiyong¹ ; Liu, Haibin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

2 Liaoning Institute of Science and Technology Benxi, 117004, China

Source title: International Journal of u- and e- Service, Science and Technology

Abbreviated source title: Int. J. u e Serv. Sci. Technol.

Volume: 9

Issue: 5

Issue date: 2016

Publication year: 2016

Pages: 299-308

Language: English

ISSN: 20054246

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: To ameliorate the limitations of traditional collaborative filtering technologies and enhance the recommendation quality of agricultural science and technology information, a collaborative filtering recommendation method based on synthetic strategy is proposed. Firstly, filter the user set and user-item rating matrix according to the location of target user, which can solve the regional problem. Then, predict ratings of items according to the similarity of users or item content, which can relax the impact of the sparse rating. In addition, add the rating time to the user-item rating matrix to distinguish the timeliness of the user preference, and add user preference shifting in the similarity formula as a factor which can express the similarity of users or item content better. Our method can not only guarantee the recommended information is local and suit to current season of agricultural production, but also ensure the recommending precision under sparse rating data. © 2016 SERSC.

Number of references: 17

Main heading: Information filtering

Controlled terms: Agriculture - Collaborative filtering - Matrix algebra - Rating

Uncontrolled terms: Agricultural productions - Agricultural science and technologies - Collaborative filtering recommendations - Recommendation methods - Recommending precision - Synthetic strategies - Timeliness - User preference shifting

Classification code: 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 903.1 Information Sources and Analysis - 921.1 Algebra

DOI: 10.14257/ijunesst.2016.9.5.27

Funding Details: Number; Acronym; Sponsor: 2013YB001; HNUST; Hebei Normal University of Science and Technology

Number; Acronym; Sponsor: 2013YB007; HNUST; Hebei Normal University of Science and Technology

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

465.

Accession number: 20161102105234

Title: Improved Teaching-Learning-Based Optimization algorithms for function optimization

Authors: Li, Xia1 ; Niu, Peifeng1 ; Li, Guoqiang1 ; Liu, Jianping2 ; Hui, Huihui2

Author affiliation:

- 1 Key Lab of Industrial Computer Control Engineering of Hebei Province, Yanshan University, Qinhuangdao, China
- 2 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Proceedings - International Conference on Natural Computation

Abbreviated source title: Proc. Int. Conf. Nat. Comput.

Volume: 2016-January

Monograph title: 2015 11th International Conference on Natural Computation, ICNC 2015

Issue date: January 8, 2016

Publication year: 2016

Pages: 485-491

Article number: 7378037

Language: English

ISSN: 21579555

ISBN-13: 9781467376792

Document type: Conference article (CA)

Conference name: 11th International Conference on Natural Computation, ICNC 2015

Conference date: August 15, 2015 - August 17, 2015

Conference location: Zhangjiajie, China

Conference code: 118970

Publisher: IEEE Computer Society

Abstract: The Teaching-Learning-Based Optimization(TLBO) algorithm does not require special parameters setting for working the algorithm, but there are some shortcomings such as slow convergence speed and long running time. Therefore, some improvements have been done on the TLBO algorithm in the paper. Firstly, the population initialization of the TLBO algorithm is random, which does not ensure the uniform distribution of initial solutions in the solution space, and then it will affect the algorithm's efficiency to some

extent. Therefore, the paper proposes opposing-based learning to initialize and renew the population of the TLBO algorithm. Secondly, to efficiently speed up the convergence speed of the algorithm, a linear decreasing inertia weight (DIW) strategy and two nonlinear DIW strategies (a parabola opening upwards and a parabola opening downwards curve) are combined with the TLBO respectively. Finally, improved TLBO algorithms have been evaluated by 13 benchmark functions. The experimental results show that improved TLBO algorithms have much better optimization performances than the TLBO algorithm on most benchmark functions. © 2015 IEEE.

Number of references: 22

Main heading: Algorithms

Controlled terms: Learning algorithms - Optimization

Uncontrolled terms: Benchmark functions - Function Optimization - Inertia weight - Learning strategy - Parameters setting - Population initializations - Teaching-learning-based optimizations - Uniform distribution

Classification code: 921.5 Optimization Techniques

DOI: 10.1109/ICNC.2015.7378037

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

466.

Accession number: 20161902344551

Title: A new variety of *Tamarix chinensis* 'Binhaicui'

Authors: Zhang, Guojun¹; Liu, Zhenlin¹; Dai, Bo¹; Yang, Qing²; Zhao, Qingqing¹; Yang, Junming¹

Author affiliation:

1 College of Horticulture Science and Technology, Hebei Normal University of Science & Technology, Changli; Hebei, China

2 Life Science and Technology College, Hebei Normal University of Science & Technology, Changli; Hebei, China

Corresponding author: Yang, Junming

Source title: *Linye Kexue/Scientia Silvae Sinicae*

Abbreviated source title: *Linye Kexue/Sci. Silvae Sinicae*

Volume: 52

Issue: 3

Issue date: March 1, 2016

Publication year: 2016

Pages: 129

Language: Chinese

ISSN: 10017488

Document type: Journal article (JA)

Publisher: Chinese Society of Forestry

Abstract: *Tamarix chinensis* 'Binhaicui' is a new variety selected from one natural mutation of *Tamarix chinensis* on the coast of Bohai sea. It grows rapidly with straight trunk, dense foliage, deeper green leaves, without blossoms and in a longer growing season compared with the ordinary *Tamarix chinensis*, thus it has high ornamental value. The variety has multiple stress tolerance, such as salinity tolerance, drought and flooding resistance. It can be easy to propagate and afforest this variety by cuttings. It is an excellent new variety for landscaping in heavy coastal saline soil landscaping. © 2016, Editorial Department of Scientia Silvae Sinicae. All right reserved.

Main heading: Bins

Controlled terms: Land use

Uncontrolled terms: Coastal saline soils - Growing season - Multiple stress - New variety - Nonflowering - Salinity tolerance - *Tamarix chinensis* - *Tamarix chinensis* 'Binhaicui'

Classification code: 403 Urban and Regional Planning and Development - 694.4 Storage

DOI: 10.11707/j.1001-7488.20160316

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20171403530772

Title: An efficient designated verifier signature scheme with pairing-free and low cost

Authors: Hu, Xiaoming¹ ; Xu, Huajie² ; Liu, Yan¹ ; Wang, Jian¹ ; Tan, Wenan¹ ; Zhang, Xiaojun³

Author affiliation:

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- 2 School of Computer and Electronic Information, Guangxi University, Nanning; 530004, China
- 3 Hebei Normal University of Science & Technology, Hebei; 066004, China

Corresponding author: Hu, Xiaoming (xmhu@sspu.edu.cn)

Source title: Security and Communication Networks

Abbreviated source title: Secur. Commun. Networks

Volume: 9

Issue: 18

Issue date: December 1, 2016

Publication year: 2016

Pages: 5724-5732

Language: English

ISSN: 19390114

E-ISSN: 19390122

Document type: Journal article (JA)

Publisher: John Wiley and Sons Inc., 410 Park Avenue, 15th Floor, 287 pmb, New York, NY 10022, United States

Abstract: In a strong designated verifier signature with message recovery (SDVSWMR) scheme, only the designated receiver has the capability to recover and validate the message-signature pair. In 2015, using the bilinear pairing, Islam and Biswas presented an SDVSWMR scheme (we call it: IsBi-SDVSWMR) with non-delegatability, which has better performance than other schemes in terms of communication and computation cost. However, in this study, we address that IsBi-SDVSWM scheme does not satisfy the security property of non-delegatability as they claimed and we present two types of delegatability attack to their scheme. We also propose a new and pairing-free SDVSWMR scheme that possesses the following security requirements:

non-delegatability, unforgeability, non-transferability and privacy of signer's identity (PrSI). Compared our scheme with other existing related schemes, our scheme obtains better performance; that is, the computational cost is only 58%(lower) of IsBi-SDVSWM scheme (other schemes), and the communication cost is 800 bits that is only 68%(lower) of IsBi-SDVSWM scheme (other schemes). Copyright © 2017 John Wiley & Sons, Ltd. Copyright © 2017 John Wiley & Sons, Ltd.

Number of references: 25

Main heading: Electronic document identification systems

Controlled terms: Copyrights - Costs - Cryptography - Public key cryptography - Recovery

Uncontrolled terms: Designated receivers - Designated verifier signature scheme - Designated verifier signatures - Message recovery - non-delegatability - pairing-free - Security requirements - Strong designated verifier signatures

Classification code: 723.5 Computer Applications - 902.3 Legal Aspects - 911 Cost and Value Engineering; Industrial Economics

DOI: 10.1002/sec.1731

Funding Details: Number; Sponsor: 2014GXNSFAA11838-2; Natural Science Foundation of Guangxi Province

Number; Acronym; Sponsor: 61103213; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 61272036; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 61672022; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

468.

Accession number: 20163902845564

Title: Evolution characteristics analysis of pressure-arch of a highway tunnel under different stress conditions

Authors: Wang, S.R.1, 2, 3 ; Wang, Y.G.2, 3 ; Li, C.L.2, 3 ; Zou, Z.S.1, 3 ; Cui, F.1, 3

Author affiliation:

- 1 Opening Laboratory for Deep Mine Construction, Henan Polytechnic University, Jiaozuo; 454003, China
- 2 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao; 066004, China
- 3 Institute of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

Corresponding author: Wang, S.R. (w_sr88@163.com)

Source title: Journal of Engineering Science and Technology Review

Abbreviated source title: J. Eng. Sci. Technol. Rev.

Volume: 9

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Issue date: 2016

Publication year: 2016

Pages: 99-105

Language: English

ISSN: 17919320

E-ISSN: 17912377

Document type: Journal article (JA)

Publisher: Technological Education Institute of Kavala

Abstract: It is very important for an engineer to understand the evolution characteristics of pressure-arch of a highway tunnel under different stress conditions. After the numerical model of the highway tunnel being built, considering the lateral pressure coefficients varied from small to large, the forming process, distributional pattern and evolution characteristics of the pressure-arch of the highway tunnel under different stress states were analyzed. The numerical simulation of the step-bystep excavation was carried out along the tunnel axis, the distribution morphology and variation characteristics of the pressure-arches located in the front of working face and roof and floor of the tunnel during excavation were revealed. The results showed that the pressure-arch shapes of the tunnel mainly varied from spire, flat, convex, to sag top with the lateral pressure coefficient from small to large. And the stability of the surrounding rock near the tunnel working face became worse and worse with the principal stress difference increasing. The results are of great significance for the construction and reinforcing design of the similar engineering practice.

Number of references: 17

Main heading: Arches

Controlled terms: Convergence of numerical methods - Excavation - Numerical models - Transportation

Uncontrolled terms: Engineering practices - Evolution characteristics - Highway tunnel - Lateral pressure coefficient - Pressure arches - Stress state - Surrounding rock - Variation characteristics

Classification code: 408.2 Structural Members and Shapes - 921 Mathematics - 921.6 Numerical Methods

Funding Details: Number; Acronym; Sponsor: 51074140; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51310105020; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51474188; NSFC; National Natural Science Foundation of China

Number; Sponsor: E2014203012; Natural Science Foundation of Hebei Province

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

469.

Accession number: 20164803060797

Title: Effect of high hydrostatic pressure processing on postharvest physiology and storage quality of green asparagus spears

Authors: Feng, Haihong^{1, 2}; Yi, Jianyong¹; Bi, Jinfeng¹; Zhou, Linyan¹; Liu, Xuan¹; Li, Jun²

Author affiliation:

1 Key Laboratory of Agro-Products Processing, Institute of Agro-Products Processing Science and Technology, Chinese Academy of Agricultural Sciences, Beijing; 100193, China

2 Hebei Normal University of Science and Technology, Changli; 066600, China

Corresponding author: Bi, Jinfeng (bijinfeng2010@163.com)

Source title: Shipin Kexue/Food Science

Abbreviated source title: Shipin Kexue/Food Sc.

Volume: 37

Issue: 22

Issue date: November 25, 2016

Publication year: 2016

Pages: 224-229

Language: Chinese

ISSN: 10026630

Document type: Journal article (JA)

Publisher: Chinese Chamber of Commerce

Abstract: Changed in the postharvest physiology and storage quality of green asparagus treated by high hydrostatic pressure (HHP) were investigated for a better understanding of the effect of HHP in preserving the quality of asparagus. Green asparagus were treated by high hydrostatic pressure at various pressure levels (20, 50 and 100 MPa, respectively) for 2 min and then stored at 4°C and 90% relative humidity for 15 days. During the storage, the changes in respiration rate, malondialdehyde (MDA) content, relative cell membrane permeability, chlorophyll content, firmness, weight loss and color were determined. The results showed that compared with untreated samples, high hydrostatic pressure processing exhibited significantly decreased respiration rate, chlorophyll degradation, and maintained higher firmness and better color. These results reinforce the application of high hydrostatic pressure processing to preservation of green asparagus. © 2016, China Food Publishing Company. All right reserved.

Number of references: 19

Main heading: Pressure effects

Controlled terms: Chlorophyll - Color - Cytology - Hydraulics - Hydrostatic pressure - Physiology - Plants (botany)

Uncontrolled terms: Cell membrane permeability - Chlorophyll contents - Chlorophyll degradation - Firmness - High hydrostatic pressure - High hydrostatic pressure processing - Postharvest physiologies - Respiration rate

Classification code: 461.9 Biology - 631.1.1 Liquid Dynamics - 632.1 Hydraulics - 741.1 Light/Optics - 804.1 Organic Compounds - 931.1 Mechanics

DOI: 10.7506/spkx1002-6630-201622034

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

470.

Accession number: 20164102888138

Title: Configuration of WLAN and Ad Hoc network access point and research on internet topology control

Authors: Liu, Aiyong¹ ; Chen, Hong¹

Author affiliation:

¹ School of Mathematics and Information Science & Technology, Hebei Normal University of Science & Technology, China

Source title: International Journal of Future Generation Communication and Networking

Abbreviated source title: Int. J. Future Gener. Commun. Networking

Volume: 9

Issue: 9

Issue date: 2016

Publication year: 2016

Pages: 313-320

Language: English

ISSN: 22337857

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society

Abstract: Wireless Mesh network, a typical wireless ad hoc network, can effectively solve the “last one thousand meters” problem of broadband access. It, with features of selfforming, self-healing and high bandwidth, provides its users with better service by integrating the advantages of WLAN and ad hoc network and fully utilizing and combining with WiMAX, WiFi and other wireless technologies. In network planning, the effective configuration of access point is of great importance for network set-up cost control. A good topological structure, in addition, plays a decisive role in network throughput capacity. The research stated in the thesis studied the configuration of wireless Mesh network access point and internet topology control, simulating a pure Mesh

network connecting to external networks. By studying the relationships between such parameters as gateway connection and broadcast interval with transfer rate of packets, end to end delay and system overhead, their relationships were able to be confirmed and the correctness of the analysis results was tested by the comparative studies of the simulation results. © 2016 SERSC.

Number of references: 15

Main heading: Wireless ad hoc networks

Controlled terms: Ad hoc networks - Gateways (computer networks) - Internet - Mesh generation - MESH networking - Reconfigurable hardware - Telecommunication networks - Topology - Wi-Fi - Wireless local area networks (WLAN) - Wireless mesh networks (WMN) - Wireless telecommunication systems

Uncontrolled terms: Access points - Broadband access - Comparative studies - End to end delay - External network - Internet topologies - Topological structure - Wireless technologies

Classification code: 721.3 Computer Circuits - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.14257/ijfgcn.2016.9.9.28

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

471.

Accession number: 20163602776781

Title: Skewed pressure characteristics of equivalent load in double-arch tunnel

Authors: Li, Chun Liu^{1, 2}; Wang, Shu Ren^{1, 3}; Wang, Yong Guang¹; Cui, Fang³; Yang, Fan²

Author affiliation:

1 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao; Hebei Province; 066004, China

2 Institute of Urban Construction, Hebei Normal University of Science & Technology, Qinhuangdao; Hebei Province; 066004, China

3 Opening Laboratory for Deep Mine Construction, Henan Polytechnic University, Jiaozuo; Henan Province; 454003, China

Source title: Journal of Engineering and Technological Sciences

Abbreviated source title: J. Eng. Tech. Sci.

Volume: 48

Issue: 3

Issue date: 2016

Publication year: 2016

Pages: 345-358

Language: English

ISSN: 23375779

Document type: Journal article (JA)

Publisher: Institute for Research and Community Services, Institut Teknologi Bandung, Jl. Tamansari 64., Bandung, West Java, 40116, Indonesia

Abstract: It is of great importance to reasonably estimate the surrounding rock load of a double-arch tunnel for the design, construction and stability evaluation of the tunnel. Currently, the basic theory on surrounding rock pressure of double-arch tunnels is insufficient for properly making the design and calculations. Generally, simplified calculations based on experience are used, such as the calculation method of Protodyakonov's theory, the building code method and others. Considering the fact that the surrounding rock pressure of double-arch tunnels has skewed distribution characteristics, a computational model of a double-arch tunnel was built using data from an actual excavation of a highway tunnel. Taking some factors into consideration, such as different stress states, different construction methods and different sizes of double-arch tunnels, the pressure evolution of the surrounding rock was analyzed during step-by-step excavation of the double-arch tunnel. The results showed that in each condition the surrounding rock pressure of the double-arch tunnel displayed skewed distribution characteristics. The skewed distribution of the surrounding rock pressure varied with changes in stress state, construction sequence and excavation size. The skewed pressure of the double-arch tunnel was converted to equivalent load. The conversion method and distribution characteristics of the equivalent load are specified. They have important theoretical significance and practical value for similar engineering practices. © 2016 Published by ITB Journal Publisher.

Number of references: 18

Main heading: Tunnels

Controlled terms: Arches - Building codes - Computation theory - Excavation - Rock pressure - Rocks

Uncontrolled terms: Double arch tunnel - Numerical calculation - Pressure arches -

Skewed distribution - Surrounding rock

Classification code: 401.2 Tunnels and Tunneling - 402 Buildings and Towers - 408.2 Structural Members and Shapes - 502.1 Mine and Quarry Operations - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory

DOI: 10.5614/j.eng.technol.sci.2016.48.3.8

Funding Details: Number; Acronym; Sponsor: 51074140; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51474188; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

472.

Accession number: 20163302712327

Title: Benzoate-modified rhodamine dyes: Large change in fluorescence properties due to photoinduced electron transfer

Authors: Zhang, Xian-Fu^{1, 2}; Su, Ning³; Lu, Xulin¹; Jia, Wenyu³

Author affiliation:

1 Chemistry Department, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei Province; 066004, China

2 MPC Technologies, Hamilton; ON; L8S 3H4, Canada

3 Physics Department, Hebei Normal University of Science and Technology, Qinhuangdao; Hebei Province; 066004, China

Corresponding author: Zhang, Xian-Fu (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Luminescence

Abbreviated source title: J Lumin

Volume: 179

Issue date: November 1, 2016

Publication year: 2016

Pages: 511-517

Language: English

ISSN: 00222313

CODEN: JLUMA8

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: Six rhodamine dyes for which the benzoate is modified with NH₂ or COOH were studied by time-correlated single photon counting and steady state fluorescence technique. The absorption and fluorescence spectra, the fluorescence quantum yield as well as fluorescence lifetime values were measured in typical solvents. The data showed that molecular rigidity, the substituent type and position on the benzoate, as well as solvent have remarkable effects on fluorescence properties. NH₂ on the benzoate showed very different effect from that of COOH. NH₂ modified rhodamines exhibit much smaller fluorescence quantum yields and much shorter lifetimes, due to the very fast intramolecular photoinduced electron transfer (PET). On the substituent position effect, 5'-COOH on the benzoate leads to larger band maximum, lower fluorescence quantum yield and shorter fluorescence lifetime than that of 6'-COOH. For NH₂ substitution, however, it is 6-NH₂ that shows larger band maximum, lower fluorescence quantum yield and shorter fluorescence lifetime than that of 5'-COOH. Although the rate constant of nonradiation process for the rhodamines is varied in several orders with structure and solvent, the rate constant of radiation process, however, shows a constant value ($0.18 \times 10^9 \text{ s}^{-1}$). Quantum chemical calculations on B3LYP/6-31+G(d) level was also carried out to obtain molecular structures and free energy change to confirm the presence of PET. © 2016 Elsevier B.V.

Number of references: 35

Main heading: Fluorescence

Controlled terms: Electron transitions - Free energy - Particle beams - Quantum chemistry
- Quantum yield - Rate constants - Solvents

Uncontrolled terms: Absorption and fluorescence spectra - Fluorescence lifetimes -
Fluorescence quantum yield - Photo-induced electron transfer - Quantum chemical calculations -
Rhodamine - Steady-state fluorescence techniques - Time-correlated single photon counting

Classification code: 641.1 Thermodynamics - 741.1 Light/Optics - 801.4 Physical Chemistry - 802.2
Chemical Reactions - 803 Chemical Agents and Basic Industrial Chemicals - 932.1 High Energy Physics

DOI: 10.1016/j.jlumin.2016.07.031

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

473.

Accession number: 20162402486100

Title: Fuzzy inference for loss severity of operational risk quantification

Authors: Liu, Shuxia1 ; Mi, Haijie2

Author affiliation:

1 School of Business Administration, Hebei Normal University of Science & Technology, Qinhuangdao; 066004, China

2 Chinese Unicom Shijiazhuang branch, Shijiazhuang; 05000, China

Source title: International Journal of Simulation: Systems, Science and Technology

Abbreviated source title: Int. J. Simul. Syst. Sci. Technol.

Volume: 17

Issue: 1

Issue date: 2016

Publication year: 2016

Pages: 14.1-14.5

Language: English

ISSN: 14738031

E-ISSN: 1473804X

Document type: Journal article (JA)

Publisher: UK Simulation Society, Clifton Lane, Nottingham, NG11 8NS, United Kingdom

Abstract: To meet the Basel proposal II regulatory requirements for the Advanced Measurement Approaches in operational risk, the statistical methods of estimating operational risk technique have been explored to measure the operational risk losses in financial institutions. A fuzzy inference approach is proposed which the fuzzy parameter of lognormal distribution function is discussed in the distribution of loss severity for operational

risk quantification. The distribution of loss severity for operational risk quantification can be described a lognormal distributed by fuzzy parametric statistical inference, in which parameters is characterized as a non-negative fuzzy variable. Prior membership function can be estimated using fuzzy maximum entropy rule, and then a fuzzy simulation method can be designed to estimate posterior mean. The paper shows how fuzzy variables can improve predictive performance. By simulating the operational risk loss of Chinese commercial bank and deriving the regulatory capital allotted for operational risks by China banking industry, the result shows that economical capital for each business line is in accord with the bank's asset. © 2016, UK Simulation Society. All rights reserved.

Number of references: 22

Main heading: Fuzzy inference

Controlled terms: Codes (symbols) - Distribution functions - Maximum entropy methods - Membership functions - Risk assessment - Risk perception - Statistical methods

Uncontrolled terms: Advanced measurement approaches - Financial institution - Fuzzy variable - Log-normal distribution - Operational risks - Predictive performance - Regulatory requirements - Statistical inference

Classification code: 716.1 Information Theory and Signal Processing - 723.2 Data Processing and Image Processing - 723.4.1 Expert Systems - 914.1 Accidents and Accident Prevention - 921 Mathematics - 922.1 Probability Theory - 922.2 Mathematical Statistics

DOI: 10.5013/IJSSST.a.17.01.14

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

474.

Accession number: 20162402486614

Title: A hierarchical load balancing strategy considering communication delay overhead for large distributed computing systems

Authors: Yang, Jixiang¹ ; Ling, Ling² ; Liu, Haibin³

Author affiliation:

- 1 School of Mathematics and Statistics, Chongqing Jiaotong University, Chongqing; 400074, China
- 2 School of Materials Science and Engineering, Chongqing Jiaotong University, Chongqing; 400074, China
- 3 College of Business Administration, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

Corresponding author: Yang, Jixiang (jixiang_yang@126.com)

Source title: Mathematical Problems in Engineering

Abbreviated source title: Math. Probl. Eng.

Volume: 2016

Issue date: 2016

Publication year: 2016

Article number: 5641831

Language: English

ISSN: 1024123X

E-ISSN: 15635147

Document type: Journal article (JA)

Publisher: Hindawi Publishing Corporation, 410 Park Avenue, 15th Floor, 287 pmb, New York, NY 10022, United States

Abstract: Load balancing technology can effectively exploit potential enormous compute power available on distributed systems and achieve scalability. Communication delay overhead on distributed system, which is time-varying and is usually ignored or assumed to be deterministic for traditional load balancing strategies, can greatly degrade the load balancing performance. Considering communication delay overhead and its time-varying feature, a hierarchical load balancing strategy based on generalized neural network (HLBSGNN) is presented for large distributed systems. The novelty of the HLBSGNN is threefold: (1) the hierarchy with optimized communication is employed to reduce load balancing overhead for large distributed computing systems, (2) node computation rate and communication delay randomness imposed by the communication medium are considered, and (3) communication and migration overheads are optimized via forecasting delay. Comparisons with traditional strategies, such as centralized, distributed, and random delay strategies, indicate that the HLBSGNN is more effective and efficient. © 2016 Jixiang Yang et al.

Number of references: 29

Main heading: Distributed computer systems

Controlled terms: Hierarchical systems - Network management - Neural networks - Time varying networks

Uncontrolled terms: Communication delays - Communication medium - Distributed

computing systems - Distributed systems - Generalized neural network - Load balancing strategy -
Random delay - Time varying

Classification code: 703.1 Electric Networks - 722.4 Digital Computers and Systems - 961 Systems
Science

DOI: 10.1155/2016/5641831

Funding Details: Number; Acronym; Sponsor: 11401061; NSFC; National Natural Science Foundation of
China

Database: Compendex

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475.

Accession number: 20162602537446

Title: An Operational Matrix of Fractional Differentiation of the Second Kind of Chebyshev
Polynomial for Solving Multiterm Variable Order Fractional Differential Equation

Authors: Liu, Jianping¹ ; Li, Xia¹ ; Wu, Limeng¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei; 066004, China

Corresponding author: Liu, Jianping (liujianping0408@126.com)

Source title: Mathematical Problems in Engineering

Abbreviated source title: Math. Probl. Eng.

Volume: 2016

Issue date: 2016

Publication year: 2016

Article number: 7126080

Language: English

ISSN: 1024123X

E-ISSN: 15635147

Document type: Journal article (JA)

Publisher: Hindawi Publishing Corporation, 410 Park Avenue, 15th Floor, 287 pmb, New York, NY 10022, United States

Abstract: The multiterm fractional differential equation has a wide application in engineering problems. Therefore, we propose a method to solve multiterm variable order fractional differential equation based on the second kind of Chebyshev Polynomial. The main idea of this method is that we derive a kind of operational matrix of variable order fractional derivative for the second kind of Chebyshev Polynomial. With the operational matrices, the equation is transformed into the products of several dependent matrices, which can also be viewed as an algebraic system by making use of the collocation points. By solving the algebraic system, the numerical solution of original equation is acquired. Numerical examples show that only a small number of the second kinds of Chebyshev Polynomials are needed to obtain a satisfactory result, which demonstrates the validity of this method. © 2016 Jianping Liu et al.

Number of references: 28

Main heading: Polynomials

Controlled terms: Algebra - Differential equations - Matrix algebra - Numerical methods

Uncontrolled terms: Chebyshev polynomials - Collocation points - Engineering problems - Fractional derivatives - Fractional differential equations - Fractional differentiation - Operational matrices - Variable order fractional differential equations

Classification code: 921 Mathematics

DOI: 10.1155/2016/7126080

Funding Details: Number; Sponsor: A2015407063; Natural Science Foundation of Hebei Province

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20163902845559

Title: Evolution characteristic analysis of pressure-arch of a double-arch tunnel in water-rich strata

Authors: Li, C.L.1, 2 ; Wang, S.R.1, 3 ; Zou, Z.S.3 ; Liu, X.L.3 ; Li, D.Q.4

Author affiliation:

1 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao; 066004, China

2 Institute of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

3 Opening Project of Key Laboratory of Deep Mine Construction, Henan Polytechnic University, Jiaozuo; 454003, China

4 School of Mining Engineering, University of New South Wales, NSW; 2502, Australia

Corresponding author: Li, C.L. (lclcc_010@163.com)

Source title: Journal of Engineering Science and Technology Review

Abbreviated source title: J. Eng. Sci. Technol. Rev.

Volume: 9

Issue: 1

Issue date: 2016

Publication year: 2016

Pages: 44-51

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ISSN: 17919320

E-ISSN: 17912377

Document type: Journal article (JA)

Publisher: Technological Education Institute of Kavala

Abstract: It is of importance to analyze the morphological characterization, the evolution process and the skewed effect of pressure-arch of a double-arch tunnel in the water-rich strata. Taking a buried depth 80 m double-arch tunnel as an example, a computational model of the double-arch tunnel was built by using FLAC3D technique. Then considering some aspects including groundwater conditions, tunnel depth, construction sequences and permeability coefficients, the coupling effect of stress field and seepage field in the pressure-arch of the double-arch tunnel was analyzed. The results show that the thickness of the pressure-arch induced by step-by-step

excavation and display a step-descent skewed distribution from the left to the right of the double-arch tunnel. The permeability coefficient has a significant influence on the shape and the skewed effect of the pressure arch. The excavation of the bench method has a better arching condition than that of the expanding method. The obtained results provide a basic reference for the rock reinforcement design and safety construction of double-arch tunnels in the water-rich strata.

Number of references: 15

Main heading: Arches

Controlled terms: Computer simulation - Excavation - Groundwater - Hydraulic conductivity - Pressure effects - Tunnels

Uncontrolled terms: Computational model - Construction sequence - Double arch tunnel - Evolution characteristics - Fluid-solid coupling - Groundwater conditions - Morphological characterization - Pressure arches

Classification code: 401.2 Tunnels and Tunneling - 408.2 Structural Members and Shapes - 444.2 Groundwater - 632.1 Hydraulics - 723.5 Computer Applications - 931.1 Mechanics

Numerical data indexing: Size 8.00e+01m

Funding Details: Number; Acronym; Sponsor: 51074140; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51310105020; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51474188; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: B2015-67; HPU; Henan Polytechnic University

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

477.

Accession number: 20164102896460

Title: Effect of ^{60}Co - γ irradiation on sterilization and sensory quality of 'fenggan' chestnut namely raw ready-to-eat chestnut

Authors: Guo, Haoning 1 ; Zhao, Yuhua 1, 2 ; Chang, Xuedong 1, 2

Author affiliation:

- 1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Changli; 066600, China
- 2 Chestnut Engineering Research Center of Hebei, Yanshan Special Agricultural Technology Industry Research Institute of Hebei, Changli; 066600, China

Corresponding author: Chang, Xuedong (cxds gx@163.com)

Source title: Shipin Kexue/Food Science

Abbreviated source title: Shipin Kexue/Food Sc.

Volume: 37

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Publication year: 2016

Pages: 262-267

Language: Chinese

ISSN: 10026630

Document type: Journal article (JA)

Publisher: Chinese Chamber of Commerce

Abstract: The effect and underlying mechanism of ^{60}Co - γ irradiation on sterilization, sensory quality, and physiological and biochemical indices of 'Fenggan' chestnut namely raw ready-to-eat chestnut was examined and the optimal dose of irradiation to extend shelf life was determined. Total bacterial count, mold and yeast, coliform bacteria, and pathogenic bacteria (*Salmonella*), some sensory attributes and physical and chemical indicators of 'Fenggan' chestnut irradiated with different doses of ^{60}Co - γ were measured after 0, 10, 15, 20 and 30 days of storage. Results showed that the total count of bacteria in ^{60}Co - γ treated 'Fenggan' chestnut was much lower than that in the untreated one, and irradiation doses in the range of 3.5-5.0 kGy were able to cause a good bactericidal effect on 'Fenggan' chestnut, especially 4.0 kGy dose. Together sensory quality evaluation and physiological and biochemical analyses indicated that exposure dose of 4.0 kGy could not only effectively inactivate microorganisms and prolong the shelf life of 'Fenggan' chestnut, but also could improve sensory quality and maintain physiological and biochemical quality during its shelf life. This preliminary study indicated that the irradiation dose of 4.0 kGy can extend the shelf life by at least 20 d at 4 °C in terms of microbial safety limits. © 2016, China Food Publishing Company. All right reserved.

Number of references: 10

Main heading: Fruits

Controlled terms: Bacteria - Coliform bacteria - Gamma rays - Indicators (chemical) - Irradiation - Physiological models - Physiology - Radiation - Sensory analysis - Sterilization (cleaning)

Uncontrolled terms: 'Fenggan' chestnut - Bactericidal effects - Biochemical analysis - Biochemical indices - Biochemical quality - Pathogenic bacterium - Sensory qualities - Total bacterial count

Classification code: 461.9 Biology - 801 Chemistry - 804 Chemical Products Generally - 821.4 Agricultural Products - 931.3 Atomic and Molecular Physics

Numerical data indexing: Absorbed_Dose 3.50e+03Gy to 5.00e+03Gy, Absorbed_Dose 4.00e+03Gy, Age 8.22e-02yr

DOI: 10.7506/spkx1002-6630-201618042

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

478.

Accession number: 20160902022022

Title: One-step synthesis of shell/core structural boron and nitrogen co-doped graphitic carbon/nanodiamond as efficient electrocatalyst for the oxygen reduction reaction in alkaline media

Authors: Liu, Xiaoxu^{1, 2}; Wang, Yanhui¹; Dong, Liang¹; Chen, Xi¹; Xin, Guoxiang¹; Zhang, Yan¹; Zang, Jianbing¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, College of Materials Science and Engineering, Yanshan University, Qinhuangdao, China

2 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zang, Jianbing (diamondzjb@163.com)

Source title: Electrochimica Acta

Abbreviated source title: Electrochim Acta

Volume: 194

Issue date: March 10, 2016

Publication year: 2016

Pages: 161-167

Language: English

ISSN: 00134686

CODEN: ELCAAV

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Shell/core structural boron and nitrogen co-doped graphitic carbon/nanodiamond (BN-C/ND) non-noble metal catalyst has been synthesized by a simple one-step heat-treatment of the mixture with nanodiamond, melamine, boric acid and FeCl₃. In the process of the surface graphitization of nanodiamond with catalysis by FeCl₃, B and N atoms from the decomposition of boric acid and melamine were directly introduced into the graphite lattice to form B, N co-doped graphitic carbon shell, while the core still retained the diamond structure. Electrochemical measurements of the BN-C/ND catalyst show much higher electrocatalytic activities towards oxygen reduction reaction (ORR) in alkaline medium than its analogues doped with B or N alone (B-C/ND or N-C/ND). The high catalytic activity of BN-C/ND is attributed to the synergetic effect caused by co-doping of C/ND with B and N. Meanwhile, the BN-C/ND exhibits an excellent electrochemical stability due to the special shell/core structure. There is almost no alteration occurred in the cyclic voltammetry measurements for BN-C/ND before and after 5000 cycles. All experimental results prove that the BN-C/ND may be exploited as a potentially efficient and inexpensive non-noble metal cathode catalyst for ORR to substitute Pt-based catalysts in fuel cells. © 2016 Elsevier Ltd. All rights reserved.

Number of references: 28

Main heading: Catalyst activity

Controlled terms: Boric acid - Boride coatings - Catalysts - Cyclic voltammetry - Electrocatalysts - Electrolytic reduction - Fuel cells - Graphite - Nanodiamonds - Nitrogen - Oxygen - Precious metals - Reduction - Shells (structures)

Uncontrolled terms: Co-doped - Electrocatalytic activity - Electrochemical measurements - Electrochemical stabilities - Non-noble metal catalysts - Oxygen reduction reaction - Shell-core structures - Voltammetry measurements

Classification code: 408.2 Structural Members and Shapes - 547.1 Precious Metals - 702.2 Fuel Cells - 761 Nanotechnology - 801.4.1 Electrochemistry - 802.2 Chemical Reactions - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally - 804.2 Inorganic Compounds - 813.2 Coating Materials

DOI: 10.1016/j.electacta.2016.02.002

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

479.

Accession number: 20170403272701

Title: Optimizing the schedule of dispatching construction machines through artificial intelligence

Authors: Xing, Yan1 ; Song, Zhibin1 ; Deng, Xilu1

Author affiliation:

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Corresponding author: Xing, Yan (xingyanqq@163.com)

Source title: Chemical Engineering Transactions

Abbreviated source title: Chem. Eng. Trans.

Volume: 51

Issue date: 2016

Publication year: 2016

Pages: 493-498

Language: English

E-ISSN: 22839216

ISBN-13: 9788895608433

Document type: Journal article (JA)

Publisher: Italian Association of Chemical Engineering - AIDIC

Abstract: Most construction projects involve use of construction machines, construction plant manager has to consider both timeliness and flexibility to develop an efficient schedule of dispatching construction

machines, which can balance the operations at different construction sites. In this paper, we constructed an optimization model with multi-target as construction quality, time limit, efficiency and cost. The model consists of a database, a rule-based system and multi-target decision making modules. The database includes detailed data about construction machine types and their properties. The rule-based system module provides rules, which are utilized by inference engine for determining the most proper construction machine type. Ultimately, a final decision is made for the most proper construction machine among the alternatives of the same type using the information axiom of axiomatic design principles. In order to verify the validity of the model, evaluation of alternatives is made for the cases of both complete and incomplete information. Copyright © 2016, AIDIC Servizi S.r.l.

Number of references: 8

Main heading: Project management

Controlled terms: Decision making - Optimization

Uncontrolled terms: Construction machines - Construction plants - Construction projects - Construction quality - Construction sites - Incomplete information - Multi-target decision makings - Optimization modeling

Classification code: 912.2 Management - 921.5 Optimization Techniques

DOI: 10.3303/CET1651083

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

480.

Accession number: 20164803072282

Title: Study of wireless sensor network route based on improved ant colony algorithm

Authors: Bo, Jingyi¹ ; Wang, Yubin¹ ; Xu, Na¹

Author affiliation:

¹ Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Bo, Jingyi (qhdbjy@126.com)

Source title: International Journal of Online Engineering

Abbreviated source title: Int. J. Online Eng.

Volume: 12

Issue: 10

Issue date: 2016

Publication year: 2016

Pages: 86-90

Language: English

ISSN: 18681646

E-ISSN: 18612121

Document type: Journal article (JA)

Publisher: Kassel University Press GmbH, Diagonale 10, Kassel, 34127, Germany

Abstract: Combining the characteristics of wireless sensor network, the ant colony algorithm is applied to a wireless sensor network, and a wireless sensor network route algorithm based on energy equilibrium is proposed in this paper. This algorithm takes the energy factor into the consideration of selection of route based on probability and enhanced calculation of information so as to find out the optimal route from the source node to the target node with low cost and balanced energy, and it prolongs the life cycle of the whole network.

Number of references: 22

Main heading: Wireless sensor networks

Controlled terms: Ant colony optimization - Life cycle - Sensor nodes

Uncontrolled terms: Ant colony algorithms - Balanced energy - Energy equilibrium - Energy factors - Improved ant colony algorithm - Optimal routes - Source nodes - Target nodes

Classification code: 722 Computer Systems and Equipment - 722.3 Data Communication, Equipment and Techniques - 921.5 Optimization Techniques

DOI: 10.3991/ijoe.v12i10.6196

Database: Compendex

481.

Accession number: 20163202684415

Title: Optical properties and energy transfers of Ce³⁺ and Mn²⁺ in Ca₉LiGd_{0.667}(PO₄)₇Authors: Zhang, Zhi-wei¹; Song, Shi-tao¹; Zhang, Zhi-gang¹; Zhang, Jian-ping¹; Zhu, Yan²; Wang, Dong-jun¹

Author affiliation:

1 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

2 Physics department, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

Corresponding author: Zhang, Zhi-wei (zhangzhiweia@163.com)

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 183

Issue date: November 15, 2016

Publication year: 2016

Pages: 296-298

Language: English

ISSN: 0167577X

E-ISSN: 18734979

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: Ca₉LiGd_{0.667}(PO₄)₇(CLGPO): Ce³⁺, Mn²⁺ phosphors were synthesized using a solid state reaction method. CLGPO:Ce³⁺, Mn²⁺ exhibits an intense emission band peaked at 361 nm. Co-doping Mn²⁺ into this material can generate a red emission band at 650 nm of Mn²⁺ through Ce³⁺–Mn²⁺ energy transfers (ETs). The resonant energy transfer from Ce³⁺ to Mn²⁺ via a dipole-quadrupole mechanism was concluded and the critical distance (R_c) of the energy transfer was calculated to be 12.31 Å. The color-tunable emission in

Ce³⁺/Mn²⁺+co-doped system as a function of Mn²⁺+concentration can be realized by continuous shifting of the emission colors from blue-violet to red region. Based on the above results, CLGPO:Ce³⁺, Mn²⁺+phosphors are considered as a kind of efficient phosphors for white UV-LEDs. © 2016 Elsevier B.V.

Number of references: 7

Main heading: Manganese

Controlled terms: Calcium - Energy transfer - Light emission - Light emitting diodes - Luminescence - Optical properties - Phosphors - Solid state reactions

Uncontrolled terms: Color tunable - Dipole-quadrupole - Emission color - Intense emission - Red emission band - Resonant energy transfer - Solid state reaction method - White light emitting diodes

Classification code: 543.2 Manganese and Alloys - 549.2 Alkaline Earth Metals - 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 802.2 Chemical Reactions

DOI: 10.1016/j.matlet.2016.07.134

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

482.

Accession number: 20162602534431

Title: Skewed pressure characteristics induced by step-by-step excavation of a double-arch tunnel based on infrared thermography

Title of translation: Značajke asimetričnog tlaka induciranog postupnim iskapanjem tunela s dvostrukim svodom na osnovu infracrvene termografije

Authors: Wang, Shu-Ren^{1, 2} ; Li, Chun-Liu^{1, 3} ; Li, De-Jian⁴ ; Zhang, Yan-Bo⁵ ; Hagan, Paul⁶

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Corresponding author: Wang, Shu-Ren (w_sr88@163.com)

Source title: Tehnicki Vjesnik

Abbreviated source title: Teh. Vjesn.

Volume: 23

Issue: 3

Issue date: June 2016

Publication year: 2016

Pages: 827-833

Language: English

ISSN: 13303651

Document type: Journal article (JA)

Publisher: Strojarski Facultet

Abstract: In order to obtain the skewed pressure characteristics, the physical model tests, adopting two kinds of excavation sequences of the bench method and the expanding method, were conducted under the different confining pressures for observation thermal radiation characteristics of the skewed pressure induced by step-by-step excavation for a double-arch tunnel. Firstly, under uniaxial compression test, the cylindrical specimen presented the cooling effect, the correlations between the axial stress of the cylindrical specimen and its surface thermal radiation temperature displayed negative nonlinear correlation in the pre-peak curve and linear correlation in the post-peak curve, respectively. Secondly, for the physical model tests, the stress-temperature-time curves showed obvious two-phase trend as first moderate decline and then rapid decline stages, and the latter was slower than the former for an excavation step after all excavations being completed. The results showed that for two different excavation sequences, the failure positions on the vault of the double-arch tunnel due to being unloaded are diametrically opposed. Then the corresponding relationships between the skewed pressure induced by double-arch tunnel excavation and the temperature field of the infrared thermal radiation were revealed, which can provide a reference for the reasonable excavation and security support of the double-arch tunnel. © 2016, Strojarski Facultet. All rights reserved.

Number of references: 18

Main heading: Excavation

Controlled terms: Arches - Bars (metal) - Compression testing - Heat radiation - Infrared radiation

Uncontrolled terms: Different confining pressures - Double arch tunnel - Non-linear correlations - Physical model - Pressure characteristics - Radiation characteristics - Surface thermal radiation - Uni-axial compression tests

Classification code: 408.2 Structural Members and Shapes - 535.1.2 Rolling Mill Practice - 641.2 Heat Transfer - 741.1 Light/Optics

DOI: 10.17559/TV-20151217142924

Funding Details: Number; Acronym; Sponsor: 51074140; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51310105020; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 51474188; NSFC; National Natural Science Foundation of China

Database: Compendex

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483.

Accession number: 20162002399651

Title: Tunable luminescence and energy transfer properties of LiSrPO₄: Ce³⁺, Tb³⁺, Mn²⁺phosphors

Authors: Zhang, Zhi-Wei¹ ; Hou, Jian-Wei¹ ; Li, Jing¹ ; Wang, Xin-Ya¹ ; Zhu, Xiao-Yan¹ ; Qi, Hong-Xia¹ ; Lv, Rui-Jiao¹ ; Wang, Dong-Jun¹

Author affiliation:

¹ Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China

Corresponding author: Zhang, Zhi-Wei (zhangzhiweia@163.com)

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 682

Issue date: October 15, 2016

Publication year: 2016

Pages: 557-564

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: A series of single-composition phosphors LiSrPO₄: Ce³⁺, Tb³⁺, Mn²⁺ have been prepared via a high-temperature solid-state reaction process. X-ray diffraction (XRD), scanning electric microscopy (SEM), photoluminescence (PL) spectra, and lifetimes were utilized to characterize the samples. The luminescence properties of Ce³⁺ in LiSrPO₄ have been discussed. The energy transfer process from Ce³⁺ to Tb³⁺/Mn²⁺ has been demonstrated to be a resonant type via the dipole-dipole/quadrupole-quadrupole interaction mechanism, respectively. The emissive colors of LiSrPO₄: Ce³⁺, Tb³⁺, Mn²⁺ samples can be adjusted from blue to green and from blue to red-orange by the energy transfer of Ce³⁺, Tb³⁺ and Ce³⁺, Mn²⁺, respectively. More importantly, white emission has been obtained through adjusting the relative concentrations of Ce³⁺, Tb³⁺ and Mn²⁺ ions in the LiSrPO₄ host under UV. It is suggested the present phosphors can be potentially applied as a candidate of single-component white-light phosphor for UV-pumped w-LED. © 2016 Elsevier B.V.

Number of references: 23

Main heading: Light emission

Controlled terms: Energy transfer - High temperature applications - Light emitting diodes - Luminescence - Manganese - Phosphors - Solid state reactions - X ray diffraction

Uncontrolled terms: Energy transfer process - Full color - High temperature solid-state reaction - Interaction mechanisms - LiSrPO₄: Ce³⁺, Tb³⁺, Mn²⁺ - Luminescence properties - Photoluminescence spectrum - Relative concentration

Classification code: 543.2 Manganese and Alloys - 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 802.2 Chemical Reactions

DOI: 10.1016/j.jallcom.2016.05.011

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

484.

Accession number: 20161002073101

Title: Properties of strong-coupling bipolaron qubit in parabolic potential quantum dot

Authors: Eerdunchaolu1 ; Han, Chao1 ; Zhang, Ying1

Author affiliation:

1 Department of Physics, Hebei Normal University of Science & Technology, Qinhuangdao, China

Corresponding author: Eerdunchaolu (eerdunchaolu@163.com)

Source title: Faguang Xuebao/Chinese Journal of Luminescence

Abbreviated source title: Faguang Xuebao

Volume: 37

Issue: 2

Issue date: February 1, 2016

Publication year: 2016

Pages: 144-150

Language: Chinese

ISSN: 10007032

CODEN: FAXUEW

Document type: Journal article (JA)

Publisher: Chines Academy of Sciences

Abstract: On the basis of Lee-Low-Pines (LLP) unitary transformation, the eigenenergy and eigenfunction of the ground-state and the first excited state of the strong-coupling bipolaron in two-dimensional

quantum dot (QD) were obtained by using the variational method of Pekar type. A qubit was formed by overlaying both the ground state and the first excited state of the bipolaron system. Numerical calculations indicate that the oscillating period T_0 of qubits decreases with the increasing the electron-phonon coupling strength α , the confinement strength ω_0 of the quantum dot, and the dielectric constant ratio η ; the distribution of the probability density Q of the electrons in quantum dot oscillates periodically with time t , angle coordinate φ , and the dielectric constant ratio η , and there is a maximum at near the center and zero away from the center of quantum dot. © 2016, Science Press. All right reserved.

Number of references: 18

Main heading: Semiconductor quantum dots

Controlled terms: Eigenvalues and eigenfunctions - Electron-phonon interactions - Excited states - Ground state - Nanocrystals - Ordinary differential equations - Phonons - Probability density function - Probability distributions - Quantum computers - Quantum optics - Quantum theory

Uncontrolled terms: Bipolaron - Confinement strength - Electron-phonon coupling strengths - Numerical calculation - Probability densities - Qubit - Unitary transformations - Variational methods

Classification code: 714.2 Semiconductor Devices and Integrated Circuits - 722 Computer Systems and Equipment - 761 Nanotechnology - 921.2 Calculus - 922.1 Probability Theory - 931.4 Quantum Theory; Quantum Mechanics

DOI: 10.3788/fgxb20163702.0144

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

485.

Accession number: 20161302144686

Title: Restricted overlay routing

Authors: Yang, Shu¹; Zhao, Wei²; Jiang, Yong¹; Xu, Mingwei³; Ming, Zhongxing^{3, 4}

Author affiliation:

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2 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

3 The Department of Computer Science and Technology, Tsinghua University, Beijing, China

4 Oudmon Technology, Shenzhen, China

Corresponding author: Yang, Shu (yang.shu@sz.tsinghua.edu.cn)

Source title: International Journal of Machine Learning and Cybernetics

Abbreviated source title: Intl. J. Mach. Learn. Cybern.

Volume: 7

Issue: 2

Issue date: April 1, 2016

Publication year: 2016

Pages: 275-285

Language: English

ISSN: 18688071

E-ISSN: 1868808X

Document type: Journal article (JA)

Publisher: Springer Verlag

Abstract: Overlay routing has been widely used in Internet, mainly because of user demands for security, reliability, bandwidth, etc. Many approaches use overlay routing by deploying certain number of overlay nodes and expose them to users. Thus, users have much more flexibility in specifying their end-to-end paths. But these benefits also bring some troubles, e.g., more serious congestions may happen on some links due to the selfish nature of network. In this paper, we adopt ROR (restricted overlay routing) which will not expose all overlay nodes to users, but provide limited number of them while considering overall performance. Different users may get different overlay nodes, and they can still make their choice according to their own demands. We carry out substantial simulations under various topologies and parameters, we show that we can achieve better performance, i.e., lower Min-max link utilization. © 2015, Springer-Verlag Berlin Heidelberg.

Number of references: 35

Main heading: Artificial intelligence

Controlled terms: Software engineering

Uncontrolled terms: DiffServ - End-to-end path - Link utilization - Min-max -

Overlay nodes - Overlay routing - User demands

Classification code: 723.1 Computer Programming - 723.4 Artificial Intelligence

DOI: 10.1007/s13042-015-0437-3

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

486.

Accession number: 20163902851922

Title: Effect of Ag⁺ and PO₄³⁻ ratios on the microstructure and photocatalytic activity of Ag₃PO₄

Authors: Qin, Jiaqian¹; Zhang, Xinyu²; Yang, Chengwu²; Song, Aijun³; Zhang, Bing²; Saravanan, Rajendran⁴; Ma, Mingzhen²; Liu, Riping²

Author affiliation:

- 1 Metallurgy and Materials Science Research Institute, Chulalongkorn University, Bangkok; 10330, Thailand
- 2 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao; 066004, China
- 3 Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao; 066600, China
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Corresponding author: Qin, Jiaqian (jiaqian.q@chula.ac.th)

Source title: Functional Materials Letters

Abbreviated source title: Funct. Mater. Lett.

Volume: 9

Issue: 5

Issue date: October 1, 2016

Publication year: 2016

Article number: 1650063

Language: English

ISSN: 17936047

E-ISSN: 17937213

Document type: Journal article (JA)

Publisher: World Scientific Publishing Co. Pte Ltd

Abstract: In this work, the catalyst silver phosphate (Ag_3PO_4) with different initial ratios of Ag^+ and PO_4^{3-} in aqueous solution was synthesized by a simple precipitation method from AgNO_3 and $\text{NH}_4\text{H}_2\text{PO}_4$ which were used as the precursor. After that, the prepared samples were characterized by different techniques such as field emission scanning electron microscopy (FE-SEM), X-ray diffraction (XRD), UV-visible diffuse reflectance spectroscopy (UV-DRS) and decomposition evolution of rhodamine B (RhB) solution. The results indicate that the initial ratios of $\text{Ag}^+/\text{PO}_4^{3-}$ in aqueous solution can modify the morphology and also it can significantly affect the photocatalytic performance. During photocatalytic process, the rich Ag^+ ion Ag_3PO_4 can form the surface plasmon resonance (SPR) of Ag nanoparticles, which inhibit the reduction of Ag_3PO_4 resulting in higher photocatalytic activity and stability. © 2016 World Scientific Publishing Company.

Number of references: 19

Main heading: Silver

Controlled terms: Enamels - Field emission microscopes - Photocatalysis - Photocatalysts
- Precipitation (chemical) - Scanning electron microscopy - Solutions - Surface plasmon resonance
- X ray diffraction

Uncontrolled terms: Field emission scanning electron microscopy - Organic dye -
Photocatalytic activities - Photocatalytic performance - Photocatalytic process - Precipitation methods
- UV-visible diffuse reflectance spectroscopy - Visible-light photocatalysts

DOI: 10.1142/S1793604716500636

Funding Details: Number; Acronym; Sponsor: CU-58-028-AM; CU; Chulalongkorn University

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20163902845921

Title: Chelating-Template-Assisted in Situ Encapsulation of Zinc Ferrite Inside Silica Mesopores for Enhanced Gas-Sensing Characteristics

Authors: Niu, Kui1 ; Liang, Liman1 ; Peng, Fei1 ; Zhang, Fan1 ; Gu, Yao2 ; Tian, Hongyan1

Author affiliation:

1 Chemistry Department, College of Life Science and Technology, Center of Instrumental Analysis, Hebei Normal University of Science and Technology, Qinhuangdao; 066004, China

2 Key Laboratory of Food Colloids and Biotechnology, Ministry of Education, Jiangnan University, Wuxi; 214122, China

Corresponding author: Niu, Kui (kui-niu@outlook.com)

Source title: ACS Applied Materials and Interfaces

Abbreviated source title: ACS Appl. Mater. Interfaces

Volume: 8

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Issue date: September 21, 2016

Publication year: 2016

Pages: 24682-24691

Language: English

ISSN: 19448244

E-ISSN: 19448252

Document type: Journal article (JA)

Publisher: American Chemical Society

Abstract: A facile in situ approach has been designed to synthesize zinc ferrite/mesoporous silica guest-host composites. Chelating surfactant, N-hexadecyl ethylenediamine triacetic acid, was employed as structure-directing agent to fabricate mesoporous silica skeleton and simultaneously as complexing agent to incorporate stoichiometric amounts of zinc and iron ions into silica cavities. On this basis, spinel zinc ferrite nanoparticles with grain sizes less than 3 nm were encapsulated in mesoporous channels after calcination. The silica mesostructure, meanwhile, displayed a successive transformation from hexagonal $p6mm$ through bicontinuous cubic $Ia3-d$ to lamellar phase with increasing the dopant concentration in the initial template solution. In comparison with zinc ferrite nanopowder prepared without silica host, the composite with bicontinuous

architecture exhibited higher sensitivity, lower detection limit, lower optimum working temperature, quicker response, and shorter recovery time in sensing performance toward hydrogen sulfide. The significant improvements are from the high surface-to-volume ratio of the guest oxides and the three-dimensional porous structure of the composite. We believe the encapsulation route presented here may pave the way for directly introducing complex metal oxide into mesoporous silica matrix with tailorable mesophases for applications in sensing or other fields. © 2016 American Chemical Society.

Number of references: 67

Main heading: Zinc sulfide

Controlled terms: Catalyst activity - Chelation - Ferrite - Gas sensing electrodes - Hydrogen sulfide - Mesoporous materials - Metal ions - Metals - Silica - Sulfur determination - Zinc - Zinc compounds

Uncontrolled terms: Gas sensing characteristics - High surface-to-volume ratio - Hydrogen sulfide sensor - Lower detection limit - Mesophases - Mesoporous composites - Structure directing agents - Zinc ferrite

Classification code: 531.1 Metallurgy - 531.2 Metallography - 546.3 Zinc and Alloys - 801 Chemistry - 802.2 Chemical Reactions - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally - 804.2 Inorganic Compounds

Numerical data indexing: Size 3.00e-09m

DOI: 10.1021/acsami.6b06689

Funding Details: Acronym; Sponsor: MOE; Ministry of Education
Number; Acronym; Sponsor: 21503067; NSFC; National Natural Science Foundation of China
Number; Sponsor: JDSJ2014-02; Jiangnan University

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

488.

Accession number: 20164903079736

Title: Spatiotemporal operations on spatiotemporal XML data using XQuery

Authors: Bai, Luyi1 ; Lin, Zhuo2 ; Xu, Changming1

Author affiliation:

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- 2 College of Mathematics and Information Technology, Hebei Normal University of Science And Technology, Qinhuangdao, China

Source title: 2016 12th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery, ICNC-FSKD 2016

Abbreviated source title: Int. Conf. Nat. Comput., Fuzzy Syst. Knowl. Discov., ICNC-FSKD

Monograph title: 2016 12th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery, ICNC-FSKD 2016

Issue date: October 19, 2016

Publication year: 2016

Pages: 1278-1282

Article number: 7603362

Language: English

ISBN-13: 9781509040933

Document type: Conference article (CA)

Conference name: 12th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery, ICNC-FSKD 2016

Conference date: August 13, 2016 - August 15, 2016

Conference location: Changsha, China

Conference code: 124487

Publisher: Institute of Electrical and Electronics Engineers Inc.

Abstract: With the rapid development of the Internet, XML is rapidly emerging and has been the de-facto standard for representing and exchanging data on the Web due to its simplicity, readability, and portability. Researches on spatiotemporal data based on XML received much attention since a considerable amount of data emerging in spatiotemporal applications both from academia and industry. However, although XML has been employed to model and handle spatiotemporal data, the study of spatiotemporal XML data has only recently started and still merits further attention. In this paper, we study spatiotemporal operations using XQuery. After presenting architecture of querying process of spatiotemporal data, we illustrate how to query spatiotemporal data

using XQuery. Furthermore, we investigate query result processing by listing three query examples to show the practicality and compatibility by using XQuery. © 2016 IEEE.

Number of references: 15

Main heading: XML

Controlled terms: Fuzzy systems

Uncontrolled terms: De facto standard - Query results - Querying process - Spatio-temporal applications - Spatio-temporal data - spatiotemporal operations - XML data - XQuery

Classification code: 961 Systems Science

DOI: 10.1109/FSKD.2016.7603362

Funding Details: Number; Acronym; Sponsor: 61402087; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

489.

Accession number: 20163202699589

Title: Numerical solution of variable order fractional differential equation with Chebyshev polynomials

Authors: Li, Xia1 ; Liu, Jianping1 ; Liu, Weina2 ; Ma, Huiquan1 ; Zhang, Ruifeng1

Author affiliation:

1 College of Mathematics and Information Science, Hebei Normal University of Science and Technology, No. 360, West Hebei Avenue, Qinhuangdao; 066004, China

2 Vocational Education Research Center, Hebei Institute of Foreign Languages, No. 6, Qianjin Rd., Nandaihe, Qinhuangdao; 066311, China

Corresponding author: Liu, Jianping (liujianping0408@126.com)

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 10

Issue: 8

Issue date: August 1, 2016

Publication year: 2016

Pages: 2003-2010

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office

Abstract: Variable order calculus is a natural candidate to provide an effective mathematical framework for the description of complex dynamical problems. Therefore, we propose a numerical method to solve a kind of variable order nonlinear fractional differential equations with the second kind of Chebyshev polynomials. The main idea of this approach is that we derive two kinds of differential operational matrixes with Chebyshev polynomials. With the operational matrixes, the original equation is transformed into the products of several dependent matrixes, which can be viewed as an algebraic system after taking the collocation points. The numerical solution of the original equation is obtained by solving the algebraic system. Finally, the example shows that the numerical method is computationally efficient. © 2016, ICIC Express Letters Office. All rights reserved.

Number of references: 12

Main heading: Polynomials

Controlled terms: Algebra - Calculations - Differential equations - Nonlinear equations - Numerical methods

Uncontrolled terms: Chebyshev polynomials - Collocation points - Computationally efficient - Mathematical frameworks - Nonlinear fractional differential equations - Operational matrix - Variable order fractional differential equations - Variable-order calculus

Classification code: 921 Mathematics

Funding Details: Number; Sponsor: A2015407063; Natural Science Foundation of Hebei Province

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

490.

Accession number: 20162202440398

Title: Improving the prediction of protein structural class for low-similarity sequences by incorporating evolutionary and structural information

Authors: Kong, Liang^{1, 2}; Kong, Lingfu²; Jing, Rong²

Author affiliation:

1 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 School of Information Science and Engineering, Yanshan University, Qinhuangdao, China

Source title: Journal of Advanced Computational Intelligence and Intelligent Informatics

Abbreviated source title: J. Adv. Comput. Intell. Intelligent Informatics

Volume: 20

Issue: 3

Issue date: 2016

Publication year: 2016

Pages: 402-411

Language: English

ISSN: 13430130

E-ISSN: 18838014

Document type: Journal article (JA)

Publisher: Fuji Technology Press

Abstract: Protein structural class prediction is beneficial to study protein function, regulation and interactions. However, protein structural class prediction for low-similarity sequences (i.e., below 40% in pairwise sequence similarity) remains a challenging problem at present. In this study, a novel computational method is proposed to accurately predict protein structural class for low-similarity sequences. This method is based on support vector machine in conjunction with integrated features from evolutionary information generated with position specific iterative basic local alignment search tool (PSI-BLAST) and predicted secondary structure. Various prediction accuracies evaluated by the jackknife tests are reported on two widely-used low-similarity benchmark datasets (25PDB and 1189), reaching overall accuracies 89.3% and 87.9%, which are significantly higher than those achieved by state-of-the-art in protein structural class prediction. The experimental results suggest that our method could serve as an effective alternative to existing methods in protein structural classification, especially for low-similarity sequences. © 2016, Fuji Technology Press. All rights reserved.

Number of references: 60

Main heading: Proteins

Controlled terms: Forecasting - Iterative methods - Support vector machines

Uncontrolled terms: Basic local alignment search tools - Evolutionary information - Protein domains - Protein sequences - Scoring matrices - Secondary protein structure - Structural classification - Structural information

Classification code: 723 Computer Software, Data Handling and Applications - 804.1 Organic Compounds - 921.6 Numerical Methods

DOI: 10.20965/jaciii.2016.p0402

Funding Details: Number; Acronym; Sponsor: 61305113; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

491.

Accession number: 20160902008360

Title: Evolution characteristics analysis of pressure-arch in a double-arch tunnel

Title of translation: Analiza razvoja znaajki tlanog svoda u tunelu s dvostrukim svodom

Authors: Wang, Shu-Ren^{1, 2} ; Li, Chun-Liu^{1, 3, 4} ; Wang, Yong-Guang¹ ; Zou, Zheng-Sheng²

Author affiliation:

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4 No. 360 Hebei West Street, Haigang District, Qinhuangdao, China

Corresponding author: Wang, Shu-Ren (w_sr88@163.com)

Source title: Tehnicki Vjesnik

Abbreviated source title: Teh. Vjesn.

Volume: 23

Issue: 1

Issue date: February 2016

Publication year: 2016

Pages: 181-189

Language: English

ISSN: 13303651

Document type: Journal article (JA)

Publisher: Strojarski Facultet

Abstract: In order to provide a basis for the reinforcement design and construction safety of the double-arch tunnel, it is of theoretical and practical value to analyse the morphological characterization, the evolution process and the skewed effect of the pressure-arch in a double-arch tunnel. Based on the descriptions of the boundary parameters of the pressure-arch in a double-arch tunnel, taking the 80 m buried depth double-arch highway tunnel as the research object, the numerical calculation model of the double-arch tunnel was built by using FLAC3D, and then the morphological evolution of the pressure-arch induced by step-by-step excavation was analysed. The results showed that the pressure-arch of the double-arch tunnel displayed the skewed distribution characteristics which were gradually diminishing from the left tunnel to the right tunnel, the strain energy dissipation of the double-arch tunnel from the left tunnel to the right tunnel was from high to low, and the nonlinear response characteristics in different excavation sequences were sensitive to the changes of the stress state. The results provided a basis for the rock reinforcement design and safety construction of double-arch tunnel. © 2016, Strojarski Facultet. All rights reserved.

Number of references: 15

Main heading: Tunnels

Controlled terms: Arches - Energy dissipation - Excavation - Pressure effects - Reinforcement - Strain energy

Uncontrolled terms: Double arch tunnel - Evolution characteristics - Morphological characterization - Morphological evolution - Numerical calculation - Numerical calculation model - Pressure arches - Skewed effect

Classification code: 401.2 Tunnels and Tunneling - 408.2 Structural Members and Shapes - 525.4 Energy Losses (industrial and residential) - 931.1 Mechanics - 951 Materials Science

Numerical data indexing: Size 8.00e+01m

DOI: 10.17559/TV-20151027082900

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

492.

Accession number: 20161402177640

Title: Research of particle diameter influences on flow characteristics based on feedback valve of internal circulating fluidized bed

Authors: Hongju, Lin^{1, 2}; Dezhong, Zheng²; Wenzhe, Liao³

Author affiliation:

- 1 Key Laboratory of Measurement Technology and Instrumentation of Hebei Province, Yanshan University, Qinhuangdao, China
- 2 Hebei Normal University of Science & Technology, Qinhuangdao, China
- 3 School of Control Science and Engineering, Hebei University of Technology, Tianjin, China

Corresponding author: Hongju, Lin (lph900@hotmail.com)

Source title: Recent Patents on Engineering

Abbreviated source title: Recent Pat. Eng.

Volume: 10

Issue: 1

Issue date: April 1, 2016

Publication year: 2016

Pages: 77-84

Language: English

ISSN: 18722121

Document type: Journal article (JA)

Publisher: Bentham Science Publishers B.V., P.O. Box 294, Bussum, 1400 AG, Netherlands

Abstract: Background: Loop Seal is a key component in circulating fluidized bed. It is necessary to study its internal flow rules. Diameter of solid particle in Loop Seal is too large or small can produce bigger effects for fluidized bed operation. Objective: We will study internal flow rules in Loop Seal, and look for relationship between the key parameters of solid particle circulation and particle diameter by cold experiment. Method: The cold experiment method is introduced based on a new J-type Loop Seal of three chambers internal circulating fluidized bed for different particle diameters silica sand in the paper. It includes building the experimental device and measuring related parameters. The equivalent model and theory formula of solid particles circulation are provided. The influences of particle diameter on three key parameters of the solid particles circulation are discussed on emphasis. Results: The experiment results show that on the same conditions the height difference of two chambers in running increases as the particle diameter increasing. The dynamic head of feedback valve in running is not affected by the right lateral blow nearly, but is linear relationship with the left lateral blow, relationship between their slope coefficients and intercepts and relative value of particle diameter both are linear nearly; the resistance coefficient in the feedback valve is power exponent relationship with right lateral blow, and particle diameters have almost nothing to do with it. Conclusion: The method provides references for particle diameter selection and usage, design and operation for feedback valve of internal circulating fluidized bed. Here, we also discussed few related patents. © 2016 Bentham Science Publishers.

Number of references: 16

Main heading: Fluidized beds

Controlled terms: Fluidized bed process - Models - Particle size - Silica sand

Uncontrolled terms: Circulating fluidized bed - Cold experiments - Loop seal - Particle diameters - Solid particles

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

493.

Accession number: 20163702796483

Title: Dual-wavelength Er³⁺-doped photonic crystal fiber laser based on superimposed fiber gratings

Authors: Wang, Feng^{1, 2} ; Bi, Weihong² ; Fu, Xinghu² ; Fu, Guangwei² ; Jiang, Peng² ; Wu, Yang² ; Wang, Ying²

Author affiliation:

1 College of Mechanical Electrical and Engineering, Hebei Normal University of Science & Technology, Qinhuangdao; 066004, China

2 School of Information Science and Engineering, Yanshan University, Qinhuangdao; 066004, China

Source title: Hongwai yu Jiguang Gongcheng/Infrared and Laser Engineering

Abbreviated source title: Hongwai yu Jiguang Gongcheng Infrared Laser Eng.

Volume: 45

Issue: 8

Issue date: August 25, 2016

Publication year: 2016

Article number: 0822001

Language: English

ISSN: 10072276

Document type: Journal article (JA)

Publisher: Chinese Society of Astronautics

Abstract: A new type of dual-wavelength photonic crystal fiber laser was proposed and demonstrated, based on superimposed fiber gratings. Linear cavity structure was used to induce the laser, Er³⁺-doped Photonic Crystal Fiber was used as the gain medium, and two superimposed fiber gratings whose reflectivity were higher than 99% were used for wavelength selection. Based on gain equalization technologies, modal competition in the cavity was suppressed to realize dual-wavelength laser at room temperature. The 3 dB line-wide is less than 0.02

nm, 30 dB line-wide is less than 0.25 nm, and SMSR is 54.34 dB. The wavelength interval of dual-wavelength laser is 0.932 nm. The experimental result show that the wavelength and the laser energy of the dual-wavelength laser are stable. © 2016, Editorial Board of Journal of Infrared and Laser Engineering. All right reserved.

Number of references: 15

Page count: 5

Main heading: Photonic crystal fibers

Controlled terms: Crystal structure - Crystal whiskers - Erbium - Fiber lasers - Fibers - Nonlinear optics

Uncontrolled terms: Dual wavelength - Dual wavelength laser - Gain equalization - Gain medium - Laser energies - Linear cavity - Super-imposed fiber gratings - Wavelength selection

Classification code: 547.2 Rare Earth Metals - 741.1.1 Nonlinear Optics - 744.4 Solid State Lasers - 933.1.1 Crystal Lattice - 951 Materials Science

Numerical data indexing: Decibel 5.43e+01dB, Percentage 9.90e+01%, Size 2.00e-11m, Size 2.50e-10m, Size 9.32e-10m, Decibel 3.00e+00dB, Decibel 3.00e+01dB

DOI: 10.3788/IRLA201645.0822001

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

494.

Accession number: 20160301815371

Title: High-brightness Eu³⁺-doped Ca₉Gd(PO₄)₇red phosphor for NUV light-emitting diodes application

Authors: Zhang, Zhi-Wei¹ ; Liu, Lu¹ ; Liu, Ru¹ ; Zhang, Xiao-Yi¹ ; Peng, Xiao-Gai¹ ; Wang, Cong-Hui¹ ; Wang, Dong-Jun¹

Author affiliation:

¹ Chemical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Zhi-Wei (zhangzhiweia@163.com)

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 167

Issue date: March 15, 2016

Publication year: 2016

Pages: 250-253

Language: English

ISSN: 0167577X

E-ISSN: 18734979

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier

Abstract: A novel red-emitting phosphor $\text{Ca}_9\text{Gd}(\text{PO}_4)_7:\text{Eu}^{3+}$ has been synthesized by a high-temperature solid-state reaction. X-ray powder diffraction (XRD) analysis confirmed the phase formation of $\text{Ca}_9\text{Gd}(\text{PO}_4)_7:\text{Eu}^{3+}$ materials. The photoluminescence excitation and emission spectra, the concentration dependence of the emission intensity, and decay curves of the phosphor were investigated. The results showed that the phosphor could be efficiently excited by the near ultraviolet (NUV) light and blue light, and it exhibited red light emission. The intensity of $\text{Ca}_9\text{Gd}_0.1(\text{PO}_4)_7:0.90\text{Eu}^{3+}$ phosphors is 4.13 times than that of commercial phosphors $\text{Y}_2\text{O}_3:0.05\text{Eu}^{3+}$. The decay time was also determined for various concentrations of Eu^{3+} in $\text{Ca}_9\text{Gd}(\text{PO}_4)_7$. The calculated color coordinates lies in the red region. Therefore, these obtained results suggest that the prepared phosphors exhibit great potential for use as red emitting phosphor for near ultraviolet white light emitting diodes (NUV WLEDs). © 2016 Published by Elsevier B.V.

Number of references: 8

Main heading: Light emitting diodes

Controlled terms: Calcium - Diodes - Emission spectroscopy - Europium - High temperature applications - Light - Light emission - Luminescence - Phosphors - Photoluminescence - Solid state reactions - X ray powder diffraction

Uncontrolled terms: Color coordinates - Concentration dependence - Emission intensity - High temperature solid-state reaction - Photo-luminescence excitation - Red emitting phosphor - Red-light emission - White light emitting diodes

Classification code: 547.2 Rare Earth Metals - 549.2 Alkaline Earth Metals - 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 802.2 Chemical Reactions

DOI: 10.1016/j.matlet.2016.01.022

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

495.

Accession number: 20164703029983

Title: A novel adaptive spectrum reservation strategy in CRNs and its performance optimization

Authors: Liu, Jianping^{1, 2}; Jin, Shunfu^{1, 3}; Yue, Wuyi⁴

Author affiliation:

1 School of Information Science and Engineering, Yanshan University, Qinhuangdao, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, China

3 Key Laboratory for Computer Virtual Technology and System Integration of Hebei Province, Qinhuangdao, China

4 Department of Intelligence and Informatics, Konan University, Kobe, Japan

Corresponding author: Jin, Shunfu (jsf@ysu.edu.cn)

Source title: Optimization Letters

Abbreviated source title: Optim. Lett.

Issue date: November 15, 2016

Publication year: 2016

Pages: 1-21

Language: English

ISSN: 18624472

E-ISSN: 18624480

Document type: Article in Press

Publisher: Springer Verlag

Abstract: Spectrum reservation strategy is an effective technology for conserving communication resources in Cognitive Radio Networks. In order to better adapt to changes of the system load, we present an adaptive control approach to determine the reservation ratio of the licensed spectrum for secondary users and propose a novel adaptive spectrum reservation strategy. We then establish a three-dimensional discrete time Markov Chain model to capture the stochastic behavior of users. By using a method similar to that of the matrix geometric solution, we obtain the steady-state probability distribution for the system model, and derive the formulas for some required performance measures of two types of users. Numerical experiments and simulation experiments indicate that the system performance is sensitive to system parameters like the adaptive control factor and the admission threshold. Finally, we construct a system cost function to balance different performance measures, and present an intelligent searching algorithm to optimize the system parameters with the global minimum system cost. © 2016 Springer-Verlag Berlin Heidelberg

Main heading: Adaptive control systems

Controlled terms: Cognitive radio - Cost functions - Costs - Global optimization - Markov processes - Optimization - Probability distributions - Stochastic models - Stochastic systems

Uncontrolled terms: Adaptive Control - Admission threshold - Cognitive radio network - Global minima - Intelligent searching - Spectrum reservation - System costs

Classification code: 716.3 Radio Systems and Equipment - 731.1 Control Systems - 911 Cost and Value Engineering; Industrial Economics - 921.5 Optimization Techniques - 922.1 Probability Theory

DOI: 10.1007/s11590-016-1093-6

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

496.

Accession number: 20164102894094

Title: Multi-scale compressed sensing based on split augmented lagrangian shrinkage algorithm for image super-resolution reconstruction

Authors: Shu-yao, Tian^{1, 2}; Chun-hai, Hu¹

Author affiliation:

1 School of Electrical Engineering, Yanshan University, Qinhuangdao; 066004, China

2 School of Electromechanical, Hebei Normal University Of Science and Technology, Qinhuangdao; 066004,

China

Source title: International Journal on Smart Sensing and Intelligent Systems

Abbreviated source title: Int. J. Smart Sensing Intelligent Syst.

Volume: 9

Issue: 2

Issue date: June 2016

Publication year: 2016

Pages: 563-579

Language: English

E-ISSN: 11785608

Document type: Journal article (JA)

Publisher: Massey University

Abstract: This paper proposes a multi-scale compressed sensing algorithm in shearlet domain by exploiting discrete Shearlet transform which can optimally represent the images with edges. An image is decomposed by shearlet. The compressed sensing is deployed in each of the directional sub-bands of high frequency scales. And inverse measurement matrix is modified by the upsampling operator to enhance the resolution of image. In addition, the original image reconstructed by compressed sensing based on super-resolution can produce the low subbands with high frequency. And an split augmented lagrangian shrinkage algorithm is exploited for compressed sensing image reconstruction , which can improve reconstruction image quality and convergence rate. Experimental results has shown that the proposed method can reconstruct the image with less iterative time by using fewer samples, improve the computational efficiency as well as achieve the images with high quality.

Number of references: 24

Main heading: Image reconstruction

Controlled terms: Compressed sensing - Computational efficiency - Constrained optimization - Edge detection - Image processing - Inverse problems - Iterative methods - Lagrange multipliers - Matrix algebra - Optical resolving power - Optimization - Shrinkage - Signal reconstruction

Uncontrolled terms: Augmented Lagrangians - Convergence rates - High frequency HF - Image super-resolution reconstruction - Measurement matrix - Reconstruction image quality - Shearlet

transforms - Super resolution reconstruction

Classification code: 716.1 Information Theory and Signal Processing - 741.1 Light/Optics - 921 Mathematics - 951 Materials Science - 961 Systems Science

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

497.

Accession number: 20162802593343

Title: Drying methods used in starch isolation change properties of C-type chestnut (*Castanea mollissima*) starches

Authors: Wang, Shujun¹ ; Liu, Chang² ; Wang, Shuo¹

Author affiliation:

1 Key Laboratory of Food Nutrition and Safety, Ministry of Education, Tianjin University of Science & Technology, Tianjin; 300457, China

2 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao City; 066600, China

Corresponding author: Wang, Shujun (sjwang@tust.edu.cn)

Source title: LWT - Food Science and Technology

Abbreviated source title: LWT - Food Sci. Technol.

Volume: 73

Issue date: November 1, 2016

Publication year: 2016

Pages: 663-669

Language: English

ISSN: 00236438

CODEN: LBWTAP

Document type: Journal article (JA)

Publisher: Academic Press

Abstract: The effect of different drying methods used in starch isolation on structural and functional properties of Chinese chestnut starches was investigated. Freeze-dried (FD) starch granules exhibited some scratches and pores on their surface, which were not observed for ethanol-dried (ED) and oven-dried (OD) starch granules. ED starch showed the highest relative crystallinity and short-range molecular order of double helices, followed by OD starch, and FD starch showed the lowest values. These results indicated that freeze drying disrupted the ordered structure of starch granules. At 92.5 °C, OD starch exhibited the highest swelling power, whereas FD starch showed the lowest swelling power. ED starch showed higher gelatinization temperatures and enthalpy changes than OD and FD starches, indicating that ED starch contained higher amount of crystallites than did OD and FD starches. FD and OD starches were hydrolyzed more greatly by alpha-amylase and amyloglucosidase compared with ED starch. Our results showed that freeze-drying disrupted the ordered structure of chestnut starch and it is not preferred for starch isolation. © 2016 Elsevier Ltd

Number of references: 31

Main heading: Starch

Controlled terms: Drying - Finite difference method - Fruits - Gelation - Granulation
- Low temperature drying - Structure (composition)

Uncontrolled terms: Castanea mollissima - Chestnut starches - Freeze drying -
Functional properties - Gelatinization - Gelatinization temperature - Relative crystallinity -
Swelling power

Classification code: 802.3 Chemical Operations - 804.1 Organic Compounds - 821.4 Agricultural
Products - 921.6 Numerical Methods - 951 Materials Science

DOI: 10.1016/j.lwt.2016.07.012

Funding Details: Number; Acronym; Sponsor: 31401651; NSFC; National Natural Science Foundation of
China

Number; Acronym; Sponsor: 31522043; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20164102899192

Title: Study on energy saving strategy and Nash equilibrium of base station in cognitive radio network

Authors: Ma, Xiao-Tong^{1, 2}; Jin, Shun-Fu^{1, 2}; Liu, Jian-Ping^{1, 3}; Huo, Zhan-Qiang⁴

Author affiliation:

1 School of Information Science and Engineering, Yanshan University, Qinhuangdao; 066004, China

2 The Key Laboratory for Computer Virtual Technology and System Integration of Hebei Province, Qinhuangdao; 066004, China

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Corresponding author: Jin, Shun-Fu (jsf@ysu.edu.cn)

Source title: Tongxin Xuebao/Journal on Communications

Abbreviated source title: Tongxin Xuebao

Volume: 37

Issue: 7

Issue date: July 1, 2016

Publication year: 2016

Pages: 172-181

Language: Chinese

ISSN: 1000436X

Document type: Journal article (JA)

Publisher: Editorial Board of Journal on Communications

Abstract: Spectrum utilization can be improved in cognitive radio network (CRN), however, the problem of increasing communication energy consumption was also brought. Under the premise of ensuring the experience quality of system users, the concept of green communication in CRN was introduced, and a novel energy saving strategy for base station was proposed. Accordingly, a two-dimensional discrete time Markov stochastic model with preemptive priority service and single working vacation was established. Using the method of a matrix geometric solution, the system performance of the energy saving strategy was evaluated in terms of energy saving rate, channel utilization, average delay of secondary users and interruption of secondary users. The theoretical analysis results and the simulation results verify the effectiveness of the energy saving strategy. From

the perspective of economics, a profit function was constructed and a nonlinear optimization algorithm was designed to investigate the Nash equilibrium and the socially optimal behavior of the secondary user packets, then a pricing policy of licensed spectrum for secondary users was formulated. In view of different system parameters, the system experiment was carried out to validate the rationality of the pricing policy. © 2016, Editorial Board of Journal on Communications. All right reserved.

Number of references: 14

Main heading: Cognitive radio

Controlled terms: Base stations - Computation theory - Costs - Economics - Energy conservation - Energy utilization - Game theory - Mobile telecommunication systems - Nonlinear programming - Optimization - Radio - Radio systems - Stochastic models - Stochastic systems

Uncontrolled terms: Cognitive radio network - Energy-saving strategies - Intelligent optimization - Pricing policy - Working vacation

Classification code: 525.2 Energy Conservation - 525.3 Energy Utilization - 716.3 Radio Systems and Equipment - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 911 Cost and Value Engineering; Industrial Economics - 921.5 Optimization Techniques - 922.1 Probability Theory - 961 Systems Science - 971 Social Sciences

DOI: 10.11959/j.issn.1000-436x.2016146

Funding Details: Number; Acronym; Sponsor: 61472342; NSFC; National Natural Science Foundation of China

Number; Acronym; Sponsor: 61572379; NSFC; National Natural Science Foundation of China

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

499.

Accession number: 20163402727383

Title: A new variety of *Robinia pseudoacacia* 'Beilinhuai 2'

Authors: Zhang, Guojun^{1, 2}; Sun, Yuhan¹; Li, Yun¹

Author affiliation:

¹ National Engineering Laboratory for Tree Breeding College of Biological Sciences and Technology, Beijing

Forestry University, Beijing; 100083, China

2 College of Horticulture Science and Technology, Hebei Normal University of Science & Technology, Changli; 066600, China

Corresponding author: Li, Yun

Source title: Linze Kexue/Scientia Silvae Sinicae

Abbreviated source title: Linze Kexue/Sci. Silvae Sinicae

Volume: 52

Issue: 7

Issue date: July 1, 2016

Publication year: 2016

Pages: 170

Language: Chinese

ISSN: 10017488

Document type: Journal article (JA)

Publisher: Chinese Society of Forestry

Abstract: Robinia pseudoacacia 'Beilinhuai 2' is a new variety selected from one mutation of Robinia pseudoacacia K3. It grows rapidly with straight trunk, longer internode, shorter and thinner thorn (6.59 mm), smaller number of leaflets (13-17), thinner leaf compared with ordinary Robinia pseudoacacia and K3. It can be easy to propagate and afforest, and thus it is an excellent multi-purpose new variety. © 2016, Editorial Department of Scientia Silvae Sinicae. All right reserved.

Uncontrolled terms: Multi-purpose - New variety - Robinia pseudo-acacia

Numerical data indexing: Size 6.59e-03m

DOI: 10.11707/j.1001-7488.20160721

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20121514937823

Title: Forecast of railway freight volumes based on LS-SVM with grey correlation analysis

Authors: Geng, Li-Yan¹ ; Zhang, Tian-Wei² ; Zhao, Peng³

Author affiliation:

- 1 School of Economics and Management, Shijiazhuang Tiedao University, Shijiazhuang 050043, China
- 2 School of Transportation, Shijiazhuang Tiedao University, Shijiazhuang 050043, China
- 3 E and A College of Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Geng, L.-Y. (gengliyan_28117@yahoo.com.cn)

Source title: Tiedao Xuebao/Journal of the China Railway Society

Abbreviated source title: Tiedao Xuebao

Volume: 34

Issue: 3

Issue date: March 2012

Publication year: 2012

Pages: 1-6

Language: Chinese

ISSN: 10018360

CODEN: TIXUF5

Document type: Journal article (JA)

Publisher: Science Press, 18, Shuangqing Street, Haidian, Beijing, 100085, China

Abstract: On the basis of analyzing the influencing factors of railway freight volumes, the LS-SVM railway freight volume forecast method with grey correlation analysis was proposed to improve the predicting accuracy and modeling speed of railway freight volumes. The influencing factors of railway freight volumes were divided into social demand factors and railway supply factors. Correlations between the two-category factors and railway freight volumes were analyzed respectively by grey correlation analysis. The input variables of LS-SVM were screened by the grey correlation degree value together with qualitative analysis to simplify the LS-SVM structure. Finally, the stochastic inertia weight PSO (SIWPSO) algorithm was used to optimize the parameters of

the LS-SVM model. Statistics of the railway freight volumes from 1980 to 2009 indicate that the proposed forecast method provides a better convergence rate and higher predicting accuracy.

Number of references: 12

Main heading: Railroads

Controlled terms: Correlation methods - Forecasting - Stochastic models

Uncontrolled terms: Convergence rates - Demand factors - Forecast - Forecast method - Freight volumes - Grey correlation - Grey correlation analysis - Inertia weight - Influencing factor - Input variables - LS-SVM - Qualitative analysis

Classification code: 681 Railway Plant and Structures - 682 Railroad Rolling Stock - 922.1 Probability Theory - 922.2 Mathematical Statistics

DOI: 10.3969/j.issn.1001-8360.2012.03.001

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

501

Accession number: 20134016797560

Title: American option pricing in fuzzy random environment

Authors: Liu, Shuxia¹ ; Liu, Enfeng¹ ; Huang, Liming¹ ; Chai, Zhaohua¹ ; Chang, YuJing¹

Author affiliation:

¹ School of Business Administration, Hebei Normal University of Science and Technology, QinHuangDao 066000, Hebei, China

Corresponding author: Liu, S.

Source title: International Journal of Applied Mathematics and Statistics

Abbreviated source title: Int. J. Appl. Math. Stat.

Volume: 45

Issue: 15

Issue date: 2013

Publication year: 2013

Pages: 111-118

Language: English

ISSN: 09731377

E-ISSN: 09737545

Document type: Journal article (JA)

Publisher: CESER Publications, Post Box No. 113, Roorkee, 247667, India

Abstract: This paper considers the problem of pricing an American put option in fuzzy random environment; Stock price is characterized as the fuzzy random variable. Basic mathematical models of option pricing with fuzziness and randomness are established. The fundamental calculation formulas of American call put and call options with fuzzy random theory are proposed, respectively. We derive the fuzzy random expected value of option. Finally, the validity of this fuzzy random approach to option pricing methodology has been highlighted with an illustrative numerical example. © 2013 by CESER Publications.

Number of references: 16

Main heading: Fuzzy systems

Controlled terms: Economics - Mathematical models - Random variables

Uncontrolled terms: American options - American put option - Calculation formula - Fuzzy random environment - Fuzzy random variable - Fuzzy variable - Option pricing - Option pricing methodology

Classification code: 921 Mathematics - 922.1 Probability Theory - 961 Systems Science - 971 Social Sciences

Database: Compendex

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502

Accession number: 20140217193447

Title: Selection of the leading industries for sustainable development of regional economy: An empirical study based on the grey approach

Authors: Xu, Zhikun1 ; Liu, Zhaohui2 ; Li, Xiuli1

Author affiliation:

1 College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 Pupillary workroom, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of Applied Environmental Sciences

Abbreviated source title: Int. J. Appl. Environ. Sci.

Volume: 8

Issue: 17

Issue date: 2013

Publication year: 2013

Pages: 2179-2191

Language: English

ISSN: 09736077

E-ISSN: 09740260

Document type: Journal article (JA)

Publisher: Research India Publications, B-2/84 Ground Floor, Rohini Sec-16,, Delhi, 110085, India

Abstract: Under the guidance of the sustainable development, it becomes more and more necessary for companies and government to take environmental factor into consideration. There are few quantitative studies on the harmonious development of regional economy and environment considering the environment factor. This paper is an attempt to identify the selection standards of leading industries in China, which could be the guideline for the harmonious development of regional economy and environment. Grey approach is employed to identify the selection standards of leading industries. The managerial implications are also discussed in the last part of this paper. © Research India Publications.

Number of references: 21

Main heading: Industry

Controlled terms: Planning - Regional planning - Sustainable development

Uncontrolled terms: Empirical studies - Environment factors - Environmental factors - Grey approach - Harmonious development - Leading industry - Managerial implications - Quantitative study

Classification code: 403 Urban and Regional Planning and Development - 403.2 Regional Planning and Development - 911 Cost and Value Engineering; Industrial Economics - 911.2 Industrial Economics - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

503

Accession number: 20134917058308

Title: The changes in the aroma components in chestnuts before and after crushing

Authors: Liang, Jianlan^{1, 2}; Liu, Xiufeng^{1, 2}; Zhao, Yuhua^{1, 2}; Shi, Pengbao^{1, 2}; Yang, Xiaokuan^{1, 2}; Chang, Xuedong^{1, 2}

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Changli 066600, Hebei, China
- 2 Chestnut Engineering Research Center of Hebei, Changli 066600, Hebei, China

Corresponding author: Chang, X.

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 13

Issue: 10

Issue date: October 2013

Publication year: 2013

Pages: 246-254

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology, 3 Floor, Qingyuan Mansion, No. 6 Beisan Street., Fucheng Road, Haidian District, Beijing, 100048, China

Abstract: To research the changes in the aroma components in chestnuts before and after crushing, aroma components in the 'Da Ban Hong', 'Qou You Yi Hao', 'Zi Po' three chestnut varieties of nuts were measured before and after crushing, by solvent extraction and gas chromatography-mass spectrometry (GC/MS). The results show that, before the sample from the three chestnut varieties of nuts was crushed, were detected 30 kinds of fragrance ingredients, mainly ketones, esters, aldehydes, acids, alcohols; after the sample from the three chestnut varieties of nuts was crushed, were detected 35 kinds of fragrance ingredients, mainly ketones, esters, aldehydes, alcohols. Which aroma ingredients of significant change as ketones, aldehydes, acids, alcohols. The main aroma components of the samples from the three chestnut varieties of nuts before and after crushing which of significant change as 2-Propanone, 1-hydroxy-, 2-Hydroxy-gamma-butyrolactone, Furfural, 2-Furancarboxaldehyde, 5-(hydroxymethyl)-, Acetic acid and so on. A total of 18 kinds of disappeared aroma components were detected in the samples from the three chestnut varieties of nuts in the process of drying and crushing, a total of 29 kinds of unique aroma components (relative to the samples from fresh Chestnut Nuts) were detected in the samples from the three chestnut varieties of nuts after drying and crushing.

Number of references: 13

Main heading: Fruits

Controlled terms: Acetone - Aldehydes - Crushing - Esterification - Esters - Gas chromatography - Odors - Solvent extraction

Uncontrolled terms: Aroma compositions - Change - Chestnut - Crushed before and after - GC-MS

Classification code: 451.1 Air Pollution Sources - 802.2 Chemical Reactions - 802.3 Chemical Operations - 804.1 Organic Compounds - 821.4 Agricultural Products

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Title: Study and practice of recrystallization annealing process of high-plasticity cold-rolled steel sheet

Authors: Jinze, Li1 ; Hailong, Zhang1 ; Zhihong, Li1

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Jinze, L. (lijinzelxf@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 181-182

Monograph title: Advanced Materials Science and Technology

Issue date: 2011

Publication year: 2011

Pages: 156-160

Language: English

ISSN: 10226680

ISBN-13: 9783037850152

Document type: Conference article (CA)

Conference name: 2010 International Conference on Materials Science and Technology, ICMST 2010

Conference date: December 27, 2010 - December 28, 2010

Conference location: Jeju Island, Korea, Republic of

Conference code: 83739

Sponsor: University of Kentucky Lexington; Huazhong University of Science and Technology

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: More detailed analysis of chemical compositions, cold plastic deformation and microstructure

and properties change of 40Mn and 65Mn steel in recrystallization annealing process were made in the paper. How to get high plasticity and improve the performance of cold pressure processing technology as to cold-rolled 40Mn, 65Mn steel in recrystallization annealing technology, it was suggested that hardness was appropriately sacrificed to ensure the high plasticity. The paper analyzed concretely the reason of the influence of ball Fe₃C to plasticity. Recrystallization annealing process and metallographic structure analysis were made. Basically set the process of 40Mn and 65Mn steel recrystallization annealing. Initially carry out the practical application, receive a better effect and have more potential applications foreground.

Number of references: 10

Main heading: Steel sheet

Controlled terms: Annealing - Manganese - Metal analysis - Microstructure - Plastic deformation - Plasticity - Recrystallization (metallurgy) - Technology

Uncontrolled terms: Annealing process - Cold-rolled steel sheet - High-plasticity - Microstructure and properties - Recrystallization annealing

Classification code: 951 Materials Science - 901 Engineering Profession - 801 Chemistry - 545.3 Steel - 543.2 Manganese and Alloys - 537.1 Heat Treatment Processes - 531.1 Metallurgy - 531 Metallurgy and Metallography - 421 Strength of Building Materials; Mechanical Properties

DOI: 10.4028/www.scientific.net/AMR.181-182.156

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

505

Accession number: 20103213139629

Title: The single machine repairable system with service breakdown

Authors: Lv, Shengli¹; Xiao, Xin²; Li, Jingbo²; Hou, Yumei³; Zhao, Bing¹

Author affiliation:

1 School of Science, Yanshan University, Qinhuangdao, 066004, China

2 Department of Mathematic, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

3 School of Economics and Management, Yanshan University, Qinhuangdao, 066004, China

Corresponding author: Lv, S. (qhdddsl@163.com)

Source title: 2010 Chinese Control and Decision Conference, CCDC 2010

Abbreviated source title: Chin. Control Decis. Conf., CCDC

Monograph title: 2010 Chinese Control and Decision Conference, CCDC 2010

Issue date: 2010

Publication year: 2010

Pages: 1480-1483

Article number: 5498236

Language: English

ISBN-13: 9781424451821

Document type: Conference article (CA)

Conference name: 2010 Chinese Control and Decision Conference, CCDC 2010

Conference date: May 26, 2010 - May 28, 2010

Conference location: Xuzhou, China

Conference code: 81319

Sponsor: IEEE Control Systems Society (CSS); IEEE Industrial Electronics Society (IES); Automatic Control Society of Chinese Association of Aeronautics; Simul. Methods Model. Soc. Chin. Assoc. Syst. Simul.; Intelligent Control Manage. Soc., Chin. Assoc. Artif. Intell.

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper studies the single machine repair system, There are one unreliable machines and one unreliable servicing facility in the system. The servicing facility maintain the failure machines and may breakdown itself. The distributions of time lasting are exponential distributions. The servicing facility breakdown rates may be different between busy and idle time. The steady state and transient state characters of the system are given. An illustrative numerical example is presented. ©2010 IEEE.

Number of references: 10

Main heading: Maintainability

Uncontrolled terms: Exponential distributions - Idle time - Machine repairable system -

Numerical example - Repairable systems - Single machines - Steady state - Transient state - Unreliable machine

Classification code: 913.5 Maintenance

DOI: 10.1109/CCDC.2010.5498236

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

506

Accession number: 20122415119518

Title: Pricing strategies and cooperative profit distribution based on game theory for reverse supply chains with multi-retailer participants

Authors: Sun, Duo-Qing^{1, 2}; Ma, Xiao-Ying³

Author affiliation:

1 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 School of Mathematics and Systems Science, Beihang University, Beijing 100191, China

3 Library, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Sun, D.-Q. (sun_duoqing@126.com)

Source title: Jisuanji Jicheng Zhizao Xitong/Computer Integrated Manufacturing Systems, CIMS

Abbreviated source title: Jisuanji Jicheng Zhizao Xitong

Volume: 18

Issue: 4

Issue date: April 2012

Publication year: 2012

Pages: 867-874

Language: Chinese

ISSN: 10065911

CODEN: JJZXFN

Document type: Journal article (JA)

Publisher: CIMS, Sub-Box 34, P.O. Box 2413, Beijing, 100089, China

Abstract: To solve the problems of pricing strategy and profit distribution in reverse supply chain involving multi-retailer participants, the optimal pricing strategy for the members in supply chain was obtained under both cooperative and non-cooperative game ways based on Stackelberg game theory. And it was theoretically proved that the recycling prices were appreciated and the quantities of recycled products as well as the profit of the whole reverse supply chain system were increased under joint pricing strategy. Thus the cooperation of all sides was beneficial to both sellers and consumers. By using improved K-S solution, the allocation scheme on how to distribute profit among the members was designed according to their contribution to the cooperative alliance. The validity of conclusions was verified by a numerical example.

Number of references: 13

Main heading: Costs

Controlled terms: Game theory - Profitability - Recycling - Sales - Supply chains

Uncontrolled terms: Joint pricing - Noncooperative game - Numerical example - Pricing strategy - Recycled products - Retailer - Reverse supply chains - Stackelberg Games

Classification code: 452.3 Industrial Wastes - 911 Cost and Value Engineering; Industrial Economics - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing - 922.1 Probability Theory

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

507

Accession number: 20142117752610

Title: Study on political status of religious parties in Israel

Authors: Wang, Xingang1

Author affiliation:

1 Education Department of Ideological and Political Theories, Hebei Normal University of Science and

Technology, Qinhuangdao 066004, Hebei, China

Corresponding author: Wang, X. (xgang24wang@126.com)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 220 LNEE

Issue: VOL. 5

Monograph title: Proceedings of the International Conference on Information Engineering and Applications, IEA 2012

Issue date: 2013

Publication year: 2013

Pages: 17-22

Language: English

ISSN: 18761100

E-ISSN: 18761119

Document type: Conference article (CA)

Conference name: 2nd International Conference on Information Engineering and Applications, IEA 2012

Conference date: October 26, 2012 - October 28, 2012

Conference location: Chongqing, China

Conference code: 99822

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University

Publisher: Springer Verlag

Abstract: Israel is a secular and modern democratic state in the western world. However, unlike the other standardized forms of state, the religious parties exert a highly important role in the social life of Israel. In this paper, first of all, an analysis is carried out by the author on the definitions on the most important religious parties in Israel, and then the characteristics of the religious parties are put forward on that basis, and finally a

conclusion is made on the highly important roles of the religious parties in the Israel social life in the modern times. © 2013 Springer-Verlag.

Number of references: 3

Main heading: Electrical engineering

Controlled terms: Mathematical techniques

Uncontrolled terms: Democratic state - Modern time - Religious parties - Religious powers - Social and political life - Social life

Classification code: 709 Electrical Engineering, General - 921 Mathematics

DOI: 10.1007/978-1-4471-4844-9_3

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

508

Accession number: 20125015781022

Title: Study on high-order polarization mode dispersion and its compensation method in high-speed optical communication systems

Authors: Wang, Feng^{1, 2}; Bi, Weihong²; Wang, Kuan¹; Feng, Wenqiu¹

Author affiliation:

1 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Yanshan University, Qinhuangdao 066004, China

Corresponding author: Wang, F. (wangfengwwff@126.com)

Source title: Journal of Networks

Abbreviated source title: J. Netw.

Volume: 7

Issue: 11

Issue date: November 2012

Publication year: 2012

Pages: 1817-1823

Language: English

ISSN: 17962056

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40,, OULU, 90571, Finland

Abstract: With the development of high-speed, longdistance optical fiber communication systems, single-mode fiber polarization mode dispersion (PMD: Polarization mode dispersion) becomes one of the important factor limiting high-speed, long-distance optical fiber transmission. Polarization mode dispersion can cause pulse broadening in the digital transmission system, result inter-symbol interference in digital communications, has seriously affected the quality of signal transmission. Because PMD has statistical properties under external influences during transmission, polarization mode dispersion compensation technology is much more complex than chromatic dispersion compensation techniques. This paper mainly discusses PMD and high-order PMD compensation method, simulate the first order PMD statistical properties, second order PMD statistical properties, and the broaden factor under un-compensation, the first-order compensation, the second-order compensation and the third-order compensation. the simulations have obtained that the compensation method based on center frequency Taylor series expansion does not apply to large PMD pulse-width ratio, but the high-order PMD compensation method based on the average frequency can reduce the broadening factor. © 2012 ACADEMY PUBLISHER.

Number of references: 14

Main heading: Dispersion compensation

Controlled terms: Communication systems - Digital communication systems - Light transmission - Optical fiber communication - Polarization mode dispersion - Single mode fibers - Taylor series

Uncontrolled terms: Average frequency - Center frequency - Compensation method - Digital communications - External influences - First order - High-order - Optical fiber transmission - PMD compensation - Pulse broadening - Pulseswidths - Second orders - Signal transmission - Statistical properties - Taylor series expansions - Third-order - Transmission systems

Classification code: 716 Telecommunication; Radar, Radio and Television - 717.1 Optical Communication Systems - 741 Light, Optics and Optical Devices - 921 Mathematics

DOI: 10.4304/jnw.7.11.1817-1823

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

509

Accession number: 20122115054442

Title: The student-oriented teaching reform of engineering testing technology

Authors: Zhang, Liang¹ ; Li, Shuzhen¹ ; Rong, Yu¹ ; Chen, Lidong¹ ; Zhang, Liling¹ ; Chen, Panfeng¹ ; Ma, Shuying¹

Author affiliation:

¹ College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, S. (zhouwuxix@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 117 AISC

Issue: 127 VOL. 2

Monograph title: Advanced Technology in Teaching - Proceedings of the 2009 3rd International Conference on Teaching and Computational Science, WTCS 2009

Issue date: 2012

Publication year: 2012

Pages: 191-195

Language: English

ISSN: 18675662

ISBN-13: 9783642254369

Document type: Conference article (CA)

Conference name: 3rd International Conference on Teaching and Computational Science, WTCS 2009

Conference date: December 19, 2009 - December 20, 2009

Conference location: Shenzhen, China

Conference code: 89867

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: This paper begins with an analysis of present teaching conditions of Engineering Testing Technology. Aiming at the problem in the course teaching, in order to adapt teaching request, and guarantee the quality of teaching, and arouse student's study enthusiasm fully, and raise student's project practical ability, this paper carries on the reform exploration in the course content, the teaching method, the experiment teaching and the inspection way, and so on, and makes the good teaching progress. © 2012 Springer Science+Business Media Dordrecht.

Number of references: 3

Main heading: Testing

Controlled terms: Curricula - Students - Teaching

Uncontrolled terms: Course contents - Experiment teachings - Quality of teaching - Teaching methods - Testing technology

Classification code: 423.2 Non Mechanical Properties of Building Materials: Test Methods - 901.2 Education

DOI: 10.1007/978-3-642-25437-6_27

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

510

Accession number: 20124115546141

Title: EPS central monitoring system based on virtual instrument

Authors: Chen, Lei¹ ; Chen, Shuang² ; Han, Baoru³

Author affiliation:

1 Northeast Petroleum University at Qinhuangdao, Qinhuangdao, Hebei 066004, China

2 Institute of Math and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

3 Department of Electronic Engineering, Hainan Software Profession Institute, Qionghai, Hainan 571400, China

Corresponding author: Han, B.

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 177 LNEE

Part number: 2 of 2

Issue: VOL. 2

Monograph title: Advances in Mechanical and Electronic Engineering

Issue date: 2012

Publication year: 2012

Pages: 183-188

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783642315152

Document type: Conference article (CA)

Conference name: 2012 International Conference on Mechanical and Electronic Engineering, ICMEE 2012

Conference date: June 23, 2012 - June 24, 2012

Conference location: Hefei, China

Conference code: 93050

Sponsor: International Science and Education Researcher Association; VIP Information Conference Center; Beijing Gireda Research Center

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: In order to realize the central monitoring to the voltage, current and the relative alarming state of emergency power supply, the system design scheme based on virtual instrument was presented. The MCU STC11F04E was used as the control core of the slave device, combining with the voltage or current transformer, true RMS voltage measurement circuit, high precision amplifier and the 10-bit resolution A/D conversion circuit, to accomplish the acquisition, processing and display of multi-channel signals in the slave device, which mainly includes city power voltage, inverting voltage, output current and storage battery voltage. The MODBUS protocol was used to realize the RS-485 communication between the master computer and the slave device. The graphical programming environment LabVIEW was adopted to realize the function of monitoring, communication, data storage and query in master computer. The practical application shows that this system design scheme is feasible and reliable. © 2012 Springer-Verlag Berlin Heidelberg.

Number of references: 5

Main heading: Electric power supplies to apparatus

Controlled terms: Analog to digital conversion - Communication - Computer graphics - Data acquisition - Digital instruments - Electric batteries - Electric power systems - Electric transformers - Systems analysis

Uncontrolled terms: A/D conversion - Central monitoring system - Data storage - Emergency power supply - Graphical programming environment - High-precision amplifiers - LabVIEW - Modbus protocol - Multi-channel - Output current - Power voltage - Slave device - State of emergency - Storage battery - Virtual instrument

Classification code: 723.2 Data Processing and Image Processing - 723.5 Computer Applications - 941 Acoustical and Optical Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 961 Systems Science - 722.4 Digital Computers and Systems - 702.1 Electric Batteries - 704 Electric Components and Equipment - 706.1 Electric Power Systems - 714 Electronic Components and Tubes - 715 Electronic Equipment, General Purpose and Industrial - 715.2 Industrial Electronic Equipment - 716 Telecommunication; Radar, Radio and Television

DOI: 10.1007/978-3-642-31516-9_31

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20134416939544

Title: Study of the function of university library based on serving society

Authors: Guo, Xiaoqin1

Author affiliation:

1 Library of Hebei Normal University of Science and Technology, Qinhuangdao, 066004 Hebei, China

Corresponding author: Guo, X. (guoxiaoqin@hrsk.net)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 218 LNEE

Part number: 3 of 4

Issue: VOL. 3

Monograph title: Proceedings of the International Conference on Information Engineering and Applications, IEA 2012

Issue date: 2013

Publication year: 2013

Pages: 293-298

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9781447148463

Document type: Conference article (CA)

Conference name: 2nd International Conference on Information Engineering and Applications, IEA 2012

Conference date: October 26, 2012 - October 28, 2012

Conference location: Chongqing, China

Conference code: 99822

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The university library is the distribution center of public resources; it should contribute to the society, benefiting all citizens. However, the management of institutional barriers, lack of library management, lack of information resources, information sharing barriers, and other reasons, resulting in library cannot really play to their capabilities to serve the society. © 2013 Springer-Verlag.

Number of references: 9

Main heading: Information management

Controlled terms: Libraries

Uncontrolled terms: Distribution centers - Information resource - Information sharing - Institutional barriers - Literature - Resource sharing - Serving society - University libraries

Classification code: 402.2 Public Buildings - 903.2 Information Dissemination

DOI: 10.1007/978-1-4471-4847-0_36

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

512

Accession number: 20123615409468

Title: Influence of temperature and LO phonon effects on the effective mass of quasi 0D bipolarons in the strong-coupling limit

Authors: Xin, Wei¹ ; Gao, Zhong-Ming¹ ; Wuyunqimuge² ; Han, Chao¹ ; Eerdunchaolu¹

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao 028043, China

Corresponding author: Xin, W.

Source title: Superlattices and Microstructures

Abbreviated source title: Superlattices Microstruct

Volume: 52

Issue: 4

Issue date: October 2012

Publication year: 2012

Pages: 872-879

Language: English

ISSN: 07496036

E-ISSN: 10963677

CODEN: SUMIEK

Document type: Journal article (JA)

Publisher: Academic Press, 24-28 Oval Road, London, NW1 7DX, United Kingdom

Abstract: In this paper, based on the of Huybrechts strong-coupling polaron model, the Tokuda modified linear-combination operator method, the Lee-Low-Pines variational method and the quantum statistics theory were used to study the temperature dependence of the effective mass of quasi-zero-dimensional strong-coupling bipolarons. The expressions for the effective mass and the mean number of longitudinal optical (LO) phonons of the strong-coupling bipolaron were derived. Numerical results show that the effective mass and the mean number of LO phonons of the bipolaron all decrease with increasing the relative distance between two electrons or the radius of the quantum dot, but they increase with increasing the electron-phonon coupling strength; the effective mass of the bipolaron decreases with the increase of the temperature; the variation of the mean number of LO phonons of the bipolaron with the temperature presents the opposite trend because of the high and low temperature difference. © 2012 Elsevier Ltd. All rights reserved.

Number of references: 29

Main heading: Phonons

Controlled terms: Semiconductor quantum dots - Statistical mechanics - Temperature distribution

Uncontrolled terms: Bipolaron - Effective mass - LO phonons - Strong-coupling -

Temperature dependence

Classification code: 641.1 Thermodynamics - 714.2 Semiconductor Devices and Integrated Circuits - 751.1 Acoustic Waves - 931.1 Mechanics

DOI: 10.1016/j.spmi.2012.07.004

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

513

Accession number: 20120914817696

Title: Study on parameter selection of phase space reconstruction for chaotic time series

Authors: Zhang, Wenyuan1 ; Ma, Yunfei2 ; Yang, Gang2

Author affiliation:

1 Department of Computer, EandA College, Hebei Normal University of Science and Technology Qinhuangdao, 066004, Hebei, China

2 Key Laboratory of Hebei Province, Industrial Computer Control Engineering Institute of Electrical Engineering, Yanshan University, Qinhuangdao 066004, Hebei Province, China

Corresponding author: Zhang, W. (wenyuanzhanghb@yeah.net)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 4

Issue: 2

Issue date: February 2012

Publication year: 2012

Pages: 67-77

Language: English

ISSN: 19763700

E-ISSN: 22339345

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: Based on the principle that the selection of delay time and embedding dimension has no correlation in the process of phase space reconstruction, this paper puts forward a new method of identifying the embedding dimension by Cao Liangyue Theory (CAO Theory) after the delay time is identified by Mutual Information Function. By means of the numerical verification of a few typical examples of chaotic dynamic system, the result shows that the method can identify the valid delay time of phase space reconstruction and the best embedding dimension. In addition, a new way of identifying the chaotic signal is provided and this method can effectively reconstruct the phase space of the original system from the time series.

Number of references: 21

Main heading: Phase space methods

Controlled terms: Chaos theory - Numerical methods - Time series

Uncontrolled terms: CAO theory - Chaotic dynamic systems - Chaotic signal - Chaotic time series - Delay Time - Embedding dimensions - Mutual information functions - Numerical verification - Original systems - Parameter selection - Phase space reconstruction - Phase spaces

Classification code: 921 Mathematics - 921.6 Numerical Methods - 922.2 Mathematical Statistics

DOI: 10.4156/AISS.vol4.issue2.9

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

514

Accession number: 20114014404506

Title: RETRACTED ARTICLE: The nonlinear classification methods in MEG-based brain computer interface

Authors: Ma, Chongxiao1 ; Wang, Jinjia2 ; Zhou, Lina2

Author affiliation:

1 Dept.of Machinery and Electron, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066600, China

2 College of Information Science and Engineer, Yanshan University, Qinhuangdao, Hebei, 066004, China

Corresponding author: Ma, C. (machongxiao2006@126.com)

Source title: Proceedings - 2011 7th International Conference on Natural Computation, ICNC 2011

Abbreviated source title: Proc. - Int. Conf. Nat. Comput., ICNC

Volume: 3

Part number: 3 of 4

Monograph title: Proceedings - 2011 7th International Conference on Natural Computation, ICNC 2011

Issue date: 2011

Publication year: 2011

Pages: 1696-1699

Article number: 6022312

Language: English

ISBN-13: 9781424499533

Document type: Conference article (CA)

Conference name: 2011 7th International Conference on Natural Computation, ICNC 2011

Conference date: July 26, 2011 - July 28, 2011

Conference location: Shanghai, China

Conference code: 86795

Sponsor: Coll. Inf. Sci. Technol. Donghua Univ.

Publisher: IEEE Computer Society

Abstract: The Magnetoencephalography (MEG) can be used as a control signal for brain computer (BCI), which contains the pattern information of the hand movement direction. In the MEG signal classification, the feature extraction based on signal processing and linear classification are usually used. The recognition rate

has been difficult to improve. The principal component analysis (PCA) and linear discriminant analysis (LDA) method has been proposed for the feature extraction, and the non-linear nearest neighbor classification is introduced for the classifier. Based on the analysis of the confusion matrix, a data-dependent kernel optimization also studied for the nonlinear nearest neighbor classifier, which effect is better than the non-linear nearest neighbor classifier. The experimental results show that the PCA + LDA method is effective in the analysis of multi-channel MEG signals, and improve the recognition rate. The average recognition rate is better than the recognition rate in the BCI competition IV. © 2011 IEEE.

Number of references: 14

Main heading: Brain computer interface

Controlled terms: Discriminant analysis - Feature extraction - Image resolution - Magnetoencephalography - Nonlinear analysis - Principal component analysis - Signal processing

Uncontrolled terms: Confusion matrices - Control signal - Hand movement - Kernel optimizations - Linear classification - Linear discriminant analysis - Multi-channel - Nearest neighbor classification - Nearest Neighbor classifier - Nonlinear classification - Nonlinear classifiers - Pattern information - Recognition rates - Signal classification

Classification code: 461.6 Medicine and Pharmacology - 716 Telecommunication; Radar, Radio and Television - 716.1 Information Theory and Signal Processing - 722.2 Computer Peripheral Equipment - 741 Light, Optics and Optical Devices - 742 Cameras and Photography - 921 Mathematics - 922 Statistical Methods - 922.2 Mathematical Statistics

DOI: 10.1109/ICNC.2011.6022312

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

515

Accession number: 20110813673946

Title: RETRACTED ARTICLE: Development of multi-span greenhouse measure and control system

Authors: Wang, Qingzhu¹ ; Ma, Shuying¹ ; Feng, Ruiyin¹ ; Cui, Lina¹ ; Luan, Ying¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Corresponding author: Wang, Q. (wqzh101@126.com)

Source title: 2nd International Conference on Information Engineering and Computer Science - Proceedings, ICIECS 2010

Abbreviated source title: Int. Conf. Inf. Eng. Comput. Sci. - Proc., ICIECS

Monograph title: 2nd International Conference on Information Engineering and Computer Science - Proceedings, ICIECS 2010

Issue date: 2010

Publication year: 2010

Article number: 5678390

Language: English

ISBN-13: 9781424479412

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: In order to adapt the needs of development of multi-span greenhouse, the monitoring system of greenhouse environment parameters is developed, such as temperature, humidity, carbon dioxide concentrations and soil moisture content. The system uses modular design of the master-slave structure. The measure and control instrument takes a new and dual serial single chip microcomputer STC12C5A60S2 as core, it is the host of parameters gathered, and the slave of upper PC computer. The PC computer software is developed by configuration software, and the MCU software is developed by C51. The system can use single, and can the unify management of multi-span greenhouse by PC, it offers flexible integrated ,reliable operation and very easy in maintenance. ©2010 IEEE.

Number of references: 8

Main heading: Computer software

Controlled terms: Carbon dioxide - Computer science - Computer software maintenance - Control theory - Greenhouses - Moisture determination - Offshore pipelines - Soil moisture

Uncontrolled terms: Carbon dioxide concentrations - Configuration software - Control instruments - Greenhouse environment - Master-slave - Measure and control system - Modular designs - Monitoring system - Multi-spans - Reliable operation - Single chip microcomputers - Soil moisture content - System use

Classification code: 402.1 Industrial and Agricultural Buildings - 483.1 Soils and Soil Mechanics - 619.1 Pipe, Piping and Pipelines - 723 Computer Software, Data Handling and Applications - 731.1 Control Systems -

804.2 Inorganic Compounds - 944.2 Moisture Measurements

DOI: 10.1109/ICIECS.2010.5678390

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

516

Accession number: 20122315092480

Title: Application of PPP mode for the construction of tourism infrastructure

Authors: Xie, Chengwei1 ; Xie, Guoren2

Author affiliation:

- 1 Environmental Management College of China, Qinhuangdao, China
- 2 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Xie, G. (303735262@qq.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 174-177

Monograph title: Advanced Building Materials and Sustainable Architecture

Issue date: 2012

Publication year: 2012

Pages: 2184-2187

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037854235

Document type: Conference article (CA)

Conference name: 2nd International Conference on Civil Engineering, Architecture and Building Materials, CEABM 2012

Conference date: May 25, 2012 - May 27, 2012

Conference location: Yantai, China

Conference code: 90003

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: PPP mode is one of the construction models that develop fast. This article departs from the characteristics of tourism infrastructure construction in Qinhuangdao, combined with PPP mode of development in China, summaries PPP mode to play a major role in construction projects, put forward the measures of the tourist infrastructure in Qinhuangdao application PPP mode. © (2012) Trans Tech Publications.

Number of references: 9

Main heading: Internet protocols

Controlled terms: Building materials - Civil engineering - Construction industry

Uncontrolled terms: Construction model - Construction projects - Infrastructure - PPP
- Tourism - Tourism infrastructure

Classification code: 415 Metals, Plastics, Wood and Other Structural Materials - 414 Masonry Materials
- 413 Insulating Materials - 723 Computer Software, Data Handling and Applications - 412 Concrete - 409 Civil Engineering, General - 405 Construction Equipment and Methods; Surveying - 411 Bituminous Materials

DOI: 10.4028/www.scientific.net/AMM.174-177.2184

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

517

Accession number: 20104313317032

Title: RETRACTED ARTICLE: The simulation analysis for sacked sand drain of soft soil foundation

Authors: Meng, Deguang¹ ; Long, Ying²

Author affiliation:

- 1 College of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Library Hebei Vocational and Technical College, Building Materials Qinhuangdao, China

Corresponding author: Meng, D. (mengdg@126.com)

Source title: ICCET 2010 - 2010 International Conference on Computer Engineering and Technology, Proceedings

Abbreviated source title: ICCET - Int. Conf. Comput. Eng. Technol., Proc.

Volume: 4

Monograph title: ICCET 2010 - 2010 International Conference on Computer Engineering and Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: V4631-V4633

Article number: 5485275

Language: English

ISBN-13: 9781424463503

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: It is extensive use to sacked sand drain in the engineering of soft soil foundation. Three-dimensional finite element model is established on the based of Biot consolidation theory, the model is loaded and calculated on the based of considering lateral deformation and spatial seepage, elastic-plasticity character of soil, construction stage loading progress etc. case study is analyzed to obtain the regular of settlement and excess hydrostatic pore pressure. The calculation value of finite element method is reasonable to compare with measured data. The finite element method is used to simulate truly every position and step settlement and excess hydrostatic pore pressure. And reasonable project plan is obtained through the optimization analysis. The method can analyze reasonably on the sacked sand drain of soil soft foundation and forecast final settlement of embankment more exactly to supply reference of design and construction. © 2010 IEEE.

Number of references: 8

Main heading: Finite element method

Controlled terms: Geologic models - Hydraulics - Hydrodynamics - Optimization - Pore pressure - Sand - Soil mechanics - Soils - Three dimensional

Uncontrolled terms: Biot consolidation theory - Construction stages - Design and construction - Elastic-plasticity - Final settlement - Lateral deformation - Measured data - Optimization analysis - Project plans - Sacked sand drain - Simulation analysis - Soft foundation - Soft soil foundation - Soft soils - Three dimensional finite element model

Classification code: 481.1 Geology - 483.1 Soils and Soil Mechanics - 631.2 Hydrodynamics - 632.1 Hydraulics - 902.1 Engineering Graphics - 921.5 Optimization Techniques - 921.6 Numerical Methods

DOI: 10.1109/ICCET.2010.5485275

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

518

Accession number: 20124715702054

Title: Present situation and problems of China processing trade of textile and garment industry

Authors: Wang, Yanwen1 ; Chen, Jianchao1

Author affiliation:

1 Finance and Economics College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Wang, Y. (wywwing2005@126.com)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 4

Issue: 20

Issue date: November 2012

Publication year: 2012

Pages: 578-584

Language: English

ISSN: 19763700

E-ISSN: 22339345

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, Myoungbo Bldg 3F,
Bumin-dong 1-ga, Seo-gu, Busan, 602-816, Korea, Republic of

Abstract: As a textile and garment producing country China has the traditional advantage in labor costs, production costs and industrial clusters. After the financial crisis, the state of the textile industry is positioned as the traditional pillar industry of China's national economy, an important livelihood industry, industry with international competitive advantage. For a long time, it plays an important role in the export trade, but the main form of textile and garment export is processing trade. it has disadvantages such as the own brand is very few and the lack of international competitiveness. After China join the WTO, China's t export volume of textile and garment processing trade is increasing, the external competitive pressures is increasing. This article Investigated China's textile and garment industry processing trade data from 2008 to 2011, researched the development status of China's textile and garment industry processing trade, found that there are many problems in the processing trade of China's textile and apparel industry, To solve these problems, this paper proposed the measures hope to play an active role in the development of China's textile and garment processing trade industry.

Number of references: 12

Main heading: Textile industry

Controlled terms: Competition - Cost accounting - Data handling - Employment -
International trade - Problem solving - Textiles - Wages

Uncontrolled terms: Apparel industry - Competitive advantage - Competitive pressure -
Export volumes - Financial crisis - Garment industries - Independent brand - Industrial cluster -
International competitiveness - Labor costs - National economy - Present situation - Production
cost - Trade data

Classification code: 921 Mathematics - 913 Production Planning and Control; Manufacturing - 912
Industrial Engineering and Management - 911 Cost and Value Engineering; Industrial Economics - 819.6 Textile
Mills, Machinery and Equipment - 819 Synthetic and Natural Fibers; Textile Technology - 723.2 Data Processing
and Image Processing

DOI: 10.4156/AISS.vol4.issue20.69

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

519

Accession number: 20111213761551

Title: A brief analysis on computer laboratory management in high schools

Authors: Gao, Wei Ming¹ ; Liu, Min² ; Wang, Ya Qin² ; Liu, Li Mei³

Author affiliation:

1 Computer Management Centre, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Department of Computer Science, Hebei Normal University of Science and Technology, Qinhuangdao, China

3 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Gao, W. M. (45141200@qq.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 187

Monograph title: Sport Materials, Modelling and Simulation

Issue date: 2011

Publication year: 2011

Pages: 540-543

Language: English

ISSN: 10226680

ISBN-13: 9783037850411

Document type: Conference article (CA)

Conference name: 2011 International Conference on Sport Material, Modelling and Simulation, ICSMMS 2011

Conference date: January 27, 2011 - January 28, 2011

Conference location: Shenzhen, China

Conference code: 84139

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc. Sport Sci. Eng. Comm.; Advanced Materials Research Journal; Howard University

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The computer laboratory management in high schools is a vital part in the management of university. In order to take good advantage of computer laboratory in high school so as to carry out smooth work on teaching and doing experiments and create the greatest social and economic benefits, it is essential to standardize the management of computer laboratory in high schools in a scientific way. © (2011) Trans Tech Publications.

Number of references: 5

Main heading: Planning

Controlled terms: Societies and institutions

Uncontrolled terms: Computer laboratory - Economic benefits - High school - Maintain
- Scientific management

Classification code: 403 Urban and Regional Planning and Development - 901.1.1 Societies and Institutions

DOI: 10.4028/www.scientific.net/AMR.187.540

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

520

Accession number: 20131916319007

Title: XML text classification model by RVM Classifier

Authors: Li, Yuxiang¹ ; Zhang, Xiaohua¹ ; Yang, Xinyue² ; Wang, Jianfeng¹ ; Kang, Yan¹

Author affiliation:

¹ College of Mathematics and Information Science and Technology, Hebei Normal University of Science Technology, Qinhuangdao 066004, China

2 Department of Enrollment and Employment, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Li, Y. (dshan2000@163.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 9

Issue: 7

Issue date: April 1, 2013

Publication year: 2013

Pages: 2543-2549

Language: Chinese

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press, P.O. Box 162, Bethel, CT 06801-0162, United States

Abstract: XML text classification model by RVM Classifier is proposed in this paper. Relevance vector machine is based on a Bayesian framework, compared with support vector machine, relevance vector machine has a comparable generalization performance and requires much fewer kernel functions. In order to solve multi-class problem, the multi-class classification formulation of relevance vector machine is presented. 240 XML texts with six XML text types are applied to study the effectiveness of RVM classifier for XML text classification. The comparison between the classification results of RVM classifier and the actual values is given, and the comparison between the classification results of SVM classifier and the actual values is given. The experimental results show that the classification ability for XML text of RVM classifier is stronger than SVM classifier. Copyright © 2013 Binary Information Press.

Number of references: 11

Main heading: XML

Controlled terms: Classification (of information) - Classifiers - Support vector machines

Uncontrolled terms: Classification ability - Classification accuracy - Classification results - Generalization performance - Multi-class classification - Relevance Vector Machine - Text classification - Text classification models

Classification code: 716.1 Information Theory and Signal Processing - 723 Computer Software, Data Handling and Applications - 802.1 Chemical Plants and Equipment

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

521

Accession number: 20112214022283

Title: Design of particle filtering algorithm based on mean shift and its application in navigation data processing

Authors: Gong, Yisong¹ ; Gui, Qingming² ; Li, Baoli^{1, 3} ; Qiao, Shubo³ ; Zhang, Lingmin⁴

Author affiliation:

1 China National Administration of GNSS and Applications, Beijing 100088, China

2 Institute of Science, Information Engineering University, Zhengzhou 450001, China

3 Institute of Surveying and Mapping, Information Engineering University, Zhengzhou 450052, China

4 Institute of Mathematics and Information, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Gong, Y.

Source title: Cehui Xuebao/Acta Geodaetica et Cartographica Sinica

Abbreviated source title: Cehui Xuebao

Volume: 40

Issue: SUPPL.

Issue date: May 2011

Publication year: 2011

Pages: 120-125+132

Language: Chinese

ISSN: 10011595

CODEN: CEXUER

Document type: Journal article (JA)

Publisher: SinoMaps Press, 50 Sanlihe Road, Fuwai, Beijing, 100045, China

Abstract: Considering the degeneracy of particle weight and the large amount of calculation existing in the standard particle filtering algorithm, the mean shift algorithm and particle filtering algorithm are fused, then a new particle filtering algorithm is designed based on the mean shift searching algorithm. This approach still obeys the computational outline of the standard particle filtering algorithm. The basic principle of this algorithm is to embed the mean shift searching process into the important sampling process of the particle filtering method via the clustering characteristics of the mean shift algorithm, to have a determinant searching to the particle set, and make each particle converge to local optimal value, approximates the true state distribution by means of the particle clustering of the mean-shift algorithm, and thus achieves good estimation results and improves the status of real time by requiring only a small number of particles compared with the standard PF algorithm on overcoming the defects, such as the degeneracy of the phenomenon of particle weight and the large amount of calculation. The results of a large amount of computational experiments and the GPS/DR integrated navigation experiment show the effectiveness of the new approach.

Number of references: 13

Main heading: Clustering algorithms

Controlled terms: Data processing - Experiments - Navigation - Navigation systems - Nonlinear filtering - Real time systems - Standards

Uncontrolled terms: A large amount of computation - Dead reckoning - Global positioning - Mean shift - Particle filtering - The degeneracy of the particle weight

Classification code: 901.3 Engineering Research - 731.1 Control Systems - 723.2 Data Processing and Image Processing - 902.2 Codes and Standards - 722.4 Digital Computers and Systems - 716.3 Radio Systems and Equipment - 434.4 Waterway Navigation - 721 Computer Circuits and Logic Elements

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

522

Accession number: 20104413349333

Title: On the improvements of Atallah's algorithm

Authors: Liu, Shan1 ; Cao, LiJun1 ; Liu, MaoHua1 ; Zhang, Lingmin1 ; Liu, JingHui1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, S. (misscao6666@163.com)

Source title: Proceedings - 9th International Symposium on Distributed Computing and Applications to Business, Engineering and Science, DCABES 2010

Abbreviated source title: Proc. - Int. Symp. Distrib. Comput. Appl. Bus., Eng. Sci., DCABES

Monograph title: Proceedings - 9th International Symposium on Distributed Computing and Applications to Business, Engineering and Science, DCABES 2010

Issue date: 2010

Publication year: 2010

Pages: 654-657

Article number: 5570840

Language: English

ISBN-13: 9780769541105

Document type: Conference article (CA)

Conference name: 9th International Symposium on Distributed Computing and Applications to Business, Engineering and Science, DCABES 2010

Conference date: August 10, 2010 - August 12, 2010

Conference location: Hong Kong, Hong kong

Conference code: 81975

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper, we give a new algorithm evolving from Atallah's algorithm proposed in 1984, and we make many improvements: First of all, combining replaced sewing in order to simplify the third step; Secondly, we delete the fourth step. And we simplify the construction of the auxiliary graph, avoiding the second time to find Euler tour and the introduction of a mass storage array. The improvements make it quicker and simpler to find the Euler tour of an Euler graph, and the improvements don't increase time and space complexity of Atallah's algorithm.

Number of references: 6

Main heading: Algorithms

Controlled terms: Parallel architectures

Uncontrolled terms: Auxiliary graph - Euler partition - Euler tour - Mass storage -
Spanning tree - Time and space

Classification code: 722 Computer Systems and Equipment - 723 Computer Software, Data Handling
and Applications - 921 Mathematics

DOI: 10.1109/DCABES.2010.165

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

523

Accession number: 20111013722843

Title: A detection system for the vehicle queue length of crossroad based on DSP image processing

Authors: Lu, Weina¹ ; Ma, Yuquan¹ ; Wang, Qingzhu¹ ; Zhang, Lihong¹ ; Zhang, Yun¹ ; Ma, Shuying¹

Author affiliation:

¹ Department of Mechanics and Electronics, Hebei Normal University of Science and Technology,
Qinhuangdao, Hebei Province, 066004, China

Corresponding author: Ma, S. (haibian016@yahoo.com.cn)

Source title: Proceedings - International Conference on Electrical and Control Engineering, ICECE
2010

Abbreviated source title: Proc. - Int. Conf. Electr. Control Eng., ICECE

Monograph title: Proceedings - International Conference on Electrical and Control Engineering,
ICECE 2010

Issue date: 2010

Publication year: 2010

Pages: 35-38

Article number: 5630718

Language: English

ISBN-13: 9780769540313

Document type: Conference article (CA)

Conference name: International Conference on Electrical and Control Engineering, ICECE 2010

Conference date: June 26, 2010 - June 28, 2010

Conference location: Wuhan, China

Conference code: 84009

Sponsor: IEEE IAS Society; Huazhong University of Science and Technology; Wuhan University of Science and Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: An image detection system based on DSP is designed for the length of vehicle queue at crossroad. The whole hardware structure of the system is described firstly, and the circuitry to process image by DSP is detailed. Also, the main program of the image detection system and the multi-threshold extraction method for the vehicle queue length are presented in the paper. By applying the system to the urban traffic signal controller, it shows that the system is better than the old ones with inductance coils on precision, stableness and maintenance. © 2010 IEEE.

Number of references: 10

Main heading: Digital signal processors

Controlled terms: Controllers - Electrical engineering - Image processing - Imaging systems - Queueing theory - Signal detection - Signal processing - Speed control - Traffic control - Vehicles

Uncontrolled terms: Detection system - Extraction method - Hardware structures - Image detection - Inductance coils - Multithreshold - Queue lengths - Stableness - Urban traffic - Urban traffic signal controller

Classification code: 922.1 Probability Theory - 746 Imaging Techniques - 741 Light, Optics and Optical Devices - 732.1 Control Equipment - 731.3 Specific Variables Control - 716.1 Information Theory and Signal

DOI: 10.1109/iCECE.2010.17

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

524

Accession number: 2011011355523

Title: Temperature dependence of the properties of strong-coupling bipolaron in a quantum dot

Authors: Eerdunchaolu1 ; Xin, Wei1

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Xin, W. (xinweigood@hotmail.com)

Source title: Physica B: Condensed Matter

Abbreviated source title: Phys B Condens Matter

Volume: 406

Issue: 3

Issue date: February 1, 2011

Publication year: 2011

Pages: 358-362

Language: English

ISSN: 09214526

CODEN: PHYBE3

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: Temperature dependence of the properties of strong-coupling bipolaron in a quantum dot (QD) is studied based on the LeeLowPinesHuybrechts variational method and quantum statistical theory. Results of the numerical calculation show that the vibration frequency as well as the absolute value of the induced potential and the effective potential all increase with increasing coupling strength and temperature, respectively, and they also increase with decreasing relative distance of electrons. The bipolarons are closer and more stable when the temperature is higher and coupling strength is larger. The influence of radius of QD and dielectric constant ratio on the effective potential is little. © 2010 Elsevier B.V. All rights reserved.

Number of references: 14

Main heading: Semiconductor quantum dots

Controlled terms: Temperature distribution

Uncontrolled terms: Bipolaron - Effective potentials - Induced potential - Quantum Dot
- Temperature dependence - Vibration frequency

Classification code: 641.1 Thermodynamics - 714.2 Semiconductor Devices and Integrated Circuits

DOI: 10.1016/j.physb.2010.10.063

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

525

Accession number: 20121414926048

Title: The application of PID based on optimized RBF in thickness control of strip steel

Authors: Yu, Yuzhen1 ; Ren, Xinyi2 ; Deng, Chunyan1 ; Wang, Xiaohui1

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 2 Yanshan University, Qinhuangdao, Hebei, China

Corresponding author: Yu, Y. (yu_yuzhen@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 466-467

Monograph title: Intelligent System and Applied Material

Issue date: 2012

Publication year: 2012

Pages: 52-56

Language: English

ISSN: 10226680

ISBN-13: 9783037853689

Document type: Conference article (CA)

Conference name: 2012 International Conference on Intelligent System and Applied Material, GSAM 2012

Conference date: January 13, 2012 - January 15, 2012

Conference location: Taiyuan, Shanxi, China

Conference code: 89236

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The strip thickness control system is difficult to establish an accurate mathematical model, and traditional PID control strategy has a poor adaptive ability, so the effect of control is always not satisfying. According to the problems above, a new control strategy of self-tuning PID controller based on RBF neural network whose parameters are optimized by PSO algorithm is proposed in the paper. The control method integrates advantages of RBF neural network as well as PID controller and good global search capability of PSO algorithm. The simulation results indicate that the method not only improves control performance and dynamic quality, but also has strong self-adapting ability and robustness. It achieved a very good control effect when used in strip thickness control system that proved the correctness and effectiveness of the control method. © (2012) Trans Tech Publications.

Number of references: 5

Main heading: Quality control

Controlled terms: Algorithms - Electric control equipment - Intelligent systems -
Mathematical models - Neural networks - Optimization - Radial basis function networks -

Robustness (control systems) - Thickness control - Three term control systems

Uncontrolled terms: Adaptive ability - Control methods - Control performance - Control strategies - Dynamic quality - Global search capability - PID controllers - PSO algorithms - RBF Neural Network - Self adapting - Self-tuning PID - Self-tuning PID control - Strip steel

Classification code: 921.5 Optimization Techniques - 921 Mathematics - 913.3 Quality Assurance and Control - 732.1 Control Equipment - 731.3 Specific Variables Control - 731.1 Control Systems - 723.4 Artificial Intelligence

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

526

Accession number: 20102012942711

Title: A new complex schema matching system

Authors: Qian, Ying¹ ; Zhang, Haitao¹ ; Song, Jinling² ; Liu, Zhenglin³

Author affiliation:

1 Network and Modern Education Technology Center, HeBei Normal University of Science and Technology, Qin Huangdao, HeBei, China

2 Department of Computer, HeBei Normal University of Science and Technology, Qin Huangdao, HeBei, China

3 IT Department, E and A College, Hebei Normal University of Science and Technology, Qin Huangdao, HeBei, China

Corresponding author: Qian, Y. (my_9199@tom.com)

Source title: CICC-ITOE 2010 - 2010 International Conference on Innovative Computing and Communication, 2010 Asia-Pacific Conference on Information Technology and Ocean Engineering

Abbreviated source title: CICC-ITOE - Int. Conf. Innovative Comput. Commun., Asia-Pac. Conf. Inf. Technol. Ocean Eng.

Monograph title: CICC-ITOE 2010 - 2010 International Conference on Innovative Computing and Communication, 2010 Asia-Pacific Conference on Information Technology and Ocean Engineering

Issue date: 2010

Publication year: 2010

Pages: 195-198

Article number: 5439260

Language: English

ISBN-13: 9780769539423

Document type: Conference article (CA)

Conference name: 2010 International Conference on Innovative Computing and Communication, 2010 Asia-Pacific Conference on Information Technology and Ocean Engineering, CICC-ITOE 2010

Conference date: January 30, 2010 - January 31, 2010

Conference location: Macao, China

Conference code: 80330

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc. (IITA Assoc.); Nanchang University; Wuhan University; Huazhong Normal University; Optical Valley Software Park

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Schema matching, the problem of finding semantic correspondences between elements of two schemas, plays a key role in many applications, such as data warehouse, E-Commerce. The existing approaches to automating schema matching almost focus on computing direct element matches (1:1 matches) between two schemas. However, relationships between real-world schemas involve many complex matches besides 1:1 matches. A new complex schema matching system called NCSM is introduced in this paper. Firstly it can filter unreasonable matches on data types and values by preprocessor, and employs a set of special-purpose searchers in match generator to explore a specialized portion of the search space and discovers 1:1 and complex matches. Then it estimates candidate matches and selects optimal candidate matches by using similarity estimator and match selector respectively. Finally, according to the problem that there are opaque columns in the schemas being matched, it can apply complementary matcher to discover matching relations between opaque columns further more. Thereby it can discover more general, reasonable matching pairs. Experiments show that, NCSM does not only discover matches between schemas roundly, but also improve the matching recall and precision in practice. © 2010 IEEE.

Number of references: 5

Main heading: Innovation

Controlled terms: Data warehouses - Information technology - Learning systems - Ocean engineering - Oceanography

Uncontrolled terms: Data type - E-Commerce - Machine-learning - Preprocessors - Real-world - Recall and precision - Schema matching - Schemas - Search spaces - Semantic correspondence

Classification code: 912 Industrial Engineering and Management - 903 Information Science - 731.5 Robotics - 723.5 Computer Applications - 723.4 Artificial Intelligence - 723.3 Database Systems - 472 Ocean Engineering - 471.1 Oceanography, General - 461.4 Ergonomics and Human Factors Engineering

DOI: 10.1109/CICC-ITOE.2010.57

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

527

Accession number: 20103713228076

Title: Research and design of general report form system

Authors: Yu, Hong Kui¹ ; Yang, Yan Ping¹ ; Li, Yu Xiang¹ ; Wang, Jian Feng¹

Author affiliation:

¹ Dept. of Computer Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Yu, H. K. (Rscyhk@126.com)

Source title: 2010 International Conference on Machine Vision and Human-Machine Interface, MVHI 2010

Abbreviated source title: Int. Conf. Mach. Vis. Hum.-Mach. Interface, MVHI

Monograph title: 2010 International Conference on Machine Vision and Human-Machine Interface, MVHI 2010

Issue date: 2010

Publication year: 2010

Pages: 25-28

Article number: 5532618

Language: English

ISBN-13: 9780769540092

Document type: Conference article (CA)

Conference name: 2010 International Conference on Machine Vision and Human-Machine Interface, MVHI 2010

Conference date: April 24, 2010 - April 25, 2010

Conference location: Kaifeng, China

Conference code: 81621

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; International Communication Sciences Association (ICSA)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The paper has analyzed to the current situation of the domestic and international report form tool, have pointed out systematic existing problem and deficiency of the report form now at first. Then to the relevant knowledge of the report form, the key technology that the report form tool involves, XML technology, dynamic SQL technology, database technology, etc. have been analyzed and introduced. Finally, how this text has recommended using the technology and report form technology to combine together and make the system be realized synthetically. © 2010 IEEE.

Number of references: 10

Main heading: Technology

Controlled terms: Computer vision - Man machine systems - Metal working tools - XML

Uncontrolled terms: Current situation - Database technology - Dynamic reports - Existing problems - General report form - Key technologies - XML technology

Classification code: 603.1 Machine Tools, General - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 901 Engineering Profession - 961 Systems Science

DOI: 10.1109/MVHI.2010.51

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

528

Accession number: 20113214223577

Title: Shallow Chinese professional soccer club reform at the basic of the whole nation system

Authors: Liu, Feng-Yong¹ ; Li, Jun¹ ; Chi, Qiang¹

Author affiliation:

¹ Department of Physical Education, Hebei Normal University of science and Technology, Qinhuangdao, Hebei province, China

Corresponding author: Liu, F.-Y.

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 66-68

Monograph title: Mechanical, Materials and Manufacturing Engineering

Issue date: 2011

Publication year: 2011

Pages: 2252-2255

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037851852

Document type: Conference article (CA)

Conference name: 2011 International Conference on Mechanical Materials and Manufacturing Engineering, ICMMME 2011

Conference date: June 20, 2011 - June 22, 2011

Conference location: Nanchang, China

Conference code: 85969

Sponsor: University of Kentucky Lexington; Huazhong University of Science and Technology

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: After the founding of our county, the development of the football under the system has accomplished remarkable achievements. Along with the change of social environment, the vocational football in China development in the old country under the system is moving slowly. As soon as possible in order to improve our competitive level of football, it is imperative to finish adapting to the charity kingdom system of social economic environment, improving the professional football clubs, operation mechanism of transformation of government functions, with the development of club football association. Clear the club ownership structure, Ascend the management benefit; the club, Strengthening human resources management construction club related theory, the professional football clubs in China for further development of brainstorm. © (2011) Trans Tech Publications, Switzerland.

Number of references: 3

Main heading: Professional aspects

Controlled terms: Industrial engineering - Manufacture - Personnel

Uncontrolled terms: Club - Economic environment - Football club - Further development - Human resources management - National sports system - Operation mechanism - Ownership structure - Professional soccer - Social environment

Classification code: 537.1 Heat Treatment Processes - 901.1 Engineering Professional Aspects - 912.1 Industrial Engineering - 912.4 Personnel

DOI: 10.4028/www.scientific.net/AMM.66-68.2252

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

529

Accession number: 20104013276779

Title: Fabrication of single-crystalline gallium nitride nanowires by using alginate as template

Authors: Wang, Yuehui^{1, 2}; Gao, Faming¹; Qin, Xiujuan¹

Author affiliation:

- 1 College of Environment and Chemical Engineering, Yanshan University, Qinhuangdao 066004, China
- 2 Department of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Gao, F. (fmgao@ysu.edu.cn)

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 64

Issue: 23

Issue date: December 15, 2010

Publication year: 2010

Pages: 2578-2581

Language: English

ISSN: 0167577X

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: Hexagonal gallium nitride nanowires were synthesized successfully by solvothermal method with alginate as template. The microstructure, morphologies and compositions of the as-prepared product were characterized by powder X-ray diffraction (XRD), transmission electron microscopy (TEM), selected area electron diffraction (SAED), high resolution transmission electron microscopy (HRTEM), and energy dispersive X-ray (EDX). Results suggested that the rod-like nanowires were hexagonal single-crystalline GaN growing along [001] direction. The photoluminescence spectra (PL) of the GaN revealed that the as-synthesized sample possesses excellent optical properties. © 2010 Elsevier B.V. All rights reserved.

Number of references: 18

Main heading: High resolution transmission electron microscopy

Controlled terms: Crystalline materials - Diffraction - Gallium alloys - Gallium nitride - Microstructure - Nanostructured materials - Nanowires - Optical properties - Photoluminescence

- Semiconductor quantum wells - X ray diffraction

Uncontrolled terms: Energy dispersive x-ray - Gallium nitride nanowires - Nanomaterials - Photoluminescence spectrum - Powder X ray diffraction - Rod-like nanowires - Selected area electron diffraction - Single-crystalline - Solvothermal method - TEM

Classification code: 933 Solid State Physics - 804.2 Inorganic Compounds - 761 Nanotechnology - 951 Materials Science - 741.3 Optical Devices and Systems - 714.2 Semiconductor Devices and Integrated Circuits - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 741.1 Light/Optics

DOI: 10.1016/j.matlet.2010.08.055

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

530

Accession number: 20105013482646

Title: RETRACTED ARTICLE: Synthetically using action-oriented teaching method in vocational education

Authors: Xiaoqin, Zhang¹ ; Chunyan, Deng¹ ; Liu, Rongchang¹ ; Lun, Cuifen¹ ; Yu, Jingjing¹

Author affiliation:

¹ College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Xiaoqin, Z. (zxqwlc@163.com)

Source title: ICEIT 2010 - 2010 International Conference on Educational and Information Technology, Proceedings

Abbreviated source title: ICEIT - Int. Conf. Educ. Inf. Technol., Proc.

Volume: 2

Monograph title: ICEIT 2010 - 2010 International Conference on Educational and Information Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: V2350-V2354

Article number: 5607589

Language: English

ISBN-13: 9781424480340

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: The connotation and basic principles of action-oriented teaching are introduced in his paper. And the process of taking action-oriented as teaching concept, implementing integrated teaching and developing students' key abilities by synthetically using various teaching methods contained in action-oriented teaching is described in detail, combined with vocational education of mechanical manufacturing specialty. © 2010 IEEE.

Number of references: 7

Main heading: Teaching

Controlled terms: Apprentices - Information technology

Uncontrolled terms: Action-oriented teaching - Basic principles - Integrated teaching - Key ability - Mechanical manufacturing - Teaching methods - Vocational education

Classification code: 901.2 Education - 903 Information Science - 912.4 Personnel

DOI: 10.1109/ICEIT.2010.5607589

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

531

Accession number: 20103413186089

Title: Identification for hydraulic AGC system of strip mill based on neural networks

Authors: Wang, Haifang¹ ; Rong, Yu¹ ; Liu, Shengtao¹ ; Cui, Jinhua¹

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Qinhuangdao, China

Corresponding author: Wang, H. (hfwang0335@126.com)

Source title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Abbreviated source title: Int. Conf. Comput. Des. Appl., ICCDA

Volume: 2

Part number: 2 of 5

Monograph title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Issue date: 2010

Publication year: 2010

Pages: V2377-V2380

Article number: 5541406

Language: English

ISBN-13: 9781424471638

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Conference date: June 25, 2010 - June 27, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 81482

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT); Institute of Electrical and Electronics Engineers (IEEE); Northeastern University at Qinhuangdao (NEUQ); Dalian University of Technology; National Natural Science Foundation of China (NSFC)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: A new adaptive identification method is presented based on analyzing the dynamic peculiarities of the components in the nonlinear hydraulic automatic gauge control press system of strip mill. A

feed-forward and dynamic neural network structure is built based on the time series using enlarged back-propagation algorithm, and the nonlinear performance of press control system of the hydraulic automatic gauge control system can be forecasted. Based on the forecasted results, the characteristic parameters of linear system are identified by least square method. Finally, the applicability of the adaptive identification method is illustrated and verified by simulation results. © 2010 IEEE.

Number of references: 7

Main heading: Adaptive control systems

Controlled terms: Backpropagation algorithms - Computer applications - Gages - Hydraulics - Identification (control systems) - Least squares approximations - Linear systems - Neural networks - Presses (machine tools) - Strip mills - Time series

Uncontrolled terms: Adaptive identification - AGC - AGC system - Automatic gauge control - BP algorithm - Characteristic parameter - Dynamic neural networks - Feed-Forward - Identification - Least Square - Least square methods - Press control systems - Simulation result

Classification code: 943.3 Special Purpose Instruments - 922.2 Mathematical Statistics - 921.6 Numerical Methods - 731.1 Control Systems - 723.5 Computer Applications - 723.4 Artificial Intelligence - 632.1 Hydraulics - 603.1 Machine Tools, General - 535.1.2 Rolling Mill Practice

DOI: 10.1109/ICCDA.2010.5541406

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

532

Accession number: 20120114660686

Title: A fast and efficient algorithm for intelligent test paper generating

Authors: Chen, Xiumin¹

Author affiliation:

¹ Computer Department, Mathematics and Information College, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Chen, X. (jsjxyinghan@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 124

Monograph title: Practical Applications of Intelligent Systems: Proceedings of the Sixth International Conference on Intelligent Systems and Knowledge Engineering, Shanghai, China, Dec 2011 (ISKE2011)

Issue date: 2011

Publication year: 2011

Pages: 231-236

Language: English

ISSN: 18675662

ISBN-13: 9783642256578

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: In order to solve the problems such as blindfold search, slower convergence, and sometimes unsuccessfully search in the present genetic algorithms used for intelligent test paper generating, this paper introduces an intelligent test paper generating algorithm based on chapter ratio score and release strategy. The algorithm transforms test paper generating problem into the question of finding a suitable solution of multivariate equations group with multiple conditions. It initially determines the numbers of those pending small questions of various question types in each chapter according to its ratio score. If the number determined by the proportion can't meet the requirements, then firstly adjust the numbers of various types of questions to be selected into paper within the chapter while maintaining the same chapter ratio score. If the number can't be adjusted within the chapter, then make other adjustable chapters release its part share of scarce type of questions for the chapter. Eventually it will find scheme for generating test paper to meet ratio score of each chapter and strictly to meet the types of questions and the number of small questions of various types. Theoretical analysis and experimental results show that the algorithm can quickly and efficiently find a reasonable solution for generating test paper compared with the current genetic algorithms. © 2011 Springer-Verlag Berlin Heidelberg.

Number of references: 4

Main heading: Testing

Controlled terms: Genetic algorithms - Information dissemination - Intelligent systems - Knowledge engineering

Uncontrolled terms: chapter ratio score based - Efficient algorithm - Intelligent test - Multivariate equations - Question type - release strategy - Suitable solutions - Test paper

Classification code: 423.2 Non Mechanical Properties of Building Materials: Test Methods - 723
Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 903.2 Information
Dissemination - 921 Mathematics

DOI: 10.1007/978-3-642-25658-5_28

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

533

Accession number: 20130615987473

Title: The application of computer software -3D studio max, lightscape and v-ray in the
environmental artistic expression

Authors: Hu, Jiaying1

Author affiliation:

1 Hebei Normal University of Science and Technology, China

Corresponding author: Hu, J. (289279239@qq.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 631-632

Monograph title: Materials Engineering for Advanced Technologies (ICMEAT 2012)

Issue date: 2013

Publication year: 2013

Pages: 1379-1384

Language: English

ISSN: 10226680

ISBN-13: 9783037855874

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Materials Engineering for Advanced Technologies, ICMEAT 2012

Conference date: December 27, 2012 - December 28, 2012

Conference location: Xiamen, China

Conference code: 95229

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Since the birth of mankind, thousands of tools have been invented where computer is the greatest one. All inventions are the expansion and extension of various organs of the human, so the invention of the computer is the expansion and extension of the human's brain. It enables the human to be smarter and more intelligent, so it is the superlative intelligence tool. Nowadays, we have stepped into the computer age, and the impact and influence of the computer technology on the arts and art design has emerged and seems to be overwhelming. © (2013) Trans Tech Publications, Switzerland.

Number of references: 3

Main heading: Computer applications

Controlled terms: Applications - Computers - Patents and inventions

Uncontrolled terms: Art design - Computer technology - Intelligence tool

Classification code: 451.2 Air Pollution Control - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 901.3 Engineering Research

DOI: 10.4028/www.scientific.net/AMR.631-632.1379

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

534

Accession number: 20112514070265

Title: Development on transparent conductive ZnO thin films doped with various impurity elements

Authors: Zhao, Lin¹ ; Shao, Guangjie^{1, 2} ; Song, Qin³ ; Xiujuan, Shitao^{1, 2} ; Han, Sihuzhi¹

Author affiliation:

1 School of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao 066004, China

2 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

3 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Shao, G. (shaogj@ysu.edu.cn)

Source title: Rare Metals

Abbreviated source title: Rare Met

Volume: 30

Issue: 2

Issue date: April 2011

Publication year: 2011

Pages: 175-182

Language: English

ISSN: 10010521

E-ISSN: 18677185

CODEN: RARME8

Document type: Journal article (JA)

Publisher: University of Science and Technology Beijing, 30 Xueyuan Lu, Beijing, 100083, China

Abstract: A general review of recent research progress in fabricating transparent conductive ZnO thin films by means of intentional doping and codoping with In, Ga, Al, Mg, Li, F, H, N, and P, divided into metals and nonmetals, is presented in this article. The main emphasis is placed on introducing and discussing the recent research achievements on the mechanisms of the incorporation of these impurities, and their effects on the electrical and optical properties. Lastly, this article concludes with a summary of the present state of investigations on doping elements in fabricating functional ZnO thin films for photoelectric applications, and with our personal view of the perspective of future studies on doped ZnO thin films. © The Nonferrous Metals Society of China and Springer-Verlag Berlin Heidelberg 2011.

Number of references: 70

Main heading: Optical films

Controlled terms: Conductive films - Electric properties - Gallium - Impurities - Metallic films - Optical properties - Semiconductor doping - Thin films - Zinc oxide

Uncontrolled terms: Co-doping - Doped ZnO - Doping elements - Electrical and optical properties - Impurity element - Research progress - Transparent conductive - ZnO thin film

Classification code: 804.2 Inorganic Compounds - 741.3 Optical Devices and Systems - 741.1 Light/Optics - 714.2 Semiconductor Devices and Integrated Circuits - 951 Materials Science - 708.2 Conducting Materials - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 539 Metals Corrosion and Protection; Metal Plating - 531 Metallurgy and Metallography - 701.1 Electricity: Basic Concepts and Phenomena

DOI: 10.1007/s12598-011-0220-x

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

535

Accession number: 20105113494338

Title: RETRACTED ARTICLE: Study of information technology's application in PE teaching in higher education

Authors: Zhang, Xuyao¹ ; Li, Rongwei¹ ; Zhao, Chengen²

Author affiliation:

- 1 Physical Education Department, Hebei Normal University of Science and Technology, QinHuangdao, China
- 2 Division of Personnel Affairs, Hebei Normal University of Science and Technology, QinHuangdao, China

Corresponding author: Zhang, X. (zhangxuyao@126.com)

Source title: ICDLE 2010 - 2010 4th International Conference on Distance Learning and Education, Proceedings

Abbreviated source title: ICDLE - Int. Conf. Distance Learn. Educ., Proc.

Monograph title: ICDLE 2010 - 2010 4th International Conference on Distance Learning and Education, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 241-244

Article number: 5605992

Language: English

ISBN-13: 9781424487509

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: This paper describes a computer network technology in the areas of secondary physical education teaching role, and then combined with the specific application, a detailed analysis of user needs, proposed physical education program of the network supporting system development and implementation. The system has broken the traditional physical education model in time and space limitations, make up the traditional physical education in some of the defects or deficiencies, learn from each other, complement multiplication; achieving students online learning, students answer questions, data download, etc. function. The friendly interface, simple operation, to enable teachers and students, teaching resources to achieve the information management and sharing among teachers teaching resources. For students of the Physical workers are provided room for continuing education, I truly realized the Athletics Teaching hospital network technology. © 2010 IEEE.

Number of references: 10

Main heading: Teaching

Controlled terms: Distance education - Education computing - Hospitals - Information management - Students

Uncontrolled terms: ASP - Computer network technology - Continuing education - Higher education - Hospital networks - Network support - Online learning - Physical education - Physical education teachings - Simple operation - Supporting systems - Teaching resources - Time and space - User need

Classification code: 462.2 Hospitals, Equipment and Supplies - 901.2 Education - 903.2 Information Dissemination

DOI: 10.1109/ICDLE.2010.5605992

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

536

Accession number: 20122315093228

Title: A solution to simultaneous localization, calibration and mapping of ubiquitous robot system

Authors: Wu, Pei-Liang¹ ; Kong, Ling-Fu¹ ; Kong, Liang^{1, 2}

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao 066004, China

2 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Wu, P.-L. (peiliangwu@gmail.com)

Source title: Zidonghua Xuebao/Acta Automatica Sinica

Abbreviated source title: Zidonghua Xuebao Acta Auto. Sin.

Volume: 38

Issue: 4

Issue date: April 2012

Publication year: 2012

Pages: 618-631

Language: Chinese

ISSN: 02544156

CODEN: ZIXUDZ

Document type: Journal article (JA)

Publisher: Science Press, 18, Shuangqing Street, Haidian, Beijing, 100085, China

Abstract: In ubiquitous robot system, robot localization, sensor network calibration, and environment mapping are three basic issues which are coupled with each other, and solutions to these three issues are prerequisites for efficient and intelligent service of ubiquitous robot system. In this paper, the concept of

simultaneous localization, calibration and mapping of ubiquitous robot system is proposed. The joint conditional probability distribution is designed to describe the coupled question, and then is decomposed into several analytic terms according to Bayesian and Markov properties. The Rao-Blackwellized particle filtering is used to solve the analytic terms. Firstly, sensor network observation of robot, robot observations of mapped environments, and robot controls are combined to deduce the proposal distribution of robot pose and formula for updating particle weight. Secondly, sensor network observations of both robot path and mapped environment are combined to deduce the recursive formula of sensor network calibration. Thirdly, both sensor network observations and robot observations of environment (localized or newly found) are combined to deduce the recursive formula of environment mapping. The whole algorithm of simultaneous localization, calibration and mapping is designed according to Rao-Blackwellized particle filtering, and its efficiency is verified by simulated experiments. Copyright © 2012 Acta Automatica Sinica. All rights reserved.

Number of references: 21

Main heading: Robots

Controlled terms: Calibration - Mapping - Probability distributions - Robot applications - Sensor networks

Uncontrolled terms: Conditional probability distributions - Environment mapping - Intelligent Services - Its efficiencies - Mapped environments - Markov property - Network calibration - Network observation - Proposal distribution - Rao-Blackwellized particle filtering - Recursive formula - Robot controls - Robot localization - Robot path - Robot pose - Robot system - Simulated experiments

Classification code: 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 922.1 Probability Theory - 732 Control Devices - 731.6 Robot Applications - 902.1 Engineering Graphics

DOI: 10.3724/SPJ.1004.2012.00618

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

537

Accession number: 20123715429864

Title: The design of optical fiber displacement sensor system

Authors: Guo, Xiumei1 ; Li, Yanping1 ; Jiang, Luansheng2 ; Ma, Chongxiao1

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Electrical and Mechanical Engineering, Changli, Hebei, 066600, China
- 2 Yanshan University, Liren College, Qinhuangdao, Hebei, 066004, China

Corresponding author: Guo, X.

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 162 AISC

Monograph title: Software Engineering and Knowledge Engineering: Theory and Practice - Selected Papers from 2012 Int. Conference on Software Engineering, Knowledge Engineering and Information Engineering, SEKEIE 2012

Issue date: 2012

Publication year: 2012

Pages: 73-80

Language: English

ISSN: 18675662

ISBN-13: 9783642294549

Document type: Conference article (CA)

Conference name: 2012 International Conference on Software Engineering, Knowledge Engineering and Information Engineering, SEKEIE 2012

Conference date: April 1, 2012 - April 2, 2012

Conference location: China

Conference code: 92498

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Introduced Fiber Optic Displacement measurement principle, Through setting the reference channel, using of modulation and demodulation technology the system eliminates interference caused by changes in non-measured light intensity effectively. After data time-sharing acquisition, the SCM system will complete the function such as the identification and the difference between the measured signal computing, data processing,

more limited display and alarm . The system's measurement range 0 ~ 1.300mm, accuracy up to 1 % . © 2012 Springer-Verlag GmbH.

Number of references: 8

Main heading: Software engineering

Controlled terms: Data processing - Demodulation - Displacement measurement - Fibers
- Knowledge engineering - Optical fibers - Optical variables measurement

Uncontrolled terms: accuracy - Light intensity - Measured signals - Measurement range
- Optical fiber displacement - Reference channels - SCM - SCM systems - Time-sharing

Classification code: 943.2 Mechanical Variables Measurements - 941.4 Optical Variables Measurements
- 817 Plastics and Other Polymers: Products and Applications - 812 Ceramics, Refractories and Glass - 741.1.2
Fiber Optics - 723 Computer Software, Data Handling and Applications - 716 Telecommunication; Radar, Radio
and Television

Numerical data indexing: Percentage 1.00e+00%, Size 0.00e+00m to 1.30e-03m

DOI: 10.1007/978-3-642-29455-6_10

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

538

Accession number: 20113214227455

Title: Morpholine-phthalocyanine (donor-acceptor) construct: Photoinduced intramolecular electron transfer and triplet formation from its charge separation state

Authors: Zhang, Xian-Fu^{1, 2}; Wang, Jing¹

Author affiliation:

1 Chemistry Department, Hebei Normal University of Science and Technology, Qinghuangdao, Hebei Province 066004, China

2 MPC Technology, Hamilton, ON L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Physical Chemistry A

Abbreviated source title: J Phys Chem A

Volume: 115

Issue: 31

Issue date: August 11, 2011

Publication year: 2011

Pages: 8597-8603

Language: English

ISSN: 10895639

E-ISSN: 15205215

CODEN: JPCAFH

Document type: Journal article (JA)

Publisher: American Chemical Society, 2540 Olentangy River Road, P.O. Box 3337, Columbus, OH 43210-3337, United States

Abstract: Silicon phthalocyanine (SiPc) with two axially attached morpholine (MP) units was prepared, and its photophysics was studied by laser flash photolysis, steady state and time-resolved fluorescence methods. Both the fluorescence efficiency and lifetime of SiPc moiety were remarkably quenched, because of the efficient intramolecular photoinduced electron transfer (PET) from morpholine donors to SiPc moiety. The generated charge separation state (CSS), SiPc \bullet -MP \bullet +, which was observed by transient absorption spectra, showed a lifetime of 4.8 ns. The triplet quantum yield of SiPc unit in the supra-molecule is unexpectedly high, and the predominant spectral signal in microsecond-scale is triplet-triplet (T1-Tn) absorption. This high triplet yield is due to the charge recombination of CSS that generates T1 in 32% efficiency: SiPc \bullet -MP \bullet + \rightarrow 3SiPc-MP. The T1 formation process occurred efficiently because the CSS SiPc \bullet -MP \bullet + has a higher energy (1.65 eV) than that of the triplet state 3SiPc-MP (1.0 eV). Emission from the CSS was also observed: SiPc \bullet -MP \bullet + \rightarrow SiPc-MP + h ν '. © 2011 American Chemical Society.

Number of references: 47

Main heading: Nitrogen compounds

Controlled terms: Absorption - Electron transitions - Fluorescence - Photolysis - Quantum yield

Uncontrolled terms: Charge recombinations - Charge separations - Donor-acceptors - Fluorescence efficiency - Formation process - Laser flash photolysis - Morpholines -

Photo-induced electron transfer - Photoinduced intramolecular electron transfers - Photophysics - Spectral signal - Steady state - Time-resolved fluorescence - Transient absorption spectra - Triplet state

Classification code: 711.1 Electromagnetic Waves in Different Media - 741.1 Light/Optics - 801.4 Physical Chemistry - 804.1 Organic Compounds - 931.2 Physical Properties of Gases, Liquids and Solids

Numerical data indexing: Electron_Volt 1.00e+00eV, Electron_Volt 1.65e+00eV, Percentage 3.20e+01%, Time 4.80e-09s

DOI: 10.1021/jp202997e

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

539

Accession number: 20120314686720

Title: Effects of cryogenic treatment on the thermal physical properties of Cu_{76.12}Al_{23.88} alloy

Authors: Wang, Ping^{1, 2}; Lu, Wei³; Wang, Yuehui⁴; Liu, Jianhua¹; Zhang, Ruijun¹

Author affiliation:

- 1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China
- 2 College of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao 066004, China
- 3 Tangshan Vocational Technology College, Tangshan 063000, China
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Corresponding author: Zhang, R. (Zhangrj@ysu.edu.cn)

Source title: Rare Metals

Abbreviated source title: Rare Met

Volume: 30

Issue: 6

Issue date: December 2011

Publication year: 2011

Pages: 644-649

Language: English

ISSN: 10010521

E-ISSN: 18677185

CODEN: RARME8

Document type: Journal article (JA)

Publisher: University of Science and Technology Beijing, 30 Xueyuan Lu, Beijing, 100083, China

Abstract: The thermal diffusion coefficient, heat capacity, thermal conductivity, and thermal expansion coefficient of Cu76.12Al23.88 alloy before and after cryogenic treatment in the heating temperature range of 25°C to 600°C were measured by thermal constant tester and thermal expansion instrument. The effects of cryogenic treatment on the thermal physical properties of Cu76.12Al23.88 alloy were investigated by comparing the variation of the thermal parameters before and after cryogenic treatment. The results show that the variation trend of the thermal diffusion coefficient, heat capacity, thermal conductivity, and thermal expansion coefficient of Cu76.12Al23.88 alloy after cryogenic treatment was the same as before. The cryogenic treatment can increase the thermal diffusion coefficient, thermal conductivity, and thermal expansion coefficient of Cu76.12Al23.88 alloy and decrease its heat capacity. The maximum difference in the thermal diffusion coefficient between the before and after cryogenic treatment appeared at 400°C. Similarly, thermal conductivity was observed at 200°C. © The Nonferrous Metals Society of China and Springer-Verlag Berlin Heidelberg 2011.

Number of references: 18

Main heading: Thermal expansion

Controlled terms: Alloys - Aluminum - Cerium alloys - Cryogenics - Expansion - Low temperature engineering - Physical properties - Specific heat - Thermal conductivity of solids - Thermal diffusion

Uncontrolled terms: Heating temperatures - Thermal constant - Thermal diffusion coefficients - Thermal expansion coefficient - Thermal expansion coefficients - Thermal parameters - Thermal-physical property

Classification code: 951 Materials Science - 931.2 Physical Properties of Gases, Liquids and Solids - 644.4 Cryogenics - 641.1 Thermodynamics - 547.2 Rare Earth Metals - 541.1 Aluminum - 531.1 Metallurgy

Numerical data indexing: Temperature 2.98e+02K to 8.73e+02K, Temperature 4.73e+02K, Temperature 6.73e+02K

DOI: 10.1007/s12598-011-0443-x

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

540

Accession number: 20142017724771

Title: Research and implement of solar panels laminating machine control system based on intelligent control

Authors: Ma, Jiwei¹ ; Lun, Cuifen¹ ; Shi, Lei¹ ; Lin, Hongju¹ ; Wang, Jian¹ ; Liu, Shiguang¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: 3rd International Symposium on Test Automation and Instrumentation, ISTAI 2010

Abbreviated source title: Int. Symp. Test Autom. Instrum., ISTAI

Monograph title: 3rd International Symposium on Test Automation and Instrumentation, ISTAI 2010

Issue date: 2010

Publication year: 2010

Pages: 109-114

Language: English

Document type: Conference article (CA)

Conference name: 3rd International Symposium on Test Automation and Instrumentation, ISTAI 2010

Conference date: May 22, 2010 - May 25, 2010

Conference location: Xiamen, China

Conference code: 105069

Sponsor: China Instrumentation and Control Society (CIS); Journal of Electronic Measurement and Instrument; Chinese Journal of Scientific Instrument; National Natural science Foundation of China; Computer

Measurement Group

Publisher: International Symposium on Test Automation and, China

Abstract: This paper introduces the hardware and software design of a fully automatic solar panels laminating machine control system. The core of hardware is that master-slave CPU is used to realize parallel detection and control, the input detection signal is effectively separated from output control signal; This system takes digital filter method of repeated sampling and weighted average to collect temperature value, at the same time expert PID control algorithm is used to control different temperature environments required for technology links at all levels, the system dynamic and static quality is further improved; By using of anti-interference measures of hardware and software, this system has reliable operation in complicated industry environment, high control precision and good robustness; Compared to PLC control system, the cost is greatly reduced, the advanced, flexible, and complex control algorithms is easier to achieve.

Number of references: 5

Main heading: Quality control

Controlled terms: Algorithms - Digital filters - Hardware - Intelligent control - Interference suppression - Laminating machinery - Solar concentrators - Three term control systems

Uncontrolled terms: Complex control algorithms - Hardware and software - Hardware and software designs - Machine control systems - Master-slave - Output control signals - Solar panels - Temperature environments

Classification code: 921 Mathematics - 913.3 Quality Assurance and Control - 816.2 Plants and Machinery for Plastics and Other Polymers - 731.1 Control Systems - 723 Computer Software, Data Handling and Applications - 711 Electromagnetic Waves - 703.2 Electric Filters - 702.3 Solar Cells - 605 Small Tools and Hardware

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

541

Accession number: 20104413342870

Title: Dynamic simulation assessment of collaboration strategies to manage demand gap in high-tech product diffusion

Authors: Yuan, Xumei¹ ; Shen, Ling^{1, 3} ; Ashayeri, Jalal²

Author affiliation:

- 1 Department of Industrial Engineering, Yanshan University, Qinhuangdao, China
- 2 Department of Econometrics and Operations Research, Tilburg University, Tilburg, Netherlands
- 3 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Yuan, X. (yxm@ysu.edu.cn)

Source title: Robotics and Computer-Integrated Manufacturing

Abbreviated source title: Rob Comput Integr Manuf

Volume: 26

Issue: 6

Issue date: December 2010

Publication year: 2010

Pages: 647-657

Language: English

ISSN: 07365845

CODEN: RCIMEB

Document type: Conference article (CA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: There is no question that many high-tech supply chains operate in a context of high process and market uncertainties due to shorter product life cycles. When introducing a new product, these supply chains must manage the cost of supply, including the cost of capacity and inventories, with revenues from the product's demand over its life cycle. However, in early phase of introduction after earlier buyers purchase, there might be a demand gap for a period followed by a sudden surge. To stay responsive and serve the market downstream after such gaps, two important decisions must be made: (a) the sizing of the capacity, and (b) the level of collaboration. It is the intention of this paper to show that the chosen level of collaboration effects significantly on managing the gap in the demand trajectory in new high-tech product diffusion. We study the impact of different collaboration strategies like vendor managed inventory (VMI), jointly managed inventory (JMI), and a collaborative planning, forecasting & replenishment (CPFR) model using system dynamics based simulation and compare the results with a non-collaborative chain. Our results yield insights into effectiveness of collaboration in managing the dynamics of demand gap. © 2010 Elsevier Ltd.

Number of references: 8

Main heading: Computer simulation

Controlled terms: Diffusion - Life cycle - Supply chain management - Supply chains

Uncontrolled terms: Collaboration strategies - Collaborative chains - Collaborative planning
- Cost of capacity - Dynamic simulation - High-tech products - Market uncertainty - New high -
New product - Product life cycles - System Dynamics - Vendor managed inventory

Classification code: 723.5 Computer Applications - 912 Industrial Engineering and Management - 913
Production Planning and Control; Manufacturing - 913.1 Production Engineering - 931.1 Mechanics

DOI: 10.1016/j.rcim.2010.06.020

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

542

Accession number: 20113114191157

Title: Research on the improvements on Atallah's algorithm: A new improved algorithm on Atallah

Authors: Liu, Shan¹ ; Cao, Lijun¹ ; Liu, Maohua¹ ; Liu, Jinghui¹

Author affiliation:

¹ Collage of Mathematics and Information Technology, Hebei Normal University of Science and Technology,
China

Corresponding author: Liu, S. (ls3252003@163.com)

Source title: Proceedings - 2011 3rd International Conference on Communications and Mobile
Computing, CMC 2011

Abbreviated source title: Proc. - Int. Conf. Commun. Mob. Comput., CMC

Monograph title: Proceedings - 2011 3rd International Conference on Communications and Mobile
Computing, CMC 2011

Issue date: 2011

Publication year: 2011

Pages: 250-253

Article number: 5931183

Language: English

ISBN-13: 9780769543574

Document type: Conference article (CA)

Conference name: 2011 3rd International Conference on Communications and Mobile Computing, CMC 2011

Conference date: April 18, 2011 - April 20, 2011

Conference location: Qingdao, China

Conference code: 85720

Sponsor: Shandong University of Science and Technology; Shandong University; Heriot Watt University; World Research Institutes

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper, we give a new algorithm evolving from Atallah's algorithm proposed in 1984, and we make many improvements: First, combining replaced sewing in order to simplify the third step, Second, we delete the fourth step. And we simplify the construction of the auxiliary graph, avoiding the second time to find Euler tour and the introduction of a mass storage array. The improvements make it quicker and simpler to find the Euler tour of an Euler graph, and the improvements don't increase time and space complexity of Atallah's algorithm. © 2011 IEEE.

Number of references: 8

Main heading: Trees (mathematics)

Controlled terms: Algorithms - Mobile computing

Uncontrolled terms: Auxiliary graph - euler partion - Euler tour - Improved algorithm - Mass storage - Space complexity - Spanning tree

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723 Computer Software, Data Handling and Applications - 921 Mathematics - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.1109/CMC.2011.45

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

543

Accession number: 20130415933075

Title: Measurement and analysis of mineral components in grape wine by inductively coupled plasma-optical emission spectrometer

Authors: Du, Bin1 ; Zhu, Feng-Mei2 ; Li, Feng-Ying2

Author affiliation:

1 Analysis and Testing Center, Hebei Normal University of Science and Technology, Qinhuangdao, 066600, China

2 School of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, 066600, China

Corresponding author: Zhu, F.-M.

Source title: Advance Journal of Food Science and Technology

Abbreviated source title: Adv. J. Food Sci. Technol.

Volume: 4

Issue: 5

Issue date: 2012

Publication year: 2012

Pages: 277-280

Language: English

ISSN: 20424868

E-ISSN: 20424876

Document type: Journal article (JA)

Publisher: Maxwell Science Publications, 74, Kenelm Road,, B10, 9AJ, Birmingham, Small Heath,

United Kingdom

Abstract: A direct measuring method for the determination of mineral components in grape wine by Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES) was developed. It was applied to six grape wines from China's 2 major wine-producing regions-Changli in Hebei Province and Yantai in Shandong Province. Here in this study, eleven elements (Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Ni, Pb and Zn) were analyzed. The analysis was performed by heating the wine sample in an oven with acid digestion method using concentrated nitric acid (HNO₃) and perchloric acid (HClO₄), followed by sequential determination of the elements by ICP-OES. Typical patterns of elements obtained by the multicomponent analyses can be evaluated by multivariate data analysis to recognize the wine origins. © Maxwell Scientific Organization, 2012.

Number of references: 8

Main heading: Wine

Controlled terms: Fruits - Inductively coupled plasma - Lead - Light emission - Manganese - Minerals - Multivariant analysis - Nitric acid - Spectrometers - Spectrometry

Uncontrolled terms: Acid digestion methods - Concentrated nitric acid - Emission spectrometers - Grape wine - Hebei Province - ICP-OES - Inductively-coupled - Measurement and analysis - Measuring method - Mineral component - Multi-component analysis - Multivariate data analysis - Perchloric acids - Sequential determination - Shandong province - Typical patterns - Wine sample

Classification code: 922 Statistical Methods - 822.3 Food Products - 821.4 Agricultural Products - 804.2 Inorganic Compounds - 932.3 Plasma Physics - 801 Chemistry - 546.1 Lead and Alloys - 543.2 Manganese and Alloys - 482.2 Minerals - 741.1 Light/Optics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

544

Accession number: 20140317199613

Title: The role of ecotourism in sustainable development of economy-an ecotourism analysis based on Alishan

Authors: Zhang, Jifei¹ ; Huang, Liming¹ ; Wang, Jing¹

Author affiliation:

¹ School of Business and Management, Hebei Normal University of Science and Technology, 360 Hebei Street(W), Haigang District, Qin huangdao 066004, China

Corresponding author: Zhang, J. (yaoyg12@163.com)

Source title: International Journal of Applied Environmental Sciences

Abbreviated source title: Int. J. Appl. Environ. Sci.

Volume: 8

Issue: 21

Issue date: 2013

Publication year: 2013

Pages: 2657-2664

Language: English

ISSN: 09736077

E-ISSN: 09740260

Document type: Journal article (JA)

Publisher: Research India Publications, B-2/84 Ground Floor, Rohini Sec-16,, Delhi, 110085, India

Abstract: Ecological tourism has become one of the largest tourist industries nowadays and also a fastest-growing part of the sustainable development of economy. Its starting point is to protect human rights and the environment and promote the development of regional economy. In order to present a complete expression of this industry, this paper provides the theoretical framework from two parts. The first part puts forward the general view of ecotourism and sustainable development of economy while the second part focuses on ecological tourism economic development form and decision analysis. It regards Alishan national scenic area as the study object, examined its tourism characteristics and summarized the regional economic impact of ecotourism development. © Research India Publications.

Number of references: 8

Main heading: Ecology

Controlled terms: Economic analysis - Planning - Regional planning - Sustainable development

Uncontrolled terms: Alishan - Eco-tourism development - Ecological tourism - Economic development - Regional economic - Regional economy - Theoretical framework - Tourist industry

Classification code: 403 Urban and Regional Planning and Development - 403.2 Regional Planning and Development - 454.3 Ecology and Ecosystems - 911.2 Industrial Economics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

545

Accession number: 20104613386518

Title: Design and research on monitoring and alarming system for mine

Authors: Chen, Panfeng¹ ; Shi, Lei¹ ; Wang, Jianfeng² ; Chen, Lidong¹ ; Liu, Shiguang¹

Author affiliation:

1 Electrical and Mechanical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

2 Mathematics and Information Science and Technology College, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Chen, P. (chenpanfeng1980@126.com)

Source title: 3rd International Workshop on Advanced Computational Intelligence, IWACI 2010

Abbreviated source title: Int. Workshop Adv. Comput. Intell., IWACI

Monograph title: 3rd International Workshop on Advanced Computational Intelligence, IWACI 2010

Issue date: 2010

Publication year: 2010

Pages: 389-391

Article number: 5585128

Language: English

ISBN-13: 9781424463343

Document type: Conference article (CA)

Conference name: 3rd International Workshop on Advanced Computational Intelligence, IWACI 2010

Conference date: August 25, 2010 - August 27, 2010

Conference location: Suzhou, China

Conference code: 82125

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper, the configuration characteristic of the safe parameter measurement and alarm system used in a new type mine is introduced. The system is made up of wire communication and radio communication with a topological structure. Then, it respectively introduces the hardware and software construction, the working principle and the method of design, which makes the enhanced single chip microcomputer STC12C5612AD as the core of detecting instrument, the STC12C5630AD as the core of coordinator and IPC (Industrial Personal Computer) as CPU. The three-class computer communication system, which integrates measurement, alarm and management, has reliable operation and convenient using, and it especially adapts to the system of parameter detecting and alarm in the mine with decentralized monitoring and centralized management.

Number of references: 5

Main heading: Alarm systems

Controlled terms: Artificial intelligence - Communication systems - Computer hardware - Monitoring - Personal communication systems - Personal computers - Radio communication - Topology

Uncontrolled terms: Centralized management - Computer Communications - Decentralized monitoring - Detecting instrument - Hardware and software - Industrial personal computers - Parameter measurement - Reliable operation - Single chip microcomputers - System of parameters - Topological structure - Wire communication - Working principles

Classification code: 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 914.2 Fires and Fire Protection - 723.4 Artificial Intelligence - 722.4 Digital Computers and Systems - 722 Computer Systems and Equipment - 716.3 Radio Systems and Equipment - 716 Telecommunication; Radar, Radio and Television

DOI: 10.1109/IWACI.2010.5585128

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

546

Accession number: 20104913448292

Title: Research of acupuncture based on Hilbert-Huang transform

Authors: Li, Xiaoxia1 ; Guo, Xiumei2 ; Xu, Guizhi1 ; Shang, Xiukui3

Author affiliation:

1 Province-Ministry Joint Key Laboratory of Electromagnetic Field and Electrical Apparatus Reliability, Hebei University of Technology, Tianjin, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, China

3 Department of Acupuncture, Tianjin University of Traditional Chinese Medicine, Tianjin, China

Corresponding author: Li, X.

Source title: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)

Abbreviated source title: Lect. Notes Comput. Sci.

Volume: 6330 LNBI

Issue: PART 3

Monograph title: Life System Modeling and Intelligent Computing - Int. Conf. on Life System Modeling and Simulation, LSMS 2010 and Int. Conf. on Intelligent Computing for Sustainable Energy and Environment, ICSEE 2010

Issue date: 2010

Publication year: 2010

Pages: 131-138

Language: English

ISSN: 03029743

E-ISSN: 16113349

ISBN-10: 3642156142

ISBN-13: 9783642156144

Document type: Conference article (CA)

Conference name: 2010 International Conference on Life System Modeling and Simulation, LSMS 2010 and the 2010 International Conference on Intelligent Computing for Sustainable, Energy and Environment, ICSEE 2010

Conference date: September 17, 2010 - September 20, 2010

Conference location: Wuxi, China

Conference code: 82248

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Acupuncture is one of the first complementary and alternative medicine methods in the world. But the mechanism of the acupuncture is still a mystery, it attracts many researchers to this field. The aim of our research is to explore the regulative effects of acupuncturing Neiguan and Shenmen acupoints. In this paper, a research based on Hilbert-Huang Transform (HHT) is presented. With this method, the energy is redistributed after the acupuncture, especially after the fourth acupuncture stimulus. It is concluded that, the acupuncture can change the distribution of the energy after several stimuli. © 2010 Springer-Verlag.

Number of references: 9

Main heading: Intelligent computing

Controlled terms: Acupuncture - Computer simulation - Mathematical transformations - Medicine - Research - Vibration measurement

Uncontrolled terms: EEG - EMD - HHT - Neiguan - Shenmen

Classification code: 461.6 Medicine and Pharmacology - 723.4 Artificial Intelligence - 723.5 Computer Applications - 901.3 Engineering Research - 921.3 Mathematical Transformations - 943.2 Mechanical Variables Measurements

DOI: 10.1007/978-3-642-15615-1_16

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20102713054525

Title: Design on environment monitoring system for greenhouse based on wireless sensor network

Authors: Guofang, Li1 ; Shengtao, Liu1 ; Lidong, Chen1 ; Yan, Liu2 ; Changchun, Bao1 ; Dong, Wang1 ; Junyu, Xue1 ; Liang, Zhang1 ; Shuying, Ma1

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Qinhuangdao Institute of Technology, Qinhuangdao, China

Corresponding author: Shuying, M. (ma_shuying@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 108-111

Issue: 1

Monograph title: Progress in Measurement and Testing

Issue date: 2010

Publication year: 2010

Pages: 145-150

Language: English

ISSN: 10226680

ISBN-10: 0878492690

ISBN-13: 9780878492695

Document type: Conference article (CA)

Conference name: 2010 International Conference on Advanced Measurement and Test, AMT 2010

Conference date: May 15, 2010 - May 16, 2010

Conference location: Sanya, China

Conference code: 80875

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Huazhong Normal University

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The information monitoring points for greenhouse environment were scattered, so a wireless sensor network with star-type network topology was designed and the wireless monitoring system for greenhouse was developed. By employing CC2430 chip as the core hardware, WSN implemented real-time data acquisition and remote wireless transmission. The field data was transmitted to the monitoring host through RS-232 interface. The node management software was developed based C language and the data management software was developed using LabVIEW 8.6. The system was featured by low cost and simply installation. The primary experiments show that the system performance is stable and can meet the design requirement of remote data acquisition.

Number of references: 6

Main heading: Monitoring

Controlled terms: Computer programming languages - Computer software - Electric network topology - Greenhouses - Remote control - Sensor networks - Wireless sensor networks

Uncontrolled terms: C language - Data management software - Design requirements - Environment information - Environment monitoring system - Field data - Greenhouse environment - Information monitoring - LabVIEW - Low costs - Network topology - Node management - Real-time data acquisition - Remote data acquisition - Remote monitoring - Wireless monitoring system - Wireless transmissions

Classification code: 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 731.1 Control Systems - 732 Control Devices - 821.6 Farm Buildings and Other Structures - 941 Acoustical and Optical Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 723.1.1 Computer Programming Languages - 722.4 Digital Computers and Systems - 722.3 Data Communication, Equipment and Techniques - 716.3 Radio Systems and Equipment - 703.1 Electric Networks - 402.1 Industrial and Agricultural Buildings - 723 Computer Software, Data Handling and Applications

DOI: 10.4028/www.scientific.net/AMR.108-111.145

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20130515974489

Title: High precision ultrasonic ranging system for mobile robot navigation

Authors: Yan, Gao¹ ; Lina, Jia¹ ; Bo, Wang¹ ; Lihua, Liu¹ ; Liming, Huang²

Author affiliation:

1 Liaoning Institute of science and technology, Liaoning Benxi 117004, China

2 HeBei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Yan, G. (Ingaoyan@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 249-250

Monograph title: Applied Mechanics and Mechanical Engineering III

Issue date: 2013

Publication year: 2013

Pages: 1139-1143

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037855577

Document type: Conference article (CA)

Conference name: 2012 3rd International Conference on Applied Mechanics and Mechanical Engineering, ICAMME 2012

Conference date: November 14, 2012 - November 15, 2012

Conference location: Macau, China

Conference code: 95109

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: This paper introduces ultrasonic ranging system which can be applied to avoid obstacle and navigate for mobile robot. This system is composed of AT89S51 single chip microcomputer, ultrasonic transmitting circuit, ultrasonic receiving circuit, amplifying and filtering circuit, peak value time detecting circuit, environment temperature compensation circuit. The method of echo peak time detection point is used to eliminate the error. It is proved that The maximum range of the system is 10 meter and maximum measurement error can be controlled to ± 2 cm or so. This system has such merits as rapid corresponding, high precision, high performance price rate. © (2013) Trans Tech Publications, Switzerland.

Number of references: 8

Main heading: Ultrasonic applications

Controlled terms: Mechanical engineering - Mobile robots - Range finding

Uncontrolled terms: Avoid obstacles - Detecting circuit - Environment temperature - Filtering circuits - High precision - Mobile Robot Navigation - Peak values - Single chip microcomputers - Time detection - Ultrasonic ranging - Ultrasonic ranging system - Ultrasonic transmitting

Classification code: 608 Mechanical Engineering, General - 731.5 Robotics - 753.3 Ultrasonic Applications - 943.2 Mechanical Variables Measurements

Numerical data indexing: Size 1.00e+01m, Size 2.00e-02m

DOI: 10.4028/www.scientific.net/AMM.249-250.1139

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

549

Accession number: 20134016813909

Title: Synthesis, fluorescence, excited triplet state properties and singlet oxygen generation of para-(tert-butylphenoxy) substituted phthalocyanines containing group IV A central elements

Authors: Zhang, Xian-Fu^{1, 2}; Shao, Xiaona¹; Tian, Hongyan¹; Sun, Xiaojie¹; Han, Kaixue¹

Author affiliation:

1 Chemistry Department, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province 066004, China

2 MPC Technology, Hamilton, ON L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Dyes and Pigments

Abbreviated source title: Dyes Pigm.

Volume: 99

Issue: 2

Issue date: 2013

Publication year: 2013

Pages: 480-488

Language: English

ISSN: 01437208

CODEN: DYPIDX

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: Phthalocyanines containing group IV A central elements and non-peripheral para-(tert-butyl)-phenoxy substituents, i.e. $M(OH)_2PC(\alpha\text{-t-butyl-phenoxy})_4$ (M is Si, Ge, Sn and Pb respectively), were synthesized. The effects of the central elements on the photosensitizing and photophysical properties (quantum yield of singlet oxygen formation, quantum yield and lifetime of lowest lying excited triplet- and singlet state) were investigated by laser flash photolysis, time correlated single photon counting, steady state fluorescence and absorption spectra. The incorporation of large atoms significantly enhances the efficiency of excited triplet state and singlet oxygen formation. The triplet quantum yield is increased 2.5 times to 0.75 for the lead tetrasubstituted phthalocyanine relative to that of 0.30 determined for the silyl analog, while the triplet lifetime is longer than 120 μs . Correspondingly, the quantum yield of singlet oxygen formation is 0.64 for the lead tetrasubstituted phthalocyanine and is 0.26 for the silyl compound. All of the PC complexes maintain reasonably good fluorescence characteristics with the shortest fluorescence lifetime measured being 3.14 ns, and the lowest fluorescence quantum yield of 0.18. These properties indicate that some of the PC complexes may be good candidates for singlet oxygen photosensitization. © 2013 Elsevier Ltd. All rights reserved.

Number of references: 62

Main heading: Excited states

Controlled terms: Fluorescence - Germanium - Lead - Nitrogen compounds - Oxygen

- Photodynamic therapy - Quantum yield - Silicon - Tin

Uncontrolled terms: Photodynamic therapy (PDT) - Phthalocyanine - Si-Ge-Sn-Pb - Singlet oxygen - Triplet state

Classification code: 931.3 Atomic and Molecular Physics - 804 Chemical Products Generally - 801.4 Physical Chemistry - 741.1 Light/Optics - 712.1.1 Single Element Semiconducting Materials - 546.2 Tin and Alloys - 546.1 Lead and Alloys

Numerical data indexing: Time 1.20e-04s, Time 3.14e-09s

DOI: 10.1016/j.dyepig.2013.06.010

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

550

Accession number: 20102613044780

Title: Text mining and the future exploration

Authors: Lijun, Cao¹ ; Yong, Cui¹ ; Yanping, Yang¹ ; Xiyin, Liu²

Author affiliation:

1 Hebei Normal University of Science and Technology, China

2 Yaohua Design Institute, Qinhuangdao, Hebei, China

Corresponding author: Lijun, C.

Source title: 2010 WRI International Conference on Communications and Mobile Computing, CMC 2010

Abbreviated source title: WRI Int. Conf. Commun. Mob. Comput., CMC

Volume: 1

Part number: 1 of 3

Monograph title: 2010 WRI International Conference on Communications and Mobile Computing, CMC 2010

Issue date: 2010

Publication year: 2010

Pages: 237-241

Article number: 5471478

Language: English

ISBN-13: 9780769539898

Document type: Conference article (CA)

Conference name: 2010 International Conference on Communications and Mobile Computing, CMC 2010

Conference date: April 12, 2010 - April 14, 2010

Conference location: Shenzhen, China

Conference code: 80844

Sponsor: Shenzhen University; World Research Institutes

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: On the basis of analyzing the basic concepts and the process of text excavation, the present study proposes some new methods in extraction of text features, deflation of characteristic collection, extraction of study and knowledge pattern, and appraisal of model quality. Meanwhile, it makes a comparison of two types of text categorization, text classifications and text cluster, and it briefly explores the basic issues to be solved in the future development of the text excavation technology. © 2010 IEEE.

Number of references: 7

Main heading: Text processing

Controlled terms: Excavation - Feature extraction - Mobile computing

Uncontrolled terms: Basic concepts - Model qualities - Text categorization - Text classification - Text cluster - Text feature - Text mining

Classification code: 903.1 Information Sources and Analysis - 751.1 Acoustic Waves - 741.1 Light/Optics - 723.5 Computer Applications - 723.2 Data Processing and Image Processing - 903.3 Information Retrieval and Use - 723 Computer Software, Data Handling and Applications - 717 Optical Communication - 716 Telecommunication; Radar, Radio and Television - 502.1 Mine and Quarry Operations - 405.2 Construction

Methods - 718 Telephone Systems and Related Technologies; Line Communications

DOI: 10.1109/CMC.2010.253

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

551

Accession number: 20131616211202

Title: The ground-state transition probability of impurity bound polaron in quantum rod

Authors: Li, Zhi-Xin¹ ; Yin, Cheng-Hong¹

Author affiliation:

¹ College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Li, Z.-X. (zzlxx2006@126.com)

Source title: Physica B: Condensed Matter

Abbreviated source title: Phys B Condens Matter

Volume: 418

Issue date: June 1, 2013

Publication year: 2013

Pages: 69-72

Language: English

ISSN: 09214526

CODEN: PHYBE3

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: We using a variational method of Pekar type to study the ground-state transition probability of impurity bound polaron with strong electron-LO-phonon coupling in a quantum rod (QR). Quantum transition is happened in the low dimensional quantum system due to the electron-phonon interaction and the impact of temperature. That is the polaron transit from the ground-state to the first-excited state after absorbing a LO-phonon. We find the ground-state transition probability of impurity bound polaron enlarger with increasing the transverse and longitudinal confinement lengths of QR and changes small with enhancing the ground-state energy of impurity bound polaron. And the ground-state transition probability of bound polaron is an increasing function of the electron-phonon coupling constant. Crown Copyright © 2013 Published by Elsevier B.V. All rights reserved.

Number of references: 13

Main heading: Ground state

Controlled terms: Electron-phonon interactions - Probability - Quantum electronics - Quantum optics

Uncontrolled terms: Electron-phonon coupling constant - Ground-state energies - Impact of temperatures - Impurity bound polarons - Increasing functions - Quantum rod - Quantum transitions - Transition probabilities

Classification code: 741.1 Light/Optics - 744 Lasers - 922.1 Probability Theory - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 933 Solid State Physics

DOI: 10.1016/j.physb.2013.03.004

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

552

Accession number: 20115214643607

Title: A multi-attribute group decision method based on triangular intuitionistic fuzzy number

Authors: Yue, Xiaoyun1 ; Zou, Dewen2 ; Guo, Yajun1 ; Wang, Guosheng1

Author affiliation:

1 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province 066004, China

2 Office of Scientific Research, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province 066004, China

Corresponding author: Yue, X. (yuexiaoyun888@sohu.com)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 244 CCIS

Part number: 2 of 2

Issue: PART 2

Monograph title: Information Computing and Applications - Second International Conference, ICICA 2011, Proceedings

Issue date: 2011

Publication year: 2011

Pages: 486-493

Language: English

ISSN: 18650929

ISBN-13: 9783642274510

Document type: Conference article (CA)

Conference name: 2nd International Conference on Information Computing and Applications, ICICA 2011

Conference date: October 28, 2011 - October 31, 2011

Conference location: Qinhuangdao, China

Conference code: 87880

Sponsor: National Natural Science Foundation of China; Northeastern University at Qinhuangdao; Yanshan University; Nanyang Technological University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: This paper proposes a new method of multi-attribute group decision by using triangular intuitionistic fuzzy number (TIFN) to represent the experts' evaluation information. At first, giving the TIFN definition and aggregation operator, such as triangular intuitionistic weighing arithmetic average (TI-WAA)

operator and ordered weighted aggregation (TI-OWA)operator. Next, extending the TIFN ranking method by using the weighted average area, the model of multi-attribute group decision is constructed. Finally, a numerical example is given to illustrate application. The numerical results show that the proposed method is feasible and effective. © 2011 Springer-Verlag Berlin Heidelberg.

Number of references: 11

Main heading: Fuzzy rules

Controlled terms: Mathematical operators - Weighing

Uncontrolled terms: Aggregation operator - Group decision - Intuitionistic Fuzzy number - Multi-attributes - Numerical example - Ordered weighted aggregations - Rank - Ranking methods - Weighted averages

Classification code: 921 Mathematics - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 943.3 Special Purpose Instruments

DOI: 10.1007/978-3-642-27452-7_66

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

553

Accession number: 20113814340180

Title: The practice teaching model of accounting research

Authors: Xiaona, Zhou¹ ; Rui, Zhao¹ ; Jiuzhi, Mao¹ ; Yin, Zhang¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Xiaona, Z. (fenyan_123@sohu.com)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 231 CCIS

Part number: 1 of 6

Issue: PART 1

Monograph title: Innovative Computing and Information - International Conference, ICCIC 2011, Proceedings

Issue date: 2011

Publication year: 2011

Pages: 313-319

Language: English

ISSN: 18650929

ISBN-13: 9783642239922

Document type: Conference article (CA)

Conference name: 2011 International Conference on Computing, Information and Control, ICCIC 2011

Conference date: September 17, 2011 - September 18, 2011

Conference location: Wuhan, China

Conference code: 86451

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: As social and economic development, particularly in the 21st century, the comprehensive ability is paid more attention for accounting professionals in the market, thus the practice teaching of accounting are also increasingly important. In this paper, all aspects of accounting practice teaching are researched, better teaching methods of accounting are considered. © 2011 Springer-Verlag.

Number of references: 14

Main heading: Teaching

Uncontrolled terms: Accounting practices - Economic development - Teaching methods - Teaching model - Teaching systems

Classification code: 901.2 Education

DOI: 10.1007/978-3-642-23993-9_46

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

554

Accession number: 20114614517550

Title: A research for the classification of knowledge visualization

Authors: Zhou, Yan¹ ; Yin, Liqun² ; Wang, Lei³

Author affiliation:

- 1 College of Science, Yanshan University, Qinhuangdao, China
- 2 Dean's Office, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 Haerbin HuaWen High School, Haerbin, China

Corresponding author: Zhou, Y. (zhouyan1958@163.com)

Source title: 2011 International Conference on Electrical and Control Engineering, ICECE 2011 - Proceedings

Abbreviated source title: Int. Conf. Electr. Control Eng., ICECE - Proc.

Monograph title: 2011 International Conference on Electrical and Control Engineering, ICECE 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 6235-6238

Article number: 6056928

Language: English

ISBN-13: 9781424481637

Document type: Conference article (CA)

Conference name: 2nd Annual Conference on Electrical and Control Engineering, ICECE 2011

Conference date: September 16, 2011 - September 18, 2011

Conference location: Yichang, China

Conference code: 87268

Sponsor: China Three Gorges University; Huazhong University of Science and Technology; Tianjin University; Beihang University; Shanghai University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Knowledge visualization is a method which is increasingly used widely for representing, conveying, and accessing knowledge with all kinds of visual elements in recently years. This paper sets forth the definitions of knowledge visualization and related at first, and then elaborates the three categories of knowledge visualization, finally analysis and compares various classification methods of knowledge. © 2011 IEEE.

Number of references: 8

Main heading: Visualization

Uncontrolled terms: Classification methods - Knowledge Visualization - Visual elements

Classification code: 902.1 Engineering Graphics

DOI: 10.1109/ICECENG.2011.6056928

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

555

Accession number: 20104813441484

Title: Water pollution forecasting model of the back-propagation neural network based on one step secant algorithm

Authors: Yue, Xiaoyun¹ ; Guo, Yajun¹ ; Wang, Jinran¹ ; Mao, Xuezhi¹ ; Lei, Xiaoqing¹

Author affiliation:

¹ Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, Hebei Province, China

Corresponding author: Yue, X. (yuexiaoyun888@sohu.com)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 105 CCIS

Part number: 1 of 2

Issue: PART 1

Monograph title: Information Computing and Applications - International Conference, ICICA 2010, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 458-464

Language: English

ISSN: 18650929

ISBN-10: 3642163351

ISBN-13: 9783642163357

Document type: Conference article (CA)

Conference name: International Conference on Information Computing and Applications, ICICA 2010

Conference date: October 15, 2010 - October 18, 2010

Conference location: Tangshan, China

Conference code: 82500

Sponsor: National Science Foundation of China; Hunan Institute of Engineering

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: To overcome the shortage of the conventional Back-propagation (BP) Network, the BP network is trained by using one step secant (OSS) algorithm. According to the Yangtze River water statistics reported from 1995 to 2004, the BP neural network model for water quality evaluation was established to predict the consequence of water pollution in the next ten years. The result shows: (1) With no effective measures, the

Yangtze River water pollution will be on drastic rise in ten years; (2) This model can predict development tendency in ten years and its result is reasonable and also proves that it has strong generalization ability. It is a very valid model of estimating non-linear problem. (3) BP neural network based on OSS algorithm possesses the advantage of high accuracy and high speed for convergence. © Springer-Verlag 2010.

Number of references: 14

Main heading: River pollution

Controlled terms: Backpropagation algorithms - Convergence of numerical methods - Forecasting - Neural networks - Oil spills - Pollution - Water quality

Uncontrolled terms: Back propagation neural networks - Backpropagation network - BP networks - BP neural network model - BP neural networks - Development tendency - Effective measures - Forecasting models - Generalization ability - High speed - Nonlinear problems - One step - Water quality evaluation - Yangtze River

Classification code: 453 Water Pollution - 454.2 Environmental Impact and Protection - 723.4 Artificial Intelligence - 921 Mathematics - 921.6 Numerical Methods

DOI: 10.1007/978-3-642-16336-4_61

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

556

Accession number: 20130716024771

Title: Analysis on supply chain coordination based on option, Price-Subsidy Contract and technology innovation

Authors: Sun, Duoqing^{1, 2}; Jiang, Tingting^{1, 3}; Du, Meng¹; Liu, Lijing¹; Wen, Jing⁴

Author affiliation:

1 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

3 First Middle School of Nanpi County, Cangzhou City Department of Education, Cangzhou 061500, China

4 Dept. of Basic Courses, Hebei Vocational and Technical College of Building Materials, Qinhuangdao 066004, China

Corresponding author: Sun, D. (sun_duoqing@126.com)

Source title: Chinese Control Conference, CCC

Abbreviated source title: Chinese Control Conf., CCC

Monograph title: Proceedings of the 31st Chinese Control Conference, CCC 2012

Issue date: 2012

Publication year: 2012

Pages: 7513-7518

Article number: 6391271

Language: Chinese

ISSN: 19341768

E-ISSN: 21612927

ISBN-13: 9789881563811

Document type: Conference article (CA)

Conference name: 31st Chinese Control Conference, CCC 2012

Conference date: July 25, 2012 - July 27, 2012

Conference location: Hefei, China

Conference code: 95448

Sponsor: Technical Committee on Control Theory, CAA; Systems Engineering Society of China; University of Science and Technology of China; Academy of Mathematics and Systems Science, CAS; China Society for Industrial and Applied Mathematics

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: The paper considers one manufacturer and one retailer supply chain under supply and demand uncertainties. The paper first analyzes the Price-Subsidy Contract model based on option, and the retailer's optimal decision is obtained when the supply chain realizes coordination. Then, it introduces the factor of technology innovation to discuss the effect on the supply chain. The results show that the technology innovation can improve the model. The numerical calculation illustrates that option and technology innovation play a major role in

improving the total profit and coordinating the supply chain. © 2012 Chinese Assoc of Automati.

Number of references: 3

Main heading: Engineering research

Controlled terms: Costs - Economics - Innovation - Profitability - Supply chains - Technology

Uncontrolled terms: Model-based OPC - Numerical calculation - Optimal decisions - Option - Retailer supply chains - Supply and demand - Supply chain coordination - Technology innovation - Total profits

Classification code: 901 Engineering Profession - 901.3 Engineering Research - 911 Cost and Value Engineering; Industrial Economics - 911.2 Industrial Economics - 912 Industrial Engineering and Management

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

557

Accession number: 20122415104042

Title: Researching on the role of e-portfolio in the learning progress

Authors: Zhang, Yuhong¹ ; Xu, Zhikun² ; Tian, Fangfang¹

Author affiliation:

- 1 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Y. (13933690306@163.com)

Source title: 2012 2nd International Conference on Consumer Electronics, Communications and Networks, CECNet 2012 - Proceedings

Abbreviated source title: Int. Conf. Consum. Electron., Commun. Networks, CECNet - Proc.

Monograph title: 2012 2nd International Conference on Consumer Electronics, Communications and Networks, CECNet 2012 - Proceedings

Issue date: 2012

Publication year: 2012

Pages: 2054-2055

Article number: 6201501

Language: English

ISBN-13: 9781457714153

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Consumer Electronics, Communications and Networks, CECNet 2012

Conference date: April 21, 2012 - April 23, 2012

Conference location: Three Gorges, China

Conference code: 90025

Sponsor: IEEE

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The research of the e-portfolio in the learning progress role, It will be beneficial to explicit the e-portfolio in which learning stage of the learning progress, and form a whole set of school's e-portfolio system, improve managers' or teachers' thought value degree. This paper, from the learning motivation, understanding learning information, consolidate the knowledge, ability to apply knowledge such five aspects to discuss e-portfolio in the process of learning role. © 2012 IEEE.

Number of references: 10

Main heading: Consumer electronics

Controlled terms: Computer networks - Information systems

Uncontrolled terms: E-portfolios - Learning motivation - learning progress - portfolio

Classification code: 903.2 Information Dissemination - 723 Computer Software, Data Handling and Applications - 722 Computer Systems and Equipment - 913 Production Planning and Control; Manufacturing - 718 Telephone Systems and Related Technologies; Line Communications - 716 Telecommunication; Radar, Radio and Television - 715 Electronic Equipment, General Purpose and Industrial - 717 Optical Communication

DOI: 10.1109/CECNet.2012.6201501

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

558

Accession number: 20140117169382

Title: Research on status and development strategy for green construction

Authors: Yanying, Dong¹ ; Lishan, Zhang¹ ; Deguang, Meng¹ ; Yan, Zhao¹

Author affiliation:

1 Institute of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao Hebei, 066004, China

Corresponding author: Yanying, D.

Source title: International Journal of Applied Environmental Sciences

Abbreviated source title: Int. J. Appl. Environ. Sci.

Volume: 8

Issue: 14

Issue date: 2013

Publication year: 2013

Pages: 1789-1794

Language: English

ISSN: 09736077

E-ISSN: 09740260

Document type: Journal article (JA)

Publisher: Research India Publications, B-2/84 Ground Floor, Rohini Sec-16,, Delhi, 110085, India

Abstract: Green construction is an important means to implement sustainable development strategy in the construction industry. This study introduces the green construction concept and the development status of

China's green construction industry. It analyzes the aspects that have affected the development of China's green construction industry, such as civic awareness, economic factors, technical management, and management system and evaluation standards. It proposes development strategies, such as to strengthen policy guidance, strengthen the green construction concept of sustainable development, accelerate technological research, improve management systems and develop evaluation systems. © Research India Publications.

Number of references: 6

Main heading: Strategic planning

Controlled terms: Construction industry - Management - Sustainable development

Uncontrolled terms: Development status - Development strategies - Evaluation standard - Green constructions - Management systems - Status - Technical management - Technological researches

Classification code: 405 Construction Equipment and Methods; Surveying - 911.2 Industrial Economics - 912.2 Management

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

559

Accession number: 20121314906002

Title: Cloning and sequence analysis of donkey growth hormone gene

Authors: Wen-Jin, Zhu1 ; Yong-Mei, Su1 ; Xue-Min, Guan1 ; Jian-Hua, Wu1 ; Yuan-Yuan, Zhao2

Author affiliation:

1 College of Animal Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 College of Animal Science and Technology, Shanxi Agriculture University, Taigu, China

Corresponding author: Wen-Jin, Z. (chinahbzwj@126.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 134 AISC

Monograph title: Information Technology and Agricultural Engineering

Issue date: 2012

Publication year: 2012

Pages: 459-464

Language: English

ISSN: 18675662

ISBN-13: 9783642275364

Document type: Conference article (CA)

Conference name: 2011 International Conference on Information Technology and Agricultural Engineering, ICITAE 2011

Conference date: December 1, 2011 - December 2, 2011

Conference location: Sanya, China

Conference code: 89181

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The PCR primers were designed online according to result of gene homology comparison. Donkey GH gene DNA and cDNA sequence were cloned from liver tissue and blood, and compared with GH gene sequences of different species by bioinformatics method. The donkey GH gene sequence was 1928bp, including the 706bp cDNA sequence with the complete CDS. By comparison for DNA and cDNA sequences, It suggested that the GH gene sequence included 5 exons and 4 introns, encoding 216AA, including signal protein of 26AA and matured protein of 190AA. Based on the analysis of the similarity of GH genes in different species on the level of cDNA, DNA and the deduced amino acid, there was the most homology to the horse. The GH gene of donkey was conservative in the process of evolution and its promotor was not specific TATA box, but was CATA box. The mutation of C G in 1267 may affect the growth and development of donkeys and horses. All researches made an essential foundation for GH regulation of gene expression, evolution, polymorphism analysis in the future. © 2012 Springer-Verlag GmbH.

Number of references: 9

Main heading: Cloning

Controlled terms: Agricultural engineering - Amino acids - Bioinformatics - DNA - DNA sequences - Ecology - Gene expression - Information technology - Polymerase chain reaction - Tissue

Uncontrolled terms: Bioinformatics methods - cDNA sequence - CdS - Donkey - Gene sequences - Growth and development - Growth hormones - Liver tissue - PCR primers - Polymorphism analysis - Process of evolution - Sequence analysis - TATA box

Classification code: 454.3 Ecology and Ecosystems - 461 Bioengineering and Biology - 801.2 Biochemistry - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 903 Information Science

DOI: 10.1007/978-3-642-27537-1_56

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

560

Accession number: 20110913705068

Title: College Personnel affairs management based on Personnel evaluation

Authors: Liu, Zhifei¹ ; Xiaohua, Zhang²

Author affiliation:

- 1 Division of Personnel Affairs, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Mathematics and Information Technology Institute, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Liu, Z. (zhifeiliu@live.cn)

Source title: 2nd International Conference on Information Science and Engineering, ICISE2010 - Proceedings

Abbreviated source title: Int. Conf. Inf. Sci. Eng., ICISE - Proc.

Monograph title: 2nd International Conference on Information Science and Engineering, ICISE2010 - Proceedings

Issue date: 2010

Publication year: 2010

Pages: 1911-1914

Article number: 5690720

Language: English

ISBN-13: 9781424480968

Document type: Conference article (CA)

Conference name: 2nd International Conference on Information Science and Engineering, ICISE2010

Conference date: December 4, 2010 - December 6, 2010

Conference location: Hangzhou, China

Conference code: 83809

Sponsor: Hangzhou Dianzi University; United Nations Educational Scientific and Cultural Organization; Nanjing University of Information Science and Technology; Georgia State University; Anhui University of Science and Technology; College of Computer and Information of Hohai University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Nowadays, it is laied emphasis upon human resource optimized of college Personnel affairs management more and more, and it is more scientific to make use of thought, method and tools of Personnel evaluation on personnel affairs management. But Personnel evaluation still belongs to new industry in our country, it has not developed to the utmost perfect, which would be appearing some concrete problems while being applied. This paper, aiming at the problems for discovering, puts forward homologous counterplans from thought, software and tools of Personnel evaluation. © 2010 IEEE.

Number of references: 5

Main heading: Human resource management

Controlled terms: Information science

Uncontrolled terms: 360-degree appraisal - Human resources - Inspiritment - New industry - Personnel evaluation

Classification code: 903 Information Science - 912.4 Personnel

DOI: 10.1109/ICISE.2010.5690720

Database: Compendex

561

Accession number: 20114314453421

Title: RETRACTED ARTICLE: Analysis of small box profiled lightweight reinforced concrete wall structure

Authors: Xie, Chengwei1 ; Xie, Guoren2 ; Yang, Fang3 ; He, Dan4

Author affiliation:

1 Environmental Management College of China, Qinhuangdao, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, China

3 Hebei Normal University of Science and Technology, Physics and Chemistry College, Qinhuangdao, China

4 Hebei Normal University of Science and Technology, Mechanical and Electrical Engineering College, Qinhuangdao, China

Corresponding author: Xie, C. (xcw_2003@tom.com)

Source title: 2011 2nd International Conference on Mechanic Automation and Control Engineering, MACE 2011 - Proceedings

Abbreviated source title: Int. Conf. Mech. Autom. Control Eng., MACE - Proc.

Monograph title: 2011 2nd International Conference on Mechanic Automation and Control Engineering, MACE 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 1949-1951

Article number: 5987350

Language: English

ISBN-13: 9781424494392

Document type: Conference article (CA)

Conference name: 2011 2nd International Conference on Mechanic Automation and Control Engineering, MACE 2011

Conference date: July 15, 2011 - July 17, 2011

Conference location: Inner Mongolia, China

Conference code: 87002

Publisher: IEEE Computer Society

Abstract: In this paper, a small box profiled lightweight reinforced concrete wall structure in seismic performance, thermal performance, social, economic and other aspects of the analysis and construction of residential projects profiled in the use of lightweight reinforced concrete wall of a small frame structure Discussed. © 2011 IEEE.

Number of references: 5

Main heading: Reinforced concrete

Controlled terms: Concrete buildings - Mechanics

Uncontrolled terms: Analysis - Frame structure - Framework - Profiled - Reinforced concrete wall - Residential projects - Seismic Performance - Thermal Performance

Classification code: 412 Concrete - 931.1 Mechanics

DOI: 10.1109/MACE.2011.5987350

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

562

Accession number: 20130415941940

Title: The dynamic characteristics research of oil source with load of rolling mill

Authors: Chen, Chunming¹ ; Feng, Lizhen¹ ; Jia, Jinmiao¹ ; Wang, Yang¹

Author affiliation:

¹ E and A College of Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Chen, C. (omxya511@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 271

Issue: PART 1

Monograph title: Frontiers of Manufacturing and Design Science III

Issue date: 2013

Publication year: 2013

Pages: 1700-1705

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037855782

Document type: Conference article (CA)

Conference name: 3rd International Conference on Frontiers of Manufacturing and Design Science, ICFMD 2012

Conference date: December 11, 2012 - December 13, 2012

Conference location: Hong kong

Conference code: 95055

Sponsor: Control Eng. Inf. Sci. Res. Assoc.; International Frontiers of science; and technology Research Association; National Chin-Yi University of Technology; Integrated Research Center for Green Living Techniques; Trans Tech Publication

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Oil source made up of constant pressure variable displacement pump, accumulator, and pipeline is widely used to provide stable pressure for electro-hydraulic control system in practical engineering. The control system is non-linear and real-time, each part of which is interactive, a simulation model of energy source system is built, which includes constant pressure pump, accumulator and pipeline and load by means of AMESim software. Based on the simulation and experiment, the relationship between the load frequency variation and the pressure fluctuation of oil-source are obtained, the research provides support on how to confirm the equipment parameter properly, improve the stability of oil source system and enhance the control precision by

reasonable confirming the equipment parameter. © (2013) Trans Tech Publications, Switzerland.

Number of references: 9

Main heading: Oil wells

Controlled terms: Computer simulation - Design - Manufacture

Uncontrolled terms: Constant pressures - Control precision - Dynamic characteristics - Electro-hydraulic control systems - Energy source - Equipment parameters - Load frequency - Oil sources - Practical engineering - Pressure fluctuation - Simulation model

Classification code: 408 Structural Design - 512.1.1 Oil Fields - 537.1 Heat Treatment Processes - 723.5 Computer Applications

DOI: 10.4028/www.scientific.net/AMM.271-272.1700

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

563

Accession number: 20113714332424

Title: Temperature dependence of effective mass of weak-coupling polaron in a quantum rod

Authors: Eerdunchaolu1 ; Wuyunqimuge2 ; Han, Chao1

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

2 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao, Inner Mongolia 028043, China

Corresponding author: Eerdunchaolu (eerdunchaolu@sohu.com)

Source title: Guangxue Xuebao/Acta Optica Sinica

Abbreviated source title: Guangxue Xuebao

Volume: 31

Issue: 8

Issue date: August 2011

Publication year: 2011

Article number: 0827001

Language: Chinese

ISSN: 02532239

CODEN: GUXUDC

Document type: Journal article (JA)

Publisher: Chinese Optical Society, P.O. Box 80, Xi'an, 710068, China

Abstract: The influences of temperature on the effective mass of the weak-coupling polaron in an asymmetric parabolic quantum rod are studied based on Tokuda-Lee-Low-Pines variational method. The change law of the effective mass m^* of the weak-coupling polarons with the aspect ratio e' of the quantum rod, the electron-phonon coupling strength α and the temperature parameter γ are derived. Numerical results indicate that the horizontal effective mass $m_{||}^*$ and the vertical effective mass m_{z}^* of the weak-coupling polaron in quantum rod will increase with the increase of the electron-phonon coupling strength α , and decrease with the increase of temperature T . The horizontal effective mass $m_{||}^*$ of the polaron will increase with the increase of the aspect ratio e' of the quantum rod. On the contrary, the vertical effective mass m_{z}^* of the polaron will decrease with the increase of the aspect ratio e' .

Number of references: 19

Main heading: Polarons

Controlled terms: Aspect ratio - Electron correlations - Electron-phonon interactions - Numerical methods - Ordinary differential equations - Quantum optics - Quantum theory - Temperature distribution

Uncontrolled terms: Effective mass - Electron-phonon coupling strengths - Numerical results - Quantum rod - Temperature dependence - Temperature parameters - Variational methods - Weak couplings

Classification code: 641.1 Thermodynamics - 921.2 Calculus - 921.6 Numerical Methods - 931.4 Quantum Theory; Quantum Mechanics - 933.1.1 Crystal Lattice - 943 Mechanical and Miscellaneous Measuring Instruments

DOI: 10.3788/AOS201131.0827001

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

564

Accession number: 20105113503883

Title: The method of eliminating information asymmetry in supply chains

Authors: Sun, Duoqing^{1, 2, 3}; Wang, Li^{1, 2}

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3 College of Mathematics and Systems Science, Beijing University of Aeronautics and Astronautics, Beijing 100191, China

Corresponding author: Sun, D. (sun_duoqing@126.com)

Source title: Proceedings of the 29th Chinese Control Conference, CCC'10

Abbreviated source title: Proc. Chin. Control Conf., CCC

Monograph title: Proceedings of the 29th Chinese Control Conference, CCC'10

Issue date: 2010

Publication year: 2010

Pages: 5574-5578

Article number: 5573132

Language: Chinese

ISBN-13: 9787894631046

Document type: Conference article (CA)

Conference name: 29th Chinese Control Conference, CCC'10

Conference date: July 29, 2010 - July 31, 2010

Conference location: Beijing, China

Conference code: 82524

Sponsor: IEEE Control Systems Society (CSS); The ICROS OF Korea; IEEE CSS Singapore Chapter; IEEE CSS Hong Kong Chapter; IEEE CSS Beijing Chapter

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The Sequential Belief Revision is one of the effective methods of eliminating information asymmetry in supply chains. The paper studies the method of eliminating information asymmetry when a retailer has the private information about the demand and the supplier only partially knows the retailer's optimal decisions, which is in the condition that the supply chain is composed of only a single supplier and retailer and demand quantity is a linear function of retail price. The paper studies a multi-stage Bayesian model that considers retail's cost, and the information asymmetry is eliminated by using Sequential Belief Revisions method. The analysis shows that information of suppliers converges in probability to private information of retailers, the asymmetric information game will also converge in probability to the symmetric information game, and the both convergence results have nothing to do with the initial belief. This paper shows that this method makes supply chain operations more effective and fits general situation to eliminate information asymmetry.

Number of references: 8

Main heading: Supply chains

Controlled terms: Bayesian networks - Sales - Supply chain management

Uncontrolled terms: Asymmetric information - Bayesian model - Belief revision - Convergence results - General situation - Incentive mechanism - Information asymmetry - Information game - Linear functions - Multi-stage - Optimal decisions - Private information - Retail price - Sequential Bayesian analysis - Supply chain operation

Classification code: 911.4 Marketing - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

565

Accession number: 20114614511543

Title: Fabrication and photoluminescent properties of ZnO/mesoporous silica composites templated by a chelating surfactant

Authors: Niu, Kui¹ ; Liang, Liman² ; Gu, Yao¹ ; Ke, Lei¹ ; Duan, Fang¹ ; Chen, Mingqing¹

Author affiliation:

1 School of Chemical and Material Engineering, Jiangnan University, Wuxi 214122, China

2 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Chen, M.

Source title: Langmuir

Abbreviated source title: Langmuir

Volume: 27

Issue: 22

Issue date: November 15, 2011

Publication year: 2011

Pages: 13820-13827

Language: English

ISSN: 07437463

E-ISSN: 15205827

CODEN: LANGD5

Document type: Journal article (JA)

Publisher: American Chemical Society, 2540 Olentangy River Road, P.O. Box 3337, Columbus, OH 43210-3337, United States

Abstract: A novel anionic surfactant-templated synthesis of ZnO/mesoporous silica nanocomposites has been carried out by using N-hexadecylethylenediamine triacetate (HED3A), a triprotic surfactant, as the structure-directing agent. The chelating template can capture zinc ions in solution and then direct the mesophase formation, enabling an amount of zinc oxide to be embedded in the porous silica matrix during calcination. With variation of the molar ratio of Zn²⁺ to HED3A in the template, a series of composites with different doping amounts were obtained after the removal of organic components. The variation of the zinc ion concentration in the initial template solution induces an evolution of the silica mesophase, presumably due to the change in electronegativity of the HED3A headgroup caused by the chelating effect. Spectroscopic studies show a strong

host-guest interaction between the silica pore walls and ultrafine ZnO nanoparticles. The photoluminescence properties of the resulting composites exhibit a size-dependent light emission and quantum-confinement effect of ZnO, accompanied by an infrequent violet emission originating from the ZnO-SiO₂ interface. © 2011 American Chemical Society.

Number of references: 43

Main heading: Chelation

Controlled terms: Anionic surfactants - Calcination - Chemical bonds - Drug interactions - Electronegativity - Nanocomposites - Nanoparticles - Silica - Silicon compounds - Spectroscopic analysis - Zinc - Zinc oxide

Uncontrolled terms: Chelating effect - Host guest interactions - Mesophase formation - Mesophases - Molar ratio - Organic components - Photo-luminescent properties - Photoluminescence properties - Porous silica matrix - Quantum-confinement effects - Silica composites - Silica nanocomposites - Silica pores - Spectroscopic studies - Structure directing agents - Surfactant-templated synthesis - Templated - Ultrafine - Violet emission - Zinc ions - ZnO - ZnO nanoparticles

Classification code: 933 Solid State Physics - 804.2 Inorganic Compounds - 803 Chemical Agents and Basic Industrial Chemicals - 802.3 Chemical Operations - 802.2 Chemical Reactions - 801 Chemistry - 761 Nanotechnology - 708 Electric and Magnetic Materials - 546.3 Zinc and Alloys

DOI: 10.1021/la202820g

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

566

Accession number: 20125015783059

Title: The design and realization of network instructional platform based on Ajax

Authors: Shi, Qiu-Xiang¹ ; Han, Jia² ; Wang, Li-Ying¹ ; Jiao, Wei-Ting¹ ; Li, Jian-Ying¹ ; Zhang, Xin-Yuan¹

Author affiliation:

1 Education Department, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Mathematics and Information Technology Department, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Shi, Q.-X. (jxyshi2004@126.com)

Source title: Proceeding of 2012 International Conference on Information Management, Innovation Management and Industrial Engineering, ICIII 2012

Abbreviated source title: Proc. Int. Conf. Inf. Manage., Innov. Manage. Ind. Eng., ICIII

Volume: 2

Part number: 2 of 3

Monograph title: Proceeding of 2012 International Conference on Information Management, Innovation Management and Industrial Engineering, ICIII 2012

Issue date: 2012

Publication year: 2012

Pages: 384-387

Language: English

ISBN-13: 9781467319324

Document type: Conference article (CA)

Conference name: 2012 International Conference on Information Management, Innovation Management and Industrial Engineering, ICIII 2012

Conference date: October 20, 2012 - October 21, 2012

Conference location: Sanya, China

Conference code: 94227

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: Network instructional platform has become more and more popular with the rapid development of distance education. This paper makes a comprehensive and systematic study of the network instructional platform. Through the introduction of Ajax to the program, the paper established a four-subsystem (network classroom system, online Question & Answer system, online testing system and online homework system) network instructional platform. Realized the checking and operating data asynchrony transmission and the refreshing of local data in users pages, such as registration page, curriculum notice addition page, and so on. The application of Ajax deduced the volume of transmission data and the burden of the server in the platform, improved the network interactive environment and the user experience. ©2012 IEEE.

Number of references: 7

Main heading: Innovation

Controlled terms: Curricula - Distance education - Industrial engineering - Information management

Uncontrolled terms: Ajax - Asynchronous interaction - Asynchrony - Interactive Environments - Local data - Network classrooms - On-line homeworks - On-line testing - Operating data - Systematic study - Transmission data - User experience

Classification code: 901.2 Education - 912 Industrial Engineering and Management

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

567

Accession number: 20104313331424

Title: Temperature and humidity measuring of a new development box based on expert PID

Authors: Ma, Jiwei¹ ; Lin, Zhipeng¹ ; Jianli, Gao² ; Ma, Jimei³ ; Lin, Hongju¹ ; Liu, Shiguang¹

Author affiliation:

- 1 College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 College of Finance and Economy, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 Department of Electronical Engineering, Hebei University of Technology, Tianjin, China

Corresponding author: Ma, J. (jdxbmjw@126.com)

Source title: Proceedings - 2010 International Conference on Intelligent Computing and Cognitive Informatics, ICICCI 2010

Abbreviated source title: Proc. - Int. Conf. Intelligent Comput. Cognitive Informatics, ICICCI

Monograph title: 2010 International Conference on Intelligent Computing and Cognitive Informatics, ICICCI 2010

Issue date: 2010

Publication year: 2010

Pages: 432-435

Article number: 5565940

Language: English

ISBN-13: 9780769540146

Document type: Conference article (CA)

Conference name: 2010 International Conference on Intelligent Computing and Cognitive Informatics, ICICCI 2010

Conference date: June 22, 2010 - June 23, 2010

Conference location: Kuala Lumpur, Malaysia

Conference code: 81932

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Wuhan University of Science and Technology, Zhongnan Branch

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper focuses on the hardware and software design method of a new type of high efficient temperature and humidity testing cabinet. As the hardware core is based on the STC12C5616AD MCU, the entire hardware system is simpler and more reliable. By using sectional measurement of temperature and humidity, adopting expert PID control algorithm and using hardware and software compensation measures, the system dynamic and static quality and control precision is further improved. The system cabinet with a unique inner and outer double-loop structure improves the system efficiency and energy saving effect. Furthermore, the use of touch screen as input and output device, which is simpler to operate and more eye-catching, meets the different needs of consumers. © 2010 IEEE.

Number of references: 5

Main heading: Humidity control

Controlled terms: Information science - Intelligent computing - Quality control - Software design - Three term control systems

Uncontrolled terms: Control precision - Design method - Double-loop - Energy-saving effect - Expert PID - Hardware and software - Hardware system - Input and outputs - Measurement of temperature - PID control algorithm - Sectional measurement - STC12C5616AD -

System Dynamics - System efficiency - Touch screen

Classification code: 402 Buildings and Towers - 723 Computer Software, Data Handling and Applications - 731.1 Control Systems - 903 Information Science - 913.3 Quality Assurance and Control

DOI: 10.1109/ICICCI.2010.98

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

568

Accession number: 20120814796578

Title: Optimization analysis of mining sequence to danhou coal mine under complicated hydrogeological conditions

Authors: Wang, Shuren¹ ; Wang, Hu¹ ; Li, Yong² ; Liu, Chengwei³

Author affiliation:

- 1 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao, China
- 2 Dept. of Civil Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 Bureau of Geology and Mineral Resources of Hebei Province, Zhangjiakou, China

Corresponding author: Wang, S. (w_sr88@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 446-449

Monograph title: Trends in Civil Engineering

Issue date: 2012

Publication year: 2012

Pages: 2992-2997

Language: English

ISSN: 10226680

ISBN-13: 9783037853474

Document type: Conference article (CA)

Conference name: 2nd International Conference on Structures and Building Materials, ICSBM 2012

Conference date: March 9, 2012 - March 11, 2012

Conference location: Hangzhou, China

Conference code: 88495

Sponsor: Beijing Univ. Technol., Coll. Archit. Civ. Eng.; Zhejiang Univ. Technol., Sch. Civ. Eng. Archit.

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Taking mining region No. 3 of Danhou Coal Mine, located in Yu County in Hebei Province, as the engineering background, the 3D visual model with three aquifers of mining region No. 3 was generalized and constructed by using SURPAC software based on the geologic drilling datum. Then 3D numerical model and its meshing were completed with the MIDAS/GTS-FLAC3D coupling modeling technique. Considering the complicated hydrogeological and mining conditions, two practicable mining sequences to No. 5 & No. 1 coal seams were designed respectively. Through fluid-solid coupling computation, the response characteristics of deformation field, principle stress field and plastic damage were analyzed during the dynamic mining process, and the mining sequences to No. 5 & No. 1 coal seams were optimized. The reasonable mining sequences provide the basis for mining safety to mining region No. 3. © (2012) Trans Tech Publications, Switzerland.

Number of references: 12

Main heading: Three dimensional

Controlled terms: Aquifers - Building materials - Civil engineering - Coal deposits - Coal mines - Hydrogeology - Mining - Optimization

Uncontrolled terms: 3D numerical model - Coal seams - Computational model - Deformation field - Drilling data - Dynamic mining - Fluid-solid coupling - Fluid-solid coupling method - Hebei Province - Hydrogeological - Hydrogeological conditions - Mine safety - Mining conditions - Mining safety - Modeling technique - Optimization analysis - Plastic damage - Principle stress - Response characteristic - Software-based - Visual model

Classification code: 921.5 Optimization Techniques - 481.1 Geology - 482 Mineralogy - 502.1 Mine and Quarry Operations - 503 Mines and Mining, Coal - 503.1 Coal Mines - 902.1 Engineering Graphics - 444.2 Groundwater - 414 Masonry Materials - 413 Insulating Materials - 412 Concrete - 411 Bituminous Materials - 409 Civil Engineering, General - 415 Metals, Plastics, Wood and Other Structural Materials

DOI: 10.4028/www.scientific.net/AMR.446-449.2992

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

569

Accession number: 20120114657897

Title: Model for college public physical education class teaching quality evaluation with intuitionistic fuzzy information

Authors: Liu, Daduo¹ ; Liu, Ji'an² ; Li, Rongwei³ ; Sun, Zhanfeng⁴

Author affiliation:

- 1 Department of Physical Education, Jilin Normal University, Siping, Jilin, 136000, China
- 2 Jilin Institute of Physical Education, Changchun, Jilin, 130000, China
- 3 Department of Physical Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China
- 4 Aviation University of Air Force, Changchun, Jilin, 130000, China

Corresponding author: Liu, D. (liu_daduo@sina.com)

Source title: International Journal of Advancements in Computing Technology

Abbreviated source title: Intl. J. Adv. Comput. Technolog.

Volume: 3

Issue: 11

Issue date: December 2011

Publication year: 2011

Pages: 34-38

Language: English

ISSN: 20058039

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: In this paper, we investigate the multiple attribute decision making problems for evaluating college public physical education class teaching quality with intuitionistic fuzzy information. We utilize the intuitionistic fuzzy weighted average (IFWA) operator to aggregate the intuitionistic fuzzy information corresponding to each alternative and get the overall value of the alternatives, then rank the alternatives and select the most desirable one(s) according to the score function and accuracy function of the overall value of the alternatives. Finally, an illustrative example for evaluating college public physical education class teaching quality with intuitionistic fuzzy information is given.

Number of references: 22

Main heading: Teaching

Controlled terms: Decision making - Fuzzy sets - Statistical methods

Uncontrolled terms: Fuzzy weighted average - Illustrative examples - Intuitionistic fuzzy - Intuitionistic Fuzzy number - Multiple attribute decision making problems - Multiple attributes - Physical education - Score function - Teaching quality

Classification code: 901.2 Education - 912.2 Management - 921 Mathematics - 922.2 Mathematical Statistics

DOI: 10.4156/ijact.vol3.issue11.5

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

570

Accession number: 20133916789911

Title: Artifact-centric business process models and similarity search method

Authors: Liu, Hai-Bin¹ ; Liu, Guo-Hua² ; Huang, Li-Ming¹ ; Song, Jin-Ling¹

Author affiliation:

1 School of Business Administration, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 School of Computer Science and Technology, Donghua University, Shanghai 201620, China

Corresponding author: Liu, H.-B. (champion_lhb@163.com)

Source title: Jisuanji Jicheng Zhizao Xitong/Computer Integrated Manufacturing Systems, CIMS

Abbreviated source title: Jisuanji Jicheng Zhizao Xitong

Volume: 19

Issue: 8

Issue date: August 2013

Publication year: 2013

Pages: 1810-1821

Language: Chinese

ISSN: 10065911

CODEN: JJZXFN

Document type: Journal article (JA)

Publisher: CIMS, Sub-Box 34, P.O. Box 2413, Beijing, 100089, China

Abstract: Aiming at the low efficiency of existing query mechanism's inquiry and precision, an Artifact-centric similarity search method for business process models was proposed. By using clustering technology, the process model was pretreated based on key artifacts similarity, structural similarity and behavioral similarity, thus query space was reduced and retrieval efficiency was improved. In the process of query, the precision efficiency was improved further due to not only considered the structure and behavior of process model, but also considered the core data in process. The effectiveness of proposed method was proved by experiment.

Number of references: 26

Main heading: Administrative data processing

Controlled terms: Efficiency - Enterprise resource management

Uncontrolled terms: Business documents - Business process management - Clustering - Graph matchings - Lifecycle trees - Process similarities

Classification code: 912.2 Management - 913.1 Production Engineering

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

571.

Accession number: 20103113115544

Title: Teaching strategies on promoting normal tertiary students multi-intelligent development in information technology circumstances

Authors: Li, Shu-Ying¹ ; Yang, Chao-Zheng² ; Zhang, Ming³ ; Liang, Xu-Guang⁴

Author affiliation:

1 Department of Education Technology, Handan College, Handan City, China

2 Department of Education, Technology Center, Handan Polytechnic College, Handan City, China

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4 Department of Information Technology, Hebei Vocational College for Correctional Police, Shijiazhuang City, China

Corresponding author: Li, S.-Y. (hdxylsy@163.com)

Source title: OPEE 2010 - 2010 International Conference on Optics, Photonics and Energy Engineering

Abbreviated source title: OPEE - Int. Conf. Opt., Photonics Energy Eng.

Volume: 1

Part number: 1 of 2

Monograph title: OPEE 2010 - 2010 International Conference on Optics, Photonics and Energy Engineering

Issue date: 2010

Publication year: 2010

Pages: 218-221

Article number: 5508149

Language: English

ISBN-13: 9781424452354

Document type: Conference article (CA)

Conference name: 2010 International Conference on Optics, Photonics and Energy Engineering, OPEE 2010

Conference date: May 10, 2010 - May 11, 2010

Conference location: Wuhan, China

Conference code: 81252

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Asia Pacific Environmental Science Research Center; Wuhan University; Huazhong University of Science and Technology; CCF Young Computer Scientists and Engineering Forum Wuhan Branch

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: To train future teachers with advances multiple intelligences is an essential measure to ensure teaching evolution. American psychologist named Howard Gardner presents the theory of Multiple Intelligences (MI) forms the base of the current article. The extensive application of information technology in teaching supports multiple intelligences teaching. This article presents related teaching strategies from four aspects to promote students' multi-Intellectual development in information technology environment, which are utilization of information technology to offer pluralistic teaching resources and meet different students' need, utilize the information technology to found the pluralistic teaching situation, to promote students' multiple intelligences, design collective practical activities by using information technology and motive students' multi-intelligence coordinate development, adopting plural evaluation and pay attention to students' individual intelligent development. The aim of this article is to promote normal students' to develop in a multi-intelligent and harmonious way. It is significance to adopt information technology to conduct multi-intelligent teaching. © 2010 IEEE.

Number of references: 3

Main heading: Strategic planning

Controlled terms: Information technology - Students

Uncontrolled terms: Intellectual development - Multimedia - Multiple intelligences - Teaching resources - Teaching strategy - Tertiary students

Classification code: 723.5 Computer Applications - 901.2 Education - 903 Information Science - 912.2 Management - 912.4 Personnel

DOI: 10.1109/OPEE.2010.5508149

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

572

Accession number: 20104813446650

Title: Stochastic newsboy inventory control model and its solving on multivariate products order and pricing

Authors: Xiao, Jixian1 ; Lu, Fangling1 ; Xiao, Xin2

Author affiliation:

1 College of Science, Hebei Polytechnic University, Tangshan 063009, China

2 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Xiao, J. (xiaojax@yahoo.com.cn)

Source title: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)

Abbreviated source title: Lect. Notes Comput. Sci.

Volume: 6377 LNCS

Issue: M4D

Monograph title: Information Computing and Applications - First International Conference, ICICA 2010, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 65-72

Language: English

ISSN: 03029743

E-ISSN: 16113349

ISBN-10: 3642161669

ISBN-13: 9783642161667

Document type: Conference article (CA)

Conference name: 1st International Conference on Information Computing and Applications, ICICA 2010

Conference date: October 15, 2010 - October 18, 2010

Conference location: Tangshan, China

Conference code: 82745

Sponsor: National Science Foundation of China; Hunan Institute of Engineering

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: In this paper based on the traditional stochastic inventory control problem, namely, the Newsboy problem, considered the factor of inventory item which has an impact on the decision-making model, a new model is built up. While assuming the form of demand to meet the adding form, and considering the impact of the price on the demand rate and the impact of the demand rate on inventory item, we discuss a new subscription model, and give corresponding calculation methods to determine the optimal order quantity and optimal sales price. Model in this paper is an extension of existing models, while the known model is a special case of this model. At last an simple example is given. © 2010 Springer-Verlag Berlin Heidelberg.

Number of references: 12

Main heading: Stochastic models

Controlled terms: Decision making - Inventory control - Optimization - Stochastic systems

Uncontrolled terms: Adding form - Calculation methods - Decision making models - Demand rates - Inventory item - New model - Newsboy problem - Optimal order quantity - Sales prices - Stochastic inventory - Stochastic inventory control models - Subscription models

Classification code: 911.3 Inventory Control - 912.2 Management - 921.5 Optimization Techniques - 922.1 Probability Theory - 961 Systems Science

DOI: 10.1007/978-3-642-16167-4_9

Database: Compendex

Accession number: 20121614950866

Title: Study on mechanics structural synthesis of six-legged walking robot with parallel leg mechanisms

Authors: Rong, Yu1, 2 ; Jin, Zhen Lin1 ; Qu, Meng Ke2

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao, China

2 Hebei Normal University Science and Technology, Qinhuangdao, China

Corresponding author: Rong, Y. (lixiangcg@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 496

Monograph title: Functional Materials and Nanotechnology

Issue date: 2012

Publication year: 2012

Pages: 247-250

Language: English

ISSN: 10226680

ISBN-13: 9783037853931

Document type: Conference article (CA)

Conference name: 2012 International conference on Function Materials and Nanotechnology, FMN 2012

Conference date: May 19, 2012 - May 20, 2012

Conference location: Zhengzhou, China

Conference code: 89307

Sponsor: Wuhan Institute of Technology; Beijing Material Research Center; International Material Research Society

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: In order to use the parallel leg mechanisms in the six-legged robot, a six-legged walking robot with parallel leg mechanisms was presented. A six-legged walking robot type synthesis method based on screw theory was proposed. By this method, the paper carried on the structural synthesis of whole robot and the parallel leg mechanisms. 2-UPS&UP mechanism was chosen as the leg mechanism of the six-legged walking robot. 2-UPS&UP mechanism had been proven not to be an instantaneous mechanism by the displacement manifold theory. The specific structure of the six-legged walking robot based on 2-UPS&UP mechanism was designed. These studies laid the theoretical foundation for further study of the six-legged walking robot. This type synthesis method could be used for the design of other multi-legged walking robot. © (2012) Trans Tech Publications, Switzerland.

Number of references: 5

Main heading: Mobile robots

Controlled terms: Functional materials - Kinematics - Nanotechnology - Screws

Uncontrolled terms: Displacement submanifold - Leg mechanism - Screw theory - Six-legged walking - Type synthesis

Classification code: 605 Small Tools and Hardware - 731.5 Robotics - 761 Nanotechnology - 931.1 Mechanics - 951 Materials Science

DOI: 10.4028/www.scientific.net/AMR.496.247

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

574

Accession number: 20124115543153

Title: Uniqueness and stability analysis of equilibrium with delayed cellular neural networks

Authors: Zhao, Tongjuan¹ ; Wang, Jinran²

Author affiliation:

1 Department of Basic Courses, Qinhuangdao Institute of Technology, Qinhuangdao, China

2 Department of Mathematics and Information Technology, Hebei Normal University of Science and

Technology, Qinhuangdao, China

Corresponding author: Zhao, T. (ztj2124@163.com)

Source title: Proceedings of 2012 International Conference on Measurement, Information and Control, MIC 2012

Abbreviated source title: Proc. Int. Conf. Meas., Inf. Control, MIC

Volume: 1

Part number: 1 of 2

Monograph title: Proceedings of 2012 International Conference on Measurement, Information and Control, MIC 2012

Issue date: 2012

Publication year: 2012

Pages: 202-205

Article number: 6273256

Language: English

ISBN-13: 9781457716027

Document type: Conference article (CA)

Conference name: 2012 International Conference on Measurement, Information and Control, MIC 2012

Conference date: May 18, 2012 - May 20, 2012

Conference location: Harbin, China

Conference code: 93012

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: The uniqueness and stability analysis of the equilibrium problem of the cellular neural networks with time delay is discussed in this paper. Firstly, the equilibrium point of uniqueness condition is proposed in form of LMIs by contradiction. The appropriate Lyapunov-Krasovskii function is established based on the delayed cellular neural networks model, then using the inequality skill, the delay dependent criteria of

global asymptotic stability of cellular neural networks is proposed. The results are given in terms of linear matrix inequalities and can be easily calculated stability delay bounds by LMI tool-box. The results in this paper can easily get the delay-independent stability of results, and the results included in existing literature on delay independent stability analysis results. Finally, a numerical example illustrates the superiority. © 2012 IEEE.

Number of references: 10

Main heading: Cellular neural networks

Controlled terms: Delay control systems - Linear matrix inequalities - Stability

Uncontrolled terms: Delay bound - Delay independent - Delay-dependent criteria - Delayed cellular neural networks - Equilibrium point - Equilibrium problem - Global asymptotic stability - Global stability - Lyapunov Krasovskii function - Numerical example - Stability analysis

Classification code: 961 Systems Science - 951 Materials Science - 931 Classical Physics; Quantum Theory; Relativity - 921.1 Algebra - 801 Chemistry - 731.1 Control Systems - 723.4 Artificial Intelligence

DOI: 10.1109/MIC.2012.6273256

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

575.

Accession number: 20134416933649

Title: Analysis of the characteristics of intangible cultural heritage Changli to Yangko

Authors: Guo, Xiao Xi¹; Li, Yang¹; Zhang, Qin¹

Author affiliation:

¹ College of the Arts, Hebei Normal University of Science and Technology, Qin Huangdao 066000, Hebei, China

Corresponding author: Guo, X.X. (Guoxiaoxi521@126.com)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 227 LNEE

Part number: 5 of 5

Issue: VOL. 5

Monograph title: Proceedings of the 2nd International Conference on Green Communications and Networks 2012, GCN 2012

Issue date: 2013

Publication year: 2013

Pages: 181-185

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783642353970

Document type: Conference article (CA)

Conference name: 2nd International Conference on Green Communications and Networks, GCN 2012

Conference date: December 12, 2012 - December 14, 2012

Conference location: Chongqing, China

Conference code: 95479

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University; Nanyang Technological University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Changli to Yangko, a form of folk dance, also known as Hebei Yangko or Jidong to Yangko, is popularized in Funing, Lulong, Luan county etc., and loved by the local people. Changli to Yangko from the initial cross-dressing evolved into today's four roles, from the traditional song and dance combination evolved into today's dance and drama combination, from the single Han nationality folk songs and dances evolved into a multi-ethnic fusion folk art. Now, Changli to Yangko has gradually got on to the art scene from the initial "street vendor," and was listed in the first national intangible cultural heritage, approved by the State Council in 2006. This thesis has discussed the characteristics of Changli to Yangko through its beautiful performance form, charming dance language, tacit cooperation band accompaniment. © 2013 Springer-Verlag.

Number of references: 6

Main heading: Electrical engineering

Controlled terms: Mathematical techniques

Uncontrolled terms: Band accompaniment - Changli to Yangko - Characteristics - Dance language - Folk dances - Folk songs - Intangible cultural heritages - Local people

Classification code: 709 Electrical Engineering, General - 921 Mathematics

DOI: 10.1007/978-3-642-35398-7_23

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

576.

Accession number: 20131016079848

Title: Analysis on local transfer pattern for rural surplus labor forces

Authors: Jin, Huixin¹ ; Li, Wei¹ ; Li, Guohong¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Jin, H. (wblxljs@126.com)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 209 LNEE

Monograph title: Informatics and Management Science VI

Issue date: 2013

Publication year: 2013

Pages: 227-235

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9781447148043

Document type: Conference article (CA)

Conference name: International Conference on Informatics and Management Science, IMS 2012

Conference date: December 21, 2012 - December 23, 2012

Conference location: Kunming, China

Conference code: 94341

Sponsor: National Natural Science Foundation of China, (NSFC)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: With the development of society and economy, more and more surplus labor forces are coming forth in rural area of China; To guide and foster the rural surplus labors to engage in non-agriculture is necessary for china to solve the "three-agricultures" issue, promote construction of small towns and establish a humorous and well-fare society, as well as a strategy for construction of rural modernization. This paper discussed the necessity of building a double-track transfer pattern under which the rural surplus labor force could realize local transfer and the double-track pattern itself: the local employment track for rural surplus labors in municipal suburbs and prefectural suburbs; the local employment track for rural surplus labors in rural area. © 2013 Springer-Verlag.

Number of references: 5

Main heading: Rural areas

Controlled terms: Agriculture - Information science - Management science

Uncontrolled terms: Local employment - Local transfer - Small towns - Surplus labors
- Transfer patterns - Travel and tourism

Classification code: 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 903 Information Science - 912.2 Management

DOI: 10.1007/978-1-4471-4805-0_28

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

577.

Accession number: 20120414711369

Title: Global exponential stability of delayed fuzzy cellular neural networks with Markovian jumping parameters

Authors: Han, Wei1 ; Liu, Yan2 ; Wang, Linshan3

Author affiliation:

1 Department of Mathematics, North University of China, Taiyuan, Shanxi 030051, China

2 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

3 Department of Mathematics, Ocean University of China, Qingdao, Shandong 266071, China

Corresponding author: Han, W. (qd_hanweiwei@126.com)

Source title: Neural Computing and Applications

Abbreviated source title: Neural Comput. Appl.

Volume: 21

Issue: 1

Issue date: February 2012

Publication year: 2012

Pages: 67-72

Language: English

ISSN: 09410643

Document type: Journal article (JA)

Publisher: Springer London, The Guildway, Old Portsmouth Road, Artington, Guildford, GU3 1LP, United Kingdom

Abstract: This paper deals with the global exponential stability in the mean square of fuzzy cellular

neural networks with time-varying delays and Markovian jumping parameters. By constructing suitable Lyapunov functionals, we obtain several sufficient conditions which can be expressed in terms of linear matrix inequalities (LMIs). The proposed LMI results are computationally efficient as it can be solved numerically by using Matlab LMI toolbox. An example is given to show the effectiveness of the results. © 2011 Springer-Verlag London Limited.

Number of references: 19

Main heading: Cellular neural networks

Controlled terms: Asymptotic stability - Fuzzy neural networks - Linear matrix inequalities - Time varying networks

Uncontrolled terms: Computationally efficient - Fuzzy cellular neural networks - Global exponential stability - Lyapunov functionals - Markovian jumping parameters - Matlab LMI toolbox - Stochastic - Sufficient conditions - Time-varying delay

Classification code: 703.1 Electric Networks - 723.4 Artificial Intelligence - 921.1 Algebra - 921.6 Numerical Methods

DOI: 10.1007/s00521-011-0685-4

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

578

Accession number: 20132216370381

Title: Nanostructures and self-assembly of organogels via benzimidazole/ benzothiazole imide derivatives with different alkyl substituent Chains

Authors: Shen, Xihai^{1, 2}; Jiao, Tifeng^{2, 3}; Zhang, Qingrui²; Guo, Haiying²; Lv, Yaopeng²; Zhou, Jingxin²; Gao, Faming²

Author affiliation:

1 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Hebei Key Laboratory of Applied Chemistry, School of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao 066004, China

3 State Key Laboratory of Solid Lubrication, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, China

Corresponding author: Jiao, T. (tfjiao@ysu.edu.cn)

Source title: Journal of Nanomaterials

Abbreviated source title: J. Nanomater.

Volume: 2013

Issue date: 2013

Publication year: 2013

Article number: 409087

Language: English

ISSN: 16874110

E-ISSN: 16874129

Document type: Journal article (JA)

Publisher: Hindawi Publishing Corporation, 410 Park Avenue, 15th Floor, 287 pmb, New York, NY 10022, United States

Abstract: New benzimidazole/benzothiazole imide derivatives with different alkyl substituent chains were designed and synthesized. Their gelation behaviors in 22 solvents were tested as novel low-molecular-mass organic gelators. The test showed that the alkyl substituent chains and headgroups of benzimidazole/benzothiazole residues in gelators played a crucial role in the gelation behavior of all compounds in various organic solvents. More alkyl chains in molecular skeletons in present gelators are favorable for the gelation of organic solvents. SEM and AFM observations revealed that the gelator molecules self-assemble into different aggregates from wrinkle, lamella and belt to dot with change of solvents. Spectral studies indicated that there existed different H-bond formation between imide groups and hydrophobic force of alkyl substituent chains in molecular skeletons. The present work may give some insights into design and character of new organogelators and soft materials with special molecular structures. © 2013 Xihai Shen et al.

Number of references: 34

Main heading: Gelation

Controlled terms: Musculoskeletal system - Organic solvents - Spectroscopic analysis

Uncontrolled terms: Alkyl substituent - Gelation behavior - Gelator molecules - Hydrophobic forces - Imide derivatives - Low-molecular-mass organic gelators - Molecular skeleton - Spectral studies

Classification code: 461.3 Biomechanics, Bionics and Biomimetics - 801 Chemistry - 802.3 Chemical Operations - 803 Chemical Agents and Basic Industrial Chemicals

DOI: 10.1155/2013/409087

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

579

Accession number: 20123615399572

Title: Probe into structuring six-dimensional system for educating and cultivating college party members

Authors: Liu, Chaohui¹ ; Zhang, Liying¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qin Huangdao, China

Corresponding author: Liu, C.

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 163 AISC

Monograph title: Advanced Technology in Teaching - Selected Papers from the 2012 International Conference on Teaching and Computational Science, ICTCS 2012

Issue date: 2012

Publication year: 2012

Pages: 349-354

Language: English

ISSN: 18675662

ISBN-13: 9783642294570

Document type: Conference article (CA)

Conference name: 2012 International Conference on Teaching and Computational Science, ICTCS 2012

Conference date: April 1, 2012 - April 2, 2012

Conference location: China

Conference code: 92330

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Along with the continuous growth of college student team, the number of college Party members multiplies. How to guarantee the quality of education and cultivation of college Party members has become an important task that needs much attention and in-depth research from Party-building work of colleges and universities. This article makes an analysis on the problems in process of current education and cultivation of college Party members and proposes to strengthen college Party members' education and cultivation in terms of theoretical study, moral cultivation, artistic edification, behavioral training, post dedication and system guarantee so as to actually enhance the overall quality of college Party members. © 2012 Springer-Verlag GmbH.

Main heading: Students

Controlled terms: Education - Personnel training

Uncontrolled terms: College students - Colleges and universities - In-process - Overall quality - Party members - Quality of education - system - Theoretical study

Classification code: 901.2 Education

DOI: 10.1007/978-3-642-29458-7_51

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

580

Accession number: 20122015019719

Title: Study on vocational college students comprehensive quality evaluation index system and evaluation method

Authors: Na, Wang1 ; Wang, Xiao-Kun1 ; Wang, Hong-Hai1 ; Gao, Xin1 ; Fan, Hai-Rong1

Author affiliation:

- 1 Youth League of Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Na, W.

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 267 CCIS

Part number: 2 of 2

Issue: PART 1

Monograph title: Information and Business Intelligence - International Conference, IBI 2011, Proceedings

Issue date: 2012

Publication year: 2012

Pages: 295-300

Language: English

ISSN: 18650929

ISBN-13: 9783642290831

Document type: Conference article (CA)

Conference name: International Conference on Information and Business Intelligence, IBI 2011

Conference date: December 23, 2011 - December 25, 2011

Conference location: Chongqing, China

Conference code: 89725

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University; Nanyang Technological University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Students overall quality assessment is an important part of quality education, and it is an important means to inspire, guide and promote the comprehensive development of students. Proceeding from the objective of higher vocational education, the paper builds a comprehensive quality of vocational college students' evaluation index system, and evaluates the overall quality of integrated individual student in higher vocational institutions scientifically by using the fuzzy comprehensive evaluation method. The results show that relatively objective evaluation results reflect the quality of the vocational college students' reality. © 2012 Springer-Verlag Berlin Heidelberg.

Number of references: 2

Main heading: Students

Controlled terms: Quality control

Uncontrolled terms: College students - Comprehensive qualities - Evaluation index system
- Evaluation Method - Fuzzy comprehensive evaluation method - higher vocational colleges - Higher vocational educations - Index systems - Objective evaluation - Overall quality - Quality education

Classification code: 901.2 Education - 913.3 Quality Assurance and Control

DOI: 10.1007/978-3-642-29084-8_44

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

581

Accession number: 20113614294751

Title: Availability evaluation of machine repairable system with service station breakdowns

Authors: Jingbo, Li1 ; Shengli, Lv2 ; Xin, Xiao1

Author affiliation:

- 1 Mathematics and Information College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 College of Science, Yanshan University, Qinhuang-dao, 066004, China

Corresponding author: Jingbo, L. (lijingbo668@126.com)

Source title: Proceedings of the 2011 Chinese Control and Decision Conference, CCDC 2011

Abbreviated source title: Proc. Chin. Control Decis. Conf., CCDC

Monograph title: Proceedings of the 2011 Chinese Control and Decision Conference, CCDC 2011

Issue date: 2011

Publication year: 2011

Pages: 2319-2322

Article number: 5968594

Language: English

ISBN-13: 9781424487363

Document type: Conference article (CA)

Conference name: 2011 Chinese Control and Decision Conference, CCDC 2011

Conference date: May 23, 2011 - May 25, 2011

Conference location: Mianyang, China

Conference code: 86250

Sponsor: IEEE Control Systems Society (CSS); IEEE Industrial Electronics Society (IES); Automatic Control Society of Chinese Association of Aeronautics; Simul. Methods Model. Soc. Chin. Assoc. Syst. Simul.; Intell. Control Manage. Soc., Chin. Assoc. Artif. Intell.

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper studies the machine repair problem, There are K identical unreliable machines, N identical unreliable service stations and c identical reliable repair facilities in the system. The service stations maintain the failure machines only, and the repair facilities repair the breakdowns of unreliable service stations only. Every distribution of time lasting is exponential distribution. The breakdown rate of each service station is changeable, it may be different between busy time and idle time. We give the transition rate matrix of the model. The availability characters in symbol form for the special case of the model. The numerical example is presented. © 2011 IEEE.

Number of references: 14

Main heading: Filling stations

Controlled terms: Markov processes - Repair

Uncontrolled terms: Exponential distributions - Idle time - Machine repair problem - Machine repairable problem - Numerical example - Repair facilities - Repairable systems - Transition rate matrix - Unreliable machine - Unreliable service station

Classification code: 432 Highway Transportation - 913.5 Maintenance - 922.1 Probability Theory

DOI: 10.1109/CCDC.2011.5968594

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

582

Accession number: 20104813441429

Title: The optimization model of hospital sick beds' rational arrangements

Authors: Guo, Yajun¹ ; Wang, Jinran¹ ; Yue, Xiaoyun¹ ; He, Shangqin¹ ; Zhang, Xiaohua¹

Author affiliation:

1 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, Hebei Province, China

Corresponding author: Guo, Y. (guoyajun111@126.com)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 105 CCIS

Part number: 1 of 2

Issue: PART 1

Monograph title: Information Computing and Applications - International Conference, ICICA 2010, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 40-47

Language: English

ISSN: 18650929

ISBN-10: 3642163351

ISBN-13: 9783642163357

Document type: Conference article (CA)

Conference name: International Conference on Information Computing and Applications, ICICA 2010

Conference date: October 15, 2010 - October 18, 2010

Conference location: Tangshan, China

Conference code: 82500

Sponsor: National Science Foundation of China; Hunan Institute of Engineering

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: It is practical to apply queuing theory in service system. Aimed at hospitalized queuing problem of the ophthalmology hospital, by analyzing the hospital statistics data, this text built sick beds' proportion allotment model based on queueing system with multi-server method and evaluation index. And solved the patient visiting's beds allotment problem, made beds most utilization and make using of the maximum resource rate. Carried on an examination and evaluation to the model, the paper gets four suitable models of hospital beds arrangement, admission waiting time, hospital beds' distribution ratio and hospital beds' distribution ratio. It also serves as reference for similar projects. © Springer-Verlag 2010.

Number of references: 12

Main heading: Queueing theory

Controlled terms: Hospital beds - Hospitals - Queueing networks - Servers

Uncontrolled terms: Distribution ratio - Evaluation index - Model-based - Multi-server - Optimization models - Program systems - Queueing system - Queueing problems - Queueing theory - Service systems - Waiting-time

Classification code: 462.2 Hospitals, Equipment and Supplies - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 922.1 Probability Theory

DOI: 10.1007/978-3-642-16336-4_6

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

583

Accession number: 20114714544659

Title: The study of face recognition based on hybrid principal components analysis and independent component analysis

Authors: Zhou, Yanhong¹ ; Cao, Shukai² ; Wen, Dong³ ; Zhang, Huiyang³ ; Zhao, Liqiang¹

Author affiliation:

1 College of Mathematics and Information Technology, Hebei Normal, University of Science and Technology, Qinhuangdao, China

2 College of Electrical, Engineering Yanshan University, Qinhuangdao, China

3 College of Information Science and Engineering, Yanshan University, Qinhuangdao, China

Corresponding author: Zhou, Y. (zhouyanhong_02@126.com)

Source title: 2011 International Conference on Electronics, Communications and Control, ICECC 2011 - Proceedings

Abbreviated source title: Int. Conf. Electron., Commun. Control, ICECC - Proc.

Monograph title: 2011 International Conference on Electronics, Communications and Control, ICECC 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 2964-2966

Article number: 6066375

Language: English

ISBN-13: 9781457703218

Document type: Conference article (CA)

Conference name: 2011 International Conference on Electronics, Communications and Control,

ICECC 2011

Conference date: September 9, 2011 - September 11, 2011

Conference location: Ningbo, China

Conference code: 87394

Sponsor: Ningbo University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper a new method has been proposed based on the combination of principal component analysis(PCA) and independent component analysis (ICA) for face recognition. In the process of face feature subspace extraction, the dimension of the data set has been reduced by the principal component analysis (PCA), and then the principal components are used to construct eigenface subspace as R . At the same time, the solution of mixed matrix W can be obtained by the fast fixed point algorithm (Fast ICA) iteration, thereby the face feature classification subspace RTW can be got in the end. In the face classification, the recognition vector can be got when the training face set and testing face set have projected in face feature subspace respectively, then the classification results can be obtained while the vector is brought into the K-neighbor classifier. In this paper the ORL face database has been used to verify this method. The experiment result shows that the algorithm has a good recognition rate. © 2011 IEEE.

Number of references: 10

Main heading: Principal component analysis

Controlled terms: Algorithms - Face recognition - Feature extraction - Independent component analysis - Vectors

Uncontrolled terms: Classification results - Eigen-face subspace - Face classification - Face features - FastICA - Fixed-point algorithms - Independent components - KNN classification - Mixed matrix - ORL face database - Principal Components - Principal components analysis - Recognition rates

Classification code: 716 Telecommunication; Radar, Radio and Television - 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 921 Mathematics - 921.1 Algebra - 922.2 Mathematical Statistics

DOI: 10.1109/ICECC.2011.6066375

Database: Compendex

584.

Accession number: 20141317518935

Title: The study of creative cultural industry competitiveness based on the environmental and cultural mediation development models

Authors: Guo, Lihong¹ ; Li, Changming¹

Author affiliation:

¹ Hebei Normal University of Science and Technology No.360, No.360, Hebei street, Haigang district, Qinhuangdao, Hebei Prov. 06600, China

Source title: International Journal of Applied Environmental Sciences

Abbreviated source title: Int. J. Appl. Environ. Sci.

Volume: 8

Issue: 23-24

Issue date: 2013

Publication year: 2013

Pages: 2907-2915

Language: English

ISSN: 09736077

E-ISSN: 09740260

Document type: Journal article (JA)

Publisher: Research India Publications, B-2/84 Ground Floor, Rohini Sec-16,, Delhi, 110085, India

Abstract: When the overall economic growth slowed down on the background of global financial crisis, cultural creative industry presents an anti "business cycle" contrarian uptrend state on the whole, thus become the new bright spot of economic development and paid attention by people. This paper discusses a few of the impact of minority cultures to cultural environment and the relationship between ecological environment and culture in the south, and uses design models and evaluation indexes as this base to complete the research of creative cultural industry competitiveness. © Research India Publications.

Number of references: 6

Main heading: Competition

Controlled terms: Economics

Uncontrolled terms: Creative cultural competitiveness - Cultural creative industries -
Cultural environment - Cultural industries - Ecological environments - Economic development -
Global financial crisis - Minority

Classification code: 911.2 Industrial Economics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

585

Accession number: 20132916505333

Title: Design of temperature monitoring system for solar laminator based on zigbee technology

Authors: Chen, Li Diong¹ ; Shi, Lei^{1, 2} ; Ma, Shu Ying¹ ; Liu, Sheng Tao¹

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Qinhuangdao Sunnyus Machinery Co., Ltd, Qinhuangdao, China

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 706-708

Monograph title: Mechatronics and Intelligent Materials III

Issue date: 2013

Publication year: 2013

Pages: 748-751

Language: English

ISSN: 10226680

ISBN-13: 9783037857106

Document type: Conference article (CA)

Conference name: 2013 3rd International Conference on Mechatronics and Intelligent Materials, MIM 2013

Conference date: May 18, 2013 - May 19, 2013

Conference location: XiShuangBanNa, China

Conference code: 97695

Sponsor: Hong Kong Control Engin. and Inform.; Science Research Assoc. (CEIS); Internat. Frontiers of science and; technol. Research Assoc. (IFST); Integrated Research Center for Green Living Techniques; National Chin-Yi University of Technology

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: To solve the traditional solar laminator distributed temperature monitoring system wiring problem, a distributed wireless network temperature monitoring system based on ZigBee technology is introduced in this paper. The system sets up a ZigBee wireless monitoring network through a Zigbee-based wireless charge germination processor, CC2430, hardware design and software design process of coordinator node and the sensor node, and we can get temperature monitoring from each sensor node by the network. The method introduced in the paper can make the detection process simple and effective. © (2013) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Zigbee

Controlled terms: Intelligent materials - Monitoring - Sensor nodes

Uncontrolled terms: CC2430 - Detection process - Distributed wireless networks - Software design process - Solar laminator - Temperature monitoring - Wireless monitoring - ZigBee technology

Classification code: 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 722.3 Data Communication, Equipment and Techniques - 722 Computer Systems and Equipment - 415 Metals, Plastics, Wood and Other Structural Materials

DOI: 10.4028/www.scientific.net/AMR.706-708.748

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

586.

Accession number: 20110313602510

Title: RETRACTED ARTICLE: A study of equating of Computer-Based College English Placement Test

Authors: Liu, Jiangying¹ ; Cui, Haiying² ; Wang, Jing² ; Xiao, Yunnan³

Author affiliation:

1 Orient Science and Technology College, Hunan Agricultural University, China

2 College of Foreign Languages, Hebei Normal University of Science and Technology, Qin Huangdao, China

3 Department of Foreign Languages, Hunan University, Changsha, China

Corresponding author: Liu, J. (abbyliu65@yahoo.com.cn)

Source title: ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings

Abbreviated source title: ICEMT - Int. Conf. Educ. Manage. Technol., Proc.

Monograph title: ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 507-511

Article number: 5657604

Language: English

ISBN-13: 9781424486175

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: This paper was to investigate the application of item response theory to specify an appropriate item response model for the equating of the mixed-format of multiple-choice items and open-ended items, since equating is the precondition of the development of an item bank for the Computer-Based College English Placement Test. It was shown that the equating approach based on common-item nonequivalent groups design and the two-parameter logistic model is ideal to be used to calibrate item and ability parameters in two alternate test forms since this model fits data of all listening and reading sections in both forms. © 2010 IEEE.

Number of references: 18

Main heading: Parameter estimation

Uncontrolled terms: Alternate test - Equating - Item bank - Item response models - Item Response Theory - Logistic models - Model fit

Classification code: 731.1 Control Systems

DOI: 10.1109/ICEMT.2010.5657604

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

587.

Accession number: 20130816038263

Title: Design of mechanism for sieving sweet corn seeds

Authors: Deng, Chunyan¹ ; Chen, Fang¹ ; Deng, Chen¹ ; Zhang, Xiaoqin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Deng, C. (dcyqhd@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 651

Monograph title: 2012 International Conference on Engineering Materials, ICEM 2012

Issue date: 2013

Publication year: 2013

Pages: 656-660

Language: English

ISSN: 10226680

ISBN-13: 9783037856130

Document type: Conference article (CA)

Conference name: 2012 International Conference on Engineering Materials, ICEM 2012

Conference date: December 30, 2012 - December 31, 2012

Conference location: Singapore

Conference code: 95489

Sponsor: Information Engineering Research Institute, USA; Hong Kong Education Society; Trans Tech Publications inc.; Singapore Management and Sports Science Institute

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The vibrating screen is used for sweet corn pre-processing. The machine is formed by the electric motor, the transmission system module, the sieving module as well as the rack, in total four parts. With enough tests, the machine is compact in structure and works smoothly and can avoid too much colliding. Also, it's good at sieving and has a high efficiency and can satisfy the requirement of sieving sweet corn. Sweet corn is popular because it's rich in nutrients and delicious in taste. Its product has appeared on table quite often. At present, the storage of seeds of sweet corn is mostly by canned. So, the seeds must be sieved before packed. © (2013) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Materials science

Controlled terms: Design - Mechanical engineering

Uncontrolled terms: Pre-processing - Screening machines - Sweet corns - Transmission systems

Classification code: 408 Structural Design - 608 Mechanical Engineering, General - 951 Materials Science

DOI: 10.4028/www.scientific.net/AMR.651.656

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

588.

Accession number: 20110613642494

Title: Automatic verification of mercury thermometer based on image processing technology

Authors: Li, Jinze¹ ; Li, Zhihong¹ ; Zhang, Hailong¹ ; Hou, Guifeng¹ ; Cheng, Fang¹ ; Xiao, Nianxin¹

Author affiliation:

¹ College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao 066000, China

Corresponding author: Li, J.

Source title: Proceedings of SPIE - The International Society for Optical Engineering

Abbreviated source title: Proc SPIE Int Soc Opt Eng

Volume: 7749

Monograph title: 2010 International Conference on Display and Photonics

Issue date: 2010

Publication year: 2010

Article number: 77491X

Language: English

ISSN: 0277786X

CODEN: PSISDG

ISBN-13: 9780819482402

Document type: Conference article (CA)

Conference name: 2010 International Conference on Display and Photonics

Conference date: July 12, 2010 - July 13, 2010

Conference location: Nanjing, China

Conference code: 83628

Sponsor: International Computer Science Society; Central China Normal University; Intelligent Inf. Technol. Appl. Res. Assoc.

Publisher: SPIE, P.O. Box 10, Bellingham, WA 98227-0010, United States

Abstract: In this paper, a new temperature automatic verification system has been studied. It uses platinum resistance temperature measurement system for thermostat bath to control roughly. Within the control point ± 2.5 °C, the system automatically switches to use first-class standard mercury thermometer for precision measurements to control precisely temperature at verification points. The mercury thermometer indication is detected by digital camera imaging, and the scale value and exact location of mercury column are calculated by using image processing methods. including image enhancement, image denoising, binary image, edge detection and so on. The system uses gray-scale transform, median filtering, binary image, Canny edge detection operator to image processing by analysis and comparison. As tens of pixels cover each degree, the system gets the standard high-precision temperature. Experiments have proved the accuracy of image processing and computer vision measuring is an order of magnitude higher than of person's observation. Temperature reading, data processing and test results have been completed by computer, which increases automation and accuracy of verification. Therefore, verifying mercury thermometer, the theoretical temperature largely depends on the accuracy of mercury thermometer itself.

Number of references: 6

Main heading: Data handling

Controlled terms: Binary images - Cameras - Computer vision - Edge detection - Imaging systems - Mercury (metal) - Photonics - Platinum - Temperature measurement - Thermometers

Uncontrolled terms: Accuracy - Automatic verification - Canny edge detection - Control point - Gray scale - High-precision - Image de-noising - Image processing - methods - Image processing and computer vision - Image processing technology - Median filtering - Mercury thermometer - Order of magnitude - Precision measurement - Resistance temperature - Scale value - System use - Test results - Verification points

Classification code: 944.6 Temperature Measurements - 944.5 Temperature Measuring Instruments - 744 Lasers - 742.2 Photographic Equipment - 723.5 Computer Applications - 723.2 Data Processing and Image Processing - 717 Optical Communication - 716 Telecommunication; Radar, Radio and Television - 712 Electronic and Thermionic Materials - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 547.1 Precious Metals

DOI: 10.1117/12.868912

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

589.

Accession number: 20095312593161

Title: Vibrational frequency of strong-coupling impurity bound magnetopolaron in quantum rods

Authors: Xiao, Jing-lin^{1, 2}; Zhao, Cui-Lan²

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

2 College of Physics and Electronic Information, Inner Mongolia National University, Tongliao, 028043, China

Corresponding author: Xiao, J.-l. (xiaojlin1939@126.com)

Source title: Physica B: Condensed Matter

Abbreviated source title: Phys B Condens Matter

Volume: 405

Issue: 3

Issue date: February 1, 2010

Publication year: 2010

Pages: 912-915

Language: English

ISSN: 09214526

CODEN: PHYBE3

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: The Hamiltonian of a quantum rod with an ellipsoidal boundary is given after a coordinate transformation which can transform the boundary into a spherical one. We study the vibrational frequency and the ground state binding energy of the strong-coupling impurity bound magnetopolaron in a quantum rod. The effects of the aspect ratio of the ellipsoid, the electron-phonon coupling strength, the cyclotron frequency of a magnetic field and the Coulomb bound potential are taken into consideration by using a linear combination operator method. It is found that the vibrational frequency and the ground state binding energy will increase with increasing Coulomb bound potential and cyclotron frequency. The vibrational frequency and the ground state binding energy are an increasing functions of the electron-phonon coupling strength. The vibrational frequency and the ground state binding energy are increasing functions of the aspect ratio of the ellipsoid in the case of the aspect ratio of the ellipsoid greater than 1. However, they become decreasing ones for the aspect ratio of the ellipsoid smaller than 1. When the aspect ratio of the ellipsoid equal to 1, the vibrational frequency and the ground state binding energy have minimum values. © 2009 Elsevier B.V. All rights reserved.

Number of references: 15

Main heading: Aspect ratio

Controlled terms: Binding energy - Binding sites - Complexation - Cyclotron resonance - Cyclotrons - Electron correlations - Electron-phonon interactions - Ground state - Magnetic field effects - Nuclear energy - Potential energy - Pressure drop - Quantum theory - Semiconductor quantum dots

Uncontrolled terms: Bound magnetopolaron - Co-ordinate transformation - Cyclotron frequency - Electron-phonon coupling strengths - Ground-state binding - Increasing functions - Linear combination operators - Minimum value - Quantum rods - Strong-coupling - Vibrational frequencies

Classification code: 943 Mechanical and Miscellaneous Measuring Instruments - 802.2 Chemical Reactions - 931.1 Mechanics - 931.3 Atomic and Molecular Physics - 931.4 Quantum Theory; Quantum Mechanics - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 932.1.1 Particle Accelerators - 932.2 Nuclear Physics - 933 Solid State Physics - 801.4 Physical Chemistry - 621 Nuclear Reactors - 622.3 Radioactive Material Applications - 631.1 Fluid Flow, General - 801.2 Biochemistry - 701.1 Electricity: Basic Concepts and Phenomena - 708.3 Superconducting Materials - 714.2 Semiconductor Devices and Integrated Circuits - 701.2 Magnetism: Basic Concepts and Phenomena

DOI: 10.1016/j.physb.2009.10.013

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20102112955798

Title: Design of the temperature control system of solar cell lamination machine

Authors: Ma, Shuying¹ ; Chen, Lidong¹ ; Shi, Lei¹ ; Liu, Shengtao¹ ; Zhang, Liang¹ ; Liu, Shiguang¹

Author affiliation:

1 College of Mechanics and Electronics Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Ma, S. (ma_shuying@126.com)

Source title: 2010 The 2nd International Conference on Computer and Automation Engineering, ICCAE 2010

Abbreviated source title: Int. Conf. Comput. Autom. Eng., ICCAE

Volume: 3

Part number: 3 of 5

Monograph title: 2010 The 2nd International Conference on Computer and Automation Engineering, ICCAE 2010

Issue date: 2010

Publication year: 2010

Pages: 506-509

Article number: 5451611

Language: English

ISBN-13: 9781424455850

Document type: Conference article (CA)

Conference name: 2nd International Conference on Computer and Automation Engineering, ICCAE 2010

Conference date: February 26, 2010 - February 28, 2010

Conference location: Singapore, Singapore

Conference code: 80373

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The temperature control is the key step in the laminating process of solar cell lamination machine. The traditional controlling method is PLC temperature control. The method being used has some shortages such as high price, low control precision, and so on. In order to improve the control precision and its performance-price ratio, a new control system taking the double microcontroller (MCU) as its core is introduced in this paper. Based upon the system, the expert PID was designed to adjust the requirements of the temperature control. The method can adjust the temperature parameters and establish an accurate laminating temperature under the condition of changing temperature and different control targets. The practical operation results show that the controller has a better robustness and a higher control precision. In addition, it can adapt to an external changing condition, and has a strong anti-jamming capability. ©2010 IEEE.

Number of references: 5

Main heading: Controllers

Controlled terms: Laminating - Machine design - Proportional control systems - Solar cells - Temperature control

Uncontrolled terms: Anti-jamming capability - Changing temperature - Control precision - Control target - Controlling methods - Expert PID - High price - Laminating process - MCU - Price ratio - Temperature parameters

Classification code: 813.1 Coating Techniques - 732.1 Control Equipment - 731.3 Specific Variables Control - 816.1 Processing of Plastics and Other Polymers - 731.1 Control Systems - 615.2 Solar Power - 601 Mechanical Design - 702.3 Solar Cells

DOI: 10.1109/ICCAE.2010.5451611

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

591

Accession number: 20120414712812

Title: Design and realization of VOD system based on campus network

Authors: Fu, Rong-Xia1 ; Zhang, Guang-Bin1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Fu, R.-X. (furongxia@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 433-440

Monograph title: Materials Science and Information Technology, MSIT2011

Issue date: 2012

Publication year: 2012

Pages: 4149-4153

Language: English

ISSN: 10226680

ISBN-13: 9783037853191

Document type: Conference article (CA)

Conference name: 2011 International Conference on Material Science and Information Technology, MSIT2011

Conference date: September 16, 2011 - September 18, 2011

Conference location: Singapore, Singapore

Conference code: 88150

Sponsor: Singapore Institute of Electronics

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: In this paper, all links of the Design and Realization of VOD System Based on Campus Network of Hebei Normal University of Science & Technology is researched. First of all, the paper analyses the system requirements, proposes the design ideas and objectives and gives the system design and Entirety functional block diagram. Then the paper gives a more detailed design of complete system. In the end, a system is completed. To ensure the quality of VOD, increase the number of the server that respond to customer service, browse fast and search video files, the system uses many technology such as intelligent video technology, multi-level admission

control scheme and a variety of scheduling options and the dynamic tree traversal video files. © (2012) Trans Tech Publications, Switzerland.

Number of references: 4

Main heading: Design

Controlled terms: Information services - Information technology - Materials science - Media streaming - Systems analysis - Video on demand

Uncontrolled terms: Admission control scheme - Campus network - Complete system - Customer services - Database - Design ideas - Detailed design - Dynamic trees - Functional block diagrams - Intelligent video - Management information service - Multi-level - Streaming media - System requirements - System use - System-based - Video files - VOD

Classification code: 408 Structural Design - 716.4 Television Systems and Equipment - 723.5 Computer Applications - 903.4 Information Services - 951 Materials Science - 961 Systems Science

DOI: 10.4028/www.scientific.net/AMR.433-440.4149

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

592.

Accession number: 20105013490982

Title: The design and implementation of network marketing platform for sports products based on web service

Authors: Wang, Yukuo¹ ; Ren, Changquan² ; Luo, Xuefeng³

Author affiliation:

1 Department of Physical Education, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Department of Computer Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

3 Department of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Wang, Y. (wyk3003@126.com)

Source title: ICLEM 2010: Logistics for Sustained Economic Development - Infrastructure,

Information, Integration - Proceedings of the 2010 International Conference of Logistics Engineering and Management

Abbreviated source title: ICLEM: Logist. Sustained Econ. Dev. - Infrastruct., Inf., Integr. - Proc. Int. Conf. Logist. Eng. Manage.

Volume: 387

Monograph title: ICLEM 2010: Logistics for Sustained Economic Development - Infrastructure, Information, Integration - Proceedings of the 2010 International Conference of Logistics Engineering and Management

Issue date: 2010

Publication year: 2010

Pages: 2495-2502

Language: English

ISBN-13: 9780784411391

Document type: Conference article (CA)

Conference name: 2010 International Conference of Logistics Engineering and Management: Logistics for Sustained Economic Development - Infrastructure, Information, Integration, ICLEM 2010

Conference date: October 8, 2010 - October 10, 2010

Conference location: Chengdu, China

Conference code: 82686

Sponsor: Transportation and Development Institute of ASCE

Publisher: American Society of Civil Engineers, 1801 Alexander Graham Bell Drive, Reston, VA 20191-4400, United States

Abstract: In order to settle the hard problem of sharing and integrating of net resources for sports products enterprises; to realize the efficient docking between internal management of sports products, enterprises and various business activities, and to establish a loosely coupled Web Service integration model through the technology of WSDL, SOAP and XML so as to design a solution plan for the enterprises having dynamic net resources sharing platform. According to the analysis of system design, Web Service Marketing Platform can realize the loosely coupled cooperation, dynamic integration and active integration that generally have excellent encapsulation, openness and integration. The design plan of marketing platform is based on Web Service, build a standardization framework for the internal integration of the enterprises and the information exchange among the

enterprises to improve marketing efficiency and reduce operating costs. © 2010 ASCE.

Number of references: 4

Main heading: Web services

Controlled terms: Design - Industry - Information management - Integration - Marketing - Operating costs - Systems analysis

Uncontrolled terms: Active integration - Business activities - Design plans - Hard problems - Information exchanges - Network marketing - Recreation - Resources sharing - Service marketing - System design - Web service integration

Classification code: 921.2 Calculus - 913 Production Planning and Control; Manufacturing - 912.2 Management - 961 Systems Science - 912 Industrial Engineering and Management - 723 Computer Software, Data Handling and Applications - 408 Structural Design - 911 Cost and Value Engineering; Industrial Economics

DOI: 10.1061/41139(387)348

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

593

Accession number: 20111713935727

Title: Development of high-precision temperature and humidity testing cabinet and its measure and control system

Authors: Wang, Qingzhu¹ ; Chen, Panfeng¹ ; Ma, Yuquan¹ ; Lin, Hongju¹ ; Cui, Lina¹ ; Liu, Haitao²

Author affiliation:

1 College of Electromechanical Engineering, Hebei normal University of Science and Technology, Qinhuangdao 066004, China

2 Hebei Vocational and Technical College of Building Materials, Qinhuangdao 066004, China

Corresponding author: Wang, Q. (wqzh1010@126.com)

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 27

Issue: 2

Issue date: February 2011

Publication year: 2011

Pages: 203-207

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Agricultural Exhibition Road South, Beijing, 100026, China

Abstract: In order to overcome the shortcomings of traditional temperature and humidity testing cabinet, such as high price, low technical indicators, single measurement and control parameter, and so on, the temperature and humidity testing equipment with high reliability, moderate cost, high degree of automation was developed. The constant humidity system of the cabinet used inside and outside double-loop structure, and the constant temperature system used two-time constant temperature technique and sectional measurement scheme. Using the methods such as expert PID control strategy, hardware double protection and software compensation, it realized accurate measurement and control of temperature and humidity, and high performance/cost ratio. The system can be widely applied to the fields of scientific research of meteorological, verification of temperature and humidity, breeding industry and other applications due to its flexibility and modularity.

Number of references: 20

Main heading: Humidity control

Controlled terms: Control theory - Low temperature testing - Temperature control - Three term control systems

Uncontrolled terms: Accurate measurement - Constant temperature - Degree of automation - Double-loop - Expert PID - High price - High reliability - High-precision - Measurement and control - Other applications - Performance/cost ratio - PID control - Scientific researches - Software compensation - Technical indicator - Testing equipment - Time constants

Classification code: 402 Buildings and Towers - 644 Refrigeration and Cryogenics - 731.1 Control Systems - 731.3 Specific Variables Control

DOI: 10.3969/j.issn.1002-6819.2011.02.034

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

594

Accession number: 20121114858821

Title: The application of PID based on optimized RBF in thickness control of strip steel

Authors: Yu, Yuzhen1 ; Ren, Xinyi2 ; Deng, Chunyan1 ; Wang, Xiaohui1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

2 Yanshan University, Qinhuangdao, Hebei, China

Corresponding author: Yu, Y. (yu_yuzhen@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 466-467

Monograph title: Intelligent System and Applied Material

Issue date: 2012

Publication year: 2012

Pages: 52-56

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037853689

Document type: Conference article (CA)

Conference name: 2012 International Conference on Intelligent System and Applied Material, GSAM 2012

Conference date: January 13, 2012 - January 15, 2012

Conference location: Taiyuan, Shanxi, China

Conference code: 88944

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The strip thickness control system is difficult to establish an accurate mathematical model, and traditional PID control strategy has a poor adaptive ability, so the effect of control is always not satisfying. According to the problems above, a new control strategy of self-tuning PID controller based on RBF neural network whose parameters are optimized by PSO algorithm is proposed in the paper. The control method integrates advantages of RBF neural network as well as PID controller and good global search capability of PSO algorithm. The simulation results indicate that the method not only improves control performance and dynamic quality, but also has strong self-adapting ability and robustness. It achieved a very good control effect when used in strip thickness control system that proved the correctness and effectiveness of the control method. © (2012) Trans Tech Publications.

Number of references: 5

Main heading: Quality control

Controlled terms: Algorithms - Electric control equipment - Intelligent systems - Mathematical models - Neural networks - Optimization - Radial basis function networks - Robustness (control systems) - Thickness control - Three term control systems

Uncontrolled terms: Adaptive ability - Control methods - Control performance - Control strategies - Dynamic quality - Global search capability - PID controllers - PSO algorithms - RBF Neural Network - Self adapting - Self-tuning PID - Strip steel

Classification code: 921.5 Optimization Techniques - 921 Mathematics - 913.3 Quality Assurance and Control - 732.1 Control Equipment - 731.3 Specific Variables Control - 731.1 Control Systems - 723.4 Artificial Intelligence

DOI: 10.4028/www.scientific.net/AMR.466-467.52

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20071610557821

Title: Effect of deformation and heat treatment on morphology of Cr phase and mechanical properties of copper alloy

Authors: Xiao, Nianxin1 ; Zhang, Hailong1

Author affiliation:

1 Department of Machinery and Electron, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Xiao, N. (nianxinx@163.com)

Source title: Journal of Rare Earths

Abbreviated source title: J Rare Earth

Volume: 24

Issue: SUPPL. 3

Issue date: December 2006

Publication year: 2006

Pages: 245-248

Language: English

ISSN: 10020721

CODEN: JREAE6

Document type: Journal article (JA)

Publisher: Chinese Society of Rare Earths

Abstract: The effect of various cold deformation quantity and heat treatment on morphology of Cr phase and mechanical properties of copper alloy containing RE were studied. The results show that when reduction is to 70%, Cr phases are deformed heavily, and it is deformed to fibrous, while some of Cr phases are broken. After the following high temperature heat treatment, broken Cr phases in the microstructure dissolves, and tend to turn into spherical morphology. As a results this kind of alloy has an obvious aging strengthening characteristics, and precipitate phase is Cr. The optimum mechanical properties of copper alloy could be obtained by 70% deformation, and solution at 980°C for 2 h, quenched in water, then aging at 500°C for 4 h.

Number of references: 9

Main heading: Copper alloys

Controlled terms: Hardness - Heat treatment - Mechanical properties - Microstructure - Morphology - Quenching - Scanning electron microscopy - Transmission electron microscopy

Uncontrolled terms: Aging - Cr phase - Impact toughness

Classification code: 421 Strength of Building Materials; Mechanical Properties - 531.2 Metallography - 537.1 Heat Treatment Processes - 544.2 Copper Alloys

Numerical data indexing: Percentage 7.00e+01%, Temperature 1.25e+03K, Temperature 7.73e+02K, Time 1.44e+04s, Time 7.20e+03s

Treatment: Theoretical (THR); Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

596

Accession number: 20064310201352

Title: Screening natural pigments for making low nitrite Chinese bacon

Authors: Zheng, Lihong; Ren, Fazheng; Liu, Shaojun; Li, Lili

Corr. author affiliation: Department of Food Engineering, Hebei Normal University of Science and Technology, Changli 066600, China

Source title: Rengong Jingti Xuebao/Journal of Synthetic Crystals

Abbreviated source title: Rengong Jingti Xuebao

Volume: 35

Issue: 4

Issue date: August 2006

Publication year: 2006

Pages: 270-272

Language: Chinese

ISSN: 1000985X

CODEN: RJXUEN

Document type: Journal article (JA)

Publisher: Chinese Ceramic Society, Beijing, China

Abstract: The utilization of three natural pigments (monascus red, sorghum red and paprika red) was studied to decrease nitrite dosage in Chinese bacon and keep its ideal color to satisfy consumer's demand for color and luster. By observing the color changes and sensory evaluation of Chinese bacons stored at 0~4°C and 15~20°C respectively, monascus red performed the best in the three natural pigments, and its stability was significantly higher than others (p less than or equal 0. 01). When the optimum adding dosage of monascus red is determined to be 0. 14 g/kg to partly substitute sodium nitrite, the adding dosage of sodium nitrite can be decreased to 0. 04 g/kg according to the sensory evaluation.

Number of references: 10

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

597.

Accession number: 20073710808995

Title: Blood compatibility and mechanical properties of oxidized-chitosan films

Authors: Yang, Yuedong^{1, 2}; Zhou, Yongguo¹; Chuo, Huimin¹; Wang, Shuyuan¹; Yu, Jiugao²

Author affiliation:

1 Chemistry Department, Hebei Normal University of Science and Technology, Changli 066600, China

2 Chemistry Department, School of Science, Tianjin University, Tianjin 300072, China

Corresponding author: Zhou, Y. (kycydy@yahoo.com.cn)

Source title: Journal of Applied Polymer Science

Abbreviated source title: J. Appl. Polym. Sci.

Volume: 106

Issue: 1

Issue date: October 5, 2007

Publication year: 2007

Pages: 372-377

Language: English

ISSN: 00218995

E-ISSN: 10974628

CODEN: JAPNAB

Document type: Journal article (JA)

Publisher: John Wiley and Sons Inc., P.O.Box 18667, Newark, NJ 07191-8667, United States

Abstract: By dipping chitosan films into saturated NO₂-glacial acetic acid solution, the hydromethyl groups on the film surface could be oxidized to carboxyl groups and the blood compatibility of the films improved. Fourier transform infrared (FTIR) spectra indicated the presence of many -COOH and -COO- groups on the modified membrane surface. Scanning electron microscopy (SEM) showed that the surface of the modified membrane was rough, as compared with the chitosan film, which possessed a smooth surface. In the oxidation process, with increased dipping time of the films in saturated NO₂-glacial acetic acid solution, the tensile strength of the films decreased slowly initially, and rapidly 10 h later. The swelling ratio of the modified chitosan film increased obvious noticeably as the degree of oxidation of the film increased. All antithrombosis and hemolysis tests and blood cell morphology observation with SEM revealed that the blood compatibility of modified chitosan membranes is superior to that of chitosan films. © 2007 Wiley Periodicals, Inc.

Number of references: 11

Main heading: Biofilms

Controlled terms: Acetic acid - Blood - Fourier transform infrared spectroscopy - Nitric oxide - Oxidation - Scanning electron microscopy - Tensile strength

Uncontrolled terms: Antithrombosis - Film surface - Hydromethyl groups - Oxidized-chitosan films - Swelling ratio

Classification code: 804.1 Organic Compounds - 802.2 Chemical Reactions - 801 Chemistry - 804.2 Inorganic Compounds - 741.1 Light/Optics - 461.2 Biological Materials and Tissue Engineering - 421 Strength of Building Materials; Mechanical Properties - 462.5 Biomaterials (including synthetics)

Numerical data indexing: Time 3.60e+04s

Treatment: Theoretical (THR)

DOI: 10.1002/app.25399

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

598

Accession number: 20102012943110

Title: Preemptive two-level priority real-time scheduling strategy for node system in wireless sensor network

Authors: Zhibin, Zhao1 ; Zhuoyue, Li1 ; Shurong, Liu2

Author affiliation:

- 1 College of Information Science and Engineering, Northeastern University, China
- 2 Department of Computer, Hebei Normal University of Science and Technology, China

Corresponding author: Zhibin, Z. (zhaozhibin@mail.neu.edu.cn)

Source title: Proceedings of the 2008 International Conference on Advanced Infocomm Technology, ICAIT '08

Abbreviated source title: Proc. Int. Conf. Adv. Infocomm Technol., ICAIT

Monograph title: Proceedings of the 2008 International Conference on Advanced Infocomm Technology, ICAIT '08

Issue date: 2008

Publication year: 2008

Article number: 95

Language: English

ISBN-13: 9781605580883

Document type: Conference article (CA)

Conference name: 2008 International Conference on Advanced Infocomm Technology, ICAIT '08

Conference date: July 29, 2008 - July 31, 2008

Conference location: Shenzhen, China

Conference code: 80346

Publisher: Association for Computing Machinery, 1515 Broadway, 17th Floor, New York, NY 10036-5701, United States

Abstract: Emerging applications such as forest fire monitoring have increasing demands on WSN to transmit data in real-time. In order to ensure real-time data transmission, it requires that the operating system of a node should schedule tasks in real-time. TinyOS is one of the most popular operation systems that support multifarious applications. However, its FIFO scheduling strategy does not guarantee requirements for hard real-time applications. A Preemptive Two-Level Priority (PTLP) Real-time Scheduling Strategy is proposed in this paper. Two tier priorities, static and dynamic, are designed and integrated in TinyOS task queue to guarantee the real-time task scheduling. We demonstrate this approach by a real-world case study: a WSN hardware node embedded with our task scheduling strategy is designed and implemented. The result demonstrates that our PTLP real-time scheduling strategy performs efficiently in terms of packet throughput and task scheduling time. Copyright © 2008 ACM.

Number of references: 6

Main heading: Scheduling

Controlled terms: Computer operating systems - Deforestation - Multitasking - Scheduling algorithms - Wireless sensor networks

Uncontrolled terms: Emerging applications - Forest fire monitoring - Hard real-time - Operating systems - Operation system - Packet throughput - Real time data transmission - Real time scheduling - Real-time tasks - Real-world - Scheduling strategies - Scheduling tasks - Static and dynamic - Task-scheduling - Transmit data

Classification code: 912.2 Management - 821.0 Woodlands and Forestry - 732 Control Devices - 731.1 Control Systems - 921 Mathematics - 723 Computer Software, Data Handling and Applications - 722.3 Data Communication, Equipment and Techniques - 722 Computer Systems and Equipment - 716.3 Radio Systems and Equipment - 722.4 Digital Computers and Systems

DOI: 10.1145/1509315.1509410

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

599

Accession number: 20101712882076

Title: Embedded water quality field analyzer based on neural network

Authors: Xueliang, Zhao1 ; Yun, Shi1 ; Xiaohui, Wang2 ; Lei, Zhang1

Author affiliation:

1 Center for Hydrogeology and Environmental Geology, CGS, 071051, China

2 E and A College, Hebei Normal University of Science and Technology, 066004, China

Corresponding author: Xueliang, Z. (zx1-1229@163.com)

Source title: Proceedings of the International Symposium on Test and Measurement

Abbreviated source title: Proc Int Symp Test Meas

Volume: 2

Part number: 2 of 2

Monograph title: ICTM 2009 - 2009 International Conference on Test and Measurement

Issue date: 2009

Publication year: 2009

Pages: 27-29

Article number: 5413057

Language: English

ISBN-13: 9781424447008

Document type: Conference article (CA)

Conference name: 2009 International Conference on Test and Measurement, ICTM 2009

Conference date: December 5, 2009 - December 6, 2009

Conference location: Hong Kong, Hong kong

Conference code: 79911

Sponsor: Institute of Electrical and Electronics Engineers; IEEE Instrumentation and Measurement Society; Intelligent Information Technology; Application Research Association

Publisher: International Academic Publishers, 137 Chaonei Dajie, Beijing, 100010, China

Abstract: Taking a water quality field analyzer as an example, a solution is proposed based on embedded and neural network. The hardware and the software design are introduced in detail. Then we sum up the complex nonlinear relation between the evaluation standard and the evaluation results through the continual study and training of BP neural network, and finally establish the BP neural network model. The system has wide application prospect with the advantages of small volume, low cost, high reliability, etc. © 2009 IEEE.

Number of references: 3

Main heading: Neural networks

Controlled terms: Computer operating systems - Software design - Water pollution - Water quality

Uncontrolled terms: Application prospect - ARM - Arm-linux - BP neural network model - BP neural networks - Complex nonlinear relation - Evaluation results - Evaluation standard - High reliability - Linux operating system - Low costs

Classification code: 723.5 Computer Applications - 723.4 Artificial Intelligence - 723.1 Computer Programming - 723 Computer Software, Data Handling and Applications - 722 Computer Systems and Equipment - 461.1 Biomedical Engineering - 453.2 Water Pollution Control - 453 Water Pollution - 445.2 Water Analysis

DOI: 10.1109/ICTM.2009.5413057

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

600

Accession number: 201011127635961172

Title: Multivalued dependencies for XML documents with DTDs

Authors: Song, Jinling^{1, 2}; Zhao, Wei²; Zhang, Xiubo³; Liu, Guohua²

Author affiliation:

- 1 Department of Computer, HeBei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 Department of Computer, Yanshan University, Qinhuangdao 066004, China
- 3 Faculty of Science, Dublin Institute of Technology, Kevin Street, Dublin 8, Ireland

Corresponding author: Song, J. (songjinling99@126.com)

Source title: 2009 International Conference on Web Information Systems and Mining, WISM 2009

Abbreviated source title: Int. Conf. Web Inf. Syst. Min., WISM

Monograph title: 2009 International Conference on Web Information Systems and Mining, WISM 2009

Issue date: 2009

Publication year: 2009

Pages: 284-288

Article number: 5368222

Language: English

ISBN-13: 9780769538174

Document type: Conference article (CA)

Conference name: 2009 International Conference on Web Information Systems and Mining, WISM 2009

Conference date: November 7, 2009 - November 8, 2009

Conference location: Shanghai, China

Conference code: 79453

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Besides functional dependencies, multivalued dependencies are also important integrity constrains in XML documents. So far, the definitions for multivalued dependencies are oriented to XML documents, rather than schemata. At present, DTD is accepted to be a major schema for a XML document, and most of XML documents are designed to have DTDs. So, it is necessary to propose a definition about multivalued dependencies in XML documents with DTDs. We define the multivalued dependency on the DTD and give its semantics via a relational representation of XML. Then, we investigate the issues related to logical implication of multivalued dependencies, give the definitions of closure, path dependency basis and the closure of paths of

multivalued dependencies for XML, propose a set of inference rules which are sound and complete. Finally, we propose an algorithm to compute the path dependency basis and an algorithm to decide the membership between a given multivalued dependency and a set of multivalued dependencies. © 2009 IEEE.

Number of references: 12

Main heading: XML

Controlled terms: Information systems - Markup languages - World Wide Web

Uncontrolled terms: Functional dependency - Inference rules - Logical implications - Path dependency - Relational representations

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723 Computer Software, Data Handling and Applications - 903.2 Information Dissemination - 903.3 Information Retrieval and Use

DOI: 10.1109/WISM.2009.66

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

601.

Accession number: 20103813249657

Title: Analysis of the characteristic of optical communication system influenced by first-order polarization mode dispersion

Authors: Wang, Feng^{1, 2}; Wang, Kuan¹; Jiao, Hong-Lei¹; Chen, Xiu-Hong¹; Cheng, Huai¹; Feng, Li-Zhen¹

Author affiliation:

1 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Yanshan University, Qinhuangdao 066004, China

Corresponding author: Wang, F.

Source title: Proceedings of SPIE - The International Society for Optical Engineering

Abbreviated source title: Proc SPIE Int Soc Opt Eng

Volume: 7820

Monograph title: International Conference on Image Processing and Pattern Recognition in Industrial Engineering

Issue date: 2010

Publication year: 2010

Article number: 78203B

Language: English

ISSN: 0277786X

CODEN: PSISDG

ISBN-13: 9780819483294

Document type: Conference article (CA)

Conference name: International Conference on Image Processing and Pattern Recognition in Industrial Engineering

Conference date: August 7, 2010 - August 8, 2010

Conference location: Xi'an, China

Conference code: 81718

Sponsor: Shaanxi University of Science and Technology; Information Technology and Industrial Engineering Research Center

Publisher: SPIE, P.O. Box 10, Bellingham, WA 98227-0010, United States

Abstract: When attenuation and chromatic dispersion are compensated for, polarization mode dispersion (PMD) is a major limitation to the transmission capabilities of optical communication systems. So it is necessary to study PMD. In the paper, we simulated first-order PMD statistical properties, the relationship of Mean DGD and transmission distance, the deterioration of the receiver pulse broadening induced by PMD on pulse broadening theory, the distance relay L limited by system transmission speed B under different PMD, several systems of different PMD restrict the transmission distance etc., come to conclusion that PMD have some restrictions on high-speed system design. And the higher the rate, the shorter the distance relay. For low-speed

system, by choosing low values of fiber PMD can increase distance relay, but for high-speed system, it is not a good idea to improve the system by selecting the optical fiber. In the actual design, you should consider PMD index of optical fiber, chosen code pattern of the system, transmission rate and error rate etc. © 2010 SPIE.

Number of references: 12

Main heading: Optical communication

Controlled terms: Communication systems - Dispersions - Electric relays - Image processing - Imaging systems - Industrial engineering - Light transmission - Optical data processing - Optical fibers - Pattern recognition - Polarization - Polarization mode dispersion - Speed

Uncontrolled terms: Code-patterns - Distance relay - Error rate - First-order - High speed systems - Pulse broadening - Statistical properties - Transmission capability - Transmission distances - Transmission rates - Transmission speed

Classification code: 951 Materials Science - 931.1 Mechanics - 912.1 Industrial Engineering - 746 Imaging Techniques - 741 Light, Optics and Optical Devices - 717.1 Optical Communication Systems - 716 Telecommunication; Radar, Radio and Television - 714 Electronic Components and Tubes - 711 Electromagnetic Waves

DOI: 10.1117/12.867459

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

602.

Accession number: 20134416933472

Title: Course provision of teacher education innovational and technology normal college analysis

Authors: Gao, Zhongming¹ ; Guo, Xiaoqin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Gao, Z. (gaozhongming@hrsk.net)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 225 LNEE

Part number: 3 of 5

Issue: VOL. 3

Monograph title: Proceedings of the 2nd International Conference on Green Communications and Networks 2012, GCN 2012

Issue date: 2013

Publication year: 2013

Pages: 353-361

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783642354694

Document type: Conference article (CA)

Conference name: 2nd International Conference on Green Communications and Networks, GCN 2012

Conference date: December 12, 2012 - December 14, 2012

Conference location: Chongqing, China

Conference code: 95479

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University; Nanyang Technological University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Vocational and technical teachers college is the machine tools of vocational education, its ability to adapt to the vocational education training requirements of the "double" teacher, was to test an important indicator of the level of their school. The curriculum for teacher education is the basis for protection of the quality of teacher training. The survey found that the vocational curriculum for teacher education is not reasonable; a serious imbalance in the internal structure of courses, and teacher education cannot meet the requirements of secondary vocational education. © 2013 Springer-Verlag.

Number of references: 2

Main heading: Teaching

Controlled terms: Apprentices - Curricula - Personnel training

Uncontrolled terms: Course provision - Course structure - Internal structure - Teacher education - Teacher training - Vocational education

Classification code: 901.2 Education - 912.4 Personnel

DOI: 10.1007/978-3-642-35470-0_43

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

603.

Accession number: 20133916784668

Title: Photoluminescence properties of $\text{Ca}_{0.99}\text{Eu}_{0.01}(\text{Mo}_{1-x}\text{Six})\text{O}_4$ nanocrystals red-phosphors obtained by the hydrothermal method

Authors: Zhang, Zhi-Wei¹ ; Liu, Lu¹ ; Shen, Xi-Hai¹ ; Peng, You-Shun¹ ; Cao, Chun-Yan² ; Zhang, Wei-Guo¹ ; Wang, Dong-Jun¹

Author affiliation:

1 Physical-Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao 066604, China

2 Department of Physics, Jinggangshan University, Ji'an 343009, China

Corresponding author: Zhang, Z.-W. (zhangzhiweia@163.com)

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 577

Issue date: 2013

Publication year: 2013

Pages: 480-485

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: In this paper, we report the obtention of a novel red-emitting $\text{Ca}_{0.99}\text{Eu}_{0.01}(\text{Mo}_{1-x}\text{Si}_x)\text{O}_4$ nanocrystals phosphor synthesized by the hydrothermal method for the first time, and its photoluminescence (PL) properties were investigated for application to white-light-emitting diodes (W-LEDs). The as-synthesized phosphors were characterized by means of X-ray powder diffraction (XRD), transmission electron microscope (TEM), high-resolution transmission electron microscopy (HR-TEM), photoluminescence excitation (PLE) and PL emission spectra. XRD patterns, TEM images and PL emission indicated that the introduction of Si^{4+} ions promotes the distortion and slight shrinking of the unit cell, narrow size distribution and the blue-shift of the charge transfer bands of $\text{Ca}_{0.99}\text{Eu}_{0.01}\text{MoO}_4$ red-phosphors. PL properties revealed that the optical brightness as well as the intensity ratio of $5D_0 \rightarrow 7F_2$ to $5D_0 \rightarrow 7F_1$ was highly dependent on the Si^{4+} ions concentration. The morphological evolution was explained via a crystal growth mechanism. Introduction of 5 mol% Si^{4+} ions into the crystal structure enhanced the PL emission brightness, and the nanocrystals $\text{Ca}_{0.99}\text{Eu}_{0.01}(\text{Mo}_{0.95}\text{Si}_{0.05})\text{O}_4$ red-phosphors showed the relatively most promising PL performance with the most intense emission. The CIE chromaticity coordinates for nanocrystals $\text{Ca}_{0.99}\text{Eu}_{0.01}(\text{Mo}_{1-x}\text{Si}_x)\text{O}_4$ red-phosphors were simulated and located in the red region. All the results imply that the studied $\text{Ca}_{0.99}\text{Eu}_{0.01}(\text{Mo}_{1-x}\text{Si}_x)\text{O}_4$ nanophosphors could be potentially used as W-LEDs. © 2013 Elsevier B.V. All rights reserved.

Number of references: 35

Main heading: Silicon

Controlled terms: Calcium - Crystal structure - Emission spectroscopy - Ions - Light emission - Light emitting diodes - Nanocrystals - Phosphors - Photoluminescence - Transmission electron microscopy - X ray powder diffraction

Uncontrolled terms: Crystal growth mechanism - Hydrothermal methods - Morphological evolution - Narrow size distributions - Photoluminescence excitation - Photoluminescence properties - W-LEDs - White light emitting diodes

Classification code: 801.4 Physical Chemistry - 801 Chemistry - 761 Nanotechnology - 931.3 Atomic and Molecular Physics - 741.3 Optical Devices and Systems - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 549.2 Alkaline Earth Metals - 741.1 Light/Optics

DOI: 10.1016/j.jallcom.2013.05.212

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

604.

Accession number: 20130315910844

Title: An efficient collision detection algorithm of convex polygons based on Minkowski sum

Authors: Geng, Qingjia^{1, 2}; Guo, Xijuan¹; Zhang, Jianfei¹; Zhang, Buying¹

Author affiliation:

1 The Key Laboratory for Computer Virtual Technology and System Integration of Hebei Province, College of Information Science and Engineering, Yanshan University, No. 438, Hebei Ave., Qinhuangdao 066004, China

2 College of Computer, Hebei Normal University of Science and Technology, No. 360, West Hebei St., Qinhuangdao 066004, China

Corresponding author: Guo, X. (xjguo@ysu.edu.cn)

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 7

Issue: 2

Issue date: 2013

Publication year: 2013

Pages: 461-464

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office, Tokai University, Kumamoto Campus, 9-1-1, Toroku, Kumamoto, 862-8652, Japan

Abstract: Collision detection is a hot research topic in the field of path planning of mobile robot, virtual assembly simulation, and so on. Fast and accurate collision detection has become one of the most key technologies of restricting their development. The study method based on Minkowski sum is an effective method for accurate collision detection through accurate numerical calculations. This paper presents a new efficient collision detection algorithm of convex polygons based on Minkowski sum, which uses the minimum separation distance to detect whether two convex polygons collide or not. The algorithm's performance is also analyzed and verified by experiment in the paper. Compared with the traditional collision detection algorithms based on the Minkowski sum, the algorithm's calculation is simpler and execution performance is higher. © 2013 ISSN 1881-803X.

Number of references: 10

Main heading: Geometry

Controlled terms: Algorithms - Motion planning - Signal detection

Uncontrolled terms: Collision detection - Collision detection algorithm - Convex polygon - Execution performance - Hot research topics - Key technologies - Minkowski sum - Numerical calculation - Separation distances - Study methods - Virtual assembly simulations

Classification code: 716.1 Information Theory and Signal Processing - 731.5 Robotics - 921 Mathematics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

605.

Accession number: 20110313595905

Title: RETRACTED ARTICLE: Microstructure evolution of Ag/SnO₂ Electrical Contact Materials via severe plastic deformation

Authors: Zhang, Max Z.-W.1 ; Hou, W.-L.1 ; W, R.-Y.1 ; Wang, Y.-H.1 ; Shen, X.-H.1 ; Y, Y.-D.1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Zhang, M. Z.-W.

Source title: 2010 International Conference on Future Information Technology and Management Engineering, FITME 2010

Abbreviated source title: Int. Conf. Future Inf. Technol. Manage. Eng., FITME

Volume: 3

Monograph title: 2010 International Conference on Future Information Technology and Management Engineering, FITME 2010

Issue date: 2010

Publication year: 2010

Pages: 214-217

Article number: 5655593

Language: Chinese

ISBN-13: 9781424490882

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: The Ag/SnO₂ Electrical Contact Materials were prepared by reactive synthesis and the microstructure homogenization of Ag/SnO₂ composites in the severe plastic deformation were researched. With the true strain increasing, the microstructure which is similar to fiber vanishes gradually, and the SnO₂ particles distribute homogenously from clusters by the SEM analysis. The number of Ag/SnO₂ composites dislocations decrease, and SnO₂ clusters are dispersed via the severe plastic deformation by the SEM analysis. The microstructure homogenization of Ag/SnO₂ composites can Guarantee improving properties of materials. © 2010 IEEE.

Number of references: 11

Main heading: Materials properties

Controlled terms: Electric contacts - Information technology - Microstructure - Plastic deformation

Uncontrolled terms: Electrical contact material - Microstructure evolutions - Reactive synthesis - SEM analysis - Severe plastic deformations - True strain

Classification code: 421 Strength of Building Materials; Mechanical Properties - 423 Non Mechanical Properties and Tests of Building Materials - 704.1 Electric Components - 903 Information Science - 933 Solid State Physics - 951 Materials Science

DOI: 10.1109/FITME.2010.5655593

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

606.

Accession number: 20121414924273

Title: Motion characteristics of composite-type sea cage under pure wave

Authors: Li, Chunliu1, 2 ; Zhao, Yunpeng2

Author affiliation:

1 HeBei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 Dalian University of Technology, Dalian, Liaoning, 116024, China

Corresponding author: Li, C. (lcicc_010@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 490-495

Monograph title: Mechatronics and Intelligent Materials II

Issue date: 2012

Publication year: 2012

Pages: 3405-3409

Language: English

ISSN: 10226680

ISBN-13: 9783037853849

Document type: Conference article (CA)

Conference name: 2nd International Conference on Mechatronics and Intelligent Materials 2012, MIM 2012

Conference date: May 18, 2012 - May 19, 2012

Conference location: GuiLin, China

Conference code: 89237

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: To study motion range changes with wave condition and motion relationship between cages, physical model experiments were carried out. The authors designed 2 models of composite-type sea cages. Experimental data obtained by the CCD data acquisition system. The experiment results showed that 1.in the same period, horizontal motion range,vertical motion range and inclination changes of float collar increase with wave height; 2.In the same wave height, horizontal motion range of the float collar increases with period; 3.The laws between vertical motion and period are not obvious 4.The laws between inclination changes and period are not obvious 5.Motion range of the first cage along the direction of waves is less than other cages. © (2012) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Experiments

Controlled terms: Intelligent materials - Water waves

Uncontrolled terms: Composite-type sea cage - Data acquisition system - Experimental data - Horizontal motion - Motion characteristics - Motion range - Motion relationship - Physical model - Vertical motions - Wave conditions - Wave heights

Classification code: 415 Metals, Plastics, Wood and Other Structural Materials - 471.4 Seawater, Tides and Waves - 901.3 Engineering Research

DOI: 10.4028/www.scientific.net/AMR.490-495.3405

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

607.

Accession number: 20103013093124

Title: A fuzzy biometric remote user authentication scheme

Authors: Yang, Yanping1 ; Che, Yonghe2 ; Ren, Changquan1

Author affiliation:

- 1 Department of Computer Science and Technology, Hebei Normal University of Science and Technology, Qinghuangdao Hebei, 066-004, China
- 2 Hebei Normal University of Science and Technology, Qinghuangdao Hebei, 066-004, China

Corresponding author: Yang, Y. (yanping_yang@163.com)

Source title: INC2010 - The International Conference on Networked Computing, Proceeding

Abbreviated source title: INC - Int. Conf. Networked Comput., Proc.

Monograph title: INC2010 - The International Conference on Networked Computing, Proceeding

Issue date: 2010

Publication year: 2010

Pages: 163-166

Article number: 5484844

Language: English

ISBN-13: 9788988678206

Document type: Conference article (CA)

Conference name: 6th International Conference on Networked Computing, INC2010

Conference date: May 11, 2010 - May 13, 2010

Conference location: Gyeongju, Korea, Republic of

Conference code: 81161

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: At the present time, biometrics is increasingly gaining popularity in security related applications. Biometrics measure individual's unique physical or behavioral characteristic to recognize or authenticate their identity and using this technology is far better than any other technology. Recently, several biometric remote user authentication schemes with smart card were proposed, but they save biometric template or information into local smart card and authenticate it in local side. In this paper, we proposed a new fuzzy biometric remote user authentication scheme which don't need to store biometric information in user side and is real fuzzy authentication by sending protected biometric information over insure internet.

Number of references: 10

Main heading: Authentication

Controlled terms: Biometrics - Security of data - Smart cards

Uncontrolled terms: Behavioral characteristics - Biometric informations - Biometric template - Remote user authentication schemes

Classification code: 461 Bioengineering and Biology - 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 723.2 Data Processing and Image Processing - 732 Control Devices

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

608.

Accession number: 20113114193603

Title: Analysis of recovery current related to core material and structure of DC power supply in high voltage active electronic current transformer

Authors: Wang, Haiming^{1, 2} ; Reed, Gregory² ; Jones, Alex K.²

Author affiliation:

1 Hebei Normal University of Science and Technology, China

2 Department of Electrical and Computer Engineering, University of Pittsburgh, United States

Corresponding author: Wang, H. (grant1207@sohu.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 284-286

Monograph title: Materials and Design

Issue date: 2011

Publication year: 2011

Pages: 2170-2176

Language: English

ISSN: 10226680

ISBN-13: 9783037851913

Document type: Conference article (CA)

Conference name: 2011 International Conference on Advanced Engineering Materials and Technology, AEMT 2011

Conference date: July 29, 2011 - July 31, 2011

Conference location: Sanya, China

Conference code: 85756

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The recovery current is an important parameter that influences the performance of the DC power supply based on the power CT in a high voltage active electronic current transformer. It is closely related to the saturation state of the core of the transformer, which harvests energy from the magnetic field generated by the current through the high voltage power line. The recovery current of three types of core material are systematically discussed in terms of their characteristics, which are the Silicon Steel, the Nanocrystalline Alloy, and the Fe-based Amorphous. The closed core of the Nanocrystalline Alloy and Fe-based Amorphous has the feature of low recovery current. Both of them can carry out a lower recovery current within 0.5A in the DC power supply; The gapped core of the Silicon Steel is able to work at the highest recovery current among the three types of cores in the same dimension, which benefits the higher input current of the DC power supply, beyond 2000A. Resultant data of analysis provides a prospective reference for design of the DC power supply with a wide range of input current by application of the combined cores. © (2011) Trans Tech Publications, Switzerland.

Number of references: 12

Main heading: DC power transmission

Controlled terms: Amorphous silicon - Coremaking - DC transformers - Electric instrument transformers - Electricity - Magnetic fields - Materials - Nanocrystalline alloys - Nanocrystalline silicon - Recovery - Silicon steel

Uncontrolled terms: Core material - Core saturation - DC power supply - Power CT - Recovery current

Classification code: 933.2 Amorphous Solids - 761 Nanotechnology - 715 Electronic Equipment, General Purpose and Industrial - 714 Electronic Components and Tubes - 706.1.1 Electric Power Transmission -

951 Materials Science - 704 Electric Components and Equipment - 701.1 Electricity: Basic Concepts and Phenomena - 545.3 Steel - 534.2 Foundry Practice - 531 Metallurgy and Metallography - 701.2 Magnetism: Basic Concepts and Phenomena

Numerical data indexing: Electric_Current 2.00e+03A, Electric_Current 5.00e-01A

DOI: 10.4028/www.scientific.net/AMR.284-286.2170

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

609.

Accession number: 20114014400438

Title: A simple and sufficient method to fabricate ZnO nanowire thin-film transistors

Authors: Dai, Zhenqing^{1, 2}; Hui, Bing¹; Zhang, Yafei¹

Author affiliation:

1 Research Institute of Micro/Nano Science and Technology, Shanghai Jiao Tong University, Shanghai 200240, China

2 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Dai, Z. (daizhenqing@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 335-336

Monograph title: Advanced Materials and Structures

Issue date: 2011

Publication year: 2011

Pages: 451-454

Language: English

ISSN: 10226680

ISBN-13: 9783037852460

Document type: Conference article (CA)

Conference name: 2011 International Conference on Materials and Products Manufacturing Technology, ICMPMT 2011

Conference date: October 28, 2011 - October 30, 2011

Conference location: Chengdu, China

Conference code: 86737

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Large-scale fabrication of ZnO nanowire (NW) based devices with a low cost process is a key issue in practical application. In this paper, we report a simple and sufficient self-assembly process to prepare highly dense, uniform ZnO NW films. In this process, the NWs are modified with the aminopropyltriethoxy silane (APTES) to form the positively charged amine-terminated layer, so they are adsorbed on negatively charged SiO₂/Si substrates to form ZnO NW films by the electrostatic interaction in aqueous solution. Nanowire thin-film transistors (NW-TFTs) based on the prepared ZnO NW films are fabricated. A typical NW-TFT exhibited a current on/off ratio of 2.7×10^5 , a transconductance of 546 nS and a field-effect mobility of 8.9 cm²/V·s. This study may pave the way toward large-scale fabrication of ZnO NW based devices with simple, sufficient and low cost process. © (2011) Trans Tech Publications.

Number of references: 13

Main heading: Thin film transistors

Controlled terms: Assembly - Fabrication - Nanowires - Self assembly - Silicon compounds - Zinc oxide

Uncontrolled terms: Field-effect mobilities - Highly dense - Large-scale fabrication - Low costs - On/off ratio - Positively charged - Self assembly process - ZnO - ZnO nanowires

Classification code: 714.2 Semiconductor Devices and Integrated Circuits - 761 Nanotechnology - 804.2 Inorganic Compounds - 913.1 Production Engineering - 913.4 Manufacturing - 933 Solid State Physics

Numerical data indexing: Electrical_Conductance 5.46e-07S

DOI: 10.4028/www.scientific.net/AMR.335-336.451

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

610.

Accession number: 20112514071263

Title: First-principles investigations on electronic, elastic and thermodynamic properties of ZrC and ZrN under high pressure

Authors: Hao, Aimin^{1, 2}; Zhou, Tiejun³; Zhu, Yan²; Zhang, Xinyu¹; Liu, Riping¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

3 College of Mathematics and Information, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, R. (riping@yzu.edu.cn)

Source title: Materials Chemistry and Physics

Abbreviated source title: Mater Chem Phys

Volume: 129

Issue: 1-2

Issue date: September 15, 2011

Publication year: 2011

Pages: 99-104

Language: English

ISSN: 02540584

CODEN: MCHPDR

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: An investigation on electronic structure, elastic and thermodynamic properties of ZrC and ZrN under high pressure has been conducted using first-principles calculations based on density functional theory (DFT) with the plane wave basis set as implemented in the CASTEP code. Our results demonstrate that the sequence of the pressure-induced structure transition of ZrC and ZrN is from NaCl-type (B1) to CsCl-type (B2) structure. The transition pressures are 295 and 205 GPa for ZrC and ZrN, respectively. The elastic constants, Debye temperature, and heat capacity each as a function of pressure and/or temperature of ZrN are presented. © 2011 Elsevier B.V.

Number of references: 27

Main heading: Zirconium compounds

Controlled terms: Calculations - Debye temperature - Density functional theory - Electronic properties - Electronic structure - Sodium chloride - Thermodynamics

Uncontrolled terms: Elastic properties - First-principles calculation - First-principles investigations - Function of pressure - High pressure - Plane-wave basis set - Pressure-induced structures - Transition pressure

Classification code: 931.1 Mechanics - 922.1 Probability Theory - 921 Mathematics - 804.2 Inorganic Compounds - 804.1 Organic Compounds - 723 Computer Software, Data Handling and Applications - 721 Computer Circuits and Logic Elements - 701.1 Electricity: Basic Concepts and Phenomena - 641.1 Thermodynamics

Numerical data indexing: Pressure 2.05e+11Pa

DOI: 10.1016/j.matchemphys.2011.03.060

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

611.

Accession number: 20114114415096

Title: Fabrication of Yb³⁺-doped photonic crystal fiber by nonchemical-vapor-deposition process

Authors: Zhao, Xing-Tao^{1, 2}; Zheng, Yi¹; Liu, Xiao-Xu³; Zhou, Gui-Yao²; Shen, Jian-Ping¹; Zhou, Cheng¹; Xia, Chang-Ming²; Hou, Lan-Tian²

Author affiliation:

1 Laser Institute, Science College, Beijing Jiaotong University, Beijing 100044, China

2 State Key Lab. of Metastable Materials Science and Technology, Key Lab. for Measurement Technology and Instrumentation of Hebei Province of China, Yanshan University, Qinhuangdao 066004, China

3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhao, X.-T. (zxt-81@sohu.com)

Source title: Guangdianzi Jiguang/Journal of Optoelectronics Laser

Abbreviated source title: Guangdianzi Jiguang

Volume: 22

Issue: 9

Issue date: September 2011

Publication year: 2011

Pages: 1301-1303

Language: Chinese

ISSN: 10050086

CODEN: GUJIE9

Document type: Journal article (JA)

Publisher: Board of Optronics Lasers, No. 47 Yang-Liu-Qing Ying-Jian Road, Tian-Jin City, 300380, China

Abstract: We present a new method for fabrication of Yb³⁺-doped photonic crystal fiber (PCF), namely the nonchemical-vapor-deposition process. Using the solution doping technique, SiO₂, YbCl₃, AlCl₃ and K₂CO₃ were mixed in water. After evaporation and drying, the well-mixed material was obtained. High concentration Yb³⁺-doped quartz glass was fabricated by high-temperature melting over 2000°C. The fiber perform was fabricated by stack-capillary method with the Yb³⁺-doped quartz glass as the core. The fiber perform was drawn to large core diameter Yb³⁺-doped photonic crystal fiber in a drawing tower. The spectrum properties of the Yb³⁺-doped photonic crystal fiber were measured. Good absorption and fluorescence spectra are obtained.

Number of references: 16

Main heading: Photonic crystal fibers

Controlled terms: Crystal whiskers - Fiber lasers - Fibers - Glass - Nonlinear optics - Optical fiber fabrication - Phase transitions - Photonic crystals - Quartz - Silicon compounds -

Single mode fibers - Water vapor - Ytterbium

Uncontrolled terms: Absorption and fluorescence spectra - High concentration - High-temperature melting - Large core - Photonic crystal fiber (PCF) - Quartz glass - Solution-doping technique - Spectrum properties

Classification code: 812.3 Glass - 812 Ceramics, Refractories and Glass - 804.1 Organic Compounds - 801.4 Physical Chemistry - 817 Plastics and Other Polymers: Products and Applications - 741 Light, Optics and Optical Devices - 641 Heat and Mass Transfer; Thermodynamics - 547.2 Rare Earth Metals - 482.2 Minerals - 641.1 Thermodynamics

Numerical data indexing: Temperature 2.27e+03K

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

612.

Accession number: 20103813251399

Title: Influence of temperature and polaron effects on the effective potential of exciton in semiconductor quantum dots

Authors: Eerdunchaolu1 ; Wuyunqimuge2 ; Xin, Wei1

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao 028043, China

Corresponding author: Xin, W. (xinweigood@163.com)

Source title: Superlattices and Microstructures

Abbreviated source title: Superlattices Microstruct

Volume: 48

Issue: 4

Issue date: October 2010

Publication year: 2010

Pages: 373-379

Language: English

ISSN: 07496036

E-ISSN: 10963677

CODEN: SUMIEK

Document type: Journal article (JA)

Publisher: Academic Press, 24-28 Oval Road, London, NW1 7DX, United Kingdom

Abstract: Influence of the temperature and polaron effects on the effective potential of the weak-coupling exciton in semiconductor quantum dots is studied based on the LeeLowPinesHuybrechts variational method. Numerical calculations for a GaAs quantum dot, as an example, are performed. The results indicate that the effective potential of the exciton will increase with increasing electronhole distance. It is found that the polaron effects are helpful to the stability of the light-hole exciton, but unfavorable to the stability of the heavy-hole exciton; the increase of the temperature does not favor the stability of the light-hole exciton, but is helpful to the stability of the heavy-hole exciton. Only on the condition $T > 93.5\text{K}$, is the influence of temperature on the state of the exciton obvious. © 2010 Elsevier Ltd. All rights reserved.

Number of references: 18

Main heading: Excitons

Controlled terms: Optical waveguides - Polarons - Semiconductor quantum dots - Stability - Temperature

Uncontrolled terms: Effective potentials - Induced potential - Polaron effects - Quantum Dot - Temperature effects

Classification code: 961 Systems Science - 951 Materials Science - 933.1.1 Crystal Lattice - 931.3 Atomic and Molecular Physics - 931 Classical Physics; Quantum Theory; Relativity - 801 Chemistry - 714.3 Waveguides - 714.2 Semiconductor Devices and Integrated Circuits - 641.1 Thermodynamics

DOI: 10.1016/j.spmi.2010.07.005

Database: Compendex

613.

Accession number: 20134416933470

Title: Study of undergraduate tutorial teaching system

Authors: Yang, Qianqian1 ; Cui, Wanqiu1 ; Xiao, Yan1 ; Meng, Ying1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Yang, Q. (yangqianqian@hrs.knet)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 225 LNEE

Part number: 3 of 5

Issue: VOL. 3

Monograph title: Proceedings of the 2nd International Conference on Green Communications and Networks 2012, GCN 2012

Issue date: 2013

Publication year: 2013

Pages: 339-345

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783642354694

Document type: Conference article (CA)

Conference name: 2nd International Conference on Green Communications and Networks, GCN 2012

Conference date: December 12, 2012 - December 14, 2012

Conference location: Chongqing, China

Conference code: 95479

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University; Nanyang Technological University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Undergraduate tutorial teaching system is a new management model for the exploration and practice of higher education. This paper describes the basic methods of the implementation of the undergraduate tutorial system and theoretically analyze the significant functions of undergraduate tutorial system for improving the quality of higher education. © 2013 Springer-Verlag.

Number of references: 8

Main heading: Education

Controlled terms: Electrical engineering - Mathematical techniques

Uncontrolled terms: Higher education - Management Model - Practice - Quality of higher educations - Teaching systems - Thinking - Tutorial system

Classification code: 709 Electrical Engineering, General - 901.2 Education - 921 Mathematics

DOI: 10.1007/978-3-642-35470-0_41

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

614.

Accession number: 20112314045836

Title: Research on cross-sectional area converting principle based model of FRP confined concrete axial compressive strength

Authors: Zhu, Tianzhi¹ ; Zhang, Ming¹ ; Dong, Yanying¹

Author affiliation:

¹ Institute of Urban Construction, Hebei Normal University of Science and Technology, No.360, West Hebei Street, Qin Huangdao, 066004, China

Corresponding author: Zhu, T. (qhdztz@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 243-249

Monograph title: Advances in Civil Engineering and Architecture

Issue date: 2011

Publication year: 2011

Pages: 5541-5546

Language: English

ISSN: 10226680

ISBN-13: 9783037851258

Document type: Conference article (CA)

Conference name: 1st International Conference on Civil Engineering, Architecture and Building Materials, CEABM 2011

Conference date: June 18, 2011 - June 20, 2011

Conference location: Haikou, China

Conference code: 85055

Sponsor: Hainan University, College of Civil Engineering and Architecture; Guizhou University, College of Civil and Architecture Engineering; Hainan Society of Theoretical and Applied Mechanics

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Fiber reinforced plastics (FRP) has been widely used in structure reinforcement processing. It is a comparatively mature field in computational models of cylindrical axial compressive strength on FRP confined concrete. In this paper, we conduct a possessive analysis on the axial compressive property that is based on the cylindrical stress model of FRP confined concrete, considering the difference among square column section, rectangular column and cylindrical column. Meanwhile, based on cross-sectional area and moment of inertia equivalent principles, we propose an equivalent diameter formula for converting rectangular column section into cylindrical column section. We also introduce sectional influence coefficients to modify ultimate strength and

establish a model of ultimate strength for FRP confined concrete. Furthermore, we use the existing experimental data to test the validity and feasibility of the model. Experimental Results of the computational model are quite coincident and consistent with the tests. Computational model can reflect the true characteristics of FRP confined concrete. Therefore, the models proposed in this paper are significant in the practice of construction project. © (2011) Trans Tech Publications.

Number of references: 5

Main heading: Compressive strength

Controlled terms: Building materials - Civil engineering - Computational methods - Concrete beams and girders - Construction equipment - Construction industry - Elastomers - Fiber reinforced materials - Fiber reinforced plastics - Plastic building materials - Polyesters - Reinforced plastics

Uncontrolled terms: Axial compressive strength - Compressive properties - Computational model - Confined concrete - Construction projects - Cross sectional area - Equivalent diameter - Equivalent principle - Experimental data - Fiber reinforced - FRP confined concrete - Influence coefficient - Mature fields - Moment of inertia - Pressive strength - Stress models - Structure reinforcement - Ultimate strength

Classification code: 415.2 Plastics Structural Materials - 421 Strength of Building Materials; Mechanical Properties - 531 Metallurgy and Metallography - 811 Cellulose, Paper and Wood Products - 815.1.1 Organic Polymers - 818.2 Elastomers - 921 Mathematics - 415 Metals, Plastics, Wood and Other Structural Materials - 405 Construction Equipment and Methods; Surveying - 405.1 Construction Equipment - 409 Civil Engineering, General - 411 Bituminous Materials - 412 Concrete - 413 Insulating Materials - 414 Masonry Materials

DOI: 10.4028/www.scientific.net/AMR.243-249.5541

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

615.

Accession number: 20132916497472

Title: Structures, luminescence, and slow magnetic relaxation of eight 3D lanthanide-organic frameworks

Authors: Fang, Ming^{1, 2}; Li, Ji-Jing¹; Shi, Peng-Fei¹; Zhao, Bin¹; Cheng, Peng¹

Author affiliation:

1 Department of Chemistry, Key Laboratory of Advanced Energy Material Chemistry, Nankai University,

Tianjin 300071, China

2 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao Hebei Province, China

Corresponding author: Zhao, B. (zhaobin@nankai.edu.cn)

Source title: Dalton Transactions

Abbreviated source title: Dalton Trans.

Volume: 42

Issue: 18

Issue date: 2013

Publication year: 2013

Pages: 6553-6563

Language: English

ISSN: 14779226

E-ISSN: 14779234

CODEN: DTARAF

Document type: Journal article (JA)

Publisher: Royal Society of Chemistry, Milton Road, Cambridge, CB4 0WF, United Kingdom

Abstract: Eight three-dimensional lanthanide-organic frameworks: [Ln(BPDC)1.5(DMF)(H₂O)₂] • 2H₂O (Ln = Eu (1), Gd (2), Tb (3), Dy (4); BPDC = 4,4'-dicarboxylate-2,2'-dipyridine anion), [Ln(BPDC)(DMF)₂(NO₃)] (Ln = Eu (5), Gd (6), Tb (7), Dy (8)) were fabricated and structurally characterized. Compounds 1-4 are isostructural, belonging to the triclinic system with space group P1, while compounds 6-8 belong to the monoclinic system with space group C2/c. Structural differences between two types of compounds may be caused by different reaction conditions. Magnetic properties of 2-4 and 6-8 have been investigated and only compounds 4 and 8 display significant frequency-dependence, albeit without reaching the characteristic maxima above 2 K, implying slow magnetic relaxation behaviors in 4 and 8. After the application of a DC field, good peak shapes of AC signal were obtained and got the energy barrier for 4, $\Delta E/k_B = 79.80$ K and the pre-exponential factor $\tau_0 = 1.28 \times 10^{-10}$ s, for 8, $\Delta E/k_B = 38.15$ K and $\tau_0 = 2.47 \times 10^{-9}$ s. Geometrical differences in the crystal fields of Dy³⁺ in 4 and 8 seem to be responsible for the large divergence of their magnetic behaviors. Luminescence analyses were performed on coordination polymers containing Eu³⁺, Tb³⁺, and Dy³⁺, which exhibit the characteristic transitions of corresponding lanthanide ions, and give the lifetime (τ_0) of 1, 3, 4, 5, 7 and 8 are 0.56 ms, 0.89 ms, 8.48 μ s, 0.60 ms, 0.75 ms and 36.35 μ s, respectively. © 2013 The

Royal Society of Chemistry.

Number of references: 96

Main heading: Rare earth elements

Controlled terms: Carboxylation - Luminescence - Magnetic relaxation - Single crystals - Three dimensional

Uncontrolled terms: Coordination Polymers - Frequency dependence - Geometrical differences - Lanthanide-organic frameworks - Luminescence analysis - Preexponential factor - Slow magnetic relaxations - Structural differences

Classification code: 547.2 Rare Earth Metals - 701.2 Magnetism: Basic Concepts and Phenomena - 741.1 Light/Optics - 802.2 Chemical Reactions - 902.1 Engineering Graphics - 933.1 Crystalline Solids

Numerical data indexing: Temperature 2.00e+00K, Temperature 3.81e+01K, Temperature 7.98e+01K, Time 3.64e-05s, Time 5.60e-01m/s, Time 6.00e-01m/s, Time 7.50e-01m/s, Time 8.48e-06s, Time 8.90e-01m/s

DOI: 10.1039/c3dt32861a

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

616.

Accession number: 20124715692073

Title: Statics analysis and optimal design of 3-DOF parallel mechanical leg

Authors: Rong, Yu1, 2 ; Jin, Zhenlin1 ; Qu, Mengke2

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao 066004, China

2 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Rong, Y. (lixiangcg@126.com)

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 28

Issue: 20

Issue date: October 15, 2012

Publication year: 2012

Pages: 41-49

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Agricultural Exhibition Road South, Beijing, 100026, China

Abstract: In order to optimal design for the statics of the six-legged robot's parallel mechanical leg, a statics optimal design method based on the mapping of both constraint and actuation forces was proposed. Firstly, the mapping of both constraint and actuation was analyzed, and the constraint and actuation Jacobian matrix was established. Then, based on the actuation Jacobian matrix, the actuation statics transmission equation was established, the performance evaluation index of actuation statics was designed, and the relationship between the performance evaluation index and structure parameters was analyzed. Through the same way, the constraint the statics analysis was conducted. Finally, based on the performance evaluation index both of constraint and actuation statics, the structure parameters were optimal designed by Monte Carlo method. Calculations showed that when the parameter of the fixed platform was 200 mm, the parameter of the connecting rod was 70 mm, the parameter of the motion platform was 50 mm, the minimum rod length of branch No.1 and 3 was 530 mm, the minimum rod length of branch 2 was 330 mm, the maximum rod length of branch No.1 and 3 was 900 mm, the maximum rod length of branch No.2 was 600 mm, the statics performance of the mechanical leg was the best. The studies laid the theoretical foundation for further study of the six-legged robot.

Number of references: 26

Main heading: Optimal systems

Controlled terms: Jacobian matrices - Monte Carlo methods - Optimization - Robots

Uncontrolled terms: Actuation force - Motion platforms - Optimal design - Optimal design methods - Parallel mechanical leg - Performance evaluation index - Six-legged robots - Statics analysis - Structure parameter - Theoretical foundations - Transmission equation

Classification code: 731.5 Robotics - 921.1 Algebra - 921.5 Optimization Techniques - 922.2
Mathematical Statistics

Numerical data indexing: Size 2.00e-01m, Size 3.30e-01m, Size 5.00e-02m, Size 5.30e-01m, Size
6.00e-01m, Size 7.00e-02m, Size 9.00e-01m

DOI: 10.3969/j.issn.1002-6819.2012.20.006

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

617.

Accession number: 20113514279606

Title: Stability analysis of the golden section adaptive control systems for attitude keeping of
spacecraft with unknown parameters

Authors: Sun, Duo-Qing¹

Author affiliation:

1 Institute of Mathematics and Systems Science, College of Mathematics and Information Technology, Hebei
Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Sun, D.-Q. (sun_duoqing@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 80-81

Monograph title: Information Engineering for Mechanics and Materials

Issue date: 2011

Publication year: 2011

Pages: 1096-1102

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037852125

Document type: Conference article (CA)

Conference name: 2011 International Conference on Information Engineering for Mechanics and Materials, ICIMM 2011

Conference date: August 13, 2011 - August 14, 2011

Conference location: Shanghai, China

Conference code: 86278

Sponsor: Zhejiang Economic and Trade Polytechnic; Institute of Electronic and Information Technology

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: All-coefficient golden section adaptive control scheme for attitude keeping of spacecraft with unknown parameters is proposed in this paper. Based on Lyapunov's direct method for time-variant discrete systems, the paper gives the conditions for the uniform asymptotic stability of the all-coefficient golden section adaptive control system. The given conditions are dependent on the relations between coefficients in the closed-loop system equations and the variable rates of the coefficients. The result in this paper can be used to analyze quantitatively the stability of multivariable time-variant discrete systems. Thus, a theoretical foundation is established to apply the golden section adaptive control method to control specific spacecraft. © (2011) Trans Tech Publications.

Number of references: 13

Main heading: Adaptive control systems

Controlled terms: Asymptotic stability - Control system analysis - Control system stability - Discrete time control systems - Mechanics - Spacecraft

Uncontrolled terms: Adaptive Control - Adaptive control methods - Adaptive control schemes - Discrete systems - Golden section - Lyapunov's direct method - Multi variables - Stability analysis - Theoretical foundations - Time variant - Uniform asymptotic stability - Unknown parameters - Variable rate

Classification code: 655.1 Spacecraft, General - 731.1 Control Systems - 731.4 System Stability - 921.6 Numerical Methods - 931.1 Mechanics

DOI: 10.4028/www.scientific.net/AMM.80-81.1096

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

618.

Accession number: 20130215879994

Title: Solution of fractional differential equations by using bernstein polynomials method

Authors: Liu, Jianping¹ ; Li, Xia¹ ; Xu, Liyong¹ ; Shen, Yufa¹

Author affiliation:

1 HeBei Normal University of Science and Technology, HeBei, China

Corresponding author: Liu, J. (liujianping0408@126.com)

Source title: Journal of Convergence Information Technology

Abbreviated source title: J. Convergence Inf. Technol.

Volume: 7

Issue: 23

Issue date: December 2012

Publication year: 2012

Pages: 820-826

Language: English

ISSN: 19759320

E-ISSN: 22339299

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, Myoungbo Bldg 3F,
Bumin-dong 1-ga, Seo-gu, Busan, 602-816, Korea, Republic of

Abstract: Recently, the fractional calculus has drawn much attention due to its wide application in engineering, but many fractional-order differential equations are not easy to find analytical results so the numerical methods of fractional order differential equations have become an important topic. In this paper, based on the definition of fractional order differential, we have given a method which calculates the fractional differential equations by using the Bernstein polynomials. It transforms fractional differential equations to algebra equations which are easily to be solved. Finally, the feasibility and validity of the method can be proved by the examples shown in the work.

Number of references: 15

Main heading: Polynomials

Controlled terms: Differential equations

Uncontrolled terms: Algebra equation - Analytical results - Bernstein polynomial - Fractional calculus - Fractional derivative - Fractional differential equations - Fractional order - Numerical results

Classification code: 921.1 Algebra - 921.2 Calculus

DOI: 10.4156/jcit.vol7.issue23.94

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

619.

Accession number: 20103613215104

Title: The research and implementation of the mathematics experimental courses of mathematics teaching in normal college

Authors: Wang, Jin-Ran¹ ; Yue, Xiao-Yun¹ ; Guo, Ya-Jun¹

Author affiliation:

¹ Institute of Mathematics and Information Technology, Hebei Normal University Science and Technology, Qinhuangdao Hebei Province, China

Corresponding author: Yue, X.-Y. (yuexiaoyun888@sohu.com)

Source title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Abbreviated source title: ICIMA- Int. Conf. Ind. Mechatronics Autom.

Volume: 1

Part number: 1 of 2

Monograph title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Issue date: 2010

Publication year: 2010

Pages: 584-587

Article number: 5538109

Language: English

ISBN-13: 9781424476541

Document type: Conference article (CA)

Conference name: 2010 2nd International Conference on Industrial Mechatronics and Automation, ICIMA 2010

Conference date: May 30, 2010 - May 31, 2010

Conference location: Wuhan, China

Conference code: 81583

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Wuhan Institute of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In 21st Century, it raised new demands in mathematics teaching in colleges and universities, while mathematical experiment courses playing an increasingly important role. In this paper, it explained the necessity and significance of offering mathematical experiment courses in the Normal Colleges and universities pointed out the current situation and implementation of it, and provided clues for the reform of mathematics teaching in colleges and universities. © 2010 IEEE.

Number of references: 7

Main heading: Teaching

Controlled terms: Mathematical techniques - Mechatronics - Societies and institutions

Uncontrolled terms: Colleges and universities - Current situation - Mathematical experiment
- Mathematical experiments - Mathematical software - Mathematics education

Classification code: 608 Mechanical Engineering, General - 901.1.1 Societies and Institutions - 901.2
Education - 921 Mathematics

DOI: 10.1109/ICINDMA.2010.5538109

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

620.

Accession number: 20125015797901

Title: The development of a coal mine intelligent safety monitoring management system based on
fuzzy inference system

Authors: Song, Dongdong¹ ; Lin, Hongju² ; Wang, Haifang² ; Lu, Weina²

Author affiliation:

1 Department of Postgraduate, Hebei Normal University of Science and Technology, QinHuang dao, Hebei,
China

2 Department of Machinery and Electronics, Hebei Normal University of Science and Technology, QinHuang
dao, Hebei, China

Corresponding author: Song, D. (Mapex_dongdong@126.com)

Source title: World Automation Congress Proceedings

Abbreviated source title: World Autom. Congress Proc.

Monograph title: 2012 World Automation Congress, WAC 2012

Issue date: 2012

Publication year: 2012

Article number: 6321603

Language: English

ISSN: 21544824

E-ISSN: 21544832

ISBN-13: 9781467344975

Document type: Conference article (CA)

Conference name: 2012 World Automation Congress, WAC 2012

Conference date: June 24, 2012 - June 28, 2012

Conference location: Puerto Vallarta, Mexico

Conference code: 94214

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: In view of current safety product and administrate situation of coal industry, so it is indispensable to develop coal mine intelligent safety monitoring system, and it also should be high intelligentizing and reliability. This system is under Windows 2000, using the skills of program mixing C# and MATLAB, establish a fuzzy inference system on MATLAB software platform, and make fuzzy inference and forecast to the gas in the mine environment. Also using the ANFIS module of MATLAB to train the FIS structure, to get further structure optimizing, combining the expert experience to analyze the reason of accident on line; at meantime, we can also build dynamic system model on Simulink platform through VRML method to reappear the situation of the coal mine so as to process the real-time monitoring. In running structure, the intelligent monitoring system consists of five modules: the real-time monitoring and displaying, query, deletion and maintenance of history data, graphic statistic, report printing, expert diagnosis and decision-making support module. This system research, development and promoted application will provide the safeguard regarding the mine pit security work. © 2012 TSI Press.

Number of references: 11

Main heading: Search engines

Controlled terms: Coal industry - Coal mines - Fuzzy systems - Management - MATLAB - Monitoring

Uncontrolled terms: Adaptive neuro-fuzzy inference system - C sharp - Fuzzy inference systems - Management systems - Simulink simulations

Classification code: 961 Systems Science - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic

Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 921 Mathematics - 913 Production Planning and Control; Manufacturing - 912.2 Management - 911 Cost and Value Engineering; Industrial Economics - 723 Computer Software, Data Handling and Applications - 524 Solid Fuels - 503.1 Coal Mines - 503 Mines and Mining, Coal

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

621.

Accession number: 20114914584995

Title: Data integration technology-based safety supervisory system information transmission strategy

Authors: Zhuang, Cheng¹ ; Wang, Hongyang¹ ; Fu, Changqing¹ ; Zhuang, Siming²

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Harbin Power Plant Equipment Corporation (Qinhuangdao) Heavy Equipment Co., Ltd., Qinhuangdao, China

Corresponding author: Zhuang, C. (chengz2004@126.com)

Source title: International Journal of Advancements in Computing Technology

Abbreviated source title: Intl. J. Adv. Comput. Technol.

Volume: 3

Issue: 10

Issue date: November 2011

Publication year: 2011

Pages: 23-29

Language: English

ISSN: 20058039

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: This article focuses on the problem of data integration and transmission happened during the renovation of work safety supervisory system for coal mine and makes analysis systematically and objectively by studying a specific coal mine example. In addition, the current situation of data integration and transmission technologies in the existing work safety supervisory system is discussed and compared. A solution of this problem is proposed: a strategy of data integration and transmission based on OPC technical standards, with FTP file transmission and DDE/NETDDE dynamic data process as a supplement.

Number of references: 8

Main heading: Data handling

Controlled terms: Coal mines

Uncontrolled terms: Current situation - Data integration - Dynamic data - OPC - Supervisory systems - Technical standards - Technology-based - Transmission technologies - Work safety

Classification code: 503.1 Coal Mines - 723.2 Data Processing and Image Processing

DOI: 10.4156/ijact.vol3.issue10.4

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

622.

Accession number: 20104313330781

Title: Preceding vehicle detecting and tracking for intelligent vehicles

Authors: Lu, Weina¹ ; Tian, Shuyao¹ ; Zhang, Lihong¹ ; Ma, Jiwei¹ ; Liu, Shengtao¹ ; Lin, Hongju¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

Corresponding author: Lu, W. (haibian016@yahoo.com.cn)

Source title: 2010 2nd International Conference on Industrial and Information Systems, IIS 2010

Abbreviated source title: Int. Conf. Ind. Inf. Syst., IIS

Volume: 1

Part number: 1 of 2

Monograph title: 2010 2nd International Conference on Industrial and Information Systems, IIS 2010

Issue date: 2010

Publication year: 2010

Pages: 306-309

Article number: 5565850

Language: English

ISBN-13: 9781424482177

Document type: Conference article (CA)

Conference name: 2010 2nd International Conference on Industrial and Information Systems, IIS 2010

Conference date: July 10, 2010 - July 11, 2010

Conference location: Dalian, China

Conference code: 81917

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; International Science and Engineering Center; Wuhan University of Science and Technology, Zhongnan Branch

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: An improved monocular vision method is studied for intelligent vehicle to detect the preceding car in the structural road environment. Through identifying the edges of the car, the object is detected; the false object is eliminated and the eligible object expressed as a 2-D model is acquired. Then the location of object in the next frame is predicted by Kalman filter, and the object is detected near that location. Finally a novel likelihood function is desired to verify the tracking results. Experiment results of the image sequence from PETS2001 showed that the method can detect and track the preceding car automatically, rapidly and exactly. © 2010 IEEE.

Number of references: 6

Main heading: Vehicles

Controlled terms: Image processing - Information systems - Intelligent vehicle highway systems - Roads and streets

Uncontrolled terms: 2-D model - False objects - Image sequence - Intelligent vehicles - Likelihood functions - Monocular vision - Structural road

Classification code: 406.1 Highway Systems - 406.2 Roads and Streets - 432 Highway Transportation - 741 Light, Optics and Optical Devices - 903.2 Information Dissemination

DOI: 10.1109/INDUSIS.2010.5565850

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

623.

Accession number: 20104313323606

Title: Effective potential of strong-coupling bipolaron in a parabolic quantum dot

Authors: Eerdunchaolu1 ; Wuyunqimuge2 ; Wang, Hongyan1

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

2 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao, Inner Mongolia 028043, China

Corresponding author: Eerdunchaolu (eerdunchaolu@163.com)

Source title: Guangxue Xuebao/Acta Optica Sinica

Abbreviated source title: Guangxue Xuebao

Volume: 30

Issue: 9

Issue date: September 2010

Publication year: 2010

Pages: 2737-2741

Language: Chinese

ISSN: 02532239

CODEN: GUXUDC

Document type: Journal article (JA)

Publisher: Chinese Optical Society, P.O. Box 80, Xi'an, 710068, China

Abstract: The ground state properties of the strong coupling bipolarons in a parabolic quantum dot are studied based on the Lee-Low-Pines-Huybrechts variational method. The law of the effective potential V_{eff} of the strong coupling bipolarons changing with the strength of the electron-phonon coupling α , the relative distance between two electrons r , and the radius of quantum dot R_0 are derived. The results show that V_{eff} consists of three parts: Coulomb potential V_{coul} , confining potential V_{conf} and induced potential $V_{\text{e-LO}}$. $V_{\text{e-LO}}$ is always less than zero, and the absolute value $|V_{\text{e-LO}}|$ increases when the strength α , and increases when the relative distance r between the electrons and quantum dot's radius R_0 decrease. The absolute value $|V_{\text{eff}}|$ increases with the strength α increasing and increases with the relative distance r decreasing. α and r are the main factors to influence the effective value. However, the quantum dot's radius R_0 and the dielectric constant ratio η have little influence on the effective potential V_{eff} .

Number of references: 13

Main heading: Quantum confinement

Controlled terms: Electric fields - Ordinary differential equations - Phonons - Photons - Quantum optics - Semiconductor quantum dots

Uncontrolled terms: Bipolaron - Effective potential - Induced potential - Quantum Dot - Variational methods

Classification code: 701.1 Electricity: Basic Concepts and Phenomena - 714.2 Semiconductor Devices and Integrated Circuits - 741.1 Light/Optics - 751.1 Acoustic Waves - 921.2 Calculus - 933 Solid State Physics

DOI: 10.3788/AOS20103009.2737

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20103613215079

Title: Rough control for hot rolled laminar cooling

Authors: Wang, Haifang1 ; Rong, Yu1 ; Wang, Tao2

Author affiliation:

- 1 College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Qinhuangdao, China
- 2 Port Machinery Branch of Engineering Technology Co., Ltd., Qinhuangdao, China

Corresponding author: Wang, H. (hfwang0335@126.com)

Source title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Abbreviated source title: ICIMA- Int. Conf. Ind. Mechatronics Autom.

Volume: 1

Part number: 1 of 2

Monograph title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Issue date: 2010

Publication year: 2010

Pages: 96-99

Article number: 5538084

Language: English

ISBN-13: 9781424476541

Document type: Conference article (CA)

Conference name: 2010 2nd International Conference on Industrial Mechatronics and Automation, ICIMA 2010

Conference date: May 30, 2010 - May 31, 2010

Conference location: Wuhan, China

Conference code: 81583

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Wuhan Institute of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Aim of laminar cooling is to make hot rolled strip from high finishing roll temperature to requested coiling temperature, it makes strip obtain satisfactory microstructure performance and mechanical property. On the view of modern control, laminar cooling control is an uncertain-information, large-lag, multi-variable, nonlinear and complex control problem. By the rough set theory, the decision-making table, which includes the diagnostic state and the corresponding control strategy of operator in the laminar cooling control of hot rolled, is reduced. And the rough control rules on the laminar cooling are get. The simulation shows the rules can apply on the laminar cooling control, and the application of the rough set can get fast the feed-forward control number of water section in the laminar cooling. © 2010 IEEE.

Number of references: 9

Main heading: Process control

Controlled terms: Cooling - Decision making - Decision tables - Decision theory - Mechanical properties - Mechatronics - Rough set theory

Uncontrolled terms: Coiling temperature - Complex control problems - Control rules - Control strategies - Cooling temperature - Hot-rolled - Hot-rolled strip - Laminar cooling - Microstructure performance - Modern control - Multi variables - Roll temperatures - Rough set

Classification code: 961 Systems Science - 951 Materials Science - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 921 Mathematics - 912.2 Management - 731 Automatic Control Principles and Applications - 723.1 Computer Programming - 641.2 Heat Transfer - 608 Mechanical Engineering, General

DOI: 10.1109/ICINDMA.2010.5538084

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

625.

Accession number: 20112514075565

Title: The standard |S| control chart with run rules

Authors: Huiquan, Ma1 ; Ying, Yu2 ; Cuiyi, Xiao1 ; Qing, Yun Xiao2 ; Ping, Liu Jian1 ; Xia, Li1

Author affiliation:

1 HeBei Normal University of Science and Technology, HeBei, QinHuangDao HeBei, China

2 YanShang University LiRen College, HeBei, QinHuangDao HeBei, China

Corresponding author: Huiquan, M. (mhqlyz@163.com)

Source title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Abbreviated source title: Proc. - ACIS Int. Symp. Cryptography, Netw. Secur., Data Min. Knowl. Discov., E-Commer. Its Appl., Embedded Syst., CDEE

Monograph title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Issue date: 2011

Publication year: 2011

Pages: 401-404

Article number: 5759312

Language: English

ISBN-13: 9780769543321

Document type: Conference article (CA)

Conference name: 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Conference date: October 23, 2010 - October 24, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 84956

Sponsor: Int. Assoc. Comput. Inf. Sci. (ACIS)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The application of standard $|S|$ control chart with two run rules in control of process variability is discussed in this paper. The control limits and average run length(ARL) are computed by the method of Markov chain. The results show that the standard $|S|$ control chart with run rules has smaller ARL than the standard $|S|$ control chart for all kinds of magnitudes of shifts. In the end, an example accompanied by simulation is used to illustrate that the chart with run rules is more sensitive to shifts in the process variability. © 2010 IEEE.

Number of references: 7

Main heading: Process control

Controlled terms: Cryptography - Data mining - Electronic commerce - Embedded systems
- Flowcharting - Markov processes - Network security - Standards

Uncontrolled terms: Average run lengths - Control charts - Control limits - Generalized variance - In-control - Markov Chain - Process Variability - Run rules - Unbiased estimates

Classification code: 723 Computer Software, Data Handling and Applications - 731 Automatic Control Principles and Applications - 902.2 Codes and Standards - 922.1 Probability Theory

DOI: 10.1109/CDEE.2010.85

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

626.

Accession number: 20112614105455

Title: Finite element analysis on concrete capability of buckling restrained brace

Authors: Dong, Yanying¹ ; Meng, Deguang¹ ; Zhang, Lishan¹ ; Zhu, Tianzhi¹

Author affiliation:

1 Urban Construction College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Dong, Y. (dongyanying9436@163.com)

Source title: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011 - Proceedings

Abbreviated source title: Int. Conf. Electr. Technol. Civ. Eng., ICETCE - Proc.

Monograph title: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 360-362

Article number: 5775227

Language: English

ISBN-13: 9781457702907

Document type: Conference article (CA)

Conference name: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011

Conference date: April 22, 2011 - April 24, 2011

Conference location: Lushan, China

Conference code: 85256

Sponsor: IEEE Beijing Section ED Chapter

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Three-dimensional nonlinear finite element analysis was processed to Buckling Restrained Brace under monotony loading with ANSYS. It was qualitatively analyzed how to determine the concrete grade and area in order to satisfy the dissipation capability of Buckling Restrained Brace. The theory foundation is afforded for seismic design of buckling restrained brace frame. © 2011 IEEE.

Number of references: 9

Main heading: Finite element method

Controlled terms: Buckling - Civil engineering - Seismic design

Uncontrolled terms: Buckling restrained braces - Concrete grades - dissipation capacity - Non-linear finite-element analysis

Classification code: 408 Structural Design - 409 Civil Engineering, General - 421 Strength of Building

Materials; Mechanical Properties - 921.6 Numerical Methods - 931 Classical Physics; Quantum Theory; Relativity

DOI: 10.1109/ICETCE.2011.5775227

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

627.

Accession number: 20130816038288

Title: Design of "software engineering" teaching website

Authors: Yuxiang, Li1 ; Xin, Liu1 ; Guangbin, Zhang1 ; Xingshun, Liu1 ; Zhenbo, Gao1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Yuxiang, L. (lyx20040205@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 651

Monograph title: 2012 International Conference on Engineering Materials, ICEM 2012

Issue date: 2013

Publication year: 2013

Pages: 802-806

Language: English

ISSN: 10226680

ISBN-13: 9783037856130

Document type: Conference article (CA)

Conference name: 2012 International Conference on Engineering Materials, ICEM 2012

Conference date: December 30, 2012 - December 31, 2012

Conference location: Singapore

Conference code: 95489

Sponsor: Information Engineering Research Institute, USA; Hong Kong Education Society; Trans Tech Publications inc.; Singapore Management and Sports Science Institute

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: software engineering is different from the general professional courses, it is born for getting rid of the software crisis and adapting to the development of software industry, it is a theory course, especially a practical course. However, due to the own characteristics of software engineering curriculum, in the daily teaching process, concerning theoretical study, students may feel boring, obtain low interest in learning and poor test results and other problems. ASPNET design technique is adopted and Access 2007 database is used for system to design and realize Software Engineering teaching website. System features mainly include theoretical teaching, case teaching, practical teaching, teaching interaction, database, test item bank, announcement, etc., which can enhance the vitality, interest and dynamic role of learning. © (2013) Trans Tech Publications, Switzerland.

Number of references: 3

Main heading: Software engineering

Controlled terms: Design - Websites

Uncontrolled terms: Case teachings - Design technique - Dynamic roles - Engineering teachings - Practical teachings - Software crisis - Software engineering curricula - Software industry - System features - Teaching process - Teaching websites - Test item banks - Theoretical study - Web site design

Classification code: 408 Structural Design - 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723 Computer Software, Data Handling and Applications - 723.1 Computer Programming

DOI: 10.4028/www.scientific.net/AMR.651.802

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20113214226667

Title: Grafting of 4-vinyl pyridine onto polyesters initiated by potassium dperiodatocuprate(III)

Authors: Zhang, Jianping¹ ; Zhao, Yongguang¹ ; Zhao, Ying¹ ; Liang, Liman¹ ; Yanjun, Ren¹ ; Bai, Libin²

Author affiliation:

- 1 Department of Chemistry, Hebei Normal University of Science Technology, Qinhuandao,066004, China
- 2 College of Chemistry and Environmental Science, Hebei University, Baoding, 071002, China

Corresponding author: Zhang, J. (maslhebu@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 287-290

Monograph title: Applications of Engineering Materials

Issue date: 2011

Publication year: 2011

Pages: 58-64

Language: English

ISSN: 10226680

ISBN-13: 9783037851920

Document type: Conference article (CA)

Conference name: 2011 International Conference on Advanced Engineering Materials and Technology, AEMT 2011

Conference date: July 29, 2011 - July 31, 2011

Conference location: Sanya, China

Conference code: 85968

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: In this article, the graft copolymerization of 4-vinyl pyridine onto poly (ethylene terephthalate)(PET) via the potassium doperiodacuprate(III)-PET redox system as an initiator was investigated in an alkaline medium. The graft copolymer was characterized with Fourier-transform infrared spectra analysis. A mechanism is proposed to explain the generation of radicals and the initiation. The effects of reaction variables, such as the initiator concentration, the ratio of monomer to PET, pH, and reaction temperature and time, are investigated, and the grafting conditions are optimized. Graft copolymers with high grafting efficiency are obtained, thus indicating that potassium doperiodacuprate(III)-PET redox system is an efficient initiator for this graft copolymerization. The quaternized PET-g-PVP (QPEVP) is proved to be an excellent adsorbent to heavy metal ions. © (2011) Trans Tech Publications.

Number of references: 20

Main heading: Grafting (chemical)

Controlled terms: Adsorption - Alkalinity - Copolymerization - Ethylene - Graft copolymers - Heavy metals - Metal ions - pH effects - Polyethylene terephthalates - Pyridine - Redox reactions - Spectroscopy

Uncontrolled terms: 4-vinyl pyridine - Alkaline medium - Graft copolymerization - Grafting efficiency - Infrared spectra analysis - Initiator concentration - Potassium doperiodatocuprate - Potassium doperiodatocuprate(III) [DPC] - Reaction temperature - Reaction variables - Redox systems - Transfer initiated

Classification code: 804.1 Organic Compounds - 802.3 Chemical Operations - 802.2 Chemical Reactions - 815 Polymers and Polymer Science - 801.1 Chemistry, General - 533 Ore Treatment and Metal Refining - 531 Metallurgy and Metallography - 801 Chemistry

DOI: 10.4028/www.scientific.net/AMR.287-290.58

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

629.

Accession number: 20120914817691

Title: Implementation of simulation practice system of surface tension measuring experiment

Authors: Wang, Hongyan¹ ; Tang, Xiaoguang¹ ; Zhuang, Cheng¹ ; Wang, Jixia¹

Author affiliation:

¹ Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Wang, H. (wanghy63@163.com)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 4

Issue: 2

Issue date: February 2012

Publication year: 2012

Pages: 24-31

Language: English

ISSN: 19763700

E-ISSN: 22339345

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: The experiment of surface tension measurement is one of the important experiment projects in the college physics experiment courses. Considering the operation of this experiment is relatively complicated, especially given that repeatedly exercise is required in order to master the technique of controlling the overlap of the three lines, a simulation experiment can benefit the students from the convenience of practicing. Using 3ds max and VR-Platform software, the simulation practice system for experiment of surface tension measurement can solve the problem of observing the three lines from different angles, so that the real overlap of three lines is achieved, raising the simulation degree greatly.

Number of references: 8

Main heading: Experiments

Controlled terms: Computer software - Surface tension

Uncontrolled terms: 3ds max - Overlap of three lines - Simulation - Simulation experiments - Simulation practices - Surface tension measurements - VR-platform

Classification code: 723 Computer Software, Data Handling and Applications - 901.3 Engineering

Research - 931.2 Physical Properties of Gases, Liquids and Solids

DOI: 10.4156/aiss.vol4.issue2.4

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

630.

Accession number: 20134216858597

Title: The nonconforming mixed finite element method for a class of nonlinear parabolic equations

Authors: Zhang, Buying1 ; Lv, Jinfeng2 ; Ma, Jingyu1 ; Wang, Yanjuan1

Author affiliation:

1 E and A College, Hebei Normal University of Science and Technology, No. 360, West Hebei St, Qinhuangdao 066004, China

2 School of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, No. 360, West Hebei St, Qinhuangdao 066004, China

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 7

Issue: 12

Issue date: December 2013

Publication year: 2013

Pages: 3191-3198

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office, Tokai University, Kumamoto Campus, 9-1-1, Toroku, Kumamoto, 862-8652, Japan

Abstract: In this paper, a new stable nonconforming mixed finite element scheme is proposed for a class of nonlinear parabolic equations, in which, a new nonconforming rectangular element and the piecewise constant element are taken as the approximating spaces, respectively. The convergence analysis is discussed through a special technology, and the optimal error estimates of both approximations in L2 norm are established. © 2013 ISSN 1881-803X.

Number of references: 13

Main heading: Partial differential equations

Controlled terms: Computer science - Technology

Uncontrolled terms: Convergence analysis - Error estimates - Mixed finite element methods - Mixed finite elements - Nonlinear parabolic equations - Optimal error estimate - Piece-wise constants

Classification code: 721 Computer Circuits and Logic Elements - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 901 Engineering Profession - 921.2 Calculus

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

631.

Accession number: 20120914815751

Title: Submicroscopic morphology comparisons between hybrid F1 by wheat and octoploid triticales and the parental generation

Authors: Yang, Liming¹ ; Zhou, Yinfu¹ ; Zhang, Zhiwen¹ ; Zhang, Shanshan¹ ; Lin, Xiaohu¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Yang, L. (ylmqhd@163.com)

Source title: Procedia Environmental Sciences

Abbreviated source title: Procedia Environ. Sci.

Volume: 8

Monograph title: 2011 International Conference on Environment Science and Biotechnology, ICESB 2011

Issue date: 2011

Publication year: 2011

Pages: 415-420

Language: English

E-ISSN: 18780296

Document type: Conference article (CA)

Conference name: 1st 2011 International Conference on Environment Science and Biotechnology, ICESB 2011

Conference date: November 25, 2011 - November 26, 2011

Conference location: Male, Maldives

Conference code: 88753

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: F1 hybrid generation comes from the hybridization of common wheat Jingdong 8 as the female parent and octoploid triticale Jinsong 5 as the male parent. It can be clearly seen from the submicroscopic morphology comparisons of pollen grains, leaf epidermis and stomas between hybrid F1 and the parents that most of the shapes of the parents' pollen grains are nearly circular, while those of the F1 hybrid pollen grains are irregular and severely wizened. In addition, the pollen grains of the F1 hybrid and parents are significantly different in the submicroscopic features of exine sculptures and germ pores. The common features of the three tested materials are stomatal apparatus, long cell and hair cell, and the cells are arranged in parallel with the vein. Leaf epidermal cells of the female parent which is the common wheat are clear outline, and they are also arranged tidily and smoothly, Pores are arranged in a straight line. Guard cells are dumbbell-shaped with bristles of different lengths. Pores of the male parent which is octoploid triticale have ridge-like heaves with horizontal and vertical alignment around them, and they are rectangular and large, also the general arrangement type is linear. Guard cells is very obvious, but with very few and short bristles. Both of the submicroscopic morphologies of leaf epidermises and stomas of the hybrid F 1 are more similar with those of the male parent, while the leaf epidermises have bristles and the size of pores ranges between the two parents. The F1 hybrids and parents are significantly different in submicroscopic morphologies on pollens, leaf epidermises and stomas, so that the distinctions of submicroscopic morphologies can be used as a basis in the indicators and identification of the distant hybrids and their parents. © 2011 Published by Elsevier Ltd.

Number of references: 9

Main heading: Grain (agricultural product)

Controlled terms: Biotechnology - Cells - Cytology - Morphology - Plants (botany)

Uncontrolled terms: Common features - Common wheat - Distant hybridization - Epidermal cells - F1 hybrid - General arrangement - Guard cells - Hair cells - Leaf epidermis - Octoploid triticale - Pollen grains - Stomatal apparatus - Vertical alignment

Classification code: 461 Bioengineering and Biology - 821.4 Agricultural Products - 951 Materials Science

DOI: 10.1016/j.proenv.2011.10.065

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

632.

Accession number: 20110813673782

Title: Design of coal mined zone temperature detector based on optic absorption principle

Authors: Li, Yan-Ping¹ ; Lun, Cui-Fen¹ ; Guo, Xiu-Mei¹ ; Zhang, Li-Ling¹ ; Zhang, Xiao-Qin¹ ; Zhang, Li-Kun¹ ; Li, Wei¹

Author affiliation:

¹ Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, Changli, Hebei, 066600, China

Corresponding author: Li, Y.-P. (liyanping999@126.com)

Source title: 2nd International Conference on Information Engineering and Computer Science - Proceedings, ICIECS 2010

Abbreviated source title: Int. Conf. Inf. Eng. Comput. Sci. - Proc., ICIECS

Monograph title: 2nd International Conference on Information Engineering and Computer Science - Proceedings, ICIECS 2010

Issue date: 2010

Publication year: 2010

Article number: 5678224

Language: English

ISBN-13: 9781424479412

Document type: Conference article (CA)

Conference name: 2nd International Conference on Information Engineering and Computer Science, ICIECS 2010

Conference date: December 25, 2010 - December 26, 2010

Conference location: Wuhan, China

Conference code: 83781

Sponsor: Res. Assoc. Mod. Educ. Comput. Sci. (RAMECS); Wuhan University; Wuhan University and Technology; National Technology University of Ukraine; Columbia University; Hubei University of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Based on the principle of optical absorption of semiconductor variation with temperature, a method of optical-electrical testing for coal mined zone is proposed. The measurement of the reflecting light intensity is utilized in the method. Also a hardware circuit and FFT data processing technology for coal mined zone temperature measuring system based on optic absorption principle is introduced emphatically. FFT technique can improve signal-to-noise ratio, the hardware structure of the system has been greatly simplified and at the same time the anti-interference capacity is enhanced. The theories and experiments show that the proposed system has characteristics of wide measurement range, high precision, good real-time performance, small volume, low-cost. Both the precision and real-time property can meet the demand of the actual application. And the system after a slight modification also suits for other temperature detection under special working condition such as strong electromagnetic interference, combustible and explosive area, narrow space. ©2010 IEEE.

Number of references: 8

Main heading: Computer hardware

Controlled terms: Absorption - Coal - Coal industry - Computer science - Data handling - Design - Electromagnetic pulse - Explosives detection - Fast Fourier transforms - Integrated circuit manufacture - Light absorption - Signal to noise ratio

Uncontrolled terms: Anti-interference - Electrical testing - Electromagnetic interference - FFT design - FFT techniques - Hardware circuit design - Hardware circuits - Hardware structures - High precision - Light intensity - Optical absorption - Processing technologies - Real time

performance - Real-time properties - Signal to noise - Temperature detection - Temperature testing
- Wide measurement - Working conditions - Zone temperature

Classification code: 931.2 Physical Properties of Gases, Liquids and Solids - 921.3 Mathematical Transformations - 801 Chemistry - 741.1 Light/Optics - 723.2 Data Processing and Image Processing - 722 Computer Systems and Equipment - 716.1 Information Theory and Signal Processing - 714.2 Semiconductor Devices and Integrated Circuits - 701 Electricity and Magnetism - 524 Solid Fuels - 408 Structural Design

DOI: 10.1109/ICIECS.2010.5678224

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

633.

Accession number: 20124115542929

Title: Research on the College English Education based on the web-assisted teaching model

Authors: Wang, Jing1 ; Chen, Xiaofeng1 ; Song, Jie1 ; Zhou, Pengyu1

Author affiliation:

1 College of Foreign Languages, Hebei Normal University of Science and Technology, Qin Huangdao, Hebei Province, China

Corresponding author: Wang, J. (Pengfeiarmy99@yahoo.com.cn)

Source title: CSAE 2012 - Proceedings, 2012 IEEE International Conference on Computer Science and Automation Engineering

Abbreviated source title: CSAE - Proc., IEEE Int. Conf. Comput. Sci. Autom. Eng.

Volume: 2

Part number: 2 of 3

Monograph title: CSAE 2012 - Proceedings, 2012 IEEE International Conference on Computer Science and Automation Engineering

Issue date: 2012

Publication year: 2012

Pages: 679-681

Article number: 6272859

Language: English

ISBN-13: 9781467300865

Document type: Conference article (CA)

Conference name: 2012 IEEE International Conference on Computer Science and Automation Engineering, CSAE 2012

Conference date: May 25, 2012 - May 27, 2012

Conference location: Zhangjiajie, China

Conference code: 93011

Sponsor: IEEE Beijing Section; Hunan University of Humanities, Science and Technology; Tongji University; Xiamen University; Central South University

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: The accelerated development of network and information technology has opened a new door for College English Education nowadays. A perfect combination of network and education, known as the web-assisted teaching model, has replaced the tradition model and yielded fruits in many universities here in China. It gives full play to students' initiative and unlike the traditional model, gives teachers a facilitator's role instead. The whole learning process witnesses students conduct autonomous learning by making use of the relevant resources and make improvement through teachers' guidance and communication with both teachers and students. In view of this positive change, the present study is designed to show that web-assisted teaching model is more effective than the traditional model based on empirical studies. The result shows that the new model can effectively improve students' listening, speaking, reading and writing skills and thus should be applied to bring about significant improvement in students. © 2012 IEEE.

Number of references: 4

Main heading: Students

Controlled terms: Computer science - Education computing - Information technology

Uncontrolled terms: autonomous leaning - Autonomous learning - Empirical studies - Learning process - Model-based OPC - Positive changes - Teaching model - Writing skills

Classification code: 721 Computer Circuits and Logic Elements - 722 Computer Systems and

Equipment - 723 Computer Software, Data Handling and Applications - 723.2 Data Processing and Image Processing - 901.2 Education - 903 Information Science

DOI: 10.1109/CSAE.2012.6272859

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

634.

Accession number: 20114114423202

Title: On the current situation of developing RFID middleware in China

Authors: Shi, Wenchong¹ ; Liu, Maohua¹ ; Liu, Honggang²

Author affiliation:

- 1 College of Math and Information, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 College of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Shi, W. (mr_shi_pb@126.com)

Source title: Proceedings 2011 International Conference on Mechatronic Science, Electric Engineering and Computer, MEC 2011

Abbreviated source title: Proc. Int. Conf. Mechatronic Sci., Electr. Eng. Comput., MEC

Monograph title: Proceedings 2011 International Conference on Mechatronic Science, Electric Engineering and Computer, MEC 2011

Issue date: 2011

Publication year: 2011

Pages: 1278-1280

Article number: 6025702

Language: English

ISBN-13: 9781612847221

Document type: Conference article (CA)

Conference name: 2011 International Conference on Mechatronic Science, Electric Engineering and Computer, MEC 2011

Conference date: August 19, 2011 - August 22, 2011

Conference location: Jilin, China

Conference code: 86866

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The paper is intended to reveal the problems existing in domestic RFID middleware development. It contrasted the RFID middleware developing situation of Chinese and foreign countries' though the developing companies and brands, then it analyzed domestic demand, the developers' actions, the barriers of closed-loop applications, developing strategy, etc. The author thinks that domestic industry of RFID middleware gets into trouble now, and to get rid of the adverse situation, the internal and external troubles must be overcome. The most important is to create RFID middleware brands of Chinese own, form the solid RFID industry chain, and select the appropriate marketing strategy. The paper's innovation is that its analysis is combined the behaviors of supply and demand sides, and not based on single case. © 2011 IEEE.

Number of references: 6

Main heading: Middleware

Controlled terms: Economics - Electrical engineering - Marketing - Radio frequency identification (RFID)

Uncontrolled terms: Closed-loop - Current situation - Developing situation - Developing strategy - development - Domestic demand - Domestic industries - Foreign countries - IoT - Marketing strategy - RFID industry - RFID middleware - Supply and demand

Classification code: 709 Electrical Engineering, General - 723.1 Computer Programming - 731.1 Control Systems - 911.4 Marketing - 971 Social Sciences

DOI: 10.1109/MEC.2011.6025702

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20105113503629

Title: Intelligent control and implementation of a new type constant temperature and humidity box

Authors: Ma, Jiwei1 ; Ma, Jimei2 ; Lin, Zhipeng1 ; Bao, Changchun1 ; Wang, Jian1 ; Liu, Shiguang1

Author affiliation:

1 College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Department of Electronical Engineering, Hebei University of Technology, Tianjin, 300130, China

Corresponding author: Ma, J. (jdxbmjw@126.com)

Source title: Proceedings of the 29th Chinese Control Conference, CCC'10

Abbreviated source title: Proc. Chin. Control Conf., CCC

Monograph title: Proceedings of the 29th Chinese Control Conference, CCC'10

Issue date: 2010

Publication year: 2010

Pages: 4263-4266

Article number: 5572861

Language: English

ISBN-13: 9787894631046

Document type: Conference article (CA)

Conference name: 29th Chinese Control Conference, CCC'10

Conference date: July 29, 2010 - July 31, 2010

Conference location: Beijing, China

Conference code: 82524

Sponsor: IEEE Control Systems Society (CSS); The ICROS OF Korea; IEEE CSS Singapore Chapter; IEEE CSS Hong Kong Chapter; IEEE CSS Beijing Chapter

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper focuses on the hardware and software design method of a new type of high efficient temperature and humidity testing cabinet. As the hardware core is based on the STC12C5620AD MCU, the entire hardware system is simpler and more reliable. By using the box inside the environmental cycle and using adjust channel of the atmospheric environment, the system efficiency is greatly improved, while energy-saving effect is remarkable. By adopting expert PID control algorithm and using hardware and software compensation measures, the system dynamic and static quality and control precision is further improved. Furthermore, the use of intelligent terminal as input and output device, which is simpler to operate, meets the different needs of consumers.

Number of references: 5

Main heading: Quality control

Controlled terms: Algorithms - Atmospheric humidity - Humidity control - Intelligent control - Software design - Three term control systems

Uncontrolled terms: Atmospheric environment - Constant temperature - Control precision - Design method - Double-loop - Energy-saving effect - Hardware and software - Hardware system - Input and outputs - Intelligent terminal - PID control algorithm - STC12C5620AD - System Dynamics - System efficiency

Classification code: 402 Buildings and Towers - 443.1 Atmospheric Properties - 723 Computer Software, Data Handling and Applications - 731.1 Control Systems - 913.3 Quality Assurance and Control - 921 Mathematics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

636.

Accession number: 20113814352805

Title: The design and realization of multimedia courseware for University Photography Foundation

Authors: Zhang, Yuhong¹ ; Sun, Hong² ; Xu, Zhikun³ ; Yao, Jian² ; Su, Xiaoli¹ ; Li, Chunyan¹

Author affiliation:

1 College of Education, Hebei Normal University of Science And Technology, Qinhuangdao, China

2 Academy of Armored Forces Engineering, Beijing, China

3 College of Bussiness and Economics, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, Y. (13933690306@163.com)

Source title: 2011 International Conference on Multimedia Technology, ICMT 2011

Abbreviated source title: Int. Conf. Multimedia Technol., ICMT

Monograph title: 2011 International Conference on Multimedia Technology, ICMT 2011

Issue date: 2011

Publication year: 2011

Pages: 828-831

Article number: 6002177

Language: English

ISBN-13: 9781612847740

Document type: Conference article (CA)

Conference name: 2nd International Conference on Multimedia Technology, ICMT 2011

Conference date: July 26, 2011 - July 28, 2011

Conference location: Hangzhou, China

Conference code: 86512

Sponsor: University of Louisville; Ningbo University; Zhejiang Sci-Tech University; Communication University of China; Georgia State University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: with the development of computer technology and the popularization of computer, the tradition of the using chalk and blackboard and the way of mainly making comments by the teacher seem too stereotyped. It is inability in the mobilization of students' positivity and activity and no longer fits the development of educational need in the present age. MCAI (Multimedia Computer Assisted Instruction), is a teaching software which uses multimedia computer to combine words, pictures, voices, animations, images and so on. It has broken through the linear constraints of conventional media. Information and knowledge can be vividly shown to the learner in a random, flexible, comprehensive and stereoscopic way. It has high knowledge intensity and great expressive force, can stimulate learners' interests effectively, raise students' learning efficiency, and reduce the repeated work of teachers' and achieve a favorable result. This essay introduces the design scheme of using Authorware to make the multimedia courseware for University Photography Foundation and explains the

function of the specific modules. © 2011 IEEE.

Number of references: 6

Main heading: Curricula

Controlled terms: Computer aided instruction - E-learning - Photography - Teaching

Uncontrolled terms: Authorware - Ccourseware - Computer Assisted Instruction - Computer technology - Design scheme - Educational needs - Knowledge-intensity - Learning efficiency - Linear constraints - MCAI - Multimedia - Multimedia courseware - Teaching software

Classification code: 746 Imaging Techniques - 901.2 Education

DOI: 10.1109/ICMT.2011.6002177

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

637.

Accession number: 20135117100767

Title: Research on development of environmental protection network information system

Authors: Liu, Min¹ ; Cao, Jing¹ ; Liu, Xiyin¹ ; Xue, Yanru¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Mathematics and Information of Science and Technology, 360 Hebei Street(W), Haigang District, Qin huangdao, 066004, China

Source title: International Journal of Applied Environmental Sciences

Abbreviated source title: Int. J. Appl. Environ. Sci.

Volume: 8

Issue: 13

Issue date: 2013

Publication year: 2013

Pages: 1581-1593

Language: English

ISSN: 09736077

E-ISSN: 09740260

Document type: Journal article (JA)

Publisher: Research India Publications, B-2/84 Ground Floor, Rohini Sec-16,, Delhi, 110085, India

Abstract: With the rapid development of economic construction and rapid growth of urban population, environmental protection has become the focus of attention. In this paper, by using computer technology, geographic information system technology, combined with the main content and essence of environmental protection, it studied the development of environmental protection network information system, put forward an environmental protection network information system based on office automation, management information system, web publishing system and GIS visualization information system. The composition of the system framework, information process, service and application mode are discussed as well as the system functions of system data system of information systems project based on WEB GIS, NFGIS, integration of image-text, spatial analysis, decision support, etc. © Research India Publications.

Number of references: 10

Main heading: Environmental protection

Controlled terms: Decision support systems - Geographic information systems - Office automation - Population statistics - Urban growth

Uncontrolled terms: Application modes - Computer technology - Decision supports - Economic constructions - Focus of Attention - GIS technology - Information process - Network information systems

Classification code: 403.1 Urban Planning and Development - 454.2 Environmental Impact and Protection - 723 Computer Software, Data Handling and Applications - 922.2 Mathematical Statistics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20113114199708

Title: The construction and analysis of spatial geometric constraint and assembly simulation

Authors: Geng, Qingjia^{1, 2}; Guo, Xijuan¹; Zhou, Kai¹

Author affiliation:

1 School of Information Science and Engineering, Yanshan University, No. 438, Hebei Ave, Qinhuangdao 066004, China

2 Department of Computer, Hebei Normal University of Science and Technology, No. 360, West Hebei Street, Qinhuangdao 066004, China

Corresponding author: Geng, Q. (gengqingjia@yahoo.cn)

Source title: ICIC Express Letters

Abbreviated source title: ICIC Express Lett.

Volume: 5

Issue: 8 B

Issue date: August 2011

Publication year: 2011

Pages: 2717-2723

Language: English

ISSN: 1881803X

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office, Tokai University, Kumamoto Campus, 9-1-1, Toroku, Kumamoto, 862-8652, Japan

Abstract: Spatial geometric constraint is an effective method that uses numerical relationship to show the interrelationship constraint of geometric figures precisely. It plays an important role in virtual mechanism assembly simulation. The paper proposes a new spatial geometric constraint method which can be directly applied in assembly of spatial mechanism, and this method's correctness and feasibility are testified. Four kinds spatial geometric constraints, Based-Constraint, Planar Constraint, Axis Constraint and Axis- Planar Constraint, are given firstly. All the mechanism's interrelationship constraint can be expressed by these four constraints. Then, the helicopter rotor operating mechanism is analyzed by using above geometric constraint relationship, and the schematic diagram of mechanism and constraint equations are given. Finally, With OpenGL graphics library, the helicopter rotor operating mechanism's assembly simulation is finished; the simulation system is given. And the results testify the correctness and feasibility of the geometric constraint relationship proposed in the paper. © 2011

ISSN 1881-803X.

Number of references: 14

Main heading: Geometry

Controlled terms: Helicopter rotors - Helicopters - Numerical methods - Rotors (windings)
- Schematic diagrams

Uncontrolled terms: Assembly simulation - Constraint equation - Geometric constraint -
OpenG - OpenGL graphics - Operating mechanism - Planar constraints - Simulation systems -
Spatial mechanism - Virtual mechanism

Classification code: 652.4 Helicopters - 703.1 Electric Networks - 704.1 Electric Components - 921
Mathematics - 921.6 Numerical Methods

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

639.

Accession number: 20113914378471

Title: The rural financial ecological environment construction in Qinhuangdao which under the
coordinate perspective of urban and rural areas

Authors: Rui, Zhao¹ ; Lixiuli¹ ; Huixin, Jin¹ ; Liming, Yang¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Rui, Z. (zhaorui66@126.com)

Source title: 2011 IEEE 3rd International Conference on Communication Software and Networks,
ICCSN 2011

Abbreviated source title: IEEE Int. Conf. Commun. Softw. Networks, ICCSN

Monograph title: 2011 IEEE 3rd International Conference on Communication Software and Networks,
ICCSN 2011

Issue date: 2011

Publication year: 2011

Pages: 321-324

Article number: 6013839

Language: English

ISBN-13: 9781612844855

Document type: Conference article (CA)

Conference name: 2011 IEEE 3rd International Conference on Communication Software and Networks, ICCSN 2011

Conference date: May 27, 2011 - May 29, 2011

Conference location: Xi'an, China

Conference code: 86671

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In the context of well-coordinated development in urban and rural areas, and for the sake of giving full scope to the positive role of finance, it is needed to build a stable and harmonious rural financial ecological environment, improve the rural financial legal system, set up a rural insurance system, establish and perfect the credit information environment, innovate financial products and services for rural area, advance the financial industry autonomy of itself and decrease the administrative intervention is the important measure to achieve this goal. © 2011 IEEE.

Number of references: 8

Main heading: Finance

Controlled terms: Communication - Ecology - Laws and legislation - Regional planning - Rural areas

Uncontrolled terms: Ecological environments - Financial industry - Financial products - Information environment - Legal system - Urban and rural areas - urban and rural development

Classification code: 403.2 Regional Planning and Development - 454.3 Ecology and Ecosystems - 716 Telecommunication; Radar, Radio and Television - 911.1 Cost Accounting - 971 Social Sciences

DOI: 10.1109/ICCSN.2011.6013839

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

640.

Accession number: 20114414482393

Title: Tactics of handling data in Internet of things

Authors: Shi, Wenchong1 ; Liu, Maohua1

Author affiliation:

1 College of Science and Technology in Mathematics and Information, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Shi, W. (mr_shi_pb@126.com)

Source title: CCIS2011 - Proceedings: 2011 IEEE International Conference on Cloud Computing and Intelligence Systems

Abbreviated source title: CCIS - Proc.: IEEE Int. Conf. Cloud Comput. Intell. Syst.

Monograph title: CCIS2011 - Proceedings: 2011 IEEE International Conference on Cloud Computing and Intelligence Systems

Issue date: 2011

Publication year: 2011

Pages: 515-517

Article number: 6045121

Language: English

ISBN-13: 9781612842011

Document type: Conference article (CA)

Conference name: 2011 IEEE International Conference on Cloud Computing and Intelligence Systems, CCIS2011

Conference date: September 15, 2011 - September 17, 2011

Conference location: Beijing, China

Conference code: 87120

Sponsor: IEEE Beijing Section; Chinese Association of Artificial Intelligence (CAAI); Beijing University of Posts and Telecommunications (BUPT); Hosei University (HU); The Chinese University of Hong Kong (CUHK)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The paper is intended to ascertain the emphases and difficulties of data processing in Internet of things (IoT) so as to identify the technical strategy. It first analyzed the characteristics of data in IoT, and then analyzed the various properties' requirements in data processing. The authors thought, the data in IoT are polymorphous, heterogeneous, large in quantity and time-limited, there are also some difficulties in data transmitting, they proposed database and middleware technology is the key to solve the polymorphism and heterogeneity, cloud computing or sea computing is the key to resolve data's largeness, the development of high quality devices for data source is the key to data's transmitting. The paper's innovation is that the author has considered the common challenges of data's transmitting in IoT and the application of sea computing. © 2011 IEEE.

Number of references: 4

Main heading: Data handling

Controlled terms: Cloud computing - Computer systems - Internet - Middleware - Telecommunication networks

Uncontrolled terms: Data source - Data transmitting - High quality - Internet of things - Middleware technology - sea computing - Technical strategy

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 722 Computer Systems and Equipment - 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications

DOI: 10.1109/CCIS.2011.6045121

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20133116560153

Title: WSO-based spatial outlier detection Algorithms

Authors: Cao, Lijun1 ; Liu, Xiyin1 ; Wang, Yubin1 ; Zhang, Zhongping1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qin huangdao, Hebei Province, China

Source title: Journal of Networks

Abbreviated source title: J. Netw.

Volume: 8

Issue: 7

Issue date: 2013

Publication year: 2013

Pages: 1582-1588

Language: English

ISSN: 17962056

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40,, OULU, 90571, Finland

Abstract: Based on the idea of Weighted Spatial Outlier (WSO), this study identifies the influences of spatial attributes on the calculation of spatial outlying degree, combines these influences with non-spatial attributes, and proposes two revised spatial outlier detection algorithms, Improved Z-value (IZ-value) algorithm and Weighted Difference Algorithm (WDA). The proposed algorithms are detailed in the paper and the time complexities of them are analyzed. The influencing factors of spatial outlier detection are considered from a global perspective, so that the determinations of outliers are more reasonable, and the detection result are more accurate. To verify the accuracy and effectiveness of the two proposed WSO-based spatial outlier detection algorithms, real-world dataset FMR and WNV are used for experiments, and the results are compared with classical algorithm. It is demonstrated that the proposed spatial outlier detection algorithms are feasible and effective. © 2013 ACADEMY PUBLISHER.

Number of references: 18

Main heading: Statistics

Controlled terms: Algorithms - Signal detection

Uncontrolled terms: Difference algorithms - Global perspective - Non-spatial attributes - Spatial attribute - Spatial outlier - Spatial regions - Time complexity - WSO

Classification code: 716.1 Information Theory and Signal Processing - 723 Computer Software, Data Handling and Applications - 921 Mathematics - 922.2 Mathematical Statistics

DOI: 10.4304/jnw.8.7.1582-1588

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

642.

Accession number: 20103713230359

Title: Study of temperature automatic verification system based on computer vision measuring

Authors: Jinze, Li1 ; Zhihong, Li1 ; Guofang, Li1 ; Guifeng, Hou1 ; Hailong, Zhang1 ; Fang, Cheng1 ; Nianxin, Xiao1

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Jinze, L. (lijnzexf@163.com)

Source title: CCTAE 2010 - 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering

Abbreviated source title: CCTAE - Int. Conf. Comput. Commun. Technol. Agric. Eng.

Volume: 1

Part number: 1 of 3

Monograph title: CCTAE 2010 - 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering

Issue date: 2010

Publication year: 2010

Pages: 312-315

Article number: 5544529

Language: English

ISBN-13: 9781424469451

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering, CCTAE 2010

Conference date: June 12, 2010 - June 13, 2010

Conference location: Chengdu, China

Conference code: 81623

Sponsor: Wuhan Institute of Technology; Yangzhou University; International Communication Sciences Association, (ICSA); Southwestern University of Finance and Economics; Nanchang University; et. al.

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The paper studies and makes an automatic temperature verification system based on computer vision in high accuracy temperature measuring to control technique, computer vision measuring technique and digital image processing. In order to acquire the higher temperature accuracy and long-term stability relative to the normal electricity measures, first-class standard mercury thermometers are adopted directly as a temperature measurement standard. The mercury thermometer indication was detected by digital camera imaging, and image processing methods are used to determine the calibration line and the exact location of the mercury column vertices, including image enhancement, image smoothing, image thresholding, edge detection, edge linear data fitting etc. After edge extraction, the system obtains the pixel location in the image of the standard mercury thermometer scale and mercury column vertex, and obtains accurate temperature values by calculation. Finally, the paper acquires the data by testing of image processing to first-class standard mercury thermometer images and the results of person's eye, contrasted and analysed with ideal temperature values, which proves the accuracy of computer vision measuring is an order of magnitude higher than of person's observation. © 2010 IEEE.

Number of references: 8

Main heading: Computer control systems

Controlled terms: Agriculture - Cameras - Computer testing - Computer vision - Edge detection - Image enhancement - Imaging systems - Mercury (metal) - Processing - Standards - Temperature measurement - Temperature sensors - Thermometers

Uncontrolled terms: Automatic verification - Calibration lines - Control techniques - Data fittings - Digital image processing - Edge extraction - Higher temperatures - Image processing - methods - Image smoothing - Image thresholding - Long term stability - Mercury thermometer - Order of magnitude - Pixel location - Temperature measuring - Temperature values - Temperature verification - Vision measuring

Classification code: 944.6 Temperature Measurements - 944.5 Temperature Measuring Instruments - 913.4 Manufacturing - 902.2 Codes and Standards - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 746 Imaging Techniques - 742.2 Photographic Equipment - 741.2 Vision - 741 Light, Optics and Optical Devices - 731.1 Control Systems - 722 Computer Systems and Equipment - 716 Telecommunication; Radar, Radio and Television - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals

DOI: 10.1109/CCTAE.2010.5544529

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

643.

Accession number: 20110913705356

Title: Study on the theory and practice of university library student's volunteers human resource management

Authors: Wang, Ai-Yun¹

Author affiliation:

1 Library of Hebei Normal University of Science and Technology, Qinhuangdao 066000, China

Corresponding author: Wang, A.-Y. (spxghs@163.com)

Source title: 2nd International Conference on Information Science and Engineering, ICISE2010 - Proceedings

Abbreviated source title: Int. Conf. Inf. Sci. Eng., ICISE - Proc.

Monograph title: 2nd International Conference on Information Science and Engineering, ICISE2010 - Proceedings

Issue date: 2010

Publication year: 2010

Pages: 6205-6207

Article number: 5691361

Language: Chinese

ISBN-13: 9781424480968

Document type: Conference article (CA)

Conference name: 2nd International Conference on Information Science and Engineering, ICISE2010

Conference date: December 4, 2010 - December 6, 2010

Conference location: Hangzhou, China

Conference code: 83809

Sponsor: Hangzhou Dianzi University; United Nations Educational Scientific and Cultural Organization; Nanjing University of Information Science and Technology; Georgia State University; Anhui University of Science and Technology; College of Computer and Information of Hohai University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: On the basis of introducing university library human resource management status, the significance and function of library management with the participation of university student volunteers were discussed in this paper. On the premise of reducing students economic burden, the pressure of library staff was relieved, the overall quality of staff was improved, the vigor and vitality of library were brought. The approach of library working with the participation of student volunteers by gratuitous practice and part-time job was illustrated. The experience of library working with the participation of student volunteers was introduced. The measures include pre-post training, strengthening management and reasonable arrangement and so on. At last, the bridge and link between readers and staff were formed with the participation of university student volunteers, it is beneficial to further development of library work. © 2010 IEEE.

Number of references: 3

Main heading: Human resource management

Controlled terms: Information science - Natural resources management - Resource allocation - Students - Teaching

Uncontrolled terms: Economic burden - Further development - Library management - Library staff - Overall quality - Student volunteers - Theory and practice - University libraries - University students

Classification code: 444 Water Resources - 454 Environmental Engineering - 901.2 Education - 903 Information Science - 912.3 Operations Research - 912.4 Personnel

DOI: 10.1109/ICISE.2010.5691361

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

644.

Accession number: 20120514731105

Title: A primary exploring on the development strategy of qinhuangdao leisure tourism

Authors: Li, Qianghua¹ ; Qin, Xuewu¹ ; Qi, Zhaochuan¹ ; Zhao, Zhiqiang¹

Author affiliation:

¹ Institute of Humanities and Law, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Li, Q.

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 114

Monograph title: Software Engineering and Knowledge Engineering: Theory and Practice: Volume 1

Issue date: 2012

Publication year: 2012

Pages: 231-237

Language: English

ISSN: 18675662

ISBN-13: 9783642037177

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Fulfilling the demand of strategic task of ring Beijing and Tianjin leisure tourism industrial belt to create a new tourism growth, Qinhuangdao needs to breakthrough the model of traditional sightseeing tourism and realize tourism upgrade. This paper discusses on the industrial distribution and marketing strategy of rapid developing leisure cultural tourism to use the superior resources in Qinhuangdao district. © Springer-Verlag Berlin Heidelberg 2012.

Number of references: 3

Main heading: Planning

Controlled terms: Industry - Knowledge engineering - Marketing - Software engineering

Uncontrolled terms: Development strategies - Industrial distribution - Industrial strategies
- Leisure tourism - Marketing strategy - Qinhuangdao - Qinhuangdao district - Tianjin

Classification code: 913 Production Planning and Control; Manufacturing - 912 Industrial Engineering and Management - 911.4 Marketing - 911 Cost and Value Engineering; Industrial Economics - 723.4 Artificial Intelligence - 723.1 Computer Programming - 403 Urban and Regional Planning and Development

DOI: 10.1007/978-3-642-03718-4_29

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

645.

Accession number: 20122115050930

Title: Study on training system of engineering students education in the context of multipole values

Authors: Feng, Ruiyin¹ ; Ma, Liping¹ ; Zhao, Jinchuan¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qin Huangda, Hebei Province, China

Corresponding author: Feng, R. (fengzj1725@sina.cn)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 116 AISC

Issue: VOL. 1

Monograph title: Advanced Technology in Teaching - Proceedings of the 2009 3rd International Conference on Teaching and Computational Science, WTCS 2009

Issue date: 2012

Publication year: 2012

Pages: 71-76

Language: English

ISSN: 18675662

ISBN-13: 9783642112751

Document type: Conference article (CA)

Conference name: 2009 3rd International Conference on Teaching and Computational Science, WTCS 2009

Conference date: December 19, 2009 - December 20, 2009

Conference location: Shenzhen, China

Conference code: 89727

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Traditional training of college students education is in accordance with the training program established arrangements, through teacher lectures, laboratory and other sectors to complete education and training work, as training programs and social needs of the relatively inflexible nature of the mainstream training mode single, extra-curricular conscious content of education is relatively small, this kind of traditional training model can not fully meet our manpower needs of diverse students to develop multi-polarization of the needs of students need to work on cultivating a more diverse, more open, more conscious of education systems to build college students under large cylinder opener field. © 2012 Springer-Verlag Berlin Heidelberg.

Number of references: 4

Main heading: Students

Controlled terms: Cylinders (shapes) - Education computing - Personnel training

Uncontrolled terms: College students - Education and training - Education systems - large cylinder opener field - Multi-polarization - Multipoles - Social needs - Training mode - Training model - Training program - Training Systems

Classification code: 408.2 Structural Members and Shapes - 901.2 Education

DOI: 10.1007/978-3-642-11276-8_10

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

646.

Accession number: 20130515953884

Title: A least squares SVM algorithm for XML text classification

Authors: Li, Yuxiang¹ ; Cheng, Chao² ; Chen, Shuang¹ ; Chen, Hong¹ ; Liu, Aiyong¹

Author affiliation:

- 1 College of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, Hebei 066004, China
- 2 College of Education, Hebei Normal University of Science and Technology, Hebei 066004, China

Corresponding author: Li, Y. (llyuxiang@yeah.net)

Source title: Journal of Information and Computational Science

Abbreviated source title: J. Inf. Comput. Sci.

Volume: 9

Issue: 18

Issue date: December 19, 2012

Publication year: 2012

Pages: 5705-5710

Language: English

ISSN: 15487741

Document type: Journal article (JA)

Publisher: Binary Information Press, Flat F 8th Floor, Block 3, Tanner Garden, 18 Tanner Road, Hong Kong

Abstract: Least squares support vector machine is a novel powerful tool for data classification, which can solve a set of linear equations instead of a quadratic programming problem. Then, a least squares SVM algorithm for XML text classification is proposed in this paper. 223 XML texts including six XML text types are used as our experimental data. The six XML text types are computer, education, transportation, environment, military affairs, sports. Firstly, we use least squares SVM algorithm to perform XML text classification; secondly, we use traditional SVM algorithm to perform XML text classification; finally, we use BPNN algorithm to perform XML text classification. The experimental results show that the classification ability for XML text of least squares SVM algorithm is stronger than other two classifiers. Copyright © 2012 Binary Information Press.

Number of references: 12

Main heading: XML

Controlled terms: Classification (of information) - Support vector machines

Uncontrolled terms: Classification ability - Data classification - Least Square - Least squares support vector machines - Military affairs - Quadratic programming problems - Semi structured data - SVM algorithm - Text classification

Classification code: 716.1 Information Theory and Signal Processing - 723 Computer Software, Data Handling and Applications

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

647.

Accession number: 20121714971687

Title: On sino-foreign investment college PE curriculum setting from the perspective of international view

Authors: Yuan, Shujuan1 ; Fu, Zhanguo2 ; Yang, Hongwu3 ; Xi, Yu3

Author affiliation:

- 1 EandA College, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 2 Hebei Vocational and Technical College of Building Materials, Qinhuangdao, Hebei, China
- 3 Qinhuangdao Institute of Technology, Qinhuangdao, Hebei, China

Corresponding author: Yuan, S. (yuanshujuan2004@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 135

Monograph title: Knowledge Discovery and Data Mining

Issue date: 2012

Publication year: 2012

Pages: 635-642

Language: English

ISSN: 18675662

ISBN-13: 9783642277078

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: By the means of literature datum, questionnaires and interviews with experts, we analyze and study the rationality, actual effect and scientific result of the PE curriculum and teaching content arrangement in Sino-foreign cooperation running college. Then proposed the "based on their own, facing the international, people-oriented "features of physical education curriculum model for Sino-foreign cooperation running college curriculum arrange and teaching content. © 2012 Springer-Verlag GmbH Berlin Heidelberg.

Number of references: 6

Main heading: Curricula

Controlled terms: Investments - Surveys

Uncontrolled terms: College curriculum - Curriculum models - Literature data - Physical education - Scientific results - Sino-foreign cooperation running schools - Status quo - Teaching contents

Classification code: 405.3 Surveying - 901.2 Education - 911.2 Industrial Economics

DOI: 10.1007/978-3-642-27708-5_88

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

648.

Accession number: 20105213517798

Title: The algorithm for computing exact minkowski sum of 3D convex polyhedral

Authors: Guo, Xijuan¹ ; Geng, Qingjia^{1, 2} ; Zhang, Ya¹

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao 066004, China

2 College of Computer, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Guo, X. (xjguo@ysu.edu.cn)

Source title: International Journal of Innovative Computing, Information and Control

Abbreviated source title: Int. J. Innov. Comput. Inf. Control

Volume: 6

Issue: 11

Issue date: November 2010

Publication year: 2010

Pages: 5105-5114

Language: English

ISSN: 13494198

Document type: Journal article (JA)

Publisher: IJICIC Editorial Office, 9-1-1 Toroku, Kamamoto, 862 8652, Japan

Abstract: The paper separated from the previous algorithm based on the traditional Gaussian map and proposed a new algorithm of computing eiad Minkowski sum of convei polyhedral. Map the con vei polyhedron into the bottom of tetrahedron according to the definition of Regular Tetrahedron Map and Point Projection, so we can reduce the problem in 3D to 2D and compute Minlcowslci sum of two con vei polyhedral amounts to computing the overlay of only one pair of planar subdivision. Comparing with the previous mnethods this algorithm establishes mapping from 3D to 2D directly and gives the function of specific type. Through the programming, we can get the procedure of mapping. The experiment shows that it improves the efficiency greatly.
© 2010 ISSN.

Number of references: 14

Main heading: Geometry

Controlled terms: Algorithms - Computational mechanics - Three dimensional

Uncontrolled terms: Convex polyhedrons - Minkowski sum - Overlay algorithm - Point projection - Regular tetrahedron

Classification code: 902.1 Engineering Graphics - 921 Mathematics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

649.

Accession number: 20123615399462

Title: Fuzzy process and the application to option pricing in risk magement

Authors: Liu, Shu-Xia¹ ; Jing, Qin-Juan¹ ; Zhao, Dian-Yu¹

Author affiliation:

¹ College of Business Administration, Hebei Normal University of Science and Technology, QinHuangDao, China

Corresponding author: Liu, S.-X. (xxgliushuxia@126.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 147 AISC

Monograph title: Fuzzy Engineering and Operations Research

Issue date: 2012

Publication year: 2012

Pages: 285-296

Language: English

ISSN: 18675662

ISBN-13: 9783642285912

Document type: Conference article (CA)

Conference name: 5th International Conference on Fuzzy Information and Engineering, ICFIE 2011

Conference date: October 15, 2011 - October 17, 2011

Conference location: Chengdu, China

Conference code: 92328

Sponsor: Fuzzy Inf. Eng. Branch Int. Inst. Gen. Syst. Stud. (IIGSS-GB); Iran Mazandran University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: In this paper an option valuation model using fuzzy process is discussed. We demonstrate how fuzzy L process can be successfully applied to the risk neutral option pricing model. Through option pricing theory and fuzzy set theory we get results that allow us to effectively price option in a fuzzy environment. © 2012 Springer-Verlag.

Number of references: 35

Main heading: Fuzzy set theory

Controlled terms: Risk management

Uncontrolled terms: Fuzzy environments - Fuzzy variable - option - Option pricing - Option pricing models - Option Pricing Theory - Option valuation

Classification code: 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 922.1 Probability Theory

DOI: 10.1007/978-3-642-28592-9_29

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

650.

Accession number: 20113914360848

Title: Design and realization of public oriented educational video system

Authors: Hao, Xiaofang1 ; Zhu, Yulian1 ; Li, Chunyan1 ; Hui, Zan2

Author affiliation:

1 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Experimental Teaching Center, Liberal Arts of Zhejiang Normal University, Jinhua, China

Corresponding author: Hao, X. (hao_xiao_fang@126.com)

Source title: Proceedings - 2011 International Conference on Intelligence Science and Information Engineering, ISIE 2011

Abbreviated source title: Proc. - Int. Conf. Intell. Sci. Inf. Eng., ISIE

Monograph title: Proceedings - 2011 International Conference on Intelligence Science and Information Engineering, ISIE 2011

Issue date: 2011

Publication year: 2011

Pages: 156-159

Article number: 5997402

Language: English

ISBN-13: 9780769544809

Document type: Conference article (CA)

Conference name: 2011 International Conference on Intelligence Science and Information Engineering, ISIE 2011

Conference date: August 20, 2011 - August 21, 2011

Conference location: Wuhan, China

Conference code: 86553

Sponsor: Wuhan University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The article starts from successful experiences of the IP/TCP Protocol and the UNIX Operating System, analyzes the feasibility and necessity of the design and realization of public oriented education video system co-construction and sharing platform, simultaneously constructs the basic model of educational video system and proposes a series of technical plan for guaranteeing the system successful realization Coconstruction and Platform including transmission, compression code, gathering and so on. © 2011 IEEE.

Number of references: 7

Main heading: Education

Controlled terms: Design

Uncontrolled terms: Basic models - Co-construction - Compression codes - Education videos - Educational videos - Public oriented - Sharing platforms - Unix Operating System

Classification code: 408 Structural Design - 901.2 Education

DOI: 10.1109/ISIE.2011.55

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

651.

Accession number: 20123515382323

Title: Identification of vulnerable links of complex networks in cascading failures

Authors: Li, Shu-Dong^{1, 2}; Han, Kun³; Zhang, Da-Cheng⁴; Li, Li-Xiang¹; Luo, Qun¹

Author affiliation:

1 Information Security Center, Beijing University of Posts and Telecommunication, Beijing 100876, China

- 2 College of Mathematics, Shandong Institute of Business and Technology, Yantai 264005, China
- 3 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 4 Dean's Office, Hebei Vocational and Technical College of Building Materials, Qinhuangdao 066004, China

Corresponding author: Li, L.-X. (li_lixiang2006@yahoo.com.cn)

Source title: Nanjing Li Gong Daxue Xuebao/Journal of Nanjing University of Science and Technology

Abbreviated source title: Nanjing Li Gong Daxue Xuebao

Volume: 36

Issue: SUPPL.1

Issue date: June 2012

Publication year: 2012

Pages: 143-149

Language: Chinese

ISSN: 10059830

CODEN: NLIXET

Document type: Journal article (JA)

Publisher: Nanjing University of Science and Technology, 200 Xiaolingwei, Nanjing, 210094, China

Abstract: The traditional research on the vulnerability of complex networks ignores the avalanche components of complex networks in cascading failures. This work probes the inner relationship between the vulnerability of the links and the cascading failures in networks. This work models the cascading dynamics induced by the link-based-attack and defines four kinds of weighting methods to characterize the features of links. Secondly, concerned with random breakdown and intentional attack, this work analyzes cascading failures of models including BA Scale-free networks, WS small-world networks and ER random networks and three real-world networks in order to identify the characteristics of the avalanche links. The simulations show that, under both random breakdown and intentional attack, the links with small product of node betweenness centrality of the end two nodes are more vulnerable and easier to breakdown. This result gives us the important theoretical methods for analyzing the potential safety problems and protecting the complex networks.

Number of references: 16

Main heading: Computer simulation

Controlled terms: Avalanches (snowslides) - Engineering

Uncontrolled terms: Cascading failures - Complex networks - Intentional Attacks - Node betweenness centrality - Random breakdown - Random network - Real-world networks - Safety problems - Scale free networks - Small world networks - Vulnerability - Weighting methods

Classification code: 443.3 Precipitation - 723.5 Computer Applications - 901 Engineering Profession

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

652.

Accession number: 20104813441473

Title: Fitting with interpolation to resolve the construction of roads in mountains

Authors: Wang, Jinran¹ ; Yue, Xiaoyun¹ ; Guo, Yajun¹ ; Yang, Xiaojing¹ ; Guo, Yacai¹

Author affiliation:

1 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, Hebei Province, China

Corresponding author: Wang, J. (wangjinran@tom.com)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 105 CCIS

Part number: 1 of 2

Issue: PART 1

Monograph title: Information Computing and Applications - International Conference, ICICA 2010, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 376-383

Language: English

ISSN: 18650929

ISBN-10: 3642163351

ISBN-13: 9783642163357

Document type: Conference article (CA)

Conference name: International Conference on Information Computing and Applications, ICICA 2010

Conference date: October 15, 2010 - October 18, 2010

Conference location: Tangshan, China

Conference code: 82500

Sponsor: National Science Foundation of China; Hunan Institute of Engineering

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The interpolation fitting is an important method in the numerical analysis, and it has applied in the practical life widely. As for the questions proposed in the mathematics model, to resolve the construction of roads in the mountains with the least cost, this paper used local optimization theory, under the specific circumstances of the mountain set up control points, made the topographic map method into the network, established new network of roads, bridges tunnels and gave different weights, By minimizing the cost instead using the shortest path problem in fitting with interpolation and solved problem using Dijkstra algorithm, finally reached the optimal route and the minimum cost. © Springer-Verlag 2010.

Number of references: 12

Main heading: Costs

Controlled terms: Algorithms - Graph theory - Interpolation - Landforms - Maps - Optimization - Roads and streets - Site selection - Wireless sensor networks

Uncontrolled terms: Control point - Dijkstra algorithms - Least cost - Local optimizations - Mathematics model - Minimum cost - Optimal routes - Shortest path - Shortest path problem - Topographic map

Classification code: 921 Mathematics - 911 Cost and Value Engineering; Industrial Economics - 902.1 Engineering Graphics - 732 Control Devices - 723 Computer Software, Data Handling and Applications - 481.1

Geology - 406.2 Roads and Streets - 403 Urban and Regional Planning and Development - 402 Buildings and Towers

DOI: 10.1007/978-3-642-16336-4_50

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

653.

Accession number: 20102012929506

Title: Research on corporation financial distress prediction in the environment of e-business

Authors: Zhao, Rui1 ; Fu, Rongxia1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Zhao, R. (zhaorui66@126.com)

Source title: IC4E 2010 - 2010 International Conference on e-Education, e-Business, e-Management and e-Learning

Abbreviated source title: IC4E - Int. Conf. e-Educ., e-Business, e-Manage. e-Learn.

Monograph title: IC4E 2010 - 2010 International Conference on e-Education, e-Business, e-Management and e-Learning

Issue date: 2010

Publication year: 2010

Pages: 548-550

Article number: 5432554

Language: English

ISBN-13: 9780769539485

Document type: Conference article (CA)

Conference name: 2010 International Conference on e-Education, e-Business, e-Management and e-Learning, IC4E 2010

Conference date: January 22, 2010 - January 24, 2010

Conference location: Sanya, China

Conference code: 80209

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper compares the early-warning model of financial crisis home and abroad, using multiple logistic regression method to build an early warning model for enterprise financial crisis in e-commerce environment. Test results show that the model can accurately estimate the samples, and help control the samples. The accuracy rate of discriminate analysis of the model shows that the model has a good reputation for having the early-warning effect. © 2010 IEEE.

Number of references: 15

Main heading: Electronic commerce

Controlled terms: E-learning - Finance - Logistics - Regression analysis

Uncontrolled terms: Accuracy rate - Discriminate analysis - E-Commerce - Early warning - eBusiness - Financial crisis - Financial distress prediction - Multiple logistic regression - Test results

Classification code: 913 Production Planning and Control; Manufacturing - 912 Industrial Engineering and Management - 911.4 Marketing - 911.2 Industrial Economics - 922.2 Mathematical Statistics - 911.1 Cost Accounting - 723.5 Computer Applications - 723 Computer Software, Data Handling and Applications - 404.1 Military Engineering - 901.2 Education

DOI: 10.1109/IC4E.2010.81

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20120814795530

Title: Control for track of swarm systems

Authors: Mao, X.1 ; Xu, Y.2 ; Liu, J.1 ; Ma, H.1 ; Gao, R.1

Author affiliation:

1 College of Mathematics and Information Technology, Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

2 School of Science, Hebei University of Technology, Tianjin 300401, China

Corresponding author: Mao, X.

Source title: Information Technology Journal

Abbreviated source title: Inf. Technol. J.

Volume: 11

Issue: 3

Issue date: 2012

Publication year: 2012

Pages: 405-407

Language: English

ISSN: 18125638

E-ISSN: 18125646

Document type: Journal article (JA)

Publisher: Asian Network for Scientific Information, 308-Lasani Town, Sargodha Road, Faisalabad, Pakistan

Abstract: In this paper, we develop an algorithm for tracking the center of swarm systems to a desired trajectory by using the sliding-mode control method. The algorithm is robust with respect to system perturbations and external disturbance. Simulation further shows the effectiveness very well. © 2012 Asian Network for Scientific Information.

Number of references: 8

Main heading: Sliding mode control

Controlled terms: Algorithms

Uncontrolled terms: Center of swarm - Dynamic trajectory - External disturbances - Swarm systems - System perturbation

Classification code: 723 Computer Software, Data Handling and Applications - 731.1 Control Systems - 921 Mathematics

DOI: 10.3923/itj.2012.405.407

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

655.

Accession number: 20131916309067

Title: XML normalization based on entity segments

Authors: Lin, Xudong^{1, 2}; Wang, Ning²; Zeng, Xiaoning³; Sun, Yanyan¹

Author affiliation:

1 Department of Information Engineering, Environmental Management College of China, Qinhuangdao, Hebei, China

2 School of Computer and Information Technology, Beijing Jiaotong University, Beijing, China

3 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Wang, N.

Source title: Information Sciences

Abbreviated source title: Inf Sci

Volume: 239

Issue date: August 1, 2013

Publication year: 2013

Pages: 85-95

Language: English

ISSN: 00200255

CODEN: ISIJBC

Document type: Journal article (JA)

Publisher: Elsevier Inc., 360 Park Avenue South, New York, NY 10010, United States

Abstract: Compared with relational data, it is more difficult to normalize XML data. In the relational data model, semantically relevant attributes compose relations which can simplify the normalization issue. But limited by the structural characteristics, the semantic relevancies of XML data cannot be outlined explicitly. Therefore, in the existing XML normalization proposals, XML constraints hold in the unsuitable ranges and cannot authentically match the original information relevancies. In this paper, a kind of semantically relevant information sets- entity segments are used to limit the ranges where XML constraints hold. Based on entity segments, XML constraints are defined as XML attribute dependencies which can authentically reflect the original information relevancies. Simultaneously, entity primary keys are defined as the unique identifiers of entity segments, and the relationships among different entity segments are denoted by the concept of entity foreign key. To form a normalization system for XML schema design, the XML integrity rules and the XML normal form are proposed, the effect of the XML integrity rules and the XML normal form on normalizing XML data is shown by practical instances. And the information-theoretic measure is used to justify their roles further. It is concluded that entity segments are the suitable ranges where XML constraints can authentically match original information relevancies and the proposal presented in this paper is not only effective on avoiding XML data redundancies but also on keeping XML data consistencies. © 2013 Elsevier Inc. All rights reserved.

Number of references: 32

Main heading: XML

Controlled terms: Information theory - Semantics

Uncontrolled terms: Attribute dependency - Integrity rule - Normal form - Relational data models - Relevant informations - Semantic relevancy - Structural characteristics - Unique identifiers

Classification code: 716.1 Information Theory and Signal Processing - 723 Computer Software, Data Handling and Applications - 903.2 Information Dissemination

DOI: 10.1016/j.ins.2013.03.025

Database: Compendex

656.

Accession number: 20134616987009

Title: Virtual campus roaming system optimization algorithms based on virtual reality

Authors: Qing, Wei Yu1 ; Juan, Xiao1 ; Qing, Hao Dong2

Author affiliation:

1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Qinhuangdao Economic and Technological Development Zone News Center, Qinhuangdao 066004, China

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 834-836

Monograph title: Research in Materials and Manufacturing Technologies

Issue date: 2013

Publication year: 2013

Pages: 1903-1906

Language: English

ISSN: 10226680

ISBN-13: 9783037859162

Document type: Conference article (CA)

Conference name: 2013 3rd International Conference on Materials and Products Manufacturing Technology, ICMPMT 2013

Conference date: September 25, 2013 - September 26, 2013

Conference location: Guangzhou, China

Conference code: 100757

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Virtual Reality combines multiple computer technology and information technology branch, to create a simulation of the real space provided strong support for an image of human-computer interaction techniques. VR calculated by computer simulation of various lights, sound and sensor devices allow users to feel immersive, real-time perception and conduct a natural interaction. This thesis is mainly based on virtual reality technology Virtual Campus Roaming System optimization algorithm for practical engineering application of virtual reality technology to provide a basis. © (2014) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Virtual reality

Controlled terms: Algorithms - Industrial research - Information technology - Manufacture
- Sensors

Uncontrolled terms: 3D - Multiple computers - Natural interactions - Practical engineering applications - Roaming systems - System optimizations - Virtual campus - Virtual reality technology

Classification code: 537.1 Heat Treatment Processes - 723 Computer Software, Data Handling and Applications - 801 Chemistry - 901.3 Engineering Research - 903 Information Science

DOI: 10.4028/www.scientific.net/AMR.834-836.1903

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

657.

Accession number: 20140217193434

Title: Analysis on supplier selection mechanism under the concept of green procurement based on AHP

Authors: Li, Zhiqiang¹ ; Zhang, Chen²

Author affiliation:

1 Construction and Purchasing Center, Hebei Normal University of Science and Technology, Qin-HuangDao, He-Bei 066004, China

2 College of Foreign Languages, English Department, Hebei Normal University of Science and Technology, Qin-HuangDao, He-Bei 066004, China

Source title: International Journal of Applied Environmental Sciences

Abbreviated source title: Int. J. Appl. Environ. Sci.

Volume: 8

Issue: 16

Issue date: 2013

Publication year: 2013

Pages: 2051-2060

Language: English

ISSN: 09736077

E-ISSN: 09740260

Document type: Journal article (JA)

Publisher: Research India Publications, B-2/84 Ground Floor, Rohini Sec-16,, Delhi, 110085, India

Abstract: With the increasingly drying up of non-renewable resources and environmental pollution, the operation mode of traditional enterprises is being challenged, green supply chain management coming into being. Green procurement is an important part of green supply chain management, which supplier selection even is the key point. From the perspective of green procurement, this paper firstly proposes the environmental factors as an important content of evaluation index system; then, given the uncertainty and ambiguity, uses AHP (Analytic Hierarchy Process) for fuzzy comprehensive evaluation of supplier selection mechanism, and illustrates the effect of environmental factors on supplier selection mechanism through the cases. Therefore, apart from strengthening operational capacity and ensuring a reasonable fair price, enterprises for realizing their own sustainable development, still need to enhance the environmental quality management, eventually promoting their sustainable development from environment sustainable development. © Research India Publications.

Number of references: 9

Main heading: Environmental management

Controlled terms: Hierarchical systems - Industry - Planning - Supply chain management
- Sustainable development

Uncontrolled terms: AHP - AHP (analytic hierarchy process) - Environmental factors -
Environmental pollutions - Fuzzy comprehensive evaluation - Green procurement - Green supply chain
management - Supplier selection

Classification code: 961 Systems Science - 913 Production Planning and Control; Manufacturing - 912
Industrial Engineering and Management - 911.2 Industrial Economics - 911 Cost and Value Engineering;

Industrial Economics - 454.1 Environmental Engineering, General - 403 Urban and Regional Planning and Development

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

658.

Accession number: 20101912918748

Title: Calibration system design for novel photonic crystal fiber fusion splicer based on harmonic diffraction component

Authors: Hao, Yong-Fa¹ ; Gao, Xing-Long² ; Chen, Shuang³

Author affiliation:

1 Vocation and Technical College, Yanshan University, Qinhuangdao 066004, China

2 Liren College of Yanshan University, Qinhuangdao 066004, China

3 Department of Computer Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Hao, Y.-F. (531703878@qq.com)

Source title: Hongwai yu Jiguang Gongcheng/Infrared and Laser Engineering

Abbreviated source title: Hongwai yu Jiguang Gongcheng Infrared Laser Eng.

Volume: 39

Issue: 1

Issue date: February 2010

Publication year: 2010

Pages: 81-85

Language: Chinese

ISSN: 10072276

Document type: Journal article (JA)

Publisher: Chinese Society of Astronautics, P.O. Box 225-32, Tianjin, 300192, China

Abstract: Difficulties exist in conventional fusion splicer calibration system for photonic crystal fiber because of its characters such as the special single core and the structure of multiple-air holes. The key technique for calibration systems structure of optical fiber fusion splicer was presented in this paper. An abaxial optical calibration system based on harmonic diffraction lens was designed by using this lens that was compact and with high diffraction efficiency as well as excellent precision. The visible light has been used for imaging. The chromatic aberration and coma of the abaxial calibration system were eliminated effectively by the harmonic diffraction component. The diffraction efficiency was greatly improved, and the system aberration was effectively compensated. By using this optical system, a vivid PCF corss-section image was attained. By comparing two photographs of two sections and adjusting the PCF spatial position, the precise calibration of photonic crystal fibers in a fusion splicer can be successfully achieved.

Number of references: 15

Main heading: Holey fibers

Controlled terms: Aberrations - Calibration - Crystal structure - Crystal whiskers - Diffraction efficiency - Fibers - Harmonic analysis - Laser pulses - Lenses - Nonlinear optics - Optical fibers - Optical instruments - Optical systems - Photography - Photonic crystals

Uncontrolled terms: Air holes - Calibration system - Chromatic aberration - Diffraction components - Diffraction lens - Fusion splicers - Harmonic diffractive elements - Key techniques - Optical calibration - Section image - Spatial positions - Two section - Visible light

Classification code: 951 Materials Science - 817 Plastics and Other Polymers: Products and Applications - 819.4 Fiber Products - 902.2 Codes and Standards - 921.6 Numerical Methods - 933.1 Crystalline Solids - 933.1.1 Crystal Lattice - 941 Acoustical and Optical Measuring Instruments - 941.3 Optical Instruments - 941.4 Optical Variables Measurements - 942 Electric and Electronic Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 812 Ceramics, Refractories and Glass - 531.2 Metallography - 711 Electromagnetic Waves - 741 Light, Optics and Optical Devices - 741.1.1 Nonlinear Optics - 741.1.2 Fiber Optics - 801.4.2 Radiation Chemistry - 741.3 Optical Devices and Systems - 743 Holography - 744.1 Lasers, General - 746 Imaging Techniques - 801.4 Physical Chemistry - 742.1 Photography

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

659.

Accession number: 20114014389132

Title: Research on corrosion of reinforced concrete structures by chloridion in port engineering

construction

Authors: Dong, Yanying¹ ; Zhang, Lishan¹ ; Zhang, Ming¹ ; Zhu, Tianzhi¹

Author affiliation:

1 Institute of Urban Construction, Hebei Normal University of Science and Technology, Hebei, Qin Huangdao, 066000, China

Corresponding author: Dong, Y. (dongyanying9436@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 90-93

Monograph title: Advances in Civil Engineering

Issue date: 2011

Publication year: 2011

Pages: 2483-2486

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037852422

Document type: Conference article (CA)

Conference name: 2011 International Conference on Civil Engineering and Transportation, ICCET 2011

Conference date: October 14, 2011 - October 16, 2011

Conference location: Jinan, China

Conference code: 86692

Sponsor: Shandong Jianzhu University, School of Civil Engineering; Shandong University, School of Civil Engineering; Shandong Univ. Sci. Technol. Sch. Civ. Eng. Archit.; Yantai University, School of Civil Engineering; Shandong Prov. Key Lab Appraisal Retrofitting Build. Struct.

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: in port engineering construction, the source of chloridion is concrete raw materials, admixtures and the penetration of seawater. Chloridion makes rebar corrosion, and makes the expansion and crack of reinforcement concrete, leading to concrete structural damage. By selecting the right concrete raw material, appropriate admixtures and to ensure concrete construction quality, in order to effectively avoid chloridion to the damage of reinforced concrete structures in construction. © (2011) Trans Tech Publications.

Number of references: 5

Main heading: Concrete additives

Controlled terms: Civil engineering - Concrete buildings - Concrete construction - Corrosion - Engineering - Materials handling - Reinforced concrete - Seawater

Uncontrolled terms: Chloridion - Control measures - Rebar corrosion - Reinforcement concrete - Structural damages

Classification code: 409 Civil Engineering, General - 412 Concrete - 471.4 Seawater, Tides and Waves - 539.1 Metals Corrosion - 691 Bulk Handling and Unit Loads - 901 Engineering Profession

DOI: 10.4028/www.scientific.net/AMM.90-93.2483

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

660.

Accession number: 20101612871183

Title: Automatic grading of the post-harvest fruit: A review

Authors: Gao, Haisheng¹ ; Cai, Jinxing¹ ; Liu, Xiufeng¹

Author affiliation:

¹ Department of Food Engineering, Hebei Normal University of Science Technology, Changli, Hebei Province 066600, China

Corresponding author: Gao, H. (spxghs@163.com)

Source title: IFIP Advances in Information and Communication Technology

Abbreviated source title: IFIP Advances in Information and Communication Technology

Volume: 317

Monograph title: Computer and Computing Technologies in Agriculture III: Third IFIP TC 12 International Conference, CCTA 2009, Beijing, China, October 14-17, 2009, Revised Selected Papers

Issue date: 2010

Publication year: 2010

Pages: 141-146

Language: English

ISSN: 18684238

ISBN-13: 9783642122194

Document type: Conference article (CA)

Publisher: Springer New York, 233 Springer Street, New York, 10013-1578, United States

Abstract: Mechanical fruit grading and automatic fruit grading have been detailed in this paper. The studies and applications of mechanical fruit grading, and computer visual and automatic fruit grading were also particularized. Computer vision technology for detecting fruit size, color, bruise and surface defects and evaluation of fruit overall quality were discussed. The primary problems and development in the future in application of automatic fruit grading in China were pointed out in the end. © 2010 IFIP International Federation for Information Processing.

Number of references: 20

Main heading: Fruits

Controlled terms: Computer vision - Grading - Machinery - Mechanization - Surface defects

Uncontrolled terms: Automatic grading - Automatization - Computer vision technology - Fruit grading - Fruit size - Overall quality - Postharvest

Classification code: 951 Materials Science - 931.2 Physical Properties of Gases, Liquids and Solids - 913.3 Quality Assurance and Control - 821.4 Agricultural Products - 741.2 Vision - 731.6 Robot Applications - 723.5 Computer Applications - 601 Mechanical Design - 421 Strength of Building Materials; Mechanical Properties

DOI: 10.1007/978-3-642-12220-0_22

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

661.

Accession number: 20121915010302

Title: Performance and application of computer technology in interior design

Authors: Zhang, Chunmi¹ ; Hu, Jiaying¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Zhang, C. (470234853@qq.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 141 AISC

Monograph title: Advances in Computer Science and Engineering

Issue date: 2012

Publication year: 2012

Pages: 171-176

Language: English

ISSN: 18675662

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Advances in Computer Science and Engineering, CES 2012

Conference date: January 13, 2012 - January 14, 2012

Conference location: Sanya, China

Conference code: 89618

Sponsor: Huazhong University of Science and Technology; International Communication Sciences Association (ICSA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Excellent interior designers usually have their own unique idea, by which they could retain their own design style, as well as let the consignor get their intention and the final interior decoration effect in a very intuitive way. The initial manifestation mode of interior decoration is usually the free-hand drawing of a designer. This free-hand drawing requires a designer to have a solid art foundation and a preferable aesthetic flavor. They are able to endow actual interior space with a deeper sense of beauty through these free-hand drawings from the perspective of design aesthetics. Although free-hand drawing has a strong nature of expressiveness, it's not good enough in simulating the actual space and inconvenient for local adjustment and modification of the program. Design softwares, such as 3D Studio Max, Photoshop, have freed designers from complicated and redundant work of free-hand drawing. These softwares have a fairly strong function in simulating the reality, and the design rendering almost can reproduce a real scene. Thus, a designer's idea can be presented with a visual effect closed to the reality. © 2012 Springer-Verlag GmbH.

Number of references: 5

Main heading: Computer software

Controlled terms: Architectural design - Computer applications - Computer science - Interiors (building)

Uncontrolled terms: 3D Studio MAX - Computer technology - Design aesthetics - Design softwares - Design styles - Free-hand drawing - Interior designers - Interior designs - Interior space - PhotoShop - Visual effects

Classification code: 402 Buildings and Towers - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications

DOI: 10.1007/978-3-642-27948-5_24

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

662.

Accession number: 20103513202264

Title: Analysis of characteristic of stress dispersion on highway's two-layered subgrade

Authors: Cao, Haiying¹ ; Xu, Shuangjun² ; Dou, Yuanming³

Author affiliation:

1 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao, China

2 School of City Construction, Hebei Normal University of Science and Technology, Qinhuangdao, China

3 School of Civil Engineering, Hebei University of Technology, Tianjin, China

Corresponding author: Cao, H. (chy_791210@126.com)

Source title: 2010 International Conference on Mechanic Automation and Control Engineering, MACE2010

Abbreviated source title: Int. Conf. Mech. Autom. Control Eng., MACE

Monograph title: 2010 International Conference on Mechanic Automation and Control Engineering, MACE2010

Issue date: 2010

Publication year: 2010

Pages: 1015-1018

Article number: 5536689

Language: Chinese

ISBN-13: 9781424477388

Document type: Conference article (CA)

Conference name: 2010 International Conference on Mechanic Automation and Control Engineering, MACE2010

Conference date: June 26, 2010 - June 28, 2010

Conference location: Wuhan, China

Conference code: 81484

Sponsor: IEEE Beijing Section CSS Chapter; Huazhong University of Science and Technology; Wuhan University of Science and Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331,

United States

Abstract: Exploiting the potential value of dry crust can produce great technical economic benefits in important projects, especially in highway engineering, but the characteristic of dry crust's stress dispersion on two-layered subgrade needs further study at present. Based on the experimental road section of Xingtai-Linxi highway in soft soil area, the monitoring data of lamination settlement, which has been processed by virtue of theoretical formula and grey prediction, can reveal the characteristic of stress dispersion directly. Meanwhile, for resolving the difficulties created by the finiteness of actual data in relative research, a new factor of influence without conditionality is put forward, which can represent the contribution of geological condition to the effect of stress dispersion synthetically. The case study shows that the coefficients of stress dispersion obtained from actual data and other methods, such as theoretical arithmetic and numerical simulation, remain big errors, so the effect of application caused by the former methods should be paid close attention to. ©2010 IEEE.

Number of references: 15

Main heading: Dispersions

Controlled terms: Engineering - Finite element method - Forecasting - Highway engineering - Mathematical models - Mechanics - Numerical methods - Roads and streets - Transportation

Uncontrolled terms: Dry crust - Finite Element - Prediction model - Road engineering - Stress dispersion - Two-layered subgrade

Classification code: 951 Materials Science - 931.1 Mechanics - 921.6 Numerical Methods - 921 Mathematics - 901 Engineering Profession - 434 Waterway Transportation - 433 Railroad Transportation - 432 Highway Transportation - 431 Air Transportation - 406.2 Roads and Streets - 406 Highway Engineering

DOI: 10.1109/MACE.2010.5536689

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

663.

Accession number: 20113814357349

Title: Sliding-mode control for track of swarm behavior

Authors: Mao, Xuezhi^{1, 2}; Xu, Yong²; Liu, Jianping¹; Yue, Xiaoyun¹

Author affiliation:

1 College of Mathematics and Information Technology, Institute of Mathematics and Systems Science, Hebei

Normal University of Science and Technology, Hebei Qinhuangdao, 066004, China

2 School of Science, Hebei University of Technology, Tianjin 300401, China

Corresponding author: Mao, X. (mxz36@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 78

Monograph title: Fuzzy Information and Engineering 2010: Volume I

Issue date: 2010

Publication year: 2010

Pages: 217-226

Language: English

ISSN: 18675662

ISBN-13: 9783642148798

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The sliding-mode control method based on reaching law is proposed for swarm systems to eliminate chattering, which makes the agents of swarm get to an expectant trajectory and track it. This paper gives the definite control law by using the upper and lower bounds instead of uncertainties. Simulation further shows well the effectiveness. © 2010 Springer-Verlag Berlin Heidelberg.

Number of references: 19

Main heading: Sliding mode control

Uncontrolled terms: Control laws - Reaching law - Swarm - Swarm behavior - Swarm systems - tracking control - Upper and lower bounds

Classification code: 731.1 Control Systems

DOI: 10.1007/978-3-642-14880-4_24

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

664.

Accession number: 20111913967304

Title: Research on mould inhibition of sweet potato starch waste water

Authors: Liu, Shaojun¹ ; Wang, Aiyun¹ ; Zhou, Liyan¹

Author affiliation:

¹ Institute of Food Science and Technology, Hebei Normal University of Science and Technology, Hebei 066004, China

Corresponding author: Liu, S.

Source title: Proceedings of the 3rd International Conference on Environmental Technology and Knowledge Transfer

Abbreviated source title: Proc. Int. Conf. Environ. Technol. Knowl. Transf.

Monograph title: Proceedings of the 3rd International Conference on Environmental Technology and Knowledge Transfer

Issue date: 2010

Publication year: 2010

Pages: 618-619

Language: English

ISBN-13: 9783860090664

Document type: Conference article (CA)

Conference name: 3rd International Conference on Environmental Technology and Knowledge Transfer

Conference date: May 13, 2010 - May 14, 2010

Conference location: Hefei, China

Conference code: 84676

Publisher: Unavailable, United Kingdom

Abstract: A certain density sweet potato starch waste water showed stronger inhibition to the growth of some kinds of molds, but its antimicrobial action was effected mainly by temperature and pH. The tomato with several kinds of liquid was treated, such as new sweet potato starch wastewater, old sweet potato starch wastewater, drinking water, sterile water. The result proved that new sweet potato starch waste water was the best choice.

Number of references: 6

Main heading: Starch

Controlled terms: Knowledge management - Liquids - Microorganisms - Molds - Potable water - Sewage - Wastewater - Wastewater treatment

Uncontrolled terms: Antimicrobial - Antimicrobial action - Best choice - Drinking water - Sour liquid - Sterile water - Sweetpotato starch

Classification code: 931.2 Physical Properties of Gases, Liquids and Solids - 816.2 Plants and Machinery for Plastics and Other Polymers - 804.1 Organic Compounds - 723.5 Computer Applications - 461.9 Biology - 452 Municipal and Industrial Wastes; Waste Treatment and Disposal - 444 Water Resources

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

665.

Accession number: 20130716023781

Title: Adaptive Gaussian particle filter for nonlinear state estimation

Authors: Kong, Liang^{1, 2}; Kong, Lingfu¹; Wu, Peiliang¹

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao 066004, China

2 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Kong, L. (kongliangouc@yahoo.com.cn)

Source title: Chinese Control Conference, CCC

Abbreviated source title: Chinese Control Conf., CCC

Monograph title: Proceedings of the 31st Chinese Control Conference, CCC 2012

Issue date: 2012

Publication year: 2012

Pages: 2146-2150

Article number: 6390279

Language: English

ISSN: 19341768

E-ISSN: 21612927

ISBN-13: 9789881563811

Document type: Conference article (CA)

Conference name: 31st Chinese Control Conference, CCC 2012

Conference date: July 25, 2012 - July 27, 2012

Conference location: Hefei, China

Conference code: 95448

Sponsor: Technical Committee on Control Theory, CAA; Systems Engineering Society of China; University of Science and Technology of China; Academy of Mathematics and Systems Science, CAS; China Society for Industrial and Applied Mathematics

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: The Gaussian particle filter has emerged as a useful tool for nonlinear state estimation problems. The sample size used in the estimation is one of the key factors to the efficiency and accuracy of the filter. However, the fixed sample size which is usually determined empirically may be highly inappropriate since it ignores the varying errors of the processes. This paper presents a sample size adaptive Gaussian particle filter that uses statistical methods and unscented transform technique to estimate the needed sample size in the time update step and the observation update step respectively at each iteration. Simulation results show that the proposed method performs much better than the standard GPF in the nonlinear problems with great accuracy. © 2012 Chinese Assoc of Automati.

Number of references: 14

Main heading: Monte Carlo methods

Controlled terms: Gaussian distribution - Iterative methods - State estimation

Uncontrolled terms: Gaussian particle filter - Nonlinear problems - Nonlinear state estimation - Sample sizes - Unscented transform

Classification code: 731.1 Control Systems - 921.6 Numerical Methods - 922.2 Mathematical Statistics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

666.

Accession number: 20134416939575

Title: Shanghai World Expo influential quantitative assessment model

Authors: Jin, Ran-Wang¹ ; Ya, Jun-Guo¹ ; Shu, Jie-Geng² ; Tong, Juan Zhao³

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Xing Tai School of Finance and Trade, Xing Tai, China
- 3 Qin Huangdao Vocational and Technical College, Department of Basic Courses, Qinhuangdao, China

Corresponding author: Jin, R.-W. (wangjinran@126.com)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 218 LNEE

Part number: 3 of 4

Issue: VOL. 3

Monograph title: Proceedings of the International Conference on Information Engineering and Applications, IEA 2012

Issue date: 2013

Publication year: 2013

Pages: 527-535

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9781447148463

Document type: Conference article (CA)

Conference name: 2nd International Conference on Information Engineering and Applications, IEA 2012

Conference date: October 26, 2012 - October 28, 2012

Conference location: Chongqing, China

Conference code: 99822

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University

Publisher: Springer Verlag

Abstract: To assess the influence of tourism on the Shanghai World Expo, this paper selected evaluation quota, used Excel software to draw data charts and set up the appropriate function model according to the background theory of trendline data interpolation. It used the Matlab software to get fitting curve and to determine the relevant parameters established for the background trendline model of the Shanghai tourism and the tourism development of Expo influence and background values for comparison of the World Expo; finally it shows the model solving, analysis, and evaluation. © 2013 Springer-Verlag.

Number of references: 11

Main heading: Exhibitions

Controlled terms: Curve fitting - MATLAB

Uncontrolled terms: Background theory - Data interpolation - Function modeling - Line models - Quantitative assessments - Tourism - Tourism development - World expo

Classification code: 921 Mathematics - 921.6 Numerical Methods

DOI: 10.1007/978-1-4471-4847-0_65

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

667.

Accession number: 20111013715729

Title: The design and implement of educational resource sharing platform based on web service

Authors: Ren, Changquan¹ ; Luo, Xuefeng² ; Wang, Yukuo³ ; Zhou, Yanhong¹

Author affiliation:

1 Department of Computer Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Department of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

3 Department of Physical Education, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Ren, C. (qhdqchr@126.com)

Source title: Proceedings - 2010 International Forum on Information Technology and Applications, IFITA 2010

Abbreviated source title: Proc. - Int. Forum Inf. Technol. Appl., IFITA

Volume: 3

Part number: 3 of 3

Monograph title: Proceedings - 2010 International Forum on Information Technology and Applications, IFITA 2010

Issue date: 2010

Publication year: 2010

Pages: 323-326

Article number: 5634676

Language: English

ISBN-13: 9780769541150

Document type: Conference article (CA)

Conference name: 2010 International Forum on Information Technology and Applications, IFITA 2010

Conference date: July 16, 2010 - July 18, 2010

Conference location: Kunming, China

Conference code: 83975

Sponsor: Int. Inf. Technol. Appl. Assoc. (IITAA)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In the informational process of education, in order to solve the hard problem of sharing and integrating of heterogeneous educational resources, to build a loose and couple Web Service integration model via WSDL, SOAP, XML, and put forward the solution of dynamic education resources sharing platform based on Web Service. The system design implementation show that the educational resource sharing platform can compatible the existing environment of software and hardware and realize the loose and couple collaborative and active integration of the educational resources, which has the character of encapsulation, openness, integration and extensibility. The design plan of distributed heterogeneous educational resources sharing platform can realize the interconnection, inter-communication and sharing, reduce the cost of education information and speed up the process of education information, which is an advanced and effective technology. © 2010 IEEE.

Number of references: 9

Main heading: Web services

Controlled terms: Design - Education - Information dissemination - Information technology - Integration - Systems analysis

Uncontrolled terms: Active integration - Design plans - Distributed - Education resource - Educational resource - Educational resources - Hard problems - Inter-communication - Platform - Speed-ups - System design - Web service integration

Classification code: 961 Systems Science - 921.2 Calculus - 903.2 Information Dissemination - 903 Information Science - 901.2 Education - 723 Computer Software, Data Handling and Applications - 408 Structural Design

DOI: 10.1109/IFITA.2010.151

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

668.

Accession number: 20103713230529

Title: The development and implementation of full-automatic solar panels packaging equipment control system

Authors: Jiwei, Ma1 ; Jimei, Ma2 ; Cuifen, Lun1 ; Jian, Wang1 ; Zhipeng, Lin1 ; Shiguang, Liu1

Author affiliation:

1 College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Department of Electronical Engineering, Hebei University of Technology, Tianjin, China

Corresponding author: Jiwei, M. (jdxbmjw@126.com)

Source title: CCTAE 2010 - 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering

Abbreviated source title: CCTAE - Int. Conf. Comput. Commun. Technol. Agric. Eng.

Volume: 2

Part number: 2 of 3

Monograph title: CCTAE 2010 - 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering

Issue date: 2010

Publication year: 2010

Pages: 274-278

Article number: 5544892

Language: English

ISBN-13: 9781424469451

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering, CCTAE 2010

Conference date: June 12, 2010 - June 13, 2010

Conference location: Chengdu, China

Conference code: 81623

Sponsor: Wuhan Institute of Technology; Yangzhou University; International Communication Sciences Association, (ICSA); Southwestern University of Finance and Economics; Nanchang University; et. al.

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The hardware and software design method of a full-automatic solar panel packaging equipment control system is presented in this paper. As the hardware core adopts the dual MCU with parallel detection and control function, the input signal and output signal is effectively separated and it also meets the system's demand to detect a great deal of input signal and control output devices. By adopting expert PID control algorithm to control the required environmental temperature at all levels of technology process, the system is further improved dynamically and statically, and it is more reliable and efficient through a series of anti-interference measures of hardware and software. Compared to traditional PLC control, the system cost is greatly reduced, and more advanced and complex control algorithms can be easily achieved, which results to higher precision and better robust. © 2010 IEEE.

Number of references: 6

Main heading: Signal detection

Controlled terms: Agriculture - Algorithms - Computer hardware - Equipment - Packaging - Software design - Solar concentrators - Three term control systems

Uncontrolled terms: Anti-interference - Complex control algorithms - Control functions - Design method - Dual CPU - Environmental temperature - Expert PID - Hardware and software - Input signal - Output devices - Output signal - Packaging equipment - Parallel detection - PID control algorithm - Solar panels - System costs

Classification code: 921 Mathematics - 901 Engineering Profession - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 731.1 Control Systems - 723 Computer Software, Data Handling and Applications - 722 Computer Systems and Equipment - 716.1 Information Theory and Signal Processing - 702.3 Solar Cells - 694.1 Packaging, General

DOI: 10.1109/CCTAE.2010.5544892

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

669.

Accession number: 20134416933473

Title: Study of elements of developmental classroom teaching evaluation

Authors: Peng, Honglin1 ; Zeng, Xuimin2 ; Yang, Qianqian3 ; Wan, Zhenyi4

Author affiliation:

- 1 School of Arts, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Department of Social Science, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 4 Adult Educational School of Chang Li, Hebei, China

Corresponding author: Peng, H. (penghonglin@hrsk.net)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 225 LNEE

Part number: 3 of 5

Issue: VOL. 3

Monograph title: Proceedings of the 2nd International Conference on Green Communications and Networks 2012, GCN 2012

Issue date: 2013

Publication year: 2013

Pages: 363-371

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783642354694

Document type: Conference article (CA)

Conference name: 2nd International Conference on Green Communications and Networks, GCN 2012

Conference date: December 12, 2012 - December 14, 2012

Conference location: Chongqing, China

Conference code: 95479

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University; Nanyang Technological University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Classroom teaching evaluation is one of the most important tools to improve the growth of students, professional development of teachers, and the quality of classroom teaching. To evaluate classroom teaching effectively has been the basic component of modern teaching, which is not only the basis of a successful teaching, but also the basis to make all kinds of decisions about education. The author starts from learning theories, such as constructivism and collaboration, and further proposes the elements of developmental classroom teaching evaluation. © 2013 Springer-Verlag.

Number of references: 6

Main heading: Quality control

Controlled terms: Chemical elements - Teaching

Uncontrolled terms: Classroom teaching - Classroom teaching evaluations - Development - Evaluation - Indicator system - Learning Theory - Professional development of teachers

Classification code: 804 Chemical Products Generally - 901.2 Education - 913.3 Quality Assurance and Control

DOI: 10.1007/978-3-642-35470-0_44

Database: Compendex

670.

Accession number: 20122015021622

Title: Magnetic field and temperature dependence of the groundstate energy of weak-coupling magnetopolaron in quantum rods with hydrogenic impurity

Authors: Xiao, Xin¹ ; Wuyunqimuge² ; Han, Chao¹ ; Eerdunchaolu¹

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao 028043, China

Corresponding author: Eerdunchaolu (eerdunchaolu@163.com)

Source title: Optoelectronics Letters

Abbreviated source title: Optoelectron. Lett.

Volume: 8

Issue: 3

Issue date: May 2012

Publication year: 2012

Pages: 237-240

Language: English

ISSN: 16731905

Document type: Journal article (JA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The dependence of the ground-state properties of weak-coupling bound magnetopolarons in quantum rods (QRs) with hydrogenic impurity on magnetic field and temperature is studied by means of the Lee-Low-Pines (LLP) transformation method and Huybrechts linear combination operator method. The expression for the ground-state energy of the magnetopolaron is derived. Results of the numerical calculations show that the ground-state energy of weak-coupling bound magnetopolarons in QRs with hydrogenic impurity increases with increasing the cyclotron frequency of the magnetic field, the confinement strength of QRs and the temperature, but decreases with increasing the electron-phonon coupling strength and the dielectric constant ratio.

The stability of the ground state of magnetopolarons is closely related to the aspect ratio e' of the QR. The ground state of magnetopolarons is the most stable at $e' = 1$. The stability of the ground state of magnetopolarons can remarkably decrease when the value of the aspect ratio increases or decreases from 1. © 2012 Tianjin University of Technology and Springer-Verlag Berlin Heidelberg.

Number of references: 13

Main heading: Ground state

Controlled terms: Aspect ratio - Linear transformations - Magnetic fields

Uncontrolled terms: Confinement strength - Cyclotron frequency - Electron-phonon coupling strengths - Ground state properties - Ground-state energies - Huybrechts linear-combination operator - Hydrogenic impurities - Magnetopolarons - Numerical calculation - Quantum rods - Temperature dependence - Transformation methods - Weak couplings

Classification code: 701.2 Magnetism: Basic Concepts and Phenomena - 921.3 Mathematical Transformations - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 933 Solid State Physics - 943 Mechanical and Miscellaneous Measuring Instruments

DOI: 10.1007/s11801-012-1163-7

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

671.

Accession number: 20122015019706

Title: The study on college library archives service under the economic construction environment

Authors: Han, Shuhua¹ ; Wang, Hongxia¹ ; Li, Xiaohui¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Corresponding author: Han, S. (hanshuhua@cssci.info)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 267 CCIS

Part number: 2 of 2

Issue: PART 1

Monograph title: Information and Business Intelligence - International Conference, IBI 2011, Proceedings

Issue date: 2012

Publication year: 2012

Pages: 215-220

Language: English

ISSN: 18650929

ISBN-13: 9783642290831

Document type: Conference article (CA)

Conference name: International Conference on Information and Business Intelligence, IBI 2011

Conference date: December 23, 2011 - December 25, 2011

Conference location: Chongqing, China

Conference code: 89725

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University; Nanyang Technological University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Archives work should be active in economic construction is close to the new situation development needs. Currently, the archives work consciousness of service and personnel quality to be further improved, information resource development, mode of service and the digital age requirement is the gap. So, in the service target location with team quality at the same time, enhance the service initiative, improve the service quality and strengthen information resources construction, economic construction is under the environment of the main measures of the file service. © 2012 Springer-Verlag Berlin Heidelberg.

Number of references: 3

Main heading: Information science

Uncontrolled terms: Archives Service - Digital age - Economic constructions -
Information resource - Service Quality - Situation development - Target location

Classification code: 903 Information Science

DOI: 10.1007/978-3-642-29084-8_32

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

672.

Accession number: 20102813070453

Title: Analytical solution of the residual stress when the inflexion of the retaining ring is on the top

Authors: Liu, Qiumei1 ; Chang, Jincai1 ; Zheng, Junling2 ; Zheng, Shiqiu1

Author affiliation:

- 1 College of Science, Hebei Polytechnic University, Tanshan, China
- 2 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Liu, Q. (liuqiumei1981@163.com)

Source title: APWCS 2010 - 2010 Asia-Pacific Conference on Wearable Computing Systems

Abbreviated source title: APWCS - Asia-Pac. Conf. Wearable Comput. Syst.

Monograph title: APWCS 2010 - 2010 Asia-Pacific Conference on Wearable Computing Systems

Issue date: 2010

Publication year: 2010

Pages: 266-269

Article number: 5480455

Language: English

ISBN-13: 9780769540030

Document type: Conference article (CA)

Conference name: 2010 Asia-Pacific Conference on Wearable Computing Systems, APWCS 2010

Conference date: April 17, 2010 - April 18, 2010

Conference location: Shenzhen, China

Conference code: 80933

Sponsor: Intelligent Information Technology Application; Research Association

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper adopts the theory of the axis symmetry column thin shell to analyse the instance that the retaining ring is on the top, and constructs a displacement function, then works out the analytical solution of the residual stress under this instance. This conclusion is very valuable in theory engineering. © 2010 IEEE.

Number of references: 5

Main heading: Fasteners

Controlled terms: Residual stresses - Wearable computers

Uncontrolled terms: Analytical solution - Analytical solutions - Displace function - Displacement function - Retaining ring - Thin shells

Classification code: 421 Strength of Building Materials; Mechanical Properties - 605 Small Tools and Hardware - 722.4 Digital Computers and Systems

DOI: 10.1109/APWCS.2010.74

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

673.

Accession number: 20124315589327

Title: Polarized spectral properties of Er-Yb-codoped Li₆Y(BO₃)₃ single crystal

Authors: Zhao, Yuwei¹ ; Xie, Ying¹ ; Li, Zhixin¹ ; Gong, Xinghong² ; Chen, Yujin² ; Lin, Yanfu² ; Huang, Yidong²

Author affiliation:

- 1 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 National Engineering Research Center for Optoelectronic Crystalline Materials, Fujian Institute of Research on the Structure of Matter, Chinese Academy of Sciences, Fuzhou, Fujian 350002, China

Corresponding author: Zhao, Y. (ywzhao@fjirsm.ac.cn)

Source title: 2012 Symposium on Photonics and Optoelectronics, SOPO 2012

Abbreviated source title: Symp. Photonics Optoelectron., SOPO

Monograph title: 2012 Symposium on Photonics and Optoelectronics, SOPO 2012

Issue date: 2012

Publication year: 2012

Article number: 6271024

Language: English

ISBN-13: 9781457709111

Document type: Conference article (CA)

Conference name: 2012 International Symposium on Photonics and Optoelectronics, SOPO 2012

Conference date: May 21, 2012 - May 23, 2012

Conference location: Shanghai, China

Conference code: 93170

Sponsor: IEEE Photonics Society; IEEE Wuhan Section; Optics and Photonics Society of Singapore; Wuhan University; Beijing Jiaotong University

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: Er-Yb-codoped Li₆Y(BO₃)₃ single crystal was grown by the Czochralski method. The accurate concentration of Er³⁺ and Yb³⁺ ions in the crystal was measured. The polarized absorption and fluorescence spectra of the Er³⁺-doped Li₆Y(BO₃)₃ crystal were recorded at room temperature. The fluorescence decay curves at 1030 and 1535nm were recorded. The efficiency of energy transfer from Yb³⁺ to Er³⁺ ions was estimated. © 2012 IEEE.

Number of references: 15

Main heading: Erbium

Controlled terms: Doping (additives) - Energy transfer - Fluorescence - Optoelectronic devices - Photonics - Single crystals - Ytterbium

Uncontrolled terms: Efficiency of energy transfer - Fluorescence decays - Optical materials and properties - Polarized absorption - Room temperature - Spectral properties

Classification code: 547.2 Rare Earth Metals - 641.2 Heat Transfer - 741.1 Light/Optics - 741.3 Optical Devices and Systems - 801 Chemistry - 933.1 Crystalline Solids

Numerical data indexing: Size 1.54e-06m

DOI: 10.1109/SOPO.2012.6271024

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

674.

Accession number: 20112614093752

Title: Structural, elastic, and thermodynamic properties of ZnSe_xTe_{1-x}: A first-principles study

Authors: Zhu, Y.1, 2 ; Zhang, S.H.1 ; Zhang, X.Y.1 ; Hao, A.M.1, 2 ; Zhang, S.L.1 ; Yang, F.2 ; Yang, J.K.1 ; Liu, R.P.1

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, R. P. (riping@ysu.edu.cn)

Source title: Computational Materials Science

Abbreviated source title: Comput Mater Sci

Volume: 50

Issue: 10

Issue date: August-September 2011

Publication year: 2011

Pages: 2745-2749

Language: English

ISSN: 09270256

CODEN: CMMSEM

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: The structural, elastic, and thermodynamic properties, as well as optical bowing parameters of $\text{ZnSe}_x\text{Te}_{1-x}$ ternary alloys are investigated. We adopt the Landau-Lifshitz structural models using the first-principles method, and show that alloys of different structures but identical compositions exhibit highly similar parameters. Results also reveal that the structural relaxation effect plays a crucial role in the gap bowing parameter. The different constituents of the alloys are all mechanically stable. However, they exhibit phase separation at low temperatures because of thermodynamic reasons. The calculated phase diagram shows the temperature at which a stable alloy may be formed for the different compositions of Se. It also demonstrates that the lowest temperature indicating the thermodynamic stability of alloys over the whole composition range (the critical temperature) is about 757 K. © 2011 Elsevier B.V. All rights reserved.

Number of references: 34

Main heading: Temperature

Controlled terms: Alloys - Model structures - Phase diagrams - Phase separation - Thermodynamic stability - Thermodynamics - Zinc alloys

Uncontrolled terms: Bowing parameters - Composition ranges - Critical temperatures - Different structure - First principles method - First-principles study - Gap bowing - Landau-Lifshitz - Low temperatures - Mechanically stable - Structural models

Classification code: 408 Structural Design - 531 Metallurgy and Metallography - 531.1 Metallurgy - 546.3 Zinc and Alloys - 641.1 Thermodynamics - 701 Electricity and Magnetism

Numerical data indexing: Temperature 7.57e+02K

DOI: 10.1016/j.commat.2011.03.037

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

675.

Accession number: 20130916054176

Title: Green and red long lasting phosphorescence (LLP) in γ -Zn₃(PO₄)₂:Mn²⁺/Ga³⁺

Authors: Liu, Ziran¹ ; Zhong, Ruixia²

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 School of Resources and Materials, Northeastern University at Qinhuangdao, Qinhuangdao 066004, China

Corresponding author: Liu, Z. (liuziran_1981@163.com)

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 556

Issue date: April 15, 2013

Publication year: 2013

Pages: 6-11

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: Green and red long lasting phosphorescent (LLP) phenomenon in γ -Zn₃(PO₄)₂:Mn²⁺/Ga³⁺ was systematically investigated. Two emission bands are observed in γ -Zn₃(PO₄)₂:Mn²⁺/Ga³⁺, which are

respectively centered at 507 nm and 620 nm. The green and the red long afterglow have been observed after removing the ultraviolet light. The spectral overlap between the green emission band and the excitation band monitored at 620 nm, which supports the feasibility of the energy transfer from Mn^{2+} (CN = 4) to Mn^{2+} (CN = 6), has been studied. The distribution of Mn^{2+} ions in tetrahedral and octahedral lattice changes with the incorporation of Ga^{3+} ions. The ratio of the green to the red enhances because of the increase of Ga^{3+} concentration. With the introduction of Ga^{3+} , the color of the afterglow has been regulated, and the performance has been improved. © 2012 Elsevier B.V. All rights reserved.

Number of references: 18

Main heading: Manganese compounds

Controlled terms: Energy transfer - Light emission - Luminescence - Manganese - Phosphorescence - Ultraviolet radiation - Zinc

Uncontrolled terms: Emission bands - Excitation bands - Green emission bands - Long afterglow - Long lasting phosphorescent - Octahedral lattice - Red long afterglows - Red long lasting phosphorescence - Spectral overlap - Ultra-violet light

Classification code: 543.2 Manganese and Alloys - 546.3 Zinc and Alloys - 641.2 Heat Transfer - 741.1 Light/Optics - 804.1 Organic Compounds

Numerical data indexing: Size 5.07e-07m, Size 6.20e-07m

DOI: 10.1016/j.jallcom.2012.12.128

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

676.

Accession number: 20105213523279

Title: Viscosity approximation methods with weak contraction for L-Lipschitzian pseudocontractive self-mapping

Authors: Li, Suhong¹ ; Su, Yongfu² ; Zhang, Lingmin¹ ; Zhao, Huijuan¹ ; Li, Lihua¹

Author affiliation:

1 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

2 Department of Mathematics, Tianjin Polytechnic University, Tianjin, 300160, China

Corresponding author: Li, S. (lisuhong103@eyou.com)

Source title: Nonlinear Analysis, Theory, Methods and Applications

Abbreviated source title: Nonlinear Anal Theory Methods Appl

Volume: 74

Issue: 4

Issue date: February 15, 2011

Publication year: 2011

Pages: 1031-1039

Language: English

ISSN: 0362546X

CODEN: NOANDD

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: In this paper, under the framework of real reflexive Banach space which admits a weakly sequentially continuous duality mapping from E to E^* , we study the strong convergence of an implicit and an explicit composite viscosity approximation algorithm (I) and (II), respectively for a pseudocontractive mapping T by using the weakly contractive mapping f as follows: $x_{t,s} = tf(x_t, s) + (1-t)y_t, s, y_t, s = sx_{t,s} + (1-s)Tx_t, s$ and $x_{n+1} = \alpha_n f(x_n) + (1-\alpha_n)y_n, y_n = \beta_n x_n + (1-\beta_n)Tx_n, \alpha_n < 0$. Our results unify, improve and complement several recent ones existing in the current literature. © 2010 Elsevier Ltd. All rights reserved.

Number of references: 34

Main heading: Approximation algorithms

Controlled terms: Approximation theory - Banach spaces - Convergence of numerical methods - Mapping - Topology - Variational techniques - Viscosity

Uncontrolled terms: Contractive mapping - Duality mapping - Lipschitzian - Pseudocontractive - Pseudocontractive mapping - Reflexive Banach spaces - Strong convergence - Variational inequalities - Viscosity approximation - Viscosity approximation method - Weak contraction

Classification code: 631.1 Fluid Flow, General - 902.1 Engineering Graphics - 921 Mathematics

Numerical data indexing: Time 1.00e+00s

DOI: 10.1016/j.na.2010.07.024

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

677.

Accession number: 20124415622876

Title: Dynamic modeling of 3-DOF parallel mechanical leg and peak prediction of servo motor

Authors: Rong, Yu1, 2 ; Jin, Zhen-Lin1

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao 066004, China

2 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Rong, Y. (zljn@ysu.edu.cn)

Source title: Guangxue Jingmi Gongcheng/Optics and Precision Engineering

Abbreviated source title: Guangxue Jingmi Gongcheng

Volume: 20

Issue: 9

Issue date: September 2012

Publication year: 2012

Pages: 1974-1983

Language: Chinese

ISSN: 1004924X

CODEN: GJGOF4

Document type: Journal article (JA)

Publisher: Chinese Academy of Sciences, 140 Renmin Street, Changchun, 130022, China

Abstract: A 3-DOF mechanical leg with compact structure, strong carrying capacity and the rotational motion in decoupled was proposed. To analyze the drive parameters of the 3-DOF parallel mechanical leg, a dynamic model was established and the peak of a servo motor was predicted based on the dynamic model. Firstly, by analyzing the motion parameters of the leg mechanism, the dynamic model was established based on the Lagrange equation, and the drive force acted on the mechanism was given. Then, based on the dynamic model, a peak prediction model of the servo motor for the drive speed and torque was defined. Finally, for a given motion equation and a set of structural parameters, the time curves of drive speed and torque were obtained, the dynamics of the mechanism was given and the peak prediction model was proved to be correct. Calculations show that the peaks of the drive speeds from three driving motors are 19, 17, 27 r/s for N_x , N_y and N_w , and the peaks of the drive torque are 5.8, 3.1, 4.4 N·m for E_x , E_y and E_w respectively.

Number of references: 18

Main heading: Torque motors

Controlled terms: Dynamic analysis - Dynamic models - Equations of motion - Solar cell arrays

Uncontrolled terms: Compact structures - Drive force - Drive parameters - Drive torque - Driving motors - Lagrange equation - Leg mechanism - Motion parameters - Parallel mechanical leg - Prediction model - Rotational motion - Structural parameter - Time curves

Classification code: 422.2 Strength of Building Materials : Test Methods - 615.2 Solar Power - 705.3 Electric Motors - 921 Mathematics - 921.2 Calculus

Numerical data indexing: Torque 4.40e+00N*m

DOI: 10.3788/OPE.20122009.1974

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

678.

Accession number: 20112614105038

Title: Construction situation and countermeasure of urban emergency evacuation refuge

Authors: Zhang, Lishan¹ ; Meng, Deguang¹ ; Dong, Yanying¹ ; Xing, Yan¹

Author affiliation:

1 Urban Construction College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, L. (zhanglishan9436@163.com)

Source title: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011 - Proceedings

Abbreviated source title: Int. Conf. Electr. Technol. Civ. Eng., ICETCE - Proc.

Monograph title: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 1125-1127

Article number: 5774722

Language: English

ISBN-13: 9781457702907

Document type: Conference article (CA)

Conference name: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011

Conference date: April 22, 2011 - April 24, 2011

Conference location: Lushan, China

Conference code: 85256

Sponsor: IEEE Beijing Section ED Chapter

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Emergency evacuation refuge is a rescue and command place. It should have a scientific planning, construction and standardized management. At first, the situation of urban emergency evacuation refuge in china is introduced. Then, some construction planning principles of emergency refuge for special disaster are put forward. At last, some countermeasures to accelerate the construction of emergency evacuation shelter are summarized. © 2011 IEEE.

Number of references: 5

Main heading: Planning

Controlled terms: Civil engineering

Uncontrolled terms: Construction planning - countermeasure - Emergency evacuation - Scientific planning

Classification code: 403 Urban and Regional Planning and Development - 409 Civil Engineering, General

DOI: 10.1109/ICETCE.2011.5774722

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

679.

Accession number: 20121414931380

Title: Research of online water quality monitoring system based on Zigbee network

Authors: Zhou, Yanhong¹ ; Wen, Dong² ; Yuan, Fuyong² ; Li, Jianye² ; Li, Mingwei³

Author affiliation:

1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

2 College of Information Science and Engineering, Yanshan University, Qinhuangdao, Hebei 066004, China

3 College of Foreign Languages, Yanshan University, Qinhuangdao, Hebei 066004, China

Corresponding author: Wen, D. (xjwd@ysu.edu.cn)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 4

Issue: 5

Issue date: March 2012

Publication year: 2012

Pages: 255-261

Language: English

ISSN: 19763700

E-ISSN: 22339345

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: For the characteristics of time consuming, complicated steps and lack of automatic of the traditional water quality monitoring, an automated real-time online water quality monitoring program based on wireless sensor network (WSN) is presented in this paper. This system combined micro-UV-Vis Fiber Optic Spectrometer with ZigBee Wireless Communication Technique to constitute Wireless Sensor Network Node which is placed at the monitoring water, and then used the ZigBee protocol's real-time transmission and monitor data to raise the automation and monitoring level. This paper discussed the network architecture based on ZigBee protocol, made design of Optical System of sensor node and the hardware and software and then made spectroscopy signal real time collection and communication test. The experiment results show that the industrial monitoring system of water quality has few transmission errors, better anti-jamming ability, small size of sensor node, fast inspection speed. All these features are suitable for real-time and continuous monitoring the pollution level of industrial sewage.

Number of references: 15

Main heading: Zigbee

Controlled terms: Network architecture - Network protocols - Optical systems - Sensor nodes - Sewage - Spectrometers - Water quality - Wireless telecommunication systems

Uncontrolled terms: Anti-jamming ability - Communication test - Continuous monitoring - Fiber-optic spectrometers - Hardware and software - Industrial monitoring systems - On-line water quality monitoring systems - Pollution level - Real-time collection - Real-time transmissions - Small size - Transmission error - Visible light - Water quality monitoring - Wireless sensor network (WSN) - ZigBee networks - ZigBee wireless communication

Classification code: 723 Computer Software, Data Handling and Applications - 722.3 Data Communication, Equipment and Techniques - 722 Computer Systems and Equipment - 741.3 Optical Devices and Systems - 717 Optical Communication - 453.2 Water Pollution Control - 452.1 Sewage - 716 Telecommunication; Radar, Radio and Television

DOI: 10.4156/AISS.vol4.issue5.30

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

680.

Accession number: 20101212777488

Title: Robust exponential stability of Markovian jumping neural networks with mode-dependent delay

Authors: Han, Wei1 ; Liu, Yan2 ; Wang, Linshan3

Author affiliation:

1 Department of Mathematics, North University of China, Taiyuan, Shanxi 030051, China

2 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

3 Department of Mathematics, Ocean University of China, Qingdao, 266071, China

Corresponding author: Han, W. (qd_hanweiwei@126.com)

Source title: Communications in Nonlinear Science and Numerical Simulation

Abbreviated source title: Comm. Nonlinear Sci. Numer. Simul.

Volume: 15

Issue: 9

Issue date: September 2010

Publication year: 2010

Pages: 2529-2535

Language: English

ISSN: 10075704

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: This paper deals with the robust exponential stability problem for a class of Markovian jumping neural networks with time delay. The delay considered varies randomly, depending on the mode of the networks. By using a new Lyapunov-Krasovskii functional, a delay-dependent stability criterion is presented, which can be expressed in terms of linear matrix inequalities (LMIs). A numerical example is given to show the effectiveness of the results. © 2009 Elsevier B.V. All rights reserved.

Number of references: 24

Main heading: Linear matrix inequalities

Controlled terms: Delay control systems - Exponential functions - Fuzzy control - Lyapunov functions - Neural networks - Stability criteria - Uncertain systems

Uncontrolled terms: Delay dependent stability criterion - Lyapunov-Krasovskii functionals - Markovian - Markovian jumping neural networks - Numerical example - Robust exponential stability

Classification code: 921.1 Algebra - 921 Mathematics - 731.4 System Stability - 961 Systems Science - 731.1 Control Systems - 723.4 Artificial Intelligence - 461.1 Biomedical Engineering - 731 Automatic Control Principles and Applications

DOI: 10.1016/j.cnsns.2009.09.024

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

681.

Accession number: 20111013715522

Title: Workflow exception handling method based on ECA rules and advanced transaction characteristics

Authors: Wang, Yukuo¹ ; Ji, Yapin² ; Wang, Yuehui³ ; Ren, Changquan⁴

Author affiliation:

1 Department of Physical Education, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Department of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

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066004, China

Corresponding author: Wang, Y. (wyk3003@126.com)

Source title: Proceedings - 2010 International Forum on Information Technology and Applications, IFITA 2010

Abbreviated source title: Proc. - Int. Forum Inf. Technol. Appl., IFITA

Volume: 1

Part number: 1 of 3

Monograph title: Proceedings - 2010 International Forum on Information Technology and Applications, IFITA 2010

Issue date: 2010

Publication year: 2010

Pages: 224-226

Article number: 5635112

Language: English

ISBN-13: 9780769541150

Document type: Conference article (CA)

Conference name: 2010 International Forum on Information Technology and Applications, IFITA 2010

Conference date: July 16, 2010 - July 18, 2010

Conference location: Kunming, China

Conference code: 83975

Sponsor: Int. Inf. Technol. Appl. Assoc. (IITAA)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In order to handle the exceptions in traditional workflow system, this paper presents a new workflow exception handling model based on ECA rules, which can effectively solve the workflow execution exception problems. The concrete design is to present a new solving model for the workflow exceptions by

connecting ECA rules with transaction conception in database field, which analyses and utilizes the advanced transaction characteristics of workflow and is represented by nested transactions. This workflow exception handling model strengthens the connection with ECA rules and can effectively solve the workflow execution exceptions. The nested transaction workflow exception handling strategy and method based on ECA rules, compared to the traditional workflow exception handling frame, can better improve the effect of workflow exception handling. © 2010 IEEE.

Number of references: 8

Main heading: Management

Controlled terms: Client server computer systems - Design - Information technology

Uncontrolled terms: Advanced transaction - Concrete design - ECA rule - ECA4 - Exception handling - Exception2 - Model-based - Nested transactions - Transaction3 - Work-flow systems - Workflow 1 - Workflow execution

Classification code: 408 Structural Design - 722.4 Digital Computers and Systems - 903 Information Science - 912.2 Management

DOI: 10.1109/IFITA.2010.152

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

682.

Accession number: 20110113537506

Title: Frequency distribution of T > C polymorphisms in the seed region of the chicken Mir-1644 gene

Authors: Zhang, Chuan-Sheng¹ ; Geng, Li-Ying¹ ; Liu, Zheng-Zhu¹ ; Fu, Zhi-Xin¹ ; Ping, Shen¹ ; Du, Li-Xin²

Author affiliation:

1 Department of Animal Science, Hebei Normal University of Science and Technology, HNUST, Qinhuangdao, China

2 National Center for Molecular and Breeding of Animal, Institute of Animal Science, Chinese Academy of Agricultural Sciences, IASCAAS, Beijing, China

Corresponding author: Zhang, C.-S. (cszhang1976@126.com)

Source title: Proceedings - 2010 3rd International Conference on Biomedical Engineering and Informatics, BMEI 2010

Abbreviated source title: Proc. - Int. Conf. Biomed. Eng. Inf., BMEI

Volume: 6

Part number: 6 of 7

Monograph title: Proceedings - 2010 3rd International Conference on Biomedical Engineering and Informatics, BMEI 2010

Issue date: 2010

Publication year: 2010

Pages: 2570-2573

Article number: 5639712

Language: English

ISBN-13: 9781424464968

Document type: Conference article (CA)

Conference name: 3rd International Conference on BioMedical Engineering and Informatics, BMEI 2010

Conference date: October 16, 2010 - October 18, 2010

Conference location: Yantai, China

Conference code: 83103

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: MicroRNAs constitute a growing class of non-coding RNAs that are thought to regulate gene expression via translational repression in animal. Single nucleotide polymorphisms (SNPs) in microRNA may modify various biological processes by influencing the processing and/or target selection of microRNAs. Therefore, genetic background differences in distribution of microRNA gene polymorphisms may be an important factor in determining phenotypic variation. In the present study, we investigated a T to C polymorphism in the seed region of mature mir-1644 sequence with forced PCR-RFLP using HpaII nuclease in six chicken populations: 102 individuals from Jiningbairi, Langya, Siyuwugu, Wenshangluhua, Beijingyou and Leghorn Chicken breeds. The results showed that genotype frequencies of the mir-1644 T>C did not differ significantly from those

expected under the Hardy-Weinberg equilibrium, and Wenshangluhua chicken have significant differences in the frequency and other chicken breeds. Bioinformatics analyses indicated that mir-1644 T>C polymorphism may alter target selection and secondary structure. Thus exert profound biological effects in the formation of some special phenotype of Wenshangluhua chicken.. ©2010 IEEE.

Number of references: 17

Main heading: Animals

Controlled terms: Bioinformatics - Gene expression - Polymerase chain reaction - Polymorphism

Uncontrolled terms: Bioinformatics analysis - Biological effects - Biological process - Chicken - Frequency distributions - Gene polymorphism - Genetic backgrounds - Genotype frequencies - Hardy-Weinberg equilibrium - MicroRNAs - mir-1644 - Non-coding RNAs - PCR-RFLP - Phenotypic variations - Single nucleotide polymorphisms - SNP - Target selection

Classification code: 951 Materials Science - 933 Solid State Physics - 903 Information Science - 822 Food Technology - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 814 Leather and Tanning - 801.2 Biochemistry - 471 Marine Science and Oceanography - 461 Bioengineering and Biology

DOI: 10.1109/BMEI.2010.5639712

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

683.

Accession number: 20104613386515

Title: Design and research of fire early warning system based on topological structure for forest

Authors: Wang, Jianfeng¹ ; Li, Yichen² ; Chen, Panfeng³ ; Ma, Jiwei³ ; Lon, Cuifen³ ; Liu, Shiguang³

Author affiliation:

1 Mathematics and Information Science and Technology College, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

2 College of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

3 Electrical and Mechanical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Wang, J. (wjfqhd@126.com)

Source title: 3rd International Workshop on Advanced Computational Intelligence, IWACI 2010

Abbreviated source title: Int. Workshop Adv. Comput. Intell., IWACI

Monograph title: 3rd International Workshop on Advanced Computational Intelligence, IWACI 2010

Issue date: 2010

Publication year: 2010

Pages: 579-582

Article number: 5585125

Language: English

ISBN-13: 9781424463343

Document type: Conference article (CA)

Conference name: 3rd International Workshop on Advanced Computational Intelligence, IWACI 2010

Conference date: August 25, 2010 - August 27, 2010

Conference location: Suzhou, China

Conference code: 82125

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: To improve the flexibility and capability-price ratio, an approach for designing the forest fire early warning system was first proposed. In this system, the wireless communication methods combined with wired one based on topological structure was adopted. Second, we discussed and introduced the characteristics of structure, working principle and design method of the system in detail. Finally, a large number of simulated experiments were done. And the experimental results showed that the proposed system was outstanding among others with the advantages of stability, reliability and low power consumption.

Number of references: 7

Main heading: Telephone systems

Controlled terms: Artificial intelligence - Deforestation - Topology - Wireless telecommunication systems

Uncontrolled terms: Design method - Early Warning System - Forest fires - Low-power consumption - Price ratio - Simulated experiments - Topological structure - Wireless communications - Working principles

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718.1 Telephone Systems and Equipment - 723.4 Artificial Intelligence - 821.0 Woodlands and Forestry - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.1109/IWACI.2010.5585125

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

684.

Accession number: 20112914164457

Title: Exploration and analysis of copyright infringement liability in P2P system

Authors: Zhou, Jianhong¹

Author affiliation:

1 College of Humanities and Law, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Zhou, J. (zhjhong163@163.com)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 153 CCIS

Part number: 2 of 2

Issue: PART 2

Monograph title: Advanced Research on Computer Science and Information Engineering - International Conference, CSIE 2011, Proceedings

Issue date: 2011

Publication year: 2011

Pages: 232-238

Language: English

ISSN: 18650929

ISBN-13: 9783642214103

Document type: Conference article (CA)

Conference name: International Conference on Advanced Research on Computer Science and Information Engineering, CSIE 2011

Conference date: May 21, 2011 - May 22, 2011

Conference location: Zhengzhou, China

Conference code: 85618

Sponsor: International Science and Education Researcher Association (ISER); Yellow River Conservancy Technical Institute; VIP Information Conference Center; Beijing Gireida Education Co. Ltd.

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The application of P2P system makes the spread of the works faster and more convenient, which also makes the infringement possible. To seek a balance between the spread of cultural and artistic works and the protection of the benefits of the copyright holders, this issue is studied from the perspective of combining Network technology with legal method. It is believed that the principle of fault liability can be applied to copyright infringement in P2P system. According to this principle, as long as the content provided by ICP infringes, it should be responsible for that, the software provider should bear tort liability in case he continues to provide services while knowing or should know the software piracy, the "notice and take down" rules applies to software operators, when evidences shows that someone utilizes P2P system to infringe copyright, software operators shall stop the corresponding service or will be exposed to tort liability. While for the P2P users, they can be asked to take the responsibility for the works in their shared folders. © 2011 Springer-Verlag.

Number of references: 11

Main heading: Peer to peer networks

Controlled terms: Computer crime - Computer science - Computer software - Copyrights
- Distributed computer systems

Uncontrolled terms: Artistic works - consistency of interests and risks - Copyright holders
- Copyright infringement - fault liability - Network technologies - P2P system

Classification code: 722 Computer Systems and Equipment - 722.4 Digital Computers and Systems -
723 Computer Software, Data Handling and Applications - 903 Information Science

DOI: 10.1007/978-3-642-21411-0_38

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

685.

Accession number: 20102012946059

Title: Nonconforming finite element method for nonlinear parabolic equations

Authors: Shi, Dongyang1 ; Zhang, Buying2

Author affiliation:

1 Department of Mathematics, Zhengzhou University, Zhengzhou, 450052, China

2 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Shi, D.

Source title: Journal of Systems Science and Complexity

Abbreviated source title: J. Syst. Sci. Complex.

Volume: 23

Issue: 2

Issue date: April 2010

Publication year: 2010

Pages: 395-402

Language: English

ISSN: 10096124

E-ISSN: 15597067

Document type: Journal article (JA)

Publisher: Springer New York, 233 Springer Street, New York, NY 10013-1578, United States

Abstract: A nonconforming finite element method for the nonlinear parabolic equations is studied in this paper. The convergence analysis is presented and the optimal error estimate in $L_2(\{\text{norm of matrix}\} \cdot \{\text{norm of matrix}\}h)$ norm is obtained through Ritz projection technique, where $\{\text{norm of matrix}\} \cdot \{\text{norm of matrix}\}h$ is a norm over the finite element space. © 2010 Institute of Systems Science, Academy of Mathematics and Systems Science, CAS and Springer-Verlag Berlin Heidelberg.

Number of references: 17

Main heading: Nonlinear equations

Controlled terms: Finite element method - Optimization - Partial differential equations

Uncontrolled terms: Convergence analysis - Finite element space - matrix - Nonconforming finite element - Nonconforming finite element method - Nonlinear parabolic equations - Optimal error estimate - Ritz projection

Classification code: 921.1 Algebra - 921.2 Calculus - 921.5 Optimization Techniques - 921.6 Numerical Methods

DOI: 10.1007/s11424-010-7120-2

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

686.

Accession number: 20114414471055

Title: Basic characteristics of air bubble forming process at the aperture

Authors: Li, Chunliu1 ; Zhang, Chengxing2 ; Hu, Zhili1

Author affiliation:

1 College of urban construction, HeBei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 Xuchang University, Xuchang, Henan, 461000, China

Corresponding author: Li, C. (lcicc_010@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 71-78

Monograph title: Frontiers of Green Building, Materials and Civil Engineering

Issue date: 2011

Publication year: 2011

Pages: 4989-4993

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037852033

Document type: Conference article (CA)

Conference name: 2011 International Conference on Green Building, Materials and Civil Engineering, GBMCE 2011

Conference date: August 22, 2011 - August 23, 2011

Conference location: Shangri-La, China

Conference code: 87032

Sponsor: Control Engineering and Information Science Research Association; Int. Front. Sci. Technol. Res. Assoc.; Trans Tech Publications; Chongqing Xueya Conferences Catering Co.,Ltd

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: On the basis of old methods of how to resolve the diameter of air bubbles in stationary water, the author uses numerical value certificated that the relation between the diameter of air bubbles and the airflow velocity of aperture is hyperbola. Then the author proves the connection of the volume of air bubbles, gas flux and the diameter of aperture, which the air bubble is forming at the first stage. It is concluded that the volume of air bubbles will expand with the diameter of aperture enlarging when the gas flux is remain unchanged. Furthermore, the volume of air bubbles will expand with the gas flux enlarging when the diameter of aperture unchanged. © (2011) Trans Tech Publications, Switzerland.

Number of references: 8

Main heading: Numerical methods

Controlled terms: Civil engineering

Uncontrolled terms: Air bubbles - Air flow velocity - Diameter of aperture - Forming process - Gas flux - Numerical values - Volume of air bubbles

Classification code: 409 Civil Engineering, General - 921.6 Numerical Methods

DOI: 10.4028/www.scientific.net/AMM.71-78.4989

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

687.

Accession number: 20114714533858

Title: The experimental research of the influence of accumulator before servo valve to mill control precision

Authors: Chen, Chunming^{1, 2}; Wang, Yiqun¹; Yang, Yang¹

Author affiliation:

1 Yanshan University, Qinhuangdao, 066004, China

2 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Chen, C. (gentlewind_chen@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 121-126

Monograph title: Frontiers of Manufacturing and Design Science II

Issue date: 2012

Publication year: 2012

Pages: 3583-3588

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037852828

Document type: Conference article (CA)

Conference name: 2nd International Conference on Frontiers of Manufacturing and Design Science, ICFMD 2011

Conference date: December 11, 2011 - December 13, 2011

Conference location: Taichung, Taiwan

Conference code: 87362

Sponsor: Control Eng. Inf. Sci. Res. Assoc. (CEIS); Int. Front. Sci. Technol. Res. Assoc.; National Chin-Yi University of Technology; Integrated Research Center for Green Living Techniques; Trans Tech Publications

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Oil source made up of constant pressure variable displacement pump, accumulator, and pipeline is widely used to provide stable pressure for electro-hydraulic control system in practical engineering. Based on the experiment, the relationship between initial charging pressure & volume of the accumulator at inlet of the servo valve and control precision is analyzed in detail, and coupling rules between the load variation and the pressure fluctuations of oil-source are obtained, the rules can give reference for selecting initial charging pressure & volume of the accumulator according to the requirement of system control precision, which can further improve control precision and product quality by optimizing equipment parameters.

Number of references: 9

Main heading: Quality control

Controlled terms: Hydraulic accumulators - Industrial research - Oil wells - Pneumatic servomechanisms - Precision engineering

Uncontrolled terms: Accumulator - Constant pressures - Control precision - Electro-hydraulic control systems - Equipment parameters - Experimental research - Influence of control precision - Load variations - Mill control - Oil sources - Oil-source - Practical engineering - Pressure fluctuation - Product quality - Servo-valve - System control

Classification code: 512.1.1 Oil Fields - 601.1 Mechanical Devices - 732.1 Control Equipment - 761 Nanotechnology - 901.3 Engineering Research - 913.3 Quality Assurance and Control

DOI: 10.4028/www.scientific.net/AMM.121-126.3583

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

688.

Accession number: 20123615399573

Title: The PE teaching in higher education based on the integration of the information technology and curriculum

Authors: Liu, Daduo¹ ; Zhang, Xianhui² ; Li, Rongwei² ; Gao, Chao³ ; Liu, Xiangfei⁴

Author affiliation:

1 College of Physical Education, Jilin Normal University, Siping, Jilin, China

2 Department of Physical Education, Hebei Normal University of Science and Technology, Qin Huangdao, China

3 No.3 Middle School of Liaoyang, Liaoyang Liaoning, China

4 Qinhuangdao Radio and TV University, Qin Huangdao, China

Corresponding author: Liu, D. (liu_daduo@sina.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 163 AISC

Monograph title: Advanced Technology in Teaching - Selected Papers from the 2012 International Conference on Teaching and Computational Science, ICTCS 2012

Issue date: 2012

Publication year: 2012

Pages: 355-360

Language: English

ISSN: 18675662

ISBN-13: 9783642294570

Document type: Conference article (CA)

Conference name: 2012 International Conference on Teaching and Computational Science, ICTCS 2012

Conference date: April 1, 2012 - April 2, 2012

Conference location: China

Conference code: 92330

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: With the development of IT, people enter information society. The society and all kinds of jobs need IT. So it is an important task for high school to make students use computer in practice and develop students' information literacy. IITC is an efficient measure to make students have all skills. In this paper, information technology, content presentation and physical education, information technology and information technology, student learning styles and teaching methods and the overall physical education teachers, three aspects of information technology and curriculum integration for Physical Education under the discussion of information technology and aims to Integration of physical education to provide a theoretical reference. © 2012 Springer-Verlag GmbH.

Number of references: 9

Main heading: Information technology

Controlled terms: Curricula - Information science - Integration - Students

Uncontrolled terms: Content presentation - Curriculum integration - High school - Higher education - Information - Information literacy - Information society - Physical education - Quality education - Student learning - Teaching methods

Classification code: 901.2 Education - 903 Information Science - 921.2 Calculus

DOI: 10.1007/978-3-642-29458-7_52

Database: Compendex

689.

Accession number: 20112514075605

Title: A new kind of indirect adaptive fuzzy control which based on type-2 fuzzy systems

Authors: Xiao, Cui-Yi1 ; Yu, Ying2 ; Dong, Yanrong1 ; Liu, Jian-Ping1

Author affiliation:

1 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

2 YanShan University, Qinhuangdao, 066004, China

Corresponding author: Xiao, C.-Y. (xcy0902@163.com)

Source title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Abbreviated source title: Proc. - ACIS Int. Symp. Cryptography, Netw. Secur., Data Min. Knowl. Discov., E-Commer. Its Appl., Embedded Syst., CDEE

Monograph title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Issue date: 2011

Publication year: 2011

Pages: 299-306

Article number: 5759360

Language: English

ISBN-13: 9780769543321

Document type: Conference article (CA)

Conference name: 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Conference date: October 23, 2010 - October 24, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 84956

Sponsor: Int. Assoc. Comput. Inf. Sci. (ACIS)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: A new Type-2 fuzzy control is based on Type-1 indirect adaptive fuzzy control, the antecedents and consequents of rules are changed into Type-2 fuzzy sets. In this paper, Type-2 fuzzy sets are used to establish indirect adaptive fuzzy controller and the stability of the controller is discussed, and the convergence of the controller is researched, and plausibility is presented. © 2010 IEEE.

Number of references: 12

Main heading: Adaptive control systems

Controlled terms: Controllers - Cryptography - Data mining - Electronic commerce - Embedded systems - Fuzzy control - Fuzzy sets - Network security

Uncontrolled terms: Adaptive fuzzy controller - Convergence - Indirect adaptive fuzzy control - Type-2 fuzzy set - Type-2 fuzzy systems - Type-2fuzzy sets

Classification code: 723 Computer Software, Data Handling and Applications - 731.1 Control Systems - 732.1 Control Equipment - 921 Mathematics

DOI: 10.1109/CDEE.2010.64

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

690.

Accession number: 20110113551144

Title: A real-time image deformation method based on line handles

Authors: Huang, Wu1, 2 ; Yao, Shubo3 ; Guan, Shengliang1, 2 ; Xia, Shihong1

Author affiliation:

- 1 Advanced Center, Institute of Computing Technology, Chinese Academy of Sciences, Beijing 100190, China
- 2 Graduate School of Chinese Academy of Sciences, Beijing 100049, China
- 3 College of Information, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Huang, W.

Source title: Jisuanji Fuzhu Sheji Yu Tuxingxue Xuebao/Journal of Computer-Aided Design and Computer Graphics

Abbreviated source title: Jisuanji Fuzhu Sheji Yu Tuxingxue Xuebao

Volume: 22

Issue: 12

Issue date: December 2010

Publication year: 2010

Pages: 2067-2072

Language: Chinese

ISSN: 10039775

CODEN: JFTXFX

Document type: Journal article (JA)

Publisher: Institute of Computing Technology, P.O. Box 2704, Beijing, 100080, China

Abstract: Image deformation denotes a way to deform the image based on the position of the input control handles. This paper introduces an optimization-driven image deformation technique based on line handles. The goal of the optimization is that the Laplacian coordinates of the boundary vertices and the mean-value coordinates of the interior vertices are preserved, while satisfying the deformation constraints specified by the user. To get a realistic similar transformation, the length of an edge is scaled based on the length of the control lines. Experimental results demonstrate the effectiveness and performance of the proposed method.

Number of references: 14

Main heading: Deformation

Controlled terms: Laplace transforms - Optimization

Uncontrolled terms: Boundary vertices - Control lines - Deformation constraints - Image deformation - Image-based - Laplacian coordinates - Mean values - Real-time images - Similar transformation

Classification code: 421 Strength of Building Materials; Mechanical Properties - 422 Strength of

Building Materials; Test Equipment and Methods - 921.3 Mathematical Transformations - 921.5 Optimization Techniques

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

691.

Accession number: 20112714114083

Title: University of new design of campus planning

Authors: Xie, Chengwei1 ; Xie, Guoren2 ; Yang, Fang2

Author affiliation:

1 Environmental Management College of China, Qinhuangdao, Hebei, 066004, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Corresponding author: Xie, C. (xcw_2003@tom.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 255-260

Monograph title: Advances in Civil Engineering

Issue date: 2011

Publication year: 2011

Pages: 1409-1412

Language: English

ISSN: 10226680

ISBN-13: 9783037851395

Document type: Conference article (CA)

Conference name: 2011 International Conference on Civil Engineering and Building Materials, CEBM

2011

Conference date: July 29, 2011 - July 31, 2011

Conference location: Kunming, China

Conference code: 85320

Sponsor: Kunming University of Science and Technology; International Association for Scientific and High Technology

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The University Campus Planning for the new design, the new campus of a university in Hebei Province, for example, from the ecological structure of the planning, construction layout groups, park user-friendly transport, green garden design, low carbon design and culture type of construction planning to do with the design described. Exploration of the environment, carbon, garden-type new campuses. © (2011) Trans Tech Publications, Switzerland.

Number of references: 2

Main heading: Design

Controlled terms: Building materials - Civil engineering - Construction equipment

Uncontrolled terms: Campus planning - Construction planning - Ecological structure - Hebei Province - Low carbon - New campus - New design - Study design - University campus

Classification code: 414 Masonry Materials - 413 Insulating Materials - 412 Concrete - 415 Metals, Plastics, Wood and Other Structural Materials - 411 Bituminous Materials - 408 Structural Design - 405.1 Construction Equipment - 409 Civil Engineering, General

DOI: 10.4028/www.scientific.net/AMR.255-260.1409

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

692.

Accession number: 20102312986858

Title: A diversity guided particle swarm optimization with chaotic mutation

Authors: Yang, Yanping1 ; Che, Yonghe2

Author affiliation:

- 1 Department of Computer Science, Hebei Normal University of Science and Technology, Qinghuangdao, 066004, China
- 2 Hebei Normal University of Science and Technology, Qinghuangdao, 066004, China

Corresponding author: Yang, Y. (yanping3ang@163.com)

Source title: CAR 2010 - 2010 2nd International Asia Conference on Informatics in Control, Automation and Robotics

Abbreviated source title: CAR - Int. Asia Conf. Informatics Control, Autom. Rob.

Volume: 2

Part number: 2 of 3

Monograph title: CAR 2010 - 2010 2nd International Asia Conference on Informatics in Control, Automation and Robotics

Issue date: 2010

Publication year: 2010

Pages: 294-297

Article number: 5456542

Language: English

ISBN-13: 9781424451937

Document type: Conference article (CA)

Conference name: 2010 2nd International Asia Conference on Informatics in Control, Automation and Robotics, CAR 2010

Conference date: March 6, 2010 - March 7, 2010

Conference location: Wuhan, China

Conference code: 80508

Sponsor: Hubei University of Education; Huazhong Normal University; Wuhan University; Huazhong Univ. Sci. Technol., China Intelligent Inf.; Technology Application Research Association

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Particle Swarm Optimization (PSO) as well as genetic algorithm has shown good search abilities in many optimization problems. However, PSO easily falls into local minima on complex problems because of the loss of swarm diversity. This paper presents an improved diversity guided PSO algorithm, called DCPSO, by employing a modified velocity model and a chaotic mutation operator. In order to verify the performance of DCPSO, we test it on six benchmark functions. The simulation results show that DCPSO outperforms other two variants of PSO in all test cases. ©2010 IEEE.

Number of references: 4

Main heading: Particle swarm optimization (PSO)

Controlled terms: Global optimization - Information science - Mathematical operators - Robotics

Uncontrolled terms: Benchmark functions - Complex problems - Evolutionary computation - Evolutionary computations - Guided particle swarm optimization - Local minimums - Modified velocity - Mutation operators - Optimization problems - PSO algorithms - Simulation result - Test case

Classification code: 723 Computer Software, Data Handling and Applications - 731.5 Robotics - 903 Information Science - 921 Mathematics - 921.5 Optimization Techniques

DOI: 10.1109/CAR.2010.5456542

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

693.

Accession number: 20134716999047

Title: Some applications of the causal statement logic programming in machine language

Authors: Ma, Xiu Li¹ ; Liu, Bang Fan² ; Xu, Shui³

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China
- 2 Humanities-law College Yanshan University, Qinhuangdao, 066004, China
- 3 Qinhuangdao Vocational and Technical College, Qinhuangdao, 066004, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 433-435

Monograph title: Advances in Mechatronics and Control Engineering II

Issue date: 2013

Publication year: 2013

Pages: 574-578

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037858943

Document type: Conference article (CA)

Conference name: 2013 2nd International Conference on Mechatronics and Control Engineering, ICMCE 2013

Conference date: August 28, 2013 - August 29, 2013

Conference location: Dalian, China

Conference code: 100758

Sponsor: Queensland University of Technology; Korea Maritime University; Hong Kong Industrial Technology Research Centre; Inha University

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: In modern science, machine language was developed on the basis of multidisciplinary, so it forms the nature of cross subject or multidisciplinary subject, especially it crosses with modern logic. Burks developed the logic of casual statement, and tried to apply to the constructing of machine language. While applying the logic of casual statement to machine language, philosophy of logical machine was put forward. Philosophy of logical machine takes an important role in guiding the development of the discipline of contemporary machine language and its practical applications. © (2013) Trans Tech Publications, Switzerland.

Number of references: 9

Main heading: Ontology

Controlled terms: Logic programming - Machining

Uncontrolled terms: Casual statement logic - Human being - Language - Logical machine philosophy - Machine languages

Classification code: 604.2 Machining Operations - 723 Computer Software, Data Handling and Applications - 723.1 Computer Programming - 903 Information Science

DOI: 10.4028/www.scientific.net/AMM.433-435.574

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

694.

Accession number: 20112514075613

Title: Random approximation with weak contraction random operator and random fixed point theorem for nonexpansive random mapping

Authors: Li, Suhong¹ ; Zhang, Lingmin¹ ; Xiao, Xin¹ ; Li, Lihua¹ ; Yin, Hongwu¹ ; Zhao, Huijuan¹

Author affiliation:

¹ College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao Hebei 066004, China

Corresponding author: Li, S. (lisuhong103@126.com)

Source title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Abbreviated source title: Proc. - ACIS Int. Symp. Cryptography, Netw. Secur., Data Min. Knowl. Discov., E-Commer. Its Appl., Embedded Syst., CDEE

Monograph title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Issue date: 2011

Publication year: 2011

Pages: 71-75

Article number: 5759368

Language: English

ISBN-13: 9780769543321

Document type: Conference article (CA)

Conference name: 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Conference date: October 23, 2010 - October 24, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 84956

Sponsor: Int. Assoc. Comput. Inf. Sci. (ACIS)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In real reflexive separable Banach space which admits a weakly sequentially continuous duality mapping, the sufficient and necessary condition that nonexpansive random mapping has a random fixed point is obtained. By introducing a random iteration process with weak contraction random operator, we obtain the convergence theorem of the random iteration process to a random fixed point for nonexpansive random mapping. © 2010 IEEE.

Number of references: 15

Main heading: Network security

Controlled terms: Banach spaces - Cryptography - Data mining - Electronic commerce - Embedded systems - Mapping

Uncontrolled terms: Convergence theorem - Duality mapping - Iteration process - Nonexpansive - Random fixed point - Random fixed point theorems - Random Mappings - Random operators - Strong convergence - Sufficient and necessary condition - Weak contraction

Classification code: 723 Computer Software, Data Handling and Applications - 902.1 Engineering

Graphics - 921.1 Algebra

DOI: 10.1109/CDEE.2010.89

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

695.

Accession number: 20121714963051

Title: Porphyrin assemblies through the air/water interface: Effect of hydrogen bond, thermal annealing, and amplification of supramolecular chirality

Authors: Rong, Yunlong^{1, 2}; Chen, Penglei²; Wang, Dongjun¹; Liu, Minghua²

Author affiliation:

1 College of PhysicoChemical, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Beijing National Laboratory for Molecular Science, Institute of Chemistry, Chinese Academy of Sciences, 100190, China

Corresponding author: Chen, P. (chenpl@iccas.ac.cn)

Source title: Langmuir

Abbreviated source title: Langmuir

Volume: 28

Issue: 15

Issue date: April 17, 2012

Publication year: 2012

Pages: 6356-6363

Language: English

ISSN: 07437463

E-ISSN: 15205827

CODEN: LANGD5

Document type: Journal article (JA)

Publisher: American Chemical Society, 2540 Olentangy River Road, P.O. Box 3337, Columbus, OH 43210-3337, United States

Abstract: Molecular assemblies of two achiral porphyrins with different substituents, 5-(4-methoxycarbonylphenyl)-10,15,20-triphenyl-21H,23H-porphine (TPPCOOMe) and 5-(4-carboxyphenyl)-10,15,20-triphenyl-21H,23H-porphine (TPPCOOH), have been fabricated by the Langmuir-Blodgett (LB) technique. It is disclosed that although only slight differences exist in the molecular skeleton of these two compounds, their interfacial assemblies display distinct chiroptical properties. It is found that weak circular dichroism (CD) signals are observed from the TPPCOOH assemblies, while in the case of the TPPCOOMe assemblies, only negligible CD signals could be detected. Interestingly, after the assemblies are subjected to a thermal annealing treatment, TPPCOOH assemblies show a distinct amplification of CD signals, while those of TPPCOOMe do not. An explanation in terms of the effect of substituents on the spreading properties of the compounds and the effect of intermolecular hydrogen bonds on the cooperative stacking of the building blocks is proposed to explain these new findings. The investigation suggests that in the present porphyrin systems, besides a nice spreading property, the cooperative interaction of various noncovalent interactions, including hydrogen bonding, π - π stacking, and hydrophobic interactions, is essentially required for the occurrence of symmetry breaking at the air/water interface. © 2012 American Chemical Society.

Number of references: 55

Main heading: Hydrogen bonds

Controlled terms: Complexation - Porphyrins - Thin film transistors

Uncontrolled terms: Air/Water Interfaces - Building blockes - CD signals - Chiroptical properties - Cooperative interactions - Effect of hydrogen - Hydrophobic interactions - Interfacial assembly - Intermolecular hydrogen bonds - Langmuir Blodgett techniques - Molecular assembly - Molecular skeleton - Non-covalent interaction - Porphine - Porphyrin assemblies - Spreading property - Supramolecular chirality - Symmetry-breaking - Thermal annealing treatment - Thermal-annealing

Classification code: 714.2 Semiconductor Devices and Integrated Circuits - 801.4 Physical Chemistry - 802.2 Chemical Reactions - 804.1 Organic Compounds

DOI: 10.1021/la3005294

Database: Compendex

696.

Accession number: 20112814129793

Title: A graphene sheet as an efficient electron acceptor and conductor for photoinduced charge separation

Authors: Zhang, Xian-Fu^{1, 2}; Xi, Qian¹

Author affiliation:

1 Chemistry Department, Hebei Normal University of Science and Technology, Qinghuangdao, Hebei Province 066004, China

2 MPC Technologies, Hamilton, ON, L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Carbon

Abbreviated source title: Carbon

Volume: 49

Issue: 12

Issue date: October 2011

Publication year: 2011

Pages: 3842-3850

Language: English

ISSN: 00086223

CODEN: CRBNAH

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: Tetrasulfonated zinc phthalocyanine (Pc) was bound to graphene (G) sheets by the π - π stacking supermolecular method. The few-layer graphene sheets were obtained by chemically reducing graphite oxide and characterized by AFM, IR and UV-vis absorption methods. Photoinduced electron transfer (PET) within the nano assembly is revealed by laser flash photolysis, time resolved and steady state fluorescence, as well as UV-vis absorption techniques. A graphene sheet can be attached by up to 52,000 Pc molecules to form a super

molecule G(Pc) 52,000, in which many Pc molecules can be simultaneously photoexcited to the S1 state. One graphene sheet can simultaneously quench thousands of excited Pcs with a large rate constant of the order of $10^{16} \text{ M}^{-1} \text{ s}^{-1}$ by PET. A graphene sheet not only accepts electrons from the excited Pcs on it but also delivers the captured electrons to its unexcited Pcs to form $(\text{Pc}^+)_n(\text{Pc}^-)_n$, so that a large electron charge (i.e. $n \gg 1$) is separated between unlinked Pc molecules with a small energy loss. These novel features of PET are explained by the following unique properties of graphene: (i) its excellent electron-transport and multi-electron-accepting ability, (ii) its multi-chromophore binding and concurrent multi-photon absorbing ability. © 2011 Elsevier Ltd. All rights reserved.

Number of references: 50

Main heading: Graphene

Controlled terms: Absorption - Chromophores - Electrons - Energy dissipation - Microcomputers - Molecules - Multiphoton processes - Photolysis - Rate constants - Zinc compounds

Uncontrolled terms: AFM - Electron acceptor - Electron charge - Electron transport - Graphene sheets - Graphite oxide - Laser flash photolysis - Multiphotons - Nano-assemblies - Photo-induced electron transfer - Photoinduced charge separation - Small energy - Steady state fluorescences - Super molecules - Supramolecular method - Time-resolved - UV-vis absorptions - Zinc phthalocyanines

Classification code: 931.3 Atomic and Molecular Physics - 931.2 Physical Properties of Gases, Liquids and Solids - 804.1 Organic Compounds - 804 Chemical Products Generally - 801.4 Physical Chemistry - 761 Nanotechnology - 741.1 Light/Optics - 722.4 Digital Computers and Systems - 525.4 Energy Losses (industrial and residential)

DOI: 10.1016/j.carbon.2011.05.019

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

697.

Accession number: 20111513902046

Title: In silico cloning of the TIR1 cDNA from Zea Mays and bioinformatic analysis

Authors: Meng, Qing Dong¹ ; Du, Jin You¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei Qinhuangdao, 066004, China

Corresponding author: Meng, Q. D. (qhnkmqd@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 159

Monograph title: Micro Nano Devices, Structure and Computing Systems

Issue date: 2011

Publication year: 2011

Pages: 656-661

Language: English

ISSN: 10226680

ISBN-13: 9783037850091

Document type: Conference article (CA)

Conference name: 2010 International Conference on Micro Nano Devices, Structure and Computing Systems, MNDSCS 2010

Conference date: November 6, 2010 - November 7, 2010

Conference location: Singapore, Singapore

Conference code: 84505

Sponsor: International Science and Engineering Center (ISEC); National University of Singapore (NUS); Shenzhen University

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Based on the data of HTGS database and Blast between Zea Mays genome and Oryza Sativa TIR1 gene, putative Zea Mays TIR1 gene of a 3150 bp - length cDNA sequence with an full ORF was obtained. The gene shared high similarity with other plant TIR1 genes, indicating that it might be a new member of TIR1 family. On this base, through public database and related softwares, the primary structure of the protein Zea Mays TIR1 such as physical and chemical characterization was analyzed, and then the secondary and tertiary structure was emulated. We also structured Phylogenetic tree of some plant TIR1. The above results may play an important role in the further research for isolation, identification and application of Zea Mays TIR1 gene. © (2011) Trans

Tech Publications.

Number of references: 6

Main heading: Bioinformatics

Controlled terms: Chemical analysis - Cloning - Genes

Uncontrolled terms: Auxin receptors - Bioinformatic analysis - cDNA sequence - Chemical characterization - In silico cloning - In-silico - New members - Oryza sativa - Phylogenetic trees - Primary structures - Public database - Secondary and tertiary structures - TIR1 - Zea mays

Classification code: 461.2 Biological Materials and Tissue Engineering - 461.8.1 Genetic Engineering - 801 Chemistry - 801.2 Biochemistry - 804 Chemical Products Generally - 903 Information Science

DOI: 10.4028/www.scientific.net/AMR.159.656

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

698.

Accession number: 20124115541754

Title: Research on and construction of network question-answering system

Authors: Fu, Changqing¹ ; Zhuang, Cheng¹ ; Gao, Xing¹ ; Wang, Hongyan¹ ; Wei, Yuqing¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Fu, C. (cq_fu@126.com)

Source title: International Journal of Digital Content Technology and its Applications

Abbreviated source title: Int. J. Digit. Content Technol. Appl.

Volume: 6

Issue: 17

Issue date: September 2012

Publication year: 2012

Pages: 279-286

Language: English

ISSN: 19759339

E-ISSN: 22339310

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, Myoungbo Bldg 3F,
Bumin-dong 1-ga, Seo-gu, Busan, 602-816, Korea, Republic of

Abstract: In teaching procedure, one of the most important steps is answering questions. This article introduces a digital answering system based on J2EE, and the answering system will serve as an important part in the network teaching platform. It can give out the solutions either synchronously or asynchronously, or by texting. It provides a cyber space for the teachers and students, so that they can communicate and discuss with each other without meeting in person. In addition, a long-term accumulation of the Q & A contents will become a valuable library for the future curriculum construction. This system also has very good openness and portability.

Number of references: 8

Main heading: Curricula

Controlled terms: Artificial intelligence

Uncontrolled terms: Chinese word segmentation - Cyberspaces - J2EE framework -
Network teaching - Question answering systems - Texting

Classification code: 723.4 Artificial Intelligence - 901.2 Education

DOI: 10.4156/jdcta.vol6.issue17.30

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

699.

Accession number: 20121214882625

Title: Practices and thoughts on information management tax

Authors: Liu, Zhaohui1 ; Yang, Liming1 ; Cai, Ning1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, Z. (liying7688@126.com)

Source title: Procedia Engineering

Abbreviated source title: Procedia Eng.

Volume: 29

Monograph title: 2012 International Workshop on Information and Electronics Engineering

Issue date: 2012

Publication year: 2012

Pages: 430-434

Language: English

ISSN: 18777058

Document type: Conference article (CA)

Conference name: 2012 International Workshop on Information and Electronics Engineering, IWIEE 2012

Conference date: March 10, 2012 - March 11, 2012

Conference location: Harbin, China

Conference code: 89020

Sponsor: Harbin University of Science and Technology; International Science and Engineering Research Center

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: With the development of economy and society, the management mode and business of taxpayers have been updated; the complexity of tax administration significantly increased; the asymmetry of levying for both information have become increasingly prominent; therefore, the traditional way of managing

households according to their apange by tax administrator has been difficult to adapt to new needs of tax source management. We should base on information technology to build a new tax management mechanism (system) under the government leadership where national tax system and local system cooperate, and relevant department must give info-technical support, to form the comprehensive taxation atmosphere with definite power and duty, standard management, effective collaboration and powerful supervisory control in order to improve the work of information management tax. © 2011 Published by Elsevier Ltd.

Number of references: 3

Main heading: Information management

Controlled terms: Electronics engineering - Information technology - Taxation

Uncontrolled terms: Economy and society - Local system - Management mechanisms - Source management - Supervisory control - Tax authorities - Tax payers - Tax source - Tax systems

Classification code: 911.2 Industrial Economics - 903.2 Information Dissemination - 903 Information Science - 718 Telephone Systems and Related Technologies; Line Communications - 717 Optical Communication - 716 Telecommunication; Radar, Radio and Television - 715 Electronic Equipment, General Purpose and Industrial - 714 Electronic Components and Tubes - 713 Electronic Circuits

DOI: 10.1016/j.proeng.2011.12.736

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

700.

Accession number: 20124315590172

Title: Explicit iteration scheme with perturbed mapping for common fixed points of a finite family of I - asymptotically nonexpansive mappings

Authors: Zhang, Lingmin¹ ; Li, Suhong¹ ; Xiao, Xin¹ ; Zhao, Huijuan¹

Author affiliation:

¹ College of Mathematic and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Zhang, L. (Lingmin9999@163.com)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 308 CCIS

Part number: 2 of 2

Issue: PART 2

Monograph title: Information Computing and Applications - Third International Conference, ICICA 2012, Proceedings

Issue date: 2012

Publication year: 2012

Pages: 280-287

Language: English

ISSN: 18650929

ISBN-13: 9783642340406

Document type: Conference article (CA)

Conference name: 3rd International Conference on Information Computing and Applications, ICICA 2012

Conference date: September 14, 2012 - September 16, 2012

Conference location: Chengde, China

Conference code: 93206

Sponsor: National Science Foundation of China; Hunan Institute of Engineering; Yanshan University; Northeastern University at Qinhuangdao; Chengde Petroleum College

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: In this paper, we propose a new explicit iteration scheme with perturbed mapping for approximation of common fixed points of a finite family of I-asymptotically nonexpansive mappings. We establish some convergence theorems for this explicit iteration scheme. In particular, necessary and sufficient conditions for strong convergence of this explicit iteration scheme were obtained. © 2012 Springer-Verlag.

Number of references: 10

Main heading: Mapping

Uncontrolled terms: Asymptotically nonexpansive mappings - Common fixed point -
Convergence theorem - I-asymptotically nonexpansive - Iteration process - Opial's property -
Strong convergence - Sufficient conditions

Classification code: 902.1 Engineering Graphics

DOI: 10.1007/978-3-642-34041-3_40

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

701.

Accession number: 20103113115684

Title: RETRACTED ARTICLE: Discussion on the development ways and countermeasures of the
skills-based teachers training in secondary vocational education

Authors: Shuying, Ma¹ ; Lidong, Chen¹ ; Guofang, Li¹ ; Rongchang, Liu¹

Author affiliation:

1 College of Mechanics and Electronics Engineering, Hebei Normal University of Science and Technology,
Qinhuangdao, China

Corresponding author: Lidong, C. (chentian-940308@163.com)

Source title: OPEE 2010 - 2010 International Conference on Optics, Photonics and Energy
Engineering

Abbreviated source title: OPEE - Int. Conf. Opt., Photonics Energy Eng.

Volume: 2

Part number: 2 of 2

Monograph title: OPEE 2010 - 2010 International Conference on Optics, Photonics and Energy
Engineering

Issue date: 2010

Publication year: 2010

Pages: 92-94

Article number: 5508050

Language: English

ISBN-13: 9781424452354

Document type: Conference article (CA)

Conference name: 2010 International Conference on Optics, Photonics and Energy Engineering, OPEE 2010

Conference date: May 10, 2010 - May 11, 2010

Conference location: Wuhan, China

Conference code: 81252

Sponsor: Asia Pacific Environmental Science Research Center; CCF Young Computer Scientists and Engineering Forum Wuhan Branch; Huazhong University of Science and Technology; Intelligent Inf. Technol. Appl. Res. Assoc.; Wuhan University

Publisher: IEEE Computer Society

Abstract: Teachers are the utmost important resource of the education, and their quantity and quality have direct relation to the scale and speed of the educational development. So does the secondary vocational education. We have been exploring appropriate teachers' education and training pattern for the secondary vocational school. The system of the teacher education and training is being improved gradually and we also get further understanding about the knowledge on the teachers' quality. Furthermore, quite a lot of experience on it is accumulated. With respect to the development course of the teachers' education and training for the secondary vocational and technical education, the education is carried out only in academic institutes and has the character of small scale and lack of practice. Therefore, it is difficult for the teachers' quantity and quality in different times to meet the requirement of today's secondary vocational and technical education. Especially at the present time when the vocational and technical education is well developed, the teachers' quantity, quality and problems with structure have prevented the secondary vocational and technical education from being improved. In this paper, we introduced the training situation of the vocational teachers, and gave some skill-based training ways. In addition, some countermeasures to enhance the training quality were proposed. It can provide meaningful references for the training of our secondary vocational education teachers. © 2010 IEEE.

Number of references: 6

Main heading: Personnel training

Controlled terms: Apprentices

Uncontrolled terms: Academic institutes - Education and training - Small scale - Teacher education - Technical educations - Vocational education - Vocational schools

Classification code: 901.2 Education - 912.4 Personnel

DOI: 10.1109/OPEE.2010.5508050

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

702.

Accession number: 20120314702019

Title: DNA-templated apple-like cuprous oxide

Authors: Cai, Aijun^{1, 2}; Wang, Yalan¹; Du, Liqiang²; Ma, Zichuan^{1, 3}

Author affiliation:

- 1 College of Life Science, Hebei Normal University, Shijiazhuang 050016, China
- 2 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066604, China
- 3 College of Chemistry and Material Sciences, Hebei Normal University, Shijiazhuang 050016, China

Corresponding author: Ma, Z. (ma_zichuan@163.com)

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 70

Issue date: March 1, 2012

Publication year: 2012

Pages: 149-151

Language: English

ISSN: 0167577X

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: Apple-like microspheres of cuprous oxide (Cu₂O) with a diameter of ~ 4 μm have been fabricated through a DNA-templated method at room temperature. The morphologies and crystal phase of the as-prepared products were characterized by field emission scanning electron microscopy(FESEM)and X-ray powder diffraction (XRD). The effects of the fixedly qualitative DNA condensed by different amount of cetyltrimethylammonium bromide (CTAB) were investigated. The results show that the condensation between DNA and CTAB is the necessary condition for producing the novel material, and the amount ratio of DNA and CTAB must be selected properly, in order to fabricate the novel product. © 2011 Elsevier B.V. All rights reserved.

Number of references: 21

Main heading: DNA

Controlled terms: Ammonium compounds - Bromine compounds - Field emission microscopes - Fruits - Microspheres - Scanning electron microscopy - X ray powder diffraction

Uncontrolled terms: Cetyltrimethylammonium bromide - Crystal phase - CTAB - Cuprous oxide - Field emission scanning electron microscopy - Novel materials - Room temperature - XRD

Classification code: 931.3 Atomic and Molecular Physics - 821.4 Agricultural Products - 818 Rubber and Elastomers - 804.1 Organic Compounds - 741.3 Optical Devices and Systems - 741.1 Light/Optics - 461.2 Biological Materials and Tissue Engineering

Numerical data indexing: Size 4.00e-06m

DOI: 10.1016/j.matlet.2011.12.015

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

703.

Accession number: 20103413185875

Title: Texture characteristic extraction of medical images based on pyramid structure wavelet transform

Authors: Liu, Shurong1 ; Han, Kun1 ; Song, Zhibin1 ; Li, Misheng1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, S. (liushurong1@sina.com.cn)

Source title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Abbreviated source title: Int. Conf. Comput. Des. Appl., ICCDA

Volume: 1

Part number: 1 of 5

Monograph title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Issue date: 2010

Publication year: 2010

Pages: V1342-V1345

Article number: 5540860

Language: English

ISBN-13: 9781424471638

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Conference date: June 25, 2010 - June 27, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 81482

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT); Institute of Electrical and Electronics Engineers (IEEE); Northeastern University at Qinhuangdao (NEUQ); Dalian University of Technology; National Natural Science Foundation of China (NSFC)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In order to extract image texture features of medical images, pyramid structure wavelet (PWT) is used in this paper. A group of gray-scale images of chest CT from medical image database are selected as test set. The PWT using three different wavelets bases db6, db2 and Haar are carried out to extract texture feature of each image respectively. A method called symmetric circular extension which takes the boundary as symmetric center are utilized to overcome data increasing and large errors existed nearby reconstructed signal. Empirical results show that the texture feature of chest CT images is mainly concentrated in the low frequency part. However, LH, HL and HH sub-bands contain only less than 7% of the total energy. The PWT using haar wavelet basis extracts more information than it using db2 and db6 wavelet basis. For texture analysis of medical images, the PWT algorithm using haar wavelet base can improve the performance of feature extraction of each sub-band.
© 2010 IEEE.

Number of references: 10

Main heading: Medical imaging

Controlled terms: Computerized tomography - Feature extraction - Image processing - Image retrieval - Textures - Wavelet analysis - Wavelet transforms

Uncontrolled terms: Boundary extensions - Chest CT - Empirical results - Gray-scale images - Haar wavelets - Image texture - Low frequency - Medical image database - Medical image retrieval - Medical images - Pyramid structure - Sub-bands - Test sets - Texture analysis - Texture characteristic extraction - Texture characteristics - Texture features - Total energy - Wavelet basis

Classification code: 921.3 Mathematical Transformations - 921 Mathematics - 801 Chemistry - 933 Solid State Physics - 746 Imaging Techniques - 716 Telecommunication; Radar, Radio and Television - 531 Metallurgy and Metallography - 741 Light, Optics and Optical Devices

Numerical data indexing: Percentage 7.00e+00%

DOI: 10.1109/ICCD.2010.5540860

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

704.

Accession number: 20140517252938

Title: Optimization of process parameters for microwave-assisted extraction of total flavones from peanut shell

Authors: Fan, Jinbo¹ ; Zhou, Suzhen¹ ; Zheng, Lihong² ; Ren, Fazheng³ ; Feng, Xuqiao¹

Author affiliation:

- 1 College of Chemistry, Chemical Engineering and Food Safety, Bohai University, Jinzhou 121013, Liaoning, China
- 2 Department of Food Engineering, Hebei Normal University of Science and Technology, Changli 066000, Hebei, China
- 3 College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China

Corresponding author: Feng, X.

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 13

Issue: 11

Issue date: November 2013

Publication year: 2013

Pages: 55-60

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology, 3 Floor, Qingyuan Mansion, No. 6 Beisan Street., Fucheng Road, Haidian District, Beijing, 100048, China

Abstract: The thesis carried out the extraction of total flavones from peanut shell by microwave-assisted extraction, and studied the optimal extraction conditions, such as solvent, Extraction temperature, Extraction time, Solid-liquid than, by response surface analysis(RSA) based on single factor tests. Model fitting and regression analysis of experimental data were made by SAS, and two significant factors which influence total flavones, extraction time and liquid to solid ratio, were determined. The results show that the optimal extraction conditions are the presence of 80% ethanol solvent, Extraction temperature 77°C, Extraction time 11 minutes and liquid-Solid than 1:34 g/mL. Under the optimal conditions. The yield of total flavones from peanut hull reached 2.165 mg/g.

Number of references: 15

Main heading: Solvent extraction

Controlled terms: Dyes - Flavonoids - Liquids - Microwaves - Models - Oilseeds
- Optimization - Organic solvents - Regression analysis - Surface analysis

Uncontrolled terms: Extraction temperatures - Flavonoid - Liquid to solid ratio -
Microwave-assisted extraction - Optimization of process parameters - Peanut shells - Response surface
analysis - Response surface analysis methods

Classification code: 931.2 Physical Properties of Gases, Liquids and Solids - 922.2 Mathematical
Statistics - 921.5 Optimization Techniques - 902.1 Engineering Graphics - 821.4 Agricultural Products - 804.1
Organic Compounds - 803 Chemical Agents and Basic Industrial Chemicals - 802.3 Chemical Operations - 711
Electromagnetic Waves

Numerical data indexing: Mass_Density 3.40e+04kg/m³, Percentage 8.00e+01%, Temperature
3.50e+02K, Time 6.60e+02s

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

705.

Accession number: 20131116103920

Title: Tunable full color emission from single-phase LiSr_{3.99-x}Dy_{0.01}(BO₃)₃:xEu³⁺ phosphors

Authors: Zhang, Zhi-Wei¹ ; Sun, Xin-Yuan² ; Jia, Dan-Dan¹ ; Song, Shi-Tao¹ ; Zhang, Jian-Ping¹ ;
Wang, Shao-Fei¹

Author affiliation:

1 Physical-Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao 066604,
China

2 Department of Physics, Jinggangshan University, Ji'an 343009, China

Corresponding author: Zhang, Z.-W. (zhangzhiweia@163.com)

Source title: Ceramics International

Abbreviated source title: Ceram Int

Volume: 39

Issue: 4

Issue date: May 2013

Publication year: 2013

Pages: 3965-3970

Language: English

ISSN: 02728842

CODEN: CINNDH

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: Tunable full color emissive $\text{LiSr}_{3.99-x}\text{Dy}_{0.01}(\text{BO}_3)_3:\text{xEu}^{3+}$ ($0 \leq x \leq 0.09$) phosphors peaked at 481 nm (blue), 574 nm (yellow), 592 nm (orange), and 617 nm (red) were synthesized in air by high temperature solid-state reaction route. The as-synthesized phosphors were characterized by X-ray powder diffraction (XRD), photoluminescence excitation (PLE) and photoluminescence (PL) spectra. The PLE spectra in the range from 200 to 500 nm include an Eu-O charge transfer band (CTB) and several 4f-4f transition peaks of Dy^{3+} and Eu^{3+} , indicating its potential application in white light emitting diodes (LEDs). The effect of Eu^{3+} concentration on the emission intensity of $\text{LiSr}_{3.99-x}\text{Dy}_{0.01}(\text{BO}_3)_3:\text{xEu}^{3+}$ phosphors was investigated in detail and the optical concentration is found to be $x=0.005$. The CIE chromaticity coordinates for $\text{LiSr}_{3.99-x}\text{Dy}_{0.01}(\text{BO}_3)_3:\text{xEu}^{3+}$ phosphors are simulated. With an increase in Eu^{3+} ion concentration, the chromaticity color coordinates can be tuned efficiently from the border of greenish white region to its equal-energy white light point, and eventually to red region. All the results imply that the studied $\text{LiSr}_{3.99-x}\text{Dy}_{0.01}(\text{BO}_3)_3:\text{xEu}^{3+}$ phosphors could be potentially used as white LEDs. © 2012 Elsevier Ltd and Techna Group S.r.l.

Number of references: 26

Main heading: Phosphors

Controlled terms: Charge transfer - Color - Europium - Light emission - Light emitting diodes - Photoluminescence - Solid state reactions - X ray powder diffraction

Uncontrolled terms: Charge transfer bands - Chromaticity color - CIE chromaticity - Emission intensity - Full color - High temperature solid-state reaction - Ion concentrations - Photoluminescence excitation - Photoluminescence spectrum - Potential applications - Transition peaks - White LED - White light - White light emitting diodes - XRD

Classification code: 547.2 Rare Earth Metals - 741.1 Light/Optics - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics

Numerical data indexing: Size 2.00e-07m to 5.00e-07m, Size 4.81e-07m, Size 5.74e-07m, Size 5.92e-07m, Size 6.17e-07m

DOI: 10.1016/j.ceramint.2012.10.244

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

706.

Accession number: 20134516951447

Title: Study on synthesis and properties of spinel structure $\text{Li}_{1+x}\text{Mn}_{2-x}\text{O}_4$ for lithium ion-sieve precursor

Authors: Song, Shi Tao¹ ; Wu, Su Xia¹ ; Peng, You Shun¹ ; Zheng, Xue Fang¹ ; Lian, Qi¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066600, China

Corresponding author: Wu, S. X. (suxiauwu@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 437

Monograph title: Industrial Design and Mechanics Power II

Issue date: 2013

Publication year: 2013

Pages: 560-563

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037858967

Document type: Conference article (CA)

Conference name: 2nd International Conference on Industrial Design and Mechanics Power, ICIDMP 2013

Conference date: August 24, 2013 - August 25, 2013

Conference location: Nanjing, China

Conference code: 100448

Sponsor: Trans Tech Publications inc.; BOSI EDU - Professional Organizer for Academic Conferences; ICIDMP 2013

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Spinel structure $\text{Li}_{1+x}\text{Mn}_{2-x}\text{O}_4$ materials for lithium ion-sieve precursor were synthesized by high temperature solid state method and their adsorption properties were improved by adjusting the molar ratio of lithium to manganese. The structure, morphology and adsorption performance of the synthetic samples were characterized by XRD, SEM, and lithium ion adsorption experiments. The influences of pH value and adsorption time on adsorption capacity were discussed. The results showed that the $\text{Li}_{1.3}\text{Mn}_{1.7}\text{O}_4$ material had the largest adsorption capacity and it reached up to $24.06 \text{ mg}\cdot\text{g}^{-1}$ when the pH value was 12 and the adsorption time was 10 h. © (2013) Trans Tech Publications, Switzerland.

Number of references: 5

Main heading: Lithium

Controlled terms: Adsorption - Lithium alloys - Manganese - pH - Product design - Sieves - Synthesis (chemical)

Uncontrolled terms: Adsorption capacities - Adsorption performance - Adsorption properties - Adsorption time - High temperature solid state methods - Lithium ions - Lithium manganates - Spinel structure

Classification code: 913.1 Production Engineering - 802.3 Chemical Operations - 802.2 Chemical Reactions - 801.1 Chemistry, General - 605 Small Tools and Hardware - 549.1 Alkali Metals - 543.2 Manganese and Alloys

Numerical data indexing: Time 3.60e+04s

DOI: 10.4028/www.scientific.net/AMM.437.560

Database: Compendex

707.

Accession number: 20131916319148

Title: Influence of begonia fimbristipula hance pigment on fermentation process of sour soy milk

Authors: Cui, Ruijing¹ ; Kang, Weimin¹ ; Guo, Shuo¹

Author affiliation:

¹ College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Cui, R.

Source title: Journal of the Chinese Cereals and Oils Association

Abbreviated source title: J. Chin. Cereals Oils Assoc.

Volume: 28

Issue: 1

Issue date: January 2013

Publication year: 2013

Pages: 93-97

Language: Chinese

ISSN: 10030174

Document type: Journal article (JA)

Publisher: Editor. Dept. of J. of the Chinese Cereals and Oils Assoc., No. 11 Baiwanzhuang Avenue, Xicheng District, Beijing, 100037, China

Abstract: Soybeans were the main raw materials and the pigment extracted from begonia fimbristipula hance was added into soy milk to make sour soy milk through the process of lactic acid fermentation, with lactobacillus bulgaricus and streptococcus thermophilus mixed in an equal ratio as leavening agent. Through single factor test, we explored the influence of begonia fimbristipula hance pigment on fermentation pH, number of lactic acid bacteria, quality and preservation performance of sour soy milk. As the results showed, in the soy milk where the soybean and water mass proportion was 1:10, we added 6% begonia fimbristipula hance pigment extract, 6% sucrose and 2% glucose, and when they were cooled to 43°C after 30 min of 85°C sterilization we

inoculated 3% lactic acid bacteria for 6 hours of fermentation. In this process, *Begonia fimbristipula hance* pigment was beneficial to growth and reproduction of lactic acid bacteria, accelerated the process of acid fermentation of soy milk, shortened the fermentation time, and could improve the product tissue state and preservation performance. With bright red color, manufactured sour soy milk had delicate tissue, good coagulation, good taste and flavor and high nutritional value.

Number of references: 15

Main heading: Fermentation

Controlled terms: Bacilli - Lactic acid - Tissue

Uncontrolled terms: *Begonia fimbristipula hance* - Fermentation process - Lactic acid bacteria - Lactic acid bacteria fermentations - Lactic acid fermentation - *Lactobacillus bulgaricus* - Soy milk - *Streptococcus thermophilus*

Classification code: 461 Bioengineering and Biology - 804.1 Organic Compounds

Numerical data indexing: Percentage 2.00e+00%, Percentage 3.00e+00%, Percentage 6.00e+00%, Temperature 3.16e+02K, Temperature 3.58e+02K, Time 1.80e+03s, Time 2.16e+04s

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

708.

Accession number: 20121214869341

Title: Overview on ontology mapping and approach

Authors: Liu, Xiyin¹ ; Cao, Lijun¹ ; Dai, Wei¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, X. (Liuxiyin2003@.sina.com)

Source title: Proceedings - 2011 4th IEEE International Conference on Broadband Network and Multimedia Technology, IC-BNMT 2011

Abbreviated source title: Proc. - IEEE Int. Conf. Broadband Netw. Multimedia Technol., IC-BNMT

Monograph title: Proceedings - 2011 4th IEEE International Conference on Broadband Network and

Multimedia Technology, IC-BNMT 2011

Issue date: 2011

Publication year: 2011

Pages: 592-595

Article number: 6156003

Language: English

ISBN-13: 9781612841564

Document type: Conference article (CA)

Conference name: 2011 4th IEEE International Conference on Broadband Network and Multimedia Technology, IC-BNMT 2011

Conference date: October 28, 2011 - October 30, 2011

Conference location: Shenzhen, China

Conference code: 88935

Sponsor: IEEE Beijing Section; Chinese Association of Artificial Intelligence; Beijing University of Posts and Telecommunications; Norges Teknisk-Naturvitenskapelige Uuniversitet; International Business Machines; Natural Science Foundation of China

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper begins with the concept of ontology and ontology mapping. On ground of the description of ontology, classification on similarity is given in this paper. They include the approaches based on syntax, instance, constraint, architecture and property relations. And the mapping approaches are also classified according to the mapping technique, such as approaches based on logic inference, statistic, machine learning, graph theory, information flow, modularization, fuzzy conceptual graph, risk decision and formal conceptual analysis. Meanwhile each approach is described briefly. The existing problems and prospect are proposed at last. © 2011 IEEE.

Number of references: 11

Main heading: Mapping

Controlled terms: Broadband networks - Fuzzy inference - Graph theory - Modular construction - Multimedia systems

Uncontrolled terms: Conceptual analysis - Conceptual graph - Existing problems - Information flows - Logic inferences - Mapping techniques - Modularizations - Ontology mapping - Risk decision - similarity - ontology

Classification code: 723.5 Computer Applications - 723.4.1 Expert Systems - 718 Telephone Systems and Related Technologies; Line Communications - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 717 Optical Communication - 405.3 Surveying - 405.2 Construction Methods - 716 Telecommunication; Radar, Radio and Television

DOI: 10.1109/ICBNMT.2011.6156003

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

709.

Accession number: 20102312999656

Title: First-principles investigations on structural and elastic properties of CaX (X=S, Se and Te) under high pressure

Authors: Hao, A.M.^{1, 2}; Yang, X.C.³; Gao, Z.M.²; Liu, X.²; Zhu, Y.^{1, 2}; Liu, R.P.¹

Author affiliation:

- 1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China
- 2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 3 Department of Physics, Baicheng Normal College, Baicheng 137000, China

Corresponding author: Liu, R. P. (riping@ysu.edu.cn)

Source title: High Pressure Research

Abbreviated source title: High. Pressure. Res.

Volume: 30

Issue: 2

Monograph title: INTERNATIONAL UNION OF CRYSTALLOGRAPHY (IUCr) MEETING ON 'ADVANCED CRYSTALLOGRAPHY AT HIGH PRESSURE', HARBIN (CHINA), 19-22 JULY 2009

Issue date: June 2010

Publication year: 2010

Pages: 310-317

Language: English

ISSN: 08957959

E-ISSN: 14772299

CODEN: HPRSEL

Document type: Conference article (CA)

Publisher: Taylor and Francis Ltd., 4 Park Square, Milton Park, Abingdon, Oxfordshire, OX14 4RN, United Kingdom

Abstract: An investigation on structural and elastic properties of CaX (X=S, Se and Te) under high pressure is conducted using first-principles calculations based on density functional theory with the plane wave basis set as implemented in the CASTEP code. Our results demonstrate that the sequence of the pressure-induced phase transition of the three compounds is the NaCl-type to the CsCl-type structure. The calculated structural and elastic parameters of CaX (X=S, Se and Te) agree well with the available experimental results and the previous theoretical data. © 2010 Taylor & Francis.

Number of references: 17

Main heading: Phase transitions

Controlled terms: Calculations - Crystallography - Density functional theory - Elasticity - Mineralogy - Sodium chloride - Structural properties - Tellurium compounds

Uncontrolled terms: Ab initio calculations - Elastic parameters - Elastic properties - First-principles calculation - First-principles investigations - High pressure - High-pressure phase transitions - Plane-wave basis set - Pressure-induced phase transition - Type structures

Classification code: 804.1 Organic Compounds - 804.2 Inorganic Compounds - 921 Mathematics - 922.1 Probability Theory - 951 Materials Science - 931.1 Mechanics - 931.4 Quantum Theory; Quantum Mechanics - 933.1 Crystalline Solids - 933.3 Electronic Structure of Solids - 931.3 Atomic and Molecular Physics - 801.4 Physical Chemistry - 723 Computer Software, Data Handling and Applications - 408 Structural Design - 421 Strength of Building Materials; Mechanical Properties - 422 Strength of Building Materials; Test Equipment and Methods - 482 Mineralogy - 482.2 Minerals - 531.2 Metallography - 641.1 Thermodynamics - 721 Computer Circuits and Logic Elements

DOI: 10.1080/08957951003774254

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

710.

Accession number: 20124615665831

Title: The character research of oil source with load of rolling screw system

Authors: Chen, Chunming¹ ; Liu, Jia¹ ; Xu, Li¹

Author affiliation:

1 E and A College of Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Chen, C. (gentlewind_chen@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 184-185

Monograph title: Frontiers of Mechanical Engineering and Materials Engineering

Issue date: 2012

Publication year: 2012

Pages: 743-747

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037854419

Document type: Conference article (CA)

Conference name: 2012 International Conference on Frontiers of Mechanical Engineering and

Materials Engineering, MEME 2012

Conference date: July 27, 2012 - July 29, 2012

Conference location: Hong Kong, Hong kong

Conference code: 92656

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Oil source made up of constant pressure variable displacement pump, accumulator, and pipeline is widely used to provide stable pressure for electro-hydraulic control system in practical engineering. The control system is non-linear and real-time, each part of which is interactive, a simulation model of energy source system is built, which includes constant pressure pump, accumulator and pipeline and load by means of AMESim software. Based on the simulation and experiment, the relationship between the load frequency variation and the pressure fluctuation of oil-source are obtained, the research provides support on how to confirm the equipment parameter properly, improve the stability of energy source system and enhance the control precision by reasonable confirming the equipment parameter. © (2012) Trans Tech Publications, Switzerland.

Number of references: 9

Main heading: Oil wells

Controlled terms: Computer simulation - Mechanical engineering

Uncontrolled terms: Constant pressures - Control precision - Electro-hydraulic control systems - Energy source - Equipment parameters - Load frequency - Oil sources - Oil-source - Practical engineering - Pressure fluctuation - Rolling screw - Simulation model

Classification code: 512.1.1 Oil Fields - 608 Mechanical Engineering, General - 723.5 Computer Applications

DOI: 10.4028/www.scientific.net/AMM.184-185.743

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

711.

Accession number: 20133616705026

Title: Plant landscape design research of urban residential area based on low-carbon concept

Authors: Li, Ying¹ ; Liu, Li¹ ; Li, Xin¹

Author affiliation:

1 College of Arts, Hebei Normal University of Science and Technology, Qinhuangdao, 066000, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 357-360

Monograph title: Architecture, Building Materials and Engineering Management

Issue date: 2013

Publication year: 2013

Pages: 2059-2062

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037857762

Document type: Conference article (CA)

Conference name: 3rd International Conference on Civil Engineering, Architecture and Building Materials, CEABM 2013

Conference date: May 24, 2013 - May 26, 2013

Conference location: Jinan, China

Conference code: 99141

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: This paper analyzes urban plant landscape in the aspect of energy and water conservation, microclimate regulation based on the concept of low carbon. The experimental data shows that the scientific and effective carbon sink design make the low carbon residential construction feasible. And the results verify that plant landscape play an important role in the construction of urban low-carbon living area. © (2013) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Plants (botany)

Controlled terms: Building materials - Civil engineering - Housing - Water conservation

Uncontrolled terms: Energy and water conservations - Landscape design - Living area - Low-carbon - Low-carbon concepts - Plant landscape - Residential construction - Urban residential areas

Classification code: 415 Metals, Plastics, Wood and Other Structural Materials - 414 Masonry Materials - 413 Insulating Materials - 461.9 Biology - 412 Concrete - 409 Civil Engineering, General - 403.1 Urban Planning and Development - 411 Bituminous Materials

DOI: 10.4028/www.scientific.net/AMM.357-360.2059

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

712.

Accession number: 20114514500742

Title: The integration of layered and target oriented teachings for college selective PE course

Authors: Wang, Shuang¹ ; Xu, Kai² ; Bi, Wen Jun³

Author affiliation:

1 Physical Education Department, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, Hebei Province, China

2 Physical Education Department, Environmental Management College of China, Qinhuangdao, 066004, Hebei Province, China

3 Physical Education Department, Hebei Vocational and Technical College of Building Materials, Qinhuangdao, 066004, Hebei Province, China

Corresponding author: Wang, S. (wangshuang333@126.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 108

Monograph title: Education and Educational Technology

Issue date: 2011

Publication year: 2011

Pages: 749-755

Language: English

ISSN: 18675662

ISBN-13: 9783642247743

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Have conducted the system research to the lamination teaching configuration of organization and the goal teaching method, thought that the two's organic conformity may enhance the ordinary university sports teaching effect effectively, to university student's physical and moral integrity development, as well as lifelong physical culture consciousness and the sports custom fosters has the positive promoter action. © 2011 Springer-Verlag Berlin Heidelberg.

Number of references: 6

Main heading: Teaching

Controlled terms: Curricula - Students

Uncontrolled terms: layered teaching organization format - Physical culture - regular institutions of higher learning - selective PE course - Teaching methods - University students

Classification code: 901.2 Education

DOI: 10.1007/978-3-642-24775-0_116

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20121414930926

Title: The application of nano-materials and technologies in sports physical sciences

Authors: Shen, Fei1 ; Wang, Hai Jun1

Author affiliation:

1 Hebei Normal University of Science and Technology, China

Corresponding author: Shen, F. (tyjx126@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 485

Monograph title: Advanced Research on Material Engineering and Its Application

Issue date: 2012

Publication year: 2012

Pages: 478-481

Language: English

ISSN: 10226680

ISBN-13: 9783037853740

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Information Science, Automation and Material System, ISAM 2012

Conference date: April 21, 2012 - April 22, 2012

Conference location: Changsha, China

Conference code: 89238

Sponsor: International Science and Education Researcher Association (ISER); Beijing Gireida Education Research Center; VIP-Information Conference Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: With the development of nano-technology, how to make use of nano-materials and technologies in sports to improve the athlete's athletic ability and skill levels get more and more attention, sports physical science play an important role in selection of athletes, sports injury, sports functions improving and so on. Using nano-technology in the field of sports physical science is extremely important, this study explain the application of nano-materials and technologies in the field of sports physical science; discuss the promoting effect of nanotechnology on the development of sports physical science. © (2012) Trans Tech Publications, Switzerland.

Number of references: 7

Main heading: SportS

Controlled terms: Applications - Sports medicine - Technology

Uncontrolled terms: Athletic abilities - Physical science - Promoting effect - Skill levels

Classification code: 451.2 Air Pollution Control - 461.3 Biomechanics, Bionics and Biomimetics - 901 Engineering Profession

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

714.

Accession number: 20103913267117

Title: The study of Ag adsorbed on Ge(1 1 1) 2×1 surfaces using first-principles calculations

Authors: Zhu, Y.1, 2 ; Zhang, S.H.1 ; Zhang, X.Y.1 ; Zhang, S.L.1 ; Hao, A.M.1, 2 ; Jin, H.Y.1 ; Liu, R.P.1

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, R. P. (riping@ysu.edu.cn)

Source title: Physica B: Condensed Matter

Abbreviated source title: Phys B Condens Matter

Volume: 405

Issue: 21

Issue date: November 1, 2010

Publication year: 2010

Pages: 4541-4546

Language: English

ISSN: 09214526

CODEN: PHYBE3

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: The surface structures and electronic properties of two proposed Ge(1 1 1) 2×1 reconstruction surfaces and the Ge(1 1 1) 2×1Ag chemisorption systems at 0.5 and 1.0 ML (monolayer) coverage are studied using first-principles calculations. The adsorption energy, work function, energy band, and density of states are calculated to distinguish the two models from each other. The calculated structures and electronic properties of the clean surface agree well with previous experimental and theoretical results. In the case of 0.5 ML coverage, the systems show metallic properties. There is a great contrast between the two optimized structures. Their electronic properties are also different. The 1 ML coverage systems show semiconductor-like properties. The electronic properties are quite similar for the two models, although their optimized geometries present slight differences. © 2010 Elsevier B.V. All rights reserved.

Number of references: 23

Main heading: Electronic properties

Controlled terms: Adsorption - Chemisorption - Germanium - Monolayers - Optimization - Silver

Uncontrolled terms: Adsorption energies - Clean surfaces - Density of state - Energy band - First-principles - First-principles calculation - Left chain - Metallic properties - Optimized geometries - Optimized structures - Right chain - Theoretical result

Classification code: 547.1 Precious Metals - 701.1 Electricity: Basic Concepts and Phenomena - 802.3 Chemical Operations - 804 Chemical Products Generally - 813.2 Coating Materials - 921.5 Optimization Techniques

DOI: 10.1016/j.physb.2010.08.034

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

715.

Accession number: 20104713403365

Title: RETRACTED ARTICLE: Comparing evaluated precision of straightness error among two spot, least square method and minimum envelope zone method

Authors: Tian, Shuyao¹ ; Lu, Weina¹ ; Hui, Tian² ; Cai, Ning² ; Yang, Ying¹

Author affiliation:

1 Department of Mechanics and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

2 Department of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

Corresponding author: Tian, S. (tianbaoshuyao@163.com)

Source title: 2010 2nd IITA International Conference on Geoscience and Remote Sensing, IITA-GRS 2010

Abbreviated source title: IITA Int. Conf. Geosci. Remote Sens., IITA-GRS

Volume: 2

Monograph title: 2010 2nd IITA International Conference on Geoscience and Remote Sensing, IITA-GRS 2010

Issue date: 2010

Publication year: 2010

Pages: 67-70

Article number: 5603259

Language: English

ISBN-13: 9781424485154

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: The aim of this paper is to find the evaluate method for straightness error conforms to the smallest condition. First, the algorithm model and the realization method of evaluating straightness error in two spot, least squares method and the minimum envelope zone method have been introduced in detail. The experiment data of eight different kinds of straights have been done on CMM. Then the measured data are evaluated by two spot, least square method and minimum envelope zone method based on search approximatioss(namely cut and try method in revolutionally). It's the experimental result indicated that minimum envelope zone method based on search approximatioss evaluates the result precision to be the highest, and conform to the smallest condition, the sampling distribution impacts the evaluating precision of two spot and least squares method. © 2010 IEEE.

Number of references: 9

Main heading: Least squares approximations

Controlled terms: Geology - Remote sensing

Uncontrolled terms: Algorithm model - Cut-and-try method - Evaluating precision - Evaluating Straightness - Experiment data - Least square methods - Least squares methods - Measured data - Realization method - Sampling distribution - Straightness errors - Zone method

Classification code: 481.1 Geology - 731.1 Control Systems - 921.6 Numerical Methods

DOI: 10.1109/IITA-GRS.2010.5603259

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

716.

Accession number: 20105013482583

Title: Applying simulation teaching method to numerical control machining practice

Authors: Xiaoqin, Zhang¹ ; Haifang, Wang¹ ; Yu, Rong¹ ; Li, Yanping¹ ; Zhang, Liling¹

Author affiliation:

¹ College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Xiaoqin, Z. (zxqwlc@163.com)

Source title: ICEIT 2010 - 2010 International Conference on Educational and Information Technology, Proceedings

Abbreviated source title: ICEIT - Int. Conf. Educ. Inf. Technol., Proc.

Volume: 2

Part number: 2 of 3

Monograph title: ICEIT 2010 - 2010 International Conference on Educational and Information Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: V2183-V2186

Article number: 5607498

Language: English

ISBN-13: 9781424480340

Document type: Conference article (CA)

Conference name: 2010 International Conference on Educational and Information Technology, ICEIT 2010

Conference date: September 17, 2010 - September 19, 2010

Conference location: Chongqing, China

Conference code: 82726

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Applying simulation method to NC (Numerical Control) machining practice can achieve real operation training goal, and can greatly reduce the expensive equipment and risk. The paper introduces the connotation and process of simulation method, describes applying process of simulation method in numerical control practice with examples. And characteristics, application scope and notice of simulation teaching method are analyzed. © 2010 IEEE.

Number of references: 7

Main heading: Computer simulation

Controlled terms: Information technology - Machining - Mathematical models - Numerical control systems - Numerical methods - Teaching

Uncontrolled terms: Numerical control - Numerical control machining - Practice - Simulation methods - Simulation teaching method - Teaching methods

Classification code: 604.2 Machining Operations - 723.5 Computer Applications - 731.1 Control Systems - 901.2 Education - 921 Mathematics - 921.6 Numerical Methods

DOI: 10.1109/ICEIT.2010.5607498

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

717.

Accession number: 20114014387233

Title: RETRACTED ARTICLE: Thinking of school-based textbooks construction

Authors: Guo, Yanzheng¹ ; Fu, Rongxia¹ ; Wang, Yanwen¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Guo, Y. (guoyanzheng64@126.com)

Source title: 2011 2nd International Conference on Artificial Intelligence, Management Science and Electronic Commerce, AIMSEC 2011 - Proceedings

Abbreviated source title: Int. Conf. Artif. Intell., Manage. Sci. Electron. Commer., AIMSEC - Proc.

Monograph title: 2011 2nd International Conference on Artificial Intelligence, Management Science and Electronic Commerce, AIMSEC 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 4889-4892

Article number: 6010212

Language: English

ISBN-13: 9781457705366

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: Features of operating a school needs to be guaranteed by school-based curriculum. School-based textbook is the premise and foundation of school-based curriculum. Its construction is the reflection of the school running characteristics. Teachers in each school compiled school-based textbooks according to the educational goal formulated by our country and on the analysis of the campus and external environment. It is written according to the teaching of school-based working practice and theoretical teaching practice. More importantly, school-based textbook plays an indispensable role in driving the discipline construction, professional construction and course construction. It helps foster exquisite courses and famous teachers, cultivate and bring up application-oriented talents which adapted to the needs of social development. © 2011 IEEE.

Number of references: 2

Main heading: Curricula

Controlled terms: Artificial intelligence - Construction - Electronic commerce - Management science - Teaching - Textbooks

Uncontrolled terms: Application-oriented - Applied talents - Educational goals - External environments - Running characteristic - School characteristics - Social development - Teaching practices - Working practices

Classification code: 405 Construction Equipment and Methods; Surveying - 723.4 Artificial Intelligence - 723.5 Computer Applications - 901.2 Education - 912.2 Management

DOI: 10.1109/AIMSEC.2011.6010212

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20094512426468

Title: Description of work-hardening layer's depth by soft coefficient

Authors: Rong-Chang, Liu1 ; Li-Dong, Chen1 ; Yu, Wu2 ; Shu-Uing, Ma1 ; Li-Zhen, Feng1

Author affiliation:

1 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Hebei Vocational and Technical College of Building Materials, Qinhuangdao 066004, China

Corresponding author: Rong-Chang, L. (lrc-lrc@163.com)

Source title: Key Engineering Materials

Abbreviated source title: Key Eng Mat

Volume: 419-420

Issue date: 2010

Publication year: 2010

Pages: 73-76

Language: English

ISSN: 10139826

CODEN: KEMAEY

Document type: Conference article (CA)

Publisher: Trans Tech Publications Ltd, Laubisrutistr.24, Stafa-Zuerich, CH-8712, Switzerland

Abstract: In this paper, by introducing the conceptions of stress condition and soft coefficient, a nonlinear equation is used to describe stress condition of the contacting body along depth. By taking the classical contact problem of two parallel cylinders as an example, we give a quantitative description of work-hardening layer's depth related to local contact problems by using soft coefficient, and it is theoretically proved that plastic deformation and plastic failure exist objectively in engineering contact problem. The analysis indicates that hardening layer's depth in the range of $0.43643b$ (where "b" represents contacting semi-width), where soft coefficient equivalent to infinity, can be defined as "work-hardening surface layer", depth ranging from $0.43643b$ to $3b$ can be roughly defined as "subsurface layer", and depth ranging out of $3b$ can be defined as "deep layer". Finite element analysis of Ono-rolling specimen shows that measuring method of x-ray of the residual stress is relatively more accurate in the surface layer; however, numerical method can give more accurate results than experimental method in the subsurface and deep layer.

Number of references: 8

Main heading: Hardening

Controlled terms: Nonlinear equations

Uncontrolled terms: Contact problem - Deep layer - Experimental methods - Finite element analysis - Measuring method - Plastic failure - Quantitative description - Soft coefficient - Stress condition - Subsurface layer - Surface layers - Work-hardening

Classification code: 537.1 Heat Treatment Processes - 921.1 Algebra

DOI: 10.4028/www.scientific.net/KEM.419-420.73

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

719.

Accession number: 20122315082695

Title: Performance test and data acquisition of voltage regulator for automotive alternator

Authors: Zhang, Xiaoqin¹ ; Li, Zhihong¹ ; Wang, Baoliang² ; Wang, Lianchuan²

Author affiliation:

- 1 Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, China
- 2 Qinhuangdao Nachun Electronic Company Limited, Qinhuangdao, China

Corresponding author: Zhang, X. (zxqwlc@163.com)

Source title: Proceedings 2011 International Conference on Transportation, Mechanical, and Electrical Engineering, TMEE 2011

Abbreviated source title: Proc. Int. Conf. Transp., Mech., Electr. Eng., TMEE

Monograph title: Proceedings 2011 International Conference on Transportation, Mechanical, and Electrical Engineering, TMEE 2011

Issue date: 2011

Publication year: 2011

Pages: 707-710

Article number: 6199300

Language: English

ISBN-13: 9781457717017

Document type: Conference article (CA)

Conference name: 2011 International Conference on Transportation, Mechanical, and Electrical Engineering, TMEE 2011

Conference date: December 16, 2011 - December 18, 2011

Conference location: Changchun, China

Conference code: 89940

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The dynamic testing system of voltage regulator must be assembled with the automotive alternator, so it's large, expensive, power consumption and operation complexity. A static testing system was developed by using electronic analog generator in place of automotive alternator sets. The system communicated with the computer can carry out performance test and data acquisition, in turn to analysis performance for large quantities of products. The paper described the methods of static testing and the principles of data acquisition. By comparison, it's proved that the static testing system is simple, reliable, easy to operate, cheap and accurate. Its accuracy came to 0.1 relative to dynamic testing system. © 2011 IEEE.

Number of references: 6

Main heading: Data acquisition

Controlled terms: Dynamics - Electrical engineering - Instruments - Voltage regulators

Uncontrolled terms: Automotive alternators - Dynamic testing - Electrical performance - Performance tests - Static testing - Static tests

Classification code: 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 931.1 Mechanics - 723.2 Data Processing and Image Processing - 709 Electrical Engineering, General - 732.1 Control Equipment

DOI: 10.1109/TMEE.2011.6199300

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

720.

Accession number: 20112514075642

Title: The high order zero-difference representation of the solutions to a system of vandermonde linear equations

Authors: Xiao, Xin1 ; Li, Jingbo1 ; Cui, Yu1

Author affiliation:

1 Dept. of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Xiao, X.

Source title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Abbreviated source title: Proc. - ACIS Int. Symp. Cryptography, Netw. Secur., Data Min. Knowl. Discov., E-Commer. Its Appl., Embedded Syst., CDEE

Monograph title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Issue date: 2011

Publication year: 2011

Pages: 116-118

Article number: 5759397

Language: English

ISBN-13: 9780769543321

Document type: Conference article (CA)

Conference name: 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Conference date: October 23, 2010 - October 24, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 84956

Sponsor: Int. Assoc. Comput. Inf. Sci. (ACIS)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: By using the theory of linear algebra and the calculus of differences, a typical representation of the solution to a system of linear equations is presented. The representation makes the solution to linear equations more concise and succinct. © 2010 IEEE.

Number of references: 5

Main heading: Network security

Controlled terms: Cryptography - Data mining - Difference equations - Electronic commerce - Embedded systems - Knowledge representation - Linear algebra - Linear equations

Uncontrolled terms: Cramer rule - High order - System of linear equations

Classification code: 723 Computer Software, Data Handling and Applications - 921 Mathematics

DOI: 10.1109/CDEE.2010.91

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

721.

Accession number: 20115014602744

Title: Rolling bearing fault diagnosis using cascade correlation based on wavelet packet characteristic entropy

Authors: Zhao, Weiguol ; Wang, Liying1 ; Li, Chunliu2 ; Wang, Nan1

Author affiliation:

- 1 Hebei University of Engineering, Handan 056021, China
- 2 College of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhao, W. (2000wangly@163.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 7

Issue: 13

Issue date: December 2011

Publication year: 2011

Pages: 4923-4930

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press, P.O. Box 162, Bethel, CT 06801-0162, United States

Abstract: The Cascade Correlation (CC) is presented as a neural network growing technique which allows one to gradually build network architecture without the need to redefine the number of neurons to be used in a feed forward. A new fault diagnosis method of vibrating of bearings based on CC is proposed, in which three layers wavelet packet decomposition of the acquired vibrating signals of bearings is performed and the wavelet packet-characteristic entropy is extracted, the eigenvector of wavelet packet of the vibrating signals is constructed, and taking this eigenvector as fault samples the adaptive CC neural networks is trained to implement the intelligent fault diagnosis. The simulation results show the proposed method is effective and feasible, so it is of great significance for improving the fault diagnosis and state identification. © 2011 Binary Information Press December, 2011.

Number of references: 12

Main heading: Neural networks

Controlled terms: Bearings (machine parts) - Eigenvalues and eigenfunctions - Entropy - Failure analysis - Network architecture - Wavelet analysis - Wavelet decomposition

Uncontrolled terms: Cascade correlation - Cascade correlation neural networks - Fault diagnosis method - Fault sample - Feed forward - Intelligent fault diagnosis - Rolling bearing - Rolling bearings - State identification - Three-layer - Wavelet Packet - Wavelet Packet Decomposition

Classification code: 921 Mathematics - 723.4 Artificial Intelligence - 723 Computer Software, Data Handling and Applications - 722 Computer Systems and Equipment - 641.1 Thermodynamics - 601.2 Machine Components - 421 Strength of Building Materials; Mechanical Properties

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

722.

Accession number: 20134917050570

Title: Impact analysis of natural environment on British English

Authors: Wang, Jing¹ ; Bian, Fenglian¹ ; Song, Jie¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qin Huangdao, Hebei, 066000, China

Source title: International Journal of Applied Environmental Sciences

Abbreviated source title: Int. J. Appl. Environ. Sci.

Volume: 8

Issue: 10

Issue date: 2013

Publication year: 2013

Pages: 1177-1183

Language: English

ISSN: 09736077

E-ISSN: 09740260

Document type: Journal article (JA)

Publisher: Research India Publications, B-2/84 Ground Floor, Rohini Sec-16,, Delhi, 110085, India

Abstract: To know the relationship between natural environment and the evolution of language, this article expounds the influence of climate, area, ocean to English accents and idioms. After literature search, Coverage analysis and discuss the relationship between language and nature. Also analyze English idioms' origin and background; it helps people's further knowledge of English idioms and English accents. © Research India Publications.

Number of references: 8

Main heading: Environmental engineering

Uncontrolled terms: Coverage analysis - English idiom - Environment - Evolution of languages - Influence - Literature search - Natural environments - UK

Classification code: 454 Environmental Engineering

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

723.

Accession number: 20121114859249

Title: The application of nano-materials and technologies in sports physical sciences

Authors: Shen, Fei1 ; Wang, Hai Jun1

Author affiliation:

1 Hebei Normal University of Science and Technology, China

Corresponding author: Shen, F. (tyjx126@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 485

Monograph title: Advanced Research on Material Engineering and Its Application

Issue date: 2012

Publication year: 2012

Pages: 478-481

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037853740

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Information Science, Automation and Material System, ISAM 2012

Conference date: April 21, 2012 - April 22, 2012

Conference location: Changsha, China

Conference code: 88945

Sponsor: International Science and Education Researcher Association (ISER); Beijing Gireida Education Research Center; VIP-Information Conference Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: With the development of nano-technology, how to make use of nano-materials and technologies in sports to improve the athlete's athletic ability and skill levels get more and more attention, sports physical science play an important role in selection of athletes, sports injury, sports functions improving and so on. Using nano-technology in the field of sports physical science is extremely important, this study explain the application of nano-materials and technologies in the field of sports physical science; discuss the promoting effect of nanotechnology on the development of sports physical science. © (2012) Trans Tech Publications, Switzerland.

Number of references: 7

Main heading: SportS

Controlled terms: Applications - Sports medicine - Technology

Uncontrolled terms: Athletic abilities - Physical science - Promoting effect - Skill levels

Classification code: 451.2 Air Pollution Control - 461.3 Biomechanics, Bionics and Biomimetics - 901

Engineering Profession

DOI: 10.4028/www.scientific.net/AMR.485.478

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

724.

Accession number: 20103613215107

Title: The teaching reform of probability and statistics and cultivation of innovative ability

Authors: Yue, Xiaoyun¹ ; Guo, Yajun¹ ; Wang, Jinran¹ ; Han, Ying²

Author affiliation:

1 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao Hebei Province, China

2 Hebei Building Materials College of Vocational Technology, Qinhuangdao Hebei Province, China

Corresponding author: Yue, X. (yuexiaoyun888@sohu.com)

Source title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Abbreviated source title: ICIMA- Int. Conf. Ind. Mechatronics Autom.

Volume: 1

Part number: 1 of 2

Monograph title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Issue date: 2010

Publication year: 2010

Pages: 588-590

Article number: 5538112

Language: English

ISBN-13: 9781424476541

Document type: Conference article (CA)

Conference name: 2010 2nd International Conference on Industrial Mechatronics and Automation, ICIMA 2010

Conference date: May 30, 2010 - May 31, 2010

Conference location: Wuhan, China

Conference code: 81583

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Wuhan Institute of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The paper has put forward an idea about the teaching reformation to course of probability and statistics in agriculture and forestry universities. We have paid attention to the theory contact with practice. We also present a new teaching method that the idea of mathematical modeling is applied in the teaching process of application cases to reform teaching methods and seek new teaching modes. Students' ability on applying and innovation will be trained by strengthening the practice of students. © 2010 IEEE.

Number of references: 9

Main heading: Teaching

Controlled terms: Cultivation - Forestry - Mechatronics

Uncontrolled terms: Innovative ability - Mathematic modeling - Mathematical modeling - New teaching - Probability and statistics - Probablity and statistics - Teaching methods - Teaching process - Teaching reform - Teaching reforms

Classification code: 608 Mechanical Engineering, General - 821.0 Woodlands and Forestry - 821.3 Agricultural Methods - 901.2 Education

DOI: 10.1109/ICINDMA.2010.5538112

Database: Compendex

725.

Accession number: 20130615997252

Title: Indoor open spaces precious device regulatory system design based on internet of things

Authors: Yu, Zhang Hong¹ ; Jian, Yu Qing¹ ; Liu, Shu Rong¹ ; Cao, Li Jun¹

Author affiliation:

1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Yu, Z. H. (yuzhanghong@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 273

Monograph title: Manufacturing and Engineering Developments

Issue date: 2013

Publication year: 2013

Pages: 718-721

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037855881

Document type: Conference article (CA)

Conference name: 2nd International Conference on Innovation Manufacturing and Engineering Management, IMEM 2012

Conference date: December 14, 2012 - December 16, 2012

Conference location: Chongqing, China

Conference code: 95255

Sponsor: National Natural Science Foundation of China (NSFC)

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: To study the design of the indoor open places precious device regulatory system based on Internet of Things, the system uses a star structure, with intelligent alarm control center, using distributed monitoring terminal, automatic detection of invasive behavior in arming monitoring area, the alarm signal is generated. Alarm control center of the system is mainly based on the ARM processor core hardware platform and embedded Linux operating system development; monitoring terminal use the SOC chip CC2530-core hardware platform; Zigbee wireless transmission technology is used to communicate between the control center and monitor terminal. © (2013) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Internet

Controlled terms: Alarm systems - Hardware - Innovation - Manufacture - Programmable logic controllers - Systems analysis - Zigbee

Uncontrolled terms: Alarm signals - ARM processor - Automatic Detection - Control center - Device regulatory - Distributed monitoring - Embedded - Embedded Linux - Hardware platform - Intelligent alarms - Internet of Things (IOT) - Regulatory systems - Star structure - System use - ZigBee wireless transmission

Classification code: 961 Systems Science - 914.2 Fires and Fire Protection - 912 Industrial Engineering and Management - 732.1 Control Equipment - 723 Computer Software, Data Handling and Applications - 722.3 Data Communication, Equipment and Techniques - 718 Telephone Systems and Related Technologies; Line Communications - 717 Optical Communication - 716 Telecommunication; Radar, Radio and Television - 605 Small Tools and Hardware - 537.1 Heat Treatment Processes

DOI: 10.4028/www.scientific.net/AMM.273.718

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

726.

Accession number: 20142317798871

Title: Analysis of technology of basic actions for aerobics based on biomechanics

Authors: Wang, Shuang¹ ; Wang, Zhonghai² ; Gao, Shuyan³

Author affiliation:

- 1 Department of Physical Education, Hebei Normal University of Science and Technology, Qin Huang Dao, 066004, China
- 2 Department of Public Sports, Hebei North University, Zhang Jia Kou, 075000, China
- 3 Department of Sports, Hebei Medical University, Shijiazhuang, 050017, China

Corresponding author: Wang, S.

Source title: Information Technology Journal

Abbreviated source title: Inf. Technol. J.

Volume: 12

Issue: 15

Issue date: 2013

Publication year: 2013

Pages: 3369-3373

Language: English

ISSN: 18125638

E-ISSN: 18125646

Document type: Journal article (JA)

Publisher: Asian Network for Scientific Information, 308-Lasani Town, Sargodha Road, Faisalabad, Pakistan

Abstract: As one of people's favorite sports, with the urgent enhancement of demand of spiritual civilization, the number of aerobics lovers is increasing. To provide better scientific methods, this study analyzes its basic arm actions, basic trunk actions and basic lower limbs actions, proposes a method in biomechanics. Finally, it extracts the biomechanical parameters for basic actions and analyzes the significances and validities of varied parameters. The technical analysis and study method provide theoretical bases for studies and trainings of aerobics. © 2013 Asian Network for Scientific Information.

Number of references: 10

Main heading: Biomechanics

Controlled terms: Computer science - Information technology

Uncontrolled terms: Basic actions - Biomechanical parameters - Intersection angles - Mechanical parameters - Scientific method - Space coordinates - Technical analysis - Varied parameters

Classification code: 721 Computer Circuits and Logic Elements - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 903 Information Science - 931.1 Mechanics

DOI: 10.3923/itj.2013.3369.3373

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

727.

Accession number: 20140117160701

Title: Self-assembly and nanostructures in organogels based on a bolaform cholesteryl imide compound with conjugated aromatic spacer

Authors: Jiao, Ti-Feng^{1, 2} ; Gao, Feng-Qing¹ ; Shen, Xi-Hai^{1, 3} ; Zhang, Qing-Rui¹ ; Zhang, Xian-Fu³ ; Zhou, Jing-Xin¹ ; Gao, Fa-Ming¹

Author affiliation:

1 Hebei Key Laboratory of Applied Chemistry, School of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao 066004, China

2 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Jiao, T.-F. (tfjiao@ysu.edu.cn)

Source title: Materials

Abbreviated source title: Mater.

Volume: 6

Issue: 12

Issue date: 2013

Publication year: 2013

Pages: 5893-5906

Language: English

E-ISSN: 19961944

Document type: Journal article (JA)

Publisher: MDPI AG, Postfach, Basel, CH-4005, Switzerland

Abstract: The self-assembly of small functional molecules into supramolecular structures is a powerful approach toward the development of new nanoscale materials and devices. As a class of self-assembled materials, low weight molecular organic gelators, organized in special nanoarchitectures through specific non-covalent interactions, has become one of the hot topics in soft matter research due to their scientific values and many potential applications. Here, a bolaform cholesteryl imide compound with conjugated aromatic spacer was designed and synthesized. The gelation behaviors in 23 solvents were investigated as efficient low-molecular-mass organic gelator. The experimental results indicated that the morphologies and assembly modes of as-formed organogels can be regulated by changing the kinds of organic solvents. Scanning electron microscopy and atomic force microscopy observations revealed that the gelator molecule self-assemble into different aggregates, from wrinkle and belt to fiber with the change of solvents. Spectral studies indicated that there existed different H-bond formations between imide groups and assembly modes. Finally, some rational assembly modes in organogels were proposed and discussed. The present work may give some insight to the design and character of new organogelators and soft materials with special structures. © 2013 by the authors; licensee MDPI, Basel, Switzerland.

Number of references: 65

Main heading: Self assembly

Controlled terms: Aromatic compounds - Atomic force microscopy - Gelation - Molecules - Nanostructures - Scanning electron microscopy - Spectroscopic analysis

Uncontrolled terms: Cholesteryl compound - Functional molecules - Nano-scale materials - Non-covalent interaction - Organogels - Self assembled material - Spacer - Supramolecular structure

Classification code: 933 Solid State Physics - 931.3 Atomic and Molecular Physics - 931.2 Physical Properties of Gases, Liquids and Solids - 804.1 Organic Compounds - 802.3 Chemical Operations - 801 Chemistry - 761 Nanotechnology

DOI: 10.3390/ma6125893

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

728.

Accession number: 20105213530869

Title: Hydraulic AGC control system based on smith fuzzy-PID control

Authors: Yu, Yuzhen^{1, 2}; Du, Fengshan¹; Ren, Xinyi¹; Zhang, Shangbin¹; Hao, Wenxu³

Author affiliation:

1 Institute of Mechanical Engineering, Yanshan University, Qinhuangdao, Hebei, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

3 Jiancheng Company, Haerbin, Heilongjiang, China

Corresponding author: Yu, Y. (yu_yuzhen@163.com)

Source title: Proceedings - 2010 International Conference on Artificial Intelligence and Education, ICAIE 2010

Abbreviated source title: Proc. - Int. Conf. Artif. Intell. Educ., ICAIE

Monograph title: Proceedings - 2010 International Conference on Artificial Intelligence and Education, ICAIE 2010

Issue date: 2010

Publication year: 2010

Pages: 89-92

Article number: 5641525

Language: English

ISBN-13: 9781424469338

Document type: Conference article (CA)

Conference name: 2010 3rd International Conference on Artificial Intelligence and Education, ICAIE 2010

Conference date: October 29, 2010 - October 30, 2010

Conference location: Hangzhou, China

Conference code: 83101

Sponsor: IEEE Beijing Section; Huazhong Normal University; Hangzhou Normal University; China Association of Educational Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In view of the characteristics of nonlinearity, time-varying and time-delay in hydraulic AGC control system, a Smith fuzzy-PID complex control strategy is proposed. Smith predictor algorithm is used to compensate for the time delay and fuzzy control is used to enhance the robustness of the system, and then PID algorithms are used to improve the static precision of the system. The simulation results indicate that the method has characteristics of small overshoot, short adjusting time and strong anti-interference ability and robustness. It can further improve the quality of the strip thickness. ©2010 IEEE.

Number of references: 8

Main heading: Adaptive control systems

Controlled terms: Algorithms - Delay control systems - Fuzzy control - Hydraulics - Remote control - Robustness (control systems) - Three term control systems - Time delay

Uncontrolled terms: Adaptive Control - Anti-interference - Complex control - Fuzzy-PID - Fuzzy-PID control - Non-Linearity - PID - PID Algorithm - Simulation result - Small overshoot - Smith predictors - Time varying

Classification code: 632.1 Hydraulics - 713 Electronic Circuits - 723 Computer Software, Data Handling and Applications - 731 Automatic Control Principles and Applications - 731.1 Control Systems - 921 Mathematics

DOI: 10.1109/ICAIE.2010.5641525

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

729.

Accession number: 20131916319678

Title: Modal cutoff in rare-earth-doped photonic crystal fibers with multi-layer air-holes missing in the core

Authors: Zhao, Xing-tao^{1, 2} ; Zheng, Yi² ; Liu, Xiao-xu^{1, 3} ; Li, Shu-guang^{1, 2} ; Han, Ying¹ ; Hou, Zhi-yun¹ ; Wang, Na¹ ; Hou, Lan-tian¹

Author affiliation:

1 Key Lab. of Measurement Technology and Instrumentation of Hebei Province, State Key Lab. of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, 066004, China

2 Laser Institute of Science College, Beijing Jiaotong University, Beijing, 100044, China

3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Zhao, X. (zxt-81@sohu.com)

Source title: Optoelectronics Letters

Abbreviated source title: Optoelectron. Lett.

Volume: 9

Issue: 3

Issue date: 2013

Publication year: 2013

Pages: 201-203

Language: English

ISSN: 16731905

Document type: Journal article (JA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The various mode effective indices of the doped photonic crystal fibers (PCFs) are compared, the mode field distributions of the fundamental mode and the second-order mode are analyzed, and the single-mode condition is presented. The mode effective indices of large-core doped PCFs with different core indices and structure parameters are simulated by the finite element method (FEM). The relations of the core index with the fiber structure parameters of pitch, hole-to-pitch ratio and core diameter are obtained for single-mode propagation. In the design and fabrication of the doped PCF, we can adjust the core index and fiber structure parameters to achieve large mode area and single-mode propagation. © 2013 Tianjin University of Technology and Springer-Verlag Berlin Heidelberg.

Number of references: 16

Main heading: Optical fiber fabrication

Controlled terms: Finite element method - Photonic crystal fibers

Uncontrolled terms: Fiber structures - Fundamental modes - Large mode area - Mode field distribution - Second order modes - Single mode condition - Single mode propagation - Structure parameter

Classification code: 812.3 Glass - 921.6 Numerical Methods - 951 Materials Science

DOI: 10.1007/s11801-013-2373-3

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

730.

Accession number: 20113114196327

Title: Research of image segmentation based on genetic algorithm

Authors: Zhu, Meining¹ ; Hu, Zhili² ; Chen, Xiumin¹

Author affiliation:

1 Mathematics and Information Technology College, Hebei Normal University of Science and Technology, 066004, China

2 College of Foreign Language, Hebei Normal University of Science and Technology, 066004, China

Corresponding author: Zhu, M.

Source title: Proceedings of SPIE - The International Society for Optical Engineering

Abbreviated source title: Proc SPIE Int Soc Opt Eng

Volume: 8009

Monograph title: Third International Conference on Digital Image Processing, ICDIP 2011

Issue date: 2011

Publication year: 2011

Article number: 800924

Language: English

ISSN: 0277786X

CODEN: PSISDG

ISBN-13: 9780819485830

Document type: Conference article (CA)

Conference name: 3rd International Conference on Digital Image Processing, ICDIP 2011

Conference date: April 15, 2011 - April 17, 2011

Conference location: Chengdu, China

Conference code: 85726

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT); Singapore Institute of Electronics

Publisher: SPIE, P.O. Box 10, Bellingham, WA 98227-0010, United States

Abstract: Through the in-depth study on the existing genetic algorithms and image segmentation technologies, based on the practical application of image segmentation, this paper improves the basic genetic algorithm and applies it in image segmentation. Practices show that this can simplify the calculation steps, consequently improve the image segmentation efficiency. © 2011 Copyright Society of Photo-Optical Instrumentation Engineers (SPIE).

Number of references: 6

Main heading: Image segmentation

Controlled terms: Genetic algorithms - Imaging systems

Uncontrolled terms: In-depth study - threshold

Classification code: 723 Computer Software, Data Handling and Applications - 723.2 Data Processing and Image Processing - 741 Light, Optics and Optical Devices - 741.1 Light/Optics - 746 Imaging Techniques - 921 Mathematics

DOI: 10.1117/12.896671

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

731.

Accession number: 20105113505948

Title: RETRACTED ARTICLE: Problems exist in financial management teaching and counter measures

Authors: Zhao, Rui1 ; Zhou, Xiaona1 ; Mao, Jiuzhi1 ; Jin, Huixin1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Zhao, R. (zhaorui66@126.com)

Source title: Proceedings - 2010 2nd IEEE International Conference on Information and Financial Engineering, ICIFE 2010

Abbreviated source title: Proc. - IEEE Int. Conf. Inf. Financ. Eng., ICIFE

Monograph title: Proceedings - 2010 2nd IEEE International Conference on Information and Financial Engineering, ICIFE 2010

Issue date: 2010

Publication year: 2010

Pages: 878-881

Article number: 5609493

Language: English

ISBN-13: 9781424469253

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: With China and the west economic and cultural exchanges and cooperation in many aspects as well as Chinese rapid economic development, financial management has been developed from the initial simple investment, financing ideas into a mature subject branch coming to China. In China, financial management is a young subject, who has a relatively short history, its theoretical system, logical structure-study object and discussing ways still need further study. This paper Carried out detailed discussion and research on some

outstanding issues exist in the process of teaching financial management and corresponding counter measures. To make further research and investigation for fostering integrated financial management talents to meet the needs of the community. © 2010 IEEE.

Number of references: 15

Main heading: Finance

Controlled terms: Economics - Management

Uncontrolled terms: Counter measures - Economic development - Financial managements
- Logical structure - Outstanding issues - Theoretical system

Classification code: 911.1 Cost Accounting - 912.2 Management - 971 Social Sciences

DOI: 10.1109/ICIFE.2010.5609493

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

732.

Accession number: 20124815717169

Title: Study on the comprehensive evaluation of the soil fertility quality of the green land in qinhuangdao

Authors: Fan, Hairong¹ ; Li, Yanpo¹ ; Wu, Suxia¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Fan, H.

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 573-574

Monograph title: Environment Science and Materials Engineering

Issue date: 2012

Publication year: 2012

Pages: 191-194

Language: English

ISSN: 10226680

ISBN-13: 9783037854952

Document type: Conference article (CA)

Conference name: 2012 International Conference on Environment Materials and Environment Management, EMEM 2012

Conference date: August 4, 2012 - August 4, 2012

Conference location: Wuhan, China

Conference code: 93578

Sponsor: Information Technology and Industrial Engineering Research Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Soil samples with the green space soil in Qinhuangdao city were collected, and soil bulk density, pH, EC, organic matter, alkali-hydrolysable nitrogen, available phosphorus, available potassium were studied, and Nemer comprehensive index method was used to evaluate the soil fertility. The results indicated that the green space soil synthesis level was general. © (2012) Trans Tech Publications, Switzerland.

Number of references: 2

Main heading: Quality control

Controlled terms: Fertilizers - Potassium - Soils

Uncontrolled terms: Available phosphorus - Comprehensive evaluation - Comprehensive index method - Green land - Green spaces - Nemer index - Qinhuangdao - Soil bulk density - Soil fertility - Soil sample

Classification code: 483.1 Soils and Soil Mechanics - 549.1 Alkali Metals - 804 Chemical Products Generally - 913.3 Quality Assurance and Control

DOI: 10.4028/www.scientific.net/AMR.573-574.191

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

733.

Accession number: 20133316609813

Title: Photosensitizer that selectively generates singlet oxygen in nonpolar environments:
Photophysical mechanism and efficiency for a covalent BODIPY dimer

Authors: Zhang, Xian-Fu^{1, 2}; Yang, Xudong¹

Author affiliation:

1 Chemistry Department, Center of Instrumental Analysis, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

2 MPC Technologies, Hamilton, ON L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Physical Chemistry B

Abbreviated source title: J Phys Chem B

Volume: 117

Issue: 30

Issue date: August 1, 2013

Publication year: 2013

Pages: 9050-9055

Language: English

ISSN: 15206106

E-ISSN: 15205207

CODEN: JPCBFK

Document type: Journal article (JA)

Abstract: Photosensitizers that selectively generate singlet oxygen in non polar/polar microenvironments are highly desirable for photodynamic therapy of tumor but not yet reported. BODIPY (boron-dipyrromethene complexes) covalent dimer 1 is such a photosensitizer that forms singlet oxygen only in hexane, cyclohexane, and toluene significantly but not in polar solvents. Its corresponding monomer is not photoactive in any solvents for forming singlet oxygen. To reveal the mechanism, we measured the excited triplet-, singlet-, and ground-state properties as well as singlet oxygen generation capability with laser flash photolysis, fluorescence spectroscopy, time-correlated single photon counting, and absorption spectroscopy in various solvents. The striking difference is due to the fact that the excited dimer (excimer) undergoes very fast intramolecular charge transfer (ICT) that makes intersystem crossing noncompetitive in polar solvents, while ICT is negligible in nonpolar solvents. © 2013 American Chemical Society.

Number of references: 32

Main heading: Photosensitizers

Controlled terms: Dimers - Fluorescence spectroscopy - Organic solvents - Oxygen - Photodynamic therapy - Solvents

Uncontrolled terms: Ground state properties - Inter-system crossings - Intramolecular charge transfers - Laser flash photolysis - Non-polar solvents - Nonpolar environment - Singlet oxygen generation - Time-correlated single photon counting

Classification code: 741.1 Light/Optics - 741.3 Optical Devices and Systems - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally

DOI: 10.1021/jp405102m

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

734.

Accession number: 20104713417182

Title: The analysis and design of security protocol on electrical business platform

Authors: Jia, Sumei¹ ; Wang, Wei¹ ; Wang, Feng² ; Guo, Ying³

Author affiliation:

- 1 College of Information Engineering, Handan College, Handan, China
- 2 School of Electronic Engineering, E and A College, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 School of Electronic Engineering, Tianjin University of Technology and Education, Tianjin, China

Corresponding author: Jia, S. (Jiasumei0920@sina.com)

Source title: 2010 6th International Conference on Wireless Communications, Networking and Mobile Computing, WiCOM 2010

Abbreviated source title: Int. Conf. Wirel. Commun., Networking Mob. Comput., WiCOM

Monograph title: 2010 6th International Conference on Wireless Communications, Networking and Mobile Computing, WiCOM 2010

Issue date: 2010

Publication year: 2010

Article number: 5601261

Language: English

ISBN-13: 9781424437092

Document type: Conference article (CA)

Conference name: 2010 6th International Conference on Wireless Communications, Networking and Mobile Computing, WiCOM 2010

Conference date: September 23, 2010 - September 25, 2010

Conference location: Chengdu, China

Conference code: 82436

Sponsor: IEEE Antennas and Propagation Society; IEEE Communications Society; Southwest Jiaotong University; University of Electronic Science and Technology of China; Wuhan University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper focuses on communication security of ecommerce. A secure electronic transaction model was designed, with the designs of security protocols of transactions for each process in detail, and the advantages was pointed out. In the design process, the security protocol proposed in this paper is not confined to a particular electronic trading system itself. This model has a wide range of practical significance and reference value. © 2010 IEEE.

Number of references: 7

Main heading: Network security

Controlled terms: Cryptography - Design - Electronic commerce - Mobile computing - Network protocols - Wireless networks - Wireless telecommunication systems

Uncontrolled terms: Analysis and design - Communication security - Design process - E-Commerce - Electronic trading - Reference values - Secure electronic transaction - Security protocols

Classification code: 408 Structural Design - 716 Telecommunication; Radar, Radio and Television - 716.3 Radio Systems and Equipment - 717 Optical Communication - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications

DOI: 10.1109/WICOM.2010.5601261

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

735.

Accession number: 20115214649138

Title: A study on the mooring-line force characteristics of composite-type sea cage

Authors: Li, Chunliu 1

Author affiliation:

1 College of Urban Construction, HeBei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Corresponding author: Li, C. (lcclcc_010@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 393-395

Monograph title: Biotechnology, Chemical and Materials Engineering

Issue date: 2012

Publication year: 2012

Pages: 555-558

Language: English

ISSN: 10226680

ISBN-13: 9783037853078

Document type: Conference article (CA)

Conference name: 2011 International Conference on Biotechnology, Chemical and Materials Engineering, CBCME 2011

Conference date: December 28, 2011 - December 29, 2011

Conference location: Kunming, China

Conference code: 87902

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The aim of this paper is to analyze the mooring-line forces and draw the layout types of composite-type sea cages suitable for deep-sea. Through physical model tests the mooring-line forces were tested respectively under pure current, pure wave and wave combined with current conditions, and the test results showed that 1.composite-type sea cage should adopt uniform layout;2. The number of sea cages increased within certain limits has no significant effect on the maximum of mooring-line force; 3. Sea cage should be arranged vertically with the flow when environmental were controlled mainly by water flow,if only from the perspective of the force;4. Sea cage should be arranged along the direction of wave propagation when environmental were mainly controlled by waves.

Number of references: 4

Main heading: Mooring

Controlled terms: Biotechnology - Chemical analysis

Uncontrolled terms: Composite-type sea cage - Force characteristics - Mooring line - Physical model test - Water flows

Classification code: 461.8 Biotechnology - 672 Naval Vessels - 801 Chemistry - 804 Chemical Products Generally

DOI: 10.4028/www.scientific.net/AMR.393-395.555

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

736.

Accession number: 20120914804830

Title: From concerning the employment rate to the quality of employment

Authors: Qianqian, Yang¹ ; Hongju, Zhang¹ ; Yan, Xiao²

Author affiliation:

1 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao Hebei, China

2 Finance and Economics College, Hebei Normal University of Science and Technology, Qinhuangdao Hebei, China

Corresponding author: Qianqian, Y.

Source title: Proceedings - 2011 4th International Symposium on Knowledge Acquisition and Modeling, KAM 2011

Abbreviated source title: Proc. - Int. Symp. Knowl. Acquis. Model., KAM

Monograph title: Proceedings - 2011 4th International Symposium on Knowledge Acquisition and Modeling, KAM 2011

Issue date: 2011

Publication year: 2011

Pages: 617-620

Article number: 6137722

Language: English

ISBN-13: 9780769545479

Document type: Conference article (CA)

Conference name: 2011 4th International Symposium on Knowledge Acquisition and Modeling, KAM 2011

Conference date: October 8, 2011 - October 9, 2011

Conference location: Sanya, China

Conference code: 88589

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Our government and educational administrative departments mainly depend on the "employment rate" to assess the employment situation of various types of universities and colleges for years. However, there have disadvantages of the "employment rate" based evaluation, because it would lead colleges focus on employment "quantitative", and would be difficult to achieve the scientific development of higher education. Based on the analysis of the function of higher education and the meaning employment quality, this article argue that the government should focus on the comprehensive assessment of employment quality, adjust the process of regulating institutions of higher education and promote the construction and development of the concept of higher education. © 2011 IEEE.

Number of references: 2

Main heading: Population statistics

Controlled terms: Education - Employment - Knowledge acquisition - Quality control - Societies and institutions

Uncontrolled terms: Comprehensive assessment - Employment situation - Higher education - Scientific development

Classification code: 922.2 Mathematical Statistics - 913.3 Quality Assurance and Control - 913 Production Planning and Control; Manufacturing - 912 Industrial Engineering and Management - 901.2 Education - 901.1.1 Societies and Institutions - 723.4 Artificial Intelligence

DOI: 10.1109/KAM.2011.167

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

737.

Accession number: 20132216380133

Title: Magnetic field and temperature dependence of the properties of the ground state of the strong-coupling bound magnetopolaron in quantum rods with hydrogenic impurity

Authors: Xin, Wei1 ; Zhao, Yuwei1 ; Han, Chao1 ; Eerdunchaolu1

Author affiliation:

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Source title: Journal of Semiconductors

Abbreviated source title: J. Semicond.

Volume: 34

Issue: 5

Issue date: May 2013

Publication year: 2013

Article number: 052001

Language: English

ISSN: 16744926

Document type: Journal article (JA)

Publisher: Institute of Physics Publishing, Temple Circus, Temple Way, Bristol, BS1 6BE, United Kingdom

Abstract: Magnetic field and temperature dependence of the properties of the ground state of the strong-coupling bound magnetopolaron in quantum rods (QRs) with hydrogenic impurity is studied by means of the Huybrechts - Lee - Low - Pines transformation method and the quantum statistical theory. The expressions for the ground-state energy and the mean number of phonons of the magnetopolaron are derived. Results of the numerical calculations show that the bound state of the magnetopolaron cannot be formed when the value of the aspect ratio of the QR, the dielectric constant ratio, the electron - phonon coupling strength or the temperature parameter is small. The larger the deviation of the value of aspect ratio e' from 1 is, the more it is unfavorable to the stability of the ground state of the magnetopolaron. When the magnetopolaron is in the bound state, the absolute value of its ground-state energy and its mean number of phonons increase with an increase of the dielectric constant ratio and confinement strength of QRs, but decrease with an increase in the cyclotron frequency of the external magnetic field and the temperature. The absolute value of the ground-state energy and the mean number of phonons of the magnetopolaron decrease with decreasing e' when $e' < 1$, but decrease with increasing e' when $e' > 1$. They get the maximum value at $e' = 1$. © 2013 Chinese Institute of Electronics.

Number of references: 27

Main heading: Ground state

Controlled terms: Aspect ratio - Magnetic fields - Phonons - Temperature distribution

Uncontrolled terms: Ground-state energies - Hydrogenic impurities - Magnetopolarons - Quantum rods - Temperature dependence

Classification code: 641.1 Thermodynamics - 701.2 Magnetism: Basic Concepts and Phenomena - 751.1 Acoustic Waves - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 933 Solid State Physics - 943 Mechanical and Miscellaneous Measuring Instruments

DOI: 10.1088/1674-4926/34/5/052001

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

738.

Accession number: 20102913084841

Title: Laminar cooling control based on fuzzy-PID controller

Authors: Wang, Haifang¹ ; Rong, Yu¹ ; Wang, Tao²

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Qinhuangdao, China

2 Port Machinery Branch of Engineering Technology Co., Ltd., Qinhuangdao Port Co., Ltd., Qinhuangdao, China

Corresponding author: Wang, H. (hfwang0335@126.com)

Source title: ICIME 2010 - 2010 2nd IEEE International Conference on Information Management and Engineering

Abbreviated source title: ICIME - IEEE Int. Conf. Inf. Manage. Eng.

Volume: 6

Part number: 6 of 6

Monograph title: ICIME 2010 - 2010 2nd IEEE International Conference on Information

Management and Engineering

Issue date: 2010

Publication year: 2010

Pages: 7-10

Article number: 5477705

Language: English

ISBN-13: 9781424452644

Document type: Conference article (CA)

Conference name: 2010 2nd IEEE International Conference on Information Management and Engineering, ICIME 2010

Conference date: April 16, 2010 - April 18, 2010

Conference location: Chengdu, China

Conference code: 81055

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Strip coiling temperature is one important parameter of performance of hot rolled strip, and its laminar cooling control system is highly nonlinear. The combination of PID control and fuzzy control was put forward and a fuzzy self-tuning PID controller was built through the rules of fuzzy control based on the inapplicability on the time-lag, timechange, big-inertia, nonlinearity problems and the difficulty of PID controller parameters adjusting, the three parameters of PID controller can be adjusted adaptively online. It presents the control for the highly nonlinear, time-varying laminar cooling control system based on the fuzzy-PID controller. The simulation shows that the static dynamic quality of the system is better, and fuzzy-PID has good adaptability. © 2010 IEEE.

Number of references: 6

Main heading: Controllers

Controlled terms: Cooling - Electric control equipment - Fuzzy control - Information management - Proportional control systems - Temperature control - Three term control systems - Two term control systems

Uncontrolled terms: Coiling temperature - Fuzzy PID controller - Fuzzy-PID - Highly

nonlinear - Hot-rolled - Hot-rolled strip - Laminar cooling - Non-Linearity - PID control - PID controller - PID controllers - Self-tuning PID - Static dynamics - System-based - Three parameters - Time lag - Time varying

Classification code: 921 Mathematics - 912.2 Management - 903.2 Information Dissemination - 802.3 Chemical Operations - 732.1 Control Equipment - 731.3 Specific Variables Control - 731.1 Control Systems - 731 Automatic Control Principles and Applications - 723.4 Artificial Intelligence - 704.2 Electric Equipment - 641.2 Heat Transfer

DOI: 10.1109/ICIME.2010.5477705

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

739.

Accession number: 20132116348906

Title: An unprecedented trinodal (3,4,7)-connected metal-organic framework containing trizinc(II) clusters

Authors: Zhang, Wei-Guo¹ ; Cui, Guang-Hua² ; Xiao, Shu-Lin² ; Du, Xu²

Author affiliation:

- 1 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangda 066004, China
- 2 College of Chemical Engineering, Hebei United University, Tangshan 063009, Hebei, China

Source title: Bulletin of the Korean Chemical Society

Abbreviated source title: Bull. Korean Chem. Soc.

Volume: 34

Issue: 4

Issue date: April 20, 2013

Publication year: 2013

Pages: 1243-1246

Language: English

ISSN: 02532964

E-ISSN: 12295949

CODEN: BKCSDE

Document type: Journal article (JA)

Publisher: Korean Chemical Society, 635-4 Yeoksam-dong, Kangnam-Gu, Seoul, 135-703, Korea, Republic of

Number of references: 35

DOI: 10.5012/bkcs.2013.34.4.1243

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

740.

Accession number: 20130215879878

Title: Improvement of β -glucosidase production by protoplast fusion between *Aspergillus Oryzae* 3.481 and *aspergillus niger* 3.316 using response surface methodology

Authors: Zhu, Feng-Mei¹ ; Du, Bin² ; Li, Jun¹

Author affiliation:

1 Hebei Normal University of Science and Technology, College of Food Science and Technology, Qinhuangdao, China

2 Hebei Normal University of Science and Technology, Analysis and Testing Center, Qinhuangdao, China

Corresponding author: Li, J. (trueyeoman@sina.com)

Source title: Biotechnology and Biotechnological Equipment

Abbreviated source title: Biotechnol. Biotechnol. Equip.

Volume: 26

Issue: 6

Issue date: 2012

Publication year: 2012

Pages: 3378-3384

Language: English

ISSN: 13102818

Document type: Journal article (JA)

Publisher: Diagnosis Press Limited., 5 Malusba Str., Sofia, 1164, Bulgaria

Abstract: β -Glucosidase production by protoplast fusion between *Aspergillus oryzae* 3.481 and *Aspergillus niger* 3.316 in shake flask culture was optimized by statistical analysis using response surface methodology (RSM). The fused protoplasts had been regenerated on a specific medium and fusants were selected for further studies. Screening of variables to find their relative effect on β -glucosidase production was done using single-factor test and analysis of variance (ANOVA). The effect of substrate concentration and initial pH on β -glucosidase production was studied. The initial pH and concentration of mixed carbon source of bran and starch, ammonium sulphate, CaCl₂ and KCl, were found to influence the enzyme production significantly. The optimal levels of these variables and the effect of their mutual interactions on β -glucosidase production were determined using Box-Behnken design. This led to a further optimization of the fermentation conditions to achieve higher enzyme activities, which reached 4.124 U/mL.

Number of references: 18

Main heading: Substrates

Controlled terms: Ammonium compounds - *Aspergillus* - Calcium chloride - Optimization
- Surface properties

Uncontrolled terms: Ammonium sulphate - *Aspergillus niger* - *Aspergillus Oryzae* -
Box-Behnken design - Carbon source - Enzyme production - Fermentation conditions -
Glucosidase - Initial pH - Mutual interaction - Optimal level - Protoplast fusion - Response
surface methodology - Shake-flask cultures - Substrate concentrations

Classification code: 461 Bioengineering and Biology - 461.9 Biology - 801 Chemistry - 804.2 Inorganic
Compounds - 921.5 Optimization Techniques - 951 Materials Science

DOI: 10.5504/bbeq.2012.0094

Database: Compendex

741.

Accession number: 20124715701900

Title: Hypergraph-based solution for selecting quasi-identifier

Authors: Huang, Liming¹ ; Song, Jinling¹ ; Lu, Qicheng¹ ; Liu, Xin¹ ; Zhang, Chao²

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Enviroment Management College of China, Qinhuangdao 066004, China

Corresponding author: Huang, L. (huangliming99@126.com)

Source title: International Journal of Digital Content Technology and its Applications

Abbreviated source title: Int. J. Digit. Content Technol. Appl.

Volume: 6

Issue: 20

Issue date: November 2012

Publication year: 2012

Pages: 597-606

Language: English

ISSN: 19759339

E-ISSN: 22339310

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, Myoungbo Bldg 3F, Bumin-dong 1-ga, Seo-gu, Busan, 602-816, Korea, Republic of

Abstract: Quasi-identifier is the key factor which may influence the validity of k-anonymity privacy protection model. The continuous release of views enables the quasi-identifiers selection of the releasing view (the view to be released) to have a close relationship with the released views (the views which have been released) and own dynamic nature, so how to single out the quasi-identifier of the releasing view has become an urgent task. First of all, the view set which has been released and the releasing view are mapped to a hypergraph, besides, the relative lemma and theorem for selecting quasi-identifier in the hypergraph are proposed. Then the problem of

choosing quasi-identifier is transformed into the problem of searching the pathway between two specific nodes in the hypergraph. Finally this paper proposes the hypergraph-based quasi-identifier selection algorithm and conducts analysis for its correctness and time complexity.

Number of references: 15

Main heading: Graph theory

Controlled terms: Digital communication systems - Software engineering

Uncontrolled terms: Correlated view - Dynamic nature - Hypergraph - K-Anonymity -
Key factors - Privacy protection model - Quasi-identifier - Selection algorithm - Time complexity

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication
- 718 Telephone Systems and Related Technologies; Line Communications - 723.1 Computer Programming -
921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.4156/jdcta.vol6.issue20.65

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

742.

Accession number: 20110813679613

Title: Study on the problem and countermeasure of fruit production quality and safety in Yanshan Mountain

Authors: Gao, Haisheng¹ ; Du, Bin¹ ; Zhu, Fengmei¹

Author affiliation:

¹ School of Food Science and Technology, Hebei Normal University of Science and Technology, 066000 Qinhuangdao, China

Corresponding author: Gao, H.

Source title: IFIP Advances in Information and Communication Technology

Abbreviated source title: IFIP Advances in Information and Communication Technology

Volume: 347 AICT

Part number: 4 of 4

Issue: PART 4

Monograph title: Computer and Computing Technologies in Agriculture IV - 4th IFIP TC 12 Conference, CCTA 2010, Selected Papers

Issue date: 2011

Publication year: 2011

Pages: 355-360

Language: English

ISSN: 18684238

ISBN-13: 9783642183683

Document type: Conference article (CA)

Conference name: 4th IFIP International Conference on Computer and Computing Technologies in Agriculture and the 4th Symposium on Development of Rural Information, CCTA 2010

Conference date: October 22, 2010 - October 25, 2010

Conference location: Nanchang, China

Conference code: 83827

Sponsor: China Agricultural University; China Society of Agricultural Engineering; International Federation for Information Processing (IFIP); Beijing Society for Information Technology in Agriculture; National Natural Science Foundation of China

Publisher: Springer New York, 233 Springer Street, New York, NY 10013-1578, United States

Abstract: In this paper, the main problem and countermeasure of fruit production quality and safety were studied in Yanshan Mountain. The subjective factor was fruit farmer quality and safety consciousness faint, and the objective factors were: severe orchard environmental pollution, faint fruit post-harvest handling, lag in process technology, fruit quality determination and market inspection system is not yet perfect. The measures of improving fruit quality and safety production in Yanshan Mountain were proposed. On the premise that adjusting and optimizing regional distribution, building and improving quality and safety production management system, controlling post-harvest handling and circulation contamination, implementing organic strategy, establishing Green Silicon Valley. © 2011 IFIP International Federation for Information Processing.

Number of references: 5

Main heading: Fruits

Controlled terms: Agriculture - Industrial management - Landforms - Safety factor

Uncontrolled terms: Countermeasure - Environmental pollutions - Fruit production - Fruit quality - In-process technology - Inspection system - Postharvest - Problem - Regional distribution - Safety production - Silicon valley - Subjective factors - Yanshan Mountain

Classification code: 481.1 Geology - 662.1 Automobiles - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 821.4 Agricultural Products - 912.2 Management

DOI: 10.1007/978-3-642-18369-0_40

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

743.

Accession number: 20121814988379

Title: The algorithm of cloth fast collision detection based on the characteristics triangle

Authors: Zhou, Yanhong¹ ; Wen, Dong² ; Cao, Shukai³ ; Lv, Mengya²

Author affiliation:

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- 2 College of Information Science and Engineering, Yanshan University, Qinhuangdao, Hebei, 066004, China
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Corresponding author: Wen, D. (xjwd@ysu.edu.cn)

Source title: International Journal of Advancements in Computing Technology

Abbreviated source title: Intl. J. Adv. Comput. Technolog.

Volume: 4

Issue: 7

Issue date: 2012

Publication year: 2012

Pages: 231-238

Language: English

ISSN: 20058039

E-ISSN: 22339337

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: Cloth simulation is an important research area in Computer Graphics worldwide at present, and the study, which detects collision, processes surface intersection and response, is a difficulty during the course of cloth simulation. Although there are some achievements, it is difficult for the researchers to improve the efficiency of collision detection due to the features of thick less and foldable. In this situation, we studied the detection problem of cloth collision based on the characteristics triangle. At first the basic idea for the cloth collision detection was proposed, then the features assignment and feature bounding volumes were introduced, and then the method of fast cloth collision detection based characteristics triangle was stated in detail, next step the concrete steps of realizing the algorithm were given, in the end the comparative analysis between the new method and the traditional method were displayed. The experiment results showed that the time consuming was dropped substantially.

Number of references: 24

Main heading: Algorithms

Controlled terms: Computer graphics

Uncontrolled terms: Bounding volume - Characteristic triangle - Cloth simulation - Collision detection - Comparative analysis - Detection problems

Classification code: 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 921 Mathematics - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.4156/ijact.vol4.issue7.26

Database: Compendex

744.

Accession number: 20122115044067

Title: Problems and countermeasures of network curriculum in distance education

Authors: Yan, Lian-Duo¹ ; Jiang, Hui² ; Chen, Yan-Li²

Author affiliation:

1 Ideological and Political Teaching Department, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 College of Humanities and Laws, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Yan, L.-D. (yanld2006@126.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 146 AISC

Monograph title: Emerging Computation and Information Technologies for Education - Proceeding of 2012 International Conference on Emerging Computation and Information Technologies for Education, ECICE 2012

Issue date: 2012

Publication year: 2012

Pages: 419-426

Language: English

ISSN: 18675662

ISBN-13: 9783642284656

Document type: Conference article (CA)

Conference name: 2012 International Conference on Emerging Computation and Information Technologies for Education, ECICE 2012

Conference date: January 15, 2012 - January 16, 2012

Conference location: Hangzhou, China

Conference code: 89818

Sponsor: Institute of Electronic and Information Technology; Zhejiang Economic and Trade Polytechnic

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Network curriculum is one of important factors that affect network education quality, which plays a vital role for success of distance education. So the development of high quality network curriculum has become a very important and urgent task in distance education. The network curriculum now has many problems that may affect and restrict its development as single teaching content forms, emphasize one teaching content while lack learning environment design, shortage of self-study resources, weak navigation, lack of evaluation and feedback and lack of teaching activities design. To solve these problems, the paper proposes corresponding solutions, such as enhance the instructional design from learner perspective and guided with advanced educational theory, increased application curriculum and other aspects, so as to meet the needs of distance education courses.

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Number of references: 5

Main heading: Curricula

Controlled terms: Construction - Design - Distance education - Information technology - Problem solving

Uncontrolled terms: Corresponding solutions - Educational theory - High quality - Instructional designs - Learning environments - Network curriculum - Network education - Teaching contents

Classification code: 405 Construction Equipment and Methods; Surveying - 408 Structural Design - 901.2 Education - 903 Information Science - 921 Mathematics

DOI: 10.1007/978-3-642-28466-3_57

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

745.

Accession number: 20135217122121

Title: Fixed point attractors of dynamical systems

Authors: Ren, Yunli1 ; Lu, Yulan2 ; Lv, Jinfeng1 ; Chen, Zuoli1

Author affiliation:

- 1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 Harbin Institute of Technology, Harbin 150001, China

Source title: Chinese Control Conference, CCC

Abbreviated source title: Chinese Control Conf., CCC

Monograph title: Proceedings of the 32nd Chinese Control Conference, CCC 2013

Issue date: October 18, 2013

Publication year: 2013

Pages: 1220-1223

Article number: 6639613

Language: English

ISSN: 19341768

E-ISSN: 21612927

ISBN-13: 9789881563835

Document type: Conference article (CA)

Conference name: 32nd Chinese Control Conference, CCC 2013

Conference date: July 26, 2013 - July 28, 2013

Conference location: Xi'an, China

Conference code: 101424

Publisher: IEEE Computer Society

Abstract: In this paper, after studying some properties of attracting fixed points, we focus on the conditions on which a fixed point becomes an attractor. And the results are as follows: (1) the fixed point of a system is an attractor when is a contraction map of a locally compact metric space or an ultimate contraction map of a compact metric space; (2) with respect to one kind of weakly contraction map of a compact metric space, a necessary and sufficient condition of an attracting fixed point is provided. © 2013 TCCT, CAA.

Number of references: 6

Main heading: Dynamical systems

Controlled terms: Set theory - Topology

Uncontrolled terms: attractor - Compact metric spaces - Fixed points - Locally compact
- Weakly contraction

Classification code: 921 Mathematics - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 931 Classical Physics; Quantum Theory; Relativity

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

746.

Accession number: 20134416933476

Title: Research of normalized role of law in the field of governing school affairs legally

Authors: Wang, Na1 ; Song, Junqiang1 ; Ning, Yanpeng1 ; Xiao, Yan1 ; Gao, Xin1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Wang, N. (sdaley@sina.cn)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 225 LNEE

Part number: 3 of 5

Issue: VOL. 3

Monograph title: Proceedings of the 2nd International Conference on Green Communications and Networks 2012, GCN 2012

Issue date: 2013

Publication year: 2013

Pages: 391-397

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783642354694

Document type: Conference article (CA)

Conference name: 2nd International Conference on Green Communications and Networks, GCN 2012

Conference date: December 12, 2012 - December 14, 2012

Conference location: Chongqing, China

Conference code: 95479

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University; Nanyang Technological University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Governing school affairs legally is one of the inevitable requirements of governing a country according to law as well as building a harmonious society. Due to a variety of reasons such as the multifarious and disorderly contents of legal knowledge and indistinct train of thought toward knowledge of law, it is quite easy for us to ignore the most basic normalized role of law. In order to actively promote the process of running universities by law and maintaining the stability of campus, this paper, is aiming at college student's crimes, expounds the meaning of normalized role of law as well as its manners of exerting function. This article also indicates the necessity and urgency of normalized role of law in the process of governing school affairs legally and further discusses the concrete prevention measures to achieve governing school affairs by law. © 2013 Springer-Verlag.

Number of references: 10

Main heading: Students

Controlled terms: Crime

Uncontrolled terms: College students - Governing school affairs legally - Harmonious societies - Legal knowledge - Normalized role - Prevention measures

Classification code: 901.2 Education - 971 Social Sciences

DOI: 10.1007/978-3-642-35470-0_47

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

747.

Accession number: 20133916771705

Title: Self-assembly and soft material preparation of binary organogels via aminobenzimidazole/benzothiazole and acids with different alkyl substituent chains

Authors: Jiao, Tifeng^{1, 2} ; Ma, Keren¹ ; Shen, Xihai^{1, 3} ; Zhang, Qingrui¹ ; Li, Xiujin¹ ; Zhou, Jingxin¹ ; Gao, Faming¹

Author affiliation:

1 Hebei Key Laboratory of Applied Chemistry, School of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao 066004, China

2 State Key Laboratory of Solid Lubrication, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, China

3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Jiao, T. (tfjiao@ysu.edu.cn)

Source title: Journal of Nanomaterials

Abbreviated source title: J. Nanomater.

Volume: 2013

Issue date: 2013

Publication year: 2013

Article number: 762732

Language: English

ISSN: 16874110

E-ISSN: 16874129

Document type: Journal article (JA)

Publisher: Hindawi Publishing Corporation, 410 Park Avenue, 15th Floor, 287 pmb, New York, NY 10022, United States

Abstract: The gelation behaviors of binary organogels composed of aminobenzimidazole/benzothiazole derivatives and benzoic acid with single-/multialkyl substituent chain in various organic solvents were designed and investigated. Their gelation behaviors in 20 solvents were tested as new binary organic gelators. This showed that the number and length of alkyl substituent chains and benzimidazole/benzothiazole segment have played a crucial role in the gelation behavior of all gelator mixtures in various organic solvents. More alkyl chains in molecular skeletons in present gelators are favorable for the gelation of organic solvents. The length of alkyl substituent chains has also played an important role in changing the gelation behaviors and assembly states. Morphological studies revealed that the gelator molecules self-assemble into different aggregates from wrinkle, lamella, belt, to fiber with change of solvents. Spectral studies indicated that there existed different H-bond formation and hydrophobic force, depending on benzimidazole/ benzothiazole segment and alkyl substituent chains in molecular skeletons. The prepared nanostructured materials have wide perspectives and many potential applications in nanoscience and material fields due to their scientific values. The present work may also give new clues for designing new binary organogelators and soft materials. © 2013 Tifeng Jiao et al.

Number of references: 47

Main heading: Gelation

Controlled terms: Musculoskeletal system - Organic solvents - Spectroscopic analysis

Uncontrolled terms: Alkyl substituent - Binary organogels - Gelation behavior - Gelator molecules - Hydrophobic forces - Molecular skeleton - Morphological study - Scientific values

Classification code: 461.3 Biomechanics, Bionics and Biomimetics - 801 Chemistry - 802.3 Chemical Operations - 803 Chemical Agents and Basic Industrial Chemicals

DOI: 10.1155/2013/762732

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

748.

Accession number: 20121514938319

Title: An algorithm based on horizontal bit vectors for mining frequent patterns in data streams

Authors: Zhou, Yanhong¹ ; Wen, Dong² ; Li, Yuxiang¹ ; Li, Hengzhi³

Author affiliation:

- 1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China
- 2 College of Information Science and Engineering, Yanshan University, Qinhuangdao, Hebei 066004, China
- 3 College of LiRen, Yanshan University, Qinhuangdao, Hebei 066004, China

Corresponding author: Wen, D. (zhouyanhong_02@126.com)

Source title: International Journal of Advancements in Computing Technology

Abbreviated source title: Intl. J. Adv. Comput. Technolog.

Volume: 4

Issue: 5

Issue date: March 2012

Publication year: 2012

Pages: 68-74

Language: English

ISSN: 20058039

E-ISSN: 22339337

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: Most algorithms for mining frequent patterns in data streams are based on structures like FP-tree, complex mining method makes time and storage space large compared to the bit vector expression. In this paper, an algorithm based on Horizontal Bit vectors for mining Frequent Patterns in data Streams HB-FPS is proposed. HB-FPS is divided into two phases, in online phase, it uses bit vectors to horizontally express all the transactions according to whether an item occurs in them, bit value 1 means occurrence, and bit value 0 means the opposite. In offline phase, HB-FPS starts from the biggest item, first mines all the frequent 2-itemsets that contain the item, and then generates candidate k-itemsets by frequent (k-1)-itemsets to growth mine all the frequent patterns by the item unit group. Experiments show that, HB-FPS has high efficiency and good scalability. Theory analysis also indicates that it has a good space overhead.

Number of references: 18

Main heading: Data mining

Controlled terms: Algorithms - Data communication systems - Mining - Trees
(mathematics) - Vector spaces

Uncontrolled terms: Bit vector - Data stream - FP tree - Frequent pattern - Horizontal
bit vector - Item sets - Mining methods - Offline - Space overhead - Storage spaces - Unit
group

Classification code: 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 921
Mathematics - 723 Computer Software, Data Handling and Applications - 718 Telephone Systems and Related
Technologies; Line Communications - 717 Optical Communication - 716 Telecommunication; Radar, Radio and
Television - 502.1 Mine and Quarry Operations

DOI: 10.4156/ijact.vol4.issue5.8

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

749.

Accession number: 20124715693583

Title: Influence of temperature and LO phonon on the effective mass of bipolarons in polar
semiconductor quantum dots

Authors: Xin, Wei1 ; Gao, Zhong-ming1 ; Han, Chao1 ; Eerdunchaolu1

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao,
066004, China

Corresponding author: Eerdunchaolu (eerdunchaolu@163.com)

Source title: Optoelectronics Letters

Abbreviated source title: Optoelectron. Lett.

Volume: 8

Issue: 6

Issue date: 2012

Publication year: 2012

Pages: 477-480

Language: English

ISSN: 16731905

Document type: Journal article (JA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The temperature and LO phonon effects of the bipolaron in polar semiconductor quantum dots (QDs) are studied by using the Tokuda modified linear-combination operator method and the Lee-Low-Pines variational method. The expressions for the mean number of LO phonons and the effective mass of the bipolaron are derived. Numerical results show that the mean number of LO phonons of the bipolaron decreases with increasing the temperature and the relative distance r between two electrons, but increases with increasing the electron-phonon coupling strength α . The effective mass of the bipolaron M^* increases rapidly with increasing the relative distance r between two electrons when r is smaller, and it reaches a maximum at $r \approx 4.05r_p$, while after that, M^* decreases slowly with increasing r . The effective mass of the bipolaron M^* decreases with increasing the temperature. The electron-phonon coupling strength markedly influences the changes of mean number of LO phonons and the effective mass M^* with the relative distance r and the temperature parameter γ . © 2012 Tianjin University of Technology and Springer-Verlag Berlin Heidelberg.

Number of references: 15

Main heading: Semiconductor materials

Controlled terms: Electron correlations - Electron-phonon interactions - Semiconductor quantum dots

Uncontrolled terms: Bipolarons - Effective mass - Electron-phonon coupling strengths - LO phonons - Numerical results - Operator method - Relative distances - Temperature parameters - Variational methods

Classification code: 712.1 Semiconducting Materials - 714.2 Semiconductor Devices and Integrated Circuits - 933 Solid State Physics

DOI: 10.1007/s11801-012-2285-7

Database: Compendex

750.

Accession number: 20114614522793

Title: Comprehensive recycling of construction waste

Authors: Huang, Jie-Feng¹ ; Liang, Qi-Bin¹ ; He, Wang¹ ; Xu, Shu-Yuan¹ ; Zhang, Li-Shan¹ ; Yan, Xing¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Corresponding author: Huang, J.-F. (tjxhjf@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 117-119

Monograph title: Materials and Computational Mechanics

Issue date: 2012

Publication year: 2012

Pages: 385-389

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037852804

Document type: Conference article (CA)

Conference name: 2011 International Conference on Applied Mechanics, Materials and Manufacturing, ICAMMM 2011

Conference date: November 18, 2011 - November 20, 2011

Conference location: Shenzhen, China

Conference code: 87300

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: With China's urbanization process accelerated ceaselessly, construction developing rapidly, the great architectural waste discharge. At present, construction waste production but also has far exceeded the rate of domestic can bear. Meanwhile, the disposing mode, such as mechanical landfill and burned, resulting in huge waste of resources and environmental pollution. So how to efficiently processing and using reasonable construction wastes have become our country now faces a severe environmental and ecological problem. This paper discusses the causes, construction waste handling and processing components, the problems existing in the detailed analysis is introduced, and introduces some developed countries and regions with the application of construction waste disposal of the newest research achievement, and comparing and analyzing current construction waste comprehensive treatment of some problems existing in China, and finally puts forward some construction waste comprehensive reuse countermeasures. © (2012) Trans Tech Publications.

Number of references: 7

Main heading: Waste disposal

Controlled terms: Computational mechanics - Recycling - Waste treatment

Uncontrolled terms: Construction wastes - Current construction - Developed countries - Ecological problem - Environmental pollutions - Recycle - Reduce - Reuse - Waste discharges

Classification code: 452.3 Industrial Wastes - 452.4 Industrial Wastes Treatment and Disposal - 921 Mathematics

DOI: 10.4028/www.scientific.net/AMM.117-119.385

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

751.

Accession number: 20102212975166

Title: Structural stabilities and optical properties of BaX (X=S, Se and Te) under high pressure

Authors: Hao, Ai-Min¹ ; Yang, Xiao-Cui² ; Zhao, Yu-Wei¹ ; Liu, Xin¹ ; Song, Ai-Jun¹ ; Zhang, Wei-Guo¹ ; Xin, Wei¹

Author affiliation:

1 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Department of Physics, Baicheng Normal University, Baicheng 137000, China

Corresponding author: Hao, A.-M. (aiminhao1991@yahoo.com.cn)

Source title: Gaoya Wuli Xuebao/Chinese Journal of High Pressure Physics

Abbreviated source title: Gaoya Wuli Xuebao

Volume: 24

Issue: 2

Issue date: April 2010

Publication year: 2010

Pages: 113-119

Language: English

ISSN: 10005773

CODEN: GWXUER

Document type: Journal article (JA)

Publisher: Chinese Journal of High Pressure Physics, P.O. Box 523-60, Chengdu, 610003, China

Abstract: An investigation on the structural stabilities and optical properties of BaX (X=S, Se and Te) under high pressure was conducted using first-principles calculations based on density functional theory. The results show that the sequence of the pressure-induced phase transition of these compounds is from the NaCl-type (B1) to the CsCl-type (B2) structure. The structural transition pressure and the metallization pressure are 8.57 and 45.4 GPa for BaS, 7.44 and 36.5GPa for BaSe, 5.67 and 16.7 GPa for BaTe, respectively. The calculation of the optical properties showed that almost all peaks of the imaginary part of dielectric constant (ϵ_2) in the B1 and B2 structures shift towards high-energy region with increasing pressure (blue shift), and the static dielectric constant increases as the pressure increases.

Number of references: 23

Main heading: Optical properties

Controlled terms: Density functional theory - Permittivity - Phase transitions - Sodium chloride - Stability - Structural properties - Tellurium compounds

Uncontrolled terms: B2 structures - Blue shift - Dielectric constants - First-principles - First-principles calculation - High energy regions - High pressure - Imaginary parts - Metallizations - Pressure increase - Pressure-induced phase transition - Structural stabilities - Structural transitions

Classification code: 804.1 Organic Compounds - 804.2 Inorganic Compounds - 922.1 Probability Theory - 931 Classical Physics; Quantum Theory; Relativity - 931.3 Atomic and Molecular Physics - 931.4 Quantum Theory; Quantum Mechanics - 933.3 Electronic Structure of Solids - 951 Materials Science - 961 Systems Science - 801.4 Physical Chemistry - 408 Structural Design - 482.2 Minerals - 531.2 Metallography - 641.1 Thermodynamics - 701 Electricity and Magnetism - 708.1 Dielectric Materials - 731.4 System Stability - 741.1 Light/Optics - 801 Chemistry

Numerical data indexing: Pressure 1.67e+10Pa, Pressure 3.65e+10Pa, Pressure 4.54e+10Pa

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

752.

Accession number: 20113714323633

Title: Characteristic comparison of hydrocarbon generation kinetics under open-closed systems with constant heating rates and its significance

Authors: Li, Ting-Ting¹ ; Wang, Min¹ ; Lu, Shuang-Fang¹ ; Tian, Shan-Si¹ ; Chen, Guo-Hui² ; Han, Lu³

Author affiliation:

1 College of Earth Sciences, Northeast Petroleum University, Daqing 163318, China

2 Key Laboratory of Tectonics and Petroleum Resources (China Univ. of Key Lab. of Geosciences), Ministry of Education, Hubei Province, Wuhan 430074, China

3 College of Horticulture Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Wang, M. (quickking@163.com)

Source title: Jilin Daxue Xuebao (Diqui Kexue Ban)/Journal of Jilin University (Earth Science Edition)

Abbreviated source title: Jilin Daxue Xuebao (Diqui Kexue Ban)

Volume: 41

Issue: 4

Issue date: July 2011

Publication year: 2011

Pages: 1040-1047

Language: Chinese

ISSN: 16715888

CODEN: JDXDA8

Document type: Journal article (JA)

Publisher: Jilin University Press, 938 Ximinzhu Street, Changchun, 130026, China

Abstract: In order to reveal the difference of hydrocarbon generation kinetics characteristics and its geologic application under different experiment conditions, two thermal simulation apparatus (open and closed systems) are employed to pyrolyze coal sample from Songliao basin. According to the relationship between experimental product yields and temperature, the kinetic models of the oil/gas generated from organic matter are calibrated. Then the kinetic parameters obtained from two experimental systems are extrapolated under the experimental heating rate and the geological heating rate, the results show that the TR (transformation ratio) increasing rate of the gas generation under closed system is slower than that under open system, the reason is that the coal sample pyrolysis to gas under open system is mainly primary cracking, but under closed system it is a common result of primary and secondary cracking. For further application, the hydrocarbon generation threshold is calculated, which combined the burial-thermal history of Xujiaweizi and the kinetic parameters obtained from two experimental systems. And the extrapolation result shows that the calculated geological time (115 Ma) corresponding to the threshold from open system is earlier than the geological time corresponding to the actual threshold (110 Ma), and the calculated geological time (92 Ma) corresponding to the threshold from closed system is later than the geological time corresponding to the actual threshold.

Number of references: 21

Main heading: Petroleum geology

Controlled terms: Cracking (chemical) - Extrapolation - Heating - Heating rate - Hydrocarbons - Kinetic parameters

Uncontrolled terms: Closed systems - Coal sample - Experiment condition - Experimental system - Gas generation - Geological time - Hydrocarbon generation - Hydrocarbon generation kinetics - Hydrocarbon generation threshold - Kinetic models - Primary cracking - Product yields - Secondary cracking - Songliao basin - Thermal simulations - Transformation ratio - Xujiaweizi

Classification code: 931 Classical Physics; Quantum Theory; Relativity - 921.6 Numerical Methods -

803 Chemical Agents and Basic Industrial Chemicals - 802.2 Chemical Reactions - 643.1 Space Heating - 641.2 Heat Transfer - 512.1 Petroleum Deposits

Numerical data indexing: Age 1.10e+08yr, Age 1.15e+08yr, Age 9.20e+07yr

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

753.

Accession number: 20114214434163

Title: Research on intelligent test paper generation base on improved genetic algorithm

Authors: Xiumin, Chen¹ ; Dengcai, Wang¹ ; Meining, Zhu¹ ; Yanping, Yang¹

Author affiliation:

1 Computer Department, Mathematics and Information College, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Xiumin, C.

Source title: ICCSE 2011 - 6th International Conference on Computer Science and Education, Final Program and Proceedings

Abbreviated source title: ICCSE - Int. Conf. Comput. Sci. Educ., Final Program Proc.

Monograph title: ICCSE 2011 - 6th International Conference on Computer Science and Education, Final Program and Proceedings

Issue date: 2011

Publication year: 2011

Pages: 269-272

Article number: 6028632

Language: English

ISBN-13: 9781424497188

Document type: Conference article (CA)

Conference name: 6th International Conference on Computer Science and Education, ICCSE 2011

Conference date: August 3, 2011 - August 5, 2011

Conference location: Singapore, Singapore

Conference code: 86885

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In order to solve the problems such as blindfold search, slower convergence, and sometimes unsuccessfully search in the present genetic algorithms used for intelligent test paper generation, this paper introduces an improved genetic algorithm for intelligent test paper generation. This algorithm generates optimized initial chromosome group and controlling crossing and variation recurring to test paper parameters and randomization. Consequently, it can avoid the problems of blind search and slower convergence resulted by complete randomization controlling adopted by the present genetic algorithms. At last, this paper proves the improved genetic algorithm can better solve the intelligent test paper generation problem compared to present genetic algorithms mentioned in algorithm analysis section of this paper. © 2011 IEEE.

Number of references: 6

Main heading: Convergence of numerical methods

Controlled terms: Chromosomes - Computer science - Education computing - Genetic algorithms - Optimization - Parameter estimation - Problem solving - Software testing - Testing

Uncontrolled terms: Algorithm analysis - Improved genetic algorithms - Intelligent test - optimized initial chromosome group - parameter-controlled crossing - parameter-controlled variation - Test paper

Classification code: 921 Mathematics - 731.1 Control Systems - 723 Computer Software, Data Handling and Applications - 722 Computer Systems and Equipment - 721 Computer Circuits and Logic Elements - 461.2 Biological Materials and Tissue Engineering - 423.2 Non Mechanical Properties of Building Materials: Test Methods

DOI: 10.1109/ICCSE.2011.6028632

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20140417230742

Title: Synthesis and evaluation of naphthenic sulphonate used for enhancing oil recovery

Authors: Zheng, Xue-Fang¹ ; Lian, Qi¹ ; Zhu, Hong² ; Wang, Fang-Hui² ; Jia, Dan-Dan¹ ; Wang, Dong-Jun¹

Author affiliation:

1 School of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

2 School of Science, Beijing University of Chemical Technology, Beijing 100029, China

Corresponding author: Lian, Q. (lianqilianqi517@163.com)

Source title: Gao Xiao Hua Xue Gong Cheng Xue Bao/Journal of Chemical Engineering of Chinese Universities

Abbreviated source title: Gao Xiao Hua Xue Gong Cheng Xue Bao

Volume: 27

Issue: 6

Issue date: 2013

Publication year: 2013

Pages: 1094-1099

Language: Chinese

ISSN: 10039015

CODEN: GHGXEG

Document type: Journal article (JA)

Publisher: Zhejiang University Press, 20 Yugu Road, Hangzhou, 310027, China

Abstract: A novel naphthenic sulphonate was prepared in laboratory by sulphonation of the naphthenic lubricating oil with fuming sulfuric acid. The optimum preparation reaction temperature found is 70°C, the optimum volume ratio of fuming sulfuric acid to naphthenic lubricating oil is 1:4, the optimum reaction time is 10 h. The structure of the product was characterized by infrared spectra, ¹H-NMR and elemental analysis. The results indicate that the product is saturated naphthenic sulphonate. The evaluation of the interfacial activity properties of the product shows that, when the naphthenic sulphonate was used in several blocks in Shengli oilfield without

alkali and other additives, the interfacial tension between crude oil and water could be reduce to a ultra-low value, such as low as $10^{-3} \text{ mN} \cdot \text{m}^{-1}$, and the lowest value of the interfacial tension can be reduced to $6 \times 10^{-4} \text{ mN} \cdot \text{m}^{-1}$. The naphthenic sulphonate possesses good salt-resisting capacity, even when the concentration of NaCl is in the range of $2.5 \times 10^3 \text{ mg} \cdot \text{L}^{-1}$ to $17 \times 10^3 \text{ mg} \cdot \text{L}^{-1}$, or the concentration of Ca^{2+} and Mg^{2+} is below $500 \text{ mg} \cdot \text{L}^{-1}$, it still can reduce the oil-water interfacial tension to $10^{-3} \text{ mN} \cdot \text{m}^{-1}$.

Number of references: 11

Main heading: Synthesis (chemical)

Controlled terms: Enhanced recovery - Lubricating oils - Oil fields - Sulfonation - Sulfuric acid

Uncontrolled terms: Enhanced oil recovery - Infrared spectrum - Interfacial activity - Optimum reaction - Reaction temperature - Shengli Oilfield - Sulphonates - Sulphonation

Classification code: 511 Oil Field Equipment and Production Operations - 511.1 Oil Field Production Operations - 607.1 Lubricants - 802.2 Chemical Reactions - 804.2 Inorganic Compounds

Numerical data indexing: Mass_Density $5.00\text{e-}01\text{kg/m}^3$, Temperature $3.43\text{e+}02\text{K}$, Time $3.60\text{e+}04\text{s}$

DOI: 10.3969/j.issn.1003-9015.2013.06.028

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

755.

Accession number: 20134416929407

Title: Effect of equal channel angular pressing and annealing on corrosion resistance of Al-Cu alloy

Authors: Fang, D.R.1 ; Liu, C.2 ; Liu, F.F.1

Author affiliation:

1 School of Materials and metallurgy, Northeastern University, Shenyang 110819, China

2 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Fang, D. R. (fangdaran@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 803

Monograph title: Frontiers of Chemical Engineering, Metallurgical Engineering and Materials II

Issue date: 2013

Publication year: 2013

Pages: 226-229

Language: English

ISSN: 10226680

Document type: Conference article (CA)

Conference name: 2nd International Conference on Chemical Engineering, Metallurgical Engineering and Metallic Materials, CMMM 2013

Conference date: August 3, 2013 - August 4, 2013

Conference location: Dali, China

Conference code: 100415

Sponsor: International Frontiers of science and; technology Research Association; HongKong Control Engineering and Information; Science Research Assoc.

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Al-3.9wt.%Cu alloy was subjected to equal channel angular pressing (ECAP) and subsequent low temperature annealing treatment, and the corrosion resistance of the samples was investigated by potentiodynamic polarization measurements in 3.5% NaCl solution. The results show that the corrosion rate of the ultrafine-grained alloy increases, in comparison with the coarse-grained alloy. Meanwhile, it is noted that the corrosion resistance of the alloy subjected to ECAP can be improved by relief annealing. © (2013) Trans Tech Publications, Switzerland.

Number of references: 24

Main heading: Corrosion resistance

Controlled terms: Aluminum - Annealing - Chemical engineering - Equal channel angular pressing - Metallurgical engineering

Uncontrolled terms: 3.5% nacl solutions - Al-Cu alloys - Coarse-grained - Cu alloy -

Low temperature annealing - Potentiodynamic polarization measurements - Ultra-fine-grained

Classification code: 421 Strength of Building Materials; Mechanical Properties - 531 Metallurgy and Metallography - 537.1 Heat Treatment Processes - 539.1 Metals Corrosion - 541.1 Aluminum - 805.1 Chemical Engineering

Numerical data indexing: Percentage 3.50e+00%

DOI: 10.4028/www.scientific.net/AMR.803.226

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

756.

Accession number: 20133316611086

Title: Biodiesel Potential of Nonfood Plant Resources from Tsinling and Zhongtiao Mountains of China

Authors: Xue, Shuai^{1, 2}; Steinberger, Yosef⁴; Wang, Ji Shi³; Li, Gui Ying⁵; Xu, Xing You⁶; Xie, Guang Hui³

Author affiliation:

- 1 College of Agronomy and Biotechnology, China Agricultural University, 100193 Beijing, China
- 2 Institute of Crop Science, University of Hohenheim, 70599 Stuttgart, Germany
- 3 College of Agronomy and Biotechnology/National Energy RandD Center for Biomass, China Agricultural University, 100193 Beijing, China
- 4 The Mina and Everard Goodman Faculty of Life Sciences, Bar-Ilan University, 52900 Ramat-Gan, Israel
- 5 Institute of Crop Science, Chinese Academy of Agricultural Sciences, 100081 Beijing, China
- 6 Institute of Wild Plant Resources Application, Hebei Normal University of Science and Technology, 066600 Qinhuangdao, China

Corresponding author: Xie, G. H. (xiegh@cau.edu.cn)

Source title: Bioenergy Research

Abbreviated source title: Bioenergy Res.

Volume: 6

Issue: 3

Issue date: September 2013

Publication year: 2013

Pages: 1104-1117

Language: English

ISSN: 19391234

E-ISSN: 19391242

Document type: Journal article (JA)

Publisher: Springer New York, 233 Spring Street, New York, NY 10013-1578, United States

Abstract: Forty-nine wild oil plants which are abundant in the Tsinling and Zhongtiao Mountains were investigated and screened as raw material for biodiesel production. The oil content was tested and found to be greatly variable, ranging from 10 to 62.8 %. Fatty acid profiles of their vegetable oils were analyzed, and their acid value, saponification number, and iodine value were found to range from 1.6 to 61.3 mg KOH/g, 128.6 to 225.9 mg KOH/g, and 54.3 to 120.9 g I₂/100 g, respectively. Cetane number, kinematic viscosity, specific gravity, high heating values, and cold filter plugging point of the 49 vegetable-oil methyl esters (MEs) were empirically calculated and were found to vary from 38.8 to 66.6, 2.9 to 4.2 mm²/s, 841.4 to 883.8 kg/m³, 39.0 to 47.5 kJ/g, and -14.3 to 13.2 °C, respectively. Almost half (25 species) of all the sampled resources were found to be suitable for biodiesel production since the profiles of their vegetable-oil MEs met the major specifications of Chinese and European Union biodiesel standards, GB/T20828 and EN-14214, respectively. Grey relational analysis was used during the optimum-species screening process. The difference between the individual species and the artificial designed ideal species (the best biodiesel plant type in this paper) was calculated and evaluated with the help of grey relational grade, which varied from 0.467 to 0.686. Finally, the selected plants, *Prunus salicina* Linn. and *Amygdalus davidiana* (C.) C. de Vos, were considered as the optimal feedstock for biodiesel production. © 2013 Springer Science+Business Media New York.

Number of references: 55

Main heading: Biodiesel

Controlled terms: Information theory - Optimization - Thermal processing (foods)

Uncontrolled terms: Biodiesel production - Cold filter plugging point - Grey relational analysis - Grey relational grade - Oil plants - Saponification numbers - Tsinling plant resources - Zhongtiao plant resources

Classification code: 523 Liquid Fuels - 716.1 Information Theory and Signal Processing - 822.2 Food Processing Operations - 921.5 Optimization Techniques

Numerical data indexing: Mass_Density 8.41e+02kg/m³ to 8.84e+02kg/m³, Percentage 1.00e+01%

to 6.28e+01%, Specific_Energy 3.90e+07J/kg to 4.75e+07J/kg, Temperature 2.59e+02K to 2.86e+02K

DOI: 10.1007/s12155-013-9346-z

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

757.

Accession number: 20132416414775

Title: The influence of B₂O₃ on the luminescence behavior of ZnGa₂O₄ phosphor at different sinter temperatures

Authors: Zhong, Rui Xia¹ ; Liu, Zi Ran² ; Qi, Jian Quan¹

Author affiliation:

1 School of Resources and Materials, Northeastern University at Qinhuangdao, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhong, R. X. (zhongruixialiu@yahoo.com.cn)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 690 693

Monograph title: Materials Design, Processing and Applications

Issue date: 2013

Publication year: 2013

Pages: 627-631

Language: English

ISSN: 10226680

ISBN-13: 9783037856925

Document type: Conference article (CA)

Conference name: 4th International Conference on Manufacturing Science and Engineering, ICMSE 2013

Conference date: March 30, 2013 - March 31, 2013

Conference location: Dalian, China

Conference code: 97228

Sponsor: Northeastern University, China; Harbin Institute of Technology; Jilin University

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: ZnGa₂O₄ phosphors have been synthesized by solid state reaction at different temperatures with different B₂O₃ concentration incorporated in the experiments. All samples present green (509 nm) and red (696 nm) emission bands under ultraviolet excitation (250 nm), whose intensity changes because of the increasing B₂O₃ contents. The green and the red long afterglow have been observed after removing the ultraviolet light and the performance largely improves with the introduction of B₂O₃. The effects of the doping contents of B₂O₃ as well as the sintering temperatures on the luminescent properties of the obtained products have been investigated. The introduction of B₂O₃ changes the ratio of the two emitting centers and increases the depth of the trap centers in the samples. © (2013) Trans Tech Publications, Switzerland.

Number of references: 14

Main heading: Luminescence

Controlled terms: Phosphors - Sintering - Solid state reactions - Ultraviolet radiation

Uncontrolled terms: Long afterglow - Luminescent property - Red long afterglows - Sinter temperature - Sintering temperatures - Ultra violet excitation - Ultra-violet light - ZnGa₂O₄

Classification code: 741.1 Light/Optics - 802.2 Chemical Reactions - 802.3 Chemical Operations

Numerical data indexing: Size 2.50e-07m, Size 5.09e-07m, Size 6.96e-07m

DOI: 10.4028/www.scientific.net/AMR.690-693.627

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20124915753172

Title: Synthesis and luminescence properties of novel $\text{LiSr}_4(\text{BO}_3)_3\text{Dy}^{3+}$ phosphors

Authors: Zhang, Zhi-Wei¹ ; Sun, Xin-Yuan² ; Liu, Lu¹ ; Peng, You-Shun¹ ; Shen, Xi-Hai¹ ; Zhang, Wei-Guo¹ ; Wang, Dong-Jun¹

Author affiliation:

1 Physical-Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao 066604, China

2 Department of Physics, Jinggangshan University, Ji'an 343009, China

Corresponding author: Zhang, Z.-W. (zhangzhiweia@163.com)

Source title: Ceramics International

Abbreviated source title: Ceram Int

Volume: 39

Issue: 2

Issue date: March 2013

Publication year: 2013

Pages: 1723-1728

Language: English

ISSN: 02728842

CODEN: CINNDH

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: The $\text{LiSr}_4(\text{BO}_3)_3\text{Dy}^{3+}$ phosphors were synthesized in air by solid-state reaction route. The as-synthesized phosphors were characterized by X-ray powder diffraction (XRD), photoluminescence excitation (PLE) and photoluminescence (PL) spectra. The PLE spectra show the excitation peaks from 300 to 400 nm is due to the 4f-4f transitions of Dy^{3+} . This mercury-free excitation is useful for solid state lighting and light-emitting diodes (LEDs). The emission of Dy^{3+} ions upon 350 nm excitation is observed at 481 nm (blue) due to the $4F_9/2 \rightarrow 6H_{15/2}$ transitions, and 575 nm (yellow) due to $4F_9/2 \rightarrow 6H_{13/2}$ transitions. The optimal PL intensity of the $\text{LiSr}_4(\text{BO}_3)_3\text{Dy}^{3+}$ phosphors under 350 nm excitation is found to be at the concentration of $x=0.02$ and the

synthesis temperature at 1000 °C. The CIE chromaticity coordinates for LiSr₄(BO₃)₃:Dy³⁺ phosphors are simulated and located in the bluish-white region. All the results imply that the studied LiSr₄(BO₃)₃:Dy³⁺ phosphors could be potentially used as white LEDs. © 2012 Elsevier Ltd and Techna Group S.r.l.

Number of references: 28

Main heading: Light emission

Controlled terms: Light emitting diodes - Phosphors - Photoluminescence - Solid state reactions - X ray powder diffraction

Uncontrolled terms: CIE chromaticity - Excitation peaks - Luminescence properties - Mercury-free - Photoluminescence excitation - Photoluminescence spectrum - PL intensity - Solid state lighting - Synthesis temperatures - White LED - XRD

Classification code: 741.1 Light/Optics - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics

Numerical data indexing: Size 3.00e-07m to 4.00e-07m, Size 3.50e-07m, Size 4.81e-07m, Size 5.75e-07m, Temperature 1.27e+03K

DOI: 10.1016/j.ceramint.2012.08.017

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

759.

Accession number: 20111313882193

Title: Fabrication and luminescence properties of Zn₂SiO₄ (ZnB₂O₄):Mn²⁺, Sm³⁺ phosphors

Authors: Zhang, Zhi-Wei¹ ; Zhang, Wei-Guo¹ ; Niu, Shao-Li¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Zhang, W.-G. (zhwgqhd@163.com)

Source title: Faguang Xuebao/Chinese Journal of Luminescence

Abbreviated source title: Faguang Xuebao

Volume: 32

Issue: 2

Issue date: February 2011

Publication year: 2011

Pages: 144-148

Language: Chinese

ISSN: 10007032

CODEN: FAXUEW

Document type: Journal article (JA)

Publisher: Chines Academy of Sciences, Southeast Lake Heading on 16th, Chungchun City, 130033, China

Abstract: Zn_2SiO_4 (ZnB_2O_4): Mn^{2+} , Sm^{3+} phosphors was fabricated by solid reaction method. The influences of sintered temperature and Sm^{3+} content on the luminescence properties of Zn_2SiO_4 (ZnB_2O_4): Mn^{2+} , Sm^{3+} phosphors were studied. Powder structure and luminescence properties were characterized by means of XRD, excitation and emission spectra. The experimental results indicate that Zn_2SiO_4 (ZnB_2O_4): Mn^{2+} , Sm^{3+} has two excitation peaks at 220 nm and 250 nm, the luminescence intensity is the largest when the sintered temperature is at 950 °C in reducing atmosphere, and the emission peaks at 521 nm. The ZnB_2O_4 as a part of host produced in the reaction can improve the luminescence intensity. At 950 °C, there are most ZnB_2O_4 reaction products, meanwhile, ZnB_2O_4 has the best crystalline properties. With the Sm^{3+} content increased, the phase is not changed, however, to a large extent, the luminescence intensity can be improved. When the Sm^{3+} mole fraction is 8%, the intensity is the most and 5 times stronger than that for 4% Sm^{3+} . With the increasing of Sm^{3+} mole fraction, the luminescence emission peak has blue-shift from 540 nm to 521 nm.

Number of references: 19

Main heading: Luminescence

Controlled terms: Atmospheric temperature - Emission spectroscopy - Luminescence of inorganic solids - Manganese - Phosphors - Silicon compounds - Sintering - Zinc

Uncontrolled terms: Blue shift - Crystalline properties - Emission peaks - Excitation and emission spectra - Excitation peaks - Luminescence emission - Luminescence intensity - Luminescence properties - Mole fraction - Powder structures - Reducing atmosphere - Sintered temperature - Sm^{3+} content - Solid reaction method - XRD - Zn_2SiO_4 (ZnB_2O_4): Mn^{2+} , Sm^{3+}

Classification code: 443.1 Atmospheric Properties - 536.1 Powder Metallurgy Operations - 543.2

Manganese and Alloys - 546.3 Zinc and Alloys - 741.1 Light/Optics - 804.1 Organic Compounds

Numerical data indexing: Percentage 8.00e+00%, Size 2.20e-07m, Size 2.50e-07m, Size 5.21e-07m, Size 5.40e-07m to 5.21e-07m, Temperature 1.22e+03K

DOI: 10.3788/fgxb20113202.0144

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

760.

Accession number: 20111113740012

Title: Fuzzy PID control of temperature and humidity in tissue culture laboratory

Authors: Deng, Chun-Yan¹ ; Liu, Sheng-Tao¹ ; Chen, Fang¹ ; Wang, Hai-Fang¹ ; Lun, Cui-Fen¹ ; Sun, Lei¹

Author affiliation:

¹ College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Qinhuangdao, China

Corresponding author: Deng, C.-Y. (dcyqhd@126.com)

Source title: Proceedings - 2010 2nd WRI Global Congress on Intelligent Systems, GCIS 2010

Abbreviated source title: Proc. - WRI Global Congr. Intelligent Syst., GCIS

Volume: 2

Part number: 2 of 3

Monograph title: Proceedings - 2010 2nd WRI Global Congress on Intelligent Systems, GCIS 2010

Issue date: 2010

Publication year: 2010

Pages: 216-219

Article number: 5709254

Language: English

ISBN-13: 9780769543048

Document type: Conference article (CA)

Conference name: 2010 2nd WRI Global Congress on Intelligent Systems, GCIS 2010

Conference date: December 16, 2010 - December 17, 2010

Conference location: Wuhan, China

Conference code: 84062

Sponsor: Wuhan University of Technology; World Research Institutes

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Tissue culture lab is a place of culturing vaccination materials in the process of breeding. Measurement and control of temperature, humidity and illumination is the essential condition. In order to meet the parameters requirements of automatic control of the laboratory, according to the status quo and requirement of temperature and humidity in Tissue Culture Room, a method of combination fuzzy control with PID Control is adopted. It may strength and minimizes their corresponding weaknesses. The system not only has the advantages of flexible fuzzy control and good adaptability, but also has the prominent characteristics of high reliability and good stability of PID. After Completing control system development of temperature and humidity in Tissue Culture Room, From The test results and system output curves, we may draw a conclusion that the system adopts different controls in the different settings. It not only meets the design requirement, but also has better Real-time Capability and Robustness; the system also has a preferable control effectiveness for the temperature and humidity in tissue culture laboratory. The paper mainly introduces the Realization of Fuzzy PID Control of Temperature and Humidity. © 2010 IEEE.

Number of references: 6

Main heading: Control system stability

Controlled terms: Automation - Fuzzy control - Humidity control - Intelligent systems - Laboratories - Proportional control systems - Temperature control - Three term control systems - Tissue - Tissue culture - Two term control systems

Uncontrolled terms: Automatic control - Control effectiveness - Design requirements - Fuzzy PID-control - Good stability - High reliability - Measurement and control - PID - PID control - System development - System output - Test results

Classification code: 402 Buildings and Towers - 461.2 Biological Materials and Tissue Engineering - 723.4 Artificial Intelligence - 731 Automatic Control Principles and Applications - 732 Control Devices - 801

Chemistry

DOI: 10.1109/GCIS.2010.162

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

761.

Accession number: 20122115037228

Title: Information technology and its application in sports science

Authors: Shen, Fei1 ; Li, Jun1 ; Wang, Zhifeng2

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Kashi Normal University, Kashi 844006, China

Corresponding author: Shen, F. (bttterfly@126.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 159 AISC

Part number: 1 of 2

Issue: VOL. 1

Monograph title: Advances in Future Computerand Control Systems

Issue date: 2012

Publication year: 2012

Pages: 591-596

Language: English

ISSN: 18675662

ISBN-13: 9783642293863

Document type: Conference article (CA)

Conference name: Future Computer and Control Systems, FCCS 2012

Conference date: April 21, 2012 - April 22, 2012

Conference location: Changsha, China

Conference code: 89766

Sponsor: International Science and Education Researcher Association; VIP Information Conference Center; Beijing Gireda Research Center

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: With the economic development and scientific technological progress, information technology raised rapidly, and become the dominant factor of socioeconomic development. Information technology applied in nearly all industries, in the field of sport science, information technology promote the development of sports science, and sports science development cannot be separated from the information technologies; This study analyze the application of information technology in the field of sport science, explain the importance of information technology application to develop sports science, proposed creating a unique means of information technology in sports to make sports science have a better development. © 2012 Springer-Verlag GmbH.

Number of references: 6

Main heading: Information technology

Controlled terms: Applications - Control systems - SportS

Uncontrolled terms: Dominant factor - Economic development - Information technology application - Socio-economic development - Technological progress

Classification code: 451.2 Air Pollution Control - 731.1 Control Systems - 903 Information Science

DOI: 10.1007/978-3-642-29387-0_91

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20114014401317

Title: An IBE scheme with threshold to decryption for groups

Authors: Cao, Jing1 ; Xing, Xue-Feng2 ; Liu, Li-Min1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qin Huangdao, China

2 Northeast Petroleum, University at Qinhuangdao, Qin Huangdao, China

Corresponding author: Cao, J. (owenjing@sina.com)

Source title: Proceedings - 2011 8th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2011

Abbreviated source title: Proc. - Int. Conf. Fuzzy Syst. Knowl. Discov., FSKD

Volume: 4

Part number: 4 of 4

Monograph title: Proceedings - 2011 8th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2011

Issue date: 2011

Publication year: 2011

Pages: 2226-2229

Article number: 6019948

Language: English

ISBN-13: 9781612841816

Document type: Conference article (CA)

Conference name: 2011 8th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2011, Jointly with the 2011 7th International Conference on Natural Computation, ICNC'11

Conference date: July 26, 2011 - July 28, 2011

Conference location: Shanghai, China

Conference code: 86748

Sponsor: Coll. Inf. Sci. Technol. Donghua Univ.

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In fact, every group has one's identity which is different from any other groups the same as a person has own identity which is different from any other persons. In an IBE scheme, we can think the sender or the receiver is a corresponding group. In practical, it is necessary that using the identity of a group to encrypt a message and sending it to other group or a person in some time. If the message is encrypted for a group, we hope that in some time there are several members of the receiving group are needed to decrypt the message. In this paper we first present the idea that combining the threshold in an IBE scheme for groups decryption, and proposes a scheme for above idea that Threshold-Based for decryption in an IBE scheme. © 2011 IEEE.

Number of references: 15

Main heading: Cryptography

Controlled terms: Fuzzy systems

Uncontrolled terms: Decryption - Group - Identity-based - Threshold

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723 Computer Software, Data Handling and Applications - 961 Systems Science

DOI: 10.1109/FSKD.2011.6019948

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

763.

Accession number: 20111913968879

Title: First-principles investigation of the electronic, elastic and thermodynamic properties of VC under high pressure

Authors: Hao, Ai-Min^{1, 2}; Zhou, Tie-Jun³; Zhu, Yan^{1, 2}; Zhang, Xin-Yu¹; Liu, Ri-Ping¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

3 College of Mathematics and Information, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, R.-P. (riping@ysu.edu.cn)

Source title: Chinese Physics B

Abbreviated source title: Chin. Phys.

Volume: 20

Issue: 4

Issue date: April 2011

Publication year: 2011

Article number: 047103

Language: English

ISSN: 16741056

Document type: Journal article (JA)

Publisher: Institute of Physics Publishing, Temple Back, Bristol, BS1 6BE, United Kingdom

Abstract: An investigation of the electronic, elastic and thermodynamic properties of VC under high pressure has been conducted using first-principles calculations based on density functional theory (DFT) with the plane-wave basis set, as implemented in the CASTEP code. At elevated pressures, VC is predicted to undergo a structural transition from a relatively open NaCl-type structure to a more dense CsCl-type one. The predicted transition pressure is 520 GPa. The elastic constant, Debye temperature and heat capacity each as a function of pressure and/or temperature of VC are presented for the first time. © 2011 Chinese Physical Society and IOP Publishing Ltd.

Number of references: 29

Main heading: Phase transitions

Controlled terms: Calculations - Debye temperature - Density functional theory - Elasticity
- Sodium chloride

Uncontrolled terms: Elastic properties - Elevated pressure - First-principles calculation -
First-principles investigations - Function of pressure - Heat capacities - high pressure - Plane-wave

basis set - Structural transitions - Transition pressure - Type structures

Classification code: 922.1 Probability Theory - 921 Mathematics - 804.2 Inorganic Compounds - 801.4 Physical Chemistry - 723 Computer Software, Data Handling and Applications - 721 Computer Circuits and Logic Elements - 641.1 Thermodynamics - 422 Strength of Building Materials; Test Equipment and Methods - 421 Strength of Building Materials; Mechanical Properties

Numerical data indexing: Pressure 5.20e+11Pa

DOI: 10.1088/1674-1056/20/4/047103

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

764.

Accession number: 20104313330822

Title: Fault diagnosis on analog circuits based on Integrated Learning Method

Authors: Chen, Pan-Feng¹ ; Du, Bao-Yin² ; Wen, Qin³

Author affiliation:

- 1 Mechanical and Electrical Engineering Institute, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Shandong Sishui Vocational Secondary School, Sishui, China
- 3 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Chen, P.-F. (chenpanfeng2010@163.com)

Source title: 2010 2nd International Conference on Industrial and Information Systems, IIS 2010

Abbreviated source title: Int. Conf. Ind. Inf. Syst., IIS

Volume: 1

Part number: 1 of 2

Monograph title: 2010 2nd International Conference on Industrial and Information Systems, IIS 2010

Issue date: 2010

Publication year: 2010

Pages: 144-147

Article number: 5565891

Language: English

ISBN-13: 9781424482177

Document type: Conference article (CA)

Conference name: 2010 2nd International Conference on Industrial and Information Systems, IIS 2010

Conference date: July 10, 2010 - July 11, 2010

Conference location: Dalian, China

Conference code: 81917

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; International Science and Engineering Center; Wuhan University of Science and Technology, Zhongnan Branch

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The Integrated Learning Method (ILM) uses multiple learners to solve the same problem, which can greatly improve the generalization ability of learning systems. To address the fault diagnosis on analog circuits, aiming at the shortcomings of diagnosis and model stability with single RBF neural network to diagnose faults of analog circuit system, the paper discussed method to improve model diagnosis accuracy with Bagging algorithm of ILM to integrated multiple neural networks. The experiment results show the adoption of this scheme can significantly improve the performance of neural network diagnostic model. © 2010 IEEE.

Number of references: 5

Main heading: Neural networks

Controlled terms: Analog circuits - Information systems - Learning algorithms - Learning systems - Networks (circuits) - Radial basis function networks

Uncontrolled terms: Bagging algorithm - Fault diagnosis - Generalization ability - Integrated learning - Model diagnosis - Model stability - Multiple neural networks - Network diagnostics - RBF Neural Network

Classification code: 703.1 Electric Networks - 713 Electronic Circuits - 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 903.2 Information Dissemination

DOI: 10.1109/INDUSIS.2010.5565891

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

765.

Accession number: 20114514502497

Title: The experimental research of the influence of accumulator to mill control precision

Authors: Chen, Chunming^{1, 2}; Wang, Yiqun¹; Jin, Chenghu¹; Luo, Zhenkun¹

Author affiliation:

1 Yanshan University, Qinhuangdao, China

2 E and A College of Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Chen, C. (gentlewind_chen@163.com)

Source title: Proceedings of 2011 International Conference on Fluid Power and Mechatronics, FPM 2011

Abbreviated source title: Proc. Int. Conf. Fluid Power Mechatronics, FPM

Monograph title: Proceedings of 2011 International Conference on Fluid Power and Mechatronics, FPM 2011

Issue date: 2011

Publication year: 2011

Pages: 77-80

Article number: 6045733

Language: English

ISBN-13: 9781424484522

Document type: Conference article (CA)

Conference name: 2011 International Conference on Fluid Power and Mechatronics, FPM 2011

Conference date: August 17, 2011 - August 20, 2011

Conference location: Beijing, China

Conference code: 87201

Sponsor: IEEE Beijing Section, CSS Chapter; National Natural Science Foundation of China (NSFC); Chinese Society of Aeronautics and Astronautics (CSAA); China Hydraulics Pneumatics and Seals Association (CHPSA)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Oil source made up of constant pressure variable displacement pump, accumulator, and pipeline is widely used to provide stable pressure for electro-hydraulic control system in practical engineering. Based on the experiment, the relationship between pressure & volume of the accumulator at inlet of the valve and control precision is analyzed in detail, and coupling rules between the load variation and the pressure ripple of oil-source are obtained. Coupling rules can give reference for selecting pressure & volume of the accumulator according to the requirement of system control precision, which can further improve control precision and product quality by optimizing equipment parameters. © 2011 IEEE.

Number of references: 9

Main heading: Quality control

Controlled terms: Hydraulic accumulators - Hydraulics - Mechatronics - Oil wells - Precision engineering

Uncontrolled terms: Accumulator - Constant pressures - Control precision - Electro-hydraulic control systems - Equipment parameters - Experimental research - Influence of control precision - Load variations - Mill control - Oil sources - Oil-source - Practical engineering - Pressure ripple - Product quality - System control

Classification code: 512.1.1 Oil Fields - 608 Mechanical Engineering, General - 632.1 Hydraulics - 632.2 Hydraulic Equipment and Machinery - 761 Nanotechnology - 913.3 Quality Assurance and Control

DOI: 10.1109/FPM.2011.6045733

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20124415632291

Title: Exercise contribute to attenuation of inflammation and oxidative stress in adipose tissue of IR rats

Authors: Yang, Hong-Tao¹ ; Li, Shu-Gang¹ ; Zheng, Yong-Cheng¹

Author affiliation:

¹ Department of PE, Hebei Normal University of Science and Technology, No. 360, West Hebei St., Qinhuangdao City, Hebei, China

Corresponding author: Yang, H.-T. (tyxbcg@163.com)

Source title: i-CREATe 2010 - International Convention on Rehabilitation Engineering and Assistive Technology

Abbreviated source title: i-CREATe - Int. Conv. Rehabil. Eng. Assistive Technol.

Monograph title: i-CREATe 2010 - International Convention on Rehabilitation Engineering and Assistive Technology

Issue date: 2010

Publication year: 2010

Language: English

ISBN-13: 9789810861995

Document type: Conference article (CA)

Conference name: 4th International Convention on Rehabilitation Engineering and Assistive Technology, i-CREATe 2010

Conference date: July 21, 2010 - July 24, 2010

Conference location: Shanghai, China

Conference code: 87507

Publisher: International Convention on Rehabilitation Engineering and, 49 Kaki Bukit View, Kaki Bukit TechPark II, 415973, Singapore

Abstract: This study examined the effect of exercise on SOD, MDA and TNF- α of insulin resistance rats' adipose tissue, so that investigate the mechanism of exercise improve insulin resistance. Twenty-three SD rats were randomly divided into 3 groups: control group (CG, n=7), insulin resistance group (IG, n=8) and insulin

resistance plus exercise group (IEG, n=8). The model of insulin resistance was induced by high-fat feed; the IEG rats take swimming for 10 weeks. Then SOD, MDA and TNF- α of all rats' adipose tissue were assessed. The levels of MDA and TNF- α were significantly increased in IG rats compared to CG ($P<0.01$); a significant increase in SOD activity was noted after exercise in IEG compared to IG ($P<0.05$); in addition, a significant decrease in MDA and TNF- α levels was discovered following exercise in IEG ($P<0.05$). Furthermore, the level of MDA have shown a positive correlation with the TNF- α ($r: 0.571, p:0.013$), a positive correlation was found between HOMA-IR and MDA ($r: 0.629, p: 0.005$), between HOMA-IR and TNF- α ($r: 0.686, p:0.002$). Conclusion: Exercise can attenuate insulin resistance of rat through decreases expression of TNF- α , this may related to the reduction of oxidative stress in adipose tissue. © 2010 START Centre.

Number of references: 23

Page count: 4

Main heading: Rats

Controlled terms: Insulin - Oxidative stress - Pathology - Tissue

Uncontrolled terms: Adipose tissue - Control groups - Exercise - Inflammation -
Insulin resistance - Positive correlations

Classification code: 461 Bioengineering and Biology

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

767.

Accession number: 20123915463286

Title: A self-assembly phase diagram from amphiphilic perylene diimides

Authors: Zhang, Zhigang^{1, 3} ; Zhan, Chuanlang¹ ; Zhang, Xin¹ ; Zhang, Shanlin¹ ; Huang, Jianhua¹ ;
Li, Alexander D.-Q.² ; Yao, Jiannian¹

Author affiliation:

1 Beijing National Laboratory for Molecular Sciences, CAS Key Laboratory of Photochemistry, Institute of Chemistry, CAS, Beijing, 100190, China

2 Department of Chemistry, Washington State University, Pullman, WA 99164, United States

3 Hebei Normal University of Science and Technology, Hebei, Qinhuangdao 066004, China

Corresponding author: Zhan, C. (clzhan@iccas.ac.cn)

Source title: Chemistry - A European Journal

Abbreviated source title: Chem. Eur. J.

Volume: 18

Issue: 39

Issue date: September 24, 2012

Publication year: 2012

Pages: 12305-12313

Language: English

ISSN: 09476539

E-ISSN: 15213765

CODEN: CEUJED

Document type: Journal article (JA)

Publisher: Wiley-VCH Verlag, P.O. Box 101161, Weinheim, D-69451, Germany

Abstract: Supramolecular forces govern self-assembly and further determine the final morphologies of self-assemblies. However, how they control the morphology remains hitherto largely unknown. In this paper, we have discovered that the self-assembled nanostructures of rigid organic semiconductor chromophores can be finely controlled by the secondary forces by fine-tuning the surrounding environments. In particular, we used water/methanol/hydrochloric acid to tune the environment and observed five different phases that resulted from versatile molecular self-assemblies. The representative self-assembled nanostructures were nanotapes, nanoparticles and their 1D assemblies, rigid microplates, soft nanoplates, and hollow nanospheres and their 1D assemblies, respectively. The specific nanostructure formation is governed by the water fraction, R_w , and the concentration of hydrochloric acid, $[HCl]$. For instance, nanotapes formed at low $[HCl]$ and R_w values, whereas hollow nanospheres formed when either the HCl concentration is high, or the water fraction is low, or both. The significance of this paper is that it provides a useful phase diagram by using R_w and $[HCl]$ as two variables. Such a self-assembly phase diagram maps out the fine control that the secondary forces have on the self-assembled morphology, and thus allows one to guide the formation toward a desired nanostructure self-assembled from rigid organic semiconductor chromophores by simply adjusting the two key parameters of R_w and $[HCl]$. Copyright © 2012 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim.

Number of references: 70

Main heading: Nanospheres

Controlled terms: Amphiphiles - Chromophores - Hydrochloric acid - Liquid crystal polymers - Morphology - Phase diagrams - Self assembly

Uncontrolled terms: Amphiphilics - Hollow nanospheres - Key parameters - Microplates - Molecular self-assemblies - Morphology control - Nanoplates - Nanostructure formation - Nanotapes - Perylenediimides - Secondary forces - Self assembled nanostructures - Self-assembled - Surrounding environment - Water fraction

Classification code: 951 Materials Science - 933 Solid State Physics - 815.1.1 Organic Polymers - 804.1 Organic Compounds - 804 Chemical Products Generally - 803 Chemical Agents and Basic Industrial Chemicals - 801 Chemistry - 761 Nanotechnology - 701 Electricity and Magnetism - 531 Metallurgy and Metallography - 423 Non Mechanical Properties and Tests of Building Materials

DOI: 10.1002/chem.201201352

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

768.

Accession number: 20114114421842

Title: Screening of Cd tolerant genotypes and isolation of metallothionein genes in alfalfa (*Medicago sativa* L.)

Authors: Wang, Xiaojuan¹ ; Song, Yu^{1, 2} ; Ma, Yanhua³ ; Zhuo, Renying⁴ ; Jin, Liang¹

Author affiliation:

1 School of Pastoral Agriculture Science and Technology, Lanzhou University, P.O. Box 61, Lanzhou 730020, China

2 Environment Management College of China, Qinhuangdao 066004, China

3 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

4 Key Lab of Tree Genomics, Research Institute of Subtropical of Forest, Chinese Academy of Forest, Fuyang 311400, China

Corresponding author: Wang, X. (xiaojuanwang@lzu.edu.cn)

Source title: Environmental Pollution

Abbreviated source title: Environ. Pollut.

Volume: 159

Issue: 12

Issue date: December 2011

Publication year: 2011

Pages: 3627-3633

Language: English

ISSN: 02697491

E-ISSN: 18736424

CODEN: ENPOEK

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: In order to evaluate Cd tolerance in wide-ranging sources of alfalfa (*Medicago sativa*) and to identify Cd tolerant genotypes which may potentially be useful for restoring Cd-contaminated environments, thirty-six accessions of alfalfa were screened under hydroponic culture. Our results showed that the relative root growth rate varied from 0.48 to 1.0, which indicated that different alfalfa accessions had various responses to Cd stress. The candidate fragments derived from differentially expressed metallothionein (MT) genes were cloned from leaves of two Cd tolerant genotypes, YE and LZ. DNA sequence and the deduced protein sequence showed that MsMT2a and MsMT2b had high similarity to those in leguminous plants. DDRT-PCR analysis showed that MsMT2a expressed in both YE and LZ plants under control and Cd stress treatment, but MsMT2b only expressed under Cd stress treatment. This suggested that MsMT2a was universally expressed in leaves of alfalfa but expression of MsMT2b was Cadmium (Cd) inducible. © 2011 Elsevier Ltd. All rights reserved.

Number of references: 58

Main heading: Transcription

Controlled terms: Cadmium - Cloning - Genes - Polymerase chain reaction

Uncontrolled terms: CD tolerance - Differential display reverse transcriptions - Hydroponic culture - Leguminous plants - Medicago - Metallothioneins - Protein sequences - Root growth

Classification code: 461 Bioengineering and Biology - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 801.2 Biochemistry

DOI: 10.1016/j.envpol.2011.08.001

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

769.

Accession number: 20112214016029

Title: On constructing interactive college english learning environment via computer-assist teaching model

Authors: Cui, Haiying1 ; Shao, Lijun1 ; Wang, Jing1

Author affiliation:

1 College of Foreign Languages, Hebei Normal University of Science and Technology, Qin Huangdao, China

Corresponding author: Cui, H. (wyx_chy@126.com)

Source title: ICCRD2011 - 2011 3rd International Conference on Computer Research and Development

Abbreviated source title: ICCRD - Int. Conf. Comput. Res. Dev.

Volume: 3

Part number: 3 of 4

Monograph title: ICCRD2011 - 2011 3rd International Conference on Computer Research and Development

Issue date: 2011

Publication year: 2011

Pages: 177-180

Article number: 5764273

Language: English

ISBN-13: 9781612848372

Document type: Conference article (CA)

Conference name: 2011 3rd International Conference on Computer Research and Development,

ICCRD 2011

Conference date: March 11, 2011 - March 15, 2011

Conference location: Shanghai, China

Conference code: 84959

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: With quick upgrading of knowledge and high demand for all-round talents at the age of information, the integration of computer multimedia into college English course has altered traditional teaching model. The teaching focus is converted to learning process from content; teacher becomes the organizer and manager of class, the director and supervisor of students instead of the lecturer; students become active and autonomous learners instead of passive receivers. Meanwhile, their collaborative skills and communication styles are improved in the so-called computer-assist teaching model. All in all, this student-centered interactive environment contributes to the improvement of the students' comprehensive English skills. The present authors intend to compare the two models, put forward concrete methods to apply this computer-assist teaching model to college English teaching and some constructive suggestions to the improvement of this new model. © 2011 IEEE.

Number of references: 6

Main heading: Teaching

Controlled terms: Curricula - Students - User interfaces

Uncontrolled terms: Communication styles - computer-assist teaching - Concrete method - constructivism - English Learning - English skills - English teaching - High demand - Interactive Environments - Interactive learning environment - Learning process - New model - Passive receivers - Student-centered - Teaching model

Classification code: 722.2 Computer Peripheral Equipment - 901.2 Education

DOI: 10.1109/ICCRD.2011.5764273

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

770.

Accession number: 20114614518554

Title: Design and implement of safe product monitoring and measuring system for mine based on C#

Authors: Song, Dongdong 1

Author affiliation:

1 Department of Postgraduate, Hebei Normal University of Science and Technology, QinHuang dao, Hebei, China

Corresponding author: Song, D. (Mapex_dongdong@126.com)

Source title: 2011 International Conference on Electrical and Control Engineering, ICECE 2011 - Proceedings

Abbreviated source title: Int. Conf. Electr. Control Eng., ICECE - Proc.

Monograph title: 2011 International Conference on Electrical and Control Engineering, ICECE 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 2959-2962

Article number: 6057942

Language: Chinese

ISBN-13: 9781424481637

Document type: Conference article (CA)

Conference name: 2nd Annual Conference on Electrical and Control Engineering, ICECE 2011

Conference date: September 16, 2011 - September 18, 2011

Conference location: Yichang, China

Conference code: 87268

Sponsor: China Three Gorges University; Huazhong University of Science and Technology; Tianjin University; Beihang University; Shanghai University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The main control software of Safe Product Monitoring and Measuring System of Mine acts as the role of data acquisition and workflow control of the whole mining area. The main control software is developed on the basis of analyzing the production status and existing problem of coalmine industry. This paper introduces the design of software with single-thread technique and message mechanism, using a new generation of brief, object-oriented, type-safe advanced programming language C# and SQL Server database technique under Windows 2000. The system is based on Windows Socket-Core of Network-Programming and the Client/Server mode. By means of the data provider program within ActiveX Data Object (ADO.NET) to access database. The system implements the real-time monitoring and displaying for data under mine, query, deletion and maintenance of history data, graphic statistic, report printing, expert diagnosis and decision-making support module, etc. The system can achieve monitoring the environment parameter, also may monitor manufacture parameter and electrical parameter. This system research, development and promoted application will provide the safeguard regarding the mine pit security work. © 2011 IEEE.

Number of references: 6

Main heading: Monitoring

Controlled terms: Coal mines - Computer software maintenance - Decision making - Design - Distributed parameter control systems - Engineering research - Measurement theory - Mining - Object oriented programming - Search engines - Software design - Windows operating system

Uncontrolled terms: C# language - Client/server - Coal mine safety production monitor - Data objects - Object oriented

Classification code: 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 922 Statistical Methods - 912.2 Management - 901.3 Engineering Research - 731.1 Control Systems - 723.1 Computer Programming - 723 Computer Software, Data Handling and Applications - 503.1 Coal Mines - 502.1 Mine and Quarry Operations - 408 Structural Design

DOI: 10.1109/ICECENG.2011.6057942

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

771.

Accession number: 20112214019972

Title: The study of melting stage of bulk silicon using molecular dynamics simulation

Authors: Zhang, S.L.1 ; Zhang, X.Y.1 ; Qi, L.1 ; Wang, L.M.1 ; Zhang, S.H.1 ; Zhu, Y.1, 2 ; Liu, R.P.1

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, R. P. (riping@ysu.edu.cn)

Source title: Physica B: Condensed Matter

Abbreviated source title: Phys B Condens Matter

Volume: 406

Issue: 13

Issue date: July 1, 2011

Publication year: 2011

Pages: 2637-2641

Language: English

ISSN: 09214526

CODEN: PHYBE3

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: The melting stage of bulk silicon is studied using classical molecular dynamics simulation. The mean square displacement and diffusion coefficient are focused allowing statistics analysis of the dynamics displacement of each atom. Three stages of the melting processes, premelting, accelerated melting and relaxation, are resolved. The structural development is evaluated through the stages by Lindemann index, non-Gaussian parameter and the second neighbor coordination number. The studies emphasize the observation that premelting occurs in the ideal crystal on melting. © 2011 Elsevier B.V. All rights reserved.

Number of references: 37

Main heading: Molecular dynamics

Controlled terms: Dynamics - Melting - Molecular mechanics

Uncontrolled terms: Bulk silicon - Classical molecular dynamics - Coordination number - Diffusion Coefficients - Ideal crystals - Lindemann index - Mean square displacement - Melting process - Molecular dynamics simulations - Non-Gaussian parameter - Pre-melting - Statistics analysis - Structural development - Three stages

Classification code: 531.1 Metallurgy - 801.4 Physical Chemistry - 931.1 Mechanics

DOI: 10.1016/j.physb.2011.04.005

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

772.

Accession number: 20104313316851

Title: The development of dictionary tools on window mobile platform

Authors: Li, Yuxiang¹ ; Cao, Lijun¹ ; Yu, Hongkui¹ ; Cheng, Cao¹ ; Li, Shendong¹

Author affiliation:

1 Department of Computer, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, Y. (lyx20040205@163.com)

Source title: ICCET 2010 - 2010 International Conference on Computer Engineering and Technology, Proceedings

Abbreviated source title: ICCET - Int. Conf. Comput. Eng. Technol., Proc.

Volume: 2

Part number: 2 of 7

Monograph title: ICCET 2010 - 2010 International Conference on Computer Engineering and Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: V2728-V2732

Article number: 5485730

Language: English

ISBN-13: 9781424463503

Document type: Conference article (CA)

Conference name: 2010 2nd International Conference on Computer Engineering and Technology, ICCET 2010

Conference date: April 16, 2010 - April 18, 2010

Conference location: Chengdu, China

Conference code: 81865

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Today, mobile phones have approached people's life and work. In addition to the basic call function, they also integrate lots of other usefull features. Mobile electronic dictionary, being one of the funtions, will bring the users more convenience and save more spaces to improve the efficiency of work. The software adopts the environment of Microsoft Visual Studio 2005 and the high-level development of Visual C#, which is based on the .NET Compact Framework (that is, .NET framework streanline the set). The software is in support of Windows Mobile 5.0, bilingual dictionaries, fuzzy query and the dynamic display of the query result. When using this software, users can query words, edit entries, add new words as well as delete words in a small dictionary program. What's more, searching the English meaning of Chinese words in a small Chinese-English dictionary is available. If anybody doesn't understand the use of the software, he/she can get help from the software itself. © 2010 IEEE.

Number of references: 8

Main heading: Computer software

Controlled terms: Mobile phones - Telecommunication equipment

Uncontrolled terms: Bilingual dictionary - Dynamic displays - Electronic dictionaries - Fuzzy queries - MicroSoft - Mobile electronics - Mobile platform - NET compact framework - NET framework - PPC platform - Query results - Query words - Visual studios - Windows mobile - Windows Mobile 5.0

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 718.1 Telephone Systems and Equipment - 723 Computer Software, Data Handling and Applications

DOI: 10.1109/ICCET.2010.5485730

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

773.

Accession number: 20103413185926

Title: The electric meter reading system in rural areas based on wireless micro-computer

Authors: Lun, Cuifen1 ; Zhang, Xiaoqin1 ; Li, Yanping1 ; Liu1

Author affiliation:

1 University of Machinery and Electronic, Hebei Normal University of Science and Technology, Changli 066600, China

Corresponding author: Lun, C. (luncf@126.com)

Source title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Abbreviated source title: Int. Conf. Comput. Des. Appl., ICCDA

Volume: 1

Part number: 1 of 5

Monograph title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Issue date: 2010

Publication year: 2010

Pages: V1109-V1111

Article number: 5541117

Language: English

ISBN-13: 9781424471638

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Conference date: June 25, 2010 - June 27, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 81482

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT); Institute of Electrical and Electronics Engineers (IEEE); Northeastern University at Qinhuangdao (NEUQ); Dalian University of Technology; National Natural Science Foundation of China (NSFC)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Aimed at the limitation of meter reading system in rural areas, this article presents Zigbee wireless communication technology. Meter reading system with wireless micro-computer CC2430 as the core is designed based on the analysis of CC2430's structure and character. This system realizes remote meter reading in any position. This article describes the network structure of the system, designs the hardware circuit and analyzes Zigbee advantages in automatic meter reading system. © 2010 IEEE.

Number of references: 9

Main heading: Computer hardware

Controlled terms: Automation - Computer applications - Design - Electric measuring instruments - Hardware - Public utilities - Rural areas - Wireless telecommunication systems

Uncontrolled terms: Automatic meter reading - Hardware circuits - Hardware design - Meter reading systems - Meter readings - Network structures - Remote meter reading - Wireless - Zig-Bee - ZigBee wireless communication

Classification code: 942.1 Electric and Electronic Instruments - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 732 Control Devices - 731 Automatic Control Principles and Applications - 723.5 Computer Applications - 722 Computer Systems and Equipment - 717 Optical Communication - 716 Telecommunication; Radar, Radio and Television - 706 Electric Transmission and Distribution - 605 Small Tools and Hardware - 408 Structural Design

DOI: 10.1109/ICCDA.2010.5541117

Database: Compendex

774.

Accession number: 20095112553020

Title: Influences of temperature and low-dimensional interface phonons on the effective mass of a polaron in a quantum well

Authors: Eerdunchaolu1 ; Xin, Wei1 ; Xue, Hui-Jie2

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

2 Department of Physics, Harbin Normal University, Harbin, 150025, China

Corresponding author: Eerdunchaolu (eerdunchaolu@163.com)

Source title: Physica B: Condensed Matter

Abbreviated source title: Phys B Condens Matter

Volume: 405

Issue: 2

Issue date: January 15, 2010

Publication year: 2010

Pages: 591-596

Language: English

ISSN: 09214526

CODEN: PHYBE3

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: The temperature dependence of the effective mass of a polaron, which is weakly coupled with bulk longitudinal optical (LO) phonons and strongly coupled with interface optical (IO) phonons in an infinite quantum well (QW), are studied by means of the Tokuda modified linear-combination operator method and the modified Lee-Low-Pines variational method. The expressions for the effective mass of the polaron as a function of the well width and temperature are derived. Numerical results show that the total effective mass of the polaron

is composed of two parts: one part is the polaron effect induced by the interaction of the electron with LO-phonons, and the other part is the effective mass of the polaron caused by the interaction of the electron with IO-phonons. In particular, among four branches of IO phonons, only two branches interacting with electrons with the frequencies ω^+ and ω^- make contributions to the effective mass of the polaron. Numerical result for KI/AgCl/KI QW shows that the IO phonons dispersion has an obvious influence on the interaction between the electron and the phonons. The contributions of the interactions between the electron and the different branches of phonons to the effective mass of the polaron and the changes of the effective mass with well width and temperature are markedly different. © 2009 Elsevier B.V. All rights reserved.

Number of references: 34

Main heading: Phonons

Controlled terms: Dispersions - Electrons - Polarons - Semiconductor quantum dots - Semiconductor quantum wells - Temperature distribution

Uncontrolled terms: Combination operators - Effective mass - Interface phonons - Longitudinal optical phonons - Numerical results - Polaron effects - Quantum well - Temperature dependence - Variational methods - Well width

Classification code: 951 Materials Science - 933.1.1 Crystal Lattice - 931.3 Atomic and Molecular Physics - 801.3 Colloid Chemistry - 751.1 Acoustic Waves - 714.2 Semiconductor Devices and Integrated Circuits - 712.1 Semiconducting Materials - 701.1 Electricity: Basic Concepts and Phenomena - 641.1 Thermodynamics

DOI: 10.1016/j.physb.2009.09.071

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

775.

Accession number: 20122315086822

Title: First-principles investigations on elastic and thermodynamic properties of zirconium under pressure

Authors: Zhang, Suhong^{1, 2}; Zhang, Xinyu¹; Zhu, Yan^{1, 3}; Zhang, Shiliang¹; Qi, Li¹; Liu, Riping¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Science, Yanshan University, Qinhuangdao 066004, China

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066004, China

Corresponding author: Liu, R. (riping@ysu.edu.cn)

Source title: Computational Materials Science

Abbreviated source title: Comput Mater Sci

Volume: 61

Issue date: August 2012

Publication year: 2012

Pages: 42-49

Language: English

ISSN: 09270256

CODEN: CMMSEM

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: The structural, elastic and thermodynamic properties of α , ω and β Zr under pressure have been investigated using first-principles calculations. The axial ratio c/a increases with pressure for α Zr, while it keeps nearly constant for ω Zr. The pressure dependence of elastic constants are presented covering bulk modulus, shear modulus, Young's modulus, Poisson's ratio, aggregate sound velocities and elastic anisotropy. The mechanical stability and ductility/brittleness are also assessed. Comparing the two hexagonal structures at zero temperature, it is found that ω Zr is more incompressible with higher elastic modulus, higher aggregate sound velocities and lower elastic anisotropy. The thermal properties including the normalized volume, bulk modulus, heat capacity, Debye temperature and volume thermal expansion coefficient in a wide range of pressure and temperature for three phases of Zr are predicted for the first time, and a remarkable consistency with experimental results are demonstrated. © 2012 Elsevier B.V. All rights reserved.

Number of references: 57

Main heading: Zirconium

Controlled terms: Acoustic wave velocity - Aggregates - Anisotropy - Calculations - Debye temperature - Elastic moduli - Elasticity - Thermodynamic properties

Uncontrolled terms: Axial ratio - Elastic anisotropy - Elastic properties - First-principles - First-principles calculation - First-principles investigations - Hexagonal structures - Poisson's ratio

- Pressure and temperature - Pressure dependence - Three phasis - Volume thermal expansions - Young's Modulus - Zero temperatures

Classification code: 951 Materials Science - 931.2 Physical Properties of Gases, Liquids and Solids - 921 Mathematics - 751.1 Acoustic Waves - 723 Computer Software, Data Handling and Applications - 721 Computer Circuits and Logic Elements - 641.1 Thermodynamics - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 422 Strength of Building Materials; Test Equipment and Methods - 421 Strength of Building Materials; Mechanical Properties - 406 Highway Engineering

DOI: 10.1016/j.commatsci.2012.03.057

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

776.

Accession number: 20113914368707

Title: Distributed fault detection for discrete-time nonlinear systems: An innovation-based approach

Authors: Liu, Yan^{1, 2}; Sun, Duoqing^{1, 2}; Cui, Yu^{1, 2}

Author affiliation:

1 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Mathematics and Information Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, Y. (ly1984715@163.com)

Source title: Proceedings of the 30th Chinese Control Conference, CCC 2011

Abbreviated source title: Proc. Chin. Control Conf., CCC

Monograph title: Proceedings of the 30th Chinese Control Conference, CCC 2011

Issue date: 2011

Publication year: 2011

Pages: 4194-4199

Article number: 6000624

Language: English

ISBN-13: 9789881725592

Document type: Conference article (CA)

Conference name: 30th Chinese Control Conference, CCC 2011

Conference date: July 22, 2011 - July 24, 2011

Conference location: Yantai, China

Conference code: 86620

Sponsor: Academy of Mathematics and Systems Science, CAS; IEEE Control Systems Society; IEEE Industrial Electronics Society; The Society of Instr. and Contr. Engineers of Japan; Institute of Control, Robotics and Systems of Korea

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper addresses the problem of fault detection for a class of discrete-time nonlinear systems when using multiple sensors. A parallel distributed architecture is used to derive the state estimates, in which the unscented Kalman filter (UKF) is employed to deal with the nonlinear filtering problem. By augmenting the normalized innovation sequences, which can be derived in the UKF, into an innovation matrix, the statistical properties of this innovation matrix are used to develop fault detection rules. A numerical example is provided to verify the effectiveness of the proposed method. © 2011 Chinese Assoc of Automati.

Number of references: 30

Main heading: Discrete time control systems

Controlled terms: Fault detection - Innovation - Kalman filters - Nonlinear filtering - Nonlinear systems - Numerical methods

Uncontrolled terms: Discrete-time nonlinear systems - Distributed architecture - Distributed fusion - Innovation matrix - Innovation sequence - Multiple sensors - Non-linear filtering problems - Numerical example - State estimates - Statistical properties - Unscented Kalman Filter

Classification code: 422 Strength of Building Materials; Test Equipment and Methods - 731.1 Control Systems - 912 Industrial Engineering and Management - 921.6 Numerical Methods

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

777.

Accession number: 20133016524157

Title: Crucial issues in logistic planning for electric vehicle battery application service

Authors: Wang, Haiming^{1, 2} ; Xu, Haifeng² ; Jones, Alex K.²

Author affiliation:

1 Hebei Normal University of Science and Technology, China

2 Department of Electrical and Computer Engineering, University of Pittsburgh, United States

Source title: Proceedings - 2010 International Conference on Optoelectronics and Image Processing, ICOIP 2010

Abbreviated source title: Proc. - Int. Conf. Optoelectron. Image Process., ICOIP

Volume: 1

Part number: 1 of 2

Monograph title: Proceedings - 2010 International Conference on Optoelectronics and Image Processing, ICOIP 2010

Issue date: 2010

Publication year: 2010

Pages: 362-366

Article number: 5663048

Language: English

ISBN-13: 9780769542522

Document type: Conference article (CA)

Conference name: 2010 International Conference on Optoelectronics and Image Processing, ICOIP 2010

Conference date: November 11, 2010 - November 12, 2010

Conference location: Haiko, China

Conference code: 97793

Sponsor: Hunan University of Science and Technology; Central South University; Intelligent Computation Technology and Automation Society; Changsha University of Science and Technology; InfoBeyond Technology LLC

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: Based on a brief introduction of typical battery features, several crucial issues in logistic planning for Electric Vehicle (EV) battery applications are discussed in this paper. The obvious issues include the access of battery charging stations, the accessibility of emergence swapping, and the monitoring of batteries at charging stations on network. Standardization of the battery and energy exchange technology would accelerate the popularity and market penetration of EVs. Some barriers to widespread EVs include issues related to battery recycling and environmental protection. Furthermore, training and certification are required to prepare the workforce for EV battery service. Finally a battery management information system is systematically a very important factor for supporting battery manufacturing, battery supply chains, battery charging services, battery swapping services, recycling regulations, safety of transportation, and insurance markets. © 2010 IEEE.

Number of references: 15

Main heading: Charging (batteries)

Controlled terms: Commerce - Electric vehicles - Image processing - Management information systems - Optoelectronic devices - Recycling - Safety factor - Supply chains

Uncontrolled terms: Battery Management - Charging station - Crucial issues - EV battery - Service standardization - Workforce training

Classification code: 913 Production Planning and Control; Manufacturing - 912.2 Management - 912 Industrial Engineering and Management - 911.2 Industrial Economics - 741.3 Optical Devices and Systems - 741 Light, Optics and Optical Devices - 702.1.2 Secondary Batteries - 662.1 Automobiles - 452.3 Industrial Wastes

DOI: 10.1109/ICOIP.2010.125

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20122115054820

Title: To build a development strategy of adult education in the course of learning society

Authors: Zhao, Baozhu¹ ; Liu, Yongjun¹ ; Wang, Jing¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Zhao, B. (pxkwj@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 133 AISC

Monograph title: Frontiers in Computer Education

Issue date: 2012

Publication year: 2012

Pages: 139-143

Language: English

ISSN: 18675662

ISBN-13: 9783642275517

Document type: Conference article (CA)

Conference name: 2011 International Conference on Frontiers in Computer Education, ICFCE 2011

Conference date: December 1, 2011 - December 2, 2011

Conference location: Macao, China

Conference code: 89871

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: o build the lifelong learning system and society is an inevitable demand of the times. Though the adult education has an irreplaceable place in that process, we should adjust the development strategy to meet requirement of social transformation and self-development. © 2012 Springer-Verlag GmbH Berlin Heidelberg.

Number of references: 3

Main heading: Strategic planning

Controlled terms: Education

Uncontrolled terms: Adult education - Development strategies - Life long learning - Social transformation

Classification code: 901.2 Education - 912.2 Management

DOI: 10.1007/978-3-642-27552-4_22

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

779.

Accession number: 20102312991683

Title: Design of control system of solar cell lamination machine based on double MCU

Authors: Chen, Lidong¹ ; Shi, Lei¹ ; Liu, Rongchang¹ ; Ma, Shuying¹ ; Liu, Shiguang¹ ; Zheng, Junling¹ ; Liu, Shengtao¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066600, China

Corresponding author: Chen, L. (chentian-940308@163.com)

Source title: 2010 International Conference on Measuring Technology and Mechatronics Automation, ICMTMA 2010

Abbreviated source title: Int. Conf. Meas. Technol. Mechatronics Autom., ICMTMA

Volume: 1

Part number: 1 of 3

Monograph title: 2010 International Conference on Measuring Technology and Mechatronics Automation, ICMTMA 2010

Issue date: 2010

Publication year: 2010

Pages: 1046-1048

Article number: 5459666

Language: English

ISBN-13: 9780769539621

Document type: Conference article (CA)

Conference name: International Conference on Measuring Technology and Mechatronics Automation, ICMTMA 2010

Conference date: March 13, 2010 - March 14, 2010

Conference location: Changsha, China

Conference code: 80501

Sponsor: Changsha University of Science and Technology; Hunan University of Science and Technology; IEEE Instrumentation and Measurement Society; City University of Hong Kong

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: To obtain high quality and high ratio of performance to price of the control system of solar cell lamination machine, and improve temperature control precision, double Microcontroller Unit (MCU) parallel control system was designed, used expert PID control algorithm, which can make the system get a further improvement on dynamic and static quality. In addition, a series of hardware and software measures applied in the system make it have a steady control performance and reliable operation. Compared with the PLC control system used in the control system of lamination machine, it can greatly reduce the cost, and it is also easier to realize a complex control algorithms, so that the system introduced in the paper has a high control precision and good robustness. © 2010 IEEE.

Number of references: 3

Main heading: Control theory

Controlled terms: Algorithms - Cost reduction - Laminating - Machine design - Mechatronics - Pneumatic control equipment - Solar cells - Three term control systems

Uncontrolled terms: Complex control algorithms - Control performance - Control precision - Design of control system - Double MCU - Hardware and software - High quality -

Microcontroller unit - ON dynamics - Parallel control systems - PID control algorithm - PLC control systems - Reliable operation - Temperature control precision

Classification code: 732.1 Control Equipment - 813.1 Coating Techniques - 816.1 Processing of Plastics and Other Polymers - 911.2 Industrial Economics - 912.2 Management - 913.4 Manufacturing - 921 Mathematics - 731.7 Mechatronics - 601 Mechanical Design - 608 Mechanical Engineering, General - 615.2 Solar Power - 632.4 Pneumatic Equipment and Machinery - 702.3 Solar Cells - 723 Computer Software, Data Handling and Applications - 731.1 Control Systems

DOI: 10.1109/ICMTMA.2010.293

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

780.

Accession number: 20102913084853

Title: Study on knowledge processing of fault diagnosis for Hydraulic AGC system

Authors: Wang, Haifang¹ ; Rong, Yu¹ ; Cui, Jinhua¹ ; Liu, Shengtao¹

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Qinhuangdao, China

Corresponding author: Wang, H. (hfwang0335@126.com)

Source title: ICIME 2010 - 2010 2nd IEEE International Conference on Information Management and Engineering

Abbreviated source title: ICIME - IEEE Int. Conf. Inf. Manage. Eng.

Volume: 6

Part number: 6 of 6

Monograph title: ICIME 2010 - 2010 2nd IEEE International Conference on Information Management and Engineering

Issue date: 2010

Publication year: 2010

Pages: 1-3

Article number: 5477802

Language: English

ISBN-13: 9781424452644

Document type: Conference article (CA)

Conference name: 2010 2nd IEEE International Conference on Information Management and Engineering, ICIME 2010

Conference date: April 16, 2010 - April 18, 2010

Conference location: Chengdu, China

Conference code: 81055

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The method of knowledge processing and the basic question in an intelligent diagnosis system for Hydraulic AGC fault system are presented. The knowledge range of Hydraulic AGC system diagnosed is classified by the object-oriented approach. Finally, the approach to obtaining fault knowledge on Hydraulic AGC system is presented. It provides some foundation for establishment of intelligent fault diagnosis system. © 2010 IEEE.

Number of references: 7

Main heading: Information management

Controlled terms: Expert systems - Failure analysis - Hydraulics - Milling machines - Rolling mills

Uncontrolled terms: AGC - AGC system - Fault diagnosis - Fault system - Intelligent diagnosis system - Intelligent fault diagnosis - Knowledge processing - Object oriented approach

Classification code: 912.2 Management - 903.2 Information Dissemination - 723.4.1 Expert Systems - 921 Mathematics - 632.1 Hydraulics - 535.1.1 Rolling Mills - 421 Strength of Building Materials; Mechanical Properties - 603.1 Machine Tools, General

DOI: 10.1109/ICIME.2010.5477802

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

781.

Accession number: 20113914378466

Title: The research of computerized accounting system of internal control

Authors: Yingwei, Li1 ; Jiuzhi, Mao1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Yingwei, L. (ryyyhjs@126.com)

Source title: 2011 IEEE 3rd International Conference on Communication Software and Networks, ICCSN 2011

Abbreviated source title: IEEE Int. Conf. Commun. Softw. Networks, ICCSN

Monograph title: 2011 IEEE 3rd International Conference on Communication Software and Networks, ICCSN 2011

Issue date: 2011

Publication year: 2011

Pages: 302-304

Article number: 6013834

Language: English

ISBN-13: 9781612844855

Document type: Conference article (CA)

Conference name: 2011 IEEE 3rd International Conference on Communication Software and Networks, ICCSN 2011

Conference date: May 27, 2011 - May 29, 2011

Conference location: Xi'an, China

Conference code: 86671

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: With the development of the information technology, network technology and computer technology, it has using the computer in order to help the accounting work and management accounting profession has become the inevitable trend of development. But with the computerized accounting profession to change the existing account, by the accounting work in the division of functions, duties and rights, inspection and verification of records and accounting documents for processing earth-shaking changes have occurred, therefore, if the use of internal control system and will lose the role of internal control and was unable to create a series of new internal control system is imminent. © 2011 IEEE.

Number of references: 6

Main heading: Computer control systems

Controlled terms: Communication - Control systems - Finance - Information management
- Information technology - Nuclear fuel accounting - Research and development management

Uncontrolled terms: Accounting system - Computer technology - computerized accounting systems - Internal controls - Management accounting - Network technologies

Classification code: 911.1 Cost Accounting - 903.2 Information Dissemination - 903 Information Science - 901.3 Engineering Research - 731.1 Control Systems - 716 Telecommunication; Radar, Radio and Television - 622.1 Radioactive Materials, General

DOI: 10.1109/ICCSN.2011.6013834

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

782.

Accession number: 20104913459000

Title: RETRACTED ARTICLE: A discussion on the status quo.of human resources management and innovative mode in university library

Authors: Wang, Aiyun1 ; Zheng, Chunying1 ; Ma, Junyun1

Author affiliation:

1 Library, Hebei Normal University of Science and Technology, Changli, China

Corresponding author: Wang, A. (way00_2008@yahoo.com.cn)

Source title: Proceedings of the International Conference on E-Business and E-Government, ICEE 2010

Abbreviated source title: Proc. Int. Conf. E-Bus. E-Gov., ICEE

Monograph title: Proceedings of the International Conference on E-Business and E-Government, ICEE 2010

Issue date: 2010

Publication year: 2010

Pages: 3494-3497

Article number: 5591486

Language: Chinese

ISBN-13: 9780769539973

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: The thesis points out the status quo. of human resources management and the existing problems in university libraries, which are mainly about the overall low quality of human resources, the unreasonable knowledge structure, the unsatisfactory professional and technical training and the serious brain-drain phenomenon. In view of these analysis above, this paper brings out the innovative mode of human resources management, that is to say, on the basis of librarians' continuous self-renewal, all-round personnel training plans should be implemented, further educational system should be established, human resources should be equipped according to personal aptitude, a motivation system should be strengthened to compete for positions for those middle-level leaders of libraries and an open and fair mutual selection should be carried out to appoint librarians according to their majors, expertise and abilities. © 2010 IEEE.

Number of references: 4

Main heading: Personnel training

Controlled terms: Electronic commerce - Government data processing - Libraries - Motivation - Personnel selection

Uncontrolled terms: Educational systems - Existing problems - Human resources -

Human resources management - Innovative mode - Knowledge structures - Low qualities - Status quo - Technical training - University libraries

Classification code: 402.2 Public Buildings - 902.3 Legal Aspects - 911.2 Industrial Economics - 912.4 Personnel

DOI: 10.1109/ICEE.2010.878

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

783.

Accession number: 20134716999048

Title: An idea of dynamics inductive logic in complex cognition

Authors: Xu, Shui² ; Liu, Bang Fan¹ ; Ma, Xiu Li³

Author affiliation:

- 1 Qinhuangdao Vocational and Technical College, Qinhuangdao, 066004, China
- 2 Humanities-law College Yanshan University, Qinhuangdao, 066004, China
- 3 Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 433-435

Monograph title: Advances in Mechatronics and Control Engineering II

Issue date: 2013

Publication year: 2013

Pages: 579-582

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037858943

Document type: Conference article (CA)

Conference name: 2013 2nd International Conference on Mechatronics and Control Engineering, ICMCE 2013

Conference date: August 28, 2013 - August 29, 2013

Conference location: Dalian, China

Conference code: 100758

Sponsor: Queensland University of Technology; Korea Maritime University; Hong Kong Industrial Technology Research Centre; Inha University

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: As humankind enters the era of organized social cognition, the collective wisdom of the human form needs to face a very complex social conditions and the social environment. In such circumstances, more likely to use social cognition inductive logic. The accumulation and wealth of society knowledge will be more and more abstract representation to promote social awareness, and promote more in-depth characteristics from behavior to inductive references, while ignoring or rarely used to from the nature of the behavior of deductive reasoning. In dynamic cognition conditions, the fusion method is using the following branches of cognitive logic, dynamic logic and probability logic to combine to form a probabilistic dynamic cognition logic, and logic to study the use of these information changes in probability reference. In complex cognitive conditions, the pursuit of knowledge as the basic logic of the value of research areas, including philosophy logic, artificial intelligence logic, computer logic, fuzzy logic and so on. © (2013) Trans Tech Publications, Switzerland.

Number of references: 11

Main heading: Probabilistic logics

Controlled terms: Artificial intelligence - Fuzzy logic

Uncontrolled terms: Abstract representation - Cognitive logic - Complex cognitive - Deductive reasoning - Dynamic logic - Inductive logic - Probabilistic dynamics - Social environment

Classification code: 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 723.4 Artificial Intelligence

DOI: 10.4028/www.scientific.net/AMM.433-435.579

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

784.

Accession number: 20141017420627

Title: Image based computer-aided manufacturing technology

Authors: Hu, Zhanqi¹ ; Zhang, Xiaoqin² ; Li, Jinze² ; Li, Wei¹

Author affiliation:

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2 Mechanical and Electrical Engineering College, Hebei Normal University of Science and technology, Qinhuangdao, Hebei, 066004, China

Source title: Sensors and Transducers

Abbreviated source title: Sensors Transducers

Volume: 159

Issue: 11

Issue date: 2013

Publication year: 2013

Pages: 13-18

Language: English

E-ISSN: 17265479

Document type: Journal article (JA)

Publisher: International Frequency Sensor Association, 46 Thorny Vineway, Toronto, ON M2J 4J2, Canada

Abstract: Image based manufacturing technique is a novel manufacturing method, which is combine of machining technique and machine vision technique. By using the technique, machine tools can perform cutting process according to what they see, which is very like that the machine tool is equipped with "eyes". In this paper, some researches of author about the subject are proposed, and key techniques are included. Construction of image based manufacturing system is introduced briefly. The geometrical model is then built from the image information,

in which process shape from shading with adaptive pro-processing method is used. After the model is built, cutting path is planed, and two cutting paths, line cutting and contour cutting, are conducted. NC programs are generated automatically, and machining process is then performed. Finally a prototype system named ImageCAM is introduced. Algorithms developed in our research are verified in the system. © 2013 by IFSA.

Number of references: 14

Main heading: Computer vision

Controlled terms: Computer aided manufacturing - Image processing - Machine tools - Manufacture

Uncontrolled terms: Bitmap - Cutting methods - Geometrical modeling - Line cuttings - Machining techniques - Manufacturing methods - Manufacturing techniques - Shape from shading

Classification code: 537.1 Heat Treatment Processes - 603.1 Machine Tools, General - 741 Light, Optics and Optical Devices - 741.2 Vision - 913.4.2 Computer Aided Manufacturing

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

785.

Accession number: 20104713403297

Title: The research of flatness error measure sampling program

Authors: Tian, Shuyao¹ ; Lu, Weina¹ ; Zhao, Chunxia² ; Cai, Ning³ ; Chen, Qianqian³

Author affiliation:

1 Department of Mechanics and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

2 Dept. of Economics and Trade, Hebei Normal University of Science and Technology, Qinhuangdao Hebei, 066004, China

3 Department of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

Corresponding author: Tian, S. (tianbaoshuyao@163.com)

Source title: 2010 2nd IITA International Conference on Geoscience and Remote Sensing, IITA-GRS 2010

Abbreviated source title: IITA Int. Conf. Geosci. Remote Sens., IITA-GRS

Volume: 2

Part number: 2 of 2

Monograph title: 2010 2nd IITA International Conference on Geoscience and Remote Sensing, IITA-GRS 2010

Issue date: 2010

Publication year: 2010

Pages: 594-597

Article number: 5602367

Language: English

ISBN-13: 9781424485154

Document type: Conference article (CA)

Conference name: 2010 2nd IITA Conference on Geoscience and Remote Sensing, IITA-GRS 2010

Conference date: August 28, 2010 - August 31, 2010

Conference location: Qingdao, China

Conference code: 82429

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Asia Pacific Environmental Science Research Center; Wuhan University; Huazhong Normal University; Wuhan Institute of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: First of all, this paper points out that the significance of studying the Linear measurement of sample's interval, and then applying different sampling programs on the same plane for collecting, and separately by the least square method, the smallest tolerance zones flatness error evaluation. The result indicated along with the sampling interval increasing or the sampling points reduction, the flatness error always tendency is reduction Tthe result of two methods evaluate along indicated along with the sampling interval increasing or the sampling points reducing, the influence of evaluating method to the evaluate be also smaller. © 2010 IEEE.

Number of references: 3

Main heading: Sampling

Controlled terms: Coordinate measuring machines - Errors - Fits and tolerances - Geology
- Least squares approximations - Remote sensing

Uncontrolled terms: CMM - Evaluating method - Flatness error - Least square methods
- Linear measurements - Measure - Optimum sampling interval - Sampling interval - Sampling
points - Tolerance zones

Classification code: 921.6 Numerical Methods - 921 Mathematics - 801 Chemistry - 943.3 Special
Purpose Instruments - 731.1 Control Systems - 601 Mechanical Design - 481.1 Geology - 731 Automatic Control
Principles and Applications

DOI: 10.1109/IITA-GRS.2010.5602367

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

786.

Accession number: 20140217193442

Title: On ecological criticism discourse analysis of English advertisement

Authors: Zhang, Chen1 ; Li, Zhiqiang2

Author affiliation:

1 College of Foreign Languages, English Department, Hebei Normal University of Science and Technology,
Qin-HuangDao, He-Bei 066004, China

2 Construction and Purchasing Center, Hebei Normal University of Science and Technology, Qin-HuangDao,
He-Bei 066004, China

Source title: International Journal of Applied Environmental Sciences

Abbreviated source title: Int. J. Appl. Environ. Sci.

Volume: 8

Issue: 16

Issue date: 2013

Publication year: 2013

Pages: 2123-2130

Language: English

ISSN: 09736077

E-ISSN: 09740260

Document type: Journal article (JA)

Publisher: Research India Publications, B-2/84 Ground Floor, Rohini Sec-16,, Delhi, 110085, India

Abstract: With the continuous development of social economy, environmental pollution and ecological problems are becoming more and more serious. In this situation, ecological linguistics arises at the historic moment. Therefore, discourse analysis of the ecological criticism as one of the important research areas of ecological linguistics, has received more and more attention of people. Its main content is to make critical analysis on use of language from the perspective of ecology and environment. Advertising as an effective consumer guide and manufacturer's propaganda tool has gradually filled with every aspect of modern life. Therefore, the environmental protection advertisement has gradually developed into a trend. However, under the fierce market competition, many vendors in order to fight for market share, will not hesitate to do deception and exaggeration. Therefore, this paper based on the English advertisements for cosmetic industry, first of all, collected 25 ads from the major largest international cosmetics companies' official websites and made a statistical analysis on the advertising characteristics from the aspect of language step, lexical phrases and digital use. Then, it applies the ecological criticism analysis method to make a specific ecological interpretation of two of the famous English cosmetic advertisements. Also, it tried to reveal the surface ecological phenomenon in the advertisements and to point out its potential harm to the environment so as to improve people's recognition capability of the non-ecological phenomenon in the discourse. At the mean time, this paper aims to warn the consumers not to be fooled by advertising representation of the products. Instead, we should improve our environmental awareness and reduce the use of these products, so as to reduce environmental pollution and resource consumption. © Research India Publications.

Number of references: 7

Main heading: Ecology

Controlled terms: Automobile manufacture - Automobiles - Commerce - Competition - Cosmetics - Linguistics - Marketing - Semantics

Uncontrolled terms: Advertisement - Continuous development - Critical discourse analysis - Ecological linguistics - Environment - Environmental awareness - Environmental pollutions - Resource consumption

Classification code: 454.3 Ecology and Ecosystems - 662.1 Automobiles - 804 Chemical Products Generally - 903.2 Information Dissemination - 911.2 Industrial Economics - 911.4 Marketing

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

787.

Accession number: 20134416914560

Title: Projective synchronization of a new chaos based on state observer

Authors: Liu, Jianping¹ ; Li, Xia¹ ; Li, Zhiru² ; Yang, Xiaojing¹

Author affiliation:

1 HeBei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Qin HuangDao Shen He Middle School, Qinhuangdao 066006, China

Corresponding author: Liu, J. (liujianping0408@126.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 9

Issue: 17

Issue date: 2013

Publication year: 2013

Pages: 6903-6909

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press, P.O. Box 162, Bethel, CT 06801-0162, United States

Abstract: Fractional-order chaotic system has become hot topics in chaos theory research field in recent years. This paper firstly investigates a new fractional-order chaotic system which is generated by smooth inverse tangent function, then propose the design of state observer of new chaos for synchronization based on the stability theory of fractional-order systems and pole placement technique, illustrate examples are included to demonstrate the validity. © 2013 Binary Information Press.

Number of references: 19

Main heading: State estimation

Controlled terms: Chaotic systems

Uncontrolled terms: Fractional derivatives - Fractional order - Fractional-order chaotic systems - Fractional-order systems - Pole placement technique - Projective synchronization - Stability theories - State observer

Classification code: 731.1 Control Systems - 921 Mathematics - 931 Classical Physics; Quantum Theory; Relativity - 961 Systems Science

DOI: 10.12733/jcis6617

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

788.

Accession number: 20112914160021

Title: RETRACTED ARTICLE: Research of corporate uncertain tax planning decision-making

Authors: Shengwu, Jia¹ ; Liying, Zhang¹ ; Yan, Xiao¹ ; Xiaodong, Wang¹

Author affiliation:

¹ Finance and Economic College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Shengwu, J. (Jsw65@126.com)

Source title: 2011 International Conference on E-Business and E-Government, ICEE2011 - Proceedings

Abbreviated source title: Int. Conf. E-Bus. E-Gov., ICEE - Proc.

Monograph title: 2011 International Conference on E-Business and E-Government, ICEE2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 6162-6164

Article number: 5884523

Language: Chinese

ISBN-13: 9781424486946

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: Uncertain decision-making is an important decision problem in the corporate tax planning. This article use the basic principles of decision-making, through the combination of theory and case methods, elaborate the basic methods of corporate uncertain tax planning decision-making; Meanwhile, depending on the characteristics of different decision-making methods, the authors analyze the assumption and application environment of various uncertain tax planning decision-making methods. © 2011 IEEE.

Number of references: 4

Main heading: Decision making

Controlled terms: Decision theory - Electronic commerce - Government data processing - Intelligent networks - Taxation

Uncontrolled terms: Application environment - Basic principles - Case method - Decision problems - Decision-making method - ktax planning - Tax planning - uncertain

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 902.3 Legal Aspects - 911.2 Industrial Economics - 912.2 Management - 921 Mathematics - 961 Systems Science

DOI: 10.1109/ICEBEG.2011.5884523

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

789.

Accession number: 20110313602512

Title: A study on application of Communicative Approach in ELT

Authors: Haiying, Cui¹ ; Jing, Wang¹ ; Yapin, Ji¹

Author affiliation:

1 College of Foreign Languages, Hebei Normal University of Science and Technology, Qin Huangdao, China

Corresponding author: Haiying, C. (wyx_chy@126.com)

Source title: ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings

Abbreviated source title: ICEMT - Int. Conf. Educ. Manage. Technol., Proc.

Monograph title: ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 500-503

Article number: 5657606

Language: English

ISBN-13: 9781424486175

Document type: Conference article (CA)

Conference name: 2010 International Conference on Education and Management Technology, ICEMT 2010

Conference date: November 2, 2010 - November 4, 2010

Conference location: Cairo, Egypt

Conference code: 83348

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The objective of English Language Teaching (ELT) in China has transformed from reading competence as a focus to communicative competence as a goal. However, traditional teaching mode hinders the

development of students' communicative competence. This paper, from the perspective of Communicative Approach, intends to provide some concrete methods and techniques in classroom teaching. © 2010 IEEE.

Number of references: 10

Main heading: Teaching

Controlled terms: Communication

Uncontrolled terms: Appropriateness - Communicative approach - Culture - English language teaching - Fluency - Teacher's role

Classification code: 716 Telecommunication; Radar, Radio and Television - 901.2 Education

DOI: 10.1109/ICEMT.2010.5657606

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

790.

Accession number: 20112914166044

Title: Analysis on information construction of university personnel archives

Authors: Han, Shuhua1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Han, S. (huiyu4613@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 267

Monograph title: Manufacturing Systems and Industry Application

Issue date: 2011

Publication year: 2011

Pages: 30-34

Language: English

ISSN: 10226680

ISBN-13: 9783037851517

Document type: Conference article (CA)

Conference name: 2011 International Conference on Materials Engineering for Advanced Technologies, ICMEAT 2011

Conference date: May 5, 2011 - May 6, 2011

Conference location: Singapore, Singapore

Conference code: 85576

Sponsor: National University of Singapore; Asia Pacific Human-Computer Interaction Research Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: This paper begins with the significance of informatization construction of university personnel archives, then it describes the concept and content of informatization construction of university personnel archives, especially discusses the main existing problems of informatization construction of university personnel archives, and puts forward corresponding strategies according to the list issues. © (2011) Trans Tech Publications, Switzerland.

Number of references: 10

Main heading: Personnel

Controlled terms: Industrial applications - Manufacture

Uncontrolled terms: Corresponding strategies - Existing problems - Information construction - Informatization - Informatization construction - University personnel archives

Classification code: 912.4 Personnel - 913 Production Planning and Control; Manufacturing - 913.4 Manufacturing

DOI: 10.4028/www.scientific.net/AMR.267.30

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

791.

Accession number: 20130615981439

Title: Direction relations reasoning based on constraint satisfaction problems

Authors: Liu, Zheng-Lin¹ ; Chang, He-Yong² ; Gao, Ai-Hua¹ ; Guan, Jian¹ ; Wei, Rui¹

Author affiliation:

1 Information Technology Department, E and A College, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Computing Center, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Liu, Z.-L. (liuzhenglin@163.com)

Source title: Proceedings - 2012 International Conference on Computer Science and Service System, CSSS 2012

Abbreviated source title: Proc. - Int. Conf. Comput. Sci. Serv. Syst., CSSS

Monograph title: Proceedings - 2012 International Conference on Computer Science and Service System, CSSS 2012

Issue date: 2012

Publication year: 2012

Pages: 127-129

Article number: 6394277

Language: English

ISBN-13: 9780769547190

Document type: Conference article (CA)

Conference name: 2012 International Conference on Computer Science and Service System, CSSS 2012

Conference date: August 11, 2012 - August 13, 2012

Conference location: Nanjing, China

Conference code: 95196

Sponsor: IEEE Computer Society of Jiangsu Province; Zhejiang University; Nanjing University; Nanjing University of Science and Technology; Sichuan University

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: Constraint Satisfaction Problems (for short CSP) is one of the fields Artificial Intelligence is researching in, Such as Machine Vision, Space Scheduling, Relations Reasoning and other many problems of computer science are regarded as the certain example of CSP. Direction Relations are the important parts of Spatial Relations, which are used to describe the orientations of an object with other objects. This paper proposed a new idea based on the Back Jumping Algorithm in CSP, and applied it to Direction Relations Reasoning. Practice has proved that the algorithm is effective. © 2012 IEEE.

Number of references: 5

Main heading: Computer vision

Controlled terms: Algorithms - Artificial intelligence - Computer science

Uncontrolled terms: Constraint satisfaction problems - Direction Relations - Spatial relations

Classification code: 721 Computer Circuits and Logic Elements - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 921 Mathematics

DOI: 10.1109/CSSS.2012.39

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

792.

Accession number: 20134416915428

Title: On the modern service industry to separat from the manufacturing industry in Hebei province

Authors: Liu, Bang Fan1 ; Xu, Shui2 ; Ma, Xiu Li3

Author affiliation:

1 Humanities-law College Yanshan University, Qinhuangdao, 066004, China

- 2 Qinhuangdao Vocational and Technical College, Qinhuangdao, 066004, China
- 3 Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 423-426

Monograph title: Applied Materials and Technologies for Modern Manufacturing

Issue date: 2013

Publication year: 2013

Pages: 2145-2148

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037858882

Document type: Conference article (CA)

Conference name: 3rd International Conference on Applied Mechanics, Materials and Manufacturing, ICAMMM 2013

Conference date: August 24, 2013 - August 25, 2013

Conference location: Dalian, China

Conference code: 100385

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: On the whole, the road that the modern service industry of Hebei province from manufacturing stripping is still not clear, many obstacles still exist, especially prominent in the performance of enterprises, mainly the following three aspects: Manufacturing companies are reluctant to divest its productive service industry. The manufacturing industry production service industry does not have the ability to peel. The concept that cannot be stripped is still outstanding. The separated mode of the producer services of the Hebei manufacturing industry is that: step-by-step separating, step-by-step integration, o the enterprise production service outsourcing as the starting point, come true vigorously construction of Hebei province service outsourcing base. © (2013) Trans Tech Publications, Switzerland.

Number of references: 13

Main heading: Industry

Controlled terms: Manufacture

Uncontrolled terms: Enterprise production - Hebei Province - Manufacturing companies - Manufacturing industries - Modern service industries - Production services - Service industries - Step-by-step integration

Classification code: 911 Cost and Value Engineering; Industrial Economics - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing - 913.4 Manufacturing

DOI: 10.4028/www.scientific.net/AMM.423-426.2145

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

793.

Accession number: 20114514494049

Title: Design of PSOPF algorithm based on the criteria of MKLD and its application

Authors: Gong, Yisong¹ ; Li, Baoli² ; Zhang, Jinjun³ ; Zhang, Lingmin⁴

Author affiliation:

- 1 Troops 61618, Beijing 102102, China
- 2 China National Administration of GNSS and Applications, 17 Huayuan Road, Beijing 100088, China
- 3 Branch 22 of Troops 92493, Huludao 125000, China
- 4 Institute of Mathematics and Information, Hebei Normal University of Science and Technology, 36 West Hebei Street, Qinhuangdao 066004, China

Corresponding author: Gong, Y. (gongyisong@163.com)

Source title: Wuhan Daxue Xuebao (Xinxi Kexue Ban)/Geomatics and Information Science of Wuhan University

Abbreviated source title: Wuhan Daxue Xuebao Xinxi Kexue Ban

Volume: 36

Issue: 10

Issue date: October 2011

Publication year: 2011

Pages: 1251-1255

Language: Chinese

ISSN: 16718860

CODEN: WDXKA2

Document type: Journal article (JA)

Publisher: Wuhan University, LuoJia Hill, Wuhan, 430072, China

Abstract: Considering the degeneracy of particle weight and the large amount of calculation existing in the standard particle filtering algorithm, a particle swarm optimization particle filtering method based on the criteria of MKLD is brought forward in this paper. This method embeds the particle swarm optimization algorithm into the important sampling process of the particle filtering method, to optimize the sampling process and improve the fine collection of particles while maintaining the state estimation performance of the particle filtering method. At the same time, in order to reduce the computational complexity, the new algorithm adaptively selects the optimized particles and the implementation moment of the particle swarm optimization based on the criteria of MKLD. The results of a large amount of computational experiments and the GPS/DR integrated navigation simulation experiment show the effectiveness of the novel method proposed in this paper.

Number of references: 10

Main heading: Particle swarm optimization (PSO)

Controlled terms: Algorithms - Computational complexity - Experiments - Nonlinear filtering

Uncontrolled terms: Computational experiment - Estimation performance - Integrated navigation - Kullback-Leibler distance - Novel methods - Particle filtering - Particle filtering algorithms - Particle swarm - Particle swarm optimization algorithm - Sampling process - The degeneracy of the phenomenon of particle weight

Classification code: 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 723 Computer Software, Data Handling and Applications - 731.1 Control Systems - 901.3 Engineering Research - 921 Mathematics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

794.

Accession number: 20134817040511

Title: Genetic analysis and detection of the gene MILX99 on chromosome 2BL conferring resistance to powdery mildew in the wheat cultivar Liangxing 99

Authors: Zhao, Zihui^{1, 2}; Sun, Huigai^{1, 2}; Song, Wei^{1, 2}; Lu, Ming²; Huang, Jiang³; Wu, Longfei¹; Wang, Xiaoming¹; Li, Hongjie¹

Author affiliation:

1 The National Key Facility for Crop Gene Resources and Genetic Improvement (NFCRI), Institute of Crop Science, Chinese Academy of Agricultural Sciences, Beijing, 100081, China

2 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

3 College of Biotechnology, Guilin Medical University, Guilin, 541004, China

Corresponding author: Li, H. (lihongjie@caas.cn)

Source title: Theoretical and Applied Genetics

Abbreviated source title: Theor. Appl. Genet.

Volume: 126

Issue: 12

Issue date: December 2013

Publication year: 2013

Pages: 3081-3089

Language: English

ISSN: 00405752

CODEN: THAGA6

Document type: Journal article (JA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Key message: The effectiveness of wheat cultivar Liangxing 99 against powdery mildew was shown to be controlled by a single dominant gene located on a new locus of chromosome 2BL in the bin 2BL2-0.35-0.50. Liangxing 99, one of the most widely grown commercial cultivars in the winter wheat (*Triticum aestivum*) producing regions in northern China, was shown to provide a broad spectrum of resistance to *Blumeria graminis* f. sp. *tritici* (Bgt) isolates originating from that region. Using an F2 population and F2:3 lines derived from a cross of Liangxing 99 × Zhongzuo 9504, genetic analysis demonstrated that a single dominant gene, designated MILX99, was responsible for the resistance of Liangxing 99 to Bgt isolate E09. The results of molecular analysis indicated that this gene is located on chromosome 2BL and flanked by the SSR marker Xgwm120 and EST-STS marker BE604758 at genetic distances of 2.9 and 5.5 cM, respectively. Since the flanking markers of MILX99 were previously mapped to the bin 2BL2-0.36-0.50, MILX99 must be located in this chromosomal region. MILX99 showed a different resistance reaction pattern to 60 Bgt isolates from Pm6, Pm33, and PmJM22, which were all previously mapped on chromosome 2BL, but differed in their positions from MILX99. Due to its unique position on chromosome 2BL, MILX99 appears to be a new locus for resistance to powdery mildew. Liangxing 99 has shown superior yield performance and wide adaptation to different agricultural conditions, which has resulted in its extensive use as a wheat cultivar in China. The identification of resistance gene MILX99 facilitates the use of this cultivar in the protection of wheat from damage caused by powdery mildew. © 2013 Springer-Verlag Berlin Heidelberg.

Number of references: 44

Main heading: Genes

Controlled terms: Bins - Damage detection - Fungi

Uncontrolled terms: Agricultural conditions - Chromosomal regions - Commercial cultivars - Flanking markers - Genetic distances - Molecular analysis - Reaction patterns - *Triticum aestivum*

Classification code: 421 Strength of Building Materials; Mechanical Properties - 422 Strength of Building Materials; Test Equipment and Methods - 461.2 Biological Materials and Tissue Engineering - 461.9 Biology - 694.4 Storage

DOI: 10.1007/s00122-013-2194-6

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

795.

Accession number: 20112514075639

Title: The research of singularity about 3D potential problem FM-BEM

Authors: Li, Xia1 ; Xu, Liyong1 ; Liu, Jianping1 ; He, Shangqin1

Author affiliation:

1 HeBei Normal University of Science and Technology, HeBei QinHuangDao HeBei, China

Corresponding author: Li, X. (lixia_snow@yahoo.com.cn)

Source title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Abbreviated source title: Proc. - ACIS Int. Symp. Cryptography, Netw. Secur., Data Min. Knowl. Discov., E-Commer. Its Appl., Embedded Syst., CDEE

Monograph title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Issue date: 2011

Publication year: 2011

Pages: 126-128

Article number: 5759394

Language: English

ISBN-13: 9780769543321

Document type: Conference article (CA)

Conference name: 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Conference date: October 23, 2010 - October 24, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 84956

Sponsor: Int. Assoc. Comput. Inf. Sci. (ACIS)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper, by applying fast multipole expansion, the boundary integral equation about 3D potential problem is discrete. in boundary, then it is converted to exponential series by Laplace Transformation, so avoiding singularity which Bring by basic solution. Discussing effectiveness about this method at last by data processing. This method improves the original FMM and provides theory analysis for applying FMM in engineer. © 2010 IEEE.

Number of references: 8

Main heading: Network security

Controlled terms: Boundary integral equations - Cryptography - Data handling - Data mining - Differential equations - Electronic commerce - Embedded systems - Laplace transforms - Metadata - Three dimensional

Uncontrolled terms: Avoiding singularity - Basic solutions - Fast multiple expansion - Fast multipole - Laplace transformations - Potential problems

Classification code: 723 Computer Software, Data Handling and Applications - 921.2 Calculus - 921.3 Mathematical Transformations

DOI: 10.1109/CDEE.2010.34

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

796.

Accession number: 20115014601457

Title: "Network hard drive" service system in campus network

Authors: Yu, Zhang-Hong¹ ; Jian, Yu-Qing¹

Author affiliation:

¹ Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Yu, Z.-H. (yuzhanghong@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 403-408

Monograph title: MEMS, NANO and Smart Systems

Issue date: 2012

Publication year: 2012

Pages: 1306-1308

Language: English

ISSN: 10226680

ISBN-13: 9783037853122

Document type: Conference article (CA)

Conference name: 2011 7th International Conference on MEMS, NANO and Smart Systems, ICMENS 2011

Conference date: November 4, 2011 - November 6, 2011

Conference location: Kuala Lumpur, Malaysia

Conference code: 87709

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol.; Singapore Institute of Electronics

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: This study is from the Building of "network hard drive" service system of Hebei Normal University of Science and Technology. First of all, combined with the user's characteristics and application needs of college campus network, depth study is conducted on the campus network storage program, and designs a fully functional network hard drive system, and on this basis, Identifying the key factors of impacting performance through research and analysis to system, studying the optimization strategies and methods to services; proposing the design program of performance optimization system through experimental and testing of all optimization strategies to system, and ultimately achieve. © (2012) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Hard disk storage

Controlled terms: Optimization - Software testing

Uncontrolled terms: Campus network - College campus - Design programs - Functional

network - Hard drive system - Hard drives - Key factors - Optimization strategy - Performance optimizations - Research and analysis - Science and Technology - Service systems - System testing

Classification code: 722.1 Data Storage, Equipment and Techniques - 723.5 Computer Applications - 921.5 Optimization Techniques

DOI: 10.4028/www.scientific.net/AMR.403-408.1306

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

797.

Accession number: 20103113115593

Title: RETRACTED ARTICLE: Teaching of mathematics education under the new curriculum standard

Authors: Guo, Ya-Jun¹ ; Wang, Jin-Ran¹ ; Yue, Xiao-Yuan¹

Author affiliation:

1 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Guo, Y.-J. (Guoyajun111@126.com)

Source title: OPEE 2010 - 2010 International Conference on Optics, Photonics and Energy Engineering

Abbreviated source title: OPEE - Int. Conf. Opt., Photonics Energy Eng.

Volume: 2

Part number: 2 of 2

Monograph title: OPEE 2010 - 2010 International Conference on Optics, Photonics and Energy Engineering

Issue date: 2010

Publication year: 2010

Pages: 350-352

Article number: 5507957

Language: English

ISBN-13: 9781424452354

Document type: Conference article (CA)

Conference name: 2010 International Conference on Optics, Photonics and Energy Engineering, OPEE 2010

Conference date: May 10, 2010 - May 11, 2010

Conference location: Wuhan, China

Conference code: 81252

Sponsor: Asia Pacific Environmental Science Research Center; CCF Young Computer Scientists and Engineering Forum Wuhan Branch; Huazhong University of Science and Technology; Intelligent Inf. Technol. Appl. Res. Assoc.; Wuhan University

Publisher: IEEE Computer Society

Abstract: The implementation of new course standard of mathematics is one of the significant changes of our educational business. Through our analysis of the present mathematics education to discuss the new idea of mathematics education under the new curriculum standard, the new ways of mathematics classroom teaching under the new curriculum standard are given in the paper. © 2010 IEEE.

Number of references: 4

Main heading: Teaching

Controlled terms: Curricula - Mathematical techniques - School buildings - Standards

Uncontrolled terms: Classroom teaching - Curriculum standards - Mathematics curricula - Mathematics education

Classification code: 402.2 Public Buildings - 901.2 Education - 902.2 Codes and Standards - 921 Mathematics

DOI: 10.1109/OPEE.2010.5507957

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

798.

Accession number: 20124815724723

Title: Poincare sphere method in the analysis of fiber polarization mode dispersion

Authors: Wang, Feng^{1, 2}; Feng, Lizhen²; Wang, Kuan²

Author affiliation:

1 Yanshan University, Qinhuangdao 066004, China

2 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Wang, F. (wangfengwwff@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 203

Monograph title: Review of Modern Engineering Solutions for the Industry

Issue date: 2012

Publication year: 2012

Pages: 504-508

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037854921

Document type: Conference article (CA)

Conference name: 2012 International Conference on Mechatronic Systems and Automation Systems, MSAS 2012

Conference date: July 21, 2012 - July 21, 2012

Conference location: Wuhan, China

Conference code: 93982

Sponsor: Information Technology and Industrial Engineering Research Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: With the continuous improvement of the optical fiber communication rate, polarization mode dispersion (PMD: Polarization mode dispersion) is gradually depth. PMD will cause the light pulse signal wide during transmission, and in the signal transmission process continuous accumulation, damage to the transmission performance of the system, limit the system's transmission rate and transmission distance, PMD began to be the main obstacle which constrained optical fiber communication system upgrade and further development. PMD is a random value and difficult to calculate and test in the actual optical fiber communication systems. Poincare method is intuitive, easy to understand, easy measurement to study the characteristics of the PMD, and avoid a lot of tedious calculations. In the paper, analysis the single-mode fiber and its PMD, and the polarization state transmission process of polarization maintaining fiber and its nonlinear effects using the Poincare method, and simulate PMD characteristics by using Matlab software. Based on these, introduce the measurement principle of an improved Poincare method. Analysis showed that the Poincare sphere is a unique method in the analysis of fiber-optic polarization state transmission. Poincare method for the study of polarization mode dispersion has become an important direction of today's communications field. © (2012) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Light transmission

Controlled terms: Automation - Communication systems - Light pulse generators - MATLAB - Polarization - Polarization mode dispersion - Polarization-maintaining fiber - Single mode fibers

Uncontrolled terms: Continuous improvements - Differential group delay - Light pulse - Matlab- software - Measurement principle - Nonlinear effect - Poincare - Poincare sphere - Poincare sphere method - Polarization state - Principal state of polarization - Random values - Signal transmission - Tedious calculation - Transmission distances - Transmission performance - Transmission rates

Classification code: 711 Electromagnetic Waves - 716 Telecommunication; Radar, Radio and Television - 731 Automatic Control Principles and Applications - 732 Control Devices - 741 Light, Optics and Optical Devices - 921 Mathematics

DOI: 10.4028/www.scientific.net/AMM.203.504

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

799.

Accession number: 20103613215098

Title: Discussions of the mathematics teaching reform in normal universities under "New Curriculum Standard"

Authors: Zhang, Lingmin¹ ; Zheng, Guoping¹ ; Chen, Zuoli¹ ; Li, Suhong¹

Author affiliation:

1 Dept. of Maths and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Zhang, L. (Lingmin9999@163.com)

Source title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Abbreviated source title: ICIMA- Int. Conf. Ind. Mechatronics Autom.

Volume: 1

Part number: 1 of 2

Monograph title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Issue date: 2010

Publication year: 2010

Pages: 577-580

Article number: 5538103

Language: English

ISBN-13: 9781424476541

Document type: Conference article (CA)

Conference name: 2010 2nd International Conference on Industrial Mechatronics and Automation, ICIMA 2010

Conference date: May 30, 2010 - May 31, 2010

Conference location: Wuhan, China

Conference code: 81583

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Wuhan Institute of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The new curriculum standard gives higher requirements to the teaching ability of middle school mathematics teachers, such as: the ability of teaching students how to learn well, applying new teaching theory and modern information technology, and exploiting and using curriculum resources. For this, middle school mathematics teachers should improve their teaching ability to adapt to the new requirements. It demands mathematics teaching reform in normal universities to meet the requirements. In this paper, we give the methods of how to do this from four respects. At the same time, we demonstrate the validity of them. © 2010 IEEE.

Number of references: 4

Main heading: Curricula

Controlled terms: Information technology - Mathematical techniques - Mechatronics - Standards

Uncontrolled terms: Curriculum resource - Curriculum standards - Middle school - Modern information technology - New curriculum standard - New teaching - Teaching reforms

Classification code: 608 Mechanical Engineering, General - 901.2 Education - 902.2 Codes and Standards - 903 Information Science - 921 Mathematics

DOI: 10.1109/ICINDMA.2010.5538103

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

800.

Accession number: 20113414246573

Title: High accuracy analysis of the finite element method for nonlinear viscoelastic wave equations with nonlinear boundary conditions

Authors: Shi, Dongyang1 ; Zhang, Buying2

Author affiliation:

1 Department of Mathematics, Zhengzhou University, Zhengzhou 450052, China

2 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Shi, D.

Source title: Journal of Systems Science and Complexity

Abbreviated source title: J. Syst. Sci. Complex.

Volume: 24

Issue: 4

Issue date: August 2011

Publication year: 2011

Pages: 795-802

Language: English

ISSN: 10096124

E-ISSN: 15597067

Document type: Journal article (JA)

Publisher: Springer New York, 233 Springer Street, New York, NY 10013-1578, United States

Abstract: The standard finite elements of degree p over the rectangular meshes are applied to solve a kind of nonlinear viscoelastic wave equations with nonlinear boundary conditions, and the superclose property of the continuous Galerkin approximation is derived without using the nonclassical elliptic projection of the exact solution of the model problem. The global superconvergence of one order higher than the traditional error estimate is also obtained through the postprocessing technique. © 2011 Institute of Systems Science, Academy of Mathematics and Systems Science, CAS and Springer-Verlag Berlin Heidelberg.

Number of references: 12

Main heading: Nonlinear equations

Controlled terms: Boundary conditions - Finite element method - Mathematical operators - Viscoelasticity - Wave equations

Uncontrolled terms: Accuracy analysis - Continuous Galerkin - Elliptic projection - Error estimates - Exact solution - Global superconvergence - Model problems - Non-linear boundary conditions - Nonlinear visco-elastic - Post-processing techniques - postprocessing operator - Rectangular mesh - Standard finite element - Super-convergence

Classification code: 421 Strength of Building Materials; Mechanical Properties - 921 Mathematics

DOI: 10.1007/s11424-011-8315-x

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

801.

Accession number: 20124815724710

Title: The development of PMD and its compensation method

Authors: Wang, Feng^{1, 3}; Sun, Qihong^{2, 3}; Jiao, Honglei¹

Author affiliation:

1 EandA College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Hebei University of Science and Technology, Shijiazhuang 050000, China

3 Yanshan University, Qinhuangdao 066004, China

Corresponding author: Wang, F. (wangfengwwff@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 203

Monograph title: Review of Modern Engineering Solutions for the Industry

Issue date: 2012

Publication year: 2012

Pages: 445-448

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037854921

Document type: Conference article (CA)

Conference name: 2012 International Conference on Mechatronic Systems and Automation Systems, MSAS 2012

Conference date: July 21, 2012 - July 21, 2012

Conference location: Wuhan, China

Conference code: 93982

Sponsor: Information Technology and Industrial Engineering Research Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: With the quickly development of fiber communication, PMD(Polarization mode dispersion) has become one of the key factor which limit high-bit rate system performance. In 1986, C. D. Poole[1] and other people found that if do not consider loss of SOP, two upright PSP will change along certain length SMF. In 1987, D. Andresciani and N. S. Bergano validate the theory of C. D. Poole each either. Late ninety of last century, statistical theory forming[2]. In the paper, we discuss the study of PMD, including statistics of PMD, measure technology, the affect of system by PMD, and PMD Compensation Method. © (2012) Trans Tech Publications, Switzerland.

Number of references: 14

Main heading: Dispersion compensation

Controlled terms: Automation - Optical communication - Polarization mode dispersion

Uncontrolled terms: Compensation method - DGD - Fiber communications - Key factors - PMD compensation - PMF - Statistical theory

Classification code: 717.1 Optical Communication Systems - 731 Automatic Control Principles and Applications - 732 Control Devices - 741 Light, Optics and Optical Devices

DOI: 10.4028/www.scientific.net/AMM.203.445

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

802.

Accession number: 20131216128662

Title: The ecological effects of humic acid fertilizer on the spring wheat under cadmium stress

Authors: Ren, Yanjun1 ; Ma, Jianjun1

Author affiliation:

1 Analysis and Testing Centre, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Ma, J. (kycmj@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 295-298

Monograph title: Progress in Environmental Protection and Processing of Resource

Issue date: 2013

Publication year: 2013

Pages: 1204-1208

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037856499

Document type: Conference article (CA)

Conference name: 2012 International Conference on Sustainable Energy and Environmental Engineering, ICSEEE 2012

Conference date: December 29, 2012 - December 30, 2012

Conference location: Guangzhou, China

Conference code: 95889

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Using spring wheat as tested materials, by pot experiments and three fertilization modes (seed soaking mode, irrigated fertilization mode and mixed using mode), the effects of sodium humate on the wheat seedlings growth and mineral elements (Cu, Zn, Fe, Mn) absorption were studied. The results indicated that, all three modes showed obviously resistance performance to Cd stress, promoted the wheat seedlings growth and the dry matter accumulation, and the third mode had the best effects. In the background soil, sodium humate treatments could obviously inhibit the Cd elements absorption; promote the mineral elements absorption and accumulation. Along with the Cd stress degree aggravating, the inhibition effects reduced. At the same time, different fertilization modes had different effects on mineral elements absorption and accumulation. The research also puts forward that humic acid fertilizer is an ecological fertilizer and soil conditioner with alleviate heavy metals pollution and enhance plant stress resistance function. © (2013) Trans Tech Publications, Switzerland.

Number of references: 12

Main heading: Ecology

Controlled terms: Biological materials - Cadmium - Fertilizers - Growth (materials) - Heavy metals - Minerals - Organic acids - Sodium

Uncontrolled terms: Cadmium stress - Ecological effect - Fertilization modes - Sodium humate - Spring wheat

Classification code: 951 Materials Science - 804.1 Organic Compounds - 804 Chemical Products Generally - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 549.1 Alkali Metals - 531 Metallurgy and Metallography - 482.2 Minerals - 461.2 Biological Materials and Tissue Engineering - 454.3 Ecology and Ecosystems

DOI: 10.4028/www.scientific.net/AMM.295-298.1204

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

803.

Accession number: 20122115054841

Title: The new method of managing teaching archives in high learning school

Authors: Liu, Limei1 ; Gao, Weiming1 ; Dong, Litao1 ; Yu, Dongmei1 ; Cao, Jianhui1

Author affiliation:

1 Archives Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Liu, L. (Hanmei315@sohu.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 133 AISC

Monograph title: Frontiers in Computer Education

Issue date: 2012

Publication year: 2012

Pages: 273-277

Language: English

ISSN: 18675662

ISBN-13: 9783642275517

Document type: Conference article (CA)

Conference name: 2011 International Conference on Frontiers in Computer Education, ICFCE 2011

Conference date: December 1, 2011 - December 2, 2011

Conference location: Macao, China

Conference code: 89871

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Summary: according to present situation on using teaching archives in high school, the new idea as follows: amplify the scope of archives for meeting the needs of all walks of life; strengthen inspection for resisting falsify; improve work efficiency and explore new way of management; take advantage of modern management method to optimize development and utilization. © 2012 Springer-Verlag GmbH Berlin Heidelberg.

Number of references: 4

Main heading: Education

Controlled terms: Soft computing - Software engineering

Uncontrolled terms: High school - Modern management - New method - Present situation - Work efficiency

Classification code: 723 Computer Software, Data Handling and Applications - 723.1 Computer Programming - 901.2 Education

DOI: 10.1007/978-3-642-27552-4_41

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

804.

Accession number: 20103613215101

Title: Analysis of the qualities and abilities normal university students majoring in mathematics should possess under "New Curriculum Standard"

Authors: Zheng, Guoping¹ ; Zhang, Lingmin¹ ; Xiao, Xin¹ ; Gao, Ruiping¹

Author affiliation:

1 Dept. of Maths and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Zheng, G. (zhengguoping9199@126.com)

Source title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Abbreviated source title: ICIMA- Int. Conf. Ind. Mechatronics Autom.

Volume: 1

Part number: 1 of 2

Monograph title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Issue date: 2010

Publication year: 2010

Pages: 581-583

Article number: 5538106

Language: English

ISBN-13: 9781424476541

Document type: Conference article (CA)

Conference name: 2010 2nd International Conference on Industrial Mechatronics and Automation, ICIMA 2010

Conference date: May 30, 2010 - May 31, 2010

Conference location: Wuhan, China

Conference code: 81583

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Wuhan Institute of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The implementation of "New Curriculum standard" requires that normal universities students majoring in mathematics should possess the following qualities: the ideological and moral quality, cultural quality, business quality, physical and mental quality, as well as the following abilities: the awareness and ability of mathematics application, the awareness of social advocacy, flexible use of various of teaching methods, strong education management and organizational skills, strong language skills and aesthetic capabilities, skilled use of foreign languages and computers, strong spirit of innovation, awareness of mathematics education and scientific research. In this paper we discuss the qualities and abilities students majoring in mathematics should possess under "New Curriculum Standard". © 2010 IEEE.

Number of references: 4

Main heading: Students

Controlled terms: Computer science - Curricula - Linguistics - Mathematical techniques - Mechatronics - Query languages - Standards - Teaching

Uncontrolled terms: Abilities - Curriculum standards - Education management - Foreign language - Mathematics education - Organizational skills - Quality - Scientific researches -

Teaching methods - University students

Classification code: 903.2 Information Dissemination - 902.2 Codes and Standards - 901.2 Education - 921 Mathematics - 723 Computer Software, Data Handling and Applications - 721 Computer Circuits and Logic Elements - 608 Mechanical Engineering, General - 722 Computer Systems and Equipment

DOI: 10.1109/ICINDMA.2010.5538106

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

805.

Accession number: 20110813689067

Title: Based on the flow of anti-k nearest neighbors algorithm for data mining outliers

Authors: Cao, Lijun¹ ; Liu, Xiyin² ; Zhou, Tiejun¹ ; Zhang, Zhongping³ ; Liu, Aiyong¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 Yaohua Design Institute, Qinhuangdao, Hebei, China

3 College of Information Science and Engineering, Yanshan University, Qinhuangdao, Hebei, 066004, China

Corresponding author: Cao, L. (Missca06666@163.com)

Source title: Proceedings - 2010 3rd IEEE International Conference on Broadband Network and Multimedia Technology, IC-BNMT2010

Abbreviated source title: Proc. - IEEE Int. Conf. Broadband Netw. Multimedia Technol., IC-BNMT

Monograph title: Proceedings - 2010 3rd IEEE International Conference on Broadband Network and Multimedia Technology, IC-BNMT2010

Issue date: 2010

Publication year: 2010

Pages: 1207-1211

Article number: 5705281

Language: English

ISBN-13: 9781424467709

Document type: Conference article (CA)

Conference name: 2010 3rd IEEE International Conference on Broadband Network and Multimedia Technology, IC-BNMT2010

Conference date: October 26, 2010 - October 28, 2010

Conference location: Beijing, China

Conference code: 83867

Sponsor: Beijing University of Posts and Telecommunications (BUPT); IEEE Beijing Section; International Business Machines; Loughborough University; Natural Science Foundation of China

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: A new data stream outlier detection algorithm SODRNN is proposed based on reverse nearest neighbors. this paper researches data stream outlier detection algorithm which is based on Reverse k nearest neighbours. When we analyze the known algorithms, we find that the algorithm cannot deal with the concept drifting problem and they need multi-scan of the dataset. So, this paper introduces the SODRNN algorithm, which needs only one pass of scan for the current sliding window. the empirical study verify the feasibility and effectiveness of X*tree index structure which supports knn searching and the SODRNN algorithm in this paper. © 2010 IEEE.

Number of references: 11

Main heading: Trees (mathematics)

Controlled terms: Algorithms - Broadband networks - Data communication systems - Data mining - Motion compensation - Signal detection

Uncontrolled terms: Concept drifting - Data sets - Data stream - Empirical studies - K nearest neighbors - K-nearest neighbours - Multi-scan - One-pass - Outlier - Outlier detection algorithm - Paper research - Reverse nearest neighbors - Sliding window - Tree indices

Classification code: 921 Mathematics - 741 Light, Optics and Optical Devices - 723 Computer Software, Data Handling and Applications - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 718 Telephone Systems and Related Technologies; Line Communications - 716.1 Information Theory and Signal Processing - 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication

DOI: 10.1109/ICBNMT.2010.5705281

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

806.

Accession number: 20134416933725

Title: Research on artistic value of computer music for college students

Authors: Qi, Qiong1 ; Cao, Jian Ye1 ; Zhang, Yi Wen1

Author affiliation:

1 College of the Arts, Hebei Normal University of Science and Technology, Hebei, Qin Huangdao 066000, China

Corresponding author: Qi, Q. (Qiqiong666@126.com)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 227 LNEE

Part number: 5 of 5

Issue: VOL. 5

Monograph title: Proceedings of the 2nd International Conference on Green Communications and Networks 2012, GCN 2012

Issue date: 2013

Publication year: 2013

Pages: 733-738

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783642353970

Document type: Conference article (CA)

Conference name: 2nd International Conference on Green Communications and Networks, GCN 2012

Conference date: December 12, 2012 - December 14, 2012

Conference location: Chongqing, China

Conference code: 95479

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University; Nanyang Technological University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The development of computer music has contributed to the progress of musical art, and affected society at all levels, especially impacting on college students' daily study and living. Without modern digital technology, a major in music is almost impossible to study and work well. College students' music study and creation has been significantly affected by computer technology in music art creation and performance. Science and technology development has laid a good foundation for modern music making, and greatly promoted the development of music. © 2013 Springer-Verlag.

Number of references: 11

Main heading: Students

Controlled terms: Computer music

Uncontrolled terms: Art - Artistic value - College students - Computer technology - Creation - Digital technologies - Science and Technology - Study

Classification code: 752 Sound Devices, Equipment and Systems - 901.2 Education

DOI: 10.1007/978-3-642-35398-7_92

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

807.

Accession number: 20104213306775

Title: Research and exploration of text mining technology

Authors: Cao, Lijun1 ; Yu, Hongkui1 ; Li, Yuxiang1 ; Liu, Xiyin2

Author affiliation:

1 Hebei Normal University of Science and Technology, China

2 Yaohua Design Institute, Qinhuangdao, Hebei, China

Corresponding author: Cao, L. (Missca06666@163.com)

Source title: Proceedings - 2nd IEEE International Conference on Advanced Computer Control, ICACC 2010

Abbreviated source title: Proc. - IEEE Int. Conf. Adv. Comput. Control, ICACC

Volume: 5

Part number: 5 of 5

Monograph title: Proceedings - 2nd IEEE International Conference on Advanced Computer Control, ICACC 2010

Issue date: 2010

Publication year: 2010

Pages: 435-439

Article number: 5487091

Language: English

ISBN-13: 9781424458462

Document type: Conference article (CA)

Conference name: 2010 IEEE International Conference on Advanced Computer Control, ICACC 2010

Conference date: March 27, 2010 - March 29, 2010

Conference code: 81866

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT); Institute of Electrical and Electronics Engineers (IEEE)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331,

United States

Abstract: This article introduced the text excavation's research condition, has analyzed the text excavation basic concept and the technology, summarized the text excavation process, the commonly used algorithm, the text classification, the text cluster, the connection analysis, the tendency forecast and so on, pointed out that the algorithm the insufficiency, has forecast the text excavation futurology question and the direction. © 2010 IEEE.

Number of references: 10

Main heading: Text processing

Controlled terms: Data mining - Excavation

Uncontrolled terms: Labelling - Structurization - Text classification - Text cluster - Text excavation

Classification code: 502.1 Mine and Quarry Operations - 723.3 Database Systems - 723.5 Computer Applications

DOI: 10.1109/ICACC.2010.5487091

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

808.

Accession number: 20100712712531

Title: First-principles investigations on electronic and elastic properties of YX (X = N, P, As and Sb) under high pressure

Authors: Hao, Aimin^{1, 2}; Yang, Xiaocui³; Wang, Xiaoyu¹; Yu, Ruomeng⁴; Liu, Xin¹; Xin, Wei^{1, 2}; Liu, Riping²

Author affiliation:

1 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

2 State Key Laboratory for Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, 066004, China

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4 College of Physics, Huazhong University of Science and Technology, Wuhan, 430074, China

Corresponding author: Liu, R. (riping@ysu.edu.cn)

Source title: Computational Materials Science

Abbreviated source title: Comput Mater Sci

Volume: 48

Issue: 1

Issue date: March 2010

Publication year: 2010

Pages: 59-64

Language: English

ISSN: 09270256

CODEN: CMMSEM

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: An investigation on electronic and elastic properties of YX (X = N, P, As and Sb) under high pressure is conducted using first-principles calculations based on density functional theory (DFT) with the plane wave basis set as implemented in the CASTEP code. Our results demonstrate that the sequence of the pressure-induced phase transition of these compounds is from the NaCl-type (B1) to the CsCl-type (B2) structure. The calculated lattice constants, bulk modulus and transition pressures are reported, which are in good agreement with the available experimental results and the previous theoretical data. In addition, Debye temperatures of these compounds are determined for the first time. © 2009 Elsevier B.V. All rights reserved.

Number of references: 26

Main heading: Phase transitions

Controlled terms: Debye temperature - Density functional theory - Elasticity - Lattice constants - Sodium chloride

Uncontrolled terms: Ab initio calculations - Bulk modulus - Elastic properties - First-principles calculation - First-principles investigations - High pressure - High-pressure phase transitions - Plane-wave basis set - Pressure-induced phase transition - Transition pressure

Classification code: 933.3 Electronic Structure of Solids - 922.1 Probability Theory - 931.1 Mechanics -

931.2 Physical Properties of Gases, Liquids and Solids - 931.3 Atomic and Molecular Physics - 931.4 Quantum Theory; Quantum Mechanics - 933.1.1 Crystal Lattice - 804.2 Inorganic Compounds - 641.1 Thermodynamics - 531.2 Metallography - 482.2 Minerals - 422 Strength of Building Materials; Test Equipment and Methods - 421 Strength of Building Materials; Mechanical Properties - 801.4 Physical Chemistry

DOI: 10.1016/j.commatsci.2009.11.037

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

809.

Accession number: 20120714767839

Title: Research on college graduates working as village officials

Authors: Gao, Yufeng¹ ; He, Zidian¹

Author affiliation:

1 Continuing Education College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Gao, Y. (hdgyf3030@163.com)

Source title: ITME 2011 - Proceedings: 2011 IEEE International Symposium on IT in Medicine and Education

Abbreviated source title: ITME - Proc.: IEEE Int. Symp. IT Med. Educ.

Volume: 2

Part number: 2 of 2

Monograph title: ITME 2011 - Proceedings: 2011 IEEE International Symposium on IT in Medicine and Education

Issue date: 2011

Publication year: 2011

Pages: 218-220

Article number: 6132025

Language: English

ISBN-13: 9781612847023

Document type: Conference article (CA)

Conference name: 2011 IEEE International Symposium on IT in Medicine and Education, ITME 2011

Conference date: December 9, 2011 - December 11, 2011

Conference location: Guangzhou, China

Conference code: 88392

Sponsor: IEEE Sapporo Section; Lanzhou University (LZU); Henan University of Technology (HAUT); Wuhan University of Technology (WHUT); East China Normal University (ECNU)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper conducts a deep research on the college graduates' attention and attitude towards serving rural areas, as well as the motivation and influencing factors for working as village officials, in methods of questionnaires, interviews, and seminars etc. Furthermore, specific countermeasures have been put forward in terms of strengthening the students cultivation, establishing a correct concept of employment, and making full use of university education and guidance, as well as establishing long-term mechanism of students serving rural areas. © 2011 IEEE.

Number of references: 7

Main heading: Students

Controlled terms: Radar countermeasures - Research - Rural areas - Surveys

Uncontrolled terms: College graduates - Influencing factor - University education

Classification code: 405.3 Surveying - 716.2 Radar Systems and Equipment - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 901.2 Education - 901.3 Engineering Research

DOI: 10.1109/ITiME.2011.6132025

Database: Compendex

810.

Accession number: 20123215328393

Title: Ultraviolet photoresponse of ZnO nanowire thin-film transistors

Authors: Dai, Zhenqing^{1, 2}; Wei, Liangming¹; Xu, Dong¹; Zhang, Yafei¹

Author affiliation:

1 Key Laboratory for Thin Film and Microfabrication, Ministry of Education, Shanghai Jiao Tong University, Shanghai 200240, China

2 Department of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Dai, Z. (daizhenqing@gmail.com)

Source title: Physica E: Low-Dimensional Systems and Nanostructures

Abbreviated source title: Phys E

Volume: 44

Issue: 10

Issue date: July 2012

Publication year: 2012

Pages: 1999-2004

Language: English

ISSN: 13869477

CODEN: PELNFM

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: Thin-film transistors (TFTs) based on ZnO nanowire (NW) film are fabricated and used as ultraviolet (UV) photodetectors. The decay time constants and the ratio of photocurrent to dark current do not reach their own optimum value under the same conditions, and so a compromise between them should be decided with appropriate values of gate voltages and drain-source voltages. A negative gate voltage applied to the UV photodetectors causes the energy band tilting toward the interface of thin film/air, which make the free electrons in NWs migrate to the interface of thin film/air along the potential gradient and so promotes the depletion of free

electrons by adsorption of oxygen molecules. A positive gate voltage applied before the normal time-resolved measurement of photoresponse can make additional oxygen molecules remain in close proximity to the surface of ZnO NWs, which leads to the decrease of the decay time constant. The decay time constant can be greatly decreased by applying a negative gate voltage to the device in the process of time-resolved measurement of photoresponse and a positive gate voltage in advance. © 2012 Elsevier B.V.

Number of references: 26

Main heading: Thin film transistors

Controlled terms: Gas adsorption - Molecules - Nanowires - Oxygen - Photodetectors
- Zinc oxide

Uncontrolled terms: Close proximity - Decay time constant - Drain-source voltage - Free electron - Gate voltages - Negative gate voltages - Optimum value - Oxygen molecule - Photoresponses - Potential gradients - Thin-film transistor (TFTs) - Time resolved measurement - Ultra-violet - UV photodetectors - ZnO nanowires - ZnO NWs

Classification code: 933 Solid State Physics - 931.3 Atomic and Molecular Physics - 931.2 Physical Properties of Gases, Liquids and Solids - 804.2 Inorganic Compounds - 804 Chemical Products Generally - 761 Nanotechnology - 714.2 Semiconductor Devices and Integrated Circuits

DOI: 10.1016/j.physe.2012.05.033

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

811.

Accession number: 20112914166099

Title: Increment update algorithms basing on Semantic Similarity Degree for k-anonymized dataset

Authors: Huang, Liming¹ ; Liu, Jingwen¹ ; Ying, Qian¹ ; Liu, Xingshun¹ ; Song, Jinling^{1, 2}

Author affiliation:

1 HeBei Normal University of Science and Technology, China

2 Department of Computer, Yanshan University, Qinhuangdao 066004, China

Corresponding author: Huang, L. (huangliming99@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 267

Monograph title: Manufacturing Systems and Industry Application

Issue date: 2011

Publication year: 2011

Pages: 328-333

Language: English

ISSN: 10226680

ISBN-13: 9783037851517

Document type: Conference article (CA)

Conference name: 2011 International Conference on Materials Engineering for Advanced Technologies, ICMEAT 2011

Conference date: May 5, 2011 - May 6, 2011

Conference location: Singapore, Singapore

Conference code: 85576

Sponsor: National University of Singapore; Asia Pacific Human-Computer Interaction Research Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: To keep the k-anonymized dataset consistent with the original dataset in real time, the increment update algorithms basing on Semantic Similarity Degree for the k-anonymized dataset are presented. For each update operation on original dataset, the position of the tuple to be updated is located firstly on k-anonymized dataset by Semantic Similarity Degree and then the corresponding update operation is processed. The increment update algorithms not only guarantee k-anonymized dataset updating with original dataset simultaneously, but also avoid big changes in k-anonymized dataset. © (2011) Trans Tech Publications, Switzerland.

Number of references: 15

Main heading: Algorithms

Controlled terms: Industrial applications - Manufacture - Real time systems - Semantics

Uncontrolled terms: Delete - Increment update - Insert - K-Anonymity - Modify

Classification code: 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 903.2 Information Dissemination - 913 Production Planning and Control; Manufacturing - 913.4 Manufacturing - 921 Mathematics

DOI: 10.4028/www.scientific.net/AMR.267.328

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

812.

Accession number: 20120114659549

Title: The study of line formation for multi-agent systems

Authors: Zhou, Yanhong¹ ; Wen, Dong² ; Yan, Zhongwen¹ ; Zhao, Liqiang¹

Author affiliation:

1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, Taiwan

2 College of Information Science and Engineering, Yanshan University, Qinhuangdao, Hebei 066004, Taiwan

Corresponding author: Wen, D. (xjwd@ysu.edu.cn)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 3

Issue: 11

Issue date: December 2011

Publication year: 2011

Language: English

ISSN: 19763700

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: A novel potential function-based approach is presented to investigate the line formation for multi-agent systems. The control objective for these agents is to reach a final desired line formation. The line formation is achieved by using a leader-follower strategy, in which one agent is regarded as the leader and the others as followers. Moreover, each agent chooses its desired position by using a multi-target choosing strategy. The analysis using Lyapunov stability theory showed that the proposed algorithm is convergent. Finally, simulation studies are provided to verify the effectiveness of the proposed approach.

Number of references: 13

Main heading: Multi agent systems

Controlled terms: Artificial intelligence - Software engineering

Uncontrolled terms: Control objectives - Desired position - Function-based approach - Leader-follower - Line formation - Lyapunov stability theory - Simulation studies - Track

Classification code: 723 Computer Software, Data Handling and Applications

DOI: 10.4156/AISS.vol3.issue11.53

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

813.

Accession number: 20132116351524

Title: The ground-state transition rate of polaron in quantum rod

Authors: Li, Zhi-Xin¹ ; Zhang, Li-Xin¹

Author affiliation:

¹ College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Li, Z.-X. (zxlxx2006@126.com)

Source title: Superlattices and Microstructures

Abbreviated source title: Superlattices Microstruct

Volume: 60

Issue date: 2013

Publication year: 2013

Pages: 23-28

Language: English

ISSN: 07496036

E-ISSN: 10963677

CODEN: SUMIEK

Document type: Journal article (JA)

Publisher: Academic Press, 24-28 Oval Road, London, NW1 7DX, United Kingdom

Abstract: The ground-state transition rate of polaron with strong electron-LO-phonon coupling was investigated by employing a Pekar' type variational method in a quantum rod (QR). Quantum transition was occurred in the low dimensional quantum system due to the electron-phonon interaction and the effect of temperature. It was found the polaron can transit from the ground-state to the first-excited state after absorbing a LO-phonon. And the ground-state transition rate of polaron increases with enlarging the transverse and longitudinal confinement lengths of QR and decreases with the increasing of the ground-state energy of polaron. In addition, the ground-state transition rate of polaron is an increasing function of the electron-phonon coupling constant and temperature. © 2013 Elsevier Ltd. All rights reserved.

Number of references: 12

Main heading: Polarons

Controlled terms: Electron-phonon interactions - Ground state - Ordinary differential equations
- Quantum electronics - Quantum optics

Uncontrolled terms: Effect of temperature - Electron-phonon coupling constant -
Ground-state energies - Increasing functions - Quantum rod - Strong coupling - Transition rates -
Variational methods

Classification code: 741.1 Light/Optics - 744 Lasers - 921.2 Calculus - 932 High Energy Physics;
Nuclear Physics; Plasma Physics - 933 Solid State Physics - 933.1.1 Crystal Lattice

DOI: 10.1016/j.spmi.2013.04.020

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

814.

Accession number: 20104313330847

Title: RETRACTED ARTICLE: Research on closed-loop weighting determination method of the economic performance indicators of grid based on D-S evidences fusion

Authors: Ma, Liye1 ; Lu, Zhigang1 ; Li, Zhiqiang2 ; Jie, Tian1

Author affiliation:

1 Department of Electrical Engineering, Yanshan University, Qinhuangdao, 066004, China

2 Electronical Engineering and Automation Program, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Ma, L. (maliye2004@yahoo.com.cn)

Source title: 2010 2nd International Conference on Industrial and Information Systems, IIS 2010

Abbreviated source title: Int. Conf. Ind. Inf. Syst., IIS

Volume: 1

Monograph title: 2010 2nd International Conference on Industrial and Information Systems, IIS 2010

Issue date: 2010

Publication year: 2010

Pages: 53-56

Article number: 5565916

Language: English

ISBN-13: 9781424482177

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: In this paper, an index system was established, and a closed-loop weighting determination method based on D-S evidences fusion and Spearman method was proposed. First, the subjective evidence was calculated considering the expert group's advice. And the conflict experts were excluded before integration. Through defining the evidences' sufficiency, we could determine the algorithm whether to close or to combine the objective evidence which was fused the two weights calculate by the entropy method and the principal component analysis method. Meanwhile, the Spearman method was used to testify and ensure the consistent of the subjective and objective evidence. The eventual weight that could meet the requirement of objective and subjective was calculated based on the above results. Thus, the conclusive result of simulation example demonstrated the effectiveness of the method and indicator system. © 2010 IEEE.

Number of references: 12

Main heading: Principal component analysis

Controlled terms: Benchmarking - Information systems

Uncontrolled terms: Closed-loop - Correlation coefficient - D-S evidences fusion - Economy operation of grid - Index-weight

Classification code: 903.2 Information Dissemination - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing - 922.2 Mathematical Statistics

DOI: 10.1109/INDUSIS.2010.5565916

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

815.

Accession number: 20121614950839

Title: The applied research of nanophase materials in sports engineering

Authors: Zhao, Hua En¹ ; Shen, Fei

Author affiliation:

1 HeBei Normal University of Science and Technology, China

Corresponding author: Zhao, H.E. (tyxbcg@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 496

Monograph title: Functional Materials and Nanotechnology

Issue date: 2012

Publication year: 2012

Pages: 126-129

Language: English

ISSN: 10226680

ISBN-13: 9783037853931

Document type: Conference article (CA)

Conference name: 2012 International conference on Function Materials and Nanotechnology, FMN 2012

Conference date: May 19, 2012 - May 20, 2012

Conference location: Zhengzhou, China

Conference code: 89307

Sponsor: Wuhan Institute of Technology; Beijing Material Research Center; International Material Research Society

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Functional properties of nanophase materials are different from conventional materials, which determined the related technology for the rapid development and wide application space. Nanophase materials have been widely used in sports stadiums, sports turf, athletics track, sports clothing, sports equipment and sports supplements, and so on. At the same time, there may be a negative effect of nanophase materials on cell, lung, liver, kidney and brain. Therefore, the biological study of nanophase materials should also be strengthening. © (2012) Trans Tech Publications, Switzerland.

Number of references: 4

Main heading: Biological materials

Controlled terms: Functional materials - Materials properties - Nanostructured materials - Nanotechnology - Sporting goods - SportS

Uncontrolled terms: Applied research - Biological studies - Conventional materials - Functional properties - Rapid development - Sports clothing - Sports equipment - Sports turf

Classification code: 421 Strength of Building Materials; Mechanical Properties - 423 Non Mechanical Properties and Tests of Building Materials - 461.2 Biological Materials and Tissue Engineering - 761 Nanotechnology - 817.2 Polymer Applications - 951 Materials Science

DOI: 10.4028/www.scientific.net/AMR.496.126

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

816.

Accession number: 20114514501427

Title: Method for uncertain linguistic multiple attribute decision making and its application to supplier selection

Authors: Yue, Xiaoyun1 ; Li, Baofeng2 ; Zhou, Guanchen3

Author affiliation:

- 1 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004 Hebei, China
- 2 Department of Mathematics and Information Science, Tangshan Normal University, Tangshan 063000 Hebei, China
- 3 Qinggong College, Hebei United University, Tangshan 063009 Hebei, China

Corresponding author: Yue, X. (yuexiaoyun888@sohu.com)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 3

Issue: 9

Issue date: 2011

Publication year: 2011

Pages: 237-242

Language: English

ISSN: 19763700

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: In this paper, we investigate the uncertain linguistic multiple attribute decision making problems to deal with the supplier selection in supply chain management with incompletely known weights information. We developed a multiple attribute decision making method to select supplier in uncertain linguistic setting, by which the attribute weights can be determined. We utilize the uncertain linguistic weighted geometric (ULWG) operator to aggregate the uncertain linguistic information corresponding to each alternative, and then rank the alternatives by means of the aggregated uncertain linguistic information. Finally, an example with supplier selection is given.

Number of references: 14

Main heading: Decision making

Controlled terms: Linguistics - Supply chain management

Uncontrolled terms: Attribute weight - Linguistic information - Multiple Attribute Decision Making - Multiple attribute decision making problems - Supplier selection - Uncertain linguistic weighted geometric(ULWG) operator - Uncertain linguistic variables

Classification code: 903.2 Information Dissemination - 912 Industrial Engineering and Management - 912.2 Management - 913 Production Planning and Control; Manufacturing

DOI: 10.4156/AISS.vol3.issue9.32

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

817.

Accession number: 20110813677389

Title: A data stream outlier detection algorithm based on reverse K nearest neighbors

Authors: Lijun, Cao¹ ; Xiyin, Liu² ; Tiejun, Zhou¹ ; Zhongping, Zhang³ ; Aiyong, Liu¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 Yaohua Design Institute, Qinhuangdao, Hebei, China

3 College of Information Science and Engineering, Yanshan University, Qinhuangdao, Hebei, 066004, China

Corresponding author: Lijun, C. (Misscao6666@163.com)

Source title: Proceedings - 2010 International Symposium on Computational Intelligence and Design, ISCID 2010

Abbreviated source title: Proc. - Int. Symp. Comput. Intell. Des., ISCID

Volume: 2

Part number: 2 of 2

Monograph title: Proceedings - 2010 International Symposium on Computational Intelligence and Design, ISCID 2010

Issue date: 2010

Publication year: 2010

Pages: 236-239

Article number: 5692776

Language: English

ISBN-13: 9780769541983

Document type: Conference article (CA)

Conference name: 3rd International Symposium on Computational Intelligence and Design, ISCID 2010

Conference date: October 29, 2010 - October 31, 2010

Conference location: Hangzhou, China

Conference code: 83812

Sponsor: IEEE (Hong Kong) Computational Intelligence Chapter; Bristol University; Zhejiang University; Tsinghua University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: A new data stream outlier detection algorithm SODRNN is proposed based on reverse nearest neighbors. We deal with the sliding window model, where outlier queries are performed in order to detect anomalies in the current window. The update of insertion or deletion only needs one scan of the current window, which improves efficiency. The capability of queries at arbitrary time on the whole current window is achieved by Query Manager procedure, which can capture the phenomenon of concept drift of data stream in time. Results of experiments conducted on both synthetic and real data sets show that SODRNN algorithm is both effective and efficient. © 2010 IEEE.

Number of references: 20

Main heading: Data mining

Controlled terms: Algorithms - Artificial intelligence - Data communication systems - Motion compensation

Uncontrolled terms: Arbitrary time - Concept drifts - Data stream - K-nearest neighbors - Outlier - Outlier detection algorithm - Reverse k nearest neighbors - Reverse nearest neighbors - Sliding window - Synthetic and real data

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723 Computer Software, Data Handling and Applications - 741 Light, Optics and Optical Devices - 921 Mathematics

DOI: 10.1109/ISCID.2010.149

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

818.

Accession number: 20124815718381

Title: Discussion on perfecting engineering guarantee system

Authors: Xing, Yan1 ; Zheng, Jinfang1 ; Liu, Pengyuan2 ; Deng, Xilu1

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China
- 2 Yanshan University College of International Exchange, Qinhuangdao, Hebei, 066004, China

Corresponding author: Xing, Y. (xingyanqq@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 209-211

Monograph title: Sustainable Cities Development and Environment

Issue date: 2012

Publication year: 2012

Pages: 1491-1495

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037854853

Document type: Conference article (CA)

Conference name: 2012 International Conference on Civil, Architectural and Hydraulic Engineering, ICCAHE 2012

Conference date: August 10, 2012 - August 12, 2012

Conference location: Zhangjiajie, China

Conference code: 93984

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: At the present stage, China's project guarantee system is not perfect, there are problems such as the same guarantor guarantee the owner and the contractor, the risk consciousness of the construction project market is not strong, the guarantee issued by guarantee agencies is not standard, and the guarantee rate of the engineering is not unified. Such serious problems have influenced the development of China's construction market, reducing the competitiveness of China's construction enterprises in the international market. Actual survey raised a number of recommended countermeasures, such as actively carry out publicity and training work, strengthen

legislation and perfect contract management, combination of compulsory and voluntary implementation, actively cultivate the professional guarantee companies and engineering guarantee market, perfect social credit system and social security system, and determine the reasonable project guarantee fees to establish a correct sense of risk, aiming to further improve our project guarantee system. © (2012) Trans Tech Publications, Switzerland.

Number of references: 5

Main heading: Competition

Controlled terms: Fluid mechanics - International trade - Shore protection - Sustainable development

Uncontrolled terms: Construction enterprise - Construction markets - Construction projects - Contract management - Credit system - Engineering project - Guarantee agency - Guarantee rate - International markets - Present stage - Social Security - Training work

Classification code: 407.1 Maritime Structures - 911.2 Industrial Economics - 911.4 Marketing - 931.1 Mechanics

DOI: 10.4028/www.scientific.net/AMM.209-211.1491

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

819.

Accession number: 20113314244330

Title: Mismatches in college students' career awareness and the cultivation strategies

Authors: Peng, Honglin1 ; Zeng, Xiumin2 ; Sun, Qiuyue3 ; Cui, Wanqiu4

Author affiliation:

- 1 School of Arts, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 2 Department of Ideological and Political Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 3 School of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 4 School of Education, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Peng, H. (HonglinPeng2011@126.com)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 208 CCIS

Part number: 1 of 4

Issue: PART 1

Monograph title: Applied Economics, Business and Development - International Symposium, ISAEBD 2011, Proceedings

Issue date: 2011

Publication year: 2011

Pages: 105-109

Language: English

ISSN: 18650929

ISBN-13: 9783642230226

Document type: Conference article (CA)

Conference name: 2011 International Symposium on Applied Economics, Business and Development, ISAEBD 2011

Conference date: August 6, 2011 - August 7, 2011

Conference location: Dalian, China

Conference code: 86026

Sponsor: Hong Kong Education Society; International Material Science Society; Information Engineering Research Institute

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: With increasingly tough competition, college students are confronted with severe employment situation, while the improper career awareness is one of the causes for their difficulties in getting jobs. By the analysis of the mismatches in college students' career awareness, the author proposes the methods and strategies in developing their career awareness. © 2011 Springer-Verlag Berlin Heidelberg.

Number of references: 2

Main heading: Students

Uncontrolled terms: career awareness - College students - Employment situation - mismatch - strategy

Classification code: 901.2 Education

DOI: 10.1007/978-3-642-23023-3_15

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

820.

Accession number: 20122215063384

Title: Cavity of cyclodextrin, a useful tool for the morphological control of ZnO micro/nanostructures

Authors: Cai, Ai-Jun^{1, 2}; Wang, Ya-Lan¹; Xing, Sheng-Tao¹; Ma, Zi-Chuan¹

Author affiliation:

1 College of Chemistry and Material Sciences, Hebei Normal University, Shijiazhuang 050016, China

2 College of Life Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Ma, Z.-C. (ma_zichuan@163.com)

Source title: Ceramics International

Abbreviated source title: Ceram Int

Volume: 38

Issue: 6

Issue date: August 2012

Publication year: 2012

Pages: 5265-5270

Language: English

ISSN: 02728842

CODEN: CINNDH

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: Micro/nanostructures of ZnO with different morphologies were successfully prepared by using β -cyclodextrin (β -CD) as a crystallization modifier, at relatively mild conditions. The as-prepared products were characterized by field emission scanning electron microscopy (FESEM) and X-ray diffraction (XRD). The effects of β -CD concentration, the reaction time and temperature on the final morphologies of ZnO crystals were discussed. The results showed that the β -CD concentration and reaction time played an important role for the morphological change of ZnO crystals. Additionally, the cavities of β -CD molecules were underlined in the process of ZnO crystallization. On the basis of the multiple functions of β -CD molecules, we proposed a possible mechanism for the morphological evolution of various ZnO crystals. © 2012 Elsevier Ltd and Techna Group S.r.l. All rights reserved.

Number of references: 23

Main heading: Zinc oxide

Controlled terms: Field emission microscopes - Molecules - Morphology - Transition metals - X ray diffraction

Uncontrolled terms: Cd concentrations - Field emission scanning electron microscopy - Micro/nanostructures - Microstructure-final - Morphological changes - Morphological control - Morphological evolution - Multiple function - Powders: chemical preparations - Transition-metal oxides - ZnO - ZnO crystals

Classification code: 531 Metallurgy and Metallography - 741.3 Optical Devices and Systems - 804.2 Inorganic Compounds - 931.3 Atomic and Molecular Physics - 951 Materials Science

DOI: 10.1016/j.ceramint.2012.03.037

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20112914160978

Title: RETRACTED ARTICLE: A study on risk measurement and control of enterprise's tax planning

Authors: Liying, Zhang¹ ; Shengwu, Jia¹ ; Xiuju, Gao¹

Author affiliation:

1 Finance and Economic College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Liying, Z. (Liying7688@126.com)

Source title: 2011 International Conference on E-Business and E-Government, ICEE2011 - Proceedings

Abbreviated source title: Int. Conf. E-Bus. E-Gov., ICEE - Proc.

Monograph title: 2011 International Conference on E-Business and E-Government, ICEE2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 5777-5779

Article number: 5882770

Language: Chinese

ISBN-13: 9781424486946

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: Tax planning means the tax payer manages to accomplish the minimum tax burden by means of the management of its operating activities, making full use of differences of tax laws. Risk are unavoidable during the process of tax planning. Whether tax planning can achieve the expected result depends on enterprise's analysis and control of the risk. Therefore, only by identifying and measuring risks, taking practical precautionary measures in accordance with the enterprise's situation, the essential purpose of taxing planning can be achieved; consequently, the financial management objectives of business value maximization can be realized. © 2011 IEEE.

Number of references: 5

Main heading: Taxation

Controlled terms: Economic analysis - Electronic commerce - Government data processing - Planning - Risk assessment

Uncontrolled terms: Business value - Financial managements - Precautionary measures - risk measurement - Tax laws - Tax payers - Tax planning

Classification code: 403 Urban and Regional Planning and Development - 902.3 Legal Aspects - 911.2 Industrial Economics - 922.1 Probability Theory

DOI: 10.1109/ICEBEG.2011.5882770

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

822.

Accession number: 20105213520868

Title: The graphical feature extraction of star plot for wine quality classification

Authors: Li, Jing^{1, 2} ; Wang, Jin-Jia³ ; Zhang, Tao³ ; Ma, Chong-Xiao⁴ ; Hong, Wen-Xue²

Author affiliation:

1 College of Science, Yanshan University, Qinhuangdao, China

2 College of Electrical Engineering, Yanshan University, Qinhuangdao, China

3 College of Information Science and Engineer, Yanshan University, Qinhuangdao, China

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Corresponding author: Li, J. (01016888@sina.com)

Source title: Proceedings - 2010 1st International Conference on Pervasive Computing, Signal Processing and Applications, PCSPA 2010

Abbreviated source title: Proc. - Int. Conf. Pervasive Comput., Signal Process. Appl., PCSPA

Monograph title: Proceedings - 2010 1st International Conference on Pervasive Computing, Signal Processing and Applications, PCSPA 2010

Issue date: 2010

Publication year: 2010

Pages: 771-774

Article number: 5635505

Language: English

ISBN-13: 9780769541808

Document type: Conference article (CA)

Conference name: 1st International Conference on Pervasive Computing, Signal Processing and Applications, PCSPA 2010

Conference date: September 17, 2010 - September 19, 2010

Conference location: Harbin, China

Conference code: 82999

Sponsor: IEEE; K.U.A.S.; National Natural Science Foundation of China

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: We propose a visualization method of evaluation of wine quality. The wine data are from the certification phase of the physicochemical analysis test. The data include the 11 input variables, an output variable which is the quality of wine. The data include 1599 samples of red wine and 4898 samples of white wine. Our method works better than the traditional neural networks and support vector machine method, and has visual advantages. Such model is useful to support the oenologist wine tasting evaluations and improve wine production. Furthermore, similar techniques can help in target marketing by modeling consumer tastes from niche markets. © 2010 IEEE.

Number of references: 11

Main heading: Quality control

Controlled terms: Breweries - Feature extraction - Gears - Marketing - Neural networks - Signal processing - Support vector machines - Ubiquitous computing - Visualization - Wine

Uncontrolled terms: Graphical representations - Input variables - Niche markets - Output variables - Physicochemical analysis - Red wine - Star plot - Support vector - Support vector machine method - Target marketing - Visual evaluation - Visualization method - White wines - Wine production - Wine quality - Wine tasting

Classification code: 913.3 Quality Assurance and Control - 911.4 Marketing - 902.1 Engineering Graphics - 822.3 Food Products - 822.1 Food Products Plants and Equipment - 723 Computer Software, Data

Handling and Applications - 716.1 Information Theory and Signal Processing - 716 Telecommunication; Radar, Radio and Television - 601.2 Machine Components

DOI: 10.1109/PCSPA.2010.192

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

823.

Accession number: 20112814146714

Title: The photostability and fluorescence properties of diphenylisobenzofuran

Authors: Zhang, Xian-Fu^{1, 2}; Li, Xiaoli¹

Author affiliation:

1 Chemistry Department, Hebei Normal University of Science and Technology, Qinghuangdao, Hebei Province 066004, China

2 MPC Technology, Hamilton, ON L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Luminescence

Abbreviated source title: J Lumin

Volume: 131

Issue: 11

Issue date: November 2011

Publication year: 2011

Pages: 2263-2266

Language: English

ISSN: 00222313

CODEN: JLUMA8

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: The photostability and fluorescence properties of 1,3-diphenylisobenzofuran (DPBF), a popular singlet oxygen (1O_2 or $^1\Delta_g$) trapping-agent used in various solvents, are examined by UVvis absorption, steady-state and time-resolved fluorescence techniques, as well as laser flash photolysis. DPBF is found to be easily photolyzed even if it is only exposed to the weak daylight in halogen-containing solvents in the absence of singlet oxygen. The photolysis is due to the addition of $\bullet CCl_3$ ($\bullet CHCl_2$) to DPBF in the absence of oxygen, or $\bullet OOCCH_3$ ($\bullet OCH_2CO_2R$) initiated chain polymerization of DPBF in the presence of oxygen. This result suggests that the reported singlet oxygen production in these solvents detected by DPBF was significantly higher than the true value. DPBF in DMF, DMSO, etc., on the other hand, is stable enough to enable fluorescence measurements. The fluorescence quantum yield of DPBF is very high in aprotic solvents and close to unity. The absorption, excitation and emission maxima are only slightly affected by the nature of solvents. The fluorescence lifetime is 5.0 ± 0.3 ns. © 2011 Elsevier B.V. All rights reserved.

Number of references: 24

Main heading: Fluorescence

Controlled terms: Absorption - Free radicals - Oxygen - Photolysis - Quantum yield - Solvents

Uncontrolled terms: Aprotic solvents - Chain polymerization - Diphenylisobenzofuran - Emission maxima - Fluorescence lifetimes - Fluorescence measurements - Fluorescence properties - Fluorescence quantum yield - Laser flash photolysis - Photo-stability - Singlet oxygen - Singlet oxygen production - Time-resolved fluorescence - UV-vis absorptions

Classification code: 741.1 Light/Optics - 801.4 Physical Chemistry - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally - 931.2 Physical Properties of Gases, Liquids and Solids

DOI: 10.1016/j.jlumin.2011.05.048

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

824.

Accession number: 20111713936826

Title: Design of intelligent supervision system for production safety in mine areas

Authors: Zhuang, Cheng1 ; Fu, Chang Qing1 ; Zhuang, Si Ming2

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China
- 2 Electric Corporation (QHD) Heavy Equipment, Qinhuangdao, Hebei, China

Corresponding author: Zhuang, C. (Chengz2004@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 219-220

Monograph title: Advanced Research on Information Science, Automation and Material System

Issue date: 2011

Publication year: 2011

Pages: 1347-1353

Language: English

ISSN: 10226680

ISBN-13: 9783037850817

Document type: Conference article (CA)

Conference name: 2011 International Conference on Information Science, Automation and Material System, ISAM2011

Conference date: May 21, 2011 - May 22, 2011

Conference location: Zhengzhou, China

Conference code: 84544

Sponsor: International Science and Education Researcher Association (ISER); Yellow River Conservancy Technical Institute; Beijing Gireida Education Co. Ltd.

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Based on investigation into available monitoring and control system technology at home and abroad, this paper presents extensive surveys and thorough analysis of the safety supervision system being employed in Chinese coal mines. Taking a mine area as example and according to years of working experience in

technical management of coal mines, the author combines the status quo of the mine area and existing problems in the supervision system for production safety in Chinese coal mines, and provides a design proposal of supervision system for production safety in coal mines, where a digitalized supervision system for production safety in coal mines serving dual-function of supervising production safety and commanding accident rescue is designed. © 2011 Trans Tech Publications.

Number of references: 5

Main heading: Coal mines

Controlled terms: Broadband networks - Coal - Information science - Materials science - Mine rescue - Occupational risks - Wireless networks

Uncontrolled terms: Chinese coal mine - Design proposal - Existing problems - Intelligent supervision systems - Monitoring and control systems - OPC - Production safety - remote supervision - Safety supervision system - supervision and command of safety in coal mines - Supervision systems - Technical management - wireless broadband network

Classification code: 914.1 Accidents and Accident Prevention - 903 Information Science - 718 Telephone Systems and Related Technologies; Line Communications - 717 Optical Communication - 951 Materials Science - 716.3 Radio Systems and Equipment - 524 Solid Fuels - 503.1 Coal Mines - 502.1 Mine and Quarry Operations - 716 Telecommunication; Radar, Radio and Television

DOI: 10.4028/www.scientific.net/AMR.219-220.1347

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

825.

Accession number: 20131716241725

Title: Safety assessment and countermeasures of genetically modified food

Authors: Du, Bin¹ ; Zhu, Feng-Mei²

Author affiliation:

1 Analysis and Testing Center, Hebei Normal University of Science and Technology, Qinhuangdao, 066600, China

2 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, 066600, China

Corresponding author: Du, B.

Source title: Advance Journal of Food Science and Technology

Abbreviated source title: Adv. J. Food Sci. Technol.

Volume: 5

Issue: 3

Issue date: 2013

Publication year: 2013

Pages: 318-322

Language: English

ISSN: 20424868

E-ISSN: 20424876

Document type: Journal article (JA)

Publisher: Maxwell Science Publications, 74, Kenelm Road., B10, 9AJ, Birmingham, Small Heath, United Kingdom

Abstract: With the rapid development of science-biotechnology, the safety of genetically modified organisms has become some of the most controversial issues in our society. This study aims to review the safety assessment and countermeasures of Genetically Modified (GM) foods. Firstly, the research status and the main contents of GM foods safety assessment are discussed. What's more, the countermeasures of GM foods safety assessment are proposed. This study tries to summarize and discuss the safety assessment of GM foods. © Maxwell Scientific Organization, 2013.

Number of references: 15

Main heading: Safety engineering

Controlled terms: Food technology - Radar countermeasures

Uncontrolled terms: Assessment - Genetically modified food - Genetically modified organisms - GM foods - Research status - Safety assessments - Security

Classification code: 716.2 Radar Systems and Equipment - 822 Food Technology - 914 Safety Engineering

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

826.

Accession number: 20122415104375

Title: Research on applying the concept of electronic performance support system into computer teaching

Authors: Xu, Zhikun1 ; Luo, Cuili1 ; Zhang, Yuhong1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Xu, Z. (1xuvikp@126.com)

Source title: 2012 2nd International Conference on Consumer Electronics, Communications and Networks, CECNet 2012 - Proceedings

Abbreviated source title: Int. Conf. Consum. Electron., Commun. Networks, CECNet - Proc.

Monograph title: 2012 2nd International Conference on Consumer Electronics, Communications and Networks, CECNet 2012 - Proceedings

Issue date: 2012

Publication year: 2012

Pages: 3434-3436

Article number: 6201835

Language: English

ISBN-13: 9781457714153

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Consumer Electronics, Communications and Networks, CECNet 2012

Conference date: April 21, 2012 - April 23, 2012

Conference location: Three Gorges, China

Conference code: 90025

Sponsor: IEEE

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In the 1990s, the computer education has gradually become the important content of education in our country. Many schools have launched computer education extensively and the teaching methods of computer course are mostly teachers using big screen to conduct theory teaching, and then arranging time to operate in addition which cause some problems and make the teaching effect unable to reach optimization. Electronic performance support system refers to EPSS, an information system which is used by the overseas enterprises to train the staff. This information system puts training mission in work process, which is in line with the popular timely training (just-in-time training) trend in industry in recent years and it has made a great progress compared with traditional CBT (computer aided training) which puts training before work. This paper analyzes the current status and the existing problems in computer teaching, puts forward the concept of using EPSS to reform the traditional computer teaching ways to improve the effect of computer teaching. © 2012 IEEE.

Number of references: 3

Main heading: Computers

Controlled terms: Consumer electronics - Education - Information systems

Uncontrolled terms: Computer aided - Computer education - Computer teaching - Current status - Electronic performance support systems - Existing problems - In-line - Just in time - Teaching methods - Traditional computers - Work process

Classification code: 715 Electronic Equipment, General Purpose and Industrial - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 901.2 Education - 903.2 Information Dissemination - 913 Production Planning and Control; Manufacturing

DOI: 10.1109/CECNet.2012.6201835

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

827.

Accession number: 20124515646958

Title: The research on information commons based on open access in college library

Authors: Li, Xiaohui1 ; Wang, Hongxia1 ; Guo, Hongyan1

Author affiliation:

1 Library of Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Li, X. (lixiaohui@cssci.info)

Source title: Advances in Intelligent Systems and Computing

Abbreviated source title: Adv. Intell. Sys. Comput.

Volume: 191 AISC

Monograph title: Proceedings of the 2012 International Conference of Modern Computer Science and Applications

Issue date: 2013

Publication year: 2013

Pages: 295-300

Language: English

ISSN: 21945357

ISBN-13: 9783642330292

Document type: Conference article (CA)

Conference name: International Conference of Modern Computer Science and Applications, MCSA 2012

Conference date: September 8, 2012 - September 8, 2012

Conference location: Wuhan, China

Conference code: 93504

Sponsor: Information Technology and Industrial Engineering Research Center

Publisher: Springer Verlag

Abstract: Information commons, the new service model, brings a new development chance for the

service innovation of the university library in China. The practice and study abroad have been in a more mature development stage, then, how to introduce and learn from foreign experience, and build the IC suitable for the actual situation of China's library has become an important task for service transition of university library at present. Beginning with introducing the general overview of the information commons, in terms of the general procedure of IC constructing, the physical layer, virtual layer and support layer are deigned which can provide some guidance to the IC plan of university library in China. © 2013 Springer-Verlag.

Number of references: 6

Main heading: Libraries

Controlled terms: Computer science - Network layers

Uncontrolled terms: Development stages - Information commons - New services - Open Access - Physical layers - Service innovation - Study abroad - Support layer - University libraries - Virtual layers

Classification code: 402.2 Public Buildings - 723 Computer Software, Data Handling and Applications

DOI: 10.1007/978-3-642-33030-8_48

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

828.

Accession number: 20114814564571

Title: Model for Supplier Selection in Interval-Valued Intuitionistic Fuzzy Setting

Authors: Li, Baofeng¹ ; Yue, Xiaoyun² ; Zhou, Guanchen³

Author affiliation:

1 Department of Mathematics and Information Science, Tangshan Normal University, Tangshan, Hebei, 063000, China

2 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

3 Qinggong College, Hebei United University, Tangshan, Hebei, 063009, China

Corresponding author: Li, B. (lbf6713@sina.com)

Source title: Journal of Convergence Information Technology

Abbreviated source title: J. Convergence Inf. Technol.

Volume: 6

Issue: 11

Issue date: November 2011

Publication year: 2011

Pages: 12-16

Language: English

ISSN: 19759320

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: The aim of this paper is to investigate the multiple attribute decision making problems to deal with the supplier selection in supply chain management with interval-valued intuitionistic fuzzy information. Based on the traditional project method, calculation steps for solving interval-valued intuitionistic fuzzy multiple attribute decision-making problems with known weight information are given. The project values between every alternative and negative ideal solution are calculated. Then, the project values are utilized defined to determine the ranking order of all alternatives. Finally, an illustrative example with supplier selection is given.

Number of references: 32

Main heading: Decision making

Controlled terms: Fuzzy sets - Supply chain management

Uncontrolled terms: Ideal solutions - Illustrative examples - Interval-valued - Interval-valued intuitionistic fuzzy number - Intuitionistic fuzzy - Multiple attribute decision making problems - Project Method - Supplier selection - Weight information

Classification code: 912 Industrial Engineering and Management - 912.2 Management - 913 Production Planning and Control; Manufacturing - 921 Mathematics

DOI: 10.4156/jcit.vol6.issue11.2

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

829.

Accession number: 20121314903516

Title: Analysis on reasons why the farmers' income growth speed was stagnant in Hebei province

Authors: Zhao, Rui¹ ; Zhou, Xiaona¹ ; Li, Xiuli¹ ; Yang, Liming¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Zhao, R. (zhaorui1631@126.com)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 4

Issue: 4

Issue date: March 2012

Publication year: 2012

Pages: 258-265

Language: English

ISSN: 19763700

E-ISSN: 22339345

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: To increase farmer's income is the most important and most difficult task for our party and our country not only in present but also in the future, at the same time it's has the highest priority in solving the "agriculture-countryside-farmer" issue; to promote the steady growth of farmers' income is the fundamental starting point for agriculture and rural economic development which directly connected with the realization of the strategic target of comprehensive construction of a well-off society and building of a socialistic new countryside.

Hebei province is not only a big agricultural province but also a province which possesses abundant farmer population, thus the research on farmer's income growth is of important practical significance. To achieve the strategic target of well-off society, Hebei province has clearly put forward the guideline "the well-off construction dominate the overall rural development, holding the principle of to increase farmer's income as the starting point and foothold", though it has effectively contributed to the farmer's income growth of Hebei province, There are still multiple reasons that resulted in the stagnancy of farmer's income growth in Hebei province. This paper firstly described the status of the farmer's net average income in Hebei province, then analyzed the reasons which resulted in the stagnancy of farmer's income growth, and in the end it proposed the resultant countermeasure to provide a source of reference for the overall harmonized and sustainable development of Hebei Prov.

Number of references: 10

Main heading: Agriculture

Controlled terms: Population statistics - Regional planning - Rural areas

Uncontrolled terms: Economic development - Farmer's income - Growth speed - Hebei Province - Increase of income - New countrysides - Rural development - Transfer of laborer

Classification code: 403.2 Regional Planning and Development - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 922.2 Mathematical Statistics

DOI: 10.4156/AISS.vol4.issue4.31

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

830.

Accession number: 20133516682195

Title: Design of intelligent power management system based on internet of things

Authors: Jian, Yu Qing¹ ; Yu, Zhang Hong¹ ; Chen, Shuang¹

Author affiliation:

¹ College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 340

Monograph title: Green Manufacturing, Mechanical and Automation Engineering

Issue date: 2013

Publication year: 2013

Pages: 979-983

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037857489

Document type: Conference article (CA)

Conference name: 3rd International Conference on Mechanical Engineering and Green Manufacturing 2013, MEGM 2013

Conference date: March 22, 2013 - March 24, 2013

Conference location: Chongqing, China

Conference code: 99012

Sponsor: National Natural Science Foundation of China (NSFC)

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Intelligent power management system based on Internet of things is mainly used in electrical equipment focused occasions such as home or office, used for remote monitoring and managing the power of the electrical equipment, the system also has intelligent management functionality, it can control power supply based on current state of the power consumption of the electrical equipment, to achieve the purpose of saving energy consumption. The control center of the system used embedded hardware platform and Linux operating systems based on the ARM processor core, software development used C language. In this paper, the overall design of the system is described. © (2013) Trans Tech Publications Switzerland.

Number of references: 8

Main heading: Electric power systems

Controlled terms: ARM processors - C (programming language) - Computer operating systems

- Electric power supplies to apparatus - Energy utilization - Equipment - Internet - Manufacture

Uncontrolled terms: Electrical equipment - Embedded - Intelligent management - Intelligent power - Intelligent power management system - Internet of Things (IOT) - LINUX-operating system - Remote monitoring

Classification code: 723.1.1 Computer Programming Languages - 723 Computer Software, Data Handling and Applications - 722 Computer Systems and Equipment - 721 Computer Circuits and Logic Elements - 718 Telephone Systems and Related Technologies; Line Communications - 901 Engineering Profession - 717 Optical Communication - 715.2 Industrial Electronic Equipment - 706.1 Electric Power Systems - 537.1 Heat Treatment Processes - 525.3 Energy Utilization - 716 Telecommunication; Radar, Radio and Television

DOI: 10.4028/www.scientific.net/AMM.340.979

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

831.

Accession number: 20120714767153

Title: Adaptive fuzzy fault-tolerant coordinated driving control for a six-wheeled rocker-arm lunar rover

Authors: Sun, Duo-Qing^{1, 2}

Author affiliation:

1 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Science and Technology on Space Intelligent Control Laboratory, Beijing Institute of Control Engineering, Beijing 100190, China

Corresponding author: Sun, D.-Q. (sun_duoqing@126.com)

Source title: Yuhang Xuebao/Journal of Astronautics

Abbreviated source title: Yuhang Xuebao

Volume: 33

Issue: 1

Issue date: January 2012

Publication year: 2012

Pages: 76-84

Language: Chinese

ISSN: 10001328

CODEN: YUXUD6

Document type: Journal article (JA)

Publisher: China Spaceflight Society, 2 Yuetan Beixiaojie, Beijing, 100830, China

Abstract: To enhance the reliability of the driving control system of a six-wheeled rocker-arm lunar rover in complicated and unknown surroundings and prevent the control invalidation caused by actuator failures, a method for designing adaptive fuzzy fault-tolerant coordinated driving controllers based on slip ratio is proposed in this paper. In this method, fuzzy logic systems are used to approximate the unknown nonlinear dynamics of the system and the unknown fault functions, and an error compensator is designed to reduce the influence of approximation errors on tracking accuracy. Based on Lyapunov theory, it is proven that the designed fault-tolerant scheme can not only make the tracking errors converge to the small neighborhood of the origin, but also reduce the tracking errors by increasing part of parameter values in the designed controller. In addition, the followed every step and the method for choosing parameters in the fault-tolerant controller design are provided by using an example. Simulation results demonstrate that the proposed control law has higher accuracy and robustness.

Number of references: 17

Main heading: Controllers

Controlled terms: Errors - Fuzzy control - Fuzzy logic - Robots

Uncontrolled terms: Actuator failures - Adaptive fuzzy - Approximation errors - Control laws - Driving control - Fault tolerant control - Fault tolerant controllers - Fault-tolerant - Fuzzy logic system - Lunar rovers - Lyapunov theories - Parameter values - Slip ratio - Tracking accuracy - Tracking errors

Classification code: 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 731 Automatic Control Principles and Applications - 732.1 Control Equipment - 921 Mathematics

DOI: 10.3873/j.issn.1000-1328.2012.01.011

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

832.

Accession number: 20104113292210

Title: Delay-dependent H stabilisation criterion for continuous-time networked control systems with random delays

Authors: Liu, Yan1 ; Sun, Duoqing2

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, Y. (ly1984715@163.com)

Source title: International Journal of Systems Science

Abbreviated source title: Int J Syst Sci

Volume: 41

Issue: 11

Issue date: November 2010

Publication year: 2010

Pages: 1399-1410

Language: English

ISSN: 00207721

E-ISSN: 14645319

CODEN: IJSYA9

Document type: Journal article (JA)

Publisher: Taylor and Francis Ltd., 4 Park Square, Milton Park, Abingdon, Oxfordshire, OX14 4RN, United Kingdom

Abstract: This article mainly addresses the H stabilisation problem for a class of networked control systems (NCSs) with random input delays in the continuous-time domain. A Markov jump linear system (MJLS) model with two jump parameters is developed which takes both the sensor-to-controller and controller-to-actuator delays into account. Based on such a MJLS, a new Lyapunov-Krasovskii functional is proposed to establish a delay-dependent H stabilisation criterion in terms of linear matrix inequalities (LMIs), and a mode-dependent state-feedback controller of NCSs can be determined. Two numerical examples are included to illustrate the derived result. © 2010 Taylor & Francis.

Number of references: 40

Main heading: Linear matrix inequalities

Controlled terms: Continuous time systems - Control system analysis - Controllers - Delay control systems - Feedback - Linear systems - Lyapunov functions - Nonlinear control systems - State feedback - Time delay - Uncertain systems

Uncontrolled terms: Linear matrix - Markov jump linear systems - Networked control systems - Random time delay - Stabilisation

Classification code: 713 Electronic Circuits - 731 Automatic Control Principles and Applications - 731.1 Control Systems - 732.1 Control Equipment - 921 Mathematics - 921.1 Algebra

DOI: 10.1080/00207720903377566

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

833.

Accession number: 20114214432561

Title: Clustering over data streams based on adaptation and irregular grid

Authors: Ren, Jiadong1 ; Cui, Jingyan1 ; Pei, Caiyan2

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao City 066004, China

2 Department of Computer Science, Hebei Normal University of science and technology, Qinhuangdao City 066004, China

Corresponding author: Ren, J. (jdren@ysu.edu.cn)

Source title: Journal of Convergence Information Technology

Abbreviated source title: J. Convergence Inf. Technol.

Volume: 6

Issue: 9

Issue date: September 2011

Publication year: 2011

Pages: 302-309

Language: English

ISSN: 19759320

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: In the process of building grid structure, the granularity of grid has a severe effect on irregular grid clustering over data stream, and the grid structure built in the whole data space increases the clustering complexity. To solve these defects, we propose AIG Stream, a clustering algorithm based on adaptation and irregular grid, which consists of an online component and an offline component. First, we define the calculation method of grid radius and the grid correlation. In the online component, data records are read continuously, and then grid will be partitioned for the new coming data according to the grid radius. Meanwhile, based on the grid adjustment strategy, grid structure is adjusted incrementally. While in the offline component, clustering based on the connection of density grids is performed. And a novel correlation technique is adapted to handle boundary grids. Moreover, based on grid density and the grid correlation, clusters are adjusted dynamically and noise points are deleted in real time. Experimental results show that AIG Stream has better clustering quality and efficiency.

Number of references: 11

Main heading: Clustering algorithms

Controlled terms: Data communication systems

Uncontrolled terms: Adaptation - Calculation methods - Clustering - Clustering quality - Correlation techniques - Data records - Data space - Data stream - Data streams - Grid density - Grid structures - Irregular grids - Offline - Online components - Real time

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication

- 718 Telephone Systems and Related Technologies; Line Communications - 721 Computer Circuits and Logic Elements - 723 Computer Software, Data Handling and Applications

DOI: 10.4156/jcit.vol6.issue9.35

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

834.

Accession number: 20120814790725

Title: Grain growth and sintering characteristics of Ni-Cu alloy nanopowders consolidated by the spark plasma sintering method

Authors: Song, A.J.1, 2 ; Ma, M.Z.1 ; Zhou, R.Z.1 ; Wang, L.1 ; Zhang, W.G.1, 2 ; Tan, C.L.1 ; Liu, R.P.1

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 Physical-Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Ma, M.Z. (mz550509@ysu.edu.cn)

Source title: Materials Science and Engineering A

Abbreviated source title: Mater. Sci. Eng. A

Volume: 538

Issue date: March 15, 2012

Publication year: 2012

Pages: 219-223

Language: English

ISSN: 09215093

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: Ni-Cu bulk alloys are successfully prepared by the spark plasma sintering (SPS) technique using nanopowders obtained from the arc plasma evaporation method. The grain growth of Ni-Cu nanopowders during the SPS process is studied based on the classical phenomenological kinetic theory. The kinetic grain growth exponent, n , and the apparent activation energy, Q , are determined using the plot method. The calculation results exhibit that the n values vary at different sintering temperatures, whereas the Q values at low temperature are always higher than at high temperature regardless of the n values. The mechanical properties such as yield strength, tensile strength and ductility of the sintered specimens at different temperatures and raw alloy ingots are studied by tensile test. The density of the sintered samples increases with increasing sintering temperature, in contrast to the behavior of the tensile strength and yield strength of the Ni-Cu bulk alloy sintered by SPS at different temperatures. The mechanism strength of the sintered specimens is attributed to the microstructure characteristics of the specimens at different temperatures, which is further discussed with the classical reinforcement theories. © 2012 Elsevier B.V..

Number of references: 14

Main heading: Copper alloys

Controlled terms: Alloys - Grain growth - Metal castings - Nanostructured materials - Spark plasma sintering - Tensile strength - Tensile testing - Yield stress

Uncontrolled terms: Alloy ingots - Apparent activation energy - Arc plasma - Bulk alloys - Evaporation method - Grain growth exponent - High temperature - Low temperatures - Microstructure characteristics - N value - Nano powders - Ni-Cu alloy - Q -values - Reinforcement theory - Sintered samples - Sintered specimen - Sintering characteristics - Sintering temperatures - Spark plasma - Spark plasma sintering method - Tensile tests

Classification code: 933.1 Crystalline Solids - 761 Nanotechnology - 544.2 Copper Alloys - 534.2 Foundry Practice - 951 Materials Science - 531.2 Metallography - 422.2 Strength of Building Materials : Test Methods - 422 Strength of Building Materials; Test Equipment and Methods - 421 Strength of Building Materials; Mechanical Properties - 531.1 Metallurgy

DOI: 10.1016/j.msea.2012.01.033

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

835.

Accession number: 20132416422409

Title: A method for solving variable coefficients initial-boundary equations

Authors: Liu, Jianping¹ ; Xu, Liyong¹ ; Shen, Yufa¹ ; Mao, Xuezhi¹ ; Li, Xia¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei 066004, China

Corresponding author: Liu, J. (liujianping0408@126.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 9

Issue: 10

Issue date: May 15, 2013

Publication year: 2013

Pages: 3801-3807

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press, P.O. Box 162, Bethel, CT 06801-0162, United States

Abstract: In recent years, fractional order differential equations have become an important tool in mathematics modeling. This study presents a new numerical method for solving the initial-boundary equations with variable coefficients. We transform variable coefficient fractional differential equations to algebra equations which are easily to be solved. Illustrative examples are also included to demonstrate the validity and applicability of the presented method. © 2013 by Binary Information Press.

Number of references: 9

Main heading: Polynomials

Controlled terms: Differential equations

Uncontrolled terms: Algebra equation - Fractional derivate - Fractional differential equations - Fractional-order differential equations - Mathematics modeling - Numerical solution - Variable coefficients

Classification code: 921.1 Algebra - 921.2 Calculus

DOI: 10.12733/jcis5783

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

836.

Accession number: 20132916508138

Title: Chelating template-assisted fabrication of cobalt oxide/mesoporous silica composites with diverse mesophases

Authors: Niu, Kui¹ ; Liang, Liman¹ ; Geng, Hao¹ ; Hou, Wenlong¹ ; Tian, Hongyan¹ ; Liu, Suping¹

Author affiliation:

¹ Chemistry Department and Center of Instrumental Analysis, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province 066004, China

Corresponding author: Niu, K. (niukui007@gmail.com)

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 107

Issue date: 2013

Publication year: 2013

Pages: 325-328

Language: English

ISSN: 0167577X

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: A series of cobalt oxide/mesoporous silica composites with diverse mesostructure was fabricated via a one-step process by using N-hexadecyl ethylenediamine triacetic acid (HED3A), a chelating surfactant, as structure-directing agent (SDA). The chelating template can capture cobalt ions in solution and then direct the mesophase formation, enables cobalt oxide nanoparticles to be confined and evenly distributed in the mesopores after calcination. The mesophase of the composites has a successive evolution from 3D cubic to 2D hexagonal, bicontinuous cubic and lamellar phase with increasing the cobalt ion concentration in the initial template solution. The presented chelating surfactant-assistant encapsulation route has the capability to achieve various types of metal oxides/mesoporous silica composites with homogeneous guest dispersion and diversiform mesostructures. © 2013 Elsevier B.V.

Number of references: 17

Main heading: Chelation

Controlled terms: Cobalt - Composite materials - Nanocomposites - Nanoparticles - Surface active agents

Uncontrolled terms: Chelating surfactants - Cobalt oxide nanoparticles - Mesophase formation - Mesophases - Molecular geometries - One-step process - Silica composites - Structure directing agents

Classification code: 951 Materials Science - 933 Solid State Physics - 811 Cellulose, Paper and Wood Products - 803 Chemical Agents and Basic Industrial Chemicals - 802.2 Chemical Reactions - 761 Nanotechnology - 708 Electric and Magnetic Materials - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 415 Metals, Plastics, Wood and Other Structural Materials

DOI: 10.1016/j.matlet.2013.06.057

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

837.

Accession number: 20120714766546

Title: Characteristic model for multi-input-multi-output nonlinear systems and its application in flexible satellite attitude control

Authors: Sun, Duo-Qing^{1, 2}

Author affiliation:

1 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao Hebei 066004, China

2 Beijing Institute of Control Engineering, China Academy of Space Technology, Beijing 100190, China

Corresponding author: Sun, D.-Q. (duoqing@126.com)

Source title: Kongzhi Lilun Yu Yingyong/Control Theory and Applications

Abbreviated source title: Kong Zhi Li Lun Yu Ying Yong

Volume: 28

Issue: 12

Issue date: December 2011

Publication year: 2011

Pages: 1763-1772

Language: Chinese

ISSN: 10008152

CODEN: KLYYEB

Document type: Journal article (JA)

Publisher: South China University of Technology, Guangzhou, 510640, China

Abstract: The characteristic modeling is investigated for multi-input and multi-output higher-order non-affine nonlinear systems. First, we prove that the characteristic model for the above systems can be expressed by a system of quadratic time-varying difference equations and estimate the characteristic modeling errors. Next, we design an adaptive fuzzy generalized predictive controller based on this characteristic model, and analyze the stability of the closed-system using Lyapunov method. Because hierarchical fuzzy logic systems are employed in the control architecture, the number of fuzzy rules and adjustable parameters in a fuzzy logic controller are reduced greatly, thus improving the real-time operation performances of the control. Finally, the results from the control simulation on a flexible satellite attitude validate that the proposed control scheme is effective and has the advantages of high steady-state precision and strong robustness.

Number of references: 15

Main heading: Navigation

Controlled terms: Attitude control - Difference equations - Flexible structures - Fuzzy control - Fuzzy logic - Lyapunov methods - Nonlinear systems - Predictive control systems

Uncontrolled terms: Characteristic model - Hierarchical fuzzy systems - Non-affine nonlinear systems - Predictive control - Satellite attitude control

Classification code: 408.2 Structural Members and Shapes - 716.3 Radio Systems and Equipment - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 731 Automatic Control Principles and Applications - 921 Mathematics - 921.6 Numerical Methods

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

838.

Accession number: 20102012932258

Title: Photoinduced electron transfer (PET) within D4-A and D-A photosynthetic systems: Enhanced intramolecular PET achieved by increasing the number of donors

Authors: Zhang, Xian-Fu¹ ; Zheng, Hongwei¹ ; Jin, Shuangming¹ ; Wang, Ruiyun¹

Author affiliation:

¹ Chemistry Department, Hebei Normal University of Science and technology, Qinhuangdao, Hebei Province 066004, China

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Dyes and Pigments

Abbreviated source title: Dyes Pigm.

Volume: 87

Issue: 2

Issue date: October 2010

Publication year: 2010

Pages: 139-143

Language: English

ISSN: 01437208

CODEN: DYPIDX

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: Photoinduced electron transfer (PET) occurring within D4-A was compared to that within D-A, in which A (electron acceptor) was a single zinc phthalocyanine moiety and D (electron donor) a phenothiazine unit, using UV-vis absorption, fluorescence emission and laser flash photolysis. D and A in both models were directly linked by covalent C-N bonds. The symmetrical D4-A system, for which both the synthesis and purification were more straightforward than for D-A, displayed a much faster PET rate constant; although the D-A system was more difficult to prepare, it exhibited less efficient PET. The charge separation state formed through PET showed long lifetimes on the μs scale in the cases of both the D4-A and D-A molecules. © 2010 Elsevier Ltd. All rights reserved.

Number of references: 35

Main heading: Quenching

Controlled terms: Electron transitions - Fluorescence - Insecticides - Nitrogen compounds - Photolysis - Rate constants - Synthesis (chemical) - Ultraviolet lasers - Zinc - Zinc compounds

Uncontrolled terms: Charge separations - Electron acceptor - Electron donors - Fluorescence emission - Fluorescence quenching - Laser flash photolysis - Long lifetime - Photo-induced electron transfer - Photosynthetic systems - UV-vis absorptions - Zinc phthalocyanines

Classification code: 821.2 Agricultural Chemicals - 804.2 Inorganic Compounds - 804.1 Organic Compounds - 803 Chemical Agents and Basic Industrial Chemicals - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics - 801.4 Physical Chemistry - 741.1 Light/Optics - 711.1 Electromagnetic Waves in Different Media - 546.3 Zinc and Alloys - 537.1 Heat Treatment Processes - 744.1 Lasers, General

DOI: 10.1016/j.dyepig.2010.03.010

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

839.

Accession number: 20132016342499

Title: Singlet oxygen generation and triplet excited-state spectra of brominated BODIPY

Authors: Zhang, Xian-Fu^{1, 2}; Yang, Xudong¹

Author affiliation:

1 Chemistry Department, Center of Instrumental Analysis, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province 066004, China

2 MPC Technologies, Hamilton, ON L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Physical Chemistry B

Abbreviated source title: J Phys Chem B

Volume: 117

Issue: 18

Issue date: May 9, 2013

Publication year: 2013

Pages: 5533-5539

Language: English

ISSN: 15206106

E-ISSN: 15205207

CODEN: JPCBFK

Document type: Journal article (JA)

Publisher: American Chemical Society

Abstract: The excited triplet-, singlet-, and ground-state properties as well as singlet oxygen generation capability of four brominated BODIPY dyes were measured in toluene with laser flash photolysis, fluorescence spectroscopy, time-correlated single-photon counting, and absorption spectroscopy. The triplet-triplet (T1-Tn) absorption spectra were identified for four dyes 1B, 2B, 4B, and 6B substituted with one, two, four, and six Br atoms, respectively. The triplet quantum yield (Φ_T) of a usual BODIPY dye is negligible and has rarely been studied. So is the case for the parent compound 0B (8-phenyl boron-dipyrromethene), in which no Br atom is present. The substitution of the first Br atom into the π ring of BODIPY allowed a dramatic increase of Φ_T from 0.0 of 0B to 0.39 for 1B. The further addition of Br number increased Φ_T to 0.46, 0.50, and 0.66 for 2B, 4B, and 6B, respectively. The triplet lifetimes τ_T are also fairly long, which is 43, 39, 36, and 26 μ s, for 1B, 2B, 4B, and 6B, respectively. The brominated BODIPY dyes are therefore efficient singlet oxygen photosensitizers with the

formation quantum yield of 0.39, 0.45, 0.49, and 0.64 for 1B, 2B, 4B, and 6B, respectively. The result indicates their potential application in photodynamic therapy of cancer. The fluorescence properties of the dyes were also measured. © 2013 American Chemical Society.

Number of references: 25

Main heading: Bromine compounds

Controlled terms: Atoms - Fluorescence spectroscopy - Gas generators - Photodynamic therapy - Photosensitizers - Quantum yield

Uncontrolled terms: Excited-state spectra - Fluorescence properties - Ground state properties - Laser flash photolysis - Singlet oxygen generation - Time-correlated single photon counting - Triplet lifetimes - Triplet quantum yields

Classification code: 522 Gas Fuels - 741.1 Light/Optics - 741.3 Optical Devices and Systems - 801.4 Physical Chemistry - 804.1 Organic Compounds - 931.3 Atomic and Molecular Physics

Numerical data indexing: Time 2.60e-05s

DOI: 10.1021/jp4013812

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

840.

Accession number: 20132116360029

Title: The study of the process of fermented wine by tea extracting

Authors: Cui, Ruijing¹ ; Shen, Shuqi² ; Liu, Xiufeng¹

Author affiliation:

1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066600, Hebei, China

2 Ocean College of Hebei Agricultural University, Qinhuangdao 066003, Hebei, China

Corresponding author: Cui, R.

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 13

Issue: 3

Issue date: March 2013

Publication year: 2013

Pages: 65-72

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology, 3 Floor, Qingyuan Mansion, No. 6 Beisan Street., Fucheng Road, Haidian District, Beijing, 100048, China

Abstract: The wine of tea extract was made from green tea extraction solution fermented by wine yeast. The green tea extraction solution was prepared from the microwave-assisted extraction solution hydrolyzed by papain. Factors effecting on extraction and wine fermentation parameters of tea extraction solution were studied employing single-factor and orthogonal experimental designs. The results showed that the extraction solution rich in tea polyphenols and ammonia nitrogen was extracted on the conditions: tea sieved with 20 mesh sieve; ratio of tea to water, 1:60; extraction at 720 W microwave power for 3 min; the added amount of papain, 3%; pH 7.0; enzyme hydrolyzing at 55°C for 25 min; and the optimum fermentation conditions were the added sucrose, 17%; inoculating amount of wine yeast, 0.25%; pH of fermentation solution adjusted with citric acid, 3.4; fermenting at 26~28°C for 8 days. The fermented wine has not only nutrients and flavor of green tea but also nutrients and wine flavor produced in yeast fermentation. It is a low-ethanol-content, multifunctional beverage which is nutrimental, healthcare and diseases-curing.

Number of references: 19

Main heading: Wine

Controlled terms: Extraction - Fermentation - Health care - Hydrolysis - Nutrients - Papain - Yeast

Uncontrolled terms: Enzymolysis - Extraction solution - Fermentation conditions - Green tea - Microwave processing - Microwave-assisted extraction - Orthogonal experimental design - Yeast fermentation

Classification code: 461.7 Health Care - 802.2 Chemical Reactions - 802.3 Chemical Operations - 804.1 Organic Compounds - 822.3 Food Products

Numerical data indexing: Age 2.19e-02yr, Power 7.20e+02W, Temperature 2.99e+02K to 3.01e+02K, Temperature 3.28e+02K

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

841.

Accession number: 20132116345843

Title: Effects of 4 GPa pressure heat treatment on mechanical properties and electrical conductivity of CuCrNiAl alloy

Authors: Ma, Yu-Quan¹

Author affiliation:

¹ Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Ma, Y.-Q.

Source title: Materials Transactions

Abbreviated source title: Mater. Trans.

Volume: 54

Issue: 5

Issue date: 2013

Publication year: 2013

Pages: 725-728

Language: English

ISSN: 13459678

CODEN: MTARCE

Document type: Journal article (JA)

Publisher: Japan Institute of Metals (JIM), 1-14-32 Ichibancho, Aoba-ku, Sendai, 980-8544, Japan

Abstract: The hardness, compressive yield strength and electrical conductivity of CuCrNiAl alloy before and after 4 GPa pressure treatment were measured, and the microstructure of the CuCrNiAl alloy before and after 4 GPa pressure treatment were analyzed by metallurgical microscope, transmission electron microscopy and scanning electron microscope. Based on the experimental results, the effects of 4 GPa pressure heat treatment on the mechanical properties and electrical conductivity of CuCrNiAl alloy were discussed. The results showed that 4 GPa pressure treatment can increase the hardness and compressive yield strength of the CuCrNiAl alloy, and reduce its electrical conductivity. After 4 GPa pressure treatment and aged at 500°C for 1 h, higher mechanical properties and electrical conductivity of CuCrNiAl alloy could be obtained. © 2013 The Japan Institute of Metals and Materials.

Number of references: 14

Main heading: Heat treatment

Controlled terms: Alloys - Cerium alloys - Electric conductivity - Hardness - Mechanical properties - Scanning electron microscopy - Transmission electron microscopy - Yield stress

Uncontrolled terms: Electrical conductivity - Metallurgical microscope - Pressure treatments - Scanning Electron Microscope

Classification code: 951 Materials Science - 741.3 Optical Devices and Systems - 741.1 Light/Optics - 701.1 Electricity: Basic Concepts and Phenomena - 547.2 Rare Earth Metals - 537.1 Heat Treatment Processes - 531.1 Metallurgy - 422 Strength of Building Materials; Test Equipment and Methods - 421 Strength of Building Materials; Mechanical Properties

Numerical data indexing: Pressure 4.00e+09Pa, Temperature 7.73e+02K, Time 3.60e+03s

DOI: 10.2320/matertrans.M2012360

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

842.

Accession number: 20122615179782

Title: Static performance evaluation and optimal design of 5-DOF parallel mechanical leg

Authors: Rong, Yu1, 2 ; Jin, Zhen-Lin1

Author affiliation:

- 1 College of Mechanical Engineering, Yanshan University, Qinhuangdao 066004, China
- 2 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Rong, Y. (lixiangcg@126.com)

Source title: Guangxue Jingmi Gongcheng/Optics and Precision Engineering

Abbreviated source title: Guangxue Jingmi Gongcheng

Volume: 20

Issue: 6

Issue date: June 2012

Publication year: 2012

Pages: 1233-1242

Language: Chinese

ISSN: 1004924X

CODEN: GJGOF4

Document type: Journal article (JA)

Publisher: Chinese Academy of Sciences, 140 Renmin Street, Changchun, 130022, China

Abstract: To evaluate the static performance and design optimally a parallel mechanical leg for the six-legged robot, a static analysis method based on the mapping of both constraint and actuation forces was proposed, and the mechanical leg was designed based on this method. Firstly, the constraint and actuation Jacobian matrixes were established based on the mapping of both constraint and actuation. Then, according to the virtual work principle, the actuation statics transmission equation was established, the performance evaluation indexes of actuation statics were designed, and the relationship curve between the performance evaluation index and structure parameters was calculated. By the same way, the transmission equation and performance evaluation index of constraint statics were obtained, and the relationship curve between the performance evaluation index and structure parameters was also calculated. Finally, based on the performance evaluation indexes both of constraint and actuation statics, the structure parameters were optimally designed by Monte Carlo method. Calculations show that when the structure parameters of a fixed platform and a movement platform are 200 mm, and 80 mm and the UPU branched chain lengths l_{1min} , l_{1max} are 500 mm and 900 mm, the statics comprehensive performance of the parallel mechanical leg is the best. These studies lays the theoretical foundation for further study of the six-legged robot.

Number of references: 17

Main heading: Optimal systems

Controlled terms: Monte Carlo methods

Uncontrolled terms: Optimal design - Parallel mechanical leg - Performance evaluation -
Statics analysis of actuation - Statics analysis of constraint

Classification code: 922.2 Mathematical Statistics - 961 Systems Science

Numerical data indexing: Size 2.00e-01m, Size 5.00e-01m, Size 8.00e-02m, Size 9.00e-01m

DOI: 10.3788/OPE.20122006.1233

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

843.

Accession number: 20121314906008

Title: Detection class I integron of multidrug resistace pathogenic Salmonella from chicken

Authors: Wang, Qiuyue¹ ; Zhang, Yanying¹ ; Shi, Qiumei¹ ; Yao, Wei² ; Chen, Cuizhen¹ ; Gao,
Guangping¹ ; Zhang, Donglin¹ ; Fang, Hai¹

Author affiliation:

1 Key Laboratory of Preventive Veterinary Medicine of Hebei Province, Hebei Normal University of Science and Technology, Qinhuangdao, 066600, China

2 Heibe Qinglong County Pingfangzi Junior Middle School, Qinhuangdao, 066503, China

Corresponding author: Fang, H. (fanghaihb@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 134 AISC

Monograph title: Information Technology and Agricultural Engineering

Issue date: 2012

Publication year: 2012

Pages: 493-499

Language: English

ISSN: 18675662

ISBN-13: 9783642275364

Document type: Conference article (CA)

Conference name: 2011 International Conference on Information Technology and Agricultural Engineering, ICITAE 2011

Conference date: December 1, 2011 - December 2, 2011

Conference location: Sanya, China

Conference code: 89181

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Antimicrobial resistance test of 59 Samonella isolated from chicken was done by K-B method. The drug-resistance rate of oxacillin, tetracycline, erythromycin, penicillin G, gentamicin was 74.6%, 64.4%, 52.5%, 47.5% and 37.3% respectively. Most of the isolates were multidrug resistance and the rate was 81.36% (48/59). Among the total of the multidrug resistance isolates, the rate of resistance to three, four and five drugs was 45.76% (27/59), 23.73% (14/59) and 11.86% (7/59). PCR and DNA sequencing were used for screening and characterization of class I integrons. As a result, the detection rate of class I integron was 40.68% (24/59), and among these 48 isolates which had been proven multidrug-resistant, the detection rate of class I integron was 50% (24/48). Class I integron PCR positive isolates rate of multidrug-resistance was 100% (24/24). Results show that the class I integron has the relationship with multidrug resistance. © 2012 Springer-Verlag GmbH.

Number of references: 15

Main heading: Information technology

Controlled terms: Agricultural engineering - Animals - Diagnosis - Error detection - Polymerase chain reaction

Uncontrolled terms: Antimicrobial resistances - Class I - Detection rates - DNA Sequencing - Drug-resistance - Integrons - Multidrug resistance - Penicillin G - Samonella

Classification code: 461.6 Medicine and Pharmacology - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 801.2 Biochemistry - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 903 Information Science

Numerical data indexing: Percentage 1.00e+02%, Percentage 1.19e+01%, Percentage 2.37e+01%, Percentage 3.73e+01%, Percentage 4.07e+01%, Percentage 4.58e+01%, Percentage 4.75e+01%, Percentage 5.00e+01%, Percentage 5.25e+01%, Percentage 6.44e+01%, Percentage 7.46e+01%, Percentage 8.14e+01%

DOI: 10.1007/978-3-642-27537-1_61

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

844.

Accession number: 20123115295282

Title: Imidazole functionalized magnesium phthalocyanine photosensitizer: Modified photophysics, singlet oxygen generation and photooxidation mechanism

Authors: Zhang, Xian-Fu^{1, 2}; Guo, Wenfeng¹

Author affiliation:

1 Chemistry Department and Center of Instrumental Analysis, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

2 MPC Technologies, Hamilton, ON L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Physical Chemistry A

Abbreviated source title: J Phys Chem A

Volume: 116

Issue: 29

Issue date: July 26, 2012

Publication year: 2012

Pages: 7651-7657

Language: English

ISSN: 10895639

E-ISSN: 15205215

CODEN: JPCAFH

Document type: Journal article (JA)

Publisher: American Chemical Society, 2540 Olentangy River Road, P.O. Box 3337, Columbus, OH 43210-3337, United States

Abstract: Magnesium phthalocyanine (MgPc) was covalently attached by four imidazole units to form a novel photosensitizer (PS). The photophysical processes within the dyad PS were explored by steady state and time-resolved fluorescence as well as laser flash photolysis. Although the imidazole units caused a 50% decrease in fluorescence quantum yield and a remarkable shortening of fluorescence lifetime of the MgPc moiety, the triplet yield (ϕ_T) is higher and the triplet lifetime becomes longer. The transient absorption bands for MgPc⁻ were observed, indicating the occurrence of intramolecular photoinduced electron transfer (PET) from imidazole subunits to the lowest excited singlet state (S₁) of the MgPc moiety. The kinetic and thermodynamic analysis also supports the involvement of PET in S₁ deactivation. The quantum efficiency of photosensitized oxidation of diphenylisobenzofuran (DPBF) by the PS is 0.52. This value is much higher than ϕ_T (0.26), since DPBF is photo-oxidized not only by singlet oxygen (type II reaction, 54%) but also by superoxide anion radical (type I reaction, 46%). The result suggests that the mechanism of photosensitized oxidation could be changed upon the conjugation of a PS to biological molecules, so that the importance of type I reaction is enhanced. © 2012 American Chemical Society.

Number of references: 39

Main heading: Oxidation

Controlled terms: Excited states - Fluorescence - Magnesium - Nitrogen compounds - Oxygen - Photosensitizers - Quantum yield - Thermoanalysis

Uncontrolled terms: Biological molecule - Excited singlet state - Fluorescence lifetimes - Fluorescence quantum yield - Functionalized - Laser flash photolysis - Magnesium phthalocyanine - Photo-induced electron transfer - Photooxidation mechanism - Photophysical process - Photophysics - Photosensitized oxidation - Singlet oxygen - Singlet oxygen generation - Steady state - Superoxide anion radicals - Thermo dynamic analysis - Time-resolved fluorescence - Transient absorption - Type II

Classification code: 542.2 Magnesium and Alloys - 741.1 Light/Optics - 801 Chemistry - 802.2 Chemical Reactions - 804 Chemical Products Generally - 931.3 Atomic and Molecular Physics

Numerical data indexing: Percentage 4.60e+01%, Percentage 5.00e+01%, Percentage 5.40e+01%

DOI: 10.1021/jp3047938

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

845.

Accession number: 20132416415304

Title: The improvement of laminar cooling system for hot rolled strip base on rolling process

Authors: Wang, Hai Fang1 ; Ren, Xiao Guang2 ; Rong, Yu3

Author affiliation:

1 College of Control Engineering, Northeastern University at Qinhuangdao, Qinhuangdao, China

2 E and A College Hebei Normal University Science and Technology, Qinhuangdao, China

3 College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Changli, China

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 690 693

Monograph title: Materials Design, Processing and Applications

Issue date: 2013

Publication year: 2013

Pages: 3295-3298

Language: English

ISSN: 10226680

ISBN-13: 9783037856925

Document type: Conference article (CA)

Conference name: 4th International Conference on Manufacturing Science and Engineering, ICMSE
2013

Conference date: March 30, 2013 - March 31, 2013

Conference location: Dalian, China

Conference code: 97228

Sponsor: Northeastern University, China; Harbin Institute of Technology; Jilin University

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Hot strip cooling temperature and its cooling rate is get by strip cooling system and coiling temperature of hot rolled strip is an important parameter on its performance index. It presents laminar cooling system of the 700 mm hot strip mill and the mill rolling process is present, the laminar cooling system is analyzed on the rolling theory and techniques. The laminar cooling system and its problems are present. The improvement programs of laminar cooling system are present, The control system of laminar cooling system is present combining feed-forward main control and feed-backward self-learning control, and measuring instruments is reinstall and water valves is improved. It could be a reference for the similar mill units and new building rolling mills. © (2013) Trans Tech Publications, Switzerland.

Number of references: 8

Main heading: Hot rolling

Controlled terms: Control systems - Cooling systems - Thermoelectric equipment

Uncontrolled terms: Coiling temperature - Cooling temperature - Hot-rolled - Laminar cooling - Measuring instruments - Performance indices - Rolling process - Self-learning control

Classification code: 535.1.2 Rolling Mill Practice - 615.4 Thermoelectric Energy - 641.2 Heat Transfer - 731.1 Control Systems

Numerical data indexing: Size 7.00e-01m

DOI: 10.4028/www.scientific.net/AMR.690-693.3295

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

846.

Accession number: 20134416915094

Title: Influence on afterglow spectra due to different phases of Zn₃(PO₄)₂: Mn²⁺

Authors: Liu, Zi Ran¹ ; Zhong, Rui Xia² ; Zhao, Huix² ; Zhang, Xiao Yan²

Author affiliation:

- 1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 School of Resources and Materials, Northeastern University at Qinhuangdao, Qinhuangdao 066004, China

Corresponding author: Liu, Z. R. (liuziran_1981@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 423-426

Monograph title: Applied Materials and Technologies for Modern Manufacturing

Issue date: 2013

Publication year: 2013

Pages: 415-418

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037858882

Document type: Conference article (CA)

Conference name: 3rd International Conference on Applied Mechanics, Materials and Manufacturing, ICAMMM 2013

Conference date: August 24, 2013 - August 25, 2013

Conference location: Dalian, China

Conference code: 100385

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: High temperature solid state reaction has been used to prepare $\text{Zn}_3(\text{PO}_4)_2: \text{Mn}^{2+}$. XRD analysis shows that different phases have been generated with different Mn^{2+} doping concentration at the same sintering temperature. Low Mn^{2+} doping concentration is conducive to form α phase, while γ is in favor of high

Mn²⁺ doping concentration. In α phase, the emission spectrum of Mn²⁺ is a wide emission band peaking at 542 nm, green fluorescence. In γ phase, the emission spectrum of Mn²⁺ is a wide emission band peaking at 608 nm, red fluorescence. In the both phases, green and red afterglows have been observed. The red afterglow in γ phase has stronger initial brightness and longer afterglow decay time than the green afterglow in α phase, the reason of which lies in the larger trap concentration in γ phase. © (2013) Trans Tech Publications, Switzerland.

Number of references: 9

Main heading: Manganese

Controlled terms: Emission spectroscopy - Fluorescence - High temperature applications - Manufacture - Sintering - Solid state reactions - Zinc

Uncontrolled terms: Afterglow - Doping concentration - Emission spectrums - Green fluorescence - High temperature solid-state reaction - Red afterglow - Sintering temperatures - Trap concentration

Classification code: 802.3 Chemical Operations - 802.2 Chemical Reactions - 741.1 Light/Optics - 708.3.1 High Temperature Superconducting Materials - 546.3 Zinc and Alloys - 543.2 Manganese and Alloys - 537.1 Heat Treatment Processes

Numerical data indexing: Size 5.42e-07m, Size 6.08e-07m

DOI: 10.4028/www.scientific.net/AMM.423-426.415

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

847.

Accession number: 20105013487234

Title: Study of computer room management system based on CIS structure

Authors: Li, Yuxiang¹ ; Cheng, Chao¹ ; Chen, Shuang¹ ; Chen, Hong¹ ; Zhang, Guangbin¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, Y. (lyx20040205@163.com)

Source title: ICSTE 2010 - 2010 2nd International Conference on Software Technology and Engineering, Proceedings

Abbreviated source title: ICSTE - Int. Conf. Softw. Technol. Eng., Proc.

Volume: 2

Part number: 2 of 2

Monograph title: ICSTE 2010 - 2010 2nd International Conference on Software Technology and Engineering, Proceedings

Issue date: 2010

Publication year: 2010

Pages: V2380-V2383

Article number: 5608783

Language: English

ISBN-13: 9781424486656

Document type: Conference article (CA)

Conference name: 2010 2nd International Conference on Software Technology and Engineering, ICSTE 2010

Conference date: October 3, 2010 - October 5, 2010

Conference location: San Juan, PR, United states

Conference code: 82725

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT); Polytechnic University of Puerto Rico

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This article related to network data transmission technology, bar code technology, serial communications technology, Windows authentication interface technology, data encryption and decryption techniques are studied; the final design and implement a set of "Public Computer Lab Management System." The system's feature is the use of low cost, good compatibility, management model and has better management efficiency. Thesis on the public computer room of the scientific management, software process of interpretation, computer integrated control, network security of data transmission has a certain reference value. © 2010 IEEE.

Number of references: 10

Main heading: Management

Controlled terms: Bar codes - Computer networks - Computer software - Cryptography - Data communication systems - Interfaces (computer) - Network security - Technology

Uncontrolled terms: C / S structure - Cis structure - Computer rooms - Data encryption - Good compatibility - Interface technology - Low costs - Management efficiency - Management Model - Management systems - Network data transmission - Public computers - Reference values - Room management - Scientific management - Serial communications - Software process

Classification code: 722.2 Computer Peripheral Equipment - 723 Computer Software, Data Handling and Applications - 723.2 Data Processing and Image Processing - 901 Engineering Profession - 912.2 Management

DOI: 10.1109/ICSTE.2010.5608783

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

848.

Accession number: 20101312817182

Title: Preparation and growth of Ni-Cu alloy nanoparticles prepared by arc plasma evaporation

Authors: Song, A.J.1, 2 ; Ma, M.Z.1 ; Zhang, W.G.1, 2 ; Zong, H.T.1 ; Liang, S.X.1 ; Hao, Q.H.1 ; Zhou, R.Z.1 ; Jing, Q.1 ; Liu, R.P.1

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, Hebei 066004, China

2 Chemistry Department, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Liu, R.P. (riping@ysu.edu.cn)

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 64

Issue: 10

Issue date: May 31, 2010

Publication year: 2010

Pages: 1229-1231

Language: English

ISSN: 0167577X

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: Nano-scale alloy powders, with the average particle size of 50 nm and face-centered cubic structure, were prepared from Ni_xCu_{1-x} (20% < x < 80 at.%) bulk alloys by arc plasma evaporation. Because of the difference in evaporation rates for both nickel and copper in the alloy melt, the composition of the prepared powders is found to be different from that of raw bulk alloys in most of the cases. Thus the composition relationship between the powders and raw alloys are constructed in the present work. In order to control the size distribution of the powders, the aggregation and growth process of the nanoparticles are analyzed. © 2010 Elsevier B.V. All rights reserved.

Number of references: 11

Main heading: Copper alloys

Controlled terms: Agglomeration - Alloys - Cavity resonators - Crystal growth - Crystallization - Evaporation - Grain boundaries - Nanoparticles - Plasmas - Vapors

Uncontrolled terms: Alloy melt - Alloy powder - Arc plasma - Arc plasma evaporation - Average particle size - Bulk alloys - Evaporation rate - Face-centered cubic structure - Growth process - Nano scale - Ni-Cu alloy - Powder Technology

Classification code: 761 Nanotechnology - 802.3 Chemical Operations - 804 Chemical Products Generally - 932.3 Plasma Physics - 933 Solid State Physics - 933.1 Crystalline Solids - 933.1.2 Crystal Growth - 714.3 Waveguides - 531.1 Metallurgy - 531.2 Metallography - 544.2 Copper Alloys - 641.1 Thermodynamics - 708 Electric and Magnetic Materials - 712.2 Thermionic Materials - 714.1 Electron Tubes

Numerical data indexing: Size 5.00e-08m

DOI: 10.1016/j.matlet.2010.02.061

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

849.

Accession number: 20114014402886

Title: Fluorescence properties of phenol-modified zinc phthalocyanine that tuned by photoinduced intra-molecular electron transfer and pH values

Authors: Zhang, Xian-Fu1

Author affiliation:

1 Chemistry Department, Hebei Normal University of Science and Technology, Qinghuangdao, Hebei Province 066004, China

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Fluorescence

Abbreviated source title: J Fluoresc

Volume: 21

Issue: 4

Issue date: July 2011

Publication year: 2011

Pages: 1559-1564

Language: English

ISSN: 10530509

CODEN: JOFLEN

Document type: Journal article (JA)

Publisher: Springer New York, 233 Springer Street, New York, NY 10013-1578, United States

Abstract: Tetra[α -(4-hydroxyphenoxy)] zinc phthalocyanine, ZnPc(α -OPhOH) 4, was synthesized and

its photophysics was found to be sharply pH dependent. Dual fluorescence emission around 700 nm was observed when it is dissolved in basic solution. The fluorescence of the phthalocyanine can be sharply switched off at pH 9.1 due to the intramolecular photoinduced electron transfer (PET) in $\text{ZnPc}(\alpha\text{-OPhONa})_4$, formed by the deprotonation of $\text{ZnPc}(\alpha\text{-OPhOH})_4$. The photophysics of both $\text{ZnPc}(\alpha\text{-OPhOH})_4$ and $\text{ZnPc}(\alpha\text{-OPhONa})_4$ were studied in detail by UV-vis absorption, steady state and time-resolved fluorescence and transient absorption (TA) to reveal the fluorescence quenching mechanism. Intra-molecular PET in $\text{ZnPc}(\alpha\text{-OPhONa})_4$ from the donor, PhONa subunits, to the acceptor, ZnPc moiety, was characterized by the much smaller fluorescence quantum yield (0.003) and lifetime (<0.20 ns). PET was further evidenced by the occurrence of charge separation state (CSS) in TA spectra, i.e. the bands due to anion radical of ZnPc and phenol radical. The lifetime of the charge separation state is ca. 3 ns, the efficiency of PET is ca. 99% and the rate constant of PET is $2.3 \times 10^{10} \text{ s}^{-1}$. © Springer Science+Business Media, LLC 2009.

Number of references: 23

Main heading: Fluorescence

Controlled terms: Electron transitions - Free radical reactions - Molecular structure - Nitrogen compounds - Phenols - Quantum yield - Quenching - Rate constants - Separation - Zinc - Zinc compounds

Uncontrolled terms: Anion radicals - Basic solutions - Charge separations - Dual fluorescence - Fluorescence properties - Fluorescence quantum yield - Fluorescence quenching mechanism - Fluorescent probes - Intra-molecular electron transfer - pH value - PH-dependent - Photo-induced - Photoinduced electron transfer - Photophysics - Phthalocyanine - Steady state - Time-resolved fluorescence - Transient absorption - UV-vis absorptions - Zinc phthalocyanines

Classification code: 802.3 Chemical Operations - 802.2 Chemical Reactions - 801.4 Physical Chemistry - 804.1 Organic Compounds - 741.1 Light/Optics - 546.3 Zinc and Alloys - 537.1 Heat Treatment Processes - 711.1 Electromagnetic Waves in Different Media

Numerical data indexing: Percentage 9.90e+01%, Size 7.00e-07m, Time 3.00e-09s

DOI: 10.1007/s10895-011-0844-0

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

850.

Accession number: 20114114418039

Title: Interaction of dietary zinc and vitamin A influences the zinc deposition and some enzymes'

activity in broilers

Authors: Guan, Xuemin¹ ; Bian, Fenglian¹ ; Zhu, Wenjin¹ ; Wang, Bo¹ ; Zhang, Chunshan¹

Author affiliation:

1 Department of Life Science, Hebei Normal University of Science and Technology, Hebei, 066600, China

Corresponding author: Zhang, C. (guanxueming109@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 343-344

Monograph title: Materials for Environmental Protection and Energy Application, MEPEA 2011

Issue date: 2012

Publication year: 2012

Pages: 1126-1132

Language: English

ISSN: 10226680

ISBN-13: 9783037852569

Document type: Conference article (CA)

Conference name: 2011 International Conference on Materials for Environmental Protection and Energy Application, MEPEA 2011

Conference date: September 27, 2011 - September 28, 2011

Conference location: Kuala Lumpur, Malaysia

Conference code: 86828

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: 576 broilers are experimented on with 6×2 (Zn \times vitamin A) repetitive experiment in attempt to study the influence of different dietary zinc levels (40,80,120,160,200 and 320 mg/ kg) and dietary vitamin A levels (2700 and 8800 IU/ kg) on vitamin A metabolism, zinc concentration in liver and tibia, zinc apparent deposition rate, serum ALK activity, CuZn-SOD activity in liver and serum, and serum insulin concentration.

Results showed that vitamin A concentration in serum increased with the increasing of zinc level in the diet, and that in livers decreased accordingly, which means that zinc can mobilize vitamin A of liver into serum. When dietary zinc level was 320 mg/kg, vitamin A concentration in serum, liver and kidney increased at the same time, perhaps higher dietary zinc level promoted vitamin A absorption except for mobilizing it into serum. Higher dietary vitamin A level (8800 IU/kg) increased zinc concentration in liver and tibia slightly. Zinc apparent deposition rate increased with the increasing of dietary zinc level within certain range and then decreased.; dietary Zinc level has a prominent influence on CuZn - SOD in serum when $P < 0.01$; and the result also shows that dietary zinc level, vitamin A level and their interaction has a respectively prominent influence on ALK, serum insulin concentration is also apparently affected. © (2012) Trans Tech Publications, Switzerland.

Number of references: 19

Main heading: Zinc

Controlled terms: Body fluids - Concentration (process) - Copper compounds - Deposition rates - Environmental protection - Insulin - Sustainable development

Uncontrolled terms: ALK - Broiler - CuZn-SOD - Serum insulin - Vitamin A - Zinc concentration

Classification code: 911.2 Industrial Economics - 804.1 Organic Compounds - 802.3 Chemical Operations - 617 Turbines and Steam Turbines - 546.3 Zinc and Alloys - 461.2 Biological Materials and Tissue Engineering - 454.2 Environmental Impact and Protection

DOI: 10.4028/www.scientific.net/AMR.343-344.1126

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

851.

Accession number: 20130415932940

Title: The application of web-based multimedia technology in college ELT

Authors: Dong, Yajuan¹ ; Sun, Qiuyue¹ ; Wang, Jing¹

Author affiliation:

¹ College of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Dong, Y. (yajuan_dong2007@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 263-266

Issue: PART 1

Monograph title: Information Technology Applications in Industry

Issue date: 2013

Publication year: 2013

Pages: 3414-3417

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037855744

Document type: Conference article (CA)

Conference name: 2012 International Conference on Information Technology and Management Innovation, ICITMI 2012

Conference date: November 10, 2012 - November 11, 2012

Conference location: Guangzhou, China

Conference code: 95052

Sponsor: Information Science School of Guangdong; University of Business Studies

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: In traditional way of ELT, the teacher was the center of all teaching activities. There have existed many disadvantages in the traditional ELT which is against quality-oriented education. The application of web-based multimedia teaching model changes the teacher-centered model; it puts importance on the cultivation of student's independent spirit and helps students change from the passive listeners to the active participants, thus develops student's ability of using English and their learning autonomy. However, research discovers that about 30% of students do not hold positive opinions towards the application of multimedia and nearly half teachers have trouble in making good use of multimedia. (The results are shown in Table 1 and Table 2) This paper explores the changes that multimedia has brought to ELT and the difficulties and problems in applying it, suggests that schools

increase opportunities for teachers to receive multimedia training, thus better integrating multimedia technology into college ELT. © (2013) Trans Tech Publications, Switzerland.

Number of references: 7

Main heading: Education computing

Controlled terms: Information technology - Multimedia systems - Personnel training - Students - Teaching

Uncontrolled terms: English language teaching - Multimedia technologies - Teaching model - Web-based - Web-based multimedia

Classification code: 723.5 Computer Applications - 901.2 Education

Numerical data indexing: Percentage 3.00e+01%

DOI: 10.4028/www.scientific.net/AMM.263-266.3414

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

852.

Accession number: 20121915010339

Title: The technology selection for realizing the campus E-commerce system

Authors: Qi, Zhaochuan1 ; Li, Qianghua1 ; Dong, Shuoling1

Author affiliation:

1 Institute of Finance and Economics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Qi, Z. (Qzch423@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 141 AISC

Monograph title: Advances in Computer Science and Engineering

Issue date: 2012

Publication year: 2012

Pages: 437-441

Language: English

ISSN: 18675662

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Advances in Computer Science and Engineering, CES 2012

Conference date: January 13, 2012 - January 14, 2012

Conference location: Sanya, China

Conference code: 89618

Sponsor: Huazhong University of Science and Technology; International Communication Sciences Association (ICSA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: It should adopt to the users' habit and the actual requirement of the system itself when selecting the technology to realize the campus Electronic commerce system due to the special users, special characteristic and special environment of the system. The article will discuss the selections of the technology of the campus Electronic commerce system from the sides of the development tools, the Web testing server and the software of the terminal. © 2012 Springer-Verlag GmbH.

Number of references: 4

Main heading: Technology

Controlled terms: Computer science - Electronic commerce - Software testing

Uncontrolled terms: Campus electronic commerces - Development tools - E-commerce systems - Technology selection - Web testing

Classification code: 721 Computer Circuits and Logic Elements - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 901 Engineering Profession

DOI: 10.1007/978-3-642-27948-5_58

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

853.

Accession number: 20124415632297

Title: Resistance exercise combined with vascular restriction improves endothelial function and insulin resistance in patients with type 2 diabetes mellitus

Authors: Wei, Chen¹ ; Juan, Li² ; Shang, Ning-Ning¹

Author affiliation:

1 Department of PE, Hebei Normal University of Science and Technology, No. 360, West Hebei St., Qinhuangdao City, Hebei Province, China

2 College of PE, Yan Shan University, No. 438, West Hebei St., Qinhuangdao City, Hebei Province, China

Corresponding author: Wei, C. (chenweibcg@mail.bnu.edu.cn)

Source title: i-CREATe 2010 - International Convention on Rehabilitation Engineering and Assistive Technology

Abbreviated source title: i-CREATe - Int. Conv. Rehabil. Eng. Assistive Technol.

Monograph title: i-CREATe 2010 - International Convention on Rehabilitation Engineering and Assistive Technology

Issue date: 2010

Publication year: 2010

Language: English

ISBN-13: 9789810861995

Document type: Conference article (CA)

Conference name: 4th International Convention on Rehabilitation Engineering and Assistive Technology, i-CREATe 2010

Conference date: July 21, 2010 - July 24, 2010

Conference location: Shanghai, China

Conference code: 87507

Publisher: International Convention on Rehabilitation Engineering and, 49 Kaki Bukit View, Kaki Bukit TechPark II, 415973, Singapore

Abstract: This study examined the effect of resistance exercise, combined with vascular restriction, on endothelial function and insulin resistance in patients with type 2 diabetes mellitus. Twenty-two subjects with type 2 diabetes mellitus were randomly divided into three groups, resistance exercise group (EG, n=7), resistance exercise combined with vascular restriction group (EVG, n=8), and control group (CG, n=7). The resistance exercise was performed three times a week over 16 week period at an intensity of approximately 20% of 1RM for major muscle groups in EG and EVG. And the EVG based on the externally applied vascular restriction pressure of 100 mmHg at the bilateral femoral artery and subclavian artery in exercising. A significant decrease in HOMA-IR and plasma ET-1 levels was founded after exercise in EVG ($P < 0.01$), and there was also a increase in plasma NO levels following exercise was noted in EVG ($P < 0.01$). In conclusion, resistance exercise with vascular restriction is useful to improve endothelial function and insulin resistance in patients with type 2 diabetes mellitus. © 2010 START Centre.

Number of references: 17

Page count: 4

Main heading: Insulin

Controlled terms: Engineering - Human rehabilitation equipment - Industrial engineering

Uncontrolled terms: Endothelial function - Insulin resistance - Resistance exercise - Type 2 diabetes mellitus - Vascular restriction

Classification code: 461.5 Rehabilitation Engineering and Assistive Technology - 804.1 Organic Compounds - 901 Engineering Profession - 912.1 Industrial Engineering

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

854.

Accession number: 20102913084851

Title: The design of temperate and humidity fuzzy controller based on CAN bus

Authors: Rong, Yu1 ; Wang, Haifang1 ; Zhang, Liang1 ; Qu, Mengke1

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Qinhuangdao, China

Corresponding author: Rong, Y. (lixiangcg@126.com)

Source title: ICIME 2010 - 2010 2nd IEEE International Conference on Information Management and Engineering

Abbreviated source title: ICIME - IEEE Int. Conf. Inf. Manage. Eng.

Volume: 6

Part number: 6 of 6

Monograph title: ICIME 2010 - 2010 2nd IEEE International Conference on Information Management and Engineering

Issue date: 2010

Publication year: 2010

Pages: 4-6

Article number: 5477794

Language: English

ISBN-13: 9781424452644

Document type: Conference article (CA)

Conference name: 2010 2nd IEEE International Conference on Information Management and Engineering, ICIME 2010

Conference date: April 16, 2010 - April 18, 2010

Conference location: Chengdu, China

Conference code: 81055

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The fuzzy control technology is applied in the field of temperature and humidity control, which can realize the intelligent control of temperature and humidity. A temperature and humidity fuzzy controller is designed based on CAN bus. So that temperature and humidity can be real-time monitoring and controlled. The principles method and the hardware circuit of this fuzzy control are described. Simulation studies on the fuzzy controller were carried out. The simulation results show that the fuzzy controller has the features of quick response, small overshoot, accurate action and steady process. The control of temperature and humidity is very well.
© 2010 IEEE.

Number of references: 3

Main heading: Humidity control

Controlled terms: Controllers - Fuzzy control - Information management - Moisture - Temperature control

Uncontrolled terms: CAN bus - Fuzzy controllers - Hardware circuits - Quick response - Real time monitoring - Simulation result - Simulation studies - Small overshoot - Steady process - Temperature and humidity control

Classification code: 921 Mathematics - 912.2 Management - 903.2 Information Dissemination - 801.4 Physical Chemistry - 732.1 Control Equipment - 731.3 Specific Variables Control - 731 Automatic Control Principles and Applications - 723.4 Artificial Intelligence - 643.3 Air Conditioning - 443.1 Atmospheric Properties - 402 Buildings and Towers

DOI: 10.1109/ICIME.2010.5477794

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

855.

Accession number: 20104813438592

Title: The risk management of supply chain

Authors: Jianlin, Yuanl

Author affiliation:

1 HeBei Normal University of Science and Technology, HeBei 066004, China

Corresponding author: Jianlin, Y. (yuanjianl@126.com)

Source title: 2010 International Conference on Management and Service Science, MASS 2010

Abbreviated source title: Int. Conf. Manage. Serv. Sci., MASS

Monograph title: 2010 International Conference on Management and Service Science, MASS 2010

Issue date: 2010

Publication year: 2010

Article number: 5576664

Language: English

ISBN-13: 9781424453269

Document type: Conference article (CA)

Conference name: 2010 International Conference on Management and Service Science, MASS 2010

Conference date: August 24, 2010 - August 26, 2010

Conference location: Wuhan, China

Conference code: 82047

Sponsor: IEEE Wuhan Section; Sichuan University; Wuhan University; James Madison University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: With the globalization, a product is assembled by various parts of the product that are produced in different countries. How to finish the task? It depends on the supply chain. The products are transported different area of the worlds by the supply chain; the enterprise gets the profit when the products are sold. But the supply chain suffers the different risks that are caused by uncertain economic cycles, consumer demands, and natural and manmade disasters. This paper analyzes various different supply chain risks and states various supply chain risk management strategies. We hope the risk management strategies can lower the risk of the supply chain and increase the profit of enterprise. © 2010 IEEE.

Number of references: 9

Main heading: Supply chain management

Controlled terms: Management science - Profitability - Risk analysis - Risk management
- Supply chains

Uncontrolled terms: Consumer demands - Economic cycles - Man-made disasters - Risk

management strategies - Risk strategies - Supply chain risk - Supply chain risk management

Classification code: 922 Statistical Methods - 914 Safety Engineering - 913 Production Planning and Control; Manufacturing - 912.2 Management - 912 Industrial Engineering and Management - 911.2 Industrial Economics - 911 Cost and Value Engineering; Industrial Economics

DOI: 10.1109/ICMSS.2010.5576664

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

856.

Accession number: 20131916313010

Title: Computer aided design and new manufacturing process of spherical hob

Authors: Zhang, Xiaoqin^{1, 2}; Hu, Zhanqi¹; Hao, Zhe¹

Author affiliation:

1 School of Mechanical Engineering, Yan Shan University, Qinhuangdao, China

2 Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Journal of Software

Abbreviated source title: J. Softw.

Volume: 8

Issue: 5

Issue date: 2013

Publication year: 2013

Pages: 1227-1235

Language: English

ISSN: 1796217X

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40,, OULU, 90571, Finland

Abstract: According to the working principle of spherical hob, computing formulae of normal and axial profile of the spherical hob are deduced, and calculation methods of other main parameters are introduced in the paper. Then the computer aided design and calculation of spherical hob is realized by Visual Basic programming language, which increases the calculation speed and accuracy. And the new manufacturing process of making spherical hob blade by using gear shaper cutter is put forward which can be finished on universal machine tool, so the application and popularization of spherical of hob can be promoted. At last the experiment proves that the internal gear machined by spherical hob meets the demand of precision. © 2013 ACADEMY PUBLISHER.

Number of references: 10

Main heading: Spheres

Controlled terms: BASIC (programming language) - Computer aided design - Computer control - Industrial engineering - Production engineering

Uncontrolled terms: Calculation speed - Engagement principle - Internal gear - Manufacturing process - Spherical hob - Universal machines - Visual BASIC - programming language - Working principles

Classification code: 631 Fluid Flow - 723.1.1 Computer Programming Languages - 723.5 Computer Applications - 912.1 Industrial Engineering - 913.1 Production Engineering

DOI: 10.4304/jsw.8.5.1227-1235

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

857.

Accession number: 20105113505954

Title: Accounting computerized teaching research

Authors: Jiuzhi, Mao1 ; Rui, Zhao1 ; Xiaona, Zhou1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Jiuzhi, M.

Source title: Proceedings - 2010 2nd IEEE International Conference on Information and Financial Engineering, ICIFE 2010

Abbreviated source title: Proc. - IEEE Int. Conf. Inf. Financ. Eng., ICIFE

Monograph title: Proceedings - 2010 2nd IEEE International Conference on Information and Financial Engineering, ICIFE 2010

Issue date: 2010

Publication year: 2010

Pages: 901-904

Article number: 5609499

Language: English

ISBN-13: 9781424469253

Document type: Conference article (CA)

Conference name: 2010 2nd IEEE International Conference on Information and Financial Engineering, ICIFE 2010

Conference date: September 17, 2010 - September 19, 2010

Conference location: Chongqing, China

Conference code: 82731

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: With the rapid development of computer technology and the widespread use of computers, human society has entered a computer and network based, new information times. In particular, after China Joins the World Trade Organization (WTO), the world economics' integration is further accelerated, computerized accounting has played an important role in various enterprises. Selecting compound talents who not only understands accounting expertise but also have the operational capability of computer technology has become enterprises' an important measure on computerized accounting talent. But the issue that how to cultivate accounting computerized talented people much better and make them adopt future economics' development, has been before us. This paper discusses the issue of the development of computerized accounting and computerized accounting teaching's objectives, teaching methods and so on, and seeks scientific methods to improve computerized accounting teaching. © 2010 IEEE.

Number of references: 12

Main heading: Teaching

Controlled terms: Enterprise resource planning - International trade

Uncontrolled terms: Accounting computerized - Compound talents - Computer technology - ERP teaching - Human society - Network-based - Operational capabilities - Project teaching methods - Rapid development - Scientific method - Teaching methods - World Trade Organizations

Classification code: 723.2 Data Processing and Image Processing - 901.2 Education - 902.3 Legal Aspects

DOI: 10.1109/ICIFE.2010.5609499

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

858.

Accession number: 20114314454819

Title: Fast algorithm for matrix inversion in generalized predictive control

Authors: Wang, Yubin¹ ; Bo, Jingyi¹

Author affiliation:

¹ Collage of Mathematics and Information Technology, HeBei Normal University of Science and Technology, Qin Huang Dao, China

Corresponding author: Wang, Y. (Super_birdy2001@yahoo.com.cn)

Source title: 2011 2nd International Conference on Mechanic Automation and Control Engineering, MACE 2011 - Proceedings

Abbreviated source title: Int. Conf. Mech. Autom. Control Eng., MACE - Proc.

Monograph title: 2011 2nd International Conference on Mechanic Automation and Control Engineering, MACE 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 7367-7371

Article number: 5988752

Language: Chinese

ISBN-13: 9781424494392

Document type: Conference article (CA)

Conference name: 2011 2nd International Conference on Mechanic Automation and Control Engineering, MACE 2011

Conference date: July 15, 2011 - July 17, 2011

Conference location: Inner Mongolia, China

Conference code: 87002

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: New fast algorithm for the inverse of the matrix in generalized predictive control(GPC) is presented to reduce the computational load of matrix inverse in GPC, and improve the real-time ability of system. When maximum prediction horizon p is equal to control horizon m , the inverse matrix in control increment of GPC is transformed Toeplitz matrix, then the Trench-Zohar algorithm is applied to calculate the inverse ; when p is not equal to m , the matrix is decomposed based on Cholesky factorization firstly, the matrix inverses for lower triangular is used secondly, finally the result is gotten by matrix multiplication. The theory and the example indicate the effectiveness of the above algorithm. Moreover, the method is not only simple, but also easy to programme. © 2011 IEEE.

Number of references: 5

Main heading: Matrix algebra

Controlled terms: Algorithms - Factorization - Inverse problems - Mechanics - Predictive control systems

Uncontrolled terms: Cholesky factorizations - Generalized predictive control - Inverse matrix - Toeplitz Matrix - Trench-Zohar Algorithm

Classification code: 731.1 Control Systems - 921 Mathematics - 921.1 Algebra - 931.1 Mechanics

DOI: 10.1109/MACE.2011.5988752

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

859.

Accession number: 20140117152923

Title: The spatial outlier mining algorithm based on the KNN graph

Authors: Cao, Lijun1 ; Liu, Xiyin1, 2 ; Wang, Zhi Ping1, 2 ; Zhang, Zhongping1, 2

Author affiliation:

1 Hebei Normal University of Science and Technology, China

2 Foreign Language College of Dalian Jiaotong University, College of Information Science and Engineering
Yanshan University, China

Source title: Journal of Software

Abbreviated source title: J. Softw.

Volume: 8

Issue: 12

Issue date: 2013

Publication year: 2013

Pages: 3158-3165

Language: English

ISSN: 1796217X

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40,, OULU, 90571, Finland

Abstract: In order to solve the defect in the spatial outlier mining algorithm that the spatial objects may be affected by their surrounding abnormal neighbors, a Based K-Nearest Neighbor (BKNN) algorithm was proposed based on the working principle of KNN Graph, which could effectively identify the spatial outliers by

using cutting edge strategies. The core idea of BKNN is to calculate the dissimilarity of the non-space attribute values the between adjacent objects, and to find the find the largest local outlier or outlier regions by cropping off the edges with the largest dissimilarity. The experiments for the spatial outlier mining algorithm BKNN based on the KNN Graph were carried out in the real datasets FMR and WNV. The example of the algorithm and the time complexity were analyzed and the results were compared to those of the existing classical algorithms, which verified that this algorithm could improve the accuracy of spatial outlier mining and simultaneously mine spatial region outliers. © 2013 Academy Publisher.

Number of references: 22

Main heading: Statistics

Controlled terms: Learning algorithms

Uncontrolled terms: Attribute values - K-nearest neighbors - k-NN graphs - Real data sets - Spatial objects - Spatial outlier - Spatial regions - Time complexity

Classification code: 723 Computer Software, Data Handling and Applications - 922.2 Mathematical Statistics

DOI: 10.4304/jsw.8.12.3158-3165

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

860.

Accession number: 20114514500625

Title: The construction of management system for combination of sports and education

Authors: Li, Shu Gang¹ ; Huo, Peng Feng² ; Wang, Hai Jun¹

Author affiliation:

1 Department of PE, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Physical Education Department, Environmental Management College of China, Qinhuangdao 066044, China

Corresponding author: Li, S.G. (lishugang126@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 109

Monograph title: Education Management, Education Theory and Education Application

Issue date: 2011

Publication year: 2011

Pages: 683-688

Language: English

ISSN: 18675662

ISBN-13: 9783642247712

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: This paper finds that construction and development of college sports teams is facing difficult to combine with the school management system and irrational allocation of resources and related other issues with the continuous reform of education system through analyzing the current situation of combination of education with sport. This study suggests that university should establish management system of combination of education with sport matched with market services and education management under the guidance of combination of education with sport. And it is a main way to culture high-level athletes in college. © 2011 Springer-Verlag Berlin Heidelberg.

Number of references: 5

Main heading: Education

Controlled terms: Management

Uncontrolled terms: college - combination of education with sport - Current situation - Education management - Education systems - Management systems - Resource distribution

Classification code: 901.2 Education - 912.2 Management

DOI: 10.1007/978-3-642-24772-9_99

Database: Compendex

861.

Accession number: 20134416937329

Title: Virtools based development of computer experiment

Authors: Wei, Yu Qing¹ ; Gao, Xing¹ ; Gao, Jinghua²

Author affiliation:

1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinghuangdao 066004, China

2 E and A college Hebei Normal University of Science and Technology, Qinghuangdao 066004, China

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 756-759

Monograph title: Information Technology Applications in Industry, Computer Engineering and Materials Science

Issue date: 2013

Publication year: 2013

Pages: 2887-2891

Language: English

ISSN: 10226680

ISBN-13: 9783037857700

Document type: Conference article (CA)

Conference name: 3rd International Conference on Materials Science and Information Technology, MSIT 2013

Conference date: September 14, 2013 - September 15, 2013

Conference location: Nanjing, Jiangsu, China

Conference code: 100389

Sponsor: Trans tech publications inc.; Computer Science and Electronic Technology; BITS Narsampet; Universitatea Politehnica Din Bucuresti

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Virtools is a set of integrated 2D graphic images, 3D models, audio, video, and so a variety of file formats, interactive software itself has a wealth of interactive behavior module, 3D games can be created, virtual experiments simulation objects very strong interaction with the display and other three-dimensional product. This paper presents a virtual experiment based on 3D and Virtools technology, which is built with 3D experiments scenes, making 3D animation; with Virtools data processing, interactive control. The experiments show that this method has the authenticity, interactivity, simple and easy to implement features. © (2013) Trans Tech Publications, Switzerland.

Number of references: 9

Main heading: Three dimensional computer graphics

Controlled terms: Animation - Data processing - Experiments - Information technology - Materials science - Three dimensional - Virtual reality

Uncontrolled terms: 3D - Computer experiment - Interactive behavior - Interactive control - Interactive software - Strong interaction - Virtools - Virtual experiments

Classification code: 723 Computer Software, Data Handling and Applications - 901.3 Engineering Research - 903 Information Science - 951 Materials Science

DOI: 10.4028/www.scientific.net/AMR.756-759.2887

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

862.

Accession number: 20113814334480

Title: XML webpage design teaching method application: A study

Authors: Yuxiang, Li1 ; Danxia, Bi2 ; Lijun, Shao3 ; Shi, Wang1 ; Qingjia, Geng1

Author affiliation:

1 College of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

2 Trade Union of Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

3 College of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Yuxiang, L.

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 235 CCIS

Part number: 5 of 6

Issue: PART 5

Monograph title: Information and Management Engineering - International Conference, ICCIC 2011, Proceedings

Issue date: 2011

Publication year: 2011

Pages: 105-110

Language: English

ISSN: 18650929

ISBN-13: 9783642240218

Document type: Conference article (CA)

Conference name: 2011 International Conference on Computing, Information and Control, ICCIC 2011

Conference date: September 17, 2011 - September 18, 2011

Conference location: Wuhan, China

Conference code: 86451

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Proceeding from arrangement of courses and choice of teaching methods (task-driven, divergent thinking, and analogism), this Article elaborates on how to arose students' interest and foster their innovative thinking and team spirit in the course of XML teaching, thus to raise the quality level of teaching of students. © 2011 Springer-Verlag.

Number of references: 4

Main heading: Teaching

Controlled terms: Curricula - Innovation - XML

Uncontrolled terms: analogism - Design teaching - divergent thinking - Innovative thinking - Quality levels - Task-driven - Teaching methods - Team spirit - Web-page

Classification code: 723 Computer Software, Data Handling and Applications - 901.2 Education - 912 Industrial Engineering and Management

DOI: 10.1007/978-3-642-24022-5_17

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

863.

Accession number: 20121414930944

Title: The application of cell material in tendon injuries for exercise training with biological materials

Authors: Zhao, Hua En¹ ; Shen, Fei¹

Author affiliation:

1 Hebei Normal University of Science and Technology, China

Corresponding author: Zhao, H.E. (zhaohuaen@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 485

Monograph title: Advanced Research on Material Engineering and Its Application

Issue date: 2012

Publication year: 2012

Pages: 558-561

Language: English

ISSN: 10226680

ISBN-13: 9783037853740

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Information Science, Automation and Material System, ISAM 2012

Conference date: April 21, 2012 - April 22, 2012

Conference location: Changsha, China

Conference code: 89238

Sponsor: International Science and Education Researcher Association (ISER); Beijing Gireida Education Research Center; VIP-Information Conference Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Traditional tendon repair methods mainly used autogenous tendon transplantation and autogenous tendon transfer, but the development of two repair methods may be greatly limited due to the limited donor site and the added trauma. At the present time, the research on tissue-engineered tendon has made significant progress. The sources of seed cells for tendon repair cannot be limited to the autogenous tendon cells; we should make gene transformation to mechanocyte through gene chips method in order to resolve the problems related with sources of seed cells of tissue engineered tendon. The well-balanced mechanical stimulation is very important in tendon regeneration process. This stimulation on realignment of neonatal tendon collagen fibers and improve mechanical strength is necessary, which can guarantee implementation of early functional exercise, reducing tendon adhesion, and make tendon repair process into a virtuous circle. © (2012) Trans Tech Publications, Switzerland.

Number of references: 4

Main heading: Tendons

Controlled terms: Adhesion - Biological materials - Cell engineering - Cells - Cytology
- Genes - Repair

Uncontrolled terms: Cell materials - Collagen fiber - Exercise injuries - Exercise training
- Gene transformation - Genechips - Mechanical stimulation - Repair methods - Repair process
- Seed cells - Tendon injuries - Tendon regeneration - Tendon tissue repair - Tendon transfer

Classification code: 461.1 Biomedical Engineering - 461.2 Biological Materials and Tissue Engineering
- 801 Chemistry - 913.5 Maintenance - 951 Materials Science

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

864.

Accession number: 20113014169238

Title: A new algorithm for stable communication in wireless emergency network

Authors: Ma, Xin¹ ; Huang, Quan-Yi¹ ; Kang, Yan²

Author affiliation:

1 Department of Engineering Physics, Tsinghua University, Beijing 100084, China

2 Department of Computer Science, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Ma, X.

Source title: 2011 International Conference on Computer and Management, CAMAN 2011

Abbreviated source title: Int. Conf. Comput. Manage., CAMAN

Monograph title: 2011 International Conference on Computer and Management, CAMAN 2011

Issue date: 2011

Publication year: 2011

Article number: 5778902

Language: English

ISBN-13: 9781424492831

Document type: Conference article (CA)

Conference name: 2011 International Conference on Computer and Management, CAMAN 2011

Conference date: May 19, 2011 - May 21, 2011

Conference location: Wuhan, China

Conference code: 85624

Sponsor: IEEE Wuhan Section; Hunan University; Wuhan University; Engineering Information Institute; Chongqing VIP Information Co., Ltd

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Emergency communication has been intensively investigated for solving suddenly-occurred events of public safety. Wireless network can play an important role of information acquisition and command decision-making in disaster areas, so a new Wireless Emergency Communication (WEC) algorithm is proposed in this paper. This algorithm possesses the characteristics of quick, stability, low energy and high reliability. The test results show that wireless emergency network adopting this algorithm can achieve the optimal stable communication. ©2011 IEEE.

Number of references: 6

Main heading: Wireless networks

Controlled terms: Algorithms - Communication - Decision making

Uncontrolled terms: Disaster areas - Emergency - Emergency communication - High reliability - Information acquisitions - Low energies - Public safety - Stable - Test results

Classification code: 716 Telecommunication; Radar, Radio and Television - 716.3 Radio Systems and Equipment - 723 Computer Software, Data Handling and Applications - 912.2 Management - 921 Mathematics

DOI: 10.1109/CAMAN.2011.5778902

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

865.

Accession number: 20111513901977

Title: Research on harmonic suppression and power compensation of aluminum electrolytic rectifier

Authors: Lin, Hong Ju1

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei Qinhuangdao, 066004, China

Corresponding author: Lin, H. J. (linhongju@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 159

Monograph title: Micro Nano Devices, Structure and Computing Systems

Issue date: 2011

Publication year: 2011

Pages: 258-263

Language: English

ISSN: 10226680

ISBN-13: 9783037850091

Document type: Conference article (CA)

Conference name: 2010 International Conference on Micro Nano Devices, Structure and Computing Systems, MNDSCS 2010

Conference date: November 6, 2010 - November 7, 2010

Conference location: Singapore, Singapore

Conference code: 84505

Sponsor: International Science and Engineering Center (ISEC); National University of Singapore (NUS); Shenzhen University

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: According to analyze damage of current aluminum electrolytic rectifier, one second order high pass filter was presented, which can complete harmonic suppression and power compensation. At the same time, principle and parameters computation method of it were given in the paper. Experiment results proved, it could reduce harmonic currents and increase power factor effectively if the according methods were used to design filter, it is obvious economic effects and good application prospects in the aluminum electrolytic enterprises. With the

current power system harmonic pollution becoming serious, its damage is given great concern by the electrical profession. The aluminum electrolytic rectifier is great harmonic source in power system, which output currents to it, and which bright large sum of extra power rate to enterprises according to current power rate metering method[1].Furthermore, it can reduce rectifier units power factor. Accordingly, it is necessary to complete harmonic suppression and reactive power compensation for power system supplying good quality electrical energy. The given company 160KA aluminum electrolytic rectifier was presented for the experiment object in our country in the paper. According to analyzing its structure and parameters, one design method of second order high pass filter was given, which could complete harmonic suppression and power compensation. After the filter was used, it not only could suppress harmonic current, but also could increase power factor to reasonable level so as to reach anticipation effects. © (2011) Trans Tech Publications.

Number of references: 4

Main heading: Electric rectifiers

Controlled terms: Aluminum - Electric power factor - Experiments - Harmonic analysis - High pass filters - Reactive power

Uncontrolled terms: Application prospect - Computation methods - Current power - Design method - Economic effect - Electrical energy - Harmonic suppression - Harmonic currents - Harmonic sources - Harmonic suppression - Output current - Parameters computation - Power compensation - Power factor - Power factors - Power rates - Power systems - Reactive power compensation - Second order high pass filter - Second orders

Classification code: 541.1 Aluminum - 703.2 Electric Filters - 706 Electric Transmission and Distribution - 714.2 Semiconductor Devices and Integrated Circuits - 901.3 Engineering Research - 921.6 Numerical Methods

DOI: 10.4028/www.scientific.net/AMR.159.258

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

866.

Accession number: 20110613642504

Title: Automatic calibration system of the temperature instrument display based on computer vision measuring

Authors: Li, Zhihong¹ ; Li, Jinze¹ ; Bao, Changchun¹ ; Hou, Guifeng¹ ; Liu, Chunxia¹ ; Cheng, Fang¹ ; Xiao, Nianxin¹

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Li, Z.

Source title: Proceedings of SPIE - The International Society for Optical Engineering

Abbreviated source title: Proc SPIE Int Soc Opt Eng

Volume: 7749

Monograph title: 2010 International Conference on Display and Photonics

Issue date: 2010

Publication year: 2010

Article number: 774908

Language: English

ISSN: 0277786X

CODEN: PSISDG

ISBN-13: 9780819482402

Document type: Conference article (CA)

Conference name: 2010 International Conference on Display and Photonics

Conference date: July 12, 2010 - July 13, 2010

Conference location: Nanjing, China

Conference code: 83628

Sponsor: International Computer Science Society; Central China Normal University; Intelligent Inf. Technol. Appl. Res. Assoc.

Publisher: SPIE, P.O. Box 10, Bellingham, WA 98227-0010, United States

Abstract: With the development of computers and the techniques of dealing with pictures and computer optical measurement, various measuring techniques are maturing gradually on the basis of optical picture processing technique and using in practice. On the bases, we make use of the many years' experience and social

needs in temperature measurement and computer vision measurement to come up with the completely automatic way of the temperature measurement meter with integration of the computer vision measuring technique. It realizes synchronization collection with theory temperature value, improves calibration efficiency. based on least square fitting principle, integrate data procession and the best optimize theory, rapidly and accurately realizes automation acquisition and calibration of temperature.

Number of references: 5

Main heading: Computer vision

Controlled terms: Calibration - Display devices - Optical data processing - Photonics - Processing - Temperature measurement

Uncontrolled terms: Automatic calibration systems - Data procession - Least-square fitting - Measuring technique - Optical measurement - Processing technique - Social needs - Temperature calibration - Temperature values - Vision measurement - Vision measuring

Classification code: 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 913.4 Manufacturing - 944.6 Temperature Measurements - 744 Lasers - 723.5 Computer Applications - 722.2 Computer Peripheral Equipment - 717 Optical Communication - 712 Electronic and Thermionic Materials - 741.3 Optical Devices and Systems

DOI: 10.1117/12.869999

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

867.

Accession number: 20124815718416

Title: On the development of low-carbon economy and construction industry

Authors: Huang, Jiefeng¹ ; Wang, He¹ ; Zhang, Mingquan¹ ; Zhang, Weimin²

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 CPI MENG Dong ENERGY GROUP CO.LTD, Neimenggu, 028000, China

Corresponding author: Huang, J. (tjxhj@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 209-211

Monograph title: Sustainable Cities Development and Environment

Issue date: 2012

Publication year: 2012

Pages: 1654-1657

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037854853

Document type: Conference article (CA)

Conference name: 2012 International Conference on Civil, Architectural and Hydraulic Engineering, ICCAHE 2012

Conference date: August 10, 2012 - August 12, 2012

Conference location: Zhangjiajie, China

Conference code: 93984

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Global warming in the key period, all countries in the corresponding measures are put forward, the resulting low carbon economy become a global trend. Low carbon economy has become the development in the world today and future development of the main melody. This paper analyzes the background of low carbon buildings, put forward the meaning of a low carbon economy, emphatically analyses the meaning of low carbon buildings and our low carbon building currently in question, compared to developed countries construction development a low carbon economy advanced experience, and explores our country construction on the future development of low carbon building method and the strategy. © (2012) Trans Tech Publications, Switzerland.

Number of references: 10

Main heading: Renewable energy resources

Controlled terms: Construction industry - Emission control - Fluid mechanics - Global warming - Shore protection - Sustainable development

Uncontrolled terms: Building methods - Construction development - Corresponding measures - Developed countries - Emission reduction - Global trends - Low carbon - Low carbon economy

Classification code: 931.1 Mechanics - 911.2 Industrial Economics - 525.1 Energy Resources and Renewable Energy Issues - 451.2 Air Pollution Control - 451 Air Pollution - 407.1 Maritime Structures - 405 Construction Equipment and Methods; Surveying

DOI: 10.4028/www.scientific.net/AMM.209-211.1654

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

868.

Accession number: 20112514075640

Title: The reliability analysis of the repairable system

Authors: Xiao, Xin¹ ; Li, Jingbo¹ ; Ma, Li²

Author affiliation:

1 Dept. of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

2 Spare-time College for Staff and Workers in Beijing, Dongcheng District, Beijing, 100020, China

Corresponding author: Xiao, X.

Source title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Abbreviated source title: Proc. - ACIS Int. Symp. Cryptography, Netw. Secur., Data Min. Knowl. Discov., E-Commer. Its Appl., Embedded Syst., CDEE

Monograph title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Issue date: 2011

Publication year: 2011

Pages: 123-125

Article number: 5759395

Language: English

ISBN-13: 9780769543321

Document type: Conference article (CA)

Conference name: 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Conference date: October 23, 2010 - October 24, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 84956

Sponsor: Int. Assoc. Comput. Inf. Sci. (ACIS)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper we consider the system of M/M/N queue with service interruptions, the rates of server breakdown are different between busy time and idle time, and there is one repairman in its system. We give out the group of equations for the steady state distribution of the number of effective servers. We obtain the steady-state probabilities of the states and the steady-state availability of the system. © 2010 IEEE.

Number of references: 7

Main heading: Reliability analysis

Controlled terms: Cryptography - Data mining - Electronic commerce - Embedded systems - Network security

Uncontrolled terms: Idle time - Repairable systems - Server breakdown - Service interruption - Steady state probabilities - Steady-state availability - Steady-state distributions

Classification code: 723 Computer Software, Data Handling and Applications - 913 Production Planning and Control; Manufacturing

DOI: 10.1109/CDEE.2010.33

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

869.

Accession number: 20110313604968

Title: Optimization design of spur gear reducer based on genetic algorithm

Authors: Zhang, Xiao-Qin^{1, 2}; Hu, Zhan-Qi¹; Lun, Cui-Fen²; Yu, Jing-Jing²

Author affiliation:

1 College of Mechanical Engineering, Yan Shan University, Qinhuangdao, China

2 College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, X.-Q.

Source title: 2010 International Conference on E-Product E-Service and E-Entertainment, ICEEE2010

Abbreviated source title: Int. Conf. E-Prod. E-Serv. E-Entertain., ICEEE

Monograph title: 2010 International Conference on E-Product E-Service and E-Entertainment, ICEEE2010

Issue date: 2010

Publication year: 2010

Article number: 5661361

Language: English

ISBN-13: 9781424471614

Document type: Conference article (CA)

Conference name: 2010 International Conference on E-Product E-Service and E-Entertainment, ICEEE2010

Conference date: November 7, 2010 - November 9, 2010

Conference location: Henan, China

Conference code: 83418

Sponsor: IEEE Consumer Electronics Society; Henan Polytechnic University; Huazhong Normal University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Gear reducer is one of the most widely used methods in mechanical transmission, optimization of which is of great significance in improving the bearing capacity, prolonging service life and reducing its size and quality. By Visual Basic programming mixed with MATLAB, automatic optimization design for gear reducer is realized in the paper, design efficiency and quality greatly improved. Genetic algorithm and genetic toolbox of MATLAB is used when calculating, with the advantages of simple programming, good reliability and high efficiency. ©2010 IEEE.

Number of references: 7

Main heading: Design

Controlled terms: Bearings (machine parts) - Genetic algorithms - Optimization - Speed reducers - Spur gears

Uncontrolled terms: Automatic optimization - Design efficiency - Gear reducers - Genetic algorithm MATLAB - High efficiency - Mechanical transmission - Optimization design - Reducer - Visual basic programming

Classification code: 408 Structural Design - 601.2 Machine Components - 602 Mechanical Drives and Transmissions - 723 Computer Software, Data Handling and Applications - 921 Mathematics - 921.5 Optimization Techniques

DOI: 10.1109/ICEEE.2010.5661361

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

870.

Accession number: 20120114656050

Title: E-business logistics development in China: Bottleneck and countermeasures

Authors: Xinbo, Zhao1 ; Qianqian, Chen2 ; Fenglian, Bian2

Author affiliation:

1 LiRen College, Yanshan University, Qinhuangdao, Hebei Province, 066004, China

2 College of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

Corresponding author: Xinbo, Z. (zhxbqhd@126.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 119

Monograph title: Future Computer, Communication, Control and Automation

Issue date: 2011

Publication year: 2011

Pages: 449-455

Language: English

ISSN: 18675662

ISBN-13: 9783642255373

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: E-commercial logistics has come to be an inevitable trend in the development of modern logistics and it has been pushing forward the development of national economy. It has shortened the trading span of commodities, sped it up and lowered the cost of trading. However, its recent development saw some problems, which has constrained the development of E-business. How to reconcile E-business and logistics is crucial and worth exploring in the new-born logistics in China. This paper began with the birth and growth of logistics to elaborate its significance in E-business and analyzed the bottlenecks in the development of E-commercial logistics with some countermeasures at last. © 2011 Springer-Verlag Berlin Heidelberg.

Number of references: 12

Main heading: Electronic commerce

Controlled terms: Logistics - Radar countermeasures - Soft computing - Software

engineering

Uncontrolled terms: bottleneck - eBusiness - Logistics development - Modern logistics
- National economy

Classification code: 716.2 Radar Systems and Equipment - 723 Computer Software, Data Handling and Applications - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing

DOI: 10.1007/978-3-642-25538-0_63

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

871.

Accession number: 20103713230312

Title: Design of a new measurement and control system of CO₂ for greenhouse based on fuzzy control

Authors: Shuying, Ma¹ ; Yuquan, Ma¹ ; Lidong, Chen¹ ; Shiguang, Liu¹

Author affiliation:

¹ College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Yuquan, M. (mayuquan2004@126.com)

Source title: CCTAE 2010 - 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering

Abbreviated source title: CCTAE - Int. Conf. Comput. Commun. Technol. Agric. Eng.

Volume: 1

Part number: 1 of 3

Monograph title: CCTAE 2010 - 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering

Issue date: 2010

Publication year: 2010

Pages: 128-131

Article number: 5543648

Language: English

ISBN-13: 9781424469451

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering, CCTAE 2010

Conference date: June 12, 2010 - June 13, 2010

Conference location: Chengdu, China

Conference code: 81623

Sponsor: Wuhan Institute of Technology; Yangzhou University; International Communication Sciences Association, (ICSA); Southwestern University of Finance and Economics; Nanchang University; et. al.

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: A greenhouse carbon dioxide concentration measurement and control system is designed based on fuzzy control with infrared carbon dioxide gas sensor, and the choice of the control structure parameters are given. According to the experience, the main points of the design of control rules are induced, and the carbon dioxide concentration fuzzy controller is constructed with relevant fuzzy logic. The modular structure is used for system hardware and software design, enhance the versatility and flexibility of the use of system. The application shows that the carbon dioxide measurement and control system achieved using fuzzy control is running stable, fast response, has broad application prospects. © 2010 IEEE.

Number of references: 6

Main heading: Fuzzy logic

Controlled terms: Agriculture - Carbon dioxide - Chemical sensors - Control systems - Design - Fuzzy control - Greenhouses - Software design

Uncontrolled terms: Broad application - Carbon dioxide concentrations - Carbon dioxide gas sensor - Control rules - Control structure - Fast response - Fuzzy controllers - Intelligent fuzzy - Measurement and control - Modular structures - System hardware

Classification code: 821.6 Farm Buildings and Other Structures - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 804.2 Inorganic Compounds - 801 Chemistry - 921 Mathematics - 731.1 Control Systems - 723.1 Computer Programming - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 408 Structural Design - 731 Automatic Control Principles and Applications

DOI: 10.1109/CCTAE.2010.5543648

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

872.

Accession number: 20122015032446

Title: Intelligent interaction system of distance education based on natural language matching

Authors: Yan, Lian-Duo¹ ; Ma, Xiu-Lan² ; Wang, Li-Ling¹

Author affiliation:

1 Department of Ideological and Political, Hebei Normal University of Science and Technology, 066004 Qinhuangdao, China

2 College of Continuing Education, Hebei Normal University of Science and Technology, 066004 Qinhuangdao, China

Corresponding author: Yan, L.-D. (lianduoyan@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 160 AISC

Issue: VOL. 2

Monograph title: Advances in Future Computer and Control Systems

Issue date: 2012

Publication year: 2012

Pages: 237-242

Language: English

ISSN: 18675662

ISBN-13: 9783642293894

Document type: Conference article (CA)

Conference name: Future Computer and Control Systems, FCCS 2012

Conference date: April 21, 2012 - April 22, 2012

Conference location: Changsha, China

Conference code: 89766

Sponsor: International Science and Education Researcher Association; VIP Information Conference Center; Beijing Gireda Research Center

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Rapid development of distance education enables intelligent interaction as an important part to utilize resources in knowledge database of distance education network and to automatically answer questions from students. It can also improve teaching efficiency and quality. Therefore, intelligent interaction system also becomes a research focus. The proposed system represents relation among words by establishing natural language thesaurus database. It returns the closest answer by computing similarity among questions. Key techniques as natural language processing, semantic analysis and fuzzy matching to implement intelligent interaction system were also presented. © 2012 Springer-Verlag GmbH.

Number of references: 5

Main heading: Natural language processing systems

Controlled terms: Computational linguistics - Control systems - Distance education - Semantics - Soil structure interactions

Uncontrolled terms: Fuzzy matching - Intelligent interactions - Key techniques - Knowledge database - Natural language processing - Natural languages - Rapid development - Semantic analysis

Classification code: 483.2 Foundations - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 723.2 Data Processing and Image Processing - 731.1 Control Systems - 901.2 Education - 903.2 Information Dissemination

DOI: 10.1007/978-3-642-29390-0_39

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

873.

Accession number: 20134616968254

Title: The control of CO₂ emissions based on hybrid swarm intelligence algorithm in green logistics

Authors: Zhaohui, Liu¹ ; Zhikun, Xu² ; Yanwen, Wang²

Author affiliation:

1 Enrollment and employment, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of Applied Environmental Sciences

Abbreviated source title: Int. J. Appl. Environ. Sci.

Volume: 8

Issue: 8

Issue date: 2013

Publication year: 2013

Pages: 1017-1026

Language: English

ISSN: 09736077

E-ISSN: 09740260

Document type: Journal article (JA)

Publisher: Research India Publications, B-2/84 Ground Floor, Rohini Sec-16,, Delhi, 110085, India

Abstract: The CO₂ emission is the main factor to influence on global warming and climate change. Through the optimization of vehicle routing, can reduce CO₂ emissions. Therefore, the Carbon emission problem

of transport vehicles is actually a transport path minimization problem. The TSP (Traveling Salesman Problem) in logistics distribution vehicle traveling route of application research is very active. Then, we establish the model of Hybrid swarm intelligence algorithm to solve the Path optimization of the vehicle. The hybrid swarm intelligence algorithm for accelerating convergence and premature stagnation phenomenon, according to genetic algorithm crossover operator, mutation operator and particle extreme value of particle swarm algorithm. Finally, this paper used an example to verify and compared with the traditional method. © Research India Publications.

Number of references: 16

Main heading: Algorithms

Controlled terms: Artificial intelligence - Carbon dioxide - Global warming - Logistics - Traveling salesman problem

Uncontrolled terms: CO2 emissions - Global warming and climate changes - Green logistics - Particle swarm algorithm - Premature stagnation phenomenon - Swarm Intelligence - Swarm intelligence algorithms - TSP

Classification code: 921.5 Optimization Techniques - 921 Mathematics - 913 Production Planning and Control; Manufacturing - 912.3 Operations Research - 912 Industrial Engineering and Management - 804.2 Inorganic Compounds - 723.4 Artificial Intelligence - 723 Computer Software, Data Handling and Applications - 451 Air Pollution

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

874.

Accession number: 20103513190954

Title: Wireless monitoring system for granary based on 1-wire

Authors: Lun, Cuifen¹ ; Ma, Jiwei¹ ; Fan, Hua¹ ; Liu, Ce¹ ; Sun, Lei¹ ; Yu, Jingjing¹

Author affiliation:

¹ College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, 066000, China

Corresponding author: Lun, C. (luncf@126.com)

Source title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Abbreviated source title: Int. Conf. Comput. Des. Appl., ICCDA

Volume: 4

Part number: 4 of 5

Monograph title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Issue date: 2010

Publication year: 2010

Pages: V4496-V4499

Article number: 5540688

Language: English

ISBN-13: 9781424471638

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Conference date: June 25, 2010 - June 27, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 81482

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT); Institute of Electrical and Electronics Engineers (IEEE); Northeastern University at Qinhuangdao (NEUQ); Dalian University of Technology; National Natural Science Foundation of China (NSFC)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: On the basis of analyzing the importance of grain temperature and humidity measurement, this paper introduces a temperature and humidity wireless monitoring system for barn based on 1-wire. The wireless monitoring and control of the terminal node by the host computer is realized through a combination of wireless and wired mode. Because there are more measuring points in the barn, 1-wire technology is used to save connection and simplifies the system. In line with the principle of saving the hardware, the system uses powerful STC micro-controller, takes micro-controller and wireless module as the core, achieving the measurement of temperature and humidity. The circuit of temperature, humidity sensor, and RF module is designed, the software of wireless communication is designed. © 2010 IEEE.

Number of references: 8

Main heading: Monitoring

Controlled terms: Atmospheric humidity - Computer applications - Grain elevators - Humidity control - Humidity sensors - Wire - Wireless telecommunication systems

Uncontrolled terms: 1-wire - Granary - Monitor - STC mcu - Wireless

Classification code: 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 732 Control Devices - 723.5 Computer Applications - 717 Optical Communication - 716 Telecommunication; Radar, Radio and Television - 643 Space Heating, Ventilation and Air Conditioning - 535.2 Metal Forming - 443.1 Atmospheric Properties - 402.1 Industrial and Agricultural Buildings - 402 Buildings and Towers

DOI: 10.1109/ICCDA.2010.5540688

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

875.

Accession number: 20115114621628

Title: The design and realization of PE course selection system based on B/S/S structure technology

Authors: Li, Wei-Dong¹ ; Wang, Yu-Kuo²

Author affiliation:

1 Department of Sports, Tianjin University of Commerce, Tianjin, China

2 Department of Physical Education, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, W.-D. (tianjinliweidong@126.com)

Source title: Proceedings - 2011 International Conference on Computational and Information Sciences, ICCIS 2011

Abbreviated source title: Proc. - Int. Conf. Comput. Inf. Sci., ICCIS

Monograph title: Proceedings - 2011 International Conference on Computational and Information Sciences, ICCIS 2011

Issue date: 2011

Publication year: 2011

Pages: 239-242

Article number: 6086179

Language: English

ISBN-13: 9780769545011

Document type: Conference article (CA)

Conference name: 2011 International Conference on Computational and Information Sciences, ICCIS 2011

Conference date: October 21, 2011 - October 23, 2011

Conference location: Chengdu, Sichuan, China

Conference code: 87714

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In order to solve the problems in college PE course selection such as the disorder, being time-consuming and hard to manage, this paper, considering the specialty characteristics of college PE course management, constructs online course selection system based on B/S/S mode by adopting ASP dynamic web pages technology combined with database technology (ODBC and ADO). The system includes three function modules: students' function module, teachers' function module and administrator's function module, and it realizes the functions such as information setting, information query, information browsing, information modification and information addition, etc.. Meanwhile, this paper also puts emphasis on the introduction of various function modules, system structure, key technology, and design of database and the realization of security mechanism of the system. After test, this system has the characteristics of convenient, fast and stable operation, and it has a strong interaction. This system basically realizes the functions such as online course selection, course selection management, and course selection query, etc., which satisfies the demands of college PE teaching informatization management. © 2011 IEEE.

Number of references: 10

Main heading: Search engines

Controlled terms: Curricula - E-learning - Information science - Teaching - Technology - Websites

Uncontrolled terms: ADO - ASP - Course management - Database technology -
Dynamic Web-pages - Function module - Information query - Information setting - Informatization
- Key technologies - Online course - Security mechanism - Selection systems - Stable operation
- Strong interaction - System structures

Classification code: 723 Computer Software, Data Handling and Applications - 901 Engineering
Profession - 901.2 Education - 903 Information Science

DOI: 10.1109/ICCIS.2011.287

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

876.

Accession number: 20132516433402

Title: Visual and artistic images denoising methods based on partial differential equation

Authors: Ye, Zhenhe¹ ; Li, Xin² ; Li, Ying²

Author affiliation:

- 1 College of Mechanical and Electrical Engineering, Agricultural University of HeBei, Baoding, 071000, China
- 2 College of Arts, Hebei Normal University of Science and Technology, Qinhuangdao, 066000, China

Source title: Journal of Multimedia

Abbreviated source title: J. Multimedia

Volume: 8

Issue: 3

Issue date: 2013

Publication year: 2013

Pages: 284-290

Language: English

ISSN: 17962048

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40,, OULU, 90571, Finland

Abstract: Partial differential equation has a remarkable effect on image denoising, compression and segmentation. Based on partial differential equations, the denoising experiment is carried out on those artistic images requiring high degree of visual reduction through the application of 3 image-denoising algorithm models including thermal diffusion equation, P-M diffusion equation and the TV diffusion equation. By this experience, the respective characteristics in image-denoising of these 3 methods can be analyzed so that a better way can be chosen in adapting to digitization of artistic images or in dealing with distant signal. © 2013 ACADEMY PUBLISHER.

Number of references: 24

Main heading: Image denoising

Controlled terms: Partial differential equations - Thermal diffusion

Uncontrolled terms: Algorithm model - Artistic images - De-noising - Denoising methods - Diffusion equations - Thermal diffusion equations - Visual reduction

Classification code: 641.2 Heat Transfer - 716.1 Information Theory and Signal Processing - 921.2 Calculus

DOI: 10.4304/jmm.8.3.284-290

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

877.

Accession number: 20111713931225

Title: Transient Reliability of machine repairable system

Authors: Lv, Shengli1 ; Yue, Dequan1 ; Li, Jingbo2

Author affiliation:

1 College of Science, Yanshan University, Qinhuangdao 066004, China

2 College of Mathematics and Information Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Lv, S. (qhdddsl@163.com)

Source title: Journal of Information and Computational Science

Abbreviated source title: J. Inf. Comput. Sci.

Volume: 7

Issue: 13

Issue date: December 2010

Publication year: 2010

Pages: 2879-2885

Language: English

ISSN: 15487741

Document type: Journal article (JA)

Publisher: Binary Information Press, P.O. Box 162, Bethel, CT 06801-0162, United States

Abstract: This paper studies the machine repairable system, The machines may be failure at any time. The service stations maintain the failure machines and may be breakdown themselves. The repair facilities repair the breakdown service stations, the repair facilities are reliable. All the time distributions are exponential. The breakdown rate of service station is variable. We obtain the transient-state Reliability of the system. The numerical example is presented. Copyright © 2010 Binary Information Press.

Number of references: 8

Main heading: Markov processes

Controlled terms: Filling stations - Reliability - Repair

Uncontrolled terms: Machine Repairable Problem - Numerical example - Repair facilities
- Repairable systems - Time distribution - Transient reliability

Classification code: 421 Strength of Building Materials; Mechanical Properties - 432 Highway
Transportation - 913.5 Maintenance - 922.1 Probability Theory

Database: Compendex

878.

Accession number: 20124515646957

Title: The study on university library information service for regional characterized economy construction based on integrated agent

Authors: Han, Shuhua¹ ; Su, Xuemei¹

Author affiliation:

1 Library of Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Han, S. (hanshuhua@cssci.info)

Source title: Advances in Intelligent Systems and Computing

Abbreviated source title: Adv. Intell. Sys. Comput.

Volume: 191 AISC

Monograph title: Proceedings of the 2012 International Conference of Modern Computer Science and Applications

Issue date: 2013

Publication year: 2013

Pages: 289-294

Language: English

ISSN: 21945357

ISBN-13: 9783642330292

Document type: Conference article (CA)

Conference name: International Conference of Modern Computer Science and Applications, MCSA 2012

Conference date: September 8, 2012 - September 8, 2012

Conference location: Wuhan, China

Conference code: 93504

Sponsor: Information Technology and Industrial Engineering Research Center

Publisher: Springer Verlag

Abstract: An Integrated Agent-Based University Information System (IABUIS) consisting of following four modules: Student Administration Management System (SAMS), Library Information System (LIS), Distance Learning System (DLS) and University Management Information System (UMIS), has been presented in this paper. An agent based testing subsystem as a part of the Distance Learning System (DLS) has been also described. It is better for regional characterized economy construction. © 2013 Springer-Verlag.

Number of references: 5

Main heading: Distance education

Controlled terms: Computer science - Dynamic light scattering - Information services - Intelligent agents - Knowledge management - Learning systems - Management information systems

Uncontrolled terms: Agent based - Agent-based testing - Library information systems - Management systems - regional characterized economy - Sams - Student administration - University libraries

Classification code: 721 Computer Circuits and Logic Elements - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 744.9 Laser Applications - 901.2 Education - 903.3 Information Retrieval and Use - 903.4 Information Services

DOI: 10.1007/978-3-642-33030-8_47

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

879.

Accession number: 20102012931411

Title: Temperature effect on magnetopolaronic vibrational frequency in an anisotropic quantum dot

Authors: Li, Zhi-Xin¹ ; Ding, Zhao-Hua² ; Xiao, Jing-Lin^{1, 2}

Author affiliation:

¹ Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Physics and Electronic Information, Inner Mongolia National University, Tongliao 028043, China

Corresponding author: Xiao, J. -L. (xiaojlin1939@126.com)

Source title: Journal of Low Temperature Physics

Abbreviated source title: J. Low Temp. Phys.

Volume: 159

Issue: 5-6

Issue date: June 2010

Publication year: 2010

Pages: 592-600

Language: English

ISSN: 00222291

E-ISSN: 15737357

CODEN: JLTPAC

Document type: Journal article (JA)

Publisher: Springer New York, 233 Springer Street, New York, NY 10013-1578, United States

Abstract: We study the temperature effects of the vibrational frequency, the ground state energy and the ground state binding energy of the strong-coupling magnetopolaron in an anisotropic quantum dot. The vibrational frequency, the ground state energy and the ground state binding energy are expressed as functions of the temperature, the cyclotron frequency of a magnetic field and the electron-phonon coupling strength by using linear combination operator and unitary transformation methods. It is found that these quantities will increase with increasing temperature and cyclotron frequency of a magnetic field. The vibrational frequency and the ground state binding energy are increasing functions of the electron-phonon coupling strength, whereas the ground state energy is an decreasing one of it. © 2010 Springer Science+Business Media, LLC.

Number of references: 24

Main heading: Binding energy

Controlled terms: Anisotropy - Complexation - Cyclotron resonance - Cyclotrons - Electron correlations - Electron-phonon interactions - Ground state - Linear transformations - Magnetic fields - Nuclear energy - Potential energy - Quantum theory - Semiconductor quantum

dots - Temperature

Uncontrolled terms: Cyclotron frequency - Electron-phonon coupling strengths - Ground-state binding - Ground-state energies - Increasing functions - Linear combination operators - Magnetopolarons - Quantum Dot - Strong-coupling - Temperature effects - Unitary transformations - Vibrational frequencies

Classification code: 933 Solid State Physics - 921.3 Mathematical Transformations - 931.1 Mechanics - 931.2 Physical Properties of Gases, Liquids and Solids - 931.3 Atomic and Molecular Physics - 931.4 Quantum Theory; Quantum Mechanics - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 932.1.1 Particle Accelerators - 932.2 Nuclear Physics - 802.2 Chemical Reactions - 621 Nuclear Reactors - 622.3 Radioactive Material Applications - 641.1 Thermodynamics - 801.4 Physical Chemistry - 701.1 Electricity: Basic Concepts and Phenomena - 708.3 Superconducting Materials - 714.2 Semiconductor Devices and Integrated Circuits - 701.2 Magnetism: Basic Concepts and Phenomena

DOI: 10.1007/s10909-010-0164-9

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

880.

Accession number: 20122115051040

Title: Design for item bank in exam system based on network

Authors: Li, Guohong¹ ; Wang, Xiaodong¹ ; Qi, Yubin² ; Li, Guofang³

Author affiliation:

- 1 College of Finance and Economics, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 College of EandA, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 College of MandE Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, G. (liwangmy@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 116 AISC

Issue: VOL. 1

Monograph title: Advanced Technology in Teaching - Proceedings of the 2009 3rd International Conference on Teaching and Computational Science, WTCS 2009

Issue date: 2012

Publication year: 2012

Pages: 633-639

Language: English

ISSN: 18675662

ISBN-13: 9783642112751

Document type: Conference article (CA)

Conference name: 2009 3rd International Conference on Teaching and Computational Science, WTCS 2009

Conference date: December 19, 2009 - December 20, 2009

Conference location: Shenzhen, China

Conference code: 89727

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The paper analyzed the item bank of the exam system from the aspects of reliability and validity of questions, database structure and database maintenance. The paper presents the following points: the validity should be emphasized; the technical indicators in the database structure should be diverse to fully reflect the knowledge points; the system should provide a more extensive database maintenance method for the convenience of the administrator to operate. © 2012 Springer-Verlag Berlin Heidelberg.

Number of references: 3

Main heading: Database systems

Controlled terms: Maintenance

Uncontrolled terms: Database maintenance - Database structures - Exam systems - Item bank - Reliability and validity - Structure design - Technical indicator

Classification code: 723.3 Database Systems - 913.5 Maintenance

DOI: 10.1007/978-3-642-11276-8_84

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

881.

Accession number: 20140317204910

Title: Noncovalent binding of xanthene and phthalocyanine dyes with graphene sheets: The effect of the molecular structure revealed by a photophysical study

Authors: Zhang, Xian-Fu^{1, 2}; Liu, Su-Ping¹; Shao, Xiao-Na¹

Author affiliation:

1 Chemistry Department, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province 066004, China

2 MPC Technologies, Hamilton, ON L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy

Abbreviated source title: Spectrochim. Acta Part A Mol. Biomol. Spectrosc.

Volume: 113

Issue date: September 2013

Publication year: 2013

Pages: 92-99

Language: English

ISSN: 13861425

CODEN: SAMCAS

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: (Chemical Equation Presented) The fluorescence and absorption properties of several xanthene and phthalocyanine dyes were measured in the presence and absence of chemically derived graphene (CDG) sheets. The interaction of pyronine Y (PYY) with graphene sheets was compared with that of rhodamine 6G (R6G) to reveal the effect of the molecular structure. Although the presence of the perpendicular benzene moiety in a R6G or phthalocyanine molecule does cause the difficulty for forming dye-CDG complex and make CDG less efficient in quenching the fluorescence intensity and shortening the fluorescence lifetime, it does not affect the band position of charge transfer absorption, suggesting that no molecular shape change occurred in a dye molecule caused by the interaction with CDG sheets. The spectroscopic and thermodynamic data indicated that the dye-CDG binding is of charge transfer nature, while the dynamic fluorescence quenching is due to photoinduced energy and electron transfer. © 2013 Elsevier B.V. All rights reserved.

Number of references: 55

Main heading: Graphene

Controlled terms: Binding energy - Charge transfer - Fluorescence - Molecular structure - Molecules - Nitrogen compounds - Quenching - Xanthenes

Uncontrolled terms: Charge-transfer absorption - Chemically derived graphene - Fluorescence intensities - Fluorescence lifetimes - Fluorescence quenching - Phthalocyanine - Phthalocyanine molecules - Rhodamine

Classification code: 804.1 Organic Compounds - 804 Chemical Products Generally - 802.2 Chemical Reactions - 931.3 Atomic and Molecular Physics - 801.4 Physical Chemistry - 741.1 Light/Optics - 537.1 Heat Treatment Processes - 761 Nanotechnology

DOI: 10.1016/j.saa.2013.04.066

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

882.

Accession number: 20114814553674

Title: On the management of the college capital construction archive

Authors: Liu, Limei1

Author affiliation:

1 Archives, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Liu, L. (liuengineering@TOM.COM)

Source title: Proceedings of SPIE - The International Society for Optical Engineering

Abbreviated source title: Proc SPIE Int Soc Opt Eng

Volume: 8205

Monograph title: 2011 International Conference on Photonics, 3D-Imaging, and Visualization

Issue date: 2011

Publication year: 2011

Article number: 820500

Language: English

ISSN: 0277786X

CODEN: PSISDG

ISBN-13: 9780819488473

Document type: Conference article (CA)

Conference name: 2011 International Conference on Photonics, 3D-Imaging, and Visualization

Conference date: October 30, 2011 - October 31, 2011

Conference location: Guangzhou, China

Conference code: 87386

Sponsor: South China Normal University; International Computer Science Society; National Natural Science Foundation of China

Publisher: SPIE, P.O. Box 10, Bellingham, WA 98227-0010, United States

Abstract: This paper discusses how to manage college capital construction archives in accordance with the archive collection & arrangement and exploitation in light of the problems in the management of college capital construction archives © 2011 Copyright Society of Photo-Optical Instrumentation Engineers (SPIE).

Number of references: 7

Main heading: Photonics

Controlled terms: Three dimensional - Visualization

Uncontrolled terms: capital construction archive - College - exploitation

Classification code: 712 Electronic and Thermionic Materials - 717 Optical Communication - 744 Lasers
- 902.1 Engineering Graphics

DOI: 10.1117/12.905934

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

883.

Accession number: 20112314045999

Title: Analysis on harmonious relations between development strategies of real estate and urbanization

Authors: Meng, De Guang¹ ; Xu, Shu Yuan¹ ; Zhu, Tian Zhi¹ ; Wang, Pengfei¹

Author affiliation:

¹ College of Urban construction, Hebei Normal University of Science and Technology, No.360, Hebei, Qinhuangdao, Hebei, 066004, China

Corresponding author: Meng, D. G. (mengdg@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 243-249

Monograph title: Advances in Civil Engineering and Architecture

Issue date: 2011

Publication year: 2011

Pages: 6410-6413

Language: English

ISSN: 10226680

ISBN-13: 9783037851258

Document type: Conference article (CA)

Conference name: 1st International Conference on Civil Engineering, Architecture and Building Materials, CEABM 2011

Conference date: June 18, 2011 - June 20, 2011

Conference location: Haikou, China

Conference code: 85055

Sponsor: Hainan University, College of Civil Engineering and Architecture; Guizhou University, College of Civil and Architecture Engineering; Hainan Society of Theoretical and Applied Mechanics

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The implementation of urbanization strategies to speed up the urbanization is not only a historical process in realizing the modernization in China but also the key to solving the present and future problems in the economic and social developments. Meanwhile, the real estate industry is developing rapidly with the quickening pace of urbanization, By studying the existing problems and strategies in the real estate industry of Qinhuangdao, this paper points out the related measures to solve the problems in the harmonious developments of the real estate industry and urbanization, which is very important in the management of real estate industry. © (2011) Trans Tech Publications.

Number of references: 5

Main heading: Problem solving

Controlled terms: Building materials - Civil engineering - Construction equipment - Industry - Strategic planning

Uncontrolled terms: Development strategies - Existing problems - Harmonious development - Historical process - Real estate - Social development - Speed-ups - Urbanization

Classification code: 913 Production Planning and Control; Manufacturing - 912.2 Management - 912 Industrial Engineering and Management - 911 Cost and Value Engineering; Industrial Economics - 415 Metals, Plastics, Wood and Other Structural Materials - 921 Mathematics - 414 Masonry Materials - 412 Concrete - 411 Bituminous Materials - 409 Civil Engineering, General - 405.1 Construction Equipment - 413 Insulating Materials

DOI: 10.4028/www.scientific.net/AMR.243-249.6410

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

884.

Accession number: 20103413185996

Title: Remote monitoring system of greenhouse environment based on LabVIEW

Authors: Li, Guofang¹ ; Chen, Lidong¹ ; Yubin, Qi² ; Liu, Shengtao¹ ; Xue, Junyu¹

Author affiliation:

1 College of M and E Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 College of E and A, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, G. (lgfqyb@yahoo.com.cn)

Source title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Abbreviated source title: Int. Conf. Comput. Des. Appl., ICCDA

Volume: 2

Part number: 2 of 5

Monograph title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Issue date: 2010

Publication year: 2010

Pages: V289-V292

Article number: 5541107

Language: English

ISBN-13: 9781424471638

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Conference date: June 25, 2010 - June 27, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 81482

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT); Institute of Electrical and Electronics Engineers (IEEE); Northeastern University at Qinhuangdao (NEUQ); Dalian University of Technology; National Natural Science Foundation of China (NSFC)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In order to solve the problem of low automaticity and poor real time in the current monitoring approaches for greenhouse, a remote environment information monitoring and distributing system for greenhouse based on ZigBee and WEB technology was developed. By applying LabVIEW virtual instrument platform, the field monitoring system can sample real-time environmental information in greenhouse with the wireless sensor networks and simultaneously transmit it to PC through RS-232 bus. The information distributing system establishes the connection between the field monitoring system and Internet and transmits the acquisitioned information to the WEB data server. The remote monitoring system is featured with satisfactory automation, intelligence and graphics. Experiment results show that the system has higher efficiency for the real-time monitoring result, and can significantly reduce the workload for greenhouse environment monitoring. The system can be used for evaluation of greenhouse environment and bring out the basis for modern greenhouse control. © 2010 IEEE.

Number of references: 9

Main heading: Monitoring

Controlled terms: Computer applications - Greenhouses - Remote control - Wireless sensor networks - World Wide Web - XML

Uncontrolled terms: Current monitoring - Environmental information - Field monitoring - Greenhouse environment - Higher efficiency - Lab VIEW - LabVIEW virtual instrument - Real time - Real time monitoring - Remote environment - Remote monitoring - Remote monitoring system - WEB application - Web data - Web technologies - Zig-Bee

Classification code: 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 731.1 Control Systems - 723 Computer Software, Data Handling and Applications - 402.1 Industrial and Agricultural Buildings - 723.5 Computer Applications

DOI: 10.1109/ICCDA.2010.5541107

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

885.

Accession number: 20142017724774

Title: Greenhouse environment parameters monitoring and control system based on master-slave combined

Authors: Ma, Yuquan¹ ; Zhang, Lihong¹ ; Lin, Hongju¹

Author affiliation:

¹ Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao 066000, China

Source title: 3rd International Symposium on Test Automation and Instrumentation, ISTAI 2010

Abbreviated source title: Int. Symp. Test Autom. Instrum., ISTAI

Monograph title: 3rd International Symposium on Test Automation and Instrumentation, ISTAI 2010

Issue date: 2010

Publication year: 2010

Pages: 125-130

Language: English

Document type: Conference article (CA)

Conference name: 3rd International Symposium on Test Automation and Instrumentation, ISTAI 2010

Conference date: May 22, 2010 - May 25, 2010

Conference location: Xiamen, China

Conference code: 105069

Sponsor: China Instrumentation and Control Society (CIS); Journal of Electronic Measurement and Instrument; Chinese Journal of Scientific Instrument; National Natural science Foundation of China; Computer Measurement Group

Publisher: International Symposium on Test Automation and, China

Abstract: According to the needs of environment parameters monitoring and control in greenhouse, a master-slave combined system of distributed monitoring and control is designed. The system consists of the master control unit and the different types of slave module. By using single chip computer STC12C5A32S2, the master control unit realizes direct monitoring and control of temperature and humidity and CO₂ concentration, makes fuzzy control operation by focusing on various greenhouse parameters, and displays all the parameters and current control state of greenhouse on LCD. The slave module has two parts: the soil moisture monitor-control module and light-intensity monitoring-control module. In this structure, the data storage amount of master microcontroller is large so that the fuzzy control expert system is easy to realize data storage, modification and system upgrade, easy to operate, can shows more information user-friendly, establishes a friendly human-computer interactive interface; and some parameters monitoring-control are focused on the master, which reduces the slave number and increases the system reliability; lastly, different types and number of slave can be chosen according to production needs to achieve partition or block control of greenhouse.

Number of references: 7

Main heading: Humidity control

Controlled terms: Carbon dioxide - Data storage equipment - Expert systems - Fuzzy control - Greenhouses - Liquid crystal displays - Soil moisture

Uncontrolled terms: Distributed monitoring - Environment parameters - Greenhouse environment - Interactive interfaces - Parameters monitoring - Single chip computers - System reliability - Temperature and humidities

Classification code: 921 Mathematics - 804.2 Inorganic Compounds - 731 Automatic Control Principles and Applications - 723.4.1 Expert Systems - 722.2 Computer Peripheral Equipment - 722.1 Data Storage, Equipment and Techniques - 483.1 Soils and Soil Mechanics - 402.1 Industrial and Agricultural Buildings - 402 Buildings and Towers

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

886.

Accession number: 20124415630939

Title: Configuration analysis and structure parameter design of six-leg agricultural robot with parallel-leg mechanisms

Authors: Rong, Yu1, 2 ; Jin, Zhenlin1 ; Cui, Bingyan3

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao 066004, China

2 College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Qinhuangdao 066004, China

3 College of Mechanical Engineering, Hebei United University, Tangshan 063009, China

Corresponding author: Rong, Y. (lixiangcg@126.com)

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 28

Issue: 15

Issue date: August 1, 2012

Publication year: 2012

Pages: 9-14

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Agricultural Exhibition Road South, Beijing, 100026, China

Abstract: To apply the six-legged robot in the field of agriculture, the parallel mechanism was used in the mechanical leg of the six-legged robot. The six-legged walking robot could be used for transportation, cultivation, harvesting of agricultural fields in the mountains, woodlands, hills. The configuration of the six-legged robot was analyzed, and the 2-UPS+UP parallel manipulator was selected as the initial configuration of the mechanical leg. The rotational decoupled optimization of 2-UPS+UP parallel manipulator was done with screw theory, a rotational decoupled UPR+UPS+UP parallel manipulator was proposed. Based on configuration analysis, kinematics position equations were formulated. Kinematics model of the parallel manipulator was discussed as a key. The inverse position analysis and velocity mapping equations were presented. The workspace of UPR+UPS+UP parallel manipulator was analyzed. Three-dimensional graphic of workspace was drawn. By analyzing the impact of the design parameters on the work space, a set of structural parameters with good performance were selected. These studies laid the theoretical foundation for further study of the six-legged agricultural robot.

Number of references: 26

Main heading: Cultivation

Controlled terms: Agriculture - Kinematics - Machine design - Manipulators - Mechanisms - Robots

Uncontrolled terms: Agricultural fields - Agricultural robot - Configuration analysis - Design parameters - Initial configuration - Kinematics models - Leg mechanism - Parallel manipulators - Parallel mechanisms - Position analysis - Position equations - Screw theory - Six-legged robots - Six-legged walking - Structural parameter - Structure parameter - Theoretical foundations - Velocity mapping - Workspace

Classification code: 601 Mechanical Design - 601.3 Mechanisms - 731.5 Robotics - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 821.3 Agricultural Methods - 931.1 Mechanics

DOI: 10.3969/j.issn.1002-6819.2012.15.002

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

887.

Accession number: 20121714971672

Title: The research on physical education teaching in sino-foreign cooperation in running schools

Authors: Ma, Baoling¹ ; Wang, Xiangdong² ; Li, Qiang³

Author affiliation:

- 1 EandA College, Hebei Normal University of Science Technology, Qinhuangdao, Hebei, China
- 2 College of Physical Education, Hebei Normal University of Science Technology, Qinhuangdao, Hebei, China
- 3 Hebei Vocational College of Foreign Languages, Qinhuangdao, Hebei, China

Corresponding author: Ma, B. (mabaoling528@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 135

Monograph title: Knowledge Discovery and Data Mining

Issue date: 2012

Publication year: 2012

Pages: 539-546

Language: English

ISSN: 18675662

ISBN-13: 9783642277078

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: College Physical Education is an important part of the whole higher education. In order to optimize Sino-foreign Cooperation in Running Schools PE curriculum setting and Reform College PE teaching in Sino-foreign Cooperation in Running Schools. The paper studies PE documentation, teaching practice, teaching subjects, teaching-led teaching environment of Sino-foreign cooperative education institutions in china by literature review, questionnaire and interview. The result shows that Teaching the basic integrity of the document, standard, but does not reflect the characteristics of Sino-foreign cooperation in running schools sports; Education was the main motivation for diversification trend sports, sports a soft spot for foreign; Teaching-led structure has its own characteristics, but the school is not conducive to sustainable development; Barely meet the physical education field devices to work with students on the sports needs were quite different. And analysis of this study, presented by "international" training as the goal of foreign cooperation in running schools sports development ideas, to Chinese and foreign cooperation in running schools provide physical education to carry out the work of reference. © 2012 Springer-Verlag GmbH Berlin Heidelberg.

Number of references: 7

Main heading: Societies and institutions

Controlled terms: Curricula - SportS

Uncontrolled terms: Cooperative education - Future development - Higher education - Literature reviews - Physical education - Physical education teachings - Sino-foreign co-operational - Teaching practices

Classification code: 901.1.1 Societies and Institutions - 901.2 Education

DOI: 10.1007/978-3-642-27708-5_74

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

888.

Accession number: 20103413182768

Title: Calculation of the filter parameters for the aluminum electrolyzation rectifier

Authors: Ma, Yuquan1 ; Zhang, Lihong1 ; Han, Shufen1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuanggao, Hebei, 066004, China

Corresponding author: Ma, Y. (mayuquan2004@126.com)

Source title: 2010 International Conference on Intelligent Computation Technology and Automation, ICICTA 2010

Abbreviated source title: Int. Conf. Intelligent Comput. Technol. Autom., ICICTA

Volume: 1

Part number: 1 of 3

Monograph title: 2010 International Conference on Intelligent Computation Technology and Automation, ICICTA 2010

Issue date: 2010

Publication year: 2010

Pages: 906-910

Article number: 5522763

Language: English

ISBN-13: 9780769540771

Document type: Conference article (CA)

Conference name: 2010 International Conference on Intelligent Computation Technology and Automation, ICICTA 2010

Conference date: May 11, 2010 - May 12, 2010

Conference location: Changsha, China

Conference code: 81471

Sponsor: IEEE Intelligent Computation Society; Res. Assoc. Intelligent Comput. Technol. Autom.; Hunan University; Changsha University of Science and Technology; Hunan University of Science and Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper, the rectifier transformer third winding to install high-pass filter have been studied, and the calculating method of the high-pass filter parameters have been put forward. The power factor and the filter parameter of three series rectifier unit in a company are calculated, then it's discovered that the practical operating parameter tallies with theoretical result and the practical power factor fits with the theory in one of the series of filters, and this attain the system requisition, so then demonstrates the parameter calculation method in this paper is correct. It is suggested that the capacitance capacity of the high-pass filter of the third winding in aluminum electrolyzation rectifier unit should be calculated according to meeting to the displacement factor compensation requisition, that is, cut-off frequency: 3th harmonic, resonance frequency: 7th harmonic, quality factor: 5 or so, m: 0.2 or so, resistance: $\leq 10\Omega$. The greater the filtering resistance, the stronger the harmonic impedance, which will affect the harmonic filtering effect. © 2010 IEEE.

Number of references: 6

Main heading: High pass filters

Controlled terms: Aluminum - Electric power factor - Electric rectifiers - Harmonic analysis - Resonance - Winding

Uncontrolled terms: Calculating methods - Filter - Filter parameter - Harmonic - Harmonic filtering - Harmonic impedances - Operating parameters - Parameter calculation - Power factors - Powerfactor - Quality factors - Rectification - Rectifier transformers - Resonance frequencies - Theoretical result

Classification code: 921.6 Numerical Methods - 816.1 Processing of Plastics and Other Polymers - 714.2 Semiconductor Devices and Integrated Circuits - 706 Electric Transmission and Distribution - 703.2 Electric Filters - 701 Electricity and Magnetism - 541.1 Aluminum

DOI: 10.1109/ICICTA.2010.500

Database: Compendex

889.

Accession number: 20104313331426

Title: Study on inquiry teaching mode for software courses in college

Authors: Zhang, Ming¹ ; Li, Shu-Ying² ; Yang, Chao-Zheng³

Author affiliation:

1 Department of Civil Engineering, Hebei Normal University of Science and Technology, Qinhuangdao City, China

2 Department of Education Technology, Handan College, Handan City, China

3 Department of Computer Center, Handan Polytechnic College, Handan City, China

Corresponding author: Zhang, M. (lola_zhang@sina.com)

Source title: Proceedings - 2010 International Conference on Intelligent Computing and Cognitive Informatics, ICICCI 2010

Abbreviated source title: Proc. - Int. Conf. Intelligent Comput. Cognitive Informatics, ICICCI

Monograph title: 2010 International Conference on Intelligent Computing and Cognitive Informatics, ICICCI 2010

Issue date: 2010

Publication year: 2010

Pages: 424-427

Article number: 5565942

Language: English

ISBN-13: 9780769540146

Document type: Conference article (CA)

Conference name: 2010 International Conference on Intelligent Computing and Cognitive Informatics, ICICCI 2010

Conference date: June 22, 2010 - June 23, 2010

Conference location: Kuala Lumpur, Malaysia

Conference code: 81932

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Wuhan University of Science and Tecchnology, Zhongnan Branch

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This -Inquiry teaching helps students to solve practical problems. It is meaningful to improve students' innovative thinking capacity. Based on inquiry-teaching theories, the article takes a full consideration of demands in university software course teaching. M-O-P-I-A is proposed as a five-step inquiry teaching mode. It is a teaching and learning process of "Model-Operate-Problem-Inquiry-Assessment". Details of "M-O-P-I-A" characteristics and operational procedures are illustrated in the article. Some theories are presented to support the "M-O-P-I-A" model in software course teaching. © 2010 IEEE.

Number of references: 3

Main heading: Teaching

Controlled terms: Information science - Information technology - Intelligent computing

Uncontrolled terms: Innovative thinking - Inquiry teaching - Operational procedures - Practical problems - Software course teaching - Teaching and learning - Teaching mode - Teaching modes

Classification code: 723.4 Artificial Intelligence - 901.2 Education - 903 Information Science

DOI: 10.1109/ICICCI.2010.57

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

890.

Accession number: 20104313331423

Title: The application and Research of new style the measuring and controlling system of agricultural facilities

Authors: Ma, Jiwei¹ ; Lin, Hongju¹ ; Gao, Jianli² ; Lihong, Zhang¹ ; Chen, Panfeng¹ ; Liu, Shiguang¹

Author affiliation:

1 College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology,

Qinhuangdao, China

2 College of Finance and Economics, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Ma, J. (jdxbmjw@126.com)

Source title: Proceedings - 2010 International Conference on Intelligent Computing and Cognitive Informatics, ICICCI 2010

Abbreviated source title: Proc. - Int. Conf. Intelligent Comput. Cognitive Informatics, ICICCI

Monograph title: 2010 International Conference on Intelligent Computing and Cognitive Informatics, ICICCI 2010

Issue date: 2010

Publication year: 2010

Pages: 443-446

Article number: 5565939

Language: English

ISBN-13: 9780769540146

Document type: Conference article (CA)

Conference name: 2010 International Conference on Intelligent Computing and Cognitive Informatics, ICICCI 2010

Conference date: June 22, 2010 - June 23, 2010

Conference location: Kuala Lumpur, Malaysia

Conference code: 81932

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Wuhan University of Science and Technology, Zhongnan Branch

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The hardware and software design methods of the measuring and controlling instrument in agriculture, are introduced, whose key part is C8151F005 singlechip. To increase the automation management of the agricultural facilities, the control system's structure characteristics and design method of the agricultural facilities based on the wireless communication technology are introduced, which used the single chip RF

transceiver nRF403. The control system is characterized by the hierarchical divergence and chain structure, as well as master-slave mode. The structure and operation of the measuring and controlling front-end instrument is simple. The control system does not require communication circuit, which can shorten the building period and reduce the investment of the measuring and controlling system. The hierarchical divergence and chain structure can make the system be transformed conveniently in future. The industrial personal computer (IPC) is the host computer, which can effectively realize to control and collect data against nRF403 transceiver. © 2010 IEEE.

Number of references: 5

Main heading: Intelligent computing

Controlled terms: Control theory - Information science - Personal computers - Software design - Space optics - Transceivers - Wireless telecommunication systems

Uncontrolled terms: Agricultural facilities - Automation management - Chain structure - Communication circuits - Controlling system - Design method - Hardware and software - Host computers - Industrial personal computers - Key parts - Master-slave - Measure and control - NRF403 - RF transceivers - Single chips - Single-chip - Structure characteristic - Wireless communication technology

Classification code: 741.1 Light/Optics - 731.1 Control Systems - 723 Computer Software, Data Handling and Applications - 903 Information Science - 722.4 Digital Computers and Systems - 716.3 Radio Systems and Equipment - 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication

DOI: 10.1109/ICICCI.2010.103

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

891.

Accession number: 20121314903487

Title: Model for evaluating the risk management of trade enterprise with interval intuitionistic trapezoidal fuzzy information

Authors: Liu, Xuehua1

Author affiliation:

1 School of Finance and Economics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Liu, X. (xhddd@126.com)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 4

Issue: 4

Issue date: March 2012

Publication year: 2012

Pages: 11-17

Language: English

ISSN: 19763700

E-ISSN: 22339345

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: The problem of evaluating the risk management of trade enterprise with interval intuitionistic trapezoidal fuzzy information is the multiple attribute decision making (MADM) problems. In this paper, we investigate the multiple attribute decision making (MADM) problems for evaluating the risk management of trade enterprise with interval intuitionistic trapezoidal fuzzy information. We utilize the interval intuitionistic trapezoidal fuzzy weighted geometric (IITFWG) operator to aggregate the interval intuitionistic trapezoidal fuzzy information corresponding to each alternative and get the overall value of the alternatives, then rank the alternatives and select the most desirable one(s) according to the score function and accuracy function. Finally an illustrative example has been given to show the developed approach.

Number of references: 21

Main heading: Risk management

Controlled terms: Commerce - Decision making - Industry

Uncontrolled terms: Accuracy functions - Fuzzy information - Illustrative examples - Interval intuitionistic trapezoidal fuzzy weighted geometric (IITFWG) operator - Multiple attribute decision making - Multiple attribute decision makings (MADM) - Score function

Classification code: 911 Cost and Value Engineering; Industrial Economics - 912 Industrial Engineering

and Management - 912.2 Management - 913 Production Planning and Control; Manufacturing

DOI: 10.4156/AISS.vol4.issue4.2

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

892.

Accession number: 20113814345256

Title: Analysis of Reference System development technology

Authors: Zhang, Chao1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Zhang, C. (Gao_19889@163.com)

Source title: Proceedings - PACCS 2011: 2011 3rd Pacific-Asia Conference on Circuits, Communications and System

Abbreviated source title: Proc. - PACCS: Pac.-Asia Conf. Circuits, Commun. Syst.

Monograph title: Proceedings - PACCS 2011: 2011 3rd Pacific-Asia Conference on Circuits, Communications and System

Issue date: 2011

Publication year: 2011

Article number: 5990207

Language: English

ISBN-13: 9781457708565

Document type: Conference article (CA)

Conference name: 2011 3rd Pacific-Asia Conference on Circuits, Communications and System, PACCS 2011

Conference date: July 17, 2011 - July 18, 2011

Conference location: Wuhan, China

Conference code: 86504

Sponsor: Wuhan University of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper analyzed the Reference System software development environment, the system architecture of the browser/server mode is analyzed in detail, described the object-oriented analysis method, Analyzed the main actors and use cases of reference system, described the various development environments and tools and presented different development framework according to different needs. This paper also analyzes some new technologies of reference system, mainly analysis category navigation system; introduced Chinese segmentation, quizzes indexing and search technology based on lucene; and analyzed methods and strategies of the question recommendation from the question, the reader and the consulting expert. © 2011 IEEE.

Number of references: 7

Main heading: Computer architecture

Controlled terms: Electric network analysis - Information retrieval - Navigation systems - Software design

Uncontrolled terms: Browser/server modes - Chinese segmentation - Development environment - Object-oriented analysis - Question recommendation - Reference - Reference systems - Search technology - System architectures

Classification code: 434.4 Waterway Navigation - 703.1.1 Electric Network Analysis - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications

DOI: 10.1109/PACCS.2011.5990207

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

893.

Accession number: 20123915472522

Title: A clustering approach for artifact-centric business process models

Authors: Liu, Haibin¹ ; Liu, Guohua^{1, 2} ; Zhao, Danfeng¹ ; Song, Jinling³

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao 066004, China

2 College of Computer Science and Technology, Donghua University, Shanghai 201620, China

3 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, H. (champion_lhb@163.com)

Source title: Journal of Computational Information Systems

Abbreviated source title: J. Comput. Inf. Syst.

Volume: 8

Issue: 16

Issue date: August 15, 2012

Publication year: 2012

Pages: 6601-6609

Language: English

ISSN: 15539105

Document type: Journal article (JA)

Publisher: Binary Information Press, P.O. Box 162, Bethel, CT 06801-0162, United States

Abstract: Artifact-centric business process has emerged as a representative paradigm of data-centric business process. Being similar to the traditional control-centric business process management, process clustering is also a critical procedure for process mining, process retrieval, process analysis, etc. Process similarity is a very important indicator for process clustering. According to the features of process model, this paper proposes a clustering approach for artifact-centric business process models. Firstly, process similarity is measured based on the key artifact, process structure and process behavior. Secondly, a clustering algorithm for artifact-centric business process models is presented. Lastly, experimental results have proved that the approach is accurate and effective. © 2012 Binary Information Press.

Number of references: 14

Main heading: Mathematical models

Controlled terms: Clustering algorithms - Enterprise resource management

Uncontrolled terms: Artifact - BPM - Clustering - Graph matchings - Process similarity

Classification code: 721 Computer Circuits and Logic Elements - 912.2 Management - 921 Mathematics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

894.

Accession number: 20120414713907

Title: A novel method of electrical discharge machining in gas gap state control

Authors: Lu, Zhixue¹ ; Guo, Lieen¹ ; Yan, Ying¹ ; Li, Juanjuan²

Author affiliation:

1 School of Electromechanical Engineering, Nanchang University, Nanchang, 330031, China

2 Hebei Normal University of Science and Technology, Hebei, China

Corresponding author: Lu, Z. (luzhixue868@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 430-432

Monograph title: Frontiers of Advanced Materials and Engineering Technology, FAMET 2012

Issue date: 2012

Publication year: 2012

Pages: 1886-1889

Language: English

ISSN: 10226680

ISBN-13: 9783037853399

Document type: Conference article (CA)

Conference name: 2012 International Conference on Frontiers of Advanced Materials and Engineering Technology, FAMET 2012

Conference date: January 4, 2012 - January 5, 2012

Conference location: Xiamen, China

Conference code: 88155

Sponsor: Int. Front. Sci. Technol. Res. Assoc.; HongKong Control Eng. Inf. Sci. Res. Assoc.

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: According to the characteristics of electrical discharge machining in gas, a reference voltage adjustment module was joined into the traditional reference voltage comparison gap state control system, to constitute a closed-loop gap state control system. The proposed gap state control method is expected to improve machining efficiency and machining accuracy of electrical discharge machining (EDM) in gas and improve the automaticity of electric discharge machine tool in gas. Meanwhile, it also has certain reference value for the traditional electrical discharge machining gap state control. © (2012) Trans Tech Publications.

Number of references: 6

Main heading: Electric discharges

Controlled terms: Control systems - Electric discharge machining - Engineering technology - Gases - Machine tools - Surface discharges

Uncontrolled terms: Closed-loop - Data base - Discharge gap - EDM - Electric discharge machine - Electrical discharge machining - Gap state - Gas gaps - Machining Accuracy - Machining efficiency - Reference values - Reference voltages

Classification code: 603.1 Machine Tools, General - 701.1 Electricity: Basic Concepts and Phenomena - 731.1 Control Systems - 901 Engineering Profession - 902 Engineering Graphics; Engineering Standards; Patents - 931.2 Physical Properties of Gases, Liquids and Solids

DOI: 10.4028/www.scientific.net/AMR.430-432.1886

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20104513357892

Title: Effects of reagent rotation on stereodynamics information of the reaction $O(1D)+H_2$ ($v = 0, j = 0-5$)? $OH+H$: A theoretical study

Authors: Kuang, Da1 ; Chen, Tianyun1 ; Zhang, Weiping1 ; Zhao, Ningjiu2 ; Wang, Dongjun2

Author affiliation:

1 School of Materials Science and Engineering, Dalian University of Technology, Dalian 116024, China

2 Department of Chemistry, Hebei Normal University of Sciences and Technology, Qinhuangdao 066600, China

Corresponding author: Kuang, D. (zhangwpdlut@126.com)

Source title: Bulletin of the Korean Chemical Society

Abbreviated source title: Bull. Korean Chem. Soc.

Volume: 31

Issue: 10

Issue date: October 20, 2010

Publication year: 2010

Pages: 2841-2848

Language: English

ISSN: 02532964

E-ISSN: 12295949

CODEN: BKCSDE

Document type: Journal article (JA)

Publisher: Korean Chemical Society, 635-4 Yeoksam-dong, Kangnam-Gu, Seoul, 135-703, Korea, Republic of

Abstract: Quasiclassical trajectory (QCT) method has been used to investigate stereodynamics information of the reaction $O(1D)+H_2$ $OH+H$ on the DK (Dobbyn and Knowles) potential energy surface (PES) at a collision energy of 23.06 kcal/mol, with the initial quantum state of reactant H_2 being set for $v = 0$ (vibration quantum number) and $j = 0-5$ (rotation quantum number). The PDDCSs (polarization dependent differential cross

sections) and the distributions of $P(r)$, $P(\varphi r)$, $P(r, \varphi r)$ have been presented in this work. The results demonstrate that the products are both forward and backward scattered. As j increases, the backward scattering becomes weaker while the forward scattering becomes slightly stronger. The distribution of $P(r)$ indicates that the product rotational angular momentum j tends to align along the direction perpendicular to the reagent relative velocity vector k , but this kind of product alignment is found to be rather insensitive to j . Furthermore, the distribution of $P(\varphi r)$ indicates that the rotational angular momentum vector of the OH product is preferentially oriented along the positive direction of y -axis, and such product orientation becomes stronger with increasing j .

Number of references: 48

Main heading: Forward scattering

Controlled terms: Angular distribution - Angular momentum - Polarization - Potential energy surfaces - Quantum chemistry - Trajectories - Vectors

Uncontrolled terms: Angular momentum vector - Backward scattering - Collision energies - Differential cross section - O(1D)+H₂ OH+H reaction - Product orientation - Quantum numbers - Quantum state - Quasiclassical trajectories - Quasiclassical trajectory (QCT) method - Reagent rotation - Relative velocity - Stereodynamics - Theoretical study - Vector correlation

Classification code: 933 Solid State Physics - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 931.1 Mechanics - 922.2 Mathematical Statistics - 921.1 Algebra - 801.4 Physical Chemistry - 711.1 Electromagnetic Waves in Different Media - 711 Electromagnetic Waves - 404.1 Military Engineering

DOI: 10.5012/bkcs.2010.31.10.2841

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

896.

Accession number: 20120114655847

Title: Image detection to vehicle queue length of crossroad based on DSP

Authors: Weina, Lu¹ ; Haifang, Wang¹ ; Yuquan, Ma¹ ; Lihong, Zhang¹ ; Qingzhu, Wang¹

Author affiliation:

¹ Department of Mechanics and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

Corresponding author: Qingzhu, W. (haibian016@yahoo.com.cn)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 110

Monograph title: Proceedings of the 2011 International Conference on Informatics, Cybernetics, and Computer Engineering (ICCE2011) November 19-20, 2011, Melbourne, Australia: Volume 1: Intelligent Control and Network

Issue date: 2011

Publication year: 2011

Pages: 237-243

Language: English

ISSN: 18675662

ISBN-13: 9783642251849

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: An image detection to vehicle queue length at crossroad based on DSP is presented in this paper. It describes the hardware structure and the main program of the image detection system, as well as the vehicle queue length extraction method. The system is applied to the city traffic signal control machine, and it shows the system is better than the means of using inductance coil on precision, fixing and etc. © 2011 Springer-Verlag Berlin Heidelberg.

Number of references: 10

Main heading: Queueing theory

Controlled terms: Traffic signals

Uncontrolled terms: City traffic - Extraction method - Hardware structures - Image detection - Inductance coils - Queue lengths

Classification code: 406 Highway Engineering - 922.1 Probability Theory

DOI: 10.1007/978-3-642-25185-6_32

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

897.

Accession number: 20121214875433

Title: The study of wireless measurement system for neuro-motor reaction time

Authors: Gang, Li Shu¹ ; Wu, Zhu Zhi² ; Fei, Shen¹

Author affiliation:

1 Hebei Normal University of Science and Technology, China

2 Environmental Management College of China, China

Corresponding author: Gang, L.S. (lishugang126@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 472-475

Monograph title: Advanced Manufacturing Technology

Issue date: 2012

Publication year: 2012

Pages: 2850-2853

Language: English

ISSN: 10226680

ISBN-13: 9783037853702

Document type: Conference article (CA)

Conference name: 3rd international Conference on Manufacturing Science and Engineering, ICMSE
2012

Conference date: March 27, 2012 - March 29, 2012

Conference location: Xiamen, China

Conference code: 88970

Sponsor: Fujian University of Technology; Xiamen University; Fuzhou University; Huaqiao University; University of Wollongong

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The purpose of this study was to introduce the design and realization about a measurement system, which is based by accelerometer ADXL105 and wireless data-transmission module for starting line of athlete's reaction time. This system plotted curves of players' reaction time using 89C2051 as the core of the front-end of the system reaction time measurement device, the measurement device take real-time captures players' reaction time, and then sent over the wireless data-transmission module player reaction time to the PC machine to display, and to record the reaction time. © (2012) Trans Tech Publications.

Number of references: 4

Main heading: Manufacture

Controlled terms: Accelerometers - Design - Light transmission - Measurements - Sensors

Uncontrolled terms: Measurement device - Measurement system - Single chips - Wireless data transmission - Wireless measurement system

Classification code: 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 943.1 Mechanical Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 801 Chemistry - 741.1 Light/Optics - 537.1 Heat Treatment Processes - 408 Structural Design

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

898.

Accession number: 20134116835753

Title: Research progress of quantum dot intermediate band solar cell

Authors: Ma, Shu-Ying¹ ; Shi, Lei^{1, 2} ; Chen, Li-Dong¹ ; Feng, Li-Zhen¹

Author affiliation:

- 1 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, 066600, China
- 2 Qinhuangdao Sunnyus Machinery Co. Ltd, Qinhuangdao, 066004, China

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 774-776

Monograph title: Advanced Technologies in Manufacturing, Engineering and Materials

Issue date: 2013

Publication year: 2013

Pages: 2013-2016

Language: English

ISSN: 10226680

ISBN-13: 9783037858004

Document type: Conference article (CA)

Conference name: 2013 International Forum on Mechanical and Material Engineering, IFMME 2013

Conference date: June 13, 2013 - June 14, 2013

Conference location: Guangzhou, China

Conference code: 99920

Sponsor: Korea Maritime University; Inha University; Hong Kong Industrial Technology Research Centre

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: The quantum dot intermediate band solar cell is a theoretical concept with the potential for exceeding the conversion efficiency of conventional single-gap solar cells. This paper focuses on summarizing the present status of quantum dot intermediate band solar cell. From the introduction of the concept, it hasn't been realized. Some theoretical proposals and suitable material systems have been investigated to improve the actual conversion efficiency. It seems that there is still a long but bright way to go in this field. © (2013) Trans Tech Publications, Switzerland.

Number of references: 26

Main heading: Solar cells

Controlled terms: Conversion efficiency - Semiconductor quantum dots

Uncontrolled terms: Intermediate-band solar cells - Material systems - Present status - Quantum dot

Classification code: 525.5 Energy Conversion Issues - 615.2 Solar Power - 714.2 Semiconductor Devices and Integrated Circuits

DOI: 10.4028/www.scientific.net/AMR.774-776.2013

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

899.

Accession number: 20123115296468

Title: Research on teaching evaluation system model based on trusted network

Authors: Qin, Wen1 ; Li, Hai-Ying1 ; Qin, Wu2

Author affiliation:

- 1 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 Tianjin Railway Technical and Vocational College, Tianjin 300240, China

Corresponding author: Qin, W. (qinwen003@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 148 AISC

Part number: 1 of 2

Issue: VOL. 1

Monograph title: Advances in Electronic Commerce, Web Application and Communication

Issue date: 2012

Publication year: 2012

Pages: 613-617

Language: English

ISSN: 18675662

ISBN-13: 9783642286544

Document type: Conference article (CA)

Conference name: Electronic Commerce, Web Application and Communication, ECWAC 2012

Conference date: March 17, 2012 - March 18, 2012

Conference location: Wuhan, China

Conference code: 91390

Sponsor: International Science and Education Researcher Association; VIP Information Conference Center; Beijing Gireda Research Center

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Teaching evaluation is an important part in school teaching activities, which has good promoting action on improving teaching method and accelerates teaching level. In the viewpoint of trusted network, a novel evaluation model on teaching system was proposed. The model gives computation method of student credibility and integrates credibility into students-centered teaching evaluation. It also takes full account far-reaching and progressive characters of teaching, which not only making school students participate in the evaluation, but also allow graduate students to evaluate. © 2012 Springer-Verlag GmbH.

Number of references: 4

Main heading: Students

Controlled terms: Communication - Electronic commerce - World Wide Web

Uncontrolled terms: Computation methods - credibility - Evaluation models - Graduate students - School students - Teaching evaluation - Teaching methods - Teaching systems - Trusted network

Classification code: 716 Telecommunication; Radar, Radio and Television - 901.2 Education - 911.2 Industrial Economics

DOI: 10.1007/978-3-642-28655-1_97

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

900.

Accession number: 20105013482734

Title: Teaching reform of rural vocational education based on modern educational technology

Authors: Ning, Yonghong¹ ; Han, Qingshan² ; Zhang, Shuai³ ; Jie, Song² ; Pei, Caiyan⁴

Author affiliation:

- 1 Research Institute of Vocational Education, HNUST, Qinhuangdao, China
- 2 College of Foreign Languages, HNUST, Qinhuangdao, China
- 3 Personnel Department, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 4 College of Mathematics and Information, HNUST, Qinhuangdao, China

Corresponding author: Ning, Y. (ningyongh@126.com)

Source title: ICEIT 2010 - 2010 International Conference on Educational and Information Technology, Proceedings

Abbreviated source title: ICEIT - Int. Conf. Educ. Inf. Technol., Proc.

Volume: 3

Part number: 3 of 3

Monograph title: ICEIT 2010 - 2010 International Conference on Educational and Information Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: V3435-V3438

Article number: 5608334

Language: English

ISBN-13: 9781424480340

Document type: Conference article (CA)

Conference name: 2010 International Conference on Educational and Information Technology, ICEIT 2010

Conference date: September 17, 2010 - September 19, 2010

Conference location: Chongqing, China

Conference code: 82726

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In the new developing era, rural vocational education is confronted with the wild demands for vocational education from different service groups, such as rural workers, incoming labor force and migrant workers. Their enthusiasm for learning, however, is harmed because of their short learning time, backward learning methods and low income. The cultivation of talents for rural areas will be accelerated if modern educational technology based on computer technique, multimedia applications and telecommunication networks finds its way in the rural vocational education, which will surely satisfy the social demands for skilled talents so as to promote the rural social and economic development. © 2010 IEEE.

Number of references: 9

Main heading: Teaching

Controlled terms: Apprentices - Information technology - Learning systems - Rural areas
- Telecommunication networks

Uncontrolled terms: Computer techniques - Different services - Economic development - Educational models - Educational technology - Labor force - Learning methods - Learning time - Migrant workers - Multimedia applications - Teaching reforms - Training of rural surplus labors - Vocational education

Classification code: 903 Information Science - 901.2 Education - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 912.4 Personnel - 731.5 Robotics - 717 Optical Communication - 716 Telecommunication; Radar, Radio and Television - 718 Telephone Systems and Related Technologies; Line Communications

DOI: 10.1109/ICEIT.2010.5608334

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

901.

Accession number: 20135117100769

Title: An empirical study on coal consumption, GDP and SO2 pollution relationship in China

Authors: Wang, Yanwen1 ; Liu, Zhaohui2 ; Xu, Zhikun1

Author affiliation:

- 1 College of Finance, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China
- 2 Pupillary workroom Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Source title: International Journal of Applied Environmental Sciences

Abbreviated source title: Int. J. Appl. Environ. Sci.

Volume: 8

Issue: 13

Issue date: 2013

Publication year: 2013

Pages: 1607-1615

Language: English

ISSN: 09736077

E-ISSN: 09740260

Document type: Journal article (JA)

Publisher: Research India Publications, B-2/84 Ground Floor, Rohini Sec-16,, Delhi, 110085, India

Abstract: The Chinese economy has been developing rapidly in recent decades, which accompanied by energy consumption and environmental deterioration. Coal as a primary energy plays an important role in the

development of China, but substantial use of coal will cause series environmental problems, one of which is the acid gas emissions. This study based on the provincial panel data between 1995-2007 of China, using panel unit root test, panel co-integration test, Granger causality test and the error correction model for empirical analysis. The results show that there exists co-integration relationship between GDP, coal consumption and emission of sulfur dioxide of China. The relationship between emission of sulfur dioxide and per capita GDP fits the curve of the quadratic logarithmic perfectly, and also fits the down-up U curve, which means the relationship between sulfur dioxide emissions and per capita GDP confirms the EKC hypothesis. © Research India Publications.

Number of references: 9

Main heading: Sulfur dioxide

Controlled terms: Coal - Curve fitting - Energy utilization - Error correction - Gas emissions - Sulfur

Uncontrolled terms: Acid gas emissions - Cointegration - Environmental deterioration - Environmental pollutions - Environmental problems - Error correction models - Panel date - Sulfur dioxide emissions

Classification code: 921.6 Numerical Methods - 804.2 Inorganic Compounds - 804 Chemical Products Generally - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 525.3 Energy Utilization - 524 Solid Fuels - 451.1 Air Pollution Sources

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

902.

Accession number: 20120114657923

Title: Model for evaluating the competitive power of service trade with intuitionistic fuzzy information

Authors: Liu, Xuehua1

Author affiliation:

1 School of Finance and Economics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Liu, X. (lxhddd@126.com)

Source title: International Journal of Advancements in Computing Technology

Abbreviated source title: Intl. J. Adv. Comput. Technolog.

Volume: 3

Issue: 11

Issue date: December 2011

Publication year: 2011

Pages: 252-258

Language: English

ISSN: 20058039

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: In this paper, we investigate the multiple attribute decision making (MADM) problems for for evaluating the competitive power of service trade with intuitionistic fuzzy information. A modified project method is proposed. Then, based on the traditional project method, calculation steps for evaluating the competitive power of service trade with known weight information are given. The project values between every alternative and positive ideal solution and negative ideal solution are calculated. Then, according to the concept of the project method, a relative closeness degree is defined to determine the ranking order of all alternatives. Finally, an illustrative example about risk investment is given to verify the developed approach and to demonstrate its practicality and effectiveness.

Number of references: 24

Main heading: Commerce

Controlled terms: Decision making - Fuzzy sets

Uncontrolled terms: Closeness degree - Competitive power - Ideal solutions - Illustrative examples - Intuitionistic fuzzy - Multiple Attribute Decision Making - Multiple attributes - Project method - Risk investment - Weight information

Classification code: 911.2 Industrial Economics - 912.2 Management - 921 Mathematics

DOI: 10.4156/ijact.vol3.issue11.32

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

903.

Accession number: 20124615672214

Title: Parallel performance of MPI based parallel FDTD on NUMA architecture workstation

Authors: Guo, Xiaomei1 ; Zhao, Wei2 ; Zhang, Lihong1 ; Yu, Wenhua3

Author affiliation:

1 School of Information Engineering, Communication University of China, Beijing 100024, China

2 School of maths and Information Engineering, Hebei Normal University of Science and Technology, Hebei, 066000, China

3 Electromagnetic Communication Laboratory, Pennsylvania State University, University Park, PA 16802, United States

Corresponding author: Guo, X. (gxmqin@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 532-533

Monograph title: Materials Science and Information Technology II

Issue date: 2012

Publication year: 2012

Pages: 1115-1119

Language: English

ISSN: 10226680

ISBN-13: 9783037854389

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Materials Science and Information Technology, MSIT 2012

Conference date: August 24, 2012 - August 26, 2012

Conference location: Xi'an, Shaan, China

Conference code: 92642

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: This paper introduces a parallel FDTD (Finite Difference Time Domain) algorithm based on MPI (Message Passing Interface) parallel environment and NUMA (Non-Uniform Memory Access) architecture workstation. The FDTD computation is carried out independently in local meshes in each process. The data are exchanged by communication between adjacent subdomains to achieve the FDTD parallel method. The results show the consistency between serial and parallel algorithms, and the computing efficiency is improved effectively. © (2012) Trans Tech Publications, Switzerland.

Number of references: 7

Main heading: Information technology

Controlled terms: Finite difference time domain method - Materials science - Memory architecture - Parallel algorithms - Parallel architectures

Uncontrolled terms: Computing efficiency - FDTD (finite-difference time-domain) - Message passing interface - MPI - Non uniform memory access - NUMA - Parallel environment - Parallel method - Parallel performance - Sub-domains

Classification code: 722 Computer Systems and Equipment - 903 Information Science - 921 Mathematics - 951 Materials Science

DOI: 10.4028/www.scientific.net/AMR.532-533.1115

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

904.

Accession number: 20130615997661

Title: Application of text mining based on neural network computing

Authors: Zhou, Guohong1

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei, Qinhuangdao, 066004, China

Corresponding author: Zhou, G. (hbzhouguohong@yeah.net)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 278-280

Monograph title: Advances in Mechatronics and Control Engineering

Issue date: 2013

Publication year: 2013

Pages: 1972-1975

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037855959

Document type: Conference article (CA)

Conference name: 2012 International Conference on Mechatronics and Control Engineering, ICMCE 2012

Conference date: November 29, 2012 - November 30, 2012

Conference location: Guangzhou, China

Conference code: 95258

Sponsor: Queensland University of Technology, Australia; Korea Maritime University; Hong Kong Industrial Technology Research Centre; Inha University, Korea

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Today, numbers of documents that firms must process and with the extensive amounts of information available on the Internet, an automated intelligent method is needed to sort through all available documents or sites. It would be beneficial to start with grouping similar documents or sites together based on similarities. Classifying documents and sorting them into categories could be beneficial since in most cases, no

one user would be interested in all the different categories of documents at the same time. Classifying a large number of documents would also make it easier to locate a specific document. In this paper, neural network computing based text mining (TM) and its application will be discussed. © (2013) Trans Tech Publications, Switzerland.

Number of references: 8

Main heading: Data mining

Controlled terms: Neural networks

Uncontrolled terms: Computing - Intelligent method - Network computing - Text mining

Classification code: 723.3 Database Systems - 723.4 Artificial Intelligence

DOI: 10.4028/www.scientific.net/AMM.278-280.1972

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

905.

Accession number: 20112013982709

Title: The model of reliability for a repairable system

Authors: Xiao, Xin1 ; Li, Jing-Bo1 ; Ma, Li2

Author affiliation:

1 Dept. of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao ,066004, China

2 Spare-time College for Staff and Workers in Beijing Dongcheng District, Beijing, 100020, China

Corresponding author: Xiao, X. (xiaoxin-qhd@163.com)

Source title: Key Engineering Materials

Abbreviated source title: Key Eng Mat

Volume: 474-476

Monograph title: Advanced Materials and Computer Science

Issue date: 2011

Publication year: 2011

Pages: 1715-1719

Language: English

ISSN: 10139826

CODEN: KEMAEY

ISBN-13: 9783037850978

Document type: Conference article (CA)

Conference name: 2011 International Conference on Advanced Materials and Computer Science, ICAMCS 2011

Conference date: May 1, 2011 - May 2, 2011

Conference location: Chengdu, China

Conference code: 84811

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Southern Illinois University Carbondale; National University of Singapore

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: In this paper we consider the system of M/M/N queue with service interruptions, the rates of server breakdown are different between busy time and idle time, and there is one repairman in the system. We give out the group of equations for the steady state distribution of the number of effective servers. We obtain the steady-state probabilities of the states and the steady-state availability of the system. This document. © (2011) Trans Tech Publications.

Number of references: 7

Main heading: Servers

Controlled terms: Computer science

Uncontrolled terms: Idle time - Repairable systems - Server breakdown - Steady state probabilities - Steady-state availability - Steady-state distributions

Classification code: 721 Computer Circuits and Logic Elements - 722 Computer Systems and

Equipment - 723 Computer Software, Data Handling and Applications

DOI: 10.4028/www.scientific.net/KEM.474-476.1715

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

906.

Accession number: 20110313595315

Title: Electromagnetic field in the chaotic motion of thin plate

Authors: Liu, Lijing¹ ; Wang, Zhiren² ; Lv, Jinfeng¹

Author affiliation:

1 College of Mathematics and Information Science, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 College of Science Yanshan University, Qinhuangdao, Hebei, 066004, China

Corresponding author: Liu, L. (liulijing888@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 163-167

Monograph title: Advances in Structures

Issue date: 2011

Publication year: 2011

Pages: 3114-3117

Language: English

ISSN: 10226680

ISBN-13: 9780878492060

Document type: Conference article (CA)

Conference name: 2011 International Conference on Structures and Building Materials, ICSBM 2011

Conference date: January 7, 2011 - January 9, 2011

Conference location: Guangzhou, China

Conference code: 83464

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Based on the vibration equation of beam plate, under mechanical loading in a uniform transverse magnetic field, the vibration equation of the conductive beam plate is reduced to two cases, which is no-perturbation system and perturbation system. For perturbation system, n-order harmonic orbit is given by means of the Melnikov method. Finally, the critical condition of chaos phenomena is given in the transformation of Smale horseshoe. © (2011) Trans Tech Publications.

Number of references: 10

Main heading: Chaotic systems

Controlled terms: Building materials - Construction equipment - Electromagnetic fields - Harmonic analysis - Magnetic fields - Plates (structural components) - Vibrations (mechanical)

Uncontrolled terms: Beam-plates - Chaos - Chaos phenomena - Chaotic motions - Critical condition - Harmonic - Mechanical loading - Melnikov method - Smale horseshoe - Thin plate - Transverse magnetic field - Vibration equations

Classification code: 961 Systems Science - 701 Electricity and Magnetism - 701.2 Magnetism: Basic Concepts and Phenomena - 921 Mathematics - 921.6 Numerical Methods - 931 Classical Physics; Quantum Theory; Relativity - 931.1 Mechanics - 415 Metals, Plastics, Wood and Other Structural Materials - 413 Insulating Materials - 412 Concrete - 411 Bituminous Materials - 408.2 Structural Members and Shapes - 405.1 Construction Equipment - 414 Masonry Materials

DOI: 10.4028/www.scientific.net/AMR.163-167.3114

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

907.

Accession number: 20114314454773

Title: Analysis of shear wall formwork burst in construction

Authors: Xie, Chengwei1 ; Xie, Guoren2 ; Yang, Fang3 ; He, Dan4

Author affiliation:

- 1 Environmental Management College of China, Qinhuangdao, China
- 2 Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 Hebei Normal University of Science and Technology, Physics and Chemistry College, Qinhuangdao, China
- 4 Hebei Normal University of Science and Technology, Mechanical and Electrical Engineering College, Qinhuangdao, China

Corresponding author: Xie, C. (xcw_2003@tom.com)

Source title: 2011 2nd International Conference on Mechanic Automation and Control Engineering, MACE 2011 - Proceedings

Abbreviated source title: Int. Conf. Mech. Autom. Control Eng., MACE - Proc.

Monograph title: 2011 2nd International Conference on Mechanic Automation and Control Engineering, MACE 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 7177-7180

Article number: 5988706

Language: Chinese

ISBN-13: 9781424494392

Document type: Conference article (CA)

Conference name: 2011 2nd International Conference on Mechanic Automation and Control Engineering, MACE 2011

Conference date: July 15, 2011 - July 17, 2011

Conference location: Inner Mongolia, China

Conference code: 87002

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This article analyzes the reasons for formwork burst which appeared on the shear wall of the formwork construction process, the formwork and formwork components were compared with model checking, according to current national standards and give an advice on the proposed shear wall construction process formwork. © 2011 IEEE.

Number of references: 5

Main heading: Shear flow

Controlled terms: Construction - Model checking - Shear walls - Standards

Uncontrolled terms: Cause analysis - Checking - Formwork - Formwork burst - Formwork construction - National standard - Wall construction

Classification code: 402 Buildings and Towers - 405 Construction Equipment and Methods; Surveying - 421 Strength of Building Materials; Mechanical Properties - 723.1 Computer Programming - 902.2 Codes and Standards

DOI: 10.1109/MACE.2011.5988706

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

908.

Accession number: 20103413174517

Title: First-principles study of structural stabilities, electronic and optical properties of CaF₂ under high pressure

Authors: Yang, Xiao-Cui¹ ; Zhao, Yu-Wei² ; Gao, Zhong-Ming² ; Liu, Xin² ; Zhang, Li-Xin² ; Wang, Xiao-Ming² ; Hao, Ai-Min^{2, 3}

Author affiliation:

1 Department of Physics, Baicheng Normal College, Baicheng 137000, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

3 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

Corresponding author: Hao, A.-M. (aiminhao1991@yahoo.com.cn)

Source title: Gaoya Wuli Xuebao/Chinese Journal of High Pressure Physics

Abbreviated source title: Gaoya Wuli Xuebao

Volume: 24

Issue: 3

Issue date: June 2010

Publication year: 2010

Pages: 225-230

Language: Chinese

ISSN: 10005773

CODEN: GWXUER

Document type: Journal article (JA)

Publisher: Chinese Journal of High Pressure Physics, P.O. Box 523-60, Chengdu, 610003, China

Abstract: An investigation on the structural stabilities and electronic properties of CaF₂ under high pressure was conducted using first-principle calculation based on density functional theory (DFT) with the plane wave basis set as implemented in the CASTEP code. Our results demonstrate that the sequence of the pressure-induced phase transition of CaF₂ is the fluorite structure (Fm3m) to the PbCl₂-type structure (Pnma), and to the Ni₂In-type phase (P63/mmc). The energy gap increases with pressure in the Fm3m and Pnma phases, then begins to decrease in the P63/mmc phase. The band gap overlap metallization does not occur up to 210 GPa. It is predicted that the metallization pressure of CaF₂ should be over 300 GPa. The pressure effect on the optical properties is discussed.

Number of references: 17

Main heading: Optical properties

Controlled terms: Density functional theory - Electronic properties - Energy gap - Metallizing - Organic polymers - Phase transitions - Pressure effects - Stability - Structural properties

Uncontrolled terms: Band gaps - First principle calculations - First-principles calculation - First-principles study - Fluorite structure - High pressure - Metallizations - Plane-wave basis set - Pressure-induced phase transition - Structural stabilities - Type structures

Classification code: 961 Systems Science - 951 Materials Science - 931 Classical Physics; Quantum

Theory; Relativity - 815.1.1 Organic Polymers - 813.1 Coating Techniques - 801.4 Physical Chemistry - 801 Chemistry - 741.1 Light/Optics - 408 Structural Design

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

909.

Accession number: 20112514075643

Title: The complete asymptotic expansion for the operators of Bleinmann-Butzer and Hahn-Durrmeyer with double parameters α, β

Authors: Yu, Cui¹ ; Xin, Xiao¹ ; Yan, Liu¹

Author affiliation:

1 Mathematics and Information Technology Institute, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Yu, C. (cuiyu2004@sina.com)

Source title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Abbreviated source title: Proc. - ACIS Int. Symp. Cryptography, Netw. Secur., Data Min. Knowl. Discov., E-Commer. Its Appl., Embedded Syst., CDEE

Monograph title: Proceedings - 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Issue date: 2011

Publication year: 2011

Pages: 114-115

Article number: 5759398

Language: English

ISBN-13: 9780769543321

Document type: Conference article (CA)

Conference name: 2010 1st ACIS International Symposium on Cryptography, and Network Security, Data Mining and Knowledge Discovery, E-Commerce and Its Applications, and Embedded Systems, CDEE 2010

Conference date: October 23, 2010 - October 24, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 84956

Sponsor: Int. Assoc. Comput. Inf. Sci. (ACIS)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Based on the relationship of the weighted BBH-D operator and the Bernstein-Durrmeyer operator with the Jacobi's right, we obtain the complete asymptotic expansion for the operators of Bleinmann-Butzer and Hahn-Durrmeyer with Double Parameters α, β . © 2010 IEEE.

Number of references: 8

Main heading: Network security

Controlled terms: Asymptotic analysis - Cryptography - Data mining - Electronic commerce - Embedded systems - Expansion

Uncontrolled terms: Asymptotic expansion - Bernstein-Durrmeyer operator - Bleimann-Butzer and Hahn operator

Classification code: 723 Computer Software, Data Handling and Applications - 921 Mathematics - 951 Materials Science

DOI: 10.1109/CDEE.2010.90

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

910.

Accession number: 20130716023986

Title: Exponential stability of delayed reaction-diffusion neural networks with Markovian jumping parameters based on state estimation

Authors: Liu, Yan1 ; Sun, Duoqing1 ; Ma, Huiquan2

Author affiliation:

1 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, Y. (ly1984715@163.com)

Source title: Chinese Control Conference, CCC

Abbreviated source title: Chinese Control Conf., CCC

Monograph title: Proceedings of the 31st Chinese Control Conference, CCC 2012

Issue date: 2012

Publication year: 2012

Pages: 3267-3272

Article number: 6390485

Language: English

ISSN: 19341768

E-ISSN: 21612927

ISBN-13: 9789881563811

Document type: Conference article (CA)

Conference name: 31st Chinese Control Conference, CCC 2012

Conference date: July 25, 2012 - July 27, 2012

Conference location: Hefei, China

Conference code: 95448

Sponsor: Technical Committee on Control Theory, CAA; Systems Engineering Society of China;

University of Science and Technology of China; Academy of Mathematics and Systems Science, CAS; China Society for Industrial and Applied Mathematics

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: This paper deals with the exponential stability problem for a class of delayed reaction-diffusion neural networks with Markovian jumping parameters. Based on the state estimation of jump parameters, a suitable stochastic Lyapunov-Krasovskii functional is employed to develop a sufficient condition for the exponential stability in terms of linear matrix inequalities (LMIs). A numerical example is provided to show the effectiveness of the proposed approach. © 2012 Chinese Assoc of Automati.

Number of references: 23

Main heading: Diffusion in liquids

Controlled terms: Linear matrix inequalities - Lyapunov functions - Neural networks - State estimation - Stochastic systems

Uncontrolled terms: Jump parameter - Linear matrix inequality (LMIs) - Lyapunov-Krasovskii functionals - Markovian jumping parameters - Numerical example - Reaction diffusion - Reaction-diffusion neural networks - Stochastic exponential stabilities - Sufficient conditions

Classification code: 723.4 Artificial Intelligence - 731.1 Control Systems - 921 Mathematics - 921.1 Algebra - 931.2 Physical Properties of Gases, Liquids and Solids

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

911.

Accession number: 20114614521178

Title: Temperature dependence of strong-coupled polaron in a triangular potential quantum dot

Authors: Li, Zhi-Xin1

Author affiliation:

1 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Li, Z.-X. (zzlxx2006@126.com)

Source title: Journal of Low Temperature Physics

Abbreviated source title: J. Low Temp. Phys.

Volume: 165

Issue: 1-2

Issue date: October 2011

Publication year: 2011

Pages: 36-42

Language: English

ISSN: 00222291

E-ISSN: 15737357

CODEN: JLTPAC

Document type: Journal article (JA)

Publisher: Springer New York, 233 Springer Street, New York, NY 10013-1578, United States

Abstract: The effect of temperature on the ground-state energy of polaron was obtained with strong electron-LO-phonon coupling by using a variational method of the Pekar type in triangular potential quantum dot (QD). The ground-state energy was expressed as functions of the confinement length of QD, the coupling strength, the polar angle and the temperature. It is found that the ground-state energy decreases with increasing the confinement length of QD and the electron-phonon coupling strength and increases with enhancing the temperature. © Springer Science+Business Media, LLC 2011.

Number of references: 20

Main heading: Quantum theory

Controlled terms: Ground state - Phonons - Polarons - Semiconductor quantum dots - Temperature

Uncontrolled terms: Coupling strengths - Effect of temperature - Electron-phonon coupling strengths - Ground-state energies - Polar angles - Temperature dependence - Temperature effect - Variational methods

Classification code: 933.1.1 Crystal Lattice - 933 Solid State Physics - 932 High Energy Physics;

Nuclear Physics; Plasma Physics - 931.4 Quantum Theory; Quantum Mechanics - 931.3 Atomic and Molecular Physics - 714.2 Semiconductor Devices and Integrated Circuits - 641.1 Thermodynamics

DOI: 10.1007/s10909-011-0389-2

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

912.

Accession number: 20103713230642

Title: Design and research of automated production line for Emulsified asphalt

Authors: Wang, Jianfeng1 ; Chen, Panfeng2 ; Li, Guofang2 ; Lun, Cuifen2 ; Liu, Shiguang2

Author affiliation:

1 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

2 College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Wang, J. (wjfqhd@126.com)

Source title: CCTAE 2010 - 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering

Abbreviated source title: CCTAE - Int. Conf. Comput. Commun. Technol. Agric. Eng.

Volume: 3

Part number: 3 of 3

Monograph title: CCTAE 2010 - 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering

Issue date: 2010

Publication year: 2010

Pages: 557-560

Article number: 5544357

Language: English

ISBN-13: 9781424469451

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer and Communication Technologies in Agriculture Engineering, CCTAE 2010

Conference date: June 12, 2010 - June 13, 2010

Conference location: Chengdu, China

Conference code: 81623

Sponsor: Wuhan Institute of Technology; Yangzhou University; International Communication Sciences Association, (ICSA); Southwestern University of Finance and Economics; Nanchang University; et. al.

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The Design method of automated production line for Emulsified asphalt is introduced. The combined control system's hardware and software structure for IPC (Industrial personal computer) - PLC (programmable logic controller) has been designed. The application of the PLC makes the control system run reliably and simplifies logic program design. The automatic control of the IPC to process can largely raise productivity and can fulfill some management task. © 2010 IEEE.

Number of references: 7

Main heading: Computer control systems

Controlled terms: Agriculture - Asphalt - Automation - Computer hardware - Control - Control theory - Controllers - Design - Emulsification - Logic programming - Personal computers

Uncontrolled terms: Automated productions - Automatic control - Combined control - Design method - Emulsified asphalt - Hardware and software - Industrial personal computers - IPC - Logic programs - Management tasks - PLC (programmable logic controller)

Classification code: 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 802.3 Chemical Operations - 732.1 Control Equipment - 732 Control Devices - 731.1 Control Systems - 731 Automatic Control Principles and Applications - 723.1 Computer Programming - 722.4 Digital Computers and Systems - 722 Computer Systems and Equipment - 411.1 Asphalt - 408 Structural Design

DOI: 10.1109/CCTAE.2010.5544357

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

913.

Accession number: 20132616450086

Title: Process-based security detection approach for virtual machines on private cloud platforms

Authors: Cao, Lijun¹ ; Liu, Xiyin¹ ; Liu, Min¹ ; Han, Kun¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qin huangdao, Hebei Province, China

Source title: Journal of Networks

Abbreviated source title: J. Netw.

Volume: 8

Issue: 6

Issue date: 2013

Publication year: 2013

Pages: 1380-1386

Language: English

ISSN: 17962056

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40,, OULU, 90571, Finland

Abstract: A process-based security detection method PAMon is proposed in this paper based on analysis of current security detection techniques for virtual machines on private cloud platforms. The modules of PAMon, including semantic reconstruction, hidden process detection, resource utilization analysis, comprehensive analysis, and so forth, are thoroughly analyzed and investigated. To validate the feasibility of PAMon, a miniaturized private cloud was configured aided by Xen and eucalyptus technology. Through experiments, it is demonstrated that the PAMon detection system can effectively address malicious programs running on the monitored virtual

machines by comprehensively analyzing the critical processes, hidden processes, and resource-seizing processes. Moreover, this detection system is more comprehensive, thorough, and reliable than existing detection techniques.
© 2013 ACADEMY PUBLISHER.

Number of references: 18

Main heading: Computer simulation

Controlled terms: Semantics

Uncontrolled terms: Cloud platforms - Detection models - PAMon - Process - Resource monitoring

Classification code: 723.5 Computer Applications - 903.2 Information Dissemination

DOI: 10.4304/jnw.8.6.1380-1386

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

914.

Accession number: 20114814572242

Title: Temperature rise and flow of Zr-based bulk metallic glasses under high shearing stress

Authors: Zhang, Weiguol, 2 ; Ma, Mingzhen1 ; Song, Aijun1, 2 ; Liang, Shunxing1 ; Hao, Qihong1 ; Tan, Chunlin1 ; Jing, Qin1 ; Liu, Riping1

Author affiliation:

1 State Key Laboratory of Meta-stable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 Physical-Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, R. (riping@ysu.edu.cn)

Source title: Science China: Physics, Mechanics and Astronomy

Abbreviated source title: SCI. CHINA Phys. Mech. Astron.

Volume: 54

Issue: 11

Issue date: November 2011

Publication year: 2011

Pages: 1972-1976

Language: English

ISSN: 16747348

Document type: Journal article (JA)

Publisher: Science in China Press, 16 Donghuangchenggen North Street, Beijing, PR 100717, China

Abstract: Deformation of the bulk metallic glasses (BMGs) and the creation and propagation of the shear bands are closely interconnected. Shearing force was loaded on Zr_{41.2}Ti_{13.8}Cu_{12.5}Ni_{10.0}Be_{22.5}(Vit.1) BMGs by cutting during the turning of the BMG rod. The temperature rise of alloy on the shear bands was calculated and the result showed that it could reach the temperature of the super-cooled liquid zone or exceed the melting point. The temperature rise caused viscous fluid flow and brought about the deformation of BMGs. This suggested that the deformation of BMGs was derived, at least to some extent, from the adiabatic shear temperature rise. © 2011 Science China Press and Springer-Verlag Berlin Heidelberg.

Number of references: 26

Main heading: Metallic glass

Controlled terms: Deformation - Flow of fluids - Glass - Shear bands - Shear flow - Shearing - Shearing machines - Zirconium

Uncontrolled terms: Adiabatic shear - Bulk metallic glass - Shearing force - Shearing stress - Supercooled liquids - temperature rise - Viscous fluid flow - Zr based bulk metallic glass

Classification code: 812.3 Glass - 604.1 Metal Cutting - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 931.1 Mechanics - 535.1 Metal Rolling - 422 Strength of Building Materials; Test Equipment and Methods - 421 Strength of Building Materials; Mechanical Properties - 531 Metallurgy and Metallography

DOI: 10.1007/s11433-011-4489-4

Database: Compendex

915.

Accession number: 20123315345716

Title: A comparative study of the tradable bottleneck permits scheme and congestion pricing policy

Authors: Fang, Yuan1 ; Wang, Pengfei2 ; Huang, Jiefeng2 ; Meng, Deguang2 ; Wang, Zhisen1

Author affiliation:

1 R and D Institute of Integrated Measurement and Control, Dalian Polytechnic University, Dalian 116034, China

2 Institute of Urban Construction, Hebei Normal University of Science and Technology Qinhuangdao, Hebei 066004, China

Corresponding author: Fang, Y. (fangy@dlpu.edu.cn)

Source title: IET Conference Publications

Abbreviated source title: IET Conf Publ

Volume: 2011

Issue: 586 CP

Monograph title: IET International Conference on Communication Technology and Application, ICCTA 2011

Issue date: 2012

Publication year: 2012

Pages: 949-953

Language: English

ISBN-13: 9781849194709

Document type: Conference article (CA)

Conference name: IET International Conference on Communication Technology and Application, ICCTA 2011

Conference date: October 14, 2011 - October 16, 2011

Conference location: Beijing, China

Conference code: 91840

Publisher: Institution of Engineering and Technology, Six Hills Way, Stevenage, SG1 2AY, United Kingdom

Abstract: In recent years, various countries traffic scholars pay attention to the tradable bottleneck permits (TBP), as a new type of traffic demand management (TDM). And it was be proved by theory, that it can eliminate vehicle queuing phenomenon completely. This paper with the network traffic congestion, vehicle queue problem for objects, compares traffic congestion pricing (CP) and new type of tradable bottleneck permits (TBP) in base idea, suit objects, charges principle and correct charge of premise. The tradable bottleneck permits facing the problems in theory and in practical application were analyzed in this paper, and its development was prospected.

Number of references: 15

Main heading: Traffic congestion

Controlled terms: Communication - Queueing theory

Uncontrolled terms: Comparative studies - Congestion pricing - Flow congestion - Network traffic - Queue problem - Queuing congestion - Tradable bottleneck permits - Traffic demand managements

Classification code: 432.4 Highway Traffic Control - 716 Telecommunication; Radar, Radio and Television - 922.1 Probability Theory

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

916.

Accession number: 20123615392691

Title: ZnO nanowire network transistors based on a self-assembly method

Authors: Dai, Zhenqing^{1, 2}; Chen, Changxin¹; Zhang, Yaozhong¹; Wei, Liangming¹; Zhang, Jing¹; Xu, Dong¹; Zhang, Yafei¹

Author affiliation:

1 Key Laboratory for Thin Film and Microfabrication of the Ministry of Education, Research Institute of Micro/Nano Science and Technology, Shanghai Jiao Tong University, Shanghai 200240, China

2 Department of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao

066004, China

Corresponding author: Dai, Z. (daizhenqing@126.com)

Source title: Journal of Semiconductors

Abbreviated source title: J. Semicond.

Volume: 33

Issue: 8

Issue date: August 2012

Publication year: 2012

Article number: 084003

Language: English

ISSN: 16744926

Document type: Journal article (JA)

Publisher: Institute of Physics Publishing, Temple Circus, Temple Way, Bristol, BS1 6BE, United Kingdom

Abstract: Dense, uniform ZnO nanowire (NW) networks are prepared by using a simple and sufficient self-assembly method. In this method, ZnO NWs are modified with aminopropyltriethoxysilane (APTES) to form positively charged amine-terminated surfaces. The modified ZnO NWs are adsorbed on negatively charged SiO₂/Si substrates to form ZnO NW networks by the electrostatic interaction in an aqueous solution. Field-effect transistors (FETs) are fabricated and studied based on the ZnO NW networks. For a typical device with an NW density of 2.8 μm^{-2} , it exhibits a current on/off ratio of 2.4×10^5 , a transconductance of 336 nS, and a field-effect mobility of 27.4 $\text{cm}^2/(\text{V}\cdot\text{s})$. © 2012 Chinese Institute of Electronics.

Number of references: 30

Main heading: Zinc oxide

Controlled terms: Field effect transistors - Nanowires - Self assembly - Silicon compounds

Uncontrolled terms: Aminopropyltriethoxysilane - Field-effect mobilities - On/off ratio - Positively charged - Self-assembly method - ZnO - ZnO nanowires - ZnO NWs

Classification code: 714.2 Semiconductor Devices and Integrated Circuits - 761 Nanotechnology - 804.2 Inorganic Compounds - 933 Solid State Physics

Numerical data indexing: Electrical_Conductance 3.36e-07S

DOI: 10.1088/1674-4926/33/8/084003

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

917.

Accession number: 20121314906004

Title: Genetic polymorphisms of the second intron of GH genes in Chinese donkeys

Authors: Guan, Xuemin¹ ; Liu, Yanfang¹ ; Shu, Yongmei¹ ; Zhu, Wenjin¹

Author affiliation:

1 Department of Life Science, Hebei Normal University of Science and Technology, Hebei, China

Corresponding author: Zhu, W.

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 134 AISC

Monograph title: Information Technology and Agricultural Engineering

Issue date: 2012

Publication year: 2012

Pages: 471-477

Language: English

ISSN: 18675662

ISBN-13: 9783642275364

Document type: Conference article (CA)

Conference name: 2011 International Conference on Information Technology and Agricultural Engineering, ICITAE 2011

Conference date: December 1, 2011 - December 2, 2011

Conference location: Sanya, China

Conference code: 89181

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: To reveal the genetical diversity of different donkey breeds at molecular level and provide some bases for the breed resource evaluation and utilization of donkeys in China. seven donkey breeds (Linxian, Guanzhong, Xingjiang, Cuangling, Huaibei, Dezhou, Jinnan) were used as experimental population; the genetic variations of GH genes were researched by PCR-SSCP method. The results were as follows: The polymorphic PCR-SSCP sites in the 2rd intron. Three haplotypes with the percentage of 1.7% in 174 animals were obtained. The haplotype diversity was high as 0.678 and 0.542 for the Linxian donkeys and Huaibei donkeys, and low as 0.077 for Xingjiang donkeys, with that of 0.409 and 0.462 for Cuangling donkeys and Guanzhong donkeys respectively, with that of 0.355 and 0.304 for Dezhou donkeys and Jinnan donkeys respectively. The amplified fragments of AA and BB of the fragment were cloned and sequenced. The result showed that in 214 bp BB genotype had one substitution mutation at 735 site (G→C), AA genotype had one substitution mutation at 869 site (G→T). The result above mentioned first confirmed that there are polymorphisms in intron 2 (214 bp) region of GH gene. © 2012 Springer-Verlag GmbH.

Number of references: 13

Main heading: Genes

Controlled terms: Agricultural engineering - Animals - Cloning - Information technology
- Polymerase chain reaction

Uncontrolled terms: Amplified fragments - Genetic polymorphisms - Genetic variation - genetics diversity - Haplotype diversity - Haplotypes - Molecular levels - PCR-SSCP - Resource evaluation

Classification code: 461.2 Biological Materials and Tissue Engineering - 801.2 Biochemistry - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 903 Information Science

Numerical data indexing: Percentage 1.70e+00%

DOI: 10.1007/978-3-642-27537-1_58

Database: Compendex

918.

Accession number: 20112814137715

Title: Fabrication of transparent conductive Al-doped ZnO thin films by aerosol-assisted chemical vapour deposition

Authors: Qin, Xiu-Juan^{1, 2}; Han, Si-Hui-Zhi¹; Zhao, Lin¹; Zuo, Hua-Tong¹; Song, Shi-Tao³

Author affiliation:

1 College of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao 066004, China

2 State Key Laboratory of Metastable Materials Science and Technology, Qinhuangdao 066004, China

3 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Qin, X.-J. (qinxj@ysu.edu.cn)

Source title: Wuji Cailiao Xuebao/Journal of Inorganic Materials

Abbreviated source title: Wuji Cailiao Xuebao

Volume: 26

Issue: 6

Issue date: June 2011

Publication year: 2011

Pages: 607-612

Language: Chinese

ISSN: 1000324X

CODEN: WCXUET

Document type: Journal article (JA)

Publisher: Science Press, 18, Shuangqing Street, Haidian, Beijing, 100085, China

Abstract: Al-doped ZnO thin films were prepared by aerosol-assisted chemical vapour deposition (AACVD) on glass substrates. The effect of Al content (2at%-8at%) on the structural, optical and electrical properties of Al-doped ZnO thin films was investigated in detail. The samples were tested by XRD, SEM, EDAX

and UV-Vis spectrophotometer. The results indicate that the AZO films have a hexagonal (wurtzite) structure without preferential orientation along c-axis, and however no Al related phases are observed. The average transmittances of the AZO film is over 72% in the visible regions. The optical band gap for the AZO films becomes narrow with the increasing Al dopant. The four-point probe technique is used to characterize thin films electrically. The data shows that Al dopant decrease the sheet resistance. The ZnO films doped with 6at% Al exhibit a minimum of sheet resistance ($18 \Omega/\square$).

Number of references: 21

Main heading: Aluminum

Controlled terms: Atmospheric aerosols - Chemical vapor deposition - Conductive films - Deposition - Doping (additives) - Electric properties - Electric resistance - Metallic films - Optical films - Sheet resistance - Substrates - Thin films - Zinc oxide - Zinc sulfide

Uncontrolled terms: Aerosol-assisted chemical vapour depositions - Al content - Al-doped ZnO - AZO films - Chemical vapour deposition - Four-point probe techniques - Glass substrates - Optical and electrical properties - Preferential orientation - Transparent conductive - Transparent conductive thin films - UV-Vis spectrophotometers - Visible region - Wurtzites - XRD - ZnO films

Classification code: 804.2 Inorganic Compounds - 802.2 Chemical Reactions - 741.3 Optical Devices and Systems - 714.2 Semiconductor Devices and Integrated Circuits - 708.2 Conducting Materials - 933 Solid State Physics - 701.1 Electricity: Basic Concepts and Phenomena - 539.3 Metal Plating - 539 Metals Corrosion and Protection; Metal Plating - 531 Metallurgy and Metallography - 423 Non Mechanical Properties and Tests of Building Materials - 541.1 Aluminum

Numerical data indexing: Percentage 7.20e+01%

DOI: 10.3724/SP.J.1077.2011.00607

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

9 19.

Accession number: 20134917058322

Title: Optimization of fermentation technological and the characteristic analysis during storage of *Begonia Fimbristipula* Hance yogurt

Authors: Cui, Ruijing1 ; Kang, Weimin1 ; Shen, Shuqi2

Author affiliation:

- 1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066600, Hebei, China
- 2 Ocean College of Hebei Agricultural University, Qinhuangdao 066003, Hebei, China

Corresponding author: Cui, R.

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 13

Issue: 9

Issue date: September 2013

Publication year: 2013

Pages: 86-93

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology, 3 Floor, Qingyuan Mansion, No. 6 Beisan Street., Fucheng Road, Haidian District, Beijing, 100048, China

Abstract: Begonia Fimbristipula Hance yogurt was made using Begonia Fimbristipula Hance juice as ingredients, optimization of fermentation technological and the quality variety during storage of Begonia Fimbristipula Hance yogurt. The results showed, joins the milk volume fraction 15% Begonia Fimbristipula Hance juice, sugar 7%, 4% of the inoculated with a 1:1 mixture of *Lactobacillus bulgaricus* and *Streptococcus thermophilus*, fermentation 5 h at 41°C, the technology is feasible. Physical index was determine, effect of Begonia Fimbristipula Hance juice on hardness, elasticity, adhesion of yoghourt, improve the viscous of yoghourt, reduce the rate of whey precipitation of yoghourt, substitute the synthetic stabilizer. Increase the stability of the product. Compared with the conventional yogurt, Begonia Fimbristipula Hance yoghurt had lower acidity and better sensory quality during 4°C. At the same time, Begonia Fimbristipula Hance yoghurt greatly increased the antioxidant of yogurt.

Number of references: 18

Main heading: Dairy products

Controlled terms: Elasticity - Fermentation - Optimization

Uncontrolled terms: Begonia Fimbristipula Hance juice - Characteristic analysis - Lactic fermentations - Lactobacillus bulgaricus - Physical indices - Sensory qualities - Streptococcus thermophilus - Yogurt

Classification code: 421 Strength of Building Materials; Mechanical Properties - 422 Strength of Building Materials; Test Equipment and Methods - 802.2 Chemical Reactions - 822.3 Food Products - 921.5 Optimization Techniques

Numerical data indexing: Percentage 1.50e+01%, Percentage 4.00e+00%, Percentage 7.00e+00%, Temperature 2.77e+02K, Temperature 3.14e+02K, Time 1.80e+04s

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

920.

Accession number: 20103213145868

Title: Fluorescent and triplet state photoactive J-type phthalocyanine nano assemblies: Controlled formation and photosensitizing properties

Authors: Zhang, Xian-Fu¹ ; Xi, Qian¹ ; Zhao, Jing¹

Author affiliation:

¹ Chemistry Department, Hebei Normal University of Science and Technology, Qinghuangdao Hebei Province 066004, China

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Materials Chemistry

Abbreviated source title: J. Mater. Chem.

Volume: 20

Issue: 32

Issue date: August 28, 2010

Publication year: 2010

Pages: 6726-6733

Language: English

ISSN: 09599428

E-ISSN: 13645501

CODEN: JMACEP

Document type: Journal article (JA)

Publisher: Royal Society of Chemistry, Milton Road, Cambridge, CB4 0WF, United Kingdom

Abstract: Cofacial J type nano aggregates, which are both fluorescent and triplet state photoactive, were formed in chloroform via multiple O \rightarrow Zn $^{2+}$ coordination bonds between molecules of ZnPc(α -OPh) 4, i.e. tetra(α -phenoxy) zinc phthalocyanine. Non photoactive H aggregates, on the other hand, were observed in DMF-water mixtures. The formation, structure and bonding of the J aggregates were examined by TEM, electronic absorption and fluorescence methods. Photophysical studies revealed that the J-aggregates have narrowed absorption and emission bands with peak wavelengths at 740 and 751 nm, which are 50 nm and 43 nm red shifted from the values of the monomers, respectively. The fluorescence decay of the J aggregates is monoexponential with a long lifetime of 2.41 ns, in contrast to J aggregates of other dyes that usually exhibit much shorter, while widely distributed, lifetimes in the ps scale due to the loosely formed structures. The J aggregates emit fluorescence with an efficiency as high as 50% of its monomer. The laser flash photolysis study revealed that both the triplet state and anion species were generated upon photo excitation. The triplet state was formed in a quantum yield of 0.20 and its lifetime is 11 μ s, which makes it sufficiently effective to transfer triplet energy and produce singlet oxygen with a yield of 0.23. The J aggregates represent a new category of nano assemblies that have the potential to be utilized in a variety of optoelectronic devices and photodynamic therapy of tumors. © 2010 The Royal Society of Chemistry.

Number of references: 25

Main heading: Aggregates

Controlled terms: Absorption - Fluorescence - Laser excitation - Monomers - Nitrogen compounds - Optoelectronic devices - Oxygen - Photodynamic therapy - Photolysis - Quantum theory - Zinc - Zinc compounds

Uncontrolled terms: Anion species - Coordination bonds - Electronic absorption - Emission bands - Fluorescence decays - Fluorescence method - H-aggregates - J aggregates - Laser flash photolysis - Long lifetime - Nano aggregates - Nano-assemblies - Peak wavelength - Photo-excitations - Photophysical studies - Red-shifted - Singlet oxygen - TEM - Triplet energy - Triplet state - Water mixture - Zinc phthalocyanines

Classification code: 931.4 Quantum Theory; Quantum Mechanics - 801.4 Physical Chemistry - 802.2 Chemical Reactions - 802.3 Chemical Operations - 804 Chemical Products Generally - 804.1 Organic Compounds - 804.2 Inorganic Compounds - 815.1 Polymeric Materials - 931.2 Physical Properties of Gases, Liquids and

Solids - 744.9 Laser Applications - 406 Highway Engineering - 412.2 Concrete Reinforcements - 461.6 Medicine and Pharmacology - 741.3 Optical Devices and Systems - 546.3 Zinc and Alloys - 717.2 Optical Communication Equipment - 741.1 Light/Optics - 714.2 Semiconductor Devices and Integrated Circuits

Numerical data indexing: Percentage 5.00e+01%, Size 4.30e-08m, Size 5.00e-08m, Size 7.51e-07m, Time 1.10e-05s, Time 2.41e-09s

DOI: 10.1039/c0jm00695e

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

921.

Accession number: 20130615996693

Title: Preparation and photocatalytic properties of TiO₂ microspheres

Authors: Song, Shi-Tao¹ ; Wu, Su-Xia¹ ; Peng, You-Shun¹ ; Zheng, Xue-Fang¹ ; Lian, Qi¹

Author affiliation:

¹ School of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Wu, S.-X.

Source title: Gongneng Cailiao/Journal of Functional Materials

Abbreviated source title: Gongneng Cailiao

Volume: 43

Issue: SUPPL. 2

Issue date: November 2012

Publication year: 2012

Pages: 276-280

Language: Chinese

ISSN: 10019731

CODEN: GOCAEA

Document type: Journal article (JA)

Publisher: Journal of Functional Materials, P.O. Box 1512, Chongqing, 630700, China

Abstract: The TiO₂ microspheres were prepared by hydrolysis precipitation. The influences of the molar ratio of TBT and PEG400 on the particle size and size distribution of TiO₂ microsphere were studied. The particle size and morphology of TiO₂ microspheres were characterized by the X-ray diffraction, the scanning electron microscope and the FT-IR. The results showed that TiO₂ microspheres distributed in double-size when the additive concentration in the 0.05-0.10 mol/L range. With the increase of additive concentration, the number of small TiO₂ microspheres increased. When the additive concentration increased to 0.15-0.20 mol/L, the small TiO₂ microspheres preserved and large microspheres disappeared, and the catalytic properties were the best. The highest decolorization rate on the methyl orange solution of 20 mg/L reached to 98.29%, and it had perfect reuse effect.

Number of references: 10

Main heading: Microspheres

Controlled terms: Characterization - Hydrolysis - Particle size - Photocatalysis - Photodegradation - Scanning electron microscopy - Titanium dioxide - X ray diffraction

Uncontrolled terms: Additive concentrations - Catalytic properties - Hydrolysis precipitation - Methyl orange solution - Molar ratio - Particle size and morphologies - PEG-400 - Photo catalytic degradation - Photocatalytic property - Scanning Electron Microscope - Size and size distributions - TiO

Classification code: 951 Materials Science - 943.2 Mechanical Variables Measurements - 931.3 Atomic and Molecular Physics - 818 Rubber and Elastomers - 804.2 Inorganic Compounds - 802.2 Chemical Reactions - 741.1 Light/Optics

Numerical data indexing: Mass_Density 2.00e-02kg/m³, Molar_Concentration 1.50e+02mol/m³ to 2.00e+02mol/m³, Molar_Concentration 5.00e+01mol/m³ to 1.00e+02mol/m³, Percentage 9.83e+01%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

922.

Accession number: 20132416422108

Title: Preparation and luminescent characteristics of Sr_{1-x}B₆O₁₀:x Dy³⁺ white-emitting phosphor for white LED

Authors: Zhang, Zhi-Wei¹ ; Ren, Yan-Jun¹ ; Zhang, Wei-Guo¹ ; Yang, Qiu-Kui² ; Qi, Bo-Yu¹ ; Ren, Zhao-Guang¹

Author affiliation:

1 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

2 Metallurgical Industry Press, Beijing 100009, China

Corresponding author: Zhang, W.-G. (zhangzhiweia@sina.cn)

Source title: Faguang Xuebao/Chinese Journal of Luminescence

Abbreviated source title: Faguang Xuebao

Volume: 34

Issue: 5

Issue date: May 2013

Publication year: 2013

Pages: 590-594

Language: Chinese

ISSN: 10007032

CODEN: FAXUEW

Document type: Journal article (JA)

Publisher: Chines Academy of Sciences, Southeast Lake Heading on 16th, Chungchun City, 130033, China

Abstract: A novel white-light emission for full color emission Sr_{1-x}B₆O₁₀:x Dy³⁺ phosphor was synthesized at 900 °C in air by solid-state reaction route. The crystal structure and photoluminescence proerties were characterized by XRD and fluorescence spectra, respectively. The results show that the incorporation of Dy³⁺ ions do not change the single-phase structure of SrB₆O₁₀. The PL spectra show the excitation peaks range from 300 to 400 nm is due to the 4f-4f transitions of Dy³⁺. This mercury-free excitation is useful for solid state lighting and light-emitting diodes (LEDs). The emission of Dy³⁺ ions upon 349 nm excitation is observed at 484 nm (blue) due to the 4F_{9/2}→6H_{15/2} transitions, 579 nm (yellow) due to 4F_{9/2}→6H_{13/2} transitions, respectively. The emission intensity of the 4F_{9/2}→6H_{15/2} transition under 349 nm excitation related to Dy³⁺

doping concentration (x value), which increases rapidly with the increase of Dy³⁺ concentration, and reaches a maximum value at 4%, then decreases with increasing Dy³⁺ ions due to the concentration quenching. For Sr_{1-x}B₆O₁₀:xDy³⁺ phosphor, the three-dimensional network of BO₄ tetrahedra acts as a shield. It can isolate the Dy ions from each other, and resist the concentration quenching. By simulation of white light, the CIE chromaticity coordinates for Sr_{1-x}B₆O₁₀:xDy³⁺ phosphors located in the bluish-white region. All the results imply that the Sr_{1-x}B₆O₁₀:xDy³⁺ phosphors could be potentially used as white LEDs.

Number of references: 19

Main heading: Light emitting diodes

Controlled terms: Ions - Light emission - Phosphors - Quenching - Solid state reactions

Uncontrolled terms: Concentration quenching - Doping concentration - Fluorescence spectra - Luminescent characteristics - Single-phase structure - Solid state lighting - Three-dimensional networks - White-LEDs

Classification code: 537.1 Heat Treatment Processes - 741.1 Light/Optics - 801 Chemistry - 802.2 Chemical Reactions

Numerical data indexing: Percentage 4.00e+00%, Size 3.00e-07m to 4.00e-07m, Size 3.49e-07m, Size 4.84e-07m, Size 5.79e-07m, Temperature 1.17e+03K

DOI: 10.3788/fgxb20133405.0590

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

923.

Accession number: 20125215828838

Title: A new hybrid heating system for solar cell module laminator

Authors: Shi, Lei¹ ; Chen, Li-Dong¹ ; Zhang, Liang¹ ; Ma, Shuying¹

Author affiliation:

¹ College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, 066600, China

Corresponding author: Shi, L. (xnshilei@126.com)

Source title: Proceedings of the 2nd International Conference on Electronic and Mechanical

Engineering and Information Technology, EMEIT 2012

Abbreviated source title: Proc. Int. Conf. Electron. Mech. Eng. Inf. Technol., EMEIT

Monograph title: Proceedings of the 2nd International Conference on Electronic and Mechanical Engineering and Information Technology, EMEIT 2012

Issue date: 2012

Publication year: 2012

Pages: 1605-1609

Language: English

ISBN-13: 9789078677604

Document type: Conference article (CA)

Conference name: 2012 2nd International Conference on Electronic and Mechanical Engineering and Information Technology, EMEIT 2012

Conference date: September 26, 2012 - September 28, 2012

Conference location: Shenyang, Liaoning, China

Conference code: 94434

Publisher: Atlantis Press, 29 avenue Laumiere, Paris, 75019, France

Abstract: Solar cell module laminator is important equipment in the production of solar cell, which can press several layers of the glass, EVA plastic, semiconductor wafer and etc together. The heating temperature of laminator is the key parameter to guarantee the quality of solar modules. To improve the heating control precision and decrease the temperature heterogeneity of the table surface, a kind of hybrid temperature-control heating system of solar cell module laminator is introduced. The system consists of the oil-electron hybrid heater, the oil temperature automatic measurement and control system, the temperature setting and display system and other components. The principle of the system is to heat the work table by the electric heater and uses the oil as a heat conduction medium for the temperature compensation, which can make the heating uniformity control precision reach 1.2 °C. © the authors.

Number of references: 7

Main heading: Solar cells

Controlled terms: Display devices - Heating equipment - Information technology - Mechanical engineering

Uncontrolled terms: Automatic measurements - Display system - Electric heater - Heating control - Heating system - Heating temperatures - Heating uniformity - Key parameters - Laminator - Oil temperature - Semi-conductor wafer - Solar cell module - Solar module - Table surface - Temperature compensation - Temperature setting

Classification code: 608 Mechanical Engineering, General - 615.2 Solar Power - 642.2 Industrial Furnaces and Components - 722.2 Computer Peripheral Equipment - 903 Information Science

Numerical data indexing: Temperature 2.74e+02K

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

924.

Accession number: 20123715429978

Title: The application of RFID-based on IOT in logistics management

Authors: Zhang, Dacheng¹ ; Liu, Yu¹ ; Han, Kun² ; Liu, Aiyong² ; Liu, Lijing²

Author affiliation:

1 Dean's Office, Hebei Vocational and Technical College of Building Materials, Qinhuangdao, Hebei Province, China

2 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Zhang, D. (qhdzdc@126.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 162 AISC

Monograph title: Software Engineering and Knowledge Engineering: Theory and Practice - Selected Papers from 2012 Int. Conference on Software Engineering, Knowledge Engineering and Information Engineering, SEKEIE 2012

Issue date: 2012

Publication year: 2012

Pages: 711-718

Language: English

ISSN: 18675662

ISBN-13: 9783642294549

Document type: Conference article (CA)

Conference name: 2012 International Conference on Software Engineering, Knowledge Engineering and Information Engineering, SEKEIE 2012

Conference date: April 1, 2012 - April 2, 2012

Conference location: China

Conference code: 92498

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Internet of Things is an object link to object internet established by using computers and technologies such as RFID, wireless data communication based on internet. RFID technology has been widely used in industry, commerce, transportation and many other fields. The paper demonstrated the advantage of Internet of Things supported and based on RFID technology and projected the facilitating function to logistics development through Internet of Things technology improvement. © 2012 Springer-Verlag GmbH.

Number of references: 3

Main heading: Software engineering

Controlled terms: Internet - Knowledge engineering - Logistics

Uncontrolled terms: Internet of Things (IOT) - Logistics development - Logistics management - RFID Technology - Technology improvement - Wireless data communication

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723 Computer Software, Data Handling and Applications - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing

DOI: 10.1007/978-3-642-29455-6_97

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

925.

Accession number: 20132416420926

Title: Modeling and its error analysis for load-sensing steering system

Authors: Wang, Hai Fang^{1, 3}; Ren, Xiao Guang²; Rong, Yu³

Author affiliation:

1 College of Control Engineering, Northeastern University at Qinhuangdao, Qinhuangdao, China

2 E and A College Hebei Normal University Science and Technology, Qinhuangdao, China

3 College of Mechanical and Electronic Engineering Hebei Normal University Science and Technology, Changli, China

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 694 697

Monograph title: Manufacturing Process and Equipment

Issue date: 2013

Publication year: 2013

Pages: 678-682

Language: English

ISSN: 10226680

ISBN-13: 9783037856932

Document type: Conference article (CA)

Conference name: 4th International Conference on Manufacturing Science and Engineering, ICMSE 2013

Conference date: March 30, 2013 - March 31, 2013

Conference location: Dalian, China

Conference code: 97229

Publisher: Trans Tech Publications Ltd, Kreuzstrasse 10, Zurich-Durnten, CH-8635, Switzerland

Abstract: Load-sensing hydraulic steering system is universally used in wheeled machinery for good steering regulation performance and obviously saving energy effect. The load-sensing hydraulic steering system is present, and it is considered to be a mechanical and hydraulic position control system. The flow continuity equation and force balance equation of steering system is established, the transfer function of load-sensing hydraulic steering system is obtained, the system steady-state error caused by the typical input signal and load input signal on the basis of transfer function. The main parameters affecting the steady-state error are got, and it provides theoretical support for designing and improvement of load-sensing hydraulic steering system. © (2013) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Hydraulic machinery

Controlled terms: Error analysis - Hydraulic equipment - Models - Sensors - Steering - Transfer functions

Uncontrolled terms: Flow continuity equations - Force balance equation - Hydraulic position control - Hydraulic system - Load sensing systems - Main parameters - Steady state errors - Steering systems

Classification code: 632.2 Hydraulic Equipment and Machinery - 663.2 Heavy Duty Motor Vehicle Components - 801 Chemistry - 902.1 Engineering Graphics - 921 Mathematics - 921.6 Numerical Methods

DOI: 10.4028/www.scientific.net/AMR.694-697.678

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

926.

Accession number: 20104213314600

Title: Influence of polaron effects on the ground state of weak-coupling exciton in semiconductor quantum dots

Authors: Eerdunchaolu1 ; Wuyunqimuge2 ; Xin, Wei1

Author affiliation:

- 1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao 028043, China

Corresponding author: Eerdunchaolu (eerdunchaolu@sohu.com)

Source title: Optoelectronics Letters

Abbreviated source title: Optoelectron. Lett.

Volume: 6

Issue: 4

Issue date: 2010

Publication year: 2010

Pages: 317-320

Language: English

ISSN: 16731905

Document type: Journal article (JA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The influence of polaron effects on the effective potential of weak-coupling exciton in semiconductor quantum dots (QDs) is studied based on the Lee-Low-Pines-Huybrechts variational method. The results show that the effective potential of the exciton consists of three parts: coulomb potential, induced potential and confining potential. Numerical calculations for the GaAs quantum dot, as an example, are performed. The result indicates that the effective potential of the exciton increases with the electron-hole distance. It is found that the polaron effects have remarkable influence on the states of the exciton: helpful to the stability of the light-hole exciton, but unfavorable to the stability of the heavy-hole exciton. © 2010 Tianjin University of Technology and Springer-Verlag Berlin Heidelberg.

Number of references: 12

Main heading: Semiconductor quantum dots

Controlled terms: Electric fields - Excitons - Optical waveguides - Polarons - Quantum confinement

Uncontrolled terms: Coulomb potential - Effective potentials - Electron hole - GaAs -

Light hole exciton - Numerical calculation - Polaron effects - Quantum Dot - Variational methods
- Weak couplings

Classification code: 701.1 Electricity: Basic Concepts and Phenomena - 714.2 Semiconductor Devices and Integrated Circuits - 714.3 Waveguides - 931.3 Atomic and Molecular Physics - 933 Solid State Physics - 933.1.1 Crystal Lattice

DOI: 10.1007/s11801-010-0021-8

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

927.

Accession number: 20112914166347

Title: Modeling of stator based on VRM(virtual reality machining) in toroidal planet gear driving

Authors: Liu, Chunxia¹ ; Li, Ping² ; Li, Xin³

Author affiliation:

1 College of Mechanics and Electronics, Hebei Normal University of Science and Technology, Education Department, Changli, China

2 Hebei Vocational College of Foreign Languages, Qinhuangdao, China

3 Miao Guo Iron Mine of Hebei Iron and Steel Group Mining Company, Zushan Country, Qinglong 066501, China

Corresponding author: Liu, C. (Liuchunxia1974@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 268-270

Monograph title: Computational Materials Science, CMS 2011

Issue date: 2011

Publication year: 2011

Pages: 568-573

Language: English

ISSN: 10226680

ISBN-13: 9783037851555

Document type: Conference article (CA)

Conference name: 2011 International Conference on Computational Materials Science, CMS 2011

Conference date: April 17, 2011 - April 18, 2011

Conference location: Guangzhou, China

Conference code: 85578

Sponsor: Shanghai Jiaotong University; The University of Adelaide

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The paper will introduce the processing principle of the stator (the major parts of the toroidal planet gear driving). Then taking pro/e as tool, establishing the full - scale process modeling of the stator by the new method - VRM. © (2011) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: Stators

Controlled terms: Machining - Materials science - Virtual reality

Uncontrolled terms: Process Modeling - VRM (virtual reality machining) method

Classification code: 604.2 Machining Operations - 705.1 Electric Machinery, General - 723 Computer Software, Data Handling and Applications - 951 Materials Science

DOI: 10.4028/www.scientific.net/AMR.268-270.568

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20112514084746

Title: Quasiclassical trajectory study on the integral cross-section and stereodynamics information of the reaction $O(1D) + H_2 (v = 0, j = 0) \rightarrow OH + H$

Authors: Chen, Tianyun¹ ; Zhao, Ningjiu^{1, 2} ; Zhang, Weiping¹ ; Wang, Dongjun² ; Wang, Xinqiang³

Author affiliation:

1 School of Materials Science and Engineering, Dalian University of Technology, Dalian 116024, China

2 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

3 College of Physics, Chongqing University, Chongqing 400044, China

Corresponding author: Zhang, W. (zhangwp@dlut.edu.cn)

Source title: Journal of Chemical Sciences

Abbreviated source title: J. Chem. Sci.

Volume: 123

Issue: 3

Issue date: May 2011

Publication year: 2011

Pages: 291-298

Language: English

ISSN: 09743626

Document type: Journal article (JA)

Publisher: Indian Academy of Sciences, C.V. Raman Avenue, P.O. Box 8005, Bangalore, 560 080, India

Abstract: Integral cross-section and stereodynamics study of the reaction $O(1D) + H_2 (v = 0, j = 0) \rightarrow OH + H$ is undertaken using the quasiclassical trajectory (QCT) method for the collision energy is in the large length of 1.3 to 43 kcal/mol using Dobbyn and Knowles (DK) surface, and the obtained results are compared with those available from earlier available calculated results on the BR surface. The integral cross sections obtained from the quasiclassical trajectory method are in good agreement with those of Chebyshev wave packet method for collision energies above 0.2 eV. We also investigated the vector correlations and polarized dependent differential cross sections (PDDCS) at different collision energies. It is demonstrated that the alignment and state distribution significantly decrease with increase in the collision energy. © Indian Academy of Sciences.

Number of references: 52

Main heading: Trajectories

Uncontrolled terms: Chebyshev - Collision energies - Differential cross section - Integral cross-sections - Quasiclassical trajectories - Quasiclassical trajectory method - State distributions - Stereodynamics - Vector correlation - Vector correlations - Wave-packet method

Classification code: 404.1 Military Engineering

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

929.

Accession number: 20114714533660

Title: Application of systematical engineering theory in study style construction

Authors: Sun, Hua¹ ; Zhao, Yanjun²

Author affiliation:

1 Hebei Normal University of Science and Technology, College of Education, Hebei Qin Huangdao, 066004, China

2 Party Committee Office and Principal Office, Hebei Normal University of Science and Technology, China

Corresponding author: Sun, H. (sunhuasunhua@hotmail.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 121-126

Monograph title: Frontiers of Manufacturing and Design Science II

Issue date: 2012

Publication year: 2012

Pages: 2557-2560

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037852828

Document type: Conference article (CA)

Conference name: 2nd International Conference on Frontiers of Manufacturing and Design Science, ICFMD 2011

Conference date: December 11, 2011 - December 13, 2011

Conference location: Taichung, Taiwan

Conference code: 87362

Sponsor: Control Eng. Inf. Sci. Res. Assoc. (CEIS); Int. Front. Sci. Technol. Res. Assoc.; National Chin-Yi University of Technology; Integrated Research Center for Green Living Techniques; Trans Tech Publications

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The basic principles of systematical thinking with an eye to its application take optimization as the primary objective. Based on the principle of integrity of the system as the most significant and essential feature, study style construction is considered to be system engineering. And in connection with the principle of relevance for the system, study style construction is characterized by and reflected in the whole process of education instead of a kind of temporary, periodic and partial work. All aspects of work are involved in colleges and universities, which are in need of active coordination, participation and support of all parts. Therefore, total study style construction should be advocated. According to the principle of hierarchy for the system, we also need to attach importance to the personality development of students while emphasizing comprehensive quality of all-round development.

Number of references: 7

Main heading: Manufacture

Controlled terms: Applications - Mechanics

Uncontrolled terms: Basic principles - Comprehensive qualities - Personality development
- Primary objective - Principle of integrity - Systematical thinking - Whole process

Classification code: 451.2 Air Pollution Control - 537.1 Heat Treatment Processes - 931.1 Mechanics

DOI: 10.4028/www.scientific.net/AMM.121-126.2557

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

930.

Accession number: 20104113287281

Title: First-principles investigations on electronic, elastic and optical properties of XC (X=Si, Ge, and Sn) under high pressure

Authors: Hao, Aimin^{1, 2}; Yang, Xiaocui³; Wang, Xiaoming²; Zhu, Yan²; Liu, Xin²; Liu, Riping¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

3 Department of Physics, Baicheng Normal College, Baicheng 137000, China

Corresponding author: Hao, A. (riping@ysu.edu.cn)

Source title: Journal of Applied Physics

Abbreviated source title: J Appl Phys

Volume: 108

Issue: 6

Issue date: September 15, 2010

Publication year: 2010

Article number: 063531

Language: English

ISSN: 00218979

CODEN: JAPIAU

Document type: Journal article (JA)

Publisher: American Institute of Physics, 2 Huntington Quadrangle, Suite N101, Melville, NY 11747-4502, United States

Abstract: An investigation on electronic, elastic, and optical properties of XC (X=Si, Ge, and Sn) under high pressure has been conducted using first-principles calculations based on density functional theory with the plane wave basis set as implemented in the CASTEP code. Our results demonstrate that the sequence of the pressure-induced structure transition of these compounds is from zincblende-type (B3) to NaCl-type (B1) structure. The calculated lattice constants and transition pressures are reported, which are in good agreement with the available experimental results and the previous theoretical data. The elastic constants and anisotropy as a function of pressure are presented. These results suggest technological applications of such materials in extreme environments. Debye temperatures of B3-SnC and B1-SnC are determined for the first time. © 2010 American Institute of Physics.

Number of references: 27

Main heading: Optical properties

Controlled terms: Debye temperature - Density functional theory - Ecology - Germanium
- Lattice constants - Sodium chloride - Tin

Uncontrolled terms: Extreme environment - First-principles calculation - First-principles investigations - Function of pressure - High pressure - Plane-wave basis set - Pressure-induced structures - Technological applications - Transition pressure - Zinc-blende

Classification code: 933.1.1 Crystal Lattice - 804.2 Inorganic Compounds - 804 Chemical Products Generally - 933.3 Electronic Structure of Solids - 741.1 Light/Optics - 546.2 Tin and Alloys - 454.3 Ecology and Ecosystems - 641.1 Thermodynamics

DOI: 10.1063/1.3478717

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

931.

Accession number: 20133616704575

Title: The research about concrete aggregate size affecting the concrete compression failure with the numerical simulation

Authors: Meng, Deliang¹ ; Li, Huijian¹ ; Zhang, Lixin² ; Cheng, Pin¹

Author affiliation:

1 Department of Engineering Mechanics Yanshan University, No. 438, Hebei Avenue, Qinhuangdao 066004, China

2 College of Urban Construction Hebei Normal University of Science and Technology, No. 360, West Hebei Street, Qinhuangdao 066004, China

Source title: ICIC Express Letters, Part B: Applications

Abbreviated source title: ICIC Express Lett Part B Appl.

Volume: 4

Issue: 4

Issue date: 2013

Publication year: 2013

Pages: 839-845

Language: English

ISSN: 21852766

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office, Tokai University, Kumamoto Campus, 9-1-1, Toroku, Kumamoto, 862-8652, Japan

Abstract: Concrete is the most widely used engineering material. Concrete materials were treated as a single-phase material instead of composite material in most of the studies in the past. However, this simplification is not helpful to research the broken process and broken mechanism of concrete. Many scholars at home and abroad have used the numerical simulation methods to research concrete failure. And they also have achieved remarkable results. However, there is almost nothing achievements in concrete aggregate size affecting meso-scale destruction. In this paper, we used the method of the numerical simulation to analyse how the different concrete aggregate sizes influence the strain field evolution trend when concrete was compressed. We have got the impact of the law that the sizes of aggregate affect the degree of localization of the concrete. This will provide great guiding significance to the engineering practice. © 2013 ISSN 2185-2766.

Number of references: 11

Main heading: Concretes

Controlled terms: Aggregates - Computer simulation - Numerical models - Research

Uncontrolled terms: Aggregate size - Compression failure - Degree of localization - Evolution trend - Mesoscale - Strain fields

Classification code: 406 Highway Engineering - 412 Concrete - 723.5 Computer Applications - 901.3 Engineering Research - 921 Mathematics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

932.

Accession number: 20112314028647

Title: The finite element analysis of rolling cone enveloping hourglass worm gearing based on PRO/ENGINEER

Authors: Liu, Chunxia¹ ; Li, Ping² ; Guo, Xiumei¹

Author affiliation:

1 College of Mechanics and Electronics, Hebei Normal University of Science and Technology, Changli, Hebei, 066000, China

2 Education Department, Hebei Vocational College of Foreign Languages, Qinhuangdao, Hebei, 066311, China

Corresponding author: Liu, C. (liuchunxia1974@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 230-232

Monograph title: Frontiers of Manufacturing Science and Measuring Technology

Issue date: 2011

Publication year: 2011

Pages: 554-558

Language: English

ISSN: 10226680

ISBN-13: 9783037851333

Document type: Conference article (CA)

Conference name: 2011 International Conference on Frontiers of Manufacturing Science and Measuring Technology, ICFMM 2011

Conference date: June 23, 2011 - June 24, 2011

Conference location: Chongqing, China

Conference code: 85006

Sponsor: Control Engineering and Information Science Research Association; Int. Front. Sci. Technol. Res. Assoc.; Trans Tech Publications; Chongqing Xueya Conferences Catering Co., Ltd

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: This paper is to analyse rolling cone worm drive model by the way of the finite element on sub-module Pro / MECHANIC of Pro / ENGINEER software and to get the stress distribution contour when the structure is on the static load., then to sum up the stress distribution. © 2011 Trans Tech Publications, Switzerland.

Number of references: 5

Main heading: Worm gears

Controlled terms: Computer crime - Finite element method - Machinery - Manufacture - Stress concentration - Wheels

Uncontrolled terms: Finite Element - Finite element analysis - Pro/Engineer - Rolling cone enveloping hourglass worm gearing - Static loads - Stress distribution - Worm drive - Worm gearing

Classification code: 921.6 Numerical Methods - 723 Computer Software, Data Handling and Applications - 601.2 Machine Components - 601 Mechanical Design - 537.1 Heat Treatment Processes - 422 Strength of Building Materials; Test Equipment and Methods - 421 Strength of Building Materials; Mechanical Properties

DOI: 10.4028/www.scientific.net/AMR.230-232.554

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20123615399577

Title: The application of modern information technology in university daily management

Authors: He, Dan1 ; Xie, ChengWei2 ; Yang, Fang3

Author affiliation:

1 Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

2 Environmental Management College of China, Qinhuangdao, Hebei, China

3 Physics and Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: He, D.

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 163 AISC

Monograph title: Advanced Technology in Teaching - Selected Papers from the 2012 International Conference on Teaching and Computational Science, ICTCS 2012

Issue date: 2012

Publication year: 2012

Pages: 385-388

Language: English

ISSN: 18675662

ISBN-13: 9783642294570

Document type: Conference article (CA)

Conference name: 2012 International Conference on Teaching and Computational Science, ICTCS 2012

Conference date: April 1, 2012 - April 2, 2012

Conference location: China

Conference code: 92330

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: University daily management is a very important subject, the daily management throughout the life of each student every day,if we don't manage the students's daily management, it will undoubtedly affect the normal teaching and other activities. With the rise of information technology in the daily management of our colleges and universities, the application of modern information technology will save us a lot of unnecessary red tape links,so that we can establish an effective communication mechanism with students and class teacher directly,and it plays a catalytic role. © 2012 Springer-Verlag GmbH.

Number of references: 3

Main heading: Information technology

Controlled terms: Management

Uncontrolled terms: Catalytic role - Colleges and universities - communicate - Effective communication - Modern information technologies - Red tape

Classification code: 903 Information Science - 912.2 Management

DOI: 10.1007/978-3-642-29458-7_56

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

934.

Accession number: 20110313602503

Title: A study on college English writing instructions for non-English majors

Authors: Haiying, Cui1 ; Qingshan, Han1 ; Jiangying, Liu2

Author affiliation:

- 1 College of Foreign Languages, Hebei Normal University of Science and Technology, Qin Huangdao, China
- 2 Department of Foreign Languages, Hunan Agricultural University, Changsha, Hunan Province, China

Corresponding author: Haiying, C. (wyx_chy@126.com)

Source title: ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings

Abbreviated source title: ICEMT - Int. Conf. Educ. Manage. Technol., Proc.

Monograph title: ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 544-548

Article number: 5657597

Language: English

ISBN-13: 9781424486175

Document type: Conference article (CA)

Conference name: 2010 International Conference on Education and Management Technology, ICEMT 2010

Conference date: November 2, 2010 - November 4, 2010

Conference location: Cairo, Egypt

Conference code: 83348

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The present study tries to explore some effective approaches to college English writing instructions for non-English majors in China. Based on quantitative analysis of students' needs and current teaching and learning situations of college English writing in China, the author comes up with six suggested approaches, namely, integrating writing with reading and speaking to enhance students' comprehensive competence; conducting group discussion and group error correction to create student-centered class mode and improve learner autonomy; providing hyper-syntactic analysis and sample essay to improve students' logical thinking and writing techniques. A questionnaire was conducted in order to analyze students' needs in college English writing class to provide foundation for this research. © 2010 IEEE.

Number of references: 10

Main heading: Students

Controlled terms: Syntactics - Teaching

Uncontrolled terms: Class modes - College English writing - Group discussions - Hyper-syntactic analysis - Learner autonomy - Logical thinking - Needs analysis - Quantitative analysis - Student-centered - Syntactic analysis - Teaching and learning - Writing instruction

Classification code: 901.2 Education - 903.2 Information Dissemination

DOI: 10.1109/ICEMT.2010.5657597

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

935.

Accession number: 20140417226359

Title: Research on three dimensional animation production combined with virtual reality technology

Authors: Cao, Jing¹ ; Xing, Xuefeng² ; Zeng, Xiaoning¹

Author affiliation:

- 1 Hebei Normal University of Science and Technology, 066004, Qinhuangdao, China
- 2 Northeast Petroleum University at Qinhuangdao, 066004, Qinhuangdao, China

Corresponding author: Cao, J.

Source title: Information Technology Journal

Abbreviated source title: Inf. Technol. J.

Volume: 12

Issue: 14

Issue date: 2013

Publication year: 2013

Pages: 2913-2920

Language: English

ISSN: 18125638

E-ISSN: 18125646

Document type: Journal article (JA)

Publisher: Asian Network for Scientific Information, 308-Lasani Town, Sargodha Road, Faisalabad, Pakistan

Abstract: The research investigates and researches the three-dimensional animation production combined with virtual reality technology, in order to provide a reference and help for the underlying business. Traditional three-dimensional animation technique mainly dues to the role of animation production and special post-production effects, etc. and as the three-dimensional animation gradually entering into the vision of the crowd in these years, its application is increasingly widespread in the world. In order to break through the bottleneck of traditional three-dimensional animation' backward, the relevant personnel has made some achievements in constant exploration and research, especially in three-dimensional animation production combined with virtual reality technology. The research will discuss the following aspects: the overview of virtual reality and three-dimensional animation production, the current status of the three-dimensional animation production, three-dimensional animation production and virtual reality technologies, as well as the application of the combination technology in the animation practice. Through research, It is the truth that using imaging technology, three-dimensional computer graphics technology-CG (Computer Graphics) and the motion capture system can achieve higher quality and efficiency of three-dimensional animation production and the effect is very significant, so it should be widely applied. © 2013 Asian Network for Scientific Information.

Number of references: 10

Main heading: Technology

Controlled terms: Animation - Imaging techniques - Research - Three dimensional computer graphics - Virtual reality

Uncontrolled terms: Combination technology - Current status - Imaging technology - ITS applications - Motion capture - Motion capture system - Three-dimensional animations - Virtual reality technology

Classification code: 723 Computer Software, Data Handling and Applications - 741 Light, Optics and Optical Devices - 746 Imaging Techniques - 901 Engineering Profession - 901.3 Engineering Research

DOI: 10.3923/itj.2013.2913.2920

Database: Compendex

936.

Accession number: 20134116834706

Title: Task scheduling algorithm in grid environment based on duplication and insertion

Authors: Cao, Lijun1 ; Liu, Xiyin1, 2, 3 ; Hans-Georg, Torkel1, 2, 3 ; Zhang, Zhongping1, 2, 3

Author affiliation:

1 Hebei Normal University of Science and Technology, China

2 Vocational College of Technology and computer science (BTI), Hammfelddamm 2, 41460 Neuss, Germany

3 College of Information Science and Engineering, Yanshan University, China

Source title: Journal of Software

Abbreviated source title: J. Softw.

Volume: 8

Issue: 10

Issue date: 2013

Publication year: 2013

Pages: 2447-2454

Language: English

ISSN: 1796217X

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40,, OULU, 90571, Finland

Abstract: Grid resource scheduling theory involving basic theoretical knowledge for grid scheduling was discussed in this paper. Then an intensive study of the scheduling strategy was made. According to the heterogeneous characteristic of grid environment, an improved algorithm DIBS for task scheduling were proposed. In this algorithm, the entire scheduling process was divided into three steps: layering, task priority, and task replication. In the layering stage, according to the characteristics of the DAG, the simultaneous distribution strategy for the multiple DAG images was adopted. In the task priority stage, an improved decision path strategy was proposed. In the replication stage, the previous key path nodes were replaced by the best precursor replication nodes. The effectiveness of this algorithm was verified by Gantt chart. In this paper, the relevant scheduling algorithm simulation was successfully realized by using the basic framework and functions provided by SimGrid and combining with the proposed scheduling algorithm. The availability, validity and stability of the DIBS

scheduling algorithm were verified by comparison and analysis of simulation results. © 2013 ACADEMY PUBLISHER.

Number of references: 19

Main heading: Scheduling

Controlled terms: Grid computing - Multitasking - Scheduling algorithms

Uncontrolled terms: Comparison and analysis - DIBS - Distribution strategies - Grid resource scheduling - Heterogeneous characteristic - Simgrid - Task-scheduling - Task-scheduling algorithms

Classification code: 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 912.2 Management - 921 Mathematics

DOI: 10.4304/jsw.8.10.2447-2454

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

937.

Accession number: 20113814352497

Title: Design and implementation of video-on-demand system for elementary and secondary schools

Authors: Li, Chunyan1 ; Cui, Haitao2

Author affiliation:

- 1 College of Education, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Educational Technology Department, Qinhuangdao No.1 Senior School, Qinhuangdao, China

Corresponding author: Li, C. (licy6035@126.com)

Source title: 2011 International Conference on Multimedia Technology, ICMT 2011

Abbreviated source title: Int. Conf. Multimedia Technol., ICMT

Monograph title: 2011 International Conference on Multimedia Technology, ICMT 2011

Issue date: 2011

Publication year: 2011

Pages: 4891-4893

Article number: 6001868

Language: English

ISBN-13: 9781612847740

Document type: Conference article (CA)

Conference name: 2nd International Conference on Multimedia Technology, ICMT 2011

Conference date: July 26, 2011 - July 28, 2011

Conference location: Hangzhou, China

Conference code: 86512

Sponsor: University of Louisville; Ningbo University; Zhejiang Sci-Tech University; Communication University of China; Georgia State University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The courseware, which is merely made up of texts, pictures, links, etc, can not meet the requirements of learners. The teaching video is becoming more and more popular. Videoon- demand system for elementary and secondary schools contains much teaching videos, it allow learners to choose what to learn freely, control learning process. From the paper, you can learn what the video-on-demand system for elementary and secondary school is and how it is designed in its general structure, users, functions and database. Besides, you can also learn how the system is implemented from the homepage, registration /login, retrieving video, video on demand and management. © 2011 IEEE.

Number of references: 1

Main heading: Learning systems

Controlled terms: Media streaming - Teaching - Video on demand

Uncontrolled terms: Courseware - Homepage - Learning process - Secondary schools - Streaming media - Video-on-demand system - Vod

Classification code: 716.4 Television Systems and Equipment - 723.5 Computer Applications - 901.2 Education

DOI: 10.1109/ICMT.2011.6001868

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

938.

Accession number: 20122415113595

Title: A digital watermarking algorithm based on DCT-SVD for audio copyright protection

Authors: Li, Haicheng¹ ; You, Fucheng² ; Su, Hong^{3, 4} ; Han, Kun⁵ ; Zhang, Dacheng⁶

Author affiliation:

1 Department of Computer Science, Tangshan Teachers College, Hebei, China

2 Mechanical Engineering School, Beijing Institute of Graphic Communication, Beijing, China

3 Chinese People's Public Security University, Beijing, China

4 Institute for Internet Behavior, Tsinghua University, Beijing, China

5 Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

6 Dean's Office, Hebei Vocational and Technical College of Building Materials, Qinhuangdao, China

Corresponding author: You, F. (youfucheng@yahoo.com.cn)

Source title: International Journal of Digital Content Technology and its Applications

Abbreviated source title: Int. J. Digit. Content Technol. Appl.

Volume: 6

Issue: 9

Issue date: May 2012

Publication year: 2012

Pages: 50-57

Language: English

ISSN: 19759339

E-ISSN: 22339310

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: The paper proposes a digital watermarking algorithm for audio copyright protection combined characteristics of singular value decomposition (SVD) and discrete cosine transform (DCT). The audio are split into blocks, and each block are decomposed on discrete cosine transform (DCT), then the DCT coefficients are decomposed on singular value decomposition (SVD) transform and embedded the watermark information into the first element of diagonal matrix. Simulation results show that the peak signal-to-noise ratio (PSNR) has high peak when the embedding strength is 0.1 and 0.2 respectively, and the proposed algorithm has better transparency. At the same time, the algorithm can resist against common audio signal attacks, such as re-sampling, echo, noise and so on.

Number of references: 12

Main heading: Singular value decomposition

Controlled terms: Acoustic noise - Algorithms - Audio watermarking - Automatic indexing - Copyrights - Digital watermarking - Discrete cosine transforms

Uncontrolled terms: Audio signal - Copyright protections - DCT coefficients - Diagonal matrices - Embedding strength - Information resource - Peak signal-to-noise ratio - Resampling - Watermark information - Watermarking algorithms

Classification code: 921.3 Mathematical Transformations - 921 Mathematics - 903.1 Information Sources and Analysis - 903 Information Science - 751.4 Acoustic Noise - 723.5 Computer Applications - 723.2 Data Processing and Image Processing

DOI: 10.4156/jdcta.vol6.issue9.7

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

939.

Accession number: 20104813441536

Title: Kinetic study on hydrogenation of propiophenone catalyzed by chitosan-palladium

Authors: Wang, Hong-Lei¹ ; Jia, Dan-Dan¹ ; Liu, Lu¹ ; Wang, Yue-Hui¹ ; Tian, Hong-Yan¹

Author affiliation:

1 College of Chemistry and Physics, Hebei Normal University of Science and Technology, Hebei str. 360west section, Qinhuangdao 066600, China

Corresponding author: Wang, H.-L. (wanghongleik@yahoo.com.cn)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 106 CCIS

Part number: 2 of 2

Issue: PART 2

Monograph title: Information Computing and Applications - International Conference, ICICA 2010, Proceedings

Issue date: 2010

Publication year: 2010

Pages: 354-359

Language: English

ISSN: 18650929

ISBN-10: 3642163386

ISBN-13: 9783642163388

Document type: Conference article (CA)

Conference name: International Conference on Information Computing and Applications, ICICA 2010

Conference date: October 15, 2010 - October 18, 2010

Conference location: Tangshan, China

Conference code: 82500

Sponsor: National Science Foundation of China; Hunan Institute of Engineering

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Chitosan-palladium complex (SiO₂-CS-Pd) is prepared and used as catalyst to catalyze the hydrogenation of propiophenone. The reaction is taken placed at normal temperature and 1 atm H₂. The solvent is alcohol. GC is used to test the reaction course. The reaction is found to be pseudo-zero order with respect to propiophenone. The reaction rate increases with the increase of the catalyst, However, the effect on reaction rate will be not so notable after the amount of catalyst reaches a certain value. A probable reaction mechanism is proposed based on the experimental results. © 2010 Springer-Verlag.

Number of references: 10

Main heading: Palladium compounds

Controlled terms: Catalysts - Chitin - Chitosan - Hydrogenation - Palladium - Reaction rates - Silicon compounds

Uncontrolled terms: Kinetic study - Palladium complexes - Propiophenone - Rate increase - Reaction course - Reaction mechanism - Zero order

Classification code: 547.1 Precious Metals - 802.2 Chemical Reactions - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally - 804.1 Organic Compounds

DOI: 10.1007/978-3-642-16339-5_47

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

940.

Accession number: 20123515381718

Title: Design of parallel mechanical leg of six-legged robot

Authors: Rong, Yu1, 2 ; Jin, Zhen-Lin1 ; Qu, Meng-Ke2

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao 066004, China

2 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Rong, Y. (lixiangcg@126.com)

Source title: Guangxue Jingmi Gongcheng/Optics and Precision Engineering

Abbreviated source title: Guangxue Jingmi Gongcheng

Volume: 20

Issue: 7

Issue date: July 2012

Publication year: 2012

Pages: 1532-1541

Language: Chinese

ISSN: 1004924X

CODEN: GJGOF4

Document type: Journal article (JA)

Publisher: Chinese Academy of Sciences, 140 Renmin Street, Changchun, 130022, China

Abstract: A parallel mechanism was applied to the mechanical leg of a six-legged robot to expand the application areas of the six-legged robot. A new mechanical leg based on the (U+UPR)P+UPS parallel mechanism was proposed, and the structure parameters of the mechanical leg were designed. Firstly, the kinematics of leg mechanism was discussed, and the inverse position and velocity mapping equations were presented. Then, the workspace of the leg mechanism was discussed and a 3D map of the workspace was drawn. The performance evaluation index of workspace was defined and the relationship curve of the structure parameters and the evaluation index of workspace was given. Furthermore, the kinematics dexterity of the leg mechanism was analyzed, and the 3D map for condition numbers of Jacobian matrix was drawn. The performance evaluation index of kinematics dexterity was defined, and the relationship curve of the structure parameters and the index of kinematics dexterity were given. Finally, based on the indexes of workspace and kinematic dexterity, the structure parameters were analyzed by Monte Carlo method. A set of excellent structural parameters were proposed, and a 3-DOF mechanical leg was designed. These results lay the theoretical foundation for the further study of six-legged robots.

Number of references: 18

Main heading: Kinematics

Controlled terms: Jacobian matrices - Mechanisms - Monte Carlo methods - Number theory - Three dimensional

Uncontrolled terms: Kinematics analysis - Parallel mechanical leg - Parameter designs - Performance evaluation index - Workspace analysis

Classification code: 601.3 Mechanisms - 902.1 Engineering Graphics - 921 Mathematics - 921.1 Algebra

- 922.2 Mathematical Statistics - 931.1 Mechanics

DOI: 10.3788/OPE.20122007.1532

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

941.

Accession number: 20121314903476

Title: Research on the competitiveness of China's tourism trade in service with uncertain linguistic information

Authors: Liu, Xuehua1

Author affiliation:

1 School of Finance and Economics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Liu, X. (lxhddd@126.com)

Source title: International Journal of Digital Content Technology and its Applications

Abbreviated source title: Int. J. Digit. Content Technol. Appl.

Volume: 6

Issue: 4

Issue date: March 2012

Publication year: 2012

Pages: 214-220

Language: English

ISSN: 19759339

E-ISSN: 22339310

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: The problem of evaluating the competitiveness of China's tourism trade in service with uncertain linguistic information is the multiple attribute decision making (MADM) problems. In this paper, we investigate the multiple attribute decision making (MADM) problems for evaluating the competitiveness of China's tourism trade in service with uncertain linguistic information. We utilize the interval uncertain linguistic weighted average (IULWA) operator to aggregate the uncertain linguistic information corresponding to each alternative and get the overall value of the alternatives, then rank the alternatives and select the most desirable one(s) by using the formula of the degree of possibility for the comparison between two uncertain linguistic variables. Finally, an illustrative example for competitiveness of China's tourism trade in service with uncertain linguistic information is given.

Number of references: 18

Main heading: Linguistics

Controlled terms: Commerce - Competition - Decision making - Statistical methods

Uncontrolled terms: Competitiveness of china's tourism trade in service - Illustrative examples - Interval uncertain linguistic weighted average (IULWA) operator - Linguistic information - Linguistic weighted average - Multiple attribute decision making - Uncertain linguistic variables

Classification code: 903.2 Information Dissemination - 911.2 Industrial Economics - 912.2 Management - 922.2 Mathematical Statistics

DOI: 10.4156/jdcta.vol6.issue4.26

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

942.

Accession number: 20105113503572

Title: Rao-blackwellized particle filtering for fault detection and diagnosis

Authors: Liu, Yan^{1, 2}; Sun, Duoqing^{1, 2}; Kong, Liang^{1, 2}

Author affiliation:

1 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

2 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, Y. (ly1984715@163.com)

Source title: Proceedings of the 29th Chinese Control Conference, CCC'10

Abbreviated source title: Proc. Chin. Control Conf., CCC

Monograph title: Proceedings of the 29th Chinese Control Conference, CCC'10

Issue date: 2010

Publication year: 2010

Pages: 3870-3875

Article number: 5572574

Language: English

ISBN-13: 9787894631046

Document type: Conference article (CA)

Conference name: 29th Chinese Control Conference, CCC'10

Conference date: July 29, 2010 - July 31, 2010

Conference location: Beijing, China

Conference code: 82524

Sponsor: IEEE Control Systems Society (CSS); The ICROS OF Korea; IEEE CSS Singapore Chapter; IEEE CSS Hong Kong Chapter; IEEE CSS Beijing Chapter

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper deals with the problem of fault detection and diagnosis of multiple failures in a nonlinear dynamic system. By modeling the multiple failures as different models of jump Markov nonlinear systems, a Rao-Blackwellized particle filter is developed by combining with the unscented transform technique, in which the posterior model probability is used as an indicator of a failure occurrence. Two numerical examples are provided to illustrate the effectiveness of the proposed method, and simulation results show that the fault can be detected quickly and reliably.

Number of references: 26

Main heading: Fault detection

Controlled terms: Dynamical systems - Mathematical transformations - Nonlinear dynamical systems - Nonlinear filtering - Numerical methods

Uncontrolled terms: Fault detection and diagnosis - Jump Markov nonlinear systems - Jump Markov system - Model probabilities - Multiple failures - Non-linear dynamic systems - Numerical example - Rao-Blackwellized particle filter - Rao-Blackwellized particle filtering - Simulation result - Unscented transform

Classification code: 422 Strength of Building Materials; Test Equipment and Methods - 731.1 Control Systems - 921 Mathematics - 931 Classical Physics; Quantum Theory; Relativity - 961 Systems Science

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

943.

Accession number: 20105013482638

Title: On the revolution of teaching mode - Integrating virtual environments with reality

Authors: Xu-Liyong¹ ; Li-Xia¹ ; Dong-Yanrong¹ ; Liu-Jianping¹

Author affiliation:

1 HeBei Normal University of Science and Technology, HeBei, QinHuangDao HeBei, China

Corresponding author: Xu-Liyong (xuliyong_d@163.com)

Source title: ICEIT 2010 - 2010 International Conference on Educational and Information Technology, Proceedings

Abbreviated source title: ICEIT - Int. Conf. Educ. Inf. Technol., Proc.

Volume: 2

Part number: 2 of 3

Monograph title: ICEIT 2010 - 2010 International Conference on Educational and Information Technology, Proceedings

Issue date: 2010

Publication year: 2010

Pages: V2321-V2322

Article number: 5607581

Language: English

ISBN-13: 9781424480340

Document type: Conference article (CA)

Conference name: 2010 International Conference on Educational and Information Technology, ICEIT 2010

Conference date: September 17, 2010 - September 19, 2010

Conference location: Chongqing, China

Conference code: 82726

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The traditional teaching mode has been applied for years and the newly-emerged modern network teaching mode has become popular. They both have their own advantages and disadvantages, they supplement each other, but neither of them can substitute the other. No matter teachers use solely the traditional teaching mode or the modern network teaching mode, they ignore the individual differences of the students. A pure teaching mode fits only part of the students. The revolution of teaching mode in colleges will combine the two together and reserve the advantages of both teaching modes and discard their disadvantages to make the teaching mode in colleges suitable for the study features of various students and improve the teaching quality. © 2010 IEEE.

Number of references: 4

Main heading: Teaching

Controlled terms: Computer aided instruction - Information technology - School buildings - Students - Virtual reality

Uncontrolled terms: Education modes - Individual Differences - Network education -

Network teaching - Teaching modes - Teaching quality - Traditional teachings - Virtual classroom
- Virtual environments

Classification code: 402.2 Public Buildings - 723 Computer Software, Data Handling and Applications -
901.2 Education - 903 Information Science

DOI: 10.1109/ICEIT.2010.5607581

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

944.

Accession number: 20142117752621

Title: Standard system and legal protection of food security of agricultural special products

Authors: Zhao, Fu-Jiang¹ ; Zang, Chen² ; Luo, Cheng Bing¹

Author affiliation:

1 Faculty of Literature and Law, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei
066004, China

2 Environmental Management College of China, Qinhuangdao, Hebei 066004, China

Corresponding author: Zhao, F.-J. (zhaofujiang@cssci.info)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 220 LNEE

Issue: VOL. 5

Monograph title: Proceedings of the International Conference on Information Engineering and
Applications, IEA 2012

Issue date: 2013

Publication year: 2013

Pages: 23-28

Language: English

ISSN: 18761100

E-ISSN: 18761119

Document type: Conference article (CA)

Conference name: 2nd International Conference on Information Engineering and Applications, IEA 2012

Conference date: October 26, 2012 - October 28, 2012

Conference location: Chongqing, China

Conference code: 99822

Sponsor: National Science Foundation of China; Shanghai Jiao Tong University

Publisher: Springer Verlag

Abstract: By researching the current conditions of standard system and legal protection of food security of agricultural special products in Yanshan mountainous areas, this paper points out that there exist some problems, which are that standard system is not complete, the standard is too old and not proper, protective system of standard is not perfect, the strategy of intellectual property and the system of legal protection are imperfect, etc. According to this, appropriate countermeasures have been proposed to solve these problems. © 2013 Springer-Verlag.

Number of references: 6

Main heading: Food supply

Controlled terms: Agriculture

Uncontrolled terms: Agricultural special products - Food security - Legal protection - Mountainous area - Technological barriers

Classification code: 404.2 Civil Defense - 821 Agricultural Equipment and Methods; Vegetation and Pest Control

DOI: 10.1007/978-1-4471-4844-9_4

Database: Compendex

945.

Accession number: 20114614521940

Title: Regulation of PID controller parameters based on ant colony optimization algorithm in bending control system

Authors: Yu, Yuzhen^{1, 2}; Ren, Xinyi¹; Deng, Chunyan²; Yu, Jingjing²; Li, Shuzhen²; Shi, Junjie¹

Author affiliation:

1 Institute of Mechanical Engineering, Yanshan University, Qinhuangdao, Hebei, 066004, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Corresponding author: Yu, Y. (yu_yuzhenn@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 128-129

Monograph title: Measuring Technology and Mechatronics Automation IV

Issue date: 2012

Publication year: 2012

Pages: 205-210

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037852842

Document type: Conference article (CA)

Conference name: 4th International Conference on Measuring Technology and Mechatronics Automation, ICMTMA 2012

Conference date: January 6, 2012 - January 7, 2012

Conference location: Sanya, China

Conference code: 87286

Sponsor: Hunan University of science and Technology; Changsha University of Science and Technology; Huan instrument and Control Society

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The bending-roll control system has characteristics of time-varying, time-delay, nonlinearity and serious external disturbance, so it is hard to establish precise math model that be applied to control. In view of the problems above, ant colony algorithm is used to tuning parameters of PID controller and concrete step of PID parameters tuning based on ant colony algorithm is given. The simulation results indicate that the method not only improves control performance and dynamic quality, but also has strong self-adapting ability and robustness. It achieved a very good control effect when used in bending control system that proved the correctness and effectiveness of the control method.

Number of references: 6

Main heading: Quality control

Controlled terms: Algorithms - Controllers - Delay control systems - Electric control equipment - Mathematical models - Parameter estimation - Three term control systems

Uncontrolled terms: Ant colony algorithms - Ant Colony Optimization algorithms - Bending control - Control methods - Control performance - Dynamic quality - External disturbances - Math model - Non-Linearity - Parameters Regulation - PID controllers - PID Parameters Tuning - Self adapting - Time varying - Tuning parameter

Classification code: 731.1 Control Systems - 732.1 Control Equipment - 913.3 Quality Assurance and Control - 921 Mathematics

DOI: 10.4028/www.scientific.net/AMM.128-129.205

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

946.

Accession number: 20122115051008

Title: Security analysis on exam system based on network

Authors: Li, Guofang¹ ; Li, Guohong² ; Qi, Yubin³ ; Wang, Tao³ ; Zou, Ping³

Author affiliation:

- 1 College of MandE Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 College of Finance and Economics, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 College of EandA, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, G. (lhy05120@21cn.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 116 AISC

Issue: VOL. 1

Monograph title: Advanced Technology in Teaching - Proceedings of the 2009 3rd International Conference on Teaching and Computational Science, WTCS 2009

Issue date: 2012

Publication year: 2012

Pages: 421-427

Language: English

ISSN: 18675662

ISBN-13: 9783642112751

Document type: Conference article (CA)

Conference name: 2009 3rd International Conference on Teaching and Computational Science, WTCS 2009

Conference date: December 19, 2009 - December 20, 2009

Conference location: Shenzhen, China

Conference code: 89727

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Different from the traditional exam, the network exam has more complicated security problem. The security over the whole process of general network exam is analyzed. The security of network exam is considered in the organization and management of exam, the seriousness of exam, system accident and protocol and data transmission. Some measurements to improve network exam security are present, such as personal identification, secondary login, time synchronization and restoration of exam. New flow chart of network exam is designed with security measurements. A network exam system based on above security analyses is developed and has got a good result in application with high safety. The security methods can provide a basis for the design of network exam system. © 2012 Springer-Verlag Berlin Heidelberg.

Number of references: 5

Main heading: Network security

Controlled terms: Data communication systems - Management - Network protocols - Security systems

Uncontrolled terms: exam bank - Exam systems - Flow charts - General networks - High safety - Organization and management - Personal identification - security - Security analysis - Security measurement - Security methods - Security problems - System accidents - Time synchronization - Whole process

Classification code: 723 Computer Software, Data Handling and Applications - 912.2 Management - 914.1 Accidents and Accident Prevention

DOI: 10.1007/978-3-642-11276-8_55

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

947.

Accession number: 20124615658117

Title: Analysis and countermeasures of pragmatic failures in Chinese learners' oral English

Authors: Wang, Jing1 ; Chen, Jina2 ; Liu, Chenxi1 ; Bian, Fenglian1

Author affiliation:

1 College of Foreign Languages, Hebei Normal University of Science and Technology, Qin Huangdao, Hebei Province, China

2 Foreign Language Department, Nanhai Neusoft Institute of Information Technology, Feshan, Guangdong Province, China

Corresponding author: Wang, J. (Pengfeiarmy99@yahoo.com.cn)

Source title: Proceedings - 4th International Conference on Computational and Information Sciences, ICCIS 2012

Abbreviated source title: Proc. - Int. Conf. Comput. Inf. Sci., ICCIS

Monograph title: Proceedings - 4th International Conference on Computational and Information Sciences, ICCIS 2012

Issue date: 2012

Publication year: 2012

Pages: 730-733

Article number: 6300692

Language: English

ISBN-13: 9780769547893

Document type: Conference article (CA)

Conference name: 4th International Conference on Computational and Information Sciences, ICCIS 2012

Conference date: August 17, 2012 - August 19, 2012

Conference location: Chongqing, China

Conference code: 93469

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: The present study is designed to explore the reasons for pragmatic failures occurred in Chinese learners' oral English with the guidance of Error Analysis and to figure out effective countermeasures to remove them. Furthermore, we try to provide a tentative verification of the role pragmatic competence plays in oral English teaching and learning, which is supposed to be helpful for successful communication, especially in cross-cultural context. © 2012 IEEE.

Number of references: 8

Main heading: Information science

Controlled terms: Error analysis - Teaching

Uncontrolled terms: English teaching - pragmatic competence

Classification code: 901.2 Education - 903 Information Science - 921.6 Numerical Methods

DOI: 10.1109/ICCIS.2012.73

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

948.

Accession number: 20122815233336

Title: First-principles study on the structural stabilities, electronic and elastic properties of Zr₂Si alloy under pressure

Authors: Huang, Xiaochun¹ ; Zhang, Xinyu¹ ; Zhu, Yan^{1, 2} ; Zhang, Shiliang¹ ; Ma, Mingzhen¹ ; Liu, Riping¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, R. (riping@ysu.edu.cn)

Source title: Computational Materials Science

Abbreviated source title: Comput Mater Sci

Volume: 62

Issue date: September 2012

Publication year: 2012

Pages: 65-70

Language: English

ISSN: 09270256

CODEN: CMMSEM

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: The structural, elastic and electronic properties of Zr₂Si alloy under pressure are investigated by first-principles calculation based on density-functional theory. The thermodynamic and mechanical properties of Zr₂Si are predicted by calculating the pressure dependence of enthalpy of formation, elastic parameters and density of state. Our results show that Zr₂Si is mechanically stable according to the elastic stability criteria and anisotropic with the Ba/Bc value. The Mulliken populations are calculated under pressure to explore the nature of elastic anisotropy of Zr₂Si. In addition, bonding characteristics are discussed by analyzing the partial density of states, charge density distribution and Mulliken populations. © 2012 Elsevier B.V. All rights reserved.

Number of references: 30

Main heading: Silicon alloys

Controlled terms: Anisotropy - Calculations - Cerium alloys - Elasticity - Electronic properties - Silicon - Stability criteria - Zirconium

Uncontrolled terms: Bonding characteristics - Charge density distributions - Density of state - Elastic anisotropy - Elastic parameters - Elastic properties - Enthalpy of formation - First-principles calculation - First-principles study - Mechanically stable - Mulliken populations - Partial density of state - Pressure dependence - Si alloys - Structural stabilities

Classification code: 961 Systems Science - 931.2 Physical Properties of Gases, Liquids and Solids - 921 Mathematics - 723 Computer Software, Data Handling and Applications - 721 Computer Circuits and Logic Elements - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 547.2 Rare Earth Metals - 422 Strength of Building Materials; Test Equipment and Methods - 421 Strength of Building Materials; Mechanical Properties

DOI: 10.1016/j.commat.2012.04.047

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

949.

Accession number: 20113514279501

Title: Analytical solution of the residual stress when the inflexion of the retaining ring is near to the top

Authors: Liu, Qiumei1 ; Zheng, Junling2

Author affiliation:

1 Hei Bei United University, Tangshan, Hebei Province, China

2 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Liu, Q. (liuqiumei1981@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 80-81

Monograph title: Information Engineering for Mechanics and Materials

Issue date: 2011

Publication year: 2011

Pages: 561-565

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037852125

Document type: Conference article (CA)

Conference name: 2011 International Conference on Information Engineering for Mechanics and Materials, ICIMM 2011

Conference date: August 13, 2011 - August 14, 2011

Conference location: Shanghai, China

Conference code: 86278

Sponsor: Zhejiang Economic and Trade Polytechnic; Institute of Electronic and Information Technology

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: We analyses the instance that the retaining ring is near to the top, adopt the theory of the axis symmetry column thin shell, and construct a displacement function, then work out the analytical solution of the residual stress under this instance. © (2011) Trans Tech Publications.

Number of references: 5

Main heading: Residual stresses

Controlled terms: Fasteners - Mechanics

Uncontrolled terms: Analytical solutions - Displacement function - Retaining ring - Stress-displacement - Thin shells

Classification code: 421 Strength of Building Materials; Mechanical Properties - 605 Small Tools and Hardware - 931.1 Mechanics

DOI: 10.4028/www.scientific.net/AMM.80-81.561

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

950.

Accession number: 20115214643496

Title: The design of aerobics course theory examination question database management system

Authors: Ou, Xiuling¹ ; Yu, Baoming² ; Wang, Yukuo³

Author affiliation:

1 Department of Sports, Tianjin Agricultural University, Tianjin 300384, China

2 Department of Materials, Tianjin University of Sport, Tianjin 300381, China

3 Department of Physical Education, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Ou, X. (xiulingou@126.com)

Source title: Communications in Computer and Information Science

Abbreviated source title: Commun. Comput. Info. Sci.

Volume: 243 CCIS

Part number: 1 of 2

Issue: PART 1

Monograph title: Information Computing and Applications - Second International Conference, ICICA 2011, Proceedings

Issue date: 2011

Publication year: 2011

Pages: 387-393

Language: English

ISSN: 18650929

ISBN-13: 9783642275029

Document type: Conference article (CA)

Conference name: 2nd International Conference on Information Computing and Applications, ICICA 2011

Conference date: October 28, 2011 - October 31, 2011

Conference location: Qinhuangdao, China

Conference code: 87880

Sponsor: National Natural Science Foundation of China; Northeastern University at Qinhuangdao; Yanshan University; Nanyang Technological University

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: In order to solve the problems of the different scoring standards and low paper validity in the evaluation of aerobics course theoretical knowledge, this paper, combined with the specialty characteristics of aerobics course, proposes the construction of aerobics course theory examination question database management system by adopting SQL Server2000 and Visual Basic 6.0. This system includes five function modules: examination paper generation, examination paper output, examination question database editing, examination question database output and system maintenance, and it realizes the functions such as the batch input of examination questions, the random selection of examination questions and the automatic examination paper generation. Meanwhile, the paper also makes an analysis of the design basis and the treatment of key technical

problems of the examination question database management system. This system is simple and practical, with strong expandability, and it improves teachers' working efficiency, improves the quality of teaching evaluation, has important application significance in reducing education investment cost and reusing test question resources, etc. © 2011 Springer-Verlag Berlin Heidelberg.

Number of references: 11

Main heading: Information management

Controlled terms: Curricula - Database systems - Function evaluation - Management information systems - Quality control - Teaching

Uncontrolled terms: aerobics course - Expandability - Function module - Investment costs - Paper generation - Paper output - Quality of teaching - Question database - Random selection - SQL server 2000 - System maintenance - Technical problem - Visual Basic 6.0 - Working efficiency

Classification code: 723.2 Data Processing and Image Processing - 723.3 Database Systems - 901.2 Education - 903.2 Information Dissemination - 913.3 Quality Assurance and Control - 921.6 Numerical Methods

DOI: 10.1007/978-3-642-27503-6_53

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

951.

Accession number: 20114914573707

Title: The main problems of learning style construction in institution of higher education

Authors: Sun, Hua1 ; Zhao, Yanjun2

Author affiliation:

1 Hebei Normal University of Science and Technology, College of Education, Hebei Qin Huangdao, 066004, China

2 Party Committee Office and Principal Office, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Sun, H. (sunhuasunhua@hotmail.com)

Source title: Lecture Notes in Electrical Engineering

Abbreviated source title: Lect. Notes Electr. Eng.

Volume: 111 LNEE

Monograph title: Engineering Education and Management - Vol 1, Results of the 2011 International Conference on Engineering Education and Management, ICEEM2011

Issue date: 2011

Publication year: 2011

Pages: 741-745

Language: English

ISSN: 18761100

E-ISSN: 18761119

ISBN-13: 9783642248221

Document type: Conference article (CA)

Conference name: 2011 International Conference on Engineering Education and Management, ICEEM2011

Conference date: November 18, 2011 - November 20, 2011

Conference location: Guangzhou, China

Conference code: 87500

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: In view of the main problems of learning style in institution of higher education at present, the author analyzed them from three aspects, i.e. students, schools and society. For students, the problems includes the drop of students' quality, the indifference of professional thoughts, the tendency towards utilitarianism of learning motivation, the weakness of cognitive ability and psychological quality, and restricting factors from family, etc. For schools, the problems lie in the challenges in the management of higher school students, the backwardness in teaching management and the harmful effects of learning style, etc. For society, the problems consist of the effects of employment policy, the negative influence of market economy, social corruption and unfairness, and the influence of Internet towards learning style, etc. © 2012 Springer-Verlag.

Number of references: 9

Main heading: Students

Controlled terms: Economics - Engineering education

Uncontrolled terms: Cognitive ability - Employment policies - Harmful effects - Higher education - Higher School - Learning motivation - Learning Style - Market economies - Negative influence - problems - Restricting factors

Classification code: 901.2 Education - 971 Social Sciences

DOI: 10.1007/978-3-642-24823-8_118

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

952.

Accession number: 20121714971682

Title: Teaching reform exploration of automobile examination and diagnosis based on ability training

Authors: Zhang, Liang¹ ; Li, Shuzhen¹ ; Shi, Lei¹ ; Li, Guofang¹ ; Chen, Lidong¹ ; Ma, Shuying¹ ; Zheng, Lixin¹

Author affiliation:

¹ School of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Zhang, L. (lzhang7608@163.com)

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 135

Monograph title: Knowledge Discovery and Data Mining

Issue date: 2012

Publication year: 2012

Pages: 601-605

Language: English

ISSN: 18675662

ISBN-13: 9783642277078

Document type: Conference article (CA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Aiming at the problem in the course teaching of Automobile Examination and Diagnosis, in order to adapt teaching request under the new situation, and guarantee the quality of teaching, this article carries on the reform exploration from the course content, the teaching method, and the inspection way and so on three aspects. In teaching, the theoretical teaching and the practical teaching are combined organically, the goal is to develop the independent and innovative spirit of students, and raise student's project practical ability, and improve the comprehensive abilities of handling practical problems. © 2012 Springer-Verlag GmbH Berlin Heidelberg.

Number of references: 3

Main heading: Curricula

Controlled terms: Teaching

Uncontrolled terms: Course contents - Innovative spirit - Practical problems - Practical teachings - Quality of teaching - Teaching methods

Classification code: 901.2 Education

DOI: 10.1007/978-3-642-27708-5_83

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

953.

Accession number: 20130615995412

Title: On web-assisted college english autonomous learning

Authors: Dong, Yajuan1 ; Li, Shuang1

Author affiliation:

1 College of Foreign Languages, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Dong, Y.

Source title: 2012 15th International Conference on Interactive Collaborative Learning, ICL 2012

Abbreviated source title: Int. Conf. Interact. Collab. Learn., ICL

Monograph title: 2012 15th International Conference on Interactive Collaborative Learning, ICL 2012

Issue date: 2012

Publication year: 2012

Article number: 6402031

Language: English

ISBN-13: 9781467324274

Document type: Conference article (CA)

Conference name: 2012 15th International Conference on Interactive Collaborative Learning, ICL 2012

Conference date: September 26, 2012 - September 28, 2012

Conference location: Villach, Austria

Conference code: 95312

Publisher: IEEE Computer Society, 2001 L Street N.W., Suite 700, Washington, DC 20036-4928, United States

Abstract: The progress of internet and communication technology has called for changes in College English teaching mode. The traditional teacher centered method can't keep up with the society. The 21st century needs people who are autonomous learners. Consequently, teachers have the responsibility to implement internet and communication technology into their teaching and involve developing student's learning autonomy as their teaching goal. This is a research on fostering students learning through webassisted English teaching. 32 non-English majors in grade two were selected for the research. Through one-year application of web-assisted English teaching method, the research aims at exploring students' changes in learning motivation, learning efficiency, listening & speaking, learning strategy and communication skills. In the research, questionnaires on learning anatomy were conducted on the students, also, students were asked to write their opinions on the web-assisted teaching method which may cover the problems they encountered and suggestions they have. The results shows that in web-assisted learning environment, most students' autonomous learning ability have been improved, especially on learning motivation, learning strategy, and communication skills, while on learning motivation, learning efficiency and learning strategy, some students feel worse than before. The author of this

paper suggests teacher take new roles in the new learning environment. © 2012 IEEE.

Number of references: 2

Main heading: Computer aided instruction

Controlled terms: Communication - Internet - Motivation - Research - Students - Surveys - Teaching

Uncontrolled terms: Autonomous learning - Autonomous learning abilities - autonomy - Communication skills - Communication technologies - English Learning - English teaching - Learning efficiency - Learning environments - Learning motivation - Learning strategy - Students learning - teachers' role - Teaching methods - web-assisted

Classification code: 405.3 Surveying - 716 Telecommunication; Radar, Radio and Television - 901.2 Education - 901.3 Engineering Research - 912.4 Personnel

DOI: 10.1109/ICL.2012.6402031

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

954.

Accession number: 20135117116253

Title: Based on wavelet packet transform and artificial neural network to identify types and regions of concrete internal defects

Authors: Zhang, Lixin¹ ; Meng, Deliang² ; Cao, Zhigang¹ ; Li, Huijian²

Author affiliation:

1 College of Urban Construction, Hebei Normal University of Science and Technology, No. 360, West Hebei Street, Qinhuangdao 066004, China

2 School of Civil Engineering and Mechanics, Yanshan University, No. 438, Hebei Avenue, Qinhuangdao 066004, China

Corresponding author: Li, H. (ysulhj@163.com)

Source title: ICIC Express Letters, Part B: Applications

Abbreviated source title: ICIC Express Lett Part B Appl.

Volume: 4

Issue: 5

Issue date: 2013

Publication year: 2013

Pages: 1259-1265

Language: English

ISSN: 21852766

Document type: Journal article (JA)

Publisher: ICIC Express Letters Office, Tokai University, Kumamoto Campus, 9-1-1, Toroku, Kumamoto, 862-8652, Japan

Abstract: In the field of non-destructive testing of concrete ultrasonic, most existing detection methods can only detect the existence of internal defects with pool reliability and accuracy, but the identification of the types of defects cannot be achieved. In order to solve this problem, in this paper, the wavelet packet transform (WPT) and artificial neural network (ANN) are applied in this field, i.e., WPT is used to extract the feature vector of ultrasonic signals and ANN to identify defects. Verified by experiments, through this information processing method, we can not only identify defect regions, but also identify the types of defects with high reliability and accuracy. © 2013 ISSN 2185-2766.

Number of references: 10

Main heading: Defects

Controlled terms: Concretes - Data processing - Identification (control systems) - Neural networks - Nondestructive examination - Ultrasonic testing

Uncontrolled terms: Concrete defects - Detection methods - High reliability - Non destructive testing - Ultrasonic detection - Ultrasonic signals - Wavelet packet transform(WPT) - Wavelet packet transforms

Classification code: 731.1 Control Systems - 723.4 Artificial Intelligence - 723.2 Data Processing and Image Processing - 951 Materials Science - 423.2 Non Mechanical Properties of Building Materials: Test Methods - 421 Strength of Building Materials; Mechanical Properties - 412 Concrete - 423 Non Mechanical Properties and Tests of Building Materials

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

955.

Accession number: 20132616450077

Title: Network intrusion detection based on GMKL Algorithm

Authors: Li, Yuxiang¹ ; Wang, Haiming¹ ; Yu, Hongkui¹ ; Ren, Changquan¹ ; Geng, Qingjia¹

Author affiliation:

1 College of Mathematics and Information Science and Technology, Hebei Normal University of Science and Technology, Qinghuangdao 066004, China

Source title: Journal of Networks

Abbreviated source title: J. Netw.

Volume: 8

Issue: 6

Issue date: 2013

Publication year: 2013

Pages: 1315-1321

Language: English

ISSN: 17962056

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40,, OULU, 90571, Finland

Abstract: According to the 31th statistical reports of China Internet network information center (CNNIC), by the end of December 2012, the number of Chinese netizens has reached 564 million, and the scale of mobile Internet users also reached 420 million. But when the network brings great convenience to people's life, it also brings huge threat in the life of people. So through collecting and analyzing the information in the computer system or network we can detect any possible behaviors that can damage the availability, integrity and confidentiality of the computer resource, and make timely treatment to these behaviors which have important research significance to improve the operation environment of network and network service. At present, the Neural Network, Support Vector machine (SVM) and Hidden Markov Model, Fuzzy inference and Genetic Algorithms are introduced into the research of network intrusion detection, trying to build a healthy and secure

network operation environment. But most of these algorithms are based on the total sample and it also hypothesizes that the number of the sample is infinity. But in the field of network intrusion the collected data often cannot meet the above requirements. It often shows high latitudes, variability and small sample characteristics. For these data using traditional machine learning methods are hard to get ideal results. In view of this, this paper proposed a Generalized Multi-Kernel Learning method to applied to network intrusion detection. The Generalized Multi-Kernel Learning method can be well applied to large scale sample data, dimension complex, containing a large number of heterogeneous information and so on. The experimental results show that applying GMKL to network attack detection has high classification precision and low abnormal practical precision. © 2013 ACADEMY PUBLISHER.

Number of references: 23

Main heading: Computer crime

Controlled terms: Algorithms - Complex networks - Hidden Markov models - Information services - Internet - Intrusion detection - Support vector machines

Uncontrolled terms: Classification precision - Heterogeneous information - Machine learning methods - Multi-kernel learning - Network information - Network intrusion detection - Network intrusions - Research significances

Classification code: 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 903.4 Information Services - 922 Statistical Methods

DOI: 10.4304/jnw.8.6.1315-1321

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

956.

Accession number: 20131016083210

Title: Cascade-Correlation neural network for vibration fitting of hydraulic turbine units

Authors: Li, Chunliu1 ; Wang, Liying2

Author affiliation:

1 College of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao 066004, Hebei, China

2 Hebei University of Engineering, Handan 056038, Hebei, China

Corresponding author: Li, C.

Source title: Journal of Theoretical and Applied Information Technology

Abbreviated source title: J. Theor. Appl. Inf. Technol.

Volume: 45

Issue: 2

Issue date: November 2012

Publication year: 2012

Pages: 723-727

Language: English

ISSN: 19928645

E-ISSN: 18173195

Document type: Journal article (JA)

Publisher: Asian Research Publishing Network (ARPN)

Abstract: Cascade-Correlation (CC) network is a new architecture and supervised learning algorithm for artificial neural networks. The learning algorithm of CC network and its network structure are described in this paper, the CC network with an excellent fitting ability is applied to fitting vibration characteristics of hydraulic turbine units according to different parts under three water heads. Compared with the BP network, the simulation experiments demonstrates that the CC network has a faster convergence speed and a higher accuracy, it is much closer to true to describe the vibration characteristics of hydraulic turbine units under different working conditions for their parts than its counterpart. © 2005 - 2012 JATIT & LLS. All rights reserved.

Number of references: 11

Main heading: Computer simulation

Controlled terms: Hydraulic turbines - Learning algorithms - Neural networks - Vibration analysis

Uncontrolled terms: BP networks - Cascade-correlation neural network - Faster convergence - Network structures - Turbine unit - Vibration characteristics - Vibration fitting - Water heads

Classification code: 617.1 Hydraulic Turbines - 723 Computer Software, Data Handling and Applications - 943.2 Mechanical Variables Measurements

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

957.

Accession number: 20103013093123

Title: Strengthen the security of CONFIDANT by using attribute-policy handshake

Authors: Ren, Changquan1 ; Yang, Yanping1

Author affiliation:

1 Department of Computer Science and Technology, Hebei Normal University of Science and Technology, Qinghuangdao Hebei, 066-004, China

Corresponding author: Ren, C. (renchangquan@gmail.com)

Source title: INC2010 - The International Conference on Networked Computing, Proceeding

Abbreviated source title: INC - Int. Conf. Networked Comput., Proc.

Monograph title: INC2010 - The International Conference on Networked Computing, Proceeding

Issue date: 2010

Publication year: 2010

Pages: 159-162

Article number: 5484843

Language: English

ISBN-13: 9788988678206

Document type: Conference article (CA)

Conference name: 6th International Conference on Networked Computing, INC2010

Conference date: May 11, 2010 - May 13, 2010

Conference location: Gyeongju, Korea, Republic of

Conference code: 81161

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Recently, an intrusion detection system which named CONFIDANT was proposed, which utilized file integrity analyzers and mobile agent for intrusion detection and aimed to detection of malicious activity by insiders. Shi et al proposed CONFIDANT has vulnerabilities in security aspect, so they integrated a clone agent protocol into CONFIDANT in 2009. Because of Shi et al's protocol's high communication cost, we proposed a new attribute-policy handshake structure for CONFIDANT to protect agents and strengthen its security even though there are a few malicious platforms.

Number of references: 17

Main heading: Intrusion detection

Controlled terms: Cloning - Computer crime - Mobile agents - Network protocols - Network security

Uncontrolled terms: Communication cost - Intrusion Detection Systems - Malicious activities - Mobile agent security

Classification code: 461.8.1 Genetic Engineering - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 801.2 Biochemistry - 902.3 Legal Aspects

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

958.

Accession number: 20113014175254

Title: Discussion on digital reference system development technology

Authors: Zhang, Chao1

Author affiliation:

1 Library, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

Corresponding author: Zhang, C. (zhchao12@qq.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 271-273

Monograph title: Advanced Materials and Information Technology Processing, AMITP 2011

Issue date: 2011

Publication year: 2011

Pages: 883-886

Language: English

ISSN: 10226680

ISBN-13: 9783037851579

Document type: Conference article (CA)

Conference name: 2011 International Conference on Advanced Materials and Information Technology Processing, AMITP 2011

Conference date: April 17, 2011 - April 18, 2011

Conference location: Guangzhou, China

Conference code: 85650

Sponsor: Hainan University; Asia Pacific Human-Computer Interaction Research Center

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: This paper analyzes the Reference System software development environment, the system architecture of the browser / server mode is analyzed in detail, describes the object-oriented analysis method, and presented different development framework according to different needs. This paper is from the resource classification, information retrieval, question recommendation and other technical to give a certain amount of evaluation and analysis. This paper mainly analysis a category navigation system, it help users find ways by providing users with search suggestions help them find answers from local resources or the Internet; introduced Chinese segmentation, quizzes indexing and search technology based on lucene; and discussed methods and strategies of the question recommendation from the consultants, the questioner and the question. © (2011) Trans Tech Publications, Switzerland.

Number of references: 7

Main heading: Computer architecture

Controlled terms: Information retrieval - Information technology - Navigation - Navigation systems - Software design

Uncontrolled terms: Chinese segmentation - Digital reference - Evaluation and analysis - Information search - Object-oriented analysis - Question recommendation - Reference systems - Resource classification - Search technology - Server mode - System architectures

Classification code: 434.4 Waterway Navigation - 716.3 Radio Systems and Equipment - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 903 Information Science - 903.3 Information Retrieval and Use

DOI: 10.4028/www.scientific.net/AMR.271-273.883

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

959.

Accession number: 20121614950920

Title: The application of carbon fiber composite material for sports equipment

Authors: Bai, Xue1 ; Li, Ning2

Author affiliation:

- 1 Hebei Normal University of Science and Technology, China
- 2 Qinhuangdao Institute of Technology, China

Corresponding author: Bai, X. (tjqq521@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 496

Monograph title: Functional Materials and Nanotechnology

Issue date: 2012

Publication year: 2012

Pages: 480-483

Language: English

ISSN: 10226680

ISBN-13: 9783037853931

Document type: Conference article (CA)

Conference name: 2012 International conference on Function Materials and Nanotechnology, FMN 2012

Conference date: May 19, 2012 - May 20, 2012

Conference location: Zhengzhou, China

Conference code: 89307

Sponsor: Wuhan Institute of Technology; Beijing Material Research Center; International Material Research Society

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: With the development of science and technology, the requirements on the properties of new materials was increasing, the research and production of carbon fiber arriving an advanced stage. In the field of sports, carbon fiber composite material was widely used in sports equipment, this study illustrates the unique advantages of carbon fiber composite materials applied to sports apparatus, reveals the important role of carbon fiber and its composites on the modern sports development by describing the molding technology and typical examples. © (2012) Trans Tech Publications, Switzerland.

Number of references: 6

Main heading: SportS

Controlled terms: Applications - Carbon fibers - Composite materials - Equipment - Functional materials - Materials properties - Nanotechnology

Uncontrolled terms: Carbon fiber composite - Carbon fiber composite materials - Development of science and technologies - Modern sports - Sports equipment

Classification code: 951 Materials Science - 901 Engineering Profession - 804 Chemical Products Generally - 761 Nanotechnology - 451.2 Air Pollution Control - 423 Non Mechanical Properties and Tests of Building Materials - 421 Strength of Building Materials; Mechanical Properties

DOI: 10.4028/www.scientific.net/AMR.496.480

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

960.

Accession number: 20114914585568

Title: Computer-aided Monte Carlo aircraft tolerance design based on UG

Authors: Guo, Changhong^{1, 2}; Xi, Ping²; Wang, Zhenyu³; Li, Xingdong¹

Author affiliation:

- 1 School of Mechanical Engineering, Yanshan University, QinHuangdao, Hebei, 066004, China
- 2 School of Mechanical Engineering and Automation, Beihang University, Beijing, 100191, China
- 3 Hebei Normal University of Science and Technology, QinHuangdao, Hebei, 066000, China

Corresponding author: Guo, C. (ekho_guo@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 338

Monograph title: Product Design and Manufacturing

Issue date: 2011

Publication year: 2011

Pages: 300-303

Language: English

ISSN: 10226680

ISBN-13: 9783037852484

Document type: Conference article (CA)

Conference name: 2011 International Conference on Materials and Products Manufacturing Technology, ICMPMT 2011

Conference date: October 28, 2011 - October 30, 2011

Conference location: Chengdu, China

Conference code: 86792

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Along with the CAD technology being popularized, three-dimensional design of aircraft is ultimately realized into digital design. However, aircraft tolerances have not been designed by computer. They are mainly based on lots of manual calculations and not coordinated with integrated design and hold back the development of aircraft digital design and manufacture technologies. This paper introduces how to develop computer-aided aircraft tolerance analysis and distribution modules on UG and introduces Monte Carlo tolerance analysis technology. Running instances of aircraft tolerance design are illustrated in the paper. © (2011) Trans Tech Publications.

Number of references: 6

Main heading: Aircraft materials

Controlled terms: Aircraft - Computer aided analysis - Computer aided design - Computer simulation - Fits and tolerances - Manufacture - Monte Carlo methods - Product design - Technology

Uncontrolled terms: Monte Carlo Simulation - Tolerance - Tolerance analysis - Tolerance design - Tolerance distribution

Classification code: 913.4 Manufacturing - 913.1 Production Engineering - 901 Engineering Profession - 922.2 Mathematical Statistics - 723.5 Computer Applications - 652.1 Aircraft, General - 601 Mechanical Design - 652.2 Aircraft Materials

DOI: 10.4028/www.scientific.net/AMR.338.300

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

961.

Accession number: 20125215844382

Title: Model evaluation based on emotional furniture industrial design elements

Authors: Ye, Zhenhe¹ ; Li, Xin² ; Li, Ying²

Author affiliation:

- 1 College of Mechanical and Electrical Engineering, Agricultural University of HeBei, Baoding, HeBei, 071000, China
- 2 College of Arts, Hebei Normal University of Science and Technology, Qinhuangdao, 066000, China

Corresponding author: Ye, Z. (yezhenhe@163.com)

Source title: International Journal of Advancements in Computing Technology

Abbreviated source title: Intl. J. Adv. Comput. Technolog.

Volume: 4

Issue: 22

Issue date: December 2012

Publication year: 2012

Pages: 73-78

Language: English

ISSN: 20058039

E-ISSN: 22339337

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, Myoungbo Bldg 3F,, Bumin-dong 1-ga, Seo-gu, Busan, 602-816, Korea, Republic of

Abstract: Based on the application of emotional design system theoretical framework and principles, emotional awareness and aesthetic appeal of furniture products trends in industrial design through the emotional evaluation questionnaire method, carry out quantitative evaluation and analysis of the form factor, color factors, material and texture factors in furniture design, this paper explores the relationship of the emotional intention and furniture design program in industrial design elements, makes the design of furniture products is not only more meet the needs of the user's physiological, and give users a more relaxed and happy feelings and emotional experience, it provides a new theoretical ideas and implementation processes for furniture industrial design and product manufacturing.

Number of references: 9

Main heading: Product design

Controlled terms: Approximation theory - Factor analysis - Physiological models

Uncontrolled terms: Emotional design - Form factors - Furniture - Furniture design - Implementation process - Model evaluation - Product manufacturing - Quantitative evaluation - Texture factor - Theoretical framework

Classification code: 461.1 Biomedical Engineering - 913.1 Production Engineering - 921.6 Numerical Methods - 922.2 Mathematical Statistics

DOI: 10.4156/ijact.vol4.issue22.9

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

962.

Accession number: 20121214871887

Title: Oat fibre: Overview on their main biological properties

Authors: Xu, Rui1

Author affiliation:

1 College of Food Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Xu, R. (robust100@163.com)

Source title: European Food Research and Technology

Abbreviated source title: Eur. Food Res. Technol.

Volume: 234

Issue: 4

Issue date: April 2012

Publication year: 2012

Pages: 563-569

Language: English

ISSN: 14382377

E-ISSN: 14382385

Document type: Journal article (JA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Oat is a species of cereal grain grown for its seed and widely accepted to contain many valuable constituents. These include especially fibre that possesses important biological properties, particularly with regard to promotion of health, as well as to prevention of diseases. Reducing risk of coronary heart disease and plasma LDL cholesterol has, indeed, been associated with such oat fibre. The most important advances reported to date pertaining to biological properties of oat fibre are reviewed in this communication. The purpose of this review is to focus on available knowledge on the interactions between insoluble or soluble dietary fibre and lipid metabolism in the human body. © 2012 Springer-Verlag.

Number of references: 82

Main heading: Fibers

Controlled terms: Health risks

Uncontrolled terms: Biological properties - Cereal grains - Coronary heart disease - Dietary fibre - Functional food - Health benefits - Human bodies - LDL cholesterol - Lipid metabolisms - Oat - Soluble dietary fibre

Classification code: 461.7 Health Care - 812 Ceramics, Refractories and Glass - 817 Plastics and Other Polymers: Products and Applications

DOI: 10.1007/s00217-012-1666-2

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

963.

Accession number: 20112614099187

Title: Effective mass of strong-coupled bound polaron in an asymmetric quantum dot induced with Rashba effect

Authors: Li, Zhixin¹ ; Xiao, Juan² ; Liu, Aiyong² ; Xiao, Jinglin³

Author affiliation:

- 1 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China
- 2 College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China
- 3 College of Physics and Electronic Information, Inner Mongolia National University, Tongliao 028043, China

Corresponding author: Li, Z. (zlx2006@126.com)

Source title: International Journal of Nanoscience

Abbreviated source title: Int. J. Nanosci.

Volume: 10

Issue: 3

Issue date: June 2011

Publication year: 2011

Pages: 501-505

Language: English

ISSN: 0219581X

Document type: Journal article (JA)

Publisher: World Scientific Publishing Co. Pte. Ltd, 5 Toh Tuck Link, Singapore, 596224, Singapore

Abstract: In this paper, on the basis of Huybrechts' strong-coupled polaron model, the Tokuda-modified linear-combination operator method and the unitary transformation method are used to study the properties of the strong-coupled bound polaron considering the influence of Rashba effect, which is brought by the spin-orbit (SO) interaction, in an asymmetric quantum dot (QD). The expression for the effective mass of the polaron as functions of the transverse and longitudinal bound strengths, velocity, vibration frequency, and the bound potential has been derived. After a simple numerical calculation on the RbCl crystal, we found that the total effective mass of the bound polaron is composed of three parts. The interaction between the orbit and the spin with different directions has different effects on the effective mass of the bound polaron. © 2011 World Scientific Publishing Company.

Number of references: 18

Main heading: Polarons

Controlled terms: Linear transformations - Semiconductor quantum dots

Uncontrolled terms: Bound polaron - Different effects - Effective mass - Numerical calculation - Operator method - Polaron models - Rashba effects - Rashba spin orbit interaction - Spin orbit interactions - Unitary transformations - Vibration frequency

Classification code: 714.2 Semiconductor Devices and Integrated Circuits - 921.3 Mathematical Transformations - 933.1.1 Crystal Lattice

DOI: 10.1142/S0219581X11008265

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

964.

Accession number: 20132716470598

Title: Magnetic field and temperature dependence of the effective mass of strong-coupling bound magnetopolaron in quantum rods with hydrogenic impurity

Authors: Xin, Wei1 ; Wuyunqimuge2 ; Han, Chao1 ; Eerdunchaolu1

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao 028043, China

Corresponding author: Xin, W. (xinweigood@hotmail.com)

Source title: Superlattices and Microstructures

Abbreviated source title: Superlattices Microstruct

Volume: 61

Issue date: 2013

Publication year: 2013

Pages: 13-21

Language: English

ISSN: 07496036

E-ISSN: 10963677

CODEN: SUMIEK

Document type: Journal article (JA)

Publisher: Academic Press, 24-28 Oval Road, London, NW1 7DX, United Kingdom

Abstract: Magnetic field and temperature dependence of the properties of strong-coupling bound magnetopolarons in quantum rods (QRs) with hydrogenic impurity is studied by means of the Tokuda improved linear combination operator method, Lee-Low-Pines transformation method and quantum statistical theory. The expressions for the effective mass and the vibrational frequency of magnetopolarons are derived. Results of numerical calculations show that the effective mass and the vibrational frequency of magnetopolarons increase with increasing the cyclotron frequency of the magnetic field, the confinement strength of QRs, the electron-phonon coupling strength and the dielectric constant ratio, but decrease with increasing the aspect ratio of QRs and the temperature; the quantum size effects caused by the ellipsoidal structure and the parabolic confinement potential of QRs have significant influence on the changes of the effective mass and the vibrational frequency of magnetopolarons. © 2013 Elsevier B.V.

Number of references: 23

Main heading: Temperature distribution

Controlled terms: Aspect ratio - Linear transformations - Magnetic fields - Mathematical transformations

Uncontrolled terms: Effective mass - Hydrogenic impurities - Magnetopolarons - Quantum rods - Temperature dependence

Classification code: 641.1 Thermodynamics - 701.2 Magnetism: Basic Concepts and Phenomena - 921.3 Mathematical Transformations - 943 Mechanical and Miscellaneous Measuring Instruments

DOI: 10.1016/j.spmi.2013.05.033

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20134116844533

Title: The virtual prototyping design and evaluation of ergonomic gymnastic based on CATIA

Authors: Ye, Zhenhe¹ ; Li, Xin² ; Li, Ying²

Author affiliation:

1 College of Mechanical and Electrical Engineering, Agricultural University of HeBei, Baoding, HeBei, 071000, China

2 College of Arts, Hebei Normal University of Science and Technology, Qinhuangdao, HeBei, 066000, China

Source title: International Journal of Hybrid Information Technology

Abbreviated source title: Int. J. Hybrid Inf. Technol.

Volume: 6

Issue: 5

Issue date: 2013

Publication year: 2013

Pages: 67-78

Language: English

ISSN: 17389968

Document type: Journal article (JA)

Publisher: Science and Engineering Research Support Society, 20 Virginia Court, Sandy Bay, Tasmania, Australia

Abstract: Simulate the computer-aided design of gymnastic device in the pre-development stage by applying CATIA V6 software, and explore the matching degree between gymnastic device design and human body database using the theory and data of Ergonomics. Build the improved model of gymnastic device based on CATIA V6 virtual human data and explore the best evaluation method of man-machine simulation for gymnastic device design after the analysis of man-machine operational processes for computer-aided gymnastic product design and the experiment of human data measurement specimens. The experiment of arm strength gymnastic device for shoulder shows that the application of CATIA V6 software platform not only further shortens the product development cycle and improves the degree of match between gymnastic device and human body, but also enhance the true integration of gymnastic device development and design system from 3D, design and simulation to manufacture. © 2013 SERSC.

Number of references: 18

Main heading: Ergonomics

Controlled terms: Computer aided analysis - Computer aided design - Experiments - Product design - Product development - Three dimensional

Uncontrolled terms: 3D simulations - CATIA V6 - Design and simulation - Device development - Operational process - Posture - Product development cycle - Virtual prototyping

Classification code: 461.4 Ergonomics and Human Factors Engineering - 723.5 Computer Applications - 901.3 Engineering Research - 913.1 Production Engineering

DOI: 10.14257/ijhit.2013.6.5.07

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

966.

Accession number: 20103813249655

Title: Analysis of four schemes of polarization mode dispersion compensation in 40Gbit/s optical-communication system

Authors: Wang, Feng^{1, 2} ; Jia, Su-Mei³ ; Guo, Ying⁴ ; Cheng, Hui¹ ; Chen, Xiu-Hong¹ ; Jiao, Hong-Lei¹

Author affiliation:

1 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Yanshan University, Qinhuangdao 066004, China

3 Information Engineering College, Handan College, Handan 056001, China

4 School of Electronic Engineering, Tianjin University of Technology and Education, Tianjin 300222, China

Corresponding author: Wang, F.

Source title: Proceedings of SPIE - The International Society for Optical Engineering

Abbreviated source title: Proc SPIE Int Soc Opt Eng

Volume: 7820

Monograph title: International Conference on Image Processing and Pattern Recognition in Industrial

Engineering

Issue date: 2010

Publication year: 2010

Article number: 78202Z

Language: English

ISSN: 0277786X

CODEN: PSISDG

ISBN-13: 9780819483294

Document type: Conference article (CA)

Conference name: International Conference on Image Processing and Pattern Recognition in Industrial Engineering

Conference date: August 7, 2010 - August 8, 2010

Conference location: Xi'an, China

Conference code: 81718

Sponsor: Shaanxi University of Science and Technology; Information Technology and Industrial Engineering Research Center

Publisher: SPIE, P.O. Box 10, Bellingham, WA 98227-0010, United States

Abstract: With the development of optical fiber communication, and after chromatic dispersion and attenuation are compensated for, polarization mode dispersion(PMD)in optical fibers becomes more and more important and cannot be ignored when the transmission system is up to 40Gbit/s or above, or transmission distance is several thousand kilometers long. In the paper, it is discussed four kinds of compensation schemes in 40Gbit/s optical communication system, it point out that transmission distance is different when use different compensation schemes by pulse broadening theory. And when the transmission speed is very high or the transmission distance is very long, it is necessary to compensated high-order PMD. It compared 2nd-order PMD compensated system and first-order PMD compensated system, it point out that 2nd-order PMD compensated system is much better than first-order PMD compensated system by pulse broadening theory. © 2010 SPIE.

Number of references: 11

Main heading: Optical communication

Controlled terms: Communication systems - Electromagnetic dispersion - Image processing - Imaging systems - Industrial engineering - Light transmission - Optical data processing - Optical fibers - Pattern recognition - Polarization - Polarization mode dispersion

Uncontrolled terms: 40-Gbit/s - Compensation scheme - First-order - High-order - Optical fiber communication - PMD - PMD compensation - Pulse broadening - Transmission distances - Transmission speed - Transmission systems

Classification code: 912.1 Industrial Engineering - 746 Imaging Techniques - 741 Light, Optics and Optical Devices - 717.1 Optical Communication Systems - 716 Telecommunication; Radar, Radio and Television - 711.1 Electromagnetic Waves in Different Media - 711 Electromagnetic Waves

DOI: 10.1117/12.866725

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

967.

Accession number: 20103613215095

Title: Teaching of mathematics education under the new curriculum standard

Authors: Guo, Ya-Jun¹ ; Wang, Jin-Ran¹ ; Yue, Xiao-Yun¹

Author affiliation:

¹ Institute of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Guo, Y.-J. (Guoyajunlll@126.com)

Source title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Abbreviated source title: ICIMA- Int. Conf. Ind. Mechatronics Autom.

Volume: 1

Part number: 1 of 2

Monograph title: ICIMA 2010 - 2010 2nd International Conference on Industrial Mechatronics and Automation

Issue date: 2010

Publication year: 2010

Pages: 574-576

Article number: 5538100

Language: English

ISBN-13: 9781424476541

Document type: Conference article (CA)

Conference name: 2010 2nd International Conference on Industrial Mechatronics and Automation, ICIMA 2010

Conference date: May 30, 2010 - May 31, 2010

Conference location: Wuhan, China

Conference code: 81583

Sponsor: Intelligent Inf. Technol. Appl. Res. Assoc.; Wuhan Institute of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The implementation of new course standard of mathematics is one of the significant changes of our educational business. Through our analysis of the present mathematics education to discuss the new idea of mathematics education under the new curriculum standard, the new ways of mathematics classroom teaching under the new curriculum standard are given in the paper. © 2010 IEEE.

Number of references: 4

Main heading: Teaching

Controlled terms: Curricula - Mathematical techniques - Mechatronics - School buildings - Standards

Uncontrolled terms: Curriculum standards - Mathematics classroom teachings - Mathematics curriculum standard - Mathematics education - New idea - Ways to explore

Classification code: 402.2 Public Buildings - 608 Mechanical Engineering, General - 901.2 Education - 902.2 Codes and Standards - 921 Mathematics

DOI: 10.1109/ICINDMA.2010.5538100

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

968.

Accession number: 20124815724258

Title: Realization of computer-aided aircraft tolerance design

Authors: Guo, Changhong¹ ; Zhan, Zaiji² ; Wang, Zhenyu³

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao 066004, China

2 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

3 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhan, Z. (zjzhan@ysu.edu.cn)

Source title: Xinan Jiaotong Daxue Xuebao/Journal of Southwest Jiaotong University

Abbreviated source title: Xinan Jiaotong Daxue Xuebao

Volume: 47

Issue: 5

Issue date: October 2012

Publication year: 2012

Pages: 776-783

Language: Chinese

ISSN: 02582724

CODEN: XJDXEW

Document type: Journal article (JA)

Publisher: Science Press, 18, Shuangqing Street, Haidian, Beijing, 100085, China

Abstract: In order to solve the problem of aircraft tolerances computerization, the modeling techniques of aircraft tolerance were researched. Using UG (UniGraphics) second development technology and VC++, computer-aided aircraft tolerance optimization design modules were developed in the UG platform to realize computer-aided aircraft tolerance analysis and tolerance distribution. A practical and reliable aircraft tolerance database was created to realize aircraft tolerance automatic inquiry. Finally, the applied examples of aircraft tolerance analysis and tolerance distribution were given. The examples verify the correctness of the research results to complete the preliminary computerization of aircraft tolerance design and provide a technical reference for digital design of aircraft tolerances.

Number of references: 16

Main heading: Aircraft

Controlled terms: Fits and tolerances

Uncontrolled terms: Digital designs - Modeling technique - Research results - Second development - Tolerance analysis - Tolerance design - Tolerance models - Tolerance optimization - Unigraphics

Classification code: 601 Mechanical Design - 652.1 Aircraft, General

DOI: 10.3969/j.issn.0258-2724.2012.05.008

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

969.

Accession number: 20125015788110

Title: The design of "The use and maintenance of common digital products" popular science website

Authors: Li, Chunyan¹; Fang, Qijiao²; Kong, Dewei³

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Hebei Normal University, Shijiazhuang, China

3 Yanshan University, Qinhuangdao, China

Corresponding author: Li, C. (licy6035@126.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 220-223

Monograph title: Advances in Manufacturing Technology

Issue date: 2012

Publication year: 2012

Pages: 2475-2478

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037855034

Document type: Conference article (CA)

Conference name: 2nd International Conference on Advanced Design and Manufacturing Engineering, ADME 2012

Conference date: August 16, 2012 - August 18, 2012

Conference location: Taiyuan, China

Conference code: 94259

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: With the development of technology and the improvement of people's living standard, more and more people purchase digital products, a multimedia website becomes an important way for people to learn how to use and maintain the digital products. The demand for knowledge about digital products use and maintenance was identified by questionnaire and interview, and then the popular science website was designed and made. From the paper, you can learn the design principles of the popular science website: properly selecting contents, using multimedia technology, clear navigation and easy to be used. This website contains the modules of computer, mobile phone, camera, DV, MP4, expert answer and forum, you can learn the basic modules and functions design, and the technical key points of implementation of the popular science website in the paper. © (2012) Trans Tech Publications, Switzerland.

Number of references: 5

Main heading: Design

Controlled terms: Engineering education - Maintenance - Multimedia systems - Websites

Uncontrolled terms: Design Principles - Digital products - Keypoints - Living standards
- Multimedia technologies - Popular science

Classification code: 901.2 Education - 723.5 Computer Applications - 723 Computer Software, Data Handling and Applications - 913.5 Maintenance - 718 Telephone Systems and Related Technologies; Line Communications - 716 Telecommunication; Radar, Radio and Television - 408 Structural Design - 717 Optical Communication

DOI: 10.4028/www.scientific.net/AMM.220-223.2475

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

970.

Accession number: 20113214218842

Title: Unreliable multi-server machine repairable system with variable breakdown rates

Authors: Lv, Sheng-Li¹; Li, Jing-Bo²; Yue, De-Quan¹

Author affiliation:

1 College of Science, Yanshan University, Qinhuangdao 066004, China

2 Mathematics and Information College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Lv, S.-L. (qhdddsl@163.com)

Source title: Journal of the Chinese Institute of Industrial Engineers

Abbreviated source title: J. Chin. Inst. Ind. Eng.

Volume: 28

Issue: 5

Issue date: July 2011

Publication year: 2011

Pages: 400-409

Language: English

ISSN: 10170669

E-ISSN: 21517606

CODEN: GOGOE4

Document type: Journal article (JA)

Publisher: Taylor and Francis Ltd., 4 Park Square, Milton Park, Abingdon, Oxfordshire, OX14 4RN, United Kingdom

Abstract: We consider the machine repair system in which K identical unreliable machines are maintained by N servers. Each server is subject to breakdown even if no failed machines are in the system. There are c reliable repairmen in the system to repair the breakdown servers. Failure and service times of the machines, and breakdown and repair times of the servers, are assumed to follow a negative exponential distribution. Each unreliable server has different breakdown rates in its busy times and idle times. The system performance measures are obtained by a matrix geometric method. Some important relationships between the system performance measures are given. An optimization model is developed for the optimum numbers of servers and repairmen to minimize the expected total cost of the system. A numerical example is given for illustration. © 2011 Chinese Institute of Industrial Engineers.

Number of references: 18

Main heading: Repair

Controlled terms: Optimization

Uncontrolled terms: Idle time - Machine repair - machine repairable - Matrix geometric methods - Multi-server - Negative exponential distribution - Numerical example - Optimization models - Optimum number - problem - Repairable systems - Service time - System performance measures - Total costs - Unreliable machine - Unreliable servers

Classification code: 913.5 Maintenance - 921.5 Optimization Techniques

DOI: 10.1080/10170669.2011.599431

Database: Compendex

971.

Accession number: 20105213531024

Title: Application of fuzzy immune PID control based on GA in bending control system

Authors: Yu, Yuzhen^{1, 2} ; Du, Fengshan¹ ; Ren, Xinyi¹ ; Zhang, Shangbin¹ ; Hao, Wenxu³

Author affiliation:

1 Institute of Mechanical Engineering, Yanshan University, Qinhuangdao, Hebei, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

3 Jiancheng Co. Haerbin, Heilongjiang, China

Corresponding author: Yu, Y.

Source title: Proceedings - 2010 International Conference on System Science, Engineering Design and Manufacturing Informatization, ICSEM 2010

Abbreviated source title: Proc. - Int. Conf. Syst. Sci., Eng. Des. Manuf. Inf., ICSEM

Volume: 1

Part number: 1 of 2

Monograph title: Proceedings - 2010 International Conference on System Science, Engineering Design and Manufacturing Informatization, ICSEM 2010

Issue date: 2010

Publication year: 2010

Pages: 245-248

Article number: 5640318

Language: English

ISBN-13: 9780769542232

Document type: Conference article (CA)

Conference name: 2010 International Conference on System Science, Engineering Design and Manufacturing Informatization, ICSEM 2010

Conference date: November 12, 2010 - November 14, 2010

Conference location: Yichang, China

Conference code: 83105

Sponsor: Guizhou University; Aurel Vlaicu University of Arad; Int. Assoc. Manage. Sci. Ind. Eng. (MSIE)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: A novel control strategy of Fuzzy-Immune PID based on GA is proposed in this paper. The strategy learns from the immune feedback principle of biological immune system and takes advantage of the good approaching ability of fuzzy control to achieve nonlinear function of the immune controller, and then the GA algorithm is used to optimize parameters of PID controller and immune controller. Apply the strategy into the bending control system of rolling mills with characteristics of high nonlinearity, time-varying and time-delay. The simulation results indicate that the strategy has strong adaptability to the transformation of the system parameters and has advantages of low overshoot, short adjusting time, strong anti-disturbance ability and great robustness. © 2010 IEEE.

Number of references: 9

Main heading: Controllers

Controlled terms: Delay control systems - Fuzzy control - Genetic algorithms - Manufacture - Nonlinear feedback - Proportional control systems - Remote control - Rolling mills - Systems science - Three term control systems - Time varying control systems - Two term control systems

Uncontrolled terms: Bending control - Biological immune system - Control strategies - Fuzzy immune PID control - GA algorithm - High nonlinearity - Immune controllers - Immune feedback - Nonlinear functions - PID controllers - Simulation result - Time varying

Classification code: 921 Mathematics - 732.1 Control Equipment - 731.1 Control Systems - 731 Automatic Control Principles and Applications - 723 Computer Software, Data Handling and Applications - 537.1 Heat Treatment Processes - 535.1.1 Rolling Mills

DOI: 10.1109/ICSEM.2010.73

Database: Compendex

972.

Accession number: 20123015280917

Title: A graph similarity matching algorithm for artifact-centric business process models

Authors: Liu, Haibin¹ ; Liu, Guohua² ; Zhao, Danfeng¹ ; Song, Jinling³

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, China

2 College of Computer Science and Technology, Donghua University/ College of Information Science and Engineering, Yanshan University, China

3 Hebei Normal University of Science and Technology, China

Corresponding author: Liu, H. (champion_lhb@163.com)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 4

Issue: 12

Issue date: June 2012

Publication year: 2012

Pages: 321-329

Language: English

ISSN: 19763700

E-ISSN: 22339345

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: Artifact-centric business process has emerged as a representative paradigm of data-centric business process. As concerned in traditional business process, it is a critical issue to match business process models quickly, exactly and efficiently. Because of the pertinence between artifacts and tasks which deal with them, ordinary graph cannot describe the process successfully. Therefore, a bipartite graph for artifact-centric business process models is presented firstly, which can transform process model matching to graph matching.

Secondly, a novel method using matrix conversion to measure graph edit distance is also brought forward. Finally, a similarity matching algorithm named ArtiMatch was designed and implemented. Theoretical analysis and experimental results show that the ArtiMatch algorithm outperforms existing algorithms in a number of performance metrics such as execution time, precision and recall.

Number of references: 18

Main heading: Pattern matching

Controlled terms: Algorithms - Mathematical models

Uncontrolled terms: Artifact - BPM - Graph edit distance - Graph matchings -
Process similarity

Classification code: 751.1 Acoustic Waves - 921 Mathematics

DOI: 10.4156/AISS.vol4.issue12.37

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

973.

Accession number: 20105213520866

Title: A novel modified genetic algorithm for training wavelet neural networks

Authors: Li, Jing¹ ; Wang, Jin-Jia² ; Hou, Chun-Liang² ; Ma, Chong-Xiao³ ; Hong, Wen-Xue⁴

Author affiliation:

- 1 College of Science, Yanshan University, Qinhuangdao, China
- 2 College of Information Science and Engineer, Yanshan University, Qinhuangdao, China
- 3 Determent of Machinery and Electron, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 4 College of Electrical Engineering, Yanshan University, Qinhuangdao, China

Corresponding author: Li, J. (01016888@sina.com)

Source title: Proceedings - 2010 1st International Conference on Pervasive Computing, Signal Processing and Applications, PCSPA 2010

Abbreviated source title: Proc. - Int. Conf. Pervasive Comput., Signal Process. Appl., PCSPA

Monograph title: Proceedings - 2010 1st International Conference on Pervasive Computing, Signal Processing and Applications, PCSPA 2010

Issue date: 2010

Publication year: 2010

Pages: 775-778

Article number: 5635502

Language: English

ISBN-13: 9780769541808

Document type: Conference article (CA)

Conference name: 1st International Conference on Pervasive Computing, Signal Processing and Applications, PCSPA 2010

Conference date: September 17, 2010 - September 19, 2010

Conference location: Harbin, China

Conference code: 82999

Sponsor: IEEE; K.U.A.S.; National Natural Science Foundation of China

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Inspired by the genetic algorithm (GA) and wavelet neural networks, a novel modified GA algorithm is proposed for finding the optimal number of hidden layer as well as the networks parameters. The efficacy of the proposed algorithm in function approximation is demonstrated through theoretical analysis and experimental results. © 2010 IEEE.

Number of references: 10

Main heading: Neural networks

Controlled terms: Approximation algorithms - Genetic algorithms - Signal processing - Ubiquitous computing

Uncontrolled terms: Function approximation - GA algorithm - Hidden layers - Modified genetic algorithms - Optimal number - Wavelet neural networks

Classification code: 716.1 Information Theory and Signal Processing - 723.4 Artificial Intelligence - 723.5 Computer Applications - 921 Mathematics

DOI: 10.1109/PCSPA.2010.193

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

974.

Accession number: 20112814137523

Title: Solving kinematics for a novel over-constrained 2UPR+UPU parallel manipulator

Authors: Hu, Bo1 ; Lu, Yi1 ; Xu, Jiayin2 ; Yu, Jingjing3

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao 066004, China

2 Tianjin Research Institute of Construction Machinery, Tianjin 300384, China

3 Department of Mechanics and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Hu, B. (hzb0001@yahoo.com.cn)

Source title: Jixie Gongcheng Xuebao/Journal of Mechanical Engineering

Abbreviated source title: Jixie Gongcheng Xuebao

Volume: 47

Issue: 11

Issue date: June 5, 2011

Publication year: 2011

Pages: 36-43

Language: Chinese

ISSN: 05776686

CODEN: CHHKA2

Document type: Journal article (JA)

Publisher: Editorial Office of Chinese Journal of Mechanical, 22 Baiwanzhuang Dajie, Beijing, 100037, China

Abstract: A novel 2UPR+SPR parallel manipulator (PM) is proposed. The two RPU legs of this PM provide four constraints whereas two of them are overconstraints due to the particular arrangement of the joints in RPU legs. The UPU leg provides one constrained force for this PM. The velocity constraint equation of this PM is established, and based on this, the degree of freedom of this PM is analyzed. The geometric constraint equations of this PM are established, the independent motion parameters which express the pose of mechanism end are determined, and the coupling relations of the pose, velocity and acceleration of the platform on the mechanism are derived. The inverse kinematics, velocity and acceleration of this PM are solved, and the detailed kinematics model of RPU and UPU type leg is established. The dynamics model is established on the basis of the principle of virtual work and the kinematics model of this PM, and the simulation of mechanism dynamics is implemented by using Matlab software. The simulation results testify the validity of the analytic model. The analytic method for this PM is fit for other over-constrained PMs. © 2011 Journal of Mechanical Engineering.

Number of references: 18

Main heading: Manipulators

Controlled terms: Computer simulation - Computer software - Dynamics - Inverse kinematics - Jacobian matrices - Mathematical models - MATLAB

Uncontrolled terms: Analytic method - Analytic models - Constrained forces - Coupling relation - Degree of freedom - Dynamics models - Geometric constraint - Jacobians - Kinematics models - Matlab- software - Motion parameters - Over-constrained - Parallel manipulators - Principle of virtual work - Simulation result - Velocity constraints

Classification code: 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 731.5 Robotics - 921 Mathematics - 921.1 Algebra - 931.1 Mechanics

DOI: 10.3901/JME.2011.11.036

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

975.

Accession number: 20112614105272

Title: The finite element analysis for the Geogrid treatment soft clay foundation of embankment

Authors: Meng, Deguang¹ ; Dong, Yanying¹ ; Zhang, Lishan¹

Author affiliation:

1 College of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Meng, D. (mengdg@126.com)

Source title: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011 - Proceedings

Abbreviated source title: Int. Conf. Electr. Technol. Civ. Eng., ICETCE - Proc.

Monograph title: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011 - Proceedings

Issue date: 2011

Publication year: 2011

Pages: 833-835

Article number: 5775709

Language: English

ISBN-13: 9781457702907

Document type: Conference article (CA)

Conference name: 2011 International Conference on Electric Technology and Civil Engineering, ICETCE 2011

Conference date: April 22, 2011 - April 24, 2011

Conference location: Lushan, China

Conference code: 85256

Sponsor: IEEE Beijing Section ED Chapter

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The geogrid is used widely in road and railroad embankment project because of high tensile strength, large friction angle with soil interface and lock ability etc. Embankment project of soft clay foundation is

analyzed by the finite element analysis with ADINA, the soil and filling of embankment project uses the Mohr-Coulomb model, the sand mat uses linear elastic constitutive model, the contact element uses the plane strain 2-D element. Step load is considered in the model, the settlement and lateral deformation is discussed in the analysis, the calculation value of finite element method is reasonable to compare with measured data. The method can supply reference more exactly for design and construction of reinforced treatment soft clay foundation. © 2011 IEEE.

Number of references: 8

Main heading: Finite element method

Controlled terms: Civil engineering - Embankments - Geologic models - Hydraulic structures - Tensile strength

Uncontrolled terms: Contact elements - Design and construction - Finite Element - geogrid - High-tensile strength - Large friction - Lateral deformation - Linear elastic - Measured data - Mohr Coulomb model - Plane strains - Sand mat - Soft clay foundation - Soft clays - Soil interfaces - Step load

Classification code: 921.6 Numerical Methods - 611 Hydroelectric and Tidal Power Plants - 483 Soil Mechanics and Foundations - 481.1 Geology - 441 Dams and Reservoirs; Hydro Development - 422 Strength of Building Materials; Test Equipment and Methods - 421 Strength of Building Materials; Mechanical Properties - 409 Civil Engineering, General - 405 Construction Equipment and Methods; Surveying

DOI: 10.1109/ICETCE.2011.5775709

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

976.

Accession number: 20134817023618

Title: Research on Hebei province e-government affairs Web2.0 in China

Authors: Wang, Yan¹ ; Ma, Xiuli² ; Zhang, Dongliang³ ; Liu, Bangfan¹ ; Lou, Yu³

Author affiliation:

- 1 Humanities-law College, Yanshan University, Qinhuangdao, China
- 2 Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 Qinhuangdao Vocational and Technical College, Qinhuangdao, China

Source title: WIT Transactions on Information and Communication Technologies

Abbreviated source title: WIT Trans. Inf. Commun. Technol.

Volume: 46 VOLUME 2

Monograph title: Information Science and Management Engineering

Issue date: 2013

Publication year: 2013

Pages: 1903-1910

Language: English

ISSN: 17433517

ISBN-13: 9781845648282

Document type: Conference article (CA)

Publisher: WITPress

Abstract: The e-government affairs Web2.0 is a new concept and a new development trend. There is a great deal of research space in the construction of Hebei in China e-government affairs taking public service as central factor. The following objectives are expected to be achieved through the research to construct Hebei province electronic service system, to promote the construction of e-government, service-typed government and rural e-government based on the 3-networks integration in Hebei province, and to innovate the theories and methods of e-government with the characteristics of Hebei province. © 2014 WIT Press.

Number of references: 10

Main heading: Government data processing

Controlled terms: Information technology - Research

Uncontrolled terms: Development trends - e-Government - E-Government Affairs - Electronic services - Hebei Province - Public services - Web2.0

Classification code: 901.3 Engineering Research - 902.3 Legal Aspects - 903 Information Science

DOI: 10.2495/ISME20132472

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

977.

Accession number: 20122015021616

Title: Design of large-core single-mode Yb³⁺-doped photonic crystal fiber

Authors: Zhao, Xing-tao^{1, 2} ; Zheng, Yi¹ ; Liu, Xiao-xu³ ; Zhou, Gui-yao² ; Liu, Zhaolun² ; Hou, Lan-tian²

Author affiliation:

1 Laser Institute of Science College, Beijing Jiaotong University, Beijing 100044, China

2 Measurement Technology and Instrumentation Key Lab of Hebei Province, State Key Lab of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

3 College of Physics and Chemistry, Hebei Normal University of Science Technology, Qinhuangdao 066004, China

Corresponding author: Zhao, X. (zxt-81@sohu.com)

Source title: Optoelectronics Letters

Abbreviated source title: Optoelectron. Lett.

Volume: 8

Issue: 3

Issue date: May 2012

Publication year: 2012

Pages: 212-215

Language: English

ISSN: 16731905

Document type: Journal article (JA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The effective index of the cladding fundamental space-filling mode in photonic crystal fiber (PCF) is simulated by the effective index method. The variation of the effective index with the structure parameters of the fiber is achieved. For the first time, the relations of the V parameter of Yb³⁺-doped PCF with

the refractive index of core and the structure parameters of the fiber are provided. The single-mode characteristics of large-core Yb³⁺-doped photonic crystal fibers with 7 and 19 missing air holes in the core are analyzed. The large-core single-mode Yb³⁺-doped photonic crystal fibers with core diameters of 50 μm, 100 μm and 150 μm are designed. The results provide theory instruction for the design and fabrication of fiber. © 2012 Tianjin University of Technology and Springer-Verlag Berlin Heidelberg.

Number of references: 19

Main heading: Fibers

Controlled terms: Nonlinear optics - Optical fiber fabrication - Optical waveguides - Photonic crystal fibers - Refractive index - Ytterbium

Uncontrolled terms: Air holes - Core diameters - Effective index - Effective index method - Large-core - Single mode - Space-filling - Structure parameter - V-parameter

Classification code: 547.2 Rare Earth Metals - 741 Light, Optics and Optical Devices - 812 Ceramics, Refractories and Glass - 812.3 Glass - 817 Plastics and Other Polymers: Products and Applications - 951 Materials Science

Numerical data indexing: Size 1.00e-04m, Size 1.50e-04m, Size 5.00e-05m

DOI: 10.1007/s11801-012-2002-6

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

978.

Accession number: 20105213520893

Title: GMM-based detection methods in EEG-based Brain-Computer Interfaces

Authors: Wang, Jin-Jia¹ ; Jiang, Ke-Mei¹ ; Ma, Chong-Xiao²

Author affiliation:

1 College of Information Science and Engineer, Yanshan University, Qinhuangdao, China

2 Determent of Machinery and Electron, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Wang, J.-J. (wj@ysu.edu.cn)

Source title: Proceedings - 2010 1st International Conference on Pervasive Computing, Signal

Processing and Applications, PCSPA 2010

Abbreviated source title: Proc. - Int. Conf. Pervasive Comput., Signal Process. Appl., PCSPA

Monograph title: Proceedings - 2010 1st International Conference on Pervasive Computing, Signal Processing and Applications, PCSPA 2010

Issue date: 2010

Publication year: 2010

Pages: 779-782

Article number: 5635550

Language: English

ISBN-13: 9780769541808

Document type: Conference article (CA)

Conference name: 1st International Conference on Pervasive Computing, Signal Processing and Applications, PCSPA 2010

Conference date: September 17, 2010 - September 19, 2010

Conference location: Harbin, China

Conference code: 82999

Sponsor: IEEE; K.U.A.S.; National Natural Science Foundation of China

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Brain Computer Interface (BCI) technology allows a person to control a device by bypassing the use of muscular activity. In previous studies, Signal processing and classification methods play a decisive role in the performance accuracy in BCI application, and there is a current requirement for preliminary analyses to identify the brain signal features best suited for communication. This paper designs proposal of signal detection instead of classification, and which does not require such perplexing analysis procedures. This signal detection concept is carried out by establishing Gaussian mixture models (GMM) of resting brain activity (idle state), so that any imagined movement or real movement signals in brain can be detected. GMM as a versatile modeling tool can be used to approximate any probability density function (pdf) given a sufficient number of components, and impose only minimal assumptions about the modeled random variables. Meanwhile GMM is effective in the calculation. Our best results were 82% on BCI Competition 2002 - Data set and 75% on BCI Competition 2003 - Data set IV in accuracy rate. It confirms the truth of feasibility on detection. In summary, this paper demonstrates

how the approach of detection could be used to overcome one of the present impediments to translation of laboratory BCI demonstrations into clinically practical applications. © 2010 IEEE.

Number of references: 10

Main heading: Brain computer interface

Controlled terms: Blind source separation - Brain - Brain models - Communication channels (information theory) - Competition - Electroencephalography - Electrophysiology - Gaussian distribution - Interfaces (computer) - Object recognition - Probability density function - Random variables - Signal detection - Signal processing - Ubiquitous computing

Uncontrolled terms: Accuracy rate - Brain activity - Brain signals - Classification methods - Data sets - Detection methods - Gaussian Mixture Model - Modeling tool - Muscular activities - Number of components - Preliminary analysis - Probability density function (pdf)

Classification code: 922.1 Probability Theory - 911.2 Industrial Economics - 722.3 Data Communication, Equipment and Techniques - 722.2 Computer Peripheral Equipment - 716.1 Information Theory and Signal Processing - 716 Telecommunication; Radar, Radio and Television - 461 Bioengineering and Biology

Numerical data indexing: Percentage 7.50e+01%, Percentage 8.20e+01%

DOI: 10.1109/PCSPA.2010.194

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

979.

Accession number: 20130816041086

Title: Research on the extraction process of water-soluble asparagus powder and removal of free radical

Authors: Penga, You-Shun¹ ; Song, Shi-Tao¹ ; Wang, Shu-Yuan¹ ; Zheng, Xue-Fang¹ ; Qi, Lian¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinghuangdao Hebei 066000, China

Corresponding author: Penga, Y.-S. (qhdyps@163.com)

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 284-287

Monograph title: Innovation for Applied Science and Technology

Issue date: 2013

Publication year: 2013

Pages: 385-389

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037856123

Document type: Conference article (CA)

Conference name: 2nd International Conference on Engineering and Technology Innovation 2012, ICETI 2012

Conference date: November 2, 2012 - November 6, 2012

Conference location: Kaohsiung, Taiwan

Conference code: 95485

Sponsor: AandF; Tailift Co., Ltd; SPINTECH; Smart Motion Control Co.,Ltd.; FXB Flexible Motion; et al

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: The optimum extraction condition of water-soluble asparagus powder through water boiling method is to extract it twice, in the first extraction, 8% is set as the solid-liquid ratio, 15 minutes is set as the soak time and 40 minutes is set as the boiling time; in the second extraction, 10% is set as the solid-liquid ratio, 40 minutes is set as the boiling time. Under this condition, the dry yield rate is 33.98%, and the total active substance yield rate is 10.34% (including flavones yield rate of 1.0%, saponin yield rate of 5.99%, and polysaccharide yield rate of 3.35%). Water-soluble asparagus powder has good removal effects on hydroxyl radicals, superoxide anion free radicals, and DPPH free radicals. The water-soluble asparagus powders made from the raw material in different pick-time have different removal effects on DPPH free radicals, and the asparagus powder made from asparagus picked in August, September, and October is better. The best is to read these instructions and follow the outline of this text. © (2013) Trans Tech Publications, Switzerland.

Number of references: 9

Main heading: Extraction

Controlled terms: Free radicals - Innovation - Oxygen - Phase transitions - Thermodynamic properties

Uncontrolled terms: Active substance - Asparagus - DPPH free radicals - Extraction process - Hydroxyl radicals - Optimum extraction conditions - Removal effects - Soak time - Solid-liquid ratio - Superoxide anions - Yield rates

Classification code: 641.1 Thermodynamics - 802.3 Chemical Operations - 804 Chemical Products Generally - 912 Industrial Engineering and Management

Numerical data indexing: Percentage 1.00e+00%, Percentage 1.00e+01%, Percentage 1.03e+01%, Percentage 3.35e+00%, Percentage 3.40e+01%, Percentage 5.99e+00%, Percentage 8.00e+00%, Time 2.40e+03s, Time 9.00e+02s

DOI: 10.4028/www.scientific.net/AMM.284-287.385

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

980.

Accession number: 20133616697967

Title: Effects of high pressure heat treatment on thermal conductivity and electrical conductivity of CuAlBi alloy

Authors: Ma, Yu-Quan¹ ; Lin, Hong-Ju¹ ; Zhang, Li-Hong¹

Author affiliation:

¹ Mechanical and Electrical Engineering College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Ma, Y.-Q. (mayuquan2004@126.com)

Source title: Materials Transactions

Abbreviated source title: Mater. Trans.

Volume: 54

Issue: 8

Issue date: 2013

Publication year: 2013

Pages: 1480-1483

Language: English

ISSN: 13459678

CODEN: MTARCE

Document type: Journal article (JA)

Publisher: Japan Institute of Metals (JIM)

Abstract: The thermal conductivity and electrical conductivity of CuAlBi alloy before and after 1-6 GPa high pressure treatment were measured by thermal constant tester and conductivity gauge when it was heated at 700°C and lasted for 30 min. And the effects of high pressure heat treatment on thermal conductivity and electrical conductivity of CuAlBi alloy were discussed by its microstructure. The results show that the thermal conductivity variation trend of CuAlBi alloy before and after 3 GPa pressure heat treatment is almost the same in range of 25-600° C, high pressure can reduce the thermal conductivity and electrical conductivity of CuAlBi alloy, the thermal conductivity and electrical conductivity of the alloy decrease with the increment of pressure in less than 3 GPa, when the pressure is over 3 GPa, the variation of thermal conductivity and electrical conductivity are not obvious. © 2013 The Japan Institute of Metals and Materials.

Number of references: 16

Main heading: Thermal conductivity of solids

Controlled terms: Alloys - Cerium alloys - Electric conductivity - Heat treatment - High pressure effects - Thermal conductivity

Uncontrolled terms: Conductivity variation - Electrical conductivity - High pressure - High pressure treatments - Thermal constant

Numerical data indexing: Pressure 1.00e+09Pa to 6.00e+09Pa, Pressure 3.00e+09Pa, Temperature 2.98e+02K to 8.73e+02K, Temperature 9.73e+02K, Time 1.80e+03s

DOI: 10.2320/matertrans.M2013131

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

981.

Accession number: 20125015788707

Title: Preparation and investigation of (Sr_{0.85}Mg_{0.14})₃(P_{1-x}Si_xO₄)₂: Dy³⁺ single-phase full-color phosphor

Authors: Zhang, Zhi-Wei¹; Mao, Zhi-Yong²; Song, Shi-Tao¹; Zhang, Jian-Ping¹; Liu, Lu¹; Zhang, Wei-Guo¹; Wang, Dong-Jun¹

Author affiliation:

1 Physical-Chemistry College, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

2 Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai 200050, China

Corresponding author: Zhang, Z.-W. (zhangzhiweia@163.com)

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 90

Issue date: January 2013

Publication year: 2013

Pages: 1-3

Language: English

ISSN: 0167577X

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: White light emission (Sr_{0.85}Mg_{0.14})₃(P_{1-x}Si_xO₄)₂: Dy³⁺ phosphors applied for white light emitting diodes (LEDs) were synthesized by the solid state reaction process. The phases and luminescence

properties of the obtained $(\text{Sr}_{0.85}\text{Mg}_{0.14})_3(\text{P}_{1-x}\text{Si}_x\text{O}_4)_2$: Dy^{3+} phosphors were well characterized. The presented results demonstrate that the $(\text{Sr}_{0.85}\text{Mg}_{0.14})_3(\text{P}_{1-x}\text{Si}_x\text{O}_4)_2$: Dy^{3+} particles emit an intensive white light emission under excitation at 350 nm. Additionally, the effect of Si^{4+} incorporation concentration on the luminescence properties of $(\text{Sr}_{0.85}\text{Mg}_{0.14})_3(\text{PO}_4)_2$: Dy^{3+} was investigated in detail. © 2012 Elsevier B.V.

Number of references: 11

Main heading: Light emitting diodes

Controlled terms: Luminescence - Luminescence of inorganic solids - Phosphors - Silicon
- Solid state reactions

Uncontrolled terms: Full-color - Intensive white light - Luminescence properties -
Single-phase - Solid-state reaction process - White LED - White light emission - White light
emitting diodes

Classification code: 712.1.1 Single Element Semiconducting Materials - 741.1 Light/Optics - 802.2
Chemical Reactions

Numerical data indexing: Size 3.50e-07m

DOI: 10.1016/j.matlet.2012.08.144

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

982.

Accession number: 20112514083104

Title: Analysis and estimate of corn quality by near infrared reflectance (NIR) spectroscopy

Authors: Fang, Yang¹ ; Chengwei, Xie² ; Dan, He³

Author affiliation:

- 1 Physics and Chemical College, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Environment Management College of China, Qinhuangdao, China
- 3 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Fang, Y. (yangfang2622@yahoo.cn)

Source title: 2011 Symposium on Photonics and Optoelectronics, SOPO 2011

Abbreviated source title: Symp. Photonics Optoelectron., SOPO

Monograph title: 2011 Symposium on Photonics and Optoelectronics, SOPO 2011

Issue date: 2011

Publication year: 2011

Article number: 5780611

Language: English

ISBN-13: 9781424465545

Document type: Conference article (CA)

Conference name: 2011 Symposium on Photonics and Optoelectronics, SOPO 2011

Conference date: May 16, 2011 - May 18, 2011

Conference location: Wuhan, China

Conference code: 85158

Sponsor: IEEE Photonics Society; IEEE Wuhan Section; Wuhan University; Optics and Photonics Society of Singapore; Shandong University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The objective of this study was to investigate the feasibility of predicting the composition of corn by near infrared reflectance spectroscopy. The partial least square (PLS) regression method, second derivative and Norris derivative filter were applied in the NIRS prediction of composition of corn. For Dry matter, crude protein, ash, fat, starch, neutral-detergent fiber and acid-detergent fiber, the determination coefficients were 0.9743, 0.9683, 0.9478, 0.9098, 0.9777, 0.9354 and 0.9269, and the SD/RMSEP values for them were 3.96, 4.78, 3.75, 4.25, 4.13, 3.88 and 3.12, respectively. The determination coefficient and SD/RMSEP value were 0.8575 and 3.06 for soluble protein, but low determination coefficients of 0.5319 and 0.6833 with SD/RMSEP values of 5.50 and 2.85 were observed for acid-detergent insoluble protein and neutral-detergent insoluble protein. The results of this study indicated that corn nutritive values could be fast and accurately predicted by NIRS. © 2011 IEEE.

Number of references: 9

Main heading: Infrared devices

Controlled terms: Detergents - Least squares approximations - Mathematical models - Near infrared spectroscopy - Optoelectronic devices - Photonics - Proteins - Reflection

Uncontrolled terms: Corn - Crude proteins - Derivative filter - Determination coefficients - Dry matters - Insoluble proteins - Near Infrared - Near infrared reflectance spectroscopy - Nutritive values - Partial least-square regression - Quality testing - Second derivatives - Soluble proteins

Classification code: 921.6 Numerical Methods - 921 Mathematics - 804.1 Organic Compounds - 804 Chemical Products Generally - 803 Chemical Agents and Basic Industrial Chemicals - 741.3 Optical Devices and Systems - 711 Electromagnetic Waves

DOI: 10.1109/SOPO.2011.5780611

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

983.

Accession number: 20122915263063

Title: Dual fluorescence of graphene oxide: A time-resolved study

Authors: Zhang, Xian-Fu^{1, 2}; Shao, Xiaona¹; Liu, Suping¹

Author affiliation:

1 Chemistry Department, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province 066004, China

2 MPC Technologies, Hamilton, ON L8S 3H4, Canada

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Physical Chemistry A

Abbreviated source title: J Phys Chem A

Volume: 116

Issue: 27

Issue date: July 12, 2012

Publication year: 2012

Pages: 7308-7313

Language: English

ISSN: 10895639

E-ISSN: 15205215

CODEN: JPCAFH

Document type: Journal article (JA)

Publisher: American Chemical Society, 2540 Olentangy River Road, P.O. Box 3337, Columbus, OH 43210-3337, United States

Abstract: The fluorescence properties of graphene oxide (GO) was studied by recording the fluorescence lifetime, fluorescence emission, and excitation spectra, as well as UV-visible and near-IR absorption spectra. For the first time, we showed that a blue band (ca. 440 nm) and a long wavelength (LW) band (ca. 700 nm) are coexistent, which can be recorded simultaneously by controlling concentration, excitation wavelength, and pH values. Two bands are closely related by the protonation or deprotonation of GO. The blue band is favored by low GO concentration, short excitation wavelength, and high pH value, while the LW band is favored by low pH and long excitation wavelength. To reveal the nature of the dual emission of GO, the fluorescence lifetimes under various conditions were also measured. The blue band contains three emitting components; one of them has a lifetime as long as 10 ns, and its emitting intensity is fairly sensitive to pH, showing the potential for applications in sensing H⁺ and fluorescence lifetime imaging. Combining the results under various conditions, we conclude that the electronic transition for this component is very likely due to n- π^* transition. The LW band contains two main emitting components (0.2 and 2.1 ns) that also appear in the blue band as minor contributors; the related emission is assigned to π - π^* transition. In summary, GO emission is of broadband (300-1250 nm), long-lived, pH sensitive, and excitation wavelength dependent. This makes it easily tailored for versatile applications. © 2012 American Chemical Society.

Number of references: 36

Main heading: Fluorescence

Controlled terms: pH

Uncontrolled terms: Dual emissions - Dual fluorescence - Electronic transition - Excitation spectrum - Excitation wavelength - Fluorescence emission - Fluorescence lifetime imaging - Fluorescence lifetimes - Fluorescence properties - Graphene oxides - High pH value - Long wavelength - Near-IR absorption - pH sensitive - pH value - Time resolved studies - UV-visible

Classification code: 741.1 Light/Optics - 801.1 Chemistry, General

Numerical data indexing: Size 3.00e-07m to 1.25e-06m, Size 4.40e-07m, Size 7.00e-07m, Time 1.00e-08s, Time 2.10e-09s

DOI: 10.1021/jp301755b

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

984.

Accession number: 20132816496968

Title: Five enzymatic study on the extraction of soluble dietary fiber from old stalk of asparagus

Authors: Yang, Xiaokuan¹ ; Shi, Pengbao¹ ; Zhao, Yuhua¹ ; Zhang, Jialin¹ ; Xu, Yinling¹ ; Chang, Xuedong¹

Author affiliation:

¹ Institute of Food Science and Technology of Hebei Normal University of Science and Technology, Qinhuangdao 066004, Hebei, China

Corresponding author: Chang, X.

Source title: Journal of Chinese Institute of Food Science and Technology

Abbreviated source title: J. Chin. Inst. Food Sci. Technol.

Volume: 13

Issue: 5

Issue date: May 2013

Publication year: 2013

Pages: 24-31

Language: Chinese

ISSN: 10097848

Document type: Journal article (JA)

Publisher: Chinese Institute of Food Science and Technology, 3 Floor, Qingyuan Mansion, No. 6 Beisan Street., Fucheng Road, Haidian District, Beijing, 100048, China

Abstract: Old stalk of asparagus as raw materials, processing 40 mesh screening treatment of ground into a powder. In 1: 25 g/mL ratio of liquid/solid to solvent aqueous environment, using lipase in turn(100 U/mg), amylase(30 U/mg) and Glucoamylase (100 U/mg), protease (60 U/mg), cellulose (1: 1 000 U/mg) by enzymatic hydrolysis and extraction of soluble dietary fiber. It is studied respectively for the enzyme amount, enzymatic hydrolysis-pH, enzymatic hydrolysis-temperature and enzymatic hydrolysis-time affecting these enzymes effect. On the basis of orthogonal test to determine the optimal conditions for enzymatic hydrolysis: lipase is added 0.8%, pH 9.5 by enzymatic hydrolysis and enzymatic hydrolysis temperature 35°C, enzymatic hydrolysis time 105min; Amylase and Glucoamylase are added 0.75% and 0.20%, respectively, pH 6.0 enzyme solutions, enzymatic hydrolysis temperature 70°C, enzymatic hydrolysis time 180 min; Protease is added 1.75%, pH 7.3 by enzymatic hydrolysis and enzymatic hydrolysis temperature 43°C, enzymatic hydrolysis time 120 min; Cellulase amounts to 0.3%, enzymatic hydrolysis of pH4.8, enzymatic hydrolysis of temperatures of 60°C, enzymatic hydrolysis time 60 min. Soluble dietary fibre yield of 13.7%, high purity of 85.05%.

Number of references: 23

Main heading: Enzymatic hydrolysis

Controlled terms: Amylases - Extraction - Fibers - Optimization

Uncontrolled terms: Aqueous environment - Asparagus - Cellulase - Dietary fibers - Extraction of soluble dietary fibers - Optimal conditions - Orthogonal experiment - Soluble dietary fibre

Classification code: 802.3 Chemical Operations - 804.1 Organic Compounds - 812 Ceramics, Refractories and Glass - 817 Plastics and Other Polymers: Products and Applications - 921.5 Optimization Techniques

Numerical data indexing: Mass_Density 2.50e+04kg/m³, Percentage 1.37e+01%, Percentage 1.75e+00%, Percentage 2.00e-01%, Percentage 3.00e-01%, Percentage 7.50e-01%, Percentage 8.00e-01%, Percentage 8.50e+01%, Temperature 3.08e+02K, Temperature 3.16e+02K, Temperature 3.33e+02K, Temperature 3.43e+02K, Time 3.60e+03s

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

985.

Accession number: 20120414713707

Title: Research on the quenching medium recycling technology based on a melting-solution confluence method

Authors: Chen, Lidong¹ ; Fu, Changzhi² ; Li, Yajing³ ; Feng, Lizhen¹ ; Fu, Yuxuan³

Author affiliation:

- 1 College of Mechanical and Electronic Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, 066600, China
- 2 Tangshan Changzhi Agricultural Tools Designing and Manufacturing Co. Ltd., Tangshan, China
- 3 Luannan Vocational Education Center, Tangshan, Hebei, China

Corresponding author: Chen, L. (chentian-940308@163.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 430-432

Monograph title: Frontiers of Advanced Materials and Engineering Technology, FAMET 2012

Issue date: 2012

Publication year: 2012

Pages: 988-991

Language: English

ISSN: 10226680

ISBN-13: 9783037853399

Document type: Conference article (CA)

Conference name: 2012 International Conference on Frontiers of Advanced Materials and Engineering Technology, FAMET 2012

Conference date: January 4, 2012 - January 5, 2012

Conference location: Xiamen, China

Conference code: 88155

Sponsor: Int. Front. Sci. Technol. Res. Assoc.; HongKong Control Eng. Inf. Sci. Res. Assoc.

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: In order to avoid the direct discharge of wastewater and the environmental pollution caused by the metal parts quenching treatment, a three-level micro-water washing system is designed, which uses a small

amount water to clean the quenched metal parts. The melting-solution confluence method is introduced at the first time to realize the recycling usage of quenching medium in the waste water. The test results show that the use of the technology can achieve maximum water conservation and the quenching medium materials recycling, so that the method does not waste water and the media materials can be recycled more than 90%, and the water consumption is also reduced to nearly 1/20 compared with the original one in the whole production process. The method can be applied not only to shovel type metal parts heat treatment process, also to the related industries. © (2012) Trans Tech Publications.

Number of references: 3

Main heading: Water recycling

Controlled terms: Chemicals removal (water treatment) - Design - Engineering technology - Heat treatment - Melting - Quenching - Sewage - Technology - Washing - Wastewater - Wastewater reclamation - Wastewater treatment - Water conservation - Water supply

Uncontrolled terms: Environmental pollutions - Heat treatment process - Melting-solution confluence method - Metal parts - Production process - Quenching medium - Quenching treatment - Recycling technology - Three-level - Washing systems - Water consumption

Classification code: 811.1.1 Papermaking Processes - 537.1 Heat Treatment Processes - 531.1 Metallurgy - 901 Engineering Profession - 452 Municipal and Industrial Wastes; Waste Treatment and Disposal - 444 Water Resources - 408 Structural Design - 446.1 Water Supply Systems

Numerical data indexing: Percentage 9.00e+01%

DOI: 10.4028/www.scientific.net/AMR.430-432.988

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

986.

Accession number: 20114514484669

Title: The construction of physical monitoring model of adults in Shijiazhang, Hebei

Authors: Haitao, Feng¹ ; Jun, Li²

Author affiliation:

- 1 Physical Education Department, Hebei University of Science and Technology, Shijiazhuang, China
- 2 Physical Education Department, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Haitao, F. (fylouisfylouis@sina.com)

Source title: Proceedings of the 2011 International Conference on Future Computer Science and Education, ICFCSE 2011

Abbreviated source title: Proc. Int. Conf. Future Comput. Sci. Educ., ICFCSE

Monograph title: Proceedings of the 2011 International Conference on Future Computer Science and Education, ICFCSE 2011

Issue date: 2011

Publication year: 2011

Pages: 279-282

Article number: 6041683

Language: English

ISBN-13: 9780769545332

Document type: Conference article (CA)

Conference name: 2011 International Conference on Future Computer Science and Education, ICFCSE 2011

Conference date: August 20, 2011 - August 21, 2011

Conference location: Xi'an, China

Conference code: 87114

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: By using the method of factor analysis and regression analysis, the national physical data of 2000 and 2005 were disposed by SPSS13.0 software (the national physical data of 2010 is unknown now) and the physical monitoring model of the adult in Shijiazhuang was established by taking the physical data of male from 20 to 25 years old as an example. The national physical condition of adults in Shijiazhuang was compared between 2000 and 2005 based on this model. © 2011 IEEE.

Number of references: 7

Main heading: Education computing

Controlled terms: Computer science - Regression analysis

Uncontrolled terms: Factor analysis - Monitoring models - Physical conditions - Physical data - physical monitor

Classification code: 721 Computer Circuits and Logic Elements - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 723.2 Data Processing and Image Processing - 922.2 Mathematical Statistics

Numerical data indexing: Age 2.00e+01yr to 2.50e+01yr

DOI: 10.1109/ICFCSE.2011.74

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

987.

Accession number: 20113814354352

Title: The ground state energy of the electron in quantum ring induced by the Rashba effects

Authors: Li, Haifeng¹ ; Wuyunqimuge, W.² ; Liu, Xiaolei³ ; Eerdunchaolu⁴

Author affiliation:

- 1 Qinhuangdao Radio and TV University, Qinhuangdao Hebei, China
- 2 College of Physics and Electronic Information, Inner Mongolia University for Nationalities, Tongliao Inner Mongolia, China
- 3 College of Continuing Education, Hebei Normal University of Science and Technology, Qinhuangdao Hebei, China
- 4 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao Hebei, China

Corresponding author: Li, H.

Source title: Applied Mechanics and Materials

Abbreviated source title: Appl. Mech. Mater.

Volume: 88-89

Monograph title: Computer-Aided Design, Manufacturing, Modeling and Simulation, CDMMS 2011

Issue date: 2011

Publication year: 2011

Pages: 321-325

Language: English

ISSN: 16609336

E-ISSN: 16627482

ISBN-13: 9783037852361

Document type: Conference article (CA)

Conference name: International Conference on Computer-Aided Design, Manufacturing, Modeling and Simulation, CDMMS 2011

Conference date: September 13, 2011 - September 16, 2011

Conference location: Hangzhou, China

Conference code: 86582

Sponsor: National Natural Science Foundation of China (NSFC)

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Influences of Rashba spin-orbit interaction(SOI) effects on the ground state energy of the electron in quantum ring at zero fields are studied by means of the perturbation method. Numerical calculations for CdF₂ ring are performed and the results show that the Rashba SOI makes the ground state energy of electron split into two branches, which are induced by the spin-up state and spin-down state, respectively. Two branches splitting energy increases oscillatorily with increasing the inner radius of quantum ring and decreases oscillatorily with increasing the outer radius of quantum ring. The largest Rashba spin splitting energies in the process of oscillation-increase and oscillation-decrease are 11.91meV and 13.97meV, respectively. These data and results are helpful to design and develop spin field effect transistor, spin light-emitting diode, spin resonant tunneling device, etc. © (2011) Trans Tech Publications.

Number of references: 12

Main heading: Quantum theory

Controlled terms: Computer aided design - Computer simulation - Field effect transistors - Ground state - Industrial applications - Light emitting diodes - Manufacture - Nanorings - Perturbation techniques - Resonant tunneling - Resonant tunneling diodes

Uncontrolled terms: Ground-state energies - Numerical calculation - Perturbation method - Quantum ring - Rashba effects - Rashba SOI - Rashba spin orbit interaction - Rashba spin splitting - Spin field-effect transistors - Spin resonant tunneling device - Spin-down state - Spin-up - Splitting energy - Zero fields

Classification code: 932 High Energy Physics; Nuclear Physics; Plasma Physics - 931.4 Quantum Theory; Quantum Mechanics - 931.3 Atomic and Molecular Physics - 921 Mathematics - 933 Solid State Physics - 913.4 Manufacturing - 761 Nanotechnology - 723.5 Computer Applications - 714.2 Semiconductor Devices and Integrated Circuits - 913 Production Planning and Control; Manufacturing

Numerical data indexing: Electron_Volt 1.19e-02eV, Electron_Volt 1.40e-02eV

DOI: 10.4028/www.scientific.net/AMM.88-89.321

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

988.

Accession number: 20124415622672

Title: First-principles investigations on structure transformation, elastic and thermodynamic properties of TiN under high pressure

Authors: Hao, Ai-Min^{1, 2}; Zhou, Tie-Jun³; Zhu, Yan^{2, 4}; Liu, Xin⁴

Author affiliation:

1 School of Resources and Materials, Northeastern University at Qinhuangdao, Qinhuangdao 066004, China

2 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

3 College of Mathematics and Information, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

4 College of Physics and Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Hao, A.-M. (aiminhao1991@yahoo.com.cn)

Source title: Gaoya Wuli Xuebao/Chinese Journal of High Pressure Physics

Abbreviated source title: Gaoya Wuli Xuebao

Volume: 26

Issue: 4

Issue date: August 2012

Publication year: 2012

Pages: 395-401

Language: English

ISSN: 10005773

CODEN: GWXUER

Document type: Journal article (JA)

Publisher: Chinese Journal of High Pressure Physics, P.O. Box 523-60, Chengdu, 610003, China

Abstract: An investigation on the structure transformation, elastic and thermodynamic properties of TiN under high pressure is conducted using first-principles calculations based on density functional theory (DFT) with the plane wave basis set. At elevated pressures TiN is predicted to undergo a structural phase transition from a relatively open NaCl-type (B1) structure into a denser CsCl-type (B2) structure. The predicted transition pressure is 348 GPa. The elastic constants, Debye temperature, and heat capacity each as a function of pressure and/or temperature of TiN are presented.

Number of references: 27

Main heading: Calculations

Controlled terms: Debye temperature - Density functional theory - Sodium chloride - Thermodynamic properties - Titanium nitride

Uncontrolled terms: Ab initio calculations - Density functional theories (DFT) - Elastic properties - Elevated pressure - First-principles calculation - First-principles investigations - Function of pressure - High pressure - Plane-wave basis set - Structural phase transition - Structure transformations - Transition pressure

Classification code: 641.1 Thermodynamics - 721 Computer Circuits and Logic Elements - 723 Computer Software, Data Handling and Applications - 804.2 Inorganic Compounds - 921 Mathematics - 922.1 Probability Theory

Numerical data indexing: Pressure 3.48e+11Pa

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

989.

Accession number: 20104113285783

Title: The excited triplet state properties of titanyl phthalocyanine and its sulfonated derivatives

Authors: Zhang, Xian-Fu¹ ; Huang, Jingyao¹ ; Xi, Qian¹ ; Wang, Yun¹

Author affiliation:

¹ Chemistry Department, Hebei Normal University of Science and Technology, Qinghuangdao, Hebei Province 066004, China

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Australian Journal of Chemistry

Abbreviated source title: Aust. J. Chem.

Volume: 63

Issue: 10

Issue date: 2010

Publication year: 2010

Pages: 1471-1476

Language: English

ISSN: 00049425

CODEN: AJCHAS

Document type: Journal article (JA)

Publisher: CSIRO, P.O. Box 1139, Collingwood, VIC 3066, Australia

Abstract: Titanyl phthalocyanine (TiOPc) is a well-known, excellent photoconductive material for laser printers and photocopying machines. Its organic derivatives have recently been shown to be excellent photosensitizers for singlet oxygen [O₂(¹Δ_g)] production. The excited triplet state properties of TiOPc, in homogeneous DMSO solution, were measured in this study for the first time by nanosecond laser flash photolysis.

The data enabled comparisons to be drawn with TiOPcS4 and zinc phthalocyanine (ZnPc), ultimately providing a better understanding of the reported observations. Absorption, fluorescence, and O₂(¹Δg) sensitization were also studied. TiOPcS4 in DMSO shows remarkably different fluorescence properties from that reported in aqueous solution: both the fluorescence quantum yield ($\phi_f = 0.068$) and the fluorescence lifetime ($\tau_f = 3.71$ ns) were much larger than that reported for aqueous solutions (0.012 and 0.09 ns, respectively). The photosensitizing properties of TiOPcS4 in DMSO are also so significantly better than that in aqueous solution, i.e. triplet lifetime (τ_T) of 252 μ s, triplet quantum yield (ϕ_T) of 0.42, and the quantum yield of O₂(¹Δg) (ϕ_Δ) of 0.49; compare with values of 60 s, 0.32, 0.13 reported in aqueous solution. TiOPc, however, shows comparable photophysical properties to that of ZnPc, a well-recognized photosensitizer. These results suggest that TiOPc and its derivatives are not only good photoconductors but also good photosensitizers of O₂(¹Δg), which may find application in photodynamic therapies for treatment of cancer. © 2010 CSIRO.

Number of references: 39

Main heading: Photosensitizers

Controlled terms: Complexation - Excited states - Fluorescence - Nitrogen compounds - Oxygen - Photocopying - Photolysis - Quantum yield - Solutions - Sulfur compounds - Zinc compounds

Uncontrolled terms: Aqueous solutions - Excited triplet state - Fluorescence lifetimes - Fluorescence properties - Fluorescence quantum yield - Laser printers - Nanosecond lasers - Organic derivatives - Photoconductive materials - Photophysical properties - Singlet oxygen - Sulfonated derivatives - Zinc phthalocyanines

Classification code: 741.1 Light/Optics - 745.2 Reproduction, Copying - 802.2 Chemical Reactions - 804 Chemical Products Generally - 931.3 Atomic and Molecular Physics

Numerical data indexing: Time 2.52e-04s, Time 3.71e-09s, Time 9.00e-11s

DOI: 10.1071/CH10076

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

990.

Accession number: 20121814985942

Title: RVM based on PSO for groundwater level forecasting

Authors: Zhao, Weiguol ; Gao, Yanfeng1 ; Li, Chunliu2

Author affiliation:

- 1 Hebei University of Engineering, Handan 056038, China
- 2 College of Urban Construction, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhao, W. (zww770123@163.com)

Source title: Journal of Computers

Abbreviated source title: J. Comput.

Volume: 7

Issue: 5

Issue date: 2012

Publication year: 2012

Pages: 1073-1079

Language: English

ISSN: 1796203X

Document type: Journal article (JA)

Publisher: Academy Publisher, P.O.Box 40,, OULU, 90571, Finland

Abstract: Relevance Vector Machine (RVM) is a novel kernel method based on Sparse Bayesian, which has many advantages such as its kernel functions without the restriction of Mercer's conditions, the relevance vectors automatically determined. In this paper, a new RVM model optimized by Particle Swarm Optimization (PSO) is proposed, and it is applied to groundwater level forecasting. The simulation experiments demonstrate that the proposed method can reduce significantly both relative mean error and root mean squared error of predicted groundwater level. Moreover, the model achieved is much sparser than its counterpart, so the RVM based on PSO is applicable and performs well for groundwater data analysis. © 2012 ACADEMY PUBLISHER.

Number of references: 18

Main heading: Groundwater

Controlled terms: Forecasting - Particle swarm optimization (PSO) - Support vector machines

Uncontrolled terms: Groundwater level forecasting - Kernel function - Kernel methods - Mean errors - Relevance Vector Machine - Root mean squared errors - Simulation experiments

Classification code: 444.2 Groundwater - 723 Computer Software, Data Handling and Applications - 921 Mathematics

DOI: 10.4304/jcp.7.5.1073-1079

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

991.

Accession number: 20110313595922

Title: RETRACTED ARTICLE: Preparation of chitosan / CMC capsule and immobilized sucrase

Authors: Hou, Max W.-L.1 ; Yang, T.1 ; Zhang, Z.-W.1 ; Niu, S.-L.1 ; Liu, X.-M.1 ; Y, Y.-D.1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Y, Y.-D.

Source title: 2010 International Conference on Future Information Technology and Management Engineering, FITME 2010

Abbreviated source title: Int. Conf. Future Inf. Technol. Manage. Eng., FITME

Volume: 3

Monograph title: 2010 International Conference on Future Information Technology and Management Engineering, FITME 2010

Issue date: 2010

Publication year: 2010

Pages: 317-320

Article number: 5655611

Language: Chinese

ISBN-13: 9781424490882

Document type: Conference article (CA)

Publisher: IEEE Computer Society

Abstract: The immobilized sucrase capsule of 3.0mm diameter was prepared by chitosan and sodium carboxymethyl cellulose(CMC) ion interaction. The immobilization conditions were optimized as following: The sucrase was dissolved in chitosan solution with the concentration of 2.0%. The solution was dropped into the CMC solution with concentration of 1.5%, and the formed capsules were kept hardening for 24h at room temperature. The immobilized enzyme more stable to pH values, the optimum pH of the immobilized sucrase for the enzyme activity was at 3.6~5.0, and the activity of free enzyme at pH=3.6 became 63% of maximum activity. The immobilize sucrase stored at room temperature retained 80% of its initial activity even after 6d, and free enzyme retained 15% of its initial activity. The enzyme activity of the immobilized sucrase retained almost the same after repeated use, and leaching of the enzyme after 5 cycles of reuse. © 2010 IEEE.

Number of references: 12

Main heading: Enzyme activity

Controlled terms: Chitin - Chitosan - Enzymes - Information technology - Leaching

Uncontrolled terms: Chitosan solution - Free enzyme - Immobilization - Immobilization conditions - Immobilized enzyme - Initial activity - Ion interactions - Optimum pH - pH value - Room temperature - Sodium carboxymethyl cellulose - Sucrase

Classification code: 461.9 Biology - 533.1 Ore Treatment - 804.1 Organic Compounds - 903 Information Science

Numerical data indexing: Percentage 1.50e+00%, Percentage 1.50e+01%, Percentage 2.00e+00%, Percentage 6.30e+01%, Percentage 8.00e+01%, Size 3.00e-03m, Time 8.64e+04s

DOI: 10.1109/FITME.2010.5655611

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

992.

Accession number: 20105113504313

Title: Basic pose control algorithm of 5-DOF hybrid robotic arm suitable for table tennis robot

Authors: Zheng, Kuijing1 ; Cui, Pei1 ; Mao, Haixia2

Author affiliation:

- 1 Mechanical Engineering College, Yanshan University, Qinhuangdao, 066004, China
- 2 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Zheng, K. (kjzheng@ysu.edu.cn)

Source title: Proceedings of the 29th Chinese Control Conference, CCC'10

Abbreviated source title: Proc. Chin. Control Conf., CCC

Monograph title: Proceedings of the 29th Chinese Control Conference, CCC'10

Issue date: 2010

Publication year: 2010

Pages: 3728-3733

Article number: 5573693

Language: English

ISBN-13: 9787894631046

Document type: Conference article (CA)

Conference name: 29th Chinese Control Conference, CCC'10

Conference date: July 29, 2010 - July 31, 2010

Conference location: Beijing, China

Conference code: 82524

Sponsor: IEEE Control Systems Society (CSS); The ICROS OF Korea; IEEE CSS Singapore Chapter; IEEE CSS Hong Kong Chapter; IEEE CSS Beijing Chapter

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The development and the composition of table tennis robot are introduced. Based on the moving characteristic of table tennis, a sort of 3-RPUR+RP 5-DOF hybrid robotic arm is put forward, which can perform three translational DOFS and two rotational DOFS. By using D-H parameter method and XYZ Euler angle, the kinematic inverse solution of the hybrid robotic arm is analyzed and the pose of the racket is described conveniently. The pose control equation is deduced, which can transform the racket pose in working space into the parameters of the driving axis in joint space. By using ADAMS software, the motion simulation is performed so

as to prove the theoretical analysis effectively. The basic algorithm lays the theoretical foundation for the successful 5-axis simultaneous control of the table tennis robot.

Number of references: 11

Main heading: Robotics

Controlled terms: Algorithms - Computer software - Mechanics - Robotic arms

Uncontrolled terms: ADAMS software - Control algorithms - Control equations - Degrees of freedom - Euler angles - H-parameter - Hybrid robotic arm and inverse solution of pose - Inverse solution - Joint space - Motion simulations - Simultaneous control - Table tennis robot - Table-tennis - Theoretical foundations - Working space

Classification code: 723 Computer Software, Data Handling and Applications - 731.5 Robotics - 931.1 Mechanics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

993.

Accession number: 20140417231164

Title: Effects of micronization methods on physicochemical properties of *Pleurotus eryngii* powders

Authors: Liu, Su-Wen¹ ; Chang, Xue-Dong¹ ; Li, Hang-Hang¹ ; Gao, Hai-Sheng¹

Author affiliation:

1 Department of Food Engineering, Hebei Normal University of Science and Technology, Qinhuangdao 066000, China

Corresponding author: Chang, X.-D.

Source title: Modern Food Science and Technology

Abbreviated source title: Mod. Food Sci. Technol.

Volume: 29

Issue: 11

Issue date: 2013

Publication year: 2013

Pages: 2722-2727

Language: Chinese

ISSN: 16739078

Document type: Journal article (JA)

Publisher: South China University of Technology, Guangzhou, 510640, China

Abstract: The effects of micronization methods, such as shear pulverization, mechanical milling and jet milling, on the physicochemical properties of *Pleurotus eryngii* powders were investigated. Six powders from dried mushroom cap and stipe by the three grinding methods were prepared. Compared with shear pulverization and mechanical milling, jet milling effectively reduced particle size (cap 14.16 μm and stipe 13.16 μm) and brought about a narrow and uniform particle size distribution. Cap powders possessed higher protein (18.34 g/100 g, dry basis), fat and ash contents. With the same material (cap or stipe), powders from jet milling had higher values in specific surface area, bulk density, fluidity, water soluble index and solubility of protein and polysaccharide ($p < 0.05$), but lower values in the water holding and swelling capacities than other two processed powders. With the same grinding method, cap powders owned higher values in water soluble index, swelling capacity, bulk density, and solubility of polysaccharide than stipe powders. Under the same humidity environment, the water activity (A_w) of jet milling powder was less than the mechanical milling and shear pulverization powder, and A_w of cap was less than that of stipe. The Oswin model was considered as the optimal regression equation of moisture sorption isotherms within different kinds of *Pleurotus eryngii* powders at 25°C, with the highest value of regression coefficient (0.9902~0.9943) and lowest value of relative errors.

Number of references: 14

Main heading: Powders

Controlled terms: Comminution - Mathematical models - Mechanical alloying - Milling (machining) - Particle size analysis - Proteins - Shear flow - Solubility

Uncontrolled terms: Mechanical milling - Micronizations - Moisture sorption isotherms - Physicochemical property - *Pleurotus eryngii* - Regression coefficient - Regression equation - Swelling capacities

Classification code: 921 Mathematics - 804.1 Organic Compounds - 804 Chemical Products Generally - 801.4 Physical Chemistry - 951 Materials Science - 604.2 Machining Operations - 531 Metallurgy and Metallography - 483 Soil Mechanics and Foundations - 421 Strength of Building Materials; Mechanical Properties - 536 Powder Metallurgy

Numerical data indexing: Size 1.32e-05m, Temperature 2.98e+02K

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

994.

Accession number: 20102112955791

Title: Research on control and management system of solar cell laminators based on network platform

Authors: Chen, Lidong¹ ; Ma, Shuying¹ ; Li, Guofang¹ ; Shi, Lei¹ ; Zhang, Liang¹ ; Zheng, Lixin¹ ; Liu, Shengtao¹

Author affiliation:

1 College of Mechanics and Electronics Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Chen, L. (chentian-940308@163.com)

Source title: 2010 The 2nd International Conference on Computer and Automation Engineering, ICCAE 2010

Abbreviated source title: Int. Conf. Comput. Autom. Eng., ICCAE

Volume: 3

Part number: 3 of 5

Monograph title: 2010 The 2nd International Conference on Computer and Automation Engineering, ICCAE 2010

Issue date: 2010

Publication year: 2010

Pages: 475-477

Article number: 5451402

Language: English

ISBN-13: 9781424455850

Document type: Conference article (CA)

Conference name: 2nd International Conference on Computer and Automation Engineering, ICCAE 2010

Conference date: February 26, 2010 - February 28, 2010

Conference location: Singapore, Singapore

Conference code: 80373

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: As for large-scale solar cell laminators, a new type of control and management based on the network was produced. Firstly, an acquisition and control system was established upon the IPC and FP21 controller. And then, using Browser/Server (B/S) structure, the OPC technology and real-time database technology, a measurement and control system with integration of detecting was designed, which could make an integration of solar cell laminating, real-time monitoring and production management. On the condition of large-scale laminators, using network to control and manage the lamination has a broad prospect of development. ©2010 IEEE.

Number of references: 7

Main heading: Laminating

Controlled terms: Database systems - Industrial management - Solar cells

Uncontrolled terms: Control and management - Measurement and control - Network control
- Network platforms - Production management - Real time monitoring - Real-time database

Classification code: 615.2 Solar Power - 702.3 Solar Cells - 723.3 Database Systems - 813.1 Coating Techniques - 816.1 Processing of Plastics and Other Polymers - 912.2 Management

DOI: 10.1109/ICCAE.2010.5451402

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

995.

Accession number: 20135217123415

Title: Analysis on supply chain strategy with logistic service provider under different recovery conditions

Authors: Sun, Duoqing^{1, 2}; Zhang, Xiaomei^{1, 3}; Ma, Xiaoying¹; Yin, Hongwu¹; Liu, Lijing¹; Shao, Xiangyuan¹

Author affiliation:

1 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Mathematics and Systems Science, Beijing University of Aeronautics and Astronautics, Beijing 100190, China

3 School of Science, Xi'an Polytechnic University, Xi'an 710048, China

Source title: Chinese Control Conference, CCC

Abbreviated source title: Chinese Control Conf., CCC

Monograph title: Proceedings of the 32nd Chinese Control Conference, CCC 2013

Issue date: October 18, 2013

Publication year: 2013

Pages: 8330-8335

Article number: 6640912

Language: Chinese

ISSN: 19341768

E-ISSN: 21612927

ISBN-13: 9789881563835

Document type: Conference article (CA)

Conference name: 32nd Chinese Control Conference, CCC 2013

Conference date: July 26, 2013 - July 28, 2013

Conference location: Xi'an, China

Conference code: 101424

Publisher: IEEE Computer Society

Abstract: For the closed-loop supply chain with third party logistics service provider, the pricing decisions in both cooperative and non-cooperative game ways are investigated by using Stackelberg game theory in manufacturer recovery closed-loop supply chain and tradesman recovery closed-loop supply chain models. Through the comparison of the equilibrium solutions of independent and joint decisions, it is theoretically proved that the retail price is reduced, the recycling price is appreciated, and the recycled product quantity and the profit of the whole reverse supply chain system are all increased under the cooperative game ways. Thus such joint pricing will advantage to businessmen, consumers and the environmental protection. Finally, the conclusions proposed in the paper are verified with a numerical example. © 2013 TCCT, CAA.

Number of references: 5

Main heading: Costs

Controlled terms: Game theory - Logistics - Recovery - Recycling - Supply chains

Uncontrolled terms: Closed-loop supply chain - Equilibrium solutions - Noncooperative game - Recycled products - Reverse supply chains - Stackelberg Games - Supply chain strategy - Third party logistics

Classification code: 452.3 Industrial Wastes - 531 Metallurgy and Metallography - 911 Cost and Value Engineering; Industrial Economics - 912 Industrial Engineering and Management - 913 Production Planning and Control; Manufacturing - 922.1 Probability Theory

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

996.

Accession number: 20103513191086

Title: Fieldbus technology and rolling process automation

Authors: Wang, Haifang¹ ; Rong, Yu¹ ; Liu, Shengtao¹ ; Cui, Jinhua¹

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Qinhuangdao, China

Corresponding author: Wang, H. (hfwang0335@126.com)

Source title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Abbreviated source title: Int. Conf. Comput. Des. Appl., ICCDA

Volume: 4

Part number: 4 of 5

Monograph title: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Issue date: 2010

Publication year: 2010

Pages: V473-V476

Article number: 5541484

Language: English

ISBN-13: 9781424471638

Document type: Conference article (CA)

Conference name: 2010 International Conference on Computer Design and Applications, ICCDA 2010

Conference date: June 25, 2010 - June 27, 2010

Conference location: Qinhuangdao, Hebei, China

Conference code: 81482

Sponsor: Int. Assoc. Comput. Sci. Inf. Technol. (IACSIT); Institute of Electrical and Electronics Engineers (IEEE); Northeastern University at Qinhuangdao (NEUQ); Dalian University of Technology; National Natural Science Foundation of China (NSFC)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Fieldbus technology is the product of the development automation, computer and intelligence instruments technology. Rolling process automation is improved with development of rolling technology, control theory and fieldbus technology. It reviews the brief description of fieldbus technology. After summarizing the development of its relevant control theory, control technology and control instrument, analyzing the characters of distributed control system and fieldbus control system and considering the characters of rolling process, a new distributed control structure of rolling mill based on fieldbus is presented, and it is meet with the request of expansion, maintenance and manipulation of rolling control structure. © 2010 IEEE.

Number of references: 12

Main heading: Rolling mills

Controlled terms: Automation - Computer applications - Control theory - Distributed parameter control systems - Distributed parameter networks - Milling machines - Process control - System theory - Technology

Uncontrolled terms: Control instruments - Control technologies - DCS - Distributed control - Distributed Control System - FCS - Field bus technology - Fieldbus - Fieldbus control systems - Rolling control - Rolling process

Classification code: 901 Engineering Profession - 731.1 Control Systems - 731 Automatic Control Principles and Applications - 961 Systems Science - 723.5 Computer Applications - 603.1 Machine Tools, General - 535.1.1 Rolling Mills - 703.1 Electric Networks

DOI: 10.1109/ICCDA.2010.5541484

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

997.

Accession number: 20113914368029

Title: Synthesis and fluorescence properties of hyperbranched poly(amido amine) with new fluorescence-emitting moieties

Authors: Wang, Shaofei¹ ; Jia, Dandan¹ ; Liu, Chun¹ ; Wang, Dongjun¹

Author affiliation:

¹ College of Physic Chemical, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Wang, D. (wdj9999@126.com)

Source title: Advanced Materials Research

Abbreviated source title: Adv. Mater. Res.

Volume: 306-307

Monograph title: Emerging Focus on Advanced Materials

Issue date: 2011

Publication year: 2011

Pages: 348-351

Language: English

ISSN: 10226680

ISBN-13: 9783037852040

Document type: Conference article (CA)

Conference name: 1st International Congress on Advanced Materials 2011, AM2011

Conference date: May 13, 2011 - May 16, 2011

Conference location: Jinan, China

Conference code: 86613

Publisher: Trans Tech Publications, P.O. Box 1254, Clausthal-Zellerfeld, D-38670, Germany

Abstract: Hyperbranched poly(amido amine) (PAMAM) was prepared by Michael addition reaction of methyl acrylate (MA) and ethylenediamine (EDA). The result showed that fluorescence intensities increased with increasing the molecular weight. Importantly, the present work showed a new kind of fluorescence-emitting moieties in the fluorescence spectra, which different from the results as reported in PAMAM dendrimers. © (2011) Trans Tech Publications, Switzerland.

Number of references: 15

Main heading: Fluorescence

Controlled terms: Addition reactions - Dendrimers - Neutron emission - Organic compounds - Synthesis (chemical)

Uncontrolled terms: Fluorescence intensities - Fluorescence lifetimes - Fluorescence properties - Fluorescence spectra - Hyperbranched - Methyl acrylates - Michael addition reactions - PAMAM dendrimer - Poly(amido amine) - Polyamidoamine dendrimers

Classification code: 741.1 Light/Optics - 802.2 Chemical Reactions - 804.1 Organic Compounds - 931.3 Atomic and Molecular Physics - 932.1 High Energy Physics

DOI: 10.4028/www.scientific.net/AMR.306-307.348

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

998.

Accession number: 20133016522457

Title: Design of software engineering teaching website

Authors: Li, Yuxiang¹ ; Xin, Liu¹ ; Zhang, Guangbin¹ ; Liu, Xingshun¹ ; Gao, Zhenbo¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Source title: Proceedings of SPIE - The International Society for Optical Engineering

Abbreviated source title: Proc SPIE Int Soc Opt Eng

Volume: 8762

Monograph title: PIAGENG 2013: Intelligent Information, Control, and Communication Technology for Agricultural Engineering

Issue date: 2013

Publication year: 2013

Article number: 876221

Language: English

ISSN: 0277786X

E-ISSN: 1996756X

CODEN: PSISDG

ISBN-13: 9780819495594

Document type: Conference article (CA)

Conference name: 3rd International Conference on Photonics and Image in Agriculture Engineering, PIAGENG 2013

Conference date: January 27, 2013 - January 28, 2013

Conference location: Sanya, China

Conference code: 97677

Sponsor: Wuhan University of Technology; Information Engineering Research Institute

Publisher: SPIE, P.O. Box 10, Bellingham, WA 98227-0010, United States

Abstract: Software engineering is different from the general professional courses, it is born for getting rid of the software crisis and adapting to the development of software industry, it is a theory course, especially a practical course. However, due to the own characteristics of software engineering curriculum, in the daily teaching process, concerning theoretical study, students may feel boring, obtain low interest in learning and poor test results and other problems. ASPNET design technique is adopted and Access 2007 database is used for system to design and realize Software Engineering teaching website. System features mainly include theoretical teaching, case teaching, practical teaching, teaching interaction, database, test item bank, announcement, etc., which can enhance the vitality, interest and dynamic role of learning.

Number of references: 3

Main heading: Software engineering

Controlled terms: Design - Photonics - Websites

Uncontrolled terms: Design of softwares - Engineering teachings - Practical teachings - Software engineering curricula - Software industry - Teaching websites - Theoretical study - Web site design

Classification code: 723.1 Computer Programming - 723 Computer Software, Data Handling and Applications - 718 Telephone Systems and Related Technologies; Line Communications - 744 Lasers - 717 Optical Communication - 712 Electronic and Thermionic Materials - 408 Structural Design - 716 Telecommunication; Radar, Radio and Television

DOI: 10.1117/12.2019616

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20121314903509

Title: Suitability evaluation of traditional sports tourism development with uncertain linguistic information

Authors: Li, Rongwei¹ ; Yu, Shujuan¹ ; Xu, Haitao¹ ; Wang, Haijun¹

Author affiliation:

1 Department of Physical Education, Hebei Normal University, Science and Technology, Hebei, 066004, China

Corresponding author: Li, R. (sunny8026@sohu.com)

Source title: Advances in Information Sciences and Service Sciences

Abbreviated source title: Adv. Inf. Sci. Serv. Sci.

Volume: 4

Issue: 4

Issue date: March 2012

Publication year: 2012

Pages: 202-208

Language: English

ISSN: 19763700

E-ISSN: 22339345

Document type: Journal article (JA)

Publisher: Advanced Institute of Convergence Information Technology, 707 Seokjang-dong, Gyeongju, BI Center, Room 207, Gyeongju, Gyeongbuk, 780-714, Korea, Republic of

Abstract: In this paper, we investigate the multiple attribute group decision making (MAGDM) problems for for evaluating the suitability evaluation of traditional sports tourism development with uncertain linguistic information. We utilize the uncertain linguistic averaging (ULA) operator and uncertain linguistic weighted averaging (ULWA) operator to aggregate the uncertain linguistic information corresponding to each alternative and get the overall value of the alternatives, then rank the alternatives and select the most desirable one(s) by using the formula of the degree of possibility for the comparison between two uncertain linguistic variables. Finally, an illustrative example for suitability evaluation of traditional sports tourism development with uncertain linguistic information is given.

Number of references: 20

Main heading: Linguistics

Controlled terms: Decision making - SportS - Statistical methods

Uncontrolled terms: Illustrative examples - Linguistic information - Multiple attribute group decision makings (MAGDM) - Sports tourisms - Suitability evaluation - Traditional sports tourism development - Uncertain linguistic variables - Uncertain linguistic weighted averaging operators

Classification code: 903.2 Information Dissemination - 912.2 Management - 922.2 Mathematical Statistics

DOI: 10.4156/AISS.vol4.issue4.24

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1000.

Accession number: 20111113740009

Title: Design on multi-parameter measurement and control system for tissue culture laboratory

Authors: Chen, Fang¹ ; Deng, Chun-Yan¹ ; Liu, Sheng-Tao¹ ; Wang, Hai-Fang¹ ; Lun, Cui-Fen¹ ; Sun, Lei¹

Author affiliation:

1 College of Mechanical and Electronic Engineering, Hebei Normal University Science and Technology, Qinhuangdao, China

Corresponding author: Chen, F. (cfqhd619@126.com)

Source title: Proceedings - 2010 2nd WRI Global Congress on Intelligent Systems, GCIS 2010

Abbreviated source title: Proc. - WRI Global Congr. Intelligent Syst., GCIS

Volume: 2

Part number: 2 of 3

Monograph title: Proceedings - 2010 2nd WRI Global Congress on Intelligent Systems, GCIS 2010

Issue date: 2010

Publication year: 2010

Pages: 204-206

Article number: 5709164

Language: English

ISBN-13: 9780769543048

Document type: Conference article (CA)

Conference name: 2010 2nd WRI Global Congress on Intelligent Systems, GCIS 2010

Conference date: December 16, 2010 - December 17, 2010

Conference location: Wuhan, China

Conference code: 84062

Sponsor: Wuhan University of Technology; World Research Institutes

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Tissue culture lab is a place of culturing vaccination materials in the process of breeding. Measurement and control of temperature, humidity and illumination is the essential condition. At present, exist many problems in measurement and control system, such as the low controlling precision, mutual interference between temperature and humidity controlling, energy waste. In addition, the data of experimentation could not be measured, recorded, stored and handled. The price of foreign product is so expensive that general units can't accept it. In order to solve these problems, measurement and control of temperature and humidity was studied to develop more applicable multiparameter measure and control system with low price and stable performance, so that the temperature, humidity and illumination indicator can be automatically measured and controlled. In this article, according to status quo of tissue culture lab and requirement of temperature and humidity control and system function, the system overall structure was built; The system working process, characteristic and main technical indicator were introduced. © 2010 IEEE.

Number of references: 7

Main heading: Humidity control

Controlled terms: Control theory - Data acquisition - Energy conversion - Intelligent systems - Laboratories - Proportional control systems - Temperature control - Three term control systems - Tissue - Tissue culture - Two term control systems

Uncontrolled terms: Data collection - Energy wastes - Fuzzy PID control - Measurement and control - Multi-parameter measure and control - Multiparameters - Mutual interference - System functions - Technical indicator - Temperature and humidity control - Working process

Classification code: 731.3 Specific Variables Control - 731.1 Control Systems - 723.4 Artificial Intelligence - 801 Chemistry - 723.2 Data Processing and Image Processing - 461.2 Biological Materials and Tissue Engineering - 402 Buildings and Towers - 525.5 Energy Conversion Issues

DOI: 10.1109/GCIS.2010.160

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1001.

Accession number: 20063810118316

Title: Over-expression of glucose dehydrogenase improves cell growth and riboflavin production in *Bacillus subtilis*

Authors: Zhu, Yingbo^{1, 2}; Chen, Xun¹; Chen, Tao¹; Shi, Shuobo¹; Zhao, Xueming¹

Author affiliation:

1 Department of Biochemical Engineering, School of Chemical Engineering and Technology, Tianjin University, Tianjin 300072, China

2 Laboratory of Plant Protection, Department of Agronomy, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Zhao, X. (xmzhao@tju.edu.cn)

Source title: Biotechnology Letters

Abbreviated source title: Biotechnol. Lett.

Volume: 28

Issue: 20

Issue date: October 2006

Publication year: 2006

Pages: 1667-1672

Language: English

ISSN: 01415492

E-ISSN: 15736776

CODEN: BILED3

Document type: Journal article (JA)

Publisher: Kluwer Academic Publishers

Abstract: Ribulose 5-phosphate is a precursor for riboflavin biosynthesis. Alteration of carbon flow into the pentose phosphate pathway will affect the availability of ribulose 5-phosphate and the riboflavin yield. We have modulated carbon flow in *Bacillus subtilis* through the gluconate bypass by over-expression of glucose dehydrogenase under the control of the constitutively expressed P43 promoter. Over-expression of glucose dehydrogenase resulted in low acid production (acetate and pyruvate). The substantial reduction in acid production is accompanied by increased riboflavin production and an increased rate of growth while glucose consumption remained unchanged. Metabolic analysis indicated that over-expression of glucose dehydrogenase increased intracellular pool of ribulose 5-phosphate. The high concentrations of ribulose 5-phosphate could explain the increased riboflavin production. © Springer Science+Business Media B.V. 2006.

Number of references: 21

Main heading: Bacteria

Controlled terms: Biosynthesis - Enzymes - Glucose - Growth kinetics

Uncontrolled terms: *Bacillus subtilis* - Glucose dehydrogenase - Riboflavin - Ribulose 5-phosphate

Classification code: 461.2 Biological Materials and Tissue Engineering - 461.8 Biotechnology - 461.9 Biology - 804.1 Organic Compounds

Treatment: Theoretical (THR); Experimental (EXP)

DOI: 10.1007/s10529-006-9143-2

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20090211845734

Title: An intelligent search algorithm based on skyline query in unstructured P2P systems

Authors: Wang, Xinsheng¹ ; Cui, Xiaowei¹ ; Dong, Leigang¹ ; Wang, Zhenyu² ; Liu, Jun³

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao, China

2 Hebei Normal University of Science and Technology

3 Baicheng Normal College

Corresponding author: Wang, X.

Source title: Proceedings - 5th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2008

Abbreviated source title: Proc. - Int. Conf. Fuzzy Syst. Knowl. Discov., FSKD

Volume: 4

Part number: 4 of 5

Monograph title: Proceedings - 5th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2008

Issue date: 2008

Publication year: 2008

Pages: 322-326

Article number: 4666406

Language: English

ISBN-13: 9780769533056

Document type: Conference article (CA)

Conference name: 5th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2008

Conference date: October 18, 2008 - October 20, 2008

Conference location: Jinan, Shandong, China

Conference code: 74641

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Information retrieval has been the important problem of research in unstructured P2P systems. In order to improve the efficiency of the data retrieval, this paper proposed an algorithm for intelligent search based on skyline query technology. Combining the similarity of messages and the hit rate of nodes, a best set of neighbour nodes which was sent messages to was obtained by skyline query technology. The experiment shows that it can obviously reduce the number of messages and advance the efficiency of querying. © 2008 IEEE.

Number of references: 12

Main heading: Indexing (of information)

Controlled terms: Client server computer systems - Distributed computer systems - Fuzzy logic
- Fuzzy systems - Information services - Learning algorithms

Uncontrolled terms: Data retrievals - Hit rates - Intelligent search - Intelligent search algorithms - P2P systems - Peer-to-peer - Skyline query

Classification code: 961 Systems Science - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 903.4 Information Services - 903.1 Information Sources and Analysis - 731.1 Control Systems - 723.4 Artificial Intelligence - 723 Computer Software, Data Handling and Applications - 722.4 Digital Computers and Systems - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory

DOI: 10.1109/FSKD.2008.275

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1003.

Accession number: 2005469481785

Title: Study of intelligent ultrasonic position-meter

Authors: Lun, Cuifen; Hou, Guifeng; Zhang, Shuqing; Zhang, Lihong

Corr. author affiliation: Department of Mechanic and Electronic, Hebei Normal University of Science and Technology, Changli 066600, China

Source title: Yi Qi Yi Biao Xue Bao/Chinese Journal of Scientific Instrument

Abbreviated source title: Yi Qi Yi Biao Xue Bao

Volume: 26

Issue: SUPPL.

Issue date: August 2005

Publication year: 2005

Pages: 443-444

Language: Chinese

ISSN: 02543087

CODEN: YYXUDY

Document type: Journal article (JA)

Publisher: Science Press, Beijing, China

Abstract: The principle of the ultrasonic position-meter is introduced, and the intelligent position meter system based on the single chip microcomputer is given. The problem of temperature influencing the position measurement is discussed and the solution is put forward. The detecting error is analyzed on the base of test.

Number of references: 2

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1004.

Accession number: 20071510544440

Title: Balanced multiwavelet and its application in image compressing

Authors: Xu, Tao¹ ; Zou, Peng² ; Wang, Guo Sheng³ ; Liu, Jie⁴

Author affiliation:

1 College of Mechanical Science and Engineering, JiLin University, Changchun 130022, China

- 2 Quartermaster University, Chinese People's Liberation Army, ChangChun 130062, China
- 3 Dept. of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao Hebei, 066004, China
- 4 College of Computer Science and Technology, Jinlin University, Changchun 130012, China

Corresponding author: Xu, T. (xutao@jlu.edu.cn)

Source title: Proceedings of the World Congress on Intelligent Control and Automation (WCICA)

Abbreviated source title: Proc. World Congr. Intelligent Control Autom. WCICA

Volume: 2

Part number: 2 of 2

Monograph title: Proceedings of the World Congress on Intelligent Control and Automation (WCICA)

Issue date: 2006

Publication year: 2006

Pages: 9849-9853

Article number: 1713920

Language: Chinese

ISBN-10: 1424403324

ISBN-13: 9781424403325

Document type: Conference article (CA)

Conference name: 6th World Congress on Intelligent Control and Automation, WCICA 2006

Conference date: June 21, 2006 - June 23, 2006

Conference location: Dalian, China

Conference code: 69445

Publisher: Institute of Electrical and Electronics Engineers Inc., 445 Hoes Lane / P.O. Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Orthogonality and symmetry are desirable transform properties in image compression. And

most multiwavelet can hold the two properties concomitantly. While the choice of pre-filter is of the utmost importance and pre-filtering brings complexity of computation in applications. Thereby, balanced multiwavelet which can avoid pre-filtering is considered widely by researchers. A new approach on the construction of orthogonal balanced multiwavelet is proposed. It holds the properties of 1st approximation order, orthogonality, symmetry-antisymmetry, balance at the same time and was applied in image compression. The experimental result shows that a better effect was obtained using the balanced multiwavelet than GHM and CL multiwavelets with no prefiltering and lower computational complexity. Especially it is useful for compressing of the "rubber" model of iris image. © 2006 IEEE.

Number of references: 13

Main heading: Wavelet transforms

Controlled terms: Adaptive filtering - Approximation theory - Computational complexity - Image compression - Mathematical models

Uncontrolled terms: Balanced multiwavelets - Multiwavelets - Orthogonality - Prefiltering

Classification code: 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 723.2 Data Processing and Image Processing - 731.1 Control Systems - 921.3 Mathematical Transformations - 921.6 Numerical Methods

Treatment: Theoretical (THR); Experimental (EXP)

DOI: 10.1109/WCICA.2006.1713920

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1005.

Accession number: 20094612456203

Title: Research on remote monitoring of large-scale oil tanks based on web

Authors: Lin, Hongju¹ ; Wang, Qingzhu¹ ; Ma, Jiwei¹ ; Ma, Yuquan¹ ; Zhang, Lihong¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei Qinhuangdao, 066004, China

Corresponding author: Lin, H. (linhongju@126.com)

Source title: 2009 WRI World Congress on Computer Science and Information Engineering, CSIE 2009

Abbreviated source title: WRI World Congr. Comput. Sci. Inf. Eng., CSIE

Volume: 3

Part number: 3 of 7

Monograph title: 2009 WRI World Congress on Computer Science and Information Engineering, CSIE 2009

Issue date: 2009

Publication year: 2009

Pages: 192-196

Article number: 5170828

Language: English

ISBN-13: 9780769535074

Document type: Conference article (CA)

Conference name: 2009 WRI World Congress on Computer Science and Information Engineering, CSIE 2009

Conference date: March 31, 2009 - April 2, 2009

Conference location: Los Angeles, CA, United states

Conference code: 78368

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: To overcome many shortcuts of oil tanks which were mostly based on manual operation in the past, we developed one new remote online monitoring system based on Web. The CAN Bus is core of lower layer control network, and design of CAN Bus intellect node is given. Software design was set forth based on adapter CANLite. The WebSnap middleware and ADO components in Delphi 6.0 are used to build Web server that was based on B/S access mode. The system software principles were discussed in emphases. Debug results and Web released method were given. Seamless connection has been realized between CAN and Internet/Intranet. Users can monitor oil tanks parameters by general IE browser on off-site. The system application prospects were given finally. © 2008 IEEE.

Number of references: 5

Main heading: Oil tanks

Controlled terms: Computer science - Control system synthesis - Controllers - Middleware
- Process control - Remote control - SCADA systems - Software design - Web browsers -
Web services

Uncontrolled terms: B/S (Browser/Server)access mode - CAN(Controller Area Network) -
Large-scale oil tanks - Remote monitoring - Web server

Classification code: 903.4 Information Services - 732.1 Control Equipment - 731.1 Control Systems -
731 Automatic Control Principles and Applications - 723.5 Computer Applications - 723.1 Computer
Programming - 723 Computer Software, Data Handling and Applications - 722 Computer Systems and Equipment
- 721 Computer Circuits and Logic Elements - 619.2 Tanks - 523 Liquid Fuels

DOI: 10.1109/CSIE.2009.402

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1006.

Accession number: 20075110983506

Title: Vibration-characteristic simulation of a novel hybrid machine tool

Authors: Xie, Shun-Qiang^{1, 2} ; Yu, Yue-Qing¹ ; Zhang, Lan-Xia^{2, 4} ; Wang, Li-Ping³ ; Wang,
Jin-Song³ ; Long, Yun-Jia⁴

Author affiliation:

1 College of Mechanical Engineering and Applied Electronics Technology, Beijing University of Technology,
Beijing 100022, China

2 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao
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4 China Agricultural University, Beijing 100083, China

Corresponding author: Xie, S.-Q. (xie_shunqiang@sina.com.cn)

Source title: Gongcheng Lixue/Engineering Mechanics

Abbreviated source title: Gongcheng Lixue

Volume: 24

Issue: 11

Issue date: November 2007

Publication year: 2007

Pages: 186-192

Language: Chinese

ISSN: 10004750

CODEN: GOLIEB

Document type: Journal article (JA)

Publisher: Tsinghua University, Tsinghua University Xueyan Plaza, 100084, China

Abstract: The hybrid machine tool is a challenging topic in the field of parallel mechanisms. A novel hybrid machine tool with a 2-DOF parallel mechanism and a serial orientation is investigated. Based on some assumptions, the elastic restoring force and elastic vibration model of the mechanism are studied. A numerical simulation is taken for the example of an end-milling cutter in the procedure of milling a plane. The influence of milling parameters on the vibration characteristics is presented. The numerical results show that the rotating speed has an important effect on the chaos vibration property of the machine. However, the depth of cutting has very little influence on the chaos characteristics of the machine.

Number of references: 19

Main heading: Machine tools

Controlled terms: Chaos theory - Computer simulation - Milling (machining) - Milling cutters - Speed - Vibrations (mechanical)

Uncontrolled terms: Chaos property - End-milling cutter - Hybrid machine tool

Classification code: 603.1 Machine Tools, General - 604.2 Machining Operations - 723.5 Computer Applications - 921 Mathematics - 931.1 Mechanics

Treatment: Applications (APP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1007.

Accession number: 20084811744204

Title: Research on stability of the mined-up region for prebuilding steelworks

Authors: Wang, S.R.1 ; Wu, C.F.1 ; Li, Y.2 ; Li, Z.F.3

Author affiliation:

- 1 Yanshan University, Qinhuangdao, China
- 2 Hebei Normal University of Science and Technology, Qinhuangdao, China
- 3 Qinhuangdao Fu Li the Real Estate Company, Qinhuangdao, China

Corresponding author: Wang, S. R.

Source title: Proceedings of the International Young Scholars' Symposium on Rock Mechanics - Boundaries of Rock Mechanics Recent Advances and Challenges for the 21st Century

Abbreviated source title: Proc. Int. Young Sch. Symp. Rock Mech. - Boundaries Rock Mech. Recent Adv. Chall. Century

Monograph title: Proceedings of the International Young Scholars' Symposium on Rock Mechanics - Boundaries of Rock Mechanics Recent Advances and Challenges for the 21st Century

Issue date: 2008

Publication year: 2008

Pages: 701-705

Language: English

ISBN-10: 0415469341

ISBN-13: 9780415469340

Document type: Conference article (CA)

Conference name: International Young Scholars' Symposium on Rock Mechanics - Boundaries of Rock Mechanics Recent Advances and Challenges for the 21st Century

Conference date: April 28, 2008 - May 2, 2008

Conference location: Beijing, China

Conference code: 74132

Publisher: Taylor and Francis/Balkema, P.O Box 447, Leiden, 2300 AK, Netherlands

Abstract: Engineering analogue method is commonly used to evaluate the stability of the ground surface of mined-out area. Because the technique depends on subjective experience, its reliability is suspectable. The stability of the mined-out area for the prebuilding steelworks is researched by the comprehensive methods, including in-situ investigation, laboratory testing, theoretical analysis and numerical simulation. The results provided evidences for decision-making and design of the prebuilding steel works, they are also applicable to the similar field conditions. © 2008 Taylor & Francis Group.

Number of references: 4

Main heading: Mechanics

Controlled terms: Electric network analysis - Numerical methods - Problem solving - Rock mechanics - Rocks - Steel - Steel construction

Uncontrolled terms: Comprehensive methods - Field conditions - Ground surfaces - In-situ - Numerical simulations - Steel works - Theoretical analyses

Classification code: 931.1 Mechanics - 921.6 Numerical Methods - 921 Mathematics - 723.4 Artificial Intelligence - 703.1.1 Electric Network Analysis - 545.3 Steel - 502.1 Mine and Quarry Operations - 483.1 Soils and Soil Mechanics - 481.1 Geology - 415.1 Metal Structural Materials - 405.2 Construction Methods

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1008.

Accession number: 20084111636334

Title: Analysis for acceleration performance indices of serial robots

Authors: Guo, Xijuan1 ; Geng, Qingjia2

Author affiliation:

- 1 College of Information Science and Engineering, Yanshan University, Qinhuangdao 066004, China
- 2 Department of Computer, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Guo, X. (xjguo@ysu.edu.cn)

Source title: Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering

Abbreviated source title: Jixie Gongcheng Xuebao

Volume: 44

Issue: 9

Issue date: September 2008

Publication year: 2008

Pages: 56-60

Language: Chinese

ISSN: 05776686

CODEN: CHHKA2

Document type: Journal article (JA)

Publisher: Editorial Office of Chinese Journal of Mechanical, 22 Baiwanzhuang Dajie, Beijing, 100037, China

Abstract: Through theoretical derivation from mechanism's velocity and acceleration formulae, serial mechanism's acceleration performance indices, including acceleration, angular acceleration and linear acceleration performance indices are defined based on mechanism's first-order and second-order influence coefficient matrices. By using definition of mechanism's global performance index put forward by GOSSELIN, serial mechanism's global performance indices of acceleration, angular acceleration and linear acceleration are presented. At last, by using previous index, PUMA 260 serial industrial robot's dynamic performance is analyzed, and the performance atlases are given. The results show that Hessian matrix plays a more important role in acceleration performance, and these new indices are feasible in mechanism's dynamic performance analysis.

Number of references: 7

Main heading: Acceleration

Controlled terms: Dynamic analysis - Matrix algebra - Mechanisms - Robotics

Uncontrolled terms: Acceleration performance - Angular accelerations - Dynamic performance analysis - Dynamic performances - First orders - Global performance - Hessian matrices - Influence coefficient matrices - Influence coefficient matrix - Linear accelerations - New indices - Performance index - Second orders - Serial mechanism - Serial robot - Serial

robots

Classification code: 422.2 Strength of Building Materials : Test Methods - 601.3 Mechanisms - 731.5 Robotics - 921.1 Algebra - 931.1 Mechanics

DOI: 10.3901/JME.2008.09.056

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1009.

Accession number: 20073810818611

Title: Measurement and elimination of information disclosure in publishing views

Authors: Liu, Guohua¹ ; Song, Jinling^{1, 2} ; Huang, Liming² ; Zhao, Danfeng¹ ; Song, Li¹

Author affiliation:

1 Department of Computer Science and Engineering, Yanshan University, Qinhuangdao 066004, China

2 Department of Computer Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, G. (ghliu@ysu.edu.cn)

Source title: Jisuanji Yanjiu yu Fazhan/Computer Research and Development

Abbreviated source title: Jisuanji Yanjiu yu Fazhan

Volume: 44

Issue: 7

Issue date: July 2007

Publication year: 2007

Pages: 1227-1235

Language: Chinese

ISSN: 10001239

CODEN: JYYFEY

Document type: Journal article (JA)

Publisher: Science Press, 18,Shuangqing Street,Haidian, Beijing, 100085, China

Abstract: Although publishing views supply convenience to data exchange, it will potentially threat data owner because some information may be disclosed in the publishing process, so guaranteeing the security of the publishing views becomes a new issue of database security. Theoretically, the methods preventing the information from disclosing in the publishing process can be divided into two kinds, one is for the people who accept views, and the other is for the people who publish views. In practical applications, it is very difficult to realize the first method, so, people focus study on the second method. So far, relevant evaluating algorithms and protecting models have been proposed, for example, query answering, K-anonymity, probabilistic independence event model and so on, but all these methods have the same weakness, namely, limitation and can't eliminate information disclosure effectively, so they cannot resolve the problem completely. In order to measure the leakage of the publishing views and eliminate disclosure, an information 'disclosure measuring method of relative deviation is proposed, which can facilitate the information disclosure calculation, and a disclosure elimination method based on critical tuples is presented, which can eliminate the information disclosure of the publishing views completely. The experiment results show that the information disclosure measuring method of relative deviation can measure information disclosure effectively, and the information disclosure method based on critical tuples can eliminate information disclosure effectively. They can resolve the problem of information disclosure in the publishing process completely, and can guarantee the security of views in the logic level.

Number of references: 18

Main heading: Security of data

Controlled terms: Algorithms - Database systems - Electronic data interchange

Uncontrolled terms: Critical tuple - Data owner - Database security - Information disclosure - K anonymity - Probabilistic independence event model - Query answering - View publishing

Classification code: 723.2 Data Processing and Image Processing - 723.3 Database Systems - 921 Mathematics

Treatment: Theoretical (THR); Experimental (EXP)

DOI: 10.1360/crad20070719

Database: Compendex

1010.

Accession number: 20084911761521

Title: Fluorescence properties of dibenzofluorescein in aqueous solution

Authors: Zhang, Xian-Fu^{1, 2}; Liu, Qiang^{1, 2}; Son, Aijun¹; Zhang, Qihang¹; Zhao, Fuqun^{1, 2}; Zhang, Fushi^{1, 2}

Author affiliation:

1 Department of Chemistry, Hebei Normal University of Science and Technology, Qinghuangdao, Hebei Province 066004, China

2 Chemistry Department, Tsinghua University, 202 West, Gongwuguan, Beijing 100084, China

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Fluorescence

Abbreviated source title: J Fluoresc

Volume: 18

Issue: 6

Issue date: November 2008

Publication year: 2008

Pages: 1051-1057

Language: English

ISSN: 10530509

CODEN: JOFLEN

Document type: Journal article (JA)

Publisher: Springer New York LLC, 233 Springer Street, New York, 10013-1578, United States

Abstract: The deprotonation of dibenzofluorescein (DBFL), a long wavelength fluorescence probe, results in the simultaneous occurrence of neutral form, monoanion and dianion under physiological conditions. The fluorescence properties of the former two cannot be measured directly because they are always coexistent with some other species. By measuring the fluorescence under various pHs we computed the fluorescence parameters for each species involved in the prototropic equilibria of DBFL, including each species' emission spectrum, excitation spectrum, emission and excitation maximum, fluorescence quantum yield and lifetime. It was

found that the monoanion is the most fluorescent chromospheres ($\Phi_f = 0.66$, compared to $\Phi_f = 0.25$ for dianion, 0.18 for cation and 0.0 for the neutral form). Together with the computed pKas, we are able to suggest that the monoanion plays a major role under physiological conditions when DBFL is used as a fluorescence probe, contrary to the assumption in literature. © 2008 Springer Science+Business Media, LLC.

Number of references: 19

Main heading: Light emission

Controlled terms: Emission spectroscopy - Fluorescence - Luminescence - Solutions

Uncontrolled terms: Aqueous solutions - Dibenzofluorescein - Emission spectrums - Excitation spectrums - Fluorescein - Fluorescence probe - Fluorescence probes - Fluorescence properties - Fluorescence quantum yields - Life-times - Long wavelengths - Monoanion - Physiological conditions - Various phs

Classification code: 741.1 Light/Optics - 801 Chemistry - 803 Chemical Agents and Basic Industrial Chemicals - 804 Chemical Products Generally - 931.3 Atomic and Molecular Physics

DOI: 10.1007/s10895-008-0349-7

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1011.

Accession number: 20101112768964

Title: Preserving FDs in K-anonymization by K-MSDs and association generalization

Authors: Song, Jinling^{1, 2}; Huang, Liming¹; He, Qi³; Gao, Yan⁴; Liu, Xin¹; Li, Yuxiang¹

Author affiliation:

1 HeBei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Yanshan University, Qinhuangdao 066004, China

3 College of Information Technology, Shanghai Ocean University, Shanghai 201306, China

4 Department of Information Engineering, Liao Ning Institute of Science and Technology, Benxi 117022, China

Corresponding author: Song, J. (songjinling99@126.com)

Source title: CIS 2009 - 2009 International Conference on Computational Intelligence and Security

Abbreviated source title: CIS - Int. Conf. Comput. Intell. Secur.

Volume: 1

Part number: 1 of 2

Monograph title: CIS 2009 - 2009 International Conference on Computational Intelligence and Security

Issue date: 2009

Publication year: 2009

Pages: 565-569

Article number: 5375898

Language: English

ISBN-13: 9780769539317

Document type: Conference article (CA)

Conference name: 2009 International Conference on Computational Intelligence and Security, CIS 2009

Conference date: December 11, 2009 - December 14, 2009

Conference location: Beijing, China

Conference code: 79508

Sponsor: Beijing Institute of Technology; Guangdong University of Technology; Xidian University; IEEE Computer Society Press

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Although k-anonymity can guarantee the security of privacy, it may violate data dependencies, such as FDs in k-anonymization. We define a new data dependency named k-multiset dependency (K-MSD), and show that a K-MSD dataset satisfies k-anonymity constraint too. So, it is possible to implement k-anonymization through constructing K-MSDs over original dataset. For the FDs over the original dataset, we preserve them using association generalization (AG) while constructing K-MSDs. Then, we propose a k-anonymization algorithm: K-MSD-AG to preserve FDs. © 2009 IEEE.

Number of references: 14

Main heading: Data privacy

Controlled terms: Artificial intelligence

Uncontrolled terms: Data dependencies - Data sets - K-Anonymity - K-anonymization
- Multiset

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication
- 718 Telephone Systems and Related Technologies; Line Communications - 723.2 Data Processing and Image
Processing - 723.4 Artificial Intelligence - 902.3 Legal Aspects

DOI: 10.1109/CIS.2009.142

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1012.

Accession number: 20081311176449

Title: Structural evolution of mechanically alloyed nanocrystalline FeAl intermetallics

Authors: Shi, Hongwei¹ ; Guo, Debo² ; Ouyang, Yifang³

Author affiliation:

1 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

2 Institute of Semiconductors, Chinese Academy of Sciences, Beijing, 100083, China

3 Department of Physics, Guangxi University, Nanning, Guangxi 530004, China

Corresponding author: Guo, D. (guodebo@semi.ac.cn)

Source title: Journal of Alloys and Compounds

Abbreviated source title: J Alloys Compd

Volume: 455

Issue: 1-2

Issue date: May 8, 2008

Publication year: 2008

Pages: 207-209

Language: English

ISSN: 09258388

CODEN: JALCEU

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: Nanostructured FeAl intermetallics were prepared directly by mechanical alloying (MA) in a high-energy planetary ball-mill. The phase transformations and structural changes occurring in the studied material during mechanical alloying were investigated by X-ray diffraction (XRD). Transmission electron microscopy (TEM) was employed to examine the morphology of the powders. Thermal behavior of the milled powders was examined by differential scanning calorimetry (DSC). Disordered Fe(Al) solid solution was formed at the early stage. After 30 h of milling, Fe(Al) solid solution transformed into an ordered FeAl phase. The average crystallite size reduction down to about 12 nm was accompanied by the introduction of the average lattice strain up to 1.7%. The TEM picture showed that the size of milled powders was less than 30 nm. © 2007 Elsevier B.V. All rights reserved.

Number of references: 18

Main heading: Intermetallics

Controlled terms: Differential scanning calorimetry - Iron compounds - Mechanical alloying
- Morphology - Nanocrystalline materials - Transmission electron microscopy - X ray diffraction

Uncontrolled terms: Milled powders - Size reduction - Structural evolution

Classification code: 951 Materials Science - 944.6 Temperature Measurements - 933.1 Crystalline Solids
- 931.3 Atomic and Molecular Physics - 931.2 Physical Properties of Gases, Liquids and Solids - 804.2 Inorganic
Compounds - 761 Nanotechnology - 741.3 Optical Devices and Systems - 531.1 Metallurgy

Numerical data indexing: Percentage 1.70e+00%, Size 1.20e-08m, Size 3.00e-08m, Time 1.08e+05s

Treatment: Theoretical (THR); Experimental (EXP)

DOI: 10.1016/j.jallcom.2007.01.079

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1013.

Accession number: 20084611708864

Title: Distribution of Pb and Zn in transgenic metallothionein tobacco

Authors: Sheng, Ji-Ping^{1, 3}; Li, Han-Chen²; Liu, Kai-Lang¹; Ru, Bing-Gen³; Shen, Lin¹

Author affiliation:

- 1 College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China
- 2 Department of Food Science, Hebei Normal University of Science and Technology, Qinghuangdao 066600, China
- 3 College of Life Science, Peking University, Beijing 100871, China

Corresponding author: Sheng, J.-P.

Source title: Guang Pu Xue Yu Guang Pu Fen Xi/Spectroscopy and Spectral Analysis

Abbreviated source title: Guang Pu Xue Yu Guang Pu Fen Xi

Volume: 28

Issue: 10

Issue date: October 2008

Publication year: 2008

Pages: 2401-2403

Language: Chinese

ISSN: 10000593

CODEN: GYGFED

Document type: Journal article (JA)

Publisher: Science Press, 18, Shuangqing Street, Haidian, Beijing, 100085, China

Abstract: Transgenic metallothionein (MT) plant can clear the heavy metals from soil and environment, but the distribution of metals in plants has not been studied systematically. The Pb and Zn contents in different parts of transgenic MT tobacco plant of sixth generation and traditional plant (same culture variety as control)

were analyzed. The Pb and Zn contents in total transgenic plant were 21.8% and 27.2% higher than control, respectively. The distribution of Pb and Zn in different organs varied in these two types of plants. The Pb and Zn contents in old leaves, stem and root in transgenic plants were significantly higher than those in wild type tobacco, while there was no significant difference in young leaves. The Pb contents in old leaves and root were 30.2% and 47.8% higher than those in the control, and the Zn contents in old leaves, stem and root were 4.7%, 29.2% and 21.6% higher than those in the control. These data showed that Pb was accumulated in old leaves and root easily, while Zn was accumulated in old leaves and stem easily.

Number of references: 8

Main heading: Lead

Controlled terms: Agricultural products - Heavy metals - Lead alloys - Telluric prospecting
- Tobacco - Zinc

Uncontrolled terms: And environments - Distribution - In plants - Metallothionein -
Tobacco plants - Transgenic - Transgenic plants - Transgenic tobacco - Two types - Wild types
- Zn contents

Classification code: 821.4 Agricultural Products - 546.3 Zinc and Alloys - 546.1 Lead and Alloys - 531
Metallurgy and Metallography - 512 Petroleum and Related Deposits - 501.1 Exploration and Prospecting
Methods - 481.4 Geophysical Prospecting

Numerical data indexing: Percentage 2.16e+01%, Percentage 2.18e+01%, Percentage 2.72e+01%,
Percentage 2.92e+01%, Percentage 3.02e+01%, Percentage 4.70e+00%, Percentage 4.78e+01%

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1014.

Accession number: 20063310068430

Title: Properties of quasi-two-dimensional strong-coupling magnetopolarons in magnetic fields

Authors: Eerdunchaolu1 ; Wuyunqimuge2 ; Xu, Qiu1 ; Bai, Xufang2

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao
066004, China

2 College of Physics and Electromechanics, Inner Mongolia University for Nationalities, Tongliao 028043,
China

Corresponding author: Eerdunchaolu (eerdunchaolu@sohu.com)

Source title: Pan Tao Ti Hsueh Pao/Chinese Journal of Semiconductors

Abbreviated source title: Pan Tao Ti Hsueh Pao

Volume: 27

Issue: 5

Issue date: May 2006

Publication year: 2006

Pages: 824-829

Language: Chinese

ISSN: 02534177

CODEN: PTPPDZ

Document type: Journal article (JA)

Publisher: Science Press

Abstract: The ground state of a magnetopolaron that is weakly coupled with bulk longitudinal optical phonons and strongly coupled with interface optical phonons, in an infinite quantum well within magnetic fields is studied using the linear-combination operator and a modified LLP variational method. Rules for how the vibration frequency and self-trapping energy of the magnetopolaron change with the width of the quantum well and the magnetic fields are obtained. Our numerical results for a CdF₂/AgCl QW show that the vibration frequency and the self-trapping energy of the magnetopolaron decrease with increasing well width and increase with increasing magnetic fields strength, but the contribution of interaction between the different branches of phonons and the electron and the magnetic fields to the vibration frequency and the self-trapping energy of the magnetopolaron are greatly different. The above-mentioned phenomena are also analyzed.

Number of references: 30

Main heading: Semiconductor quantum wells

Controlled terms: Electrons - Frequencies - Ground state - Magnetic fields - Phonons
- Polarons - Vibrations (mechanical)

Uncontrolled terms: Magnetopolaron - Selftrapping energy - Vibration frequency - Well
within

Classification code: 933.1.1 Crystal Lattice - 931.3 Atomic and Molecular Physics - 931.1 Mechanics - 751.1 Acoustic Waves - 714.2 Semiconductor Devices and Integrated Circuits - 711.1 Electromagnetic Waves in Different Media - 701.2 Magnetism: Basic Concepts and Phenomena

Treatment: Applications (APP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1015.

Accession number: 20160801982473

Title: A potential application of bluetooth in the medical field—HOLTER applied by the bluetooth technology

Authors: Qiu, Xu¹ ; Xu, Aijun^{2, 3} ; Zhen, Huang³ ; Li, Chengwei³

Author affiliation:

- 1 HeBei Normal University of Science and Technology, Qin Huangdao, China
- 2 North China Coal Medical College, Tan Shan, China
- 3 Institute of Biomedical Engineering, Yanshan University, Qinhuangdao, China

Corresponding author: Qiu, Xu (hbzjsyxq@163.com)

Source title: IFMBE Proceedings

Abbreviated source title: IFMBE Proc.

Volume: 14

Issue: 1

Issue date: 2007

Publication year: 2007

Pages: 362-365

Language: English

ISSN: 16800737

Document type: Conference article (CA)

Conference name: 10th World Congress on Medical Physics and Biomedical Engineering, WC 2006

Conference date: August 27, 2006 - September 1, 2006

Conference location: Seoul, Korea, Republic of

Conference code: 163739

Sponsor: AAPM; BMES; EFOMP; et al; IAEA; WHO

Publisher: Springer Verlag

Abstract: Bluetooth is a short-range radio link conceived of replacing cable connections among portable and/or fixed electronic devices. As its robustness, low complexity, low power, and low cost, it has been well applied in many fields from computers and electric equipments to household electrical appliances and even telemedicine. This paper first introduced the Bluetooth technology and its application at present and in the future, especially in the telemedicine. And then a potential application in the wireless telemedicine is introduced. That's wireless HOLTER applied by the Bluetooth technology. As HOLTER until now is only limited to do some analyze work based on electrocardiogram, small store capacity and not support long distance communication, the new HOLTER applied by Bluetooth technology can support the live communication which can do a good favor to doctor and patient. © International Federation for Medical and Biological Engineering 2007.

Number of references: 3

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1016.

Accession number: 20083511484794

Title: Note on Characterization of Uniquely 3-List Colorable Complete Multipartite Graphs

Authors: Zhao, Yongqiang¹ ; He, Wenjie² ; Shen, Yufa³ ; Wang, Yanning⁴

Author affiliation:

1 Department of Mathematics, Shijiazhuang College, Shijiazhuang 050035, China

2 Applied Mathematics Institute, Hebei University of Technology, Tianjin 300130, China

3 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

4 Department of Mathematics, Yanshan University, Qinhuangdao 066004, China

Corresponding author: Zhao, Y. (yqzhao1970@yahoo.com)

Source title: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)

Abbreviated source title: Lect. Notes Comput. Sci.

Volume: 4381 LNCS

Monograph title: Discrete Geometry, Combinatorics and Graph Theory 7th China-Japan Conference, CJCDGCGT 2005, Tianjin, China, November 18-20, 2005, Xi'an, China, November 22-24, 2005, Revised Selected Papers

Issue date: 2007

Publication year: 2007

Pages: 278-287

Language: English

ISSN: 03029743

E-ISSN: 16113349

ISBN-10: 3540706658

ISBN-13: 9783540706656

Document type: Conference article (CA)

Conference name: 7th China-Japan Conference on Discrete Geometry, Combinatorics and Graph Theory, CJCDGCGT 2005

Conference date: November 22, 2005 - November 24, 2005

Conference location: Xi'an, China

Conference code: 73264

Sponsor: Nankai University, Center for Combinatorics; Northwestern Polytechnical Univ., Dep. Applied Mathematics; Tokai University of Japan, Institute for Education Development

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Let G be a graph and suppose that for each vertex v of G , there exists a list of k colors, $L(v)$, such that there is a unique proper coloring for G from this collection of lists, then G is called a uniquely k -list colorable graph. M. Ghebleh and E. S. Mahmoodian characterized uniquely 3-List colorable complete multipartite graphs except for nine graphs. Recently, except for graph $K_{2,3,4}$, the other eight graphs were shown not to be uniquely 3-list colorable by W. He and Y. Shen, etc. In this paper, it is proved that $K_{2,3,4}$ is not uniquely 3-list colorable, and then the uniquely 3-list colorable complete multipartite graphs are characterized completely. © 2007 Springer-Verlag Berlin Heidelberg.

Number of references: 9

Main heading: Graph theory

Controlled terms: Geometry - Topology

Uncontrolled terms: Combinatorics - Complete multipartite graph - Discrete geometry - List coloring - Multipartite graphs - Proper coloring - Tianjin, China - Uniquely k -list colorable

Classification code: 921 Mathematics - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.1007/978-3-540-70666-3_30

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1017.

Accession number: 20101112763635

Title: Discovering complex semantic matches between database schemas

Authors: Qian, Ying¹; Li, Yuxiang²; Song, Jinling²; Yue, Liwen³

Author affiliation:

1 Network and Modern Education Technology Center, HeBei Normal University of Science and Technology, Qin Huangdao, HeBei, China

2 Department of Computer, HeBei Normal University of Science and Technology, Qin Huangdao, HeBei, China

3 College of Information and Engineering, Yanshan University, Qin Huangdao, HeBei, China

Corresponding author: Qian, Y. (my_9199@tom.com)

Source title: 2009 International Conference on Web Information Systems and Mining, WISM 2009

Abbreviated source title: Int. Conf. Web Inf. Syst. Min., WISM

Monograph title: 2009 International Conference on Web Information Systems and Mining, WISM
2009

Issue date: 2009

Publication year: 2009

Pages: 756-760

Article number: 5368370

Language: English

ISBN-13: 9780769538174

Document type: Conference article (CA)

Conference name: 2009 International Conference on Web Information Systems and Mining, WISM
2009

Conference date: November 7, 2009 - November 8, 2009

Conference location: Shanghai, China

Conference code: 79453

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331,
United States

Abstract: Schema matching, the problem of finding semantic correspondences between elements of two schemas, plays a key role in many applications, such as data warehouse, heterogeneous data sources integration and semantic Web. The existing approaches to automating schema matching almost focus on computing direct element matches (1:1 matches) between two schemas. However, relationships between real-world schemas involve many complex matches besides 1:1 matches. At present, there are few methods can discover complex matches, such as iMAP[1], but they have bad matching efficiency, because the candidate matches space is so large which they need searching. A complex schema matching system called CSM is introduced in this paper. Firstly it can filter unreasonable matches on data types and values by preprocessor and clustering processor, and employs a set of special-purpose searchers in match generator to explore a specialized portion of the search space and discovers 1:1 and complex matches. Then it estimates candidate matches and selects optimal candidate matches by using similarity estimator and match selector respectively. Finally, according to the problem that there are opaque columns in the schemas being matched, it can apply complementary matcher to discover matching relations between opaque columns further more. Thereby it can discover more general, reasonable matching pairs. Experiments show that, CSM does not only discover matches between schemas roundly, but also improve the

matching recall and precision in practice. © 2009 IEEE.

Number of references: 6

Main heading: Semantic Web

Controlled terms: Data warehouses - Information systems - Semantics - World Wide Web

Uncontrolled terms: Data type - Database schemas - Heterogeneous data sources - Preprocessors - Real-world - Recall and precision - Schema matching - Schemas - Search spaces - Semantic correspondence

Classification code: 903.2 Information Dissemination - 903 Information Science - 723.3 Database Systems - 903.3 Information Retrieval and Use - 723 Computer Software, Data Handling and Applications - 717 Optical Communication - 716 Telecommunication; Radar, Radio and Television - 718 Telephone Systems and Related Technologies; Line Communications

DOI: 10.1109/WISM.2009.156

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1018.

Accession number: 20073510790391

Title: Optimization of the fermentation conditions for soybean milk wine

Authors: Cui, Ruijing; Li, Hanchen; Du, Maobao; Zhang, Meishen

Corresponding author: Cui, R. (spcrj@126.com)

Corr. author affiliation: Department of Food Engineering, Hebei Normal University of Science and Technology, Changli 066600, China

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 23

Issue: 7

Issue date: July 2007

Publication year: 2007

Pages: 257-262

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Beijing, 100026, China

Abstract: The technology of fermented wine made from hydrolysate of soybean milk was preliminarily studied. The processing technology was optimized by means of single factor and orthogonal experiments. Results show that the hydrolysate can be obtained by adding 12000 U/L papain into the soybean milk, in which the ratio of soybean to water is 1:10, and hydrolysing for 6 hours at 60°C with pH value of 7.0. Subsequently, the soybean milk wine can be developed with the hydrolysate under the conditions such as adding 0.15 [per mille] *Saccharomyces cerevisiae* and 18% sugar, regulating pH value to 3.4 with citric acid, fermenting for 7-9 days at 25-27°C and brewing some time. This product have excellent flavor, plentiful nutritive value, better stability. A new road for utilizing soybeans was developed.

Number of references: 25

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1019.

Accession number: 20085111792263

Title: Magnetic field and temperature dependence of the properties of the magnetopolaron in an asymmetric quantum dot

Authors: Eerdunchaolu; Yu, Ruo-Meng

Corresponding author: Eerdunchaolu (Eerdunchaolu@sohu.com)

Corr. author affiliation: Institute of Condensed Matter Physics, Hebei Normal University of Science

and Technology, Qinhuangdao 066004, China

Source title: Wuli Xuebao/Acta Physica Sinica

Abbreviated source title: Wuli Xuebao

Volume: 57

Issue: 11

Issue date: November 2008

Publication year: 2008

Pages: 7100-7107

Language: Chinese

ISSN: 10003290

CODEN: WLHPAR

Document type: Journal article (JA)

Publisher: Science Press, Beijing, 100085, China

Abstract: The influence of the magnetic field and temperature on the properties of the strong-coupling magnetopolaron in an asymmetric quantum dot is studied by using the Tokuda's linear-combination operator and the Lee-Low-Pines variational method. The expressions for the vibration frequency λ , ground state energy E_0 and the effective mass m^* of the magnetopolaron as a function of the transverse effective confinement strength ω_1 , the longitudinal effective confinement strength ω_2 , the electron-phonon coupling strength α , the cyclotron frequency ω_c and the temperature parameter γ are derived. Numerical results indicate that λ and m^* of the magnetopolaron will increase with increasing ω_1 , ω_2 , ω_c and α , and will decrease with increasing temperature T . The value of E_0 changing with ω_1 , ω_2 , ω_c , α and γ are strongly related to the properties of the state of the magnetopolaron. The signs of positive and negative E_0 relate not only to the value of ω_1 , ω_2 , ω_c and α but also to the value of γ . However, only on the condition of higher temperature (γ less than or equal 0.4), the influence of temperature on λ , m^* and E_0 of the magnetopolaron is obvious. ©2008 Chin. Phys. Soc.

Number of references: 16

Database: Compendex

1020.

Accession number: 20110713665832

Title: The ideas of learning with technology: Contributions of patrick suppes to computers and education

Authors: Zhou, Y.H.1 ; Wen, D.2 ; Meng, H.J.3 ; Yuan, F.Y.2

Author affiliation:

- 1 Department of computer, Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 College of Information Science and Engineering, University of Yanshan, Qinhuangdao, China
- 3 Center for Technology in Education, PLA University of Technology, Nanjing, China

Corresponding author: Zhou, Y. H. (wencangdong@sohu.com)

Source title: Proceedings - International Conference on Computer Science and Software Engineering, CSSE 2008

Abbreviated source title: Proc. - Int. Conf. Comput. Sci. Softw. Eng., CSSE

Volume: 5

Part number: 5 of 6

Monograph title: Proceedings - International Conference on Computer Science and Software Engineering, CSSE 2008

Issue date: 2008

Publication year: 2008

Pages: 1346-1348

Article number: 4723159

Language: English

ISBN-13: 9780769533360

Document type: Conference article (CA)

Conference name: International Conference on Computer Science and Software Engineering, CSSE 2008

Conference date: December 12, 2008 - December 14, 2008

Conference location: Wuhan, Hubei, China

Conference code: 75355

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Patrick Suppes is one of the most influential pioneers in the field of computers and education. In this article, the authors make a brief biography for him and introduce his outstanding achievements in terms of both research and practice in learning with technology, ending with concluding remarks. © 2008 IEEE.

Number of references: 10

Main heading: Engineering education

Controlled terms: Biographies - Computer aided instruction - E-learning - Software engineering

Uncontrolled terms: Computer Assisted Instruction - Computers and education - Patrick Suppes

Classification code: 723.1 Computer Programming - 901.2 Education - 903 Information Science - 971 Social Sciences

DOI: 10.1109/CSSE.2008.124

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1021.

Accession number: 20092712169307

Title: Substituted phosphorous triazatetrazabenzocorroles: Correlation between structure and excited state properties

Authors: Zhang, Xian-Fu^{1, 2} ; Chang, Yakuan¹ ; Peng, Yanling¹ ; Zhang, Fushi²

Author affiliation:

1 Chemistry Department, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

2 Chemistry Department, Tsinghua University, Beijing, 100084, China

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Australian Journal of Chemistry

Abbreviated source title: Aust. J. Chem.

Volume: 62

Issue: 5

Issue date: 2009

Publication year: 2009

Pages: 434-440

Language: English

ISSN: 00049425

CODEN: AJCHAS

Document type: Journal article (JA)

Publisher: CSIRO, P.O. Box 1139, Collingwood, VIC 3066, Australia

Abstract: The photophysical properties of five novel phthalocyanine analogues, dihydroxy phosphorus(v) triazatetrazabenzocorrole (PTBC) substituted with NO₂, SO₃H, OiPr, and NH₂, respectively, were studied by a combination of absorption, steady-state emission, time-resolved fluorescence, and laser flash photolysis. All substituents, even for the strong electron-donating NH₂, cause only a slight red shift of their absorption and emission maxima. These complexes are generally monomeric in organic solution, whereas the sulfonated derivative, PTBC(SO₃H)₄, slightly aggregates in aqueous buffer. Distinct from phthalocyanines, PTBCs substituted with NO₂ or NH₂ still show high photo activities. The electron-withdrawing NO₂ and SO₃H decrease the fluorescence quantum yield but increase the triplet formation yield to 0.76 and 0.82, respectively. All PTBCs have long triplet lifetimes and hence generate singlet oxygen efficiently with a quantum yield from 0.43 to 0.75. Together with the ground-state absorption properties, the results suggest that these PTBCs may be used as excellent photosensitizers for photodynamic therapy. © CSIRO 2009.

Number of references: 25

Main heading: Absorption

Controlled terms: Dyes - Fluorescence - Metallic glass - Oxygen - Phosphorus -
Photodynamic therapy - Photolysis - Photosensitizers

Uncontrolled terms: Aqueous buffer - Electron-donating - Electronwithdrawing - Emission maxima - Excited-state properties - Fluorescence quantum yield - Ground state absorption - Laser flash photolysis - Organic solutions - Photo-activities - Photophysical properties - Red shift - Singlet oxygen - Steady-state emissions - Sulfonated derivatives - Time-resolved fluorescence

Classification code: 931.2 Physical Properties of Gases, Liquids and Solids - 804 Chemical Products Generally - 803 Chemical Agents and Basic Industrial Chemicals - 802.3 Chemical Operations - 933.2 Amorphous Solids - 802.2 Chemical Reactions - 741.1 Light/Optics - 531 Metallurgy and Metallography - 461.6 Medicine and Pharmacology - 741.3 Optical Devices and Systems

DOI: 10.1071/CH09020

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1022.

Accession number: 20084911757513

Title: Influences of spin on the properties of a weak-coupled magnetopolaron in quantum dot

Authors: Li, Zhi-Xin¹ ; Xiao, Jing-Lin¹

Author affiliation:

¹ Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Li, Z.-X. (zzlxx2006@126.com)

Source title: Optoelectronics Letters

Abbreviated source title: Optoelectron. Lett.

Volume: 4

Issue: 4

Issue date: July 2008

Publication year: 2008

Pages: 307-310

Language: English

ISSN: 16731905

Document type: Journal article (JA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: Considering the influences of the spin on the ground state energy, the properties of a weak-coupled magnetopolaron in quantum dots are studied by using a linear combination operator and unitary transformation method. The numerical calculation results for CaP crystals have been given as examples. © 2008 Tianjin University of Technology and Springer-Verlag GmbH.

Number of references: 7

Main heading: Semiconductor quantum dots

Controlled terms: Crystallography - Mathematical operators - Numerical analysis - Optical waveguides - Quantum electronics - Spin dynamics

Uncontrolled terms: CaP crystals - Linear combination operators - Magnetopolaron - Numerical calculations - Quantum dots - Spin-on - Unitary transformations

Classification code: 932.1 High Energy Physics - 931.4 Quantum Theory; Quantum Mechanics - 931.3 Atomic and Molecular Physics - 921.6 Numerical Methods - 921 Mathematics - 933.1 Crystalline Solids - 801.4 Physical Chemistry - 741.3 Optical Devices and Systems - 717.2 Optical Communication Equipment - 714.3 Waveguides - 714.2 Semiconductor Devices and Integrated Circuits - 744 Lasers

DOI: 10.1007/s11801-008-7154-z

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1023.

Accession number: 20073410779346

Title: Method for support matrix of the multisensor data fusion

Authors: Cheng, Hui¹ ; Wang, Hong-Tao² ; Chen, Xiu-Hong¹ ; Liu, Rong-Chang¹ ; Wang, Feng¹

Author affiliation:

1 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Beijing Institute of Technology, Beijing 100081, China

Corresponding author: Cheng, H. (chnet@163.com)

Source title: Dongbei Daxue Xuebao/Journal of Northeastern University

Abbreviated source title: Dongbei Daxue Xuebao

Volume: 28

Issue: SUPPL. 1

Issue date: July 2007

Publication year: 2007

Pages: 38-40

Language: Chinese

ISSN: 10053026

CODEN: DDXKEZ

Document type: Journal article (JA)

Publisher: Northeastern University, P.O.Box 352, Shengyang, -, China

Abstract: In the process of the multisensor data fusion, the reliability degree of each sensor must be calculated before establishing the correct relation matrix. The general method is to estimate whether the two sensors support each other with the threshold value, or with the subsection beeline On the basis of the analysis, using the normal curve relation matrix, a method is presented to express the reliability degree and the fusion results from the example data are given respectively.

Number of references: 7

Main heading: Data fusion

Controlled terms: Normal distribution - Reliability

Uncontrolled terms: Bayes theory - Multiseneor - Support matrix

Classification code: 723.2 Data Processing and Image Processing - 922.1 Probability Theory

Treatment: Applications (APP); Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1024.

Accession number: 20101712882089

Title: Research of reverse nearest neighbor query technology in spatial objects

Authors: Yu, Hong Kui¹ ; Yang, Yan Ping¹ ; Cao, Li Jun¹ ; Pei, Cai Yan¹

Author affiliation:

1 Dept. of Computer Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Yu, H. K. (Rscyhk@126.com)

Source title: Proceedings of the International Symposium on Test and Measurement

Abbreviated source title: Proc Int Symp Test Meas

Volume: 2

Part number: 2 of 2

Monograph title: ICTM 2009 - 2009 International Conference on Test and Measurement

Issue date: 2009

Publication year: 2009

Pages: 217-220

Article number: 5413070

Language: English

ISBN-13: 9781424447008

Document type: Conference article (CA)

Conference name: 2009 International Conference on Test and Measurement, ICTM 2009

Conference date: December 5, 2009 - December 6, 2009

Conference location: Hong Kong, Hong kong

Conference code: 79911

Sponsor: Institute ofElectrical and Electronics Engineers; IEEE Instrumentation and Measurement Society; Intelligent Information Technology; Application Research Association

Publisher: International Academic Publishers, 137 Chaonei Dajie, Beijing, 100010, China

Abstract: In the past, the query based on R tree index structure, in the case of high-dimensional, the speed of the query decline sharply, a "dimension disaster", in this paper a new index structure-VAR tree is proposed, and the algorithm of anti-nearest neighbor and nearest neighbor queries based on the index structure is proposed, in order to enhance the query efficiency of the reverse nearest neighbor queries in high-dimensional space. © 2009 IEEE.

Number of references: 17

Main heading: Value engineering

Controlled terms: Decision trees

Uncontrolled terms: High dimensional spaces - High-dimensional - Index structure - Nearest neighbor queries - Nearest neighbors - New indices - Query efficiency - R-tree index structure - Reverse nearest neighbors - Spatial objects

Classification code: 911.5 Value Engineering - 912.1 Industrial Engineering - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 922 Statistical Methods - 961 Systems Science

DOI: 10.1109/ICTM.2009.5413070

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1025.

Accession number: 20084011616084

Title: Discovering complex matches between database schemas

Authors: Qian, Ying1 ; Yue, Liwen2 ; Liu, Zhenglin3

Author affiliation:

- 1 Network and Modern Education Technology Center, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 College of Information and Engineering, Yanshan University, Qinhuangdao 066004, China
- 3 IT Department, E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Qian, Y. (my_9199@tom.com)

Source title: Proceedings of the 27th Chinese Control Conference, CCC

Abbreviated source title: Proc. Chin. Control. Conf., CCC

Monograph title: Proceedings of the 27th Chinese Control Conference, CCC

Issue date: 2008

Publication year: 2008

Pages: 663-667

Article number: 4605164

Language: English

ISBN-13: 9787900719706

Document type: Conference article (CA)

Conference name: 27th Chinese Control Conference, CCC

Conference date: July 16, 2008 - July 18, 2008

Conference location: Kunming, Yunnan, China

Conference code: 73759

Sponsor: Technical Committee on Control Theory; Chinese Association of Automation Kunming Univ. Sci. Technol.; Yunnan Division; Chinese Association of Automation

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Schema matching, the problem of finding semantic correspondences between elements of two schemas, plays a key role in many applications, such as data warehouse, heterogeneous data sources integration and semantic Web. The existing approaches to automating schema matching almost focus on computing direct

element matches (1:1 matches) between two schemas. However, relationships between real-world schemas involve many complex matches besides 1:1 matches. At present, there are few methods can discover complex matches, such as iMAP [1], but most of them have poor matching efficiency, because the candidate match space is so large which they need searching. A complex schema matching system called CSM is introduced in this paper. Firstly it can filter unreasonable matches on data types and values by preprocessor and clustering processor; then it employs a set of special-purpose searchers in match generator to explore a specialized portion of the search space and discovers 1:1 and complex matches; Finally it estimates candidate matches and selects optimal candidate matches by using similarity estimator and match selector respectively. Experiments show that, CSM does not only discover matches between schemas roundly, but also improve the matching recall and precision in practice.

Number of references: 6

Main heading: Chlorine compounds

Controlled terms: Administrative data processing - Data warehouses - Database systems - Information theory - Semantics

Uncontrolled terms: Clustering - Complex match - Database schemas - Heterogeneous data sources - Real-world - Schema matching - Schemas - Similarity

Classification code: 716.1 Information Theory and Signal Processing - 723.2 Data Processing and Image Processing - 723.3 Database Systems - 804.1 Organic Compounds - 903.2 Information Dissemination

DOI: 10.1109/CHICC.2008.4605164

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1026.

Accession number: 20070910447154

Title: Recognizing transliterated names from Chinese texts based on support vector machines and rules

Authors: Li, Shuang¹ ; Mao, Tingting¹ ; Huang, Degen¹ ; Li, Hua²

Author affiliation:

1 Department of Computer Science and Engineering, Dalian University of Technology, Dalian, 116024

2 Department of Mathematics-Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004

Corresponding author: Li, S. (nlp@cjmt.com)

Source title: Proceedings of 2005 International Conference on Neural Networks and Brain Proceedings, ICNNB'05

Abbreviated source title: Proc. 2005 Int. Conf. Neural Netw. Brain Proc. ICCNB'05

Volume: 2

Part number: 2 of 3

Monograph title: Proceedings of 2005 International Conference on Neural Networks and Brain Proceedings, ICNNB'05

Issue date: 2005

Publication year: 2005

Pages: 1135-1138

Article number: 1614816

Language: English

ISBN-10: 0780394224

ISBN-13: 9780780394223

Document type: Conference article (CA)

Conference name: 2005 International Conference on Neural Networks and Brain Proceedings, ICNNB'05

Conference date: October 13, 2005 - October 15, 2005

Conference location: Beijing, China

Conference code: 69185

Sponsor: China Neural Networks Council, CNNC; IEEE Computational Intelligence Society Beijing Chapter; Chinese Institute of Electronics, CIE; Chinese Association of Artificial Intelligence CAAI

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: According to the characteristics of transliterated names in Chinese texts, a method of

automatic recognition of Chinese transliterated names combining support vector machines (SVMs) with rules is proposed. The attributes of feature vectors based on characters are extracted. A training set is established and the machine learning models of automatic identification of transliterated names are obtained by testing polynomial Kernel functions; the knowledge cannot be acquired completely if we only use the machine learning model, which will affect the recall. Through careful error analysis, the base of recognition-rules is constructed as post-processing steps to overcome the shortcoming of machine learning model. The results show that the method is efficient for identifying transliterated names from Chinese texts. © 2005 IEEE.

Number of references: 7

Main heading: Character recognition

Controlled terms: Error analysis - Function evaluation - Learning systems - Set theory - Text processing

Uncontrolled terms: Automatic recognition - Chinese texts - Support vector machines (SVM) - Training sets

Classification code: 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 723.5 Computer Applications - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 921.6 Numerical Methods

Treatment: Theoretical (THR)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1027.

Accession number: 20074710930919

Title: On choosability of some complete multipartite graphs and Ohba's conjecture

Authors: Shen, Yufa¹ ; He, Wenjie² ; Zheng, Guoping¹ ; Wang, Yanning³ ; Zhang, Lingmin¹

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

2 Applied Mathematics Institute, Hebei University of Technology, Tianjin, 300130, China

3 School of Science, Yanshan University, Qinhuangdao, 066004, China

Corresponding author: Shen, Y. (syf030514@163.com)

Source title: Discrete Mathematics

Abbreviated source title: Discrete Math

Volume: 308

Issue: 1

Issue date: January 6, 2008

Publication year: 2008

Pages: 136-143

Language: English

ISSN: 0012365X

CODEN: DSMHA4

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: A graph G is said to be chromatic-choosable if $ch(G) = \chi(G)$. Ohba has conjectured that every graph G with $2\chi(G) + 1$ or fewer vertices is chromatic-choosable. It is clear that Ohba's conjecture is true if and only if it is true for complete multipartite graphs. But for complete multipartite graphs, the graphs for which Ohba's conjecture has been verified are nothing more than $K_3^{*2}, 2^{*(k-3)}, 1, K_3, 2^{*(k-1)}$, and $K_{s+3}, 2^{*(k-s-1)}, 1^*s$. These results have been obtained indirectly from the investigation about complete multipartite graphs by Gravier and Maffray and by Enomoto et al. In this paper we show that Ohba's conjecture is true for complete multipartite graphs $K_{4,3}, 2^{*(k-4)}, 1^*2$ and $K_{5,3}, 2^{*(k-5)}, 1^*3$. By the way, we give some discussions about a result of Enomoto et al. © 2007 Elsevier B.V. All rights reserved.

Number of references: 12

Main heading: Graph theory

Controlled terms: Coloring - Gravimeters - Number theory

Uncontrolled terms: Chromatic choosable - Chromatic choosable graphs - Complete multipartite graphs - List coloring - Multipartite graphs - Ohbas conjectures

Classification code: 802.3 Chemical Operations - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 931.5 Gravitation, Relativity and String Theory

Treatment: Theoretical (THR)

DOI: 10.1016/j.disc.2007.03.059

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1028.

Accession number: 20084911762240

Title: System calibration and error rectification of binocular active visual platform for parallel mechanism

Authors: Zhao, Liqiang^{1, 2}; Kong, Lingfu¹; Qiao, Xiaoyong¹; Zhou, Yanhong^{1, 2}

Author affiliation:

1 School of Information Science and Engineering, Yanshan University, Qinhuangdao, 066004, China

2 Department of Math. and Phy., Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Zhao, L. (zhao_liqiang@126.com)

Source title: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)

Abbreviated source title: Lect. Notes Comput. Sci.

Volume: 5314 LNAI

Issue: PART 1

Monograph title: Intelligent Robotics and Applications - First International Conference, ICIRA 2008, Proceedings

Issue date: 2008

Publication year: 2008

Pages: 734-743

Language: English

ISSN: 03029743

E-ISSN: 16113349

ISBN-10: 3540885129

ISBN-13: 9783540885122

Document type: Conference article (CA)

Conference name: 1st International Conference on Intelligent Robotics and Applications, ICIRA 2008

Conference date: October 15, 2008 - October 17, 2008

Conference location: Wuhan, China

Conference code: 74343

Sponsor: Huazhong University of Science and Technology (HUST); National Natural Science Foundation of China (NSFC)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: This paper presents a novel binocular active visual platform for monitoring the workspace of a parallel mechanism. Its cameras are mounted on two independent controlled kinematic chains which moving along a circular orbit. The system is designed for precise kinematic calibration of the end-effector on the parallel mechanism and other deepening application. At first, the geometric model of the platform and the 3D reconstruct model based stereo vision are established. Then, in order to eliminate the influence of monitoring accuracy because of the own accuracy of visual system, A dynamic system calibration and error rectification method is proposed. Experiment results show that the approach is effective with respect to dynamic property and calibration accuracy. © 2008 Springer Berlin Heidelberg.

Number of references: 15

Main heading: Calibration

Controlled terms: Applications - Binoculars - Birefringence - Kinematics - Mechanisms
- Optical instruments - Optical properties - Robotics - Stereo vision - Three dimensional

Uncontrolled terms: 3d reconstruct - Calibration accuracies - Circular orbits - Dynamic properties - Dynamic systems - Geometric models - Kinematic calibrations - Kinematic chains - Model-based - Monitoring accuracies - Parallel mechanism - Parallel mechanisms - System calibrations - Visual platforms - Visual system - Visual systems

Classification code: 902.1 Engineering Graphics - 902.2 Codes and Standards - 931.1 Mechanics - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 941 Acoustical and Optical Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 943 Mechanical and Miscellaneous

Measuring Instruments - 941.3 Optical Instruments - 741.3 Optical Devices and Systems - 741.2 Vision - 451.2
Air Pollution Control - 601.3 Mechanisms - 723.5 Computer Applications - 731.5 Robotics - 731.6 Robot
Applications - 741.1 Light/Optics

DOI: 10.1007/978-3-540-88513-9-79

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1029.

Accession number: 2005399382072

Title: Chinese syntactic category disambiguation using support vector machines

Authors: Li, Lishuang¹ ; Li, Lihua² ; Huang, Degen¹ ; Song, Heping²

Author affiliation:

1 Department of Computer Science and Engineering, Dalian University of Technology, Dalian, Liaoning 116023, China

2 Department of Mathematics-Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Li, L. (nlp@cjmt.com)

Source title: Lecture Notes in Computer Science

Abbreviated source title: Lect. Notes Comput. Sci.

Volume: 3497

Part number: 2 of 3

Issue: II

Monograph title: Advances in Neural Networks - ISSN 2005: Second International Symposium on Neural Networks. Proceedings

Issue date: 2005

Publication year: 2005

Pages: 246-250

Language: English

ISSN: 03029743

Document type: Conference article (CA)

Conference name: Second International Symposium on Neural Networks: Advances in Neural Networks - ISNN 2005

Conference date: May 30, 2005 - June 1, 2005

Conference location: Chongqing, China

Conference code: 65632

Sponsor: Chongqing university; Southwest Normal University; Chongqing University of Posts and Telecommunications; Southwest Agricultural University; Chongqing Education College

Publisher: Springer Verlag

Abstract: This paper presents a method of processing Chinese syntactic category ambiguity with support vector machines (SVMs): extracting the word itself, candidate part-of-speech (POS) tags, the pair of candidate POS tags and their probability and context information as the features of the word vector. A training set is established. The machine learning models of disambiguation based on support vector machines are obtained using polynomial kernel functions. The testing results show that this method is efficient. The paper also gives the results obtained with neural networks for comparison. © Springer-Verlag Berlin Heidelberg 2005.

Number of references: 8

Main heading: Syntactics

Controlled terms: Feature extraction - Functions - Information analysis - Learning systems - Neural networks - Polynomials - Probabilistic logics - Speech processing - Word processing

Uncontrolled terms: Context information - Kernel functions - Part-of-speech (POS) tags - Support vector machines (SVM)

Classification code: 921.1 Algebra - 903.2 Information Dissemination - 903.1 Information Sources and Analysis - 751.5 Speech - 731.5 Robotics - 723.4 Artificial Intelligence - 723.2 Data Processing and Image Processing - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 716 Telecommunication; Radar, Radio and Television

Treatment: Theoretical (THR); Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1030.

Accession number: 20071610557837

Title: Sub-critical treatment process of high Cr-W wear resistance cast iron

Authors: Zhang, Hailong¹ ; Xiao, Nianxin¹

Author affiliation:

¹ Department of Machinery and Electron, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhang, H.

Source title: Journal of Rare Earths

Abbreviated source title: J Rare Earth

Volume: 24

Issue: SUPPL. 3

Issue date: December 2006

Publication year: 2006

Pages: 303-305

Language: English

ISSN: 10020721

CODEN: JREAE6

Document type: Journal article (JA)

Publisher: Chinese Society of Rare Earths

Abstract: By measuring hardness of high Cr-W wear resistance cast iron after treated with different sub-critical treatment process, sub-critical treatment process of high Cr-W wear resistance cast iron was discussed. The results show that the secondary hardening of the cast iron appears under the proper sub-critical treatment

process. As a result, the high Cr-W near resistance cast iron can obtain higher hardness under sub-critical treating at 570°C for 5 h.

Number of references: 10

Main heading: Cast iron

Controlled terms: Hardening - Hardness - Microstructure - Wear resistance - X ray diffraction analysis

Uncontrolled terms: Secondary hardening - Subcritical treatment

Classification code: 421 Strength of Building Materials; Mechanical Properties - 531.2 Metallography - 537.1 Heat Treatment Processes - 545.2 Iron Alloys

Numerical data indexing: Temperature 8.43e+02K, Time 1.80e+04s

Treatment: Theoretical (THR); Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1031.

Accession number: 2006159819141

Title: Measurement of leaf area based on digital photography surveying and computer graphical analysis

Authors: Cao, Zhi-Gang¹ ; Feng, Zhong-Ke² ; Long, Chun-Ling¹ ; Wang, Jiu-Xing¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Institute of GIS, RS and GPS, Beijing Forestry University, Beijing 100083, China

Corresponding author: Cao, Z.-G. (zgcao9@yahoo.com)

Source title: Beijing Linye Daxue Xuebao/Journal of Beijing Forestry University

Abbreviated source title: Beijing Linye Daxue Xuebao

Volume: 27

Issue: SUPPL. 2

Issue date: December 2005

Publication year: 2005

Pages: 200-204

Language: Chinese

ISSN: 10001522

CODEN: BLDXE8

Document type: Journal article (JA)

Publisher: Beijing Forestry University

Abstract: The leaf area in a picture can be calculated by measuring the actual area every pixel accounts for in the digital image and the number of pixels that the leaf image covers. Accordingly, we provide a method to obtain the plant leaf image by digital camera and to measure the leaf area precisely. This method is suitable for the measurement of the areas of various living or picked flat-shaped leaves, especially for their mass measurement. This method has advantages of high speed, accuracy and high precision.

Number of references: 26

Main heading: Image analysis

Controlled terms: Cameras - Computers - Photography - Surveying

Uncontrolled terms: Computer graphical analysis - Digital photography surveying - Leaf area - Measurement system - Nondestruction - Visual image analysis

Classification code: 405.3 Surveying - 722 Computer Systems and Equipment - 741 Light, Optics and Optical Devices - 742.1 Photography - 742.2 Photographic Equipment

Treatment: Applications (APP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20073810818509

Title: Application of FTIR and metabolomics analysis in high-throughput screening strains

Authors: Chen, Wei1 ; Yu, Fengming1, 2 ; Yuan, Yingjin1

Author affiliation:

1 School of Chemical Engineering and Technology, Tianjin University, Tianjin 300072, China

2 Department of Life Science, Hebei Normal University of Technology and Science, Changli 066000, China

Corresponding author: Chen, W. (chenguangjian230@sohu.com)

Source title: Huagong Xuebao/Journal of Chemical Industry and Engineering (China)

Abbreviated source title: Huagong Xuebao

Volume: 58

Issue: 9

Issue date: September 2007

Publication year: 2007

Pages: 2336-2340

Language: Chinese

ISSN: 04381157

CODEN: HUKHAI

Document type: Journal article (JA)

Publisher: Chemical Industry Press, No. 3 Huixinli, Chaoyangqu, Beijing, 100029, China

Abstract: For the sake of searching new methods of high-throughput screening of mutant strains, the strains were screened by applying the technology of metabolomics. Through using Fourier Transformation Infrared spectroscope (FTIR) accompanied with Principal Component Analysis (PCA) and Hierarchical Cluster Analysis (HCA), the experiment successfully distinguished *Streptomyces lydicus* AS 4.2501 strains at different times of fermentation, and found the possible biomarkers when *Streptomyces lydicus* AS 4.2501 synthesized streptolydigin. The experiment, which attempted to use FTIR accompanied with Artificial Neural Network (ANN) to forecast *Streptomyces lydicus* AS 4.2501 mutation strains with different capacities of streptolydigin biosynthesis also obtained satisfying result. The results suggested that the combination of FTIR of metabolomics analysis with the data analysis of stoichiometric methods have prospective future in high-throughput screening of mutant strains.

Number of references: 15

Main heading: Bacteria

Controlled terms: Biomarkers - Biosynthesis - Data reduction - Fermentation - Fourier transform infrared spectroscopy - Metabolites - Neural networks - Principal component analysis - Screening

Uncontrolled terms: High-throughput screening - Mutant strains - Streptomyces lydicus AS 4.2501

Classification code: 461.9 Biology - 801.2 Biochemistry - 802.2 Chemical Reactions - 805.1.1 Biochemical Engineering - 931.1 Mechanics

Treatment: Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1033.

Accession number: 20073910835868

Title: Helical and random coil conformations of N-propargylamide polymer and copolymers

Authors: Deng, Jianping^{1, 2}; Chen, Bo^{1, 2}; Zhang, Zhigang^{1, 2, 3}; Yang, Wantai^{1, 2}

Author affiliation:

- 1 State Key Laboratory of Chemical Resource Engineering, Beijing 100029, China
- 2 College of Materials Science and Engineering, Beijing University of Chemical Technology, Beijing 100029, China
- 3 Hebei Normal University of Science and Technology, Hebei, Qinhuangdao 066004, China

Corresponding author: Yang, W. (yangwt@mail.buct.edu.cn)

Source title: Polymer International

Abbreviated source title: Polym. Int.

Volume: 56

Issue: 10

Issue date: October 2007

Publication year: 2007

Pages: 1247-1253

Language: English

ISSN: 09598103

E-ISSN: 10970126

Document type: Journal article (JA)

Publisher: John Wiley and Sons Ltd, Southern Gate, Chichester, West Sussex, PO19 8SQ, United Kingdom

Abstract: An N-propargylamide monomer, $\text{CH}\equiv\text{CCH}_2\text{NHCOC}(\text{CH}_3)_2\text{CH}_2\text{CH}_3$ (monomer 9), was polymerized in the presence of $(\text{nb})\text{Rh}+\text{B}-(\text{C}_6\text{H}_5)_4$ (nb represents norbornadiene) in CH_2Cl_2 , CHCl_3 , tetrahydrofuran or dimethylformamide, to provide polymers with moderate number-average molecular weights ($M_n = 8700-12\ 100\ \text{g mol}^{-1}$) in high yields ($\geq 92\%$). The resulting poly(N-propargylamide) (polymer 9) dissolves almost completely in CHCl_3 ($>95\%$). According to the UV-visible spectra, measured at various temperatures, polymer 9 forms relatively stable helices over a wide temperature range ($35-65^\circ\ \text{C}$). Moreover, it exhibits reversible conformational transitions from an ordered helix to a random coil. On copolymerization of monomer 9 with $\text{CH}\equiv\text{CCH}_2\text{NHCO}(\text{CH}_2)_3\text{CH}_3$ (monomer 4) or $\text{CH}\equiv\text{CCH}_2\text{NHCO}(\text{CH}_2)_7\text{CH}_3$ (monomer 8), the solubility of polymer 9 improves noticeably. All the copolymers form helices under the experimental conditions. From the viewpoint of monomers 4 and 8, copolymerization with monomer 9 is favorable in terms of the copolymers forming helices. These findings reveal that the helical content and thermodynamic stability of the helices formed in the copolymers are likely to be controlled by selecting a suitable comonomer and by adjusting the composition of the copolymer. © 2007 Society of Chemical Industry.

Number of references: 22

Main heading: Copolymers

Controlled terms: Conformations - Copolymerization - Molecular weight - Monomers - Solubility - Structure (composition) - Thermodynamic stability

Uncontrolled terms: Comonomer - Conformational transition - Random coil

Classification code: 641.1 Thermodynamics - 801.4 Physical Chemistry - 815.1 Polymeric Materials - 815.2 Polymerization - 931.2 Physical Properties of Gases, Liquids and Solids - 931.3 Atomic and Molecular Physics

Numerical data indexing: Molar_Mass $8.70\text{e}+03\text{g/mol}$ to $1.21\text{e}+04\text{g/mol}$, Temperature $3.08\text{e}+02\text{K}$

to 3.38e+02K

Treatment: Experimental (EXP)

DOI: 10.1002/pi.2267

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1034.

Accession number: 20073910839045

Title: A study of the electrical properties of HgS under high pressure

Authors: Hao, Aimin^{1, 2}; Gao, Chunxiao^{1, 3}; Li, Ming¹; He, Chunyuan¹; Huang, Xiaowei¹; Zhang, Dongmei¹; Yu, Cuiling¹; Liu, Hongwu¹; Ma, Yanzhang³; Tian, Yongjun⁴; Zou, Guangtian¹

Author affiliation:

1 State Key Laboratory for Superhard Materials, Institute of Atomic and Molecular Physics, Jilin University, Changchun 130012, China

2 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

3 Department of Mechanical Engineering, Texas Tech University, Lubbock, TX, United States

4 State Key Laboratory for Metastable Materials Science and Technology, College of Materials Science and Engineering, Yanshan University, Qinhuangdao 066004, China

Corresponding author: Gao, C. (cxgao599@yahoo.com.cn)

Source title: Journal of Physics Condensed Matter

Abbreviated source title: J Phys Condens Matter

Volume: 19

Issue: 42

Issue date: October 24, 2007

Publication year: 2007

Article number: 425222

Language: English

ISSN: 09538984

E-ISSN: 1361648X

CODEN: JCOMEL

Document type: Conference article (CA)

Publisher: Institute of Physics Publishing, Temple Back, Bristol, BS1 6BE, United Kingdom

Abstract: Using a microcircuit fabricated in a diamond anvil cell, we carried out in situ conductivity measurements on α -HgS and β -HgS under high pressure, and investigated the temperature dependence of the conductivity of the samples under several pressures. For α -HgS, the results show that the conductivity increases rapidly with increasing pressure from 8 to 20GPa. The energy gap was obtained by fitting linearly the plot of the logarithm of conductivity versus the reciprocal of temperature. At 29GPa, the sample becomes metallic, characterized by a negative temperature slope of conductivity and a zero energy gap. For β -HgS, a discontinuity of conductivity was observed at 5GPa, corresponding to a transition from the β phase to the α phase. From 5 to 20GPa, the conductivity rises rapidly with increasing pressure. At 27GPa, the sample becomes metallic. In comparison with HgSe and HgTe, we obtained experimentally the transition pressure of the two samples from the cinnabar structure to the rock-salt structure, respectively. © IOP Publishing Ltd.

Number of references: 38

Main heading: Mercury compounds

Controlled terms: Characterization - Electric conductivity - Energy gap - High pressure effects - Microfabrication - Phase transitions

Uncontrolled terms: Cinnabar - Logarithms - Microcircuits - Rock-salt structure

Classification code: 951 Materials Science - 931.2 Physical Properties of Gases, Liquids and Solids - 804.2 Inorganic Compounds - 801.4 Physical Chemistry - 712.1 Semiconducting Materials - 701.1 Electricity: Basic Concepts and Phenomena - 604 Metal Cutting and Machining

Numerical data indexing: Pressure 2.70e+10Pa, Pressure 2.90e+10Pa, Pressure 5.00e+09Pa to 2.00e+10Pa, Pressure 5.00e+09Pa, Pressure 8.00e+09Pa to 2.00e+10Pa

Treatment: Theoretical (THR); Experimental (EXP)

DOI: 10.1088/0953-8984/19/42/425222

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1035.

Accession number: 20081311174132

Title: The effective mass of strong-coupling polaron in a triangular quantum well induced by the Rashba effect

Authors: Zhang, Hai-Rui^{1, 2}; Xiao, Jing-Lin^{1, 2}

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

2 College of Physics and Electronic Information, Inner Mongolia National University, Tongliao, 028043, China

Corresponding author: Xiao, J.-L. (xiaojlin@126.com)

Source title: Physica B: Condensed Matter

Abbreviated source title: Phys B Condens Matter

Volume: 403

Issue: 10-11

Issue date: May 1, 2008

Publication year: 2008

Pages: 1933-1936

Language: English

ISSN: 09214526

CODEN: PHYBE3

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: In this paper, on the basis of Huybrechts' strong-coupling polaron model, the Tokuda modified linear-combination operator method and the unitary transformation method were used to study the properties of the strong-coupling polaron considering the influence of Rashba effect, which is brought by the spin-orbit (SO)

interaction, in the semiconductor triangular quantum well (TQW). Numerical calculation on the RbCl TQW, as an example, is performed. The expressions for the effective mass of the polaron as a function of the vibration frequency, the velocity, the coupling constant and the electron areal density were derived. Numerical results show that the total effective mass of the polaron is composed of three parts. The interactions between the orbit and the spin with different directions have different effects on the effective mass of the polaron. © 2007 Elsevier B.V. All rights reserved.

Number of references: 18

Main heading: Semiconductor quantum wells

Controlled terms: Carrier concentration - Magnetolectronics - Phase transitions - Polarons

Uncontrolled terms: Effective mass - Huybrechts' strong-coupling polaron - Rashba effect
- Triangular quantum well

Classification code: 701.1 Electricity: Basic Concepts and Phenomena - 714.2 Semiconductor Devices and Integrated Circuits - 762 Magnetolectronics (Spintronics) - 801.4 Physical Chemistry - 933.1.1 Crystal Lattice

Treatment: Theoretical (THR); Experimental (EXP)

DOI: 10.1016/j.physb.2007.10.256

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1036.

Accession number: 20091612037681

Title: Effects of spin on the properties of strong-coupled bound magnetopolaron in quantum dot

Authors: Li, Zhi-Xin¹; Zhao, Yu-wei¹; Xiao, Jing-Lin¹

Author affiliation:

¹ Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Li, Z.-X. (zzlxx2006@126.com)

Source title: Physica B: Condensed Matter

Abbreviated source title: Phys B Condens Matter

Volume: 404

Issue: 8-11

Issue date: May 1, 2009

Publication year: 2009

Pages: 1490-1493

Language: English

ISSN: 09214526

CODEN: PHYBE3

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: On the basis of the Huybrechts' strong-coupled model, the Tokuda modified linear combination operator method and the unitary transformation method are used to study the properties of the strong-coupled bound magnetopolaron considering the influence of the spin in the quantum dot (QD). The expressions for the ground-state energy of the polaron as a function of the confinement length of the QD, the magnetic field and the coulomb bound potential are derived. Numerical calculation is performed and the results illustrate that the ground-state energy of the magnetopolaron is composed of three parts. Finally, we discuss the contribution of the spin to the ground-state energy, the self-energy, the Landau ground-state energy and the coulomb bound energy of the bound magnetopolaron and find the spin has very important effects on the properties of the polaron. © 2009 Elsevier B.V. All rights reserved.

Number of references: 19

Main heading: Semiconductor quantum dots

Controlled terms: Ground state - Magnetic fields - Mathematical operators - Polarons - Spin dynamics

Uncontrolled terms: Bound magnetopolaron - Coupled bounds - Coupled models - Ground-state energies - Linear combination operators - Numerical calculations - Quantum dot - Self energies - Spin - Spin-on - Strong-coupled - Unitary transformations

Classification code: 933.1.1 Crystal Lattice - 933 Solid State Physics - 932.1 High Energy Physics - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 931.3 Atomic and Molecular Physics - 921 Mathematics - 801.4 Physical Chemistry - 714.2 Semiconductor Devices and Integrated Circuits - 701.2 Magnetism: Basic

Concepts and Phenomena

DOI: 10.1016/j.physb.2009.01.003

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1037.

Accession number: 20094712479785

Title: The M/M/1 repairable queueing system with variable breakdown rates

Authors: Lv, Sheng-Li¹ ; Li, Jing-Bo² ; Yue, De-Quan¹

Author affiliation:

1 College of Science Yanshan University, Qinhuangdao 066004, China

2 Department of Mathematic, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Lv, S.-L. (qhdddsl@163.com)

Source title: 2009 Chinese Control and Decision Conference, CCDC 2009

Abbreviated source title: Chin. Control Decis. Conf., CCDC

Monograph title: 2009 Chinese Control and Decision Conference, CCDC 2009

Issue date: 2009

Publication year: 2009

Pages: 2635-2637

Article number: 5194959

Language: English

ISBN-13: 9781424427239

Document type: Conference article (CA)

Conference name: 2009 Chinese Control and Decision Conference, CCDC 2009

Conference date: June 17, 2009 - June 19, 2009

Conference location: Guilin, China

Conference code: 78484

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper considers the M/M/1 queueing system with service interruptions. The service station may breakdown, and the breakdown rate is changeable. A repairman maintains the service station. Using the transform method and generating function, we obtain the steady-state availability and mean queueing length of the system. © 2009 IEEE.

Number of references: 9

Main heading: Queueing theory

Controlled terms: Filling stations - Function evaluation - Large scale systems - Queueing networks

Uncontrolled terms: Generating function - Generating functions - Queueing length - Queueing system - Repairable system - Service interruption - Steady-state availability - Transform methods

Classification code: 961 Systems Science - 922.1 Probability Theory - 921.6 Numerical Methods - 912.3 Operations Research - 731.1 Control Systems - 723 Computer Software, Data Handling and Applications - 461.1 Biomedical Engineering - 432 Highway Transportation - 402.1 Industrial and Agricultural Buildings

DOI: 10.1109/CCDC.2009.5194959

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1038.

Accession number: 20082311291575

Title: Design of automatic measuring and controlling device for the vegetable greenhouse

Authors: Bao, Changchun1 ; Shen, Chunbao2 ; Dang, Shengming2 ; Liu, Haitao2

Author affiliation:

- 1 Department of Machinery and Electron, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China
- 2 Department of Machinery and Electron, Hebei Vocational and Technical College of Building Materials, Qinhuangdao, Hebei Province, China

Corresponding author: Bao, C. (baochangchun@163.com)

Source title: 2007 IEEE International Conference on Control and Automation, ICCA

Abbreviated source title: IEEE Int. Conf. Control Autom. ICCA

Monograph title: 2007 IEEE International Conference on Control and Automation, ICCA

Issue date: 2008

Publication year: 2008

Pages: 2408-2410

Article number: 4376794

Language: English

ISBN-10: 1424408180

ISBN-13: 9781424408184

Document type: Conference article (CA)

Conference name: 2007 IEEE International Conference on Control and Automation, ICCA

Conference date: May 30, 2007 - June 1, 2007

Conference location: Guangzhou, China

Conference code: 72048

Publisher: Institute of Electrical and Electronics Engineers Inc., 445 Hoes Lane / P.O. Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The design of the hardware and software of a multifunctional agricultural meter is presented. Its controlling center is based on the new type Micro controller AT89C52. In the A/D converting stage the V/F converter is used and the sensors, which are reliable, cheap and satisfactory to the degree of the accuracy, are used. Therefore the system has the features such as simpler interface, stronger anti-jamming, more adaptive distant transmission, better measurement accuracy and better control reliability. The system can be applied extensively in

the agriculture. © 2007 IEEE.

Number of references: 7

Main heading: Agricultural machinery

Controlled terms: Atmospheric humidity - Computer hardware - Computer software - Greenhouse effect - Microcontrollers - Microsensors - Temperature control

Uncontrolled terms: Multifunctional agricultural meters - Soil moisture content

Classification code: 732.2 Control Instrumentation - 731.3 Specific Variables Control - 723 Computer Software, Data Handling and Applications - 821.1 Agricultural Machinery and Equipment - 722 Computer Systems and Equipment - 451 Air Pollution - 443.1 Atmospheric Properties - 714.2 Semiconductor Devices and Integrated Circuits

Treatment: Theoretical (THR)

DOI: 10.1109/ICCA.2007.4376794

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1039.

Accession number: 20071210504218

Title: Human simulated intelligent controller for grain dryer

Authors: Li, Guofang; Qi, Yubin; Li, Dong; Mao, Zhihuai

Corresponding author: Li, G.

Corr. author affiliation: Hebei Normal University of Science and Technology, China

Source title: Nongye Jixie Xuebao/Transactions of the Chinese Society of Agricultural Machinery

Abbreviated source title: Nongye Jixie Xuebao

Volume: 38

Issue: 1

Issue date: January 2007

Publication year: 2007

Pages: 83-86

Language: Chinese

ISSN: 10001298

CODEN: NUYCA3

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Machinery, Beijing, China

Abstract: Grain drying is a non-linear process with a long delay and a high disturbance, and therefore it is difficult to control. A new human-simulated intelligent controller for continuous-flow grain dryers is proposed. The error of the outlet grain moisture content was used as the input parameter of the controller. The output parameter of the controller was the speed of the unloading auger. Proportional coefficient of the controller could be on-line adjusted according to the maximum error of moisture content. Hardware and software system were developed based on virtual instrument technology, DAQ card and moisture content sensor. Experiment indicates that test results may reflect the human-simulated rules and the controller is efficient.

Number of references: 9

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1040.

Accession number: 20074110862476

Title: A synchronous detection of the road boundary and lane marking for intelligent vehicles

Authors: Lu, Weina¹ ; Wang, Haifang¹ ; Wang, Qingzhu¹

Author affiliation:

¹ Department of Mechanics and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

Corresponding author: Lu, W. (haibian016@yahoo.com.cn)

Source title: Proceedings - SNPD 2007: Eighth ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing

Abbreviated source title: Proc. Eighth ACIS Int. Conf. Softw. Eng. Artif. Intell. Netw. Parallel Distrib. Comput.

Volume: 1

Part number: 1 of 3

Monograph title: Proceedings - SNPD 2007: Eighth ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing

Issue date: 2007

Publication year: 2007

Pages: 741-745

Article number: 4287602

Language: English

ISBN-10: 0769529097

ISBN-13: 9780769529097

Document type: Conference article (CA)

Conference name: SNPD 2007: 8th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing

Conference date: July 30, 2007 - August 1, 2007

Conference location: Qingdao, China

Conference code: 70334

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: To prevent an intelligent vehicle from departing the lane in the vision-based navigation, an integrated method based on image processing is proposed to detect the road boundary and lane marking synchronously in structural road environment. The feature of the road boundary is extracted by means of gradient magnitude and gradient direction of pixels. And the lane marking feature is extracted by self-adaptive threshold segmenting with region connectivity analyzing. The characteristic points of both the road boundary and lane

marking are matched to the straight or crooked road models by leastsquares fit. With the circular calling of detecting and tracking blocks for mass image sequences, the whole process shows a real time and high antinoise capability. All the algorithms in the paper have been tested by the videos captured from real road scenes, and the experimental results proved that the detecting method is efficient, stable and accurate. © 2007 IEEE.

Number of references: 8

Main heading: Highway markings

Controlled terms: Adaptive optics - Feature extraction - Intelligent vehicle highway systems
- Pixels - Roads and streets - Stereo vision

Uncontrolled terms: Least squares fitting - Road boundary - Synchronous detection -
Vision-based navigation

Classification code: 741.2 Vision - 741.1 Light/Optics - 723.5 Computer Applications - 722.2 Computer
Peripheral Equipment - 432.4 Highway Traffic Control - 406.2 Roads and Streets - 406.1 Highway Systems

Treatment: Theoretical (THR); Experimental (EXP)

DOI: 10.1109/SNPD.2007.107

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1041.

Accession number: 2006079708034

Title: Improved scheme of double-direction signature in SET protocol

Authors: Zheng, L.-J.1 ; Piao, C.-H.1 ; Zhang, C.-Y.1 ; Jia, Y.-F.1 ; Zheng, L.-W.2 ; Qi, J.-G.3

Author affiliation:

- 1 Computer Department, Shijiazhuang Railway Institute, China
- 2 Department of Food Engineering, HeBei Normal University of Science and Technology, Qinhuangdao, China
- 3 TianZheng Jian Li Company, He Bei Water Project Geologic Reconnaissance Institute, Shijiazhuang, China

Corresponding author: Zheng, L.-J.

Source title: Advances in e-Engineering and Digital Enterprise Technology - I. Proceedings of the
Fourth International Conference on e-Engineering and Digital Enterprise Technology

Abbreviated source title: Adv. Eng. Digit. Enterp. Techn. Proc. Int. Conf. Digit. Enterp. Techn.

Monograph title: Advances in e-Engineering and Digital Enterprise Technology - I. Proceedings of the Fourth International Conference on e-Engineering and Digital Enterprise Technology

Issue date: 2004

Publication year: 2004

Pages: 545-550

Language: English

ISBN-10: 1860584675

ISBN-13: 9781860584671

Document type: Conference article (CA)

Conference name: Advances in e-Engineering and Digital Enterprise Technology - I. Proceedings of the Fourth International Conference on e-Engineering and Digital Enterprise Technology

Conference date: September 1, 2004 - September 3, 2004

Conference location: Leeds, United kingdom

Conference code: 66598

Sponsor: Leeds Metropolitan University, UK; IMechE; IEE

Publisher: Professional Engineering Publishing

Abstract: SET is an international standard applied to e-business security. The introduction of a double-direction signature avoids deception between the merchant and the bank, and establishes the authenticity of the customer. However, it doesn't consider the merchant-bank undeniability. Also, the hash algorithm employed is SHA-1 which, with improvements in computer performance and execution speed, is becoming increasingly insecure. In this paper, a new hash function and time stamp are introduced and the undeniability of the sender and receiver is realized. Through the theoretical analysis and test, it is concluded that the scheme has a good measure of security.

Number of references: 5

Main heading: Network protocols

Controlled terms: Algorithms - Electronic commerce - Security of data - Standards

Uncontrolled terms: E-business security - Merchant-bank undeniability - SET

Classification code: 723 Computer Software, Data Handling and Applications - 723.2 Data Processing and Image Processing - 723.5 Computer Applications - 902.2 Codes and Standards - 921 Mathematics

Treatment: Theoretical (THR)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1042.

Accession number: 20104813426156

Title: Semantic web discovery model research and implementation

Authors: Gao, Jing-Wei1 ; Li, Jian-Guo2 ; Xu, Li-Yong2

Author affiliation:

1 College of the Mathematics and Information Science, HeBei Normal University, Shijiazhuang, 050016, China

2 Dept. of Computer Science, HeBei Normal University of Science and Technology, Hebei, 066004, China

Corresponding author: Gao, J.-W. (lijg3343@126.com)

Source title: ICACTE 2009 - Proceedings of the 2nd International Conference on Advanced Computer Theory and Engineering

Abbreviated source title: ICACTE - Proc. Int. Conf. Adv. Comput. Theory Eng.

Volume: 2

Part number: 2 of 2

Monograph title: ICACTE 2009 - Proceedings of the 2nd International Conference on Advanced Computer Theory and Engineering

Issue date: 2009

Publication year: 2009

Pages: 1949-1958

Language: English

ISBN-13: 9780791802977

Document type: Conference article (CA)

Conference name: 2nd International Conference on Advanced Computer Theory and Engineering, ICACTE 2009

Conference date: September 25, 2009 - September 27, 2009

Conference location: Cairo, Egypt

Conference code: 82481

Sponsor: IACSIT Computer Theory and Engineering Society; Modeling and Simulation Society; IACSIT

Publisher: American Society of Mechanical Engineers, 3 Park Avenue, New York, NY 10016-5990, United States

Abstract: In this paper, based on the research on the existing semantic web service discovery, a service discovery program based on semantic matching and service quality filtration is presented, and then this program is implemented. The experimental results show that: under the premise of no affecting on the accuracy of the service discovery, the program can greatly save user time of waiting for service.

Number of references: 8

Main heading: Semantic Web

Controlled terms: Web services

Uncontrolled terms: Discovery model - Semantic matching - Semantic web service discovery - Service discovery - Service Quality - Web services discovery

Classification code: 723 Computer Software, Data Handling and Applications - 903 Information Science

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20083111422733

Title: Fabrication and magnetic properties of $\text{Co}_x\text{Cu}_{1-x}$ composite nanowire arrays

Authors: Liu, Xiao-Xu; Chen, Gui-Feng; Li, Yang-Xian; Xu, Shi-Feng; Wu, Guang-Heng; Xu, Qiu; Wang, Hong-Yan; Liu, Bao-Hai; Shi, Hong-Wei; Wang, Ji-Xia; Zhao, Yu-Hai

Corresponding author: Liu, X.-X.

Corr. author affiliation: Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Wuli Xuebao/Acta Physica Sinica

Abbreviated source title: Wuli Xuebao

Volume: 57

Issue: 7

Issue date: July 2008

Publication year: 2008

Pages: 4527-4533

Language: Chinese

ISSN: 10003290

CODEN: WLHPAR

Document type: Journal article (JA)

Publisher: Science Press, Beijing, 100085, China

Abstract: A series of composite structured $\text{Co}_x\text{Cu}_{1-x}$ ($x = 0.38-0.87$) nanowire arrays have been successfully deposited in the same $\text{Co}^{2+}/\text{Cu}^{2+} = 10:1$ solution by applying various depositing potentials. We found that the structures of $\text{Co}_x\text{Cu}_{1-x}$ composite nanowires regularly changed with increase of Cu content, thus causing regular change of the magnetic properties of CoCu nanowires. With the percent content of Cu increasing, part of Cu and Co form metastable face-centred cubic (fcc) CoCu solid solution which decreases the competition between the crystallographic anisotropy and shape anisotropy and improves the squareness of CoCu nanowires; the remaining part of Cu exists in the nanowires as fcc Cu crystals which destroy the crystallographic anisotropy and increases the pinning of domain walls, thus improves the squareness and coercivity of CoCu nanowires. Comparing $\text{Co}_x\text{Cu}_{1-x}$ nanowires of different compositions, we found that the nanowires have their maximum of the squareness (M_r/M_s) and coercivity (H_c) values for $\text{Co}_{75}\text{Cu}_{25}$ and $\text{Co}_{60}\text{Cu}_{40}$, respectively. Because of the special composite structures, the values exceed those of single phase CoCu nanowire with the same diameter.

Number of references: 17

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1044.

Accession number: 20082611337412

Title: Numerical simulation of crankshaft rolling process

Authors: Liu, Rong-Chang¹ ; Xue, Long-Quan³ ; Feng, Li-Zhen¹ ; Dong, Li-Tao² ; Ma, Shu-Ying² ;
Chen, Chun-Ming¹

Author affiliation:

1 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Department of Mechanics and Electronics, Hebei Normal University of Science and Technology,
Qinhuangdao 066004, China

3 School of Mechanical and Precision Instrument Engineering, Xi'an University of Technology, Xi'an 710048,
China

Corresponding author: Liu, R.-C. (lrc-lrc@163.com)

Source title: Neiranji Xuebao/Transactions of CSICE (Chinese Society for Internal Combustion
Engines)

Abbreviated source title: Neiranji Xuebao

Volume: 26

Issue: 3

Issue date: May 2008

Publication year: 2008

Pages: 283-287

Language: Chinese

ISSN: 10000909

CODEN: NEXUEC

Document type: Journal article (JA)

Publisher: Chinese Society for Internal Combustion Engines, 92 Weijin Road, Tianjin, Meng Qing, 300072, China

Abstract: The 2D numerical simulation on the rolling process of the crankshaft journal is carried out and the influence of rolling times and friction coefficient on the plastic deforming layer and residual stress caused by rolling pass is studied. The 2D simulation of journal rolling process shows that the rolling times has little influence on the depth of deforming layer and the magnitude and distribution of plastic strain. Friction force has certain effect on the surface hardening. However, with increasing friction force, the raising of the residual stress in subsurface and deep layer is not obvious. Based on the above consideration, the embedded-separated 3D rigid-flexible contact model of crankshaft fillet rolling process is established. By comparison with the experimental results of Oho rolling specimen, the results show that, on the surface layer of a work piece, the magnitude of residual stress measured by x-ray method gives the accurate value comparing with the calculation by the finite element method which does not account of material harden effect. For the subsurface and deep layer, the calculation results give good agreement with the experimental data.

Number of references: 13

Main heading: Rolling

Controlled terms: Crankshafts - Finite element method - Friction - Plastic deformation - Strain - Stresses

Uncontrolled terms: Numerical simulation - Rigid flexible contact model - Surface hardening - X ray method

Classification code: 421 Strength of Building Materials; Mechanical Properties - 535.1 Metal Rolling - 601.2 Machine Components - 921.6 Numerical Methods - 931.1 Mechanics

Treatment: Applications (APP); Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1045.

Accession number: 20084511688750

Title: Distributed task oriented risk analysis for information construction

Authors: Jia, Hongliang1 ; Dai, Feng1 ; Xue, Yanru2

Author affiliation:

1 Dept. of Command Management, Institute of Information Engineering, Information Engineering University, Zhengzhou, 450002, China

2 Dept. of Mechanical and Electronic, Hebei Normal University of Science and Technology, Qinhuangdao, 006004, China

Corresponding author: Jia, H. (jiahongliangnsd@126.com)

Source title: Advances in Management of Technology - Proceedings of the International Conference on Management of Technology, Taiyuan 2007

Abbreviated source title: Adv. Manage. Technol. - Proc. Int. Conf. Manage. Technol., Taiyuan

Monograph title: Advances in Management of Technology - Proceedings of the International Conference on Management of Technology, Taiyuan 2007

Issue date: 2007

Publication year: 2007

Pages: 122-126

Language: English

ISBN-13: 9780646480930

Document type: Conference article (CA)

Conference name: International Conference on Management of Technology, Taiyuan 2007

Conference date: October 13, 2007 - October 13, 2007

Conference location: Taiyuan, China

Conference code: 73837

Sponsor: Shanxi Province Association for Risk Management

Publisher: Aussino Academic Publishing House, P0 Box 893, Marrickville, NSW 2204, Australia

Abstract: In the information construction risk management, traditional risk analysis methods define risk analysis scope according to physical or logical entities, which neglects the risks that leading to conflict between the subtasks of information project. This paper, basing on distributed task cooperative mode of information construction, considering the risk influence between the information construction subtasks, analyzes and infers

information construction risk factors with the method of Bayesian network. The example proves that it can be effectively identify the threat factors in information construction and offers scientific reference to the risk management of information construction.

Number of references: 7

Main heading: Risk analysis

Controlled terms: Bayesian networks - Decision making - Distributed parameter networks - Industrial management - Inference engines - Intelligent networks - Management - Project management - Risk assessment - Risk management - Safety factor - Speech analysis

Uncontrolled terms: Analysis methods - Distributed task - Distributed tasks - Information construction - Information constructions - Information projects

Classification code: 922.1 Probability Theory - 751.5 Speech - 911 Cost and Value Engineering; Industrial Economics - 912 Industrial Engineering and Management - 912.2 Management - 914 Safety Engineering - 914.1 Accidents and Accident Prevention - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 922 Statistical Methods - 723.4.1 Expert Systems - 408.1 Structural Design, General - 652.1 Aircraft, General - 662.1 Automobiles - 723.4 Artificial Intelligence - 703.1 Electric Networks - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 716 Telecommunication; Radar, Radio and Television

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1046.

Accession number: 20093612290742

Title: The construction of college English teaching model based on blended learning

Authors: Liu, Xin-Hong¹

Author affiliation:

1 Foreign Language Dept., Hebei Normal University of Science and Technology, Qin Huang Dao, China

Corresponding author: Liu, X.-H. (Liuxinhong75@163.com)

Source title: Proceedings of the 1st International Workshop on Education Technology and Computer Science, ETCS 2009

Abbreviated source title: Proc. Int. Workshop Educ. Technol. Comput. Sci., ETCS

Volume: 1

Part number: 1 of 3

Monograph title: Proceedings of the 1st International Workshop on Education Technology and Computer Science, ETCS 2009

Issue date: 2009

Publication year: 2009

Pages: 773-777

Article number: 4958882

Language: English

ISBN-13: 9780769535579

Document type: Conference article (CA)

Conference name: 1st International Workshop on Education Technology and Computer Science, ETCS 2009

Conference date: March 7, 2009 - March 8, 2009

Conference location: Wuhan, Hubei, China

Conference code: 76728

Sponsor: Huazhong University Science and Technology; Harbin Institute of Technology; IEEE Harbin Section; IEEE Technical Committee on Learning Technology

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In the information society, traditional classroom teaching method has been challenged. The development of the internet makes the reform of teaching method possible. Blended learning is a combination of face-to-face learning and e-learning. An investigation on four-year student college students is carried out in order to know about their information literacy. A new teaching model is constructed based on blended learning according to the result of the investigation. © 2009 IEEE.

Number of references: 16

Main heading: Education computing

Controlled terms: Computer science - E-learning - Information science - Internet -
Multimedia systems - Students - Teaching

Uncontrolled terms: Blended learning - Blended learning college English teaching -
Classroom teaching - College students - English teaching - Face-to-face learning - Information
literacy - Information society - New teaching - Teaching methods - Teaching model

Classification code: 912.4 Personnel - 903 Information Science - 901.2 Education - 723.5 Computer
Applications - 723.2 Data Processing and Image Processing - 723 Computer Software, Data Handling and
Applications - 722 Computer Systems and Equipment - 721 Computer Circuits and Logic Elements - 718
Telephone Systems and Related Technologies; Line Communications - 717 Optical Communication - 716
Telecommunication; Radar, Radio and Television

DOI: 10.1109/ETCS.2009.177

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1047.

Accession number: 20094512438508

Title: Explicit dynamic analysis of crankshaft rolling process

Authors: Liu, Rong-Chang¹ ; Sun, Hua-Dong² ; Jiao, Hong-Lei¹ ; Ma, Shu-Ying¹ ; Xue, Long-Quan²

Author affiliation:

1 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 School of Mechanical and Precision Instrument, Xi'an University of Technology, Xi'an 710048, China

Corresponding author: Liu, R.-C. (lrc-lrc@163.com)

Source title: Neiranji Xuebao/Transactions of CSICE (Chinese Society for Internal Combustion
Engines)

Abbreviated source title: Neiranji Xuebao

Volume: 27

Issue: 5

Issue date: September 2009

Publication year: 2009

Pages: 463-468

Language: Chinese

ISSN: 10000909

CODEN: NEXUEC

Document type: Journal article (JA)

Publisher: Chinese Society for Internal Combustion Engines, 92 Weijin Road, Tianjin, Meng Qing, 300072, China

Abstract: Explicit dynamic analyzing model of crankshaft rolling is established and the stress distribution regularities along fillet layer depth are obtained. Influences on distribution regularities and numerical value of residual stresses from feeding amount and rolling passes are studied. The results show that, compressive stresses of axial direction possess sufficient strength and have enough distributing areas after fillet rolling, while these compressive stresses are propitious to counteracting the draw stresses which are caused by bending loads in crankshaft working condition; Residual compressive stress increases with feeding amount gradually in a certain range, then residual compressive stress does not increase but decrease with increasing the feeding amount; Residual compressive stress fluctuates slightly during the rolling process and the fluctuating range is decreased with increasing the rolling passes, finally, the residual stress is stabilized. The increasing of rolling passes can make for stabilize and maintain residual compressive stress which has been attained by rolling. This paper reveals the reason why fillet rolling can significantly enhance crankshaft bending fatigue strength and provides analysis and calculation methods for perfect feeding amount and reasonable number of rolling passes. References and fundamental theories about how to select technological parameters for crankshaft rolling process are also provided in this paper.

Number of references: 14

Main heading: Dynamic analysis

Controlled terms: Bending strength - Compressive stress - Crankshafts - Feeding - Residual stresses - Stress concentration - Tensile stress

Uncontrolled terms: Axial direction - Bending fatigue - Bending load - Calculation methods - Distribution regularities - Draw stress - Explicit dynamic analysis - Explicit dynamics - Feeding amount - Fundamental theory - Numerical values - Residual compressive stress - Rolling process - Stress distribution - Technological parameters - Working conditions

Classification code: 408.1 Structural Design, General - 421 Strength of Building Materials; Mechanical Properties - 422 Strength of Building Materials; Test Equipment and Methods - 422.2 Strength of Building Materials : Test Methods - 601.2 Machine Components - 691.2 Materials Handling Methods

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1048.

Accession number: 20100512678731

Title: Adaptive energy saving scheme for industry wireless network

Authors: Wang, Ping¹ ; Feng, Haipeng¹ ; Li, Yong¹ ; Kang, Yan²

Author affiliation:

1 Chongqing University of Posts and Telecommunications, Key Laboratory of Network Control and Intelligent Instrument, Chongqing 400065, China

2 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Wang, P.

Source title: Yi Qi Yi Biao Xue Bao/Chinese Journal of Scientific Instrument

Abbreviated source title: Yi Qi Yi Biao Xue Bao

Volume: 30

Issue: SUPPL. 2

Issue date: December 2009

Publication year: 2009

Pages: 150-154

Language: Chinese

ISSN: 02543087

CODEN: YYXUDY

Document type: Journal article (JA)

Publisher: Science Press, 18, Shuangqing Street, Haidian, Beijing, 100085, China

Abstract: The paper presented an adaptive sleep algorithm. The sleep time and sleep period of the nodes in network are adjusted adaptively. The sleep state and awake state switches in the energy saving process. The algorithm saved the energy of the whole network and improved the energy saving efficiency and the supervising efficiency. Computer simulation showed that the algorithm achieved a well monitoring result and saved a great portion of the energy. In the paper we also presented a management scheme for the energy saving process. The energy manager and user can both adjust the parameter so the monitoring frequency and the energy saving efficiency can adjust automatically or manually.

Number of references: 6

Main heading: Energy conservation

Controlled terms: Adaptive algorithms - Computer simulation - Electric load forecasting - Sleep research - Wireless networks

Uncontrolled terms: Energy consumption - Energy managers - Energy saving - In-network - Management scheme - Sleep state - Sleep time - Well monitoring

Classification code: 921 Mathematics - 723.5 Computer Applications - 723 Computer Software, Data Handling and Applications - 722.4 Digital Computers and Systems - 722.3 Data Communication, Equipment and Techniques - 716.3 Radio Systems and Equipment - 706.1 Electric Power Systems - 525.2 Energy Conservation - 461.4 Ergonomics and Human Factors Engineering

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1049.

Accession number: 20073110738921

Title: A study on the electrical property of HgSe under high pressure

Authors: Hao, Ai-Min^{1, 2} ; Gao, Chun-Xiao¹ ; Li, Ming¹ ; He, Chun-Yuan¹ ; Huang, Xiao-Wei¹ ; Zhang, Dong-Mei¹ ; Yu, Cui-Ling¹ ; Guan, Rui¹ ; Zou, Guang-Tian¹

Author affiliation:

1 State Key Laboratory for Superhard Materials, Institute of Atomic and Molecular Physics, Jilin University, Changchun 130012, China

2 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Gao, C.-X. (cxgao599@yahoo.com.cn)

Source title: Chinese Physics

Abbreviated source title: Chin. Phys.

Volume: 16

Issue: 7

Issue date: July 1, 2007

Publication year: 2007

Pages: 2087-2090

Article number: 047

Language: English

ISSN: 10091963

E-ISSN: 17414199

CODEN: CHPHF4

Document type: Journal article (JA)

Publisher: Institute of Physics Publishing, Temple Back, Bristol, BS1 6BE, United Kingdom

Abstract: Using a microcircuit fabricated on a diamond anvil cell, we have measured in-situ conductivity of HgSe under high pressures, and investigated the temperature dependence of conductivity under several different pressures. The result shows that HgSe has a pressure-induced transition sequence from a semimetal to a semiconductor to a metal, similar to that in HgTe. Several discontinuous changes in conductivity are observed at around 1.5, 17, 29 and 49GPa, corresponding to the phase transitions from zinc-blende to cinnabar to rocksalt to orthorhombic to an unknown structure, respectively. In comparison with HgTe, it is speculated that the unknown structure may be a distorted CsCl structure. For the cinnabar-HgSe, the energy gap as a function of pressure is obtained according to the temperature dependence of conductivity. The plot of the temperature dependence of conductivity indicates that the unknown structure of HgSe has an electrical property of a conductor.
© 2007 Chin. Phys. Soc. and IOP Publishing Ltd.

Number of references: 15

Main heading: Mercury compounds

Controlled terms: Electric conductivity measurement - Energy gap - High pressure effects - Phase transitions - Thermal effects

Uncontrolled terms: Cinnabar - Electrical property - Microcircuit fabrication -
Temperature dependence

Classification code: 951 Materials Science - 942.2 Electric Variables Measurements - 931.2 Physical Properties of Gases, Liquids and Solids - 804.2 Inorganic Compounds - 801.4 Physical Chemistry - 712.1 Semiconducting Materials - 641 Heat and Mass Transfer; Thermodynamics

Numerical data indexing: Pressure 4.90e+10Pa

Treatment: Experimental (EXP)

DOI: 10.1088/1009-1963/16/7/047

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1050.

Accession number: 20101512832908

Title: Computer application in type synthesis based on systematic linkage and topology matrix-graph approach

Authors: Ding, Ling¹ ; Lu, Yi² ; Cui, Wei³

Author affiliation:

- 1 College of Information Science and Engineering, Yanshan University, Qinhuangdao, Hebei, China
- 2 College of Mechanical Engineering, Yanshan University, Qinhuangdao, Hebei, China
- 3 Dept. of Computer, HeBei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Ding, L. (D1197139@yahoo.com.cn)

Source title: 2009 International Conference on Computer and Electrical Engineering, ICCEE 2009

Abbreviated source title: Int. Conf. Comput. Electr. Eng., ICCEE

Volume: 1

Part number: 1 of 2

Monograph title: 2009 International Conference on Computer and Electrical Engineering, ICCEE 2009

Issue date: 2009

Publication year: 2009

Pages: 118-122

Article number: 5380655

Language: English

ISBN-13: 9780769539256

Document type: Conference article (CA)

Conference name: 2009 International Conference on Computer and Electrical Engineering, ICCEE 2009

Conference date: December 28, 2009 - December 30, 2009

Conference location: Dubai, United arab emirates

Conference code: 79725

Sponsor: International Association of Computer; Science and Information Technology (IACSIT)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper study how to establish topology graphs (TGs) from a topology embryonic graph (TEG) with the help of computer in type synthesis of parallel mechanisms (PMs). The character of TGs are depicted by character arrays(CAs). Define what is isomorphic CAs in virtue of the concept of character string. Then put forward the new approach to identify isomorphism of CAs by using identification matrix. The program finding all non-isomorphic CAs is presented. Accordingly CAs of TGs creating automatically can bring into effect. At last draw relevant topology graphs according to their CAs automatically. These processes are carried out by program with Visual Basic on a computer. Illustrate with some examples. © 2009 IEEE.

Number of references: 12

Main heading: Topology

Controlled terms: Computer applications - Electrical engineering - Graphic methods - Mechanisms - Set theory

Uncontrolled terms: Character arrays - Character strings - Identification matrix - matrix - New approaches - Parallel mechanism - Parallel mechanisms - Type synthesis - VISUAL BASIC

Classification code: 601.3 Mechanisms - 703.1 Electric Networks - 709 Electrical Engineering, General - 723.5 Computer Applications - 902.1 Engineering Graphics - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.1109/ICCEE.2009.33

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1051.

Accession number: 20094712491850

Title: Research on coal mine personnel positioning system based on zigbee and CAN

Authors: Hongju, Lin1 ; Haifang, Wang1 ; Nianxin, Xiao1 ; Chunxia, Liu1 ; Panfeng, Chen1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Hongju, L. (linhongju@126.com)

Source title: Proceedings - 2009 International Conference on New Trends in Information and Service Science, NISS 2009

Abbreviated source title: Proc. - Int. Conf. New Trends Inf. Serv. Sci., NISS

Monograph title: Proceedings - 2009 International Conference on New Trends in Information and Service Science, NISS 2009

Issue date: 2009

Publication year: 2009

Pages: 749-753

Article number: 5260902

Language: English

ISBN-13: 9780769536873

Document type: Conference article (CA)

Conference name: 2009 International Conference on New Trends in Information and Service Science, NISS 2009

Conference date: June 30, 2009 - July 2, 2009

Conference location: Beijing, China

Conference code: 78436

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: After researching Zigbee wireless network and CAN bus, one coal mine personnel positioning system was designed, which was mostly comprised by new wireless microcontroller JN5121 and embedded ARM chip LPC2294. Firstly, the system architecture and personnel positioning principle was presented. Secondly, its hardware and software design methods were primarily discussed in the paper. The system can realize coal mine personnel positioning and check on work attendance, and can provide advice to relief for making decision in the accidents. The design has important applications in coal mine industry. © 2009 IEEE.

Number of references: 6

Main heading: Wireless networks

Controlled terms: Base stations - Coal - Coal industry - Coal mines - Coal research - Control system synthesis - Controllers - Microcontrollers - Mines - Mining - Personnel - Process control - SCADA systems - Software design

Uncontrolled terms: Can(controller area network) - Identity cards - Wireless base stations - Wireless microcontroller jns121 - Zigbee

Classification code: 913 Production Planning and Control; Manufacturing - 722.4 Digital Computers and Systems - 723.1 Computer Programming - 723.5 Computer Applications - 731 Automatic Control Principles and Applications - 731.1 Control Systems - 732.1 Control Equipment - 911 Cost and Value Engineering; Industrial Economics - 912.4 Personnel - 722.3 Data Communication, Equipment and Techniques - 502.1 Mine and Quarry Operations - 503 Mines and Mining, Coal - 503.1 Coal Mines - 722 Computer Systems and Equipment - 521 Fuel Combustion and Flame Research - 714.2 Semiconductor Devices and Integrated Circuits - 716.3 Radio Systems and Equipment - 524 Solid Fuels

DOI: 10.1109/NISS.2009.113

Database: Compendex

1052.

Accession number: 20094612446580

Title: Observer-based robust H^∞ control of a class of discrete time systems with state uncertaintiesAuthors: Wang, Shu-Yun¹ ; Gao, Zhi-Feng² ; Qiu, Ji-Qing³ ; He, Hai-Kuo⁴

Author affiliation:

1 Department of Mathematics, Handan College, Handan, 056005, China

2 College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, 210016, China

3 College of Science, Hebei University of Science and Technology, Shijiazhuang, 050018, China

4 Department of Mathematics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Wang, S.-Y. (shuyunw65@163.com)

Source title: Proceedings of the 2009 International Conference on Machine Learning and Cybernetics

Abbreviated source title: Proc. Int. Conf. Mach. Learn. Cybern.

Volume: 4

Part number: 4 of 6

Monograph title: Proceedings of the 2009 International Conference on Machine Learning and Cybernetics

Issue date: 2009

Publication year: 2009

Pages: 1949-1953

Article number: 5212209

Language: English

ISBN-13: 9781424437030

Document type: Conference article (CA)

Conference name: 2009 International Conference on Machine Learning and Cybernetics

Conference date: July 12, 2009 - July 15, 2009

Conference location: Baoding, China

Conference code: 78063

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper, it is shown that the observer-based robust H^∞ control of a class of discrete-time systems with state uncertainties is conditioned by the solvability of a linear matrix inequality. We show that the observer-based robust H^∞ control problem, which is originally a non-convex issue, can be transformed into a convex problems by using an particular inequality, The new proposed linear matrix inequality is neither iterative nor subject to any equality constraint. A flight control system example is given to indicate the feasibility of the proposed design approach. © 2009 IEEE.

Number of references: 16

Main heading: Discrete time control systems

Controlled terms: Continuous time systems - Convex optimization - Cybernetics - Digital control systems - Flight control systems - Linear matrix inequalities - Observability - Robot learning

Uncontrolled terms: Control problems - Convex problems - Design approaches - Discrete time system - Discrete-time systems - Equality constraints - Observer-based control - Robust H

Classification code: 921.5 Optimization Techniques - 921.1 Algebra - 921 Mathematics - 731.5 Robotics - 731.1 Control Systems - 961 Systems Science - 723.4 Artificial Intelligence - 722.4 Digital Computers and Systems - 716.1 Information Theory and Signal Processing - 652.3 Aircraft Instruments and Equipment - 461.9 Biology - 723.1 Computer Programming

DOI: 10.1109/ICMLC.2009.5212209

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1053.

Accession number: 20075110982947

Title: Effects of surface treatments on ohmic contact to p-GaN

Authors: Guo, Debo¹ ; Liang, Meng¹ ; Fan, Manning¹ ; Shi, Hongwei² ; Liu, Zhiqiang¹ ; Wang, Guohong¹ ; Wang, Liangchen¹

Author affiliation:

1 Institute of Semiconductors, Chinese Academy of Sciences, Beijing 100083, China

2 Department of Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Guo, D. (guodebo@semi.ac.cn)

Source title: Pan Tao Ti Hsueh Pao/Chinese Journal of Semiconductors

Abbreviated source title: Pan Tao Ti Hsueh Pao

Volume: 28

Issue: 11

Issue date: November 2007

Publication year: 2007

Pages: 1811-1814

Language: Chinese

ISSN: 02534177

CODEN: PTTDPZ

Document type: Journal article (JA)

Publisher: Science Press, 18, Shuangqing Street, Haidian, Beijing, 100085, China

Abstract: Three different solutions [dilute HCl, (NH₄)₂S, and aqua regia] are used to treat a p-GaN surface, and bi-layer Ni/Au films are used as ohmic contacts to p-GaN. XPS spectra show that the (NH₄)₂S and aqua regia are more effective in removing the native oxide of the p-GaN than the dilute HCl. By comparing and analyzing I-V characteristics, the specific contact resistances, and the relative Ga/N atomic concentration ratio on p-type GaN surfaces of these samples, we concluded that there are more Ga vacancies in the aqua regia treated p-GaN surface and a higher ohmic contact performance can be obtained.

Number of references: 16

Main heading: Gallium nitride

Controlled terms: Contact resistance - Ohmic contacts - Surface treatment - X ray photoelectron spectroscopy

Uncontrolled terms: CTLM - Specific contact resistances

Classification code: 701.1 Electricity: Basic Concepts and Phenomena - 712.1.2 Compound Semiconducting Materials - 714.2 Semiconductor Devices and Integrated Circuits - 804.2 Inorganic Compounds - 931.3 Atomic and Molecular Physics

Treatment: Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1054.

Accession number: 20083711537617

Title: An integrated approach to recognition of lane marking and road boundary

Authors: Lu, Weina¹ ; Zheng, Yucui¹ ; Ma, Yu Quan¹ ; Liu, Tao¹

Author affiliation:

¹ Department of Mechanics and Electronics Hebei Normal, University of Science and Technology, Qinhuangdao, Hebei Province, 066004, China

Corresponding author: Zheng, Y.

Source title: Proceedings - 1st International Workshop on Knowledge Discovery and Data Mining, WKDD

Abbreviated source title: Proc. - Int. Workshop Knowl. Discov. Data Min., WKDD

Monograph title: Proceedings - 1st International Workshop on Knowledge Discovery and Data Mining, WKDD

Issue date: 2008

Publication year: 2008

Pages: 649-653

Article number: 4470477

Language: English

ISBN-10: 0769530907

ISBN-13: 9780769530901

Document type: Conference article (CA)

Conference name: 1st International Workshop on Knowledge Discovery and Data Mining, WKDD

Conference date: January 23, 2008 - January 24, 2008

Conference location: Adelaide, Australia

Conference code: 73057

Sponsor: University of Adelaide; Inst. Computer Sci., Social Inf. Telecommunications Eng. (ICST); E-Forensics 2008

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: An integrated vision method was proposed for intelligent vehicles to synchronously recognize the lane marking and road boundary in direct or curve road environment. Firstly, with region connectivity analyzing, the method extracted the brightness features of lane markings on input images by self-adaptive threshold segmenting. Not only the gradient magnitude but also the gradient direction features of the road boundary were extracted by the Sobel operator method. Secondly, the 2-D models of road shape were acquired and the features above were matched to them by least-squares fit. With the circular calling of detecting and tracking program block, the whole process showed a fast and exact capability. The experiments have been conducted with the videos captured from real road scenes, and the results proved that it is a real time and robust method to recognize the road for the vision-based navigation of intelligent vehicles. © 2008 IEEE.

Number of references: 8

Main heading: Road and street markings

Controlled terms: Administrative data processing - Data mining - Decision support systems - Gradient methods - Image enhancement - Information management - Intelligent vehicle highway systems - Knowledge based systems - Least squares approximations - Mining

Uncontrolled terms: Knowledge Discovery and Data mining - Road boundary

Classification code: 921.6 Numerical Methods - 912.2 Management - 903.2 Information Dissemination - 741 Light, Optics and Optical Devices - 723.5 Computer Applications - 723.4.1 Expert Systems - 723.3 Database Systems - 723.2 Data Processing and Image Processing - 723 Computer Software, Data Handling and

Applications - 502.1 Mine and Quarry Operations - 432 Highway Transportation - 406.2 Roads and Streets - 406.1 Highway Systems

DOI: 10.1109/WKDD.2008.119

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1055.

Accession number: 20084411662712

Title: Error analysis of binocular active hand-eye visual system on parallel mechanisms

Authors: Zhao, Liqiang^{1, 2} ; Kong, Lingfu¹ ; Wang, Yueming³

Author affiliation:

1 School of Information Science and Engineering, Yanshan University, Qinhuangdao, China

2 Department of Math. and Phys., Hebei Normal University of Science and Technology, Qinhuangdao, China

3 School of Science, Inner Mongolia University of Science and Technology, Baotou, China

Corresponding author: Zhao, L. (zhao_liqiang@126.com)

Source title: Proceedings of the 2008 IEEE International Conference on Information and Automation, ICIA 2008

Abbreviated source title: Proc. IEEE Int. Conf. Inf. Autom., ICIA

Monograph title: Proceedings of the 2008 IEEE International Conference on Information and Automation, ICIA 2008

Issue date: 2008

Publication year: 2008

Pages: 95-100

Article number: 4607975

Language: English

ISBN-13: 9781424421848

Document type: Conference article (CA)

Conference name: 2008 IEEE International Conference on Information and Automation, ICIA 2008

Conference date: June 20, 2008 - June 23, 2008

Conference location: Zhangjiajie, Hunan, China

Conference code: 73815

Sponsor: IEEE Robotics and Automation Society; National University of Defense Technology; The Chinese University of Hong Kong; The National Science Foundation of China; Natl. Univ. Defense Technol., Sch. Electronic Sci. Eng.

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Binocular active hand-eye visual system on parallel mechanisms is a novel workspace monitoring mechanism, which fixed on the moving platform of a parallel mechanism with a circular orbit. Considering kinematic coupling between the parallel mechanism and the visual system, a general scheme based on the 3D reconstruct model of a binocular stereo vision is proposed to evaluate the control errors of the robot and the visual mechanism using the image coordinates of two kinds of target points. First, the optimal estimation of the perspective transformation matrix (PPM) relative to the base frame and the moving platform frame are calibrated respectively. Then the actual kinematic parameters of the parallel mechanism and the visual system are estimated by decomposing PPM. The tracking experiment on a 6-PUS parallel engraving machine is presented to show effectiveness of the method. © 2008 IEEE.

Number of references: 18

Main heading: Mechanisms

Controlled terms: Binoculars - Computer vision - Error analysis - Errors - Kinematics - Optical instruments - Pulse modulation - Pulse position modulation - Stereo vision - Three dimensional

Uncontrolled terms: 3D reconstructs - Binocular stereo visions - Circular orbits - Control errors - Decomposing - Image coordinates - Kinematic couplings - Kinematic parameters - Moving platforms - Optimal estimations - Parallel mechanisms - Perspective transformation matrixes - Target points - Tracking - Visual systems

Classification code: 941.3 Optical Instruments - 931.1 Mechanics - 922.2 Mathematical Statistics - 921.6 Numerical Methods - 921 Mathematics - 902.1 Engineering Graphics - 741.3 Optical Devices and Systems - 741.2 Vision - 731.6 Robot Applications - 731 Automatic Control Principles and Applications - 723.5 Computer Applications - 716 Telecommunication; Radar, Radio and Television - 601.3 Mechanisms

DOI: 10.1109/ICINFA.2008.4607975

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1056.

Accession number: 20082311291506

Title: The M/M/2 repairable queueing system

Authors: Lv, Shengli1 ; Li, Jingbo2 ; Yue, Dequan1 ; Xiao, Xin2

Author affiliation:

1 School of Science, Yanshan University, Qinhuangdao, 066004, China

2 Department of Mathematic, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Lv, S. (qhdddsl@163.com)

Source title: 2007 IEEE International Conference on Control and Automation, ICCA

Abbreviated source title: IEEE Int. Conf. Control Autom. ICCA

Monograph title: 2007 IEEE International Conference on Control and Automation, ICCA

Issue date: 2008

Publication year: 2008

Pages: 2071-2075

Article number: 4376725

Language: English

ISBN-10: 1424408180

ISBN-13: 9781424408184

Document type: Conference article (CA)

Conference name: 2007 IEEE International Conference on Control and Automation, ICCA

Conference date: May 30, 2007 - June 1, 2007

Conference location: Guangzhou, China

Conference code: 72048

Publisher: Institute of Electrical and Electronics Engineers Inc., 445 Hoes Lane / P.O. Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper, we consider the M/M/2 queueing system with service interruptions. The rates of server breakdown are different between busy time and idle time, and there is one repairman in the system. Using the transform method we obtain the steady-state probabilities of the states, the steady-state availability and the steady-state queueing length, give a new form of the condition for the existence of the steady-state probabilities. © 2007 IEEE.

Number of references: 8

Main heading: Queueing networks

Controlled terms: Mathematical transformations - Probability - Servers - Telecommunication services

Uncontrolled terms: Moment generating functions - Queue length - Queueing systems - Service interruptions

Classification code: 716 Telecommunication; Radar, Radio and Television - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 921.3 Mathematical Transformations - 922.1 Probability Theory

Treatment: Theoretical (THR)

DOI: 10.1109/ICCA.2007.4376725

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1057.

Accession number: 20154501513016

Title: Advances in studies on Natural preservatives for Fruits and Vegetables

Authors: Gao, Haisheng¹ ; Shi, Pengbao¹ ; Zhao, Yuhua¹

Author affiliation:

1 Department of Food Engineering, Hebei Normal University of Science and Technology, Changli; Hebei Province, China

Corresponding author: Gao, Haisheng

Source title: IFIP Advances in Information and Communication Technology

Abbreviated source title: IFIP Advances in Information and Communication Technology

Volume: 295

Monograph title: Computer and Computing Technologies in Agriculture II - 2nd IFIP International Conference on Computer and Computing Technologies in Agriculture, CCTA 2008

Issue date: 2009

Publication year: 2009

Pages: 1655-1669

Language: English

ISSN: 18684238

ISBN-13: 9781441902122

Document type: Conference article (CA)

Conference name: 2nd IFIP International Conference on Computer and Computing Technologies in Agriculture, CCTA 2008

Conference date: October 18, 2008 - October 20, 2008

Conference location: Beijing, China

Conference code: 153559

Sponsor: Beijing Society for Information Technology in Agriculture; China Agricultural University; Chinese Society of Agricultural Engineering; et al; International Federation for Information Processing; National Engineering Research Center for Information Technology in Agriculture

Publisher: Springer New York LLC

Abstract: The author introduced general research and application situations of natural preservatives for

fruits and vegetables all over the world these years, and summarized application of vegetation of *Murraya* in Rutaceae, *Cinnamomum* in Lauraceae, *Artemisia* in Compositae and other families and genera on fruits and vegetables preservation and fresh-keeping. Decoction or extraction of Chinese traditional medicine, such as *Alpinia Officinarum*, *Amarphalus Konjac* K., *stemona* etc, could be used in fresh-keeping for orange, apple, strawberry, edible fungi and so on. Garlic could be used in fresh-keeping for orange. Phytic acid and fresh-keeping agents compounded with Phytic acid could extend storage periods of easily rotting fruits and vegetables, such as strawberry, banana, cantaloup, edible fungi and so on, and better keep original fresh condition. Extraction of Snow Fresh, Semper Fresh, Arthropod shell extraction, and halite also had better effect on preservation and fresh-keeping for fruits and vegetables. Main problems existed in the application of natural preservatives for fruits and vegetables were showed in this article and the applying prospect were discussed too. © 2009 by International Federation for Information Processing.

Number of references: 29

Main heading: Fruits

Controlled terms: Agriculture - Citrus fruits - Extraction - Fungi - Vegetables - Wood preservation

Uncontrolled terms: Applying prospect - Chinese traditional medicine - Edible fungus - Fresh keepings - Fruits and vegetables - Natural preservatives - Research and application - Storage periods

Classification code: 802.3 Chemical Operations - 811.2 Wood and Wood Products - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 821.4 Agricultural Products

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1058.

Accession number: 20082211285260

Title: Another proof of the 5-choosability of K_5 -minor-free graphs

Authors: He, Wenjie¹ ; Miao, Wenjing¹ ; Shen, Yufa²

Author affiliation:

1 Applied Mathematics Institute, Hebei University of Technology, Tianjin, 300130, China

2 Department of Mathematics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: He, W. (he_wenjie@yahoo.com)

Source title: Discrete Mathematics

Abbreviated source title: Discrete Math

Volume: 308

Issue: 17

Issue date: September 6, 2008

Publication year: 2008

Pages: 4024-4026

Language: English

ISSN: 0012365X

CODEN: DSMHA4

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: Thomassen showed in 1994 that all planar graphs are 5-choosable; Škrekovski showed in 1998 that all K_5 -minor-free graphs also are 5-choosable. In this short paper we prove this result using another method. © 2007 Elsevier B.V. All rights reserved.

Number of references: 6

Main heading: Graph theory

Controlled terms: Computational geometry - Numerical methods - Problem solving - Theorem proving

Uncontrolled terms: Choosability - List coloring - Wagner graph

Classification code: 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 723.4 Artificial Intelligence - 723.5 Computer Applications - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 921.6 Numerical Methods

Treatment: Theoretical (THR)

DOI: 10.1016/j.disc.2007.07.089

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1059.

Accession number: 20101212792516

Title: Development of the dryer cluster measure and control system

Authors: Wang, Qingzhu¹ ; Zhao, Jinchuan¹ ; Chen, Panfeng¹ ; Zhang, Xiaomin¹ ; Lin, Hongju¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Wang, Q. (wqzh101@126.com)

Source title: Proceedings - 2009 International Conference on Information Engineering and Computer Science, ICIECS 2009

Abbreviated source title: Proc. - Int. Conf. Inf. Eng. Comput. Sci., ICIECS

Monograph title: Proceedings - 2009 International Conference on Information Engineering and Computer Science, ICIECS 2009

Issue date: 2009

Publication year: 2009

Article number: 5365822

Language: English

ISBN-13: 9781424449941

Document type: Conference article (CA)

Conference name: 2009 International Conference on Information Engineering and Computer Science, ICIECS 2009

Conference date: December 19, 2009 - December 20, 2009

Conference location: Wuhan, China

Conference code: 79561

Sponsor: Wuhan University; Huazhong Normal University; Wuhan University of Technology; National Technology University of Ukraine; Columbia University

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In order to overcome the shortcomings of moisture content and air temperature controlling of traditional dryer, the Dryer Cluster Measure and Control System Based on Kingview is designed. The system is a collection and distribution and control system integrating management with controlling. The system takes the STC10F12XE SCM as a core, and the modular design is applied to the software and hardware of the unit, and the master-slave mode is adopted. It realized measurement and control to moisture content of material, to hot air temperature and to temperature of material, as well as dryer cluster apply united management by PC. The PC software is developed with Kingview 6.52, and The SCM software is developed with Keil C51, so the development cycle is greatly shortened and the supervision and control Picture is colorful and vivid. ©2009 IEEE.

Number of references: 8

Main heading: Computer control

Controlled terms: Atmospheric temperature - Computer science - Computer software - Control theory - Dryers (equipment) - Moisture control - Moisture determination

Uncontrolled terms: Air temperature - Development cycle - Dryer cluster - Hot air temperature - Master-slave - Measurement and control - Modular designs - Moisture contents

Classification code: 922.2 Mathematical Statistics - 802.1 Chemical Plants and Equipment - 731.5 Robotics - 731.3 Specific Variables Control - 731.1 Control Systems - 944.2 Moisture Measurements - 723.5 Computer Applications - 722 Computer Systems and Equipment - 721 Computer Circuits and Logic Elements - 642.2 Industrial Furnaces and Components - 443.1 Atmospheric Properties - 723 Computer Software, Data Handling and Applications

DOI: 10.1109/ICIECS.2009.5365822

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1060.

Accession number: 20101312805054

Title: Simulation analysis for the engineering of soft soil foundation on the based of ADINA

Authors: Meng, Deguang¹ ; Li, Zheng¹ ; Li, Yong¹ ; Huang, Jiefeng¹

Author affiliation:

1 Dept of Civil Engineering, Hebei Normal University of Science and Technology (HBNUST), Qinhuangdao, 066004, China

Corresponding author: Meng, D. (mengdg@126.com)

Source title: IFCSTA 2009 Proceedings - 2009 International Forum on Computer Science-Technology and Applications

Abbreviated source title: IFCSTA Proc. - Int. Forum Comput. Sci.-Technol. Appl.

Volume: 3

Part number: 3 of 3

Monograph title: IFCSTA 2009 Proceedings - 2009 International Forum on Computer Science-Technology and Applications

Issue date: 2009

Publication year: 2009

Pages: 119-122

Article number: 5384759

Language: English

ISBN-13: 9780769539300

Document type: Conference article (CA)

Conference name: 2009 International Forum on Computer Science-Technology and Applications, IFCSTA 2009

Conference date: December 25, 2009 - December 27, 2009

Conference location: Chongqing, China

Conference code: 79658

Sponsor: IITAA - International Information Technology; and Applications Association

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: It is important geotechnical problem to consolidation of soft soil foundation. Three-dimensional finite element model is established on the based of Biot consolidation theory, the model is loaded and calculated on the based of considering lateral deformation and spatial seepage, elastic-plasticity character of soil, construction stage loading progress etc. case study is analyzed to obtain the regular of settlement, lateral displacement and excess hydrostatic pore pressure. The calculation value of finite element method is reasonable to compare with measured data. The finite element method is used to simulate truly every position and step settlement, later displacement and excess hydrostatic pore pressure, feedback calculation value can instruct information construction, control and adjust fill rate of construction, and then settlement of embankment is controlled better. The method can forecast final settlement of embankment more exactly to supply reference of design and construction. © 2009 IEEE.

Number of references: 8

Main heading: Finite element method

Controlled terms: Computer science - Embankments - Foundations - Geologic models - Hydraulic structures - Hydraulics - Hydrodynamics - Pore pressure - Settlement of structures - Soils - Three dimensional

Uncontrolled terms: Biot consolidation theory - Construction stages - Design and construction - Elastic-plasticity - Fill rate - Final settlement - Geotechnical problems - Information construction - Lateral deformation - Lateral displacements - Measured data - Settlement - Simulation analysis - Soft soil foundation - Three dimensional finite element model

Classification code: 631.1.1 Liquid Dynamics - 631.2 Hydrodynamics - 632.1 Hydraulics - 721 Computer Circuits and Logic Elements - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 723.5 Computer Applications - 902.1 Engineering Graphics - 921.6 Numerical Methods - 611 Hydroelectric and Tidal Power Plants - 402 Buildings and Towers - 405 Construction Equipment and Methods; Surveying - 407.2 Waterways - 441 Dams and Reservoirs; Hydro Development - 446.2 Related Hydraulic Structures - 481.1 Geology - 483 Soil Mechanics and Foundations - 483.1 Soils and Soil Mechanics - 483.2 Foundations

DOI: 10.1109/IFCSTA.2009.268

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20083311451736

Title: The effects of LO phonons on charge qubit

Authors: Liu, Yun-Fei^{1, 2}; Xiao, Jing-Lin^{1, 2}

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

2 College of Physics and Electronic Information, Inner Mongolia National University, Tongliao, 028043, China

Corresponding author: Liu, Y.-F. (yunfei2005521@163.com)

Source title: Physica B: Condensed Matter

Abbreviated source title: Phys B Condens Matter

Volume: 403

Issue: 18

Issue date: September 1, 2008

Publication year: 2008

Pages: 3013-3017

Language: English

ISSN: 09214526

CODEN: PHYBE3

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: In this paper, we study the influence of LO phonon (LOP) on the charge qubit in a quantum dot (QD), and find that the eigenenergies of the ground and first excited states are reduced due to the electron-LOP interaction. At the same time, the time evolution of the electron probability density is obtained, the dependence of the oscillating period on electron-LOP coupling constant is found, the relation of between the oscillating period and the confinement length of the QD is calculated. Finally, we consider the effects of the electron-LOP coupling constant on pure dephasing factor under considering the correction of electron-LOP interaction for the wave functions. Our results suggest that electron-LOP interaction has very important effects on charge qubit. © 2008 Elsevier B.V. All rights reserved.

Number of references: 19

Main heading: Electrons

Controlled terms: Flow interactions - Phonons - Quantum electronics - Semiconductor quantum dots - Wave functions

Uncontrolled terms: Charge qubit - Confinement length - Coupling constants - Eigenenergies - Longitudinal optical (LO) phonons - Probability densities - Pure-dephasing - Quantum Dot (CO) - Time evolutions

Classification code: 631.1 Fluid Flow, General - 701.1 Electricity: Basic Concepts and Phenomena - 714.2 Semiconductor Devices and Integrated Circuits - 751.1 Acoustic Waves - 921 Mathematics - 931.4 Quantum Theory; Quantum Mechanics

DOI: 10.1016/j.physb.2008.03.003

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1062.

Accession number: 20071910595864

Title: Melting, crystallization behaviors, and nonisothermal crystallization kinetics of PET/PTT/PBT ternary blends

Authors: Run, Mingtao¹; Song, Aijun²; Wang, Yingjin¹; Yao, Chenguang¹

Author affiliation:

1 College of Chemistry and Environmental Science, Hebei University, Baoding 071002, China

2 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 06660, China

Corresponding author: Run, M. (rmthyp@hotmail.com)

Source title: Journal of Applied Polymer Science

Abbreviated source title: J. Appl. Polym. Sci.

Volume: 104

Issue: 5

Issue date: June 5, 2007

Publication year: 2007

Pages: 3459-3468

Language: English

ISSN: 00218995

E-ISSN: 10974628

CODEN: JAPNAB

Document type: Journal article (JA)

Publisher: John Wiley and Sons Inc., P.O.Box 18667, Newark, NJ 07191-8667, United States

Abstract: The melting, crystallization behaviors, and nonisothermal crystallization kinetics of the ternary blends composed of poly(ethylene terephthalate), poly(trimethylene terephthalate) (PIT) and poly(buthylene terephthalate) (PBT) were studied with differential scanning calorimeter (DSC). PBT content in all ternary blends was settled invariably to be one-third, which improved the melt-crystallization temperature of the ternary blends. All of the blend compositions in amorphous state were miscible as evidenced by a single, composition-dependent glass transition temperature (T_g) observed in DSC curves. DSC melting thermograms of different blends showed different multiple melting and crystallization peaks because of their various polymer contents. During melt-crystallization process, three components in blends crystallized simultaneously to form mixed crystals or separated crystals depending upon their content ratio. The Avrami equation modified by Jeziorny and the Ozawa theory were employed to describe the nonisothermal crystallization process of two selected ternary blends. The results spoke that the Avrami equation was successful in describing the nonisothermal crystallization process of the ternary blends. The values of the $t_{1/2}$ and the parameters Z_c showed that the crystallization rate of the ternary blends with more poly(ethylene terephthalate) content was faster than that with the lesser one at a given cooling rate. The crystal morphology of the five ternary blends investigated by polarized optical microscopy (POM) showed different size and distortional Maltese crosses or light spots when the PTT or poly(ethylene terephthalate) component varied, suggesting that the more the PTT content, the larger crystallites formed in ternary blends. © 2007 Wiley Periodicals, Inc.

Number of references: 31

Main heading: Polymer blends

Controlled terms: Crystallization - Differential scanning calorimetry - Glass transition - Melting - Polyethylene terephthalates - Reaction kinetics

Uncontrolled terms: Content ratio - Polybutylene terephthalates - Polytrimethylene terephthalates - Ternary blends

Classification code: 802.2 Chemical Reactions - 802.3 Chemical Operations - 815.1.1 Organic Polymers
- 817.1 Polymer Products - 944.6 Temperature Measurements

Treatment: Theoretical (THR); Experimental (EXP)

DOI: 10.1002/app.26147

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1063.

Accession number: 20081011136748

Title: Influences of temperature and polaron effect on the ground state of quasi-two-dimensional strong-coupling exciton

Authors: Eerdunchaolu

Corresponding author: Eerdunchaolu (eerdunchaolu@sohu.com)

Corr. author affiliation: Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Wuli Xuebao/Acta Physica Sinica

Abbreviated source title: Wuli Xuebao

Volume: 57

Issue: 1

Issue date: January 2008

Publication year: 2008

Pages: 416-424

Language: Chinese

ISSN: 10003290

CODEN: WLHPAR

Document type: Journal article (JA)

Publisher: Science Press, Beijing, 100085, China

Abstract: The influences of temperature and polaron effect on the ground state of the system, for which the exciton is strongly coupled with interface-optical (IO) phonons but weakly coupled with bulk-longitudinal-optical (LO) phonons in a quantum well, are studied by using the Huybrechts' linear-combination operator and Lee-Low-Pines (LLP) transformation method. The expressions for the induced potential and energy shift of the ground state of the exciton were derived. Numerical calculations for AgCl/AgBr QW, as an example, are performed. The result indicates that the induced potential and the energy shift increases for strong exciton-IO-phonon coupling but decreases for weak exciton-LO-phonon coupling with temperature.

Number of references: 25

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1064.

Accession number: 20070410389265

Title: Calculation of measurement error caused by thermal expansion effect on Rogowski coil

Authors: Wang, Haiming; Zhang, Hongling; Liu, Feng; Zheng, Shengxuan

Corresponding author: Wang, H. (grant1207@sohu.com)

Corr. author affiliation: Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Gaodianya Jishu/High Voltage Engineering

Abbreviated source title: Gaodianya Jishu

Volume: 32

Issue: 11

Issue date: November 2006

Publication year: 2006

Pages: 15-17

Language: Chinese

ISSN: 10036520

CODEN: GAJIE5

Document type: Journal article (JA)

Publisher: Science Press, Beijing, China

Abstract: Rogowski coils are increasingly designed for measurement of alternating current or transient current in electronic transformers-in power industry, and they are important parts that influence the accuracy of current measurement. Thermal expansion can change dimensions and mutual inductance of a Rogowski coil when the ambient temperature varies, which results in current measurement error of an electronic current transducer. A quantitative analysis of thermal expansion effect on Rogowski coil is important for the design of a high performance electronic current transducer. Based on a definition of a novel factor, ratio error of induced voltage per unit rises in temperature, formulas for calculating the coil's factors are derived, which are used for describing the typical Rogowski coils with rectangular cross section, circular cross section and the cross section in racetrack shape respectively. The analysis of the results shows that each of the factors has been described as a function of the thermal expansion coefficient of the employed material. The numerical value of the factor describing coil's former is equal to the numerical value of the thermal expansion coefficient of the former material; the numerical value of factor describing coil's winding is approximately the double of the thermal expansion coefficient of the winding wire material. By employing the factors above, a mathematical model is introduced for calculating the ratio voltage error caused by thermal expansion effect on the Rogowski coil. The proposed method and resultant data are instructive in design of the Rogowski coil with high measurement precision.

Number of references: 16

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1065.

Accession number: 20084811744173

Title: Analysis of the formation mechanism of Xiamen subsea tunnel fault

Authors: Wang, J.S.1 ; Li, Y.1 ; Wang, L.1 ; Cao, Z.G.1 ; Zhang, Y.X.2 ; Li, Z.F.3

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

2 Yanshan University, Qinhuangdao, China

3 Qinhuangdao Fuli Real Estate Development Co. Ltd., Qinhuangdao, Hebei, China

Corresponding author: Wang, J. S.

Source title: Proceedings of the International Young Scholars' Symposium on Rock Mechanics - Boundaries of Rock Mechanics Recent Advances and Challenges for the 21st Century

Abbreviated source title: Proc. Int. Young Sch. Symp. Rock Mech. - Boundaries Rock Mech. Recent Adv. Chall. Century

Monograph title: Proceedings of the International Young Scholars' Symposium on Rock Mechanics - Boundaries of Rock Mechanics Recent Advances and Challenges for the 21st Century

Issue date: 2008

Publication year: 2008

Pages: 533-537

Language: English

ISBN-10: 0415469341

ISBN-13: 9780415469340

Document type: Conference article (CA)

Conference name: International Young Scholars' Symposium on Rock Mechanics - Boundaries of Rock Mechanics Recent Advances and Challenges for the 21st Century

Conference date: April 28, 2008 - May 2, 2008

Conference location: Beijing, China

Conference code: 74132

Publisher: Taylor and Francis/Balkema, P.O Box 447, Leiden, 2300 AK, Netherlands

Abstract: According to the actual condition of Xiamen Subsea Tunnel fault during the construction process, the mechanical properties of fault were analyzed, regional tectonic sequence, and its structural system and pattern, also makes a detailed analysis on the regional stress activity, the combination and composition of different systems have also been studied by applying the theory of geomechanics. Finally geological genesis of tunnel fault is proposed, and provides a basis for developing of geological prediction ahead and avoiding the geological hazards effectively during the process of construction. © 2008 Taylor & Francis Group.

Number of references: 5

Main heading: Mechanics

Controlled terms: Mechanical properties - Rock mechanics - Rocks - Tunnels

Uncontrolled terms: Construction processes - Formation mechanisms - Geological hazards - Geological predictions - Geomechanics - Structural systems - Subsea tunnels

Classification code: 401.2 Tunnels and Tunneling - 481.1 Geology - 483.1 Soils and Soil Mechanics - 502.1 Mine and Quarry Operations - 931.1 Mechanics - 951 Materials Science

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1066.

Accession number: 20085211816780

Title: A novel collaborative filtering mechanism for product recommendation in P2P networks

Authors: Fuyong, Yuan1 ; Jian, Liu1 ; Chunxia, Yin1 ; Yulian, Zhang1 ; Nan, Shen2

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao, China

2 Network and Modern Education Technology Center, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Fuyong, Y. (fyyuan@ysu.edu.cn)

Source title: Proceedings - International Conference on Signal Image Technologies and Internet Based Systems, SITIS 2007

Abbreviated source title: Proc. - Int. Conf. Signal Image Technol. Internet Based Syst., SITIS

Monograph title: Proceedings - International Conference on Signal Image Technologies and Internet Based Systems, SITIS 2007

Issue date: 2007

Publication year: 2007

Pages: 254-261

Article number: 4618784

Language: English

ISBN-13: 9780769531229

Document type: Conference article (CA)

Conference name: 3rd IEEE International Conference on Signal Image Technologies and Internet Based Systems, SITIS'07

Conference date: December 16, 2007 - December 18, 2007

Conference location: Jiangong Jinjiang, Shanghai, China

Conference code: 74800

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: With the fast development of Internet, many recommender systems have emerged in e-commerce applications to support the product recommendation. However, most centralized recommender systems based on collaborative filtering can't work effectively when large number of users require to them. In P2P networks, this paper proposes a PRBOCF (Product Recommendation Based On Collaborative Filtering), which is a scalable mechanism to recommend products in distributed way. In PRBOCF, as two main parts of product information, image and text are weighted respectively and their features are represented by one vector. For increasing the quality of representing the text of product according to the Vector Space Model, WordNet v2.0 is employed to deal with the relationship of words in the text. Then a peer's preference is represented by a feature space consisting of all the vectors of its saved products information. For acquiring the recommender systems scalable and best quality of recommendation, PRBOCF makes product recommendation by searching for neighbor peers with similar preference through local information of recent ratings. Finally, the simulation results are discussed. © 2008 IEEE.

Number of references: 19

Main heading: Distributed computer systems

Controlled terms: Client server computer systems - Commerce - Electronic commerce - Information retrieval systems - Internet - Signal filtering and prediction - Vectors

Uncontrolled terms: Collaborative filtering - Distributed ways - E-commerce - Feature spaces - Local informations - P2P - P2p networks - Product informations - Product recommendation - Recommender systems - Simulation results - Vector Space models - WordNet

Classification code: 911.4 Marketing - 911.2 Industrial Economics - 903.3 Information Retrieval and

Use - 731.1 Control Systems - 723.5 Computer Applications - 921.1 Algebra - 723 Computer Software, Data Handling and Applications - 718 Telephone Systems and Related Technologies; Line Communications - 717 Optical Communication - 716.1 Information Theory and Signal Processing - 716 Telecommunication; Radar, Radio and Television - 722.4 Digital Computers and Systems

DOI: 10.1109/SITIS.2007.69

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1067.

Accession number: 20085111800437

Title: New robust stability criterion for neural networks of neutral type with time-varying delays

Authors: Mao, Xue-Zhi¹ ; Li, Xia¹ ; Liu, Jian-Ping¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei, Qinhuangdao, 066004

Corresponding author: Mao, X.-Z. (mxz36@163.com)

Source title: Proceedings - 4th International Conference on Natural Computation, ICNC 2008

Abbreviated source title: Proc. - Int. Conf. Nat. Comput., ICNC

Volume: 3

Part number: 3 of 7

Monograph title: Proceedings - 4th International Conference on Natural Computation, ICNC 2008

Issue date: 2008

Publication year: 2008

Pages: 491-494

Article number: 4667187

Language: English

ISBN-13: 9780769533049

Document type: Conference article (CA)

Conference name: 4th International Conference on Natural Computation, ICNC 2008

Conference date: October 18, 2008 - October 20, 2008

Conference location: Jinan, China

Conference code: 74642

Sponsor: Int. Natural Computation and Knowledge Discovery Assoc. (INCKDA)

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Based on Lyapunov stability theory and linear matrix inequality (LMI) technique, robust stability criterion is derived in terms of LMI for a class of neural networks of neutral type with time-varying delays and norm-bounded uncertainties. The result is obtained under mild conditions, assuming neither differentiability nor monotonicity for activation function. And the restriction of the derivative of the discrete time delay is removed. The proposed stability criterion can be checked by the LMI Control Toolbox in Matlab. Finally, the effectiveness of the result is demonstrated by an example. © 2008 IEEE.

Number of references: 12

Main heading: Neural networks

Controlled terms: Control theory - Linear control systems - Linear matrix inequalities - MATLAB - Robustness (control systems) - Stability criteria - System stability - Time varying control systems - Time varying networks - Time varying systems - Uncertain systems

Uncontrolled terms: Activation functions - Bounded uncertainties - Differentiability - Discrete time delays - Linear matrixes - Lyapunov stability theories - Mild conditions - Monotonicity - Neutral types - Time-varying delays

Classification code: 921.1 Algebra - 921 Mathematics - 731.4 System Stability - 731.1 Control Systems - 961 Systems Science - 723.5 Computer Applications - 723.1.1 Computer Programming Languages - 703.1 Electric Networks - 461.1 Biomedical Engineering - 723.4 Artificial Intelligence

DOI: 10.1109/ICNC.2008.687

Database: Compendex

1068.

Accession number: 20101212787178

Title: K-MSD-WGT: A local recoding algorithm capturing attribute preferences

Authors: Song, Jinling^{1, 2} ; Liu, Guohua³ ; Huang, Liming⁴

Author affiliation:

1 Department of Computer HeBei, Normal University of Science and Technology, Qinhuangdao 066004, China

2 Department of Computer HeBei, Yanshan University, Qinhuangdao 066004, China

3 Department of Computer, Yanshan University, Qinhuangdao 066004, China

4 Department of Computer, HeBei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Song, J. (songjinling99@126.com)

Source title: Proceedings - 2008 International Conference on Computational Intelligence and Security, CIS 2008

Abbreviated source title: Proc. - Int. Conf. Comput. Intell. Secur., CIS

Volume: 2

Part number: 2 of 2

Monograph title: Proceedings - 2008 International Conference on Computational Intelligence and Security, CIS 2008

Issue date: 2008

Publication year: 2008

Pages: 438-441

Article number: 4724814

Language: English

ISBN-13: 9780769535081

Document type: Conference article (CA)

Conference name: 2008 International Conference on Computational Intelligence and Security, CIS

2008

Conference date: December 13, 2008 - December 17, 2008

Conference location: Suzhou, China

Conference code: 75360

Sponsor: Guangdong University of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: We address how to capture the attribute preferences and maintain higher precision of the anonymized table. At first, we define a new data dependency named kmultiset dependency (K-MSD), and show that if a dataset satisfies K-MSD then it also satisfies kanonymity constraint. Then, we present minimal distance generalization (MDG) to construct K-MSD between attributes. In addition, we propose a local recoding algorithm: K-MSD-WGT, which performs MDG to k-violation values on attribute level based on the assigned preference weights. K-MSD-WGT can maintain higher precision and improve the utility of the released table. © 2008 IEEE.

Number of references: 9

Main heading: Artificial intelligence

Uncontrolled terms: Attribute levels - Data dependencies - Data sets - K-Anonymity - Minimal distance - Recoding

Classification code: 723.4 Artificial Intelligence

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1069.

Accession number: 20073910834981

Title: Design and realization of measuring and controlling system based on ZigBee technology in agricultural facilities

Authors: Bao, Changchun; Shi, Ruizhen; Ma, Yuquan; Liu, Rongchang; Lun, Cuifen; Wang, Qingzhu; Liu, Shiguang

Corresponding author: Bao, C. (baochangchun@163.com)

Corr. author affiliation: Department of Machinery and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 23

Issue: 8

Issue date: August 2007

Publication year: 2007

Pages: 160-164

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Beijing, 100026, China

Abstract: In order to improve the automation and information level of agricultural group facilities, structure characteristics of the measuring and controlling system at home and abroad were deeply studied. Measurement and control network of the agricultural facilities with flexible structure and low-cost was set up by combining wired communication with wireless communication technology. After introducing the characteristics, merit and application rule of the real SoC system loaded with ZigBee technology-wireless single chip computer CC2430, the design, realization way, and running effect of the measurement and control system in agricultural facilities based on wireless communication network technology ZigBee were expatiated.

Number of references: 17

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 2005529617596

Title: Landslide analysis and treatment in the area of Chengdu-Nanning expressway

Authors: Xie, Fei-Hong^{1, 2}; Wang, Jin-Shan^{2, 3}; Yin, Bo-Yue²

Author affiliation:

1 School of Civil Engineering, Lanzhou Jiaotong University, Lanzhou 730070, China

2 School of Civil and Environmental Engineering, University of Science and Technology Beijing, Beijing 100083, China

3 Department of Civil Engineering, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Xie, F.-H. (feihong_xie@163.com)

Source title: Yanshilixue Yu Gongcheng Xuebao/Chinese Journal of Rock Mechanics and Engineering

Abbreviated source title: Yanshilixue Yu Gongcheng Xuebao

Volume: 24

Issue: SUPPL. 2

Issue date: November 2005

Publication year: 2005

Pages: 5795-5798

Language: Chinese

ISSN: 10006915

CODEN: YLGXF5

Document type: Journal article (JA)

Publisher: Academia Sinica

Abstract: The formation of the landslide, influencing factor of the landslide stability, characteristic of sliding surface and earth slide are analyzed, and the slope stability before and after landslide is calculated. According to the characteristics of the landslide, the synthesized measures of retaining and draining are considered for environmental geology. The economic developments of the human activity and the engineering activity should obey the nature regulation. At the same time, the mutual function of the engineering developments and the geology environment should be carefully considered. The derived results show that the method is feasible,

and it can provide reference to other landslides treatment.

Number of references: 8

Main heading: Slope stability

Controlled terms: Clay - Engineering geology - Highway engineering - Landslides - Soil mechanics

Uncontrolled terms: Chengdu-Nanning expressway - Landslide treatment - Stabilizing pile

Classification code: 406 Highway Engineering - 481.1 Geology - 483.1 Soils and Soil Mechanics - 914.1 Accidents and Accident Prevention

Treatment: Applications (APP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1071.

Accession number: 20082311291284

Title: Intellectualized orientating and calibrating method for temperature and humidity meter

Authors: Shen, Chunbao¹ ; Bao, Changchun² ; Liu, Shiguang² ; Chen, Panfeng²

Author affiliation:

1 Department of Machinery and Electron., Hebei Vocational and Technical College of Building Materials, Qinhuangdao, Hebei Province, China

2 Department of Machinery and Electron., Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Shen, C. (vip_mvpscb@163.com)

Source title: 2007 IEEE International Conference on Control and Automation, ICCA

Abbreviated source title: IEEE Int. Conf. Control Autom. ICCA

Monograph title: 2007 IEEE International Conference on Control and Automation, ICCA

Issue date: 2008

Publication year: 2008

Pages: 980-983

Article number: 4376502

Language: English

ISBN-10: 1424408180

ISBN-13: 9781424408184

Document type: Conference article (CA)

Conference name: 2007 IEEE International Conference on Control and Automation, ICCA

Conference date: May 30, 2007 - June 1, 2007

Conference location: Guangzhou, China

Conference code: 72048

Publisher: Institute of Electrical and Electronics Engineers Inc., 445 Hoes Lane / P.O. Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The software system, hardware system and performance principle of the temperature and humidity meter are briefly described. An Intellectualized method is developed for orientating and calibrating the meter. This kind of new method is excellence in automation and intelligence, and presents simpler and more reliable new method for orientating and calibrating the nominal physical quantity of the nonlinear sensor. © 2007 IEEE.

Number of references: 9

Main heading: Computer software

Controlled terms: Artificial intelligence - Automation - Calibration - Computer hardware
- Humidity control - Sensors - Temperature measurement

Uncontrolled terms: Intellectualized - Nonlinear sensors

Classification code: 902.2 Codes and Standards - 732.2 Control Instrumentation - 731 Automatic Control Principles and Applications - 944.6 Temperature Measurements - 723.4 Artificial Intelligence - 722 Computer Systems and Equipment - 643.3 Air Conditioning - 723 Computer Software, Data Handling and Applications

Treatment: Theoretical (THR)

DOI: 10.1109/ICCA.2007.4376502

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1072.

Accession number: 20084111631003

Title: On hamiltonian colorings for some graphs

Authors: Shen, Yufa^{1, 3} ; He, Wenjie² ; Li, Xue² ; He, Donghong² ; Yang, Xiaojing¹

Author affiliation:

- 1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China
- 2 Applied Mathematics Institute, Hebei University of Technology, Tianjin, 300130, China
- 3 Center for Mathematics of Hebei Province, Hebei Normal University, Shijiazhuang, 050016, China

Corresponding author: Shen, Y. (syf030514@163.com)

Source title: Discrete Applied Mathematics

Abbreviated source title: Discrete Appl Math

Volume: 156

Issue: 15

Issue date: August 6, 2008

Publication year: 2008

Pages: 3028-3034

Language: English

ISSN: 0166218X

CODEN: DAMADU

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: For a connected graph G and any two vertices u and v in G , let $D(u, v)$ denote the length of a longest $u - v$ path in G . A hamiltonian coloring of a connected graph G of order n is an assignment c of colors (positive integers) to the vertices of G such that $|c(u) - c(v)| + D(u, v) \geq n - 1$ for every two distinct vertices u and v in G . The value $hc(c)$ of a hamiltonian coloring c is the maximum color assigned to a vertex of G . The hamiltonian chromatic number $hc(G)$ of G is $\min \{hc(c)\}$ taken over all hamiltonian colorings c of G . In this paper we discuss the hamiltonian chromatic number of graphs G with $\max \{D(u, v) \mid u, v \in V(G), u \neq v\} \leq \frac{n}{2}$. As examples, we determine the hamiltonian chromatic number for a class of caterpillars, and double stars. © 2007 Elsevier B.V. All rights reserved.

Number of references: 7

Main heading: Coloring

Controlled terms: Graph theory - Hamiltonians

Uncontrolled terms: Caterpillars - Chromatic number of graphs - Chromatic numbers - Connected graphs - Double stars - Hamiltonian - Hamiltonian chromatic number - Hamiltonian coloring - Hamiltonian colorings - Positive integers

Classification code: 802.3 Chemical Operations - 921.3 Mathematical Transformations - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.1016/j.dam.2007.12.002

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1073.

Accession number: 20091412011806

Title: The study of enhancing authenticity of cloth surface intersection processing

Authors: Wen, Dong1 ; Liu, Guohua1 ; Zhou, Yanhong2 ; Jin, Shunfu1

Author affiliation:

1 College of Information Science and Engineering, University of Yanshan, Qinhuangdao, HeBei, 066004, China

2 2 Department of computer, Hebei Normal University of Science and Technology, Qinhuangdao, HeBei, 066004, China

Corresponding author: Wen, D. (wencangdong@sohu.com)

Source title: Proceedings - 2008 Pacific-Asia Workshop on Computational Intelligence and Industrial Application, PACIIA 2008

Abbreviated source title: Proc. - Pacific-Asia Workshop Comput. Intel. Ind. Appl., PACIIA

Volume: 1

Part number: 1 of 2

Monograph title: Proceedings - 2008 Pacific-Asia Workshop on Computational Intelligence and Industrial Application, PACIIA 2008

Issue date: 2008

Publication year: 2008

Pages: 977-981

Article number: 4756705

Language: English

ISBN-13: 9780769534909

Document type: Conference article (CA)

Conference name: 2008 Pacific-Asia Workshop on Computational Intelligence and Industrial Application, PACIIA 2008

Conference date: December 19, 2008 - December 20, 2008

Conference location: Wuhan, China

Conference code: 75763

Sponsor: Institute of Electrical and Electronics Engineers; Wuhan Institute of Technology, IEEE; Huazhong University of Science and Technology; Huazhong Normal University; Computing and Security Center

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Cloth simulation is an important research area in Computer Graphics worldwide at present, and the study, which processes surface intersection during the course of cloth collision, is a difficulty in cloth simulation. We present a global optimization algorithm close to the reality and minimizing intersection contour

lines, in order to improve authenticity of the results of cloth surface intersection processing of the cloth simulation. This algorithm, which is based on pre-time process of the construction of the model of cloth, the collision detection and later process of the collision response,disposes emphatically the situation of cloth surface intersection, using the method globally minimizing intersection contour lines, and also evaluates and optimizes the results of processing. Experimental results show that this method is superior to previous researches in two aspects: the simulation authenticity and real-time, and can increase verisimilitude of the production in the domain of cloth animation. © 2008 IEEE.

Number of references: 8

Main heading: Intersections

Controlled terms: Animation - Artificial intelligence - Computer graphics - Contour measurement - Global optimization - Industrial applications - Industrial research - Intelligent control - Optimization - Time domain analysis

Uncontrolled terms: Cloth animations - Cloth simulations - Collision detections - Collision response - Contour lines - Global optimization algorithms - Research areas

Classification code: 901.4 Impact of Technology on Society - 912.1 Industrial Engineering - 913 Production Planning and Control; Manufacturing - 921 Mathematics - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 921.5 Optimization Techniques - 943.3 Special Purpose Instruments - 901.3 Engineering Research - 406 Highway Engineering - 703.1.1 Electric Network Analysis - 723.4 Artificial Intelligence - 723.4.1 Expert Systems - 723.5 Computer Applications - 731.1 Control Systems - 742.1 Photography

DOI: 10.1109/PACIIA.2008.76

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1074.

Accession number: 20095312599873

Title: The topic similarity computation model based information granularity

Authors: Xu, Liyong¹ ; Dong, Yanrong¹ ; Xu, Na¹ ; Pei, Caiyan¹ ; Gu, Liwei¹ ; Yan, Kang¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei, Qinhuangdao, 066004, China

Corresponding author: Xu, L. (xuliyong_d@163.com)

Source title: 2009 WRI World Congress on Software Engineering, WCSE 2009

Abbreviated source title: WRI World Congr. Softw. Eng., WCSE

Volume: 2

Part number: 2 of 4

Monograph title: 2009 WRI World Congress on Software Engineering, WCSE 2009

Issue date: 2009

Publication year: 2009

Pages: 12-15

Article number: 5319717

Language: English

ISBN-13: 9780769535708

Document type: Conference article (CA)

Conference name: 2009 WRI World Congress on Software Engineering, WCSE 2009

Conference date: May 19, 2009 - May 21, 2009

Conference location: Xiamen, China

Conference code: 78770

Sponsor: WRI

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Topic Similarity Computation Model is a research hotspot in fields of information retrieval and text classification, etc. From the view of information granularity, this paper integrates traditional content topic identification with event topic identification, and presents a new topic similarity computation model, i.e., first carrying out content identification, secondly event identification. Finally, the model is evaluated by experiments. © 2009 IEEE.

Number of references: 6

Main heading: Classification (of information)

Controlled terms: Computer software - Information services - Text processing

Uncontrolled terms: Event identification - Hot spot - Information granularity - Text classification - Topic identification - Topic similarity

Classification code: 903.4 Information Services - 903.3 Information Retrieval and Use - 903.1 Information Sources and Analysis - 723.5 Computer Applications - 723.2 Data Processing and Image Processing - 723 Computer Software, Data Handling and Applications - 716.1 Information Theory and Signal Processing

DOI: 10.1109/WCSE.2009.21

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1075.

Accession number: 20072510656804

Title: Effect of humic acid on the sorption and kinetic desorption of radiocaesium ions on/from Na-rectorite studied by the batch technique and a chelating resin

Authors: Wu, W.S.1 ; Fan, Q.H.1, 2 ; Lu, S.2, 3 ; Niu, S.4 ; Wang, X.2

Author affiliation:

- 1 Radiochemistry Laboratory, Lanzhou University, Lanzhou 730000, China
- 2 Institute of Plasma Physics, Chinese Academy of Sciences, P. O. Box 1126, 230031 Hefei, China
- 3 New Star Institute of Applied Technology, Huangshan Road, Hefei, Anhui, China
- 4 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, China

Corresponding author: Wang, X. (xkwang@ipp.ac.cn)

Source title: Adsorption Science and Technology

Abbreviated source title: Adsorption Sci. Technol.

Volume: 24

Issue: 7

Issue date: September 2006

Publication year: 2006

Pages: 601-610

Language: English

ISSN: 02636174

CODEN: ASTEEZ

Document type: Journal article (JA)

Publisher: Multi-Science Publishing Co. Ltd, 5 Wates Way, Brentwood, Essex, CM15 9TB, United Kingdom

Abstract: The sorption of radiocaesium ions onto Na-rectorite was studied at a pH value of 5.0 ± 0.2 using the batch technique under ambient conditions. The effect of humic acid on the Cs⁺ ion sorption was also investigated. The results indicated that the presence of humic acid significantly enhanced the sorption of Cs⁺ ions onto rectorite. The kinetic desorption of Cs⁺ ions from bare and HA-bound rectorite, respectively, was studied by the addition of a chelating resin. The results obtained indicated that Cs⁺ ion sorption onto rectorite generated reversible and irreversible sorption sites, with the irreversible sorption sites consisting of at least two kinds, i.e. "weak" and "strong". With increasing ageing time, surface-sorbed Cs⁺ ions on solid colloids can move from "weak" sites to "strong" sites, whereas that corresponding to irreversible sorption are incapable of movement irrespective of the length of the aging time. The results obtained are important for the evaluation of the behaviour of radionuclides in the natural environment.

Number of references: 19

Main heading: Sorption

Controlled terms: Cesium - Chelation - Radioisotopes - Reaction kinetics

Uncontrolled terms: Batch technique - Chelating resin - Humic acid - Radiocaesium ion

Classification code: 549.1 Alkali Metals - 622.1.1 Radioisotopes - 802.2 Chemical Reactions - 802.3 Chemical Operations

Treatment: Theoretical (THR)

DOI: 10.1260/026361706780810294

Database: Compendex

1076.

Accession number: 20072310635160

Title: Online calibration for a stereo vision measurement system

Authors: Yu, Z.J.1 ; Ma, S.Y.1 ; Che, R.S.2 ; Wang, Q.Z.1 ; Tian, W.1 ; Li, Z.H.1 ; Li, U.Z.1

Author affiliation:

1 Department of Mechanical Engineering, Hebei Normal University of Science and Technology, Changli, Hebei, China

2 Department of Precision Instruments, Harbin Institute of Technology, Harbin, Heilongjiang, China

Corresponding author: Yu, Z.J.

Source title: Key Engineering Materials

Abbreviated source title: Key Eng Mat

Volume: 295-296

Issue date: 2005

Publication year: 2005

Pages: 723-728

Language: English

ISSN: 10139826

CODEN: KEMAEY

Document type: Journal article (JA)

Publisher: Trans Tech Publications Ltd, Laubisrutistr.24, Stafa-Zuerich, CH-8712, Switzerland

Abstract: A new method for calibrating stereo vision measurement system is presented. By moving a rigid optical reference bar in a pattern in and around the measurement volume, the relative orientation and position of the two cameras can be determined by using the epipolar constraint, the linear normalization eight-point algorithm and the M-estimator method. The scale factor of the translation between the two cameras can be calculated by the distances between the marks on the reference bar. With automatically controlled infrared LED marks, the imaging feature points have a uniform intensity profile and a high contrast with background. The calibration accuracy can be improved. The simulation and experiments have shown that the calibration accuracy can be comparable with the complex off-line calibration.

Number of references: 7

Main heading: Stereo vision

Controlled terms: Algorithms - Calibration - Cameras - Computer simulation - Light emitting diodes - Online systems

Uncontrolled terms: Epopolar geometry - Imaging feature points - Measurement volume - Optical reference bar

Classification code: 714.2 Semiconductor Devices and Integrated Circuits - 722.4 Digital Computers and Systems - 723.5 Computer Applications - 741.2 Vision - 742.2 Photographic Equipment - 902.2 Codes and Standards

Treatment: Theoretical (THR)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1077.

Accession number: 20094412410507

Title: Mathematical model and its self-learning algorithm for hot strip laminar cooling

Authors: Haifang, Wang1 ; Yiqun, Wang2

Author affiliation:

- 1 Department of Mechatronics, Hebei Normal University Science and Technology, Qinhuangdao, China
- 2 School of Mechanical Engineering, Yanshan University, Qinhuangdao, China

Corresponding author: Haifang, W. (hfwang0335@126.com)

Source title: 2009 International Conference on Industrial Mechatronics and Automation, ICIMA 2009

Abbreviated source title: Int. Conf. Ind. Mechatronics Autom., ICIMA

Monograph title: 2009 International Conference on Industrial Mechatronics and Automation, ICIMA 2009

Issue date: 2009

Publication year: 2009

Pages: 375-378

Article number: 5156641

Language: English

ISBN-13: 9781424438181

Document type: Conference article (CA)

Conference name: 2009 International Conference on Industrial Mechatronics and Automation, ICIMA 2009

Conference date: May 15, 2009 - May 16, 2009

Conference location: Chengdu, China

Conference code: 77672

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: During the process of the strip cooling after finished rolling, the mathematical model of hot rolled strip coiling temperature is very important for obtaining satisfactory microstructure performance and mechanical property of the hot strip. The outdated and the advanced mathematical models of coiling temperature are presented in the paper, and selflearning of online control strategy based on the advanced mathematical model is analyzed. Finally, the measured data based on the advanced model is analyzed. ©2009 IEEE.

Number of references: 6

Main heading: Mathematical models

Controlled terms: Computer simulation - Cooling - Hot rolling - Learning algorithms - Mechanical properties - Mechatronics - Strip metal

Uncontrolled terms: Coiling temperature - Finished rolling - Hot rolled - Hot strips - Hot-rolled strip - Laminar cooling - Measured data - Microstructure performance - On-line controls - Self-learning

Classification code: 931.1 Mechanics - 921 Mathematics - 913.4 Manufacturing - 802.3 Chemical Operations - 731.7 Mechatronics - 951 Materials Science - 723.5 Computer Applications - 641.2 Heat Transfer - 608 Mechanical Engineering, General - 535.1.2 Rolling Mill Practice - 535.1 Metal Rolling - 723 Computer Software, Data Handling and Applications

DOI: 10.1109/ICIMA.2009.5156641

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1078.

Accession number: 20080211012832

Title: Space target positioning based on binocular active vision system of parallel robot

Authors: Kong, Ling-Fu¹ ; Wang, Yue-Ming^{1, 2} ; Zhao, Li-Qiang^{1, 3}

Author affiliation:

1 School of Information Science and Engineering, Yanshan University, Qinhuangdao 066004, China

2 School of Science, Inner Mongolia University of Science and Technology, Baotou 014010, China

3 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Kong, L.-F. (lfkong@ysu.edu.cn)

Source title: Jisuanji Jicheng Zhizao Xitong/Computer Integrated Manufacturing Systems, CIMS

Abbreviated source title: Jisuanji Jicheng Zhizao Xitong

Volume: 13

Issue: 11

Issue date: November 2007

Publication year: 2007

Pages: 2284-2288

Language: Chinese

ISSN: 10065911

CODEN: JJZXFN

Document type: Journal article (JA)

Publisher: CIMS, Sub-Box 34, P.O. Box 2413, Beijing, 100089, China

Abstract: To avoid blind working state for parallel robot and to improve its motion precision, a new platform called Binocular Active Vision (BAV) system was proposed, which was designed to monitor the space target position of the parallel robot at work. Based on this platform, an algorithm of space target positioning was presented. By this algorithm, space positions could be worked out whether the optical axes of two cameras were coplanar or not.

Number of references: 8

Main heading: Robots

Controlled terms: Algorithms - Automatic target recognition - Binocular vision - Cameras
- Computer vision - Degrees of freedom (mechanics) - Matrix algebra - Position control

Uncontrolled terms: Binocular active vision systems - Monitoring platforms - Motion precision - Parallel robots - Space target positioning - Visual localization

Classification code: 931.1 Mechanics - 921 Mathematics - 742.2 Photographic Equipment - 741.2 Vision
- 731.6 Robot Applications - 731.5 Robotics - 731.3 Specific Variables Control - 723.5 Computer Applications -
716 Telecommunication; Radar, Radio and Television

Treatment: Applications (APP); Theoretical (THR)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1079.

Accession number: 20095012544525

Title: Temperature dependence of the effective mass of the polaron in an asymmetry quantum dot

Authors: Eerdunchaolu1 ; Xin, Wei1

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

Corresponding author: Eerdunchaolu (eerdunchaolu@sohu.com)

Source title: Pacific Rim Conference on Lasers and Electro-Optics, CLEO - Technical Digest

Abbreviated source title: Pacif Rim Conf Lasers Electro Opt CLEO Tech Dig

Monograph title: CLEO/Pacific Rim 2009 - 8th Pacific Rim Conference on Lasers and Electro-Optics

Issue date: 2009

Publication year: 2009

Article number: 5292608

Language: English

ISBN-13: 9781424438303

Document type: Conference article (CA)

Conference name: CLEO/Pacific Rim 2009 - 8th Pacific Rim Conference on Lasers and Electro-Optics

Conference date: August 30, 2009 - September 3, 2009

Conference location: Shanghai, China

Conference code: 78645

Sponsor: Chinese Institute of Electronics; Chinese Optical Society; Chinese Physical Society; National Natural Science Foundation of China

Publisher: Institute of Electrical and Electronics Engineers Inc., 445 Hoes Lane / P.O. Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The influences of the temperature on the effective mass of the weak-coupling polaron in an asymmetry quantum dot are studied by using the Tokuda's improved linear-combination operator and the Lee-Low-Pines (LLP) variational method. The results indicate that the effective mass m^* of the weak-coupling polaron is only related to the temperature parameter γ and the electron-phonon coupling strength α , but it is independent of the confinement strength ω_1 (ω_2) of the quantum dot. © 2009 IEEE.

Number of references: 10

Main heading: Semiconductor quantum dots

Controlled terms: Phonons - Polarons - Temperature distribution

Uncontrolled terms: Asymmetry quantum dot - Combination operators - Confinement strength - Effective mass - Electron-phonon coupling strengths - Quantum Dot - Temperature dependence - Temperature parameters - Variational methods - Weak couplings

Classification code: 641.1 Thermodynamics - 714.2 Semiconductor Devices and Integrated Circuits -
751.1 Acoustic Waves - 931.3 Atomic and Molecular Physics - 933.1.1 Crystal Lattice

DOI: 10.1109/CLEOPR.2009.5292608

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1080.

Accession number: 20160801981985

Title: The performance evaluation of traditional moxibustion, electronic moxibustion and
laseracupuncture on apoplexy and their comparison research

Authors: Aijun, Xu^{1, 2}; Chengwei, Li²; Xu, Qiu³

Author affiliation:

- 1 North China Coal Medical College, Tan Shan, China
- 2 Institute of Biomedical Engineering, Yanshan University, Qinhuangdao, China
- 3 HeBei Normal University of Science and Technology, QinHuangdao, China

Corresponding author: Xu, Qiu (hbzjsyxq@163.com)

Source title: IFMBE Proceedings

Abbreviated source title: IFMBE Proc.

Volume: 14

Issue: 1

Issue date: 2007

Publication year: 2007

Pages: 3591-3593

Language: English

ISSN: 16800737

Document type: Conference article (CA)

Conference name: 10th World Congress on Medical Physics and Biomedical Engineering, WC 2006

Conference date: August 27, 2006 - September 1, 2006

Conference location: Seoul, Korea, Republic of

Conference code: 163739

Sponsor: AAPM; BMES; EFOMP; et al; IAEA; WHO

Publisher: Springer Verlag

Abstract: Today apoplexy is one of the three kind of diseases which have the highest death rate. The moxibustion can hasten the blood circulation, improve the blood purvey [1] to the tissue and apparatus, Neiguan, Zusanli, Guanyuan, Dazhui points always be selected. With the development of the Biomedicine Engineering, people have developed the electron moxibustion and Laser acupuncture. Objective To explore and compare the effects of the moxibustion, the electron moxibustion and Laser acupuncture to the apoplexy patients, Methods The patients, which were select according to The standards for curative effect and diagnoses of traditional medicine on apoplexy, were divided into four groups: Comparison group, moxibustion group, electron moxibustion group and Laser acupuncture group. General druggery were given to comparison group, other groups were given both druggery and their own treatments. For example, moxibustion group were given both druggery and moxibustion. The effects were evaluated by clinic symptoms, denaturalization of blood flow and changes of superoxide dismutase (SOD) in blood. Results (1) the availability of the melioration on clinic symptoms in comparison group is 46.7%; in moxibustion group is 73.3%; in electron moxibustion group is 80%and Laser acupuncture group is 86.7%. (2) Denaturalization of blood flow are improved in moxibustion group [2], the result is better than comparison group;the result of electron moxibustion group is similar to moxibustion group; the result of Laser acupuncture group is better than moxibustion group. (3) SOD and NO in blood all enhanced [3] in moxibustion group, electron moxibustion group and Laser acupuncture group. This result on the above three groups is similar, And all of them were higher than comparison group ($P<0.05$). Conclusions: moxibustion, electron moxibustion and Laser acupuncture have good effects on the apoplexy patients, and Laser acupuncture has the best effect. © International Federation for Medical and Biological Engineering 2007.

Number of references: 31

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1081.

Accession number: 20080111005684

Title: Research advance in the development of soil rock picker

Authors: Yu, Yuzhen; Gao, Lianxing; Ma, Xiuli; Ma, Fang; Zhao, Jinsheng

Corresponding author: Yu, Y. (yu_yuzhen@163.com)

Corr. author affiliation: Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 23

Issue: 11

Issue date: November 2007

Publication year: 2007

Pages: 274-279

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Beijing, 100026, China

Abstract: Soils contain large numbers of rock fragments in the soil matrix of Chinese mountainous farmland. Rock fragments affect physical properties and hydraulic properties of soil, and bring inconvenience to cultivation and management. At present, manual rock picking in farmland is widely adopted to remove rocks in farmland, but the work is hard and the efficiency is low. This paper analyzed the development history and actuality of rock picker in recent years. The picking and separating mechanism and working principle of typical rock pickers in farmland were investigated. The research trend and scheme of soil rock picker suitable for the characteristics of farmland in Chinese mountainous areas were put forward.

Number of references: 22

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1082.

Accession number: 20074910962772

Title: Practice on synthetic geological prediction ahead of construction of Xiamen subsea tunnel

Authors: Wang, Jinshan^{1, 2}; Wang, Li²; Cao, Zhigang²; Liu, Zhigang³; Wang, Liang⁴; Zhu, Hui⁵

Author affiliation:

- 1 State Key Laboratory of High-efficient Mining and Safety of Metal Mines, University of Science and Technology Beijing, Beijing 100083, China
- 2 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 3 Shijiazhuang Railway Institute, Shijiazhuang 050043, China
- 4 Yanshan University, Qinhuangdao 066004, China
- 5 Site Headquarters of Xiamen Subsea Tunnel, China Railway 22nd Bureau Group Co. Ltd., Xiamen 361009, China

Corresponding author: Wang, J. (wjswlwgybkd@163.com)

Source title: Yanshilixue Yu Gongcheng Xuebao/Chinese Journal of Rock Mechanics and Engineering

Abbreviated source title: Yanshilixue Yu Gongcheng Xuebao

Volume: 26

Issue: 11

Issue date: November 2007

Publication year: 2007

Pages: 2309-2317

Language: Chinese

ISSN: 10006915

CODEN: YLGXF5

Document type: Journal article (JA)

Publisher: Academia Sinica, Wuhan, 430071, China

Abstract: In view of the actual situation that there is still not any systematic theory of geological prediction for the tunnel construction, the concept of geological prediction ahead of construction for the tunnel and technical scheme of geological prediction have been constructed on the basis of the previous research results; and a complete set of geological forecasting techniques including the macro forecast, the long-term prediction, the short-term prediction and the alarm of the disaster approach, have been proposed based on the theory of geomechanics. According to the practical test of the prediction in Xiamen subsea tunnel, the accuracy of the prediction can meet the requirements of the construction standards. It shows the rationality and feasibility of the related theory and the technical method; and the proposed technical method can provide some references to the tunnel constructions.

Number of references: 17

Main heading: Tunnels

Controlled terms: Disasters - Earthquakes - Forecasting - Geology - Underwater construction - Underwater structures

Uncontrolled terms: Geological prediction ahead - Subsea tunnel - Synthetic prediction technique - Technical method - Tunnel construction - Tunnel seismic prediction (TSP) - Unfavourable geology

Classification code: 914.1 Accidents and Accident Prevention - 484 Seismology - 481.1 Geology - 922.2 Mathematical Statistics - 472 Ocean Engineering - 405.2 Construction Methods - 401.2 Tunnels and Tunneling - 408.1 Structural Design, General

Treatment: Theoretical (THR)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1083.

Accession number: 20071010471472

Title: Application of wireless communication technology in the measuring and controlling system for greenhouses

Authors: Liu, Shiguang; Shen, Chunbao; Bao, Changchun; Li, Guofang; Wang, Jian; Ji, Rukai

Corresponding author: Liu, S. (liushiguang9574@163.com)

Corr. author affiliation: Department of Machinery and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 22

Issue: 12

Issue date: December 2006

Publication year: 2006

Pages: 155-158

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Beijing, China

Abstract: The structural characteristics of control system and design method for the greenhouse group based on the wireless communication technology were introduced. The control system is characterized by the hierarchical divergence and chain structure, as well as master-slave mode. The wireless communication technology, which does not require communication circuit, can shorten the initial building period and reduce the investment of the measuring and controlling system, and the system is constructed flexibly and upgraded easily. The hierarchical divergence and chain structure can make the system be able to be large or small and be transformed conveniently. The structure and design method of the measuring and controlling meter, whose key part is C8151F005, and the design method of interface circuit and controlling software of the industrial personal computer (IPC), which is the host computer, were described respectively. The methods make system simple, reliable and easy to control.

Number of references: 17

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20094712469927

Title: Research on remote monitoring system of petrochemical farm tanks based on web and CAN

Authors: Hongju, Lin1 ; Yuquan, Ma1 ; Changchun, Bao1 ; Qingzhu, Wang1 ; Jiwei, Ma1

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei Qinhuangdao, 066004, China

Corresponding author: Hongju, L. (linhongju@126.com)

Source title: 2009 Chinese Control and Decision Conference, CCDC 2009

Abbreviated source title: Chin. Control Decis. Conf., CCDC

Monograph title: 2009 Chinese Control and Decision Conference, CCDC 2009

Issue date: 2009

Publication year: 2009

Pages: 1282-1286

Article number: 5194695

Language: English

ISBN-13: 9781424427239

Document type: Conference article (CA)

Conference name: 2009 Chinese Control and Decision Conference, CCDC 2009

Conference date: June 17, 2009 - June 19, 2009

Conference location: Guilin, China

Conference code: 78484

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Three layers of petrochemical farm tanks monitoring system structure were presented based on B/S, including software and hardware designs of bottom control network based on CAN, interface layer server and top layer designs. That middleware WebSnap and ActiveX ADO were used to design Web server is discussed

in emphasis. Communication mechanism between Web server application and control program based on CANmini adapter was discussed. Connection of Web server application and database was also discussed in the paper. System debugging has been completed, and exchange with CAN bus data and Internet information has been realized. The system has wide application in petrochemical industry. © 2009 IEEE.

Number of references: 8

Main heading: Controllers

Controlled terms: Control system synthesis - Distributed parameter control systems - Farms - Middleware - Petrochemicals - Process control - Remote control - SCADA systems - Tanks (containers) - Web services

Uncontrolled terms: Active X - ActiveX ADO - Bottom control - CAN (Controller Area Network) - CAN bus - Communication mechanisms - Control program - Hardware design - Interface layer - Internet information - Monitoring system - Petrochemical industry - Remote monitoring - Remote monitoring system - Three-layer - Web server applications - Web servers

Classification code: 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 804.1 Organic Compounds - 732.1 Control Equipment - 731.1 Control Systems - 903.4 Information Services - 731 Automatic Control Principles and Applications - 723 Computer Software, Data Handling and Applications - 619.2 Tanks - 513.3 Petroleum Products - 723.1 Computer Programming

DOI: 10.1109/CCDC.2009.5194695

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1085.

Accession number: 20095212569149

Title: A new weighted average method and it's applications in finite element method

Authors: Rongchang, Liu¹ ; Lizhen, Feng² ; Lidong, Chen¹ ; Shuying, Ma¹

Author affiliation:

1 College of Mechanical and Electrical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Rongchang, L. (lrc-lrc@163.com)

Source title: 2009 2nd International Conference on Intelligent Computing Technology and Automation, ICICTA 2009

Abbreviated source title: Int. Conf. Intelligent Comput. Technol. Autom., ICICTA

Volume: 3

Part number: 3 of 4

Monograph title: 2009 2nd International Conference on Intelligent Computing Technology and Automation, ICICTA 2009

Issue date: 2009

Publication year: 2009

Pages: 297-301

Article number: 5287963

Language: English

ISBN-13: 9780769538044

Document type: Conference article (CA)

Conference name: 2009 2nd International Conference on Intelligent Computing Technology and Automation, ICICTA 2009

Conference date: October 10, 2009 - October 11, 2009

Conference location: Changsha, Hunan, China

Conference code: 78591

Sponsor: IEEE Intelligent Computation Society; IEEE Computer Society; Res. Assoc. Intelligent Computation Technology and Automation; Changsha University of Science and Technology; Hunan University of Science and Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In many problems about stationary or time-variant physical fields of 2D plane or 3D space, application of Lagrange's interpolation is very difficult. Because the purpose of interpolation is to predict function value of unknown points according to that of known and limited points, a new method of polynomial interpolation named as weighted average method is suggested and linear equations about weights based on the physical

meaning of interpolation is deduced succinctly by this paper. The equations of this method possess the special and uniform format i.e. row vectors of coefficient matrix and that of the right side of the equations have the same format. Therefore, weighted coefficients are easy to be gotten with the aid of Cramer's rule and then interpolation polynomial is obtained easily. Methods suggested by this paper avoid cumbersome steps in process of constructing interpolation basis functions repeatedly and also avoid complex iteratively solving process of linear equations about polynomial coefficients efficiently. Compared with Lagrange or other traditional interpolating methods which rely on seeking interpolating basis functions or solving equations directly, the weighted average method suggested by this paper is both simpler in deduction and more significant in physics. Furthermore, the weighted average method is also applied into shape functions' derivations of triangular element and quadrilateral isoparametric element so that the correctness of this method is gained verification. At the same time, from view of deduction process, the method of this paper not only possesses simple deducting steps because of no solving linear equations which takes 6 undetermined coefficients as unknown quantities, but also takes on distinct meaning in physics and geometry and so it is easier to make people understand the cause of shape function in finite element method. © 2009 IEEE.

Number of references: 10

Main heading: Finite element method

Controlled terms: Computer science - Function evaluation - Intelligent computing - Interpolation - Lagrange multipliers - Linear equations - Polynomials - Three dimensional

Uncontrolled terms: 3-D space - Basis functions - Coefficient matrix - Finite Element - Function values - In-process - Interpolation basis functions - Interpolation polynomials - Isoparametric element - Lagrange - Lagrange's interpolation - Physical field - Physical meanings - Polynomial coefficients - Polynomial interpolation - Shape functions - Time variant - Triangular elements - Unknown quantity - Weighted average method

Classification code: 921.6 Numerical Methods - 921.1 Algebra - 921 Mathematics - 902.1 Engineering Graphics - 723.5 Computer Applications - 723.4 Artificial Intelligence - 723 Computer Software, Data Handling and Applications - 722 Computer Systems and Equipment - 721 Computer Circuits and Logic Elements

DOI: 10.1109/ICICTA.2009.538

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1086.

Accession number: 20082811368745

Title: Effects of LA phonon on pure dephasing for exciton qubit

Authors: Liu, Yun-Fei; Xiao, Jing-Lin

Corresponding author: Liu, Y.-F.

Corr. author affiliation: Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Wuli Xuebao/Acta Physica Sinica

Abbreviated source title: Wuli Xuebao

Volume: 57

Issue: 6

Publication year: 2008

Pages: 3324-3327

Language: Chinese

ISSN: 10003290

CODEN: WLHPAR

Document type: Journal article (JA)

Publisher: Science Press, Beijing, 100085, China

Abstract: In a parabolic quantum dot (QD), the exciton vacuum state and the exciton ground state may be employed as a two-level quantum system—a qubit. The pure dephasing due to deformation potential exciton-bulk longitudinal acoustic phonon (LAP) interaction for the exciton qubit is investigated by using the reduced density matrix. The dependence of dephasing factor on time and the confinement length of the QD and temperature is calculated. It is shown that the pure dephasing factor increases quickly with increasing time when time is smaller than 2.5 ps, and the dephasing time is of the order of ps. Even at absolute zero temperature, exciton-LAP interaction still causes excitonic dephasing. The pure dephasing factor increases with increasing temperature quickly when temperature is higher than 3 K. At the same time, it is found that the confinement length of the QD has important effects on pure dephasing of qubit, the smaller the quantum size, the faster the pure dephasing is. The results show that using appropriate QD size at low temperature and using ultra-fast laser technology can effectively suppress pure dephasing due to exciton-LAP interaction.

Number of references: 25

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1087.

Accession number: 20070510402148

Title: Synthesis of optically active poly(N-propargylsulfamides) with helical conformation

Authors: Zhang, Zhigang^{1, 2, 3} ; Deng, Jianping^{1, 2} ; Zhao, Weiguo² ; Wang, Jianmin¹ ; Yang, Wantai^{1, 2}

Author affiliation:

1 Department of Polymer Science, College of Materials Science and Engineering, Beijing University of Chemical Technology (BUCT), Beijing 100029, China

2 State Key Laboratory of Chemical Resource Engineering, Beijing University of Chemical Technology, Beijing 100029, China

3 Hebei Normal University of Science and Technology, Hebei, Qinhuangdao 066004, China

Corresponding author: Deng, J. (dengjp@mail.buct.edu.cn)

Source title: Journal of Polymer Science, Part A: Polymer Chemistry

Abbreviated source title: J Polym Sci Part A

Volume: 45

Issue: 3

Issue date: February 1, 2007

Publication year: 2007

Pages: 500-508

Language: English

ISSN: 0887624X

E-ISSN: 10990518

CODEN: JPACEC

Document type: Journal article (JA)

Publisher: John Wiley and Sons Inc., P.O.Box 18667, Newark, NJ 07191-8667, United States

Abstract: A novel chiral N-propargylsulfamide monomer (1a) and its enantiomer (1b) were synthesized and polymerized with (nbd)Rh+B-(C₆H₅)₄ as a catalyst providing poly(1) (poly(1a) and poly(1b)) in high yields ($\geq 99\%$). Poly(1) could take stable helices in less polar solvents (chloroform and THF), demonstrated by strong circular dichroism signals and UV-vis absorption peaks at about 415 nm and the large specific rotations; but in more polar solvents including DMF and DMSO, poly(1) failed to form helix. Quantitative evaluation with anisotropy factor showed that the helical screw sense had a relatively high thermal stability. These results together with the IR spectra measured in solvents showed that hydrogen bonding between the neighboring sulfamide groups is one of the main driving forces for poly(1) to adopt stable helices. In addition, copolymerization of monomer 1a and monomer 2 was conducted, the solubility of poly(1) was improved drastically. However, the copolymerization had adverse effects on the formation of stable helices in the copolymers. © 2006 Wiley Periodicals, Inc.

Number of references: 52

Main heading: Organic polymers

Controlled terms: Catalysts - Conformations - Copolymerization - Infrared spectroscopy - Monomers - Organic solvents - Polyacetylenes - Synthesis (chemical) - Thermodynamic stability

Uncontrolled terms: Absorption peaks - Circular dichroism signals - Enantiomer - Helical conformation

Classification code: 815.1.1 Organic Polymers - 804 Chemical Products Generally - 803 Chemical Agents and Basic Industrial Chemicals - 815.2 Polymerization - 802.2 Chemical Reactions - 741.1 Light/Optics - 641.1 Thermodynamics - 801.4 Physical Chemistry

Numerical data indexing: Size 4.15e-07m

Treatment: Literature review (LIT); Experimental (EXP)

DOI: 10.1002/pola.21869

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1088.

Accession number: 20084911765634

Title: Effect of high pressure and heat treatment on microstructure of aluminum bronze

Authors: Yang, Jing-Ru¹ ; Liu, Lin² ; Ren, Yan-Jun³ ; Liu, Jian-Hua⁴ ; Zhang, Rui-Jun⁴

Author affiliation:

1 Department of Information and Mechatronics Engineering, Hebei Building Material College of Professional Technology, Qinhuangdao 066004, China

2 Tangshan Vocational Technology College, Tangshan 063000, China

3 Analysis and Measure Center, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

4 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

Corresponding author: Yang, J.-R. (yang_jr45@sohu.com)

Source title: Gaoya Wuli Xuebao/Chinese Journal of High Pressure Physics

Abbreviated source title: Gaoya Wuli Xuebao

Volume: 22

Issue: 3

Issue date: September 2008

Publication year: 2008

Pages: 318-322

Language: Chinese

ISSN: 10005773

CODEN: GWXUER

Document type: Journal article (JA)

Publisher: Chinese Journal of High Pressure Physics, P.O. Box 523-60, Chengdu, 610003, China

Abstract: The effects of high pressure and heat treatment on microstructure of aluminum bronze were investigated by means of metallographic, scanning electronic microscope (SEM)/energy disersive spectrometer (EDS) and X-ray diffraction (XRD). Results showed that the grain size of α phase in the aluminum bronze after the treatment at 750°C and 6 GPa high pressure is smaller than that after treatment at 750°C and normal pressure. When the aluminum bronze was treated at 750°C and 6 GPa and followed by a treatment at 750°C for 2 min, thin stripy α phase occurred in the aluminum bronze, and its amount increased but the amount of granular α phase decreased with increase of the cooling rate.

Number of references: 8

Main heading: Bronze

Controlled terms: Alumina - Aluminum - Aluminum alloys - Cooling - Copper alloys
- Heat treating furnaces - Heat treatment - Light metals - Microstructure - X ray analysis

Uncontrolled terms: After treatments - Aluminum bronze - Aluminum bronzes - Cooling rates - Effect of high pressures - Electronic microscopes - Grain sizes - High pressure - High pressures - Normal pressures - X-ray diffractions

Classification code: 546.2 Tin and Alloys - 641.2 Heat Transfer - 801 Chemistry - 801.4 Physical Chemistry - 802.3 Chemical Operations - 804.2 Inorganic Compounds - 812.1 Ceramics - 933 Solid State Physics - 951 Materials Science - 544.2 Copper Alloys - 421 Strength of Building Materials; Mechanical Properties - 531.2 Metallography - 532.4 Heat Treating Furnaces - 537.1 Heat Treatment Processes - 541.1 Aluminum - 541.2 Aluminum Alloys - 542.1 Beryllium and Alloys - 542.2 Magnesium and Alloys - 542.3 Titanium and Alloys

Numerical data indexing: Pressure 6.00e+09Pa, Temperature 1.02e+03K, Time 1.20e+02s

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1089.

Accession number: 20084811743550

Title: Application study of mine alarm system based on ZigBee technology

Authors: Wang, Qingzhu¹ ; Liu, Rongchang¹ ; Ma, Yuquan¹ ; Zhao, Jinchuan¹ ; Feng, Lizhen¹ ; Liu, Shiguang¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qin huangdao , Hebei Province, China

Corresponding author: Wang, Q. (wqzh101@126.com)

Source title: Proceedings of the IEEE International Conference on Automation and Logistics, ICAL 2008

Abbreviated source title: Proc. IEEE Int. Conf. Autom. Logist., ICAL

Monograph title: Proceedings of the IEEE International Conference on Automation and Logistics, ICAL 2008

Issue date: 2008

Publication year: 2008

Pages: 2537-2540

Article number: 4636596

Language: English

ISBN-13: 9781424425020

Document type: Conference article (CA)

Conference name: IEEE International Conference on Automation and Logistics, ICAL 2008

Conference date: September 1, 2008 - September 3, 2008

Conference location: Qingdao, China

Conference code: 74122

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: After introducing the wireless network communication technology ZigBee and the features, advantages and application rule of the wireless single chip microcomputer cc2430 which is a true system-on-chip (SOC) loading ZigBee technology, the article introduced the design method of mine alarm system based on ZigBee technology. The composition of the mine alarm system and the design features of hardware and software were expounded mainly. © 2008 IEEE.

Number of references: 11

Main heading: Wireless networks

Controlled terms: Alarm systems - Application specific integrated circuits - Communication - Integrated circuits - Mines - Mining - Programmable logic controllers - Technology

Uncontrolled terms: Application studies - Communication technology - Design features - Design methods - Hardware and softwares - Single chip micro computers - System on Chips - Wireless network communications - Zig bees - ZigBee - ZigBee technologies

Classification code: 914.1 Accidents and Accident Prevention - 901 Engineering Profession - 732.1 Control Equipment - 722.4 Digital Computers and Systems - 914.2 Fires and Fire Protection - 722.3 Data Communication, Equipment and Techniques - 716 Telecommunication; Radar, Radio and Television - 714.2

Semiconductor Devices and Integrated Circuits - 502.1 Mine and Quarry Operations - 716.3 Radio Systems and Equipment

DOI: 10.1109/ICAL.2008.4636596

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1090.

Accession number: 20094312403565

Title: Functional analysis of an *Aspergillus ficuum* phytase gene in *Saccharomyces cerevisiae* and its root-specific, secretory expression in transgenic soybean plants

Authors: Li, Guilan² ; Yang, Shaohui¹ ; Li, Minggang³ ; Qiao, Yake² ; Wang, Jiehua¹

Author affiliation:

1 School of Agriculture and Bioengineering, Tianjin University, Tianjin 300072, China

2 Hebei Normal University of Science and Technology, Changli 066600, China

3 School of Life Sciences, Nankai University, Tianjin 300071, China

Corresponding author: Wang, J. (jiehuaw_tju@yahoo.com)

Source title: Biotechnology Letters

Abbreviated source title: Biotechnol. Lett.

Volume: 31

Issue: 8

Issue date: July 2009

Publication year: 2009

Pages: 1297-1303

Language: English

ISSN: 01415492

E-ISSN: 15736776

CODEN: BILED3

Document type: Journal article (JA)

Publisher: Springer Netherlands, Van Godewijkstraat 30, Dordrecht, 3311 GZ, Netherlands

Abstract: Phytases release inorganic phosphates from phytate in soil. A gene encoding phytase (AfPhyA) was isolated from *Aspergillus ficuum* and its ability to degrade phytase and release phosphate was demonstrated in *Saccharomyces cerevisiae*. A promoter from the Arabidopsis Pky10 gene and the carrot extensin signal peptide were used to drive the root-specific and secretory expression of the AfPhyA gene in soybean plants. The phytase activity and inorganic phosphate levels in transgenic soybean root secretions were 4.7 U/mg protein and 439 μ M, respectively, compared to 0.8 U/mg protein and 120 μ M, respectively, in control soybeans. Our results demonstrated the potential usefulness of the root-specific promoter for the exudation of recombinant phytases and offered a new perspective on the mobilization of phytate in soil to inorganic phosphates for plant uptake. © Springer Science+Business Media B.V. 2009.

Number of references: 14

Main heading: Gene encoding

Controlled terms: Amines - Phosphates - Plants (botany) - Soils - Yeast

Uncontrolled terms: *Aspergillus ficuum* - Phytase - Root-specific expression - Secretory protein - Transgenic soybean

Classification code: 822.3 Food Products - 804.2 Inorganic Compounds - 804.1 Organic Compounds - 801.2 Biochemistry - 483.1 Soils and Soil Mechanics - 461.9 Biology - 461.8.1 Genetic Engineering

DOI: 10.1007/s10529-009-9992-6

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1091.

Accession number: 2005299211640

Title: The scaling behavior of the molecular parameters of the hyperbranched polymers made by self-condensing vinyl polymerization

Authors: Ba, X.W.1, 2 ; Tian, Y.L.2 ; Diao, J.Z.1 ; Wang, S.J.1 ; Wang, H.J.1

Author affiliation:

- 1 College of Chemistry and Environmental Science, Hebei University, Baoding 071002, China
- 2 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, 066600, China

Corresponding author: Ba, X.W. (baxw@mail.hbu.edu.cn)

Source title: European Physical Journal E

Abbreviated source title: Eur. Phys. J. E

Volume: 17

Issue: 2

Issue date: June 2005

Publication year: 2005

Pages: 221-223

Language: English

ISSN: 12928941

E-ISSN: 1292895X

Document type: Journal article (JA)

Publisher: Springer New York LLC

Abstract: The hyperbranched polymers can be made by self-condensing vinyl polymerization without gelation transition. The average molecular weights, as well as the average sizes, can reach infinite values as the reaction is quantitatively completed, and the scaling forms of the molecular parameters should exist. In the paper, based on a recursion formula, the scaling form of the number fraction distribution and the number of the n-mers are given analytically as the conversion of double bonds is near 1. The mean square radius of gyration for very large hyperbranched polymers is calculated explicitly to give a scaling exponent. Finally, a scaling relation associated with the fractal dimension and the polydispersity exponent is given clearly. © EDP Sciences / Societa` Italiana di Fisica / Springer-Verlag 2005.

Number of references: 22

Main heading: Polymers

Controlled terms: Approximation theory - Catalysis - Coagulation - Condensation - Gelation - Molecular weight - Polymerization - Reaction kinetics

Uncontrolled terms: Cluster formation - Molecular parameters - Polymer properties - Scaling laws - Self-condensing vinyl polymerization

Classification code: 931.3 Atomic and Molecular Physics - 921.6 Numerical Methods - 815.2 Polymerization - 815.1 Polymeric Materials - 802.3 Chemical Operations - 802.2 Chemical Reactions - 801.4 Physical Chemistry

Treatment: Theoretical (THR); Experimental (EXP)

DOI: 10.1140/epje/i2004-10140-y

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1092.

Accession number: 20094812504618

Title: Dynamic split-point selection method for decision tree evolved by gene expression programming

Authors: Qu, Li1 ; Min, Yao1 ; Weihong, Wang2 ; Xiaohong, Cheng3

Author affiliation:

- 1 Computer College, Zhejiang University, China
- 2 Software College, Zhejiang University of Technology, China
- 3 EandA College, Hebei Normal University of Science and Technology, Qinghuangdao, China

Corresponding author: Qu, L. (liqu@zju.edu.cn)

Source title: 2009 IEEE Congress on Evolutionary Computation, CEC 2009

Abbreviated source title: IEEE Congr. Evol. Comput., CEC

Monograph title: 2009 IEEE Congress on Evolutionary Computation, CEC 2009

Issue date: 2009

Publication year: 2009

Pages: 736-740

Article number: 4983018

Language: English

ISBN-13: 9781424429592

Document type: Conference article (CA)

Conference name: 2009 IEEE Congress on Evolutionary Computation, CEC 2009

Conference date: May 18, 2009 - May 21, 2009

Conference location: Trondheim, Norway

Conference code: 77108

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Gene Expression Programming(GEP) is a kind of heuristic method based on evolutionary computation theory. GEP has been used to evolve parsimonious decision tree with high accuracy comparable to C4.5. However, the basic GEPDT do not distinguish different attributes, whose boundaries are usually quite different. The basic GEPDT often fails to find optimal split points for some branches and thus handicapped the learning tasks. In this paper, we proposed a simple but effective Split-point Selection Method for GEP evolved decision tree to improve the performance of tree splitting and classification accuracy. Results show that our method can find better generalized ability rules and it is especially suitable for difficult problems with many attributes in different boundaries. © 2009 IEEE.

Number of references: 12

Main heading: Heuristic methods

Controlled terms: Bioactivity - Calculations - Computation theory - Decision trees - Gene expression

Uncontrolled terms: Classification accuracy - Evolutionary computations - Gene expression programming - Learning tasks - Point selection - Tree splitting

Classification code: 961 Systems Science - 922 Statistical Methods - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 921 Mathematics - 912.1 Industrial Engineering - 723 Computer Software, Data Handling and Applications - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 721 Computer Circuits and Logic Elements - 461.9 Biology - 461.8.1 Genetic Engineering - 461.6 Medicine and Pharmacology

DOI: 10.1109/CEC.2009.4983018

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1093.

Accession number: 20094712467034

Title: Design of remote supervisory system of large-scale oil tanks based on ASP

Authors: Lin, Hongju1 ; Liu, Rongchang1 ; Wang, Qingzhu1 ; Ma, Jiwei1 ; Liu, Jinhua1

Author affiliation:

1 Hebei Normal University of Science and Technology, Hebei Qinhuangdao, 066004, China

Corresponding author: Lin, H. (linhongju@126.com)

Source title: Proceedings of the 2009 WRI Global Congress on Intelligent Systems, GCIS 2009

Abbreviated source title: Proc. WRI Global Congr. Intelligent Syst., GCIS

Volume: 4

Part number: 4 of 4

Monograph title: Proceedings of the 2009 WRI Global Congress on Intelligent Systems, GCIS 2009

Issue date: 2009

Publication year: 2009

Pages: 577-581

Article number: 5209229

Language: English

ISBN-13: 9780769535715

Document type: Conference article (CA)

Conference name: 2009 WRI Global Congress on Intelligent Systems, GCIS 2009

Conference date: May 19, 2009 - May 21, 2009

Conference location: Xiamen, China

Conference code: 77974

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: At present, many large-scale oil tanks of petrochemical tank farms are operated by manual power or adopted by C/S (Client/Server) access mode, one new remote online supervising system based on ASP was presented. The CAN Bus was core of bottom layer control network, and design of CAN Bus intellect node is given. Web server was built by ASP and DDE (Dynamic Data Exchange) based on B/S (Browser/Server) access mode. Debugging results and Web released method were given. Seamless connection has been realized between control network and Internet/Intranet. Authorized users can supervise oil tanks parameters by general IE browser on off-site. The system application prospects are widespread in petroleum and chemical industry. © 2009 IEEE.

Number of references: 5

Main heading: Oil tanks

Controlled terms: Chemical industry - Control system synthesis - Controllers - Electric load management - Farms - Intelligent systems - Petroleum industry - Process control - SCADA systems - Web browsers - Web services - Windows - Windows operating system

Uncontrolled terms: ASP(active server page) - CAN(controller area network) - Remote supervisory - Self-defining windows message - Tank farms - Web server

Classification code: 731.1 Control Systems - 732.1 Control Equipment - 805 Chemical Engineering, General - 731 Automatic Control Principles and Applications - 812.3 Glass - 903.4 Information Services - 912.1 Industrial Engineering - 821 Agricultural Equipment and Methods; Vegetation and Pest Control - 723.4 Artificial Intelligence - 511 Oil Field Equipment and Production Operations - 512 Petroleum and Related Deposits - 513 Petroleum Refining - 402 Buildings and Towers - 523 Liquid Fuels - 706.1 Electric Power Systems - 723 Computer Software, Data Handling and Applications - 619.2 Tanks

DOI: 10.1109/GCIS.2009.346

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1094.

Accession number: 20101112765052

Title: Key technique research of image retrieval based on combination feature

Authors: Yang, Yanping¹ ; Wang, Lei²

Author affiliation:

1 Department of Computer Science and Technology, Hebei Normal University of Science and Technology, Qinghuangdao, China

2 Department of Computer Science and Technology, Nanchang Institute of Technology, Nanchang, China

Corresponding author: Yang, Y. (yanping-yang@163.com)

Source title: PACIIA 2009 - 2009 2nd Asia-Pacific Conference on Computational Intelligence and Industrial Applications

Abbreviated source title: PACIIA - Asia-Pac. Conf. Comput. Intell. Ind. Appl.

Volume: 2

Part number: 2 of 2

Monograph title: PACIIA 2009 - 2009 2nd Asia-Pacific Conference on Computational Intelligence and Industrial Applications

Issue date: 2009

Publication year: 2009

Pages: 69-72

Article number: 5406539

Language: English

ISBN-13: 9781424446070

Document type: Conference article (CA)

Conference name: 2009 2nd Asia-Pacific Conference on Computational Intelligence and Industrial Applications, PACIIA 2009

Conference date: November 28, 2009 - November 29, 2009

Conference location: Wuhan, China

Conference code: 79480

Sponsor: Wuhan Institute of Technology; Huazhong University of Science and Technology; Huazhong Normal University; CCF Young Computer Scientists and Engineering Forum Wuhan Branch; International Communication Sciences Association (ICSA)

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper, we introduce the generalization of feature-based image retrieval, the technology of semantic query and how to use CBIR on web. It research the different methods retrieval the image, including color-shape feature (CS) and color-texture-shape (CTS) feature. Through contrasting CS, CST we found CS and CST enhanced effectively and decreased the storage space and calculation. On the base of the color, texture and shape features, the technology of semantic query is proposed in this paper. The query not only reflect the low-layer physical property of image, but also joined with the high-layer semantic property of image. The retrieval performance is improved efficiently. ©2009 IEEE.

Number of references: 8

Main heading: Semantic Web

Controlled terms: Artificial intelligence - Color - Image retrieval - Industrial applications - Morphology - Semantics - Textures - Turpentine - World Wide Web

Uncontrolled terms: Feature-based - Image database - IT research - Key techniques - Retrieval performance - Semantic properties - Semantic query - Shape features - Storage spaces

Classification code: 951 Materials Science - 811.2 Wood and Wood Products - 813.2 Coating Materials - 901.4 Impact of Technology on Society - 903 Information Science - 903.2 Information Dissemination - 913 Production Planning and Control; Manufacturing - 931.2 Physical Properties of Gases, Liquids and Solids - 933 Solid State Physics - 804.1 Organic Compounds - 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 741.1 Light/Optics - 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 741 Light, Optics and Optical Devices - 723.2 Data Processing and Image Processing

DOI: 10.1109/PACIIA.2009.5406539

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1095.

Accession number: 20094512438308

Title: Design of monitoring system for grain depot based on ZigBee technology

Authors: Bao, Changchun1 ; Li, Zhihong1 ; Zhang, Lishan1 ; Li, Guofang1 ; Lun, Cuifen1 ; Li, Yanping1 ; Lin, Zhipeng1

Author affiliation:

1 Department of Mechanical and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Bao, C. (baochangchun@163.com)

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 25

Issue: 9

Issue date: September 2009

Publication year: 2009

Pages: 197-201

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Agricultural Exhibition Road South, Beijing, 100026, China

Abstract: As the environmental parameters monitoring points for large scale grain depot facilities were scattered, a wireless sensor network central monitoring system was designed with the structure of hierarchical network topology. CC2430 chip with ZigBee technology was considered as the core of information processing and wireless nodes detection. The terminal child-nodes of the wireless sensor network was established with temperature and humidity sensors. The system implemented real-time circumstances monitoring at the scene, and transferred data by routing nodes. The routing nodes module corresponded with central node in wireless or RS-485 manner; as a result the detecting information at the scene was transferred to central monitoring computer in real time. The system fulfilled multi-point and real-time detecting inside the grain depot. Results show that the system has the characteristics of good expansibility, networking flexibility and low cost. The design lays a foundation for modern management of large scale grain depot facilities.

Number of references: 19

Main heading: Wireless sensor networks

Controlled terms: Data processing - Electric network topology - Monitoring - Sensor networks - Technology - Wireless telecommunication systems

Uncontrolled terms: Central monitoring system - Environmental parameter - Grain depot - Hierarchical network - Information processing - Low costs - Modern management - Monitoring points - Monitoring system - Real time - Routing node - Single-chip computers - Temperature and humidity sensor - Wireless nodes - ZigBee technology

Classification code: 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 731.1 Control Systems - 732 Control Devices - 901 Engineering Profession - 941 Acoustical and Optical Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 723.2 Data Processing and Image Processing - 722.3 Data Communication, Equipment and Techniques - 717 Optical Communication - 716.3 Radio Systems and Equipment - 716 Telecommunication; Radar, Radio and Television - 703.1 Electric Networks - 722.4 Digital Computers and Systems

DOI: 10.3969/j.issn.1002-6819.2009.09.035

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1096.

Accession number: 20095212569150

Title: An optimal design method for fillet rolling

Authors: Rongchang, Liu¹ ; Yu, Wu² ; Lidong, Chen³ ; Shuying, Ma³

Author affiliation:

1 Europe and America College, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 Tourism Department, Hebei Vocational and Technical College of Building Materials, Qinhuangdao, China

3 Dept. of Mechanics and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Rongchang, L. (lrc-lrc@163.com)

Source title: 2009 2nd International Conference on Intelligent Computing Technology and Automation, ICICTA 2009

Abbreviated source title: Int. Conf. Intelligent Comput. Technol. Autom., ICICTA

Volume: 3

Part number: 3 of 4

Monograph title: 2009 2nd International Conference on Intelligent Computing Technology and Automation, ICICTA 2009

Issue date: 2009

Publication year: 2009

Pages: 302-304

Article number: 5287964

Language: English

ISBN-13: 9780769538044

Document type: Conference article (CA)

Conference name: 2009 2nd International Conference on Intelligent Computing Technology and Automation, ICICTA 2009

Conference date: October 10, 2009 - October 11, 2009

Conference location: Changsha, Hunan, China

Conference code: 78591

Sponsor: IEEE Intelligent Computation Society; IEEE Computer Society; Res. Assoc. Intelligent Computation Technology and Automation; Changsha University of Science and Technology; Hunan University of Science and Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: On the basis of analysis of mechanism about crankshaft fillet rolling, the sliding motion in rolling process is classified into elastic sliding caused by elastic deformation of material and geometry sliding caused by geometrical shape and relative position of sliding pair. Aiming at the issue of sliding in crankshaft rolling process, the kinematical model of fillet rolling machining is established. Velocities of contact-arc on journal and the corresponding point on roller are described by mathematic functions. By drawing line graph about contact-arc velocity between rolling tool and work piece, analysis on kinematics matching is executed. In order to

enhance surface quality, reduce heating value, bring down power loss and achieve the double effect of rolling and polishing, the optimal mathematical model by taking minimum sliding friction as objective function and by taking crankshaft rotating speed, radius of roller and Strutting angle of roller as design variables. Solving is carried out by method of penalty function of interior point and by taking 480 crankshaft as an computational example and satisfying polishing effect is received. © 2009 IEEE.

Number of references: 3

Main heading: Rolling

Controlled terms: Cavity resonators - Computer science - Crankshafts - Design - Functions - Intelligent computing - Kinematics - Mathematical models - Optimal systems - Optimization - Polishing - Rollers (machine components)

Uncontrolled terms: Crankshaft fillet rolling - Design variables - Double effects - Fillet rolling - Geometrical shapes - Heating value - Interior point - Kinematical models - Line graph - Objective functions - Optimal design - Optimal design methods - Optimal design parameters - Penalty function - Polishing effects - Power-losses - Relative positions - Rolling process - Rolling tool - Rotating speed - Sliding friction - Sliding motions - Surface qualities - Work pieces

Classification code: 731.1 Control Systems - 818.3 Rubber and Elastomer Processing - 902.1 Engineering Graphics - 723.4 Artificial Intelligence - 921 Mathematics - 931.1 Mechanics - 961 Systems Science - 921.5 Optimization Techniques - 723 Computer Software, Data Handling and Applications - 535.1 Metal Rolling - 601.2 Machine Components - 604.2 Machining Operations - 408 Structural Design - 714.1 Electron Tubes - 721 Computer Circuits and Logic Elements - 722 Computer Systems and Equipment - 714.3 Waveguides

DOI: 10.1109/ICICTA.2009.539

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1097.

Accession number: 2005409395183

Title: Comprehensive evaluation and study on material consumption of coal machinery

Authors: Zheng, Jin-Fang¹

Author affiliation:

¹ Department of Business Administration, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zheng, J.-F. (zjf640305@sohu.com)

Source title: Journal of Coal Science and Engineering

Abbreviated source title: J. Coal Sci. Eng.

Volume: 11

Issue: 1

Issue date: June 2005

Publication year: 2005

Pages: 109-111

Language: English

ISSN: 10069097

Document type: Journal article (JA)

Publisher: China Coal Society

Abstract: Based on fuzzy mathematics, comprehensive comparisons among four kinds of materials for manufacturing shearer bits were made in six aspects which are respectively hardness, tensile strength, impact toughness, relative wearability, relative lifespan and relative cost. Material 4 is preferred to be the targeted choice for manufacturing bits with superior comprehensive and economic performances.

Number of references: 2

Main heading: Mining machinery

Controlled terms: Coal mines - Costs - Fracture toughness - Fuzzy sets - Hardness - Tensile strength - Wear of materials

Uncontrolled terms: Coal mine machinery - Comprehensive evaluation - Consuming materials - Wearability

Classification code: 421 Strength of Building Materials; Mechanical Properties - 502.2 Mine and Quarry Equipment - 503.1 Coal Mines - 911 Cost and Value Engineering; Industrial Economics - 921 Mathematics - 931.2 Physical Properties of Gases, Liquids and Solids

Treatment: Theoretical (THR)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1098.

Accession number: 2006259948933

Title: Analysis of finite element on tube plug drawing mill

Authors: Xue, Longquan¹ ; He, Yafeng² ; Liu, Rongchang³ ; Dai, Chunying¹ ; Chen, Juntao¹

Author affiliation:

1 School of Mechanical and Precise Instrument, Xi'an University of Technology, Xi'an 710048, China

2 Department of Mechanics and Electronics, Changzhou Institute of Technology, Changzhou 213002, China

3 Department of Mechanics and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Corresponding author: Xue, L.

Source title: Yingyong Jichu yu Gongcheng Kexue Xuebao/Journal of Basic Science and Engineering

Abbreviated source title: Yingyong Jichu yu Gongcheng Kexue Xuebao

Volume: 14

Issue: 1

Issue date: March 2006

Publication year: 2006

Pages: 100-105

Language: Chinese

ISSN: 10050930

Document type: Journal article (JA)

Publisher: Editorial Board of Journal of Basic Science and

Abstract: 3D finite element model of steel tube and internal and external dies is created to simulate the whole process of tube plug drawing mill dynamically based on explicit dynamic module of ANSYS. The

relationship of drawing force and processing parameter such as die angle, friction coefficient and wall thickness is studied. According to regularities of stress distribution, the mechanisms of the problem, which often cause tensile failure etc in production, are analyzed. The phenomenon of longitudinal fission seldom occurs during the process of tube plug drawing mill compared with empty-sunken steel tube. The problem which causes transverse fissure in form of partial failure also seldom occurs owing to uniform distribution of axial stress in cross section. The analysis of drawing force model is in good agreement with the experimental result. Foundation is laid for optimal design of die structure and technological design of tube plug drawing mill.

Number of references: 9

Main heading: Drawing (forming)

Controlled terms: Dies - Dynamics - Failure (mechanical) - Finite element method - Friction - Mathematical models - Steel - Stresses - Tensile strength - Three dimensional - Tubes (components)

Uncontrolled terms: Drawing force - Steel tube - Stress distribution - Tube plug drawing mill

Classification code: 931.1 Mechanics - 921.6 Numerical Methods - 619.1 Pipe, Piping and Pipelines - 603.2 Machine Tool Accessories - 545.3 Steel - 535.2 Metal Forming - 421 Strength of Building Materials; Mechanical Properties

Treatment: Applications (APP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1099.

Accession number: 20091411996892

Title: Theoretical model and loading analysis of crankshaft fillet rolling

Authors: Liu, Rongchang¹ ; Ma, Shuying¹ ; Chen, Xiuhong¹ ; Xue, Longquan² ; Dong, Litao¹

Author affiliation:

- 1 Hebei Normal University of Science and Technology, E and A College, Qin huangdao 066004, China
- 2 Xi'an University of Technology, School of Mechanical and Precise Instrument, Xi'an 710048, China

Corresponding author: Liu, R. (lrc-lrc@163.com)

Source title: Proceedings of the International Conference on Information Management Proceedings of

the International Conference on Information Management, Innovation Management and Industrial Engineering, ICIII 2008

Abbreviated source title: Proc. Int. Conf. Inf. Manage., Innov. Manage. Ind. Eng., ICIII

Volume: 3

Part number: 3 of 3

Monograph title: Proceedings of the International Conference on Information Management, Innovation Management and Industrial Engineering, ICIII 2008

Issue date: 2008

Publication year: 2008

Pages: 440-444

Article number: 4737810

Language: English

ISBN-13: 9780769534350

Document type: Conference article (CA)

Conference name: International Conference on Information Management, Innovation Management and Industrial Engineering, ICIII 2008

Conference date: December 19, 2008 - December 21, 2008

Conference location: Taipei, Taiwan

Conference code: 75554

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: In this paper, the equivalent mechanics model of strengthening crankshaft fillet through the rolling process is established. The calculation formulae of limit rolling load are deduced by considering of the influence of structural parameters of crankshaft and rolling cutter, layout situation of rolling cutter and material property parameters. The relationship between rolling load and stress is studied and the correcting method by using the plastic coefficient is put forward: the selection of rolling load should not only rely on the structural parameters of crankshaft but also should consider of the influences of material properties, structural dimensions of crankshaft and rollers and layout situation of rolling cutters. Calculation and test verification is carried out by example of 480Q crankshaft. the calculating formulas of the limited rolling loads and the principle about selecting

the rolling loads which is provided by this paper are propitious to turn away the situation of "no evidence to rely on" in selecting loads of rolling equipments at present. © 2008 IEEE.

Number of references: 7

Main heading: Rolling mills

Controlled terms: Crankshafts - Industrial engineering - Information management - Innovation

Uncontrolled terms: Crankshaft fillet rollings - Loading analysis - Material properties - Material property parameters - Mechanics models - Plastic coefficients - Rolling loads - Rolling process - Structural dimensions - Structural parameters - Test verifications - Theoretical models

Classification code: 535.1.1 Rolling Mills - 601.2 Machine Components - 903.2 Information Dissemination - 912 Industrial Engineering and Management - 912.1 Industrial Engineering - 912.2 Management

DOI: 10.1109/ICIII.2008.104

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1100.

Accession number: 20074710936137

Title: Fuzzy control with robust controller for MIMO nonlinear systems

Authors: Sun, Duo-Qing^{1, 2}; Ma, Xiao-Ying³; Yu, Bai-Yin¹; Li, Xia¹

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Beijing Institute of Control Engineering, Chinese Academy of Space Technology, Beijing 100080, China

3 Institute of Mathematics and Systems Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Sun, D.-Q. (sun_duoqing@126.com)

Source title: Zhejiang Daxue Xuebao (Gongxue Ban)/Journal of Zhejiang University (Engineering Science)

Abbreviated source title: Zhejiang Daxue Xuebao (Gongxue Ban)

Volume: 41

Issue: 10

Issue date: October 2007

Publication year: 2007

Pages: 1620-1624+1628

Language: Chinese

ISSN: 1008973X

CODEN: CHHPDK

Document type: Journal article (JA)

Publisher: Zhejiang University Press, 20 Yugu Road, Hangzhou, 310027, China

Abstract: A novel indirect adaptive fuzzy robust control scheme was proposed for a class of uncertain multi-input and multi-output (MIMO) nonlinear systems to improve the fuzzy control accuracy. Fuzzy logic systems were used to approximate unknown nonlinear functions, and the parameter adjusting laws were derived by the tracking errors. The robust control term was used to compensate approximation errors, which reducing the effect on tracking accuracy caused by approximation errors. Based on Lyapunov function method, it was proved that the proposed scheme can not only make the tracking errors converge to the small neighborhood of the origin, but also reduce the tracking errors by increasing the value of designed parameters, and improve the control accuracy. The simulation demonstrates the effectiveness of the approach.

Number of references: 11

Main heading: Fuzzy control

Controlled terms: Adaptive control systems - Fuzzy logic - Lyapunov functions - Nonlinear systems - Robust control - System stability

Uncontrolled terms: Adaptive control - Indirect adaptive fuzzy robust control scheme - Nonlinear multioutput (MIMO) system

Classification code: 723.4 Artificial Intelligence - 731.4 System Stability - 921 Mathematics - 961 Systems Science

Treatment: Applications (APP); Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1101.

Accession number: 20083711531336

Title: Preparation and anticoagulant activity of sulfated 6-carboxychitosan

Authors: Yang, Yuedong¹ ; Zhou, Yongguo¹ ; Hou, Wenlong¹ ; Zhao, Yongguang¹ ; Ren, Yanjun¹

Author affiliation:

1 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Yang, Y. (kycyyd@yahoo.com.cn)

Source title: 2nd International Conference on Bioinformatics and Biomedical Engineering, iCBBE 2008

Abbreviated source title: Int. Conf. Bioinformatics Biomed. Eng., iCBBE

Monograph title: 2nd International Conference on Bioinformatics and Biomedical Engineering, iCBBE 2008

Issue date: 2008

Publication year: 2008

Pages: 982-985

Article number: 4535121

Language: English

ISBN-13: 9781424417483

Document type: Conference article (CA)

Conference name: 2nd International Conference on Bioinformatics and Biomedical Engineering, iCBBE 2008

Conference date: May 16, 2008 - May 18, 2008

Conference location: Shanghai, China

Conference code: 73341

Sponsor: Cent. Devices and Radiological Health, Food and Drug Adm.; et al.; IEEE Engineering in Medicine and Biology Society (EMB); Shanghai Jiaotong Univ., College of Life Science and Technology; Univ. Iowa, Cent. Bioinformatics and Computational Biology; Wuhan Univ., Advanced Research Center for Science and Technology

Publisher: IEEE Computer Society

Abstract: 6-Carboxychitosan (6-CC), prepared by selectively oxidization of chitosan powder with NO_2 gas in glacial acetic acid, was sulfated with chlorosulfonic acid in formamide to give sulfated 6-carboxylchitosan (S6CC). In S6CC, $-\text{SO}_3\text{H}$ groups were primarily grafted on $-\text{NH}_2$, next on secondary $-\text{OH}$, and thirdly on $-\text{CH}_2\text{OH}$ positions. Sodium salt of S6CC (Na-S6CC) was more similar with heparin sodium than sulfated chitosan in both structure and anticoagulation activity.

Number of references: 5

Main heading: Information science

Controlled terms: Amines - Biocommunications - Bioinformatics - Biomedical engineering

Uncontrolled terms: 6-carboxychitosan - Chitosan - International conferences - Sulfated 6-carboxychitosa - Sulfated chitosan

Classification code: 461.1 Biomedical Engineering - 461.8.2 Bioinformatics - 716.1 Information Theory and Signal Processing - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 723 Computer Software, Data Handling and Applications - 804.1 Organic Compounds - 903 Information Science

DOI: 10.1109/ICBBE.2008.241

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1102.

Accession number: 2005239144863

Title: New method of orientation and calibration for gas detector

Authors: Jin, Ren-Chang¹ ; Van, Dong-Liang¹ ; Li, Guo-Fang¹ ; Ma, Yu-Quan¹ ; Wang, Jian-Feng¹ ; Liu, Shi-Guang¹

Author affiliation:

1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Jin, R.-C.

Source title: Journal of Coal Science and Engineering

Abbreviated source title: J. Coal Sci. Eng.

Volume: 10

Issue: 2

Issue date: December 2004

Publication year: 2004

Pages: 111-113

Language: English

ISSN: 10069097

Document type: Journal article (JA)

Publisher: China Coal Society

Abstract: The software system, hardware system and performance principle of the gas detector were briefly described. A new method was developed for orientating and calibrating the instrument. The method shows excellence in automation and intelligence, and presents simpler and more reliable new method for orientating and calibrating the nominal physical quantity of the nonlinear sensor.

Number of references: 8

Main heading: Gas detectors

Controlled terms: Automation - Calibration - Chemical sensors - Computer hardware - Computer software - Flash memory - Light emitting diodes - Microprocessor chips - Random access storage

Uncontrolled terms: Calibrating - Detector - Nonlinear sensors - Orientating - Software system

Classification code: 914.1 Accidents and Accident Prevention - 801 Chemistry - 731 Automatic Control Principles and Applications - 943.3 Special Purpose Instruments - 723 Computer Software, Data Handling and

Applications - 722 Computer Systems and Equipment - 714.2 Semiconductor Devices and Integrated Circuits -
722.1 Data Storage, Equipment and Techniques

Treatment: Theoretical (THR)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1103.

Accession number: 20093612289828

Title: Temperature properties of mean number of phonons for magnetopolaron in an asymmetric quantum dot

Authors: Eerdunchaolu1 ; Zhang, Peng2 ; Xin, Wei1

Author affiliation:

- 1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 Department of Mathematics and Physics in China University of Petroleum, Beijing 102249, China

Corresponding author: Eerdunchaolu

Source title: Zhongguo Shiyou Daxue Xuebao (Ziran Kexue Ban)/Journal of China University of Petroleum (Edition of Natural Science)

Abbreviated source title: Zhongguo Shiyou Daxue Xuebao (Ziran Kexue Ban)

Volume: 33

Issue: 4

Issue date: August 2009

Publication year: 2009

Pages: 171-174

Language: Chinese

ISSN: 16735005

Document type: Journal article (JA)

Publisher: University of Petroleum, China, Dongying, 257062, China

Abstract: Temperature dependence of the the vibration frequency and the mean number of phonons for weak-coupling magnetopolaron in an asymmetric quantum dot were studied by using Huybrechts' linear combination operator and Lee-Low-Pines variation method. Numerical results show that the vibration frequency of weak-coupling magnetopolaron will increase with the longitudinal effective confinement strength, transverse effective confinement strength and the cyclotron frequency increasing. The mean number of phonons for weak-coupling magnetopolaron will increase with the coupling strength increasing and will decrease with the temperature increasing.

Number of references: 11

Main heading: Semiconductor quantum dots

Controlled terms: Phonons

Uncontrolled terms: Asymmetry quantum dot - Confinement strength - Coupling strengths
- Cyclotron frequency - Linear combination operators - Magnetopolarons - Mean number of phonons
- Numerical results - Quantum Dot - Temperature dependence - Temperature properties -
Variation method - Vibration frequency - Weak couplings

Classification code: 714.2 Semiconductor Devices and Integrated Circuits - 751.1 Acoustic Waves -
931.3 Atomic and Molecular Physics

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1104.

Accession number: 20090211855803

Title: Ground-state lifetime of strong-coupling bound magnetopolaron in asymmetrical quantum dot

Authors: Li, Zhixin¹ ; Xiao, Jinglin^{1, 2}

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Physics and Electro-Information, Inner Mongolia University for Nationalities, Tongliao 028043, China

Corresponding author: Li, Z. (zxlxx2006@126.com)

Source title: Guangxue Xuebao/Acta Optica Sinica

Abbreviated source title: Guangxue Xuebao

Volume: 28

Issue: 12

Issue date: December 2008

Publication year: 2008

Pages: 2416-2419

Language: Chinese

ISSN: 02532239

CODEN: GUXUDC

Document type: Journal article (JA)

Publisher: Chinese Optical Society, P.O. Box 80, Xi'an, 710068, China

Abstract: The properties of bound magnetopolaron with strong electron-LO phonon coupling were studied using a linear combination operator and a unitary transformation method in an asymmetry quantum dot. The ground state energy of strong-coupling bound magnetopolaron was obtained in an asymmetry quantum dot and the effects of the transverse and longitudinal confinement lengths of quantum dot, the ground state energy of magnetopolaron, the electron-phonon coupling strength and the external temperature on the ground state lifetime of magnetopolaron were discussed. Quantum transition which causes the changes of the magnetopolaron lifetime is occurred in the quantum system due to the electron-phonon interaction and the influence of external temperature which is the magnetopolaron leap from the ground state to the first-excited state after absorbing a LO-phonon. Numerical calculations are performed and the results show that the ground state lifetime of bound magnetopolaron is extended with the rise of the ground state energy, and shortened with the electron-phonons coupling strength, the transverse and longitudinal confinement lengths of quantum dot, and the external temperature.

Number of references: 16

Main heading: Semiconductor quantum dots

Controlled terms: Electron-phonon interactions - Electrons - Ground state - Mathematical operators - Numerical analysis - Optical waveguides - Phonons - Photons - Quantum electronics - Quantum optics - Quantum theory

Uncontrolled terms: Asymmetry quantum dot - Bound magnetopolaron - Confinement lengths - Coupling strengths - External temperatures - Ground-state lifetime - Linear combination operator - Lo phonons - Numerical calculations - Phonon couplings - Quantum systems - Quantum transitions - State energies - Unitary transformations

Classification code: 933 Solid State Physics - 751.1 Acoustic Waves - 921 Mathematics - 921.6 Numerical Methods - 931.3 Atomic and Molecular Physics - 931.4 Quantum Theory; Quantum Mechanics - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 744 Lasers - 741.1 Light/Optics - 717.2 Optical Communication Equipment - 714.3 Waveguides - 714.2 Semiconductor Devices and Integrated Circuits - 701.1 Electricity: Basic Concepts and Phenomena - 741.3 Optical Devices and Systems

DOI: 10.3788/AOS20082812.2416

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1105.

Accession number: 20093612290731

Title: Application of microteaching under network environment

Authors: Zhang, Guirong¹ ; Zhao, Jiangong² ; Shao, Lijun² ; Bian, Fenglian²

Author affiliation:

1 Education Department, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, Hebei Province, China

Corresponding author: Zhang, G. (zgr64@126.com)

Source title: Proceedings of the 1st International Workshop on Education Technology and Computer Science, ETCS 2009

Abbreviated source title: Proc. Int. Workshop Educ. Technol. Comput. Sci., ETCS

Volume: 1

Part number: 1 of 3

Monograph title: Proceedings of the 1st International Workshop on Education Technology and Computer Science, ETCS 2009

Issue date: 2009

Publication year: 2009

Pages: 724-727

Article number: 4958871

Language: English

ISBN-13: 9780769535579

Document type: Conference article (CA)

Conference name: 1st International Workshop on Education Technology and Computer Science, ETCS 2009

Conference date: March 7, 2009 - March 8, 2009

Conference location: Wuhan, Hubei, China

Conference code: 76728

Sponsor: Huazhong University Science and Technology; Harbin Institute of Technology; IEEE Harbin Section; IEEE Technical Committee on Learning Technology

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper made suggestions as to the modifying and improving of the traditional microteaching under network environment. This paper discussed the shortcomings of microteaching, explained that it is necessary to apply the microteaching under the network environment after describing its function and advantage, and concludes with the implementing measures. © 2009 IEEE.

Number of references: 6

Main heading: Teaching

Controlled terms: Computer science - Education computing - Students

Uncontrolled terms: Microteaching - Network environment - Network environments - Normal students - Skill training

Classification code: 721 Computer Circuits and Logic Elements - 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 723.2 Data Processing and Image

Processing - 901.2 Education - 912.4 Personnel

DOI: 10.1109/ETCS.2009.166

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1106.

Accession number: 2005349312622

Title: Technology for sour soymilk from leaching of Tremella fuciformis Berk added to non-odor soybean

Authors: Cui, Ruijing; Zhang, Meishen; Liu, Shaojun; Liu, Xiufeng

Corr. author affiliation: Department of Food Engineering, Hebei Normal University of Science and Technology, Changli 066600, China

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 21

Issue: 7

Issue date: July 2005

Publication year: 2005

Pages: 158-161

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Beijing, China

Abstract: The soymilk yogurt was processed using the leaching liquid of Tremella fuciformis Berk by direct addition of non-odor soybean without lipoxidase. The result showed that the optimum conditions were adding 10% leaching liquid of Tremella fuciformis Berk, 3% sugar, 15% pure milk, 25% acid creamery, and fermenting for 7 hours at the temperature of 40-42°C. Such soymilk yogurt had significant advantages over conventional products by using usual processing technology with common bean, such as without deodorisation, decreasing the consumption of the energy, enhancing the protein recovery rate. What's more, under the condition that soymilk and the leaching liquid of Tremella fuciformis Berk were mixed fermentation, the leaching liquid of Tremella fuciformis Berk not only benefited the fermentation of lactic acid bacteria, and the increase of aldehyde and diacetyl content, but also increased the stability of soymilk regarding against water bleeding.

Number of references: 15

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1107.

Accession number: 20100712715434

Title: MFISW: A new method for mining frequent itemsets in time and transaction sensitive sliding window

Authors: Feng, Jiayin¹ ; Yan, Zhongwen¹ ; Kang, Yan¹ ; Wang, Jing¹ ; An, Lihong¹

Author affiliation:

1 Computer Science Department, Foreign Languages Department, College of HeBei Normal University of Science and Technology, Qin Huangdao, HeBei Province, China

Corresponding author: Feng, J. (Feng_ada2000@163.com)

Source title: 6th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2009

Abbreviated source title: Int. Conf. Fuzzy Syst. Knowl. Discov., FSKD

Volume: 5

Part number: 5 of 7

Monograph title: 6th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2009

Issue date: 2009

Publication year: 2009

Pages: 270-274

Article number: 5360616

Language: English

ISBN-13: 9780769537351

Document type: Conference article (CA)

Conference name: 6th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2009

Conference date: August 14, 2009 - August 16, 2009

Conference location: Tianjin, China

Conference code: 79367

Sponsor: Tianjin University of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: It is challenge to design an efficient summary data structure and an online approximation algorithms to limit the memory usage and the scan times in streaming data mining. In this paper, we present a CST(compressed Suffix Tree) structure to store arriving itemsets in the SC model. Then, our MFISW (Mining Frequent Itemsets in Sliding Window) algorithm with the top-down traversal strategy can only scan data once to mine frequent itemsets in sliding window. Next, MFISW algorithm can update the mining result incrementally. Experiment shows that MFISW is efficient and scalable. © 2009 IEEE.

Number of references: 8

Main heading: Approximation algorithms

Controlled terms: Data communication systems - Data mining - Data structures - Fuzzy systems - Hydraulics - Mining - Windows

Uncontrolled terms: Data stream - Frequent Itemsets - Item sets - Memory usage - Mining frequent itemsets - Scan data - Sliding Window - Streaming data - Suffix-trees - Topdown

Classification code: 723.3 Database Systems - 723.4 Artificial Intelligence - 731.1 Control Systems -

812.3 Glass - 921 Mathematics - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 961 Systems Science - 723.2 Data Processing and Image Processing - 402 Buildings and Towers - 502.1 Mine and Quarry Operations - 632.1 Hydraulics - 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723 Computer Software, Data Handling and Applications

DOI: 10.1109/FSKD.2009.844

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1108.

Accession number: 20084011617449

Title: Discrete formulations of the BIE without singularity for the elastic FM-BEM

Authors: Chen, Yingjie¹ ; Liu, Jianping^{2, 3} ; Chen, Yiming² ; Li, Yong² ; Bai, Silin²

Author affiliation:

- 1 College of Architecture Engineering and Mechanics, Yanshan University, Qinhuangdao, 066004, China
- 2 College of Science, Yanshan University, Qinhuangdao, 066004, China
- 3 Hebei Normal University of Science and Technology, Hebei Qinhuangdao, 066004, China

Corresponding author: Chen, Y. (cyjysu@126.com.cn)

Source title: 3rd International Conference on Innovative Computing Information and Control, ICICIC'08

Abbreviated source title: Int. Conf. Innovative Comput. Inf. Control., ICICIC

Monograph title: 3rd International Conference on Innovative Computing Information and Control, ICICIC'08

Issue date: 2008

Publication year: 2008

Article number: 4603776

Language: English

ISBN-13: 9780769531618

Document type: Conference article (CA)

Conference name: 3rd International Conference on Innovative Computing Information and Control, ICICIC'08

Conference date: June 18, 2008 - June 20, 2008

Conference location: Dalian, Liaoning, China

Conference code: 73762

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Combined with the fast multiple methods, the boundary element method become quite efficient to deal with large-scale engineering and scientific problems. In this paper, by applying fast multiple expansions, the boundary integral equation about the elastic problem is discrete. In boundary integral equality, because solutions contain singular term $1/r$, which influences the application of fast multiple expansion method, but by applying Laplace transformation, that can be reduced to exponential series. Then this method avoids the singularity of FMM, gets the new discrete equality and provides a new method for theory analysis of FMM. © 2008 IEEE.

Number of references: 8

Main heading: Boundary element method

Controlled terms: Boundary integral equations - Differential equations - Integral equations - Laplace transforms - Numerical analysis - Technology

Uncontrolled terms: Boundary elements - Boundary integrals - Elastic problems - Expansion methods - International conferences - Laplace transformations - Large-scale engineering - Multiple methods

Classification code: 901 Engineering Profession - 921.2 Calculus - 921.3 Mathematical Transformations - 921.6 Numerical Methods

DOI: 10.1109/ICICIC.2008.232

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20083611518747

Title: Indentation and friction of Zr-based bulk metallic glasses on nano-scale

Authors: Ma, M.Z.1 ; Zong, H.T.1 ; Wang, H.Y.1 ; Zhang, W.G.1, 2 ; Song, A.J.1, 2 ; Liang, S.X.1 ; Wang, Q.1 ; Zhang, X.Y.1 ; Jing, Q.1 ; Li, G.1 ; Liu, R.P.1

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, 066004, China

2 Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Liu, R.P. (riping@ysu.edu.cn)

Source title: Materials Letters

Abbreviated source title: Mater Lett

Volume: 62

Issue: 28

Issue date: November 15, 2008

Publication year: 2008

Pages: 4348-4350

Language: English

ISSN: 0167577X

CODEN: MLETDJ

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: Indentation and sliding friction of the as-cast, the relaxed and the crystallized Zr₄₁Ti₁₄Cu_{12.5}Ni₁₀Be_{22.5} bulk metallic glass (BMG) are investigated on nano - scale by nanoindentation. The depth, the width and the morphology of the scratches formed by the tip of the nanoindenter are different, which reflect the differences in structure, not only between the glassy and the crystallized states but also between the two glassy states, the as - cast and the relaxed. The coefficient of sliding friction of Zr - based BMG is increased with increasing the load, and it is maximal for annealed at 553K. Improved plastic deformability is found for the relaxed one. Crown Copyright © 2008.

Number of references: 20

Main heading: Metallic glass

Controlled terms: Alloys - Friction - Liquid metals - Zirconium

Uncontrolled terms: As-cast - Bulk metallic glasses - Nano scaling - Nanoindentation - Sliding friction - Zr41Ti14Cu12.5Ni10Be22.5 bulk metallic glasses

Classification code: 531 Metallurgy and Metallography - 531.1 Metallurgy - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 931.1 Mechanics

Numerical data indexing: Temperature 5.53e+02K

DOI: 10.1016/j.matlet.2008.07.019

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1110.

Accession number: 20092912195286

Title: Effect of duplex surface treatment on electrochemical properties of AB₃-type La_{0.88}Mg_{0.12}Ni_{2.95}Mn_{0.10}Co_{0.55}Al_{0.10} hydrogen storage alloy

Authors: Bai, Taoyu² ; Han, Shumin^{1, 2} ; Zhu, Xilin² ; Zhang, Yue³ ; Li, Yuan² ; Zhang, Wencui²

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, 066004, China

2 College of Environmental and Chemical Engineering, Yanshan University, Qinhuangdao, 066004, China

3 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Han, S. (hanshm@ysu.edu.cn)

Source title: Materials Chemistry and Physics

Abbreviated source title: Mater Chem Phys

Volume: 117

Issue: 1

Issue date: September 15, 2009

Publication year: 2009

Pages: 173-177

Language: English

ISSN: 02540584

CODEN: MCHPDR

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: A new surface treatment technique, i.e. HF etching-Ni coating duplex surface treatment was applied to modify AB₃-type La_{0.88}Mg_{0.12}Ni_{2.95}Mn_{0.10}Co_{0.55}Al_{0.10} hydrogen storage alloy. Surface structure and electrochemical properties were investigated. SEM and EDS indicated that Ni deposited on the alloy surface, forming a porous Ni-rich layer. And thus initial activation ability and kinetics properties of the alloy electrode were improved significantly. The ratio C_{1st}/C_{max} increased from 68.0% to 89.3%, the middle discharge voltage is 0.025 V higher, the high rate dischargeability (HRD) was about 10% higher at a current density of 1080-1800 mA g⁻¹, and the cycling stability was improved slightly after duplex surface treatment. In addition, the exchange current density I₀, the limiting current density I_L, the oxidation peak current and the peak area of cyclic voltammograms were also increased obviously after the duplex surface treatment. © 2009 Elsevier B.V. All rights reserved.

Number of references: 17

Main heading: Surface properties

Controlled terms: Aluminum - Cerium alloys - Electric discharges - Electrochemical electrodes - Electrochemical properties - Hydrogen - Hydrogen storage - Hydrogen storage alloys - Lanthanum - Manganese - Manganese compounds - Nickel - Surface structure - Surface treatment - Trace analysis

Uncontrolled terms: Activation ability - Alloy electrodes - Alloy surfaces - Cyclic voltammograms - Cycling stability - Discharge voltages - Duplex surface treatment - Exchange current densities - HF etching - High rate dischargeability - Limiting current density - Ni coating - Oxidation peak - Peak area - Porous Ni - SEM - Treatment techniques

Classification code: 704.1 Electric Components - 801 Chemistry - 801.4.1 Electrochemistry - 802 Chemical Apparatus and Plants; Unit Operations; Unit Processes - 802.1 Chemical Plants and Equipment - 804

Chemical Products Generally - 804.1 Organic Compounds - 804.2 Inorganic Compounds - 931 Classical Physics; Quantum Theory; Relativity - 931.2 Physical Properties of Gases, Liquids and Solids - 951 Materials Science - 701.1 Electricity: Basic Concepts and Phenomena - 522 Gas Fuels - 525.7 Energy Storage - 539 Metals Corrosion and Protection; Metal Plating - 541.1 Aluminum - 542 Beryllium, Lithium, Magnesium, Titanium and Other Light Metals and Alloys - 543.2 Manganese and Alloys - 547.2 Rare Earth Metals - 548.1 Nickel - 548.2 Nickel Alloys - 549 Nonferrous Metals and Alloys - 604.2 Machining Operations

Numerical data indexing: Percentage 1.00e+01%, Percentage 6.80e+01% to 8.93e+01%, Voltage 2.50e-02V

DOI: 10.1016/j.matchemphys.2009.05.031

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1111.

Accession number: 20070510400533

Title: Fluorescence emitted from low generation PAMAM dendrimer and its application in fluorescence labeling

Authors: Wang, Dong-Jun¹ ; Jia, Dan-Dan¹ ; Shen, Xi-Hai¹ ; Zhen, Zhen² ; Liu, Xin-Hou²

Author affiliation:

- 1 Department of Chemistry, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China
- 2 Institute of Science and Technology, Chinese Academy of Sciences, Beijing 100101, China

Corresponding author: Wang, D.-J.

Source title: Gongneng Cailiao/Journal of Functional Materials

Abbreviated source title: Gongneng Cailiao

Volume: 37

Issue: 12

Issue date: December 2006

Publication year: 2006

Pages: 1864-1866

Language: Chinese

ISSN: 10019731

CODEN: GOCAEA

Document type: Journal article (JA)

Publisher: Journal of Functional Materials, P.O. Box 1512, Chongqing, 630700, China

Abstract: Based on the experiment results of fluorescence from low generation PAMAM dendrimer, it can be proposed that amine groups in PAMAM dendrimer play the critical role in emitting fluorescence, but not the crowding state of these amine groups. At different pH values, the speed of forming fluorescence centers and the fluorescence stability were observed to be different. The intensity of fluorescence would be obviously reduced after varying the pH value between 10 and 3 for several times. Because of its high biocompatibility and low price, low generation PAMAM dendrimer may find applications as a new kind of fluorescence indicator.

Number of references: 10

Main heading: Dendrimers

Controlled terms: Biocompatibility - Fluorescence - Labeling - pH

Uncontrolled terms: Fluorescence labeling - PAMAM dendrimer - Without fluorophore

Classification code: 462.5 Biomaterials (including synthetics) - 741.1 Light/Optics - 801.1 Chemistry, General - 815.1 Polymeric Materials

Treatment: Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1112.

Accession number: 20092312107177

Title: Digital watermark algorithm based on embedding gray image into color image

Authors: Gao, Jing-Wei1 ; Li, Jian-Guo2

Author affiliation:

- 1 College of Mathematics and Information Science, Hebei Normal University, Shijiazhuang, China
- 2 Department of Computer Science, Hebei Normal University of Science and Technology, Qin Huangdao, China

Corresponding author: Gao, J.-W. (jingwei_gao@126.com)

Source title: Proceedings - 2009 International Conference on Computer Engineering and Technology, ICCET 2009

Abbreviated source title: Proc. - Int. Conf. Comput. Eng. Technol., ICCET

Volume: 2

Monograph title: Proceedings - 2009 International Conference on Computer Engineering and Technology, ICCET 2009

Issue date: 2009

Publication year: 2009

Pages: 146-147

Article number: 4769576

Language: English

ISBN-13: 9780769535210

Document type: Conference article (CA)

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Recently, as the fast development of the computer network communication technology, it's more and more convenient for the digital information storage and transmission. Therefore, more and more attention is focused on the copyright protection of digital information. An algorithm that gray image as watermark is embedded in original color-image is introduced. This algorithm thinks over both unobtrusiveness and robustness, and the size of image is unlimited. So it has strongly practical significance. © 2009 IEEE.

Number of references: 7

Main heading: Military photography

Controlled terms: Algorithms - Copyrights - Data processing - Digital watermarking - Internet - Watermarking

Uncontrolled terms: Color images - Copyright protections - Digital information - Digital information storage - Digital water-marks - Gray image - Network communications - Unobtrusiveness - Watermark algorithm

Classification code: 921 Mathematics - 903 Information Science - 902.3 Legal Aspects - 811.1.1 Papermaking Processes - 742.1 Photography - 723.2 Data Processing and Image Processing - 723 Computer Software, Data Handling and Applications - 718 Telephone Systems and Related Technologies; Line Communications - 717 Optical Communication - 716 Telecommunication; Radar, Radio and Television - 404.1 Military Engineering

DOI: 10.1109/ICCET.2009.238

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1113.

Accession number: 20101212782418

Title: Soft control for swarm systems with simple attraction and repulsion functions

Authors: Wang, Ying¹ ; Mao, Xue-Zhi¹ ; Liu, Jian-Ping¹

Author affiliation:

¹ Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Hebei Qinhuangdao, 066004, China

Corresponding author: Wang, Y. (zhuti@163.com)

Source title: ICINIS 2009 - Proceedings of the 2nd International Conference on Intelligent Networks and Intelligent Systems

Abbreviated source title: ICINIS - Proc. Int. Conf. Intelligent Netw. Intelligent Syst.

Monograph title: ICINIS 2009 - Proceedings of the 2nd International Conference on Intelligent Networks and Intelligent Systems

Issue date: 2009

Publication year: 2009

Pages: 482-485

Article number: 5362921

Language: English

ISBN-13: 9780769538525

Document type: Conference article (CA)

Conference name: 2nd International Conference on Intelligent Networks and Intelligent Systems, ICINIS 2009

Conference date: November 1, 2009 - November 3, 2009

Conference location: Tianjin, China

Conference code: 79558

Sponsor: Intelligent Networks and Systems Society (INASS); Hebei University of Technology; IEEE Wuhan Section; Chinese Academy of Science and Technology in Japan; Japanese Neural Network Society

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper considers a swarm model with a class of simple attraction and repulsion functions and delves into the question of "soft control" for swarms system in Euclidean space, which disturb the collective behavior of the group by adding a few controlled intelligent agents at the condition of keeping the local rules of the existing agents in the system. This paper gives a control law for controlled intelligent agents according to the initial center and the expectant center, which can make the swarm center to an expectant position. Simulation testing shows the feasibility of soft control for swarms system. © 2009 IEEE.

Number of references: 8

Main heading: Intelligent agents

Controlled terms: Intelligent networks - Intelligent systems - Mathematical models

Uncontrolled terms: Collective behavior - Control laws - Euclidean spaces - Local rules - Repulsion functions - Soft control - Swarm model - Swarm systems

Classification code: 716 Telecommunication; Radar, Radio and Television - 717 Optical Communication - 718 Telephone Systems and Related Technologies; Line Communications - 723.4 Artificial Intelligence - 723.5 Computer Applications - 921 Mathematics

DOI: 10.1109/ICINIS.2009.129

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1114.

Accession number: 20073110726902

Title: Improved distribution function for electrons bound to donors suitable for valley-orbit splitting

Authors: Dai, Zhenqing^{1, 2}; Yang, Kewu^{1, 3}; Yang, Ruixia¹

Author affiliation:

1 Hebei University of Technology, Tianjin 300130, China

2 Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

3 The 13th Research Institute, CETC, Shijiazhuang 050051, China

Corresponding author: Dai, Z. (daizhenqing@126.com)

Source title: Gutu Dianzixue Yanjiu Yu Jinzhan/Research and Progress of Solid State Electronics

Abbreviated source title: Gutu Dianzixue Yanjiu Yu Jinzhan

Volume: 27

Issue: 2

Issue date: May 2007

Publication year: 2007

Pages: 147-150+180

Language: Chinese

ISSN: 10003819

CODEN: GDYJE2

Document type: Journal article (JA)

Publisher: Research Progress of Solid State Electronics, P.O. Box 1601, Nanjing, 210016, China

Abstract: In semiconductors, there is the phenomenon of valley-orbit splitting. However, the existed distribution function for electrons bound to donors does not include it. In this paper, a new distribution function

including valley-orbit splitting is established by introducing a new partition function and an ensemble average increment of all split donor levels. It is found that the thermal ionization energy and the optical ionization energy for donors are uniform when the least-squares fit is carried out with the new distribution function for silicon doped with arsenic and 6H-SiC containing nitrogen.

Number of references: 16

Main heading: Semiconductor materials

Controlled terms: Arsenic - Band structure - Curve fitting - Distribution functions - Doping (additives) - Electrons - Silicon

Uncontrolled terms: Donors - Electrons bound - Ensemble average increment - Least squares fit - Optical ionization energy - Partition function - Thermal ionization energy - Valley orbit splitting

Classification code: 933 Solid State Physics - 931.3 Atomic and Molecular Physics - 922.1 Probability Theory - 921.6 Numerical Methods - 712.1 Semiconducting Materials - 701.1 Electricity: Basic Concepts and Phenomena - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals

Treatment: Applications (APP); Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1115.

Accession number: 20135217125723

Title: Application of strength reduction method in the stability analysis of Danjiangkou reservoir 3D bank

Authors: Song, Zhi-Bin¹ ; Xu, Li-Hua² ; Liu, Shu-Rong¹ ; Chi, Yin²

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 School of Civil Engineering, Wuhan University, Wuhan 430072, China

Source title: Proceedings of the 10th International Symposium on Structural Engineering for Young Experts, ISSEYE 2008

Abbreviated source title: Proc. Int. Symp. Struct. Eng. Young Experts, ISSEYE

Monograph title: Proceedings of the 10th International Symposium on Structural Engineering for Young Experts, ISSEYE 2008

Issue date: 2008

Publication year: 2008

Pages: 328-332

Language: English

ISBN-13: 9787030227058

Document type: Conference article (CA)

Conference name: 10th International Symposium on Structural Engineering for Young Experts, ISSEYE 2008

Conference date: October 19, 2008 - October 21, 2008

Conference location: Changsha, China

Conference code: 101461

Sponsor: National Natural Science Foundation of China (NSFC)

Publisher: Science Press, 16 Donghuangchenggen North Street, Beijing, 100717, China

Abstract: The physical mechanics parameters of the main rock in the reservoir region in different hydrous states are obtained by tests. Based on these parameters, strength reduction finite element analysis for the stability of the reservoir bank is carried out. The results of the analysis indicates that strength reduction method is feasible in the stability analysis of 3D reservoir bank, and the conclusions are credible; Moreover, the change of the reservoir water level has an obvious effect on the stability of the reservoir bank, and "the criteria of plastic zone interpenetration" accords with "the criteria of displacement catastrophe" while estimating the criticality in strength reduction theory.

Number of references: 5

Main heading: Stability criteria

Controlled terms: Finite element method - Landslides - Structural design - Three dimensional - Water levels

Uncontrolled terms: Danjiangkou reservoir - Physical mechanics parameters - Plastic zones - Reservoir bank - Reservoir water level - Stability analysis - Strength reduction - Strength reduction method

Classification code: 408.1 Structural Design, General - 484.1 Earthquake Measurements and Analysis - 614.2 Steam Power Plant Equipment and Operation - 902.1 Engineering Graphics - 921.6 Numerical Methods - 961 Systems Science

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1116.

Accession number: 20091311983408

Title: Algorithms to find the set of relevant views and quasi-identifiers for k-anonymity method

Authors: Song, Jinling^{1, 2}; Liu, Guohua¹; Huang, Liming²; Zhu, Caiyun¹

Author affiliation:

1 Department of Computer Science and Engineering, Yanshan University, Qinhuangdao 066004, China

2 Department of Computer, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Song, J.

Source title: Jisuanji Yanjiu yu Fazhan/Computer Research and Development

Abbreviated source title: Jisuanji Yanjiu yu Fazhan

Volume: 46

Issue: 1

Issue date: January 2009

Publication year: 2009

Pages: 77-88

Language: Chinese

ISSN: 10001239

CODEN: JYYFEY

Document type: Journal article (JA)

Publisher: Science Press, 18, Shuangqing Street, Haidian, Beijing, 100085, China

Abstract: Quasi-identifier is a key factor to impact the validity of k-anonymity method. If the quasi-identifier is not identified correctly, the publishing view may still disclose secret information although it has been k-anonymized on the quasi-identifier. In the procedure of publishing views, an important problem concerning identifying quasi-identifiers is how to find all the views relevant to the publishing view from the set of published views. By mapping the set of published views and the publishing view into a hypergraph, the problem of finding the set of relevant views can be converted to searching for all the paths containing special edge between two given nodes in the hypergraph. In this paper, at first, the method mapping all the views to hypergraph and the related lemma and deciding theorems are presented; the algorithm for finding the set of relevant views based on hypergraph is proposed too. Secondly, the composing structures of the quasi-identifiers for the basic table with FDs and without FDs are studied respectively, and the characters of quasi-identifiers are generalized. Then, the algorithms to identify quasi-identifiers of the publishing view based on the set of relevant views for the cases with and without FDs are proposed. At last, the correctness of all the algorithms are proved, and the time complexity of these algorithms are analyzed. The algorithms finding the set of relevant views and quasi-identifiers can ensure the successful application of the k-anonymity method.

Number of references: 20

Main heading: Data privacy

Controlled terms: Algorithms

Uncontrolled terms: Hypergraph - Information disclosure - k-anonymity -
Quasi-identifier - Set of relevant views - View publishing

Classification code: 921 Mathematics - 902.3 Legal Aspects - 723.2 Data Processing and Image Processing - 723 Computer Software, Data Handling and Applications - 718 Telephone Systems and Related Technologies; Line Communications - 717 Optical Communication - 716 Telecommunication; Radar, Radio and Television

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1117.

Accession number: 20094112368181

Title: Effective mass of the ground state of the strong-coupling exciton in a quantum well

Authors: Eerdunchaolu1 ; Xin, Wei1

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Eerdunchaolu (eerdunchaolu@sohu.com)

Source title: Optoelectronics Letters

Abbreviated source title: Optoelectron. Lett.

Volume: 5

Issue: 2

Issue date: April 2009

Publication year: 2009

Pages: 154-157

Language: English

ISSN: 16731905

Document type: Journal article (JA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The properties of the effective mass of the ground state of the exciton, for which the electron (hole) is strongly coupled with interface-optical (IO) phonons but weakly coupled with bulk-longitudinal-optical (LO) phonons in a quantum well, are studied by means of Tokuda's improved linear combination operator and a modified second Lee-Low-Pines transformation method. The results indicate that the contributions of the interaction between the electron (hole) and the different phonon branches to the effective mass are greatly different, and change with the well width and the relative position between the electron and the hole. © Tianjin University of Technology and Springer-Verlag 2009.

Number of references: 12

Main heading: Integrated optoelectronics

Controlled terms: Excitons - Ground state - Optical properties - Phonons - Semiconductor quantum dots - Semiconductor quantum wells

Uncontrolled terms: Effective mass - Linear combination operators - Longitudinal optical - Phonon branches - Quantum well - Relative positions - Strong-coupling - Transformation methods - Well width

Classification code: 932 High Energy Physics; Nuclear Physics; Plasma Physics - 931.3 Atomic and Molecular Physics - 751.1 Acoustic Waves - 933 Solid State Physics - 741.3 Optical Devices and Systems - 714.2 Semiconductor Devices and Integrated Circuits - 712.1 Semiconducting Materials - 741.1 Light/Optics

DOI: 10.1007/s11801-009-8170-3

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1118.

Accession number: 20084111634019

Title: Application of sweet potato stem apex powder in the processing of dried noodles

Authors: Du, Lianqi; Zhao, Yongguang; Liu, Yuling

Corresponding author: Du, L. (dduulliii@163.com)

Corr. author affiliation: Department of Food Engineering, Hebei Normal University of Science and Technology, Changli 066600, China

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 24

Issue: 8

Issue date: August 2008

Publication year: 2008

Pages: 275-278

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Beijing, 100026, China

Abstract: In order to make use of the abundant nutrition component in sweet potato stem apex, the effects of different addition of its powder and starch phosphate on four quality indices of the dried noodle such as broken ratio, cooking time, cooking loss, cooked noodle's broken ratio and water absorption were studied. The results indicate that different addition of the sweet potato stem apex powder and starch phosphate has significant effect on the noodle's broken ratio, and the two additions have an interactive impact on each other. The addition of the sweet potato stem apex powder has no significant effect on the cooking time, cooking loss, cooked noodle's broken ratio and water absorption, but different treatments and addition of starch phosphate have significant on the four quality indices that mentioned above. Through the comprehensive competitive analysis of the results of the four quality indices, the optimum formula of dried noodle is that the ratio of wheat flour, the powder of sweet potato stem apex and starch phosphate is 100:1.5:7. Comparison with the dried noodles in sale, it can be concluded that the nutritional and good quality dried noodles which are made of the sweet potato stem apex powder can be produced.

Number of references: 18

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1119.

Accession number: 20080211011648

Title: Microstructure and mechanical properties of TiCP/LD7 composite prepared by SHS/HE

Authors: Zhang, W.G.1, 2 ; Song, A.J.1, 2 ; Liu, R.P.1 ; Ma, M.Z.1

Author affiliation:

- 1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, 066004, China
- 2 Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Ma, M.Z. (mz550509@ysu.edu.cn)

Source title: Materials Science and Engineering A

Abbreviated source title: Mater. Sci. Eng. A

Volume: 474

Issue: 1-2

Issue date: February 15, 2008

Publication year: 2008

Pages: 225-229

Language: English

ISSN: 09215093

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: TiCP/LD7 matrix composites were prepared by self-propagating high-temperature synthesis and hot extrusion (SHS/HE) technology. Phase constituents of the composite and the morphology and distribution of TiC particles in matrix have been investigated by X-ray diffraction (XRD) and scanning electron microscopy (SEM), respectively. Mechanical properties and the coefficient of thermal expansion (CTE) of the composite were tested at room temperature and elevated temperature. The results have shown that the TiCP/LD7 matrix composites possess good mechanical properties and thermal stability. © 2007 Elsevier B.V. All rights reserved.

Number of references: 12

Main heading: Ceramic matrix composites

Controlled terms: Mechanical properties - Morphology - Phase composition - Synthesis (chemical) - Thermal expansion - Thermodynamic stability - Titanium carbide

Uncontrolled terms: Hot extrusion - Self-propagating high-temperature synthesis

Classification code: 641.1 Thermodynamics - 802.2 Chemical Reactions - 804.2 Inorganic Compounds - 812.1 Ceramics - 951 Materials Science

Treatment: Experimental (EXP)

DOI: 10.1016/j.msea.2007.04.010

Database: Compendex

1120.

Accession number: 20093812841936

Title: Hierarchical fuzzy generalized predictive control and its application in vibration suppression of flexible spacecraft

Authors: Sun, Duo-Qing^{1, 2}

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Beijing Institute of Control Engineering, China Academy of Space Technology, Beijing 100080, China

Corresponding author: Sun, D.-Q. (sun_duoqing@126.com)

Source title: Yuhang Xuebao/Journal of Astronautics

Abbreviated source title: Yuhang Xuebao

Volume: 30

Issue: 4

Issue date: July 2009

Publication year: 2009

Pages: 1537-1543

Language: Chinese

ISSN: 10001328

CODEN: YUXUD6

Document type: Journal article (JA)

Publisher: China Spaceflight Society, 2 Yuetan Beixiaojie, Beijing, 100830, China

Abstract: By introducing adaptive hierarchical fuzzy logic system (HFLS) into the generalized predictive control strategy, a direct adaptive fuzzy generalized predictive control method for linear systems with unknown parameters is proposed to overcome the limitation of the large computation load of original generalized predictive control. The method directly employs HFLS to design generalized predictive controller in which the parameters and the unknown vectors in the estimation of generalized error are adjusted adaptively. It is proved that the proposed method can make the generalized error converges to a small neighborhood of the origin. By

using HFSL in the control architecture, the problem that the number of rules in a fuzzy controller increases exponentially with the number of involving variables is avoided. The simulation results show that this method is effective for vibration suppression of flexible spacecraft and further it possesses a high precision of steady-state.

Number of references: 11

Main heading: Adaptive control systems

Controlled terms: Control system stability - Controllers - Flexible spacecraft - Fuzzy control - Fuzzy logic - Fuzzy systems - Hierarchical systems - Linear systems - Predictive control systems - System stability

Uncontrolled terms: Adaptive Control - Generalized predictive control - Hierarchical fuzzy system - Hierarchical fuzzy systems - Unknown parameters - Unknown parameters linear system

Classification code: 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 921 Mathematics - 732.1 Control Equipment - 731.4 System Stability - 961 Systems Science - 731.1 Control Systems - 723.4 Artificial Intelligence - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 655.1 Spacecraft, General - 731 Automatic Control Principles and Applications

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1121.

Accession number: 20084811744092

Title: Research on rock mechanics parameters by using comprehensive evaluation method of rock quality grade-oriented

Authors: Li, Y.1 ; Wang, S.R.2 ; Wu, C.F.2 ; Zhang, H.Q.2 ; Li, Z.F.3

Author affiliation:

- 1 Hebei Normal University of Science and Technology, Qinhuangdao, China
- 2 Yanshan University, Qinhuangdao, China
- 3 Qinhuangdao Fu Li the Real Estate Company, Qinhuangdao, China

Corresponding author: Li, Y.

Source title: Proceedings of the International Young Scholars' Symposium on Rock Mechanics - Boundaries of Rock Mechanics Recent Advances and Challenges for the 21st Century

Abbreviated source title: Proc. Int. Young Sch. Symp. Rock Mech. - Boundaries Rock Mech. Recent

Adv. Chall. Century

Monograph title: Proceedings of the International Young Scholars' Symposium on Rock Mechanics - Boundaries of Rock Mechanics Recent Advances and Challenges for the 21st Century

Issue date: 2008

Publication year: 2008

Pages: 93-97

Language: English

ISBN-10: 0415469341

ISBN-13: 9780415469340

Document type: Conference article (CA)

Conference name: International Young Scholars' Symposium on Rock Mechanics - Boundaries of Rock Mechanics Recent Advances and Challenges for the 21st Century

Conference date: April 28, 2008 - May 2, 2008

Conference location: Beijing, China

Conference code: 74132

Publisher: Taylor and Francis/Balkema, P.O Box 447, Leiden, 2300 AK, Netherlands

Abstract: It is always a challenge going with geotechnical engineering to reasonably convert the values of mechanics parameters of rock obtained from laboratory tests to the values of mechanics parameters of the engineering rockmass. On the basis of in-situ investigations, field engineering coring and laboratory test, the mechanical parameters of rockmass are evaluated and classified by combining with CSIR (RMR) and BQ system, the results provide the basic data for the design and construction of slopes. The engineering practice shows that these parameters adopted are rational and the calculated results are reliable. © 2008 Taylor & Francis Group.

Number of references: 5

Main heading: Mechanics

Controlled terms: Geotechnical engineering - Piles - Quality control - Rock mechanics - Rocks

Uncontrolled terms: Comprehensive evaluation methods - Design and constructions - Engineering practices - Engineering rock masses - In-situ - Laboratory tests - Mechanics

parameters - Rock masses - Rock mechanics parameters - Rock qualities

Classification code: 931.1 Mechanics - 913.3 Quality Assurance and Control - 502.1 Mine and Quarry Operations - 483.1 Soils and Soil Mechanics - 483 Soil Mechanics and Foundations - 481.1 Geology - 481 Geology and Geophysics - 409 Civil Engineering, General - 408.2 Structural Members and Shapes

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1122.

Accession number: 20100712717455

Title: Inverse dynamic modeling of two unsymmetrical 3UPU parallel manipulators

Authors: Hu, Bo1 ; Lu, Yi1 ; Mao, Haixia2

Author affiliation:

- 1 College of Mechanical Engineering, Yanshan University, Qinhuangdao 066004, China
- 2 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Hu, B. (hbz0001@yahoo.com.cn)

Source title: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)

Abbreviated source title: Lect. Notes Comput. Sci.

Volume: 5928 LNAI

Monograph title: Intelligent Robotics and Applications - Second International Conference, ICIRA 2009, Proceedings

Issue date: 2009

Publication year: 2009

Pages: 580-591

Language: English

ISSN: 03029743

E-ISSN: 16113349

ISBN-10: 3642108164

ISBN-13: 9783642108167

Document type: Conference article (CA)

Conference name: 2nd International Conference on Intelligent Robotics and Applications, ICIRA 2009

Conference date: December 16, 2009 - December 18, 2009

Conference location: Singapore, Singapore

Conference code: 79291

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The inverse dynamic of two 3UPU parallel manipulators (PM) are analyzed in this paper. The first 3UPU PM has three translational degree of freedom (DOF) and the second 3UPU PM has two translational and one rotational DOF. First, the mobility of the two UPU PMs is analyzed. Second, the constrained forces/torques in UPU-type legs are determined, and the 6×6 Jacobian matrices of the two 3UPU PMs are derived by considering the constrained forces/torques. Third, based on the principle of virtual work, the dynamic is solved with the active forces and the constrained forces/torques derived. Finally, an analytic solved example for the 3UPU PM is given. © 2009 Springer-Verlag Berlin Heidelberg.

Number of references: 15

Main heading: Manipulators

Controlled terms: Jacobian matrices - Kinematics - Robotics

Uncontrolled terms: Degree of freedom (dof) - Inverse dynamic modeling - Inverse dynamics - Parallel manipulator - Parallel manipulators - Principle of virtual work - Unsymmetrical

Classification code: 691.1 Materials Handling Equipment - 731.5 Robotics - 921.1 Algebra - 931.1 Mechanics

DOI: 10.1007/978-3-642-10817-4_58

Database: Compendex

1123.

Accession number: 20072710691077

Title: Analysis of the thermal expansion effect on measurement accuracy of Rogowski coils

Authors: Zhang, Hongling^{1, 2}; Wang, Haiming³; Zheng, Shengxuan¹

Author affiliation:

1 Yanshan University, Qinhuangdao 066004, China

2 Hebei Institute of Architecture Civil Engineering, Zhangjiakou 075024, China

3 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Zhang, H.

Source title: Diangong Jishu Xuebao/Transactions of China Electrotechnical Society

Abbreviated source title: Diangong Jishu Xuebao

Volume: 22

Issue: 5

Issue date: May 2007

Publication year: 2007

Pages: 18-23

Language: Chinese

ISSN: 10006753

CODEN: DIJXE5

Document type: Journal article (JA)

Publisher: Chinese Machine Press, 1 Nanjie Baiwanzhuang, Beijing, 100037, China

Abstract: Rogowski coils are mostly used to measure AC current, pulse current and transient current in power industry. Rogowski coils have the advantages of small output power, simple configuration and ideal linearity. Thermal expansion can change the cross-sectional area of the coils when the ambient temperature varies. In order to analyze the thermal expansion effect on Rogowski coils in this paper, a parameter is introduced, which can be described as the ratio error of induced voltage per unit rise in temperature. The parameter is a function of the thermal expansion coefficient of the material. Mathematical models are developed for calculating the ratio error caused by thermal expansion effect. Rogowski coils with rectangular cross section and with circular cross

section are analyzed in order to compare the thermal expansion effect on measurement accuracy of coils with different cross section. The experimental results indicate that the ratio voltage error tendency with temperature is the same as the error tendency from theoretical analysis; the summation of two kinds of ratio errors caused by the coil winding and the coil former is included within errors from measurement. It is instructive in design the high precision Rogowski coils.

Number of references: 12

Main heading: Thermal expansion

Controlled terms: Mathematical models - Temperature

Uncontrolled terms: Coil winding - Measurement accuracy - Pulse current - Ratio error
- Rogowski coils

Classification code: 641.1 Thermodynamics - 921 Mathematics

Treatment: Applications (APP); Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1124.

Accession number: 20090611898563

Title: Study of structural stabilities and optical properties of HgTe under high pressure

Authors: Hao, Aimin^{1, 2, 3}; Yang, Xiaocui⁴; Yu, Ruomeng⁵; Gao, Chunxiao²; Han, Yonghao²; Liu, Riping³; Tian, Yongjun³

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

2 State Key Laboratory for Superhard Materials, Jilin University, Changchun, 130012, China

3 State Key Laboratory for Metastable Materials Science and Technology, College of Materials Science and Engineering, Yanshan University, Qinhuangdao, 066004, China

4 Department of Physics, Baicheng Normal College, Baicheng 137000, China

5 College of Physics, Huazhong University of Science and Technology, Wuhan, 430074, China

Corresponding author: Gao, C. (cxgao599@yahoo.com.cn)

Source title: Journal of Physics and Chemistry of Solids

Abbreviated source title: J Phys Chem Solids

Volume: 70

Issue: 2

Issue date: February 2009

Publication year: 2009

Pages: 433-438

Language: English

ISSN: 00223697

CODEN: JPCSAW

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: A theoretical investigation on the structural stabilities and electronic properties of HgTe under high pressure was conducted using first principles based on density functional theory. Our results demonstrate that the sequence of the pressure-induced phase transitions of HgTe is from the zinc blende, to cinnabar, rocksalt, orthorhombic, and CsCl-type structures. The pressure effects on the optical properties were discussed and compared with previous calculations and experimental data whenever available. © 2008 Elsevier Ltd. All rights reserved.

Number of references: 34

Main heading: Phase transitions

Controlled terms: Chalcogenides - Density functional theory - Electronic properties - Inorganic compounds - Optical properties - Pressure effects - Programming theory - Stability - Zinc

Uncontrolled terms: A. Chalcogenides - C. Ab initio calculations - C. High pressure - D. Optical properties - D. Phase transitions

Classification code: 922.1 Probability Theory - 931 Classical Physics; Quantum Theory; Relativity - 931.1 Mechanics - 931.2 Physical Properties of Gases, Liquids and Solids - 804.2 Inorganic Compounds - 931.3 Atomic and Molecular Physics - 933.3 Electronic Structure of Solids - 951 Materials Science - 961 Systems Science - 931.4 Quantum Theory; Quantum Mechanics - 801.4 Physical Chemistry - 546.3 Zinc and Alloys - 641.1 Thermodynamics - 701.1 Electricity: Basic Concepts and Phenomena - 721.1 Computer Theory, Includes

Formal Logic, Automata Theory, Switching Theory, Programming Theory - 531.2 Metallography - 723.1
Computer Programming - 741.1 Light/Optics - 741.3 Optical Devices and Systems - 801 Chemistry - 731.4
System Stability

DOI: 10.1016/j.jpccs.2008.11.014

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1125.

Accession number: 20083111424127

Title: Temperature dependence of the energies of quasi-two-dimensional strong-coupling excitons

Authors: Eerdunchaolu1

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao
066004, China

Corresponding author: Eerdunchaolu (eerdunchaolu@sohu.com)

Source title: Pan Tao Ti Hsueh Pao/Chinese Journal of Semiconductors

Abbreviated source title: Pan Tao Ti Hsueh Pao

Volume: 29

Issue: 7

Issue date: July 2008

Publication year: 2008

Pages: 1318-1325

Language: Chinese

ISSN: 02534177

CODEN: PTPPDZ

Document type: Journal article (JA)

Publisher: Science Press, 18, Shuangqing Street, Haidian, Beijing, 100085, China

Abstract: The influences of lattice vibration and polaron effects on the ground state and the excited state of the system, for which the exciton is strongly coupled with interface-optical (IO) phonons but weakly or intermediately coupled with bulk-longitudinal-optical (LO) phonons in a quantum well, are studied using the linear-combination operator and the LLP variational method. The expressions for the ground state energy shift and the first internal excited state energy shift of the exciton as a function of the well width and temperature are derived. Numerical calculations for an AgCl/AgBr/AgCl QW, for example, are performed. The results indicate that the ground state energy shift and the first internal excited state energy shift increases with the temperature for strong exciton-IO-phonon coupling but decreases with the temperature for weak exciton-LO-phonon coupling.

Number of references: 26

Main heading: Excitons

Controlled terms: Electron transitions - Excited states - Ground state - Lattice vibrations - Mathematical operators - Numerical analysis - Phonons - Semiconductor quantum wells - Semiconductor quantum wires - Two dimensional

Uncontrolled terms: Excited state energy - Ground-state energies - Lattice (CO) - LLP variational method - Longitudinal-optical (LO) - Numerical calculations - Optical (PET) (OPET) - Phonon coupling - Polaron effects - Quantum wells - Strong couplings - Temperature dependences - Two-dimensional (2D) - Well width

Classification code: 933.1.1 Crystal Lattice - 931.3 Atomic and Molecular Physics - 921.6 Numerical Methods - 921 Mathematics - 751.1 Acoustic Waves - 723.5 Computer Applications - 714.2 Semiconductor Devices and Integrated Circuits - 712.1 Semiconducting Materials - 711.1 Electromagnetic Waves in Different Media

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1126.

Accession number: 20071610557835

Title: Effect of rare earth elements on nitrocarburizing kinetics of 35CrMo steel

Authors: Wang, Kuan1 ; Liu, Jianhua2 ; Fan, Liru3

Author affiliation:

- 1 Academic Affairs Department, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China
- 3 College of Mathematics and Physics, Yanshan University, Qinhuangdao 066004, China

Corresponding author: Wang, K. (W-kuan@163.com)

Source title: Journal of Rare Earths

Abbreviated source title: J Rare Earth

Volume: 24

Issue: SUPPL. 3

Issue date: December 2006

Publication year: 2006

Pages: 297-299

Language: English

ISSN: 10020721

CODEN: JREAE6

Document type: Journal article (JA)

Publisher: Chinese Society of Rare Earths

Abstract: The effect of RE elements on nitrocarburizing kinetics of 35CrMo steel was studied. The results show that adding proper quantity of RE can decrease the diffusion activation energy of N atoms, the nitrocarburizing process is accelerated obviously under the acting of activity and catalysis of RE, and compared with nitrocarburizing process without RE addition, the nitrocarburizing rate increases 25%-30%. In addition, the math formula was set up between case depth of the samples and its corresponded nitrocarburizing time, and the catalytic effect mechanism was also preliminarily discussed.

Number of references: 10

Main heading: Steel

Controlled terms: Carbonitriding - Catalysis - Diffusion - Microstructure - Nitriding - Rare earth elements

Uncontrolled terms: Diffusion activation energy - Nitrocarburizing

Classification code: 531.2 Metallography - 537.1 Heat Treatment Processes - 545.3 Steel - 547.2 Rare Earth Metals

Numerical data indexing: Percentage 2.50e+01% to 3.00e+01%

Treatment: Theoretical (THR); Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1127.

Accession number: 20092312107167

Title: Research on improved weighted fuzzy clustering algorithm based on rough set

Authors: Li, Jian-Guo¹ ; Gao, Jing-Wei²

Author affiliation:

1 Department of Computer Science, Hebei Normal University of Science and Technology, Qin Huangdao, China

2 College of Mathematics and Information Science, Hebei Normal University, Shijiazhuang, China

Corresponding author: Li, J.-G. (lijg3343@126.com)

Source title: Proceedings - 2009 International Conference on Computer Engineering and Technology, ICCET 2009

Abbreviated source title: Proc. - Int. Conf. Comput. Eng. Technol., ICCET

Volume: 2

Monograph title: Proceedings - 2009 International Conference on Computer Engineering and Technology, ICCET 2009

Issue date: 2009

Publication year: 2009

Pages: 98-102

Article number: 4769566

Language: English

ISBN-13: 9780769535210

Document type: Conference article (CA)

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: Clustering is used to find out the objects that resemble each other and compose different groups, cluster analysis is an important job in data mining. This article brings the rough set into fuzzy cluster, by using the methods of attributes contracted in the rough set theory to improve the FCM algorithm; the improved algorithm had been proved a high precise ratio. © 2009 IEEE.

Number of references: 6

Main heading: Rough set theory

Controlled terms: Cluster analysis - Clustering algorithms - Fuzzy clustering - Fuzzy sets - Fuzzy systems - Information management - Mining

Uncontrolled terms: Clustering - FCM algorithm - Fuzzy clusters - High-precise - Improved algorithm - Rough set - Weighted fuzzy algorithm - Weighted fuzzy clustering

Classification code: 922 Statistical Methods - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory - 921 Mathematics - 912.2 Management - 903.2 Information Dissemination - 961 Systems Science - 903.1 Information Sources and Analysis - 723.4 Artificial Intelligence - 723 Computer Software, Data Handling and Applications - 721 Computer Circuits and Logic Elements - 502.1 Mine and Quarry Operations - 731.1 Control Systems

DOI: 10.1109/ICCET.2009.236

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1128.

Accession number: 20142017730942

Title: Design of hydraulic test-bed control system based on configuration software

Authors: Wang, Qingzhu1 ; Zhao, Jinchuan1 ; Lu, Weina1 ; Liu, Rongchang1 ; Zhang, Lihong1 ; Ma, Yuquan1

Author affiliation:

1 Hebei Normal University of Science and Technology, Qin huangdao 066004, China

Source title: 2nd International Symposium on Test Automation and Instrumentation, ISTAI 2008

Abbreviated source title: Int. Symp. Test Autom. Instrum., ISTAI

Monograph title: 2nd International Symposium on Test Automation and Instrumentation, ISTAI 2008

Issue date: 2008

Publication year: 2008

Pages: 533-537

Language: English

Document type: Conference article (CA)

Conference name: 2nd International Symposium on Test Automation and Instrumentation, ISTAI 2008

Conference date: November 17, 2008 - November 18, 2008

Conference location: Beijing, China

Conference code: 105068

Sponsor: China Instrumentation and Control Society (CIS)

Publisher: International Academic Publishers

Abstract: To overcome the weakness of control and measurement system which in common used test-bed of hydraulic pressure in the past, we develop a kind of hydraulic test-bed which is controlled by computer based on configuration software. This paper mainly introduces the hardware and software design of lower computer taking SCM as the core and including temperature control module, blow measurement module, pressure control module and dynamic test module, as well as the supervisory & control software development of upper computer based on KINGVIEW. The system is a DCS which is a collection of management and control, so it realizes measurement which is vivid, rapid, accurate and reliable to static and dynamic property for hydraulic component by control of the temperature and pressure.

Number of references: 5

Main heading: Software testing

Controlled terms: Computer hardware - Distributed parameter networks - Measurements - Software design - Temperature control

Uncontrolled terms: Configuration software - Control and measurement - DCS - Hardware and software designs - Hydraulic components - Management and controls - SCM - Temperature and pressures

Classification code: 703.1 Electric Networks - 722 Computer Systems and Equipment - 723.5 Computer Applications - 731.3 Specific Variables Control - 941 Acoustical and Optical Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 943 Mechanical and Miscellaneous Measuring Instruments - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1129.

Accession number: 20095212577265

Title: Charge transfer photophysics of tetra(α -amino) zinc phthalocyanine

Authors: Zhang, Xian-Fu¹ ; Li, Xijiang¹ ; Niu, Lihong² ; Sun, Lou¹ ; Liu, Lu¹

Author affiliation:

1 Department of Chemistry, Hebei Normal University of Science and Technology, Qinghuangdao, Hebei Province 066004, China

2 Chemistry Department, Tsinghua University, Beijing 100084, China

Corresponding author: Zhang, X.-F. (zhangxianfu@tsinghua.org.cn)

Source title: Journal of Fluorescence

Abbreviated source title: J Fluoresc

Volume: 19

Issue: 6

Issue date: November 2009

Publication year: 2009

Pages: 947-954

Language: English

ISSN: 10530509

CODEN: JOFLEN

Document type: Journal article (JA)

Publisher: Springer New York, 233 Springer Street, New York, 10013-1578, United States

Abstract: The absorption, fluorescence, and transient absorption spectra of Tetra(α -amino) zinc phthalocyanine, ZnPc(α -NH₂)₄, have been measured in polar solvents and compared with that of ZnPc(α -R)₄ (R = H, NO₂, OCH(CH₃)₂). While the latter three showed the typical photophysics of phthalocyanines, ZnPc(α -NH₂)₄ exhibits distinct spectral properties, a very low fluorescence quantum yield and a relatively long fluorescence lifetime. These observations are explained by the substantial charge transfer characters in the absorption and fluorescence spectra of ZnPc(α -NH₂)₄. NMR indicates that intramolecular H-bonding makes atoms in NH₂ actually coplanar with other elements of ZnPc(α -NH₂)₄. The local excited state is non emissive and the weak emission is assigned to its charge transfer state. The transient absorption bands from laser flash photolysis located at 630 nm, 645 nm is assigned to the mono-charge transfer state, while that at 545 nm is assigned to the di-charge transfer state. © 2009 Springer Science+Business Media, LLC.

Number of references: 30

Main heading: Ion exchange

Controlled terms: Absorption - Amination - Amines - Charge transfer - Fluorescence - Mass transfer - Nitrogen compounds - Photolysis - Zinc - Zinc compounds

Uncontrolled terms: Absorption and fluorescence spectra - Charge transfer fluorescence - Charge transfer state - Fluorescence lifetimes - Fluorescence quantum yield - Intramolecular H-bonding - Laser flash photolysis - Photophysics - Polar solvents - Spectral properties - Transient absorption - Transient absorption spectra - Zinc phthalocyanines

Classification code: 804.2 Inorganic Compounds - 804.1 Organic Compounds - 802.3 Chemical Operations - 931.2 Physical Properties of Gases, Liquids and Solids - 802.2 Chemical Reactions - 641.3 Mass Transfer - 546.3 Zinc and Alloys - 741.1 Light/Optics

Numerical data indexing: Size 5.45e-07m, Size 6.30e-07m, Size 6.45e-07m

DOI: 10.1007/s10895-009-0494-7

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1130.

Accession number: 20093012218903

Title: Storage method of XML documents based-on the pri-order labeling scheme

Authors: Yue, Liwen^{1, 2} ; Ren, Jiadong^{1, 2} ; Qian, Ying^{1, 2}

Author affiliation:

1 College of Information Science and Engineering, Yanshan University, Qinhuangdao, China

2 Network and Modern Education Technology Center, HeBei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Yue, L. (ylw06220814@126.com)

Source title: Proceedings of the 1st International Workshop on Education Technology and Computer Science, ETCS 2009

Abbreviated source title: Proc. Int. Workshop Educ. Technol. Comput. Sci., ETCS

Volume: 2

Part number: 2 of 3

Monograph title: Proceedings of the 1st International Workshop on Education Technology and Computer Science, ETCS 2009

Issue date: 2009

Publication year: 2009

Pages: 127-131

Article number: 4959004

Language: English

ISBN-13: 9780769535579

Document type: Conference article (CA)

Conference name: 1st International Workshop on Education Technology and Computer Science, ETCS 2009

Conference date: March 7, 2009 - March 8, 2009

Conference location: Wuhan, Hubei, China

Conference code: 76728

Sponsor: Huazhong University of Science and Technology; Harbin Institute of Technology; IEEE Harbin Section; IEEE Technical Committee on Learning Technol.

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: With the development of the technique of XML, how to make use of database to store and query XML documents has become a hot topic. In this paper, a labeling scheme and a storage method of XML documents based-on this labeling scheme are proposed. According to the node types, this method decomposes the document tree structure into nodes and stores them into the relational table; it enables us to store any kinds of documents using a fixed relational schema. The simple paths of document were also stored with a table. This method supports the query and retrieval of original XML document efficiently based-on the label of node. We report our experimental results on a real dataset to show the performance of our method at last. © 2009 IEEE.

Number of references: 9

Main heading: Markup languages

Controlled terms: Computer science - Education computing - Information retrieval - Labels - Retail stores - XML

Uncontrolled terms: Data sets - Document trees - Labeling scheme - Labeling scheme - Relational schema - Relational tables - Retrieval method - Storage - Tree structure

Classification code: 903.3 Information Retrieval and Use - 901.2 Education - 723.5 Computer Applications - 723.2 Data Processing and Image Processing - 911.4 Marketing - 723 Computer Software, Data Handling and Applications - 721 Computer Circuits and Logic Elements - 694.2 Packaging Materials - 402.2 Public Buildings - 722 Computer Systems and Equipment

DOI: 10.1109/ETCS.2009.290

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20071210503453

Title: Uniformly asymptotic stability of the 4th-order time-varying discrete systems

Authors: Sun, Duo-Qing^{1, 2}; Wu, Hong-Xin²

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Beijing Institute of Control Engineering, Chinese Academy of Space Technology, Beijing 100080, China

Corresponding author: Sun, D.-Q. (sun_duoqing@126.com)

Source title: Kongzhi Lilun Yu Yingyong/Control Theory and Applications

Abbreviated source title: Kong Zhi Li Lun Yu Ying Yong

Volume: 23

Issue: 6

Issue date: December 2006

Publication year: 2006

Pages: 845-852

Language: Chinese

ISSN: 10008152

CODEN: KLYYEB

Document type: Journal article (JA)

Publisher: South China University of Technology, Guangzhou, 510640, China

Abstract: The principle of characteristic modeling provides a theoretical basis for the design of intelligent controllers and the control of higher-order plants by using lower controllers. For the control of speed tracking or acceleration, the stability of the adaptive control systems based on characteristic modelling is exactly the stability of the 4th-order time-varying discrete systems. The brief expressions of discriminants for the varying coefficient quadratic trinomials are deduced when their coefficients satisfy complicated system of difference equations. Based on the results, the uniformly asymptotic stability criteria of the 4th-order linear time-varying discrete systems are also quantitatively given by employing the Lyapunov's direct method. The obtained results are only related to the variation ranges of coefficients in the system equation, thus simplifying the existing results in their dependence on the variation ranges of some coefficient functions.

Number of references: 9

Main heading: Asymptotic stability

Controlled terms: Acceleration - Adaptive control systems - Control equipment -
Difference equations - Discrete time control systems - Stability criteria

Uncontrolled terms: Characteristic modeling - Intelligent controllers - Lyapunov's direct
method - Speed tracking - Time varying discrete system - Varying coefficient quadratic trinomials

Classification code: 731.1 Control Systems - 731.4 System Stability - 732.1 Control Equipment - 921.6
Numerical Methods - 931.1 Mechanics

Treatment: Applications (APP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1132.

Accession number: 20140817362093

Title: Temperature dependence of the effective mass of the polaron in an asymmetry quantum dot

Authors: Eerdunchaolu1 ; Xin, Wei1

Author affiliation:

1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao,
Hebei 066004, China

Source title: Optics InfoBase Conference Papers

Abbreviated source title: Opt.InfoBase Conf. Papers

Monograph title: Conference on Lasers and Electro-Optics/Pacific Rim, CLEOPR 2009

Issue date: 2009

Publication year: 2009

Language: English

E-ISSN: 21622701

ISBN-13: 9781424438303

Document type: Conference article (CA)

Conference name: Conference on Lasers and Electro-Optics/Pacific Rim, CLEOPR 2009

Conference date: August 30, 2009 - September 3, 2009

Conference location: Shanghai, China

Conference code: 102747

Publisher: Optical Society of America, 2010 Massachusetts Ave, NW, Washington, DC, DC 20036-1023, United States

Abstract: The influences of the temperature on the effective mass of the weak-coupling polaron in an asymmetry quantum dot are studied by using the Tokuda's improved linear-combination operator and the Lee-Low-Pines (LLP) variational method. The results indicate that the effective mass m^* of the weak-coupling polaron is only related to the temperature parameter γ and the electron-phonon coupling strength α , but it is independent of the confinement strength ω_1 (ω_2) of the quantum dot. © 2009 IEEE.

Number of references: 10

Main heading: Semiconductor quantum dots

Controlled terms: Polarons - Temperature distribution

Uncontrolled terms: Asymmetry quantum dot - Confinement strength - Effective mass - Electron-phonon coupling strengths - Temperature dependence - Temperature parameters - Variational methods - Weak couplings

Classification code: 641.1 Thermodynamics - 714.2 Semiconductor Devices and Integrated Circuits - 933.1.1 Crystal Lattice

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1133.

Accession number: 2005409401039

Title: Application of improved BP algorithm based on numerical optimization to fault diagnosis of rotating machinery

Authors: Zheng, De-Zhong¹ ; Ge, Wen-Qian^{1, 2}

Author affiliation:

1 Electric Engineering College, Yanshan University, Qinhuangdao Hebei 066004, China

2 Department of Mechanics and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao Hebei 066004, China

Corresponding author: Zheng, D.-Z. (qhdzdz@sina.com)

Source title: Chinese Journal of Sensors and Actuators

Abbreviated source title: Chin. J. Sens. Actuators

Volume: 18

Issue: 3

Issue date: September 2005

Publication year: 2005

Pages: 510-513

Language: Chinese

ISSN: 10041699

Document type: Journal article (JA)

Publisher: Guojia Jiaowei Quanguo Gaoxiao Chuangan Jishu Yanjiuhui

Abstract: The safety of machine equipment running is very important to modern production of corporation, so fault machinery diagnosis is paid more attention to in recent years. Neural networks have the ability of distinguishing the types and reason of faults, so it's widely applied in the area of fault diagnosis. Aiming at the problems that BP algorithm has slow convergence rate and is likely to fall into local minimum point, this paper presents two improved BP algorithm methods based on numerical optimization. The research result of applying the improved BP algorithm to the fault diagnosis of rotating machinery shows that it can make convergence rate of network faster. It is proved that the method has higher precision and faster convergence rate than the BP algorithm.

Number of references: 9

Main heading: Algorithms

Controlled terms: Computer networks - Fault tolerant computer systems - Neural networks - Numerical analysis - Optimization - Problem solving - Rotating machinery

Uncontrolled terms: Conjugate gradient - Fault diagnosis - Fault machinery diagnosis - LM algorithm

Classification code: 601.1 Mechanical Devices - 722.4 Digital Computers and Systems - 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 921.5 Optimization Techniques - 921.6 Numerical Methods

Treatment: Applications (APP); Theoretical (THR)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1134.

Accession number: 20073710810387

Title: Research on optimal crankshaft rolling parameter using BP neural network

Authors: Xue, Long-Quan¹ ; Xu, Guo-Ning¹ ; Liu, Rong-Chang² ; Jia, Xiao-Gang³

Author affiliation:

- 1 Faculty of Mechanical and Precision Instrument Engineering, Xi'an University of Technology, Xi'an 710048, China
- 2 Department of Mechanics and Electronics, Hebei Normal University of Science and Technology, China
- 3 Department of Ordnance and Transportation, Engineering College of Armed Police Force, China

Corresponding author: Xue, L.-Q. (xuelongquan@163.com)

Source title: Neiranji Gongcheng/Chinese Internal Combustion Engine Engineering

Abbreviated source title: Neiranji Gongcheng

Volume: 28

Issue: 4

Issue date: August 2007

Publication year: 2007

Pages: 61-64

Language: Chinese

ISSN: 10000925

CODEN: NEG0EB

Document type: Journal article (JA)

Publisher: Chinese Society for Internal Combustion Engines, 92 Weijin Road, Tianjin, Meng Qing, 300072, China

Abstract: Based on the theory of optimal residual stress, the operation status of the crankshaft of 480Q engine was simulated by using ANSYS software and the corresponding optimal residual stress was obtained. At the same time, the fillet rolling experiment of the crankshaft was performed by means of DEFORM software and a set of residual stress data when using different rolling parameter was obtained. The corresponding relation between rolling parameter and residual stress was obtained by artificial neural networks (ANNs). Finally, the optimal rolling parameter corresponding to the optimal residual stress was found out using ANNs, which provided a credible reference for practical production.

Number of references: 7

Main heading: Crankshafts

Controlled terms: Backpropagation - Internal combustion engines - Neural networks - Rolling

Uncontrolled terms: ANSYS software - Artificial neural network - Optimal residual stress - Orthogonal experiment

Classification code: 535.1 Metal Rolling - 601.2 Machine Components - 612.1 Internal Combustion Engines, General - 723.4 Artificial Intelligence

Treatment: Applications (APP); Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20064210187308

Title: Optical properties of the tissue effects upon the dynamic spectrum

Authors: Li, Xiaoxia^{1, 2}; Li, Gang¹; Lin, Ling¹; Liu, Yuliang¹; Wang, Yan^{1, 3}; Guo, Xiumei⁴

Author affiliation:

- 1 College of Precision Instrument and Opto-Electronics Engineering, Tianjin University, Tianjin, 300072, China
- 2 School of Electrical and Automatic Engineering, Hebei University of Technology, Tianjin, 300130, China
- 3 Liaoning Technical University, Liaoning Fuxin, 123000, China
- 4 HeBei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Li, X.

Source title: Progress in Biomedical Optics and Imaging - Proceedings of SPIE

Abbreviated source title: Progr. Biomed. Opt. Imaging Proc. SPIE

Volume: 6047 I

Part number: 1 of 2

Monograph title: Fourth International Conference on Photonics and Imaging in Biology and Medicine

Issue date: 2006

Publication year: 2006

Article number: 604704

Language: English

ISSN: 16057422

ISBN-10: 081946080X

ISBN-13: 9780819460806

Document type: Conference article (CA)

Conference name: 4th International Conference on Photonics and Imaging in Biology and Medicine

Conference date: September 3, 2005 - September 6, 2005

Conference location: Tianjin, China

Conference code: 68311

Sponsor: National Natural Science Foundation of China; SPIE Russia Chapter; Int. Laser Center of M.V. Lomonosov Moscow State Univ.; Bio-optics and Laser Medicine Comm. of Chinese Optics Soc.; Science and Techn. Garden of Tianjin University, China

Publisher: SPIE

Abstract: In the research of non-invasive concentration blood measurement, the scattering behavior of the tissue may lead to significant differences in the ideal Lambert Beer's law. In this paper, Monte Carlo method is used to analyze the blood tissue's influence to the Dynamic Spectrum proposed by Professor LI Gang. The Dynamic Spectrum evaluates only the pulsatile part of the entire optical signal, this approach is rather independent of individual or time changes in scattering or absorption characteristics of the tissue. In this paper, Monte Carlo method is used to analyze the scattering behavior of the blood, the influence of the scattering behavior of the skin tissue to the scattering behavior of the blood, and their influence to the Dynamic Spectrum. The pulsatile part of the spectrum was modeled by performing simulations of photon migration through the tissue for the diastolic and systolic states. With the simulation of the Monte Carlo method, the diffuse reflectance and transmittance of the model were calculated, analyzed and compared. The scattering behavior must be considered in the measurement of Dynamic Spectrum to get the high precision measurement. The error caused by the transmittance is greater than the error caused by the diffuse reflectance. The thickness of the Epidermis can influence the nonlinearity of the transmittance, and influence the value of the diffuse reflectance. The thickness of the tissue can influence the scattering behavior of the tissue.

Number of references: 9

Main heading: Tissue

Controlled terms: Error analysis - Light scattering - Mathematical models - Monte Carlo methods - Optical properties - Photons

Uncontrolled terms: Diffuse reflectance - Lambert Beer's law - Pulsatile spectrum signal - Transmittance

Classification code: 461.2 Biological Materials and Tissue Engineering - 741.1 Light/Optics - 921.6 Numerical Methods - 922.2 Mathematical Statistics - 931.3 Atomic and Molecular Physics

Treatment: Theoretical (THR)

DOI: 10.1117/12.709741

Database: Compendex

1136.

Accession number: 20100312640467

Title: Analytic analysis and optimal design of isotropy performance of six-dimensional force sensor based on Stewart platform

Authors: Yao, Jiantao¹ ; Hou, Yulei¹ ; Mao, Haixia² ; Zhao, Yongsheng¹

Author affiliation:

1 College of Mechanical Engineering, Yanshan University, Qinhuangdao 066004, China

2 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Mao, H. (yszhao@ysu.edu.cn)

Source title: Jixie Gongcheng Xuebao/Journal of Mechanical Engineering

Abbreviated source title: Jixie Gongcheng Xuebao

Volume: 45

Issue: 12

Issue date: December 2009

Publication year: 2009

Pages: 22-28

Language: Chinese

ISSN: 05776686

Document type: Journal article (JA)

Publisher: Editorial Office of Chinese Journal of Mechanical, 22 Baiwanzhuang Dajie, Beijing, 100037, China

Abstract: Isotropy is an important index of performance evaluation for a six-dimensional force sensor, and the isotropic performance analysis is a key problem in the structural design of Stewart platform-based force sensor. In order to achieve the best isotropy performance, the static mathematical model of Stewart platform-based force sensor is built by using screw theory, and the isotropy indices of the sensor are studied systematically. By using the mathematical analysis method, the performance analysis of the forward and backward isotropy is presented. The analytic expressions of the key structural parameters are derived when both forward force and torque isotropy are satisfied. It is proved to be impossible to realize the backward force and torque isotropy simultaneously, and the restrictive relationships of the four isotropy indices are obtained. By compromising all the

four isotropy indices and solving the extreme of the comprehensive performance objective function, the best comprehensive isotropy index of Stewart platform-based force sensor is achieved and the corresponding analytic expressions of the key structural parameters are obtained. The results of the theoretical deduction are important to the performance evaluation and structure design of the six-dimensional force sensor. © 2009 Journal of Mechanical Engineering.

Number of references: 15

Main heading: Sensors

Controlled terms: Design - Mathematical models - Optimal systems - Optimization - Structural analysis

Uncontrolled terms: Analysis method - Analytic analysis - Analytic expressions - Analytic method - Comprehensive performance - Force sensor - Key problems - Optimal design - Performance analysis - Performance evaluation - Screw theory - Six-dimensional force - Stewart platforms - Structural parameter - Structure design

Classification code: 961 Systems Science - 921.5 Optimization Techniques - 921 Mathematics - 902.1 Engineering Graphics - 801 Chemistry - 732.2 Control Instrumentation - 731.1 Control Systems - 408.1 Structural Design, General - 408 Structural Design

DOI: 10.3901/JME.2009.12.022

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1137.

Accession number: 20073310766548

Title: Research on load simulator for vehicle suspension

Authors: Zheng, Yucai; Liu, Tao; Liu, Changrong

Corresponding author: Zheng, Y.

Corr. author affiliation: Hebei Normal University of Science and Technology, Changli 066600, China

Source title: Nongye Jixie Xuebao/Transactions of the Chinese Society of Agricultural Machinery

Abbreviated source title: Nongye Jixie Xuebao

Volume: 38

Issue: 7

Issue date: July 2007

Publication year: 2007

Pages: 16-18

Language: Chinese

ISSN: 10001298

CODEN: NUYCA3

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Machinery, Beijing, 100083, China

Abstract: To improve the performance of active vehicle suspension, a special load simulator and its control system were designed, and its mathematical model was established. The testing system, which has friendly interface and powerful functions, was constructed with the LabVIEW. And the system can trace the load sample designed specially. The test results showed that this system stability, high tracking accuracy, and has a strong anti-jamming capability.

Number of references: 4

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1138.

Accession number: 20091311977667

Title: Registration of multiple medical images using N-dimensional mutual information

Authors: Ren, Changquan¹ ; Liu, Qing² ; Zhou, Yanhong¹ ; Xu, Shenyang²

Author affiliation:

1 Department of Computer, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei, 066004, China

2 College of Information Science and Engineering, Yanshan University, Qinhuangdao Hebei, 066004, China

Corresponding author: Ren, C. (qhdqchr@126.com)

Source title: 2008 International Symposium on Information Science and Engineering, ISISE 2008

Abbreviated source title: Int. Symp. Inf. Sci. Eng., ISISE

Volume: 1

Part number: 1 of 2

Monograph title: 2008 International Symposium on Information Science and Engineering, ISISE 2008

Issue date: 2008

Publication year: 2008

Pages: 379-383

Article number: 4732240

Language: English

ISBN-13: 9780769534947

Document type: Conference article (CA)

Conference name: 2008 International Symposium on Information Science and Engineering, ISISE 2008

Conference date: December 20, 2008 - December 22, 2008

Conference location: Shanghai, China

Conference code: 75535

Publisher: Inst. of Elec. and Elec. Eng. Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: The medical image registration has been all confined in registering two images and rarely involved multiple images (three and more than three). Using the expanded mutual information measure (E-MIM) to register multiple images, which is inefficiency, can't meet the clinical requirement, and mutual information (MI) values are not necessarily nonnegative. In this paper, we introduce an N-dimensional mutual information measure (N-MIM), which can ensure MI values are nonnegative, bounded to range from 1 to 2. At the same time, the rate of the registration has moved up. Then this definition is tested and proved to be effective on registration of

multiple lumbar vertebra images through simulation. © 2008 IEEE.

Number of references: 12

Main heading: Image registration

Controlled terms: Fourier transforms - Information science - MIM devices

Uncontrolled terms: Affine transformation - Lumbar vertebrae - Medical image registrations
- Medical images - Multiple images - Mutual information - Rigid transformation

Classification code: 714.2 Semiconductor Devices and Integrated Circuits - 723.2 Data Processing and Image Processing - 903 Information Science - 921.3 Mathematical Transformations

DOI: 10.1109/ISISE.2008.304

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1139.

Accession number: 20091712056302

Title: Ohba's conjecture is true for graphs with independence number at most three

Authors: Shen, Yufa^{1, 2}; He, Wenjie^{2, 3}; Zheng, Guoping^{1, 2}; Li, Yanpo¹

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

2 Center for Mathematics of Hebei Province, Hebei Normal University, Shijiazhuang, 050016, China

3 Applied Mathematics Institute, Hebei University of Technology, Tianjin, 300130, China

Corresponding author: Shen, Y. (syf030514@163.com)

Source title: Applied Mathematics Letters

Abbreviated source title: Appl Math Lett

Volume: 22

Issue: 6

Issue date: June 2009

Publication year: 2009

Pages: 938-942

Language: English

ISSN: 08939659

CODEN: AMLEEL

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: A graph G is said to be chromatic-choosable if its choice number is equal to its chromatic number. Ohba has conjectured that every graph G with $2\chi(G) + 1$ or fewer vertices is chromatic-choosable. At present, only several special classes of graphs have been verified, for which Ohba's conjecture is true. In 2004, Ohba proved that if $|V(G)| \leq 2\chi(G)$ and the independence number of G is at most 3, then G is chromatic-choosable (Ars Combinatoria, 72 (2004), 133-139). In this work we show that if $|V(G)| \leq 2\chi(G) + 1$ and the independence number of G is at most 3, then G is chromatic-choosable. This proves that Ohba's conjecture is true for all graphs G with independence number at most 3 and all $\chi(G)$ -chromatic subgraphs of G . © 2009 Elsevier Ltd. All rights reserved.

Number of references: 12

Main heading: Coloring

Uncontrolled terms: Chromatic-choosable - Complete multipartite graphs - Independence number - List coloring - Ohba's conjecture

Classification code: 802.3 Chemical Operations - 812.3 Glass - 813.1 Coating Techniques

DOI: 10.1016/j.aml.2009.01.001

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1140.

Accession number: 20092112091336

Title: Experimental on squeezed pan piles in single and double rows under loading for protecting foundation excavation

Authors: Wang, Shu-Ren¹ ; Li, Yong² ; Li, Zhong-Fen³

Author affiliation:

- 1 School of Civil Engineering and Mechanics, Yanshan University, Qinhuangdao 066004, China
- 2 Department of Civil Engineering, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 3 Yaohua Construction Installation Corp., Qinhuangdao 066000, China

Corresponding author: Li, Y. (llyong0823@163.com)

Source title: Meitan Xuebao/Journal of the China Coal Society

Abbreviated source title: Meitan Xuebao

Volume: 34

Issue: 4

Issue date: April 2009

Publication year: 2009

Pages: 537-541

Language: Chinese

ISSN: 02539993

CODEN: MTHPDA

Document type: Journal article (JA)

Publisher: China Coal Society, Hepingli, Beijing, 100013, China

Abstract: The displacement characteristic in the top of the cantilever piles and the squeezed branch piles, and the axial force and the distribution of bending moment of these single row piles for protecting foundation excavation were analysed by model test and numerical simulation individually, and that were studied for the double rows squeezed branch piles also. The results show that the displacement in top of the squeezed branch pile is reduced, the multiple bending moments are distributed more evenly, and the maximum bending moment is decreased compared with the cantilever piles. It is concluded that the double rows squeezed branch piles have many significant advantages, including displacement, structure stiffness, axial force and bending moment comparing with the single row ones, and little risk.

Number of references: 14

Main heading: Piles

Controlled terms: Atomic force microscopy - Axial flow - Bending (deformation) - Bending moments - Computer simulation - Excavation - Foundations - Mathematical models - Nanocantilevers

Uncontrolled terms: Axial forces - Cantilever piles - Displacement characteristics - Foundation excavations - Model tests - Numerical simulation - Squeezed branch pile - Structure stiffness - Supporting foundation

Classification code: 723.5 Computer Applications - 741.3 Optical Devices and Systems - 761 Nanotechnology - 921 Mathematics - 931.1 Mechanics - 931.3 Atomic and Molecular Physics - 933 Solid State Physics - 631.1 Fluid Flow, General - 405 Construction Equipment and Methods; Surveying - 405.2 Construction Methods - 408.2 Structural Members and Shapes - 421 Strength of Building Materials; Mechanical Properties - 422.2 Strength of Building Materials : Test Methods - 483.2 Foundations - 502.1 Mine and Quarry Operations

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1141.

Accession number: 20081611206611

Title: Influence of the electric field on the properties of the bound magnetopolaron in GaAs semiconductor quantum wells

Authors: Shan, Shuping^{1, 2}; Xiao, Jinglin^{1, 2}

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Physics and Electronic Information, Inner Mongolia National University, Tongliao 028043, China

Corresponding author: Shan, S.

Source title: Pan Tao Ti Hsueh Pao/Chinese Journal of Semiconductors

Abbreviated source title: Pan Tao Ti Hsueh Pao

Volume: 29

Issue: 3

Issue date: March 2008

Publication year: 2008

Pages: 438-441

Language: English

ISSN: 02534177

CODEN: PTPPDZ

Document type: Journal article (JA)

Publisher: Science Press, 18, Shuangqing Street, Haidian, Beijing, 100085, China

Abstract: The influence of the electric field on the properties of the bound magnetopolaron in an infinite-depth GaAs semiconductor quantum well is investigated using the linear-combination operator and the unitary transformation method. The relationships between the polaron's ground state energy and the Coulomb bound potential, electric field, magnetic field, and well-width are derived and discussed. Our numerical results show that the absolute value of the polaron's ground state energy increases as the electric field and the Coulomb bound potential increase, and decreases as the well-width and the magnetic field strength increase. When the well-width is small, the quantum size effect is significant.

Number of references: 11

Main heading: Semiconductor quantum wells

Controlled terms: Electric fields - Ground state - Magnetic fields - Mathematical operators
- Mathematical transformations - Semiconducting gallium arsenide

Uncontrolled terms: Bound magnetopolaron - Ground state energy - Linear combination operator - Quantum size effect

Classification code: 701.1 Electricity: Basic Concepts and Phenomena - 701.2 Magnetism: Basic Concepts and Phenomena - 712.1 Semiconducting Materials - 714.2 Semiconductor Devices and Integrated Circuits - 921 Mathematics - 931.3 Atomic and Molecular Physics

Treatment: Theoretical (THR)

Database: Compendex

1142.

Accession number: 20101512842850

Title: On the construction of net-based microteaching training mode

Authors: Zhang, Guirong¹ ; Bian, Fenglian² ; Li, Guolin²

Author affiliation:

1 Education Department, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 College of Foreign Languages, Education Department, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Zhang, G. (zgr64@126.com)

Source title: ETT 2009 - 2009 2nd International Conference on Education Technology and Training

Abbreviated source title: ETT - Int. Conf. Educ. Technol. Train.

Monograph title: ETT 2009 - 2009 2nd International Conference on Education Technology and Training

Issue date: 2009

Publication year: 2009

Pages: 86-89

Article number: 5381359

Language: English

ISBN-13: 9780769539362

Document type: Conference article (CA)

Conference name: 2009 2nd International Conference on Education Technology and Training, ETT 2009

Conference date: December 13, 2009 - December 14, 2009

Conference location: Sanya, China

Conference code: 79728

Sponsor: Intelligent Information Technology; Application Research Association; IEEE SMC TC on Education and Training; IEEE Technical Committee on Learning Technology; Wuhan Institute of Technology

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: As information technology advanced, computer and network has been widely used in teaching, thus a broad space for the development of microteaching training mode. This paper designed its net-based training mode based on the traditional training mode so that network learning resources can be fully exploited to improve the efficiency of normal students' teaching training. © 2009 IEEE.

Number of references: 7

Main heading: Teaching

Uncontrolled terms: Microteaching - Network learning - Training mode

Classification code: 901.2 Education

DOI: 10.1109/ETT.2009.47

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1143.

Accession number: 20091211966008

Title: Excitation energy and frequency of transition spectral line of electron in an asymmetry quantum dot

Authors: Xiao, Jing-Lin^{1, 2}

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 College of Physics and Electronic Information, Inner Mongolia University for the Nationalities, Tongliao 028043, China

Corresponding author: Xiao, J.-L. (xiaojlin@126.com)

Source title: Guang Pu Xue Yu Guang Pu Fen Xi/Spectroscopy and Spectral Analysis

Abbreviated source title: Guang Pu Xue Yu Guang Pu Fen Xi

Volume: 29

Issue: 3

Issue date: March 2009

Publication year: 2009

Pages: 598-601

Language: Chinese

ISSN: 10000593

CODEN: GYGFED

Document type: Journal article (JA)

Publisher: Science Press, 18, Shuangqing Street, Haidian, Beijing, 100085, China

Abstract: In an asymmetry quantum dot, the properties of the electron, which is strongly coupled with phonon, were investigated. The variational relations of the first internal excited state energy, the excitation energy and the frequency of transition spectral line between the first internal excited state and the ground state of the electron which is strongly coupled with phonon in an asymmetry quantum dot with the transverse and longitudinal effective confinement length of quantum dot and the electron-phonon coupling strength were studied by using a linear combination operator and the unitary transformation methods. Numerical calculations for the variational relations of the first internal excited state energy, the excitation energy and the frequency of transition spectral line between the first internal excited state and the ground state of the electron which is strongly coupled with phonon in an asymmetry quantum dot with the transverse and longitudinal effective confinement length of quantum dot and the electron-phonon coupling strength were performed and the results show that the first internal excited state energy, the excitation energy and the frequency of transition spectral line between the first internal excited state and the ground state of the electron which is strongly coupled with phonon in an asymmetry quantum dot will strongly increase with decreasing the transverse and longitudinal effective confinement length. The first internal excited state energy of the electron which is strongly coupled with phonon in an asymmetry quantum dot will decrease with increasing the electron-phonon coupling strength. The excitation energy and the frequency of transition spectral line between the first internal excited state and the ground state of the electron which is strongly coupled with phonon in an asymmetry quantum dot will increase with increasing the electron-phonon coupling strength.

Number of references: 15

Main heading: Semiconductor quantum dots

Controlled terms: Auger electron spectroscopy - Electron correlations - Electron-phonon interactions - Electrons - Excitation energy - Excited states - Ground state - Mathematical operators - Spectrum analysis

Uncontrolled terms: Asymmetry quantum dot - Effective confinement length - Electron-phonon coupling strengths - Excited-state energies - Linear combination operator - Numerical calculations - Spectral lines - Unitary transformations - Variational relations

Classification code: 932.1 High Energy Physics - 933 Solid State Physics - 941 Acoustical and Optical Measuring Instruments - 932 High Energy Physics; Nuclear Physics; Plasma Physics - 941.4 Optical Variables Measurements - 943 Mechanical and Miscellaneous Measuring Instruments - 944 Moisture, Pressure and Temperature, and Radiation Measuring Instruments - 942 Electric and Electronic Measuring Instruments - 931.4 Quantum Theory; Quantum Mechanics - 708.3 Superconducting Materials - 714.2 Semiconductor Devices and Integrated Circuits - 801 Chemistry - 701.1 Electricity: Basic Concepts and Phenomena - 921 Mathematics - 931.2 Physical Properties of Gases, Liquids and Solids - 931.3 Atomic and Molecular Physics - 922.2 Mathematical Statistics

DOI: 10.3964/j.issn.1000-0593(2009)03-0598-04

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1144.

Accession number: 20071610557834

Title: Effect of rare earth elements on solid boronizing process of T8steel

Authors: Wang, Kuan1 ; Liu, Jianhua2 ; Fan, Liru3

Author affiliation:

- 1 Academic Affairs Department, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China
- 3 College of Mathematics and Physics, Yanshan University, Qinhuangdao 066004, China

Corresponding author: Wang, K. (W-kuan@163.com)

Source title: Journal of Rare Earths

Abbreviated source title: J Rare Earth

Volume: 24

Issue: SUPPL. 3

Issue date: December 2006

Publication year: 2006

Pages: 293-296

Language: English

ISSN: 10020721

CODEN: JREAE6

Document type: Journal article (JA)

Publisher: Chinese Society of Rare Earths

Abstract: The boronizing supply agent of a low-priced solid was presented, and the experimental of the boronizing process was studied, microstructure and properties of bonding layer by means of the microstructure observation and hardness testing, as well as the effect of rare earth elements on the bonding process, microstructure and properties of bonding layer were also discussed. The results show that the boronizing supply agent is feasible, the boronizing layer on the surface of steel is continuous, even, no defect is produced, and it can be used repetitively. As a result, RE can increase the rate of boronizing and the hardness of boriding layer, and can also improve the distribution of hardness of bonding layer.

Number of references: 7

Main heading: Steel

Controlled terms: Boriding - Hardness - Heat treatment - Microstructure - Rare earth elements

Uncontrolled terms: Boronizing - Surface strengthening

Classification code: 421 Strength of Building Materials; Mechanical Properties - 531.2 Metallography - 537.1 Heat Treatment Processes - 545.3 Steel - 547.2 Rare Earth Metals

Treatment: Theoretical (THR); Experimental (EXP)

DOI: 10.1016/S1002-0721(07)60384-6

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1145.

Accession number: 2005249160933

Title: Preparation of 6-carboxy-chitosan spheres and its adsorption properties for low molecular weight uremic toxins

Authors: Zhang, Wei-Guo¹ ; Yang, Yue-Dong¹ ; Zhou, Yong-Guo¹ ; Lu, Xu-Lin¹

Author affiliation:

1 Department of Chemistry, Hebei Normal University of Science and Technology, Changli 066600, China

Corresponding author: Yang, Y.-D.

Source title: Gongneng Cailiao/Journal of Functional Materials

Abbreviated source title: Gongneng Cailiao

Volume: 36

Issue: 5

Issue date: May 2005

Publication year: 2005

Pages: 737-739

Language: Chinese

ISSN: 10019731

CODEN: GOCAEA

Document type: Journal article (JA)

Publisher: Journal of Functional Materials

Abstract: A new uremic toxin adsorbent, 6-carboxy-chitosan spheres, was prepared by crosslinking 6-carboxy-chitosan with glutaraldehyde. The spheres didn't adsorb albumin. Having many well-distributed folds on the surface, 6-carboxy-chitosan spheres was a good adsorbent for some uremic toxins such as uric acid, hippuric acid, etc. The adsorption capacities of the spheres for uric acid was 2.61 mg/g when 0.10 g adsorbent was

admitted to 3.0 ml of a 0.12 mg/ml uric acid solution, for hippuric acid and creatinine were 1.5 mg/g and 0.81 mg/g when 0.10 g adsorbents were admitted to 3.0 ml of a 0.10 mg/ml hippuric acid solution and 0.10 mg/ml creatine solution, respectively. After the serum that contained uremic toxins being treated with the adsorbent, the uric acid and hippuric acid contents in it could be recovered to normal level.

Number of references: 12

Main heading: Polyelectrolytes

Controlled terms: Adsorbents - Adsorption - Biomedical engineering - Crosslinking - Human engineering - Morphology - Scanning electron microscopy - Toxic materials

Uncontrolled terms: Chitosan - Low molecular weight toxins - Uremic toxin

Classification code: 461.1 Biomedical Engineering - 461.4 Ergonomics and Human Factors Engineering - 815.1.1 Organic Polymers

Numerical data indexing: Mass 1.00e-04kg, Mass_Density 1.00e-01kg/m3, Mass_Density 1.20e-01kg/m3, Volume 3.00e-03l

Treatment: Experimental (EXP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1146.

Accession number: 20091512023289

Title: Technology for preparation of semidry solid nitrosohemoglobin from pig blood

Authors: Zheng, Lihong¹ ; Xiao, Yuejuan¹ ; Li, Fengying¹ ; Li, Hanchen¹ ; Guo, Shuo¹ ; Ren, Fazheng²

Author affiliation:

1 Department. of Food Engineering, ,, Hebei Normal University of Science and Technology, Changli 066600, China

2 College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China

Corresponding author: Ren, F.

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 25

Issue: 1

Issue date: January 2009

Publication year: 2009

Pages: 276-280

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Agricultural Exhibition Road South, Beijing, 100026, China

Abstract: In order to make use of pig blood sufficiently and provide colorant which possesses excellent color and is rich in nutrition for meat products, hemoglobin solution was separated from fresh pig blood and semidry solid nitrosohemoglobin was prepared with vitamin C as reducer and sodium nitrite as color fixatives and the preparation of hemachrome is not necessary. Single factor experiment was conducted to determine the best range of addition of sodium nitrite, addition of vitamin C and heating time in which chromogenic rate of the prepared nitrosohemoglobin is higher. orthogonal test of three factors and three levels was conducted to optimize the technology. The results show that the optimum technology is as follows: hemachrome, sodium nitrite and vitamin C should be mixed in hemoglobin solution as the mol ratio of 1:3:12, heating temperature is 85°C, and holding time is 15min. The chromogenic rate of the nitrosohemoglobin prepared under this condition is 90.42%.

Number of references: 14

Main heading: Blood

Controlled terms: Color - Heating - Hemoglobin - Sodium - Technology

Uncontrolled terms: Fixation - Heating temperatures - Heating time - Holding time - Meat products - Nitrosohemoglobin - Orthogonal tests - Pig - Preparation technology - Sodium nitrites - Vitamin-C

Classification code: 901 Engineering Profession - 804 Chemical Products Generally - 741.1 Light/Optics - 643.1 Space Heating - 642.1 Process Heating - 549.1 Alkali Metals - 461.2 Biological Materials and Tissue

Engineering

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1147.

Accession number: 2006099733309

Title: Design of long-distance measuring-controlling system based on topological structure for agricultural facilities

Authors: Liu, Shiguang; Liu, Jianmin; Ma, Jiwei; Wang, Jianfeng; Qiao, Xiaohui

Corr. author affiliation: Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Nongye Jixie Xuebao/Transactions of the Chinese Society of Agricultural Machinery

Abbreviated source title: Nongye Jixie Xuebao

Volume: 37

Issue: 1

Issue date: January 2006

Publication year: 2006

Pages: 101-103+117

Language: Chinese

ISSN: 10001298

CODEN: NUYCA3

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Machinery, Beijing, China

Abstract: In order to heighten composing flexible performance and capability-price ratio, a long-distance measuring-controlling system, which adopts the wireless communication methods combined with

linear one based on topological structure for agricultural facilities, was designed. The characteristics of structure, working principle and design method of the system were introduced. The field experiments indicate that the developed long-distance measuring-controlling system has good stability and flexibility.

Number of references: 16

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1148.

Accession number: 20104813426154

Title: Design and implementation of the embedded wince software platform drive

Authors: Xu, Liyong¹ ; Dong, Yanrong¹ ; Gu, Liwei¹ ; Li, Jianguo¹

Author affiliation:

1 Dept. of Computer Science, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Xu, L. (lijg3343@126.com)

Source title: ICACTE 2009 - Proceedings of the 2nd International Conference on Advanced Computer Theory and Engineering

Abbreviated source title: ICACTE - Proc. Int. Conf. Adv. Comput. Theory Eng.

Volume: 2

Part number: 2 of 2

Monograph title: ICACTE 2009 - Proceedings of the 2nd International Conference on Advanced Computer Theory and Engineering

Issue date: 2009

Publication year: 2009

Pages: 1933-1940

Language: English

ISBN-13: 9780791802977

Document type: Conference article (CA)

Conference name: 2nd International Conference on Advanced Computer Theory and Engineering, ICACTE 2009

Conference date: September 25, 2009 - September 27, 2009

Conference location: Cairo, Egypt

Conference code: 82481

Sponsor: IACSIT Computer Theory and Engineering Society; Modeling and Simulation Society; IACSIT

Publisher: American Society of Mechanical Engineers, 3 Park Avenue, New York, NY 10016-5990, United States

Abstract: As a Embedded real-time operating system released by Microsoft, WinCE, with features of good man-machine interface, high reliability and short development cycle, open and convenience to connect with various equipments fast, makes itself the first choice for operating embedded system. This paper are described the development process and methods of WinCE operating system in the three aspects of the start program, OAL layer and the driver program, focusing on design principles and implementation methods of key drive modules such as the serial port driver and NANDFlash driver, and gives a detailed implementation project.

Number of references: 8

Main heading: Embedded software

Controlled terms: Windows operating system

Uncontrolled terms: Design Principles - Development cycle - Development process - Driver - Driver program - Embedded - Embedded real time operating system - High reliability - Implementation methods - Implementation projects - Man-machine interface - MicroSoft - Operating systems - Serial - Serial port - Software platforms

Classification code: 723 Computer Software, Data Handling and Applications

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20064710256826

Title: Preparation of in situ TiCP/LY12 composite and its microstructure and mechanical properties

Authors: Zeng, X.W.1 ; Zhang, W.G.1, 2 ; Wei, N.1 ; Liu, R.P.1 ; Ma, M.Z.1

Author affiliation:

- 1 State Key Laboratory of Metastable Materials Science and Technology, College of Material Science and Technology, Yanshan University, Qinhuangdao, 066004, China
- 2 Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China

Corresponding author: Ma, M.Z. (mz550509@ysu.edu.cn)

Source title: Materials Science and Engineering A

Abbreviated source title: Mater. Sci. Eng. A

Volume: 443

Issue: 1-2

Issue date: January 15, 2007

Publication year: 2007

Pages: 224-228

Language: English

ISSN: 09215093

Document type: Journal article (JA)

Publisher: Elsevier Ltd

Abstract: Mechanical properties of TiCP/LY12 Al-based composites prepared by an in situ synthesis method were studied. The micro-structure, morphology, and distribution of TiCp particles in the LY12 Al alloy matrix were also investigated by XRD, SEM, and HRTEM. The phase composition of the TiCP/LY12 composites, interfacial structure of TiC particle-to-particle and TiC particle-to-Al matrix, and structure of triple phase among TiC particle, Al₂Cu phase, and Al matrix were also studied. There are no detectable Al₃Ti phases in TiCP/LY12 composites, and a strong cohesive interface between TiC particles and Al-based alloy matrix was observed in the in situ synthesized TiCP/LY12 composites. After heat treatment using T6 procedure, it was found that ultimate strength (σ_b), yield strength (σ_s), and Young's modulus (E) of TiCP/LY12 composites increased but the elongation ratio decreased with increasing of the mass fraction of TiC particles. © 2006 Elsevier B.V. All rights reserved.

Number of references: 14

Main heading: Metallic matrix composites

Controlled terms: Crystal microstructure - Elastic moduli - High resolution electron microscopy - Interfaces (materials) - Morphology - Scanning electron microscopy - Transmission electron microscopy - X ray diffraction analysis - Yield stress

Uncontrolled terms: In situ synthesis method - Ultimate strength

Classification code: 531.1 Metallurgy - 801.1 Chemistry, General - 931.2 Physical Properties of Gases, Liquids and Solids - 933.1.1 Crystal Lattice

Treatment: Experimental (EXP)

DOI: 10.1016/j.msea.2006.08.030

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1150.

Accession number: 20064910289673

Title: Properties of strong-coupling excitons in semiconductor quantum dots

Authors: Li, Zhixin^{1, 2}; Xiao, Jinglin²

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Department of Physics, Inner Mongolia National University, Tongliao 028043, China

Corresponding author: Li, Z.

Source title: Pan Tao Ti Hsueh Pao/Chinese Journal of Semiconductors

Abbreviated source title: Pan Tao Ti Hsueh Pao

Volume: 27

Issue: 10

Issue date: October 2006

Publication year: 2006

Pages: 1755-1758

Language: Chinese

ISSN: 02534177

CODEN: PTPPDZ

Document type: Journal article (JA)

Publisher: Science Press

Abstract: The properties of strong-coupling excitons in semiconductor quantum dots are investigated using the linear combination operator and unitary transformation methods. The ground state energy of the heavy-hole exciton is obtained under the effective-mass approximation. The influences of the radius of the quantum dots and the confinement strength on the ground state energy of the strong-coupling exciton in the semiconductor quantum dots are discussed in the case of strong-coupling. Numerical calculations are performed for a TlCl semiconductor. Our results illustrate that the energy of the ground state heavy-hole exciton decreases with the increase of the radius of the quantum dots and increases with the increase of the confinement strength ω_0 of quantum dots.

Number of references: 15

Main heading: Excitons

Controlled terms: Calculations - Couplings - Ground state - Semiconductor materials - Semiconductor quantum dots

Uncontrolled terms: Linear combination - Numerical calculations - Strong coupling excitons - Unitary transformation

Classification code: 712.1 Semiconducting Materials - 714.2 Semiconductor Devices and Integrated Circuits - 921 Mathematics - 931.3 Atomic and Molecular Physics

Treatment: Theoretical (THR)

Database: Compendex

1151.

Accession number: 20101712882112

Title: Design of distributed firewall based on KeyNote in campus network

Authors: Yang, Yan Ping¹ ; Yu, Hong Kui¹ ; Che, Yong He¹ ; Kang, Yan¹

Author affiliation:

1 Dept. of Computer Science and Technology, Hebei Normal University of Science and Technology, Qinhuangdao, China

Corresponding author: Yang, Y. P. (Yanping_yang@163.com)

Source title: Proceedings of the International Symposium on Test and Measurement

Abbreviated source title: Proc Int Symp Test Meas

Volume: 2

Part number: 2 of 2

Monograph title: ICTM 2009 - 2009 International Conference on Test and Measurement

Issue date: 2009

Publication year: 2009

Pages: 137-140

Article number: 5413093

Language: English

ISBN-13: 9781424447008

Document type: Conference article (CA)

Conference name: 2009 International Conference on Test and Measurement, ICTM 2009

Conference date: December 5, 2009 - December 6, 2009

Conference location: Hong Kong, Hong kong

Conference code: 79911

Sponsor: Institute of Electrical and Electronics Engineers; IEEE Instrumentation and Measurement Society; Intelligent Information Technology; Application Research Association

Publisher: International Academic Publishers, 137 Chaonei Dajie, Beijing, 100010, China

Abstract: In this paper, the network security and traditional firewall technology were introduced, pointing out that the problems faced by traditional firewall. Then the structure of the distributed firewall, key technology and advantages of an in-depth study. The various parts of the text on the design and implementation of a detailed introduction. Then, the analysis of the control of several now distributed firewall technology at home and abroad, chose KeyNote distributed firewall model to achieve specific functions, and KeyNote model describes the various modules and functions to make. © 2009 IEEE.

Number of references: 8

Main heading: Network security

Uncontrolled terms: Campus network - Distributed firewall - In-depth study - Key technologies

Classification code: 723 Computer Software, Data Handling and Applications

DOI: 10.1109/ICTM.2009.5413093

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1152.

Accession number: 20073710810192

Title: Temperature-dependent 4H-SiC MOSFET channel-electron mobility model for circuit simulation

Authors: Dai, Zhenqing^{1, 2}; Yang, Ruixia¹; Yang, Kewu^{1, 3}

Author affiliation:

1 Hebei University of Technology, Tianjin 300130, China

2 Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

3 The 13th Research Institute, China Electronics Technology Group Corporation, Shijiazhuang 050051, China

Corresponding author: Dai, Z. (daizhenqing@126.com)

Source title: Pan Tao Ti Hsueh Pao/Chinese Journal of Semiconductors

Abbreviated source title: Pan Tao Ti Hsueh Pao

Volume: 28

Issue: 8

Issue date: August 2007

Publication year: 2007

Pages: 1252-1255

Language: Chinese

ISSN: 02534177

CODEN: PTPPDZ

Document type: Journal article (JA)

Publisher: Science Press, 18,Shuangqing Street,Haidian, Beijing, 100085, China

Abstract: An improved temperature-dependent 4H-SiC MOSFET channel-electron mobility model for circuit simulation is established. Some factors are introduced, including the effects of temperature on transverse effective electric field and surface roughness scattering, the dependence of the saturation drift velocity of the electron on transverse effective electric field and temperature, and an improved interface trapped charge and fixed oxide charge coulomb scattering model. In addition, the interface state parameters and fixed oxide charge density are extracted by simulation with the experimental temperature-threshold voltage curve. The simulated output characteristic curves with this model agree with experimental results.

Number of references: 16

Main heading: MOSFET devices

Controlled terms: Circuit simulation - Electric fields - Electron mobility - Surface roughness - Threshold voltage

Uncontrolled terms: Interface state parameters - Temperature dependent mobility

Classification code: 701.1 Electricity: Basic Concepts and Phenomena - 712.1 Semiconducting Materials - 714.2 Semiconductor Devices and Integrated Circuits - 931.2 Physical Properties of Gases, Liquids and Solids

Treatment: Theoretical (THR)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1153.

Accession number: 2005249156750

Title: Accurate camera intrinsic parameters calibration using virtual stereo board

Authors: Yu, Zhijing¹ ; Ma, Jiwei¹ ; Ma, Yuquan¹ ; Che, Rensheng² ; Li, Zhihong¹ ; Li, Jinze¹ ; Tian, Wei¹

Author affiliation:

1 Dept. of Mechanical Engineering, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

2 Dept. of Precision Instruments, Harbin Institute of Technology, Harbin 150001, China

Corresponding author: Yu, Z. (yuzhj_qhd@yahoo.com.cn)

Source title: Proceedings of SPIE - The International Society for Optical Engineering

Abbreviated source title: Proc SPIE Int Soc Opt Eng

Volume: 5633

Monograph title: Advanced Materials and Devices for Sensing and Imaging II

Issue date: 2005

Publication year: 2005

Pages: 371-382

Article number: 55

Language: English

ISSN: 0277786X

CODEN: PSISDG

Document type: Conference article (CA)

Conference name: Advanced Materials and Devices for Sensing and Imaging II

Conference date: November 8, 2004 - November 10, 2004

Conference location: Beijing, China

Conference code: 64960

Sponsor: SPIE; Chinese Optical Society, COS

Publisher: SPIE

Abstract: A high accuracy and flexible method for calibrating intrinsic parameters of CCD camera is presented. The intrinsic parameters of camera is determined from collinear constraint and computed through bundle adjustment algorithm. Calibration is carried out by moving an optical feature point with CMM and forming a virtual stereo calibration board. The images of this virtual board are taken by the calibrated camera which in different locations and orientations. Due to take infrared LED as feature point and the light intensity of these feature points can be automatically controlled according to the distance between camera and feature point, the imaging feature points have uniform intensity profile and high contrast with background, and hence the calibration accuracy is improved. This method has been used for calibrating the Kodak MegaPlus 1.4i CCD cameras, which used in large-scale stereo vision coordinate online measurement system, and obtained higher measurement precision.

Number of references: 24

Main heading: Cameras

Controlled terms: Charge coupled devices - Computer vision - Imaging techniques - Light amplifiers - Light emitting diodes - Photogrammetry - Remote sensing - Stereo vision - Virtual reality

Uncontrolled terms: Bundle adjustment - Camera calibration - Collinear constraint - Online measurement systems

Classification code: 742.1 Photography - 741.2 Vision - 731.1 Control Systems - 742.2 Photographic Equipment - 723.5 Computer Applications - 714.2 Semiconductor Devices and Integrated Circuits - 405.3 Surveying - 723.2 Data Processing and Image Processing

Treatment: Theoretical (THR)

DOI: 10.1117/12.571934

Database: Compendex

1154.

Accession number: 20082811356885

Title: The fluidity and molding ability of glass-forming Zr-based alloy melt

Authors: Ma, MingZhen¹ ; Zong, HaiTao¹ ; Wang, HaiYan¹ ; Qi, YanPeng¹ ; Liang, SunXing¹ ; Song, AiJun^{1, 2} ; Zhang, WeiGuo^{1, 2} ; Wang, Qiang¹ ; Zhang, XinYu¹ ; Jing, Qin¹ ; Li, Gong¹ ; Liu, RiPing¹

Author affiliation:

1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao 066004, China

2 Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Corresponding author: Liu, R. (riping@ysu.edu.cn)

Source title: Science in China, Series G: Physics, Mechanics and Astronomy

Abbreviated source title: Sci. China Ser. G Phys. Mech. Astron.

Volume: 51

Issue: 4

Issue date: April 2008

Publication year: 2008

Pages: 438-444

Language: English

ISSN: 16721799

E-ISSN: 18622844

Document type: Journal article (JA)

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The fluidity and filling ability of glass-forming Zr-based alloy melt in copper mould were investigated both theoretically and experimentally. The major factors which affected the flowing behavior of the metallic melt in the mold were determined, which provides the foundation for overcoming the contradiction between the filling and formation of amorphous alloy during the rapid cooling process of the metallic melts. The casting factors to prepare a metallic ring were discussed and selected. As a result, a Zr-based bulk metallic glass

ring was prepared successfully. © 2008 Science in China Press.

Number of references: 26

Main heading: Metallic glass

Controlled terms: Alloys - Amorphous alloys - Copper - Fluidity - Forming - Glass - Liquid metals - Metallic soaps - Molding - Molds - Phase composition - Zirconium - Zirconium alloys

Uncontrolled terms: (O-sec.-butyldithiocarbonatio-S ,S') copper - Filling abilities - Glass-forming - Metallic melts - Metallic rings - Rapid cooling processes - Zr-based alloy - Zr-based bulk metallic glass

Classification code: 812.3 Glass - 804.1 Organic Compounds - 641.1 Thermodynamics - 549.3 Nonferrous Metals and Alloys excluding Alkali and Alkaline Earth Metals - 931.2 Physical Properties of Gases, Liquids and Solids - 544.1 Copper - 535.2 Metal Forming - 531.1 Metallurgy - 531 Metallurgy and Metallography - 535.2.1 Metal Forming Machines

DOI: 10.1007/s11433-008-0041-6

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1155.

Accession number: 20082311291628

Title: Application research on groundwater dynamic auto-monitoring system based on smart device

Authors: Chen, Xiuhong¹ ; Liu, Rongchang¹ ; Cheng, Hui¹ ; Chen, Chunming¹ ; Feng, Lizhen¹ ; Wang, Feng¹ ; Qian, Dongping² ; Chen, Zhongfeng³

Author affiliation:

1 E and A College, Hebei Normal University of Science and Technology, Qinhuangdao, China

2 MandE College Agricultural University, Hebei Baoding, China

3 Tang Shan Strong Coal Preparation Technology Co.Ltd., Tangshan, China

Corresponding author: Chen, X. (cxdhxm791117@yahoo.com.cn)

Source title: 2007 IEEE International Conference on Control and Automation, ICCA

Abbreviated source title: IEEE Int. Conf. Control Autom. ICCA

Monograph title: 2007 IEEE International Conference on Control and Automation, ICCA

Issue date: 2008

Publication year: 2008

Pages: 2675-2678

Article number: 4376847

Language: English

ISBN-10: 1424408180

ISBN-13: 9781424408184

Document type: Conference article (CA)

Conference name: 2007 IEEE International Conference on Control and Automation, ICCA

Conference date: May 30, 2007 - June 1, 2007

Conference location: Guangzhou, China

Conference code: 72048

Publisher: Institute of Electrical and Electronics Engineers Inc., 445 Hoes Lane / P.O. Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: This paper has developed a new-type groundwater dynamic autfr monitoring system based on Smart Device. The system adopted Smart Device as host computer of data acquisition, used Windows Mobile which was prevalent operation system of Smart Device now, software development environment Visual Studio.NET 2003, and C# as the developing language based on .NET framework. It adopted serial port RS232 as the communication interface between Smart Device and monitor host machine and utilized multi-threading design to achieve serial port communication. It adopted the standardized and textual XML to store the data. And this system implemented the function of data acquiring, file managing, and analysing and displaying. In virtue of fully considerations in characteristic of Smart Device, tills system had the succinct window interface, simply operation, powerful function, and was very convenient to carry. Moreover it has already made very good use result in practice. © 2007 IEEE.

Number of references: 7

Main heading: Groundwater

Controlled terms: Computer software - Data acquisition - Intelligent materials - Interfaces

(computer) - Standardization - XML

Uncontrolled terms: Groundwater monitoring - Operation system - Smart Devices

Classification code: 415 Metals, Plastics, Wood and Other Structural Materials - 444.2 Groundwater - 722.2 Computer Peripheral Equipment - 723.2 Data Processing and Image Processing - 902.2 Codes and Standards

Treatment: Applications (APP); Theoretical (THR)

DOI: 10.1109/ICCA.2007.4376847

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1156.

Accession number: 20084111631272

Title: Structural properties and edge choosability of planar graphs without 4-cycles

Authors: Shen, Yufa^{1, 4}; Zheng, Guoping¹; He, Wenjie²; Zhao, Yongqiang³

Author affiliation:

- 1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China
- 2 Applied Mathematics Institute, Hebei University of Technology, Tianjin, 300130, China
- 3 Department of Mathematics, Shijiazhuang College, Shijiazhuang, 050801, China
- 4 Center for Mathematics of Hebei Province, Hebei Normal University, Shijiazhuang, 050016, China

Corresponding author: Shen, Y. (syf030514@163.com)

Source title: Discrete Mathematics

Abbreviated source title: Discrete Math

Volume: 308

Issue: 23

Issue date: December 6, 2008

Publication year: 2008

Pages: 5789-5794

Language: English

ISSN: 0012365X

CODEN: DSMHA4

Document type: Journal article (JA)

Publisher: Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands

Abstract: Some structural properties of planar graphs without 4-cycles are investigated. By the structural properties, it is proved that every planar graph G without 4-cycles is edge- $(\Delta(G) + 1)$ -choosable, which perfects the result given by Zhang and Wu: If G is a planar graph without 4-cycles, then G is edge- t -choosable, where $t = 7$ if $\Delta(G) = 5$, and otherwise $t = \Delta(G) + 1$. © 2007 Elsevier B.V. All rights reserved.

Number of references: 16

Main heading: Graph theory

Controlled terms: Structural properties

Uncontrolled terms: Choosability - Cycles - Edge choosability - Planar graphs

Classification code: 408 Structural Design - 921.4 Combinatorial Mathematics, Includes Graph Theory, Set Theory

DOI: 10.1016/j.disc.2007.09.048

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1157.

Accession number: 2005489513839

Title: Biological characterization and phylogenetic analysis of pathogenic *E. tarda* isolated from flounder (*Paralichthys olivaceus*) and turbot (*Scophthalmus maximus*)

Authors: Chen, Cuizhen; Fang, Hai; Zhang, Xiaojun; Zhan, Wenbin

Corr. author affiliation: Department of Animal Science, Hebei Normal University of Science and Technology, Qinhuangdao 066600, China

Source title: Gaojishu Tongxin/Chinese High Technology Letters

Abbreviated source title: Gaojishu Tongxin

Volume: 15

Issue: 10

Issue date: October 2005

Publication year: 2005

Pages: 82-88

Language: Chinese

ISSN: 10020470

Document type: Journal article (JA)

Publisher: Inst. of Scientific and Technical Information of China, Beijing, China

Abstract: Identification of extensive phenotypic information including morphological, physiological and biochemical characteristics of the pathogenic bacteria isolated from seven cases of flounder (*Paralichthys olivaceus*) and 3 cases of turbot (*Scophthalmus maximus*) was conducted, and the mol% G + C ratio of the DNA for the representative strains were detected. In addition, the molecular identification of 16S rRNA gene for the representative strains was performed, the 16S rRNA gene was sequenced and compared with that of related strains, and the molecular phylogenetic dendrogram was constructed. The results showed that the isolated 148 strains belonged to *E. tarda* of *Edwardsiella*, 128 strains were identified as *E. tarda* wild type and 20 strains were identified as *E. tarda* indole-negative. The 16S rRNA gene sequence of the representative strains (HC010907-1 and HC010830-1) exhibited high similarity (99%) with the 16S rRNA gene of *E. tarda* from GenBank database.

Number of references: 25

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

Accession number: 20071810577455

Title: Development of ELISA for the determination of transgenic Bt-cottons using antibodies against Cry1Ac protein from *Bacillus thuringiensis* HD-73

Authors: Wang, S.1 ; Guo, A.Y.2 ; Zheng, W.J.3 ; Zhang, Y.1 ; Qiao, H.1 ; Kennedy, I.R.4

Author affiliation:

- 1 Tianjin Key Laboratory of Food Nutrition and Safety, Faculty of Food Engineering and Biotechnology, Tianjin University of Science and Technology, 1038 Dagunan Road, Tianjin 300222, China
- 2 Hebei Normal University of Science and Technology, Hebei, China
- 3 Tianjin Entry-Exit Inspection and Quarantine Bureau of the People's Republic of China, Tianjin, China
- 4 Faculty of Agriculture, Food and Natural Resources, University of Sydney, Sydney, NSW, Australia

Corresponding author: Wang, S. (s.wang@tust.edu.cn)

Source title: Engineering in Life Sciences

Abbreviated source title: Eng. Life Sci.

Volume: 7

Issue: 2

Issue date: April 2007

Publication year: 2007

Pages: 149-154

Language: English

ISSN: 16180240

E-ISSN: 16182863

CODEN: ELSNAE

Document type: Journal article (JA)

Publisher: Wiley-VCH Verlag, P.O. Box 101161, Weinheim, D-69451, Germany

Abstract: The area cultivated with Bt-cottons expressing Cry1Ac gene increases year by year in China and other countries. To evaluate any potential adverse impacts on the environment from the release of Bt (*Bacillus thuringiensis*) technology, the development of a method for easily detecting the activity of the Cry1Ac toxins is of particular interest. The aim of this study was to develop sandwich-ELISA for the detection of Cry1Ac protein in Bt-cotton tissues. A specific antibody was obtained from rabbits inoculated with Cry1Ac protein derived from Bt

strain HD-73 and a secondary antibody conjugated to HRP could combine the Bt Cry1Ac protein specifically. The limit of detection was 5 ng/mL and there were no cross-reactions between the positive control of Cry1Ac, Cry1C, Cry2A, Cry3Bb1 and Cry9C. Extracts of proteins from cotton leaves were used to evaluate the suitability of the assay. Tris-borate buffer and sodium carbonate buffer were employed for the extraction of protein, the limit absorbance of detection was 0.134 and 0.449, respectively, and the latter produced a higher background. The results showed that cultivars GK-12, GK-22, insect-resistant cotton, bivalent transgenic cotton and shiyuan 321 assayed positively and NON was the negative sample. The PCR method was used for the validation of the developed assay. Although both methods allowed the same results to be obtained, ELISA needed simple equipment and took less time. The developed immunoassay method is considered reliable for the detection of Bt Cry1Ac protein. © 2007 Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim.

Number of references: 17

Main heading: Genetic engineering

Controlled terms: Antibodies - Bacteria - Bioassay - Cotton - Extraction - Genes - Proteins

Uncontrolled terms: Bacillus thuringiensis - Immunoassay method - Transgenic plants

Classification code: 461.2 Biological Materials and Tissue Engineering - 461.9.1 Immunology - 801.2 Biochemistry - 802.3 Chemical Operations - 804.1 Organic Compounds - 821.4 Agricultural Products

Treatment: Experimental (EXP)

DOI: 10.1002/elsc.200620179

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1159.

Accession number: 20074310888342

Title: Influences of the magnetic field on the internal excited state of the polaron in the parabolic quantum dot

Authors: Wuyunqimuge1 ; Yang, Hongtao1, 2 ; Eerdunchaolu2

Author affiliation:

1 College of Physics and Electromechanics, Inner Mongolia University for Nationalities, Tongliao 028043, China

2 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao

066004, China

Corresponding author: Wuyunqimuge

Source title: Gutu Dianzixue Yanjiu Yu Jinzhan/Research and Progress of Solid State Electronics

Abbreviated source title: Gutu Dianzixue Yanjiu Yu Jinzhan

Volume: 27

Issue: 3

Issue date: August 2007

Publication year: 2007

Pages: 285-289

Language: Chinese

ISSN: 10003819

CODEN: GDYJE2

Document type: Journal article (JA)

Publisher: Research Progress of Solid State Electronics, P.O. Box 1601, Nanjing, 210016, China

Abstract: The influences of the external magnetic field on the properties of the excited state of the polaron in a parabolic quantum dot are studied by using the linear combination operator and the unitary transformation method, the relation of the first internal excited state energy E_1 , excited energy ΔE and the resonance frequency ω of both the strong- and weak-coupling polaron with the effective confinement length l_0 of the quantum dot, the electron-phonon coupling strength α and external magnetic field B are derived. Numerical calculation results show that, λ , E_1 , ΔE and ω of both the strong- and weak-coupling polaron in quantum dot under the magnetic field will increase with the decrease of l_0 of the quantum dot, and will increase with the increase of the cyclotron frequency ω_c (magnetic field B). In addition, for weak-coupling case, λ , ΔE and ω of polaron have no connection with α , and E_1 will decrease with the increase of α . On the contrary, for strong-coupling case, λ , E_1 , ΔE and ω of polaron will increase with the increase of α .

Number of references: 15

Main heading: Semiconductor quantum dots

Controlled terms: Calculations - Excitation energy - Excited states - Magnetic fields - Polarons

Uncontrolled terms: Excited energy - First internal excited state - Parabolic quantum dot - Resonance frequency

Classification code: 701.2 Magnetism: Basic Concepts and Phenomena - 714.2 Semiconductor Devices and Integrated Circuits - 921 Mathematics - 931.3 Atomic and Molecular Physics - 932.1 High Energy Physics - 933.1.1 Crystal Lattice

Treatment: Applications (APP)

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1160.

Accession number: 20091011946187

Title: General iterative methods for a one-parameter nonexpansive semigroup in Hilbert space

Authors: Li, Suhong¹ ; Li, Lihua¹ ; Su, Yongfu²

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao, Hebei 066004, China

2 Department of Mathematics, Tianjin Polytechnic University, Tianjin, 300160, China

Corresponding author: Li, S. (lisuhong103@eyou.com)

Source title: Nonlinear Analysis, Theory, Methods and Applications

Abbreviated source title: Nonlinear Anal Theory Methods Appl

Volume: 70

Issue: 9

Issue date: May 1, 2009

Publication year: 2009

Pages: 3065-3071

Language: English

ISSN: 0362546X

CODEN: NOANDD

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: Let H be a Hilbert space and f a fixed contractive mapping with coefficient $0 < \alpha < 1$, A a strongly positive linear bounded operator with coefficient $\overline{(\gamma, \bar{\gamma})} > 0$. Consider two iterative methods that generate the sequences $\{x_n\}$, $\{y_n\}$ by the algorithm, respectively. (I) $x_n = (I - \alpha_n A) \frac{1}{n} \int_0^n T(s) x_n ds + \alpha_n \gamma f(x_n)$ (II) $y_{n+1} = (I - \alpha_n A) \frac{1}{n} \int_0^n T(s) y_n ds + \alpha_n \gamma f(y_n)$ where $\{\alpha_n\}$ and $\{t_n\}$ are two sequences satisfying certain conditions, and $\mathfrak{S} = \{T(s) : s \geq 0\}$ is a one-parameter nonexpansive semigroup on H . It is proved that the sequences $\{x_n\}$, $\{y_n\}$ generated by the iterative method (I) and (II), respectively, converge strongly to a common fixed point $x^* \in F(\mathfrak{S})$ which solves the variational inequality $\langle (A - \gamma f)x^*, x^* - z \rangle \leq 0$ $z \in F(\mathfrak{S})$. © 2008 Elsevier Ltd. All rights reserved.

Number of references: 15

Main heading: Iterative methods

Controlled terms: Hilbert spaces - Mathematical operators - Variational techniques - Viscosity

Uncontrolled terms: Common fixed points - Contractive mappings - Linear bounded operators - Nonexpansive semigroup - Variational inequality - Viscosity approximation

Classification code: 631.1 Fluid Flow, General - 921 Mathematics - 921.2 Calculus - 921.6 Numerical Methods - 931.2 Physical Properties of Gases, Liquids and Solids - 931.4 Quantum Theory; Quantum Mechanics

DOI: 10.1016/j.na.2008.04.007

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1161.

Accession number: 20091412009676

Title: Creep behavior of in situ TiCP/2618 aluminum matrix composite

Authors: Ji, F.1 ; Ma, M.Z.1 ; Song, A.J.1, 2 ; Zhang, W.G.1, 2 ; Zong, H.T.1 ; Liang, S.X.1 ; Osamu, Y.3 ; Liu, R.P.1

Author affiliation:

- 1 State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, 066004, China
- 2 Hebei Normal University of Science and Technology, Qinhuangdao, 066004, China
- 3 Graduate School of Engineering, Hiroshima University, Higashi-Hiroshima, 739-8527, Japan

Corresponding author: Ma, M.Z. (mz550509@ysu.edu.cn)

Source title: Materials Science and Engineering A

Abbreviated source title: Mater. Sci. Eng. A

Volume: 506

Issue: 1-2

Issue date: April 25, 2009

Publication year: 2009

Pages: 58-62

Language: English

ISSN: 09215093

Document type: Journal article (JA)

Publisher: Elsevier Ltd, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom

Abstract: The creep behavior of 2618 aluminum alloy and in situ TiCP/2618 aluminum composites (with 15% and 20% volume fraction of TiC particles, respectively) was investigated under a condition of constant compressive stress at 523, 573 and 623 K, respectively. The results showed that both the stress exponent and the apparent activation energy of the composite were higher than these of 2618 aluminum alloy, indicating that the existence of TiC particles significantly improved the high-temperature creep property of 2618 aluminum alloy. Both the calculation based on the Orowan dislocation model through the introduction of the threshold stress concept and the normalization of the creep data showed that the high-temperature creep behavior of the composites could be explained by the dislocation climb (lattice diffusion) mechanism. © 2008 Elsevier B.V. All rights reserved.

Number of references: 31

Main heading: Activation energy

Controlled terms: Alumina - Aluminum - Aluminum alloys - Creep - Metallic matrix

composites - Temperature indicating cameras - Titanium carbide - Wear of materials

Uncontrolled terms: Aluminum matrix composites - Apparent activation energies - Creep behavior - Creep datum - Dislocation climbs - Dislocation models - High-temperature creeps - In situ TiCP/2618 aluminum composite - Lattice diffusions - Stress exponent - Threshold stress - Tic particles

Classification code: 951 Materials Science - 804.2 Inorganic Compounds - 812.1 Ceramics - 812.2 Refractories - 931.2 Physical Properties of Gases, Liquids and Solids - 931.3 Atomic and Molecular Physics - 944.5 Temperature Measuring Instruments - 801.4 Physical Chemistry - 541.2 Aluminum Alloys - 541.1 Aluminum - 531 Metallurgy and Metallography - 421 Strength of Building Materials; Mechanical Properties - 415.1 Metal Structural Materials - 742.2 Photographic Equipment

Numerical data indexing: Percentage 1.50e+01%, Percentage 2.00e+01%, Temperature 6.23e+02K

DOI: 10.1016/j.msea.2008.11.010

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1162.

Accession number: 20132416419880

Title: Sliding-mode control for track of swarm behavior

Authors: Mao, Xuezhil, 2 ; Xu, Yong2 ; Liu, Jianping1 ; Yue, Xiaoyun1

Author affiliation:

- 1 Institute of Mathematics and Systems Science, College of Mathematics and Information Technology, Hebei Normal University of Science and Technology, Hebei Qinhuangdao, 066004, China
- 2 School of Science, Hebei University of Technology, Tianjin 300401, China

Source title: Advances in Intelligent and Soft Computing

Abbreviated source title: Adv. Intell. Soft Comput.

Volume: 78 AISC

Issue: VOL. 1

Monograph title: Fuzzy Information and Engineering 2010

Issue date: 2009

Publication year: 2009

Pages: 217-226

Language: English

ISSN: 18675662

ISBN-13: 9783642148798

Document type: Conference article (CA)

Conference name: 5th Annual Conference on Fuzzy Information and Engineering, ACFIE 2010

Conference date: September 23, 2010 - September 27, 2010

Conference location: Huludao, China

Conference code: 97313

Sponsor: Liaoning Technology University; Fuzzy Inf. Eng. Branch China Oper. Res. Soc.; IIGSS-GB

Publisher: Springer Verlag, Tiergartenstrasse 17, Heidelberg, D-69121, Germany

Abstract: The sliding-mode control method based on reaching law is proposed for swarm systems to eliminate chattering, which makes the agents of swarm get to an expectant trajectory and track it. This paper gives the definite control law by using the upper and lower bounds instead of uncertainties. Simulation further shows well the effectiveness. © Springer-Verlag Berlin Heidelberg 2010.

Number of references: 19

Main heading: Sliding mode control

Controlled terms: Soft computing - Software engineering

Uncontrolled terms: Control laws - Reaching law - Swarm - Swarm behavior - Swarm systems - Tracking controls - Upper and lower bounds

Classification code: 723 Computer Software, Data Handling and Applications - 723.1 Computer Programming - 731.1 Control Systems

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1163.

Accession number: 20092012082791

Title: Temperature dependence of quasi-two-dimensional strong-coupling excitons' effective mass

Authors: Eerdunchaolu1 ; Yu, Ruomeng2

Author affiliation:

- 1 Institute of Condensed Matter Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China
- 2 Department of Physics, Huazhong University of Science and Technology, Wuhan 430074, China

Corresponding author: Eerdunchaolu (eerdunchaolu@sohu.com)

Source title: Guangxue Xuebao/Acta Optica Sinica

Abbreviated source title: Guangxue Xuebao

Volume: 29

Issue: 4

Issue date: April 2009

Publication year: 2009

Pages: 1105-1111

Language: Chinese

ISSN: 02532239

CODEN: GUXUDC

Document type: Journal article (JA)

Publisher: Chinese Optical Society, P.O. Box 80, Xi'an, 710068, China

Abstract: The influences of the temperature on the effective mass of the exciton, for which the electron (hole) is strongly coupled with interface-optical phonons but weakly coupled with bulk-longitudinal-optical phonons in a quantum well, are studied by means of Tokuda's improved linear combination operator and a modified Lee-Low-Pines transformation method. The results indicate that the effective mass (M_{ex-LO^*}) of the

exciton, which is induced by the electron (hole) weakly coupled with bulk-longitudinal-optical phonons, will increase with the well width (N) increasing and first increase and then decrease, finally tends to a stable value with the distance between the electron and the hole (ρ) increasing. The influence of temperature on Mex-LO* and its changing with N and ρ is obvious. The change of Mex-LO* with T is strongly related to the quantum-size effect. The effective mass Mex-IO* of the exciton, which is induced by the electron (hole) strongly coupled with interface-optical phonons, will decrease with increasing N, increase with increasing T and first increase and then decrease, finally tends to a stable value with increasing ρ . But the influence of temperature on Mex-IO* and its changing with N and ρ is not obvious.

Number of references: 19

Main heading: Integrated optoelectronics

Controlled terms: Electrons - Excitons - Optical properties - Phonons - Semiconductor quantum dots - Semiconductor quantum wells - Solids - Temperature distribution

Uncontrolled terms: Effective mass - Linear combination operator method - Longitudinal-optical - Optical phonons - Quantum wells - Quantum-size effects - Strong couplings - Temperature dependence - Transformation methods - Two-dimensional - Well widths

Classification code: 931.3 Atomic and Molecular Physics - 931.2 Physical Properties of Gases, Liquids and Solids - 751.1 Acoustic Waves - 741.3 Optical Devices and Systems - 933 Solid State Physics - 741.1 Light/Optics - 712.1 Semiconducting Materials - 701.1 Electricity: Basic Concepts and Phenomena - 641.1 Thermodynamics - 714.2 Semiconductor Devices and Integrated Circuits

DOI: 10.3788/AOS20092904.1105

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1164.

Accession number: 20101312805055

Title: Research for settlement prediction on the based of neural network and ADINA

Authors: Meng, Deguang¹ ; Zhu, Tianzhi¹ ; Li, Bingxin¹ ; Dong, Yanying¹

Author affiliation:

¹ Dept of Civil Engineering, Hebei Normal University of Science and Technology (HBNUST), Qinhuangdao 066004, China

Corresponding author: Meng, D. (mengdg@126.com)

Source title: IFCSTA 2009 Proceedings - 2009 International Forum on Computer Science-Technology and Applications

Abbreviated source title: IFCSTA Proc. - Int. Forum Comput. Sci.-Technol. Appl.

Volume: 3

Part number: 3 of 3

Monograph title: IFCSTA 2009 Proceedings - 2009 International Forum on Computer Science-Technology and Applications

Issue date: 2009

Publication year: 2009

Pages: 123-126

Article number: 5384760

Language: English

ISBN-13: 9780769539300

Document type: Conference article (CA)

Conference name: 2009 International Forum on Computer Science-Technology and Applications, IFCSTA 2009

Conference date: December 25, 2009 - December 27, 2009

Conference location: Chongqing, China

Conference code: 79658

Sponsor: IITAA - International Information Technology; and Applications Association

Publisher: IEEE Computer Society, 445 Hoes Lane - P.O.Box 1331, Piscataway, NJ 08855-1331, United States

Abstract: It is important geotechnical problem to consolidation of soft soil foundation. Three-dimensional finite element model is established on the based of Biot consolidation theory, the model is loaded and calculated on the based of considering lateral deformation and spatial seepage, elastic-plasticity character of soil, construction stage loading progress etc. ANN has the advantages of self-organizing, adaptive identifying, self-studying and being tolerant towards errors, and is trained and tested by the data sample to back

analysis parameter of soft soil foundation, and then the settlement prediction model is established by finite element method, prediction data compare with measured data, the result indicate that the model can give a precise forecast and is rationality. The method can provide the reference for the construction. © 2009 IEEE.

Number of references: 9

Main heading: Finite element method

Controlled terms: Computer science - Embankments - Forecasting - Geologic models - Hydraulic structures - Mathematical models - Neural networks - Settlement of structures - Soils - Three dimensional

Uncontrolled terms: Back analysis - Biot consolidation theory - Construction stages - Data sample - Elastic-plasticity - Geotechnical problems - Lateral deformation - Measured data - Self organizing - Settlement prediction - Soft soil foundation - Three dimensional finite element model

Classification code: 722 Computer Systems and Equipment - 723 Computer Software, Data Handling and Applications - 723.4 Artificial Intelligence - 723.5 Computer Applications - 721 Computer Circuits and Logic Elements - 902.1 Engineering Graphics - 921 Mathematics - 921.6 Numerical Methods - 922.2 Mathematical Statistics - 912.2 Management - 611 Hydroelectric and Tidal Power Plants - 405 Construction Equipment and Methods; Surveying - 407.2 Waterways - 441 Dams and Reservoirs; Hydro Development - 446.2 Related Hydraulic Structures - 402 Buildings and Towers - 461.1 Biomedical Engineering - 483 Soil Mechanics and Foundations - 483.1 Soils and Soil Mechanics - 483.2 Foundations - 481.1 Geology

DOI: 10.1109/IFCSTA.2009.269

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1165.

Accession number: 20100312644961

Title: A formulary solution of multiple integration by parts

Authors: Xuezhi, Mao¹ ; Xiaojing, Yang¹ ; Ruifeng, Zhang¹ ; Ying, Wang¹

Author affiliation:

1 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Hebei, Qinhuangdao, 066004, China

Corresponding author: Xuezhi, M. (mxz36@163.com)

Source title: Proceedings of the 2nd International Conference on Modelling and Simulation, ICMS2009

Abbreviated source title: Proc. Int. Conf. Model. Simul., ICMS

Volume: 2

Part number: 2 of 8

Monograph title: Proceedings of the 2nd International Conference on Modelling and Simulation, ICMS2009

Issue date: 2009

Publication year: 2009

Pages: 75-79

Language: English

ISBN-13: 9781846260612

Document type: Conference article (CA)

Conference name: 2009 Joint International Conference on Modelling and Simulation

Conference date: May 21, 2009 - May 22, 2009

Conference location: Manchester, United kingdom

Conference code: 79025

Publisher: World Academic Union, Mill Lane, Wavertree Technology Park, Liverpool, L13 4AH, United Kingdom

Abstract: In this paper, we introduced a new symbol, deduced the formula of multiple integration by parts. It makes some integrals become simple and easy, especially to high order polynomial multiply exponential function or trigonometric function.

Number of references: 3

Main heading: Integration

Controlled terms: Exponential functions - Function evaluation

Uncontrolled terms: High order polynomial - Integration by parts - Primitive function -
Trigonometric functions

Classification code: 921 Mathematics - 921.2 Calculus - 921.6 Numerical Methods

Database: Compendex

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1166.

Accession number: 20092712163405

Title: Face detection for multidimensional description adaptive video coding

Authors: Jiang, Xiaojun1 ; Shi, Yunhui1 ; Sun, Yanfeng1 ; Yin, Baocai1 ; Niu, Xiuyan2

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Source title: Journal of Information and Computational Science

Abbreviated source title: J. Inf. Comput. Sci.

Volume: 5

Issue: 5

Issue date: October 2008

Publication year: 2008

Pages: 2361-2368

Language: English

ISSN: 15487741

Document type: Journal article (JA)

Publisher: Binary Information Press, P.O. Box 162, Bethel, CT 06801-0162, United States

Abstract: In this paper, we propose a novel method with which we can locate faces in a video sequence based haar-like feature, as an extension to Viola and Jones' cascade learning method for object detection. Our method is adopted to supply region of interest of one frame for adaptive video coding based on multidimensional description space. The detector is programmed by C language so that it will be integrated in AV S coder. Our goal is to achieve lower false positive rate so that detector will hardly detect any false face if there is no face in one frame of a video. To meet the target, we make an improvement on the aspects of how to select feature, set sample weight and decrease threshold of weak classifier and strong classifier. Experimental results show that our detector yields high classification performance over frame-based detection. 1548-7741/Copyright © 2008 Binary Information Press October 2008.

Number of references: 10

Main heading: Detectors

Controlled terms: Adaptive boosting - Classifiers - Education - Image coding - Learning systems - Video recording - Visual communication

Uncontrolled terms: Adaboost - Adaptive video coding - C language - Classification performance - Coding - Detection - Face Detection - False positive rates - Haar-like features - Learning methods - Multidimensional description - Novel methods - Object Detection - Region of interest - Video - Video sequences - Weak classifiers

Classification code: 901.2 Education - 802.1 Chemical Plants and Equipment - 741 Light, Optics and Optical Devices - 731.5 Robotics - 723.5 Computer Applications - 914 Safety Engineering - 723.4 Artificial Intelligence - 723 Computer Software, Data Handling and Applications - 717.1 Optical Communication Systems - 716.4 Television Systems and Equipment - 461.4 Ergonomics and Human Factors Engineering - 723.2 Data Processing and Image Processing

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1167.

Accession number: 20085011779059

Title: Design of measuring-controlling system for modern agricultural facilities based on hierarchy-chain structure

Authors: Bao, Changchun; Li, Zhihong; Zhang, Lishan; Li, Guofang; Ma, Jiwei; Li, Yanping; Lun, Cuifen

Corresponding author: Bao, C. (baochangchun@163.com)

Corr. author affiliation: Department of Machinery and Electronics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 24

Issue: SUPPL. 2

Issue date: September 2008

Publication year: 2008

Pages: 270-273

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Beijing, 100026, China

Abstract: Facility agriculture, featured with high efficiency, green environmental protection, is the development goal of the new rural construction. The commercialization prospect of modern agricultural facilities is great. The measuring and controlling system with microcomputers can automatically regulate such environmental factors as temperature, moisture, light and nutrition in modern agricultural facilities to ensure the optimal state for crop growth. The measuring and controlling system for modernization agricultural facilities was designed, which adopts hierarchy-chain structure and wireless communication methods combined with wired one. The new system, which is characterized by flexible networking, long-distance communication, high reliability and capability-price ratio, can meet precision requirements for realizing measurement and control in agricultural facility.

Number of references: 17

Database: Compendex

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1168.

Accession number: 20071310508405

Title: Conductivity of AgI under high pressure

Authors: Hao, Aimin^{1, 2} ; Gao, Chunxiao¹ ; Li, Ming¹ ; He, Chunyuan¹ ; Huang, Xiaowei¹ ; Zou, Guangtian¹ ; Tian, Yongjun³ ; Ma, Yanzhang⁴

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2 Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

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Corresponding author: Gao, C. (cxgao599@yahoo.com.cn)

Source title: Journal of Applied Physics

Abbreviated source title: J Appl Phys

Volume: 101

Issue: 5

Issue date: 2007

Publication year: 2007

Article number: 053701

Language: English

ISSN: 00218979

CODEN: JAPIAU

Document type: Journal article (JA)

Publisher: American Institute of Physics, 2 Huntington Quadrangle, Suite N101, Melville, NY

11747-4502, United States

Abstract: We carried out in situ conductivity measurements on silver iodide (AgI) under high pressure using a fabricated microcircuit on a diamond anvil cell (DAC). The result shows that the conductivity of AgI increases discontinuously by two orders of magnitude at 1.0 GPa, accompanying the transition from wurtzite/zinc-blende structure to AgI-III (NaCl structure). The conductivity gradually decreases with increasing pressure from 1.0 to 11 GPa, indicating the ionic conduction is impeded by the application of pressure. The conductivity changes very little with further pressure increase from 11 to 20 GPa, implying that the ionic conductivity decrease with pressure may be offset by the conductivity increase with pressure from the electronic process. Above 20 GPa, the conductivity starts to increase again, indicating that the electronic contribution becomes dominant. We calculated the ionic carrier concentration and the activation energy for ionic transport in AgI-III, and investigated the temperature and pressure dependence of conductivity above 20 GPa. Based on this experimental information, we predict that the metallization of AgI should occur at about 91 GPa. © 2007 American Institute of Physics.

Number of references: 27

Main heading: Silver compounds

Controlled terms: Activation energy - Carrier concentration - Conductive materials - Electric conductivity - Metallizing - Phase transitions - Pressure effects

Uncontrolled terms: Diamond anvil cell (DAC) - In situ conductivity measurements - Pressure dependence - Silver iodide

Classification code: 931.1 Mechanics - 813.1 Coating Techniques - 804.2 Inorganic Compounds - 931.3 Atomic and Molecular Physics - 801.4 Physical Chemistry - 701.1 Electricity: Basic Concepts and Phenomena - 539.3 Metal Plating - 708.2 Conducting Materials

Treatment: Theoretical (THR)

DOI: 10.1063/1.2709579

Database: Compendex

Compilation and indexing terms, © 2017 Elsevier Inc.

1169.

Accession number: 20063910137925

Title: Application research of radio communication in mine alarm system

Authors: Liu, Shi-Guang¹ ; Shen, Chun-Bao² ; Li, Yan-Ping¹ ; Wang, Qing-Zhu¹ ; Qiao, Xiao-Hui¹

Author affiliation:

1 Department of Mechanical and Electrical, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

2 Department of Mechinery and Electronics, Hebei Vocational and Technical College of Building Materials, Qinhuangdao 066004, China

Corresponding author: Liu, S.-G. (liushiguang9574@163.com)

Source title: Journal of Coal Science and Engineering

Abbreviated source title: J. Coal Sci. Eng.

Volume: 12

Issue: 1

Issue date: June 2006

Publication year: 2006

Pages: 110-114

Language: English

ISSN: 10069097

Document type: Journal article (JA)

Publisher: China Coal Society

Abstract: In this paper, the configuration characteristic of the safe parameter measurement and alarm system in new type mine was first simply introduced, which is made up of topological structure and combines wire communication with radio communication, then introduced respectively the hardware and software construction and the working principle and the method of design, which is composed of detecting instrument as the core of enhanced single chip microcomputer AT89S8252 and relay station and CPU which consists of I PC. The three class computer communication system that integrates with measurement and alarm and management works reliably and uses conveniently, especially to the system of parameter detecting and alarm in mine, which is adapted to measure dispersedly and manage intensively.

Number of references: 10

Main heading: Alarm systems

Controlled terms: Accident prevention - Data communication equipment - Measurements - Microcomputers - Mines - Radio communication

Uncontrolled terms: Data communication - Industrial personal computer - Mine alarm systems - Single chip microcomputers

Classification code: 502.1 Mine and Quarry Operations - 716.3 Radio Systems and Equipment - 722.4 Digital Computers and Systems - 914.1 Accidents and Accident Prevention

Treatment: Theoretical (THR)

Database: Compendex

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1170.

Accession number: 2005479497782

Title: Effects of peat on water conserving properties of sandy soil

Authors: Qin, Ling; Wei, Qiping; Li, Jiarui; Wang, Xiaowei; Liu, Jun

Corr. author affiliation: Department of Life Science, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 21

Issue: 10

Issue date: October 2005

Publication year: 2005

Pages: 51-54

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Beijing, China

Abstract: Hydrophysical characteristics of peat, sand, peat-sand mixed media and evaporation and water potential under three irrigation conditions were compared. Effects of peat on water conserving properties of sandy soil were analyzed. The results showed that through utilizing low-humified sphagnum peat to amend sandy soil, the total porosity, field capacity, saturated capacity were increased, and water retention of the medium was improved. The degree of medium shrinkage was increased with the increase of peat in media. Effect of irrigation frequency on the evaporation and water potential of different media is obvious. The higher the peat content was, the quicker the surface evaporation was along with the increase of irrigation frequency. Using infrequent irrigation, the pure peat retained more available water for the plant growth.

Number of references: 13

Database: Compendex

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1171.

Accession number: 20071510545149

Title: Review of postharvest treatment and preservation technologies of fruit and vegetable

Authors: Gao, Haisheng; Zhao, Xiyan; Li, Runfeng

Corresponding author: Gao, H. (spxghs@163.com)

Corr. author affiliation: Department of Food Engineering, Hebei Normal University of Science and Technology, Changli 066600, China

Source title: Nongye Gongcheng Xuebao/Transactions of the Chinese Society of Agricultural Engineering

Abbreviated source title: Nongye Gongcheng Xuebao

Volume: 23

Issue: 2

Issue date: February 2007

Publication year: 2007

Pages: 273-278

Language: Chinese

ISSN: 10026819

CODEN: NGOXEO

Document type: Journal article (JA)

Publisher: Chinese Society of Agricultural Engineering, Beijing, China

Abstract: This article discusses non-destructive methods for testing fruit quality, mechanizing and automatic technologies for fruit classification. At the same time, fruit and vegetable modern storing equipments are introduced. After that, it reviews the developments of storing and freshening technologies for fruit and vegetable in recent years, including the application of natural fresh-keeping, regulating air pressure storage method, ozone and negative oxygen refreshing technology, biotechnology for storage, low dose radiation treatment and air conditioned fresh keeping technology of structurizing intracellular water. Moreover, this paper proposes that the persistent development of fruit and vegetable storage industry should depend on innovation of science and technology.

Number of references: 41

Database: Compendex

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1172.

Accession number: 2005389375823

Title: Effects of lattice vibration on the effective mass of quasi-two-dimensional strong-coupling polaron

Authors: Eerdunchaolu; Li, Shu-Shen; Xiao, Jing-Lin

Corr. author affiliation: Department of Mathematics and Physics, Hebei Normal University of Science and Technology, Qinhuangdao 066004, China

Source title: Wuli Xuebao/Acta Physica Sinica

Abbreviated source title: Wuli Xuebao

Volume: 54

Issue: 9

Issue date: September 2005

Publication year: 2005

Pages: 4285-4293

Language: Chinese

ISSN: 10003290

CODEN: WLHPAR

Document type: Journal article (JA)

Publisher: Science Press, Beijing, China

Abstract: The effects of lattice vibration on the system in which the electron is weakly coupled with bulk longitudinal optical phonons and strongly coupled with interface optical phonons in an infinite quantum well were studied by using 'Tokuda' linear-combination operator and a modified LLP variational method. The expressions for the effective mass of the polaron in a quantum well QW as functions of the well's width and temperature were derived. In particular, the law of the change of the vibration frequency of the polaron changing with well's width and temperature are obtained. Numerical results of the effective mass and the vibration frequency of the polaron for KI/AgCl/KI QW show that the vibration frequency and the effective mass of the polaron decrease with increasing well's width and temperature, but the contribution of the interaction between the electron and the different branches of phonons to the effective mass and the vibration frequency and the change of their variation with the well's width and temperature are greatly different.

Number of references: 28

Database: Compendex

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