Table of Contents

Preface, Conference Organization and Acknowledgement

I. Material Science, Chemical Engineering and Technologies

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Oxidation Mechanism of CuO Nanowires and Layered Copper Oxides Structure</td>
<td>3</td>
</tr>
<tr>
<td>Characterization of Organic Matter Released during Analytical Pyrolysis of PM$_{10}$ Samples Obtained from Biomass and Oil Combustion</td>
<td>7</td>
</tr>
<tr>
<td>Structure Analysis and Fabrication of Binary Colloid Crystals</td>
<td>13</td>
</tr>
<tr>
<td>Optimal Number of Contact Angle Measurements on Pyrite Surface</td>
<td>17</td>
</tr>
<tr>
<td>Characterization of Mg$<em>x$Zn$</em>{1-x}$O Films Grown by Electrochemical Deposition</td>
<td>22</td>
</tr>
<tr>
<td>A Fuzzy Recognition of early Crack of Metal Deep Drawing Stamping Based on the Fuzzy Clustering</td>
<td>26</td>
</tr>
<tr>
<td>A Novel Zeolite-Containing Composite Material Synthesized via In Situ Crystallization</td>
<td>32</td>
</tr>
<tr>
<td>Advances in High-Purity Alumina and Resource Distribution</td>
<td>36</td>
</tr>
<tr>
<td>Alignment of Electrospun Nanofibers on Folding Foil</td>
<td>40</td>
</tr>
<tr>
<td>Analysis and Design of Anti-Penetration Property of Ceramic/Metal Composite Target Plate</td>
<td>44</td>
</tr>
<tr>
<td>Analysis of Double Hybrid Medium Absorbing Microwave Performance</td>
<td>48</td>
</tr>
<tr>
<td>Analysis of Friction Vibration in Sliding Model of Double Rough Surfaces</td>
<td>52</td>
</tr>
<tr>
<td>Analysis of the Composition of Infrared Stealth Coating and the Influence Factors of its Emissivity</td>
<td>56</td>
</tr>
<tr>
<td>Catalytic Conversion of Octanoic Acid over HZSM-5 Catalyst</td>
<td>60</td>
</tr>
<tr>
<td>Demulsification of Emulsion Liquid Membrane Extracting Rare Earth Ions in Leaching Liquid of Phosphate Rock</td>
<td>64</td>
</tr>
<tr>
<td>Dynamicly Functional Materials Based on Hydrogen-Bonded Liquid Crystals</td>
<td>68</td>
</tr>
<tr>
<td>Effect of Directional Solidification Condition on Interfacial Reaction between DD6 Single Crystal Superalloy and Zirconia-Silica Ceramic Core</td>
<td>72</td>
</tr>
<tr>
<td>Effect of Parameters on Properties of Polypropylene in Dynamic Injection Molding</td>
<td>77</td>
</tr>
<tr>
<td>Effects of Friction on Constrained Groove Pressing of Pure Al Sheets</td>
<td>81</td>
</tr>
<tr>
<td>Effects of Mixed Template on Pore Structure of Order of Crack-Free Monolithic Mesoporous Carbon</td>
<td>85</td>
</tr>
<tr>
<td>Effects of Second Extrusion Deformation on Microstructure and Mechanical Properties of ZM21 Magnesium Alloy</td>
<td>89</td>
</tr>
<tr>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Effects of Sintering Temperature on Microstructure and Properties of Ultrafine WC-VC-NbC-Co Cemented Carbides</td>
<td>93</td>
</tr>
<tr>
<td>A.M. Jiang, X.Q. Jiang, Z.P. Zhao, R. Yu and R.J. Yang</td>
<td></td>
</tr>
<tr>
<td>Effects of Temperature on Crack Propagation of Nanocrystalline Nickel: A Molecular Dynamics Approach</td>
<td>98</td>
</tr>
<tr>
<td>Z.Q. Li, J.G. Yu and Q.X. Zhang</td>
<td></td>
</tr>
<tr>
<td>Electroless Nickel Plating on Copper Foil</td>
<td>103</td>
</tr>
<tr>
<td>Z.Q. Tang, S.R. Hu and Y.C. Chao</td>
<td></td>
</tr>
<tr>
<td>Experimental Research on Rough Flotation of Lead in Bainiuchang Lead-Zinc Mines</td>
<td>108</td>
</tr>
<tr>
<td>Q.F. Zhang, Z.Y. Lan and X.K. Shang</td>
<td></td>
</tr>
<tr>
<td>Experimental Study on Sensitivity Damage of Offshore High-Porosity and High-Permeability Reservoir</td>
<td>111</td>
</tr>
<tr>
<td>J.Y. Liu, Z.S. Qiu, W.A. Huang and Y. Luo</td>
<td></td>
</tr>
<tr>
<td>Experimental Study on the Grinding Rate with Different Grinding Concentration of Dahongshan Copper</td>
<td>115</td>
</tr>
<tr>
<td>Q.H. Wang, G.Z. Zhuang and C.M. Wang</td>
<td></td>
</tr>
<tr>
<td>Experimental Study on the Thermal Stability of Surfactant Aqueous Solutions</td>
<td>119</td>
</tr>
<tr>
<td>X.N. Song, J.L. Jin, Y. Wang and X.L. Li</td>
<td></td>
</tr>
<tr>
<td>Experimental Study on the Treatment of Bath Wastewater in the Campus by Membrane Bioreactor</td>
<td>124</td>
</tr>
<tr>
<td>K. Sun and Y. Shi</td>
<td></td>
</tr>
<tr>
<td>Extract Vanadium and Molybdenum from Spent Catalyst</td>
<td>128</td>
</tr>
<tr>
<td>S. Xu, Y.H. Shao and M.M. Li</td>
<td></td>
</tr>
<tr>
<td>Influence of Ag Atoms on Structural Evolution of Pd-Ag Bimetallic Clusters during Heating Processes</td>
<td>132</td>
</tr>
<tr>
<td>X.Y. Xiao, R.P. Chen and H. Huang</td>
<td></td>
</tr>
<tr>
<td>Influence of Magneto-Thermal Treatments on Longitudinally Driven Giant Magneto-Impedance Effect in Co-Fe-Si-B Amorphous Ribbons</td>
<td>137</td>
</tr>
<tr>
<td>J. Li, X.H. Lin, X.H. Wang and M. Tang</td>
<td></td>
</tr>
<tr>
<td>Influence of Oxygen Plasma Modification Carbon Fiber on Flexural Strength and Hydrothermal Properties of CF/PES Composite</td>
<td>141</td>
</tr>
<tr>
<td>X. Cui, Y.J. Huang, Y. Gao and S. Wang</td>
<td></td>
</tr>
<tr>
<td>Magnetic Composite Microspheres of Cassava Starch: Preparation and Characterization</td>
<td>145</td>
</tr>
<tr>
<td>P. Lan, Y.X. Feng, R.M. He, L.L. Qiao, L.H. Lan, A.P. Liao, Y.C. Wei and L. Zhou</td>
<td></td>
</tr>
<tr>
<td>Matching Plugging Technology for GSY High-Water Swelling Diagenetic Powder</td>
<td>150</td>
</tr>
<tr>
<td>H. Guo and S.E. Liu</td>
<td></td>
</tr>
<tr>
<td>Measuring the W-J Parameter of Graphite via a Pressure-Jump Method</td>
<td>154</td>
</tr>
<tr>
<td>L.Y. Chen, X.R. Liu, Z. He and S.M. Hong</td>
<td></td>
</tr>
<tr>
<td>Metal Ions on the Membrane Bioreactor in the Slow Progress of Membrane Fouling Studies</td>
<td>158</td>
</tr>
<tr>
<td>W.Y. Zhang, S.C. Ji, H.F. Zhang and X.X. Zhang</td>
<td></td>
</tr>
<tr>
<td>Modeling of TWIP Steel Tensile Behavior with Crystal Plasticity Finite Element Method</td>
<td>162</td>
</tr>
<tr>
<td>Y.Y. Wang, X. Sun, Y.D. Wang, X.H. Hu and H.M. Zbib</td>
<td></td>
</tr>
<tr>
<td>Nanosized Zirconium Dioxide Particles as an Efficient Sorbent for Lead Removal in Waters</td>
<td>166</td>
</tr>
<tr>
<td>C. Jiang and D.A. Xiao</td>
<td></td>
</tr>
<tr>
<td>Noninvasive Detection of Concealed Complex Mixed Solution Using Raman Spectroscopy</td>
<td>170</td>
</tr>
<tr>
<td>Q.Y. Wang, Z.G. Li and Z.H. Ma</td>
<td></td>
</tr>
<tr>
<td>Pectin Extraction from Potato Residues by Different Methods of Salting out and Process Optimization</td>
<td>174</td>
</tr>
<tr>
<td>S.Q. Li</td>
<td></td>
</tr>
<tr>
<td>Photodegradation Characterizations of Gaseous Dichloromethane by the CdS/TiO₂/ACFs Composites</td>
<td>178</td>
</tr>
<tr>
<td>W.X. Zhao, Y.J. Zhang and E.H. Duan</td>
<td></td>
</tr>
<tr>
<td>Plastic Deformation at High Temperature and Processing Map of AZ61 Magnesium Alloy</td>
<td>182</td>
</tr>
<tr>
<td>Preparation Process and Performance of Porous Alumina Ceramics</td>
<td>186</td>
</tr>
<tr>
<td>X.Z. Wang</td>
<td></td>
</tr>
<tr>
<td>Progress in Fabrication and Application of Gold Nanoparticles Modified Indium Tin Oxide Glass</td>
<td>190</td>
</tr>
<tr>
<td>F.X. Lei</td>
<td></td>
</tr>
</tbody>
</table>
Research and Application of High-Tech Materials Adapted in the Sport Training
J.Q. Yang, Y.C. Zheng and L. Chen

Research of Epoxy Resin Modified by Polyether Imidazole Ionic Liquid
L.Y. Guo, J.L. Liu, P.C. Huang, J.H. He, S.Y. Bai and L. Tong

Research of Sculpture Material Influence on the Form and Morphosis of Creation
W.W. Li and H.Y. Li

Research on Beneficiation of a Copper Sulphide Ore in Yunnan
Q.F. Zhang, Z.Y. Lan and X.K. Shang

Research on Crystallization Kinetics of Calcium Sulfate Dihydrate Prepared by Bittern under 20°C and 120r/min Condition
B.J. Luo, H.H. Wu, Y.Q. Wang and Q. Zhang

Research on Properties of Antibacterial Paper Sprayed by Nano-Chitosan
Y. Hong and L.Z. Tang

Research the Effect of Forced Flow on Dendritic Growth with Adaptive Finite Element Method
C.S. Zhu, P. Lei and R.Z. Xiao

Role of Complexation in Propranolol Sorption to Clay Minerals in the Presence of Fulvic and Humic Acid

Role of Nitrite Ions and Natural Organic Matters as Photosensitizers on Photolysis of Phenol
C. Liang, H.M. Zhao, M.J. Deng, X. Quan and S. Chen

Solvent-Dependent Catalytic Behavior of Hydrophobic Guest Artificial Glutathione Peroxidase Determined Using H₂O₂ and 4-Nitrobenzenethiol as Substrates

Studies on the Geometric and Electronic Structures of SiC Polytypes
F.C. Zhang, X.H. Zhong, X.X. Ruan and W.H. Zhang

Study on Active Ingredient of Blueberry Pomace in Fermentation by Lentinus edodes Hypha
L. Guo and P. Wang

Study on Properties of Modified Poplar Wood

Study on Surfacing Technics of 18CrNiWA Engine Crankshaft Surfacing Welding with Flux-Cored Wire
Y.F. Zhang, M.R. Li and J.C. Wang

Study on the Anti-Rust Mechanism of Compound Rust Inhibitor TW742
B.B. Yang, H.R. Fu and B.L. Wang

Study on the Synthesis Process of Carbon Nanotubes
A.Y. Zhang

Synthesis and Characteristics of Hierarchical Nanostructure Fe₃O₄ Coated Multi-Walled Carbon Nanotubes
J.H. Deng, K.P. Yu and J.G. Xie

Synthesis and Crystal Structure Studies on 1N-Acetyl-3-Phenyl-5-(3,4,5-trimethoxyl-phenyl)-2-Pyrazoline
H.M. Guo, Y.C. Zhang and Y.F. Li

Synthesis of Water-Soluble Phthalocyanine Derivatives as Models for Petroleum Fractions

Study of Zinc Phthalocyanine and its Dimerization in DMF
Y.H. Bian, S.T. Xu, L.C. Song and D.H. Xia

The Effect of Annealing Heat Treatment on Structural and Optical Properties of ZnO Thin Films
S. Cui, C.Y. Liu and X.T. Li

The Effects of Solvent on Polysulfone Membrane Structure
Y.Y. Xue and J.Y. Lian

The Preparation of Polysaccharide in Froth Flotation

The Simulation of Thermal Stress Field for Polysilicon Crystal in Different Shapes of Crucible
The Structure Evolution of Biomimetic Silica Directed by Poly(L-lysine)
L. Xia

292

The Study on Infrared Radiation Characteristics of Textile Materials
R.W. Guo, L.Y. Jiang, Z. Fu and X.Q. Zhao

296

Synthesis and Crystal Structure Studies on 3-(4-Fluorophenyl)-1,5-Bis(pyridyl)-1,5-Pentanediene
H.M. Guo, Y.C. Zhang and Y.F. Li

300

Effect Factors on the Preparation of Polystyrene Microspheres by Emulsifier-Free Emulsion Polymerization
Q. Wang, J.L. Li, A.P. Fu and H.L. Li

304

Synthesis and Characterization of Magnetic Nanocomposite Fe3O4@mSiO2@mSiO2 with Dual Shells Containing Non-Porous Silica and Mesoporous Silica Structure
Q. Yu, J.J. Sang, A.P. Fu and H.L. Li

308

An Investigation on Explosive Welding of Bimetallic Ribbed Panel
M.J. Duan, Y.H. Wang, J. Hong, C.F. Fan and R. Ma

312

Application of Ultrasonic Treatment on the Stripping of Cellulose Sponge
J. Zang and C.H. Ye

316

Comparative Study on Hydrotreating of Venezuela De-Asphalted Oil: Conversion Behavior of Heteroatom Compounds and HDM Catalyst Deactivation

320

Design and Fabrication of Inkjet Materials

325

Effects of Gd3+-Substitution on the Structure and Magnetic Properties of Multi-Doped YIG Ferrites
J.X. Zhao, H.Q. Zhou and M.S. Wang

329

Exploration of Accurate Evaluation Methods for Oil-Soluble Viscosity Reducing Agent
L.J. Zhu, X.H. Jing, S.L. Wang, D.H. Xia and A.F. Li

333

Impact of Closed Flowsheet Structure on Oxidised Copper Ores in Huidong
T.M. Zhang, J.J. Fang, T.G. Jiang, S. Wang and Y.B. Mao

337

Mold Manufacturing of Electroforming Combining with Arc Spraying
H.L. Han

341

Research on Warpage of the Microfluidic Chip in Injection Molding Process
L.Y. Zhu, C.P. Chu and B.Y. Jiang

345

Study on the Effects of Technological Factors of Shortcut Nitrification-Denitrification Simultaneous Phosphorus Removal
M.F. Niu, J.H. Yu, X.Y. Wu, W.J. Liang and X.Y. Lu

349

A Study on the Explosive Welding of Three-Layer Panel
M.J. Duan, Y.H. Wang, J. Hong, J.R. Zhou and R. Ma

354

Fault Diagnosis of Composite Insulators Based on the X-Ray
Z.J. Lv, J. Wang, G.J. Tang, G.D. Han, Z.Q. Wu and S.T. Wan

358

Finite Element Simulation for Titanium Alloy Cutting by Bio-Mimetic Wear-Resistant Cutter
G.Q. Liang, L.G. Cui and F. Shao

362

Study of the Craft and Properties on Cr/WC System Hardfacing Alloy with Flux-Cored Wire
S.X. Xie, Y.F. Zhang, Y.H. Ding, S.J. You and Y. Hong

366

The Study on Magnetron Sputtering Rate of Metal Targets

371

Acoustical Radiation Characteristics Test of Magnesium Alloy Sheets with Element Method
T. Jin and Z.Y. Ding

375

Nitrogen-Doped Mesoporous Carbon Derived from Polyaniline
D.Y. Zhang, L.W. Zheng and L.Y. Lei

379

The Study of Zinc Doped in Chitosan-Hydrxyapatite Composite
Y.X. Yang

383

Research on the Influence of Coal Quality on Sludge Coal Slurry Property
X.N. Song and X.F. Zhai

387

Quantitative Model Study on Desulfurizer Quality of KR Desulfurization
L.W. Xiao, K.S. Chen, Q.H. Xi and C. Yu

392
## Progress in Applied Sciences, Engineering and Technology

Influence of High-Salinity Impact Load on an Integrated Sync Contact Oxidation Process  
P.F. Yu, Y.T. He and J.X. Fu  

### II. Electric Material and Electronic Devices

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerating Image Pyramid on GPUs</td>
<td>L. Yu</td>
<td>403</td>
</tr>
<tr>
<td>Research on Fiber Bragg Grating Sensor Technology</td>
<td>C. Lin</td>
<td>411</td>
</tr>
<tr>
<td>Slow Light Effect of Photonic Crystal Waveguides by Adjusting Parameters of Crescent Scatterers</td>
<td>Y. Wan, Y. Guo, J. Gao and M.H. Jia</td>
<td>415</td>
</tr>
<tr>
<td>The Effect of Electrostatic Filament Deflectors Based on the Stimulation of its Electric Field</td>
<td>L. Liu and C.Y. Zhang</td>
<td>419</td>
</tr>
<tr>
<td>The Harmonic Suppression of DFIG</td>
<td>Z.R. Liang and M.Y. Zhao</td>
<td>423</td>
</tr>
<tr>
<td>The Improved Calculation of the Minimum Capacitor Parameter of Passive Filter Capacitor Considering the Transformer Inductance</td>
<td>H. Lian, P.M. Pan, F.X. Hui and W.P. Tan</td>
<td>427</td>
</tr>
<tr>
<td>The Study of Hydroxyapatite Coating on Titanium Surfaces though Electrochemical Technology</td>
<td>Y.F. Yuan, Y.X. Yang, X.C. Liu and C.P. Liu</td>
<td>431</td>
</tr>
<tr>
<td>Design and Implementation of Digital Photo Frame Based on STM32F103VET6</td>
<td>L.J. Zhang and M. Zhang</td>
<td>448</td>
</tr>
<tr>
<td>ESD Failure Analysis and Robustness Design in Vertical-Diffused MOS Transistors</td>
<td>S.L. Chen, W.M. Lee and C.L. Chu</td>
<td>456</td>
</tr>
<tr>
<td>Research of DSP-Based Automatic Quasi-Synchronization Device</td>
<td>L. Ge, W.H. Liu and C.Y. Wang</td>
<td>466</td>
</tr>
<tr>
<td>The Design of Elderly Apartment Infusion Monitoring System Based on Wireless Module APC220</td>
<td>Y.J. Chen, P.X. Liu, P.F. Jin and Y.J. Guo</td>
<td>470</td>
</tr>
<tr>
<td>The Design of Indoor Monitoring System Based on Atmega128L</td>
<td>L. Zhang and M.Q. Tian</td>
<td>474</td>
</tr>
<tr>
<td>Optical Switches Based on Photoinduced Electron Transfer (PET) Process</td>
<td>X.H. Li, Z.N. Yu and Z.L. Liu</td>
<td>486</td>
</tr>
<tr>
<td>Hardware Design and Implementation of Power Line Carrier Communication for Medium Voltage Based on DSP</td>
<td>S.Z. Hou and Y. Zhang</td>
<td>490</td>
</tr>
</tbody>
</table>
III. Construction Materials, Architecture Science and Civil Engineering

Analysis into Forms and Causes of Brick-Wood Buildings' Wall Cracks
C. Yu 497

Analysis of Current Situation about House Anti-Seismic Capacity of One Village in North China Earthquake Region
C. Yu 501

Analysis of Effect Factors about Shear Lag in Curved Box Girder under Seismic Loads

Analysis of Magnetic Suspension Gyro Total Station' Azimuth Directional Error and Engineering Application
T. Wang, S. Liu, Y. Zhang and L.G. Li 511

Analysis of the Stability and Treatment Method of K135+514~+678 Section Landslide of a Highway in Shaanxi Province
Z.P. Zhang, G.Q. Zhao, L. Fei and F.L. Li 515

Application of Electrical Energy Saving Technology in Architectural Engineering
W.T. Liu 520

Application of Limit Equilibrium FEM Method to the Slope

Behavior Analysis of Looped Prestressed Tendons in Different Penetrating Strands Technology
J.Y. Luo, X.D. Zhang and X.M. Guo 529

Coarse Aggregate Replacement Ratio on the Properties of Recycled Concrete Bonding Effect
F.B. Cao and F.Y. Li 533

Compressive Resistance Reliability Analysis of Gravity Dam Based on Elastic Stochastic Finite Element
Z.Q. Wang, K.H. Zheng and X.B. Wu 537

Development of Bridge Concealment Engineering State Detection Technology
Y. Zheng, K.C. Zhang and J.Z. Chen 541

Development of Structural Health Monitoring Analysis Management System of Cable-Stayed Bridge on Metro
Y.J. Li, D. Wang, L. Meng, Q. Li, X. Liu and F. Yang 545

Dynamic Characteristic Analysis of Mega-Sub Controlled Structure with Friction Pendulum Bearings
C. Xia, D.B. Fu, B. Huang and L.Y. Liu 550

Effect of Grain Size and Specimen Dimension on Triaxial Shear Strength Parameters of Coarse Soil
S. Asreazad 557

Experimental Research on Bond Behavior between Recycled Concrete and Rebar
C.X. Wang, F.Y. Li and Y.L. Hou 561

Experimental Study on the Flow Mitigation Characteristic of Sub-Water Permeable Spur Dike
C.T. Huang 565

Flexural Performance Experimental Study on the Recycled Concrete Beams Under the Influence of Various Factors
B.B. Li, S.L. Wang and J.L. Zhao 571

Influence Analysis of Differences between Construction Temperature and Design Temperature on Structure
L.P. Xu 576

Influence of Support Horizontal Stiffness on a New Type of Cable Arch Structure
C.Y. Zhang, D.B. Yang, Y. Wei and L.L. Li 580

Influencing Factors of Laws of Bending Force on Railway Bridge

Mechanics Characteristic Analysis of Support Structure of Shallow-Buried Large-Section Loess Tunnel
Z.J. Sun 589
<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerical Simulation of Squeezed Branch and Plate Pile Subjected to</td>
<td>X.J. Gao and Y.H. Li</td>
<td>597</td>
</tr>
<tr>
<td>Vertical and Lateral Loads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On the Bridges of the Qin and Han Dynasties</td>
<td>H.Q. Li and F.Y. Yu</td>
<td>601</td>
</tr>
<tr>
<td>Performance Study on Asphalt Mortar with Dynamical Shear Rheometer</td>
<td>L.X. Ren</td>
<td>605</td>
</tr>
<tr>
<td>Prediction of Shear Strength for Subgrade Soil under Freezing-Thawing</td>
<td>J.L. Chen, P.F. Cheng and C.J. Yin</td>
<td>610</td>
</tr>
<tr>
<td>Realization of Public Building Energy Efficiency Monitoring Simulation System Based on OPC UA</td>
<td>Z.M. Jiang, Y. Fan, C.T. Zhang and L.K. Wang</td>
<td>615</td>
</tr>
<tr>
<td>Regionalism in Architectural Design</td>
<td>L.X. He, T. Jiao and Q. Zhang</td>
<td>619</td>
</tr>
<tr>
<td>Research on Durability Design of Concrete Structure under Chloride Environment</td>
<td>K.F. Zhang</td>
<td>623</td>
</tr>
<tr>
<td>Seismic Design of Tall Buildings Structure</td>
<td>W.J. Zhang, Q.H. Su, Z.D. Cui and S.L. Chen</td>
<td>627</td>
</tr>
<tr>
<td>Studying on the Application of the Flat-Top Straight Wall Cross Diaphragm (CRD)+Multiple Pre-Top Bracing Concealed Excavation Construction Method</td>
<td>J.D. Li, L.J. Tao, J.H. An and B.L. Wu</td>
<td>640</td>
</tr>
<tr>
<td>Test Research on Strength of Concrete Shaft Lining under Salt Disaster Corrosion</td>
<td>X.R. Li, H.G. Ji, J. Wang and C.L. Song</td>
<td>645</td>
</tr>
<tr>
<td>The Analysis on Failure Characteristic of Piled Wharf System</td>
<td>S.P. Zhang and C.Y. Cui</td>
<td>649</td>
</tr>
<tr>
<td>The Construction and Management of Steel Structure Work of the Large Stadium</td>
<td>F.Y. Wang</td>
<td>657</td>
</tr>
<tr>
<td>The Construction of the Later Poured Band and Quality Control</td>
<td>M. Chen</td>
<td>661</td>
</tr>
<tr>
<td>The Design and Construction of Foundation Pit Dewatering under Poor Geological Conditions</td>
<td>J.T. Liu and X. Chen</td>
<td>665</td>
</tr>
<tr>
<td>The Design and Implementation of Intelligent Prediction System of Shield Construction</td>
<td>Y.P. Shi</td>
<td>669</td>
</tr>
<tr>
<td>The Developing of Query and Analysis System for 3D Digital City</td>
<td>M. Li</td>
<td>673</td>
</tr>
<tr>
<td>The Effect of Dust Overload on Security of Single Layer Steel Structural Workshop</td>
<td>C.N. Wang, B. Zhang and X.P. Hu</td>
<td>677</td>
</tr>
<tr>
<td>The Extenics Design Analysis of Abstract Architectural Form Factor</td>
<td>M.H. Xue, H.Z. Zhang and N. Liu</td>
<td>681</td>
</tr>
<tr>
<td>The Numerical Analysis of Gradient Material Replacement on Arch Dam of Stress Concentration Area</td>
<td>J.B. Zhu, Z.M. Su, C.J. Jiang, Z.F. Tian and X. Lu</td>
<td>693</td>
</tr>
</tbody>
</table>
The Simulation of Foundation Pit Construction on Basis of Strength Reduction Method and the Research on its Stability  
T. Yang  

The Water Conservancy Water Electricity Construction Engineering Professional Result Analysis of Application Base on C4.5 Algorithm  
H. Yong  

The Research of Ground Deformation Prediction Neural Network Model on City Underground Construction  
W.X. Zhu  

The Deformation Behavior Analysis for Deep Foundation Pit in Soft Soil Area Considering Seepage-Consolidation Coupling  
L.Q. Cao  

The Status of the Full Decoration Residential and the Systematic Design  
C.R. Peng, X.D. Zhang and L.Y. Zhang  

Implementation of Urban 3D Geographic Information System  
Z.Z. Gao and H.X. Wei  

The Research on the Design Method of Urban Metro Viaduct and the Landscape along the Route  
J. Zhao  

Load-Settlement (Q-s) Curves Fitting and Bearing Capacity Forecast of Piles with Expanded Branches and Plates  
M.H. Fan  

IV. Industrial, Mechanical and Manufacturing Engineering  

A Study on Industrial Design Patent of Hunan Province — Based on Quantitative Analysis  
Z.Y. Zhang  

Air Material Order Optimization Strategy Based on Aircraft Availability  
Y.Q. He, J.J. Li, H.Y. Guo, H. Gao and T. Wang  

Analyses of the Relation Between Degree of Mixing and Regenerative Braking in Hybrid Electric Vehicles  
J.M. Zhang, J.L. Liu and M.Z. Xue  

Analysis and Optimization of Motor Assembly Process Flow  
Y.R. Wang  

Analysis of Cracking of Automotive Stamping Parts and Improvement Measure  
J.Y. Zhang, L.S. Chen, Y.Q. Tian, J.Y. Song and X.Y. Qi  

Analysis of the Evolution of the Blast Furnace Top Charging Equipment Based on Theory of Technology Evolution of TRIZ  
J.X. Wang, Y.B. Wang and Q.M. Wu  

ANSYS Workbench for Static Analysis of Excavator Arm  
X.M. Qi and J.D. Zhang  

Calculation Model for Thermal Crown of Work Roll in Hot Strip Rolling  
Z.Y. Liu, Y.G. Sun and X.R. Song  

Car-Door Forming Optimization and Numerical Simulation Based on Trust Region Method  
J.H. Liu and F. Liang  

Crankshaft Transient Motion Analysis for Marine Diesel Engine  
H.L. Yu and S.L. Duan  

Drag Reduction Performance Parameter Optimization of Vibration Digging Shovel  
W. Sun, J.M. Wu, L.R. Shi, H. Zhang, T. Li and J. Kao  

Evolution of the Research on Oxygen-Enriched Intake Air with Variable Composition of a Gasoline Engine  
D.W. Xie, Y.A. Jin and Q. Gao  

Fault Analysis and Improvement of Starter Contactor of Cessna 172R Power System  
Y.F. Zhou and L. Lin  

Finite Element Analysis of Fluid-Elastic Instability of Heat Exchanger Array  
P. Wang and J. Hu  

Improvement of Process Capability in a Multistep Machining Process  
F. Zhu, X.F. Huang and B.Y. Ye
Mechanical Analysis of Cycloid Gear Rod
Y.Q. Liu, Y.P. Peng and T. Chen

Metallurgical Secondary Cooling of Continuous Casting Based on Neural Network Adaptive System Design of Water Distribution

Outer Characteristics Simulation and Performance Analysis of Motorcycle’s Rear Shock Absorber
C.X. Shan, L.C. Sun and M.H. Sui

Pressure and Flow Stability for Ultra-High Pressure Water Jet System

Quality Deviation Analysis of a Multistage Machining Process
X.F. Huang, F. Zhu and B.Y. Ye

Research on Cell Production Layout of TV Assembly Line
J. Wu, Q.W. Zhang, D. Lai, J.F. Liao and C.L. Jia

Simplified Calculation of the Maximum Thrusting Force of Hydraulic Shear-Fork Type Lifting Platform
H. Zheng

The Comparison and Analysis of the System Utilizing the General Boiler Flue Gas Waste Heat
Y.F. Liu, P.C. Wang and S.S. Zhang

The Impact of Different Screw Edge Width on Extrusion Quality of the Single-Screw Extruder
Y.L. Gao, X. Wang and L. Zhou

The Research of Power Matching Optimization Design for Mini Cars
J.F. Zhang and L. Deng

The Selection of Manufacturing Grid Resources Node Based on the Model
F.H. Hu and H. You

The Large Turbine Impeller Cavitation Technology of Integrated Prevention and Control Lancang River Basin

Design and Simulation Research of Leveling Tanks System

Strip Width Model in Hot Strip Rolling
K. Wu, X.R. Song and Z.Y. Liu

Calculation of Steady State Parameter in Permanent Magnet Linear Synchronous Motors by Analysis Method and FEM
M.J. Wang and Z.X. Ma

Injection Mould Design of Mobile Phone Back Shell
F. Liang and G.D. Liang

Liquid-Solid Coupling Vibration Analysis of the Offshore Pipeline
F.X. Chu and J.J. Li

Stress Analysis of Interference Fit in Wheelset
M. Zhang, G.Z. Hu, S.N. Xiao and Y.M. Tang

Analysis for Ride Comfort Evaluation of Passenger Car Traveling on Roads with Generalized Road Profiles and Conventional Speeds

Fabrication Comparison of the SCS-Based and SOI-Based Micromachining
Q.H. Chen, Y.M. Li, Y.J. Chen and W.G. Wu

Researching of Seismic Wave Excitation Technology
X.F. Zhu and B. Yan

Study on Aluminum Alloy Helicopter Deck under Static Loads
A.T. Feng and X.G. Zhou

Analyses of the Relations Between Driving Types and Regenerative Braking in Electric Vehicles
J.L. Liu, Z.W. Gao and J.M. Zhang

Design of New Energy-Saving Pumping Unit Suitable for Remote Areas and Heavy Oil Recovery
H. Guo and S.E. Liu
Effects of Exhaust Gas Recirculation on Combustion and Emission of a Marine Diesel Engine
H.L. Yu, G.Z. Yu and S.L. Duan

V. Power Engineering and Energy Supply

Analysis of Ship Renewable Alternative Energy Sources
H.Z. Wang

Calculation and Characteristics Analysis of Lithium Ion Batteries’ Internal Resistance Using HPPC Test
H. Zhang, H.W. Mu, Y. Zhang and J. Han

Characteristics of Wind Power Fluctuations
J.Y. Xu

Development and Utilization of Panzhihua Solar Energy Resources — Taking a Small Solar Energy Theme Park as an Example
X.Y. Chen

Electric Vehicle Battery SOC Estimation Based on EKF
H. Bao, W. Jiang and D. Wei

Manganese Oxide Anodized from Manganese Films Electrodeposited at Different Cathodic Currents and its Capacitive Performance
W.P. Li, X.L. Zuo, T.M. Lv and S.T. Zhang

MnO/CNTs Composite as Anode Material for Lithium Ion Batteries

Research on the Probability Distribution of the Power Fluctuation for Wind Electricity
Y.N. Ji

The Analysis of Single Bus-Bar Connection and its Switching Operation

The Broken Analysis of 220kV Transmission Line Tension Crimp Barrel Steel Core

Research on the Prediction Model of Urban Power Grid Short-Term Load Based on BP Neural Network Algorithm
P.L. Xu

VI. Biological Engineering and Food Science

Application of Visible-Near Infrared Spectra Technique Based on to the Non-Destructive Measurement of the Salmon Quality
J.J. Yin

Characterization and Bioactivity of Ti-6Al-4V Alloy Dental Implant Surface Treated by SLA Technique

Content Determination of Total Saponins in Different Parts of Plant Paris Polyphylla Var. Chinensis
H. Yang, J. Zhang, Y.H. Wang and M.L. Tian

Control Study on Contamination Rate of Tissue Culture of Paris Polyphylla
H. Yang, F. Liu, W. An and M.L. Tian

Effects of Shenqihuafen Tablets on Immune Function in Normal Mices
M.S. Miao, T.S. Cui and B.L. Cheng

Effects of Shenqihuafen Tablets on Improving Endurance and Microcirculation in Mice
M.S. Miao, J.J. Jia and M. Bai

Effects of Yuntongding Capsules on Mice Model of Migraine Induced by Reserpine
M.S. Miao, B.L. Cheng and T.S. Cui

Experimental Study on Mechanical Compression of Potato
F.W. Zhang, L.R. Shi, L.J. Wang, F. Dai and Z.S. Han

High Level Expression and Purification of King Cobra Cathelicidin OH-CATH30 in Escherichia coli as a Thioredoxin Fusion Protein
T.Y. Sun
HPLC Method for Bacillamide C Analysis in the Metabolites of a *Bacillus atrophaeus* Strain
L.J. Jin, C.H. Liang, Y. Zhang and Z.Y. Li

Preparation and *In Vitro* Release of Alginate/Chitosan Microparticles Containing α-Glucosidase Inhibiting Peptide
W.J. Jiang, Z.B. Li, Y.X. Qi and Q.C. Zhao

Quantitative Structure-Retention Time Relationship for Retention Time of Coffee Flavor Compounds
D.X. Zhang, H.Z. Si and X. Liu

Research on the Effect of Composition Ratio on the Drying Quality of Plant Bowl-Seeding Tray
Y.F. Zhang and C. Wang

Rootstock Grafting Helps Improve Main Metal Nutrient Translocation of Bleeding Sap in Muskamelon
C.M. Bai, Q.B. Song, X.R. Han, T.L. Li, Z.X. Cen and Y.F. Liu

Stability and Releasing Property of Anthocyanins Microcapsules from *Acanthopanax sessiliflorus* (Rupr. et Maxim.) Seem
X.R. Shao, Z.S. Ma and Y. Dai

Study on Changes of Total Flavonoid Content in *Suaeda salsa* in Different Months of Growing Season

Study on Determination of Cadmium Content in Rice
H.Y. Zhou

The Study of Flavonoids and Polysaccharide Content and Antioxidant Capacity *In Vitro* of Compound Chinese Herbal Medicine in Changbai Mountain
Y.T. Zhang, Y.L. Xi, M. Liu and H.B. Ma

Ultrastructure of Synergids in Sugar Beet
W. Li

Effects of Motherwort Total Alkaloids on Prostatitis Model of Rats
M.S. Miao, S. Tian and L. Guo

Effects of Motherwort Total Alkaloids on Prostatitis Model of Mice
M.S. Miao, L. Guo and S. Tian

Compound Injection of Shenqi as a Reversal Drug on Docetaxel Resistant Human Lung Adenocarcinoma Cell A549/DTX
X.D. Liu, Y.J. Hou, L. Zhang and H.L. Cao

**VII. Medicine and Health Engineering**

3,4,5-Trihydroxybenzoic Acid Triggered Oxidative Stress in 95-D Lung Cancer Cell Line

An Epidemic Model with Isolated Intervention Based on Cellular Automata
X.X. Tan, S.J. Li, Q.W. Dai and J.T. Gang

Analysis of the Development of Residents Electronic Health Records
L. Ning

Association of CYP2B6 c.516G>T Polymorphism with Acute Lymphoblastic Leukemia Susceptibility
Z.H. Yuan, Y.J. Hou, C. Zhao and Y. Li

Bioinformatics Analysis on Functional Site and Fingerprint of CagI Protein in *Helicobacter pylori* Cag Pathogenicity Island
L.P. Xie, S.W. Tian, Y. Gao and S.H. Shao

Bioinformatics Analysis on Homology of CagM Protein in *Helicobacter pylori* Cag Pathogenicity Island
L.P. Xie, Y.J. Xue, S.W. Tian and S.H. Shao

Clinical Analysis of 106 Cases of Mycoplasma Mixed Infections in Children with Pneumonia
L.P. Cheng, Q.W. Zhang, J. Sun and Y.G. Zeng
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Features of HFRS Patients in Jilin Area</td>
<td>Y. Zhao, Y.C. Wang, X.H. Song and C. Zhao</td>
<td>1092</td>
</tr>
<tr>
<td>Experiment of Two Models of Hypoxia Training, and their Influence on Rats’ Cardiovascular System</td>
<td>W. Liu</td>
<td>1096</td>
</tr>
<tr>
<td>Expression and Purification of Serine Protease Inhibitor, OH-TCI, in <em>Escherichia coli</em> as a Thioredoxin Fusion Protein</td>
<td>T.Y. Sun</td>
<td>1100</td>
</tr>
<tr>
<td>Human Identification System Research with the Electrocardiograms Based on the Neural Network</td>
<td>J.L. Lin</td>
<td>1104</td>
</tr>
<tr>
<td>Protective Effects of Xinmailong on Endothelial Cells Functions</td>
<td>F. Li, Y.L. Que, W.Z. Shao, L. Hu, W.G. Sun, S.J. Li and C. Yang</td>
<td>1108</td>
</tr>
<tr>
<td>Rapamycin Induced Autophagy and Suppression in Human Leukemia Cells Proliferation</td>
<td>Y.J. Hou, Z.H. Yuan, X.D. Liu, K.X. Sun, C. Zhao and Y. Li</td>
<td>1112</td>
</tr>
<tr>
<td>Research on the Priorities, Challenges and Risk Factors of Urban Inhabitant Health</td>
<td>J.J. Wang</td>
<td>1120</td>
</tr>
<tr>
<td>The Effect of Chloroquine on the Apoptosis Induced by Cisplatin in Human Gastric Cancer BGC823 Cells</td>
<td>Z.X. Jin, L.L. Zhang, Y. Wang, L.C. Zeng, Y. Yu, S.B. Liu, X.J. Wang and Y. Xu</td>
<td>1124</td>
</tr>
<tr>
<td>The Study of Prophylaxis and Nursing of 55 Examples Multiple Pregnancy Complication</td>
<td>C.H. Yang</td>
<td>1128</td>
</tr>
<tr>
<td>Two Models of Hypoxia on Rat Myocardial Aerobic Metabolism Ability</td>
<td>Q.Z. Yan</td>
<td>1132</td>
</tr>
<tr>
<td>XBP1S Induces GEP and Enhances Endochondral Bone Growth</td>
<td>F.J. Guo, R. Jiang and X.F. Han</td>
<td>1136</td>
</tr>
<tr>
<td>A Study of Intelligent Decision Supporting System Based on Multi-Agent Exercise Prescription of Psychological Disorder</td>
<td>H. Gao, H.J. Wu and H.Y. Zhao</td>
<td>1140</td>
</tr>
<tr>
<td>The Research and Application of Computer Technology for the Sports Skilled Motion Characteristic Model</td>
<td>X.D. Huang</td>
<td>1148</td>
</tr>
<tr>
<td>SVR Model for Prediction of Incidence Influenza Based on Automated Method</td>
<td>J. Song</td>
<td>1159</td>
</tr>
<tr>
<td>Research on Application of College Students’ Physical Health Test Data</td>
<td>M. Tang</td>
<td>1164</td>
</tr>
<tr>
<td>Research on Chinese Population Aging Speed Based on the ARMA Model</td>
<td>Y.B. Fan, G.X. Wang and L.N. Sun</td>
<td>1168</td>
</tr>
<tr>
<td>Research on Countermeasure of Badminton Competition Athletics Rhythm Phenomenon</td>
<td>Y.F. Fan</td>
<td>1172</td>
</tr>
<tr>
<td>Taekwondo Athletes Physical Fitness Evaluation System Based on Multi-Agent</td>
<td>C.Y. Ren, Y.X. Cao and H.Y. Wang</td>
<td>1176</td>
</tr>
<tr>
<td>Research on Application of Information Technology in Vegetable Cultivation of High Yield and Quality</td>
<td>H. Chen and X.L. Yang</td>
<td>1179</td>
</tr>
<tr>
<td>Study on the Mechanism of Led Incapacitator Device Based on the Variable Frequency and Variable Waves</td>
<td>D.Q. Wei and R.J. Zhan</td>
<td>1183</td>
</tr>
<tr>
<td>Efficient Expression and Purification of <em>Bombina maxima</em> Trefoil Factors 2 Variant in <em>Escherichia coli</em> as Fusion Protein</td>
<td>T.Y. Sun</td>
<td>1187</td>
</tr>
</tbody>
</table>
VIII. Products Design and Simulation, Intelligent and Control Systems

A Calibrator Design for Thermometer Based on Precision Thermal Resistance
W. Liu and J. Li

A Design of Intelligent Emergency Rescue System Based on ARM
S.X. Zeng, R. Xue and J. Song

A Kind of New Tool Design and Research of being Suitable for Straw Knead Device
F.W. Zhang, L.R. Shi, H.Y. Su, L.J. Wang, F. Dai and Z.S. Han

A Signal Tester Design Based on Computer Simulation and Software Defined Radio
J.K. Zhong and W.B. Zeng

Analysis on the Error of Fire Control Measuring Equipment of a Certain Type of Aircraft
X.G. Ge, Y.G. Ji, C.Y. Tian, Y.C. Zhang and W.D. Zhang

Analysis on the NC Milling Machining Precision and the Error
B. Tang

Application of PID Controller for Servo Motors
J. Shi and H.J. Wu

Based on Embedded Distributed Control System of the Poultry House Environment
G.X. Zhu

Based on the Design of the Single Chip Microcomputer Numerical Control Constant Current Source
Z.J. Yin, Q. Luo, K. Xiang and F. Wang

DC Servo Motor Control Research Based on BP Neural Network PID
Y. Xie

Design and Characteristic Analysis on Servo Amplifier

Design and Development of DC Motor Speed Control System Based on ARM
D.X. Liu

Design and Development of Test Data Interpretation System for Space Power-Sources
Y.L. Lv and B. Feng

Design and Finite-Element Analysis on Double-Circular-Arc Gear of the Turbodrill Reducer
L.Z. He, Q. Zhou, Y.S. Du and B.B. Li

Design and Implementation of Elevator Monitoring Terminal
S.H. Li, H.P. Hu and Y. Jin

Design and Implementation of Intelligent Controller Based on CAN Bus of Charge and Discharge Machine for Lead-Acid Battery
H. Zhang, H.W. Mu, J. Han and Y. Zhang

Design and Implementation of IPTV Set-Top Box Player Based on BCM7466
Y. Fu, H. Zeng and H. Cao

Design and Implementation of Self-Learning Electrical Measurement System
Y.C. Chen and Y.D. Wang

Design and Realization of 3D Design System for Integrating Metro Depot Outdoor Pipelines
J. Xia and C.L. Song

Design and Realization of Atmosphere Pressure Measurement System with Temperature Compensation Based on FPGA
H.T. Zhang and W. Zhao

Design and Realization of Driving Circuit for 5-Inch Nixie Tube Based on CH452
L.G. Cui, G.X. Li and H.Q. Guo

Design and Simulation of the Air-Gap L-Shaped Feeding Arc Slot Antenna
P. Li, Y.Z. Zhu, Y.Y. Guo and Y. Peng

Design of Platform for Digital Electronic Technology Based on EP3C5E
L. Fu, X.W. Fu and J. Li

Design of Single-Axis Control System Based on FM354
C. Qiu, W.Y. He and B. Tian

Design of Steam Heated Drying Line-Finned Tubes
W.J. Kang and D.Q. Peng
Design of Temperature Monitoring System of Laboratory Based on VB
Y.Y. Xu and Y. Wang 1297

Design of the Remote Control System Based on AT89S52+GPRS
C.Z. Yao and F.X. Liu 1301

Design of Well Diameter Mapping System Based on Underwater Acoustic Transducer
S.G. Zhang, D.H. Wang and X.F. Guo 1306

Detecting and Repairing Damage of Helicopter Composite Blade
W.J. Zhang, H. Ma and D.M. Tan 1310

Detection of Real-Time Event in Intelligent Traffic System Based on RFID
L. Yang 1314

Development of Basketball Assisted Training System Based on Kinect Motion Capture
T.D. Li and F. Wen 1318

Dynamic Optimal Control for Metallurgical Continuous Casting Secondary Cooling Water
Design of Adaptive Systems
J.H. Zhang, J.L. Jia and S.Y. Zhang 1322

Dynamic Response Control of Asymmetric Systems with Load Interference
L. Zeng, J.P. Tan and J. Yang 1326

Ecological Modeling and Humanized Design of CRH2 Type EMU
X.D. Jin, J. Ma and Y.Z. Zhang 1330

Emulation Calculation on Damage Probability of Air Defense Rockets Intercepting Low Attitude Targets
C.T. Wei, D. Chen and J.J. Zong 1334

Environmental Art Design of Subway Station
X.K. Zhang 1340

Explicit Indirect Predictive Control Algorithm in the Application of AWC Control
F.C. Yin, G.S. Ma, Y.F. Ji, Z.P. Li and D.H. Zhang 1344

Failure Model Research of Power HBTs
J.W. Yang and M.M. Xu 1348

Fuzzy Logic Control Based Navigation Research for Mine Rescue Robot in Unknown Environments
Z.Y. Song, R.Q. Jia and J.Y. Zhao 1352

Hardware Design of Data Acquisition and Analysis System for Airplane Power Supply
X.C. Zhao, J.W. Ma, H.J. Lv and X.K. Wang 1357

Hydraulic System Pump Controlled Motor Speed Control Performance Research
Y. Tian and L.C. Gu 1361

Influence of Magnetic Conductive Rubber on Maglev Actuator in Active Vibration Control
Y. Ni, L. He and C.G. Shuai 1365

Integrator Back-Stepping Algorithm on Attitude Control of Quadrotor Helicopter Based on Disturbance Observer
G.D. Jin, L.B. Lu, X.F. Zhu and J. Liang 1370

Interaction Factors Effecting on Gas Heat of Sectional Straw Gasifier
B.G. Sun, J.M. Wu, L.R. Shi and W. Sun 1374

Maneuverability Modeling and Visual Simulation for Unmanned Semi-Submersible Vehicle
C.Y. Zhou, G.X. Wu, Q.X. Yan, J. Wu and R. Yan 1378

Numerical Control of Surrounding and Columniform Cam
Y. Wang and Y.Y. Xu 1383

Parameter Matching and Simulation Study of Powertrain for Extended-Range Electric Vehicle
D.J. Wu, T.Y. Lu, L.J. Zhang and X.W. Gong 1387

Research on Key Technology for General-Purpose Electromechanical Controller
Q.F. Ma 1392

Research on PID Control of Electro-Hydraulic Position Servo Control System Based on SDO Optimization
X.D. Yuan, Y.C. Xie and J.H. Hua 1396

Research on the Application of Generated Controlling System Base on OPC Rules
N. Li 1400

Research on the Automatic Method of Reverse Engineering System in Innovation Design
D.F. Cao 1404
Software Function Design for Measurement and Control System of a Magnetorheological Machine Tool
F.L. Yin, B.Q. Huo and L.G. Cui
1408

Structure Design of the ANSYS-Based SLC9-2-Type Direct Reading Current Meter
S.M. Wang, Z. Wang, Q.Y. He, J. Zhang and Y.Q. Zhang
1412

Study of Pressure Compensation Variable Clearance Seal Hydraulic Cylinder
S.G. Fu, J.X. Deng and S.W. Lu
1417

Study on AFR Control for a PFI Air-Cooled Motorcycle Engine
L.P. Wan, Y.K. Jiang and S. Wang
1421

Study on Dynamic and Virtual Prototyping of Artillery Ramming Device
P.C. Yan, C.Y. Hao, H.G. Sun and C. Liu
1425

Study on Improved Fuzzy Semi-Active Control for the Cable-stayed with MR Damper by Finite Element Simulation
Z.X. Zhang and Q.H. Liu
1429

The Contact Stress Analysis on Involute Slope Modification of Asymmetric Spur Gear
X.H. Deng and J. Cai
1436

The Design of a Maintenance Simulation System for Lasers
W.F. Zeng, Y.M. Tian, B.H. Zhu and D. Li
1440

The Design of a Portable Online Detection Device for Vehicle-Mounted Optoelectronic Systems
S.P. Li, X. Zhang, D.Y. Sheng and Z.Y. Wang
1444

The Design of Discrete Fuzzy Controller for Flatness Control of Cold Rolled Strip
P.F. Wang, D.C. Wang, Y. Zhang and D.M. Qiao
1448

The Design of Switch Assembly Equipment Based on the Pneumatic Drive and PLC Control Technology
Q.R. Zhang and J.H. Liu
1454

The Intelligent Identification and Control Systems of Vehicles Drunk Driving
J.Y. Huang
1459

The Research Based on Fuzzy Sliding Mode Control for Linear Double Inverted Pendulum
L. Ding and S.B. Qiu
1463

The Research on Modeling Architecture of Command and Control System Based on SOA
Y.C. Huang, J. Yang, Y.T. Zhao, Y. Dai and F.Y. Li
1468

The Sintered Ring Cold Trolley Track Detection Method and Application
G.J. Wan, K.L. Fang and Y.B. Wang
1472

An Efficient Electrochemical Biosensor for Silver Ion Detection Using Hydrogen Peroxide as a Redox Indicator
N. Hu, Y.Q. Lai and L.P. Sun
1476

Process Optimization for Pedestal Parts in Wire Crimper
Y.F. Chen
1482

The Measurement and Control System of Agricultural Greenhouse Based on Network
X. Fang, L. Chen and H.Z. Yin
1488

Research of Discrete Manufacturing Industry Production Control System Based on RFID Technology
X.Q. Ding, W.D. Zhang and R.C. Hou
1493

Servo Control System of Electrical Discharge Machining Based on PMAC
1497

The Modeling Study of Compound Control System of the Injection Molding Machine' VFSR
Y.H. Zhong
1501

Design of Ship Dynamic Positioning Controller Based on Internal Model Control
B.Y. Ye, X.F. Huang, F. Zhu and C.S. Liu
1505

Design on Intelligent Control System in Gyms of Generating Electricity
T.J. Meng
1509

Analysis of Anti-Riot Helmet Material Based on Numerical Simulation
H.W. Zhuang, D.H. Xiang and F.D. Zhao
1513

Design on Light Geodesic Instrument Semi-Physical Simulation Training System Based on Virtual Scene
X.J. Wang, G.D. Li, Z.L. Zhang and Z. Li
1517
Design of Measurement and Control System Based on Mechanical Properties of MEMS Materials
J. Pan, Z.J. Weng, G.C. Gan, Y.F. Mo and Z.W. Lin 1522

Development and Application of the Driving Components for 51 Series MCU under MCGS Platform
L.J. Zhang, S.Y. Liu and J.L. Zhang 1526

Distortion Calibration for Camera Lens Based on Digital Image Processing
D.Y. Sheng, S.P. Li, Z.Y. Wang and J. Zhang 1530

Gesture Recognition and Application Research of Kinect
Q. Zhu and T.Z. Liu 1534

Study on Grain Topology with Potts Model Monte Carlo Simulation
H. Wang and G.Q. Liu 1538

The Design of Remote Logistics Warehouse Management System Based on ZIGBEE
P.X. Liu, P.F. Jin and Y.J. Chen 1542

Localization Algorithm for Three-Dimensional Space of Building Based on ZigBee Wireless Networks
Y.H. Liu and T.W. Niu 1546

Measurement Device of Cooling Performance for Quenchants Based on Microcontroller
Y.B. Li, Y.B. Zhang and J. He 1550

Research on the Calibration Method for Analog Measuring Instrument
X.J. Ma, Y. Gao and L.Y. Zhou 1554

Research Rewinding Machine Constant Tension Control System
J.X. Yuan and M.K. Lu 1558

Simulating an AGV Scheduling in Job Workshop for Optimal Configuration
J.B. Wang, L.Y. Hou, W. Li and X.J. Zheng 1562

A Method to Get Template for Ultrasonic Inspection
Y.Q. Gong and Y. Zhang 1566

A WSN-Based Remote Monitoring System for Water Quality
H. Feng and Z.J. Pan 1571

An Experiment System on Seismic Wave to Detect Buried Targets
B. Yan and X.F. Zhu 1576

Guaranteed Cost Control of the NCS with Uncertain Time-Delay
M.M. Wang, B. Liu and B. Xiao 1580

The Distributed Water Supply System Based on the Technology of Power Line Communication
H. Zhao, Z.D. Yuan and C.Y. Zhu 1584

Research on the Fuel Consumption Optimization of Multi-Satellites Formation Establishment
J.W. Shi and J.L. Liu 1589

Study on Personality Behaviour for Virtual Character
L. Shi and Z.G. Li 1593

Measuring Light Based on Sphere Integrating Engineering Design
Z.G. Yue and F. Liu 1597

Scheduling Interval Job Shop with Flexible Preventive Maintenance Using Two-Phase Neighborhood Search
X.Q. Xu and D.M. Lei 1601

Comparisons of the Straight Torsion Beam and Folded Torsion Beam Designs for MEMS Micromirrors
Y.M. Li, Y.F. Fan, Q.H. Chen, Y.J. Chen and W.G. Wu 1610

Simulation of Airborne Electronic Reconnaissance System Based on HLA
F. Zhou, Z.Z. Han and J.P. Feng 1614

The Research of Dance Costume Design Based on Virtual Reality Technology
Y.L. Jia 1619

The New Design of Globe Valve Virtual Assembly Design
J. Wu, S.P. Sun and D.Z. Wang 1623

The Numerical Simulation Research on Thermal Flow-Reversal Reactor of Mine Ventilation Gas
W.F. Zou and B. Lan 1627
The Design of Ship-Borne Antenna Stabilized Platform Based on SOPC
G.S. Ma

IX. Signal Processing and Computer Aided Modeling and Design

3D Modeling for Hillside Landscape Engineering
H.H. Wei, X.H. Li and Y. Bao

A Matrix Completion Based Spectrum Prediction Scheme under Incomplete Data
X. Gao, G.C. Ren, J. Chen and G.R. Ding

A New Approach for Calibration of Sinusoidal Encoder Signals
J. Zhang and L.N. Gong

A Study of Method on Evaluation of Aircraft's IR Image Stealth Effectiveness
S.J. Chai, Z.X. Tong and C.Z. Wang

Research on Locate Mode of Military Repertory Based on RFID
J.Q. Sun, H. Wan, T. Liu and C. Ma

A Three-Dimensional Mechanical Model Preprocessing Method Based on Modeling Software
N. Sun, S.J. Liu, Y.J. Ma and J.M. Wei

An Index Based on the Method of Inertial Parameters Parts
N. Sun, Y.J. Ma and S.J. Liu

Analysis and Application of Plane Visual Aesthetics Elements Design Based on Computer-Aided Technology
X.L. Wang

Application of Computer Aided Design in Sculpture Art
N. Ben, X.G. Yang and P.L. Li

Application of Computer Graphics Technology in Packaging Design
E.J. Bai, G.X. Liu and S.Q. Sun

Application of Computer System in the Study of Sociology
Y.M. Xu and S.J. Jin

Application Research of Genetic Neural Network in Speech Recognition
F. Zhao

Applications of Computer Graphics and Image Processing in Art Design
X.G. Yang

Architectural Design with Autocad
W. Li

Artificial Neural Network Model Analysis Based on the Rules that unless Overtaking otherwise Driving on the Right
J.H. Lu

CPM Signal of the Iterative Timing Synchronization Research
X. Bing

Depth Estimation Based Underwater Image Enhancement
Q.Y. Wang

Experimental Study of Sports Training of Computer Supported Collaboration
G. Lin

Fault Diagnosis of Transmission Based on EMD and Fractal Technology
Z.S. Ma, C. Liu, H.G. Sun and Z.C. Liu

Feasibility Research of Computer-Aided Design Applied to the Sports Action
X. Ying and W.M. Yu

High Speed Motion Compensation for Range Profiles
K.F. Zhang, F. Wang, T.X. Dang and Y.J. Zhao

Key Technologies for Adaptive Change Design of Armored Vehicle in Response to Complex Environment
W.D. Miao, F. Li, W. Zeng and X.J. Zheng

Keyword Recognition Based on MFCC
S. Yang, T. Hu and Y.L. Zhang
Non-Stationary Harmonics Analysis Based on Wavelet Packet Transform and Neural Network  
W.L. Zhao, H. Song, Q. Pan and L. Tang  

Research on Virtual Plant Fruit Modeling Construction  
S.H. Zhu and J.B. Chen  

Simulation on the Flow Field of Centrifugal Pump Based on Fluent  
A.F. Guo, T. Wang, T.T. Jiang, Y.P. Hu and D.J. Zhang  

Study on LOD Framework Based on Hierarchical Simplification  
Y.D. Nie, Y. Zhang and X.M. Liu  

Study on Nearly Lossless Compression with Progressive Decoding  
H.M. Song, H.W. Mu and D.Y. Zhao  

The Application of Digital Technology in Environmental Art Design  
X.K. Zhang  

The Application of Virtual Reality Technology in Industrial Design  
Y. Feng  

The Simulation of Speech Enhancement Based on Variable Leaky LMS Algorithm  
Y.M. Tian, B.N. Li, Z.H. Wang and W. Tan  

Three Dimensional Animation Design and Production Based on Computer Graphics  
Y.D. Guo  

Design and Implementation of Visual Simulation System of Sports Training  
F. Xue  

Apple near Infrared Spectral Preprocessed Based on Wavelet Analysis  
M. Li, Q. Jiang, X.Y. Zhang and L.Q. Chen  

Detection of Weak Magnetic Anomaly Signal Using EMD  
L.H. Zhao and X.Q. Xu  

Dynamics Research on High-Energy and Microsecond-Pulse Laser Irradiating Aluminum Target Underwater  

Research on L-PPM Modulation Rate of Pulse Fiber Lasers  
Z.Q. Hao, H.Z. Li and X. Ren  

An Acoustics Study on Prepositional Consonant [h] in Xiahe Tibetan  
T. Sun, H.Z. Yu and Y.S. Jin  

Study of High Resolution DOA Estimation Based on Vector-Hydrophone  
H. Zhou and Z.J. Huo  

The Analysis of Gearbox Fault Diagnosis Research Based on the EMD and Hilbert Envelope Demodulation  

Endpoint Detection in Noisy Speech Signal Using Teager Energy Entropy  
L.H. Zhao and X.Q. Xu  

IF Modulation in the Millimeter-Wave Transmitter End  
M.X. Ma  

Improved Common Spatial Patterns on EEG Feature Extraction  
Y.Y. Gao  

Iterative Frequency Domain Equalization for Single-Carrier Space Time Diversity Systems  
Q.F. Zou, X.Z. Tan and M. Liu  

Performance Comparison of MDFT Filter Bank with OFDM in Multi-Carrier Systems  
L. Zhuang, J. Ge, G.Y. Wang and K. Shao  

Research and Analysis of ECG Signal Feature Detection Based on Multi-Resolution Analysis and Baselines Wander  
H.Y. Yang  

Signal Simulation of Target Tracking System of Fire-Control Radar Based on HLA  
Q. Xiao, Z.Z. Han and H.W. Zhang  

The Numerical Simulation and Experiment of Pulse Transmission in Fiber Lasers Based on Dispersion Management  
S.Y. Liu, W.D. Huang, S. Xu, Z.G. Yi and B. Li  

Study of MVDR Adaptive Beam High Resolution Bearing Estimation Algorithms Based on SMI  
H. Zhou and Z.J. Huo
The Acoustic Analysis of the Male’s F0 in Mongolia Folk Long Song’s Vibrato
T. Sun, H.Z. Yu and Y.S. Jin

X. Communications and Information Technology Applications

A DOA Estimation Algorithm in OFDM Radar-Communication System for Vehicular Application
X.Y. Yu and M.Q. Zhou

A High Efficient Baseband GNSS Signal Narrow Band Anti-Jamming Approach in Frequency Domain
Z. Zheng, M.Y. Li and W.J. Wang

A Method to Check ADS-B Message Based on Direction-Finder Antenna
L. Lin, Z.Y. Liu and Y.F. Zhou

A Modified AODV to Cope with Marine Mobile Ad-Hoc Networks
Z.Y. Liao, J. Li and C. Shen

An Efficient Communication Network SDH Alarm Association Rule Mining Algorithm
H.S. Gao and Y.M. Li

Application and Research of Weighted Network Node Load Evaluation Method Based on Network Contribution Degree
Y.P. Zhang

Applications of Gesture Interaction Based on 3-D Sensing in Mobile Devices
X.M. Mao

Augmented Reality Based on Mobile Phones
L.T. Li

Based on ETEO Pattern Abnormal Event Detection in Wireless Sensor Networks
B. Tian, D.H. Wang, F.X. Chen and Z.P. Zhang

BIM Technology in the Information Age Applications in Interior Design
Y.W. Wang and X.G. Yang

Construction and Application of Integration under IFC Standard Based on BIM Database
C.L. Sun, C. Liu and D. Shi

Data Mining Architecture System Expansion
J.Z. Li, H.L. Wu and T.Y. Liu

Design and Implementation of Internet Public Opinion Monitoring System
Y.Z. Li and M.S. Zhang

Design of QT-4.7 LAN Chat System Based on ARM Linux
J. Yin, W. Gu, X.F. Yang and C.H. Li

Design of Update for Remote Device Based on GPRS
H. Meng and L. Pan

Development Research of University Library Reader Function Based on Information Technology
X. Wang and Y.L. Wang

Earth-Rock Dam Deformation Monitoring Based on Three-Dimensional Laser Scanning Technology
J. Wang and C.C. Zhang

Effect of Rotation of a High Altitude Platform on Handover
J.Y. Jiang and D.X. Guo

Explore Information Technology Application in Anthropology Field Investigation
S.Q. Ge

FPGA-Based Realization and Simulation of Channel De-Interleaving in TD-LTE System

FPGA-Based Realization and Simulation of Tail-Biting Convolutional Coding and Decoding in TD-LTE System
D. Wang, X.P. Dong, C.Y. Jiang and N. Lv

Function Projective Synchronization in Complex Dynamical Networks
F.L. Jia

Implementation of E-Chat Webpage Chat Room Design Guided by Openness
Improving Westwood over Bandwidth Instability
M.K. Wang and W. Zhang 1947

Influence Factors Research on Microblog Users’ Loyalty - Based on Lifecycle Perspective
J.D. Wang and D.M. Zhao 1953

Information Construction of Accounting System
Q.J. Peng and P.R. Wang 1958

Information Security Risk and Security Requirement Analysis Based on Interaction Power Mode
C. Liu, F. Wang and C.L. Sun 1962

Layered Channel Estimation for High Data Rate DS-UWB
Z.Y. Li, X.L. Meng, K. Dong, S. Yan and D.Q. Wang 1966

Mobile Information Technology Application Based on the Balanced Resources
H.L. Fan and L. Feng 1970

Ontology Construction Using Multiple Concept Lattices
W.C. Wang and J. Lu 1975

Optimization Design of the CRC Check for RFID Communication System
W.W. Zhang, W.P. Jing and B. Jiang 1979

Performance Evaluation of Transport Protocol in Data Distribution Service Middleware
P.W. Li, H.L. Zhao, H.T. Yang and S. Sun 1984

Principle Study and Usage of Hadoop Benchmark

Random Immunization Algorithm to Energy Consumption in Optical Network

Reliability Allocation of Seafloor Observation Network by Using Monte Carlo Method

Research and Application of Evidence Synthesis FTA Model Based on Similarity Analysis
Y.L. Yuan and B. Liu 2001

Research for Network Security Mechanism of Ad Hoc Network
H.Y. Zhao, J.Q. Yang and H. Li 2006

Research on a Reliable Zone Routing Protocol and its Key Technologies in Ad Hoc Networks
J. Wu, S.S. Sun and L.Q. Tian 2010

Research on Construction Strategy of Web-Based College Aerobics Information Resources
A.Y. Tang 2014

Research on Gibbs Mobility Model for Ad Hoc Networks in the Contingency-Responding Battle
X.K. Li, H.W. Lv and R.L. Song 2018

Research on Ideology Based on Information Dissemination Model
C.X. Jiang, J.J. Qin and Y.H. Pan 2022

Research on Internal Control of Accounting Information System under Network Environment
Q. Xie 2026

Research on Key Technology of Internet Public Sentiment
D.Z. An and Y. Ke 2030

Research on MAMSK and OOFDM Technology in Optical Fiber Communication System
Y.K. Liang 2034

Research on Modeling and Performance of Steering Operating System
T. Jin and F. Tang 2038

Research on Multi-Objective Reservoir Optimal Operation Based on Adaptive Genetic Algorithms
J. Chang and G.W. Ma 2042

Research on Network Security and Identity Authentication
Y.X. Fan and R.B. Zhang 2046

Research on Resource Scheduling Algorithm in Cloud Computing Data Center
Y. Zhang and Y.M. Su 2050

Research on Simulation Customers Participate Type in Open Innovation
J.H. He 2054
Research on Small and Micro Enterprise Information Integration Applications Based on SOA
W.M. Shuai, X.F. Fu and Y. Zhang 2058

Research on the Application of Network Language in Information Technology Time
H.H. Li 2062

Research on the Copyright Protection and Information Sharing in the Network Publishing
W.B. Yu 2066

Research on the Deployment and Configuration of IPv6 in Campus Network
Q. An, X.T. Li and X.G. Liu 2070

Research on the Enterprise Network from IPv4 to IPv6 Transition
X.Y. Han, Q. Zhang and J.Z. Jin 2074

Research on the Network Fault Isolation Based on Negative Selection
Y.G. Li 2079

Research on Trigger Strategy of Virtual Machine Dynamic Migration in Cloud Computing
C.L. An, C.L. Li, Y.L. Luo and S.J. He 2084

RRM Conformance Testing Validation of Cell Handover in TD-LTE System
X.W. Li, G.Z. Wang and G. Zhou 2088

Simulation and FPGA Realization of Scramble Algorithm in TD-LTE System
X.W. Li, M. Tao, W. Gao and C.Y. Jiang 2092

SSR Surveillance Network Double Covering Problem with Obstacle Effect Consideration
J. Guan, Z.G. Su and H.Y. Wu 2097

Study and Application on Wireless Sensor Networks in Counterterrorism Operations
C.B. Liu, G.H. Wu, L. He and X.W. Wang 2102

Study of Complex Networked Control System Exponential Stability
Y. Pan 2106

Study of the Factors Affecting Wireless Transmission on JN5148
Z.Y. Wu, H. Gong, S.J. Li, M.H. Yu and S.Y. Wang 2110

Study on Feature Extraction Methods Based on Motion Capture Data
Y.D. Nie, Y. Zhang and X.M. Liu 2114

Study on Level-of-Detail for Behavior of Real-Time Virtual Environments
Y.D. Nie, Y. Zhang and X.M. Liu 2118

Study on the Development of Wushu from the Perspective Based on Information Technology
X.D. Cao and L. Zhang 2122

Technical Analysis of the PLC Access Networks
Q. Ren and X.Y. Li 2127

The Current Situation and Development Trend of Trunking Mobile Communication System
G.L. Yang, X. Wang and X.Z. Tan 2131

The Design and Implementation of an Environmental Information Collection and Dissemination Terminal Based on Mobile Platform
D.C. Zhu, M. Che and J. Li 2135

The Design and Implementation of Psychological Counseling Management Information System
H. Lei 2139

The Design of Remote Monitoring System of PM2.5 Air Quality Based on ARM-M3 Ethernet
X.W. Fu, L. Fu and J. Li 2143

The Keep-Right-Expect-to-Pass Rule
S.C. Yu 2147

The Key Technology Research of Network Security for Electronic Commerce
J.H. Lu 2151

The Research of Data Communication on Wind Power Monitoring and Diagnosis System Based on XML
C. Zhang and X.J. Pan 2155

The Research of Information Retrieval Technology Based on Semantic Analysis
M. Xu and Y. Ke 2160

The Research of Several Technical Problems about Wireless Mesh Network Routers
Y.H. Zhao 2164
The Research of the Interaction Mechanism between BIM and Organizational Integration
Y.H. Chen and Y. Zhang
2169

The Research on GNSS Message Synchronization Method Based on SOC
H. Bao
2173

The Research on Key Issues of Machine Translation
Y. Zhu
2177

The Review of Dynamic Capabilities
X.Q. Bi and Y.C. Chen
2181

The Study of Network Management System for Power Communication Terminal Access Network
S.Z. Hou and B.L. Ge
2185

The Study of the Basically same Convergence Problem
G.X. Wang and Y.B. Fan
2189

The Study on Strategies of Winning Information Dominance in Modern Battlefield
2194

T-LB: A Topology-Based Load-Balancing Algorithm for Structured P2P Networks
Z. Wang, L.X. Peng and W.D. Zhao
2198

Wireless Network Based Image Transmission between Heterogeneous Operating System
N. Wang, Y.X. Liu and Y. Wang
2204

Distributed Caching Technology Research Based on Cloud Computing Model
Y.Q. Liu
2208

A Study on Smart Agricultural Facilities Wireless Networking
Z.G. Yao
2213

Application Research of Computer Network Load Certification Constructing VPN Tunnel Technology
A.N. Kuang
2217

Blog Topic Detection Based on the Model
T. Kuang and S.H. Zhu
2221

Chinese Garbled Studies with PHP and MySQL Platform
H.Y. Zhu and X.P. Zhao
2225

Cooperative Spectrum Sensing with Peer-Assessment for Cognitive Radio Network
S.Q. Xu, Y.T. Xu, H. Jiang, X. Gao and K. Luo
2228

The Design of Public Opinion Analysis System Based on Topic Events
S.J. Jin and Y.M. Xu
2233

The Construction of University Emergency Response Mechanism under the Network Environment
D. Wang and S.Q. Feng
2237

Use of Multitenant Feature in Oracle 12c
E.N. Wang
2241

Unified Login Authentication Method Based on Cloud Computing
L. Jia
2245

Tourism Planning and Design of the Proposed System of Computer Software
H. Hu
2249

The Study of Online Recharging for Campus Cards Based on the Third-Party Payment Platform
H.L. Zhang, Y. Zhang, W.F. Zhong and M.Y. Li
2253

The Research on Computer Security Monitoring System Design
Y.B. Wang
2259

The Ontology Definition Metamodel for Search Engine Based on Contextual Concept
L.J. Diao, J.Z. Gu and L. Chun
2263

The Key Role of GBAS in the Implementation of PBN Procedures
2267

The Internet of Things Based Yak Farm Image Acquisition Node Hardware Design
G.J. Ma
2272

The Internet of Things Based the Framework of Gannan Yak Disease Early Warning System Design
G.J. Ma
2276
The Development of Data Mining System Based on Cloud Computing
Q. Ren 2280

The Analysis of Foreign and Domestic E-Commerce Security Technology
Y. Zhou and P.C. Li 2284

Design and Implementation of Flex RemoteObject Proxy Pattern
C.M. Huang, W.X. Jiang and F.M. He 2289

Design and Realization of Laboratory Information Management System under the Background of JAVA
C.X. Fang 2293

Design and Realization of the Computer Network Traffic Monitoring
Y.P. Zhang 2297

Design of Data Acquisition Module Based on Power Line Carrier
L.L. Chen, W. Liu and J. Li 2301

Design of Information Management Requirement and Information Management System of Community Sports
J. Li 2305

Design of Non-Lethal Ammunition Combat Simulation
L. Lu and J.W. Hu 2309

Design of Online Testing System Based on Web
X. Fu and S. Fu 2313

Develop Cross-Platform Smartphone Application for Lotus OA
L. Liu and R. Dai 2317

Efficient Beam-Forming for Maximum Outage of Cognitive Relay Networks
Z.J. Liu, Z. Gao, G.X. Li and H.T. Zhang 2321

A Cyber-Physical System (CPS) Based Hybrid Micro-Grid Model with Wind-Solar Complementary Power
L.X. Hu, J.L. Mao, B.L. Zhang and A.S. Zhou 2325

A New Simple Channel Simulator Based on FPGA
L. Yu, L.C. Chen, M. Li and P.R. Wang 2329

Electronic Paper Display Technology and its Application Development
N.N. Zhang, W. Gu, F.Q. Xu and X.F. Yang 2333

Generation of OAM Radio Waves Using Patch Antenna
C.L. Qin, M. Huang, J.J. Yang, L. Shen and Y.H. Liang 2337

Implementation of Real Time Video Transfer System Based on Android Platform
M.K. Lu and J.X. Yuan 2341

Implementation of Robocode Online Platform Based on J2EE
H. Rao 2345

Key Technology Research and System Development of Service Management Platform Based on Cloud Computing
Q. Ren 2349

Management Information System for Communication Engineering Based on J2EE
A.Q. Chen 2353

Multi-User Opportunistic Spectrum Access Using Reinforcement Learning
C.L. Xu, Y.P. Cheng, Y. Chen, C.M. Ren and H. Yang 2357

Network Literature Recommendation Technology Based on User-Based Collaborative Filter
R. He, G.H. Song and S.T. Sun 2362

Reconstruction on Database Technology Module Based on University-Enterprise Cooperation for Polytechnic

Research and Implementation of CDR Synthesis Scheme on S1-MME Interface in LTE Network
Z. Li, Z.Z. Zhang and D. Ran 2370

Research and Implementation of General Online Examination System

Research and Implementation of SOA Application Based on Component Technology
M.X. Tang 2378

Research of Application & Optimization of Nurse Workstation in HIS
R.D. Lin and L.Z. Chen 2382
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research on Collaborative Service Platform of Ticket Business Oriented to Multiple-Terminal Heterogeneous System</td>
<td>2385</td>
</tr>
<tr>
<td>Research on Multimedia Active Service System of City Sports Park</td>
<td>2390</td>
</tr>
<tr>
<td>Research on Network Fitness Service System Based on Multi-Agent Technology</td>
<td>2394</td>
</tr>
<tr>
<td>Research on Reader Service Mode in the Library Based on Digital Networked Environment</td>
<td>2398</td>
</tr>
<tr>
<td>Research on the Agent Oriented Software Design Engineering</td>
<td>2402</td>
</tr>
<tr>
<td>Research on the Development and Applications of Computer Science and Technology</td>
<td>2406</td>
</tr>
<tr>
<td>Research on the Development of Smart Library Based on Embedded RFID Middleware</td>
<td>2410</td>
</tr>
<tr>
<td>StreamMAP: Automatic Task Assignment System on GPU Cluster</td>
<td>2414</td>
</tr>
<tr>
<td>Structural Analysis and Preparation of the Netfilter</td>
<td>2418</td>
</tr>
<tr>
<td>Study On Development of Management Information System</td>
<td>2422</td>
</tr>
<tr>
<td>Computer Aided Sports Technology in Physical Training</td>
<td>2426</td>
</tr>
<tr>
<td>Application and Research Analysis of Computer in Modern Athletic Training</td>
<td>2430</td>
</tr>
<tr>
<td>Analysis of the Security Mechanism of IPV6</td>
<td>2434</td>
</tr>
<tr>
<td>An Indoor Localization of WiFi Based on Support Vector Machines</td>
<td>2438</td>
</tr>
<tr>
<td>An Energy Balance Routing Protocol Based on AODV</td>
<td>2442</td>
</tr>
<tr>
<td>An Android 4.2 Set-Top Box Realizes Video Sharing by Miracast</td>
<td>2446</td>
</tr>
<tr>
<td>Analysis on the Deviation of Final Approach Path Based on Satellite Navigation</td>
<td>2450</td>
</tr>
<tr>
<td>Augmented Reality Based on Mobile Terminals</td>
<td>2454</td>
</tr>
<tr>
<td>Bluetooth-Based Room Localization Research Based on NB and SVM Approach</td>
<td>2458</td>
</tr>
<tr>
<td>Data Storage Scheme of Sensor Network Based on HDFS</td>
<td>2462</td>
</tr>
<tr>
<td>Design and Realization of Intelligent Vehicle Based on Android Mobile Phone Bluetooth Control</td>
<td>2466</td>
</tr>
<tr>
<td>Design of the Software for Wirelessly Intercepting Voices</td>
<td>2470</td>
</tr>
<tr>
<td>Design of the Web Log Analysis System Based on Hadoop</td>
<td>2474</td>
</tr>
<tr>
<td>A Note for Order-Preserving Encryption Based on Negative Hypergeometric Distribution</td>
<td>2478</td>
</tr>
<tr>
<td>Hardware Design of Low-Power ZigBee Wireless Sensor Network Node</td>
<td>2482</td>
</tr>
<tr>
<td>HLA-Based Anti-Reconnaissance Fire-Control Radar Network Data Fusion and Control Simulation System Development</td>
<td>2486</td>
</tr>
<tr>
<td>Implement Synchronization Algorithms in OFDM System</td>
<td>2490</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>Program Development and System Integration for Human-Computer Interface of Numerical Control System</td>
<td>F.L. Yin, B.Q. Huo and F. Shao</td>
</tr>
<tr>
<td>Research and Design of a Large Bandwidth Receiver RF Front-End</td>
<td>W.K. Liu, P. Wang and J. Cui</td>
</tr>
<tr>
<td>Construction of Sports Training Information Management System</td>
<td>L. Min</td>
</tr>
<tr>
<td>Construction of E-Commerce Information Services Platform in International Trade</td>
<td>L. Wei</td>
</tr>
<tr>
<td>Research and Design of Digital Museum Based on Virtual Reality</td>
<td>R.G. Wang, H.L. Dong, M.W. Wu and Q.F. Wu</td>
</tr>
<tr>
<td>Research and Implementation of RTP/RTCP in Mobile Video Surveillance System</td>
<td>H. Cao, H. Zeng and Y. Fu</td>
</tr>
<tr>
<td>Animal Husbandry Decision Tree Data Mining Applications in Intelligent System</td>
<td>S.Y. Wu, H.L. Wu, T.Y. Liu and X.Y. Cui</td>
</tr>
<tr>
<td>Data Mining and its Application in Modern Animal Husbandry</td>
<td>Z.M. Zhang, Y.J. Sun, T.Y. Liu and L. Xu</td>
</tr>
<tr>
<td>Research on Comprehensive Clustering for Smart Phone Configuration</td>
<td>J. Yang</td>
</tr>
<tr>
<td>Design and Implementation of the Automobile Network Marketing Management System</td>
<td>R. Liang</td>
</tr>
<tr>
<td>Research on Digital Media Technology in the Folk Art Design</td>
<td>Y. Zhao and X.G. Yang</td>
</tr>
<tr>
<td>Service and Role Oriented Access Control Model</td>
<td>L. Guo and X.J. Yang</td>
</tr>
<tr>
<td>Development of ERP Financial Accounting Management System Based on J2EE Technology</td>
<td>H.H. Luo and W.P. Liu</td>
</tr>
<tr>
<td>E-Commerce Platform Implementation Strategy for Hotel</td>
<td>G. Feng</td>
</tr>
<tr>
<td>E-Commerce Recommendation System Based on Cloud Computing</td>
<td>W. Zhao and H.T. Zhang</td>
</tr>
<tr>
<td>State Monitoring of Civil Engineering Structures Based on Wireless Network Sensor</td>
<td>L. Wang</td>
</tr>
<tr>
<td>Strength Analysis of Miniature Thermoaoustic Refrigerator Resonance Tube Based on ANSYS</td>
<td>J.X. Wang and T. Zhang</td>
</tr>
<tr>
<td>Research and Application of Internet of Things in the Field of Home-Based Care for the Aged</td>
<td>C.B. Yin, S.Q. Sun and P. Ren</td>
</tr>
<tr>
<td>Research on Application of IT in Techniques and Tactics Analysis of Basketball</td>
<td>H.T. Guo</td>
</tr>
<tr>
<td>The Design and Development of an Earthquake Rapid Assessment System Based on GIS Technology in Yunnan</td>
<td>S.Y. Peng and K. Yang</td>
</tr>
<tr>
<td>Research on Development of Sports Information Management Systems</td>
<td>G.J. Li and S.Q. Ma</td>
</tr>
<tr>
<td>The Design of File Transfer Protocol Based on R^2UDP in Digital Radio Narrowband System</td>
<td>J. Zhang, Z.Y. Zhao and H.S. Jiang</td>
</tr>
</tbody>
</table>
The Design of Multi-Channel Rural Information Push Service System
H.Y. Nie and L.N. Yue

Research on Information Dissemination Channelsand Monitoring of Sports Events
J.W. Yang

Research on Legislative Protection for the Network Consumers’ Rights and Interests in E-Commerce
D.F. Cai

The Research and Implementation of Wireless Channel Multipath Effect Based on FPGA
F.T. Chen, L.C. Chen, P.R. Wang and M. Li

Research on the Key Technologies of Resource Dynamic Management in Cloud Computing Environment
J.J. Xiang

Research on the Legal Protection of Consumer Rights on Mobile Internet
X. Ni

The Research of Ad Hoc Network Routing Protocols
Q. Sun

The Research of Sensors’ Interface on Wireless Sensor Network
D. Su

Research on the New Trend in E-Commerce Industry: Mobile E-Commerce
Y.L. Liu

The Simulator Research of the Traffic Network Particle Swarm Optimization Based on Wireless Sensor
X.B. Wang

Software Engineering and Software Quality Management
W.H. Liu, C.Y. Wang and L. Ge

The Study of the Effects of Information Technology on Battle
Z.H. Lan, Y.G. Ji, Y. Feng and C.D. Ning

Study on the Objects and Principles of Inter-Satellite Link Management of Navigation Systems
Y. Liu, B. Wu and B. Wang

An Improved Clustering Algorithm for Wireless Sensor Networks
X.Y. Zhou, L.Q. Liu and G. Zhang

The Design of Enterprise Management Information System Based on ERP
L.J. Wang

The Research on Information Collection System Design for Internet of Things
Q. Ren and J. Tao

Design and Implementation of Community Mental Evaluation System Online
F.Z. Wang

Application of Cloud Technology in Social Science Research
Y.M. Xu and S.J. Jin

Design of the ‘One-Map’ Mineral Resource Administration E-Government System of China
H. Cao

Data Mining in Animal Husbandry Decision Support System
A.D. Jiang, H.Y. Duan, T.Y. Liu and S.Y. Wu

Machine Translation Based on Translation Rules for Processing Natural Language
L.D. Li, W.Y. Xing and X.L. Zhang

The Influence of Internet on Sport Culture Communication
D.C. Zhang and S.Y. Zhang

Promote the Ethernet Performance Based on Inline Assemble
Y. Cheng

Research on Application of Computer Virtual Reality Technology in Sports Training
B. Wang and Z.Z. Wu

Research on Design of Collection and Intellectual Analysis System of Technical and Tactical Information in Basketball Matches
Z. Liu

Research on Impact of the Internet on the Dissemination of Sports Culture
W. Zeng
Research on Multimedia Sports Humanistic Information Systems  
M.W. Hu  
Research on the Application of Information Technology in Computer Musical Creation  
X.C. Che  
Research on the Application of Motion Capture of Kinect Technology in the Sport Training  
Q.W. Shi  
Research on the Application of Video-Feedback Method in Volleyball Training  
S.Q. Ma and G.J. Li  
Research on the Impact of Modern Network Technology on Sports Culture Dissemination  
N. Chen and J. Liu  
Research on WebGIS-Based Sport Games Information System  
H. Li  
Residents’ Traveling Track and Analysis Methods Based on Mobile Phone Data  
P. Li, Y.W. Gao, J.W. Wu, X. Li and B.B. Wu  
The Development of Badminton Auxiliary Training System Based on Kinect Motion Capture  
Z.D. He, R.M. Hu and J.C. Xu  
The Development of Basketball Assistant Training System Based on Kinect Motion Capture  
Z.F. Qiu  
The Research of 3D Human Motion Simulation and Video Analysis System Implemented in Sports Training  
R.M. Hu, Z.D. He and F. Bai  
The Research of Visual Simulation Application in Sports Training  
Z.F. Qiu  
The Research on Key Issues of Analysis of Basketball Video  
F. Liu  
The Research on Tactics Application of Table Tennis Matches Based on Artificial Intelligence  
Z.W. Cao  
Theoretical Construction of Sports Information Management and Research on Application System Development  
L. Shao, L. Luo and H.X. Qi  
A CTCSS Approach to Mitigate Interference in VHF Cellular Network  
Y.G. Bian, J.H. Su and X.M. Song  
An Improvement of Slotted CSMA/Ca in IEEE 802.15.4  
J.H. Wang and L.J. Sun  
Application of RBF Networks in Mercury Pollution Spatial Prediction of a Gold Mine Area  
H.C. Wang, J. Yang and H.P. Lin  
Application of Symplectic Partitioned Runge-Kutta Method and Total-Field Scattered-Field Formulation to Simulation of GPR Data  
H.Y. Fang, J. Li and J. Li  
Characterizing and Modeling Microblog Traffic in Cellular Data Network Based on Massive Data Analysis  
S. Zhang, J. Liu, Z.M. Lei, W.H. Lin and Q. Yan  
Data Mining: Modeling, Algorithms, Applications and Systems  
J.Z. Li, Q. Li, T.Y. Liu and W.H. Niu  
Dynamic Task Allocation Based on Game Theory  
X.P. Wan and S.Y. Li  
Research and Analysis of the Radio Network Channel Control Based on Router Discovery and Cross Layer Design  
E.G. Yuan and X.Q. Wu  
Research of Multi-Data Integration Based on Lotus Domino  
S.Y. Guo and E. Qin  
Research on Common Virus Properties in Computer Lab  
J. Meng  
Research on Computer Network Data Transfer Methods  
L.J. Liu
Research on Data Security in Cloud Computing
Z.H. Li 2811

Research on Information Hiding Method Based on Word Text
X.F. Wang and H.J. Li 2815

Research on the Network Security and Identity Authentication Technology
Y.H. He 2819

The Application of BIM Technology to Improve the Installation Accuracy of Curtain
S. Zheng 2823

The Choice of Legal Protection Mode of Computer Software
Y.X. Li 2827

The Exploration and Implementation of Wireless Forecasting for Bus System
Z.S. Wang, J.G. Cui and B.L. Zhang 2832

The Exploration on the Application of Chinese Ink Painting in Web Design
Q. Wang and M. Zhou 2836

The Extraction of Buzzwords for Micro-Blogs
W.L. Ye 2840

The Research of Key Technology of Application Integration and Cloud Service Platform Application on NC Machining
W.L. Yu 2845

The Research on Professional Design Software for the Creativity Promotion of Graphic Design
M. Lei 2849

The Research on Simulation Technology of OTV Based on HLA
Y.C. Huang, J. Yang, Z. Fan and X.X. Li 2853

The Simulation Research of Classic Spectrum Estimation Periodogram Method Based on Matlab
B.N. Su, H. Xie and X.Y. Hua 2857

XI. Computational Science Technology, Algorithms

(G) Fuzzy Integral on Fuzzy Set
G.L. Li 2863

“Threshold-Deciding” Policy in Distributed Multiuser Opportunistic Spectrum Access

2D-DOA Estimation for MIMO Radar on Monostatic L-Shaped Minimum-Redundancy Linear Arrays
Y. Li and G. Zhang 2871

A 3D-FEA of Temporomandibular Joint with Reduced Curvature of Curve of Spee
Y.M. Wan, M. Bi and J.Y. Wang 2876

A Dynamic Replication Algorithm Based on Access Popularity in Cloud Storage Environment
L.L. Li, Q.C. Wang, Y.J. Han, X.H. Ma and Y. Jiao 2880

A Dynamic Sub-Array Divided Technique for Spherical Conformal Array Antenna Using K-Means Algorithm
J.Y. Tang, Y.L. Xie and C.C. Peng 2884

A Hybrid Optimization Algorithm Based on Bat and Cuckoo Search
Y.M. Duan 2889

A Multiple Frequency Band Watermarking Algorithm Based on Stripe Image
B.B. Liu and H.Q. Chen 2893

A New Data Stream Clustering Approach about Intrusion Detection
Z.Q. Li 2898

A New Method of Image Fusion Based on Wavelet Transform
C. Luo 2902

A New SVM Active Learning Algorithm Based on KNN
Y. Leng, G.H. Qi, X.Y. Xu, X.P. Wang and D.W. Li 2906

A Novel Modified Algorithm for Local Statistic Enhancement
X.L. Song 2910
A Semi-Supervised Regression Algorithm Based on Co-Training with SVR - KNN
Y.Q. Li and M. Tian 2914

A Topology Aggregation Scheme in Multi-Domain WDM-TDM Networks
B.S. Quan, H. Li and Z.C. Le 2919

A Way to Predict and Evaluate of Software Maintainability Based on Machine Learning
W.H. Chen and X.W. Wang 2924

Accelerate Bregman MRI Image Reconstruction Algorithm
X.Y. Wang and Z.C. Zhong 2928

Algorithm Based on the Vertex Similarity of the Network for Detecting Community Structure
C. Zhang, L. Xu, C. Liu and C.L. Fan 2932

Algorithm Optimization of Motion Tracking Based on Optical Flow
D.M. Liu, C. Liu and H.W. Mu 2938

An Algorithm Based on Self-Organizing Kohonen’s SOM for Color Image Segmentation
T.T. Wang and W. Dong 2942

An Application Research on Adaptive Learning Algorithm in Image Recognition
H.L. Jia and K. Cao 2947

An Efficient Packet Scheduling and Resource Allocation Algorithm for Practical Multi-Layer Systems
Y.H. Ma, W. Zhang, W.H. Wang and Y.X. Liu 2951

An Improved Algorithm of Weighted Centroid Algorithm Based on RSSI
P.F. Jin, P.X. Liu and Y.J. Chen 2955

An Improved BIST Algorithm Research
M.X. Ma 2959

An Improved Blind Source Extraction Algorithm
S.C. Zhang 2964

An Improved K-Means Algorithm of High-Dimensional Data
C.C. Zheng and H. Zhang 2968

An Improved NAS-RIF Algorithm for Turbulence-Degraded Images Restoration
F. Wang, K.F. Zhang, F.K. Meng and Y.J. Zhao 2973

An Integrated Pipeline Soft-Collision Algorithm and its Implementation Based on MicroStation
T. Wu and W. Wang 2978

Analysis of Active Deception Jamming Model against SAR
R.H. Peng, Y.S. Lv, X.W. Wang and Y.Q. Gao 2982

Analysis of Coupled Water Hammer Vibration Equation of Improvement

Analysis of the Effect of Noise in CosaMP Algorithm
Z.P. Zhang, X.F. Guo and B. Tian 2992

Application of Locally Linear Embedding Based on Improved Distance in Neuron Classification
Z.Z. Wang, X.J. Tong and S. Zeng 2996

Based on the Edge of the Threshold Control Adaptive Fast Image Interpolation Algorithm and its Improvement
X.J. Ma, L.Y. Zhou and Y. Gao 3000

Collaborative Filtering Recommendation Algorithm Integrated into Co-Rating Impact Factor
X.Y. Wang and H. Liu 3004

Combining Clustering and Voting Scheme to Select Initial Training Set for Active Learning
Y. Leng, G.H. Qi, X.Y. Xu, X.P. Wang and D.W. Li 3008

Comparison of PAEs Migration Models and Experiment
J.X. Tan, G.Y. Li, R.J. Zhao, G.C. Yang and H.J. Li 3012

Computer Animation Process Research
M. Fei 3018

Design of a Ka-Band 4th Sub-Harmonic Image Rejection Mixer
Q.Y. Pang 3022

Design of Remote Sensing Image Files Unified Processing Component
Y.J. Wang, C.H. Yuan and L. Wu 3026
Disparity Map Acquisition Based on Matlab Calibration Toolbox and OpenCV Stereo Matching Algorithm
W. Gu, J. Yin, X.F. Yang and P. Liu
3030

Double Anomaly Detection Algorithm Based on Dendritic Cells
L.C. Xu, D. Xu, G.G. Zhou and X.Y. Hou
3034

Fast Ellipse Detection Method Based on Coordinates Transformation
C. Wang
3038

Finite Element Analysis Based on ANSYS of Bolt of Roof Bolter
S.C. Yuan, X. Guo, X.Y. Wang and X.Y. Pei
3042

Hybrid Projective Synchronization of Different Fractional Order Hyperchaotic Systems
J.P. Jia and F.D. Zhang
3046

Image Background Removal by Contour Feature
Z.F. Li and J.Q. Wang
3050

Improved GPSR Algorithm Based on the Last Hop Node Selection Mechanism of the Destination Node
R.H. Dong, Q. Yang, C.S. Zhu and J. Wang
3054

Improved SIFT Algorithm Based on Mixed Programming
D.G. Zuo, T. Wen, Z.K. Li and Z.L. Li
3058

Intrusion Scenario Dynamic Correlation Algorithm Based on Single Value Causality Diagram
C.Y. Zhang and X.Q. Wu
3063

LW Algorithm in the Application Research of Digital Blasting Vibration Signal Compression
T. Guo, Q.M. Xie, M.S. Zhong, Y.S. Li and Y. Gao
3068

Margin Refine of Candide-3 Model for Facial Deformation
X.X. Chen and H.J. Han
3073

Modeling and Analysis of Air Defense Process for Warship Formation Based on PEPA
S.R. Chen, J.C. Huang and G.Q. Cheng
3079

Modeling and Analysis of the Ground Experiment for Restricted Three-Body Problem
H.Y. Li, Z.K. She, B. Xue, W.J. Qiu and Z.M. Zheng
3084

Modeling and Simulating for Queuing System with QuickPass
M.P. Li and L.K. Tao
3088

Multi-Attribute Decision Making Based on the Similarity Degree of Ternary Interval Numbers
G.F. Liu, L. Guo and Y. Bao
3092

Multi-Field Coupling Simulation on Quench Process in Superconducting Magnet
X.L. Guo
3096

New Feature Selection Method Based on SVM-RFE
X. Wang, Q. Li and Z.H. Xie
3100

Numerical Algorithm of the Fractional Diffusion Equation Based on Sinc-Chebyshev Collocation
Z. Mao and T.T. Wang
3105

Numerical Analysis of Wave Overtopping Failure of Booms with SPH
Q. Wang, Z. Zhao, S. Meng and R. Yang
3109

Numerical Methods for Solving Implied Volatility in Option Pricing
L. Xing
3115

Numerical Simulation of Loading Test on Rubble Bed by Granular Discrete Element Method
D.J. Li, C. Shi, B.Y. Liang and C.Y. Yan
3119

Numerical Simulation of Marine Diesel Ignited Natural Gas Engine Based on the Finite Volume Method
H.L. Yu, F.S. Xing and S.L. Duan
3124

On Improving Path Clearance Optimization Method for Motion Planning
F.Y. Yan, F. Wu, F. Peng and Z.J. Zhu
3128

Optimal AGV Configuration by Simulation of Flow Shop Scheduling in an Assembly Plant
J.J. Lin, Y. Sun and X.J. Zheng
3132
Parameter Identification and Comparative Analysis of Three Kinds of Rubber Bushing Model
B.J. Feng, X. Guan and R. Guo 3137

Particle Filter Object Tracking Algorithm Based on Color and Gradient
J. He and Y.N. Li 3141

Peak Feature Extraction of Target in SAR Image
Y.S. Lv, R.H. Peng, J. Zhang and Y.Q. Gao 3145

Primary Functions on a Curve and its Applications
B.C. Xu 3149

QSPR Model for Predicting Retention Time Basis on Gene Expression Programming
T. Wang, K. Ma, X.C. Li, H.Z. Si, K.J. Zhang and Y.B. Duan 3153

Real-Time Intrusion Detection Based on System Call and ARTIS Model
Z. Huang, Y.Y. Jiang and L.B. Li 3157

Real-Time Video Matting Algorithm Based on Chroma Key
J.B. Xiahou, X.N. Deng, Q.Q. Wei and X.W. Liu 3161

Research and Optimization of Materialized Views Selection Algorithm Based on the Data Warehouse
J.B. Xiahou, Q.Q. Wei, X.N. Deng and X.W. Liu 3165

Research of Digital Image Watermarking Robustness Algorithm Based on DCT
N.N. Zhang, L. Yu and X.F. Yang 3171

Research of Particle Swarm Optimization Algorithm and its Applications in Optimization Theory
Y.H. Liu 3175

Research of Single Cavity Exhaust Muffler Based on AML and CFD Method

Research on an Improved Random Weight GA Based on Heap Sort
W.X. Jiang, M.X. Liu and J. Tan 3183

Research on Intelligent Algorithms for Energy-Aware Scheduling in Computational Grids
Y.J. Wang, L. Wu and C.K. Yan 3187

Research on Regional Innovation Capability Based on BP Neural Network
Y.Q. Gao 3191

Research on Search Sorting Algorithm Based on Multi-Dimensional Matching
X.Y. Yuan 3195

Research on Technology of Automatic Paper Generation Based on Genetic Algorithm of Mandarin Test
Y. He and C.H. Liu 3200

Research on the Algorithm of Automatic Urban Traffic Congestion Identification
K. Bo, S. Ping and K. Yun 3204

Research on the Application of 3D Modeling and Visualization Method in Construction Mine Model
S.M. Li, K.Y. Xiao, X.Y. Luo, C.H. Wen and X. Gan 3208

Research on the Application of Semi-Parametric Estimation Method
Z.F. Zhao, Y.C. Zhao and X.C. Mao 3212

Research on the Improvement of BP Neural Network Algorithm and its Application
X. Kai 3216

Research on the Method of Asset Valuation Based on Grey Statistics Evaluation
Q.C. Zhao 3220

Research on the Rapid Generation Flow of Three-Dimensional Process Model for Complex Parts
H.L. Zhang, W.D. Wu, X.F. Huang and J.S. Xia 3224

Research on Traffic Condition Recognition Algorithm Based on the Internet of Things
D. Wang and J. Wu 3228

Resource Scheduling Algorithm of Cloud Computing for Energy Optimization Base on Virtual Machine Migration
L. Hao, G. Cui, M.C. Qu and W.D. Ke 3232

Review of Task Scheduling Algorithm Research in Cloud Computing
M.G. Huang and Z.Q. Ou 3236
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riccati Equation Solutions to Higher Order Korteweg-de Vries Equation</td>
<td>3240</td>
</tr>
<tr>
<td>H.L. Wang and C.H. Xiang</td>
<td></td>
</tr>
<tr>
<td>SHP-VI Method of Solving DEC-POMDP Problem</td>
<td>3245</td>
</tr>
<tr>
<td>X.P. Wan and S.Y. Li</td>
<td></td>
</tr>
<tr>
<td>Simulation Research of Sow Trajectory about Direct Insert Precision Hill-Seeder with Corn Whole Plastic-Film Mulching on Double Ridges</td>
<td>3250</td>
</tr>
<tr>
<td>F. Dai, W.Y. Zhao, J. Yang and Z.L. Shi</td>
<td></td>
</tr>
<tr>
<td>Sine-Fit Estimation of Time-Base Distortion Based on Inner-Triggering</td>
<td>3254</td>
</tr>
<tr>
<td>X. Li, F. Huang and Y. Cao</td>
<td></td>
</tr>
<tr>
<td>Stereo Vision Based Distance Measurement and its Application</td>
<td>3258</td>
</tr>
<tr>
<td>G.L. Hu, Y. Chen and Z.G. Gu</td>
<td></td>
</tr>
<tr>
<td>Study on the Effectiveness Evaluation of the Weapon Equipment Based on Artificial Neural Network</td>
<td>3262</td>
</tr>
<tr>
<td>F. Gao, F. Song, G.Q. Huang and M. Yang</td>
<td></td>
</tr>
<tr>
<td>Sub-Nyquist Sampling for Short Pulse Based on Gabor Frame with B-Splines Windows</td>
<td>3266</td>
</tr>
<tr>
<td>P. Chen, C. Meng and C. Wang</td>
<td></td>
</tr>
<tr>
<td>Survey on Matting Algorithm</td>
<td>3270</td>
</tr>
<tr>
<td>J.B. Xiahou, X.W. Liu, Q.Q. Wei and X.N. Deng</td>
<td></td>
</tr>
<tr>
<td>Tangentbug Algorithm’s Application and Implementation in the NAO Avoidance</td>
<td>3276</td>
</tr>
<tr>
<td>A.Y. Chen, T.W. Lu, W.J. He and W.T. Liu</td>
<td></td>
</tr>
<tr>
<td>Terrain Real-Time Rendering Based on Projected Grid and GPU Unsaturated Error Metric</td>
<td>3281</td>
</tr>
<tr>
<td>Y. Yang</td>
<td></td>
</tr>
<tr>
<td>The Application of Nonlinear Modeling in the Fault Diagnosis of Fan</td>
<td>3286</td>
</tr>
<tr>
<td>Y. Li and L. Pan</td>
<td></td>
</tr>
<tr>
<td>The Impact of Complex Network Models to EDAs</td>
<td>3290</td>
</tr>
<tr>
<td>C.C. Ding, W.X. Peng and W.M. Wang</td>
<td></td>
</tr>
<tr>
<td>The Limits of Estimation of Distribution Algorithms</td>
<td>3294</td>
</tr>
<tr>
<td>C.C. Ding, W.X. Peng and W.M. Wang</td>
<td></td>
</tr>
<tr>
<td>The Parameters Optimization of Bionic Tongue Block Based on the Discrete Element Method</td>
<td>3298</td>
</tr>
<tr>
<td>L. Chen, Y.H. Sun and Y. Liu</td>
<td></td>
</tr>
<tr>
<td>The Realization of Real-Time Motion Tracking Algorithm Based on FPGA</td>
<td>3302</td>
</tr>
<tr>
<td>D.M. Liu, C. Liu and H.W. Mu</td>
<td></td>
</tr>
<tr>
<td>The Research and Implementation of Professional Skill Appraisal System: Based on the J2EE Architecture</td>
<td>3306</td>
</tr>
<tr>
<td>W. Ma and S.B. Bai</td>
<td></td>
</tr>
<tr>
<td>The Stability Analysis for Multivariable System Based on Lyapunov’s Function and its Application in Oil-Water Separation</td>
<td>3310</td>
</tr>
<tr>
<td>A.H. Xu and Y.Z. Yuan</td>
<td></td>
</tr>
<tr>
<td>The Stability and Hopf Bifurcation for a Predator-Prey Model with Delays</td>
<td>3314</td>
</tr>
<tr>
<td>H.B. Chen</td>
<td></td>
</tr>
<tr>
<td>The Synchronization of Two Different Fractional-Order Systems</td>
<td>3318</td>
</tr>
<tr>
<td>X.J. Liu</td>
<td></td>
</tr>
<tr>
<td>Usage Intensity-Based Optimal Replace-Repair Strategy for Warranty Items</td>
<td>3322</td>
</tr>
<tr>
<td>W.D. Miao, X.C. Wang, W. Zeng and Y.J. Shi</td>
<td></td>
</tr>
<tr>
<td>Using Excel and MATLAB to Calculate Liquid Limit of Soil</td>
<td>3326</td>
</tr>
<tr>
<td>M.H. Fan</td>
<td></td>
</tr>
<tr>
<td>Video Steganographic Algorithm Based on Motion Vector</td>
<td>3330</td>
</tr>
<tr>
<td>Y.N. Zhang, M.Q. Zhang and K. Niu</td>
<td></td>
</tr>
<tr>
<td>Water Surface Floater Clustering Based on Mean Shift</td>
<td>3334</td>
</tr>
<tr>
<td>P. Yang, Y.F. Wu, Z.S. Chen, X.L. Wang and M.G. Zhang</td>
<td></td>
</tr>
<tr>
<td>A Hybrid Particle Swarm Optimization Algorithm for Dynamic Environments</td>
<td>3338</td>
</tr>
<tr>
<td>H.M. Ni, Z. Yi and J.Y. Liu</td>
<td></td>
</tr>
<tr>
<td>A New Fast Algorithm for Intra Prediction Mode Selection in the High Efficiency Video Coding (HEVC) Standard</td>
<td>3342</td>
</tr>
<tr>
<td>C.J. Duanmu, D. Dong and X.Q. Yang</td>
<td></td>
</tr>
</tbody>
</table>
A Satisfaction Differential Evolution Algorithm for Detailed Machine Layout in Assembly Plant
W. Zeng, C.L. Liu and X.J. Zheng

A Text Location Method for Web Images
X. Ning, W.J. Li and W.J. Liu

An Ant Colony Algorithm with Memory Grouping List for Multi-Depot Vehicle Routing Problem
W. Zeng, Y.L. He and X.J. Zheng

An Innovative Game Method for Multilevel-Objective Optimization
Z.X. Shang, Y. Wang and R. Zhang

Algorithm Optimization of Shape Setup Calculation in Hot Strip Mill
Z.Y. Liu, Y.G. Sun and X.R. Song

Bidirectional Maximal Matching Word Segmentation Algorithm with Rules
R.L. Gai, F. Gao, L.M. Duan, X.H. Sun and H.Z. Li

Capsule Defects Classification Based on Hierarchical Support Vector Machines
D.Y. Qi and Z. Jiang

Collaborative Filtering Recommendation Algorithm Applying Multi-Criteria Decision Making
J. Lu, M.Q. Zhu and W.C. Wang

Compression Method for Good Visual Quality Based on JPEG XR
H.J. Cai, X. Tian and T. Li

Computer Digital Image Processing Application and Research
H.P. Yang

The Research of Parallelization of K-Means Algorithm Based on CPU/GPU Heterogeneous Platform
F. Zheng, X.B. Xu and Y.H. Feng

Research Based on Stitching Technology of Scrapped Paper
P. Yang, Y.F. Wu, J. Wu and M.Q. Kong

The Data Mining Based on the Co-Author Network
X.L. Zang

The Blog Topic Detection Research Based on Bursty Word
T. Kuang and S.H. Zhu

The Application of Support Vector Machine in Transformer Fault Diagnosis
X.L. Tan, C. Shu and Y.F. Peng

The Application of Pattern Recognition Technology in Quantitative Drug Design
J. Ma

The Study of Laser Scanning Point Cloud Data Automatic and High-Precision Mosaics Technology
L. Jian, F.J. Zheng and Y.R. Ma

Distracters Generation Algorithm for Near-Shaped English Word Combined with its Part of Speech
R.L. Gai, X.H. Sun, L.M. Duan, F. Gao and H.Z. Li

Extract Soccer Video Highlights with Modified CRF
N.G. Huang, Y. Yi, Y.L. Wang and P.F. Zhu

Football Extraction Method Based on Image Segmentation Algorithm
S.H. Zhu and W.P. Dong

Image Processing Techniques and Application of Bilateral Filter Keeping Margin Random Noise Suppression
F.X. Hu and Y.H. Chen

Application of Improved Failure Modes and Effects Analysis in Product Reliability Analysis
J.L. Shi, H.W. Qu, Y.J. Wang, Y.Q. Liu, K.X. Wang and J.L. Li

Optimization of Characteristic Parameters of Pipeline Crack Identification Based on BP Neural Network
Y.C. Dai, D.K. Huang and J.W. Xu

The Circle-End-Face Centering Device Based on Image Processing
Y.B. Li, Y.Z. Xu and J. He

Interest Point Detection Based on Monogenic Signal Theory
L.J. Wang and C.S. Zhang
Mutil-Conditions Impress Nonsingular Dimensional Cellular Automaton on Traffic Flow
L.N. Liu, J. Wang, C.S. Zhu and T. Jing 3455

Research and Application of the Methods for Irregular Graphics Recognition Based on VB
X.C. Zhu, Q.T. Tian and Y.C. Luan 3459

Research on Chaos Theory Improved Evolutionary Algorithm
S.Q. Liu, Y. Zhou and W.P. Yan 3463

Seal Extraction Based on Clustering and Local Thresholding Techniques
C.Y. Wang and Y.B. Chen 3467

A Novel Seam-Searching Approach for Image Mosaic
W.L. Li, X.Q. Yin and M.J. Zhang 3471

A Parallel Iterated Local Search for Two-Agent Flow Shop Scheduling
X.Q. Xu and D.M. Lei 3476

An Optimization Algorithm for Barrier Coverage in Mobile Sensor Networks
H.L. Wang 3485

Application of Method of Undetermined Coefficients in the Higher Mathematics
H.X. Wei 3489

Automatic Detection Algorithm for Chest Compressions Signal with Classification Algorithm
D. Xiang 3493

Design and Research of Hardware-in-the Loop Platform of Infrared Seeker Based on LabVIEW
C. Chen, X.P. Xu, L.X. Li, Y.G. Ji, S.C. Xiao and T. Zhao 3497

Design of the Oil Well Gets Remote Monitoring System Based on GoAhead
B. Zhou, X. Liu and Y.J. Qin 3501

Fault Diagnosis of some TV Seeker Based on General Grey Relation Analysis
Q. Li, D.L. Sun and S. Gao 3505

Feature Extraction Method Based on Content-Aware Tiling on Mobile Devices
L. Zhu and W.M. Li 3509

Kinematic Transmission Analysis of a Novel Spherical 3-RRR Parallel Manipulator
L. Zhang and Z.L. Jin 3513

Multi-Sensor Data Fusion Algorithm in the Belt of Coal Dust Spray Application
G.X. Zhu 3517

Numerical Simulation of the Extrusion Process with Feeder Plate Die
T.X. Chen, C.M. Li, N.P. Cheng and H.N. Jia 3521

Numerical Simulation of Ventilation Characteristics in a Hydropower Station Spillway Tunnel with High Head and Large Discharge
H.Q. Zhang, Y.L. Lou, W.P. Xing and J.J. Tan 3527

Ocean Wave Real-Time Simulation Based-on Ocean Wave Spectrum and FFT
Z.Y. Li and X.L. Hou 3531

One Method of Design and Implementation of LAN Resources Search Platform
Y.Q. Kong, Y.F. Jin and F.X. Zhao 3537

Refinement Analysis for Time-Frequency Characteristic of Blasting Seismic Exploration Signals

Research of Genetic Algorithm Controller Based Fuzzy Neural Network in Vacuum Pre-Cooling Freshness-Keeping Machine
K.L. Zhou, Q. Tan and J. He 3545

Rule of the Road: Optimization Model of Traffic Rule Based on Cellular Automata
Y.N. Ji 3550

Securely Compressive Sensing Using Double Random Phase Encoding
H. Liu, Y.B. Liu and G.X. Xu 3554

Skin Color Protection Based on Wide Gamut Display
Y.B. Han and G. Song 3559

Moving Object Detection Based on Bionic Compound Eye
X.M. Wang, L. Yan, X. Qian, B.R. Luo and X. Jing 3563

The Application Research of Phase Referencing Imaging in Deep Space Navigation
H. Zhou and H.T. Li 3568
Research of User-Based Collaborative Filtering Algorithm in Tag Recommendation
Q.Z. Qiu and J.B. Zhang 3677

Research on Prediction Method of Profile Grinding Surface Roughness Based on PSO-LS SVM Algorithm
D.W. Lu 3684

Research on the Path Optimization of Satellite Formation Reconfiguration Based on Gauss Pseudospectral Method
J.W. Shi, Y.W. Cai and X.C. Xing 3688

Saliency Detection through Nonlinear Metric Fusion
Z. Yang 3692

Study on the Stability of Virtual Network Mapping Algorithm Based on the Improved Genetic Algorithm
J.W. Ge, Y. Yu and Y.Q. Fang 3696

The Improvement of the Three Dimensional Douglas-Peucker Algorithm
S.Q. Dou and X.Y. Zhang 3701

The Optimization of Roll Force Model in Hot Strip Mill
G.S. Ma, F.C. Yin, Z.W. Yan, H.N. Bu, W. Peng and D.H. Zhang 3705

The Research of the Digital Image-Processing of Colorful Painting
Y. Zhan and J. Lei 3709

Two Conclusions of Points Produced by Incremental Sub-Gradient Method for the Non-Differentiable Optimal Problem in Hilbert Space
L.P. Ge and W. Song 3713

Value Reduction Algorithm Based on Attribute Union

Study on the Integrated Method of SEM and DEMATEL
W. Meng 3722

XII. Management, Economics, Business, Logistics and Engineering Management

A Study of the Micrometeorological Characteristics in the Surface Layer of Kangding Airport
J.J. Wu, L. Duan and S. Zhang 3731

A Study on the Relationship between Capital Structure and Profitability Based on the Empirical Data of Listed Companies in Cultural Media Industry in China
X. Zhong, X.Z. Song and Y.Y. Xie 3735

An Empirical Study on International Transmission Path of Inflation in China
H.Y. Liu 3741

Analysis of Economic Effect of Rural Labor Transfer in Central Region
Z.G. Li 3746

Analysis on the Situation of China’s E-Commerce Logistics
X.F. Hou 3750

Analyze and Improvement of Production Site Based on IE
Y.R. Wang 3754

Application of Marketing Network in Leisure Sports Industry
J. Li 3758

Application of Option-Based Pricing Model in Investment Decision
Y.G. Xue and M.L. Zhang 3762

Collaborative Mechanism of Corporate Risk Management Network
Z.G. Li 3766

Construction of Evaluation System for Risk Investment Institutions
L. Wang, G.F. Luo and L.Z. Kang 3770

Construction of the Operational Risk Management System of Bank by Information Technology
Z.G. Li 3774

Cost Analysis of Cloud Computing Services
C. Zheng and L.Q. Zhou 3778
Design and Implementation of the Solution of Venue Result System for the Comprehensive Games
Y. Liu 3782

Discussion on the Anti-Trend Expert Systems of RSI, BIAS, KDJ and W&R
X.M. Huang, H.P. Huang and P. Wang 3786

Discussion on Urban Road Traffic Congestion Algorithm for Automatically Determining
Y.B. Dong 3790

Economic Management of Enterprises in E-Commerce Environment
X.L. Liu 3794

Effects of Lanes Occupied on Urban Road Traffic Capacity
Z.W. Yang 3798

Empirical Analysis on Expert Tendency System MA, MACD and MTM
P. Wang and H.P. Huang 3802

Evaluation of Capability of Weapon System of Systems Based on Multi-Scenario
S.T. Zhang, Y.J. Dou and Q.S. Zhao 3806

Evaluation of Emergency Plans of High-Speed Railway in Mountainous Area Based on Intuitionistic Fuzzy Sets
Y.H. Yao and Y.F. Li 3812

Financial Analysis Methodology of the Benefit of Safety Investment
Y. Liu, D. Chen and K. Ni 3818

Financial Engineering and the Risk Management of Commercial Banks
Y.M. Pan and X.L. Wang 3822

Forestry Investment and Output Value of Forestry in China
Y. Gao, Y.L. Hou, Z. Zhao and Y.L. Wen 3826

Gibbs Sampling Method in the Multidimensional Logistic Response Model with Missing Responses
Z.H. Fu, C.X. Peng and B. Li 3830

Gold Investment Risk Analysis Model Based on Time Series
Z.T. Yu 3834

Innovation in HeNan Province Food Group Enterprise Strategic Management Research
Z.Q. Feng and Z. Tao 3838

Management and Optimization of Road Design Process Based on Multi Agent Simulation
X.L. Deng, K. Cheng and B.S. Sun 3842

Management of Individual Consumption Credit Risk Based on Financial Ecology
Y.M. Pan and M. Liu 3846

Online Buying Decision Preference and Prospect Theory
J. Ren, D.M. Zhao and X.H. Zhang 3850

Online Legal System Popularization of Rural Land System
X.L. Zhang and F. Li 3854

Online Shopping Decision Behavior under Chinese Scene: Retrospect and Review
Y. Zhao and L. Wang 3858

Optimization and Analysis of Production Plan of Mechanical Products
Y.H. Liao and B. Huang 3862

Optimization of Tour Line Structure Flow Assignment Model: Based on Resort Environment Pressure
R. Zhao, P.Y. Ren and L. Chen 3866

Predicting Sales with Social Media Data
W.K. Zhang 3870

Probability Analysis on Development of Post-Urbanization Based on Hypercycle Theory
T. Ji, F.F. Zhang and X.C. Liu 3874

Research and Development of College Fund Settlement Center System
H.Y. Gu 3878

Research of Third-Party E-Commerce Risk and Measures
S.H. Zhu and Q.M. Shi 3882

Research on Analysis of the Defense Strategy of Defense Phase in Football Games
D. Liu 3886
Research on Customer Value Evaluation Based on Data Mining and Mathematical Statistics
B. Yang 3890

Research on Financial Supervision System Design in the Public Finance Framework
H. Li 3894

Research on Modes and Operating Mechanism of Informal Finance
S.B. Zhou and P. Zhou 3898

Research on Service Process Improvement Based on Basic Industrial Engineering
F. Gu, Y.Y. Sun and J.L. Liu 3902

Research on the Application of Agile Financial Chain in the Development of Financial Management System
H.L. Tan 3906

Research on the Development of China’s Social Tourism
H.Y. Mao and X. Liu 3910

Research on the Increase of Agriculture Economy of China with the Development of Information Technology
H.M. Jia 3914

Research on the Knowledge of Contract for Construction Project Management
W.Z. Yan and Y.J. Ma 3918

Research on the Marketing Strategies Based on Corporate Social Responsibility
Y.H. Hu 3922

Research on the Model of Reverse Logistics Networks Planning Based on Recycling Waste Household Appliances
X.Y. Pan, Y.L. Liu, J. Wu, Q.W. Zhang and D. Lai 3926

Research on the Realization of Human Resource Management System
X. Jie 3930

Research on the Resource Integration of University Emergency Management System under Network Environment
X.N. He and Y. Ke 3934

Research on University-Industry-Research Cooperation Feature to Universities as the Main Target

RFID Based Supply Chain Management Information System
L.Q. Liu 3942

Risk Assessment of Chemical Plants Based on the Vulnerability
D.F. Zhao, S. Hu, S. Chen and C. An 3946

Risks and Management of P2P Online Lending
Y.L. Du 3950

Role of Principal Component Analysis (PCA) in the Evaluation of Competitiveness of Small Firms
L.P. Xiao and Y. Liu 3954

Shanghai Culture Relic Protection Site Tourist Attraction Model
Z. Wei and Z.Y. Zhu 3958

Small Business Management Information System Design and Implementation
L.J. Wang 3962

Social Relationship Analysis and Prediction Based on Location Information
H. Hu and L. Zhang 3966

Study on Development Strategies for Express Delivery Services Industry in Yangtze River Delta Based on Internet of Things
Y. Han 3970

Study on Mergers of Large Scale Corporations in Steel Industry Based on the Perspective of Uncertainty of Market Demand
B.H. Wu, X.J. Zhuang and X. Ji 3974

Study on the (s, S) Policy for the Manufacturing Enterprises Inventory Management
J. Yang and C.R. Zhang 3978

Study on the Performance Evaluation System of Human Resource Management Department
X. Jie 3984
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study on the Sustainable Development of Private Enterprises</td>
<td>Z.G. Fan and J.L. Guo</td>
<td>3988</td>
</tr>
<tr>
<td>The Application of Activity-Based Costing in E-Commerce Enterprises</td>
<td>L.P. Xiao, Z. Liu and Z. Li</td>
<td>3992</td>
</tr>
<tr>
<td>The Application of Value Engineering in Budget Software Selection of Universities’ Cost Major in Western Areas of Chongqing</td>
<td>X.F. Fu</td>
<td>3996</td>
</tr>
<tr>
<td>The Application Research of Statistical Process Control in Quality Management</td>
<td>Q.Y. Liu, J.L. Shi and S.Y. Xing</td>
<td>4000</td>
</tr>
<tr>
<td>The Construction of Human Anatomy Library of Open PBL Case</td>
<td>Z. Peng, J. Liang and S. Lei</td>
<td>4004</td>
</tr>
<tr>
<td>The Design and Implementation of Network Class of Economic Law System</td>
<td>L. Lian</td>
<td>4012</td>
</tr>
<tr>
<td>The Design of Financial Risk Management System Based on VAR Model</td>
<td>H.H. Zhou</td>
<td>4016</td>
</tr>
<tr>
<td>The Development of a Human Resource Management System</td>
<td>H. Li</td>
<td>4020</td>
</tr>
<tr>
<td>The Discussion of Precise Depreciation Management in China</td>
<td>X.B. Zhang</td>
<td>4024</td>
</tr>
<tr>
<td>The Effectiveness Analysis of Modern Logistics in the Agricultural Product Futures Operation</td>
<td>G.G. Li, M.M. Zhang and X.L. Xu</td>
<td>4028</td>
</tr>
<tr>
<td>The Game Analysis for Financial Fraud Behavior of CPAs under the Shareholder Selecting Pattern</td>
<td>P. Chen and S.L. Tian</td>
<td>4032</td>
</tr>
<tr>
<td>The GIS-Based Research of Measurement and Planning on Walkability of Educational Public Service Facilities - A Case Study in Wuhan</td>
<td>J. Yin, Q.M. Zhan and Y. Qian</td>
<td>4037</td>
</tr>
<tr>
<td>The Innovation of Tourism Marketing Model on E-Commerce Environment</td>
<td>Q.L. Li</td>
<td>4041</td>
</tr>
<tr>
<td>The Research of NBA Sports Culture Communication Strategy in China</td>
<td>Y.L. Zhou</td>
<td>4045</td>
</tr>
<tr>
<td>The Research on Development of Sports Tourism and Sports Marketing Model</td>
<td>Z.C. Chen</td>
<td>4049</td>
</tr>
<tr>
<td>The Risk Management of the Life Cycle of Computer-Based Interlocking System</td>
<td>Z.G. Li</td>
<td>4053</td>
</tr>
<tr>
<td>The Risk Management of Whole Life Cycle of IT Outsourcing Project</td>
<td>Z.G. Li</td>
<td>4057</td>
</tr>
<tr>
<td>The Third-Party E-Commerce Platform Based on the Trading Service</td>
<td>T. Kuang and W.P. Dong</td>
<td>4061</td>
</tr>
<tr>
<td>Time Pressure Effects on Impulse Buying in Sales Situation: Need for Cognitive Closure of Intermediary Role</td>
<td>M. Hu and X.B. Qin</td>
<td>4065</td>
</tr>
<tr>
<td>Tourism Resource Investigation by Remote Sensing Technology</td>
<td>W.J. Wang</td>
<td>4069</td>
</tr>
<tr>
<td>Valuing Research Investment Projects Based on Discrete Time Model: A Real Options Approach</td>
<td>Y.G. Xue and M.L. Zhang</td>
<td>4073</td>
</tr>
<tr>
<td>Analysis of Road Capacity Based on Traffic Volatility Models</td>
<td>J.H. Lu</td>
<td>4077</td>
</tr>
<tr>
<td>Signaling Game in CI Activity</td>
<td>H.D. Yu</td>
<td>4081</td>
</tr>
<tr>
<td>The Design of Index about Corporate Governance Based on PCA Method</td>
<td>C.J. Li</td>
<td>4085</td>
</tr>
</tbody>
</table>
Construction of E-Business Information Service Platform of International Trade
X. Sun

Analysis on the Characteristics and Barriers of Organization Internal Communication during the Transitional Period
Y.L. Qiao

Identification and Control of Hazard in Underground Blasting
D.T. Hu

Mechanical Properties and Bursting Liability Experimental Research of Roof in East Mine of Kouzi
B. Wang

Research on Method of Information System Information Security Risk Management
X.L. Cao

Study on the Improvement Method of Employees' Performance Evaluation System
C.X. Hu and L.J. Huang

The Advantages and Disadvantages of Traditional Hand Drawing and Computer Drawing in the Network Era
Y.X. Wu and Y. Zhan

The Application of Internet of Things Technology in Modern Logistics and Supply Chain Management
Z.Z. Liu and H.Y. Gong

The Application of Modern Technology in Sports Promotion
Q. Cao and L.H. Wu

The Design and Implementation of Tourism Monitoring Analysis System
H. Hu

The Optimization Research of Outburst Prevention Measures of Coal Roadway Excavation Area in South Second Underground Mine of Liziya
B. Liu, X.P. Wang and L.P. Xiao

The Rational Thought of Science Popularization from the Perspective of Disembodying Mechanism Theory
H.F. Zhang and J. Liu

The Reason Statistics and Analysis of the Loss of Hotel Employees
L.L. Wang and W.S. Xu

The Research on New Air Materiel Support Model Based on VMI
J.J. Li, H.Y. Guo, Y.Q. He, M.X. Shi and Y. Cui

Using Genetic Algorithm to Solve Mixed Delivery Optimization in Tobacco Logistics
L. Zhao

Architecture Research and Implementation of Human Resource Management Information System
P.F. Li, Y.X. Xiang and Y.X. Guo

The Research on the Traffic Rules of Freeways
Z.W. Yang

From Aerobics Training and Competitions to see the Status of Development of Aerobics in China and Countermeasures
A.H. Zhang

Application of Multimedia Technology in Sports Test
S.L. Ge, X.L. Xu and W. Dai

Research of Financial Management System Based on Web Services
G. Jin

Research on the Mode of Ideological and Political Communication
Y.H. Pan, G.Q. Wang, J.J. Qin and K.Q. Tu

Research on the Network of China's Rural Market Information Service
H.X. Li

Research on Theory and Model of the B2C E-Commerce Buyer Credit Risk Evaluation
Q. Yao and J. Xu

Research on Sports Information Integrated Management Application Development
P.S. Xie and X. Cai

Analysis of Wellbore Integrity System
X.F. Zhao and Y.X. Wu
Research on Computer Modeling of Human Movement
P.S. Xie and X. Cai

XIII. Environmental Engineering and Resource Development

A Comprehensive Recovery of Copper-Iron Experimental Research in the Copper Smelting Slag
X.K. Shang, Z.Y. Lan, Q.F. Zhang and T.T. Li

Acidophiles and its Use in Mineral Biomining with Emphasis on China
B.W. Chen, J.K. Wen and G.C. Yao

Adding Ash Methane Oxidation in Landfill Cover Soil Research
Y.L. Wu, Q.F. Zhang, R.Z. Zhang, X.M. Mao and X.H. Sun

Air Stripping of Ammoniacal Nitrogen from Fecal Sewage Using a Fluidized Bed
A.F. Li, Y.Y. Ning, W.J. Xu and T. Pan

An Analysis of the Surface Wind Field in Kangding Airport
J.J. Wu, L. Duan, Y.F. Huang and S. Zhang

Analysis of Marine Environmental Quality and Pollution Source in Beidaihe Nearshore District
M.C. Li, Y.J. Zhao and Y. Wang

Coordination of Metal Cations with Amino-Functionalized MCM-41 for Adsorptive Desulfurization
L.C. Song, X.L. Duan, J.S. Chen and D.H. Xia

Desulfurization Performance of Cu(II)-Ce(IV)/13X Zeolites for C4 Hydrocarbon
L.C. Song, Y.H. Bian, J.S. Chen and D.H. Xia

Ecological Effect of Vegetation on the Reservoir Shore
J.H. Zhang and X. Hou

Effect of Regulated Deficit Irrigation on Water Use and Economic Benefit of Processing Tomato (Solanum lycopersicum) in an Arid Environment
H.J. Zhang, A.C. Wen and J.D. Zhang

Evaluation of the Soil Heavy Metal Pollution around the Lead-Zinc Plants
D.L. Sun and Y.B. Sun

Expansion of Urbanization Based on Remote Sensing Technology Research to Zhengzhou City as an Example
Y. Fu and J.Z. Wu

Heavy Metal Contamination of Soil in Zhuzhou Smelting
J.Y. Wang, J.X. Long and H.W. Lu

Impact of the Three Gorges Project's Operation on Low Water Level in Changsha Reach

Implementation of Marine Environment Monitoring Data Quality Control System
J. Xu, D.T. Yu, Z.J. Yuan, B. Li and Z.Z. Xu

Industrial Pollution Reduction among Administrative Regions
H. Huang and J. Lu

Investigation of the Effects of Hygienization and Moisture Content of Sewage Sludge on Pyrolysis Products
A. Hlavsová, A. Corsaro and H. Raclavská

Metallogenetic Model of Bauxite Deposit in WZD Area, Northern Guizhou, China
Y.P. Liu and T. Cui

Papermaking Wastewater Treatment - A Brief Review
L.J. Zhao, Y.F. Zhang, J.F. Hong and W.W. Tu

PM 2.5 Concentration Research Based on Multiple Models
P.F. Lian, J. Xu, B. Yi, L. Tang and Y.G. Zhao

Prediction of Groundwater Contamination with a Coupled Model in Coastal Areas: A Case Study of Benzene Leaching Accident

Recovery of Silver and Lead through Reprocessing of Lead Tailings from Yunnan
B. Han, X. Tong, X. Xie and H.Z. Lv
Research on Jiepai Riverbed Evolution Law and its Evolution Trend Forecast in Middle Yangtze River  
C.T. Huang  
4292

Research on Leakage and Diffusion Impact of Ammonia Leak Accident  
D. Chen, L. Yang and K. Ni  
4298

Research on Low Carbonization of Tourism and its Sustainable Development in Qinhuangdao City  
L.L. Wang  
4302

Research on Navigation-Obstruction Characteristics and Waterway Regulation Scheme of Multi-Branched River Reach in the Lower Yangtze River  
L. Liu  
4306

Research on Navigation-Obstruction with Complex Boundary and its Counter Measures in Middle Reaches of the Yangtze River  
L. Liu, M. Zhang and F.Y. Liu  
4313

Research on Oxidation Methods for Coking Wastewater Treatment  
K. Huang, B.X. Du and J.Y. Zhang  
4320

Research on Phenolic Wastewater Treatment Based on Adsorption Methods  
K. Huang  
4324

Research on the Application of Environmental Monitoring and Data Transmission System  
M. He, J.J. Jin and P. Liu  
4328

Research on the Couple of Canal Cultural Heritage and Ecological Community Building  
R. Xu  
4332

Research on the Preparation of Thioether Adsorbent  
J.S. Chen, C. Chi, Y.H. Bian, Y.Z. Xian and D.H. Xia  
4336

Research the Potential Risk-Points of the Oilfield Operation Wastewater with High Salinity on the Environment  
R. Huang, Y. Zeng, G.Y. Du and J. Wang  
4340

Reservoir Forming Conditions of Paleogene Shale Gas and Oil in Liaohe Depression  
Q. Zhou  
4344

Sequence Strata Division and Source Bed of Coal Bed Gas Accumulation Law of Early~Middle Jurassic at Xinjiang KuBai Coalfield  
H. Wang and L.Y. Pang  
4348

Study on Adsorption Characteristics of Klebsiella Biological Adsorbent to Leaded Wastewater  
J. Zhao, X.J. Xu, Q. Zhan, X. Li, S.L. Liu and T.G. Li  
4353

Study on Emission Trading Mode in Shaanxi Province  
H.L. Fu and X.J. Liu  
4357

Study on Improving Biodegradability of Straw Pulp Papermaking Wastewater by Coagulation and Nuclear-Flocculation  
X.Q. Song  
4361

Study on Industrial Carbon Emission of Qinhuangdao City  
L.L. Wang  
4365

Study on Low-Carbonization of Commerce in Qinhuangdao City  
L. Ta, L.L. Wang and H. Gao  
4369

Study on the Salt Gradient Maintenance of Solar Pond  
C.J. Gao, Q. Zhang, L. Wang, Y.N. Zhang and X.P. Huang  
4373

The Effect of Heavy Metal Ion on Microorganism in Activated Sludge  
M.J. Liu, G.R. Dong and J.B. Wang  
4377

The Impact of Fly Ash as an Additive on Fertility of Sludge  
W.B. Zhao, Y.K. Ju and W. Peng  
4381

The Index System Construction of Basin Initial Water Rights Allocation by Integrating Water Quantity and Water Quality  
X.Y. Wu, Q.H. Pang and Y. Chen  
4385

The Integration of Modern Packaging Design and the Environment  
L. Han  
4390

The Research of Urban Development System Model Based on System Dynamics  
Y.M. Su  
4394
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Research on Temporal and Spatial Econometric Analysis of...</td>
<td>4398</td>
</tr>
<tr>
<td>The Treatment of Copper-Containing Wastewater by Electrolysis-Enhanced...</td>
<td>4402</td>
</tr>
<tr>
<td>Wind Environment Simulation and Evaluation of the Residential District...</td>
<td>4406</td>
</tr>
<tr>
<td>Calculation and Decomposition of China’s Carbon Emissions from...</td>
<td>4411</td>
</tr>
<tr>
<td>Evolution Mechanism Study of Sand and Gravel Braided River</td>
<td>4415</td>
</tr>
<tr>
<td>The Land Use/Cover Change in Flood Storage and Detention Area Based...</td>
<td>4420</td>
</tr>
<tr>
<td>Reservoir Characteristics of Buried Hill and Oil and Gas Distribution of...</td>
<td>4425</td>
</tr>
<tr>
<td>The Application of Multistage Fuzzy Comprehensive Evaluation Mathematics Method for the Analysis of Determining the Remaining Oil in Ultra-High Water-Cut Oilfield</td>
<td>4429</td>
</tr>
<tr>
<td>Application of BP Network Based on PSO Algorithm in Cementing Quality Prediction</td>
<td>4433</td>
</tr>
<tr>
<td>Research on the Influential Factors of Agricultural High-Tech Enterprises Debt Acquisition: Based on Multivariate Linear Regression Analysis</td>
<td>4437</td>
</tr>
<tr>
<td>XIV. New Technologies in Engineering Education and Teaching</td>
<td></td>
</tr>
<tr>
<td>Acquisition of Swarm Intellegence (SI) Principle in Practice Teaching of Automation Disciplines</td>
<td>4443</td>
</tr>
<tr>
<td>An Empirical Study of Internet-Based Collaborative Language Learning in China</td>
<td>4447</td>
</tr>
<tr>
<td>An Empirical Study of the Use of Learning Strategies in the Web-Assisted Autonomous Learning Environment</td>
<td>4452</td>
</tr>
<tr>
<td>An Improved Education Evaluation Model Based on SEEQ</td>
<td>4457</td>
</tr>
<tr>
<td>Analysis of Psychological Factors Affecting the Quality of Online Learning</td>
<td>4461</td>
</tr>
<tr>
<td>Application of Information Technology in Physical Education and Training</td>
<td>4465</td>
</tr>
<tr>
<td>Application of Virtual Reality Technology in the English Teaching of the University</td>
<td>4469</td>
</tr>
<tr>
<td>Construction and Application Network to Economic Law Teaching</td>
<td>4473</td>
</tr>
<tr>
<td>Design and Implement of Long-Distance Education System Base on Stream Media Technology</td>
<td>4477</td>
</tr>
<tr>
<td>Vertical Integration Dynamic Model Research of Higher Education Curriculum</td>
<td>4481</td>
</tr>
<tr>
<td>Design and Implementation of the Intelligent Mobile Phone Platform for English Learning</td>
<td>4485</td>
</tr>
<tr>
<td>Design and Research of Basketball Evaluation System in Information Teaching Conditions</td>
<td>4489</td>
</tr>
</tbody>
</table>
Design of Multimedia Teaching System Platform Based on Cloud Computing
L.N. Yue and H.Y. Nie 4493

Development of Flash Network Courseware
W.Y. Liang 4497

Each Factor Research of University-Industry-Research Cooperation Mechanism
Y.H. Gao, L. Gao, K.Y. Yang and T.H. Wang 4501

Ecological Design in Network Learning Resources
Z. Gao 4505

E-Learning and French Teaching
F. Du 4509

Hybrid Learning Based Competitive Sports Training
Z.Z. Wu and B. Wang 4514

Information Technology Application in the Aesthetic Education
Y. Wang 4518

Management Technology and Practice of University Library under Open Environment
Q. Wang 4522

Online Course Platform Database Analysis Based on the MVC Structure
Y.F. Jiang, X.M. Lv and Y.F. Zhang 4526

Optimization Research on English Teaching under Network Environment
L.Y. Zhu 4532

Postgraduate Students' Autonomous English Learning System Based on Guide
H.Y. Jin 4536

Reflections on the Polymer Material of the English Language
K. Li and T.T. Sun 4540

Reformation and Practice of Integrated Teaching Mode on Professional Curriculum,
Graduation Design and Employment for Environmental Engineering
L.X. Li, Z.W. Song, Y. Zhan and Y. Liu 4545

Research and Practice on Method of Computer Professional English
C.Y. Lou and L. Lu 4549

Research of Education Reform in C Programming Language
H.C. Du and J.D. Fan 4553

Research on Application of Computer Technology in Accounting Practice Teaching System
J.M. Fang and X.Z. Meng 4557

Research on English Learning Modes of Graduate Student under the Multimedia and
Internet Environment
H.Y. Jin 4562

Research on Interaction of PowerPoint Courseware
J. Meng 4566

Research on Paperless Examination of Modern Distant Education
X. Hu 4570

Research on Personnel Training Mode for Manufacturing Industry of Private Vocational
Colleges under Registration Enrollment
D.M. Cao, Q. Zhang and G.X. Zhu 4574

Research on Social Evaluation System Building for Higher Vocational Education Based on
AHP
Y.B. Jiao 4578

Research on Teaching Quality Evaluation Using Data Mining Technique
A.F. Li, Y. Hu and W.J. Zhao 4582

Research on Teaching Resource Management Model for Colleges Based on Google App
Engine
Y.Z. Zhong, W.C. Gao and Y.Y. Fu 4586

Research on the Construction of Education Network Platform in Universities Based on the
WEB Services
C.Y. Tian and D.M. Guo 4590

Research on the Network Education Platform of Universities Based on Cloud Computing
C.M. Wei 4594
Research on the Problems in Dormitory Culture in Higher Vocational Colleges Based on Quantitative Study
Z.G. Xie and J.Q. Hui

Situational Teaching Reform of “Mechanical Manufacturing Fundamental”
F. Gu and X. Wan

Study on Physical Training in Colleges and Universities with a Combination of Computer-Aided Analysis
A.J. Li

Study on the Case Teaching Mode of Economic Law under Network Environment
Q.Z. Wu

Study on the Construction of Enterprise Education System in Universities
B.Y. Wu

Study on the Realization of Music Education and Teaching Management System of Universities
Y.B. Fan

The Application Analysis of Imagery Training in Aerobics Training
T.R. Guo

The Application of Agricultural Remote Sensing in Remote Sensing Teaching Practice
J.Z. Li, H. Yan and M.M. Yang

The Application of Fuzzy Comprehensive Evaluation Method in Social Evaluation of Higher Vocational Education
Y.B. Jiao

The Application of Multimedia Computer Assisted Language Learning in English Teaching
Y. Chen

The Application of Multimedia Technology in Vocal Music Teaching
Y.B. Fan

The Apply of DirectShow in Scenario Interactive Teaching System
J.B. Xiahou and Z.X. Wang

The Cultivation of Comprehensive Ability of Students under Interactive Network Teaching Environment for Automation

The Design and Implementation of College Textbooks Management System of Information
J.X. Wei and C. Sun

The Development and Application of Management System for College P.E Education
H.K. Ma

The Effect of Massive Open Online Course on the Universities in the Western Region
Y.X. Guo, X.B. Chen and P.F. Li

The Exploration of the Students’ Social Practice and Innovation in Colleges for Electrical Engineering
Q. Zhou and C. Liu

The Influence of Modern Information Technology on the Ideology of College Students
S.G. Lv

The Multimedia and Computer Technology Application in Physical Education
W. Zhang

The Research of Mobile Learning
L.T. Li and S.H. Zhu

The Research on the Cloud Computing Assisted Instruction under the Low Carbon Circumstance
T.T. Wang

The Study about the Cultivation of Communication Engineering Students’ Information Literacy
Q. Zhou and C. Liu

The Virtual Machine Technology in the Application of Computer Practice Teaching
H. Wang and M.Y. Wang

The Way to Reasonably Introduce Information Technology into PE Classes
Y.J. Zhou
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration and Practice of Teaching Mode for Mechanism Professional Course Based on the Engineering Process</td>
<td>G.C. Yang</td>
</tr>
<tr>
<td>Research on Cultivation of Pre-School Reading Ability under the Information Technology Circumstances</td>
<td>X.X. Huo and H.X. Lu</td>
</tr>
<tr>
<td>Choice of Computer and Surveying in Geographic Information System in Beibu Bay Area</td>
<td>Y. Dong, Q.H. Cheng, B.Q. Hu, Y.L. Huang, S.L. Zhang and Z.H. Xiu</td>
</tr>
<tr>
<td>The Application of Multimedia Network Technology in Production Practice for Foreign Language</td>
<td>J.Y. Mo</td>
</tr>
<tr>
<td>Design of Stadium Management ERP System</td>
<td>J.J. Wang</td>
</tr>
<tr>
<td>Research on Construction of Campus Culture under New Media Environment</td>
<td>A.P. Weng</td>
</tr>
<tr>
<td>Analysis Standard of Higher Education Tuition by Multiple Regressions</td>
<td>H.Y. Xuan, Y.X. Shi and J.S. Chen</td>
</tr>
<tr>
<td>Research on Fall Point Control of Badminton Techniques Training</td>
<td>X.F. Jiang</td>
</tr>
<tr>
<td>Modeling for Talents Development of Colleges and Universities in Jiangxi Province Based on Knowledge Base</td>
<td>Z.G. Li</td>
</tr>
<tr>
<td>Modern Information Technology Based Interactive Community Sport Education Research and Analysis</td>
<td>X. Mei</td>
</tr>
<tr>
<td>Office Informatization in the New Private Universities</td>
<td>S.Q. Sun, C.B. Yin and E.J. Bai</td>
</tr>
<tr>
<td>Design and Implementation of the English Curriculum Evaluation System</td>
<td>X.Y. Zhang</td>
</tr>
<tr>
<td>A Study on Power Li-ion Battery Pack's Management System of Robot</td>
<td>J. Li</td>
</tr>
<tr>
<td>Art Course Planning under Information Technology Environment</td>
<td>L.C. Xu and N. Chen</td>
</tr>
<tr>
<td>Review of Library Development Strategy Based on Information Technology</td>
<td>X. Wang and F.Q. Zhang</td>
</tr>
<tr>
<td>The Effectiveness of Multimedia Information Technology in Physical Education Model</td>
<td>X. Cheng</td>
</tr>
<tr>
<td>Poetic Dwelling Art in Information Technology Age</td>
<td>H.Y. Liao</td>
</tr>
</tbody>
</table>