Table of Contents

Preface, Conference Organization and Acknowledgement

Chapter 1: Materials Science and Technology, Chemical Engineering

Based Materials	
A.A. Christy	3
Research on Silver-Plated Fiber / Acrylic Blended Yarn and Fabric Antistatic Performance X.B. Li and Y.M. Zhang	11
Synthesis of a Polysiloxane with High Reaction Activity C.H. Dong, Z. Lu, P. Zhu and L. Wang	15
A New Molecularly Imprinted Polymer Prepared by Surface Imprinting Technique for Selective Adsorption towards Rhodamine B G.S. Xuan, Q.Y. Sun and X. Zheng	19
Analysis of the Relationship between Desulfurization Treatment and Green Chemistry of Coal	
L.J. Meng, Z.K. Xuan and J.Y. Liu	23
Carbon Nanotube Network in Polymer Nanocomposites: Rheology and Flammability H.Y. Ma, J.W. Liu, W.C. Han and L.C. Zhao	27
Corrosion Fatigue Crack Propagation of 6151-T6 Aluminum Alloy Based on Virtual Crack Closure Technique	21
G.M. Kong, X.D. Li and Z.T. Mu	31
Determination of Rhodium in Waste Rhodium-Loaded Carbon Catalyst Samples Using Teflon Pressure Vessel-Assisted Sample Digestion and ICP-AES X.J. Wei and J.M. Pan	35
Effect of Anodic Films on Galvanic Corrosion Behavior of TC4 Titanium Alloy and LY12 Aluminum Alloy	
Z.Y. Wu, X.Y. Li, L.N. Zhao and S.R. Hu	39
Effect of LPC on the Corrosion Behavior of AZ81 Magnesium Alloy J. Chen, Q.A. Li and X.Y. Zhang	43
Effect of TGA Concentration on Morphology of Cu ₂ S Nanoparticals G.X. Ma, J.Q. Hu and N.A. Kotov	47
Enhanced Dispersion Strengthening of Sm in Mg-10Y-0.5Sm Alloy Q. Zhang, Q.A. Li, J. Chen and X.Y. Zhang	51
Facile Synthesis and Luminescence Properties of Gd ₂ O ₃ :Eu ³⁺ Hollow Spheres C.M. Zhang, J.Y. Wang, Y.M. Liu and G. Jia	55
Fracture Analysis of 6A02 Aluminum Alloy Subjected to Corrosion Fatigue Damage G.M. Kong, X.D. Li and Z.T. Mu	59
In Situ Self-Assembled Graphene-Polyaniline Nanocomposite Thin Films for Ammonia Gas	
Sensor N.J. Guo, H.L. Tai, Z.B. Ye and G.Z. Xie	63
Measurement of Passive Rubidium Frequency Standard Left Field and the Assessment of the Impact of Frequency Stability Z.M. Zhan and H.D. Lei	67
One-Pot Synthesis of a Novel 3D CuO Microstructure with Excellent Electrochemical Hydrogen Capacity	
Y. Li, Y.K. Yin, S.Z. Rong, X.Y. Cui, G. Jin, M.J. Li and X.D. Jin	71
pH Tunable Turn on and Turn off Quantum Dots Conjugated with Poly(2-(Dialkylamino)ethyl Methacrylate)	75
X.N. Huang, W. Li and W. He Photogridation Activity of Mixed Phase TiO. Nanoparticles	75
Photooxidation Activity of Mixed Phase TiO ₂ Nanoparticles J. Wei, L.G. Yan, H. Li and Y.Y. Zhao Passayah on Pasizing Making of Fine Chamicals? Entangian	79
Research on Decision-Making of Fine Chemicals' Extension X.L. Ren and X.R. Jiang	83

Research on Electrical Characteristics of Metal Rubber Y. Chen, H.B. Bai and C.H. Lu	87
Study on the Carbon Doping of Sugar Added MgB ₂ Superconductors Prepared by Low Temperature Sintering R. Wang, Z.Q. Ma and H. Yang	91
Synthesis and Self-Assembly Study of Biodegradable Amphiphilic Triblock Copolymers with PEG Block	
X. Du, Q. Wang, C.D. Wang and Y. Liu	95
Synthesis, Photophysical Properties and Photoinduced Intermolecular Electron Transfer of a Novel Aryl Benzyl Ester Dendritic Axially Substituted Silicon (IV) Phthalocyanine X.Q. Chen, D.D. Ma, S.J. Pan, Y.H. Wang, K.Z. Chen, H.Q. Yang and Y.R. Peng	99
Temperature Monitoring on Microwave Curing of DGEBA E-51 and 4,4'DDM System R.L. Ma, X.L. Chang and B. Long	103
The BPG Property of Photonic Crystal for TE Mode with Sector Pillars as Scatterers Y. Wan, X.H. Ge, Y. Yang, J. Gao and Y. Cui	107
The Fabrication of Nanometer- and Micrometer-Sized Silica Hollow Spheres H. Liu, F. Yan, H.J. Fang and L.D. Zhang	111
The Investigation of Microstructure Silicon NH ₃ Gas Sensors Based on Polyaniline Nano-Thin Films	
X.Y. Xu, H.L. Tai, C.H. Liu, G.Z. Xie and X.S. Du	115
The Structure and Electrical Property of sp ² Rich Carbon Films by Magnetron Sputtering J. Du, X.Y. Zhu, Y. Zang and L. Guo	120
Theoretical Investigation on the Role of Amine Bases in Stabilizing the Key Intermediate of Proline Enamine Carboxylate in Proline-Catalyzed Asymmetric Reactions C.K. Tian, A.P. Fu, C.Y. Zhao, F.H. Tian, Y.B. Duan and Z.H. Wang	124
Well-Defined BaWO ₄ :Dy ³⁺ Luminescent Materials: Hydrothermal Synthesis and Luminescence Properties G. Jia, D.B. Dong, J.Y. Liu, Q.Y. Kang and C.M. Zhang	128
The Study of Brush Plating Process on Polyamide Engineering Plastics Surface J.R. Wang, Y.F. Zhang and Z.J. Gao	132
Research on Preparation and Properties of Textile Materials Deposited with Nanostructured Titanium Oxide Y.M. Zhang	136
Ionization Cross Sections by Electron Impact for Single Ionization from the Atomic Ground State Y.H. Li	140
Chapter 2: Biomaterials, Medicine, Biotechnologies and Pharmaceutics	
Determination of Vitamin C Content in Brown Rice by Capillary Zone Electrophoresis H.X. Liu, Q.H. Fan, X.P. Zhang, Y. Xu, L.T. Wang and H. Cao	147
In Vitro and In Vivo Antitumor Efficacy of Curcumol Nanosuspension against H22 Tumor Z.P. Wang, J.B. Wu, Q. Zhou, H. Fan, Y.F. Wang and T.S. Chen	151
<i>I</i> -Stepholidine Blocks Methamphetamine-Induced Locomotor Sensitization in Mice B.M. Ma, K. Yue, J.Q. Xing, X.K. Gong, Q. Ru, L. Chen, Q. Xiong, X. Tian, L. Liu, Y.Q. Gan, D.S. Wang, G.Z. Jin and C.Y. Li	156
20(S)-Ginsenoside Rg ₃ Inhibits Human Glioma Cell Growth through the Suppression of Voltage-Gated K ⁺ Channels	1.00
Q. Ru, X. Tian, Y.X. Wu, K. Yue, L. Chen, B.M. Ma, Q. Xiong and C.Y. Li 2Hz-Electroacupuncture Attenuates Conditioned Cue-Evoked Heroin-Seeking Behavior and Increase CB2-Rs Expression in Relapse-Relevant Brain Regions in Heroin-Addicted Rats	160
L. Chen, B.M. Ma, K. Yue, Q. Ru, X. Tian, Q. Xiong, L. Liu and C.Y. Li	164
<i>l</i> -Stepholidine, a Naturally Occurring Dopamine D1 Receptor Agonist and D2 Receptor Antagonist, Attenuates Methamphetamine Self-Administration in Rats	
K. Yue, B.M. Ma, J.Q. Xing, X.K. Gong, Q. Ru, L. Chen, Q. Xiong, X. Tian, L. Liu, Y.Q. Gan, D.S. Wang, G.Z. Jin and C.Y. Li	169
Analysis of Factors and Characteristics in Patients with Hand-Foot-Mouth Disease S. Dan and W. Dan	173

Aneuploidy <i>Alnus formosana</i> Selection and ISSR Analysis H.X. Zhu, D.J. Yi, J. Tang, X.H. Huang, G.L. Liang and D.L. Feng	177
Anti-Tumor Effects of a Newly Cloned Serine Protease from the Marine Annelid, <i>Arenicola cristata</i>	
C.L. Zhao, W.J. Yu and J.Y. Ju	183
Application of Carbon Nanoparticles as Fluorescent Quenchors in Biochemistry L.Y. Wang, Y.Y. Han, Y. Ding, B.N. Li and C.S. Liu	187
Application of Ultrasonic Treatment on Collecting Recombinant Protein from Yeast J.K. Dai, Y. Li, H.H. Zhuang, X. Chen, Q. Ma, S.Y. Xu, T. Qin and Y.H. Wei	191
Biodistribution and Toxicity Study of Titanium Dioxide Nanoparticles of Different Sizes after Intravenous Injection in Mice	106
J. Fang, L.L. Yuan, C.J. Yao, Y.L. Wang and M.H. Wu	196
Cardioprotective Effects of Aqueous Extract of Salvia miltiorrhiza on Heart Failure is Related to SDF-1/CXCR4 Axis and Bcl-2 Family Expressions J.H. Zhang, M.Q. Shi, W.Y. Yang, G.Y. Liu, D.D. Liu, W. Deng, H.L. Qin and Z.F. Chen	200
Cloning and Activity Analysis of a New Protease from <i>Arenicola cristata</i> J.Y. Ju, J.X. Chu and C.L. Zhao	206
Cloning and Expression of a Novel Protease with Fibrinolytic Activity from <i>Arenicola</i>	
cristata	210
C.L. Zhao, W.J. Yu and J.Y. Ju Computational Modeling of the Potient Specific Femoral Head before and effort the	210
Computational Modeling of the Patient-Specific Femoral Head before and after the Treatment	
Y.Q. Mei, C. Lu, H.J. He, W.H. Chen and D.D. Chen	214
Determination of Fluoride in Antarctic Krill by Ultrasonic Extraction and Ion	
Chromatography H.L. Huang, H. Cui, J.M. Ma, K.L. Leng, W.H. Zhang, H.X. Li and L.Z. Dong	219
Determination of Vitamin C Content in Saposhnikovia Divaricata by Capillary Zone	
Electrophoresis H.X. Liu, X.P. Zhang, Q.H. Fan, Y. Xu, T.T. Huang and H. Cao	224
Effects of Echinomycin on PCNA-Dependent Follicular Development in PMSG-Induced	
Sprague-Dawley Rats Z.H. Zhang, F. Wang, Y.Q. Wu, Z.H. Tang, Q.Q. Lin, Y.D. Tang and Z.C. Wang	228
Effects of Immediate Stimulation on Single Nucleotide and Catecholamine Level in Chinese Tree Shrews	
F.R. Yu, X.Z. Lian, M.R. Xie and Z.P. Li	233
Effects of Self-Assembling Peptide RADA16-I Hydrogel on Neural Differentiation of Bone Marrow Mesenchymal Stem Cells	
Y.S. Liao, L. Deng, X.Q. Gao and C.X. Yang	238
Exercise Induce HO-1 Expression in Skeletal Muscle and Improve Sports Ability of Mice Y.L. Li and L.M. Zhou	243
Expression of a Fusion Protein of Human Proinsulin with Glutathione-S-Transferase in Escherichia coli	
Z.X. Di, J.Z. Ma and Y.G. Wang	248
Foxp3 in Lewis Lung Cancer Cells Enhances the Expression of TGF-β1 and IL-10 L.S. Chen, X.D. Gai and C. Li	252
In Situ Imaging of Cancer Cell via Cancer Aptamer and its Fluorescent Clusters L. Ga and J. Ai	256
Inhibition of HIF-1α Signaling in the Ovaries of Sprague-Dawley Rats with Polycystic Ovary Syndrome	260
F. Wang, Y.Q. Wu, K.Z. Xiao, Z.H. Zhang, Q. Wang, L.Q. Huang and Z.C. Wang	260
IRE1a Negative Regulates Chondrocyte Differentiation F.J. Guo, F. Xia, R. Jiang and M.L. Li	265
Neuroprotection of Saponins from <i>Rhizoma panacis majoris</i> in Cerebral Ischemia/Reperfusion is Related to Nrf2-Mediated Antioxidant Response: Role of Nrf2 and Bcl-2 Family Expressions	•
W. Yi, M.Q. Shi, G.Y. Liu, W. Deng, H.L. Qin, Z.F. Chen, D.D. Liu and W.Y. Yang	269
Optimum the Fermentation Condition to Produce the Polysaccharide of <i>Hericium erinaceus</i> with Tofu Whey Z.F. Zhang, G.Y. Lv, X. Jiang and L.F. Fan	275
2.1. 2.101.15, O. 1. 17, 11, Viuit und 12.1. 1 un	413

PLK1 Promotes Invasion of Esophageal Squamous Cell Carcinoma Cells through Inducing Epithelial-Mesenchymal Transition	
J.Y. Ju, W.J. Yu and C.L. Zhao	279
Progress of Molluscan Nacre Proteins Research X.F. Wang, Z.M. Liu and W.J. Wu	283
Protective Effects of 5,7,3',4'-Tetramethoxyflavone on Proliferation of Rat Chondrocytes Induced by IL-1 β	
Z.W. Liu, H.Q. Liu, L.F. Li, L.Y. Jiao and L.H. Wu Protective Effects of Overestin Derivatives against Hydrogen Percevide Induced Ovidetive	287
Protective Effects of Quercetin Derivatives against Hydrogen Peroxide-Induced Oxidative Damage in PC-12 Cells Z.Y. Shi and Y.Q. Li	291
Purification of Pomegranate Pericarps (<i>Punica granatum l.</i>) Extracts with Macroporous Resins and Evaluation of Antioxidant Activities <i>In Vivo</i> B.H. Zhou, J. Tu, J. Zhou, H.L. Yi, Y. Wu and G. Liu	296
Simulate Efficacy of Vegetative Filter Strips Based on Coupling Model and its Application N. Deng, Y. Zhou and H.E. Li	302
Simultaneous Analysis of 6 Trace Elements in Pomegranate (<i>Punica granatum l.</i>) Juice by ICP-MS after Microwave-Assisted Digestion L.P. Sun, Y.L. Yin, C. Wang and L. Wang	307
Stem Cell-Like Characteristics of Corneal Epithelial Cells F. Wang, B. Ren and Y.N. Yan	312
Structure and Characteristics of Pineapple Leaf Fibers Obtained from Pineapple Leaves C.H. Dong, Z. Lv, L. Zhang, H.J. Shen, N.N. Li and P. Zhu	316
Study of Multi-b-Value Diffusion-Weighted Imaging at 3.0 T for Measuring Renal Function of Patients with Chronic Renal Failure J.L. Xue, M.C. Zhang, M.H. Zhang, D. Tong and W. Qiang	320
Study on Compatibility of Self-Assembly Peptide RADA16-I, PLGA and PS Scafolds and BMSCs	22.5
L. Wang, Y.S. Liao and C.X. Yang Study on Phenol-Degrading Characteristics of Hybrid Strains and Immobilized Cells C.H. Yu, W.Z. Zhang, C.Y. Li, W.J. Wang and Y. Huang	325 330
Synthesis and Detection Experiments of a Biomolecule Detection Probe Based on Fluorescence Changes J. Wang and D.H. Ren	336
The Application of Case-Based Reasoning (CBR) in the Medical Management of Community Health	340
J. Bing and D.Y. Mu The Application of High Throughput Microarrays in the Screening Active Ingredients of Traditional Chinese Medicine	340
Q.S. Liu, W.W. Zhang, X. Li, S.J. Zhuang and X.Y. Yin The Protective Effects of Probiotics on High Fat Diet-Induced Oxidative Damage Using a	346
Comet Assay in Rats X.L. Chen, L.Z. Gong and J.X. Xu	350
Ultrastructural Changes in Cultured Rat Alveolar Macrophage Cells Induced by Fine Particulate Matter	
Q. Xiong, Q. Ru, L. Chen, X. Tian, K. Yue, B.M. Ma, L. Liu and C.Y. Li Confocal Micro-Raman Spectroscopic Analysis of the Variants of the Erythrocyte in the	354
Rare Earth Poisoned Rats J.Y. Li, H.M. Long and D.L. Chen	358
Determination of Brucine in Strychnos by Capillary Electrophoresis H.X. Liu, Q. Chen, T.T. Huang, Q.H. Fan, L.T. Wang and H. Cao	363
Determination of Multi-Class Pesticide Residues in Lettuce and Cucumber by GC-MSD and the Degradation Study on Vegetables Simultaneously C.A. Kang, L. Wang, X.F. Li, J.J. Jia, J. He, J. Zhang, Z.Q. Wu and G.H. Peng	367
Establishment and Evaluation of Determination of Cinnamaldehyde in Baoyuanqingxue Granules by HPLC Q. Wu, C.H. Wang, P. Wang and X.R. Liu	372
V. wu, C.11. wang, 1. wang and A.N. Liu	312

Extraction Procedure and Partial Characterization of Polysaccharide from <i>Eucheuma</i> gelatinae	
J. Tang, D.Y. Liu, Z. Kong and A.J. Liu	378
Study on Rheological Characterization of Uncured Natural Rubber with Different Initial Moisture Contents Dried by Microwave F.Q. Zhang, Y.Z. Wang, M. Chen, M.F. Huang and R.Z. Zeng	383
The Difference of Flavonoids and Phenolic Acids in Six Kinds Vinegar Y. Liu, T.J. Ma and J. Chen	387
The Extracting Technique of Effective Materials from CTM Based on Phonochemistry L. Yang, B.Q. Wang, Y.H. Li and L. Deng	391
Chapter 3: Industrial, Dynamics, Mechanical, Manufacturing Engineering and Processing, Measurement and Instrumentation	
Advances in Test Methods for Poisson's Ratio of Solid Propellant X. Zhang, J. Zheng, W. Peng and Z.X. Gu	397
Design of a Downhole Motor Drilling Experimental System M.X. Huang, L.G. Wang, H. Liu and B.L. Liu	401
Design of Steam-Heated Drying Line L.H. Wang and X.Q. Wu	405
Dynamic Analysis of a 3-DOF Parallel Mechanism Based on Kane Equations M.W. Song, H. Liu and W.Y. Chen	409
Equipment and Technology Research of Ballast Water Treatments J. Wang	414
Experiment Research on Effect of Moving Flat Speed on Carding Force in Carding Machine Y.P. Zhao, P.Z. Sun and X.G. Han	418
Failure Analysis and Welding Repair for Water Wall Connection Tube Burst of SA210C Steel	110
X.F. Zheng, N. Wu, Y.J. Jiang, W.B. Li, X.J. Hao, H. Ke, W.P. Li and X.H. Dai Investigation on Fully Mechanized Mining Technology of Thin Coal Seam under the Near	422
Goaf C.W. Zang, M. Chen and E.Y. Wang	426
Measuring Method and Device Microwave Cavity System Temperature Control Factor H.D. Lei and J.J. Zhang	430
Modal Analysis of Crankshaft for Two-Stroke Marine Diesel Engine Based on Block Lanczos Method	12.1
G.Z. Yu, H.L. Yu and D.W. Wang Modeling and Movement Simulation of Tractor-Semitrailer G.H. Lie Y. Fans, F. Donard P.W. Share	434
C.H. Liu, Y. Fang, F. Du and R.W. Shen Numerical Investigation of Static and Dynamic Aerodynamic Characteristics for a Guided Projectile with Fin Slot	438
H.D. Sun, J.Q. Yu, Y.S. Mei and C. Liang Optimal Design of Working Face Ventilating System of Huoerxinhe Company	442
L.P. Yang, W. Qiao and H.Q. Zhou Practical 4.4KW ZVZCS Full-Bridge Power Converter Design	446
B.W. Sun Research Based on CFD for Helical Intake Port Position Defect of Diesel Engines	450
X. Mi Research for PV Cell and Storage Battery of Dynamic Economic Dispatch in Micro-Grid	454
J.J. Liu, Z.J. Wang, Y.Z. Ye and Z.H. Zhang Research on the Application of New Media Technology in the Micro-Film Products	458
C. Zhang Research on the Processing Simulation of Whorl Milling Based on LISP	462
Y. Zhang and X. Shi Rolling Bearing Fault Diagnosis and Health Assessment Based on EMD–TEO	466
Y.N. Tang, C. Lu and J.M. Hu	470

Simulation and Experiment of Power Amplifier for Magnetic Bearings Z.J. Zhao, Y.F. Hu, L. Zhang and H.C. Wu	476
The Absolute Measurement Deviation of Rotational Averaging Mirror Surface Based on the Finite Element Method Y. Liu, T.T. Ren and J.S. Guo	481
The Creation of Virtual Assembly System Based on Virtools	401
Y. Cheng and Y.P. Han	486
The Development of a Highly Integrated Secondary Instrument H. Pan and Q.F. Ma	491
The Motor Temperature Rise Test System Based on Magnetic Powder Dynamometer Z.H. Zhang, C.C. Chi, J.J. Liu, Z.B. Lian and S.L. Shao	495
The Present Situation and Development Trend of Rapid Drilling Technology in Coal Mine Emergency Rescue J.S. Wang, P.L. Cao and K. Yin	499
Tri-Linear Regulation of Diffusion Tensor Field for WM Fiber Tracking Z.X. Wu and X. Li	503
Novel N-3 Compressor for Low-Power Booth Multiplier S.H. Wang and Y.S. Xia	507
On Theoretical Models for Oil Droplets Size Distribution under the Influence of Surface	
Wave Breaking B.N. Sun, Z. Lian and Y.Z. Yang	511
A Constructed PQ ² Chart for Calculating the Optimized Process Parameters in Die Casting of Aluminum Alloy	510
W. Dai, L.B. Fu and W. Zhang Analysis of Three Dimensional Nonlinear Coupled Finite Element Based on some Concrete	518
Rock-Fill Dam J.J. Jin, M. He and P. Liu	522
Experimental Research of Laser Cutting 1Cr17Mn6Ni5N Steel Plates Z.G. Li, Y.C. Shi, W. Yuan and X.G. Yang	526
Finite Element Analysis on Ultimate Bearing Capacity of Diagonally Stiffened Steel Plates with Different Span-Depth Ratio Y. Yin, T.T. Zhang and X.D. Li	530
Status Analysis of Quality Prediction for Automotive Injection Molded Parts C.N. Wang and X.Y. Fan	534
Stress and Deformation Analysis of Concrete Face Rockfill Dam Based on ABAQUS C.H. Fang and X. Wang	538
Multiscale Model of Shape Rolling Taking into Account the Microstructure Evolution – Frontal Cellular Automata	515
Ł. Łach and D. Svyetlichnyy Standard Technical Research of Shore-to-Ship Power Supply System	545
R. Yang, W. Zhang, R. Fan and Q. Gu	549
A Survey of Common Technology and Data Model Standard of Equipment IETM W.J. Liang, J.N. Jia, L.Y. Cai, F. Xie and N. Zhu	553
Research on Risk Generation Mechanism of China's Alternative Fuel Vehicle Industry J.F. Lin	558
Chapter 4: Products and Systems Design, Modelling and Simulation, Intelligent Automation and Control Systems	
A Product-Level Rapid Modeling Method for Mesh Reflector Antenna Z.H. Zhang, S. Li and P. Li	565
An Improved Calibration Algorithm for Low-Cost Laser Triangulation-Based Sensor L. Lin, Y.T. Zhao and Z.C. Qiu	569
An Islanding Detection Method for Photovoltaic Power Generation System Using Fluctuation Characteristic of PCC Harmonic Voltage	
L. Yun	574
Analysis and Improvement of the BLP Security Model H.Y. Zhao, H.Y. Wang and H. Li	578

Analysis of Design Parameter Sensitivity of On-Off Shift Solenoid Valve F. Huang, C.Y. Wang and Y.B. Sun	582
Automatic Evaluation Based on Computer Science B. Li	587
Components Association Mechanism Supporting Requirements Tracing H.L. Wang, L. Peng and Y.C. Ding	591
Design of High Performance Fixed Point CORDIC Processor W. Sun and J.S. An	597
Design of the Double-Stuffed Bag Machine Control System P. Xu and F. Zhong	602
Direct Torque Control for Permanent Magnet Synchronous Motors Based on Fuzzy Regulator X. Tang, J. Gu and T.G. Qin	607
Effect of Control Parameters of Secondary Jet on Fluidic Thrust Vectoring L. Li, D.P. Wang and T. Saito	613
Electronic Control Unit Design of Artificial Neural Network-Based Natural Gas Engine F. Jiang and Z.H. Luo	617
Microcontroller-Based Intelligent Traffic Signal Controller Design H.K. Xu, J.Y. Yang, M.Q. Song, Y.Z. Qu and X.H. Wang	621
Millimeter-Wave Reduced-Size Wilkinson Power Divider Y.F. Qiu	626
Multi-Target Tracking Based on Regional Correlation and Color Histogram Match S.H. Yu, J.H. Chen, J.Y. Ou and D.C. Xu	631
Nonlinear Position Control of Digital Hydraulic Cylinder Despite Disturbance S.J. Xu, J.F. Xing and L.K. Peng	638
Research on the Application of Wavelet Neural Network in Temperature Control System G. Yong	642
Research on Virtual and Actual Complex Firing Test Method for Anti-Aircraft Weapon System C.L. Ge and Y.C. Zhu	646
Secondary Cooling Control of Continuous Casting Process with Model Strategy J.H. Zhang, J.L. Jia and G.Z. Wang	650
Software System for the Multi-Field-Coupled and Multidisciplinary Optimization of Electronic Equipments Z.H. Zhang, P. Li and S. Li	654
Study on Digital Modeling of the Virtual Near-Earth Space for Astronaut Training Z.Q. Zhao, J.G. Chao and H. Hu	659
System of Environment Monitoring Based on Internet of Things X. Qin	664
The Advanced Control Technology in the Application of the Traditional Boiler Control R.X. Zhao, X.J. Wang and F. Teng	668
The Application of Piezoelectric Actuator for Small Aircraft X. Zhang, W. Wang and G.H. Zong	674
The Calibration for Dual-Robot System Based on the Three-Point Method M.X. Kong and G.D. Yu	678
The Design of Greenhouse Temperature Control System Base on SimpliciTI X.Y. Shi, J. Huang and X.J. Guo	682
The Design of Wireless Sensor Network Node Based on TinyOS H.K. Li and J. Huang	686
The Development of Flow Controller Based on RF Card Q.F. Ma The Involvement time of Sub-Window Control Adjustment in Learn Survey Displayer for	690
The Implementation of Sub-Window Contrast Adjustment in Large Screen Displayer for Aircraft S.W. Sun, F. Cao, Q. Huang, T.T. Tan and N.D. Wang	694
The Optical Path Closed-Loop Control System F. Xing	700
The Research of Design and Simulation of Four-Wheel Drive Car ASR Controller Model S.L. Wang and L.S. Li	704

Vehicles Categorization in Complex Background Y.Z. Xiang, D.M. Yang and J.K. Yan	708
Virtual Assembly Training System of Special Equipment Chassis Based on Virtools J. Zhang, F. Wang and X.J. Wang	712
Vision-Based Vehicle Detection in Real Traffic Environment Using Fast Wavelet Transform and Kalman Filter F.Q. Zhuo, P.Q. Lin and Y.M. Gu	717
The Design and Realization of Real-Time Video Transmission System Using in Tracked Robot	
K. Wang, Y.W. Zhang and J.W. Hu	723
Research and Development of Instrument Testing Device Based on LabWindows_CVI X.Q. Liu and H. Liu	727
Research on Electronic Automotive Combined Instrument Based on CAN Bus Z.H. Luo and F. Jiang	731
The Research of Wheel Drive Vehicle Yaw Stability Controller Based on Model Predictive Control	7 2.5
C.G. Zou, H.L. Zhou and Z. He	735
Design on Control System of Automatic Sole Edge Grinding Machine Based on PLC S.P. Long	741
The Design of Signal Generator in Motor Function Rehabilitation Based on MCU F. Wu, X. Guo, X.Y. Shen and Y.Z. Zhou	745
An Efficient Deadlock Avoidance Policy for FMS Using ROPN Y.M. Zhao, X.J. Chai and L.Z. Zhao	751
Modeling and Simulation of Brushless DC Motor Speed Control System Based on MATLAB/SIMULINK X.L. Yue and P. Bai	755
Moving Target Detection Based on Double Model X.P. Wu and M.C. Fu	759
Study on Numerical Simulation of Shrapnel Fragments at the Components Damage Effect on Armored Vehicle Concept X.Y. Wu and F. Li	763
Design of the Space-Based Optical Surveillance System Based on the Observation of Pinch Points Region on Earth Geostationary Orbit Y.H. Wu, J. Wu and X.Y. Wang	768
A Theme-Oriented Data Automatic Organization Method R. Cao, L.Y. Hao and L.D. Wu	772
Chapter 5: Signal and Image Processing, Intelligent Recognition, Intelligent Algorithms and Methods, Computational Mathematics	
2D DOA Estimation Using Sparse Representation of Higher-Order Power of Covariance Matrix	
Z. Luo, F. Yu, L. Wu and Y. Liu	779
A Cooperative Dual-Camera System for Face Recognition and Video Monitoring Z. Chen, H.B. Wu and S.P. Xia	784
A Multi-Weights Ant Colony Algorithm for Solving Optimal Path in Tourism Y.Z. Liu, H.P. Yu, B. Huang and Y.F. Zhang	789
A New Edge-Based Method for Artificial Text Detection D.G. Zhou, Q.C. Du, Q. Lin and J.Y. Lin	793
A Novel Image Encryption Algorithm Based on Cellular Automata and Chaotic System P. Cheng and H.X. Zhao	797
A Novel Learned Model for Boundary Detection M.Z. Shao, J.F. Qi and Y. Chen	802
Adaptive Sampling Based on GH-Distance for Realistic Image Synthesis J. Wang and Q. Xu	806
An Improved BMQ Algorithm for Pattern Matching Y.P. Jiang, Y.X. Tian and J.W. Zhao	814

An Improved Method for Wild-Angle Image Correction K. Jiang, H. Zhang, W.H. Zhou and W.Z. Yao	818
An Improved Moving Body Detection Method Based on Gaussian Mixture Model and Differencing	
W.Z. Zhang, W. Wu and X.G. Shen	823
An Improvement Based on Wavelet Transform Speech Denoising Threshold Function W.L. Xing and B.H. Zhang	828
Analysis of Motor Imagery EEG Based on Hilbert-Huang Transform X.L. Zhu, J.P. Liu and X.N. Zhang	833
Application of Improved Median Filtering Algorithm to Image De-Noising W.L. Jiang, G.L. Li and W.B. Luo	838
Association Rules Mining Based on Adaptive Fuzzy Clustering Algorithm J.M. Guo and Y.X. Pei	842
Discrete Spectrum Error Analysis of Carrier Signal M.J. Yang, H. Ding and Z.Y. Jiang	846
Discussion on Application of Digging out the Image in Photoshop Image Processing Method Y.H. Wang	851
Driver Fatigue Detection Based on Eye Locating Algorithm W. Wu	855
Empirical Mode Decomposition on Geometry Signal Based Spherical Parameterization J.G. Wang, Q. E, K.M. Yao and X.L. Wan	860
Estimation of Crowd Density Based on Adaptive LBP Y. Li, T. Zou and P. Chen	864
Face Recognition Classifier Design Based on the Genetic Algorithm and Neural Network N. Li, P. He and Q. Zhao	869
Fuzzy C-Means Clustering Algorithm Based on Coefficient of Variation Z.B. Wang and B.Z. Qiu	873
Iterative ML Symbol Detection without Timing and Phase Synchronization Z.X. Shen, H.Y. Yu, X.Y. Zhang and Y.P. Hu	878
Multi-View Face Detection Based on Multi-Features AdaBoost Collaborative Learning Algorithm	
R.B. Huang, H. Zhang and C.M. Shu	884
Non-Line-of-Sight Positioning Algorithm Based on Robust Principal Component Analysis Z.L. Xiong, C.L. Liu, W. Du and Z.B. Xie	889
Palmprint Recognition Based on Sparse Two-Dimensional Local Discriminant Projections J.X. Zhang, Z.E. Zhang and J.Y. Liu	894
Research on Association Rule Mining Algorithm Based on Distributed Data C. Luo and Y. Chen	899
Research on Building IMC Model in Mobile Bank Y. Zhang	903
Research on Text-Related Speaker Recognition Based on First Order Differential F. Zhao	907
Research on the Application of BP Neural Networks in 3D Reconstruction Noise Filter X.P. Li and L.Z. Chen	911
Research on Topology Association Rules Algorithm Based on Spatial Constraints X.B. Tang and Y.Z. Zhang	915
Study on Extraction Method of Automobile Center Axis L. Wang, P.J. Chen and L.X. Zhou	921
Study on Otsu Threshold Method for Image Segmentation Based on Genetic Algorithm Z.B. Xu, P.J. Chen, S.L. Yan and T.H. Wang	925
Study on the Image Segmentation Algorithm with Depth Data of Kinect L.Y. Li and J.Y. Ye	929
The Analysis of the Method of Screening Initiating Events Based on the Improved Borda	
Ranking Method Y. Zhang, J.G. Zhao, J.J. Hao and Y.Q. Wang	934
The Application of Matrix Partitioning Algorithm in PageRank Computational Efficiency M.F. Jiang	939

The Optimization of Adaptive PID Control Algorithm Based on RBF Neural Network J. Liu and G.X. Wang	943
The RFID Indoor Positioning Algorithm Based on Lagrange Interpolation H. Bao and J.Y. Zhi	947
Geometrically Robust Image Watermarking Based on Krawtchouk Invariant Moments H. Bing	951
Research on the Application of 20 Degrees Probe Pair in TOFD X.J. Hao, J.F. Zhao, X.G. Niu, C.F. Liu, W.B. Li and X.F. Zheng	957
Design on Engineering Database of Bridge Seismic CAD System X.M. Yang	962
Angle Estimation with Knowledge-Aided Constraint-Based Space-Time Adaptive Monopulse G. Chen, W.C. Xie and Y.L. Wang	966
Research on Modulation Recognition of the MPSK Signals Based on Statistical Analysis Z. Wang, B.H. Wang and Y. Qu	971
A Subdividing of Local Fractional Integral Holder's Inequality on Fractal Space G.S. Chen	976
An Improvement of Local Fractional Integral Minkowski's Inequality on Fractal Space G.S. Chen	980
An Improvement of Minkowski's Inequality for Sums H.Y. Tang and G.S. Chen	984
On Subdividing of Holder's Inequality for Sums H.Y. Tang and G.S. Chen	988
Research on the Forward Euler Difference Method for Parabolic Equations Y.G. Li and Y.F. Dong	992
The Local Fractional Hilbert Transform Based on Fractal Theory Y.H. Wang	996
The Solution of 2D Parabolic Equations Based on the Alternating Direction Implicit Scheme F. Wang	1000
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	1004
An Application of Computer Image Processing Technique to Decoration Pattern Design X.G. Yang and Q.H. Lin	1009
Commonly Used Correction Model Comparison, Improvement and Precision Analysis of Radiation Remote Sensing Image	
X.L. Liu Efficient Multi-Scale Registration of 3D Reconstructions Based on Camera Center	1013
Constraint R.B. Guo, T. Guan, D.X. Zhou, K.J. Peng and W.H. Fan	1018
Identifying Abbreviations in Biomedical Literature Based on Maximum Entropy with Web Features	1010
J. Peng, Y. Wang and H.M. Sun	1024
Learning Object Groups for Scene Recognition H. Su and S. Liao	1028
Prediction of Aero Engine Fault by Relative Vector Machine and Genetic Algorithm Model J. Wang, X.H. Duan, Y. Li and P. Bai	1033
Study on Astronaut Self-Rotation Methods in Space Flight C. Ma, Y.Q. Liu and X.Q. Zhu	1037
The Basic Control Chart Pattern Recognition Neural Network X.A. Qiao and J. Liu	1042
Load Forecasting of Zhejiang Province Based on Combined Optimization Methods Q. Xu, Z. Lan, J.H. Huang, H.H. Qin and X.M. Xu	1046
Optimization Vehicle Scheduling Based on Simulated Annealing Genetic Algorithm Y. Xia and C. Yi	1052
Research on Improved Immune Genetic Algorithm and its Application in Integration	
Planning W.X. Jiang and M.X. Liu	1058

Study of Vision-Based Hand Gesture Recognition System for Astronaut Virtual Training H. Hu, J.G. Chao and Z.Q. Zhao	1062
A Computer-Supported Axiomatic Design System Integrating TRIZ X.J. Hu	1066
A Method to Forecast the Dynamics of Express Delivering Quality Elements Classification Based on GM(1,1) Model W. Meng, Y.Q. Han and Q.L. Meng	1070
Based on the Location Entropy Method to Study the Agglomeration Development of the Software Industry of Jilin Province Z.X. Jiang, W.D. Zhang and Y.Z. Li	1075
Application of Improved Grey Prediction Model in Jilin Province of the Software Industry W.S. Yin, P.C. Meng and Y.Z. Li	1079
Chapter 6: Information Technology and Networks Applications, Data Management and Software, Internet and Communications Technologies	
A Method for Verifying Traceability between Feature Model and Software Architecture N.Y. Jia and G.Z. Yang	1085
An Improved Cluster Key Management Algorithm for Wireless Sensor Networks Q.S. Zhao, X.M. Liu and H.S. Zhu	1092
An Information Mining Model of Intelligent Collaboration Based on Agent Technology L.Y. Wan, J.X. Chen and D.J. Gu	1096
Design and Implementation of Public Bicycle Rental System Service Platform Based on IOCP and JSON L.L. Chen and J. Huang	1100
Design and Implementation of Public Bike Smart Lease System Y. Liu and J. Huang	1104
Design and Implementation of University Computer Laboratories Course Scheduling System Based on WEB R.H. Lu and H.Y. Liu	1108
Design for the Application Layer of Network Security Solutions Y.P. Zhang	1113
Design of Intelligent Community Network Compatible with IPv4/IPv6 Protocol S.H. Zhang and J. Huang	1117
Design of Smart Healthcare Data Management System Based on Hadoop M. Zhang, R. Zhang and C.S. Liu	1121
Design of Vehicle Terminal Based on Android System L. Wang and Z.Y. Liu	1125
Detection and Control of I/O Interface by Calling DLL in VB W. Ren and Y. Wang	1129
Distribution Center Multi-Objective Location Problem Using NSGA-II S. Liu, B.H. Gao, E.C. Liu and Y.K. Liu	1133
Domain Adaptation for Video Steganalysis against Motion Vector Based Steganography K.R. Wang and W.X. Li	1138
Empirical Analysis on Human Dynamics of QQ Group Communication R. Tian, X. Han and W.J. Wang	1146
Hash Technology for Connection Management in High-Speed Networks R.J. Liu, Y.Z. Li and C.X. Cao	1151
Network Case Establishment and Application Research under Portable Network Environment F. Yang and L.Z. Zhao	1157
Network Coding Based Multiple-Hop Efficient Transmission Method for Multiple-User Multiple-Relay Networks	
G.M. Chen, Z.G. Ma, S. Ban and N. Kamleshd Privacy Preserving for Location-Based Services in Road Networks	1161
K.G. Liu, J.P. Zhang and J. Yang	1165

QoS Routing Optimization Based on Improved Genetic Algorithm C.L. He, Y.F. Li and L. Zhang	1169
Research and Application of Importance Degree Evaluation Method of Complex Network Cascade Connection Node Based on Load Redistribution Y.P. Zhang	1174
Research and Application of Network Technology and Online Translation Tools in English Translation	
N. Lu	1178
Research in Hebei Private Digital Information Technology for the Development of Calligraphy and Art Institutions X.G. Yang and S.P. Xu	1182
Research of the Intellectual Property Protection Based on the Internet Information Utilization L.M. Zhao	1186
Research on Adaptable Load Balancing of Task in Cloud Robots W.J. He, K. Pan, X. Li and A.Y. Chen	1190
Research on Application of Network Video Technology Based on Cloud Computing Model H.Y. Yang and X. Zhang	1195
Research on Archives Personalized Service System Based on Cloud Computing F. Li, H.Q. Wang and H.Y. Zhao	1199
Research on LabSQL Database Technology in the Virtual Laboratory Design W.X. Jiang, G.Z. Ye and M.X. Liu	1203
Research on Marketing Website Construction - A Case Study in Hospital Y. Qu	1207
Research on Physical Layer Network Coding Technology in Wireless Network C.G. Cheng	1211
Research on Public Health Information Resource Service System Based on Cloud Computing W.J. Yang, H.Y. Zhao and Z.Y. Li	1215
Research on Smart Healthcare Platform Construction Based on Cloud Computing M. Zhang, R. Zhang and C.S. Liu	1219
Research on the Application of VPN Technology in the Computer Network X.G. Feng	1223
Research on the Assessment of Disaster-Carrying Bodies' Comprehensive Vulnerability on Variable Fuzzy Clustering J. Wang and D.M. Wang	1227
Research on the Circulation of Urban and Rural Agricultural Products Based on the Network Technology Z. Li	1231
Research on the Development of a Tourism Information System Based on Geographic Information	1231
L. Zhu	1235
Research on the Fault Diagnosis for Computer Network Based on VXI W.W. Xiao	1239
Research on the Realization of Network Accounting in Financial Information Times Y.Q. Mao and J. Peng	1243
Researches on JVMTI-Based Security Enhancement Techniques for Java Software Z.P. Wen, G.L. Li, Y.Z. Tao and G.H. Yang	1247
Study on Agricultural Information Service Mode in Cloud Computing Z.G. Yao	1253
Study on Information Graphics in Web Interface Design F.Y. Liu, S.S. Bai and Y.X. Gao Study the Personal Push Service of University Library Person on Pig Date Mining	1257
Study the Personal Push Service of University Library Based on Big Data Mining C. Yi, Y. Xia and Z.Y. Zhang The Application of Both Applysis on Application CRS System.	1261
The Application of Path Analysis on Andriod GPS System D. Juan and J. Lei The Fabilities Desire and Insulance Action Board on Vistoral Business and Insulance Action Board on Computer Action Business and Insulance Action Board on Computer Action Board on Co	1266
The Exhibition Design and Implementation Based on Virtual Reality Technology H.X. Liu and Z.H. Teng	1270

The Network Security Analysis of Linux Operating System Y.J. Cui and Y.H. Zhang	1274
The Research and Improvement of Wireless Network Security Model H.Y. Zhao, H.J. Zhou and J. Zhao	1278
The Research Based on CDN Technology in Communication System Server Design J. Tian and X.G. Liu	1282
The Research of Campus Networks Layout and Application Based on IPv6 L.Z. Zhao, F. Yang and Y.M. Zhao	1286
The Research of Copyright Protection in P2P Network Mode W.B. Yu	1291
The Research of Public Physical Training Service System Based on Cloud Computing H.J. Wu and H.Y. Zhao	1295
The Security Issues and Common Attacks in Wireless Sensor Networks R. Zeng	1299
Research on RSSI and Triangles Deformation Based APIT Localization Algorithm for Wireless Sensor Networks F. Liu and G.Z. Feng	1305
Research on Sports Information Management Application System Development M.L. Li and Z.B. Liu	1311
Research on the Communication Nodes Design of Wireless Sensor Network Data Based on ZIGBEE X.J. Xu	1315
Research on the Design and Implementation of Scoring System for Large Sports Venues M.L. Li	1319
Design and Application of Small Coal Mine Management Information System Q.H. Jiang	1323
Research on the Development of Sports Information System Based on the Sports Information Management Theory S.C. Luo and G.F. Deng	1327
The Research on the Construction of Ancient Books Digital Resources M.J. Wu and S.L. Wu	1331
Research on the Interactive Visualization Technique of Accounting Information System W. Xing, J.L. Lv and M. Xian	1335
RETRACTED: A Methodology for the Emulation of Context-Free Grammar C.Z. Hu and S. Cheng	1339
A Research of Improving the EG Key Pre-Distribution Scheme Based on the Hash Function and the Multi-Path Routing	
J.N. Zhang, J.Y. Tian, C. Yang and J.B. Liu Analysis of Personalized Recommendation Models Based on Multi-Dimensional Ontology	1343
X.Y. Yuan Improvement of Spatial and Temporal Co-Occurrence Pattern for Time Aggregate Graph	1347
J.Y. He and Q.S. Tang Research on Duplicated Documentation Removal Model Based on Information Entropy and	1352
Decision Classification Techniques Q.S. Tang and J.Y. He	1357
An Adaptive Performance Prediction Method of Distributed File System Based on Performance Correlation W.F. Gao, T.Z. Zhao and M.B. Lin	1362
Complexity Analysis of Beijing Urban Rail Transit Network X.H. Li	1366
Research on the Application of Health Information System in Community Residents Based on the Internet of Things	1300
H.M. Liu, G.Y. Yang and Q. Li	1370
Research on the Key Technology in Data Transmission Based on the Control System of Internet of Things D.H. Li	1374

The Study of Cloud Computing Data Interaction Platform on the New Type of Rural Cooperative Medical Care System	
R.D. Lin, L.Z. Chen and Y.H. Sheng	1378
Design and Implementation of a Database for Human Resources Management of Higher Vocational Colleges C. Zhang	1382
Study on Batch Plotting the Profiles of the Beach on the Coast Y.W. Zhu and B. Shi	1386
A Localization Algorithm of Nodes Based on Hypersphere Granular Computing in Wireless Sensor Networks Y. He	1390
Development of AutoCAD Graphic Database Management System Based on Component Technology	
Y. Zhang and X. Shi COG Analysis System Design for Military Planning Based on Coordination Theory and	1394
ANP Y. Yang, J. Wang, T.T. Yang, Z. Liu and W.D. Bao	1398
Chapter 7: Environmental Engineering and Resource Development	
An Empirical Model of Sediment Trapping Efficiency by Vegetative Filter Strips in Chinese Northwest	
N. Deng and H.E. Li	1405
Assessment of Sustainable Development Based on Emergy Ecological Footprint in the Beijing-Tianjin-Hebei Region F.F. Tan, Z.H. Lu, Z.Y. Niu, H.Y. Zhang and X. Zhang	1410
Correlation Analysis of PM _{2.5} and NO ₂ Concentrations in City Ambient Air of Changsha C.H. Dai, Y.P. Luo, S. Luo, P.F. Qin and H. Peng	1414
Effects of Root Exudates from Invasive Plant (<i>Mirabilis jalapa</i>) on Soil Microenviroment under Different Land-Use Types J.L. Zhao, C.Q. Cheng, X.Y. Gu and B. Liu	1419
Regeneration of the Brewing Spent Diatomite W.Y. Mei and T.H. Hui	1425
Research on Chaotic Characteristics of Diary Return Water Time Series in Qingtongxia Irrigation Area X.Y. Zhao, J.L. Gao, P.F. Gu and P. Huang	1429
Research on Huaian Ecological Tourism's Development Based on TEF (Ecological Footprint of Tourism) Model	112)
Y. Ren Research on Natural Mowing Steppe Resources Based on AHP in Shaertao Mountain,	1435
ZHAOSU Xinjiang F.F. Zhang, L. Yu, C.H. Ma and W.H. Lu	1439
Research on the Prediction and Calculation Method of Settlement of Red Clay Foundation Y.Z. Zhou, X.R. Liu and Y. Yu	1444
Reservoir Characteristics of Reef-Shoal Facies, Changxing Formation, Yuanba Gasfield, Sichuan Basin P.R. Zhao	1448
Shale Gas Organic Geochemistry Characteristic of the Mesoproterozoic Xiamaling Formation in Western Beijing Area	
L.N. Guo, B.L. Ke, Q.J. Liu, H.L. Lin, T.Y. Yin, T.Y. Lin, H.L. Xue and C.H. Fu	1452
Shale Gas Preservation Conditions in South Anhui of Lower Yangtze Area J.H. Chen	1458
Study on Biocides of Municipal Middle Water Reused to the Circulating Cooling Water System	1462
X. Kang, Y.Q. Li and P.Y. Xu Study on the Relationship between Soil Nutrient and Yield Analysis Based on Bivariate	1462
Correlation between L.Y. Cao, X.X. Zhang, Y.L. Zhao and G.F. Chen	1466

Study on Thermal Insulation Solutions for Submarine Oil Storage in Offshore Gravity Platform	
W.J. Li, Y.B. Wang and W.H. Wu	1470
The Interception and Decontamination of Nitrogen in Input Watercourse by Lake Wetland D. Yang and L.N. Li	1474
The Planning Study of Disaster Comprehensive Prevention of Nanjing City Z.L. Chen, X.B. Wang, H.Y. Yang, X.B. Yang and H. Xie	1479
The Research of Reservoir Forming Characteristics of Tight Sand Gas G.Z. Hui	1483
The Study on Ecological Basic Flow in Baoji Section of Wei River Y. Zhou and N. Deng	1487
Third-Order Sequence Division of Yunmengshan and Baicaoping Formation of Proterozoic in Yuxi District of China: an Example from Xiatang Profile in Lushan H.Y. Wu and B. Hao	1492
Ultimate Potential Nature Gas Resource Prediction and Exploration Direction in Sichuan Basin X.L. Xue, Y. Luo and P.R. Zhao	1498
Vertical Dynamics of Soil Enzyme Activities and Active Organic Carbon in a Freshwater Marsh in Sanjiang Plain, Northeast China	
Z.M. Wan Software Design for Theory Analysis of Underweter Electromagnetic Field in Shellow See	1504
Software Design for Theory Analysis of Underwater Electromagnetic Field in Shallow Sea Environment P. Cui, L. Wu and K.N. Jiang	1508
The Efficient Water Resources Strategy Z. Jia	1512
Simple Methods of Carbon Capture by Using Photosynthetic Microorganisms Y.Q. Li, S.H. Zhang and Y.Y. Xu	1516
A Study of Carbon Footprint Evaluation at PP-R Pipe Based on Life Cycle Assessment L.P. Wang, B.X. Dong and M.M. Yin	1520
Chapter 8: Management, Economics, Social, Logistics and Engineering Management	
1 0 7 7 0 0	1527
Management A Medical Decision Support System Based on Structured Injection Orders L.Y. Kang, Y.S. Lo and C.T. Liu A Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems with Oil Residency Time Constraint	
Management A Medical Decision Support System Based on Structured Injection Orders L.Y. Kang, Y.S. Lo and C.T. Liu A Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems with Oil Residency Time Constraint Y.M. Zhao A Statistical Analysis of Papers and Author Group in Geomatics and Information Science of Wuhan University	1532
Management A Medical Decision Support System Based on Structured Injection Orders L.Y. Kang, Y.S. Lo and C.T. Liu A Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems with Oil Residency Time Constraint Y.M. Zhao A Statistical Analysis of Papers and Author Group in Geomatics and Information Science of Wuhan University Z.P. Yan, H.J. Wang and Q.Q. He	
Management A Medical Decision Support System Based on Structured Injection Orders L.Y. Kang, Y.S. Lo and C.T. Liu A Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems with Oil Residency Time Constraint Y.M. Zhao A Statistical Analysis of Papers and Author Group in Geomatics and Information Science of Wuhan University Z.P. Yan, H.J. Wang and Q.Q. He Aging Risk Between China and Russia Based on the Catastrophe Series Y.B. Fan	1532
Management A Medical Decision Support System Based on Structured Injection Orders L.Y. Kang, Y.S. Lo and C.T. Liu A Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems with Oil Residency Time Constraint Y.M. Zhao A Statistical Analysis of Papers and Author Group in Geomatics and Information Science of Wuhan University Z.P. Yan, H.J. Wang and Q.Q. He Aging Risk Between China and Russia Based on the Catastrophe Series	1532 1536
Management A Medical Decision Support System Based on Structured Injection Orders L.Y. Kang, Y.S. Lo and C.T. Liu A Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems with Oil Residency Time Constraint Y.M. Zhao A Statistical Analysis of Papers and Author Group in Geomatics and Information Science of Wuhan University Z.P. Yan, H.J. Wang and Q.Q. He Aging Risk Between China and Russia Based on the Catastrophe Series Y.B. Fan Analysis of City Traffic Characteristics from GPS Data J.Y. Dong, X. Han and W.J. Wang Analysis of College Student Employment Option under the Perspective of Evolutionary	1532 1536 1541
Management A Medical Decision Support System Based on Structured Injection Orders L.Y. Kang, Y.S. Lo and C.T. Liu A Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems with Oil Residency Time Constraint Y.M. Zhao A Statistical Analysis of Papers and Author Group in Geomatics and Information Science of Wuhan University Z.P. Yan, H.J. Wang and Q.Q. He Aging Risk Between China and Russia Based on the Catastrophe Series Y.B. Fan Analysis of City Traffic Characteristics from GPS Data J.Y. Dong, X. Han and W.J. Wang Analysis of College Student Employment Option under the Perspective of Evolutionary Game L.L. Sun, G.H. Li and M.Y. Sun	1532 1536 1541
Management A Medical Decision Support System Based on Structured Injection Orders L.Y. Kang, Y.S. Lo and C.T. Liu A Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems with Oil Residency Time Constraint Y.M. Zhao A Statistical Analysis of Papers and Author Group in Geomatics and Information Science of Wuhan University Z.P. Yan, H.J. Wang and Q.Q. He Aging Risk Between China and Russia Based on the Catastrophe Series Y.B. Fan Analysis of City Traffic Characteristics from GPS Data J.Y. Dong, X. Han and W.J. Wang Analysis of College Student Employment Option under the Perspective of Evolutionary Game	1532 1536 1541 1545
Management A Medical Decision Support System Based on Structured Injection Orders L.Y. Kang, Y.S. Lo and C.T. Liu A Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems with Oil Residency Time Constraint Y.M. Zhao A Statistical Analysis of Papers and Author Group in Geomatics and Information Science of Wuhan University Z.P. Yan, H.J. Wang and Q.Q. He Aging Risk Between China and Russia Based on the Catastrophe Series Y.B. Fan Analysis of City Traffic Characteristics from GPS Data J.Y. Dong, X. Han and W.J. Wang Analysis of College Student Employment Option under the Perspective of Evolutionary Game L.L. Sun, G.H. Li and M.Y. Sun Application of Fast Mapping Techniques in Sudden Crisis H. Yuan Cloudy-Based Optimization of the Human Resource Management System S.Q. Hu	1532 1536 1541 1545 1549
Management A Medical Decision Support System Based on Structured Injection Orders L.Y. Kang, Y.S. Lo and C.T. Liu A Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems with Oil Residency Time Constraint Y.M. Zhao A Statistical Analysis of Papers and Author Group in Geomatics and Information Science of Wuhan University Z.P. Yan, H.J. Wang and Q.Q. He Aging Risk Between China and Russia Based on the Catastrophe Series Y.B. Fan Analysis of City Traffic Characteristics from GPS Data J.Y. Dong, X. Han and W.J. Wang Analysis of College Student Employment Option under the Perspective of Evolutionary Game L.L. Sun, G.H. Li and M.Y. Sun Application of Fast Mapping Techniques in Sudden Crisis H. Yuan Cloudy-Based Optimization of the Human Resource Management System	1532 1536 1541 1545 1549 1553
Management A Medical Decision Support System Based on Structured Injection Orders L.Y. Kang, Y.S. Lo and C.T. Liu A Priority-Slot Based Continuous-Time Formulation for Crude-Oil Scheduling Problems with Oil Residency Time Constraint Y.M. Zhao A Statistical Analysis of Papers and Author Group in Geomatics and Information Science of Wuhan University Z.P. Yan, H.J. Wang and Q.Q. He Aging Risk Between China and Russia Based on the Catastrophe Series Y.B. Fan Analysis of City Traffic Characteristics from GPS Data J.Y. Dong, X. Han and W.J. Wang Analysis of College Student Employment Option under the Perspective of Evolutionary Game L.L. Sun, G.H. Li and M.Y. Sun Application of Fast Mapping Techniques in Sudden Crisis H. Yuan Cloudy-Based Optimization of the Human Resource Management System S.Q. Hu Development of Logistics Park Based on Symbiosis Theory	1532 1536 1541 1545 1549 1553 1557

Evaluation Research of Pig Farmers' Behaviors of Veterinary Drug Usage Based on Factor Analysis	
R.Y. Sun, J. Zhou and M.L. He	1581
Facility-Optimizing Plan for Intersection System Based on Intelligence Traffic Management Technique	
B.J. Huang, W. Ma, H.H. Dong, L.M. Jia, Y. Qin and H.J. Li	1586
Performance Evaluation of Logistics and Distribution H. Yu and K. Zhang	1591
Research of Bid Evaluation Risk Analysis Model Based on Decision Tree H.K. Gao, L.Y. Xu and C.H. Li	1595
Research on Cigarette Consumption Behavior of Guizhou Based on MLP J. Tan, Y.F. Tao and Z.Z. Xiao	1601
Research on Electronic Commerce Warehouse Logistics Management System Based on Cloud Computing	1.605
H. Shi, P. Ren and X.Q. Zhang Research on Influence of the Balance Sheet Channel Effect on Enterprise Investment J.J. Fu	1605 1610
Research on the Development of the Iron and Steel Enterprise Logistics X.J. Dong and X.M. Wang	1614
Research on the Operation Models of Fresh Vegetable Logistics H.M. Jia	1618
Research on the Pre-Judging and Pre-Warning Information Management System Based on the Tourism Crisis X. Liu	1622
Reserve of Semi-Continuous Life Insurance Model under Random Interest Rate J. Wei and S.G. Ge	1626
The Application Research of Basic Surveying and Mapping Product in Urban Management H. Yuan	1630
The Comparison on Corporate Governance between Temasek and State-Owned Companies in China X.B. Zhang	1634
The Empirical Research of the Relationship of Transportation Listed Company's Capital Structure with Enterprise Value J.J. Fu	1638
The Pathway Analysis on Benefit of Agricultural Science and Technology Projects (ASTP) Based on Logical Framework Approach C.M. Wang and B.F. Chen	1642
The Study of SO ₂ Emissions Embodied in International Trade of China C.H. Dugu and H. Liu	1649
Total Factor Productivity and Convergence of Port Logistics with Tianjin Port L.P. Wang, M.M. Yin and B.X. Dong	1653
The Design and Implementation of the Stadium Safety Evacuation System Q.H. Li and Y.L. Yu	1657
Evaluation of Knowledge Absorptive Capability of Enterprise Based on Entropy Weights and Interval TOPSIS	
G.Z. Zhang, S.Z. Zhao and J.R.R. Wang Research on the Design and Realization of Management Information System of Enterprise	1661
Risk Assessment Y.Z. Li	1666
The Design and Implementation of Corporate Human Resources Management Information System	
C. Zhang Combination Weighting Method Pesed on Conordized Mehalenghis Distance and	1670
Combination Weighting Method Based on Generalized Mahalanobis Distance and Weighting Relative Entropy F. Zhang, Z.H. Xie, J.T. Cheng, G.L. Cui and L. Li	1674
Research on the Risk Assessment for the Construction Safety in the Planning and Design Stages of Bridge Engineering	
H.M. Cao	1678

Chapter 9: New Technologies in Engineering Education and Teaching

Application of AHP in Teaching Quality Evaluation for Polytechnic Y.Z. Zhong, W.X. Jiang and W.C. Gao	1685
Development of Multimedia Teaching Software Based on Self-Learning H.M. Yu	1689
Evaluation of College Coach Capacity in USA F.X. Wan, D. Hu and J. Tian	1693
Research on College Students' Interpersonal Flat-Form under New Network Media Environment	
J.D. Chen	1697
Research of the Teaching Mode for the Teamwork in Basketball Training X.B. Guan, R.M. Hu and L.J. Kang	1701
Research on the Construction of Physical Education Curriculum Evaluation System Based on Information Technology J.C. Xu, J.Q. Wang and J. Li	1705
Research on the Integration of Mail System and Digital Campus Platform S.Y. Guo and X.X. Zhang	1709
Research on the Loss and Motivation of Teachers in the Civilian-Run Colleges and Universities	
L. Zhou	1713
The Application of Information Technology in Sports Teaching in Private Universities J.G. Cui and Z.S. Wang	1717
The Construction of Open Course Platform of Teaching Resources Oriented to Local Colleges and Universities H.Y. Liu and R.H. Lu	1721
The Design and Implementation of Student Management Information System under the Campus Network Environment Y. Lv, X. Li and L.N. Gao	1725
The Design of Teaching Resources Platform Based on Cloud Computing in University X. Lu and S.H. Lu	1729
The Development of Multimedia Teaching Software Based on Self-Learning Model W.Y. Li, L.P. Zhang and X.T. Zhang	1733
The Reflection for Multimedia Technology Application in Medical Chemistry Teaching C.X. Shang	1737
The Research and Design of Computerized Adaptive English Testing System M.L. Tian	1741
The Research of Communication of Chinese Language and Culture under New Technologies	
L. Zhu	1745
The Research on the Mechanism Construction of the University Informatization in China Research on the Design and Realization of Electrical Training System Based on the Virtual	1749
Reality Technology B.Z. Feng	1753
Choose the Best Coach Based on the Theory of Grey System J. Zhao	1757
Research on Countermeasures Based on Enterprise Practice of the Higher Vocational Teachers	
X.G. Yang	1761
Application of Wireless Network on Campus D.L. Ran	1765
Research on the Status Quo and the Character of the Development of the National Fitness Program J.H. Zhang	1769