ISBN(softcover): 978-0-87849-223-7 ISBN(eBook): 978-3-03813-563-0

Table of Contents

Preface

Committees

Reviewers

Value-at-Risk Estimation Based on Empirical Likelihood Method
Z.W. Meng and P.C. Yu 1

A Scheduling Strategy Suitable for Industrial Ethernet and Mine WSN Scheduling System
F. Tian, S.R. Pan, E.Y. Sun, C.Y. Wang and H.Y. Liu 6

Concurrency Control Protocol for Real-Time Database and the Analysis Base on Petri Net
J. Chen, Y.F. Wang and J.P. Wang 12

The Study on Personalized Guidance in Intelligent Library Based on Multi-Agent
Z.G. Ji 18

A Automation Library Management Method Based on Knowledge Management Tools
Z.G. Ji 23

Pressure Prediction Technology of the Deep Strata Based on BP Neural Network
W. Li, T. Yan and Y.J. Liang 28

Experimental Study on Moving Train Loads Identification from Bridge Responses
Y. Wang and W.L. Qu 32

Measuring User Trajectory Privacy in LBSs with Adversarial Background Knowledge
C.M. Wang, Y.M. Guo, Y.J. Guo and Y.H. Guo 38

The Study on Knowledge Service Models in Digital Library
G.F. Zhao 43

The Study on Knowledge Organization for Digital Library
G.F. Zhao 48

Chattering Reduction of Sliding Mode Control by Adopting Nonlinear Saturation Function
N.B. Cheng, L.W. Guan, L.P. Wang and J. Han 53

RETRACTED: Application of Much-Touted Stochastic Algorithm in Investigating Active Networks and World Wide Web
J. Li and Z.M. Qu 62

RETRACTED: Application of Probabilistic and Interactive Information in Verifying Machine System and Kernels Based on Relational Modality
D.P. Li and Z.M. Qu 67

Particle-Size Effects on the Volatilization of Oil in Porous Media
Y.F. Ma, J. Lu and X.D. Feng 72

Designing of SMS Gateway Based on 3G Technology
S.T. Yan, J.P. Wang and X.Y. Wu 77

Plan Model for Airway Network Based on Bilevel Programming
M. Zhang, T.T. Zhang and S.C. Han 81

Scale and Corrosion Inhibition of Synthesized Polymers from Waste Itaconic Acid
J.C. Ding 90

Wind-Induced Response Analysis of Guyed Mast Earplate Considering Welding Residual Stresses
W.L. Wang, W.L. Qu and J. He 95

Research on Decision of ANP-Based Enterprise Software Outsourcing Alliance
X. Wang and S.L. Sun 100

Study on the Preparation of Polytetrafluoroethylene Hollow Fiber Membranes and the Properties
Q.L. Huang, C.F. Xiao and X.Y. Hu 106

Facial Expression Recognition Based on Orthogonal Nonnegative CP Factorization
C. Liu, K. He, J.L. Zhou and Y.L. Zhu 111

To Construct an Individual Credit Risk Assessment Method
J.J. Li, L.P. Qin and J. Zhao 116

Research on Lyapunov Exponent of Chaos Feature in Different Stress Stage of Concrete Joint System
J.W. Song 120

Low-Temperature Synthesis of Improved $LiMn_2O_4$ by a Modified Solution Combustion Synthesis
G.Y. Liu, J.M. Guo and B.S. Wang 125

A Novel Discriminant Non-Negative Matrix Factorization and its Application to Facial Expression Recognition
Y.L. Zhu, J. Chen and P.X. Qu 129

Study on Pressure and Temperature Characteristics of Sensitive Rubber Composite
G. Bing, Q. Lan and W. Biao 134

Color Image Region Growth Segmentation Integration of Normalized Cut
X.Y. Wu, L.J. Ma, Z.F. Li and S.T. Yan 139

DMTA: A Task Scheduling Algorithm in Multi-Sinks Wireless Sensor Networks Based on Divisible Load Theory
L. Dai, Z. Shen and Y.L. Chang 143

Simulation and Analysis of Roller Eccentricity Compensation in Cold Mill
Q.M. Gao, G.Q. Zhao and H.F. Wang 148

Design and Application of Real-Time Embedded Software Simulation Testing Object Framework
Y.F. Yin, B. Liu and H.Y. Ni 152

Numerical Analysis on Splitting Failure of Brittle Material
N. Liu and C.S. Zhang 156

An Interval-Valued Fuzzy Reasoning Approach Based on Weighted Similarity Measure
Q.S. Zhang, H.X. Yao and Z.H. Zhang 161

Artificial Glowworm Swarm Optimization Algorithm for Solving 0-1 Knapsack Problem
Q.Q. Gong, Y.Q. Zhou and Y. Yang 166

The Design of Coprocessor for Portable Electronic Devices Based on Tightly Coupled Structure
J.B. Liu and G.F. Zhao 172

Analysis and Simulation of Automatic Control System
F. Chen and L. Chen 177

Study on Psychology Teaching Theory in Physical Education
F.X. Mei and Y.Q. Bian 181

A Novel 3D Model Retrieval Approach Based on Model-Partitioning and Fuzzy Relevance Feedback
K.S. Zou, C.H. Wu, W.H. Ip, C.Y. Chan, K.L. Yung and Z.Q. Chen 186

Chebyshev-Legendre Pseudo-Spectral Method for the Modified Kawahara Equation
T.G. Zhao, Y.T. Liang and H.P. Ma 191

Use Piezoelectric Bimorph for the Fiber Bragg Grating Tuner
X.L. Zhang, D.K. Liang and J. Zeng 196

Context Aware Service System Supported the Collaborative Management of Distribution Task
L. Xiao and F. Wang 201

Analysis of the Requirements Change for Different Level Users in Software Developing
B.J. Zhang, Y.W. Zhang and J.H. Fu 207

Generation of Extended Cut Sequence Set for Dynamic Fault Tree
H.L. Zhang, C.Y. Zhang, D. Liu and Y.H. Wang 211

The Application of Green Manufacturing Technology in Mechanical Processing
Q. Hong, L.Z. Gu and X.H. Yu 217

The Research on Coal Chemical Industry Chain Development in China Based on Value-Added Model
X.G. Li, X.B. Ma and S.Y. Gong 222

Ancient Books Chinese Characters Segmentation Based on Connected Domain and Chinese Characters Feature
L. Zhu and J. Yang 227

Application of Artificial Neural Network for Cotton Boil Spoiling Disease Prediction
F.G. Chen, B.J. Zhang and J.H. Fu 233

Research on the Model and Architecture of Immune-SoftMan
Z.F. Ma 239

The Research and Development of On-Line Inspection Work-Pieces Using CNC Machines
Y.Q. Wang and W.D. Qu 244

On the Calculation of Bounds of Probability of System Performance Using Evidence Theory
B. Suo, Y.S. Cheng, C. Zeng and J. Li 249

The Forecast of the Requirement of Distance Education Resources Based on Neural Network
J. Gao, J.L. An, Z.F. Li and Y.Z. Song 255

(λ,μ)
Z.H. Liao, S. Cao, M.H. Hu and L. Wu 260

Using Stress Wave Based Technology for Wood Material Nondestructive Testing
H.L. Feng, Y.M. Fang, J. Li and G.H. Li 265

Synthesis of Al-Doped ZnO Nanoparticles and its Electromagnetic Performance
Y.Q. Jia, D.M. Shi and J. Yan 271

Analyzing and Modeling of High-Tech Virtual Enterprise
B. Sun and M. Huang 277

Application of Genetic Algorithms in Particle Inversion
J. Li and H.Y. Jiang 283

A New Close-Form Solution for Initial Registration of ICP
L.Z. Liu, X.J. Hu, Y.F. Chen, T.H. Zhang and M.Q. Li 287

Design and Implementation of Maxi-Linear Deviation Search Algorithm Based on Improved ICP
L.Z. Liu, Y.F. Chen, T.H. Zhang, Y. Wang and M.Q. Li 293

A New Adaptive SSC and SSSC Stream Cipher Model Design and Implementation
L.Z. Liu, X.J. Hu, T.H. Zhang, Y. Wang and M.Q. Li 298

Empirical Equations for a Study on Strain Rate Sensitivity of Polypropylene Syntactic Foam
E.Y. Wang and M. Omiya 303

Singularity Elimination of Stewart Parallel Manipulator Based on Redundant Actuation
Y. Cao, H. Zhou, B.K. Li, S. Long and M.S. Liu 308

Trajectory Planning of Wire-Driven Parallel Manipulator Based on Influence Coefficient Method
Y. Cao, X.Y. Wang, H. Zhou, S. Long and M.S. Liu 313

Design of an Intelligent Mini Car Based on AT80C51
Y.J. Wang, C.P. Zhao and G.H. Gao 318

Research and Construction on Simulation Traffic Environment with Inter-Car Communication
J.D. Zhang, Z.H. Gao and Q. Lin 323

Research and Design the Primary Two Vehicles Communication System
J.D. Zhang and Z.H. Gao 328

The Research about Intelligent Search Engine and in Digital Library Personalization Services
J.H. Fu, J.Q. Lv and X.Y. Li 333

Research on Structure and Model of E-Commerce Based on Web Mining
X. Hao 338

Rough Dual Ideal in Lattices
Y.X. Shao, Z.H. Liao, L. Wu and S. Cao 343

Adaptively Secure Identity-Based Threshold Broadcast Encryption without Random Oracles
L.Y. Zhang, Y.P. Hu and Q. Wu 347

Temperature Profile of Microencapsulation for Self-Healing Application
T.T. Li, X. Liu and R. Wang 353

Spatiotemporal Clustering Method for Automatic Estimation of the FDG Input Function for Small-Animal PET
L. Sun, Y.N. Zhang, M. Ma and G.J. Tian 358

Hybrid GA Variational Bayes Inference of Finite Mixture Models for Voxel Classification in Brain Images 364

Water Absorption and Diffusion in Hollow Glass Microsphere Filled Epoxy Syntactic Foams
X.M. Liu, C.J. He, H.J. Li and H.Y. Peng 370

Research on Teaching Goal of C-Language for Computer Major in Higher Education
L. Li, Y. Huang and B. Liang 375

Image Segmentation Method Based on Improved Genetic Algorithm and Fuzzy Clustering
J. Zhang, X. Zhang and J. Zhang 379

Analysis of Zhejiang Logistics Industry Spreading Effect Based on Inverse Matrix Coefficient Table
R. Zhang, J. Hu and L.P. Huang 384

A Smooth Clustering Algorithm Based on Parameter Free Filled Function
Q. Wu and L.X. Yuan 389

A Study on Properties of Ionic Polymer Metal Composite
T. Kobayashi and M. Omiya 394

Finding Representative Tags for User Profile Construction
J.L. Wei 399

Image Compression Algorithm with Radix-4 FFT
J.B. Deng, J.L. Hu, H.H. Chi and J.B. Wu 404

An Improved Gravitation Search Algorithm for Unconstrained Optimization
J.N. Wang and X.T. Li 409

Stochastic Optimal Dispatch of Power System with Multiple Wind Farms
S. Wang, H.M. Yang, S. Zuo, W.J. Xu and B. Zhang 414

Study on Traffic Congestion State Modeling of Urban Road
M. Wang and L.J. Xu 419

Electromagnetic Material Based Semi-Passive Switching Shunt Damper
Y.D. Shen, G. Ma, I.K. Oh and T.H. Cheng 424

The Study on Anti-Icing Critical Current of Overhead Conductors
B. Zhang, J. Wang, J.Y. Song, H.M. Yang and X.Z. Liu 428

The Simulation Study Based on Multi-Agents of Mobile Market
W. Zheng, X. Jin and B. Zhang 433

Modeling for Safety Evaluation of Coal Mine Roof Based on Information Fusion
R.S. Jia, H.M. Sun, C.Q. Zhang and X.T. Lv 439

Running Simulation System of Distillation Columns Based on MATLAB
C.X. Liu 444

The Research of Distributed Manufacturing System Based on Agent
G.H. Gao, M. Guo and N. Li 448

An Efficient Distance Education System Based on VOD Cluster
Z. Wu 452

Internet Based Chinese Language Distance Education System
D. Lu and Z. Wu 457

Intelligent Job Service Scheduling Scheme in Campus Grids
S. Yan 462

Resource Sharing Campus Grid Platform Based on Load Balancing and Open Grid Service Architecture
S. Yan 467

Data Mining and Heuristic Algorithm for Electronic Commerce
G.C. Ren 472

An Improved Data Mining Method Applied to Enterprise's Financial
Y.Q. Wang and X. Xu 477

A New Method of Extraction of Mobile Robot Navigation Line Based on Edge Detection
J.W. Dong and H.M. Lv 482

Research on Torsional Vibration of Gear-Shafting System Based on an Extended Lumped Parameter Model
X. Xu and R.P. Zhou 487

Research on Large Aircraft Industry in Xi'an from View of Industry Chain
F.L. Niu and D.J. Liu 493

A Study on Evalution of HR Outsourcing Providers Based on Multi-Criteria Decision Making with Linguistic Preference Information
Q. Li 499

Studies on Evaluation of Express Companies' Emergency Logistics Capabilities
S. Lu 503

Research on the Methods of Suppliers Selection in the Context of E-Commerce
S. Lu 509

Composition Identification of Typical Decorative Textiles in Tibetan Historical Buildings by Burning Test and Projection Microscope Test
F. You, F. Yang and M. Ren 515

Realtime Measurement of Temperature Field during Direct Laser Deposition Shaping
K. Zhang, X.F. Shang and W.J. Liu 521

A Novel Empirical Mode Decomposition Denoising Scheme
W. Du and Q. Liu 527

Perceptually Optimized UDP-Lite Protocol for 3D Model Streaming among Lossy Network
B.L. Yang 533

An Improved Algorithm for TSP Problem Solving with Hopfield Neural Networks
J.L. An, J. Gao, J.H. Lei and G.H. Gao 538

Design of the Thermoelectric Generator
G.L. Yang 543

Immune-Inspired Quantum Genetic Optimization Algorithm and its Application
Z. Lian 547

A Novel Heuristic Routing Algorithm for Peer-to-Peer Network
Y.H. Ren 552

Enterprise Search Services and Application of Security Database System
X.Q. Ma, Y. Huang and B. Lv 557

Study of Athletic Trauma in College Physical Education
H.Y. Lou and G.Z. Wang 562

The Insulator's Pollution Raining Flashover Forecast under GARCH-Based Forecast of Rainstorm Disasters1
J. Yi, H.M. Yang, M.Y. Lai and S.K. Li 566

Training Practice Talents of Information Management Professional
H.Y. Wu 571

Control System Based on PLC and Touch Screen for Energy-Saving in Public Lighting
S.X. Zhu, B.F. Wang, X.L. Zhu and S.H. Guo 576

AI-VCR Subtraction Realizing with NM
Q.S. Ye 580

AI-VCR Searching without Information
Q.S. Ye 586

AI-VCR Computational Research on Visibility of 3D Materials Solids Reality Pictures
Q.S. Ye 592

Distributed Biological Datasets Index Model
P.F. Liu, S.B. Dong, Y.C. Cao and Z.P. Du 599

Economic Evaluation and Chaos Control of Dynamic Cournot Game in Power Market
Y. Wang, M. Zhang and D.L. Yang 604

The Numerical Simulation of Pure-Oil Lubrication Journal Bearing
L. Cai, J.L. Wang and H.T. Zheng 609

Research on Identification Theories of Bridge Damage
G.J. Liu, Y.Q. Yang and F. Guo 614

A Novel Heuristic Genetic Algorithm Based on Simulated Annealing Strategy for Intelligent Computing
H.X. Diao and J. Xiao 619

Compression Resistance of Magnetorheological Fluid
H.Y. Wang, X. Wang and C. Bi 624

Research of Fault Diagnosis Based on Bayesian Network for Air Brake System
S.T. Zhang 629

Multi-Step Prediction Algorithm for State Prediction Model
Z.L. Zhang and H.W. Song 634

Hybrid Effect of Carbon Fiber on Piezoresistivity of Carbon Nanotube Cement-Based Composite
J.L. Luo, Z.D. Duan, T.J. Zhao and Q.Y. Li 639

Self-Sensing Property of Cementitious Nanocomposites Hybrid with Nanophase Carbon Nanotube and Carbon Black
J.L. Luo, Z.D. Duan, T.J. Zhao and Q.Y. Li 644

Anomalous Human Activity Detection Based on Online One-Class SVM with N-Grams Kernel
X.D. Zhu and Z.J. Liu 648

The Study on Sports CAD Training Software
P.X. Xu 653

A New Distributed Mining Association Rules Algorithm in Distributed Database System
S.T. Gao 658

A Multi-Objective PSO Algorithm for Energy-Efficient Scheduling
T.Q. Yang 663

A Model for Chinese Sentence Similarity Computing
X.F. Yang, Z. Yu, P.Y. Zhang and G.H. Gao 668

Research and Applications of Access Control Based on Logic SQL Database System
Y. Huang, X.Q. Ma, D.N. Li and R. Wu 672

Research on Affective Recognition with Physiological Signals Based on IAGA and wkNN Classification
H.N. Wang, S.Q. Sun, T. Shu and J.F. Wu 677

Research about Petri Nets Modeling of Railway Spring Festival Passenger Transport Based on Scale Free Networks
B. Huang, Y. Li, Q. Zhou, J.J. Guan and H.D. Wei 682

Study of the Temporary Passengers' Transportation Program during the Spring Festival Season Based on QoSFR Model
X.Y. Yan, Y. Li, B. Huang and Q. Zhou 687

The Analysis and Building of LibGALS System 693

Virtual Serial Port in the Construction of the CAN-Bus Network Technology Research
L. Tu, J. Liu and J.J. Song 698

Reaction Sintering of NiTi-Ti_2Ni-TiC under Cubic High Pressure
R.S. Yang, M.T. Li and F.W. Luo 703

Exponential Convergence Rate Estimation for a Class of BAM Neural Networks with Time-Delays
J.D. Yu 707

Detecting Backbone of Weighted Complex Network
W.S. Lan and G.H. Zhao 712

Construction and Application of Hierarchical Knowledge Granularity
C.F. Liu and L. Feng 717

Design and Realization of Submarine Voyage Training Simulation System
J.B. Xiao, D.B. Hu and X. Ji 722

New Problems and Solutions for Accounting in Internet
N. Wang 728

A Study of Piezoresistivity of Graphite Cement Mortar Specimen Embedded Double Electrodes by a Series Connected AC Circuit
W.M. Gan, Z.G. Li and X. Huang 733

Wind Load Monitoring System Based on ZigBee Technology
Z.X. Li, J.N. Ding, C. Yan and B. Wang 739

Digital Calibration for Current-Loop Output of Piezoresistive Sensors
C. Yan, J.N. Ding, Z.X. Li and C.M. Mao 744

A Porous Carbon Prepared by Using a Mordenite Mineral as Template and its Cyclic Voltammetry Study in H_2SO_4
G.Y. Liu, Y.N. Li, J.M. Guo and B.S. Wang 749

Comment on Lee J-s et al.'s Identity-Based Designated Verifer Proxy Signature Scheme and its Improvement
D.J. Liao and Y.S. Tang 753

Laser Cladding of $Mg_{65}Cu_{25}Y_{10}$/SiC Amorphous Composite Coatings on AZ91D Magnesium Alloy for Improvement of Corrosion Resistance
K.J. Huang, H.G. Liu and C.R. Zhou 758

Study on Dynamics of a Nonlinear Damping Absorber Coupled to the Linear System
S.M. Tang, S.J. Zhu and J.J. Lou 763

Material Surface Reconstruction Based on Light Projection
S.Y. Gai and F.P. Da 768

Decision Models of Supply Chain Under Asymmetric Information with Demand Disruption
X.R. Jiang and Y.C. Li 773

Robust Motion Objects Detection in Moving Camera Scenes
Y.J. Zhong and S.P. Zhang 782

Numerical Simulation of Air-Deck Slotted Charge Blasting
G.L. Yang, R.S. Yang, C. Huo and Y.L. Che 787

Preparation and UV Absorption Property of Hybrid Fluorocarbon/ZnO Thin Films Deposited by RF Magnetron Sputtering
Y.H. Zhang, Q. Ji and Z.J. Liu 792

Research of Influence Factors of Initial Crack with Slotted Charge Blasting
G.L. Yang, R.S. Yang, C. Huo and C.C. Pan 797

Creep Behaviors of 3D C/SiC in High Speed Combustion Gas at 1300°C
X.G. Luan and L.F. Cheng 802

Optimization of Laser Cladding Forming Parameters by Numerical Simulation to Minimize the Cracking Posibilitys
J.L. Song, Y.T. Li and Q.L. Deng 806

Research on Function-Structure Mapping Method in Parametric Design Based on Axiomatic Principles
S.F. Jiang, S. Chen and C.D. Lu 813

Experiment and FEM Analysis for Fracture of Fan Blades
H.M. Huang and W. Jiao 819

The Design and Implementation of Baiyangdian Tourism Business System Based on Web Service
H.X. Xu and J.M. Lai 824

Relations of A*H and A^H
Y. Yan, C.L. Mi and X.C. Wang 828

Dynamic Analysis of the Base Isolator Structure
Y.L. Liu, C.M. Li and T.L. Yan 832

The Applied Research of Real-Time Monitoring System for Earthquake
Y.L. Liu, T.L. Yan and Z. Jiang 837

A Study on Location Technology of Humsn Face Gradient Direction
J.Y. Zhu, Y.J. Liang and L. Li 841

The Inherent Viscosity Test and Hardening Experiment Research to the Polymeric Soil Consolidator of Acrylic Acid
B. Tong, Z. Guo, Z. Li and J. Liu 846

Clustering Users According to Common Interest Based on User Search Behavior
P.Y. Zhang, Y.J. Du and C. Wang 851

Study on High-Rise Building Transfer Floor
B. Wang, H.Q. Yang and W.X. Zhang 857

Simulation and Experimental Research on Milling Force of High Manganese Steel
Y. Tang, Q. Wu, X.F. Hu and Y.Z. Li 863

Simulation Study on Laser Welding of High Strength Steel to Vehicle
Q. Wu, Y. Tang, Y.Q. Yang and Y.Z. Li 868

Numerical Simulation of Triaxial Tests for Coarse-Grained Soil Considering the Initial Fabric of Samples Grain
G.J. Wang, X.Y. Kong, Y.L. Gu and C.H. Yang 873

Effect of Friction on Billet Deformation during Multi-Axial Compressions
F.J. Shi, S.Z. Ye, L.G. Wang and S. Lu 879

Motion Control and Design for Experimental Feeding Device
X.G. Zhang and B. Gao 884

The Structural Dynamical Buckling Analysis for a Novel Vacuum Autoclave under the Extreme Operating Conditions
H.P. Liu, X.J. Li, D. Wang, J.S. Tang, X.L. Yang and C.J. Zhu 888

A Large-Scale Device Collaboration Resource Selection Method with Multi-QoS Constraint Supported
X.H. Rong, P. Deng and F. Chen 894

Population Migration Algorithm for Integer Programming and its Application in Cutting Stock Problem
D.X. He and L.D. Qu 899

Modeling the Large-Scale Device Collaboration System Based on PI-Calculus
P. Deng, J.W. Zhang, X.H. Rong and F. Chen 905

Exponential Stability of Numerical Solutions to Stochastic Investment System
Z.P. Wang 910

A New Threshold Password Authentication Scheme
Y.C. Lee 915

A Novel Combination Method of Conflict Evidence in Multi-Sensor Target Recognition
Y.M. Xiong and Z.P. Yang 920

The Study of Problems and Countermeasures of Current Basic Computer Education in College
P. Wu 925

Studying of Fuzzy Logic Control for Semi-Active Suspension Based on Improved Genetic Algorithm
J.J. Zhang and Z.Q. Xu 929

Influence of Silane Coupling Agent on Interfacial Strength of SMA Composite
Y.L. Wang, Z.Q. Wang, L.M. Zhou and H.T. Huang 933

The Typical Wetland Biological Environmental Monitoring System Based on ZigBee and GPRS Wireless Sensor Network
Y.Z. Liu, Y. Zeng and N. Yi 938

Study on WEB Page Fusion Classification Model
X.D. Zhang and L.J. Zhu 944

Research of Seed Levitation Based on Magneto-Archimedes Effect
S.P. Li, W.P. Zhang, M.F. Hu, W.Y. Chen, F. Cui and W. Liu 949

Studying of Fuzzy Logic Control Semi-Active Suspension Based on ADAMS/Car and MATLAB/Simulink
J.J. Zhang and Z.Q. Xu 956

A Personalized Recommender Systems Framework Based on Ontology and Bayesian Network in E-Commerce
F. Long, Y.F. Zhang and F. Hu 961

Cathodeluminescence Characterization of AlGaN Film Grown by MOCVD
L.J. Wang, Y.Z. Zhu, H.X. Wang, B.L. Liu and J.S. Yuan 966

Benefits Assignment Mechanism for Construction Machinery Supply Chain Based on Improved Cooperative Game Model
X. Ma 971

The Forecast Model of China's B2B E-Commerce Transactions
Z.G. Liao, W.F. Liu and S.J. Wu 976

System Optimal Design Based on Neighborhood Cultivation Genetic Algorithm Combined with Modified Method of Feasible Directions
L. Wang and C.S. Zhao 980

Robust Adaptive Inverse Optimal Tracking for Strict-Feedback Stochastic Nonlinear System
L. Wang 984

A Micro Diamagnetic Actuator for Micro Beads Levitation and Manipulation
Q. Wang, W.P. Zhang, W.Y. Chen, F. Cui, S.P. Li, W. Liu and X.S. Wu 990

Human-Computer Interface Design for Simulation of Activity-Travel Patterns
B. Wang, L. Zhang and H.Y. Cao 996

Study of Pressure Sensitive Coating Using Palladium Octaethylporphyrin as Luminescent Molecule
X.L. Cao, H.D. Deng and W. Lan 1002

Frequency Dependence of the Internal Friction for $Ti_{50}Ni_{48.5}Fe_{1.5}$ Shape Memory Alloy
T.Y. Xing, X.J. Mi, X.Q. Yin, B.D. Gao and Y.F. Li 1007

Comparison of Pullout Behaviour on Sand between Planer Grid Forms and Grid with Rib of Reinforcement
Y.L. Lin, M.X. Zhang and C. Cai 1012

Digital Control of the Substations Based on IEC61850
H.L. Zhou and X.H. Ran 1017

Effects of Environmental Temperature and Humidity on the Electrical Properties of Carbon Fiber Graphite Cement Mortar
X.M. Fan 1022

Design of a Switched Reluctance Generator Drive System for Hybrid Electric Vehicles
A.H. Wu, J.F. Mao, G.Q. Wu, Z. Li and F. Zheng 1027

Visual-Based Motion Planning for Autonomous Humanoid Service Robot
X.S. Ji, P. Xu and G.C. Niu 1031

Study on Compression Sensing Algorithm for Mobile Robot Localization
Y. Huang, Q.J. Luo and Q.J. Gao 1036

Supply Chain Equilibrium under Asymmetric Information Based on Information Transparency Model
X. Ma 1041

Genetic Algorithm and its Application in Optimization of Frequency Selective Surface
J.Y. Han, W. Qun, C.Y. Li, Z.H. Tang and M.W. Shi 1046

Design and Optimize Spherical Particle Absorber for Broadband Electromagnetic Wave Absorption Wall
Z.H. Tang and W. Qun 1051

Amphetamine Detection Based on Surface Plasmon Resonance Techniques
Y. Bao, B. Li, Y.R. Guan and G.F. Yang 1056

Synchronized Hydraulic Bulging Forming Technology of Three-Layer-Metal Tubes
W.W. Wang, J.L. Song, J.B. Yu and B.B. Jia 1059

The Study on Three Gorges Reservoir Geologic Hazard Monitoring Data Communication System
Y. Liu 1065

Research on Microencapsulated Aquatic Feed Preparation Based on Micro-Jet Spraying Technology
S.F. Chen, H.J. Dai and H.L. Zhou 1071

Tool Life Estimation for High-Speed Machining of Composite Material
P.Z. Li and W.M. Zhang 1075

Fiber Optic Displacement Monitoring in Laboratory Physical Model Testing
H.H. Zhu, J.H. Yin, H.F. Pei, L. Zhang and W.S. Zhu 1081

Analysis of the Gear Contact Fatigue Strength Based on the Compressive Residual Stress
Y.Q. Xu, T. Zhang and P. Xu 1086

Experimental Study of the Light Scattering Induced by the Surface Roughness of the Ultraprecision Machined Workpiece
C.D. Cheng, H.H. Tsai and H.P. Feng 1091

Study of Failure Mechanism of Anti-Dip Rocks Materials Slope under Mining Subsidence
Y.Q. Lv, H.F. Liu and J.J. Yang 1097

The Feasibility Analysis of the Double-Curved Positive Displacement Motor (PDM) Into Casing
X.H. Zhu, Y. Gao, S.H. Liu and H. Tong 1102

A Distributed Monitoring and Information Announcing System
B. Li, Y.D. Wang, S. Qiao, Z.Q. Ma and G.F. Yang 1107

The Effect of Temperature and Oxide Concentration of Galena Oxidation
Q.M. Jia, S.H. Yan and C. Bing 1111

Comparative Analysis of Three General Game Players
Z.D. Li, L.C. Feng, S.Q. Zheng and D.X. Gong 1117

Improved Iterative Methods for Solving High Order Polynomial Equations
D.X. Gong, L. Wang, C.A. Wei and Y.M. Peng 1122

The Study of the Factors to Establishing an Online Environment for Negotiation
W.X. He, J.G. Qu and Y.H. Cui 1127

Partheno Genetic Ant Colony Optimization Algorithm and its Application
G.L. Wang, J.H. Wu and Y. Su 1132

Prediction for the Sulfur Content in Pig Iron of Blast Furnace by Combining Artificial Neural Network with Genetic Algorithm
W. Chen, B.X. Wang and Y. Chen 1137

Four Quadrants Numerical Prediction for Hydrodynamic Performance of Open-Water Propeller
B. Xiao, X. Wang, A.G. Shi and M. Wu 1143

On the Convergence of Parallel Broyden Method
G.Z. Wu 1148

An Improved PSO-ACO Algorithm for Solving Large-Scale TSP
A.J. Ouyang and Y.Q. Zhou 1154

OneAPI Restful Services and Java Implementation
D.J. Wang, M.N. Song and Y. Li 1159

The Mid-Long Term Power Load Forecasting Based on Gray and SVM Algorithm
W. Li, Z.G. Zhang and N. Yan 1164

The Converse Theorem of Lyapunov Exponential Stability Theorem
Y.J. Zhang, C.Y. Ding, S.H. Yan, Y. Yu, J.Y. Zhang and H.J. Zhao 1170

Model of Pollutant Loads and Rainfall Physical Parameters for Urban Surface Runoff
J.K. Liu, H.B. Luo, G. Huang, X.L. Liu, M. Li and J. Liang 1175

Using Virtual Reality to Determine how Visual Factors Impact Pedestrian Behavior - A Case Study in Hubin Road, China
Y. Zhang 1181

The Research on the Wind Energy Distribution over Complex Terrain of Wind Power Plant
Y.Q. Liu, Z.C. Tian, F.H. Li and J. Xing 1186

Mathematical Foundation of the Fast Multipole BEM for 2D Potential Problems
W.W. Wang and Y.M. Chen 1190

The Prediction Research on the Transport & Storage of Guangxi in China with the GMDH Algorithm Method
Z.G. Liao, Z.P. Lu, C.Y. Lu and W. Fang 1195

A New Hierarchy of Evolution Equations and its Integrable System
S.J. Yuan and M.X. Chen 1200

An Improved Ant-Colony Algorithm Based on Cloud Model Theory
X.M. Wei 1204

Generalized Constraint Neural Network Model System Parameter Identification
S. Zhang, G. Jin, J. Xiao, S. Li, Y.P. Qin, J.H. Liu, T. An and W.F. Zhong 1207

A Novel WebService Architecture Based on REST
N. Wei, M.N. Song, K. Xu and C. Jiang 1213

The Security Analysis of Supply Chain Network Based on the Complex Network
P.H. Fu and Y.C. Liu 1218

The Research of Temporal-Based Authorization for Group-Centric Secure Information Sharing
P.W. Li 1223

Algorithm of Sparse Least Squares Support Vector Machine
Y.L. Zhang, Y.W. Zhu, S.F. Lin, X.J. Sun, Q.N. Zhang and X.H. Liu 1229

Multiple-Instance Classification via Generalized Eigenvalue Proximal SVM
Z. Wang and D.M. Li 1235

A Parallel Calculation System for the Shortest Path in Traffic Network
L. Zhang, Z.S. Yang, H.M. Jia and B. Wang 1240

The Development of an Environmental Risk Emergency Management Decision Support Information System
B. Chen and Y.H. Ge 1245

Resource Virtualization Model in Cloud Manufacturing
L. Wu 1250

The Study of Specificities of Interaction between Peptides and MHC Molecules
T. Liu, Z.X. Zhang, H. Wei, H.K. Hu and F.M. Wang 1254

A Unified Approach for Analysis of Randomized Response Surveys
Z.M. Hong and Z.Z. Yan 1259

Dynamic Analysis of Stochastic Finite Element Based on Sensitivity Computation
W.H. Mo 1264

Vertical Search Engines on Forestry
F. Zhang, X.L. Feng and J.S. Yuan 1270

Access Process of Data-Flow in Cross-Domain Usage Control Model Based on XACML
C.Y. Dai, W.T. Gong and J. Liu 1275

Research of Tent Map Based Chaotic Particle Swarm Optimization Algorithm for Emotion Recognition
H.N. Wang, S.Q. Sun, J.F. Wu and F.Q. Shi 1280

The Determination on Minimal Covering of Regular Separable Function Sets in Partial Four-Valued Logic
X.Q. Zhou 1285

The Relationship of Nonfinancial Performance Measures and Earnings Management
Y. Xu and J. Zhang 1290

Prediction Model for Power Transmission Line Icing Load Based on Data-Driven
P. Li, N. Li, Q.M. Li, M. Cao and H.X. Chen 1295

Intelligent Data-Fusion Model Using Correlation Fractal Dimension for Structural Damage Identification
S.F. Jiang, C. Fu and Z.Q. Wu 1300

CUGrid and VGE Based Air Pollution Dispersion Simulation
B.L. Xu, H. Lin, W.N. Cui, Y. Hu, J. Zhu and S. Tang 1305

Middleware Design and Xml Data Table Creation Relate to Agent-Based Information Release System
J.L. Wu, P.P. Zhang and Y. Wang 1311

Statistical Analysis on Coal Mine Gas Explosion and Optimization of Safety Input
C.Y. Xiao, L.W. Guo, S.Z. Chen and Y.C. Yang 1316

The Effect of the Humidification Treatment of the Roving on the Quality of the Hemp/Cotton Blended Yarn
Z. Li, Y.B. Li, H. Zhang and X.T. Wang 1322

A Comparison of Different Methods for LAD Regression
H.J. Chen, X.L. Liu and L.H. Liu 1328

Sweet Spot and the Influence of Corking and Materials on Baseball Bat
Z.C. Song, T.L. Zhang, C. Zhang and X.H. Song 1332

Evidence Theory of One-Dimensional Compression KNN Classification Method
W.F. Yan, G.X. Wu, C.Z. Li and L. Zhou 1337

Analysis of PDR Passenger-Sharing Rate Based on Service Attributes
T. Zhou and H. Fang 1342

Qualitative Analysis and Quantitive Account for Tunnel Fire Location
L.Q. Zhu and X.Q. Zhou 1347

The Research of Neural-Fuzzy Inference System Model for Arm of Excavator Robot
F.B. Wang, J. Liu, Z.K. Chen and D.M. Guo 1352

Stability and Bifurcation Analysis in a Delayed Predator-Prey Model with Stage-Structure and Harvesting
Z.C. Jiang and M.W. Nie 1358

Optimal Operational Planning of Utility Systems in Petrochemical Plants Using an Improved Particle Swarm Optimization Algorithm
W.Z. Dai, Z.Y. Huo, H.C. Yin and H.F. Liang 1364

Multi-Objective Optimization of the Housing's Fillet Angle of the Universal Rolling Mills Using Improved Genetic Algorithm Combined with FEM
J.H. Ma, W.Z. Zhang, W. Chen and S.P. Chao 1370

BIM Digital Technology in the Construction Industry in the Field of Application
L. Zhu, W.S. Lian and F. Wang 1375

Institutional InnovationGuarantee of Agricultural Industrialization Operating Performance - Take the "Lihua Mode" as an Example
Y.H. Sun, X.H. Liu and F.M. Zhou 1380

Research on the Arithmetic of the Image Processing of Flange Weld Seam
P. Huo, X.Y. Li and J. Han 1386

The Numerical and its Application in the Interval Estimates and Hypothesis Test
X.C. Wang, X.H. Ma and B. Han 1391

Regularity of the Very Weak Solutions for Double Obstacle Problems
X.J. Xu, X.N. Lu and Y.X. Tong 1396

Based Flying Capacitor Converter Wind Power Generator System
H.Y. Xu 1401

Based on Wireless Network Migration Multimedia in Education Application
D. Lu and J.G. Dai 1406

Effect of T6 Heat Treatment on the Microstructures and the Aging Behavior of the Grain-Refined A356 Alloys
M. Zhu, G.C. Yang, L.J. Yao and Y.H. Zhou 1410

An Effective Tabu Search for the Vehicle Routing Problem with Backhauls
C.S. Liu, L.X. Li and J. Wu 1415

Assessment and Remediation of Landscape Water Quality in the Central Area of Zibo City
J. Lu and X.D. Liu 1420

Analysis of Electrostatic Precipitator's Vibration Cleaning Device
H.G. Peng, J.A. Liu, Y. Deng and Q. Xie 1424

Modification of Wheat Straws through Steam Explosion and its Effect on Panel Properties
S.X. Fu, G.P. Han, W.L. Cheng and J. Deng 1429

Experimental Analysis on Technology of Piezoelectric Self-Adaptive Micro-EDM
X.Z. Fu, Q.H. Zhang, G.H. Bao and Y.J. Zhu 1434

Effects of External Transverse Alternating Magnetic Field on the Heat Flux Density Distribution of Atmospheric Pressure Plasma Arc
J.B. Meng, X.J. Dong and W.J. Xu 1439

Implementation and Validation of an Improved Collaborative Optimization Method
M.H. Han 1445

Tensile Tests on High Strength Steel Q345 Notched Plates with the Moderate Thickness
W.Z. Wang, L.Y. Jiang, R.Q. Sun and X.T. Wang 1450

Influence of Submicron Alumina on Thermal Conductivity of the Filled EVA Encapsulant
M.X. Shen, Y.X. Cui and Y.M. Zhang 1454