

# Table of Contents

## Preface, Committees and Reviewers

## Chapter 1: Mechanical Engineering

<b>Research on Automated Analysis Approach for Tests of Hydro-Turbine Generator Sets</b> G.C. Xie and Z.H. Li	3
<b>Flat Knitting Machine Design Based on Display Accelerator</b> J.Y. Huang and M.Y. Gao	8
<b>Mechanical Analysis on Tennis Forehand Drive</b> X.H. Zhang	13
<b>Gear Failure Forms and Processing Technology Improvement</b> Y. Wei, H. Li and H. Gao	17
<b>Study on Combing Machine Based on Promotion Display Materials</b> X. Ren	21

## Chapter 2: Applied Mechanics, Vibration and Friction

<b>Research on Oil and Water Well Casing Damage in the Process of Oil-Field Development</b> Q.H. Li, W. Qu and H.C. Li	27
<b>A Simple Calculation Method of Assembled Type Steel Truss Bridge's Deflection</b> Z.J. Wang, L. Gao, X.H. He and H.B. Liu	31
<b>Study of STI Change Characteristics of Different Groups during Exhaustive Load Process with Vibration and Friction</b> M. Liu	37
<b>Analysis on the Frequency Expansion Seismic Processing Technology in TA112 Field with Vibration</b> S. Fang, X.R. Zhang, H.T. Cao and L. Liu	42
<b>Research on Retaining and Protecting Technology for Foundation Excavation Engineering of Soft Highway Section with Vibration and Friction</b> S.B. Li	50
<b>Measures for Controlling the Steel Support Welding Quality of Building</b> S.B. Li	55
<b>Study on the Safety of Bridge Structure</b> Y. Zhang and Y.D. Wang	59
<b>Study on Repairing and Strengthening Measures of Reinforced Concrete Truss Arch Bridge</b> H.Y. Luo, Q. Li and D. Zhao	64
<b>Vibration Analysis of Gear Drive System Based on Whole Transfer Matrix Method</b> F.J. Lv	69
<b>Distributed Wireless Acquisition System for Seismic Signal with Vibration and Noise</b> H.L. Li, X.G. Tuo and M.Z. Liu	75
<b>Design and Construction Analysis of Cement-Stabilized Macadam Foundation</b> D. Lin	80
<b>The Study on Tunnel Surrounding Rock Displacement Prediction</b> W.S. Shen	85
<b>Stream Turbine Vibration Fault Diagnosis</b> H.S. Su	90
<b>Mechanical Assembly Design Strategy for Rapid Development of Technology</b> D.D. Gao	95
<b>Study on the Durability of Highway Bridge under Heavy Traffic</b> Z.Y. Wang and L.J. Liu	100
<b>Defect Identification and Quality Control of Steel Structure Installation Projects Based on Fishbone Diagram</b> G.F. Wang	104

## **Chapter 3: Engineering for Green Manufacturing, Supply Chain Management, Decision-Making Technologies and Industry**

<b>A Comparative Study of the Equipment Manufacturing Industry Cluster Development Mode</b>	
T.F. Bi and P. Shen	111
<b>Research on Manufacturing Enterprise Training Management Information System Based on B/S Architecture</b>	
Y.X. Yang, C.Y. Yuan and N. Wang	116
<b>Research of Super Capacitance in Automobile Industry</b>	
Y.L. Zhang, Y.S. Wang and Z.X. Wu	122
<b>Research on Sustainable Mining Engineering</b>	
X.G. Yue, G. Zhang, Q.G. Ren, W.C. Liao, J.X. Chen, Z.Q. Zhao and X.L. Xie	126
<b>Improved Facility Layout of Manufacturing Production Workshops</b>	
S.Y. Jia and L. Huang	131
<b>Manufacturer Order Fulfillment Based on Multi-Objective Optimization NSGA II Model</b>	
L.Y. Shu and L.X. Yang	136
<b>Analysis on the Evolution of Information Construction Model in Green Industry Engineering</b>	
W. Xiao	141
<b>Study on Logistics Resources Integration Based on Sustainable Logistics Networking in Manufacturing Engineering</b>	
Z. Yi	145
<b>Safety Performance Evaluation of Green Building Based on Structural Equation Modeling</b>	
L.X. Hu	150
<b>Research on Passing Capacity of Tunnel Section of Highway</b>	
J. Liu	157
<b>Research of Driving Cycle for Electric Bus of Expo Guozhan Line</b>	
P. Gao, X.C. Zhu, Z.X. Ma and S.L. Zhu	163
<b>Green Supply Chain of Coal Chemical Enterprises</b>	
Y. Zhang	168
<b>Research on Inventory Transportation Integrated Optimization Model under the Supply Chain in Green Manufacturing Engineering</b>	
J.X. Xiao, Y.Q. Kang and S.S. Kong	172
<b>Study on Green Ecology-Oriented Fashion Design</b>	
W. Ding	179
<b>Evolutionary Game Research on Cooperative Development in Virtual Manufacturing Enterprise Engineering Management</b>	
Z.L. Geng and Q.H. Min	185
<b>Study on Municipal Water Supply and Drainage Designs</b>	
J.R. He	190
<b>Network Monitoring System in Sustainable Manufacturing Environment Based on .NET and Ethernet/SDARP</b>	
B. Liu, J.Q. Xia and K. Liu	194
<b>Analysis of Products Supply Chain Service System Development and Application in Service-Oriented Manufacturing Mode-Taking Professional Audio Equipment System for Example</b>	
H.N. Mei	199
<b>Study of Management Mode in Machinery Industry</b>	
J.F. Meng and J. Hou	204
<b>On Transformation and Upgrading Manufacturing Industry</b>	
Y. Zhu	208
<b>Analysis of Network-on-Chip Structure in Green Manufacturing</b>	
T. He and T. Qin	213
<b>Study on E-Commerce System of Green Mechanical Processing Enterprises</b>	
Y.P. Ding	218
<b>Study on the Regional Agglomeration of Manufacturing Industries</b>	
X.J. Li	222

<b>Two Basic Issues in the Development of Oil-Field Visualization</b> Q.H. Li, Q. Peng and P.L. Wang	226
<b>Study on Green Intelligent Supply Chain Cost Management in Manufacturing Engineering</b> F.L. Guo	230
<b>Manufacturing Grid Based on Service Request Mode</b> X.L. Xie and Y. Deng	235
<b>Manufacturing Evaluation Model Based on Multi-Attribute Making Engineering</b> P. Ye and Z.W. Chen	240
<b>Stepwise Regression Analysis of Work Locus of Control and Stress in Mine Emergency Rescuers</b> X.M. Li, X.H. Xu, S.Q. Yao, J. Li, R.Z. Wang, Y. Liu, Y.P. Bai and Y.L. Jin	245
<b>Study on Sustainable Integrated Program of Dump Open Pit Optimization</b> C. Chen, D.Q. Gan, Y.B. Zhang and H.J. Lu	250
<b>State Transition Model of Green Logistical Network in Manufacturing Engineering</b> Y.S. Huang and H.M. Du	255
<b>Research on Humanity in Development of Electrical Engineering</b> Y.J. Guo and W. Wang	259
<b>Remote Monitoring System for Green Farmland Engineering</b> R. Luo and Z.H. Zhang	264
<b>Machine Scheduling Scheme in Green Manufacturing Engineering</b> H.R. Diao, F.W. Shao and X. Li	268
<b>Ant Colony Optimization for Optimal Control in Manufacturing Engineering</b> J. Bai, L. Zu and W. Liu	273
<b>A New Image Watermarking Algorithm Using NSCT and Harris Detector in Green Manufacturing</b> D.D. Zhu, X.P. Zhang, Y.L. Zhang and J.B. Dai	277
<b>Research on Network Virtual Laboratory in Manufacturing Industry</b> Z.S. Teng	283
<b>Research on Deformation Monitoring of Manufacturing Engineering</b> K. Ma and M. Sun	287
<b>Design of Vehicle Reservation System in Manufacturing Engineering</b> L.M. Xie	292
<b>Thermodynamical Analysis-Based Design Calculation and Optimization of Chemical Industry Wastes Incinerator</b> H. Zhang, Y. Li, X.Y. He and X.F. Xu	298
<b>Carrying Capacity Estimation of Fleshy Prawn Based on Ecopath Model</b> M.L. Zhang, Z.B. Lv, H.J. Zhang, F. Li, S.W. Li, B.Q. Xu and Y. Zhang	303
<b>Design of Alarm Information in WLAN Monitoring System in Manufacturing Engineering</b> J. Zhao, B.L. Xiao and L.Y. Gao	308
<b>Analysis and Verification of Bullwhip Effect Based on System Dynamics</b> F.X. Yang, B.L. Zhang and Z.Y. Su	312
<b>Research of Pond Fire Model of Base Oil Tin</b> Y.C. Wu, W.H. Song, Z. Chen, X. Xu and K.R. Li	320
<b>Research on Green Hotels Based on Green Materials</b> B. Su	325
<b>Control Measures for High-Rise Building Operation Safety Management</b> Y.K. Chu	329

## **Chapter 4: New and Sustainable Materials Engineering**

<b>Study on Sculpture Based on New Materials</b> J.X. Wang	335
<b>Research on Visual Cortex Prosthesis System and Visual Information Coding Strategy Based on Sustainable Materials</b> H. Zhang and J. Wang	339
<b>Study on New Chinese Architecture Based on New Materials</b> Z.J. Wang and Z.H. Jiang	344

<b>Study of Biosafety of Nanomaterials in Sports Engineering</b> Y. Kai	348
<b>A Modified Protocol for Microbial DNA Extraction and Purification in Crude Oil-Spilled Marsh Soil</b> Y. Wang, J. Feng, G.P. Wang, X.G. Lv and X.Y. Wang	353
<b>Research of the Materials of Building Experimental Model</b> Y. Xia	358
<b>Studies on One-Step Preparation of Multi-Color Fluorescent Carbon-Doped Silica Biological Nanomaterials</b> W.W. Xiong, J. Guo, X. Chen and C.Y. Zhang	362
<b>Design of Sports Field Based on Nanometer Materials</b> B.F. Li	366
<b>Study on Low-Carbon Buildings Materials</b> J. Lin, Z.Y. Wu and J.X. Guo	370
<b>Art of Fashion Design Based on New Materials</b> Z.H. Jiang	374
<b>Sports Equipment Based on High-Tech Materials</b> S. Tao	378
<b>Emission Characteristics of PCBs of Combustion of Sludge-Coal Water Slurry in Fluidized Bed</b> X.L. Zhao and W. Zhu	382
<b>Aquatic Products Determination of Nonylphenol and Octylphenol</b> X.K. Cao, Q.Z. Qian, J.W. Tong and Q. Wang	388
<b>VSR Mechanism Based on MC Algorithm Simulation of Grain Growth Behavior of Sustainable Materials</b> X. Zou, X.J. Li, Y.Y. Gao, K.F. He and J.J. Kun	392
<b>The Application in the Movement Materials Based on the Grey Fuzzy Theory</b> B. Gao, H.N. Cao and H.T. Jiang	396
<b>Study on Mechanics Analysis of Underwater Explosion of Triethylaluminium</b> G.R. Liu, W. Lu, N. Wang and T. Zhou	401
<b>The Largest Eigenvalue Calculating Scheme of Catacondensed Benzenoids in Environment Engineering</b> F.Q. Zhan and O.F. Qiao	407

## **Chapter 5: Methodology, Devices and Instruments, Measure and Diagnosis, Evaluation and Testing**

<b>Interference and Countermeasures of Single Chip Microcomputer System</b> X.X. Zhao and X.M. Chang	413
<b>Efficient Solving Method of Common-Mode Interference in Balanced Bus</b> X.M. Chang and C.G. Gao	418
<b>Laser Array and Key Principles for Smoke Imaging Test</b> B. Lu, L. Wang and W. Tan	422
<b>Design of a Miniaturization Microstrip Antenna and Cavity Model Analysis</b> Y.X. Yang, H.C. Zhao, S. Chen and Y. Chen	427
<b>Research on Detection Techniques of Early Forest Fire Based on Dynamic Characteristics of Smoke</b> H. Lin, Z.P. Qiang, G.Z. Di and Z.G. Liu	431
<b>Three-Dimension Seismic Data Exploration Software in VR Platform</b> X.L. Kong, S.L. Wang and X. Su	436
<b>Feature Extraction of the Crack AE Signal Using HHT Transform</b> K.F. He, Z.J. Zhang and X.J. Li	441
<b>Line Selection Algorithm of Coal Mine High Leakage Based on Fuzzy</b> J.Y. Zhao, X.H. Ma and B.Y. Yan	445
<b>Research of P2P Traffic Real-Time Monitoring Technology Based on DPI</b> Y. Yi, Z.Y. Su, Q.J. Zhao and Z.C. Dai	451

<b>Chaotic Characteristics of Workface Gas Emission Time-Series Data</b> M.Y. Qiao and J.Y. Lan	456
<b>Embedded Digital Control System of the Automatic Test System</b> C.M. Zou	461
<b>Harmonic Detetion Algorithm Based on Identification and Simulation</b> Y.J. Wang, B.B. Xie and P.L. Wang	466
<b>Study on a New Joint Source-Channel Decoder Design</b> F. Zhong and S.X. Guo	471
<b>Paper Surface Defects Recognition Technology Based on Improved BP Network</b> A.J. Wei, Q. Li and T. Wei	476
<b>Mineral Information Extraction Using Hyper Spectral Remote Sensing Technology</b> H. Zhang	480
<b>Intelligent Construction Machinery Fault Diagnosis Based on Multiple Intelligent Machines</b> R.S. Wei	484
<b>Controller Design for Network Control System Based on Gray Prediction</b> X.L. Guo, Y.X. Li and T. Li	489
<b>Research on Improved Range of Passive Radio Frequency Identification Tag by Taking Advantage of Energy-Harvesting and Efficient E-Class Oscillator</b> G. Ye	493
<b>Unknown Input and Disturbance Output Reconstruction for a Class of Linear Systems</b> J.Q. Yang, Y.T. Chen and R. Wang	497
<b>A Lattice Discrete Model for Intensive RFID Reader Deployment</b> C. Chen, S.J. Zhou, J.Q. Luo and Y.P. Chen	502
<b>Energy Efficiency of Cell Range Extension of Picocell</b> Y.F. Lou, W. Guo and W.H. Xiong	507
<b>Printing Defects Detection Based on Two-Times Difference Image Method</b> Y.Y. Guan and Y.C. Ye	512
<b>The Application Research of PLC Temperature Control System Based on Fuzzy Neural Network PID</b> Y.W. Lu	517
<b>Counteraction of Constant Modulus Demodulation Scheme for Mixing Space Borne AIS Signals</b> S.Z. Zhu, Z. Liu and W.L. Jiang	523
<b>Efficient Ring Artifact Remove Scheme of Cone-Beam CT Image</b> H. Wang, G.C. Zhu, Y.Y. Wang and H. Liu	529
<b>Earthquake Disaster Assessment System</b> G.Q. Zhu, J.D. Xu and H.S. Huang	533
<b>Measurement of Moment of Inertia for Flywheel of Bicycles</b> J. Tang, S.S. Wang and Z.G. Zhang	538
<b>Research on a New Type of Integral Sum Graph with the Sequence Label Method</b> D.Y. Shi, X.P. Zhang and W.Y. Li	542
<b>Study of Applying Dynamic Decision Process to Evaluation of Air Safety</b> Y.Y. Wu	546
<b>Timing Acquisition Based on Cooperation Verification of Distributed Receive Antennas in Linear Cell</b> C.J. Qing, J.C. Wei, Y.X. Tang and J.L. Liu	551
<b>Design of DisplayPort Based High-Definition Video Monitor System</b> X.G. Wang and S.P. Zuo	557
<b>On Edge-Balance Index Sets of a Nested Graph with Infinite Paths and Power Circles</b> H.J. Tian and Y.G. Zheng	561
<b>Measurement the Transmission Characteristics of the Power Line Communication Channel Based on Periodic PN Sequence</b> P.L. Zhang and H.X. Zhang	567
<b>A Novel Fault Line Selection Method of Distribution Network Based on Wavelet Packet Energy</b> X.W. Wang, Y.J. Zhang and Y.X. Hou	572

## **Chapter 6: Mechatronics, Automation, Control, Net and Information Technologies, Simulation and Modelling**

<b>Optimized Vehicle Scheduling Algorithm of Distribution Center</b> Z. Wang	581
<b>Community Automatic Irrigation Control System Based on Zigbee</b> J. Li and D.Q. Han	587
<b>Study of Internet of Things in China</b> L. Wang and L.K. Zhu	592
<b>Study of Road Network Traffic Condition Based on Grey Comprehensive Evaluation Model</b> Y.C. Hu	595
<b>Study of Auto-Motive Network Based on CAN-BUS</b> L. Li, C.J. Shan and J. Luo	601
<b>The Study on Wireless Video Monitoring System Based on SOPC</b> J.M. Xu	606
<b>A Simplified Unbalanced Control Strategy of PWM-VSC Based on Line Voltage Calculation</b> Q.F. Zhu, X.B. Fu, S.J. Hu and B. Zhao	611
<b>Integrated Multiple Model-Based <math>H_{\infty}</math> Loop-Shaping Control</b> J.J. Du and J.C. Hu	617
<b>Social Security Research under Automation Control</b> F. Liu	621
<b>Automation Control of Group Work Outcome Assessment</b> D.D. Wang	626
<b>Research on Optimal Control and Simulation for Active Suspension Systems</b> Y.F. Qin, J. Hua and L.W. Geng	631
<b>Study on Intelligent Traffic Lights Based on Internet of Things</b> C.J. Xu	636
<b>A Wavelet Spatial Correlation Algorithm to Partial Discharge Denoising Based on MDL Criterion</b> L.S. Tian and W.X. Chen	642
<b>Research of Mine Personnel Positioning System Based on ZigBee</b> C.G. Wang and J.M. Cui	647
<b>Research and Realization of Monitor System of Campus Network Flow</b> B. Xu	652
<b>A Down Hole Safety Management ML2012 System Based on RFID Technology</b> C.Y. Yang and C.Y. Bai	657
<b>Research of Intelligent Traffic Management System</b> D.Y. Fang	662
<b>Navigating Design System with Fallback Support</b> Z. Liu and B. Sun	665
<b>A Flexible Attribute-Based Access Control for the Dynamic Cloud</b> M.M. Li, S. Gao and J.S. Wang	671
<b>Research on Machine Translation System</b> X.W. Feng	676
<b>Interactive Virtual Globe Service System Based on OsgEarth</b> J. Zhu and J.H. Wang	680
<b>Design and Implementation of CABAC Parallelization on Multicore DSP</b> H.X. Jiang, W. Zhao, X.H. Zhang and J.Y. Lu	685
<b>Design of Position System of Underground Mines Based on Zigbee Technology</b> B.D. Zhang and B.S. Su	691
<b>Wireless Position Based on Zigbee Network in High Speed Highway ETC System</b> B.S. Su and B.D. Zhang	696
<b>Automated Alarm Based on Intelligent Visual Analysis</b> Z.H. Li and Q.L. Li	701

<b>Study on the Data Security and Privacy Protection Mechanisms of the Internet of Things</b> W.M. Zhao, R. Wang and X.Z. Zhang	706
<b>VPN Packet Loss-Oriented Dynamic Control</b> S. Li, Q. Zou and W. Huang	710
<b>Fast 3D City Modeling with Unmanned Airship System in Henan Province</b> F.F. Xie, J. Zong and D.D. Wang	715
<b>Study on Traffic Prediction Algorithm Based on Multi-Scale Bi-Orthogonal Wavelet</b> Y. Li and Y. Chen	722
<b>An Improved Genetic Algorithm Based on Cellular Automata</b> H. Tang, Y.S. Ge, X.H. Pan and S.F. We	727
<b>A Fast and Accurate Tag Estimation Algorithm for Dynamic Framed-Slotted ALOHA Based on M/D/1 Queue in RFID Systems</b> H. Song	732
<b>Research on Malicious Behavior of Firmware Based on Hardware Resources Access Control</b> L.K. Yang, D. Chen, J. Mei and L. Xue	737
<b>Integrated Supervisory Control System Based on Distributed Component Management</b> J.W. Du and Y.D. Fang	744
<b>Electronic Guide System Based on SOPC</b> H.L. Shi and D.M. Zhang	749
<b>Study of the Exact Solutions and Chaotic Behaviors in a (2+1)-Dimensional Nonlinear System</b> S.H. Ma	755
<b>Multi-Scroll Chaotic System Based on Even-Symmetric Step-Wave Sequence Control</b> Z.L. Tang and S.M. Yu	760
<b>Lane-Level Positioning Method for 3D In-Vehicle Navigation System</b> L. Zhang, B. Wang, X.Y. Mi and L.F. Yi	767
<b>Recognition of the Analog Modulation Modes</b> X.F. Gao, Y.L. An and Y. Liu	773
<b>Bluetooth Transmission System Based on Embedded Linux</b> Y.P. Zhang	778
<b>Acoustic Target Location Algorithm Based on Zigbee Wireless Sensor Network</b> J.Y. Guan, Y.C. Xu and W.Y. Zhang	783
<b>Design on Manufacturing Engineering Community Monitoring System Based on Wireless Sensor Network</b> S. Wei	787
<b>ASIC Design of Encoding Circuit in Low Frequency Read-only RFID in Manufacturing Engineering</b> P.F. Lai and W.P. Jing	792
<b>On the Application of Open CNC System in Real-Time Operation</b> Z. Min	797
<b>Research on Coal Mine Rescue Robot Model</b> X.C. Wang, X.G. Yue, Q.G. Ren and Z.Q. Zhao	801
<b>Efficient Rebar Count Scheme Based on Image Recognition in Mechanical Engineering</b> Y.L. Lei, J.Z. Yang and Y.H. Zhang	805
<b>The Research of CNC Machine Monitoring System Based on OPC and Configuration</b> T. Chen	809
<b>Research on Elements of Information Conveying Based on Interface Design</b> Y.W. Hao	814
<b>Research of Fault Location in Low-Voltage Distribution Networks</b> Y.J. Zhang and J. Li	819
<b>Design of Smart Rescue Robot Based on ARM Remote Control</b> T.Q. Li and S.G. Wang	824
<b>GPU-Based PSO Application in Multiuser Detection and Trajectory Parameter Estimation</b> L. Sun, H.T. Zhang and X.P. Zhou	829
<b>Study on Urban Environment Color Design</b> L. Yu	833

<b>Processing of Mechanical Parts Based on Virtual Simulation</b> S.M. Wu, J.W. Song and Y.B. Fan	837
<b>Numerical Simulation of the Wind Field of Assembled Steel Truss Bridge</b> H.B. Liu, X.H. He, L. Gao and F. Li	841
<b>Predictive Analysis on Maintenance of Mining Dump Truck</b> Y. Cheng	848
<b>Simulation of Pumping Unit Based on Simulink</b> Z.K. Zhang, L. He and L. Yang	852
<b>Particle Swarm Optimization Algorithms Mixed Withdifferent Thermodynamics Mechanisms</b>	857
<b>Stability and Control Analysis on a Small-Scale Coaxial Helicopter with Bell-Hiller Stabilizer Bar</b> N. Zi and C. Ming	862
<b>Applications of Research and Development of Logging in Oil-Field Visualization</b> Q.H. Li, C.Y. Zhang and Y.F. Zhang	867
<b>Pulse Design for Ultra Wideband System Based on Generalized Gaussian Pulse</b> S. Chen, H.C. Zhao, Y.X. Yang and Y. Chen	871
<b>Study of Signal Distortions on Behavior of Internal Traders</b> T. Chang and L.M. Gong	876
<b>Study on Signal Integrity Simulation for High Speed Serial Rapid IO</b> H.X. Jiang, X.H. Zhang, W. Zhao and J.Y. Lu	881
<b>Computational Research of Internal Temperature Distribution for Liver Tissues under Laser Irradiation</b> G.X. Xiong and H.Y. Zhao	887
<b>Numerical Simulation of Roadway Deformation of Different Cutting Aperture</b> X.M. Gong, J.Y. Zhang and L.W. Guo	892
<b>Influence of Noise to Chaotic Time Series Prediction in Environment</b> Q.J. Shi, Y. Liu, J. Li, H.B. Ma, D.S. Liu and Z.W. Zhang	896

## **Chapter 7: Green Power and Environment Engineering**

<b>Study on the Property Dynamic Filtration Performance of Anthranilic Acid Copper in Environment Engineering</b> X.J. Wang, F. Wang and J. Jin	903
<b>Scheduling Scheme Based on Smart Grid of Energy-Saving</b> K. Zhang	908
<b>Online Monitoring System of Tailing Dam Seepage Line in Abominable Weather</b> O.Y. Wei and W.J. Li	913
<b>Research on Sedimentary Facies of Formation of Neogene in Oilfield</b> X. Xing, F. Cai and W.S. Hu	920
<b>Quality and Safety Warning of Edible Forest Products Based on Gray Forecast Model</b> P. Zhang, Z. Liu and Z.S. Ma	924
<b>Research on Water Pollution Monitoring System</b> H.Y. Li and S.J. Chen	929
<b>Research of High Precision DC Constant Current Source</b> D. Su, Z.H. Zhang and J.P. Zhao	933
<b>Research on Sustainable Environmental Monitoring System Based on GSM</b> W. Zhang	937
<b>Estimating Runoff and Environment Protection in Tao River Basin based on Swat Model</b> K. Xu and H.Q. Peng	942
<b>Soil Heavy Metal Pollution Analysis of City Surface Based on Neural Network</b> J.P. Pei, Z. Tai, S.X. Shuang, X.B. Yu and L. Ran	947
<b>Design and Analysis of the Building Environment Based on DeST Software</b> J. Shu and Y. Wen	952
<b>Non-Point Source Pollution Control Effect Based on Comprehensive Management of Small Watershed</b> L.P. Zhang	957



<b>Research Dry Crop and Irrigation Water Requirement in Environment Engineering</b> X.H. Wang, M.H. Guo and H.M. Liu	961
<b>Mining Exploration of Bauxite Based on High-Power Electrical Method</b> S.F. Fu	966
<b>Research on Algal Bloom Control for Environment Engineering</b> H. Jiang, J.L. Rui, H.L. Li, D.H. Zhao, J.J. Fu and S.Q. An	971
<b>Taxonomic Study on the Genus Lyophyllum in Sustainable Environment Engineering</b> X.Q. Wang, D.Q. Zhou, X.L. Zhang and S.H. Li	975
<b>Design of Intelligent Power Management System Based on Internet of Things</b> Y.Q. Jian, Z.H. Yu and S. Chen	979
<b>Design of Intelligent Green Power Management System</b> Y.S. Du, Z.H. Yu and Y.Q. Jian	984
<b>Analysis of Chinese Renewable Energy Engineering</b> Y.N. Wu and R.H. Xu	988
<b>Environment Protection Based on Internet of Things</b> R. Hu, Y. Wang and F. Wang	993
<b>Study on Efficient Grid Dispatching Scheme in Green Power Engineering</b> S.K. Li, Y. Xu, J.S. Mei and J. Zhang	999
<b>Research on Sustainable Power Distribution Network in Power Engineering</b> P. Wang	1003
<b>Design of Agricultural Intelligent Irrigation System in Green Environment</b> Y.K. Huang	1007
<b>Study on Urban Road Information Indicating System in Green Environment Engineering</b> Y. Chen and Y. Wang	1012
<b>Research of Customer Service Monitoring and Command System in Electric Power Engineering</b> H.B. Yue and F. Zhao	1016
<b>An Improved Direct Learning Architecture for Satellite High Power Amplifiers Pre-Distortion</b> M.Q. Yang, D.X. Guo, X.F. Pan, L. Lu and L. Yang	1020
<b>Miniature Gardening Collection Model in Green Environment Engineering</b> B. Fang	1025
<b>An Improved ID3 Algorithm for Power Equipment in Green Power Engineering</b> X.R. Cheng and Q. Wang	1029
<b>Power Distribution Automation System in Green Power Engineering</b> Y. Jia, Q. Fu, D.S. Ma and M.Y. Zhu	1034
<b>Power Harmonic and Interharmonic Analysis Based on TLS-ESPRIT and PSO Algorithm</b> Z.H. Dou, R.G. Yang, C.F. Gao and Y.J. Wang	1039
<b>Transformation Development and Eco-Environmental Protection of Resource-Exhausted City</b> S.X. Sun, Y.S. Zhu, C.Y. Cai, Y.M. Li, R. Tao and R. Sun	1045
<b>Load Forecasting of Green Power System Based on Data Mining</b> C.Z. Zhou, Y. Yan, H. Zhang, C. Wang and L. Wang	1050
<b>Study on Coal Performance Influence Based on Input-Output Model</b> C. Xu, L.Z. Zhao and K. Wang	1055