

2010 International Conference on Electrical and Control Engineering

(ICECE 2010)

**Wuhan, China
25-27 June 2010**

Pages 1-845



**IEEE Catalog Number: CFP1073J-PRT
ISBN: 978-1-4244-6880-5**

2010 International Conference on Electrical and Control Engineering

iCECE 2010

Table of Contents

Preface	lxx
Conference Co-Organizers	lxxiv
Program Committee / Reviewers	lxxix

Automation Control

Extended Online HECOL Based Multi-camera Object Tracking	1
<i>Jingjing Fan, Qing Lin, and Bo Hu</i>	
3D Electromagnetic Field Analysis for Mixing Suspension Electromagnet Used by Maglev Train	5
<i>Liu Shaoke, Guo Zhongjun, and Chen Guirong</i>	
3-Order Polynomial Phase Signal Parameter Estimation Algorithm Based on Instantaneous Frequency Curve Fitting Method	8
<i>Yingxiang Li, Weiwen Tang, and Yujun Kuang</i>	
A Blind Digital Watermarking Algorithm Based on Chaotic Systems	12
<i>Xuelong Hu, Wei Tian, Yongai Zheng, Xu Lian, and Wenjia Ruan</i>	
A Closed-Loop Adaptive Optical System Based on Genetic Algorithm	16
<i>Jie Li and Haiqing Chen</i>	
A CMOS-MEMS Thermoelectric Infrared Sensor	19
<i>Hung-Yu Wang, Po-Yang Tsai, Chih-Yi Liu, and Jyun-Jie Huang</i>	
A Constraints-Embedded OBS Process and Conjugate Gradient Optimizing Algorithm	23
<i>Wu Cui-juan, Li Dong, and Song Tian</i>	
A CT Centered on Rogowski Coil Applied for Low-Frequency Heavy Current Measurement	27
<i>Li Weibo, He Hong, Rao Jin, Zhang Mingyuan, and Ma Minzhong</i>	
A Design of ERF Shock Absorber Base on Fuzzy Control Technology	31
<i>He Fengqin, Zhang Chunhong, and Li Ning</i>	
A Detection System for the Vehicle Queue Length of Crossroad Based on DSP Image Processing	35
<i>Lu Weina, Ma Yuquan, Wang Qingzhu, Zhang Lihong, Zhang Yun, and Ma Shuying</i>	
A Digitized Water Display System Based on RS-422 Bus	39
<i>Jun Tao, Zheng Geng, and Qiongjian Fan</i>	
A Discovery Framework for Semantic Web Services in p2p Environment	44
<i>Fu-zhen Sun and Shen-gang Hao</i>	
A Distributed Digital Motion Control System Based SERCOS	48
<i>Shi Hongyu, Feng Yong, and Chen Na</i>	

A Face Recognition Method Based on DiaPCA and Neural Network	53
<i>Hongyuan Wang and Lei Zhao</i>	
A Fusion Estimation Method for Flight State Estimation	57
<i>Wang Runquan and Shi Zhongke</i>	
A Hardware Design of Defect Detection System in Cloth Belt Based on Machine Vision	62
<i>Zhenhua Zhao, Weifa Yang, Na Wang, and Zijie Xu</i>	
A High Accuracy Displacement Detection Method for Magnetic Bearing	66
<i>Zhang Wenyue, Yang Junyue, and Ge Yanjun</i>	
A High-precision $\Sigma\Delta$ Modulator for Real-time Signal Processing System.....	69
<i>Wang Zhu-ping, Zhong Shun-an, Nie Dan-dan, and Wang Xiao-qing</i>	
A Kind of New Method for Actuating the Linear CCD	73
<i>Yaqing Guo</i>	
A Low-Power Passive RFID Tag for UHF	76
<i>Wang Dongjian and Zou Ling</i>	
A Manual Mobile Phone Charger	79
<i>Li Linqiang, Wang Dahu, Zhang Tong, and Huang Mingke</i>	
A Method of Error Compensation in Image Based Visual Servo	83
<i>Wu Gang, Meng Zhengda, and Liu Jusan</i>	
A Milling Tool Wear Diagnostic Method Based on B-spline Fuzzy Neural Networks	87
<i>Weiqing Cao, Weilin Li, Kan Chen, and Huiping Huang</i>	
A Model Predictive Control Approach to Operational Efficiency of Intake Pump Stations	92
<i>Yuling Tang and Shirong Zhang</i>	
A Model Predictive Control Strategy for Path-Tracking of Autonomous Mobile Robot Using Electromagnetism-Like Mechanism	96
<i>Wang Yaonan, Yang Yimin, Yuan Xiaofang, Yin Feng, and Wei Shuning</i>	
A Model Set Design Method Based on Idiotypic Network	101
<i>Xue-song Xu, Yong-xian Zhang, and Di Ji</i>	
A Modification to the Current Algorithm of the Correlation Method for Cross Power Spectrum Estimation	105
<i>Guoyan Wang and Hao Qian</i>	
A Multiple Hypothesis Tracking Method for Extended Target Tracking	109
<i>Guan Zhai, Huadong Meng, Zhiwen Zhong, and Xiqin Wang</i>	
A Network Video Device Based on Specific Target Tracking	113
<i>Li Mingwei, Guan Jie, and Xie Xiaofei</i>	
A New Advanced Manufacturing Technology - An Optimization Assembly Method Based on RFID	117
<i>Li Zhekun, Wang Feng, Gao Lei, and Li Min</i>	
A New Analysis Method for Evaluating Enterprise Technical Competitiveness	121
<i>Zhang Dongli, Shao Dong, and Zhao Yanfang</i>	
A New Approach for Calculating the Secondary Arc Current and Recovery Voltage on Double-Circuit Transmission Lines	124
<i>Liqun Shang</i>	
A New Approach for Real-Time Detection of Abandoned and Stolen Objects	128
<i>Weihua Wang and Zhijing Liu</i>	
A New Disaster Monitor and Forecast System Based on RBF Neural Networks	132
<i>Xiulan Wang and Zhengzhi Han</i>	
A New Gaussian Mixture Model Optimization Method	137
<i>Lin Lin, Chen Jian, and Sun Xiaoying</i>	
A New Genetic Algorithm Combined Cultivating with Migrating Operators	141
<i>Zhurong Wang, Jing Liu, and Duwu Cui</i>	

A New Identification Strategy for Improving Convergence Stability of Load Model Parameters	145
<i>Wang Junzhi, Han Minxiao, and Ma Jie</i>	
A New Integrated Gate Driver with Shift Register Circuits Employing 4 Clocks for 14.1-inch TFT-LCD	149
<i>Changde He, Congwei Liao, Yinan Liang, and Shengdong Zhang</i>	
A New Method for Cable Monitor Wire Protection Based on Time-sharing Amplitude	153
<i>Kui Chen and Changqing Sun</i>	
A New Schedule Method for the Best Delay-Supply Time	157
<i>Zhang Jing-xiao, Lu Ning, Xu Fei, and Su Chuan-chuan</i>	
A New Sensor-Follow Control Strategy for Tracking Control Mobile Robot	163
<i>Shi Jingkui, Huang Wenxin, and Yin Liangliang</i>	
A New Smoke Concentration Measurement System: Low-Cost, High-Accuracy, and Easy-Implementation	168
<i>Yi Zeng, Tingli Cai, and Yongming Zhang</i>	
A New Type of Multi-focus Image Fusion Method Based on Curvelet Transforms	172
<i>Xuelong Hu, Huimin Lu, Lifeng Zhang, and Seiichi Serikawa</i>	
A Nonlinear Detector for Optimal DCT-Domain Watermark Detection	176
<i>Fabing Duan and Ying Wang</i>	
A Novel Color Image Filtering Algorithm-Based on Gray Scale Space Extremum-median Filter	179
<i>Zhang Licai and Bai Jingwen</i>	
A Novel Design of Master Control System for Induced Polarization Logging Instrument	183
<i>Huang Zhen, Zhang Pu, Zhou Kaibo, Kong Li, and Zeng Huaxiu</i>	
A Novel Dual-output DC-DC Converter Topology Without Transformer	187
<i>Xuefeng Hu and Jiayan Zhang</i>	
A Novel FPGA Control Process with AI-Fuzzy VCR Algorithm	190
<i>Qiusun Ye</i>	
A Novel Fuzzy Kernel Vector Quantization for Speaker Recognition with Short Utterances	194
<i>Lin Lin, Chen Jian, and Sun Xiaoying</i>	
A Novel Long-Distance Measurement Method Based on Secondary Radar	198
<i>Boren Zheng, Beniu Zhang, Zaixian Qing, and Xiaolong Liu</i>	
A Novel Measurement System for Hydrogenated Nanocrystalline Silicon Thin Films' Gauge Factor	201
<i>Pan Haibin, Yang Chunsong, Wang Xiaofei, and Li Boquan</i>	
A Novel Path Following Controller for an Uncertain Wheeled Mobile Robot	205
<i>Le Qi, Baoli Ma, and Wei Li</i>	
A Novel Positioning System of Overhead Crane	209
<i>Li Jun-fang, Li Tao, Leng Jian-wei, and An Fei</i>	
A Novel Testing System Based on Virtual Instrument for Synchronous Generators	213
<i>Liu Ping, Wu Chengming, and Xiao Jianxiu</i>	
A Precise Measurement of Windings Axes and Stiffness Coefficient for Power Magnetic Bearing	217
<i>Yang Junyue, Zhang Wunyue, and Ge Yanjun</i>	
A Profile Modeling Technology of the Reverse Engineering Digital Sample-Mode	221
<i>Jianlan Feng, Yuping Li, and Mianzhou Chen</i>	
A Recognition Algorithm Based on NAPS Kernel Hyper-Sphere Support Vector Machine	224
<i>Zhang Xinyi</i>	
A Remote Vehicle Diagnosis and Maintenance System Based on Internet	228
<i>Cao Kai and Yan Fuwu</i>	
A Reprogramming Protocol Based on State Machine for Wireless Sensor Network	232
<i>Yin Ling, Hong Tiansheng, Liu Caixing, Xia Yue, and Zhou Haoen</i>	
A Research of Health Detection System for the Rotary Kiln	236
<i>Li Zhixiang, Li Hengwu, Zhu Jin, and Zheng Jing</i>	

A Research on the Methods of Forecasting and Controlling for Air Compressor	240
<i>Wang Shenghui, Jin Xing, and Tian Wei</i>	
A Resource-Efficient Decoder Architecture for LDPC Codes	244
<i>Qinzhi Hong, Jun Wang, and Weilong Lei</i>	
A Robust Targets Matching Algorithm in 3D Reconstruction from Multi-views	249
<i>Jianying Yuan, Lifang Wang, and WenBin Wang</i>	
A Simplified Lumped Parameter Model for U-Tube Steam Generator	253
<i>Zhang Yongsheng and Ma Yunyi</i>	
A Six-Degree-of-Freedom Virtual Mouse Based on Hand Gestures	257
<i>Xingseng Wang and Kaihuai Qin</i>	
A Specific Harmonic Detection Method for Three-Phase Four-Wire Circuits Based on Multi-frequency Rotating Coordinate Transformation	261
<i>Su Shiping, Liu Guiying, Lei Jianing, and Qin Zhiqiang</i>	
A Stability and Transparency Analysis of Steer-by-Wire System Based on the Bilateral Control and Dual-Port Network Theory	265
<i>Liu Zhao and Peng Wei Ping</i>	
A Statistical Model for Gears Noise Prediction in Gearbox	270
<i>Cheng Guangming and Xu Yudong</i>	
A Structure Measure of Multicast Tree Based-on Fuzzy in MANET	273
<i>Ning Chen and Qimin Zhang</i>	
A Study on Method of Intelligent Fault Diagnosis in Large and Complex Device	277
<i>Yiming Bai and Xianyao Meng</i>	
A Study on Operational Efficiency of the Electricity Market Base on Synergetic Theory	281
<i>Pinyi Zhang and Chunjie Li</i>	
A Study on the Residual Life of High-Temperature Boiler Tube for Inner Wall Oxidation Thickness	285
<i>Zhi-yuan Zhao and Hong Xu</i>	
A Sub Peak Tracker Based Hough Transform for Accurate and Robust Linear Edge Extraction	288
<i>Xiaohui Chen and Xiaojun Liu</i>	
A SVM-Based Audio Event Detection System	292
<i>Li Lu, Fengpei Ge, Qingwei Zhao, and Yonghong Yan</i>	
A Temperature Measurement System Based on PT100	296
<i>Jiguang Liu, Yukun Li, and Hongyan Zhao</i>	
A Tourist Supervise System Based on RFID	299
<i>Fei Wang, Weijie Wang, Wentao Huang, Guangshun Xiao, and Xuezeng Zhao</i>	
A Two-Stage DEA Model to Evaluate the Science and Technology Activity Efficiency	303
<i>Yuan Lina and Yang Mingxin</i>	
A Unified Standard Traffic Light Display - The Single Pedestrian Light	307
<i>Yih-Jiun Shen</i>	
A Universal Interpolation Algorithm for Parametric Curves	311
<i>Pu Jun-guo, Xu Xin-ping, and Wu Sheng-qiang</i>	
A Verification Method of UML Model Based on SBOPN	315
<i>Xiaoling Yao and Xue Lin</i>	
A Vision Based Position System for Robot Picking	319
<i>Jinsheng Fang, Xiaoyan Deng, Cunmiao Sun, Lei Wang, and Yuanqing Huang</i>	
A Wavelet-Based Watermarking Scheme with Authentication and Recovery Mechanism	323
<i>Liu Hui and Hu Yuping</i>	
Achievement of an Adaptive Traffic Sense Algorithm in Traffic Scheduling	327
<i>Li Wei, Wei WenHong, Li Yong, and Hu XuanZi</i>	

Acoustic Topology Optimization of a Truck Cab Based on Coupled Panel Contribution Analysis	330
<i>Wang Binxing, Zheng Sifa, Hao Peng, Lian Xiaomin, and Li Keqiang</i>	
Adaboost Human Detection Based on a DSP Platform	335
<i>Xu Fen and Li Jie</i>	
Adaptive Backstepping Control of Chaotic Systems with Unknown Parameters	339
<i>Ma Junjie and Ma Shujing</i>	
Adaptive Control of the Grinding Process Based on Fuzzy RBF Neural Network	343
<i>Yunfeng Wang</i>	
Adaptive Fuzzy Control for a Dual-Thumbed Hand	347
<i>Zhao Hongcai and Wang Congqing</i>	
Adaptive Synchronization of the Fractional-Order Chaotic Systems with Unknown Parameters	351
<i>Ke Yin and Yanping Chu</i>	
An Action Classification Algorithm Based on MEI and LPP	356
<i>Lin Chunli, Wang Kejun, and Xia Yu</i>	
An Adaptive Echo Cancellation Method Based on a Blind Signal Separation	360
<i>Li Hong and Huo Zhengquan</i>	
An Analysis of Gabor Wavelet Algorithm for Tracking Driver's Feature Point	364
<i>Chunyu Zhang, Keyou Guo, and Guizhen Yu</i>	
An Autotuning PID Control Algorithm for Sensorless DC Motors	369
<i>Zhu An-ding, Xing Jian-guo, and Zhao Wen-min</i>	
An Elliptic Curve Based Message Source Authentication Protocol for Group Communication	373
<i>Changsheng Wan, Aiqun Hu, and Juang Zhang</i>	
An Elman Neural Network Application on Dynamic Equivalents of Power System	376
<i>Wei Chen, Qingwu Gong, Chuanye Yin, Tao Wang, and Jingsong Yao</i>	
An Embedded Corrosion Data Acquisition System for Marine Platform	380
<i>Lin Haibo, Wang Lina, and Yi Chujie</i>	
An Event Simulation Device to Assess the Performance of Sequence of Events for Distributed Control System in Power Plant	384
<i>Qing He, Zhi Zhang, and Kun Yang</i>	
An Image Preprocessing Algorithm of Weak and Small Target in Digital Video Interpretation System	388
<i>Li Zhuo and Geng Qi Xian</i>	
An Improved In-loop Deblocking Filter for Avs-P2	391
<i>Guang Ji and Qiupei Zhong</i>	
An Improved Localization Method for Indoor Service Robot	395
<i>Dong Lili, Meng Zhengda, and Lu Xiao</i>	
An Innovation PID Control Method of Split Air-conditioner Based on Online Prediction	400
<i>Shuanghua Cao, Fang Liu, and Wenbing Weng</i>	
An NProd Algorithm IP Design for Real-Time Image Matching Application onto FPGA	404
<i>Zeng Yonghong</i>	
An Optimal Control Strategy for Multi-evaporator Vapor Compression Systems	410
<i>Yuwen You, Aiguo Wu, and Shu Yang</i>	
An Ultrasonic Approach to Measure the Density of Battery Electrolyte	414
<i>Jia-xin Liu, Guo-feng Li, Wen-qiang Xiong, Hong-jun Xiao, and Lin Wang</i>	
Analysis and Application of Small Current Grounding System Transient Based on Mathematical Models	419
<i>Huang Zhiqin and Cui Shenjun</i>	
Analysis and Modeling of the Glitch Error in Current-Steering D/A Converter	422
<i>Si Hong-Wei and He Le-nian</i>	
Analysis of Impact on the Operating Speed of EMUs Which is Caused by the Decreased Catenary Voltage	426
<i>Gou Xiaogang and Li Mao-liang</i>	

Analysis of Inductor-Current of Boost DC-DC Converters and Its Design for Intrinsic Safety	430
<i>Tong Jun</i>	
Analysis of Power Consumption in a Submerged Arc Furnace for MgO Single Crystal Production	433
<i>Zhen Wang, Ninghui Wang, and Tie Li</i>	
Analysis of Spatial Distribution of Hexagonal Patterns Based on Fourier Spectra and Spatial Correlation Function	437
<i>Lifang Dong, Yuanyuan Li, Qian Song, Han Yue, and Hong Xiao</i>	
Analysis of Time Evolution of Patterns Based on Various Image Processing Techniques	441
<i>Junying Chen, Lifang Dong, Han Yue, Hong Xiao, and Yuanyuan Li</i>	
Analysis on Technology of Passable Ray and Airtight Cavity Temperature Measurement Applied to Hot Metal	445
<i>Yang You-song, Li Shu-jun, Li Yong-zhi, Zhao Cun-hu, Jia Xiu-min, Wang Peng-fei, Wang Li-ting, and Li Hai-long</i>	
Application and Theory of Auto Bit Feeding Technology in the Drilling Rig	448
<i>Ding Feng, Cheng Yang, Peng Wang, Qiang Luo, Li Liu, and Li Wu</i>	
Application of Acoustic Emission in the Study of Concrete	451
<i>Yang Li-hui, Xie Yuan-fang, and Sun Qicheng</i>	
Application of Adaptive Strategy Based on Model Prediction for the Stripe Thickness in Cold Rolling	456
<i>Xu Bing and Qian Ping</i>	
Application of Fuzzy-Neural Network Controller on Water Turbine Generator Set Based on T-S Model	460
<i>Huiqin Sun, Jianye Liu, Zhanwen Fu, Yun Du, and Suzhi Wang</i>	
Application of Improved Method Combined Elman NN with SVM in Tender Offer	463
<i>Wang Jing-min, Liang Xin-heng, and Yu Zou</i>	
Application of Improved Partheno-Genetic Algorithm in Distribution Network Switch Optimal Planning	467
<i>Chen Junhong, Hu Junxiang, and Zhen Xunyan</i>	
Application of Kalman's Filtering Method in Construction Control for Cable Replacement of the Cable-Stayed Bridge	471
<i>Sun Quansheng, Yu Haiying, Guo Xiaoguang, Wang Jiawei, and Wu Tong</i>	
Application of Machine Learning Methods in Active Power Security Correction of Power System	476
<i>Wang Pengxiang, Liu Wenying, and Liu Zhengyi</i>	
Application of Positive and Negative Separation Method in Stator Winding Fault Diagnosis	480
<i>Fan Bo, Dong Ming, Cheng Peiyuan, and Dong Tao</i>	
Application Research of Rough-GA-BP Method in the Real Estate Early-Warning System	483
<i>Han Dongmei</i>	
Application Research on RoboCup 3D Agent Walking Using Improved HEDGER Algorithm	486
<i>Wang Jun, Xu Jing, and Wang Hongyuan</i>	
Application Study on Control Strategy for the Hybrid Electric Public Bus	490
<i>B.H. Wang and Y.G. Luo</i>	
Applications of Wavelet-Packet in Fault Analysis of Hydroelectric Sets	495
<i>Liu Haiying and Dai Luping</i>	
Artificial Immune Algorithm Based Early-Warning System for Enterprise Financial Distress	498
<i>Pang Qingle and Zhang Min</i>	
Attitude Regulating Control for a Class of Satellites	501
<i>Chang-Fei Tong, Zhi-Biao Zhan, and Huai-Zhong Li</i>	
Audio Segmentation System for Sport Games	505
<i>Junfang Zhang, Baochen Jiang, Li Lu, and Qingwei Zhao</i>	

Auscultation Signals Analysis in Traditional Chinese Medicine Using Wavelet Packet Energy Entropy and Support Vector Machines	509
<i>Jianjun Yan, Xiaojing Shen, Chunming Xia, Yong Shen, Zhong Yan Gu, Yiqin Wang, Fufeng Li, Rui Guo, Chunfeng Chen, Lingyun Chen, and Bin Yan</i>	
Auto Turbine Control System Based on Two-Dimensional Stress Modal	513
<i>He Wankai, Sun Baomin, and Zhang Guang</i>	
Automatic Fire Alarm System Based on MCU	517
<i>Zhang Kun, Hu Shunbin, and Li Jinfang</i>	
Automatic Gain Control Method Based on Tunable Diode Laser Used for Ambient Trace-Gas Monitoring	521
<i>Hui Xia, Wenqing Liu, and Yujun Zhang</i>	
Automobile Simulation Research on Anti-lock Braking System Based on LabVIEW	524
<i>Chu Changbao and Zhang Xingwang</i>	
Based on CCD Imaging Ball Outside the New Algorithm for Extracting Profile	529
<i>Chijun Zhang, Liu Wangsheng, and Jinsong Xie</i>	
Based on Game Theory and Ant Colony Algorithm's Research on Group Robot Cooperative System Control	532
<i>Yang Ping, Yang Chao, Zhang Li, and Li Cuiming</i>	
Bayes Reliability Assessment for Micro-accelerometer Based on Failure Statistical Model	536
<i>Zhou Peng-bin and Ma Xi-hong</i>	
Bearing Faults Diagnosis Based on B-spline Neurofuzzy Networks	540
<i>Pan Fu, Li Jiang, Weilin Li, and A.D. Hope</i>	
Bilateral Asymmetry Detection in Mammograms Using Non-rigid Registration and Pseudo-color Coding	544
<i>Shengzhou Xu, Hong Liu, Xiangyang Xu, Enmin Song, and Jianye Zeng</i>	
Blind Path Identification System Design Base on RFID	548
<i>Jinying Chen, Zhi Li, Min Dong, and Xuben Wang</i>	
Building Virtual Reality Design System Based on DIVISION Mockup Software	552
<i>Lun Li, Ji-shun Li, Feng Du, and Dong-hong Si</i>	
Calibration Method of a TDR Soil Water Content Sensor Based on T-S Fuzzy Model	556
<i>Lu Qi-Fu, Xue Yue-Ju, Wang Kai, Mao Liang, and Cheng Lian-Cheng</i>	
CAN Bus Network Design Based on Bluetooth Technology	560
<i>Xiaohong Ren, Chenghua Fu, Tianwen Wang, and Shuxiang Jia</i>	
Car Rain Protection Airproof Performance Test Method Based on Ultrasonic	565
<i>He Xiao-ming and Liu Wei-juan</i>	
Casting Back Errant Stage in Multi-stage Manufacturing Process	569
<i>Jiali Zhao, Jiaohu Liang, and Chibing Hu</i>	
Chaotic Communication Systems: An Iterative Learning Perspective	573
<i>Mingxuan Sun</i>	
Chemically Sensitive Field-Effect Sensors for Polar Molecular Detection	578
<i>Shoucai Yuan, Xiaolin Fan, Xun Li, and Ziyu Wang</i>	
Chinese Semantic Role Labeling with Hierarchical Semantic Knowledge	583
<i>Xiaojun Lin, Meng Zhang, and Xihong Wu</i>	
Coal-Rock Interface Sensing Technology Applied for Horizon Control of Mining Shearers	587
<i>Wencui Yang and Shibo Wang</i>	
Coiling Temperature Optimal Setting Control Model Based on Genetic Algorithms and Application in Hot Strip Rolling Mill	591
<i>Zhang Dazhi, Ye Haili, and Xiang Xiaofei</i>	
Combined Performance Analysis of CHP System	595
<i>Zhen-xian Lin and Yong-ping Yang</i>	
Comparative Study on Voice Activity Detection Algorithm	599
<i>Xiaoling Yang, Baohua Tan, Jiehua Ding, Jinye Zhang, and Jiaoli Gong</i>	

Compensation Method of Cross-Axis Effect for AMR Sensor	603
<i>Jun Ouyang, Shi Chen, Lei Yu, Chao Zuo, Xinguo Chen, Shaobing Wu, and Xiaofei Yang</i>	
Complicated Pseudo Parallel Genetic Algorithm for Optimization Design	607
<i>Bitao Li</i>	
Conjugate Virtual Array Adaptive Beamforming	611
<i>Shuyan Ni, Naiping Cheng, and Zhengzhong Ni</i>	
Constructing Business Intelligence Solution with SharePoint Server 2007	615
<i>Zhijun Ren</i>	
Continuous Finite Time Tracking Control for Permanent Magnet Synchronous Motor	619
<i>Zhao Wang, Shihua Li, and Shumin Fei</i>	
Control Analysis and Autopilot Design for Static Unstable Missiles	623
<i>Yao Junkui and Qi Zaikang</i>	
Control Experiment of the Inverted Pendulum Using Adaptive Neural-Fuzzy Controller	629
<i>Yang Xiaohui, Liu Hesheng, Liu Guo-ping, and Xiao Gen-fu</i>	
Control Strategy for Three Phase Inverter Supply Based on Back-to-Back	633
<i>Zhu Haibin, Li Yaohua, Wang Ping, and Li Zixin</i>	
Control System for Path-Configurable Transportation Line for Large Cargo Handling	637
<i>Ma Yinyuan and Jiang Zhaoyuan</i>	
Correlation Analysis for AC Power Smart Sensor	640
<i>Jixue Xiao, Yu Yang, Kai Wang, and Shixi Li</i>	
Counteracting the Quantization Effects on Observers Based on a Novel Nonlinear Dead-Zone	644
<i>Jie Xu, Fuliang Bao, and Zhigang Fang</i>	
Credibility Evaluation Method Based on Cloud Model	648
<i>Jiao Peng and Zha Yabing</i>	
Current Measurements and Diagnosis on Dielectric Barrier Discharge in a Coaxial Geometry at Atmospheric Pressure	652
<i>Xuechen Li, Ning Yuan, Dongying Niu, Qian Song, and Yuanyuan Li</i>	
Cycle Kernel Based on Spanning Tree	656
<i>Jiang Qiangrong, Li Hualan, and Gao Yuan</i>	
Deadlock-Irrelevant Resource in Petri Nets Models of Automated Manufacturing Systems	660
<i>Hao Yue</i>	
Decision Support System for the Evaluation of Power Grid Investment Benefit	663
<i>Duan Cheng, Wu Kehe, Zhang Mingwen, and Han Changzhan</i>	
Defects Inspecting System for Tapered Roller Bearings Based on Machine Vision	667
<i>Wu Qinghua, Lou Xunzhi, Zeng Zhen, and He Tao</i>	
Design a Digital Notch Filter Based on Matlab Program for Photoacoustic Gas Sensing Systems	671
<i>Li Li, Zhenyu Song, Lei Liang, and Yiding Wang</i>	
Depression Spread Model with Cellular Automata	675
<i>Zheng Zeng, Rongxiang Zhao, and Hao Tang</i>	
Design and Application of Automatic Control System Based on Siemens TDC for Stainless Steel Hot Strip Mill	678
<i>Zhang Dazhi, Shentu Nankai, Kang Ming, Zeng Yong, and Zhao Wei</i>	
Design and Implementation of a Distributed Intelligent Network Intrusion Detection System	683
<i>Li Tian</i>	
Design and Key Technology Research into Auto-Targeting Fire Extinguishing System of Interior Large Space	687
<i>Guoliang Hu and Zhong Li</i>	
Design and Realization of a New Combustible Gas Alarm System	691
<i>Han Yaozhen, Xiao Hairong, Pan Weigang, and Shi Xianpeng</i>	

Design and Realization of Low-Cost, Fast and High-Precision FOG North Finder	695
<i>Jun Shen, Lingjuan Miao, Weixi Gao, and Jing Shi</i>	
Design and Simulation of LQR Controller with the Linear Inverted Pendulum	699
<i>Hongliang Wang, Haobin Dong, Lianghua He, Yongle Shi, and Yuan Zhang</i>	
Design for Virtual Engineering Structural Experimental System Based on UML	703
<i>Zhang Rui and Zhao Zhe</i>	
Design of a High-Precision Low-Pass Switched-Capacitor Filter	707
<i>Wang Zhu-ping, Zhong Shun-an, Wang Xiao-qing, and Nie Dan-dan</i>	
Design of Air Compressor Monitoring System Based on Modbus Protocol	710
<i>Tu Xuyue</i>	
Design of an Intelligent Sensor System Based on MC9S08EL16	714
<i>Yanchun Wang and Shaoxuan Luo</i>	
Design of Clustering Adaptive Fuzzy Control Based on Genetic Algorithm	717
<i>Yucheng Liu and Yubin Liu</i>	
Design of DC Pulse Power Supply Based on the Single-Chip Computer and PWM	721
<i>Gu Yong-jie and Wang Jian-jun</i>	
Design of Digital Thermometer Based on AT89C52 Single Chip Microcontroller	725
<i>Zhang Qian</i>	
Design of Dynamic Measurement System of Torque Based on MSP430	728
<i>Hou Pei-guo, Zhou Zhi-shuang, and Huang Liang</i>	
Design of Embedded Meteorological Data Acquisition System Based on CANopen	732
<i>Wang Bao-qiang, Wang Zhi-rou, and Yang Liang-liang</i>	
Design of Flexible Assembly Control System Based on Data Medium Moby-I	736
<i>Song Zhifeng and Chen Yitao</i>	
Design of Hybrid Architecture for Intelligent Service Mobile Robot	740
<i>Xie Wei, Ma Jiachen, Yang Mingli, and Zhang Yaowen</i>	
Design of Hybrid Integrated Capacitive Acceleration Sensor	744
<i>Ma Xi-hong and Liu Jun</i>	
Design of Intelligent Garbage Can Based on Infrared Sensors	748
<i>Wei Xiao-Hui and Sheng Hai-Yun</i>	
Design of Laser Marking Controller Based on ARM+FPGA	752
<i>Zhou Guoping, Liu Pingwei, Cheng Shengyang, and Zhu Bo</i>	
Design of Mould Trace Real Time Information System Based on RFID	755
<i>Haiyan Tan, Ruchun Cui, Zhiliang Xiao, Jiantie Hu, and Gang Liu</i>	
Design of Multi-channel Ultrasonic Flowmeter Based on ARM	758
<i>Jie Yang and Haining Jiao</i>	
Design of Multi-DSP Communication System Based on CAN Bus	762
<i>Xiaochun Guan, Guichu Wu, and Xiaojing Chen</i>	
Design of Multi-parameter Fusion Coulometer Based on Self-feedback BP Network	767
<i>Huaping Zhou, Hui Chen, and Jingzhao Li</i>	
Design of Numerically Controlled Cutting and Sealing Machine for Plastic Cup-type Lead	771
<i>Weilu Zhu and Huiqiong Deng</i>	
Design of PC/104 Processor Module Based on ARM	775
<i>Xiao Ke, Bai Wenle, and An Yanwei</i>	
Design of PLC Control System for Manufacturing Coal Slurry	778
<i>Liu Yan and Ji Zheng-biao</i>	
Design of Temperature and Humidity Intelligent Monitoring System	782
<i>Zhang Wei-zhao, Ma Sheng-qian, Fan Man-hong, and Li Jin-long</i>	

Design of Temperature Controller for Laser Diode Based on DSP and Fuzzy-PID Control	786
<i>Menglong Cong, Wenjia Xu, and Yiding Wang</i>	
Design of the High-Speed A/D Sampling Control Circuit Basing on FPGA	790
<i>Hongyan Dong and Hongmin Guo</i>	
Design of the Workstation for Extract Key Tooth Code	793
<i>Zhang Haifeng and Zhang Xinjie</i>	
Design on the Level Control System with High-Precision for the Micro-motion Platform	796
<i>Lin Wei and Xu Yang-fan</i>	
Development and Application of Dynamic Shape Control System in Hot Wide Strip Mills	800
<i>Jian Shao, Anrui He, Quan Yang, and Naian Shi</i>	
Development and Application of Mobile Water Level Monitoring Based on Multi-sensor Integration	803
<i>Hongmei Zhang, Weiliang Tao, and Ming Cao</i>	
Development and Implementation of Air & Coal On-line Monitoring System Based on AC Induction for Power Plant Boiler	807
<i>Xue Zhaomei and Jin Xiaoyang</i>	
Development of a Multi-motor Transmission and Control System of Latest-Twisting Machine Based on PCI Bus	811
<i>Xu Qiao, Zhang Zhiming, and Mei Shunqi</i>	
Development of a Remote Process Control Laboratory Using Configuration Software	815
<i>Huazhong Wang, Hua Cheng, and Jun Yao</i>	
Development of an Intelligent Prosthetic Knee Control System	819
<i>Siyuan Gong, Peng Yang, and Liang Song</i>	
Development of National Characteristic Tourism Products with AMT	823
<i>Qiu Wangbiao, Lv Shengnan, and Zuo Huiliang</i>	
Development of the Temperature Sensor for Measuring Heat Based on the Difference between the Specific Enthalpy	826
<i>Shenghua Bao and Shufen Wang</i>	
Development of Wireless Monitoring System Based on Digital Filter in Oil Well	829
<i>Lin Haibo, Liu Zunmin, and Yi Chujie</i>	
Development of Worm Gear and Worm Transmission Error Measurement System	833
<i>Zheng Yong, Peng Donglin, Chen Ziran, Wang Xianquan, and Yang Jisen</i>	
Development on Lithium Niobate High-Frequency (18.5MHz) Standard Ultrasonic Transducer	837
<i>Minyi Li and Zeliang Yang</i>	
Diagnosis on the Molecular Vibrational Temperature of a Micro-Plasma Jet Operated at Atmospheric Pressure	842
<i>Xuechen Li, Na Zhao, and Pengying Jia</i>	
Diconnected Components Kernel of Directed Graph	846
<i>Jiang Qiang-rong and Gao Yuan</i>	
Differential Evolution Inspired Clone Immune Multi-objective Optimization Algorithm	850
<i>Xu Bin, Wang Honggang, Qi Rongbin, and Qian Feng</i>	
Dual-Steering Control Strategy of 4WD EV Based on MPC	855
<i>Jingjing Fan, Yugong Luo, and Keqiang Li</i>	
Dynamic Control of Propagating Electromagnetic Waves Using a Plasma Photonic Crystal	860
<i>Weili Fan and Lifang Dong</i>	
Dynamic Template Preparing and Application on FLIR Target Recognition	864
<i>Guo Wen-pu, Sun Ji-yin, and Liu Hao</i>	
Effect of Hot Rolled Process on Microstructure and Properties of X70 Pipeline Steel	868
<i>Yun-li Feng, Jin-zhi Yin, and Zhi-qing Li</i>	

Electrical Parameters Measuring of SVC Based on CS5460A	872
<i>Chen Yang, Zai-lin Piao, and Qin-feng Ma</i>	
Electrical Properties Analysis and Control in Electric Hot Drilling	876
<i>Xu Lan-ying, Wu Qiang, Hu Xiao-fang, and Ye Bang-yan</i>	
Electrical Transport in Small-World Networks	880
<i>Pan Yong-Cai, Li Xiao, Liu Wen-Chao, and Pan Gui-Jun</i>	
Electromagnetic Signal Processing to Diagnose the Electron Density in Gas Discharge	884
<i>Xuechen Li, Dongying Niu, and Pengying Jia</i>	
Electronic Reader for the Blind Based on MCU	888
<i>Huang Xiaoli, Li Tao, Hu Bing, Cheng Qiang, Xiao Qiang, and Huang Qiang</i>	
Element Damage Detection of Steel Truss Structure Based on the Method of Wavelet Transformation	891
<i>Zhang Limei, Li Qilian, Zhang Yue, Du Shoujun, and Liu Weiran</i>	
Empirical Analysis on Co-movement of Stock Price of Gold Mine Enterprises and the International Gold Price	896
<i>Jing Wang, Lili Kou, Xuexi Hou, Jing Wang, and Zongfang Zhou</i>	
Environment Mathematical Model of Cucumber Cultivation in Multi-Span Plastic Greenhouse	900
<i>Zhou Ying and Wang Shuangxi</i>	
Equipment Modeling for Hardware-in-the-Loop Simulation System of Infrared Controlling and Guiding	904
<i>Xu Guozhen and Jiao Peng</i>	
Error Analysis and Improved Measures for Centralized Multi-users Electronic Energy Meters	908
<i>Jiafei Yao and Yu Zheng</i>	
Error Compensation and Implementation of Embedded High-Precision Magnetometer	911
<i>Lei Yu, Shi Chen, Jun Ouyang, Chao Zuo, Xinguo Chen, Shaobin Wu, and Xiaofei Yang</i>	
Establish of Coal Production Logistics Simulation System Base on WITNESS	915
<i>Feng Xiwen, Zhao Zhongling, and Sun Jian</i>	
Establishment and Dynamic Analysis of Vibration Model of TBM Disc Cutter in the Rolling Direction	919
<i>Kui Zhang, Yi-min Xia, Qing Tan, and Zhi-jun Xu</i>	
ETMD System in Vibration Control of Control Valve and Friction Compensation	922
<i>Yantao An, Yong Wang, and Fang Cao</i>	
Evaluation Method for Performance of Reverse Osmosis Antiscalants Based on the Turbidity	926
<i>Baiqing Zhou, Juan Liu, Lu Li, Xiaolan Chen, and Weinan Sun</i>	
Exact Controllability for Open Loop of the KdV-MKdV Equation	930
<i>Dianchen Lu, Ruoyu Zhu, and Yueling Cheng</i>	
Experimental Investigation of Coupling Fiber-Optic Sensor for Vibration Measurement	936
<i>Xu Jian and Ma Bin</i>	
Experimental Research on H _{oo} Control for Regenerative Braking of Electric Vehicle	940
<i>Zhang Chuanwei</i>	
Experimental Research on Producing Nanostructured Materials by Machining Al6061-T6 with Large Strain	944
<i>Huang Jun, Wang Shulin, Liu Xu, and Sun Chunhua</i>	
Experimental Study of Adiabatic Shear Critical Conditions in Orthogonal Cutting of AISI 1045 Steel	948
<i>Li Guohe, Yujun Cai, and Yan Bing</i>	
Explore and Analyze the Risk Management of Pig Industry Value Chain in China ——From the Angle of Farmer	952
<i>Sun Yan-hua, Zhou Fa-ming, and Liu Xiang-hui</i>	
Extraction of Radar Target Length Based on High Resolution Range Profile	956
<i>Liao Kuo and Yang Wanlin</i>	
Face Recognition under Complex Conditions	960
<i>Hu Tao, Liu Rui, and Zhang Mei-juan</i>	

Fast Filter Back Projection Algorithm Based on Hexagonal Grid	964
<i>Yi-Duo Wang, Ping Xi, and Wei Xue</i>	
Fast Image Matching Method and Its Applications in Underwater Positioning	970
<i>Hongmei Zhang, Nan Shao, Xiankuo Meng, and Aixue Wang</i>	
Fast Motion Estimation Algorithm for Scalable Motion Coding	974
<i>Zhang Ping, Chen Hu, and Wei Ping</i>	
Fast Vector Quantization Algorithm Based on Vector Features	978
<i>ShanXue Chen and FangWei Li</i>	
Fault Detection and Isolation Based on Optimal Fault-Tolerant Observers for Linear System	982
<i>Jianbo Yi and Qi Huang</i>	
Fault Diagnosis of Analog Circuit Based on Wavelet Neural Networks and Chaos Differential Evolution Algorithm	986
<i>Mu Li, Yigang He, Lifen Yuan, and Mu Li</i>	
Fault Diagnosis of the Blast Furnace Based on the Bayesian Network Model	990
<i>Pan Lian, Ning Ning, Chen Aiping, and Tong Yaobin</i>	
Fault Diagnosis Research in Nonlinear Circuit Based on Improved Particle Swarm Optimization Algorithm	994
<i>Yuan Haiying, Lei Fei, Ao Dun, and Xie Yongle</i>	
Fault Prediction Based on Data-Driven Technique	997
<i>Lin Luhui and Ma Jie</i>	
Fault Simulation and Diagnosis of Vacuum System Based on a Simulation Platform	1002
<i>Li Qing, Xu Zhihua, Hu Niansu, and Li Jun</i>	
Feature Extraction for Vibration Signal of Asynchronous Motor Based on Quaternion K-L Transform	1006
<i>Tong Jia</i>	
Feedforward Decoupling Intelligent Algorithm for Multivariable Based on FNN and Its Application in Biology Fermentation Control	1010
<i>Yefei Liu, Dean Zhao, Xianglin Zhu, and Yuejun Wang</i>	
Filtering Algorithm of MEMS Gyroscope Based on Swing Markov Interacting Multiple Models	1014
<i>Xiaodong Lu, Jun Zhou, and Yuanjun He</i>	
FMCW Radar Imaging with Multi-channel Antenna Array via Sparse Recovery Technique	1018
<i>Peng Wang, Huadong Meng, and Yimin Wei</i>	
Forecast and Analysis of the Effectiveness of Changsha Rail Transit Based on CA/GIS	1022
<i>Pei-juan Zhu, Huai-yu Tian, Hong Xiao, and Huan-kai Yu</i>	
Forward Simulation Platform of Driving Performance on Intelligent Hybrid Electric Vehicle	1026
<i>Tao Chen, Yugong Luo, and Keqiang Li</i>	
Forward-Looking Infrared Image Segmentation Using Support Vector Machine Based on Feature Extraction	1031
<i>Jing Xia, Jiyin Sun, and Hui Li</i>	
FPGA Soft-Core Based Step Motor Driving	1035
<i>Zhang Chengjun, Wu Xiaoguang, and Zuo Xiaoyan</i>	
Fuzzy Classification of Remote Sensing Images Based on Particle Swarm Optimization	1039
<i>Li Linyi and Li Deren</i>	
Fuzzy Multi-class Support Vector Machine Based on Binary Tree in Network Intrusion Detection	1043
<i>Lei Li, Zhi-ping Gao, and Wen-yan Ding</i>	
Fuzzy PID Control and Simulation Experiment on Permanent Magnet Linear Synchronous Motors	1047
<i>Sun Hua and Yuehong Dai</i>	
Fuzzy-PID Controller with Variable Integral Parameter for Temperature Control in Variable Air Volume Air Conditioning Systems	1050
<i>Lijuan Xing and Shizhong Yang</i>	
Gait Planning of the Gecko-Like Robot Transition to Wall	1054
<i>Wang Jing, Liu Ying, Li Xiaohu, and Meng Cai</i>	

Genetic Algorithm Based Computer Control System for Reheating Furnace Combustion	1058
<i>Qin Xiao Ping, Pan Lian, Liu Zhi Qiang, and Liu Xiao Ming</i>	
Global Exponential Regulation of Nonholonomic Chained Systems via Nonregular Feedback	1062
<i>Mingjun Li and Guoli Liu</i>	
Global Path Planning Method Based on Geometry Algorithm in a Strait Environment	1066
<i>Yajie Liu, Hangyu Wang, and Jun Xie</i>	
Global PID Adaptive Fuzzy Sliding Mode Control of Multi-link Robot	1070
<i>Xu Chuanzhong, Yang Guanlu, and Wang Yongchu</i>	
Global Position Tracking of Robot Manipulators via SM-NPID-like Controllers with Two Nonlinear Integral Actions	1074
<i>Bai-shun Liu, Feng-Lei Ding, and Ying-Ze Hao</i>	
Global Positioning of Robot Manipulators via NPID-like Regulators with Two Nonlinear Integral Actions	1079
<i>Bai-shun Liu, Bing-Li Tian, and Fan-Cai Lin</i>	
Global Synchronization Control for Lorenz System	1084
<i>Chang-Fei Tong, Zhi-Biao Zhan, and Huai-Zhong Li</i>	
GM (1, 1) Cosine Model and Its Application	1088
<i>Li Junliang and Liao Ruiquan</i>	
Graph-Based Chinese Text Categorization	1092
<i>Zonghu Wang and Zhijing Liu</i>	
Gray Image Watermark Algorithm in Integer Wavelet Transform Domain	1096
<i>Chen Yongqiang and Hu Hanping</i>	
Gray Relational Evaluation Model with Preferences Based on Characteristics-AHP	1100
<i>Li Gang, Zhang Xiaowei, and Yang Chao</i>	
H1 Control of Impulsive Systems with Quantized Feedback	1104
<i>Yingqi Zhang and Caixia Liu</i>	
Handwritten Chinese Character Recognition with Variable Precision Rough Set Approach	1108
<i>Wang Jianping and Zhang Damin</i>	
Harmonic Analysis Based on Prony Method with Acquisition Channel Error Correction	1112
<i>Guanlu Yang, Yanfeng Li, Zhenhua Cao, and Kaidi Yang</i>	
Harmonic Analysis of Power Quality Monitoring Device Based on IEC61850	1117
<i>Ying Wang and Jun Wang</i>	
Heavy Machine Failure Maintenance Strategy Study Based on FMEA	1121
<i>Deng Chao, Xiong Yao, Yuan-hang Wang, and Wu Jun</i>	
High Precision Clock Synchronization and Control Based on GPS	1125
<i>Li Zuohu, Hao Jinming, Li Jianwen, and Zhao Qile</i>	
High Precision Detection for Power System Parameters Based on Wavelet Transform under Asynchronous Sampling	1129
<i>Ying Zhang-Feng and Wu Jun-ji</i>	
Hybrid Genetic Algorithm for Advanced Planning and Scheduling	1138
<i>Junyu Yang and Wencheng Tang</i>	
Hydrogen Consumption Measurement Research Platform for Fuel Cell Vehicles	1142
<i>Fang Maodong, Chen Mingjie, Lu Qingchun, and Jin Zhenhua</i>	
Hydrometallurgy Process Control Based on Optimization Hierarchy and Fieldbus Technologies	1146
<i>Zhu Xiaoqing</i>	
Identification of Boiling Two-phase Flow Patterns in Water Wall Tube Based on BP Neural Network	1150
<i>Lei Guo, Shusheng Zhang, Yaqun Chen, and Lin Cheng</i>	
Image Feature Extraction Based on Compressive Sensing with Application of Image Denoising	1154
<i>Qiang Hou, HePing Pan, Juan Li, and Ti Wu</i>	

Image Segmentation Based on GBP Algorithm	1158
<i>Xu Sheng-jun and Zhang Xi</i>	
Impact Dynamics Analysis and Laboratory Test of FOPS for Engineering Vehicle	1162
<i>J.X. Wang, X.B. Tang, D.Y. Lin, and S.L. Feng</i>	
Implementation and Application of Remote IP Control System	1166
<i>Hou Shi-ying and Tong Shi-hua</i>	
Implementation of the Powder Dispensing of Digitization	1169
<i>Xin Geng, Li-ya Hou, and Wei-yi Zhang</i>	
Improved AdaBoost Algorithm Using VQMAP for Speaker Identification	1176
<i>Haiyang Wu, Yong Lü, and Zhenyang Wu</i>	
Improvement of Position Controller Based on Fuzzy Neural Network Performance	1180
<i>Jiang Weihua and Wang Hao</i>	
Improving Ant Colony Algorithm with Parameters Variation Mechanism	1183
<i>Yusen Cen, Fangmin Xiong, and Biqing Zeng</i>	
Impulsive Control of a Rup-Impacting Rotor System	1188
<i>Jieqiong Xu, Nan Wang, and Jie Fang</i>	
Individual Spark Advance Adjusting in a Multi-Cylinder Spark Ignition Engine	1192
<i>Niu Di, Shuang Kai, Huang Junhui, and Sun Jiajun</i>	
Influence and Analysis of IMU Attitude Measurement Error on Laser Point Accuracy	1196
<i>Han Yun, Cheng Xin-wen, Sun Hua, and Zhao Li-jian</i>	
Integrated Design of Measurement and Control System for Photovoltaic Generation	1200
<i>Xu Xiaoli and Zuo Yunbo</i>	
Integrated Guidance-Control System Design Based on H^∞ Control.....	1204
<i>Jian-guo Guo and Zhou Jun</i>	
Intelligent Electric Valve Design of the Application of PIC Single Chip Microcomputer	1208
<i>Zhang Qian and Zhang Fu Dong</i>	
Intelligent Vehicle System Design Based on MC9S12 Microcontroller	1211
<i>Wang He, Zhang Yunzhou, Yuan Quan, and Wu Hao</i>	
Interleaved Boost Expansion Flow Ttechnology in Robotics Application	1215
<i>Wen Zhiming and Zhang Anfu</i>	
Inverse System Control for Chaos of Salient Permanent Magnet Synchronous Motors	1218
<i>Xinghua Zhang</i>	
Kalman Filter Based on Wavelet Multi-scale Gas Forecasting System	1222
<i>Fu Hua and Wang Feng</i>	
Knowledge Reasoning System Architecture Based on Description Logic	1226
<i>Fuzhen Sun and Shengang Hao</i>	
Laser Line-Scanning Based Customized Shoe-Last System	1230
<i>Xiao Shunwang, An Zhiyong, Shi Hui, Feng Wubin, Li Lijuan, and Li Shengcai</i>	
License Plate Location Method Based on Integrated Features and Marker-Controlled Watershed Algorithm	1234
<i>Hongyuan Wang and Chunwan Yuan</i>	
Lightning Risk Assessment of Teaching Building and Electronics Based on the New National Standard	1238
<i>Cui Xue</i>	
Local Fractional Fourier's Transform Based on the Local Fractional Calculus	1242
<i>Xiaojun Yang, Zongxin Kang, and Changhe Liu</i>	
Localization of Multiple Speech Sources Based on Sub-band Steered Response Power	1246
<i>Weiping Cai, Xiaoyan Zhao, and Zhenyang Wu</i>	
Look-Ahead Difference PID Control Application in a Reboiler	1250
<i>Xiaoling Luo and Lei Deng</i>	

Management of Real Estate-enterprise Based on Philosophy Core of Dissipative Structures: Entropy	1254
<i>Li Yancang, Suo Juanjuan, and Zhou Shujing</i>	
Measurement Method for the Symmetry Error of Double Keyway in a Shaft	1257
<i>Zhao Xiaoming and Feng Yun</i>	
Mechanical Characteristics of Circular Arch Span Pipeline in Movement of Fixed End	1260
<i>Huimin Zhang and Jiazen Pan</i>	
Method to Transform a Kind of Semi-positive Quadratic Problem into Positive Quadratic Problem	1264
<i>Mingyu Wang</i>	
Micro-crack Damage Evolution of Fracturing Rock Chaotic Characteristics	1268
<i>Zhaowan Chun and Wang Tingting</i>	
MIMO Identification of 3 DOF Planar Micro Positioning Stage	1272
<i>Yang Jin, Yin Wensheng, and Duan Guanghong</i>	
Mix-mode Crack Growth Intelligence Analysis and Simulation Module Development Based on UIDL and APDL	1276
<i>Yuantao Sun and Qin Zhang</i>	
Model Experiment Study of Self Aligning System of Pinion of Low Speed Heavy Loading	1280
<i>Yuyi Zhai, Shiliang Yang, Liang Liu, and Lei Wang</i>	
Modeling and Analysis of the Material Orders in Composite Distribution	1284
<i>Lu Chunguang, Meng Lili, Yang Yin, and Pei Weichi</i>	
Modeling and Control for a Six-Rotor Aerial Vehicle	1289
<i>Liangliang Yin, Jingkui Shi, and Yimin Huang</i>	
Modeling and Dynamic Response Simulation of GTO-Based STATCOM	1293
<i>Huang Shao-Ping, Li Yong-Jian, Jin Guo-Bin, and Li Ling</i>	
Modeling and Simulation of Avionics Bus Signals	1297
<i>Bai He and Lu Hui</i>	
Modeling and Simulation of Humidity Inside Sealed Boxes	1302
<i>Chen Zheng and Zheng Guilin</i>	
Modeling and Simulation of Transcritical CO ₂ Heat Pump System with Throttle Valve	1306
<i>Junlan Yang, Yitai Ma, Min Xia Li, and Hua Tian</i>	
Modeling of Control and Signal Processing of MLS Simulation System	1310
<i>Miao Qiang, Wu De-wei, Meng Wen, and Tian Xiao-hua</i>	
Monitor and Fault Diagnosis of Vibration Abnormal State of Gearbox for Shape Rolling Mill	1314
<i>Ren Xueping and Qin Lili</i>	
Monitoring and Protection System of Roadheader Cutting Motor Based on CAN Bus	1317
<i>Li Xiaohuo, Sha Yongdong, Do Trungchieu, and Wu Zhiqiang</i>	
Multibody Dynamics Simulation of Balls Impact-Contact Mechanics in Ball Screw Mechanism	1320
<i>Hongkui Jiang, Xianchun Song, Xiangrong Xu, Wencheng Tang, Chunling Zhang, and Yuming Han</i>	
Multi-Objective Combinatorial Optimization of Multi-Product Single-Row Layout	1324
<i>Zhou Na, Xu Kelin, and Qin Wei</i>	
Multispectral Remote Sensing Image Restoration Based on Fuzzy Genetic Algorithm	1328
<i>Tao Zhang, Xiaohui Luo, and Song Wu</i>	
Multitarget Tracking Before Detection via Probability Hypothesis Density Filter	1332
<i>Huisi Tong, Hao Zhang, Huadong Meng, and Xiqin Wang</i>	
Neural-Network-Based Six-axis Force/Torque Robot Sensor Calibration	1336
<i>Zhihui Yao, Fei Wang, Weijie Wang, and Yu Qin</i>	
Neuron Learning Mechanism on China Construction Enterprises Knowledge Gap Compensation	1339
<i>Zhang Jing-xiao, Bai Li, Li Hui, and Zhou Tian-hua</i>	
New Dynamic Multiobjective Evolutionary Algorithm with Core Estimation of Distribution	1345
<i>Chun-an Liu</i>	

New Exact Solutions for the Variable-Coefficient Generalized Hirota-Satsuma Coupled KdV System	1349
<i>Chen Zigao, Li Junfen, and Liang Fang</i>	
New Method of Position Estimation for Self-Sensing Active Magnetic Bearings Based on Artificial Neural Network	1355
<i>Ming Tang and Changsheng Zhu</i>	
Nighttime Video Smoke Detection Based on Active Infrared Video Image	1359
<i>Liu YunChang, Yu ChunYu, and Zhang YongMing</i>	
NMI-Based Small Target Detecting Method	1363
<i>Wei Min, Chen HaiNing, Yan TianYun, Zhou Jin, Wu QinZhang, and Xu Bing</i>	
Nonlinear Control of Permanent Magnet Synchronous Motor Based on the Method of Control Lyapunov Function	1367
<i>Fan Cheng-hua, Cao Zhuo-liang, Jiang Xian-wei, and Cheng Xiao-zhang</i>	
Nonlinear Model of the Position of Dynamic Soft Reduction in Bloom Continuous Casting Process	1371
<i>Zhang YuBao and Wang ChangSong</i>	
Non-linearity Compensation for Syrup Concentration Sensor Based on BP ANN	1374
<i>Yan-me Meng and Lian-hua Huang</i>	
Novel Hysteresis Current Controller for Active Power Filter	1378
<i>Zeng Jiang, Liu Yan, Ouyang Sen, and Zhen Zaitian</i>	
Nth CDS Monte Carlo Pricing under Stochastic Recovery Rates	1385
<i>Wu Heng-yu, Chen Peng, Xiong Ling-yun, and Yan Wu</i>	
Numerical Simulation of Solar Energy/Air Compound Source Heat Pump Unit	1389
<i>Zhigang Zhang, Chunmei Guo, and Jie Liu</i>	
Numerical Simulation Research of NO _x Emissions Characteristic of Vehicle Engine Fueled with LPG	1395
<i>Li Xinguang and Zhang Aiguo</i>	
Object-Oriented Port Detection Based on Mean Shift Segmentation	1399
<i>Li Kun, Yang Ran, and Qin Qianqing</i>	
Observer-Based H ∞ Control of Fuzzy Systems with Quantized Feedback	1403
<i>Caixia Liu and Yingqi Zhang</i>	
One Fast Discrete Correlation Algorithm in the Frequency Domain	1406
<i>Hongmei Cui, Shiming Gan, and Feng Han</i>	
On-Line Diagnosis on Engine Misfire Based on Information Syncretic Theory	1410
<i>Hu Ming-jiang and Qi Li-qiao</i>	
Ontology-Based Resource Description Framework for Next Generation Intelligent Airborne Radar	1414
<i>Xi-kun Fan</i>	
Optimal Allocation of the Active Filters Based on the Tabu Algorithm in Distribution Network	1418
<i>Wang Yan-song, Shen Hua, Liu Xue-min, Liu Jun, and Gou Song-bo</i>	
Optimal Control and Simulation of Brushed Direct-Current Motor Stability Program	1422
<i>Chibing Hu and Yazhou Wang</i>	
Optimal Speed Control System of Generator Based on Chaotic Particle Swarm Optimization	1426
<i>Huilan Jiang, Yang Liu, Lin Liu, Huiqiang Ji, and Dapeng Shan</i>	
Optimal Tuning PID Controller for First Order Lag plus Time Delay System by Election Campaign Optimization Algorithm	1430
<i>Lv Wenge, Li Deyuan, Cheng Siyuan, Luo Shaoming, and Chen Zeyu</i>	
Optimization and Simulation of a Fuzzy Controller Based on Stochastic Bilinear Systems	1434
<i>Jie Yang and Haining Jiao</i>	
Optimization for Grain Gradation of Monolithic Refractory Based on Ant Colony Algorithm	1439
<i>Qin Ling and Li Zhi</i>	

Optimizing Material Distribution for Complex Curved Surface in Integrated Trajectory Optimization of Spray Painting Processes	1444
<i>Yong Zeng and Jun Gong</i>	
Optimum Design of Permanent Magnet Synchronous Motor Based on Gene Handling Genetic Algorithms	1449
<i>Jian Gao, Jiancheng Liu, Shoudao Huang, and Keyuan Huang</i>	
Order Quantity Problem for Fuzzy Market Demand	1453
<i>Li Li and Liu Jie</i>	
Overlap Analysis of the Images from Unmanned Aerial Vehicles	1459
<i>Cheng Xing, Jinling Wang, and Yaming Xu</i>	
Parallel Chaos Optimization Algorithm	1463
<i>Chunbo Xiu and Lifen Lu</i>	
Passive Tracking and Locating Radar Based on Double GSM Base Stations	1466
<i>Zhang Ping-chuan and Li Bu-yin</i>	
Path Planning of Flying Robot for Overhead Powerline Inspection Based on Key Points Algorithm	1470
<i>Liu Chang-an, Cheng Yi-qiang, Yang Guo-tian, and Wei Zhen-hua</i>	
Path Planning of Inspection Robot Based on Ant Colony Optimization Algorithm	1474
<i>Zhao Shaogang and Li Ming</i>	
Pedestrian Tracking Using Particle Filter Algorithm	1478
<i>Xu Fen and Gao Ming</i>	
Performance Analysis and Evaluation of Industrial Ethernet	1482
<i>Li Ming, Liu Hong-san, Lv Jia, and Zou En</i>	
Policy Modification in Flexible Agent	1486
<i>Yanbin Peng and Chunming Wu</i>	
Position Measurement and Wireless Measurement System of Straightness Error Based on Two-Dimensional PSD	1490
<i>Yuan Jiang, Qiu Zi-xue, Shao Jian-xin, and Cao Jin-wei</i>	
Power Cable Fault Diagnosis System Based on LabVIEW	1493
<i>Wang Mei, Duan Jinying, and Zhang Xiaoyan</i>	
Prediction for the Warpage of the Plastic Sheet Based on Artificial Neural Network	1496
<i>Qiubo Qian and Chuangyang Wang</i>	
Prediction of Power Transformer Oil Dissolved Gas Concentration Based on Modified Gray Model	1499
<i>Zheng Rui-rui, Zhao Ji-yin, and Zhao Ting-ting</i>	
Process Control and Simulation for the Fourth Party Logistics Using Value Chain Analysis	1503
<i>Zheng Leina, Pan Tiejun, and Yan Guoqing</i>	
Processing of Images in Gas Discharge by Spatial Correlation Function and Fast Fourier Transform	1507
<i>Lifang Dong, Junying Chen, Hong Xiao, Han Yue, and Yuanyuan Li</i>	
Proportional-Integral-Differential (PLC) Control System Design of Compressor Performance Test Bench	1511
<i>Yituan He</i>	
Pump-Control-Motor Combined Speed Governing System Based on Fuzzy Self-Tuning PID Controller	1515
<i>Tianhao Peng, Jiadong Liu, Xiaosong Hao, and Meisheng Yang</i>	
Rapid Hybrid Interpolation Method of Single Image	1519
<i>Ji Bin, Liu Hongchen, and Gao Yanying</i>	
Reactive Power Compensation Devices Optimization Based on Improved Ant Colony Algorithm	1523
<i>Huilan Jiang, Ming He, Lin Liu, Huiqiang Ji, and Dapeng Shan</i>	
Recursive Formulation for Dynamics of Manipulators with Joint Friction	1527
<i>Wenli Yao and Lulu Gao</i>	
Relative Coordination 3D Trajectory Generation Based on the Trimmed ACO	1531
<i>Yang Chen, Xingang Zhao, Chan Zhang, and Jianda Han</i>	

Reliability Analysis on Dual Power Supply Controller Based on FMEA and FTA	1537
<i>Huang Shize, Guo Qiyi, Zhang Minjuan, and Hu Jingtai</i>	
Reliability Study on Absolute Pressure Sensitive Chip Vacuum Packaging	1542
<i>Rongfeng Guan</i>	
Reliable Control for Uncertain Singular Systems with Time-Varying Delay	1546
<i>Ya-Mei Liu, Qi-Xun Lan, and Jia-Rong Liang</i>	
Remote Sensing Image in Mining Area Classification Based on LVQ2 Neural Network	1551
<i>Youjian Hu and Hongxia Luo</i>	
Research about Fuzzy-PID Control Method of pH Value in Chemical Industry Process	1554
<i>Xie Shi-hong</i>	
Research and Application on GA-Based Two-Stage Fuzzy Temperature Control System for a Type of Industrial Furnace	1558
<i>Peng Xiaohong, Mo Zhi, and Xiao Laisheng</i>	
Research and Design of an Intelligent Liquid-State Softstarter	1562
<i>Chang Yufang, Yuan Youxin, Chen Jing, and Huang Wencong</i>	
Research and Design of Virtual Oscilloscope Based on Sound Card	1566
<i>Deng Yi</i>	
Research and Design on Physical Multi-UAV System for Verification of Autonomous Formation and Cooperative Guidance	1570
<i>Ji Xiangyu, Wu Sentang, Liu Xiang, Du Yang, and Tang Jiqiang</i>	
Research and Development of Visual Inspection Device of Metal Aerosol Can Cover	1577
<i>Caihong Su and Na Xiang</i>	
Research and Implementation of the Security Method Based on WIA-PA Standard	1580
<i>Wei Min, Xuan Zhang, Wang Ping, Keecheon Kim, and Younghan Kim</i>	
Research and Simulation on Precise Navigation Method for High Altitude Unmanned Aerial Vehicle	1586
<i>Yang Bo, Wang Houqing, and Chai Yan</i>	
Research of Apple Harvesting Robot Based on Least Square Support Vector Machine	1590
<i>De-yuan Kong, De-an Zhao, Ying Zhang, Jin-jing Wang, and Hai-xia Zhang</i>	
Research of Auxiliary Parking System	1594
<i>Cheng Anyu and Dai Hongda</i>	
Research of Detecting System of Tower Crane Based on .NET Environment	1598
<i>Zhou Jianxing, Qiu Xinguo, Jiang Wei, and Lu Xu</i>	
Research of Electro-hydraulic Servo System Model and Reduction	1602
<i>Jing Binghua, Song Liwu, and Zhou Qingguo</i>	
Research of Face Recognition Based on LLE and RBF Neural Network	1605
<i>Y.M. Wu, L. Liu, and N. Li</i>	
Research of Fire Detection Based on Process Characteristic and LM Arithmetic	1609
<i>Liu Erli, Zhang Renceng, and Yang Jianhong</i>	
Research of Grey Forecasting Model on Tablet Weight of Tabletmachine	1613
<i>Luo Xiaohui, Tan Juan, Shi Zhaocun, and Hu Junhua</i>	
Research of Intelligent Home Control System	1616
<i>Lihua Deng</i>	
Research of Load-Balance Technique for Cooperative PSO	1619
<i>Liu Lei, Jing Tao, and Jia Lu</i>	
Research of Maximum Ratio of Torque to Current Control Method for PMSM Based on Least Square Support Vector Machines	1623
<i>Jun Zhao, Weiguo Liu, and Bo Tan</i>	
Research of NMR Oil Content Detection System Based on AVR	1629
<i>Hu Rui and Pan Lian</i>	

Research on Ship Maintenance Task Arranging Model Based on CSP	1633
<i>Zhang Bo and Yan Jin-Tun</i>	
Research of Solar Controller Based on Adaptive Fuzzy Algorithm	1637
<i>Zheng Chang Zheng and Wu Chuang Ju</i>	
Research on a New Network-Based Experimental Platform	1641
<i>Liu Qing-rui, Wang Zhong-jie, Xu Ran, and Han Ning</i>	
Research on an Automatic Counting Method for Steel Bars' Image	1644
<i>Xin Ying, Xue Wei, Yuan Pei-xin, Han Qing-da, and Chen Chang-hai</i>	
Research on Anodizing of Magnesium Alloy in Environment-Friendly Electrolyte with Nano-Al ₂ O ₃	1648
<i>Xiaochun Ma and Yuping Ni</i>	
Research on Breakout Prediction System Based on Multilevel Neural Network	1652
<i>Tingzhi Ren, Xueliang Shi, Dongmei Li, Xin Jin, Yujuan Wu, and Weiqiang Sun</i>	
Research on Characteristic of Bar Linkage Curve of Symmetrical Five Bar Mechanism	1656
<i>Xuegang Li, Teng Liu, Shuqing Zhang, and Liyang Feng</i>	
Research on Control Charts and Process Capability Analysis in Supplier Quality Management	1660
<i>Zhang Qinghua, Wang Zhuan, Cheng Guoquan, Zhang Lili, and Gao Jing</i>	
Research on Detection for Broken Wires in Non-rotating Rope Base on SVM	1664
<i>Hanjun Pu, Xiaopeng Xie, Shangyu Jia, and Guangchi Liang</i>	
Research on Digital Image Correlation Method Applied in Shear Test of New Style Automotive Structural Adhesive	1668
<i>Bin Li, Guobiao Yang, Qirong Zhu, and Fan Ni</i>	
Research on Direct Torque's Control Strategy for Three-Level Inverters Based on PI Regulating	1672
<i>Zhigen Yu and Baiqing Zhou</i>	
Research on Distributed 3D-GIS Based on WCF	1676
<i>Cai Chang, Wang Hao, Zhang Song, and Cui Tiejun</i>	
Research on Fault Diagnosis Method of Pressurization System of Water-Jet Cutting Machine Based on Support Vector Machine	1680
<i>Haixia Zhang, De-an Zhao, Wei Ji, Deyuan Kong, and Bo Chen</i>	
Research on Flexible Network Plan Simulation Based on Stateflow	1684
<i>Fan Ren and Yongli Yu</i>	
Research on Gas Station of Pipeline for Nondestructive Testing Technology	1688
<i>Cao Xiedong, Feng Rong, Chi-Jen Huang, Mei Jianyun, He Ye, and Li Gang</i>	
Research on Hybrid PSODE with Triple Populations Based on Multiple Differential Evolutionary Models	1692
<i>Xiaochen Wang, Quan Yang, and Yuntao Zhao</i>	
Research on Identification for Drawbead Geometric Parameters Based on Genetic Algorithm and Equivalent Model	1697
<i>Lifen Han, Weiping Wang, Shouyan Zhong, and Haibo Li</i>	
Research on IEC61850 Dynamic Modeling Technology	1701
<i>Wang Yan-chu and Hu Jian-feng</i>	
Research on Improving the Accuracy of the Ultrasonic Flow-Meter with Time Difference Method	1704
<i>Li Mingwei, Lv Guosheng, and Hu Yanguo</i>	
Research on Intermittent Experimental Equipment of Microwave Vacuum Drying and its Auto-monitoring System	1708
<i>Xu Zhen Fang and Wang Yan</i>	
Research on Local Area Network of Marine Gas Turbine Distributed Control System	1711
<i>Gao Jian-hua, Liu Yong-bao, and Huang Ying-yun</i>	
Research on Look-Ahead Control Strategy Based on Turbo PMAC for Parallel Kinematics Mechanism	1714
<i>Sun Hongchang, Dai Yi, Li Lina, and Z.G. Niu</i>	

Research on Neural Network Based Real-Time Thermal Load Prediction	1718
<i>Wei Dong, Zhang Long, and Liu Xi</i>	
Research on Non-Contact Measurement Technology for the Cylindrical Grinder	1721
<i>Sun Hongge, Cao Yi, Zang Yi, and Yan Xin</i>	
Research on ODMM Obstacle Avoidance Fuzzy Navigation Based on Ultrasonic-Absolute-Positioning	1725
<i>Jiang Lin, Liu Baiyan, Chen Xinyuan, Zhao Hui, Zhao Jie, and Yan Jihong</i>	
Research on Performance Prediction and Maintenance Strategy of Expressway Based on Fuzzy Optimum Theory	1730
<i>Liu Lijun and Zhang Hui</i>	
Research on Polymerizing Process Supervisory Control Strategies in PAN-Based Carbon Fiber Production	1734
<i>Yanfei Ye and Bailin Wang</i>	
Research on Predictive Functional Control over Lossy Packet Networks	1738
<i>Yin Yang, Xia Li, and Li Hong Ke</i>	
Research on Rapid Measurement of Medium Short Wave Longitudinal Road Profiles	1742
<i>Yang Diange, Han Yi, and Lian Xiaomin</i>	
Research on Remote Health Monitoring System for Wuhan Chang Jiang Bridge at Tianxingzhou	1746
<i>Tan Si-yun, Zhou Sheng-fei, Chun Wan, Chun Xiao, and Jing Chen</i>	
Research on Rotor Position Sensing of a Permanent Magnet Synchronous Motor Based on High-Frequency Voltage Injection and Kalman Filter	1750
<i>Ge Yongqiang, Wang Changsong, Zhou Xiaomin, and Wang Hui</i>	
Research on Shooting Action of Soccer Robot Based on Genetic-Fuzzy Algorithm	1755
<i>Wang Qiang, Zhang Jun-fu, and Yang Yan-jun</i>	
Research on Sliding Mode Control for Near-Surface AUV Depth Regulation in Waves Circumstance	1760
<i>Jian-sen Shen, Xu-chang Zhou, and Hong-gang Zhang</i>	
Research on Solving Laser Beam Quality Factor M^2 with Normal Equations	1765
<i>Wenbo Jing, Wenbo Yang, Xiaoman Wang, and Huilin Jiang</i>	
Research on Steam Turbine Speed Fuzzy Self-Tuning PID Control during Island Formation	1770
<i>Fei Wang, Zhihui Yao, Weijie Wang, Junqi Huo, and Xuezeng Zhao</i>	
Research on the Air-Conditioning Refrigerating Pipeline Leak NDT and Location System	1774
<i>Zhu Mu-cheng, Wang Ya-ping, Jiang Yong, Liu Shi-jie, and Tang Lin</i>	
Research on the Application of Machine Admittance in Surveying Pile's Bearing Ability	1778
<i>Su Yuehong and Song Liwei</i>	
Research on the Elevator Door Control System Based on the Image Processing Technology	1781
<i>Xi Zeng, Guo-jun Zhao, Yuan-ping Wang, Chao-rong Wang, and Jun-hui Wang</i>	
Research on the Follow-up Control for Gear Measurement	1785
<i>Liu Wei and Zhao Jun</i>	
Research on the Governor of Diesel Engine with Discrete Sliding Mode Variable Structure Theory	1789
<i>Xiao-Bing Mao and Min Xue</i>	
Research on the Method of Deformation Monitoring Prediction Based on Fuzzy Neural Network	1795
<i>Chen Gang, Ma You-li, Sun Hua, and Pan Xiong</i>	
Research on the Prediction of Breath Period Signal Based on RFN Network of Self-Adaptive Genetic Algorithm	1798
<i>Su Junjie and Zhong Quhai</i>	
Research on the Reliability of the Pyxos Network	1802
<i>Shuangqing Wang, Hongsheng Li, Jianchun Xing, and Ping Wang</i>	
Research on Time Synchronization in Cluster Robots Based on Wireless Network	1807
<i>Tan Dingzhong, Qiu Ying, and Wang Qiming</i>	
Research on Virtual Assembly and Simulation of CNC Grinder	1811
<i>Weiming Du and Fei Xue</i>	

Research on X-ray Non-Destructive Detection Method and System of Strips Density in Case	1815
<i>Qian Feng, Jijun Zhao, Nankang Xiang, Qixiu Hu, and Juanjuan Li</i>	
Researched on a Novel PV Power Inverter Applied in Micro-Grid	1819
<i>Wei Wang, Weimin Chen, and Hui Cai</i>	
Robust H ∞ Filtering for a Class of Uncertain Impulsive Systems	1822
<i>Wu-Hua Chen, Xiaomei Lu, and Guo Yuan</i>	
Robust Active Front Steering Control Based on the Mu Control Theory	1827
<i>Yuan Chao-chun, Chen Long, Wang Shao-hua, and Jiang Hao-bin</i>	
Robust Control Study for Four-Wheel Active Steering Vehicle	1830
<i>Feng Du, Ji-shun Li, Lun Li, and Dong-hong Si</i>	
Robust H ∞ Fault-Tolerant Control of a Class of Stochastic Markovian Jump Systems.....	1834
<i>Yizhong Wang and Jinye Wang</i>	
Robust Impulsive Guaranteed Cost Control of Uncertain Chaotic Lur'e Systems	1838
<i>Wu-Hua Chen, Li-Li Wang, Dan-Xia Li, and Xiaomei Lu</i>	
Robust Method for Solving Rational Function Model	1843
<i>Chen Libo and Jiao Weili</i>	
Robust Stability Analysis of Discrete Interval Systems	1848
<i>Qin Ling</i>	
Saddle-Point Equilibrium Strategy for Continuous Singular Bilinear System	1851
<i>Zhu Huainian, Zhi Jinghan, Zhang Chengke, Bin Ning, and Sun Pei-hong</i>	
SAR Imaging of Moving Targets via Compressive Sensing	1855
<i>Jun Wang, Gang Li, Yimin Liu, and Xiqin Wang</i>	
Selective Ensemble Learning Algorithm	1859
<i>Jiang Yu-yan</i>	
Self-Tuning Zero Phase Error Tracking Control of AC Permanent Magnet Linear Synchronous Motor Servo System	1863
<i>Qu Yongxin, Cui Yang, and Yang Liyuan</i>	
Semantic Analysis on Knowledge System of Intelligence Science and Technology	1868
<i>Yinghui Huang and Guanyu Li</i>	
Semantic Class Induction for Language Model Adaptation in a Chinese Voice Search System	1872
<i>Yali Li, Weiqun Xu, Changchun Bao, Ta Li, Jielin Pan, and Yonghong Yan</i>	
Semi-Automatic System for Testing Dielectric Properties of Low-Voltage Busbar	1876
<i>Yang Xuemei and She Jiangfeng</i>	
Semiconductor Laser High-precision Temperature Control System Basing on Digital Signal Processing	1880
<i>Chen Chen, Lei Li, Chengjun Dong, Hai Yu, and Yiding Wang</i>	
Service-Oriented Transparent Interconnection between Data-Centric WSN and IP networks	1884
<i>Hua Cao and Jiazhong Chen</i>	
Setpoint Optimization for Billet Reheating Furnace Based on Dynamic Immune Algorithm	1888
<i>Sun Xuegang, Yun Chao, and An Zhengang</i>	
Shadow Detection Method in Video Surveillance System	1892
<i>Li Zhang and Changjun Wang</i>	
Silicon Microgyroscope Based on SPLL and LMSD	1896
<i>Dunzhu Xia, Shourong Wang, and Xia Sheng</i>	
Simulating Research on Fuzzy PID Control to Synchronous Closing Operation of Permanent-Magnet Vacuum Circuit Breaker	1900
<i>Shu Xin-mei, Fang Chun-eng, and Wang Jun</i>	
Simulation Analysis of Intelligent PID Corrective Control Algorithm Based on MATLAB	1904
<i>Zhuo Zhang, Chenhui Jia, and Xintao Xia</i>	

Simulation and Evaluation of PID Control and Fuzzy Control	1907
<i>Haixia Zhang and Changqing Li</i>	
Simulation Design of LC VCO Based on 0.18 μ m CMOS Technique	1911
<i>Ye Jianfang and Jin Jiaxi</i>	
Simulation Implementation of FH Communication System Based on General Quadratic Prime Code	1915
<i>Ji-hua Lu and Meng Xie</i>	
Simulation of ARINC429 Bus Signal and Analysis of Transmission Characteristics	1919
<i>Yan Liqin, Li Xiaobai, and Lu Hui</i>	
Simulation of Phase Transformation in Welding Heat Affected Zone of 9% percent Ni steel	1923
<i>Yan Chunyan, Li Wushen, Xue Zhenkui, and Bai Shiwu</i>	
Simulation of Position Control for X-Y Table with Nonlinear Friction and Backlash	1928
<i>Zezhong Xia, Yanqing Fu, and Gang Wang</i>	
Simulation Research of Control Strategy on the Direct Transmission System of Tension Leveller	1932
<i>Bing Chen, Delai Chen, Zhongjun Yin, Yalin Zhang, and Hongliang He</i>	
Simulation Research on PMSM Vector Control System Based on SVPWM	1936
<i>Jia Gui-xi, Zhao Hui-chao, and Shao Hong-jun</i>	
Simulation Studies on Timing-Oriented Performance of a New Feeding System	1941
<i>Ge Yang, Qiu Zhi-ming, Xiao Liang, Ge Yang, and Li Yong-bo</i>	
Simulation Study on Ship Motion Control Algorithm Based on AOCS Structure	1946
<i>Hongbo Wang, Yiping Guo, and Zhao Pan</i>	
Single Sensor Information Fusion for Local Fault Prediction of Large Rotating Machinery	1950
<i>Sun Jianghong, Zuo Yunbo, and Xu Xiaoli</i>	
Skin Color Segmentation Based on Improved 2D Otsu and YCgCr	1954
<i>Minghua Zhao and Yonggang Zhao</i>	
Sliding Mode Ccontrol for 5-DOF Manipulator	1958
<i>Zhang Jiageng, Jiang Wenpin, Huang Weibin, and Zhang Yu</i>	
Small Hydropower Station Monitoring System Communication	1962
<i>Li Yan-pin, Chang Ji-yuan, and Li Xiaoqin</i>	
Small Hydropower Station Monitoring System Structure Analysis	1965
<i>Li Yan-pin and Chang Ji-yuan</i>	
SOC Estimation of Lead-Acid Batteries Based on UKF	1968
<i>Changhao Piao, Zhihua Sun, Zhangzhou Liang, and Chongdu Cho</i>	
Software Design for Real-Time Measuring and Control System Based on LabView and 1553B	1973
<i>Xudan Xu and Ping Zhang</i>	
Software Development on the Establishment of Local Marine Geomagnetic Filed Model	1977
<i>Shengping Wang, Jianhu Zhao, Aixue Wang, Kun Yang, and Chunhe Tian</i>	
Spatial Distributions of Plasma Temperature in Hollowneedle-Plate Discharge	1981
<i>Lifang Dong, Weiyuan Liu, Yujie Yang, and Shuai Wang</i>	
Speckle Reduction for SAR Images Based on Adaptive Gaussian Mixture Models	1985
<i>Yanqiu Cui, Tao Zhang, Shuang Xu, and Houjie Li</i>	
Stability and Bifurcation in Enterprise Symbiosis System with Delay	1989
<i>Jiao Aiying and Wang Xiao</i>	
Stator Vibration Analysis of Bearingless Switched Reluctance Motors	1993
<i>Yang Yan, Deng Zhiqian, Zhang Qianying, and Wang Xiaolin</i>	
Stored-Grain Insect Image Processing Based on a Hidden Markov Model	1997
<i>Yaling Lu and Shihong Qin</i>	
Structural Surface of Mould Softness Abrasive Flow Precision Polishing Machining Method Based on VOF	2001
<i>Bo Tang, Shiming Ji, and Dapeng Tan</i>	

Study of an Auto-Detecting System of Micro-Aperture	2006
<i>Zhou Guo-Peng and Lin Fu-Shen</i>	
Study of Balanced Stability on the Hybrid Magnetic Levitation Ball System	2009
<i>Jiang Dong, Yang Jia-xiang, Jiang Di, and Ma Ling-ling</i>	
Study of Coherency-based Dynamic Equivalent Method for Power System with HVDC	2013
<i>Zhou Yang, Duan Yao, Zhang Buhan, Li Junfang, and Wang Kai</i>	
Study of Control System of Brushless DC Motor in Mobile Robot Based on DSP	2017
<i>Bin Pan, Zhijiang Jiang, and Qingye Jiang</i>	
Study of Dynamic Calibration of Cement Stabilized Soil Mixing Plant	2020
<i>Lingyun Kong, Wei Tan, and Ming Wei</i>	
Study of Fuzzy Neural Network on Wind Velocity Control of Low-Speed Wind Tunnel	2024
<i>Chuan-Zhong Xuan, Zhi Chen, Pei Wu, Yong Zhang, and Wang Guo</i>	
Study of Intellectualized Fluorescence Spectrometer with Optical Fiber	2028
<i>Wang Jiulong</i>	
Study of Local Dry Automatic Underwater Welding Test System	2031
<i>Zhu JiaLei, Jiao XiangDong, and Zhou CanFeng</i>	
Study of Locating Ways of Pipelaying Manipulator	2035
<i>Dan Wang and Li Bin</i>	
Study of Lyapunov Exponent of the Chaotic Signal Wave Interception	2039
<i>XiaoYu Chen and LeiHu Min</i>	
Study of Magnetopneumography Using Fluxgate Sensor	2043
<i>Fang Yunlong, Qin Yanan, Yu Yang, Wang Zhen, Wang Ming, and Song Tao</i>	
Study of On-line Monitoring System of High-Voltage Circuit Breaker Based on Embedded Linux	2047
<i>Kuncan Chen, Wei Wang, Pinghao Ni, Lijie Xu, and Zhigang Wang</i>	
Study of Oxygen Lance Position Control Strategy with Self-Adaptive Fuzzy PID Control	2051
<i>Zhang Jiayan, Yang Weixin, and Lang Jiahong</i>	
Study of Proportional Control Electromyography Prosthetic Hand	2055
<i>Xi Xu-gang and Li Wen-guo</i>	
Study of Surrounding Rock's Stability Based on Monitoring Measurement of Highway Tunnel	2059
<i>Jiang Bin-song and Shen Chun-ru</i>	
Study of the Detection and Analysis Methods of Power Quality	2063
<i>Junli Wan, Yanqin Li, Xuejun Gao, and Yunhai Zhou</i>	
Study of the Residue Control Based on Feature-Model	2067
<i>Qiao GuiLing and Meng QingBo</i>	
Study on an Improved Numerical Method of Seepage Analysis for Unsaturated Soil Slope	2072
<i>Ming-tao Zhou, Wen-nian Xu, and Dong-fang Tian</i>	
Study on Detecting Laser Interference Fringes Using Four-Quadrant Optoelectronic Detectors	2076
<i>Wang Shuzhen, Xie Tiebang, and Chang Supinga</i>	
Study on Dynamic Scheduling of Steelmaking Continuous Casting and Mould Casting	2080
<i>Wei Liu, Shengping Yu, Xinfu Pang, Binglin Zheng, and Tianyou Chai</i>	
Study on Error Analysis of Measuring Projectile's Speed Using Induction-Type Coil Target	2084
<i>Li Boquan, Wang Xiaofei, Pan Haibin, and Luo Kaiyu</i>	
Study on Evolution of Patterns in Dielectric Barrier Discharge by Image Analysis	2088
<i>Lifang Dong, Qian Song, Yuanyuan Li, and Yujie Yang</i>	
Study on Fault Diagnosis Model of Condensate and Feed Water System Based Information Fusion	2092
<i>Jie Ma, Yusheng Zhang, Lifeng Guo, and Jun Zhang</i>	
Study on Hydro-mechanical Deep Drawing by Taguchi Method	2097
<i>Zhiyuan Zhang, Juli Li, and Qi Li</i>	

Study on Intelligent Hybrid Algorithm	2101
<i>Jian Guo and Fei Tan</i>	
Study on Material Constitutive Model by SHPB Compression Test and Orthogonal Cutting Test	2105
<i>Fu Xiuli, Pan Yongzhi, Wan Yi, and Ai Xing</i>	
Study on Non-enzymatic Glucose Sensor Based on a Ag ₂ O Nanoparticles Self-Assembled Ag Electrode	2109
<i>He Jia-hong, Xu Qiang, Song Zhong-rong, and Kuang Hai-yan</i>	
Study on Passive and Active Control of Vibration Isolation System with Flexible Foundation	2112
<i>Feng Dezhen and Luan Haofeng</i>	
Study on Reconstruction Algorithms in ERT for the Measurement of Two-Phase Flow	2116
<i>Jinhua Yu and Jinqiao Huang</i>	
Study on Scheduling of Steelmaking Continuous Casting and Mould Casting	2120
<i>Wei Liu, Shengping Yu, Xinfu Pang, Binglin Zheng, and Tianyou Chai</i>	
Study on Sliding Mode Variable Structure Control for Induction Heating Power Supply	2124
<i>Dai Bin and Wang Chun-hong</i>	
Study on Stability of Machining Center Spindle System Based on Vector Control	2128
<i>Yi Dai, Hang-jun Zhang, and Xi Li</i>	
Study on the Centripetal Effect of a Magnetic Bearing	2135
<i>Xiaogang Wang and Bin Mei</i>	
Study on the Connection of DFIG to Grid Based on Double-vector PWM	2139
<i>Xueqin Zheng and Donghui Guo</i>	
Study on the Control System of Friction Stitch Welding Device	2144
<i>Gao Hui, Jiao Xiangdong, Chen Jiaqing, and Zhang Yanqing</i>	
Study on the Detection of Velocity Direction for Belt-Broken	2147
<i>Zhang Xi, Zhang Yi, Li Huifang, Fang Dong, Liu Jie, Liu Hongpeng, and Wang Zongyong</i>	
Study on the Development of Synthesis Evaluation System Based on an Improved Fuzzy-AHP Algorithm	2150
<i>Wei Huang</i>	
Study on the Energy Saving of Mine Ventilator Based on Artificial Intelligence Control System	2154
<i>Xinhui Du, Jiancheng Song, and Shanjun Zhu</i>	
Study on the Measurement System for Current Velocity and Direction at Closure Gap	2158
<i>Hongmei Zhang, Jianhu Zhao, and Shengping Wang</i>	
Study on the Method of Automatic Inspection the Large Spinneret	2162
<i>Chongchang Yang, Chunlei Li, Bin Cui, and Chongchang Yang</i>	
Study on the Mitigation Method of Zero-Sequence Harmonic Current in Building Electric System	2166
<i>Ming Shen, Xiangqian Tong, and Biying Ren</i>	
Study on the Predicted Model of Forest Fuel Moisture	2170
<i>Zhilin Qu, Yingying Min, Liansheng Zhao, and Haiqing Hu</i>	
Study on the Properties of Sound Isolation for Acoustic Band Gaps Materials with Tandem Structure	2174
<i>Zhao Huanyu, He Cunfu, Wei Ruiju, Wu Bin, and Song Guorong</i>	
Study on the Sensitivity of Flow Rate Change after Head Variation in Rotary Blood Pump with Constant Voltages	2177
<i>Jing Teng and Qian Kun-xi</i>	
Study on the Side-scan Sonar Image Matching Navigation Based on SURF	2181
<i>Weiliang Tao, Jianhu Zhao, Jingnan Liu, and Hongmei Zhang</i>	
Studying Chaos in Power System Under Load Perturbation and Bounded Noise	2185
<i>Du-Qu Wei, Xiao-Shu Luo, and Ying-Hua Qin</i>	
Studying of NC Tool Crossbeam Magnetic Levitation System Based on Backstepping Adaptive Dynamic Sliding Mode Control	2189
<i>ChunFang Liu, QingGuang Chi, and QingDing Guo</i>	

Supercritical Boiler Tube Wall Temperature Test Base on the Power Plant Control System Database	2193
Yu Yanzhi, Zhang Liangbo, Xu Haichuan, Chen Duogang, Dong Gongjun, Shen Bo, and Liu Sheng	
Support Functionals of Convex Function	2197
Jinqiu Huang and ShaoBai Chen	
Support Vector Machine Algorithm Based on Kernel Hierarchical Clustering for Multiclass Classification	2201
Huaitie Xiao, Fasheng Sun, and Yongsheng Liang	
Surface Defects Inspection System Based on Machine Vision	2205
Xiaoyan Deng, Xiaojuan Ye, Jinsheng Fang, Chun Lin, and Lei Wang	
Switching Control of Regenerative Retarding of Electric Vehicles	2209
Xie Jing, Cao Binggang, Xu Dan, and Zhou Kai	
Synchronization Control of Axial Feed and Internal Pressure in Hydroforming	2213
Zhang Yong and Han Baosheng	
System Analysis of Acyclic Triangle Formation Control Initially in Collinearity	2217
Hengsheng Wang and SanCheng Du	
System Development of Quantitative Ultrasonic Detection for Osteoporosis	2221
Zhang Lei and Wang Zhengfeng	
Target Match Recognition Method Based on Contour_Area Feature	2225
Guo Wen-pu, Sun Ji-yin, and Ren Jun	
Target Simulator Design Based on Virtual Instrument Technology	2228
Guangnian Yang and Qichuan Yuan	
Task Assignment Scheme of Multi-UAV Based on Single-Unit Combinatorial Auction	2232
Zhu Mingjian, Qin Zheng, and Xing Jiankuan	
Teleoperation System of Internet-Based Multi-Operator Multi-Mobile-Manipulator	2236
Liang Ma, Jihong Yan, Jie Zhao, Zhifeng Chen, and Hegao Cai	
Temperature Control and PID Parameters Optimization Based on Finite Element Model	2241
ZhengJia Wang, ZhouPing Yin, and YouLun Xiong	
Temperature Control of Thermoelectric Cooler Based on Adaptive NN-PID	2245
Song Shaojing and Qin Qin	
The Adaptive Control Based on Inverter Output of PWM Rectifier Feedback	2249
Chai Lin and Liu Hui Kang	
The Analysis and Comparison of Tracking Error between SSE-50 ETF and SSE-180 ETF	2253
Jing Wang, Jie Kang, Jing Wang, and Zongfang Zhou	
The Analysis of a Novel Supersonic Jet Expansion Combined with an Astigmatic Multi-pass Cell	2257
Zhu De-Sheng	
The Application of Memetic Algorithm on the Slab Sequencing	2260
Gao Zhixing and Zhang Zuogang	
The Application of RTOS in Microcomputer Protection Device	2264
Liu Shuguang, Liu Yong, and Huang Xinbo	
The Application of Synchronous Triggering Technology in the Flight Data Simulation System	2268
Jin Xiaokang and Lu Hui	
The Bargmann System Related to the Fourth-Order Matrix Eigenvalue Problem	2272
Yuan Shujuan	
The Comparison of Haplotype Difference Based on the 21st Chromosome of Four Populations	2275
Zhili Pei, Yuxin Zhou, Lisha Liu, Lihua Wang, Yinan Lu, and Ying Kong	
The Compensated HS Optical Flow Estimation Based on Matching Harris Corner Points	2279
Lu Ziyun and Liu Wei	
The Crane Regulating System Research Based on State Observer	2283
Li Pei-jiang and You Ting	

The Decoupling Control of Induction Motor Based on Artificial Neural Network Inverse System Method	2287
<i>Yongxian Song, Juanli Ma, Hanxia Zhang, and Naibao He</i>	
The Defects Identify Algorithm and the Automated Detecting System for the Screw Thread	2292
<i>He Tao, Zhou Jinshan, Dai Na, Chen Zihui, and Du Li</i>	
The Design and Application of Distributed Mill's Monitoring and Diagnostic System Base on LabVIEW	2295
<i>Sun Lin, Wang Yue, and Gan Shengfeng</i>	
The Design and Development of DSP Based Ring Main Unit FTU (Feeder Automation Terminal Unit) in Intelligent Distribution	2299
<i>Zhou Hong, Luo Xing, and Deng Qijun</i>	
The Design and Dinematic Analysis of MIS	2303
<i>Fengling Shang, Longwang Yue, Yong Tian, and Wei Yue</i>	
The Design and Implementation of Soccer Robot Control System	2307
<i>Huiliang Wang and Jianhai Han</i>	
The Design and Research of PC Software in Hydraulic Supports Control System Based on VC++	2311
<i>Zhang Wei, Shi Xue-dong, and Wu He-jin</i>	
The Design of Auto-calibrated Integrated Measure Instrument Based on Two Sampling A/D Convert	2315
<i>Hai-bo Lin and Xiao-li Lv</i>	
The Design of Switching Law of Linear Switched Systems of Finite-time Stability	2318
<i>Zhang Hualin and Sun Hongfei</i>	
The Design of the ADALINE Sensor of the Biogas Generator	2321
<i>Zuo-Xun Wang, Ying-Chun Zhang, and Gui-Juan Wang</i>	
The Design of Wireless Micro-Evironment Monitoring System	2324
<i>Wang Hui-feng, Qin Tian, Hu Zhong-ze, and Cai Lankun</i>	
The Digital Field-Frequency Lock System of High-Resolution NMR Spectrometer	2328
<i>Dezhi Jiang, Haibo Chen, Zhong Chen, and Zhenyao Zheng</i>	
The Dynamic Analysis and Experimental Research of Counter Balance Valve Used in Truck Crane	2332
<i>Xiaofeng Liu, Xinhui Liu, Longshan Wang, and Jinshi Chen</i>	
The Effect of Controllers on the Dynamic Behaviour of a Rotor Supported on Active Magnetic Bearings	2336
<i>Wang Ding, Zhu Changsheng, Tang Ming, and Zuo Bin</i>	
The Effect of SRS to DWDM Optical System	2340
<i>Fang Juanni</i>	
The Foldover-free Condition of Locally Constrained Image Warping	2343
<i>Pan Jianjiang</i>	
The Ideal Interval Evaluation of Urban Public Traffic System and Its Application	2347
<i>Hu Qizhou, Lu Huapu, and Yu Xinxin</i>	
The Implementation of Haptic Interaction in Virtual Surgery	2351
<i>Ning Yi, Guo Xiao-jun, Li Xiao-ru, Xu Xiang-feng, and Ma Wan-jun</i>	
The Investigation of High-speed Cutting Possibility in Machining Inconel718 from Cutting Force and Temperature	2355
<i>R.D. Han and J. Zhou</i>	
The Lime Kiln Temperature Control Based on Setpoint Filtering Two-degree-of-freedom PID	2359
<i>Wenjin Wu, Julang Jiang, and Suoliang Ge</i>	
The LQR Real-time Control for the Inverted Pendulum Based on PSO	2363
<i>Liu Guoping, Xiao Genfu, and Yang Xiaohui</i>	
The Management Perspective of Chinese E-government Security	2367
<i>Yunping Liu</i>	
The Mechanical Performance of Piezoelectric Fiber Composite Actuators	2371
<i>Yong-gang Liu, Ji-shun Li, Xiu-jun Wang, Bin Tian, and Xing Shen</i>	

The Mobile Microphone Array Speech Enhancement Technology Based on FEA	2375
Lian-zhu Shan, Ping Yang, and Jun Zhou	
The Nonlinear Control for the DC-DC Boost Switched-mode Power Converter	2379
Wang Zheng and Zhu Xingdong	
The Optimal Drive Current of Solenoid Valve and Its Effect on Fuel Injection Characteristics	2383
Wang Yupeng, Liu Xinghua, Chen Yuhang, and Liu Fushui	
The Optimum Element Microlens Diameter Designing of the Integral Photography	2388
Zhong Bao, Xu Shanting, Ding Jun, and Yi Shuang Zhang	
The Phase-Locked Interferometric Method for Nanometric Position Control	2392
Xu Suan, Huang Yanyan, Sun Jian, Luc Chassagne, and Suat Topcu	
The Precision Analysis and Simulation Based on SLAM	7: 32
Ping Yang, Bin Zhang, Guo-fang Dong, and Shen-Qing Kuang	
The Realization of Traction Power Supply Remote Computer Experimental System	2400
Jiajun Liu, Xiaoyong Liu, Ya Guo, Yimin Li, and Zhenfeng Liang	
The Research and Design of Transmission Error Measurement System Based on an Absolute Displacement Sensor-time Grating	2404
Chen Ziran, Peng Donglin, Zheng Yong, Zheng Fangyan, and Liu Xiaokang	
The Research of Fuzzy Nerve Network Control System on Steel Rolling Heating Furnace, Implementation of Steel Rolling Heating Furnace Adopting Fuzzy Nerve Network Control System	2407
Pan Lian and Song Junjie	
The Research of LED Display Screen Based on Embedded Technology and FPGA Technology	2411
Shihong Qin and Huanhuan Li	
The Research of Measurement System Based on a New True Effective Value	2414
Qing-rui Liu, Zhong-jie Wang, Ning Han, and Ran Xu	
The Research of Nonlinear Control Based on Fuzzy Neural Network	2417
Fan Yuan-yuan, Sang Ying-jun, Fan Yuan-yuan, and Sang Ying-jun	
The Research on GQL-45 Locomotive Inductor Traction Exciter Experiment System	2421
Jianpu Wang and Sufang Zhao	
The Research on Slab Thermal Properties Estimated by BP Artificial Neural Networks	2425
Dong Min, Li Guo-you, Li Yan-xia, and Liu Cai	
The Sample Loom Control System Based on PLC and the Configuration Software	2428
Yang Chongchang, Cui Bin, Li Chunlei, and Yang Chongchang	
The Simulation Analysis and Experimental Research on Pressure Oscillation of Crane Hoisting System	2432
Xiaofeng Liu, Longshan Wang, Lu Zhao, and Xinhui Liu	
The Simulation and Analysis of the Electromagnetic Shielding Effectiveness of PoE-Hub with Redundancy by FEM	2436
Fu Wei, Tong Shi-hua, Zhang Ya-chao, and Zhang Jun	
The Simulation and Analysis of the Shunt Active Power Filter	2439
Yi-hong He and Wei-xiong Zhuang	
The Spatial MIMO Channel Implement on FPGA	2443
Liang Guo-dong and Rong Jian	
The Study of Minimum Time Algorithm in Intensive Goods Storage Planning	2447
Jiyuan Zang, Chao Yun, and Zhiqiang Zhang	
The Study of Pole-climbing Robot	2451
Lixiu Ma, Boxue Tan, Jin Shen, Wei Liu, and Xianming Sun	
The System Design of Low Power Electronic Pipette	2455
Chen Xianzhong, Hou Qingwen, and Lu Yifang	
The Variable-frequency Carrier Bands Pulse Width Modulation Using in Cascade H-Bridge Converter	2459
Sun YunQuan, Sheng Ji, Yin Qiang, and Pan WenTing	

Theoretical Study on Effect of Niobium on TiAl(010) Surface Carburization	2463
<i>Yanping Liu, Peide Han, and Chunxiang Xu</i>	
Thermohydrodynamic Lubrication Analysis of the Main Bearing with Rough Surface	2467
<i>Xiaorong Zhou, Ganwei Cai, Zhan Zhang, and Zhongqing Cheng</i>	
Three-Dimensional Flow Field in a Large-scale Gas Control Valve	2471
<i>Fang Cao, Yong Wang, Yantao An, and Yudong Xie</i>	
Time Synchronization Method Based on Dynamic Network and Its Application in Substation Automation System	2475
<i>Na Yi, Yawen Yi, and Peng He</i>	
Transmission Characteristics of Oil Film between Rotating Disks Based on Variable Viscosity and Inertia Force	2478
<i>Hou Youfu and Xie Fangwei</i>	
Tuning Algorithm of an Internal Model Control Decoupler	2482
<i>Jin Qibing and Huang Wenbing</i>	
Turbine Generator Set Vibration Faults Diagnosis Based on Wavelet Packet Analysis and Information Fusion Technology	2486
<i>Jingpei Gu and Ping Liang</i>	
Underactuated Posture Control of Humanoid Robot	2490
<i>Chengjun Liu, Zushu Li, and Fangzheng Xue</i>	
Underwater Navigation Based on Topographic Contour Image Matching	2494
<i>Kai Zhang, Hongmei Zhang, Chuang Shi, and Jianhu Zhao</i>	
Unsymmetrical SPIHT Codec and 1D SPIHT Codec	2498
<i>Zhang Zhi-hui and Zhang Jun</i>	
Using Neural Network to Determine Rockfill Parameters of Duncan E-B Model	2502
<i>Zhang Yan, Yan Qiao, Yang Xia, and Wu Chang-bin</i>	
Using the Triangle Inequality to Accelerate TTSAS Cluster Algorithm	2507
<i>Chunxia He, Jinyi Chang, and Xiaoyun Chen</i>	
Variable-Rate Fertilization Control System Based on Fuzzy PID Control Strategy	2511
<i>Liang Chunying and Wang Xi</i>	
Vector Control for the Linear Induction Motor Based on the Position Closed-Loop	2515
<i>Zhang Mingyuan, Ma Weiming, Xu Jin, and Li Weibo</i>	
Velocity Kinematics Modeling and Simulation for a Lunar Rover	2519
<i>Pingshu Ge and Rongben Wang</i>	
Vibratory Isolation Design of Vibratory Pile Hammer	2525
<i>Gao Gangyi, Xiao Feng, Wang Cunlei, Shi Guoguo, and Zhu Denglin</i>	
Virtual Program Design and Development by ActiveX Control Technology of LXI Instrument	2529
<i>Huang Feng, Lin Guohan, Yu Xiaofei, and Li Ya</i>	
Virtual Simulation Evaluation of the Human-Computer Interface of a Display and Control Device	2532
<i>Zhen Shang and Jiang Jiang</i>	
Vision-Based Gauging System for Dimensional Measurements	2536
<i>Xinwen Yao, Lei Wang, Xiaoyan Deng, Jinsheng Fang, and Xiaojuan Ye</i>	
VV&A Process of Guidance Simulation System	2540
<i>Jiao Peng</i>	
Weighted Super Resolution Reconstruction Based on an Adaptive Regularization Parameter	2544
<i>Gong Mei, Zhou Ji-Liu, and He Kun</i>	
Wind Prediction Based on Improved BP Artificial Neural Network in Wind Farm	2548
<i>Keyuan Huang, Lang Dai, and Shoudao Huang</i>	

Calculation of Geometric Dilution of Precision Using Adaptive Filtering Technique Based on Evolutionary Algorithms	6: 64
<i>M.R. Mosavi and M. Divband</i>	
A Novel Integrated PWM Lighting System	2556
<i>Hung-Yu Wang, Yu-Hsuan Lai, Jhong-Jhou Wu, and Yang-Chiu Lin</i>	
Implementation and Performance Evaluation of an Intelligent Online Argumentation Assessment System	2560
<i>Chenn-Jung Huang, Yu-Wu Wang, Tz-Hau Huang, Jia-Jian Liao, Chun-Hua Chen, Chuan-Hsiang Weng, Yu-Jen Chu, Chiao-Yun Chien, and Hung-Yen Shen</i>	
Indexes for Determine the Number and Location of Area Operation Centers (AOC) in Power Network:	
Second Level of Dispatching System	2564
<i>Seyed Siavash Karimi Madahi, Saeid Amir Araghi, Farzad Razavi, and Ali Asghar Ghadimi</i>	
Calculation of Geometric Dilution of Precision Using Adaptive Filtering Technique Based on Evolutionary Algorithms	6: 64
<i>M.R. Mosavi and M. Divband</i>	
Use of Accurate GPS Timing Based on Radial Basis Probabilistic Neural Network in Electric Systems	2572
<i>M.R. Mosavi</i>	

Computer Engineering

A Stability Analysis of Turning without Using Tailstock Considering Deflection in the Previous Cycle or Not	2576
<i>Yi-Ming Tsao, Kuan-Chen Lin, Chung-Chi Huang, and Shyune-Lee Lee</i>	
Contour Error Based Variable Feedrate Contouring Control Structure for a Biaxial Linear Motor Stage	2580
<i>Kuan-Chen Lin, Yi-Ming Tsao, and Yao-Lun Tseng</i>	
3D Numerical Simulation of the Filling and Curing Stages in Epoxy Casting Process	2584
<i>SaiJun Zhang, Ning Yuan, and Feng Ruan</i>	
A Clustering Algorithm Based Geographic Location Information for Wireless Sensor Networks	2588
<i>Shen Lin, Wang Liqin, and Zhu Zhengwei</i>	
A Design of Wireless Monitoring System for Circular Knitting Machines Based on ZigBee	2593
<i>Yiqin Yu and Xiaoguang Wu</i>	
A Distributed and Parallel Computing Framework for SCADA Application in Power System	2597
<i>Li Kang and Lei Yang</i>	
A New Adaptive BLUE Algorithm	2601
<i>Gu Da-gang</i>	
A New Method of Tool Wear Measurement	2606
<i>Xihui Liu, Chen Zhang, Jiwen Fang, and Song Guo</i>	
A New Type Promotion and Transporting Robot Stability Based on the Virtual Prototype Technology	2610
<i>Li Zhi-gang and Zhou Xin-jian</i>	
A New Watermarking Algorithm Based on DCT and DWT Fusion	2614
<i>Wang Huai-bin, Yang Hong-liang, Wang Chun-dong, and Wang Shao-ming</i>	
A Novel Energy-Efficient Approach to DSR Based Routing Protocol for Ad Hoc Network	2618
<i>Linyang Sheng, Jingbo Shao, and Jinfeng Ding</i>	
A Power Control Algorithm Based on MAC Protocol with Directional Antenna	2621
<i>Li Hong-sheng, Li Ying, Wang Wei, and Yan Run-hua</i>	
A Remote Training System of Hydropower Plant Based on Interactive Virtual Environments	2625
<i>Zeng Hongtao, Zeng Bing, Cao Yu, Feng JingSong, and Liu Bin</i>	
A Self-Adaptive Monitoring and Analysis System for Students' Behaviors in Laboratory Course	2629
<i>Yujia Zhang, Wenyong Weng, Zhe Xi, Jian Su, and Zebing Wang</i>	
A Smooth Handoff Algorithm with Dynamic Scan Time Interval	2633
<i>Wang Huai-bin, Luo Hong-wei, Wang Chun-dong, and Zhao Yan-jun</i>	

A Study on Ally Selection in Maintenance Alliance Based on Mobile Agents	2637
<i>Liu Jian, Xia Baizhan, Yu Dejie, and Li Rong</i>	
A Study on Multi-objective Optimization of E-Government Based on AHP	2643
<i>Jicheng Liu and Suhua Wang</i>	
A Survey of Wireless Sensor Networks Based on Small World Network Model	2647
<i>Zheng Gengzhong and Liu Qiumei</i>	
Aero-engine Blade Design System Based on Knowledge Integration	2651
<i>Chen ZeFeng, Yang HaiCheng, Mo Rong, and Zheng DanChen</i>	
An Ability Demand-Oriented Curriculum Design for IM & IS Degree Program	2655
<i>Qianfan Zhang</i>	
An Improved Routing Protocol Based on Cluster Tag in ZigBee Network	2659
<i>Ning Chen and Qimin Zhang</i>	
Analysis of Designing Software Defined Radio	2663
<i>Duan Lian</i>	
Analyzing Automobile Performance by Powertrain Simulation and Fuzzy Control	2667
<i>Lingyun Jiang and Xilu Wang</i>	
Application of the Wireless Sensor Network Topology Based on the Power Acquisition System	2671
<i>Chen Xupeng and Jiang Xiu</i>	
Biological Mechanism of the Locust Jumping Robot	2676
<i>Chen Yong</i>	
Boundary Rail Method of Mesh Generation	2680
<i>Bifu Hu, Ping Xi, and Changhong Guo</i>	
CAD Application in Route Three-Dimensional Model Building	2684
<i>Ying-Zhi Xia and Xin-Sheng Song</i>	
Capital Structure and Product Market Competition Advantage: The Empirical Evidence from Chinese State-Controlled and Private Listed Companies	2688
<i>Tan Duojiao</i>	
Cluster Algorithm for Electing Cluster Heads Based on Threshold Energy	2692
<i>Ying Huang and Cong Huang</i>	
Comparison of Intensity Theoretical Calculation with Finite Element Calculation for the Below Node of Storage Tank Wall	2696
<i>Si-zhu Zhou, Xin-mei Yuan, and Hua-Bin Jing</i>	
Continuous k-Nearest Neighbor Queries on Multi-core CPUs	2700
<i>He Hui Ying, Liao Wei, and Wu Xiao Ping</i>	
Creative Design Methodology for Mechanical Product CAD Based on Function-Structure and Case	2707
<i>Xiao-zhong Zhang, Zhe Yang, Li-li Dong, and Xiang Zhang</i>	
Crop Planting Decision Supporting System Based on Simulated Annealing Algorithm	2711
<i>Zhao Junying, Zhang Tiejun, and Sun Ruifeng</i>	
Cyclic Codes over Polynomial Residue Class Rings	2715
<i>Lina Zhang</i>	
Design and Implement of Journal Office Automation System Based on WWF	2718
<i>Lü Jiaguo</i>	
Design and Implementation of M-Commerce System Applied to 3G Networks Platform Based on J2ME	2722
<i>Hua Ye</i>	
Design and Implementation of Wireless FAEM System Based on the ZigBee and GPRS	2726
<i>YanRu Xue and Min Liu</i>	
Design of a Digital Type Six Dimensional Computer Input Device	2729
<i>Jinliang Gong, Yanfei Zhang, and Xiuting Wei</i>	

Design of a Dual-Switching Mode NOC Router Microarchitecture	2733
<i>Chang Wu, Song Chai, Yu-bai Li, and Zhong-ming Yang</i>	
Design of Distributed Monitoring and Diagnosis System for Locomotive Diesel Based on GPRS-Internet	2737
<i>Zhijun Chen, Ming Lv, Xiaowei Xu, Fangping Yu, and Huabiao Jin</i>	
Design of Elevator Group Control System Simulation Platform Based on Shortest Distance Algorithm	2741
<i>Wang Chuansheng and Chen Chunping</i>	
Design of Wearable Health Monitoring System Based on ZigBee Technology	2745
<i>Lu Wei-zhong, Xi Xue-feng, and Zhu Yin</i>	
Development of a Web-Based Software for Micro Power System Design	2748
<i>Jianhua Yang, Fei Lin, and Yu Fu</i>	
Discussion of Thermal Environment of Effective Utilization of Nature Source in Large Space Building	2752
<i>Ning Cai, Yang Wan, Chen Huang, Weiwei Shou, and Rong Ren</i>	
Dynamic Properties of Disk Brake Based on Thermo-elastic Instability Theory	2756
<i>Xun Yang, Jixin Wang, and Ying Liu</i>	
E-commerce Recommendation Method Based on Genetic Algorithm and Composite Weight Matrix	2760
<i>He Dian and Liang Ying</i>	
E-Commerce Security Policy Analysis	2764
<i>Zhou Jie and Xie Hong</i>	
EPC Construction Project Management: Integrating PMO and MIS to Become the Beacon of Performance	
Growth	2767
<i>Zhang Jing-xiao, Li Hui, Zhou Tian-hua, and Lu Ning</i>	
Fault Identification in the BGP System Based on Clustering Algorithm	2772
<i>Jun Lv, Tong Li, and Weining Cui</i>	
Finite Element Model of Aero Turbine Blades Investment Casting Process Based on Hypermesh	2776
<i>Dou Yangqing, Bu Kun, and Dou Yangliu</i>	
Fuzzy Comprehensive Appraisal of ERP Selection	2780
<i>Gao Hua and Xu Xu Song</i>	
Greenhouse Monitoring and Control System Based on Zigbee Wireless Sensor Network	2785
<i>Jian Song</i>	
Hydraulic Design of Water Turbine Based on the Computational Fluid Dynamics	2789
<i>Huimin Xiao and Bo Yu</i>	
Impact Research of Process Parameters on Sink Index of Rapid Heat Cycle Molding Products	2793
<i>Sun Ling and Liu Dong Lei</i>	
Implementation of Synchronization Measurement in Warship Power Monitoring and Control System Based	
on IEEE 1588	2797
<i>Qian Mei and Han Jiang-gui</i>	
Information System Reliability Prediction Based on Evidential Reasoning Approach with Audit Evidence	2801
<i>Xia Zhijie</i>	
Integration of Video Surveillance and Skyline Terrain Image	2805
<i>Huang Binghu and Han Litao</i>	
Interpolation Algorithm for Stream Turbine Blade in High Speed and High Accuracy CNC Machining	2809
<i>Yue Ying and Han Qingyao</i>	
Intrusion Detection Based on Support Vector Machine Divided up by Clusters	2813
<i>Qian Yu-wen, Song Hua-ju, and Gao Hua</i>	
Intrusion Detection Model Based on Hierarchical Structure in Wireless Sensor Networks	2816
<i>Lei Li, Yan-hui Li, Dong-yang Fu, and Wan Ming</i>	
Inverse-Hyperbolic Dynamic Model for Extra and Ultra Voltage Magnetically Controlled Shunt Reactor	2820
<i>Zheng Wei-jie, Zhou Xiao-xin, Li Ya-lou, Zhang Xing, and Xu De-chao</i>	

Inversion of Pretightening Force on Bolts by FEA and Its Application	2824
<i>Rao Gang and Wei Guoqian</i>	
Limit State Method Based Finite Element Analysis on the Long-Span Bridge Structure	2828
<i>Wei Guoqian, Rao Gang, and Dong Haitao</i>	
Link Management and Timeout Mechanism for Content Audit	2832
<i>Sun Guo-Dong, Zhao Da-Xing, and Dai Xin</i>	
Localization Algorithm Based on RSSI and Distance Geometry Constrain for Wireless Sensor Network	2836
<i>Jungang Zheng, Chengdong Wu, Hao Chu, and Peng Ji</i>	
Merging of Topic Maps Based on Corpus	2840
<i>Yong Xue, Weitao Liu, Boqin Feng, and Wen Cao</i>	
Mobile and Wireless GIS Based Upon Independent Development	2844
<i>Haidong Zhong, Jianping Wu, Ping Li, Zhenhua Lv, Yingjie Hu, and Bailang Yu</i>	
Mobile Business Solution Combining the Access Technology with Portable Smart Device	2848
<i>Zheng Leina and Pan Tiejun</i>	
Numerical Simulating for the Cyclone Separator Equipping with Acoustic Agglomeration of Inhalable Particulates	2852
<i>Ping Zhang, Ming Kang, and Jiangrong Xu</i>	
Numerical Simulation and Experimental Research on Air Conditioning Terminal Combined by Capillary Ceiling and Displacement Ventilation	2856
<i>Chunmei Guo, Zhigang Zhang, and Wanxiang Yao</i>	
Numerical Simulation and Experimental Study of DBD's Filaments	2860
<i>Zengqian Yin and Panpan Zhao</i>	
Numerical Simulation of Mold Filling in Injection Molding with Incompressible Leonov Fluid Model	2864
<i>Kuang Tang-Qing and Liu He-Sheng</i>	
Numerical Simulation of the Local Collection Efficiency on Icing Conductor	2868
<i>Guo Hua, Liu Heyun, and Gu Xiaosong</i>	
Numerical Simulation of the Tensile Fractures of the Glass Fabric Composite with 3-D Finite Element Approach (FEA)	2872
<i>Wang Rui and Xu Lei</i>	
On Application of Algorithm Visualization in Teaching Software of Algorithm	2876
<i>Wei Yu and Feng Su</i>	
On H ∞ Robust Control for Hydraulic Servo System of Steam Turbine	2880
<i>Lian-yu Chen</i>	
One New RFID Anti-collision Algorithm Based on Priority Control	2884
<i>Zhang Xuejun</i>	
Optimal Control Model of Quality Supervision in E-Commerce Quality Intermediary	2888
<i>Zhao Hongxia, Li Baoku, and Yang Jiaoping</i>	
Path Analysis on Customer Switching Behavior of Cyber Showcase Shopping: Empirical Research of Cyber Bookstore	2892
<i>Yong Yang</i>	
Performance Analysis and Improvement of DCF for Wireless Ad Hoc Networks	2896
<i>Yongkang Xiao and Yue Wang</i>	
Polygon Aggregation Algorithm Using the Simple Feature Model	2900
<i>Xie Zhong, Ma Lina, and Wu Liang</i>	
Polygon Overlay Analysis Algorithm Based on Monotone Chain and STR Tree in the Simple Feature Model	2905
<i>Chen Zhanlong, Ma Lina, and Wu Liang</i>	
Polygonal Objects Fusion in Spatial Databases	2910
<i>Yuwei Peng, Junzhou Wang, and Chuanjian Wang</i>	

Reliability Analysis of Shield Cutter Based on Stochastic Finite Element Method	2914
<i>Qing Tan, Kai Wang, Yimin Xia, and Kui Zhang</i>	
Research and Analysis on Secure DSR Routing Protocol Based on Strand Space	2917
<i>Shen Ming-yu and Li Cang-yuan</i>	
Research of New Wireless Sensor Network Protocol: ZigBee RF4CE	2921
<i>Su Dong-feng, Chen Xiang-jian, Li Di, Xu Zhi-jun, and Cheng Zhi-feng</i>	
Research of Power Flow Parallel Computing Based on MPI and P-Q Decomposition Method	2925
<i>Limin Ao, Bin Cheng, and Feifei Li</i>	
Research on Decentralized E-commerce Architecture in P2P Environment	2929
<i>Yang Xia, Qi Li, and Lei Wang</i>	
Research on Error Analysis and Calibration Method of Laser Scan Range Finder	2933
<i>Tan Ding Zhong, Qiu Ying, and Wang Qi Ming</i>	
Research on Finger Vein Recognition Technology	2937
<i>Qiu Ying and Lv Qinglei</i>	
Research on IETM Data Processing Based on XML	2941
<i>Huang Guoliang and Jiang Lili</i>	
Research on Motion of Specimen of Ultrasonic Feeding Device	2944
<i>Liang Li, Qing He, and Yan Wang</i>	
Research on Multi-dimensional Simulation Data Management Model for Complicated Product	2948
<i>Wei Wang, Rong Mo, Ye Tao Jin, and Yan Zhang</i>	
Research on Multi-head Stretch Forming Technology of Sheet Metal	2952
<i>X. Chena, M.Z. Li, W.Z. Fua, P.X. Feng, and X. Chen</i>	
Research on Network-Based Virtual Numerical Control Simulation System	2956
<i>Shuang Sun, Lufeng Luo, and Qingguo Meng</i>	
Research on the Bistability of FGM Laminate Plates	2960
<i>Zheng Zhang, Yumei Bao, and Hongxia Sun</i>	
Research on the Characteristics and Blocking Realization of Skype Protocol	2964
<i>Feng Lu, Xiao-Lei Liu, and Zhi-Nan Ma</i>	
Research on the Flow Separation Control in Hydrodynamic Coupling Based on Numerical Simulation	2968
<i>Liu Chunbao and Chu Yaxu</i>	
Research on the Incomplete Constellation GPS Positioning Algorithm Aided by Altitude	2974
<i>Ershen Wang, Shufang Zhang, and Zhixian Zhang</i>	
Research on the Influence of Data Fusion on Clustering Lifespan in Wireless Sensor Networks	2978
<i>Wang Liqin and Shen Lin</i>	
Research on Web-Based Typical Process Management	2983
<i>Yang Zhi-Gang and Ma Zi-Qin</i>	
Researching into Directional Improvement of IEEE 802.11	2987
<i>Li Hong-sheng, Li Ying, Wang Wei, and Yan Run-hua</i>	
Retrieval of 3D Models Based on Spherical Harmonics	2991
<i>Chen Ziyang</i>	
Scheduling of Network Map and Its Realization Based on Quad Tree Model	2995
<i>Wang Hao, Liu Canyou, Guo Li, Zhang Bin, and Cui Tiejun</i>	
Semantic Web Service Matching Based on Service Hierarchy	2999
<i>Shen-gang Hao and Li Zhang</i>	
Semantic Web Services Composition Based on Secure Conversation Mode	3003
<i>Shen-gang Hao and Li Zhang</i>	
Sensors Fault Diagnosis of Hydraulic Automatic Gauge Control System Based on Wavelet Neural Network	3009
<i>Xiang Wang, Cai Liu, and Mei Li</i>	

Service Sensitive and Fuzzy Based Queue Control Method and Its Performance Evaluation	3013
<i>Zhao Yingying, Chi Xuefen, Sun Zhenqi, Zhao Kun, and Lin Guan</i>	
Simulation of O-Sealing Ring in Deep Sea Instrument Cabin	3017
<i>Zhang Haosu, Gui Zheng, and Han Fei</i>	
Simulation of Oxygen and Water Mass Fraction in the Cathode for the PEM Fuel Cell	3021
<i>Shizhong Chen, Yuhou Wu, Hong Sun, and Zhengnan Jin</i>	
Simulation Research on Unsteady Helical Flow of Well Liquid in Surface-Driven Progressive Cavity Pump	
Well	3025
<i>Lv Yanping and Wu Xiaodong</i>	
SIRS: Internet Worm Propagation Model and Application	3029
<i>Dengyin Zhang and Ye Wang</i>	
Speed Tree-Based Forest Simulation System	3033
<i>Qing Xiong and Xin-yuan Huang</i>	
SPICE Model for IGBT Temperature Effects Compared with Measurements	3037
<i>Shoucui Yuan, Shouhuai Yuan, Yingsang Hong, and Yamei Liu</i>	
Study of Radar Meteorologic Nephogram Simulation Technology Based on Fractal Interpolation Theory	3041
<i>Shao Xiao-fang, Liu Chao-jun, and Cai Ming-juan</i>	
Study of Unified Protection and Fault Analysis for HV Asynchronous Motors	3043
<i>Weiping Wang and Li Ming</i>	
Study on CAD Dynamic Simulation on the Control of Airship at Windless Condition Based on the Propeller	
of Fin	3047
<i>Yang Yan-chu and Wang Sheng</i>	
Study on the Algorithm for Industrial Robot Programming in Free-Form Surfaces Polishing	3051
<i>J.M. Zhan and J.H. Mao</i>	
Study on the Constitution Dimension of Customer Value under E-Commerce	3055
<i>Han Na and Ji Xiangjun</i>	
The Application of RBAC Model in E-Commerce System	3059
<i>Li Hongxin, Guan Keqing, and Wang Yugang</i>	
The Design and Simulation of Motor Steering Link Test Bench	3063
<i>Jin Li Xu, Long Wang, Shao Jun Han, Zhao Fu Li, and Bin Zhou</i>	
The Design of Agent-Based Intelligent Traffic Visualized Simulation System	3066
<i>Li Zhou and Kai Zhao</i>	
The Design of Security Authentication System Based on Campus Network	3070
<i>Qing Zhao, Yi Mou, and Shi-hong Qin</i>	
The Design Projects Research of Collaborative Product Commerce Based on the Web	3074
<i>Liu Wei and Liang Bo</i>	
The Explanation of the Application of the Computer-Aided and Analysis Technology in the Field of Sports	3077
<i>Chen Jingfei</i>	
The Means of the Typical Fraud and Its Case Analysis in the Business Accounting Information Systems	3080
<i>Li Lizhi</i>	
The Middleware System Research Based on Home Network Core SoC Platform	3085
<i>Hua Jiao, Jie Chen, and Wei Wei</i>	
The Optimization of Wireless Sensor Networks in the Open-Pit Mine Slope Detection Base on Quantum	
Genetic Algorithms	3089
<i>Wang Yan, Sun Yan-ming, Yu Bao-qing, and Ma Yong</i>	
The Pre-estimate of Steel Wheel Fatigue Life Based on ANSYS	3094
<i>Bing Li, Wubin Xu, Qiwei He, Xinyu Liu, and Shangping Li</i>	
The Research of the Double Master/Slave System Architecture in the MPI Parallel Environment	3098
<i>Jiaqi Liu, Ning Ding, and Jiangrong Xu</i>	

The Research of Using Max, Min Function to Simulate the Step-Movement Based on ADAMS	3102
Xurong Li and Li Cai	
The Research on E-Business Marketing Pattern of Second-Hand Car	3105
Wenshan Wang and Hongying Wang	
The Residual Stress Analysis of Aluminum Alloy Alternating Magnetic Treatment after Cold Plastic Forming	3108
Chen Gexin, Fu Yuming, Yin Jing, and Li Wei	
The Shape Modification Method of Combined Subdivision Surface Based on Catmull-Clark	3112
He Gang, Zhu Denglin, Jiang Li, and Liao Wenhe	
The Simulation Breakdown Characteristic of 4H-SiC SBD with Field Rings	3116
Fasheng Zhang and Xinran Li	
The Weight Calculation in the Case-Based Reasoning Based on Sensitivity Analysis	3119
Yuan Minghai and Xu Huanmin	
Theory Study of Different Substituent Length on Structure Property of N-methyl Morpholinium Ionic Liquid	3122
Wang Li-min and Chu De-qing	
Turbulence Route Curve Fitting Method Based on K-E Differential Equation and Energy Optimization Modeling	3126
Liang Zhong-wei, Liu Xiao-chu, Ye Bang-yan, and Jiang Fan	
University Library Lending Process Analysis and Optimization	3131
Xu Chuanjie, Chen Qiubo, and Shen Hongbing	
Web Based Fluid Mechanics Experimental System	3134
Sumei Dai, Zhiying Song, and Ruiqing Jia	
Design and Implementation of a Wireless Programmable Logic Controller System	3138
Xiaolong Li, Sairam Munigala, and Qing-An Zeng	
Electrical Engineering	
A Current Transformer Saturation Detection Algorithm for Use in Current Differential Protection	3142
Li Yang, Jianguo Zhao, P.A. Crossley, and Kejun Li	
A Current-Based Security-Constrained Optimal Powe Flow by Multiple Particle Swarm Optimization	3147
Cong-Hui Huang, Chung-Chi Huang, Yi-Ming Tsao, Kuan-Chen Lin, and Ying-Nan Xiao	
A High-Voltage LED Driver Using SOI Technology	3151
Zhu Jian-hui, He Le-nian, and Jin Jin	
A Motor Control System Used in MRST Stabilized Platform Based on Model-Compensation ADRC	3155
Lv Zhen Hua, Guo Hong, Huang Zhi, Xu Jin Quan, and Shi Xiao Feng	
A New Algorithm of Line Selection by Using Principle of Traveling Wave in Small Current Grounding Fault	3159
Li Fengxiang and Zhu Weijin	
A New Fault Line Selection Method Based on Zero-Sequence Active Component	3163
Wang Chonglin, Xin Jian, Liang Rui, and Gu Yuxu	
A New Method of Calculating Generation Linear Distribution Factors for Generation Right Trade Fast Security Analysis	3167
Shi Youlong and Ai Dongping	
A New Method of Creep Ruptures Data Extrapolation Based on the Work	3173
Hui Liu and Fu-Zhen Xuan	
A New Operational Tests Circuit for Testing ±660kV UHVDC Thyristor Valves	3177
Ting Xie, Tang Guang-fu, Zha Kun-peng, and Gao Chong	
A New Position Sensorless Control Method for PM Brushless DC Propulsion Motor with Salient Pole Rotor	3181
Zhang Lin-sen, Xie Shun-yi, Hu Ping, and Liu Xiao-hu	

A Novel Co-axial Parallel Ring Type Ultrasonic Motor	3185
<i>Jiang Chunrong, Jin Long, Hu Minqiang, Jin Hong, Zhang Yan, and Song Aiguo</i>	
A Novel Control Method of Reducing Dead-Time Effects for HafI-Bridge Inverter	3189
<i>Zhang Xianjin, Zhang Hanxia, and Wang Jianhua</i>	
A Novel Drive Strategy for PMSM Compressor	3192
<i>Qiang Gao, Silei Shen, and Tieliu Wang</i>	
A Novel Excitation Control Equipment Design of Synchronous Motor	3196
<i>Gan Fangcheng and Pei Yanan</i>	
A Novel High PSR Voltage Reference with Secondary Temperature Compensation	3200
<i>Zhi-Hua Ning, Le-Nian He, Yi Wang, and Ya-Li Shao</i>	
A Novel Instantaneous Value Modulation Method for Two-Phase Matrix Converter	3204
<i>Yongli Fang, Bing Zhou, and Xing Gao</i>	
A Novel Slip Control for SLIM Propelled Transit Vehicles with Feed-Forward Compensation	3208
<i>Guan Jingru and Ge Qiongxuan</i>	
A Novel Starting Method of Sensorless BLDC Motors for Electric Vehicles	3212
<i>Mei Ying and Pan Zaiping</i>	
A Rapid and Coordinated Control Strategy in Voltage and Damping System Oscillation Control of SVC	3216
<i>Juan Li and Chao Zhang</i>	
A Remote Real-Time On-line Monitoring and Control System for Large-Scale Wind Farms	3220
<i>Yongxiang Bai, Youhua Hou, Dazhong Fang, Xuwei He, and Changsheng Zhu</i>	
A Research on the Torque Converter Performance Test-Bed Control System	3224
<i>Gao Yuanlou and Fei Xiaoxing</i>	
A Robust Key Management Scheme for WLAN	3227
<i>Ma Lin, Qin Danyang, and Xu Yubin</i>	
A Simplified Predictive Current Control for Voltage Source Inverter	3231
<i>Chen Cai-xue and Xie Yun-xiang</i>	
A Stochastic Model of Real-Time Service QoS Management for Next Generation Internet	3237
<i>Quan Liang and Kai-jian Liang</i>	
A Transmission Line Model for Prediction of Crosstalk Involving Three-Core Twisted Cables	3241
<i>Ruan Li-gang and Wang Li</i>	
A Ultra Low Supply Voltage Bandgap Reference Based on Substrate Bias	3245
<i>Yang Peng, Wu Xiaobo, Ye Zhihao, and Sun Yueming</i>	
Active Disturbance Rejection Control for PMSM Servo System Applied in Industrial Sewing Machines	3249
<i>Haibing Wang, Rongxiang Zhao, Fangbing Cheng, and Huang Yang</i>	
Active-Disturbance Rejection Control of Brushless DC Motor Based on BP Neural Network	3253
<i>Zhi Liu, Hong Guo, Dayu Wang, Zhiyong Wu, and Jinquan Xu</i>	
Adaptive Control of Aluminum Alloy GTAW Process	3257
<i>Wang Jianjun and Gu Yongjie</i>	
Adaptive Neuro Fuzzy Based Soft Starting of DC Motor	3261
<i>Li Tie and Jiang Le-jia</i>	
Adaptive Resources Allocation Algorithm Based on Genetic for Power-Line Communication System	3265
<i>Li Sheng and Xu Zhi-qiang</i>	
An Adiabatic Single-Phase MTCMOS Scheme for Leakage Reduction in Nano-Scale CMOS Processes	3271
<i>Li Su and Jianping Hu</i>	
An All-Solid-State Pulsed Power Generator Based on RSD and Saturable Transformer	3275
<i>Chao Shang, Yuehui Yu, and Weibang Li</i>	
An Audio Covert Communication System for Analog Channels	3279
<i>Zhiping Zhang and Xihong Wu</i>	

An Improved Neutral-Point Voltage Balancing Algorithm for the NPC Three-Level Inverter Based on Virtual Space Vector PWM	3283
Jian-Yong Zheng, Zhang-Liang Shen, Jun Mei, and Li-Feng Wang	
An Improved Position Sensor-Less Estimator for Vector Control of IPMSM	3288
Chunxia Gao and Lei Zhang	
An Improved Under Frequency Load Shedding Scheme Based on Rate of Change of Frequency	3292
Huilan Jiang, Geng Yan, Huiqiang Ji, Lin Liu, and Dapeng Shan	
An Integrated System of Wound Rotor Induction Motor Soft Starting and Doubly-fed Speed Adjusting	3296
Xiao Yi-ping Xiao and Yuan You-xin	
An Optimized Algorithm of Decision Tree Based on Rough Sets Model	3300
Donghui Chen and Zhijing Liu	
Analysis Algorithm for Reliability of Planning Grid	3304
Guan Lin and Li Yu-Liang	
Analysis and Implementation of USB Driver Based on VxWorks	3308
Gong Yun and Sun Li-hua	
Analysis and Matlab Simulation of 30-Pulse Rectification System Based on Stretch Triangle Transformer	3312
Xigeng Ma, Chao Li, Lina Bai, and Ying Liu	
Analysis and Research on Energy Flow Optimal Control and Allocation Strategy for Internal Combustion-Linear Generator Integrated Power System	3316
Ren Gui-zhou and Chang Si-qin	
Analysis of an Improved Magnetic Circuit for Designing Interior Permanent Magnet Synchronous Motor	3320
Zhiyong Lan, Xiangyu Yang, Chaodi Zheng, and Fangyuan Wang	
Analysis of Bifurcation Phenomena Based on Optimized Transformer in Loosely Coupled Inductive Power Transfer System	3324
Feng Aming, Qin Haihong, Mao Zhixin, and Peng Pingyan	
Analysis of Impellers' Strength in the Flat Hydrodynamic Torque Converter for Passenger Car Based on CFD	3328
Chu Yaxu, Wu Xiaoqiang, and Liu Chunbao	
Analysis of Low Voltage Ride through Capability in Wind Turbine Based on DFIG	3331
Shan-Ying Li, Yu Sun, Tao Wu, Yu-Zhi Liang, Xiao Yu, and Jian-Ming Zhang	
Analysis of Multi-period Equilibrium in Electricity Markets with Resource Constraint	3335
Zeng Ming, Wang Yuping, Jiang Danwei, and Tian Kuo	
Analysis of NEMS Switch Using Changeable Space Domain	3339
Wen-ge Yu, Kang-qu Zhou, Zheng-zhong Wu, and Ting-hong Yang	
Analysis of the Line-Frequency Electric Field Intensity around EHV Transmission	3343
Fei Wang, Weijie Wang, Zhichao Jiang, and Xuezeng Zhao	
Analysis of Three-Phase Bridge Rectifier with Constant Voltage Loads	3347
Lin Chen and Yunxiang Xie	
Analysis of Three-Phase Power Transformer Short Circuit Magnetic Field and Forces	3351
Hongkui Li and Gang Cheng	
Analysis on Relation between Automatic Voltage Control and Textile Manufacture	3355
Liu Yi, Chen Wei-hua, Liu Qu, and Zhang Meng-meng	
Application and Research on the Clustering Method in the Flow Transfer of Power Network	3358
Huiqiong Deng, Weilu Zhu, Lihua Sun, Huiqing Sun, and Lixiao He	
Application of ADI-FDTD Algorithm in RCS Calculation of Three-Dimensional Targets	3362
LiuHong Huang, Shijing Ding, and Xiaoping Liu	
Application of Back-to-Back VSC-HVDC in Power Grids Synchronization Parallel Operation	3365
Jiajun Liu, Lixiao Yao, Tiansen Wu, Ya Guo, Yuan An, and Changhong He	

Application of EKF in Laser/Inertial Sensors Localization System	3369
Luo Yahui, Jiang Ping, Hu Wenwu, and Xie Yanqun	
Application of FWT in Dielectric Loss Angle for On-line Measurement	3373
Hu Xuejun, Chen Jie, and Tan Honghua	
Application of Series Resonant Converters in Laser Power Supply	3377
Jun Yu	
Application of Single-Phase Distribution Technology and Analysis of Energy-Saving Effect	3381
Xiao Wanjun, Xu Lijie, Wang Wei, and Cao Qi	
Application of the TFQMR Method to the Analysis of PEC Target Scattering Problem in a Lossy Half Space	3385
Li Qing-bo, Zhou Ping, and Sun Hui-ling	
Applying Calculus of Variations to Seek for the Best Impurity Function of Decision Tree	3389
Shen Yongjun, Zhao Shulan, Wang Guanghui, Guo Na, and Xu Hualong	
Assessing the Growth and Future Prospect of Wind Power in China	3391
Yan Yan, Changliang Xia, Zhanfeng Song, and Tingna Shi	
Asynchronous Motor's Maximum-Efficiency Control Considering Variable Iron Loss Equivalent Resistance by Adjusting the Ratio of Active Power to Reactive Power	3396
Lin Youjie	
Automatic Generation Control Strategies under CPS Based on Particle Swarm Optimization Algorithm	3400
Weihua Luo and Yibin Shi	
Available Transfer Capability Calculation for AC/DC Systems with VSC-HVDC	3404
Guoqing Li and Jian Zhang	
Based on abc Coordinates Space Vector Control of Three-Phase Four-Leg Inverter Power Supply Simulation	3410
Kewei Cai, Zhongjiu Zheng, Guofeng Li, Ninghui Wang, and Zhiwei Zhu	
Based on Frequent Itemset for Maximal Frequent Itemsets	3416
Donghui Chen and Zhijing Liu	
Blind Detection Method of Anti-MAI Based on Wiener Filter	3419
Wanpei Chen, Ning Shao, Junsheng Chen, and Xuelong Hu	
Building and Verifying the Force/Torque-Decomposing Model of a Magnetically Levitated Stage with Moving-Coils	3423
Zhang Shengguo, Zhu Yu, Yin Wensheng, and Yang Kaiming	
Calculation and Analysis of 3D Temperature Field in Steady State of the Submersible Motor	3427
Yulei Liu	
Calculation of Infrared Absorption Coefficients of Dissolved Gases in Transformer Oil	3431
Yuxin Yun and Xiaoxiao Zhao	
Calculation of Permanent Magnetic Working Point for Polarized Magnetic System Based on Superposition Method	3435
Liu Lingshun	
Calculation of Rotor Critical Speeds from Permanent Magnet Synchronous Machine	3439
Shenbo Yu, Shi Jiao, Jing Yuan, and Yonghui Zhao	
Carbon Emissions Trading and Sustainable Development of Power Industry	3443
Chu Jingchun, Zeng Ming, Yang Lingling, and Ma Xiangchun	
Carbon Particles Reduction in Diesel Engine with Non-thermal Plasma Technology	3447
Wang Pan, Cai Yixi, Wang Jun, Zheng Rongyao, and Yan Yazhou	
Carrier Overlaping-switch Frequency optional PWM Method for Cascaded Multilevel Inverter	3450
Hong Zheng, Baohua Zhu, Hanghui Zhang, and Lingkui Chen	
Characteristics and Design of Transformer in Loosely Coupled Inductive Power Transfer System	3454
Mao Zhixin, Feng Aming, Qin Haihong, and Peng Pingyan	
Characteristics of the Surface Dielectric Barrier Discharge Plasma under Varying Pressures	3458
Bailing Zhang, Yun Wu, Min Jia, Yinghong Li, and Huimin Song	

Combining Strategy of Genetic Algorithm and Particle Swarm Algorithm for Reactive Power Optimization	5835
<i>Jingui Lu, Li Zhang, and Hong Yang</i>	
Commutation Torque Ripple Reduction with Fuzzy-PID Control in Brushless Direct Current Machine	3466
<i>Rong Dong, Dou Man-feng, and Miao Yi-wen</i>	
Comparative Study of Magnetic Fields Due to Types of Planar Permanent Magnet Array	3470
<i>Li Huang, Xueliang Huang, Hao Jiang, and Gan Zhou</i>	
Comparison of CIC and V2 Control	3474
<i>Xiao Zhou, Zhaohong Xie, and Yuan Wen</i>	
Computation of 2D and 3D Eddy Currents of Eddy Current Retarders	3478
<i>Yi Feng-yan and Yu Ming-jin</i>	
Computer Program Realization for Power System Complex Fault	3482
<i>Yong-hong Tao, Yu-song Dai, and Xia Lei</i>	
Control of Turbine and Excitation in Power System Based on Neural Networks	3485
<i>Hongbiao Li and Lixin Yin</i>	
Control System of Measurement-Processing Integrated Machine Tool	3489
<i>Sheng Xian-jun, Pei Chang-ping, Wang Ke-xin, Wang Yong-qing, and Tong Yu</i>	
Control Techniques for Active Power Filters	3493
<i>Shi Zhang, Daheng Li, and Xu Wang</i>	
Cooling System Design and Thermal Analysis of Multibrid Permanent Magnet Wind Generator	3499
<i>Wenming Tong, Shengnan Wu, Zhongliang An, Hongyang Zhang, and Renyuan Tang</i>	
Coordination Assessment of Power Plants and Power Network Based on Entropy and TOPSIS in Power	
System Planning	3503
<i>Yan-ling Wang, Jing-an Shang, and Qian Xue</i>	
Current Research Situation and Developing Tendency about Wireless Power Transmission	3507
<i>Zou Yuwei, Huang Xueliang, Tan Linlin, Bai Yang, and Zhang Jianhua</i>	
Current Sharing Schemes for Multiphase Interleaved DC/DC Converter with FPGA Implementation	3512
<i>Dehong Liu, An Hu, Guangsen Wang, and Wenhua Hu</i>	
Current Waveform Feature and Fault Identification for Overhead Contact Line in Electrified Railway	3516
<i>Xing-Jun Tian, Xia-Qing Li, and Yun-Hua Li</i>	
Decentralized Robust Control for Power Systems with STATCOM	3520
<i>Zhang Min and Liu Wei</i>	
De-icing Schemes and Operations for Overhead Power Line Based on Shunt Capacitor Over-compensation	
Method	3525
<i>Gang Liu, Hui Peng, M. Lehtonen, M. Degefa, Yonghui Chen, Shijin Jiang, Lei Sun, and Dong Wang</i>	
Design and Analysis of an Autotransformer Based 24-Pulse Rectifier	3529
<i>Xiao-hua Wu, Peng-peng Cai, and Xiao-bin Zhang</i>	
Design and Implement of Drawing of GOO One-Line Diagram of Smart Distribution Network	3533
<i>Deng Qijun, Zhou Hong, and Chen Yong</i>	
Design and Implementation of Car Black Box Based on Embedded System	3537
<i>Liewei Jiang and Chunxuan Yu</i>	
Design and Implementation of High Resolution Radar Video Transfer System	3540
<i>Chaowei Zhang, Pengshu Dong, Guoning Ding, Qibin Deng, Chengda Yu, and Yongfeng Wang</i>	
Design and Implementation of Switching Power Supply for Wheeled Mobile Robot	3543
<i>Wang Jianping, Lu Shan, Wu Huanhuan, and Mu Anle</i>	
Design and Measurement of Hollow Cylinder Type Force Transducer with Ultra Low Height	3546
<i>Keqin Li and Chaofu Zhu</i>	
Design and Research of a High Accuracy Numerical Control DC Power Supply	3549
<i>Sheng Hu and Shihong Qin</i>	

Design of a Digital Control Laser Driving Source Based on Dual Feedback Theory	3551
Menglong Cong, Chen Chen, Yansong Cui, and Yiding Wang	
Design of a New-Style LD Power Circuit	3555
Cheng Zhang, Aiwen Zhang, Min Zhou, Zhiping Cai, and Huiying Xu	
Design of a Novel Parallel Circuit Breakers	3558
Yan Du, Jiangbo Chen, Xuanshu Chen, and Fei Liu	
Design of Adaptive Chaotic Gradient Optimization Algorithm and Its Application in Electromagnetic Disturbance Testing	3562
Jianzhong Cao, Jinqiu Huang, and Zhiming Chen	
Design of an FPGA-Based 3-Phase SVPWM Controller	3565
Li XiaoNing and Huang DaGui	
Design of Compensation Network for LCC Resonant Converter	3569
Xiaohan Guan, Weiping Zhang, and Zhuo Li	
Design of dc Voltage Controller for UPQC by Using its Small Signal Model	3572
Tan Zhili and Zhu Dongjiao	
Design of Electrical Air-Condition Control System for Fuel Cell Vehicle Based on CAN Bus	3576
Hui Chen and Lin Zhan	
Design of Embedded Control System Based on ARM9 Microcontroller	3579
Lei Zhang and Zheng Feng Wang	
Design of IEC Portable Flickermeter with Error Correction	3583
Xiufang Jia, Jinghua Ma, and Weiqing Ma	
Design of Microsecond Level and High Current Pulse Driver Systems for Quantum Cascade Lasers	3587
Lei Li, Chen Chen, Hai Yu, Chengjun Dong, and Yiding Wang	
Design of Multi-machine Communication System Based on TWI	3590
Zhu Zhengwei, Zhao Huihui, and Shen Lin	
Analysis of Wavelet Envelope Spectrum to Vibration Signal in the Gearbox	3594
Liu Ziran, He Tao, and Jiang Guoxing	
Characteristics of Plasma Aerodynamic Actuation Generated by Polyphase Dielectric Barrier Discharge	3597
Gang Zhao, Min Jia, Huimin Song, Yinghong Li, Hua Liang, and Mei Lin	
New Thoughts of Urban Power Network Planning which Building the Urban Power Network Structure System	3601
Yang Weihong and Xu Jun	
Design of Robust Controller for PMSM Drivers	3605
Yu Rui-wen, Zhang Hui, Tan Guo-jun, and Yan De-kun	
The Typical Problems in the Process of Enterprise Management Information and Their Solutions for the Overall Software Architecture of Enterprise Management	3609
Li Lizhi	
Combining Strategy of Genetic Algorithm and Particle Swarm Algorithm for Reactive Power Optimization	3613
Jingui Lu, Li Zhang, and Hong Yang	
Design of the Traction Feederline's Adaptive Protection Device	3617
Di Rong-guang	
Design on Common Control Channel of MAC Protocol of Cognitive Radio Networks	3621
Liu Chuangqing, Wang Zhiming, and Song Hongmei	
Determination of the Admissible Parameter Set in Designing PID Controllers with Guaranteed Robust Performance	3625
Zeng Zhen-ping	
Development and Current Status of Low-Carbon High-Voltage Large-Capacity Circuit Breaker	3629
Cheng Xian, Liao Minfu, Duan Xiongying, and Zou Jiyan	

Development of a High Performance MCUs-Controlled Direct Current Power Supply Panel	3634
<i>Shibing Hu</i>	
Development of a New Intelligent Compound Switch in Reactive Power Compensation	3638
<i>Chen Huai-Zhong</i>	
Development of Raining Control System of 1000kV Ultra-High Voltage AC Corona Cage	3642
<i>Zeng Hongtao, Cao Yu, Zeng Bing, and Li Xiaofeng</i>	
Diagnosis of Energy-Saving Potential and Optimized Measures for 600MW Supercritical Coal-Fired Power Units	3646
<i>Ningling Wang, Yongping Yang, Zhiping Yang, and Yu Wu</i>	
Digital Control of Distributed Converter System for Battery Charge and Discharge	3650
<i>Zezhong Xia, Xiaopeng Tao, Yuanzheng Li, and Youxin Yuan</i>	
Direct Torque Control for Dual Three-Phase PMSM Based on Three-Phase Decomposition SVPWM	3655
<i>Jinbo Yang, Guijie Yang, and Tiecai Li</i>	
Distributed Reactive Power Optimization Computing in Multi-area Power Systems Using Ward Equivalent	3659
<i>Zhi-wen Liu and Ming-bo Liu</i>	
Dual Estimation Method of Speed and Stator Resistance for DTC Controlled IM Drives	3664
<i>Wang Tao and Nian Xiaohong</i>	
Dual Three-Level Double-Fed Induction Motor Control Based on Novel Stator Flux Observer	3668
<i>Guojun Tan, Xuanqin Wu, Zongbin Ye, Yaofei Han, and Panfeng Guo</i>	
Dynamic Analysis of Power Split CVT Drive System	3672
<i>Liu Xiaolin, Cui Yahui, Liu Kai, Ma Chaofeng, and Zhang Baofeng</i>	
Economic Dispatch Model Considering Randomness and Environmental Benefits of Wind Power	3676
<i>Shi Lianjun, Zeng Ming, Yan Fan, and Tian Kuo</i>	
Effect of Large-Scale Wind Farm on Transient Stability	3680
<i>Yanxu Chen and Zifa Liu</i>	
Efficient Rate-Adaptive Modulation for LDPC-Coded OFDM System	3684
<i>Xiaoqing Wang, Jintao Wang, and Jian Song</i>	
Electrically Excited Synchronous Motor Three-Level DTC_SVM Control Based on Novel Flux Observer	3689
<i>Xuanqin Wu, Guojun Tan, Meng Liu, and Hao Li</i>	
Electromagnetic Compatibility Issues in Numerical Control Machine Tools	3693
<i>Li Bin, Dai Yi, Cao Yajuan, and Li Qingjun</i>	
Emphasis and Measures to Develop the New Energy Industry in Wuhan - Study Based on the Survey of the Energy Industry in Wuhan	3697
<i>Zhihong Li</i>	
Energy-Saving Analysis on Thermal System in 600MW Supercritical Coal-Fired Power Plants	3701
<i>Yongping Yang, Yu Wu, Zhiping Yang, Ningling Wang, and Gang Xu</i>	
Enhanced Single Phase Locked Loop for Grid-Connected Converter in Distribution Network	3705
<i>Zhibing Wang, Yuhong Wang, and Shouyuan Wu</i>	
Environmental Economic Dispatch Based on Sub-area Coordinated Optimization	3710
<i>Jie Yu and XueLiang Huang</i>	
Error Analysis of Integrated Resistor Attenuation Network	3714
<i>Li Zheyng, Xiu Limei, Liu Jia, Lv Chaisia, and Li Shuo</i>	
Experimental Performance of a Solar Collector in Solar Chimney Power Plant System	3718
<i>Huilan Huang, Gang Li, and Hua Zhang</i>	
Experimental Research on an Inductive Power Transmission System for Blood Pumps	3722
<i>Fangqun Wang, Hongxia Xu, Kunxi Qian, Fukai Wan, Weiming Ru, Pei Zeng, Haiyu Yuan, and Teng Jing</i>	
Experimental Study of Testing Models for Low Noise Amorphous Alloy Core Power Transformers	3725
<i>Yingying Wang, Weijun Xing, Guoqiang Zhang, Wenhao Niu, and Dong Han</i>	

Experimental Study on the Wireless Energy Receiving System for a Capsule Endoscope	3729
<i>Kaifeng Xue and Ping Huang</i>	
Fault Detection and Tolerance of Instrument Transformer Based on Substation Integrated Automation	3733
<i>Cheng Hongbo and Wang Xun</i>	
Fault Location for Single-Phase-To-Earth Faults Based on Transient Traveling Wave Method and Artificial Pulse Signal Injection Method	3737
<i>Wang Chonglin, Wang Yangyang, Liang Rui, and Sun Gang</i>	
Fault Pattern Recognition of Thermodynamic System Based on SOM	3742
<i>Kuang Yin and Luo Gang</i>	
Feed-Forward Control for Stability Improvement in Cascaded System	3746
<i>Peng Zhang, Xuhui Wen, and Jun Liu</i>	
Ferrite Film on Silica Particles for High Frequency Application	3750
<i>Xu Junming, Hu Xiaoping, Song Kaixin, Zheng Liang, Ying Zhihua, and Qin Huibin</i>	
Field-Weakening Speed Extension of BLDCM Based on Instantaneous Power Theory	3753
<i>Han Kong, Guangzhao Cui, and Anping Zheng</i>	
Flow around Rudder Controlled by Electromagnetic Body Force	3757
<i>Huixing Liu, Benmou Zhou, Zongkai Liu, Feng Chen, and Yibing Luo</i>	
Flow Control of Air Compressor in Fuel Cell System Based on Adaptive Look-Up Table Algorithm	3761
<i>Zhou Su, Shen Xiao-yan, and Chen Feng-xiang</i>	
Flow Structure and Propulsion Effects of MHD Propulsion by Surfaces	3767
<i>Zongkai Liu, Benmou Zhou, Huixing Liu, Yifei Huang, and Zhigang Liu</i>	
Formulating State Equations of RLCM Active Network over F(z)	3771
<i>Zong Tao Wang, Hong Na Li, and Kai Sheng Lu</i>	
Frequency Domain Analysis of Transient Interference	3775
<i>Han Su-min, Zhang Wei, Xie Dong-lei, and Liu Jian-hai</i>	
Fuzzy Analysis on Criticality of Tool Magazine Based on Type-2 Membership Function and Interval Number	3779
<i>Guixiang Shen, Xiaofeng Wang, Yingzhi Zhang, Shaona Chen, and Bingkun Chen</i>	
Generalized Association Rule and Orexis Degree	3784
<i>Han Peiyou</i>	
Hardware Circuit Design on Torsional Spring Testing	3788
<i>Jianjun Ding and Chao Sun</i>	
Harmonic Statistical Analysis in the Distribution Network of Nanhai in Foshan	3791
<i>Ouyang Sen and Shi XunTao</i>	
Heat Transfer Analysis of Asphalt Concrete Pavement Based on Snow Melting	3795
<i>Yan-ping Tu, Jie Li, and Chang-sheng Guan</i>	
Hierarchical Behavior Structure for NAO Robot Utilizing Fuzzy Inference Systems	3799
<i>Bahram Jozi, Ahmed Fakharian, and Armita Karachii</i>	
High Performance Rectifier with Wide Speed Range for Direct-Drive Wind Energy System	3803
<i>Hongyang Zhang, Changbao Fan, Renyuan Tang, and Jianguang Zhu</i>	
Hybrid Optimization Strategy for Line Distribution Network	3807
<i>Qingjing Zhou and Jingui Lu</i>	
Identify PMSM's Parameters by Single-Layer Neural Networks with Gradient Descent	3811
<i>Wang Shaowei and Wan Shanming</i>	
Implementation of AES with Handshake Protocol against Differential Power Analysis	3815
<i>Zou Cheng, Zhang Peng, Xiang Kai-quan, and Zhao Qiang</i>	
Improvement on Start-up Demonstration Test	3819
<i>Panxiang Yue, Lirong Cui, and Liying Wang</i>	

In Plane Parametric Vibration of Horizontal Cable in Terms of the First Two Modes Composition	3823
<i>Li Fengchen, Zhang Lina, Yang Ou, Chen Shijun, and Tian Shizhu</i>	
Incident Duration Model on Urban Freeways Based on Discrete Choice Model	3826
<i>Li Ruimin, Zhao Xiaoqiang, Yu Xinxin, Cheng Nan, and Zhu Jianan</i>	
Indices System and Methods for Power Grid Security Assessment Based on Dynamic Fuzzy	3830
<i>Zeng Ming, Ding Shi, Xue Song, and Tian Kuo</i>	
Inductance Calculation for Stator Winding of Brushless Doubly-Fed Machine	3834
<i>Gong Sheng, Yang Xiangyu, and Ji Liangzhou</i>	
Input Admittance Analysis Based on One Cycle Control in Boost Single-Phase PFC Converters	3838
<i>Zhang Xianjin, Gong Chenglong, and Wang Jianhua</i>	
Intelligent Fault Diagnosis of Inverter Based on Improved PSO Algorithm	3842
<i>Qing-rui Liu, Ning Han, and Zhong-jie Wang</i>	
Intelligent Polyurethane Encapsulation System Controlled by MCU	3845
<i>Hong Robin and Wang Hongmei</i>	
Investigation for 600 MW Supercritical Boiler's Main Steam Temperature Control	3848
<i>Yu Yanzhi, Zhang Liangbo, Xu Haichuan, Chen Duogang, Dong Gongjun, Shen Bo, and Liu Sheng</i>	
Laser-Triggered Surface Flashover Characteristics of Polycarbonate with Pulsed Voltage	3852
<i>Ruzheng Pan, Youhua Wang, Zhizhong Zhao, Wei Xu, Ping Yan, Jue Wang, and Guangsheng Sun</i>	
Light-Beam Sensorless Control of Heliostats for Tower Type Solar Thermal Power Generation Applications	3856
<i>Xun Ma and Ping Wang</i>	
Low Losses Hysteresis Current Control Method for Active Power Filter	3860
<i>Ouyang Sen, LiuYan, Zheng Zaitian, Ye Xiao-jun, Zeng Jiang, and Yu Tao</i>	
Low Voltage Ride through Characteristics Analysis of Direct-Driven Wind Power System	3866
<i>Mei Jun, Mei Xue-feng, Zheng Jian-yong, Guo Xue-ying, and Shen Zhang-liang</i>	
Maximum Power Point Tracking Using Sliding Mode Variable Structure Control Algorithm	3871
<i>You Jun and Zheng Jian-yong</i>	
Measurement of Rotor Eccentric Distance in a Maglev Centrifugal Blood Pump	3874
<i>Fangqun Wang, Hao Wang, Fukai Wan, Kunxi Qian, Hongxia Xu, Weiming Ru, Pei Zeng, Haiyu Yuan, and Teng Jing</i>	
Mechanism of Mechanical Activation of Circulating Fluidized Bed Fly Ash	3878
<i>Li Jing-Tao, Lei Xiu-Jian, Zhang Wen-Qing, and Zhao Yong-Hong</i>	
Methodology of Regenerator Calculation for Use in Subcritical and Transcritical Organic Rankine Cycle for Low-Temperature Heat Recovery	3882
<i>Tao Guo, Huaixin Wang, Shengjun Zhang, and Shihai Yin</i>	
Modeling and Experimental Analysis of Helical Resonator for Wireless Power Transmission System	3886
<i>Zhuo Yan, Qingxin Yang, Haiyan Chen, Chao Zhang, and Guizhi Xu</i>	
Multiple Input Bidirectional DC/DC Converter for Energy Supervision in Fuel Cell Electric Vehicles	3890
<i>Shengyong Liu, Xing Zhang, Haibin Guo, and Jun Xie</i>	
Multiport DC/DC Converter for Stand-alone Photovoltaic Lighting System with Battery Storage	3894
<i>Shengyong Liu, Xing Zhang, Haibin Guo, and Jun Xie</i>	
Neural Network and Nonlinear Prime-Dual Interior Algorithm for Optimization Reactive Power Compensation	3898
<i>Lu Fang, An Luo, Xianyong Xu, and Houhui Fang</i>	
New Direct Torque Control of Brushless DC Motor	3902
<i>Tang Puhua, Lei Yuyong, Liu Kefu, and Jiang Dajun</i>	
New Environmental Friendly Evaluation Criterion for Coal-Fired Power Plant Comprehensive Performance	3908
<i>Gang Xu, Shiyuan Lu, Yongping Yang, Liqiang Duan, Ji Li, Le Li, and Xiaona Song</i>	
NoC Design for the SoC of Image Process System of Road Mark Recognition	3912
<i>Liu Jia, Li Zheing, and Li Shuo</i>	

NoC Design with DFG Model for DSPS	3917
<i>Li Zheyng, Liu Jia, and Li Shuo</i>	
Numerical Analysis of Starting Characteristic of Tubular Linear Induction Motor Based on Finite Element Method	3921
<i>Yang Jia-xiang, Ma Feng-lian, and Yang Yan-hua</i>	
Numerical Simulating for Thermoelectric Generation by Rotational Flow in Thermoelectric Porous Medium	3925
<i>Jiangrong Xu and Bo Li</i>	
Numerical Simulation of Particle Aggregation in the Poiseuille and Acoustic Flow Field	3929
<i>Dianpeng Zhao, Jiangrong Xu, Zezheng Li, and Ping Zhang</i>	
Observation Method for PMSM Rotor Position Based on High Frequency Signal Injection	3933
<i>Zheng Anping and Wang Jian</i>	
Optimal Compensation Algorithms for a Dynamic Voltage Restorer	3937
<i>Deng Pan, Chen Zhongming, Jiang Peng, Abdelkrim Benchaib, and Guillaume De Preville</i>	
Optimal Maintenance Decision of Power Transformers	3941
<i>Hong-xia Ji, Ji-quan Zhang, Zhen-yong Liu, Gui-shu Liang, and Hong-shan Zhao</i>	
Optimal Reactive Power Planning Based on Improved Tabu Search Algorithm	3945
<i>Zou Yiqin</i>	
Optimization Design of the Inductance of Boost Converters	3949
<i>Liu Shulin and Ma Yibo</i>	
Optimization Models for Power Grid Expansion Cost Allocation Based on Cooperative Game Theory	3953
<i>Xu Jun and Tan Zhongfu</i>	
Optimization of Multiloop Paratactic Buried Power Cable Layout	3957
<i>Zhang Lei, Wang Hongxin, Liu Zhiping, and Zhang Biao</i>	
Optimization of Thermal Power Units Commitment Based on Culture Algorithm	3961
<i>Lu Wei, Zeng Ming, Wang Yulong, and Tian Kuo</i>	
Optimization of Vertical Linear Synchronous Motor for Ropeless Elevator with INGA Method	3965
<i>Xiaozhuo Xu, Xudong Wang, Shiying Yuan, and Haichao Feng</i>	
Optimization the Electromagnetic Torque Ripple of Permanent Magnet Synchronous Motor	3969
<i>Shoudao Huang, Jinping Zhang, Jian Gao, and Keyuan Huang</i>	
Performance Analysis of Existing 600MW Coal-Fired Power Plant with Ammonia-Based CO ₂ Capture	3973
<i>Gang Xu, Lijiang Duan, Mingde Zhao, Yongping Yang, Ji Li, Le Li, and Haizhan Chen</i>	
Performance Analysis of Frequency Sweep Nonlinearities in LFM Radars	3977
<i>Shibing Hu</i>	
Photochemical Active of SiO ₂ , WO ₃ Doping on TiO ₂ Thin Film in H ₂ S Removal	3981
<i>Jie Ge, Cheng-zhong Zhang, and Tao Liu</i>	
Physical Pictures and Performance Analysis of Wireless Power Transfer via Evanescent Fields	3985
<i>Hongyan Zhang, Yanping Yao, Zheng Geng, and Qiongjian Fan</i>	
Power Supply Based on Small Current Transducer for Wireless Sensor in Smart Grid	3990
<i>Xin Shouqiao, Xiao Liye, Zhang Guomin, and Zhai Jiaxing</i>	
Puffer Characteristic Calculation of a Circuit Breaker Using Fluorocarbon Gas Mixture as an Arc Quenching Medium	3994
<i>Kang Li, Weijun Xing, Guoqiang Zhang, Wenhao Niu, and Xin Wang</i>	
RBF Neural Network Sliding Mode Control for Variable-Speed Adjustable-Pitch System of Wind Turbine	3998
<i>Bin Jiao and Lijun Wang</i>	
Reactive Power Optimization in Power System Based on Adaptive Focusing Particle Swarm Optimization	4003
<i>Shu-kui Liu, Jing Tang, Qi Li, Xia Wu, and Yan Luo</i>	
Realization of Time Delayed Wireless MIMO Channel	4007
<i>Guan Mingxiang, Yuan Fang, and Wan Xueyuan</i>	

Reasons and Research for Unbalanced Magnetic Pull in High Power-Density PM Synchronous Motors	4010
<i>Lei Zhang, Xuhui Wen, Youlong Wang, and Jian Zhang</i>	
Regenerative Brake System in Electric Hoist with Ultracacapacitor	4014
<i>Yongming Bian, Lijing Zhu, and Xinming Xu</i>	
Reliability-Based Prioritizing Maintenance Policy for Distribution System	4019
<i>Zhang Yong, Sun Xiaorong, Chen Hao, and Fangxing Li</i>	
Remote Monitoring System of Lead-Acid Battery Group Based on GPRS	4023
<i>Xia Zezhong, Su Hongliang, and Liu Ting</i>	
Research and Application of Grid Maintenance Scheduling Optimization Based on Multi-objective and Multi-constraint	4027
<i>Wang Yingying, Liu Wenyiing, Zou Pinyuan, Li Shiwei, and Yang Xudong</i>	
Research and Development of Self-Modulation Press Steam Generator	4031
<i>Zhibin Xie and Baoshou Sun</i>	
Research of Control Strategy at Lower Speed on the Direct Self-Control of Brushless DC Motor	4035
<i>Qing-rui Liu, Ran Xu, Jin Gao, and Zhong-jie Wang</i>	
Research of PMSM Modeling Based on Least Square Support Vector Machines	4039
<i>Jun Zhao, Weiguo Liu, and Bo Tan</i>	
Research of the Crane System Based on Technology of Storing-Energy with Super-capacitor	4046
<i>Zhi-jun Li, Gong-qing Wang, Ke-yu Shen, Tian-fang Zhao, and Xiang-gang Ni</i>	
Research of Variable Gain Nonlinear PI Controller Based Three-Phase Phase-Locked-Loop System	4050
<i>Xiaochu Qiu, Jian Xiao, Xiaochu Qiu, and Changdong Wu</i>	
Research on a Fast Algorithm for a Three-Phase SVPWM Rectifier	4054
<i>Zhongjiu Zheng, Kewei Cai, Zhenghua Gao, Guofeng Li, and Ninghui Wang</i>	
Research on a New Type Quasi-buck Topology of 4-Quadrant Converters	4059
<i>Zhang Jiasheng and Pan Dawei</i>	
Research on a Novel Type of Hybrid Propulsion System and Control Strategy for Tracked Vehicle	4065
<i>Jiangtao Gai, Tian Ma, Shoudao Huang, Xin Zhang, Xiaofeng Ma, and Gongding Bai</i>	
Research on Active Power Factor Correction of the Electronic Ballast for High-Pressure Sodium Lamps Based on L6563	4070
<i>Sun Jing</i>	
Research on an Improved Model and Method of Calculating Total Transfer Capability	4073
<i>Qian Wang and Li-zi Zhang</i>	
Research on Commercial Transmission Investment Model in Power Market	4077
<i>Zeng Ming, Xie Bing, Zheng Lin, and Yan Fan</i>	
Research on DC Partial Discharge Tentative of HVDC Filter Capacitors	4081
<i>Zongxi Zhang, Hong Zeng, Minghong Su, Ping Liu, and Fan Liu</i>	
Research on Decision of Air Cargo Strategy Based on Data Mining	4085
<i>Yuewen Li</i>	
Research on Flux Oriented Control of High Power Density Asynchronous Motor	4090
<i>Xi-wei Zhou, Chen-dong Duan, Yong-feng Ju, and Xi-jian Liu</i>	
Research on Impact of Growth of Real-Time Price Consumers on Generation Capacity Investment	4094
<i>Zeng Ming, Yang Guofeng, Wang Jiangbo, and Yin Shaohua</i>	
Research on Influence of Wind Uncertainty on Reliability of Electric System	4098
<i>Zhang Yanfu, Wang Jiangbo, Zhang Luomeng, and Liang Rongshan</i>	
Research on Large DC-Biased Power Transformer	4102
<i>Weilu Zhu, Caihong Yan, and Yongjiang Jia</i>	
Research on Li-ion Battery Management System	4106
<i>Dongping Xu, Lifang Wang, and Jian Yang</i>	

Research on Loss Allocation of Inter-provincial Transmission Lines in Interconnected Power Grid	4110
Zeng Ming, Ma Shaoyin, Yin Shaohua, and Dong Jun	
Research on Multistep Electricity Price Model with Bidirectional Regulation for Large Consumers	4114
Xia Lei, Dong-xian Yu, and Xiao-li Bai	
Research on Neutral Point Drifting Technology of High Voltage Transducer	4118
Wei Wang, Hui Cai, Weiming Chen, and Meng Cai	
Research on Rating of Power Grid Emergency Based on D-S Theory Weighted by AHP	4123
Dong-xiao Niu and Ya-nan Wei	
Research on Reducing the Power Loss of Lightning Shield Line on Lightning Protection System of Photovoltaic Grid-Connected Power	4128
Weiping Luo and Yurong Wu	
Research on Switched Reluctance Motor Drive System for the Electric Forklift Based on DSP and μC/OS	4132
Wu Xia, De-an Zhao, Minggong Hua, and Jianzhang Han	
Research on Switchgear Contact Temperature Online Monitoring Based on Zigbee Wireless Network	4136
Liu Shuguang, Huang Xinbo, and Li Pengfei	
Research on Switching Loss Minimized PWM Method for Flying Capacitor Three-Level Inverters	4140
Chang-xin Miao, Li-ping Shi, and Hong-yan Wang	
Research on the Black Start Field Test of Shandong Power Grid Based on PDCA Cycle	4144
Hongtao Wang and Yutian Liu	
Research on the Control of Switch Power Supply Based on the Digital Potentiometers	4149
Fu Yuan, Wang Lifang, and Liu Jun	
Research on the Loss Allocation Scheme Based on Real-Time Data	4153
Liming Wei and Jun Lin	
Research on the Matched DC Filter Design in the Power Accumulator Battery Testing System	4157
Kang Wei, Wang Ping, Zhang Lixia, and Wang Rugang	
Research on the Quantization Algorithm of Double-Variable Control VVVF	4161
Yudong Li, Hongxia Fu, Haichao Feng, and Qingnan Du	
Research on the Selection of Short Circuit Impedance of Converter Transformer in Extra-High Voltage	4164
Weilu Zhu, Huiqiong Deng, and Kejun Sun	
Research on the Starting Performance of SR Motor	4168
Run-ke Hao, Ren Wu, Jun Zhu, and Yuan-jiong Gao	
Research on Traffic Organization and Design Parameter of U-turn Intersection in City	4172
Fu Wang, Jie Li, and Yong-hui Shi	
Review of FRT Requirements for Integration of Wind Energy in China and Europe	4177
Zhang Yong and Guo Peiyuan	
Risk Control and Portfolio Management of Investment in Chinese New Power Market	4181
Jie Yang	
Risk Evaluation of Generation-Load System Based on Monte Carlo Method and Fast Clustering Analysis Method	4185
Jingliang Jiang, Anping Huang, and Yuanyuan Liu	
Scheme for Integrated Protection Based on Digital Substation	4189
Li Peng and Qin Lijun	
Signal Processing and System Design of Cylinder Reliability Test for ISO Standard	4193
Ying You, Tao Qin, and Gangyan Li	
Simulation and Analysis of Hysteresis Current Controller in Motor Control	4196
Chen Guoqiang and Kang Jianli	
Simulating Analysis of Single-Phase Transformer under DC Bias	4200
Xia Dong, Zhizhen Liu, Bin Liu, and Lianming Zhang	

Simulation and Analysis on Novel Dual-Rotor Permanent-Magnet Synchronous Motor	4204
<i>Rujing Xiao, Xiangyu Yang, and Qinghua Lin</i>	
Simulation and Experiment Study for the Underwater Focusing Shockwave	4208
<i>Li Ning, Lei Kaizhuo, Huang Jianguo, and Chen Jianfeng</i>	
Simulink Research of the Sensorless Vector Control System on the Base of the Novel Speed Calculate Modal	4212
<i>Jun-min Shen and Wen-zhan Dai</i>	
Sliding Mode Control of PMSM Based on Load Observer	4216
<i>Tingna Shi, Linrui Wei, and Xiao Dan</i>	
Solution of Ultrasonic Based Fuel Economy Evaluate System	4220
<i>Ming-chao Liao and Shi-hong Qin</i>	
Speed Estimation of Doubly-Fed Induction Generators Based on Active Disturbance Rejection Control	4223
<i>Yan Yan, Changliang Xia, Zhanfeng Song, and Tingna Shi</i>	
Speed Sensorless Direct Toque Control of Interior Permanent Magnet Synchronous Motor Drive Based on Space Vector Modulation	4226
<i>Yanping Xu and Yanru Zhong</i>	
Spread Spectrum Signal Acquisition in the Presence of Fractional Doppler Frequency Offset	4231
<i>Weigang Zhao and Mingyue Liu</i>	
Stability Analysis of Large Transformer Windings	4235
<i>Weilu Zhu, Caihong Yan, and Lanying Zhao</i>	
Static Analysis and Displacement Control of a Smart Beam with Weakly Bonded Piezoelectric Actuators	4239
<i>Wei Yan</i>	
Structural Study on Moving Magnet Compressor for Stirling Engine	4243
<i>Ding Guozhong, Zhang Xiaoqing, He Mingshun, and Shu Shuiming</i>	
Structure Optimization Design of High-Speed BLDC Motor Using Taguchi Method	4247
<i>Wenjuan Zhu, Xiangyu Yang, and Zhiyong Lan</i>	
Study of Control and Efficiency of AC-DC Converter	4250
<i>Shixiang Zhou</i>	
Study of CS-GE Classification Algorithm	4254
<i>Dingli Song, Bingru Yang, and Aichun Wang</i>	
Study of Current and Displacement Stiffness Characteristics of AMB System	4258
<i>Wu Guoqing, Zhou Jingling, and Wang Xiping</i>	
Study of GIS Partial Discharge On-line Monitoring Using UHF Method	4262
<i>Shen Zhang, Xincai Zheng, Jinbin Zhang, Haijun Cao, and Xiaoxing Zhang</i>	
Study of Pulsed Power Supply for Magnetoacoustic Tomography with Magnetic Induction	4266
<i>Yanhong Li, Guoqiang Liu, and Shiqiang Li</i>	
Study of the Implementation Mode of Demand Side Response in China	4271
<i>Song Xinming, Zeng Ming, Wang Jingjing, and Tian Kuo</i>	
Study of Wireless Power Transfer System Through Strongly Coupled Resonances	4275
<i>Tan Linlin, Huang Xueliang, Li Hui, and Huang Hui</i>	
Study on Bipole Protection of ±800KV UHVDC System	4279
<i>Xiao-kang Xu and Ming-chao Xia</i>	
Study on Data Mining for Grounding Fault Line Selection in 6kV Ineffectively Grounded System of Coal Mine	4283
<i>Yan-wen Wang, Fei Long, Yan Gao, and Nian-bin Wang</i>	
Study on Digital PI Control of Current Loop in Active Power Filter	4287
<i>Xueliang Wei</i>	
Study on Fluctuation Phenomenon of Power Network Cascading Overload	4291
<i>Huiqiong Deng, Weilu Zhu, Kejun Sun, Jing Zhao, and Zhenzhen Feng</i>	

Study on Hardware-in-the-Loop of Active Power Filter Based on RTDS	4295
<i>Xiaopin Yang, Xiaoming Zha, and Shangsheng Li</i>	
Study on MMIC Filter Composed of Microstrip Transmission Line	4299
<i>Bolin Ke and Chunhua Li</i>	
Study on Online Insulation Monitoring System for Working DC Power of Power Plants and Substations	4302
<i>Yunqing Liu and Xichao Wang</i>	
Study on Optical Fiber Temperature-Sensing Technique for Vacuum Circuit Breaker Contactor Based on Raman Scattering Theory	4305
<i>Chen Jingcui, Liu Shuguang, and Huang Xinbo</i>	
Study on Relay Protection Coordination in Complex Auxiliary Power System	4309
<i>Yawen Yi, Jun Xie, and Na Yi</i>	
Study on Repetitive Control of Current Loop in Active Power Filter	4312
<i>Xueliang Wei</i>	
Study on Structures and Electrical Properties of 4H-SiC Floating-Junction SBDs	4317
<i>Yagong Nan, Genxiang Xiang, and Shouyi Li</i>	
Study on Test Method for Outlier of Flight Data	4321
<i>Lu Hui and Jiao Xiuzhen</i>	
Study on the Equalizing Charge of Serial Ni-MH Traction Batteries	4325
<i>Tie-Zhou Wu, Yang Sun, Hui-Jun Zhou, and Fang-Zhen Xia</i>	
Study on the Flow Properties in Carbonate Reservoirs with a Cavern Drilled into Based on the Flow Field and Seepage Field Coupled Model	4329
<i>Li-you Ye, Wei Xiong, Shu-sheng Gao, Jian-jun Liu, and You-jun Ji</i>	
Study on the Non-power Frequency Transient Fault Selection in Distribution Network with a Single-Phase to Ground Fault Based on Hilbert-Huang Transform	4332
<i>Zhong-jian Kang, Dan-dan Li, and Xiao-lin Liu</i>	
Study on Zero CO ₂ Emission SOFC Hybrid Power System with Steam Injection	4338
<i>Liqiang Duan, Xiaoyuan Zhang, Yongping Yang, and Gang Xu</i>	
Tension Control System without Sensor for Slitting Stainless Steel Strip into Wires	4342
<i>Jing Hui and Hui He</i>	
Terminal Sliding Mode Valving Controller Based on COI Signal for Multi-machine Power Systems	4346
<i>Zou Dehu, Shi Yulin, and Wang Baohua</i>	
Test of Conductive Carbon Fiber Enhancing the Structural Bearing Capacity	4350
<i>Xiao-ming He, Jie Liang, and Peng Guan</i>	
Testbench Design for Mixed Signal SoC Based on Task Flow	4354
<i>Ruan Xiaoli and Li Zheyng</i>	
The Analysis and Improvement of Start-Up Circuits Used in the Switch Power-Supply	4358
<i>Huazhong Xu and Yifan Zhao</i>	
The Analysis and Research of a High-Stability and High-Accuracy VLDO	4364
<i>Fengge Wang, Xuewen Wang, Lei Yu, and Wu Zhao</i>	
The Analysis of LDO and the Stability of Loop Compensation	4368
<i>Xuewen Wang, Fengge Wang, and Zhongwei Li</i>	
The Analysis of Magnetic and Thermal Characteristics for the Three Gorges' 840MVA Evaporative Cooling Hydrogenerator on the Basis of Ansys Software	4372
<i>Ruan Lin and Gu Guobiao</i>	
The Application of BP Optimized by a Fuzzy-Controlled Niche Genetic Algorithm on the Prediction of the Fault of Transformer	4376
<i>Zichun Pei, Bide Zhang, Yuchun Yuan, and Yan Zhang</i>	

The Application of Entropy Power Method Improved on Electric Power Business Economic Benefit Quality Synthetic Evaluation	4380
<i>Shuliang Liu, Yanling Bai, and Congyi Zou</i>	
The Application of Intelligent Control for Switched Reluctance Motor	4384
<i>Yuyang Mao, Zhiquan Deng, and Jun Cai</i>	
The Application of PWM Control in Proportional Control System	4388
<i>Dou Jinqiang and Gao Yuanlou</i>	
The Compensation and Control Analysis of Railway Static Power Regulator	4391
<i>Ma Fujun, Luo An, Xu Xianyong, Wu Jingbing, Wu chuanping, Zeng Canlin, and Zhang Yin</i>	
The DEA Analysis of Power Grids Construction of the Socio-economic Impact	4395
<i>Jingmin Wang and Qian Wang</i>	
The Design and Realization of the Power Market Information Supervision System Based on Heterogeneous Data Integration	4399
<i>Qi Chen, Di-chen Liu, Biao Yang, and Ling Zhou</i>	
The Design of a Non-energy-Consuming Balance System for Lithium-ion Batteries	4403
<i>Jin-hui Gao, Li-feng Jia, Ying-ying Li, and Jing Tang</i>	
The Energy Flow Analysis and Capacity Calculation of UPQC	4406
<i>Shen Hong, Wang Xiaohuan, Gu Herong, and Wang Liqiao</i>	
The Feasibility Study of Monitoring System of Icing on Transmission Line Based on Fiber Optic Sensor	4410
<i>Yan Ning, Qi Huang, Changhua Zhang, Yongxing Cao, Hui Li, and Zhihang Xue</i>	
The Impact of Using Chilled Water Storage Systems on the Performance of Air Cooled Chillers	4414
<i>Li Jie</i>	
The Implication of Four-Quadrant H-bridge Cascaded Multi-level Inverters in the Speed Control System of High-Voltage Motor	4418
<i>Bing Hai Sun</i>	
The Influence of Electrical Parameters of Double Fed Induction Generator on the Transient Voltage Stability	4422
<i>Hongmei Li, Qiulan Wan, and Zhaoxing Ma</i>	
The Integration of GIS and Real-Time Monitoring System for Power Grid	4425
<i>Wu Kehe and Wang Xiaohui</i>	
The Key Technology of Complete Protection for the High Voltage Variable Frequency Drive System	4429
<i>Xiong Qing and Liu Jian</i>	
The Measuring Principle and Method of Telemetering Module of the Remote Terminal Unit	4433
<i>Liqun Shang</i>	
The Monitoring System for Electric Quantity Consumed in Extruder Based on WB Electrical Transducer	4436
<i>Zheng Shuang and Liu Fugang</i>	
The Optimal Design of 2500km-10Gbps Optical Communication Dispersion Compensation Systems Based on FBG without Electric Regenerator	4439
<i>Wen Liu, Shu-qin Guo, Li-ping Chang, and Fu-mei Sun</i>	
The Research of Structural Modal Parameter Identification for Oil Derrick	4443
<i>Zhang Lina, Li Fengchen, Yang Zepin, and Hu Minghua</i>	
The Risk-Based Optimal Maintenance Scheduling for Transmission System in Smart Grid	4446
<i>Zeng Ming, Huang Lixin, Qiu Liuqing, and Tian Kuo</i>	
The Stand-alone PV Generation System with Parallel Battery Charger	4450
<i>Hong Wang and Donglai Zhang</i>	
The Study of Micro Electrical Energy Storage System	4454
<i>Yubao Zhang and Longwu Shen</i>	
The Technology of Disk Array Striping Based on Genetic Algorithms	4457
<i>Yun-zhu Ni and Zhi-shu Li</i>	

The Torque Vector Control System of the Switched Reluctance Motor Used in Electric Vehicle	4462
<i>Li Jisheng, Gu Ye, and Lei Shuying</i>	
The Vibration Test of Combine Harvester and the Anti-vibration Study of the Monitor	4466
<i>Dianyun Chen, Kun Li, Haitao Li, and Yufang Cheng</i>	
Theoretical Analysis on Subharmonic Resonance Overvoltage	4470
<i>E.S. Jin, X.F. Chen, G.W. Xia, Z.Q. Bo, and A. Klimek</i>	
Theoretical Research on the Absorption Characteristic of Three-Layer Microperforate Plate	4474
<i>Yang Baoguo, Zhu Congyun, Ding Guofang, and Huang Qibai</i>	
Three-Level PWM Inverter Based on the Battery Discharge System	4478
<i>Zhang Lixia, Wang Hongru, and Wang Rugang</i>	
Three-Phase Four-Leg Inverter Based on Voltage Hysteresis Control	4482
<i>Xiaoyong Zhang, Jun Wang, and Chuan Li</i>	
Thrust Decoupling Control for a Novel Planar Magnetic Bearing	4486
<i>Zhenxiong Zhou, Yongxin Qu, and Jiandong Yang</i>	
To See the Input Resistance of Amplifier Circuit from Network Characteristic and Physical Meaning	4490
<i>Run-ling Yang, Hui Dong, and Jun-ni Zhou</i>	
Topology Analysis and Modeling for Smart Distribution Network Based on Complicated Equipments	4494
<i>Qijun Deng, Hong Zhou, and Yong Chen</i>	
Torque Ripple Reduction in Brushless DC Motors Based on Model Predictive Control	4498
<i>Zicheng Li and Shanmei Cheng</i>	
Transient Simulation of Double-Cage Induction Motors under Power Source Reversal Connections Braking	4502
<i>Xiaomin Xiang, Junfan Zhuo, Zhiyuan Luo, and Shuai Wang</i>	
Transient Stability Analysis for Small Electric Power Grid	4506
<i>Tangxian Chen and Zhigang Xu</i>	
Transmission Characteristics Analysis for Double Trapezoid-Ridge Waveguide by the Vector Finite-Element Method	4510
<i>Ping Zhou and Qing-bo Li</i>	
Unbalanced Load Flow for Weakly Meshed Distribution Systems with Distributed Generation	4513
<i>Shao-Qiang Hu and Sen-Mao Li</i>	
Unsteady Mixing Performance in Single Screw Extruders	4518
<i>Xu Baiping, Wang Meigui, He Liang, Kong Ping, and Liu Yuejun</i>	
Uplink OFDMA Channel Estimation with Frequency Domain Compensation in Sparse Channel	4523
<i>Guanping Lu, Jun Wang, Zhaocheng Wang, Chao Zhang, and Zhixing Yang</i>	
Voltage and Current Analysis of Multi-step STATCOM Based on Three-Level Inverters	4527
<i>Ying Xiao, Xiaoling Wen, Ling Lin, and Shengwen Lu</i>	
Wind Optimal Investment Timing Decisions Based on Stochastic Dynamic Programming	4532
<i>Zeng Ming, Zhang Jinrong, Xu Wenqiu, and Yan Fan</i>	
Experimental Study on an Ejector Refrigeration System Driven by Solar Energy for the Specific Climate Condition	4536
<i>Hui-fan Zheng and Xiao-wei Fan</i>	
Income Approach: Discount and Cap Rates	4540
<i>JiYi Cheng and Zhu Cong</i>	
Research on Two Dimension Color Analyzer with Mono CCD	4544
<i>Yao Jun and Ni Huaiyuan</i>	
Characteristic Analyse of Slope Rock Structure in the East of Daye Open Cut Iron Mine	4548
<i>Zhou Chunmei and Li Xianfu</i>	
Research on Light Polarization FSO-OFDM System	4552
<i>Zhao Li, Lei Zhi-yong, Ren An-hu, Ke Xi-zheng, and Wu Ying-hui</i>	

A Simple Design of a Mini Tesla Coil with DC Voltage Input	4556
<i>M.B. Farriz, A. Din, A.A. Rahman, M.S. Yahaya, and J.M. Herman</i>	
Research and Application on Agent System in the Mechanism Cold Forming	4560
<i>Juncai Zhang and Qingguo Chen</i>	
Binary Matrix Factorization and Consensus Algorithms	4563
<i>Yinghua Fu, Nianping Jiang, and Hong Sun</i>	
Automatic Programming System of Slicing in SLS Based on ObjectARX	4568
<i>Qingguo Chen and Suhuan Ni</i>	
Regenerative Brake System in Electric Hoist with Ultracapacitor	4571
<i>Yongming Bian, Lijing Zhu, and Xinming Xu</i>	
Electronic Technology and Information	
A Blind Watermarking Algorithm Based on Lifting Wavelet Transform and Scrambling Technology	4576
<i>Zhu-zhi Jia, Hong-yu Zhu, and Wan-sheng Cheng</i>	
A Calculation Method of Track Quality	4580
<i>Xia Min, Xing Xiaoli, and Yan Jintun</i>	
A Case Study for Distributed Business Transaction Coordination across Heterogeneous Platforms	4584
<i>Bin Mu, Xianing Zhang, and Shijin Yuan</i>	
A Concrete Independent Component Analysis Algorithm Based on the Estimating Function	4590
<i>Yunfeng Xue, Yujie Han, and Yuja Wang</i>	
A DAQ Board Based Logic Analyzer Design	4594
<i>Binggen Gu, Qirong Lu, and Yuehong Liu</i>	
A Design of Trusted Operating System Based on Linux	4598
<i>Hongjuan Li and Yuqing Lan</i>	
A Dual-Polarized Broad-Band RCS Testing System	4602
<i>Jingcheng Zhao and Tao Hong</i>	
A Fuzzy C-means Clustering Based on Hybrid Color Space	4605
<i>Zhu Yux, Wang Yuhua, and Liang Haibo</i>	
A Method to Optimize PAPR of Multi-carrier Signal	4608
<i>Kun Yao and Xiaopeng Yang</i>	
A Modified Pipeline FFT Architecture	4611
<i>Hung-Yu Wang, Jhong-Jhou Wu, Chun-Wei Chiu, and Yu-Hsuan Lai</i>	
A Monitoring System for Water Quality	4615
<i>Ning An and Yu An</i>	
A New Wavelet Modulus Maximum Method for Noise Reduction of Chaotic Signals	4618
<i>Guo-shi Yang and Yun-xia Liu</i>	
Adaptive Filter Design for UAV Navigation with GPS/INS/Optic Flow Integration	4623
<i>Weidong Ding, Jinling Wang, and Ali Almagbile</i>	
Adaptive Robust Watermarking Scheme Based on the Features of the Coefficients in NSCT Domain	4627
<i>Yunyi Yang and Ling Wang</i>	
An Abrupt Shot Change Detection Algorithm Based on the YUV Space	4630
<i>Xiao-juan Yuan and Hong-cai Feng</i>	
An Effective Background Subtraction Method Based on Pixel Change Classification	4634
<i>Songyin Fu, Gangyi Jiang, and Mei Yu</i>	
An Effective Similarity Measurement for FAQ Question Answering System	4638
<i>Zhong Min Juan</i>	
An Efficient Algorithm of 10-Point DFT and its Applications	4642
<i>Haijun Li and Ran Fei</i>	

Analysis of the Light Emission Signals Based on Autocorrelation Function Calculation	4646
<i>Lifang Dong, Yuanyuan Li, Han Yue, Hong Xiao, and Junying Chen</i>	
Application of Scalable Video Coding in Broadband Wireless Network Transmission	4649
<i>Gao Bingkun, Song Chuanjun, and Song Zhaoyun</i>	
Application of the Vision Sensor in the Seam Tracking	4653
<i>Guanglai Chen, Junyi Li, and Shoujun Wang</i>	
Asymmetrical Magneto-impedance in Tension-Annealed Glass-Covered Co-rich Amorphous Wires	4656
<i>Bin Tian and Xinguo Ma</i>	
Centralized Control System of the Electromagnetic Screen, Based on PLC and Configuration Software	4658
<i>Wei-sheng Liu</i>	
Design and Simulate of Mixed-Signal System	4661
<i>Zhu-ping Wang, Shun-an Zhong, and Yong-wang Ma</i>	
Design of a Real-Time Bus Monitor and Debugger for Embedded Systems	4665
<i>Wang Danghui and Yu Yun</i>	
Discrete Wavelet Transform for Signal Processing in Weight-in-Motion System	4668
<i>Bin Ma and Xinguo Zou</i>	
Effect on the Properties of Different Preparation Processes in Ca ₃ Co ₄ O ₉ Thermoelectric Material	4672
<i>Yuankui Chen, Chuan Chen, and Xiang Li</i>	
Electrochemical Analysis of Zn-plated Samples with Blackish Green Passivation Film	4677
<i>Hong Wang</i>	
Experimental Research of Aerial Triangulation of UAV Remote Sensing Image Based on DPGrid	4680
<i>Juan Deng, Xinweng Cheng, and Ming Liao</i>	
GPS-RTK Technology Applied Research in Physical Prospecting	4683
<i>Yan Wang, Xin-wen Cheng, Hua Sun, and Yun Han</i>	
Hybrid Method of DOA Estimation for Low-Angle Target Tracking	4687
<i>Xuebing Han, Hao Zhang, Huadong Meng, and Xiqin Wang</i>	
Identification of Heroin Covered by Simulation Skin Using Energy Dispersive X-ray Diffraction and Coherence Function	4691
<i>Fang Zhang, Minqiang Li, Chang-Xing Qi, Sun Bai, Yu Zhong, Daoyang Yu, and Jin-huai Liu</i>	
Implementation of 1024-Point FFT Algorithm Based on FPGA	4695
<i>Pang Lihui and Yang Jingchang</i>	
Implementation of Speed Match Circuit Design between DSP and Peripheral Chips Using CPLD	4698
<i>Yongxian Song, Hanxia Zhang, Juanli Ma, and Naibao He</i>	
Information-Driven Search for Multiple Moving Targets	4702
<i>Yifan Xu, Yuejin Tan, Zhenyu Lian, and Renjie He</i>	
Leakage Reduction of DTGAL Circuits with MTCMOS Power-Gating	4706
<i>Lifang Ye, Jianping Hu, and Binbin Liu</i>	
Microwave Dielectric Properties of Al-Substituted Forsterite Ceramics	7: 84
<i>Kai-Xin Song, Jun-Ming Xu, Xiao-Ping Hu, Zheng Liang, Ying Zhi-Hua, and Hui-Bin Qin</i>	
Microwave-Assisted Base-Catalyzed Decomposition Process for the Degradation of Polychlorinated Biphenyl	4713
<i>Xitao Liu and Wei Zhao</i>	
Multiple-Attribute Hierarchy Group Decision-Making on Regional Water Resources Planning Scheme	4717
<i>Zhiliang Wang and Binbin Li</i>	
Nitrite Accumulation During Wastewater Denitrification	4721
<i>Xuezhen Meng, Dong Qian, and Xiangsheng Cao</i>	
Personalized Sports Video Customization Based on Multi-modal Analysis for Mobile Devices	4725
<i>Huazhong Xu, Xiaowei Luo, and Chao Liang</i>	

Processing of Light Emission Signals of Discharge Spot by FFT	4731
<i>Lifang Dong, Song Qian, Yang Yujie, Weiyuan Liu, and Han Yue</i>	
Research on Coating Production Scheduling Based on Improved Ant Colony Algorithm	4734
<i>Zhuo Chen, Jie Zhang, and You-xin Meng</i>	
Research and Development of Law Enforcement System for Urban Management Based on Mobile Phone Platform	4738
<i>Ning Ding, Jiaqi Liu, and Jiangrong Xu</i>	
Research Denoising Method of Infrared Image of Building Energy Consumption Based on Total Variation	4741
<i>Qin-yan Yu, Ya-long Yang, Qian-sheng Fang, Wang Xiao-long, and Zhen-ya Zhang</i>	
Research for the Random Noise Circular Synthetic Aperture Radar	4744
<i>Xian-yi Zhang, Jian Jiao, and Wei-min Su</i>	
Research on Genetic Algorithm in Accelerator Power Supply	4747
<i>Xiang-ping Qian, Wei-ming Qiao, Zhong-zu Zhou, Jing Lan, and Xi-meng Chen</i>	
Research on Navigation of Substation Patrol Robot Based on Guideline Visual Recognition	4751
<i>Min Zuo, Guangping Zeng, and Xuyan Tu</i>	
Research on the Design of Online Intelligent Tutoring Agents	4755
<i>Shi Da</i>	
Research on the Mobility Management Scheme in Heterogeneous Network	4759
<i>Xin Yang, Chong Li, and Xin-sheng Ji</i>	
Researching on the Implementation Theory and Methodology for the Service Industry ERP System	4764
<i>Shi-sheng Zhu and Hui-hui Dong</i>	
Sinusoidal Components Detection of Musical Signal Based on Phase Vocoder Method	4769
<i>Shen Yang and Kun She</i>	
Study of DEA Evaluation of Efficiency of Enterprise Knowledge Innovation Network	4773
<i>Li Bai, Jing-xiao Zhang, Lan Luo, and Hui Li</i>	
SWSCPD: Architecture for Complex Product Design Based on Semantic Web Services	4779
<i>Song Xiao, He Dongjing, Zhang Lin, and Li Jiajia</i>	
System Prediction and Control Model Based on Data Simulation and its Application	4783
<i>Yi-sheng Hu, Chao Min, and Zhi-bin Liu</i>	
Target Recognition Based on the Self-Correlation Function of HRRP	4787
<i>Nan Chen and Minghua Xue</i>	
The Analysis for a Chaos-Based One-Way Hash Algorithm	4790
<i>Wang Jizhi, Xu Shuijiang, Tian Min, and Wang Yinglong</i>	
The Design and Development of Shop-Level Information Integration System	4794
<i>Shuwang Ke, Jitao Fang, Xiangqian Ding, Shusong Yu, and Dan Li</i>	
The Design and Realization of the Landscape System of Anze County	4798
<i>Yan-guo Fan, Teng-teng Wu, and Hao Zhu</i>	
The Detection of Range Extended Target Based on Adaptive Searching and Twofold Sliding Windows	4803
<i>Xu Hao, Ma Yunfei, Jiang Tao, Wang Dongjin, and Chen Weidong</i>	
The Development of Hydrographic Datum Transformation Software	4807
<i>Hao Ke and Jianhu Zhao</i>	
The FPGA Implementation of Modified Goertzel Algorithm for DTMF Signal Detection	4811
<i>Zhang Xinyi</i>	
The Front Design and Implement of Direct Digital Frequency Synthesizer Based on FPGA	4816
<i>Jing Zhang and Xin-Guang Li</i>	
The Influence of Tool Flank Wear and Depth of Cut on Temperature Fields Based on Johnson-Cook Model in Dry Hard Machining	4820
<i>Linhua Tang, Jianlong Huang, Liming Xie, and Wencui Luo</i>	

The Investigation on Au Nano-particles on Si Wafer after Annealing at Different Temperatures	4825
<i>Dongbo Zhang, Lei Yang, Jae-Wung Lee, Ze Liu, and Meilin Liu</i>	
The Portable Personal Health Records: Storage on SD Card and Network, Only for One's Childhood	4829
<i>Guoqiang Ma, Juan Liu, and Zhaoyu Wei</i>	
The Study of Electroless Plating of Ni-Cr-P/Ni-P Composite Coating on Sintered Nd-Fe-B Permanent Magnet	4834
<i>Bai-yang Lou, Keer Yu, and Ming-ming Wu</i>	
Fabrication of an Aspherical Microlens for OLED with Modified Etching Process	4838
<i>K.H. Liu, M.F. Chen, Y.C. Chen, Y.M. Hwang, C.T. Pan, S.C. Shen, M.Y. Chang, W.Y. Huang, and W.C. Li</i>	
Calculation of Geometric Dilution of Precision Using Adaptive Filtering Technique Based on Evolutionary Algorithms	4842
<i>M.R. Mosavi and M. Divband</i>	
Manufacturing Control and Automation Engineering	
Denoising Research of Doppler Blood Flow Signals with Wavelet Transform	4846
<i>Yi-kai Shi, Liang Deng, Qin Yao, and Bo Tang</i>	
The Chinese Symposium on Electrical and Control Engineering	
Numerical Analysis of Spatial Power-Frequence Electric Field of 500kV Cable	4850
<i>Li-feng Wang, Jian-yong Zheng, and Jun Mei</i>	
A Control Strategy to Eliminate Interaction between the Series and Parallel Compensator of UPQC	4855
<i>Tan Zhili and Zhu Dongjiao</i>	
A Denoising Method of Vortex Flowmeter Signal in Oscillatory Flow Based on Hilbert Huang Transformation	4859
<i>Min Fang and Jie-gang Peng</i>	
A Design of Surface EMG Signal Detector Based on DSP	4863
<i>Li Zhao, Daofu Hu, Longteng Xiao, and Qingguo Meng</i>	
A Faster SA Method TOSA for Global Placement	4867
<i>Dong-qing Wang, Masahiko Toyonaga, Hua Hu, Jin-wei Ma, and Xue-liang Fu</i>	
A Fuzzy-Based Broken Schema Mapping Detecting Approach	4871
<i>Jiajia Miao, Dongge Zhang, Aiping Li, and Guoyou Chen</i>	
A Hierarchy Integrated Train Mobile Business Platform of China	4875
<i>Yonghui Zhang, Xinhua Jiang, and Zhangxi Lin</i>	
A High Precision Algorithm of Harmonic Current Detection	4879
<i>Jing Bai, Xinying Liu, and Mingjie Wang</i>	
An Improved Schema Mapping Approach Based on Stacking	4883
<i>Jiajia Miao, Zhixue Wang, Guoyou Chen, Aiping Li, and Yan Jia</i>	
A Mechanism for Constructing the Minimum Cost Multicast Routing Tree	4887
<i>Wenxia You, Wenwu Li, Lianghu Su, and Ping Liu</i>	
A Method for Comprehensive Diagnosis of Sensors of Flight Control System Using Analytical Redundancy	4892
<i>Cheng-zhi Chi, Wei-guo Zhang, Jiang-le Zhu, and Xiao-xiong Liu</i>	
A New Approach for the Detecting and Tracing of Hopf Bifurcation Point	4896
<i>Zhaoxing Ma, Qiulan Wan, and Hongmei Li</i>	
A New Bias Method for Infrared Image Sensor Array	4900
<i>Xiqu Chen and Qiang Lv</i>	
A New Design of Greenhouse Remote Monitoring System	4904
<i>Feng Jiang</i>	
A New ICA Algorithm Based on CDF Estimation	4908
<i>Xu Shangzhi and Guo Aihuang</i>	

A New Method of Early Real-Time Fault Diagnosis for Technical Process	4912
<i>Lihua Sun, Yingjun Guo, and Haichao Ran</i>	
A New Type of DC De-icing System for Transmission Lines	4916
<i>Fan Ruixiang and Wu Sunong</i>	
A Novel Maximum-Power-Point Tracking Control Method for Photovoltaic Grid-Connected System	4920
<i>Fei Zheng, Shu-min Fei, and Xing-peng Zhou</i>	
A Novel Method of Initial Rotor Position Estimation for Surface Mounted Permanent Magnet Synchronous Motor	4924
<i>Shuai Li, Bo Zhou, Ying Liu, and Ying Feng</i>	
A Novel Permanent Magnet System for Magnetic Refrigerator and its Magnetic Field Analysis	4928
<i>Dong Xia and Lu Xia</i>	
A Prefetch Scheme Based on DTN Ferry for Countryside MultiMedia Education Platform	4932
<i>Yonghui Zhang, Xinhua Jiang, and Zhangxi Lin</i>	
A Processing Method of Pressure Sensor Array Signal and Data	4936
<i>Yucheng Liu and Yubin Liu</i>	
A Rapid Algorithm for Reduction Based on Positive Region Attribute Significance	4940
<i>Jin-biao Shen and Yue-jin Lv</i>	
A Resonant Magnetometer Based on MEMS	4944
<i>Muzhi Hu and Zheng You</i>	
A Review of Research Status on LVRT Technology in Doubly-fed Wind Turbine Generator System	4948
<i>Yun Wang, Dong-li Zhao, Bin Zhao, and Hong-hua Xu</i>	
A Security Model Based on Database System	4954
<i>Yi Huang and Xinqiang Ma</i>	
A Security Model Based on Lattice	4958
<i>Xinqiang Ma, Yi Huang, and Danning Li</i>	
A Simulation Platform for Modeling Islanding Power Systems and its Application in Designing Stability Control Schemes	4962
<i>Liu Hui, Zhang Jianming, Bi Tianshu, Wu Tao, Li Qunju, Sun Yu, Xue Ancheng, and Li Shanying</i>	
A Single-Phase Line-Start PM Motor Design Method—From Three-Phase to Single-Phase	4966
<i>Baohua Wang and Huajie Yin</i>	
A Study on Determining the Maximum Loading Index of a Power Grid	7: 3:
<i>Zhu Lan and Yan Zheng</i>	
A Survey of Plant Recognition Method Based on Image Processing	4974
<i>Juan Zhang and Xin-yuan Huang</i>	
A Voltage Stability Droop Control Strategy of Wireless Parallel Inverters	4978
<i>Hua Liao and Chun-sheng Wu</i>	
Accumulator-Based Testing Scheme for DSP Data Path	4982
<i>Jixue Xiao and Yu Yang</i>	
Accurately Portable Measurement System of Cable Tension	4986
<i>Dian-hong Wang, Rong-sheng Bai, Dong-ming Li, and Xiao-yong Ni</i>	
Adaptive Control for Hot Strip Finishing Mills Based on Decentralization and Coordination	4990
<i>Hui Wang, Caihong Yan, Lihua Sun, Jing Zhao, and Liping Shao</i>	
Adaptive Greedy Algorithm Realized by Wavelet Transform in Image Compression	4995
<i>Wenbin Wei, Wenzhen Yu, and Wenbin Wei</i>	
An Economic Analysis on Equilibrium of Power Supply and Demand	4999
<i>Jinghong Zhou and Yang Hu</i>	
An Efficient Algorithm for Shielding Electromagnetic Topological Diagram	5003
<i>Yongfeng Wang, Chengda Yu, and Chaowei Zhang</i>	

An Embedded System of Bridge Stress Monitoring Based on ARM9 and Zigbee	5007
Xiaoqi Zhuang, Lijun Zhang, Min Fang, and Hongliang Wang	
An Illumination Recorder Based on MSP430 MCU	5011
Liu Shuxia and Yan Zhao	
An Improved Feedback Linearizing Control Scheme for Three-Phase Voltage-Type PWM Rectifier	5014
Wanwei Wang, Huajie Yin, Zhixin Li, Changkai Wang, and Lin Guan	
An Improved Wavelet Threshold Shrinkage Algorithm for Noise Reduction of Heart Sounds	5018
Yan Wang, Haibin Wang, Lihuan Liu, and Junxuan Qiao	
Application in Real-Time Planning of UAV Based on Velocity Vector Field	5022
Mu Hu and Chun-tao Li	
Application of Mu-Analysis for Evaluating the Robustness of RLV's Flight Control System	5027
He Chenglong, Chen Xin, and Li Chuntao	
Application of an Improved Varying-Step Algorithm in the Real-Time Signal Filtering	5031
Guan Shouping, Lu Wei, and Han Gang	
Application of Fieldbus-Based Control System in Cement Production	5035
Wen Ma, Jun Xiao, Yimin Mo, Tengyun Guo, and Aiming Liu	
Application of GA-ANN Hybrid Algorithms in Runoff Prediction	5039
Huijuan Bo, Xiaohua Dong, and Xia Deng	
Application of Low-Frequency Communication System in Smart Plug Based on AVR MCU	5043
Zhao Honglin, Zhang Peng, Xing Tongchao, and Yang Zhaofeng	
Application Research on Road Strain Sensor About Up-Anchors Based on Circuit Bridge Compensation Method	5047
Zhi-qiang Rao and Huang Xiang	
Applications of Genetic Neural Network to Deformation Prediction of Face Rockfill Dam	5051
Qiao Yan, Chang-Bin Wu, Yan Zhang, and Xiao Dong Xu	
Axial Flow Fan Broad-Band Noise Prediction and Application to Optimum Design	5056
Jie Zhang, Shaoping Zhou, Jingkuan Ye, Xiaoling Ge, and Yongsheng Su	
Backstepping Control of PMSM Based on RBF Neural Network	5060
Yang Qian, Liu Weiguo, and Luo Guangzhao	
Backward Cloud Based Elimination of Uncertainty in Security Assessment Parameters	5065
Bing Xia, Xiangdong Li, and Qiusheng Zheng	
Bayesian Network Worm Detection Method Based on Time Model	5069
Chun-dong Wang, Qing Chang, Quancai Deng, Yanbin Xue, and Huaibin Wang	
Block Statistic under Wavelet Decomposition for Palmprint Recognition	5073
Yu-qin Liu, Wei-qi Yuan, and Jin-yu Guo	
Bus Structural Optimization Based on Sensitivity Theory	5076
Run-hao Zheng, Ming Han, and Xiao-ming Wu	
Calculation Model of Ice Melting Joule Heat for Overhead Lines	5079
Xiaosong Gu, Hanqing Wang, and Heyun Liu	
Chip Formation when Turning Inconel 718 in High Cutting Speed	5083
Song Xinyu and Zhao Jun	
Coke Oven Heating Process Fuzzy Adaptive PID Control System Research	5088
Le-peng Song and Da-yong Hu	
Color Image Retrieval Based on Vector Quantization	5092
ShanXue Chen and FangWei Li	
Combination of Three Sections of Beams of Experimental Modal Analysis Based on LabVIEW	5096
Zhou Dashuai, Wu Liangsheng, and Zhang Shihai	
Construction of a Platform for Management of Multi-dimension Heterogeneous and Mass Ocean Data	5100
Minghua Zhang, Dongmei Huang, Shengqi He, Zhongmin Xiong, Xiaolu Zheng, and Haibin Mei	

Data Fusion Algorithms of Single Sensor in Wireless Sensor Networks	5104
<i>Yi Liu</i>	
DEMONgram Enhancement Based on Hough Transformation	5107
<i>Xin Gao and Qi-jun Liu</i>	
Design of Management System for LiFePO ₄ Power Batteries Group	5110
<i>Yinquan Hu and Heping Liu</i>	
Design and Application of Coal Blending Control System Based on HOLLiAS-LK Large-Scale PLC	5114
<i>Hong Zhu, Haitao Li, Sheng Fu, and Yinhua Pang</i>	
Design and Implementation of Visual Campus Ramble System Based on VIRTOOLS	5117
<i>Yanling Wang and Zhao Feng Wang</i>	
Design and Performance Investigation on Frequency Hopping Sequence with Minimum Gap Based on RS Code	5120
<i>Gang Wu and Ding Wang</i>	
Design of an Intelligent Building Illuminating Control System Based on ZigBee	5124
<i>Yanling Wang and Zhao Feng Wang</i>	
Design of CAN Bus Data Processing System	5127
<i>Zhiwei Du and Yi Huang</i>	
Design of Electric Power Data Acquisition Card Based on PC/104 Bus	5130
<i>Yao Guozhen, Shang Qiu Feng, and Liu Li</i>	
Design of Phase Minor Translating Equipment and Control System	5134
<i>Lushen Wu and Fanwen Meng</i>	
Design of Temperature Control System of Aging Oven for Breaker Circuit Panels	5137
<i>Ping Wu and Guichu Wu</i>	
Design of Three-Phase Stand-Alone PV Generation System with Unbalanced Loads	5141
<i>Chun-sheng Wu, Hua Liao, Zi-long Yang, Yi-bo Wang, and Hong-hua Xu</i>	
Design of Transient Recorder Based on USB 2.0	5145
<i>Ying-lian Li and Bing Hu</i>	
Design of Variable Air Volume Conditioning Control System Based on CAN	5149
<i>Zhang Chen and Xu Jian</i>	
Development and Application of Process Automation on Roller-Hearth Heat Treatment Furnace	5153
<i>Yong Song, Feng-qin Lin, Zhi-mi Zhang, and Yong-jun Zhang</i>	
Development and Applications of Decision Support System for Water Distribution System	5156
<i>Shihu Shu, Suiqing Liu, and Dong Zhang</i>	
Development of Distribution Automation System Based on the Customized Integrated Services Distribution Terminal	5160
<i>Wang Jian and Ji Xiaoyong</i>	
Development of Intelligent Charging Device Based on P89LPC938	5164
<i>Shuqing Zhang, Fujin Li, Xuegang Li, and Lihong Zhang</i>	
Development on Methods of Laser Welding of Plastics	5167
<i>Xuanxuan Shen and Chuanyang Wang</i>	
Digital Circuit Simulation of a Discrete System	5171
<i>Yun Cai and Yongzhong Huo</i>	
Double Motor Synchronizing Drive Control for Pipeline Welding Machine Based on CANopen	5174
<i>Luo Yu, Jiao Xiangdong, Ji Wengang, and Zhou Chanfeng</i>	
Dynamic Performance Analysis of a Fully Pre-stressed Six-Component Force Sensor	5178
<i>Zhijun Wang, Jiantao Yao, Hang Wang, Yulei Hou, and Yongsheng Zhao</i>	
Dynamic-Boundary-Layer Based Nonlinear Robust Control for Robotic Systems	5182
<i>Bo Xu, Mingxuan Sun, and Weiyun Fan</i>	

Dynamics Simulation Study of One-Blade Cutting Sugarcane Process	5186
<i>Wang Yang, Jian Yang, and Yiqi Huang</i>	
Effects of Grinding Aids on Grinding Fineness and Activity Index of Ground Blast Furnace Slag	5191
<i>Huifen Yang and Feng Zhou</i>	
Efficient Design of Fast Fourier Transform Processor Using FPGA Technology	5195
<i>Zi-Wei Zheng and Zhe Ren</i>	
EMI Power Filter Design for Control System of DC Converter in Electric Vehicle	5199
<i>Yuan Dengke, Zhan Lingwei, Wang Xing, Zhang Yicheng, and Yao Yongtao</i>	
EMR Measurement and EMC Design of Underwater Plasma Sound Source	5203
<i>Qianbao Qiu, Xi'an Feng, Kaizhuo Lei, Ning Li, and Qunfei Zhang</i>	
Energy Efficient Geography-Based Data Forwarding Algorithm for Multi-hop Wireless Sensor Network	5207
<i>Guoqiang Zheng, Yonghai Ning, and Mingxing Wang</i>	
Enterprise Credit Guarantee Program Risk Assessment: Based on BP-ANN Evaluation Model	5211
<i>Yong He and Jian-xin Weng</i>	
Experimental Study on Carbon Nanotube Generators in Seawater Environment	5216
<i>Qiang Lv, Mingxiang Chen, Xiqu Chen, and Zhiyin Gan</i>	
Experimental Study on Dynamic Characteristics of a Novel Low Inertia Rotating Electromagnet	5219
<i>Meng Bin, Ruan Jian, Lu Lizhong, and Nie Wei</i>	
Exponential Approaching Sliding Mode Control of PWM DC/DC Converters	5223
<i>Liping Fan and Yi Liu</i>	
Fault Diagnosis Based on Wavelet Package and Phase Spectrum for Helicopter Rotor	5227
<i>Hongmei Liu, Chen Lu, Pingchao Ouyang, and Shaoping Wang</i>	
Finite Element Analysis and Shape Optimization on Gear of Tooth Modification	5231
<i>Ming Zhang, Xiuhong Li, and Jiajun Ren</i>	
Generalized Projective Synchronization for Multi-wing Chaotic Attractors	5234
<i>Bocheng Bao and Jianping Xu</i>	
GIS-Based Approach to Construct a Plan and Reconstruction Software of County Distribution Grids	5238
<i>Yan Jinghua, Yang Jianhua, and Yuan Jianpu</i>	
HIMA: A Holistic Data Instance Matching Approach	5242
<i>Jiajia Miao, Guoyou Chen, Aiping Li, Jia Yan, and Siyu Jiang</i>	
Hot Strip Laminar Cooling Control Based on Rough Set	5246
<i>Haifang Wang, Jinhua Cui, and Shengtao Liu</i>	
Hydraulic Micro-feed Actuator for Precision Machining on Conventional CNC Turning Centers	5250
<i>Shu-lin Wang, Xing-hua Chen, Gang Liu, and Zun-dong Li</i>	
Hydropower Station Dynamic Graphical Simulation Software Development	5255
<i>Yang Wang, Xianshan Li, Xiangyong Hu, and Fei Li</i>	
Implementation and Application of SOPC-Based Pulse Interpolation Techniques	5259
<i>Wei Wang and Yuming Shen</i>	
Implementation and Test of the Embedded Ethernet Module of Microprocessor Protection	5262
<i>Zhu Gelan, Lei Caijia, and Wang Gang</i>	
Implementation of a Distributed Fault-Tolerant Computer for UAV	5266
<i>Zhang Zengan, Chen Xin, and Zhou Yueping</i>	
Implementation Order of Technologic Schemes for Anti-Electricity-Larceny Upgrading Project	5270
<i>Xiao-hong Zhu, Wei-jun He, and Xiang-bing Wang</i>	
Improved Round Routing Algorithm Based on Area Covering of Wireless Sensor Network	5274
<i>Xiao-shou Tao and Xun-bo Li</i>	
Improvement and Implementation of PNLMs Algorithms Based on DSP	5278
<i>Gao Running, Gao Bingkun, and Xu Mingzi</i>	

Integration of Multi-feature for Moving Target Detection Algorithm	5281
<i>Jin Yu and Feng Qian</i>	
Intelligent Control System of Deep Drawing for Rectangular Box	5285
<i>Rui Ma and Jun Zhao</i>	
Interface Conversion Design Based on FPGA-Soft-Macro for EnDat2.2 and RS232/RS485	5289
<i>Yang Jian, Wang Hanbin, Yao Xiangqian, and Wan Sanghong</i>	
Investigation of Stator Flux Linkage and Torque Predictive Algorithms in a Motor Direct Torque Control System	5293
<i>Zhao Hongge, Fan Yinhai, and Zhu Jingwei</i>	
K-anycast DTN Routing in Predictable Environment	5296
<i>Yonghui Zhang, Xinhua Jiang, and Zhangxi Lin</i>	
Kinematics Analysis and Gait Research of the Piling Platform's Walking Mechanism in Dyke Emergency	5300
<i>Wang Cunlei, Ling Hao, Shi Guoguo, and Zhu Denglin</i>	
Life Prediction of Small Satellite Storage Battery Based on Dynamic Bi-step MPNN Method	5305
<i>Lai-fa Tao, Wen-jin Zhang, Chen Lu, Jia-hui Luan, Jian Peng, and Yi-wei Liu</i>	
Long-Distance Isolate Transportation for Analog Signals in Power Converter	5309
<i>Yi-feng Zhu, Qiong-xuan Ge, Lu Zhao, Fei Xu, and Yang Li</i>	
Low-Voltage Distribution Network Theoretical Line Loss Calculation System Based on Dynamic Unbalance in Three Phrases	5313
<i>Ni Feng and Yu Jianming</i>	
Mechanical Model and Finite Element Analysis of the Loader Drive Axle Housing in Typical Operating Conditions	5317
<i>Yan-qun Huang, Ming Han, Run-hao Zheng, and Xiao-ming Wu</i>	
Methods of Restoring a Weather Degradation Image Based on Physical Model and Their Application	5323
<i>Dong Huiying and Wang Xinweier</i>	
MLD Approach for Modeling and Predictive Control of Two-Tank Dynamic System over Networks	5327
<i>Xun-He Yin, Xiang-Long Meng, Zhen-Bang Wang, Yong-Duan Song, and Qing-Quan Cui</i>	
Modeling and Simulation of Hybrid Excitation Synchronous Starter/Generator System	5333
<i>Chu Han, Bo Zhou, and Jiadan Wei</i>	
Modeling and Simulation Studies Performed for Weak Signal Detection Algorithms	5337
<i>Zi-Wei Zheng and Fan Zhang</i>	
Modeling Gene Regulatory Network Based on Genetic Programming	5341
<i>Jing Liu and Aiguo Wu</i>	
Modeling of Starter/Generator Based on Three-stage Brushless Synchronous Machines	5345
<i>Ya-nan Li, Bo Zhou, Jia-dan Wei, and Chu Han</i>	
Multi-function Integrated FACTS Devices and its Application in the Development of Smart Grid	5349
<i>Zhenhua Zhang</i>	
Neural-PID Control of Air Pressure in Fuel Cells	5353
<i>Wei Guoai, Quan Shuhai, Chen Qihong, Zhang Liyan, and Su Lin</i>	
New Approach for Oil-Well Symbol Recognition in Petroleum Geological Structure Map	5357
<i>Fei Tian, Rui Wei, Qingxin Ding, and Lei Xiong</i>	
Novel Hyperchaotic Attractor and its Circuit Realization	5361
<i>Xiaohua Qiao and Yuxia Sun</i>	
Octane Number Detection Based on Raman Spectra	5365
<i>Jiang Shubo and Lin Jinguo</i>	
On Steganalysis of Invisible Characters Hidden in Webpage	5369
<i>Guang Sun</i>	
On the Implementation of Knowledge Management Strategy	5373
<i>Wenshan Wang and Hongying Wang</i>	

Optimal Design with CAD/CAE for Outer Surface Curvature of Flat Glass Screen Panel of CRT	5376
<i>Ren Qinghai and Geng Tie</i>	
Optimum Analysis of Energy Conversion for Solar Water Heating System	5380
<i>Bin Yang, Jun Zhao, Suzhen Lu, and Qiang Zhu</i>	
Parameter Recognition for Control Systems Based on Chaotic Ant Swarm Algorithm	5384
<i>Zhu-zhi Jia, Hong-yu Zhu, and Wan-sheng Cheng</i>	
Parameters Matching on Engine and ISG Motor for City Bus	5388
<i>Daxing Huang and Ren He</i>	
Parametric Study and Optimization of 2D Woven C/C-SiC Composite	5392
<i>Hainbin Wang and Weihong Zhang</i>	
Performance Analysis of Multiphase Induction Motor Drive	5396
<i>Wen-juan Yu, Dong Liu, Jin Huang, and Min Kang</i>	
Petri Net Modeling and LabVIEW Implementation of Power Quality Monitoring System	5401
<i>Yang Min, Chen Bo, and Zhao Buhui</i>	
Power Generation Exchange Optimization Model under Constrains of Energy-Saving and Emission-Reducing Among Regions	5405
<i>Xu Jun and Tan Zhongfu</i>	
Prediction Method of Breakdown Voltage of Transformer Oil Based on Fuzzy Clustering Theory and BP Neural Network	5409
<i>Jia-yuan Hu, Shun-an Cao, and Zhi Li</i>	
Preparation of Nanocrystalline High Nitrogen Stainless Steel Spherical Powders by High Energy Ball Milling	5413
<i>Dawei Cui</i>	
Principle of DC Magnetic Biasing in Isolated Full-Bridge DC-DC Converter	5417
<i>Yuan Dengke, Wang Xing, Zhan Lingwei, Zhang Yicheng, and Yao Yongtao</i>	
Process Parameters of Mold Fabrication for Nano-Imprint Lithography	5421
<i>Yan Le, Li Hansong, and Liu Hongzhong</i>	
Realization of Virtual Signal Generator Based on USB2.0	5425
<i>Liu Feng and Yao LianFu</i>	
Real-Time Detection of Sound's Direction with dpASP and Logic Circuits	5428
<i>Jinshan Gao, Yifei Pan, Qiushi Zhang, and Wancheng Liu</i>	
Recognition of Chemical Warfare Agents Based on Nanosensor Array and Probabilistic Neural Network	5432
<i>Chen Chuanzhi, Zuo Boli, Xiao Yanhua, and He Shuijun</i>	
Reconfigurable Design for Automatic Visual Inspection by Extension Theory	5435
<i>Fenghua Ding, Mingxing Lin, and Dawei Li</i>	
Remote CO Measurement Based on MSP430 Processor Used with GSM module	5439
<i>Xing Yuuhua and Wang Ru</i>	
Repetitive Control for the Improvement of Pressure Tracking in Fatigue Test Machine	5443
<i>Yun Wang, Jie Li, Xiaowen Song, Shugen Hu, and Fang Qi</i>	
Research and Analyzation on the Two-Symmetric-Point Vibration Source Piezoelectric Feeding Device	5447
<i>Zhu Weimin, Wu Wenfu, Zhang Yaqiu, Yin Huimin, and Shi Suping</i>	
Research and Application of Hot Rolling Monitor AGC Algorithm	5451
<i>Fei Zhang, Quan Yang, Nankai Shentu, and Futang Que</i>	
Research and Design of Large-Scale Machine Equipment Simulation System Based on Web Services	5455
<i>Li Dazhi, Li Guangbu, and Li Ruqiong</i>	
Research of Collaborative CAD which Based on Local Modeling Space	5458
<i>Ying-hao Jin and Li-juan Sun</i>	
Research of Friction and Wear Behavior of Sliding Contacts under Strong Current Conditions	5462
<i>Guo-qiang Jiang, Zhi-yong Wang, Zhong-hua Chen, Ru-bin Zhao, Zhi-ling Ren, Bin Li, and Wei Jia</i>	

Research of Multi-motor Synchronous Driving System Based on Fuzzy Smith Control	5466
<i>Su Yixin and Xu Gang</i>	
Research of Reducing the Peak to Average Power Ratio of OFDM System with Mu_Law-PTS	5470
<i>Kai Zhou and Jian Zhang</i>	
Research of the Technology of Flatness Dectction for Steel Strip Based on Linear Laser	5474
<i>Su Lanhai, Yu Lewen, and Ma Xianghua</i>	
Research of Workflow Management of VV and A in Control and Guide Simulation System	5478
<i>Xu Guozhen and Jiao Peng</i>	
Research on Attribute Discretization for One Airborne Radar Intelligence System Based on Improved FCM Clustering	5482
<i>Jian Cui, Qiang Li, Jun Wang, and Da-Wei Zong</i>	
Research on Control Method of Complex Object Based on Human Behavior Data	5486
<i>Bing-xiang Zhong, Tai-fu Li, De-biao Wang, and Ying-ying Su</i>	
Research on Differential Pulsed Eddy Current Gap Sensor	5490
<i>Li Qi, Zhang Tao, Song Nianlong, and Li Tingtuan</i>	
Research on Drive Model Shift Law of Dual-Clutch Automatic Transmission	5494
<i>Xia Huaicheng, An Zijun, Di Liming, and Song Haifeng</i>	
Research on Encoding for Low-Density Parity-Check Codes	5498
<i>Zi-Wei Zheng and Jin-Gen Li</i>	
Research on Individual Order System of Virtual Automobile Based on Network	5502
<i>Xu Chongxia, Cui Yingling, Feng Dejun, and Luo Lufeng</i>	
Research on Infrared Target Tracking and Detection Based on Least Squared Method	5506
<i>Feng-jiao Jiang, Xiao-feng Zhao, Shu-ping Zhao, and Li-li Dong</i>	
Research on Laser Atmospheric Transmittance on the Sea	5510
<i>Yanwu Liu</i>	
Research on Liver B Ultrasonic Images Classification Based on SVM	5514
<i>Danhong Zhang and Qingyong Zhang</i>	
Research on Locating Branch of Flicker Disturbance Source	5518
<i>Xiufang Jia, Jinghua Ma, Yong Zhang, and Quanxin Zhao</i>	
Research on Parametric Drawing and Material Data Extraction of Architectural Aluminium Alloy Products	5522
<i>Lei Du and Bao-jun Sun</i>	
Research on Radar Aided SINS Autonomous Navigation Scheme for Lunar Soft Landing	5526
<i>Shuai Chen, Xiaozhong Xue, Xueyuan Guan, Hongyang Bai, and Panlong Wu</i>	
Research on Semantic Description and Retrieval of Component Based on Ontology	5530
<i>Zhiyi Niu</i>	
Research on Testability Design of Microwave Module	5535
<i>Jun Yin and Yan Feng Xu</i>	
Research on the Harmonic Control Technology of Multi-phase Machine Drives	5538
<i>Youlong Wang, Wen Xuhui, and Shan Xue</i>	
Research on the Micro-tensile Test on H62 Brass Sheet and Size Effects	5542
<i>Wei Ziyun and Liu Fang</i>	
Research on the Precision Assessment of Images for Videogrammetry	5546
<i>Wang Jun, Lu Naiguang, and Dong Mingli</i>	
Research on the Surface Profiles and Arc Erosion of Silver-Based Contact Materials of LV Switching Device at 400Hz	5550
<i>Jing Li</i>	
Research on Up-to-Date Liquidometer Based on Hall Effect	5554
<i>Wang Jian, Li Xiang, Yang Yuxiang, Gao Zonghai, and Zhao Chen</i>	

Research on VSCF Power Generation System Based on Incorporation Design of HESM and TSMC	5558
<i>Quan-chun Li, Bo Zhou, Ming-ming Shi, and Xiao-yu Liu</i>	
Risk Management with Risk Chain in Electric Power Company	5562
<i>Liu Ke, Jie Chen, Shen Xiaoliu, Tan Zhongfu, and Shen Yangshuo</i>	
Robust Quasi-Sliding Mode Control for Four Wheel Steering Vehicle Based on Side Slip Angle Tracking	5566
<i>Tao Sun, Gui-hong Xu, and Ling-jiang Chai</i>	
Signal Acquisition and Tracking Method of GPS under Rotating Multi-antenna Conditions	5570
<i>Xudong Liu, Junxiang Zhao, Qiang Li, and Guangjun Liu</i>	
Simulation and Application Research of Chaotic Time Series Prediction Based on RBF Neural Network	5575
<i>Ning Ma, Wen-jin Zhang, and Chen Lu</i>	
Simulation and Calculation Analysis of Side-Tipping Rigid of Independent Hydro-pneumatic Suspension	5579
<i>Yi Jie Chen, Hai Jie Ju, Guan Hui Zheng, and Xiang Li Cui</i>	
Simulation and Experimental Analysis of Grid-Connected Doubly-Fed Induction Generators	5583
<i>Guo Jiayang, Yu Xiao, Wu Tao, Chang Xianrong, Li Shanying, Liu Hui, and Sun Yu</i>	
Simulation and Result Analysis of AMESim for the Relief Valve Dynamic Characteristics Experiment	5587
<i>Xiu Lei and Yajun Wu</i>	
Simulation Research on the Time-Delay Property of Different-Pressure Casting's Control System	5591
<i>Yang Bo, Chai Yan, and Wang Yuegang</i>	
Simulation Research on Vehicle Semi-active Vibration Isolation System	5595
<i>Hongjie Duan and Hao Tao</i>	
Single Neuron PID Model Reference Adaptive Control for Filling Machine Based on DRNN Neural Network On-Line Identification	5599
<i>Zhi-qiang Wei, Yun-kuan Wang, Xiao-fei Qin, and Jun Zheng</i>	
Software and Communication of Fully Automatic Optimizing Cross-Cut saw	5603
<i>Li Xiaochun, Ding Qingxin, Zhao Honglin, Zhang Shimin, Xi Jiaxing, and Sun Guangbin</i>	
Software Process Modeling Method Based on Object-Oriented Petri Nets	5608
<i>Panseng Yuan and Aihua Ren</i>	
Speech Pitch Period Detection Algorithm Based on Wavelet Transform and Spacial Correlation Function	5613
<i>Gao Yanhua and Zheng Guoqiang</i>	
Study of Direct Torque Control Strategy Based on Regional Interpolation of Zero Voltage Vector in a Permanent Magnet Synchronous Motor	5617
<i>Zhao Hongge, Zhu Jingwei, and Fan Yinhai</i>	
Study of the Point Element and Line Element Conic Curve Composite Algorithm	5621
<i>Zhang Zheng-wu</i>	
Study on Adaptive Control of PEMFC System	5626
<i>Song Peng, Liu Chang-hong, and Sun Yan-hui</i>	
Study on Analysis of Steel Wheel's Fatigue Life	5630
<i>Wang Guofeng, Sun Huixue, Chai Rugang, Hu Jinhua, and Wang Guofeng</i>	
Study on Initial Allocation of Electromagnetic Pollution Emission Right	5633
<i>Li Xiang, Jia Xiufang, Li Youmin, and Hang Min</i>	
Study on Inverse Technology of Low Frequency	5637
<i>Chengwu Lin, Fang Dong, and Feng Zi</i>	
Study on Mixed Sensitivity Control of Floating Dock Control System	5641
<i>Wang Fang</i>	
Study on Principle and Technology of Automatic Welding of Bellows Based on Measurement	5643
<i>Zhenyun Duan, Wenhui Zhao, and Zhongwei Ren</i>	
Study on Reactive Power and Voltage Control of Power Grid with Small Hydropower	5647
<i>Yaopeng Bai, Lijie Xu, and Wei Wang</i>	

Study on Structure Property of Different Cation and Anion Morpholinium Ionic Liquid	5651
<i>Xia Chuan and Wang Limin</i>	
Study on Test Case Automated Generation Technology Based on Genetic Algorithm and Ant Colony Optimization Algorithm	5655
<i>Duo-yong Xu and Zhi-shu Li</i>	
Study on the Combustion and Thermoelectric Conversion Characteristics of Micro-Combustors	5659
<i>Zhang Yongsheng, Zhou Junhu, Yang Weijuan, Liu Maosheng, and Cen Kefa</i>	
Study on Tubular Busbar Corona Design Optimization of ±660kV HVDC Converter Substation in Qingdao	5663
<i>Xu Mingming, Li Kejun, Tan Zhenyu, and Niu Lin</i>	
Study on Underwater Remotely Operated Welding System in Nuclear Power Stations Repair	5667
<i>Zhou Canfeng, Jiao Xiangdong, Shen Qiuping, and Yu Yan</i>	
Survey of Information Security Risk Assessment	5670
<i>Zhi-Min Gao and Sheng-Yuan Wang</i>	
Survey on Supply Chain Modeling Based Complex Networks	5677
<i>Li Gang, Yang Chun-jie, and Song Zhi-huan</i>	
System Identification Study of Subspace Subid Method Applied to Mini-Mast Structure	5681
<i>Na Meng, Yi-qi Zhou, Xin-li Chen, Bao-qing Dai, and Mang-guo Liu</i>	
The Adaptive MBER Multi-user Detection Algorithm for MIMO MC-CDMA Systems	5685
<i>Xue Bo, Luo Yinsheng, and Jia Zhongning</i>	
The Application of Fuzzy-PID in the Dual-alkali Desulfurization Control System	5689
<i>Xu Qiang and Xu Hui</i>	
The Application of Wavelet in an Image Super-Resolution Reconstruction	5692
<i>Li Xingmei, Chen Liang, and Wang Jin</i>	
The Chaos and Fractal Characteristics and Predication of Shearer Load Power	5696
<i>Chunsheng Liu and Degen Li</i>	
The Control Strategy Based on Improved Droop Method of Microgrid-Connected Inverters	5700
<i>Sha Tian, Xiangqian Tong, and Biying Ren</i>	
The Design and Implementation of a Temperature Controller Based on ARM	5704
<i>Xian-Li Huang, Dong-Mei Luo, and Min Luo</i>	
The Design of Multi-Channel ARINC429 Communication Board Based on CPLD	5708
<i>Li Leyao and Wang Xinmin</i>	
The Design of Multichannel Data Acquisition System Based on FPGA	5712
<i>Hongmei Zhao and Qichao Mi</i>	
The Design of Virtual Maintenance System of Transmitter-Receiver	5715
<i>Zhang Zhanjun</i>	
The Effect of Magnets Magnetization Direction on Brushless DC Motors by Finite Element Method	5719
<i>Zhang Cunshan</i>	
The Effect of Processing Parameters on Resistivity of Boron-doped Hydrogenated Nanocrystalline Silicon Thin Films	5722
<i>Pan Haibin, Ding Jianning, Cheng Guanggui, and Guo Liqiang</i>	
The Innovative Design of Intelligent Mechanical Ventilation Bed	5726
<i>Yan Xiao-ling, Xu Ji-ping, Liu Zai-wen, and Wang Wang-long</i>	
The Online Control System of Bag Filter Based on Temperature Detector and Transducer Technique	5730
<i>Ming-liang Wu, Li-li Wei, Shu-rong Yu, and Jian-kang Huang</i>	
The Realization and Application of Program-controlled Hardware Zero Adjustment Algorithm Based on PGA309	5734
<i>Wang Ya-xiao and Zhang Wen-Hui</i>	
The Research on the Fuzzy Control of Unified Power Flow Controller	5738
<i>Ge Tingyou and Piao Zailin</i>	

The Solution for Mobile Robot Path Planning Based on Partial Differential Equations Method	5742
<i>Kang Liang and Wang Jian-jun</i>	
The Start Characteristics Simulation Driven by the Machinery Series of Two-joint-motor	5746
<i>Chunsheng Liu and Lihong Jin</i>	
The Study of Program Control Structure Test Algorithm Parallelization	5750
<i>Gu Yuwan, Sun Yuqiang, Zhou Tiantong, and Qiao Zengwei</i>	
The Studying on the Structural Controllability of Single Inverted Pendulum Over F(z)	5754
<i>Yu-Peng Yuan, Kai-Sheng Lu, Tian-quan Guo, and Zong-Tao Wang</i>	
Theoretical Investigation on the Working Fluids of Transcritical Power Cycle Using Low-temperature Heat Sources	5758
<i>Sheng Jun Zhang, Huai Xin Wang, Tao Guo, and Shi Hai Yin</i>	
Theoretical Study on Fluid Resistance in Pores of Gasar Metal Porous Filter Material	5762
<i>Yong-jin Li, Xiao-cui Liu, and Ying-jie Ding</i>	
Three Permanent Magnet Driving Device for Artificial Heart	5765
<i>Dong Xia and Lu Xia</i>	
Topology Optimization of the Loader Hood Structure Based on SIMP Theory	5769
<i>Han Ming, Zheng Run-hao, and Wu Xiao-ming</i>	
Treatment System for Truck Exhaust Based on SAE J1939 Protocol	5773
<i>Qihong Zhou, Yanzhu Yang, Limin Mao, Ge Chen, and Yi Lu</i>	
Trust Mechanism in Grid Based on Grey System Theory	5777
<i>Qin Yan-lin, Wu Xiao-ping, and Hu Wei</i>	
UMAC Based Motion Control System Architecture Research of Reconfigurable Machine Tool	5781
<i>Jian-cheng Zhang, Lin-hui Zhao, Jun Rao, and Jian Liu</i>	
Variation Relationship among Multi-station Flood Series in Middle Reach of Xijiang River Basin	5785
<i>Ping Xie, Li Chen, Yasong Tang, Caixia Hu, and Yingying Tan</i>	
Variation Relationship among Multi-Time-Scale Runoff Series in East River Basin	5789
<i>Ping Xie, Ya-song Tang, Li Chen, Ying-ying Tan, and Cai-xia Hu</i>	
Vehicle State Estimation System Aided by Inertial Sensors in GPS Navigation	5793
<i>Zhang Tao, Yang Diange, Li Ting, and Lian Xiaomin</i>	
Vibration Energy Harvesting by Carbon Nanotube Network/Polydimethylsiloxane Composite	5797
<i>Qiang Lv, Keling Wu, Mingxiang Chen, and Sheng Liu</i>	
Water Quality Model Calibration of Water Distribution Network Using Parallel FmGA Algorithm	5801
<i>Shu Shihu, Liu Suiqing, Shu Shihu, and Zhang Dong</i>	
Study on Actuality and Strategy of Land Fragmentation in Middle China Based on GIS	5805
<i>Qiuhua Yu, Liyuan He, and Huihua Chen</i>	
The Precision Analysis and Simulation Based on SLAM	5810
<i>Ping Yang, Bin Zhang, Guo-fang Dong, and Shen-Qing Kuang</i>	
Lifecycle Data Collection Process Issues and Modeling for Equipment's Health Monitoring	5814
<i>Zhouhang Wang and Kondo H. Adjallah</i>	
A Study on Determining the Maximum Loading Index of a Power Grid	5818
<i>Zhu Lan and Yan Zheng</i>	
Analysis on Geographic Concentration Index of Inbound Tourism and Destination Preference - A Case	
<i>Study of Hunan Province</i>	5822
<i>Wu Zhuo and Wang Liangjian</i>	
Design and Application about Data-interface between Digital Simulator and EMS System	5827
<i>Tang Baofeng, Fan Hui, Zhao Chunlei, and Ren Jiangbo</i>	
Design of New-type Axial Flux Permanent Magnet in-Wheel Machine	5831
<i>Deng Qiu-ling, Xiao Feng, and Huang Wen-tao</i>	

Design of Programmable Switching Power Supply	5835
<i>Chuan-dong Bai</i>	
Design of Real-time Measuring and Displaying System for Liquid Metal Magnetohydrodynamic Generation Test Facility	5839
<i>Yuyu Xu, Ran Li, Yan Peng, Lingzhi Zhao, Ciwen Sha, Baolin Liu, Jian Li, and Wende Wei</i>	
Design of Single-phase AC Power Electronic Load	5843
<i>Wu Xiaoxi, Liang Lin, Li Fen, and Zou Yunping</i>	
Design of Solar Preheating System for Boiled Water	5847
<i>Bing Li, Qibing Chen, Wubin Xu, Qiwei He, and Shangping Li</i>	
Hierarchical Control Strategy of Hybrid Electric Vehicle	5850
<i>Tingfang Zhang and Jianchun Liu</i>	
Leakage Minimization of Single-Phase Register File Based on Two-Phase CPAL Using MTCMOS	5854
<i>Xiaolei Sheng and Jianping Hu</i>	
Microstructure of Blackishgreen Passivation Film Based on Galvanized Steel Sheet	5858
<i>Cao Yu-bao</i>	
Microwave Dielectric Properties of Al-Substituted Forsterite Ceramics	5862
<i>Song Kai-Xin, Xu Jun-Ming, Hu Xiao-Ping, Zheng Liang, Ying Zhi-Hua, and Qin Hui-Bin</i>	
Multiple Symbol Detection for Differential Unitary Space-Time Modulation Using a M-BID Algorithm	5865
<i>Jin Xiao-ping, Jin Ning, Ying Ying-guo, and Lv Yun Feng</i>	
Multi-polar Autonomous System Grid Resource Scheduling Model and Algorithm Based on Multi-agent and GA	5868
<i>Xiao Laisheng and Wang Zhengxia</i>	
NIR Spectroscopy Based on DWT and LS-SVM for Prediction of Soil Moisture	5874
<i>Liang Xiuying, Li Xiaoyu, Wang Wei, Gao Yun, Li Xiaoyu, and Lei Tingwu</i>	
Research for a Smart IVR in the Housing Fund Management Center	5877
<i>Chang-Xing Qi and Hang Li</i>	
Research of a New Messages Dissemination Algorithm Based on Structured Gossip Protocol	5881
<i>Xie Hong and Xie Hong</i>	
Research on College Party's Admission Management System Based on Workflow	5885
<i>Shen Zihao and Wang Hui</i>	
Research on GTAW Arc Behavior under High Pressure	5889
<i>Zhonghui Wang, Xiangdong Jiao, Canfeng Zhou, Jiaqing Chen, and Long Xue</i>	
Research on Model of Temperature Field and Structure Optimization for Disk Type Permanent Magnet Synchronous Motor	5892
<i>Xueyan Han, Fei Yang, Renyuan Tang, and Hongyang Zhang</i>	
Research on Network Control System of Hydraulic Supports	5896
<i>Chen Fei, Hou You-fu, Rong Yan-ping, and Wang Li-guo</i>	
Study of Destruction Rule in Shaft Diameter Variation Area Based on FLAC3D	5899
<i>Ren Dawei, Gai Lili, and Yang Ning</i>	

Author Index