

# **2010 8th World Congress on Intelligent Control and Automation**

**(WCICA 2010)**

**Jinan, China  
7-9 July 2010**

**Pages 1-784**



**IEEE Catalog Number: CFP10496-PRT  
ISBN: 978-1-4244-6712-9**

# WCICA 2010 Table of Content

<b>Quantum Artificial Fish Swarm Algorithm.....</b>	<b>.....1</b>
<i>Kongcun Zhu and Mingyan Jiang</i>	
<b>A Multi-objective Optimization Method for Power System Reactive Power Dispatch.....</b>	<b>.....6</b>
<i>Congyu Zhang, Minyou Chen and Ciyong Luo</i>	
<b>A Modified Invasive Weed Optimization with Crossover Operation.....</b>	<b>.....11</b>
<i>Xuncaizhang, Ying Niu, Guangzhao Cui and Yanfeng Wang</i>	
<b>Boiler Tube Leakage Location Optimization via Adaptive Gaussian Mutation.....</b>	<b>.....15</b>
<i>Liansuo An, Peng Wang, Guoqing Shen, Jie Shi and Qiang Feng</i>	
<b>Computational Intelligence Design on Vehicle Axle of All Terrain Vehicle.....</b>	<b>.....20</b>
<i>Yaohong Zhao</i>	
<b>Study On Travelling Waves Transform Characteristics of Potential Transformers.....</b>	<b>.....25</b>
<i>Tao Ji, Yumei Wang and Qianqian Yuan</i>	
<b>Optimization of Multi-View Texture Mapping for Reconstructed 3D Model.....</b>	<b>.....30</b>
<i>Chunmei Duan, Changhe Tu and Xiangxu Meng</i>	
<b>2-D Wavelet Transforms in the Form of Matrices and Application in Compressed Sensing.....</b>	<b>.....35</b>
<i>Huiyuan Wang and José Vieira</i>	
<b>A Novel Memory-Efficient Fast Algorithm for 2-D Compressed Sensing.....</b>	<b>.....40</b>
<i>Huiyuan Wang, José Vieira, Bruno Jesus, Isabel Duarte and Paulo Ferreira</i>	
<b>VizSynth:An Engine for Image and VideoSynthesis in Traffic-Based Application.....</b>	<b>.....44</b>
<i>Yu Cheng, Tao Zhang and Jianfei Wang</i>	
<b>A Gaze Tracking Scheme for Eye-Based Intelligent Control.....</b>	<b>.....50</b>
<i>Xiaohui Yang, Jiande Sun, Ju Liu, Jinyu Chu, Wei Liu and Yuling Gao</i>	
<b>Video Watermarking Scheme Based on Spatial Relationship of DCT Coefficient.....</b>	<b>.....56</b>
<i>Jiande Sun, Niqing Yang, Ju Liu, Xiaohui Yang, Xinchao Li and Lei Zhang</i>	

<b>A Method for Controlling Chaos with Echo State Network.....</b>	<b>.....60</b>
<i>Yibin Li, Yong Song and Xuewen Rong</i>	
<b>Fuzzy Dynamic Characteristic Modeling and Intelligent Adaptive Control for Complex Spacecraft.....</b>	<b>.....64</b>
<i>Xiong Luo, Song Hu, Zengqi Sun and Xintao Qiu</i>	
<b>Design and implementation based on FPGA of a group of three-dimension chaotic system.....</b>	<b>.....70</b>
<i>Zhong-lin Wang</i>	
<b>Analysis and FPGA Implementation of A Novel Hyperchaotic System.....</b>	<b>.....75</b>
<i>Zhonglin Wang and Fu'an Yao</i>	
<b>Research on Grey-Model Prediction Control Based on Genetic Algorithm.....</b>	<b>.....80</b>
<i>Yang Song, Yuqi Gu, Xiaoxin Li and Minrui Fei</i>	
<b>Intelligent Method Based Coordinated Integrated Flight Control of a Tailless STOVL.....</b>	<b>.....85</b>
<i>Yong Fan, Jihong Zhu, Xianyu Meng, Kai Liu and Xili Yang</i>	
<b>Road Utilization Adhesion Coefficient Real-Time Estimation for ASR System.....</b>	<b>.....91</b>
<i>Jiuhong Ruan, Yibin Li, Fuguang Yang, Xuewen Rong and Rui Song</i>	
<b>A Path Planning Method for a Shape-shifting Robot.....</b>	<b>.....96</b>
<i>Tonglin Liu, Chongdong Wu, Bin Li and Jinguo Liu</i>	
<b>Design and Motion Control of a Ping Pong Robot.....</b>	<b>.....102</b>
<i>Ping Yang, Zhengtao Zhang, Huawei Wang and De Xu</i>	
<b>Design of an <math>H^\infty</math> Loop Shaping Velocity Controller for a Small Unmanned Helicopter.....</b>	<b>.....108</b>
<i>Haibo Deng, Xiaoguang Zhao, Zengguang Hou and Yongqiang Hu</i>	
<b>An Evolutionary Method of Adaptive Behavior for Robot Based on Echo State Network.....</b>	<b>.....114</b>
<i>Yong Song, Yibin Li and Bing Liu</i>	
<b>Multi-Objective Optimization Design of Passive Suspension Parameters Based on Collusion Cooperation Game Theory.....</b>	<b>.....118</b>
<i>Jiahan Bao, Nengguang Xie, Yuwan Cen, Lu Wang and Chongzhi Sun</i>	
<b>Fault Detection of Networked Control Systems with Disturbance.....</b>	<b>.....126</b>
<i>Xiaomei Qi and Cheng-jin Zhang</i>	
<b>Identification of Countercurrent Rare Earth Extraction Process Based on Nonlinear State-space Models.....</b>	<b>.....131</b>

*Lusheng Zhong, Xiaoping Fan and Hui Yang*

Unscented Particle Filter with Estimation Windows in Submarine Tracking.....	137
<i>Shenmin Song, Xiqing Wei, Peng Li and Baoqun Zhang</i>	
Model Reduction for Uncertain Stochastic Systems.....	141
<i>Wuneng Zhou, Lin Pan, Lei Jiang, Jian'an Fang and Hongqian Lu</i>	
Characteristic Measurement of the Connection Degree for Network Monitoring.....	147
<i>Tao Qin, Xiaohong Guan, Qiuzhen Huang and Wei Li</i>	
Modeling and Analysis for a Generic Hypersonic Vehicle.....	152
<i>Zenghui Zhang, Lingyu Yang, Youwu Zhong and Gongzhang Shen</i>	
Modeling and Stabilization Control of an Underactuated Double Rotating Pendulums System.....	159
<i>Bingtuan Gao, Junyuan Li and Jianguo Zhao</i>	
Stabilization of a Class of Linear Systems with Input Delay and the Zero Distribution of Their Characteristic Equations.....	165
<i>Bin Zhou, Zongli Lin and Guang-ren Duan</i>	
Research on Domestic PV Module Structure Based on Fault Detection.....	171
<i>Yanli Liu, Bingfeng Li and Dan Zhong</i>	
An Adaptive Solar Photovoltaic Array Reconfiguration Method Based on Fuzzy Control.....	176
<i>Ze Cheng, Zhichao Pang, Yanli Liu and Peng Xue</i>	
Robust Adaptive Power Control for Cellular Communication Systems.....	182
<i>Cunwu Han, Dehui Sun, Jining Xu and Lisha Cao</i>	
Robust Adaptive Control of Time-varying Systems with Dead-zone.....	186
<i>Cunwu Han, Dehui Sun, Yinghong Li and Lisha Cao</i>	
Impulse Response Invariant Discretization of A Generalized Commensurate Fractional Order Filter.....	191
<i>Yan Li, Hu Sheng and Yangquan Chen</i>	
A Class of Fractional Dynamic Systems with Fuzzy Order.....	197
<i>Hongguang Sun, Xiaona Song and Yangquan Chen</i>	
Nonlinear Dynamic System Sensor Fault Isolation Using Parameter Interval based Method.....	202
<i>Zetao Li, Boutaieb Dahhou and Cuixa Zhang</i>	

<b>Fractional-order PID Dynamic Matrix Control Algorithm Based on Time Domain.....</b>	<b>.....208</b>
<i>Wei Guo, Jinghong Wen and Wangping Zhou</i>	
<b>Stability Analysis of the Fractional Differential Systems with Miller-Ross Sequential Derivative.....</b>	<b>.....213</b>
<i>Deliang Qian and Changpin Li</i>	
<b>D-Optimal Trajectories of Mobile Sensors with Fractional Dynamics for Parameter Estimation of Distributed Parameter Systems.....</b>	<b>.....220</b>
<i>Christophe Tricaud and Yangquan Chen</i>	
<b>Theoretical Interpretation for Some Relationships in <math>H^\infty</math> Setting.....</b>	<b>.....226</b>
<i>Hongxia Wang, Huanshui Zhang and Lihua Xie</i>	
<b>Robust Stochastic Stability of Hybrid Genetic Networks.....</b>	<b>.....232</b>
<i>Yonghui Sun, Gang Feng and Aiguo Wu</i>	
<b>Fuzzy Control for It'o Type Uncertain Stochastic Systems.....</b>	<b>.....237</b>
<i>Shaosheng Zhou and Wenyan Ren</i>	
<b>Distributed Fusion Filter for Stochastic Singular Systems with Unknown Disturbance.....</b>	<b>.....242</b>
<i>Dongmei Qu, Jing Ma and Shuli Sun</i>	
<b>Optimal Estimation with Observation Loss and Multiplicative Noise.....</b>	<b>.....248</b>
<i>Xiao Lu and Tailei Wang</i>	
<b>H-inf Output Feedback Control for Descriptor Networked Systems with Multiple Packet Dropouts.....</b>	<b>.....252</b>
<i>Jia Wang, Fuwen Yang, Qinglong Han and Wu Wang</i>	
<b>Crowd Density Estimation via Markov Random Field (MRF).....</b>	<b>.....258</b>
<i>Jinnian Guo, Xinyu Wu, Tian Cao, Shiqi Yu and Yangsheng Xu</i>	
<b>Design of a Small Biped Mechanism with 7 DOFs Legs and Double Spherical Hip Joint.....</b>	<b>.....264</b>
<i>Guangri Li, Qiang Huang, Qian Xu, Guodong Li, Jing Li and Min Li</i>	
<b>Voltage Control of Grid-Connected Inverters Based on <math>H^\infty</math> and Repetitive Control.....</b>	<b>.....270</b>
<i>Tomas Hornik and Qing-chang Zhong</i>	
<b>A Robust Vision System on an Unmanned Helicopter for Ground Target Seeking and Following.....</b>	<b>.....276</b>
<i>Feng Lin, Ben M. Chen, Kai-yew Lum and Tong H. Lee</i>	
<b>Recognizing Human Daily Activity Using A Single Inertial Sensor.....</b>	<b>.....282</b>

*Chun Zhu and Weihua Sheng*

Intelligent Optimization Scheduling of Steelmaking and Continuous Casting Production and Its Application.....	288
<i>Xiuying Wang, Tianyou Chai, Binglin Zheng, Shengping Yu and Xiaochuan Luo</i>	
Conflict Detection in Terminal Area Based on Modified Unscented Particle Filter.....	295
<i>Laihong Hu, Fuchun Sun, Hualong Xu, Huaping Liu, Shengheng Zhang and Xuejun Zhang</i>	
Identification of Discrete-time Varying Nonlinear Systems Using Time-varying Neural Networks.....	301
<i>Weili Yan and Mingxuan Sun</i>	
Global Asymptotic Adaptive Tracking of Robot Manipulators without Velocity Measurements.....	307
<i>Yuxin Su and Chunhong Zheng</i>	
Parametric Observer-based Control for Linear Discrete Periodic Systems.....	313
<i>Lingling Lv and Guangren Duan</i>	
A New Method for H-infinity Performance Analysis and Control of Networked Control Systems.....	317
<i>Wu-hua Chen and Wei-xing Zheng</i>	
Modeling and Attitude Control of Aircraft with Variations in Mass and Center of Gravity.....	323
<i>Xiaoke Yang, Youwu Zhong, Lingyu Yang, Jing Zhang and Gongzhang Shen</i>	
A Classification Algorithm on Traffic State of Expressway Link Based on Ensemble Fuzzy Classifier.....	330
<i>Dewang Chen, Shixin Li and Lijun Pei</i>	
Ink Drop and Color Distortion Modeling in Three Dimensional Printing.....	335
<i>Xinwei Chen, Jingtai Liu, Lei Sun, Hongpeng Wang, Sen Lin and Tao Shi</i>	
The Development of Intelligent Standard Part Library System Based on AutoCAD.....	341
<i>Chunsheng Ma and Zhimin Zhang</i>	
Application of Least Square Support Vector Machine for Thunderstorm Prediction.....	345
<i>Guoqing Qiu, Zexin Wu, Ziming Li and Qin Du</i>	
A Philosophy Illustration of Cultural Algorithm and Particle Swarm Optimization.....	350
<i>Chengyong Si, Wenqi Li, Lei Wang and Xihuai Wang</i>	
Convergence Analysis of the Particle Swarm Optimization with Stochastic Inertia Weight.....	356

<i>Qingguo Wang, Wenjun Yan and Wei Yao</i>	
SLAM for Robotics Assistance to Fire-Fighting Services.....	362
<i>Sid Ahmed Berrabah, Yvan Baudoin and Hichem Sahli</i>	
An Effective Crossing Cyclist Detection on a Moving Vehicle.....	368
<i>Tong Li, Xianbin Cao and Yanwu Xu</i>	
Registration-based Moving Vehicle Detection for Low-altitude Urban Traffic Surveillance.....	373
<i>Changxia Wu, Xianbin Cao, Renjun Lin and Fei Wang</i>	
High Performance Visual Servoing for Controlled Micrometer-positioning.....	379
<i>Roel Pieters, Pieter Jonker and Henk Nijmeijer</i>	
On Video-based Human Action Classification by SVM Decision Tree.....	385
<i>Huimin Qian, Yaobin Mao, Honghua Wang and Zhiquan Wang</i>	
Influence of Application Conditions on Terrain-aided Navigation.....	391
<i>Kedong Wang and Yong Yang</i>	
Fuzzy Logic Enhanced Sliding Mode Control: a Case Study.....	397
<i>Feng Qiao, Jiejia Li, Bin Ma and Quanmin Zhu</i>	
Trajectory Planning of Redundant Robot Manipulators Using QPSO Algorithm.....	403
<i>Jinchao Guo, Xinjin Wang and Xiaowan Zheng</i>	
Equipment fault diagnosis algorithm of SVM based on GA.....	408
<i>Xiaoli Cao, Chaoyuan Jiang and Siyuan Gan</i>	
Neuro-Fuzzy Control of Underwater Robot Based on Disturbance Compensation.....	413
<i>Hongli Chen, Wei Zheng and Xiaodong Gai</i>	
Design of Solar Power Semiconductor Refrigerator.....	419
<i>Shuwang Chen, Jun Zuo and Dan Xie</i>	
Control Capability Evaluation Based Reconfigurable Flight Control for Aircraft with Failures.....	424
<i>Youwu Zhong, Lingyu Yang, Haibin Duan and Gongzhang Shen</i>	
Design and Nonlinear Control of an Indoor Quadrotor Flying Robot.....	429
<i>Zheng Fang, Xiu-ying Wang and Jian Sun</i>	
Independent-on-Model Friction Compensation Study for High-precision Servo System Based on Linear Driver.....	435
<i>Zhihong Jiang, Hui Li, Que Dong, Chuan He, Jian Yang, Danfeng Li and Jingxian Wu</i>	

<b>Design and Analysis of Completely Restrained Cable Manipulators with 3 Degrees of Freedom.....</b>	<b>.....439</b>
<i>Bin Zi and Zhencai Zhu</i>	
<b>Open Source Real-Time Control Software for the Kuka Light Weight Robot.....</b>	<b>.....444</b>
<i>Matthias Schoepfer, Florian Schmidt, Michael Pardowitz and Helge Ritter</i>	
<b>A Probabilistic Approach for On-line Positioning in Nano Manipulations.....</b>	<b>.....450</b>
<i>Shuai Yuan, Lianqing Liu, Zhidong Wang, Ning Xi, Yuechao Wang, Zaili Dong and Zhiyu Wang</i>	
<b>An Approach for Corresponding Vertexes of Robots and Application in Formation Control.....</b>	<b>.....456</b>
<i>Wangbao Xu and Xuebo Chen</i>	
<b>A Three-step Identification Method Based on Step Response and Open Loop -closed Loop Transformation.....</b>	<b>.....461</b>
<i>Dazi Li, Fanyou Zeng, Qibin Jin and Tianwei Tan</i>	
<b>An Improved T-S Fuzzy Neural Network and Its Application in Soft Sensing for FCCU.....</b>	<b>.....466</b>
<i>Ying Zhang</i>	
<b>Modeling and Simulation of Traffic Flow in Work Zone on Highway.....</b>	<b>.....471</b>
<i>Wenxing Zhu, Lei Jia and Liang Zhao</i>	
<b>Closed-Loop Identification for Motion Control System.....</b>	<b>.....477</b>
<i>Lei Zhou, Jiangang Li, Jun Sheng, Jun Cao and Zexiang Li</i>	
<b>Online Modeling Method Based on Dynamic Time Warping and Least Squares Support Vector Machine for Fermentation Process.....</b>	<b>.....481</b>
<i>Yanjie Gong, Xuejin Gao, Pu Wang and Yongsheng Qi</i>	
<b>An Intelligent Hybrid Forecasting Model for Short-term Traffic Flow and Its Application.....</b>	<b>.....486</b>
<i>Guojiang Shen</i>	
<b>Operator Based Robust Nonlinear Control for Peltier Actuated Process by Robust Right Coprime Factorization and Pre-compensator.....</b>	<b>.....492</b>
<i>Mingcong Deng, Soichiro Goto, Shuhui Bi and Akira Inoue</i>	
<b>Stabilizing Controller Design for Uncertain Discrete-time Linear Switching Systems with Non-symmetrical Constrained Control.....</b>	<b>.....497</b>
<i>Guowei Fan, Zhiyuan Liu and Hong Chen</i>	
<b>Static Output Feedback Control of the Linear System with Parameter Uncertainties.....</b>	<b>.....503</b>



*Jinwu Gao and Zhiyuan Liu*

Reliable Output Feedback for Linear Systems with Sensor Mixed Faults.....	509
<i>Bo Yao, Fuzhong Wang and Jianhua Wang</i>	
An Improved Result for Stabilization and $H^\infty$ Control of T-S Fuzzy Systems.....	514
<i>Shunyuan Hsu, Chungchieh Yeh, Yimin Su and Chunhsiung Fang</i>	
State Observer and H-infinite Control Observer-based for Time-delay Linear Neutral System.....	520
<i>Weixun Li, Yali Dong and Xueli Wang</i>	
Deterministic Learning from Robust Adaptive NN Control of Robot Manipulator.....	526
<i>Cong Wang, Wujun Gu and Zhengui Xue</i>	
Control of Uncertain Constrained Nonholonomic Mobile Manipulator based on Recurrent Neural Network.....	532
<i>Z.p Wang, T Zhou and Q.j Chen</i>	
Modified Support Vector Regression for Nonlinear Control System Modeling and Its Application.....	537
<i>Dahai Li, Yangyang Zhou, Yu Shi and Tianshi Li</i>	
Dynamic Vision via Deterministic Learning.....	542
<i>Huiyan Yang, Wei Zeng and Cong Wang</i>	
Adaptive NN Tracking Control of Overactuated Ocean Surface Vessels.....	548
<i>Chen Mou, Shuzhi Sam Ge and Rongxin Cui</i>	
Stable Adaptive NN Control For Nonlinear Systems Preceded by Unknown Backlash-like Hysteresis Via Modified VSC Approach.....	554
<i>Huan Cao, Hongbin Du and Huazhong Wang</i>	
Target Aggregation of Multiple Mobile Agents by Multiple Leaders with Switching Topologies.....	559
<i>Youcheng Lou and Yiguang Hong</i>	
Consensus Analysis for Two-dimensional KH Model with Either-side Confident Level.....	564
<i>Shuang Zhang, Zhendong Sun and Weijie Sun</i>	
Lyapunov Formulation of ISS Cyclic-small-gain in Discrete-time Dynamical Networks.....	568
<i>Tengfei Liu, David J. Hill and Zhongping Jiang</i>	
New Results on Controllability of Multi-Agent Systems.....	574
<i>Na Tan, Hai Lin and Zhijian Ji</i>	

<b>Global Consensus Regions of Multi-Agent Systems with Nonlinear Dynamics.....</b>	<b>.....580</b>
<i>Zhongkui Li, Zhisheng Duan and Guanrong Chen</i>	
<b>Robust Adaptive Control of Coupled Stochastic Multi-agent Systems with Unmodeled Dynamics.....</b>	<b>.....586</b>
<i>Qiang Zhang and Ji-feng Zhang</i>	
<b>Overcoming Human Force Amplification Limitations in Comanipulation Tasks with Industrial Robot.....</b>	<b>.....592</b>
<i>Xavier Lamy, Frederic Colledani, Franck Geffard, Yvan Measson and Guillaume Morel</i>	
<b>Catering Service Robot.....</b>	<b>.....599</b>
<i>Chunjie Chen, Qiao Gao, Zhangjun Song, Liping Ouyang and Xinyu Wu</i>	
<b>Fuzzy Logic Control for Parallel Drive System of the Dual Switched Reluctance Machines.....</b>	<b>.....605</b>
<i>Hao Chen, Qiushuang Song, Ruiling Gao and Liang Guo</i>	
<b>Development of An Amphibious Snake-like Robot.....</b>	<b>.....613</b>
<i>Bin Li, Shugen Ma, Changlong Ye, Shumei Yu, Guowei Zhang and Haili Gong</i>	
<b>Intelligent Control Method for the Laminar Cooling Process of Hot Rolled Strip.....</b>	<b>.....619</b>
<i>Jinxiang Pian, Xiuping Zheng, Tianyou Chai, Zheng Fang and Yongjian Wu</i>	
<b>Study of on-line Measure Method in Petroleum Product's Humidity.....</b>	<b>.....625</b>
<i>Dedong Tang, Haiyan Tang and Xinping Yan</i>	
<b>The Simultaneous Localization and Mapping Problem in a Nonlinear Parameter Identifiability Perspective.....</b>	<b>.....630</b>
<i>Linthotage Perera and Eric Nettleton</i>	
<b>Control for Motion Synchronization of Bilateral Teleoperation Systems with Mode-dependent Time-varying Communication Delays.....</b>	<b>.....638</b>
<i>Zhijun Li, Yu Kang, Weike Shang and Lei Dai</i>	
<b>Coordination of Multiple Agents via Combination Algorithms.....</b>	<b>.....644</b>
<i>Yuan Fan, Gang Feng and Yong Wang</i>	
<b>Reference Compensation Technique of Neural Force Tracking Impedance Control for Robot Manipulators.....</b>	<b>.....650</b>
<i>Seul Jung and T.c. Hsia</i>	
<b>Optimal Control for Industrial Sucrose Crystallization with Action Dependent Heuristic Dynamic Programming.....</b>	<b>.....656</b>
<i>Xiaofeng Lin, Heng Zhang, Li Wei and Huixia Liu</i>	

<b>A Micro-Device for the Mixing of a Highly Viscous Bio-Sample with Water Using Micro-Channel.....</b>	<b>.....662</b>
<i>Liang Yuan and Yuan F. Zheng</i>	
<b>Robust PSS Design Considering Power System Contingencies Based on a Recursive PSO.....</b>	<b>.....668</b>
<i>Zhen Wang, Deqiang Gan, C.y. Chung, K.p. Wong and Chen Shen</i>	
<b>Model-based Learning with Bayesian and MAXQ Value Function Decomposition for Hierarchical Task.....</b>	<b>.....676</b>
<i>Zhaohui Dai, Xin Chen, Weihua Cao and Min Wu</i>	
<b>AdaBoost Regression Algorithm Based on Classification-Type Loss.....</b>	<b>.....682</b>
<i>Lin Gao, Peng Kou, Feng Gao and Xiaohong Guan</i>	
<b>GA and SA Based Evolutionary Algorithm for Fuzzy Flexible Job Shop Scheduling.....</b>	<b>.....688</b>
<i>Wen Chen, Deming Lei, Tao Wang and Qiongfang Zhang</i>	
<b>Genetic Algorithm Based Multi-objective Scheduling in a Flow Shop with Batch Processing Machines.....</b>	<b>.....694</b>
<i>Deming Lei, Qiongfang Zhang, Wen Chen, Tao Wang and Xiuping Guo</i>	
<b>Researches of Scale Adaptive Mean Shift Target Tracking Algorithm.....</b>	<b>.....700</b>
<i>Cunwei Tian, Guangying Ge, Shuxiang Ye and Xinzong Bao</i>	
<b>Fast Camera Calibration Technology Applied to Helicopter Blades Pyramid Angle Measurement.....</b>	<b>.....704</b>
<i>Chengtao Cai, Mai Jiang, Fan Zhang and Huayun Lin</i>	
<b>Synthesis of Controllers for Exact Entrainment to Natural Oscillation.....</b>	<b>.....709</b>
<i>Lijun Zhu, Zhiyong Chen and Tetsuya Iwasaki</i>	
<b>Stereo Vision Camera Calibration Based on AGA-LS-SVM Algorithm.....</b>	<b>.....714</b>
<i>Huixuan Fu, Sheng Liu and Feng Sun</i>	
<b>Multi-Modal Face Recognition.....</b>	<b>.....720</b>
<i>Haihong Shen, Liqun Ma and Qishan Zhang</i>	
<b>Research on ROI Extraction of Color Image.....</b>	<b>.....724</b>
<i>Ying Ma, Xiuling He, Zengzhao Chen and Cailin Dong</i>	
<b>A Fast Algorithm for Constrained GLAD Estimation with application to Image Restoration.....</b>	<b>.....729</b>
<i>Yousheng Xia</i>	

<b>Synchronization Control for an Array of Coupled Neural Networks with Time-varying Delay Coupling.....</b>	<b>.....734</b>
<i>Tao Li, Ting Wang and Aiguo Song</i>	
<b>Neural Network Fault Prediction and Its Application.....</b>	<b>.....740</b>
<i>Jiejia Li, Feng Qiao and Tongying Guo</i>	
<b>Fuzzy-PI Double Modes Control to Motor under Minus Load Circumstance.....</b>	<b>.....744</b>
<i>Shouhua Zhao, Fang He and Qiang Wang</i>	
<b>An Adaptive Dynamic Surface Control Scheme for a Class of Output Feedback Nonlinear Systems with Actuator Failures.....</b>	<b>.....750</b>
<i>Kendrick Amezquita, Waseem Aslam Butt and Yan Lin</i>	
<b>3-D Path Planning for a Mobile Robot.....</b>	<b>.....756</b>
<i>Wei Wang, Cunsheng Guo and Shimin Wei</i>	
<b>The Neural Networks Ensembles Solving Job Shop Schedule Problem Based on Evolutionary Programming.....</b>	<b>.....761</b>
<i>Fang Liu</i>	
<b>Flight Active Disturbance Rejection Control Design and Performance Analysis.....</b>	<b>.....765</b>
<i>Mingwei Sun, Ruiguang Yang and Zengqiang Chen</i>	
<b>The Selections of Nominal Plant and Weighting Functions for Robust Control Design.....</b>	<b>.....771</b>
<i>Qinghai Heng, Jing Lu, Qingzhu Heng, Wen Zhang and Hai Zhou</i>	
<b>Simulation Study of Water Level Control System Based on Active Disturbance Rejection Controller.....</b>	<b>.....776</b>
<i>Debiao Wang, Lepeng Song, Yubin Liu and Yucheng Liu</i>	
<b>Non-fragile Robust Control for a Paper Basis Weight Control System.....</b>	<b>.....781</b>
<i>Qinghai Heng, Jing Lu, Qingzhu Heng, Hai Zhou and Wen Zhang</i>	
<b>Model Predictive Control of Underactuated Surface Vessel with Invariant Manifolds Constraints.....</b>	<b>.....785</b>
<i>Zhilin Liu, Ruiting Yu and Qidan Zhu</i>	
<b>Threshold-based Restricted Searching Area Algorithm in Dynamic Route Guidance System.....</b>	<b>.....791</b>
<i>Lei Wu and Licai Yang</i>	
<b>Some Issues on WSN Localization Based on MLE.....</b>	<b>.....796</b>
<i>Lei Wang, Xiaopeng Wang and Xiaotong Du</i>	
<b>Study for Rover Position Systems Based on Lunar Lander-Robotic Rover</b>	

Communication Link in CE-3 Mission.....	801
<i>Xue Li, Yikang Yang and Lei Liu</i>	
Distributed Fusion Robust H2 and H-infinity Filtering for Uncertain Discrete-Time Systems.....	806
<i>Jiabing Sun, Chengjin Zhang and Bing Guo</i>	
Application Research of Hollow-Core Photonic Crystal Fibers in Methane Sensing System.....	811
<i>Xijun Wu, Yutian Wang, Yantao Zhao, Xingtao Zhao and Zhao Pan</i>	
ICSGDLS: Iterative Calculation of Secondary Grid Division Localization Scheme for Three-Dimensional Wireless Sensor Networks.....	816
<i>Yuxin Ren, Jianping Xing, Yanrui Zhu and Yongzhi Wang</i>	
A Novel PSO Based Acoustic Source Localization Algorithm in Wireless Sensor Network.....	820
<i>Yong Liu, Wentian Zhou, Liang Yan, Quan Pan and Yongmei Cheng</i>	
Low-thrust Orbit Transfers Based on The Combination of The Refined Q-law and Fuzzy Logic Control.....	826
<i>Qian Hou, Yuehua Cheng, Ningyun Lu and Bin Jiang</i>	
An Adaptive PI Controller for Non-Gaussian Stochastic Systems.....	832
<i>Zakwan Skaf, Ahmad Hussain Al-bayati and Hong Wang</i>	
Global Sliding Mode Control For Uncertain Linear Systems With Input Time-Delays.....	838
<i>Xiaoqian Li and Li Jing</i>	
A Novel Design of Adaptive Sliding Mode Observer.....	843
<i>Juntao Fei and Mingang Hua</i>	
Mobile Manipulator Tracking Control Based on Observer Design.....	849
<i>Yuwei Ren and Hong Wang</i>	
Manchester University / Control Systems Center.....	855
<i>Ahmad Al-bayati, Zakwan Skaf and Hong Wang</i>	
3D Scene Reconstruction Using Panoramic Laser Scanning and Monocular Vision.....	861
<i>Shengjie Wang, Yan Zhuang, Keqiang Zheng and Wei Wang</i>	
A Fast Convergent Ant Colony Algorithm for Optimization Automated Warehouse Problem.....	867
<i>Gang Wang, Meijuan Li and Xuebo Chen</i>	
Application of Ant Colony Algorithm in Image Features Extraction and	

Identification.....	.....873
<i>Zhang Ying and Xuebo Chen</i>	
The Research on Robust Movement Control of Robot Based on Fuzzy Iterative Learning Control.....	.....878
<i>Lijuan Wu and Xuebo Chen</i>	
Dynamic Programming Field Based Environment Learning and Path Planning for Mobile Robots.....	.....883
<i>Yuan Yuan, Zhiqiang Cao, Zengguang Hou and Min Tan</i>	
A Localization System for Tracking Robot.....	.....888
<i>Zhou Fang, Wenting Wang, Lei Deng and Yangsheng Xu</i>	
Infinite Horizon LQG Control with Fixed-Rate Quantization for Scalar Systems.....	.....894
<i>Li Chai and Minyue Fu</i>	
Finite-Horizon Quantized Estimation Using Sector Bound Approach.....	.....900
<i>Li Wei, Huanshui Zhang and Minyue Fu</i>	
Distributed Consensus for Multi-agent Systems with Communication Delays and Limited Data Rate.....	.....904
<i>Shuai Liu, Lihua Xie and Tao Li</i>	
Network-Based Non-fragile $H_{\infty}$ Filter Design for Linear Systems.....	.....910
<i>Xian-ming Zhang and Qing-long Han</i>	
Stability for Networked Control System with Quantization Constraints.....	.....916
<i>Yilin Wu, Tian Qi, Ling Yuan and Weizhou Su</i>	
Stability and PID Control for Networked Control System.....	.....921
<i>Xiangdong Dang and Qingling Zhang</i>	
Design for the Remote Control Hydraulic Servo Test Bed.....	.....927
<i>Jie Huang, Jian Li, Xiaoyong Yao, Rui Xiao and Pingdong Wu</i>	
Sensor Data Scheduling over a Packet-dropping Network.....	.....933
<i>Ling Shi, Peng Cheng and Jiming Chen</i>	
Global Exponential Stability of BAM Neural Networks with Varying Coefficient and Impulses on Time Scales.....	.....938
<i>Chaolong Zhang, Fengjian Yang, Liang Chen and Wei Li</i>	
Global Exponential Stability and Existence of Periodic Solution of Hopfield-type Neural Networks with Distributed Delays and Impulsive On Time Scales.....	.....943
<i>Chaolong Zhang, Qiru Wang, Fengjian Yang and Wei Li</i>	

<b>Direct Interaction Methodologies with a Large Scale Haptic Feedback.....</b>	<b>.....948</b>
<i>Jie Huang, Jian Li, Xiaoyong Yao, Rui Xiao and Pingdong Wu</i>	
<b>Intelligent Node of 1553B Bus Based on Gigabit Ethernet Protocol.....</b>	<b>.....953</b>
<i>Peng An</i>	
<b>Estimate of Domain of Attraction for A Class of Port-Controlled Hamiltonian Systems Subject to Both Actuator Saturation and Disturbance.....</b>	<b>.....957</b>
<i>Airong Wei and Yuzhen Wang</i>	
<b>Delay-dependent Passive Control of Stochastic Differential System with Time Delay.....</b>	<b>.....963</b>
<i>Hongliang Liu, Guangren Duan and Liying Fan</i>	
<b>Analysis of Weakly Coupled Neuronal Oscillators and Its Applications to Leech Swimming.....</b>	<b>.....969</b>
<i>Zhiyong Chen and Tetsuya Iwasaki</i>	
<b>State Feedback Stabilizing Switching Strategies with Dwell Time for Switched Discrete-Time Linear Systems.....</b>	<b>.....975</b>
<i>Ai-guo Wu, Gang Feng and Xianlin Zeng</i>	
<b>Linear Estimation for Discrete-time Systems with Markov Jump Delays.....</b>	<b>.....981</b>
<i>Chunyan Han, Huanshui Zhang and Minyue Fu</i>	
<b>An Adaptive Controller for Image-based Visual Servoing of Robot Manipulators.....</b>	<b>.....988</b>
<i>Yunhui Liu and Hesheng Wang</i>	
<b>A Novel Domain Optimization Technique in Fractal Image Compression.....</b>	<b>.....994</b>
<i>Muhammad Kamran, Amna Sipra and Muhammad Nadeem</i>	
<b>Moment Invariant-Based Multi-target Recognition and Grasping for Robot Manipulator.....</b>	<b>.....1000</b>
<i>Suolin Duan, Lanping Chen, Zhenghua Ma and Zhongyao Yang</i>	
<b>Color Image Registration via Quaternion Fourier Transform and Parametric Template Method.....</b>	<b>.....1006</b>
<i>Juntao Pan, Shumin Fei, Wenlin Zou and Yudong Ni</i>	
<b>A Triangular Algorithm of Image-Hiding.....</b>	<b>.....1012</b>
<i>Hongmei Wang, Limin Qu and Fengru Wang</i>	
<b>Pose Estimation of Racket Pad for Ping Pong Robot.....</b>	<b>.....1017</b>
<i>Yanqing Ren, De Xu and Min Tan</i>	

<b>A Robust Watermarking Scheme Based on Non-Subsampled Contourlet Transform.....</b>	<b>.....1022</b>
<i>Changbing Chen, Ju Liu, Jiande Sun, Zhenfeng Ren and Huibo Hu</i>	
<b>EMG and Visual Based HMI for Hands-free Control of an Intelligent Wheelchair.....</b>	<b>.....1027</b>
<i>Lai Wei and Huosheng Hu</i>	
<b>Extended State Observer Based Robust Control of Electrically-Driven Modular Manipulator.....</b>	<b>.....1033</b>
<i>Xianpeng Shi and Shirong Liu</i>	
<b>Hybrid Formation Control of Multiple Mobile Robots with Obstacle Avoidance.....</b>	<b>.....1039</b>
<i>Fan Yang, Fei Liu, Shirong Liu and Chaoliang Zhong</i>	
<b>Towards a Non-probabilistic Approach to Hybrid Geometry-Topological SLAM.....</b>	<b>.....1045</b>
<i>Hai Li and Qijun Chen</i>	
<b>Choice Mechanism of Proposal Distribution in Particle Filter.....</b>	<b>.....1051</b>
<i>Jinxia Yu, Yongli Tang, Xiancha Chen and Wenjing Liu</i>	
<b>Control of A Self-assembly Modular Robot System over A Wireless ZigBee Network.....</b>	<b>.....1057</b>
<i>Huasong Min, Zhenglin Liu, Hongxing Wei and Tianmiao Wang</i>	
<b>Adaptive Human-Simulated Intelligent Controller and Its Application in Double Inverted Pendulum.....</b>	<b>.....1063</b>
<i>Qian Qi, Zushu Li, Zhi Tan, Yanhong Dan and Ling Xiao</i>	
<b>Globally Stable Adaptive Tracking Control Using RBF Neural Networks as Feedforward Compensator.....</b>	<b>.....1067</b>
<i>Weisheng Chen and Zhenbin Du</i>	
<b>A Monocular Vision Localization Method Based On Unmanned Underground Mining Vehicle Using Barcode.....</b>	<b>.....1071</b>
<i>Guanpu Shen, Xiaojuan Ban, Zheng Chang, Shansong Shi and Shuxin Chen</i>	
<b>The Up-Down Giant-Circle Movement Control of Cart-Double Pendulum Using HSIC.....</b>	<b>.....1076</b>
<i>Lin Xiao, Zushu Li and Yuanhong Dan</i>	
<b>Realization of an Improved Location Algorithm Based on the Zigbee Wireless Sensor Network.....</b>	<b>.....1082</b>
<i>Chen Wang, Ruicai Wang, Xiaoqi Wang, Chao Wang, Shuijian Feng and Qinglin Sun</i>	
<b>Application of Fuzzy Expert Control to APMP Pulping Wastewater Treatment Process of Aerobic.....</b>	<b>.....1087</b>
<i>Wei Tang, Yuxuan Lv, Qian Feng and Mengxiao Wang</i>	
<b>Dynamic Matrix Control for Active Queue Management Based on Step Response Model.....</b>	<b>.....1093</b>



*Ping Wang, Hong Chen and Xiaohui Lu*

<b>A Finite-time Dead-zone Modification for Neural Networks Iterative Learning Control.....</b>	<b>.....1098</b>
<i>Huaying Xie, Mingxuan Sun and Weili Yan</i>	
<b>A Robust Iterative Learning Controller Design for Uncertain Nonlinear Systems.....</b>	<b>.....1104</b>
<i>Kui Jin and Mingxuan Sun</i>	
<b>Study on Satellite Attitude Determination Based on Hybrid Extended Kalman.....</b>	<b>.....1110</b>
<i>Lin Zhao, Chen Huang, Xinzhe Wang, Yong Hao and Xin Yan</i>	
<b>Robust Control for Uncertain Nonholonomic Systems and its Application to Mobile Robots.....</b>	<b>.....1115</b>
<i>Yan Sun, Chaoli Wang and Yamin Yang</i>	
<b>The Pump House Constant Pressure Fuzzy Self-tuning PID Control System Simulation.....</b>	<b>.....1121</b>
<i>Debiao Wang, Lepeng Song, Dayong Hu and Yonggang Chen</i>	
<b>Clustering Chain-type Topology for Wireless Underground Sensor Networks.....</b>	<b>.....1125</b>
<i>Wei Chen, Yanjing Sun and Hui Xu</i>	
<b>Simultaneous Registration and Fusion of Radar and ESM by EM-EKS.....</b>	<b>.....1130</b>
<i>Zhenhua Li, Henry Leung and Liang Tao</i>	
<b>A Fast Matrix Iterative Algorithm for WLS Design of 2-D Linear-phase FIR Filters.....</b>	<b>.....1135</b>
<i>Ruijie Zhao and Xiaoping Lai</i>	
<b>Real-Time Communication Protocol for CAN Based on Node Transfer.....</b>	<b>.....1140</b>
<i>Yanjing Sun, Xue Liu and Man Yu</i>	
<b>Research on Real-Time of Hybrid Scheduling for Mine Industrial Ethernet with Network Calculus.....</b>	<b>.....1145</b>
<i>Yanjing Sun, Beibei Zhang and Ruhui Li</i>	
<b>An Overview Of Range Detection Techniques for Wireless Sensor Networks.....</b>	<b>.....1150</b>
<i>Yingfei Diao, Minyue Fu and Huanshui Zhang</i>	
<b>Looper and Tension Control in Hot Strip Finishing Mills Based on Sliding Mode and Adaptive Control.....</b>	<b>.....1156</b>
<i>Zhaozhun Zhong, Jingcheng Wang and Lihua Lu</i>	
<b>A New Viewpoint on the Internal Model Principle and Its Application to Periodic Signal Tracking.....</b>	<b>.....1162</b>
<i>Quan Quan and Kai-yuan Cai</i>	

<b>A Discontinuous Control Law of An Underactuated Surface Vessel Based on Fast Terminal Sliding Mode.....</b>	<b>.....1168</b>
<i>Qidan Zhu, Ruiting Yu and Zhilin Liu</i>	
<b>Robust Model Predictive Control Approach to Time-delay Systems with Structured Uncertainty.....</b>	<b>.....1174</b>
<i>Pengyuan Zheng, Yugeng Xi and Dewei Li</i>	
<b>Matlab-Based Flight Control Design Scheme for UAVs.....</b>	<b>.....1179</b>
<i>Iftikhar Makhdoom and Shi-yin Qin</i>	
<b>Sliding-mode Controller for Four-Wheel-Steering Vehicle: Trajectory-Tracking Problem.....</b>	<b>.....1185</b>
<i>Razvan Solea, Adrian Filipescu, Silviu Filipescu and Bogdan Dumitrascu</i>	
<b>Analysis and Structure of Stability on the Interconnected Lotka-Volterra System for Species.....</b>	<b>.....1191</b>
<i>Xinyu Ouyang and Xuebo Chen</i>	
<b>Connective Stability Analysis for a Class of Pseudo-Linear Interconnected Swarm Systems.....</b>	<b>.....1195</b>
<i>Qian Wang and Xue-bo Chen</i>	
<b>Dynamic Topological Structural Modeling Of Complex System.....</b>	<b>.....1200</b>
<i>Xuebo Chen, Tianyun Huang, Yanjun Song, Xu Liu, Xinyu Ouyang and Wei Wang</i>	
<b>A Hybrid Genetic Algorithm for Dispatching Optimization Problem of Transportation System in Automated Storage and Retrieval System.....</b>	<b>.....1206</b>
<i>Meijuan Li, Xuebo Chen and Xiangling Chen</i>	
<b>Mobile Robot Indoor Semantic Mapping Using 3D Laser Scanning and Monocular Vision.....</b>	<b>.....1212</b>
<i>Jingchen Tong, Dong Chen, Yan Zhuang and Wei Wang</i>	
<b>Application of Neural Network Based on Particle Swarm Algorithm for the Results of the Students.....</b>	<b>.....1218</b>
<i>Wen-ying Zhang, Xiu-yan Peng and Mo Tang</i>	
<b>Linear System Identification Subject to Colored Noises in a Networked Environment.....</b>	<b>.....1222</b>
<i>Xianen Liu and Jiandong Wang</i>	
<b>Robust Weighted <math>H_{\infty}</math> Filtering for Networked Systems with Multiple Sensor Faults.....</b>	<b>.....1228</b>
<i>Hui Zhang, Yang Shi and A. Saadat Mehr</i>	

<b>Downer and Perron Branches in Interconnection Topologies for Coordination and Control of Multi-agent Networks.....</b>	<b>.....1234</b>
<i>Zhijian Ji, Hai Lin and Tong Heng Lee</i>	
<b>A Multicast-query-based Data Dissemination Protocol for Wireless Sensor Networks with Multiple Mobile Sinks.....</b>	<b>.....1240</b>
<i>Li Sun, Chengnian Long, Cailian Chen and Xinping Guan</i>	
<b>Quantized Stabilization of Linear Discrete Systems with Packet Dropout.....</b>	<b>.....1245</b>
<i>Jingjing Yan and Yuanqing Xia</i>	
<b>Stabilization Over Additive White Noise Forward and Feedback Channels.....</b>	<b>.....1251</b>
<i>Yiqian Li, Ertem Tuncel and Jie Chen</i>	
<b>Stability Analysis and Impulsive Control of Bifurcation and Chaos in Fluid Flow Model for TCP/AQM Networks.....</b>	<b>.....1257</b>
<i>Feng Liu, Zhi-hong Guan, Guangxi Zhu, Tao Li and Hua O. Wang</i>	
<b>Precision Control of Piezoelectric Actuated Mechanism in Scanning Tunneling Microscope.....</b>	<b>.....1262</b>
<i>Qiang Wei, Chengzhong Hu and Dong Zhang</i>	
<b>Global Exponential Stability of BAM Type Cohen-Grossberg Neural Network with Delays and Impulsive on Time Scales.....</b>	<b>.....1268</b>
<i>Zunyue Qin, Chaolong Zhang, Xiaojian Hu and Jianfu Yang</i>	
<b>Application of Fuzzy Neural Network in the Trust-Based Access Control Model.....</b>	<b>.....1273</b>
<i>Rina Su, Yongping Zhang, Jianbo Fan and Yu Wang</i>	
<b>An H2 Approach for Networked Control Systems with Multiple Packet Dropouts.....</b>	<b>.....1277</b>
<i>Wu Wang, Fenghuang Cai and Fuwen Yang</i>	
<b>Honeynet-based Collaborative Defense using Improved Highly Predictive Blacklisting Algorithm.....</b>	<b>.....1283</b>
<i>Xiaobo Ma, Jiahong Zhu, Zhiyu Wan, Jing Tao, Xiaohong Guan and Qinghua Zheng</i>	
<b>Resonant-Frequency Band Choice for Bearing Fault Diagnosis Based on EMD and Envelope Analysis.....</b>	<b>.....1289</b>
<i>Wenchang Tsao, Yifan Li and Minchun Pan</i>	
<b>Design of IIR Digital Filters with Prescribed Phase Error and Reduced Group-Delay Error.....</b>	<b>.....1295</b>
<i>Xiaoping Lai and Zhiping Lin</i>	
<b>Bearing Fault Diagnosis Based on EMD and PSD.....</b>	<b>.....1300</b>
<i>Ping Huang, Ziwei Pan, Xiaoli Qi and Jiapeng Lei</i>	

<b>Grayscale Watermarking Resistant to Geometric Attacks Based on Lifting Wavelet Transform and Neural Network.....</b>	<b>.....1305</b>
<i>Guangyong Gao and Guoping Jiang</i>	
<b>A Routing-Driven Key Management Scheme for Heterogeneous Wireless Sensor Networks Based on Deployment Knowledge.....</b>	<b>.....1311</b>
<i>Juwei Zhang and Liwen Zhang</i>	
<b>Adaptive Wavelet De-noising Based on FDR Step-up-down Procedure.....</b>	<b>.....1316</b>
<i>Wenliao Du, Yangming Li, Jin Yuan and Chengliang Liu</i>	
<b>Visual Servo of Uncalibrated Eye-In-Hand System with Time-Delay Compensation.....</b>	<b>.....1322</b>
<i>Haifeng Li, Jingtai Liu, Yan Li, Xiang Lu and Lei Sun</i>	
<b>Multiview Image Registration Using Augmented Kalman Filter.....</b>	<b>.....1329</b>
<i>Zezhong Xu and Yanbin Zhuang</i>	
<b>The Edge Detection of River Model Based on Self-adaptive Canny Algorithm and Connected Domain Segmentation.....</b>	<b>.....1333</b>
<i>Jianjun Zhao, Heng Yu, Xiaoguang Gu and Sheng Wang</i>	
<b>A Novel Geometry Based Matching Method for Images with Multi Objects.....</b>	<b>.....1337</b>
<i>Huawei Wang and De Xu</i>	
<b>Compensation for Time Delay in Teleoperation Control of Mobile Robot Using Neural Network.....</b>	<b>.....1343</b>
<i>Hojin Choi and Seul Jung</i>	
<b>An Efficient Planning Method for Mobile Robot Based 3D Digitization.....</b>	<b>.....1348</b>
<i>Sijian Zhang, Gangfeng Yan and Weihua Sheng</i>	
<b>A Generalized 3-D Path Planning Method for Robots Using Genetic Algorithm with An Adaptive Evolution Process.....</b>	<b>.....1354</b>
<i>Wing Kwong Chung and Yangsheng Xu</i>	
<b>Distributed Aggregation Control of Mobile Robotic Network.....</b>	<b>.....1361</b>
<i>Guansheng Xing, Hao Sun, Haiyong Chen and Chunyan Du</i>	
<b>The Universal Interoperability Platform for Distributed Information Systems.....</b>	<b>.....1367</b>
<i>Yanhui Wang, Chenchen Zhang, Xuemei Xiao and Yuan Ling</i>	
<b>Design and Development of Intelligent Optimization System for Cold Continuous Rolling Rules.....</b>	<b>.....1371</b>
<i>Zhaohui Wang, Suqiang Zhou, Zhiyuan Ma and Xiaoming Liu</i>	

<b>Human Simulated Intelligent Control of Magnetic Levitation Systems.....</b>	<b>.....1376</b>
<i>Peng Xu and Yuanhong Dan</i>	
<b>Modeling and Decoupling Control Simulation for a Virtual Coupling Heater System.....</b>	<b>.....1382</b>
<i>Anli Tao, Yunzhou Li, Rui Li, Shimin Xu, Lina Han, Junguo Liu and Xiangzhong Li</i>	
<b>Direct Adaptive Formation Control of Multiple Mobile Robots Using Hierarchical Fuzzy Systems.....</b>	<b>.....1386</b>
<i>Kongyi Wu and Wei Huo</i>	
<b>On-line Approximation Based Robust Adaptive Control for a Class of Uncertain Systems.....</b>	<b>.....1392</b>
<i>Xiaoqiang Li, Dan Wang, Zhouhua Peng, Jialiang Huang and Weiyao Lan</i>	
<b>Load Frequency Control considering Generation Rate Constraints.....</b>	<b>.....1398</b>
<i>Xiangjie Liu, Xiaolei Zhan and Dianwei Qian</i>	
<b>Energy-Based Controller for Machine-Side Converter of Doubly-Fed Wind Generator.....</b>	<b>.....1402</b>
<i>Huihui Song and Yanbin Qu</i>	
<b>A New Robust MPC for Uncertain Linear Systems.....</b>	<b>.....1408</b>
<i>Xiangjie Liu, Sumei Feng and Xiaobing Kong</i>	
<b>A Stair-like Hierarchical Predictive Control Strategy.....</b>	<b>.....1414</b>
<i>Xiangjie Liu, Yu Du and Dianwei Qian</i>	
<b>A Method for Structure Analysis of ZigBee Network Using Node Address.....</b>	<b>.....1419</b>
<i>Hongchun Li, Xiaoguang Zhao and Min Tan</i>	
<b>Experiments for On-Line Bearing-Only Target Localization in Acoustic Array Sensor Networks.....</b>	<b>.....1425</b>
<i>Ji-an Luo, Dahang Feng, Shantao Chen, Peng Zhang, Ming Bao and Zhi Wang</i>	
<b>Experimetal Research of Path Loss Models for Zigbee Wireless Sensor Networks.....</b>	<b>.....1429</b>
<i>Xiangyuan Jiang, Yawei Yang, Xingbo Wang and Huanshui Zhang</i>	
<b>The Design and Implementation of A Sewage Treatment Monitoring System Based on Wireless Sensor Networks.....</b>	<b>.....1434</b>
<i>Shantao Chen, Hailiang Xue, Qingdong Wang, Jie Shen, Guochuan Hu, Wei Ye and Zhi Wang</i>	
<b>Sum Rate Capacity for Orthogonal Random Beamforming in Multi-Cell MIMO Scenarios.....</b>	<b>.....1440</b>
<i>Lu Pang and Mingyan Jiang</i>	
<b>Analysis of Parallel Mechanism for Human Hip Joint Power Assist.....</b>	<b>.....1444</b>
<i>Yong Yu, Wenyuan Liang and Yunjian Ge</i>	

<b>A Localization Algorithm for Low-Cost Cleaning Robots Based on Kalman Filter.....</b>	<b>.....1450</b>
<i>Zhangjun Song, Huifen Liu, Jianwei Zhang, Liwei Wang and Ying Hu</i>	
<b>Multisensor Based Effective Indoor Environment Map Build-Up for Intelligent Service Robot.....</b>	<b>.....1456</b>
<i>Ren C. Luo and Chun C. Lai</i>	
<b>Experimentation Research on Lower-limb Power Assisted Robot.....</b>	<b>.....1462</b>
<i>Lan Wang, Shiping Bao and Keyi Wang</i>	
<b>A Novel Medical Robot Assisting Photodynamic Therapy for Port Wine Stains.....</b>	<b>.....1468</b>
<b>A Research of the Switched Reluctance Generator System Based on Internal-PID Control.....</b>	<b>.....1474</b>
<i>Xiaoshu Zan and Hao Chen</i>	
<b>Reliability Analysis of Autopilot for Airplane.....</b>	<b>.....1480</b>
<i>Huibin Xu, Yubao Gao and Jianwu Tao</i>	
<b>Simulation of Switched Reluctance Machine with the Operation at Four-Quadrant.....</b>	<b>.....1485</b>
<i>Hao Chen, Xiuli Ju, Jason J. Gu, Pude Yu and Liang Qiu</i>	
<b>The Time Series Soft-sensor Modeling based on Adaboost_LS-SVM.....</b>	<b>.....1491</b>
<i>Wenli Du, Zhenqiang Guan and Feng Qian</i>	
<b>Application of Gray Correlation Analysis in Eutrophication Evaluative of Water Bloom.....</b>	<b>.....1496</b>
<i>Shiping Zhu, Zaiwen Liu, Xiaoyi Wang, Jiping Xu, Xiaofeng Lian and Jun Dai</i>	
<b>Study on Modeling and Simulation of Inductively Coupled Power Transfer System with Bi-Directional Energy Transfer Mode.....</b>	<b>.....1502</b>
<i>Xin Dai, Yue Sun, Yugang Su, Chunsen Tang and Zhihui Wang</i>	
<b>Disturbance-free Operation of Five-phase Induction Machine with One Stator Winding Open Circuited.....</b>	<b>.....1507</b>
<i>Lin Chen, Dong Tian, Shaolian Cheng, Kangling Fang and Bin Liu</i>	
<b>An Diagnosis Method of Chatter Marks Based on PCA.....</b>	<b>.....1512</b>
<i>Jian Zhang, Shengxi Wu and Jiazhuo Xu</i>	
<b>Direct Torque Control for Dual-three Phase Induction Machine with One Stator Phase Opened.....</b>	<b>.....1518</b>
<i>Lin Chen, Dong Tian, Shaolian Cheng, Kangling Fang, Bin Liu and Ji Li</i>	
<b>Real-time Environment Protecting Supervision and Control System of Heavy Loads in Electric Power Grid.....</b>	<b>.....1523</b>

*Wei Hu, Fei Xu, Xiaohai Wang and Youhua Hou*

<b>Delay-dependent Stabilization for Delay Stochastic Differential Systems with Markov Jumping Parameters based on SLQ Controllers.....</b>	<b>.....1528</b>
<i>Liyang Fan, Hongliang Liu, Guangren Duan and Junfeng Wu</i>	
<b>Stability Analysis and Design of Uniform Ultimate Boundedness Control for a Class of Nonlinear Switched Difference Systems.....</b>	<b>.....1533</b>
<i>Alexander Aleksandrov, Yangzhou Chen, Alexey Platonov and Liguo Zhang</i>	
<b>Design of Time-Variable Boundary Layer on Sliding Mode Control.....</b>	<b>.....1539</b>
<i>Ming Lei, Weian Guo, Yan Zheng, Lei Wang and Qidi Wu</i>	
<b>Design of Nonsingular Terminal Sliding Mode Surface.....</b>	<b>.....1543</b>
<i>Weian Guo, Ming Lei, Yan Zheng, Lei Wang and Qidi Wu</i>	
<b>Optimal Operation Strategy Extraction for Blast Furnace Ironmaking Process Based on Fuzzy C-means Clustering.....</b>	<b>.....1547</b>
<i>Shihua Luo, Xihua Chen and Jiusun Zeng</i>	
<b>Predictive Modeling of Cement Decomposing Furnace Temperature.....</b>	<b>.....1552</b>
<i>Jinfeng Zhang, Bo Pang, Ning Cai and Wenjun Yan</i>	
<b>Application of Principal Component Related Variable Residual Analysis to Imperial Smelting Furnace Process Monitoring.....</b>	<b>.....1557</b>
<i>Qing Chen, Min Wu, Zhaohui Tang, Weihua Gui and Yanyu Hu</i>	
<b>Model Updating and Thruster Fault Diagnosis for Underwater Vehicle.....</b>	<b>.....1563</b>
<i>Zhenzhong Chu, Mingjun Zhang, Yujia Wang and Weixu Song</i>	
<b>A Unified Fitness Calculation Method for Automatic Modeling Algorithms.....</b>	<b>.....1569</b>
<i>Dazhi Jiang, Zhifei Wang, Haojun Sun and Yulin Du</i>	
<b>Smart Robot Perception through Internet Data Mining.....</b>	<b>.....1574</b>
<i>Peijiang Yuan, Tianmiao Wang and Yong Tao</i>	
<b>A Forward Concurrent Reasoning Approach for Rule-based Systems Using Fuzzy Colored Petri Nets.....</b>	<b>.....1579</b>
<i>Jie Yuan, Chang Liu, Bo Jiang, Yugang Shan and Wenli Shang</i>	
<b>A Knowledge Representation Method for Modeling Rule-based Systems.....</b>	<b>.....1585</b>
<i>Jie Yuan, Bo Jiang, Yugang Shan, Chang Liu and Wenli Shang</i>	
<b>Simulated Annealing Artificial Fish Swarm Algorithm.....</b>	<b>.....1590</b>
<i>Mingyan Jiang and Yongming Cheng</i>	

<b>Fuzzy Comprehensive Evaluation-Based Artificial Consciousness Model.....</b>	<b>.....1594</b>
<i>Changsheng Zhu and Zhiliang Wang</i>	
<b>Design and Implement of an Integrated, Multi-functional Health Examination Package Based on the Loogson-2F Embedded Computer.....</b>	<b>.....1599</b>
<i>Wentao Cai, Chao Hu, Yingzi Pan, Mao Li and Max Q.-h. Meng</i>	
<b>Remote Life Monitoring System Base on Internet of Things.....</b>	<b>.....1605</b>
<i>Guan Guan, Chao Hu, Xiaobin Shen, Yingzi Pan and Max Q.-h Meng</i>	
<b>Design and Implementation of a Novel CPG-based Locomotion Controller for Robotic Dolphin.....</b>	<b>.....1611</b>
<i>Ming Wang, Junzhi Yu, Min Tan and Jianwei Zhang</i>	
<b>Bio-Inspired Center Pattern Generator Based Control Models.....</b>	<b>.....1617</b>
<i>Junzhi Yu, Qinghai Yang, Ming Wang, Min Tan and Jianwei Zhang</i>	
<b>Heart Condition Analysis from ECG Signals Based on Nonlinear Theory.....</b>	<b>.....1623</b>
<i>Jun Meng, Ke Xu, Jun Zheng and Wenjun Yan</i>	
<b>A Compact Representation of Handwriting Movements with Mixtures of Primitives.....</b>	<b>.....1629</b>
<i>Min Liu, Tong Liu and Guoli Wang</i>	
<b>Global Robust Output Regulation for A Class of Output Feedback Systems with Nonlinear Exosystems and Its Application.....</b>	<b>.....1635</b>
<i>Weijie Sun</i>	
<b>Sensorless Estimation and Convergence Analysis Based on MRAS for PMSM.....</b>	<b>.....1641</b>
<i>Maogang Wu, Rongxiang Zhao and Junwei Wang</i>	
<b>Reduced Order Observer-Based Strictly Dissipative Control for Linear Singular Systems.....</b>	<b>.....1645</b>
<i>Yu Zhang, Xin-zhuang Dong and Ling Ai</i>	
<b>Reduced-order Multiple Models Robust Direct Adaptive Control of Non-minimum Phase System.....</b>	<b>.....1651</b>
<i>Jiazhen Liu, Zhenlei Wang, Xin Wang, Dahai Wang and Feng Qian</i>	
<b>Robust L2 Control Design for Speed Regulation System of Marine Diesel Engine Generator.....</b>	<b>.....1656</b>
<i>Lijun Zhang, Jie Meng, Hai Lan and Lin Yang</i>	
<b>An Industrial Wastewater Pollution Degree Evaluation Method based on Improved Fuzzy Evaluation Theories.....</b>	<b>.....1662</b>
<i>Guorong Chen, Jinliang Shi, Juli Deng, Liang Lei and Qian Xiong</i>	



<b>Producer-Consumer Distributed Energy Production Systems Modeling with a New Approach of Recurrent Synchronized Fuzzy Petri Nets.....</b>	<b>.....1668</b>
<i>Eugenia Minca, Otilia Dragomir and Florin Dragomir</i>	
<b>RVI Reinforcement Learning for Semi-Markov Decision Processes with Average Reward.....</b>	<b>.....1674</b>
<i>Yanjie Li and Fang Cao</i>	
<b>A Semantic-BDI-Based Approach to Realize Cooperative, Reflexive Workflows.....</b>	<b>.....1680</b>
<i>Sebastian Richly, Sandro Schmidt and Uwe Assmann</i>	
<b>A Calculation Model of Equipment Similarity on Manufacturing Capability and its Application.....</b>	<b>.....1686</b>
<i>Jiansheng Liu, Haining Tu, Fangchen Xai, Xia Yang and Wenyu Zhang</i>	
<b>Method for Hot Rolling Planning Considering Material Requirements of Downstream Production Lines.....</b>	<b>.....1690</b>
<i>Naiwei Tu, Xiaochuan Luo, Hui Huang, Tianyou Chai and Binglin Zheng</i>	
<b>Methodology for A Novel Lsim-HAZOP Study Based on Large Scale Simulation Approach.....</b>	<b>.....1696</b>
<i>Jianyuan Cao, Haiqing Wang and Zhaohui Wang</i>	
<b>Least Square-Support Vector Regression based Car-following Model with Sparse Sample Selection.....</b>	<b>.....1701</b>
<i>Dali Wei, Feng Chen and Tongshuang Zhang</i>	
<b>Knowledge Representation Model and Intelligent Analysis of Vibration Isolation System Design.....</b>	<b>.....1708</b>
<i>Lijuan Xing, Dezhen Feng and Huaguan Liu</i>	
<b>Self-Tuning Measurement Fusion Kalman Filter and Its Convergence for Multisensor Systems with Companion Form.....</b>	<b>.....1712</b>
<i>Chenjian Ran and Zili Deng</i>	
<b>Output-relevant Fault Reconstruction Based on Total PLS.....</b>	<b>.....1718</b>
<i>Gang Li, Donghua Zhou and S. Joe Qin</i>	
<b>Modeling of McKibben Pneumatic Artificial Muscles Using Optimized Echo State Networks.....</b>	<b>.....1723</b>
<i>Hanying Zhou, Yongji Wang and Kexin Xing</i>	
<b>Multi-Source Data Fusion Soft-Sensor Method for Ball Mill Operating Parameters Based on Transformation of Radical Basis Function.....</b>	<b>.....1729</b>
<i>Jian Tang, Xiuping Zheng, Tianyou Chai, Heng Yue and Lijie Zhao</i>	

<b>Radio/VISNAV Integrated Navigation System for Autonomous Spacecraft Rendezvous Using Two-Order Filter.....</b>	<b>.....1735</b>
<i>Xiaoliang Wang, Xiaowei Shao, Deren Gong and Dengping Duan</i>	
<b>Polynomially Parameter-dependent Approach of Robust<math>HH^\infty</math> Filter for Polytopic Delta Operator Systems.....</b>	<b>.....1741</b>
<i>Ying Zhang, Rui Zhang, Chao Hu and Yongqing Dong</i>	
<b>Adaptive Back-stepping LPV Control of Satellite Attitude Maneuvers with Sum of Squares.....</b>	<b>.....1747</b>
<i>Jia Wang, Ming Zeng, Zhiwei Yu, Bin Liu and Wenguang Xu</i>	
<b>Adaptive Output Feedback Control with Feedback-feedforward Compensator for Piezoactuator-Driven Stages.....</b>	<b>.....1753</b>
<i>Lijun Zhang, Lixin Yang, Xingwen Zhang and Lining Sun</i>	
<b>An Approach to Stability Analysis for Fuzzy Control Systems with Parametric Uncertainty.....</b>	<b>.....1759</b>
<i>Yifang Weng and Huiyan Zhang</i>	
<b>Reentry Trajectory Optimization of Hypersonic Vehicle with Minimum Heat.....</b>	<b>.....1764</b>
<i>Maorui Zhang, Yong Sun, Guangren Duan and Guanglun Wang</i>	
<b>Conditions for Essential Instability and Essential Destabilization of Linear Stochastic Systems.....</b>	<b>.....1770</b>
<i>Ting Hou, Weihai Zhang and Hongji Ma</i>	
<b>Multiple Mobile Target Localization and Pursuit Based on Discrete Measurements of the Energy Intensity Field.....</b>	<b>.....1776</b>
<i>Jinwen Hu, Cishen Zhang and Lihua Xie</i>	
<b>Object Tracking for Autonomous Biped Robot.....</b>	<b>.....1782</b>
<i>Jong C. Wang, Yanting Lin, Huei Teng Jheng, Jyun Sian Wu and Ruei Jhe Li</i>	
<b>Gait Planning and Simulation of Lateral Motion for ROBONOVA-1 Robot.....</b>	<b>.....1790</b>
<i>Weibing Zhu, Yanfei Wang and Shengren Zhou</i>	
<b>PID Control of Robot Manipulators in Task Space.....</b>	<b>.....1794</b>
<i>Chunhong Zheng and Yuxin Su</i>	
<b>Smart Remote Sensing of Environmental Systems Using Unmanned Air Vehicles.....</b>	<b>.....1800</b>
<i>Christophe Tricaud and Yangquan Chen</i>	
<b>Coordinated Motion Planning of Multiple Mobile Robots in Formation.....</b>	<b>.....1806</b>
<i>Shuang Liu, Dong Sun and Changan Zhu</i>	

<b>System Identification and Control of Piezo-based Actuators for Optical Pickup Devices.....</b>	<b>.....1812</b>
<i>C. Y. Shen, K. W. Chan, L. Y. Wong and W. H. Liao</i>	
<b>Mobile Robot Gas Source Localization via Top-Down Visual Attention Mechanism and Shape Analysis.....</b>	<b>.....1818</b>
<i>Ping Jiang, Qinghao Meng and Ming Zeng</i>	
<b>Study on Qualitative Modeling of Underwater Robot.....</b>	<b>.....1824</b>
<i>Yujia Wang, Zhenzhong Chu, Mingjun Zhang and Weixu Song</i>	
<b>Generic Calibration of an Integral Imaging Camera and its Applications on 2D Integral Image Reconstruction and 3D Scene Reconstruction.....</b>	<b>.....1830</b>
<i>Weming Li, Youfu Li, Zhanjiang Yu and Keyi Wang</i>	
<b>Servo-error Control to Compensate the Eccentricity of Spindle Motor and Disk.....</b>	<b>.....1836</b>
<i>Yun-hong Lin, Fang-bor Luoh and Min-chun Pan</i>	
<b>Real-time Performance Evaluation in Hybrid Industrial Ethernet Networks.....</b>	<b>.....1842</b>
<i>Lei Zhang and Zhi Wang</i>	
<b>Research on Delay of Data Streams in Internet-based NCS.....</b>	<b>.....1846</b>
<i>Lun Cheng and Zhongjie Wang</i>	
<b>BO-ARED: A New AQM Algorithm with Adaptive Adjustment of Parameters.....</b>	<b>.....1852</b>
<i>Yunqi Luo, Hong Chen, Xiaoping Yang and Yuxiang Hao</i>	
<b>Decoupling Control of Forging Machine Based on PID Neural Network.....</b>	<b>.....1858</b>
<i>Dapeng Zhang, Wenpeng Zhai, Aiguo Wu and Chunyan Du</i>	
<b>Game Study on the Populational Parrondo's Paradox Based on BA Network.....</b>	<b>.....1863</b>
<i>Lingang Wang, Nenggang Xie, Gang Xu, Chao Wang, Yun Chen and Rui Meng</i>	
<b>Fault-Tolerant Algorithm Based on Multi-Resolution of Haar Wavelets in Opportunistic Networks.....</b>	<b>.....1870</b>
<i>Dejun Huang, Rulong Wang, Jin Zhang and Jianxiang Lu</i>	
<b>The Influence of Parameters Variation on Efficiency Optimization Control for Electric Vehicle Drive Motor.....</b>	<b>.....1876</b>
<i>Ke Li, Chenghui Zhang and Naxin Cui</i>	
<b>Comparative Study of Induction Motor Efficiency Optimization Control Strategy for Electric Vehicle.....</b>	<b>.....1882</b>
<i>Ke Li, Chenghui Zhang and Naxin Cui</i>	
<b>An Integrative Design for Space Manipulator Joint.....</b>	<b>.....1888</b>

*Yu He, Jun Jiang, Zhihong Jiang, Hui Li and Qiang Huang*

Study on Network Architecture Based on RTnet in CNC System.....	1894
<i>Tianrong Gao, Dong Yu and Dongfeng Yue</i>	
NCO-GMC Cascade Control Algorithm Based On-line Optimization on Fed Batch Fermentation.....	1902
<i>Wei Wang, Haiqing Wang and Zhihuan Song</i>	
Air-conditioning System Energy Efficiency and Energy Consumption Evaluation.....	1908
<i>Xiaotong Du, Wenjian Cai and Lei Jia</i>	
The Information/Solver Workflow Net.....	1914
<i>Gequn Liu and Lei Liu</i>	
Mining Multi- Attribute Associate Rules Based on Attribute Union.....	1919
<i>Yuanfu Zhang, Jicheng Jiao and Xiumei Su</i>	
Simulation of Single Memory Agent Search Algorithm in EPS Power System Reconfiguration.....	1925
<i>Yan-cheng Liu and Chuan Wang</i>	
GPU based Partially Connected Neural Evolutionary Network and its Application On Gender Recognition with Face Images.....	1930
<i>Xiaoxi Chen, Minghui Shi and Hugo De Garis</i>	
Programme and Simulation of The Fuzzy Control List in Fuzzy Control.....	1935
<i>Dan Su, Kaichun Ren, Jianyuan Luo, Chunhan He, Liyong Wang and Xingqi Zhang</i>	
Analyzing Group Dynamics for Incidental Topics in Online Social Networks.....	1941
<i>Yadong Zhou, Xiaohong Guan, Qinghua Zheng, Qindong Sun and Junzhou Zhao</i>	
A Pulse Wave Filter Method Based on Wavelet Transform Soft-threshold and Adaptive Algorithm.....	1947
<i>Zhao Shen, Chao Hu and Max Q.-h. Meng</i>	
Lattice Boltzmann Method with Immersed Boundary Method for Simulating RBC Movement in Micro-vessel.....	1953
<i>Xiaochuan He, Jianqiang Cui, Shoushui Wei and Ting Yang</i>	
Application of FAHP in the Allocation of Medical Resources.....	1959
<i>Zhuanyun Yu, Shoushui Wei, Dandan Zhang, Chengjin Zhang and Shandong University, China</i>	
Complex Data Analysis of the Hindmarsh-Rose Model at Specific Parameters.....	1963
<i>Qiuju Jia and Zengqiang Chen</i>	

Stabilization of Random Boolean Networks.....	1968
<i>Hongsheng Qi, Daizhan Cheng and Xiaoming Hu</i>	
Robot-assisted Microinjection system on Zebrafish Embryos: Implementation and Experiments.....	1974
<i>Yu Xie, Dong Sun and Chong Liu</i>	
The Construction of Service System for Supporting Cluster Supply Chain Alliance.....	1980
<i>Xiao Xue, Zhifeng Zeng and Yanhui Liu</i>	
Load Analysis in Correlated Scale-free Networked Systems.....	1986
<i>Zhihai Rong and Liming Pan</i>	
Adaptive Global Synchronization of Directed Networks with Fast Switching Topologies.....	1991
<i>Xinbiao Lu and Buzhi Qin</i>	
A Tabu Search Heuristic for the Robust Wounded Transfer Problem in Large-scale Emergencies.....	1996
<i>Yuanta Song, Xin Ma and Jun Huang</i>	
A Multilayer Epidemic Simulation Framework Integrating Geographic Information System with Traveling Networks.....	2002
<i>Chung-yuan Huang and Tzai-huang Wen</i>	
Discrete Particle Swarm Optimization Algorithm for Weighted Traveling Salesman Problem.....	2008
<i>Hua Zeng, Peng Liu, Changpeng Shen and Yaohua Wu</i>	
Hysteresis Compensation of a Piezoactuated XY Micropositioning System Based on Disturbance Observer.....	2014
<i>Qingsong Xu and Yangmin Li</i>	
Information Acquisition of a Micro-Nano Displacement for Piezoelectric Actuator Sensor Based on DSP2812.....	2020
<i>Yong Yu, Renbing Chen, Hanyu Sun, Bo Song and Yunjian Ge</i>	
XPC-based Real Time Control System for an Electro-hydraulic Servo Shaking Table.....	2026
<i>Jianjun Yao, Wei Fu, Shenghai Hu and Sheng Liu</i>	
Angular Velocity Estimation in Gyroscope-free Inertial Measurement System Based on Unscented Kalman Filter.....	2031
<i>Zhen Shi, Jie Yang, Peng Yue and Zijian Cheng</i>	
A Height Error Compensation Method of Contact Mode AFM.....	2035
<i>Yangjie Wei, Chengdong Wu and Zaili Dong</i>	

<b>Kinematics Analysis and Manipulability of Closed-Loop Parallel Manipulator with Redundancy.....</b>	<b>.....2041</b>
<i>Yong Yu and Zhanwu Pei</i>	
<b>Design Of Embedded Network Router For Video Based On Security Consideration.....</b>	<b>.....2047</b>
<i>Zhenxin Zhang, Jigang Tong and Zengqiang Chen</i>	
<b>Improving Electromagnetic Compatibility of Gas Sensor based on Electromagnetic Measurement.....</b>	<b>.....2053</b>
<i>Fengying Ma</i>	
<b>Fuzzy-integral Evaluation on Enterprise Core IT Capability Based on Combination Weighting.....</b>	<b>.....2059</b>
<i>Xiuyan Yu and Shunliang Huang</i>	
<b>Study and Implementation of the Precise Temperature Control Used in Airborne Gravimetry.....</b>	<b>.....2064</b>
<i>Jilian Li, Kaidong Zhang, Qi Zhang and Lurui Xia</i>	
<b>The Study of Code Density Histogram Testing Method to High-Speed ADC Based on DSP.....</b>	<b>.....2069</b>
<i>Dijian Xu and Jun Peng</i>	
<b>A Quick Self-Compensation Method of Resistance Simulation System in Vehicle Chassis Dynamometer Based on Kernel PCA.....</b>	<b>.....2075</b>
<i>Long Guo and Yushan Wang</i>	
<b>Improved Delay-Dependent Stability Criterion on Neural Networks with Time-Varying Delay.....</b>	<b>.....2080</b>
<i>Haitao Zhang, Ting Wang, Shumin Fei and Tao Li</i>	
<b>Reachable Set Analysis for Linear Systems with Discrete and Distributed Delays.....</b>	<b>.....2085</b>
<i>Zhiqiang Zuo, Daniel Ho and Yijing Wang</i>	
<b>Output Feedback Stabilization of Stochastic Nonholonomic Systems.....</b>	<b>.....2091</b>
<i>Xiuyun Zheng and Yuqiang Wu</i>	
<b>Engine Start Control Strategy Research for Parallel -Series Hybrid Electrical Vehicles.....</b>	<b>.....2097</b>
<i>Yihe Zuo, Changle Xiang, Qingdong Yan and Yanzi Wang</i>	
<b>Backstepping Design of Current-Mode Controller for DC/DC Boost Power Converters.....</b>	<b>.....2103</b>
<i>Zhong Wu and Chaohui Liu</i>	
<b>Delay-Probability-Distribution-Dependent Robust Stability Analysis</b>	

for a Class of Stochastic System with Time-varying Delay.....	.....2107
<i>Jajun Li, Feiqi Deng and Yunjian Peng</i>	
Phi_0 -Stability for Discrete Hybrid System with Initial Time Difference.....	.....2113
<i>Weisong Chen, Zhenlai Han, Shurong Sun and Tongxing Li</i>	
Stabilization and Adaptive $L_2$ -Disturbance Attenuation Control of A Class of Nonlinear Descriptor Systems.....	.....2118
<i>Liyang Sun and Yuzhen Wang</i>	
Adaptive NN Dynamic Surface Control of Strict-Feedback Nonlinear Systems.....	.....2124
<i>Tianping Zhang, Qiuqin Zhu and Qing Zhu</i>	
Indirect adaptive fuzzy control for a class of strict-feedback nonlinear systems with time-varying dead-zone.....	.....2130
<i>Wuxi Shi</i>	
Stabilization Control of a Backward Tractor-Trailer Mobile Robot.....	.....2136
<i>Jin Cheng, Yong Zhang, Shaomin Hou and Benjia Song</i>	
Design of a Data Acquisition System on Magnetic Signal for Magnetic Localization and Orientation System.....	.....2142
<i>Jiayu Ren, Mao Li, Chao Hu, Lin Yang, Shuang Song and Max Q.-h. Meng</i>	
A Fuzzy Based Approach to Effective Relative Humidity Tracking in Industrial Systems.....	.....2148
<i>Wei Zhang and Simon X. Yang</i>	
Fuzzy Controller in the Largest Double-fed Wind Power Generator in the Study of Capture System.....	.....2154
<i>Lepeng Song, Hui Li and Zhiming Dong</i>	
Design and Control of the Propulsion for a Series Hybrid Electric Vehicle.....	.....2159
<i>Xiumin Yu, Junjie Li, Huajie Ding and Ping Sun</i>	
A Novel Method of 6-DoF Electromagnetic Navigation System for Surgical Robot.....	.....2163
<i>Mao Li, Shuang Song, Chao Hu, Dongmei Chen and Max Q.-h. Meng</i>	
An Improved SOM-based Approach to Dynamic Task Assignment of Multi-robots.....	.....2168
<i>Anmin Zhu and Simon X. Yang</i>	
Look-Ahead Control of Conveyor-Serviced Production Station under Stochastic Demand.....	.....2174
<i>Yingjun Chen, Hao Tang, Lei Zhou and Xuesen Ma</i>	
iDCS: A Multi-Agent Architecture for Modelling Manufacturing Systems.....	.....2180

*Puya Afshar, Hong Wang and Tianyou Chai*

Intelligent Controller Architecture for Safety Systems in Automatic Industry.....	.....2186
<i>Dongfeng Yue, Dong Yu, Tianrong Gao and Yi Hu</i>	
Research on Dynamic Intelligent Control System of Grinding Quality.....	.....2192
<i>Jiaqi Jin, Xingyu Jiang, Xinmin Zhang and Wanshan Wang</i>	
Loop Priority Based Decentralized Control for Coal Ball Mill System.....	.....2198
<i>Yunhui Luo, Hongbo Liu, Lei Jia and Lei Wang</i>	
A New ECG-based Automated External Defibrillator System.....	.....2204
<i>Wenguang Han, Yongjun Li, Rui Zhang, Chao Hu and Max Q.-h. Meng</i>	
A Feedback Procedure for Robust Berth Allocation with Stochastic Vessel Delays.....	.....2210
<i>Yuquan Du, Ya Xu and Qiushuang Chen</i>	
Optimal Operation of Hydropower Station Unit Based on New Algorithm.....	.....2216
<i>Xuehua Zhao, Qiang Huang and Jianhua Wu</i>	
Multi-Objective Optimization Design Methods Based on Game Theory.....	.....2220
<i>Rui Meng, Ye Ye and Neng  gang Xie</i>	
The Cooperated MPPT Control of Stand-alone PV Power Generation System.....	.....2228
<i>Hong Wang and Bing Li</i>	
Achieving Equilibrium and Local Incentive Compatibility for Electricity Markets by Using Redundant Constraints.....	.....2232
<i>Bingjie Zhang, Peter Luh, Eugene Litvinov, Tongxin Zheng and Feng Zhao</i>	
The Subgradient-Simplex Based Cutting Plane Method to Solve Linear Matrix Inequalities.....	.....2238
<i>Congcong Wang and Peter Luh</i>	
A Scaling-up Machine Learning Algorithm.....	.....2244
<i>Daxin Tian and Kuifeng Ma</i>	
A Method of Inverter Circuit Fault Diagnosis Based on BP Neural Network and D-S Evidence Theory.....	.....2249
<i>Bo Fan, Yixin Yin and Cunfa Fu</i>	
Genetic Algorithm-Piecewise Support Vector Machine Model for Short Term Wind Power Prediction.....	.....2254
<i>Yongqian Liu, Jie Shi, Yongping Yang, Shuang Han and Peng Wang</i>	
Fluid-Structure Coupling Analysis of Ultrasonic Traveling Wave	



Micro-fluid Driving Annular Model.....	.....2259
<i>Dandan Zhang, Shoushui Wei, Hao Wu and Jingtao Zhang</i>	
A Method for Recognizing Noises in Pulse Waves.....	.....2264
<i>Lisheng Xu, Cong Feng, Ying Wang, Yupeng Yao and Max Q.-h. Meng</i>	
Variation of Exterior Telemetry Links of Capsule Antenna Ingested in Human Body.....	.....2269
<i>Lisheng Xu, Cong Feng, Ying Wang, Yupeng Yao and Max.q-h. Meng</i>	
SmartCast: Mapping Complexity of an Industrial Process into Simplicity of a Representative System with High Modeling Fidelity.....	.....2273
<i>Arya Bhattacharya, Partha Mitra, P.s. Srinivas, Abhik Roy Choudhury and Utpal Nandi</i>	
Guided Munitions Carrier Navigation System Requirements and Simulation.....	.....2279
<i>Zhiping Liu and Fan Yu</i>	
Modeling and Characterizing of Unmanned Aerial Vehicles Autonomy.....	.....2284
<i>Lizhen Wu, Yifeng Niu, Huayong Zhu and Lincheng Shen</i>	
Formation Control Based on Flocking Algorithm in Multi-agent System.....	.....2289
<i>Hu Cao, Jie Chen, Yutian Mao, Hao Fang and Huagang Liu</i>	
Consensus of Multi-agent System with Communication Delays by Self-Delay PD Control.....	.....2295
<i>Jia Wei, Huajing Fang and Hua Wang</i>	
Prediction Learning in Multi Agent Systems.....	.....2301
<i>Rui Guo, Min Wu, Xin Chen and Weihua Cao</i>	
Impact of Directional Illumination Control Parameters on Seismic Signals.....	.....2305
<i>Tao Jiang, Guangda Liu and Ye Li</i>	
Study of Metal Detection Based on Chaotic Theory.....	.....2309
<i>Wenjing Hu and Zhizhen Liu</i>	
Directional Illumination Technique of Electromagnetic Vibrator System.....	.....2315
<i>Tao Jiang, Defu Cheng, Jun Wang and Chang Liu</i>	
One Type of Special Resources in Petri Nets Models of Flexible Manufacturing Systems.....	.....2319
<i>Hao Yue</i>	
Supply Chain Coordination under E-Business Environment.....	.....2323
<i>Jianghua Zhang, Xiangyi Xu and Can Sun</i>	
A Bi-level Multi-objective Programming Model for Bus Crew and Vehicle Scheduling.....	.....2328

*Yongjie Lin, Shuliang Pan, Lei Jia and Nan Zou*

<b>A Real-Time Scheduling Scheme of Quantized Control Systems Under Bandwidth Constraints.....</b>	<b>.....2334</b>
<i>Guiyun Liu and Bugong Xu</i>	
<b>Distributed and Reconfigurable Control of Lower Level Machines in Automatic Production Line.....</b>	<b>.....2339</b>
<i>Xuemei Huang</i>	
<b>Low Cost Control System with Hierarchy Architecture for Sequencer.....</b>	<b>.....2345</b>
<i>Ping Yang and De Xu</i>	
<b>A RBF Neural Networks Based Feature.....</b>	<b>.....2351</b>
<i>Lianglong Da, Guangzhi Shi, Junchuan Hu and Yuyang Li</i>	
<b>Credit Evaluation Model and Applications Based on Probabilistic Neural Network.....</b>	<b>.....2355</b>
<i>Sulin Pang</i>	
<b>Forecast of System Marginal Price by a Neural Network with Critic Mechanism.....</b>	<b>.....2361</b>
<i>Zhiling Lin, Zefang Jia, Hongjun Wang, Youjun Yue and Enzeng Dong</i>	
<b>Optimization of Basic Train Diagram Data for Railway Passenger Dedicated Line Network Based on Ant Colony Algorithms.....</b>	<b>.....2366</b>
<i>Pan Deng and Chuansheng Zhang</i>	
<b>Simulation-based Optimization of Vehicle Routing Problem with Multiple Vehicle Frequencies and Vehicle Classes.....</b>	<b>.....2372</b>
<i>Yu Zhang, Wenfeng Li and Xinping Yan</i>	
<b>Optimization of Semilinear Delay-Differential Inclusions in Infinite-Dimensional Spaces.....</b>	<b>.....2377</b>
<i>Lianwen Wang</i>	
<b>The Design of Predictive Guidance Law and Stability Analysis of Guidance System for Exo-atmospheric Interceptor.....</b>	<b>.....2383</b>
<i>Guojiang Zhang, Baoqing Yang and Yu Yao</i>	
<b>Impulse Synchronization of Spatiotemporal Chaos.....</b>	<b>.....2388</b>
<i>Congyan Chen and Shi Qiu</i>	
<b>A Dynamic Performance Compensator Design for Servo System Based on Notch Filter.....</b>	<b>.....2392</b>
<i>Xiyang Wang and Weihong Wang</i>	
<b>Analysis of the Torque Distribution Characteristics of Dual-Turbine Torque Converter.....</b>	<b>.....2397</b>

*Wei Cai, Yaxu Chu, Wenxing Ma and Yu Han*

<b>Modeling and Control of IPMC for micro-manipulation.....</b>	<b>.....2401</b>
<i>Dingyu Xue, Zhen Chen, Lina Hao, Xinhe Xu and Yanmei Liu</i>	
<b>Aircraft longitudinal Critical State Limiter Based on Adaptive Neural Fuzzy Inference System.....</b>	<b>.....2406</b>
<i>Wenhan Dong, Xiuxia Sun and Pengsong Yang</i>	
<b>A Particle Swarm Optimization for the Motion Planning of Wheeled Mobile Robot.....</b>	<b>.....2410</b>
<i>Zhengxiong Guo and Xinsheng Ge</i>	
<b>Higher-order Sliding-mode Observer for State Estimation in A Near Space Vehicle.....</b>	<b>.....2415</b>
<i>Yuehui Ji, Qun Zong, Liqian Dou and Zhanshan Zhao</i>	
<b>Research on Novel High Frequency Signal Extraction Method Based on Extended Kalman Filter Theory.....</b>	<b>.....2419</b>
<i>Lei Wang, Shanmao Gu, Shengwen Ye and Jinghuan Fang</i>	
<b>Optimal PID Position Controller of Multi-Rocket Launcher Using Improved Elman Network.....</b>	<b>.....2424</b>
<i>Jian Hu, Dawei Ma, Yajun Guo, Wenxu Zhuang and Fan Yang</i>	
<b>Motion Control Strategy of Industrial Direct Drive Robot for Vibration Suppression.....</b>	<b>.....2430</b>
<i>Liangsong Huang, Daokui Qu and Fang Xu</i>	
<b>Sliding Mode Controller Based on Fuzzy Neural Network Optimization for Direct Torque Controlled PMSM.....</b>	<b>.....2434</b>
<i>Hongkui Li and Qinlin Wang</i>	
<b>A New Control Strategy for Improving Performance of Boost DC/DC Converter Based on Input-Output Feedback Linearization.....</b>	<b>.....2439</b>
<i>Jinbo Liu, Wenlong Ming and Fanghong Gao</i>	
<b>Improved Dynamic Programming Algorithm for Tracking Small Target of Low Manoeuvring.....</b>	<b>.....2445</b>
<i>Xiaodong Zhao and Xiangyang Liu</i>	
<b>A One-Step Neural Network Model Predictive Controller.....</b>	<b>.....2449</b>
<i>Huijun Li</i>	
<b>Neuron Controller with Fuzzy Gain Scheduling Based on Takagi-Sugeno Scheme for Hydraulic Turbine Generators.....</b>	<b>.....2455</b>
<i>Wei Zhang, Ning Wang and Jili Tao</i>	

<b>DTC with Adaptive Stator Flux Observer and Stator Resistance Estimator for Induction Motors.....</b>	<b>.....2460</b>
<i>Xiaoguang Qu, Bohan Song and Hongkui Li</i>	
<b>Research of Steel Plate Temperature Prediction Based on The Improved PSO-ANN Algorithm for Roller Hearth Normalizing Furnace.....</b>	<b>.....2464</b>
<i>Jing Li and Jing Wang</i>	
<b>Continuous Path Planning and Implementation in Internet-based Robot Arm System.....</b>	<b>.....2470</b>
<i>Haiyan Zhou, Shuang Cong and Weiwei Shang</i>	
<b>Improved SDRE Control for an Unmanned Helicopter Based on Multi-Timescale Dynamics Model.....</b>	<b>.....2476</b>
<i>Runxia Guo, Aiguo Wu and Xiaoyu Zhang</i>	
<b>Wire Extension Sliding-model Control Based on Rapid Prototyping in Aluminum Alloy Pulsed MIG Welding.....</b>	<b>.....2482</b>
<i>Jiankang Huang, Ding Fan, Lihui Lu, Yu Shi and Junxia Wen</i>	
<b>A New Idiotypic Immune Network Based PID Controller Design.....</b>	<b>.....2486</b>
<i>Rui Yu and Zongyuan Mao</i>	
<b>Design of Digital Control System for Pulsed MIG Welding Power Source.....</b>	<b>.....2492</b>
<i>Qingle Pang and Min Zhang</i>	
<b>A General Form and Improvement of Fast Terminal Sliding Mode.....</b>	<b>.....2496</b>
<i>Lin Tie and Kai-yuan Cai</i>	
<b>L2 Gain Disturbance Attenuation of PMSM Based on Hamiltonian Systems Control Theory.....</b>	<b>.....2502</b>
<i>Haisheng Yu, Shanshan Yu, Jin Liu and Jinpeng Yu</i>	
<b>Control and simulation of an underwater robot using single neuron PID control based on immune feedback mechanism.....</b>	<b>.....2507</b>
<i>Wang Bo, Yushan Sun, Cao Jian and Guocheng Zhang</i>	
<b>Attenuation and Rejection for Multiple Disturbances of Nonlinear Robotic Systems Using Nonlinear Observer and PID controller.....</b>	<b>.....2512</b>
<i>Xinyu Wen and Lei Guo</i>	
<b>A Novel Algorithm for Naturally Sampled Space Vector Pulse Width Modulation.....</b>	<b>.....2518</b>
<i>Yuntao Yue and Yan Lin</i>	
<b>Adaptive Dynamic Surface Control for a Class of Time-varying Uncertain Nonlinear Systems and Application.....</b>	<b>.....2523</b>
<i>Likui Yi and Li Liu</i>	

<b>Design and Simulation of Fuzzy Sliding-mode Robust Controller for Grid-Connected Photovoltaic System.....</b>	<b>.....2527</b>
<i>Fei Zheng, Shumin Fei and Xinpeng Zhou</i>	
<b>Predictive Control for Nonlinear Systems Based on Data-drive.....</b>	<b>.....2533</b>
<i>Qingliang Li, Humin Lei, You Bian, Jiong Li and Zhixiang Chen</i>	
<b>Nonlinear Fuzzy PID Control Strategy for Nonlinear Plant with Large Inertia.....</b>	<b>.....2537</b>
<i>Jike Zhang, Shengtie Wang and Zhihe Wang</i>	
<b>Research of a Self-organizing Fuzzy PID Controller in LED Die Source-measure System.....</b>	<b>.....2542</b>
<i>Wei Huang, Yinghe Zhu and Lingyun Xue</i>	
<b>Analysis and Simulation of Automobile ABS Control Strategy Based on Braking Time Interval.....</b>	<b>.....2548</b>
<i>Qin Zhang, Ningxi Qu, Kamiya Yoshitsugu and Bo Wang</i>	
<b>The Application of the Fuzzy Neural Network BP Network Based in the Constant Speed Control of the New Vertical Wind Turbine.....</b>	<b>.....2553</b>
<i>Qian Zhang, Shuangling Wang and Huige Chen</i>	
<b>Design of Ship Straight-line Tracking Controller Based on Auto Disturbance Rejection Control Technique.....</b>	<b>.....2559</b>
<b>Speed Control for Aircraft Based on Nonlinear Adaptive Backstepping Technology.....</b>	<b>.....2565</b>
<i>Zhiwei Guo, Cheng Peng and Yong Wang</i>	
<b>Research on Hierarchical Composite Controller for Inertial Platform Servo Loop.....</b>	<b>.....2572</b>
<i>Zhongyi Chu, Jing Cui, Jingyi Xu and Jing Ma</i>	
<b>Self-adaptive Multi-objective Optimization Method Design Based on Agent Reinforcement Learning for Elevator Group Control Systems.....</b>	<b>.....2577</b>
<i>Fanlin Zeng, Qun Zong, Zhengya Sun and Liqian Dou</i>	
<b>Uncertainty Modeling and Robust Flight Control of Unmanned Combat Aerial Vehicle.....</b>	<b>.....2583</b>
<i>Hansu Dai and Jihong Zhu</i>	
<b>ADRC based study on the Anti-braking system of Electric Vehicles with Regenerative Braking.....</b>	<b>.....2588</b>
<i>Fuguang Yang, Yibin Li, Jiuhong Ruan and Zhanfang Yin</i>	
<b>Design and Implementation of Predictive Control Algorithm for Embedded System.....</b>	<b>.....2594</b>
<i>Jie Yang, Zengliang Gao and Yi Liu</i>	

Tracking Control of Nonholonomic Mobile Robot Based on Unfalsified Adaptive PID Theory.....	.....2598
<i>Fuxiao Tan, Xiping Guan, Yun Chen and Daode Sun</i>	
Generalized Predictive Control based on LS-SVM Inverse System Method.....	.....2604
<i>Hua Li and Lujiang Huang</i>	
Study on Moving-Objects Identification Based on Evidence Theory.....	.....2610
<i>Zhang Tao, Xiaoyi Wang, Zaiwen Liu and Xiaofeng Lian</i>	
Research on the MR-ILQ Design Method to Looper Control System in Hot Strip Rolling Mills.....	.....2614
<i>Shubin Tan, Jianchang Liu and Meng Wang</i>	
Analysis and Suppression for Impact Fault of Hybrid Machine Tool Based on Preview Control.....	.....2618
<i>Hongchang Sun, Yi Dai, Lina Li and Zhigang Niu</i>	
Impacts of Motor Load on the Transient Stability of the MicroGrid.....	.....2623
<i>Zhaoxia Xiao and Hongwei Fang</i>	
Research on Wastewater Treatment System Based on ADRC.....	.....2628
<i>Wandong Li, Xiaoyi Wang, Zaiwen Liu, Jiping Xu and Xiaofeng Lian</i>	
Backstepping a Pproach for Realizing the Strict-feedback Chaos Systems Lag-synchronization Control.....	.....2633
<i>Dongxiao Wang and Yongwei Zhou</i>	
Scheduling of Vehicle Body CAN-Bus with Event-triggered Least Slack Time First Technique.....	.....2637
<i>Shuju Wang, Tianxia Zhang and Guosheng Zhang</i>	
A Spread Algorithm of The Most Influential Node on Single-source.....	.....2641
<i>Fengying Wang, Caihong Li, Lili Zhou and Jinling Zhao</i>	
The Most Credible Path Algorithm on Broadcast.....	.....2647
<i>Fengying Wang, Caihong Li, Xiumei Li and Longbo Zhang</i>	
Features Extraction and Correlation Analysis of Stock Index.....	.....2653
<i>Hongjiang Wu, Qinke Peng and Yongxuan Huang</i>	
A Learning Algorithm of Dynamically Associational Multi-agents for Intelligent Environments.....	.....2659
<i>Peiyong Duan and Hui Li</i>	
A New Method of Multi-faces Detection Base on DSP.....	.....2664

<i>Wencang Zhao, Haiqing Cao, Zhen Yang and Changli Cao</i>	
Robust Stability for Neural Networks of Neutral-type with Mixed Time-delays.....	.....2668
<i>Qingyu Zhu, Wuneng Zhou and Xiaozheng Mou</i>	
Hybrid Intelligent Control of Heating Furnaces for Steel Rolling Process.....	.....2674
<i>Youwen Chen, Jieqing Zhang, Tianyou Chai, Jun Fu and Jinliang Ding</i>	
Interacting Multiple Model Approach for Very Short-Term Load Forecasting and Confidence Interval Estimation.....	.....2680
<i>Che Guan, Peter Luh, Laurent Michel, Yaakov Bar-shalom and Peter Friedland</i>	
An Intelligent TCMEP Differentiation System.....	.....2686
<i>Na Chu, Lizhuang Ma and Min Zhou</i>	
Diploid Hybrid Particle Swarm Optimization with Differential Evolution for Open Vehicle Routing Problem.....	.....2692
<i>Fengjun Hu and Fan Wu</i>	
New Transition Probability for Ant Colony Optimization: Global Random-Proportional Rule.....	.....2698
<i>Song Zheng, Ming Ge, Chunfu Li, Chunlin Wang and Anke Xue</i>	
An Improved Chaotic Genetic Algorithm Optimized LS-SVM Method for Economic Forecasting.....	.....2703
<i>Wei Yu, Zhiming Chen and Fei Luo</i>	
IPSO: An Immune Based PSO Supervised Learning System For Incremental Learning.....	.....2707
<i>Xuan Zhou, Jin Yu, Rongbin Qi, Feng Qian and Zhenlei Wang</i>	
Share-Inherit: A Novel Approach for Mining Frequent Patterns.....	.....2712
<i>Xiaoyong Lin and Qunxiong Zhu</i>	
Research on Smart Urban Transportation One Ticket System.....	.....2718
<i>Jinjiao Lin and Haitao Pu</i>	
Application of 2-State Trellis LDPC Code in OFDM System.....	.....2722
<i>Ruiping Chen, Dong Guo, Zhongxun Wang, Xingcheng Wang and Xinqiao Yu</i>	
Safety Evaluation on Equipment State Maintenance in Power Supply Enterprise Based on RS-SVM Theory.....	.....2726
<i>Yi Yang and Qiushi Du</i>	
A SVM Model for Data Mining and Knowledge Discovering of Mine Water Disasters.....	.....2730
<i>Zhigang Yan</i>	

<b>Realization of Product Quality and Food Security Internet Public Opinion Supervision System.....</b>	<b>.....2735</b>
<i>Su Wang, Junping Du, Meiyu Liang and Tian Gao</i>	
<b>Fault Diagnosis of Progressing Cavity Pump Well Based on Wavelet Package and Elman Neural Network.....</b>	<b>.....2741</b>
<i>Weijian Ren, Yang Lu and Hongli Dong</i>	
<b>Ontology-based Learning Object Recommendation for Cognitive Considerations.....</b>	<b>.....2746</b>
<i>Qiyang Han, Feng Gao and Hu Wang</i>	
<b>Agent's Architecture in the Integrated Operation Dispatch System for Passenger-Dedicated Line.....</b>	<b>.....2751</b>
<i>Honggang Wang and Junyan Wang</i>	
<b>A Variable Scale Ant Colony Algorithm to the Optimization of Beer Recipe.....</b>	<b>.....2756</b>
<i>Zheng Song, Ge Ming, Chunlin Wang and Rutian Sun</i>	
<b>Attribute Reduction In Inconsistent Decision Tables Based on Discernible Matrix.....</b>	<b>.....2760</b>
<i>Haiyan Yu, Xia Zhang, Xiaodong Qiao and Yunliang Zhang</i>	
<b>Route-Exchange Algorithm for Solving Assignment Problems Based on Swarm Intelligence.....</b>	<b>.....2764</b>
<i>Xiaoxian He and Fuming Li</i>	
<b>A New Learning Model for Swarm Intelligence Based on Q-Learning.....</b>	<b>.....2769</b>
<i>Fuming Li and Xiaoxian He</i>	
<b>Real-time Forecasting for Short-term Traffic Flow Based on General Regression Neural Network.....</b>	<b>.....2776</b>
<i>Xiyan Kuang, Lunhui Xu, Yanguo Huang and Fenglei Liu</i>	
<b>Research on Fuzzy Neural Networks Model and its Application in Calculation Wind of the Wind Assessment.....</b>	<b>.....2781</b>
<i>Kaiping Lin, Binglian Chen, Xiaoyan Huang and Weiliang Liang</i>	
<b>The ES Model for Ship Pipes Routing Design.....</b>	<b>.....2787</b>
<i>Xiaoning Fan, Yan Lin and Zuoshang Ji</i>	
<b>An Algorithm for Multi-label Learning Based on Minimum Threshold.....</b>	<b>.....2793</b>
<i>Feng Qin, Jun Huang and Zekai Cheng</i>	
<b>A Genetic Neural Network Ensemble Forecast Model for Local Heavy Rain.....</b>	<b>.....2798</b>
<i>Xvming Shi, Sudong Liu, Long Jin, Huangsheng Zhao and Jinbiao Zhao</i>	
<b>The Dynamic Data Reduction and Association Rule Parallel Mining Based</b>	



on Rough Set.....	.....2803
<i>Youquan He and Lijun Wang</i>	
Two-Person Zero-Sum Matrix Game Based on Intuitionistic Fuzz.....	.....2807
<i>Xiaoguang Zhou, Weimin Li, Zhang Lin and Songwei Li</i>	
Insert Recommendation Based on AHP and Fuzzy Evaluation.....	.....2811
<i>Weiqun Yang, Lihong Qiao and Penghui Zhang</i>	
A Stratified Sampling Algorithm for Landmark Windows over Data Streams.....	.....2817
<i>Guangyuan Zhao, Longbo Zhang, Fengying Wang, Caihong Li and Yong Wang</i>	
An Improved Sampling Algorithm for Landmark Windows over Weighted Streaming Data.....	.....2823
<i>Hong Lu, Longbo Zhang, Jinmiao Wang and Fengying Wang</i>	
An Overview of Data Mining.....	.....2828
<i>Li Li, Jinliang Wang and Fei Qiao</i>	
The System of Face Detection Based On DSP.....	.....2834
<i>Wencang Zhao, Zhen Yang and Haiqing Cao</i>	
Research on ECOC SVMs.....	.....2838
<i>Zhigang Yan</i>	
Multi-Objective Evolutionary of Distribution Algorithm Using Kernel Density Estimation Model.....	.....2843
<i>Na Luo and Feng Qian</i>	
The Design of Attitude Control Law of Exo-atmospheric Interceptor Based on Invariant Set and Predictive Control.....	.....2849
<i>Baoqing Yang, Xibin Cao and Yu Yao</i>	
A New Robust Stability Criterion of Networked Control Systems.....	.....2855
<i>Xiaohua Ge and Xiefu Jiang</i>	
A Three-tier Parallel Simulated Annealing Algorithm and Its Application.....	.....2861
<i>Jian Ma, Keping Li and Liyan Zhang</i>	
Research on Multi-lane Selective Bank Based Multi-Shop Sequencing.....	.....2867
<i>Gang Huang, Jinhang Li, Xinyu Shao, Daoyuan Yu and Haiping Zhu</i>	
Stability Analysis for a Class of Nonlinear Time-Delay Systems via Hamiltonian Functional Method.....	.....2874
<i>Renming Yang and Yuzhen Wang</i>	
Energy-Based Surveillance System for ATM Machines.....	.....2880

*Ning Ding, Yongquan Chen, Zhi Zhong and Yangsheng Xu*

Cooperative Simultaneous Localization and Mapping for Multi-robot: Approach & Experimental Validation.....	2888
<i>Tong Tao, Yalou Huang, Jing Yuan, Fengchi Sun and Xiaolin Wu</i>	
An Improved Adaptive Wavelet Denoising Method Based on Neighboring Coefficients.....	2894
<i>Jun Jiang, Jian Guo, Weihua Fan and Qingwei Chen</i>	
Optimal Production and Inventory Location in Supply Networks under Uncertainty Environment.....	2899
<i>Gaorui Yao and Jiang Wu</i>	
A Novel Stochastic Method with Modified Extremal Optimization and Nearest Neighbor Search for Hard Combinatorial Problems.....	2903
<i>Guoqiang Zeng, Yongzai Lu and Weijie Mao</i>	
Online Approach of Fault Diagnosis Based on Lifting Wavelets and Moving Window PCA.....	2909
<i>Qing Yang, Feng Tian and Dazhi Wang</i>	
PTZ Camera Target Tracking in Large Complex Scenes.....	2914
<i>Faliang Chang, Guoqiang Zhang, Xiaolin Wang and Zhenxue Chen</i>	
Bifurcation Control of Rotating Stall in Axial Flow Compressors via Dynamic Output Feedback.....	2919
<i>Pengnian Chen and Huashu Qin</i>	
Advanced Path Interpolation in High Performance Motion Control Systems.....	2925
<i>Dongjun Zhang, Zexiang Li, Shuang Cong and Hong Wu</i>	
A Hybrid Feature Selection Algorithm used in Disease Association Study.....	2931
<i>Bin Wei, Qinke Peng, Xuejiao Kang and Chenyao Li</i>	
An Embedded 3D Medical Image Processing and Visualization Platform Based on Dual-core Processor.....	2936
<i>Tiejian Chen, Yaonan Wang, Hui Zhang and Changyan Xiao</i>	
Bioprocess Soft Sensor Modeling Using SVR Based on Improved PSO.....	2942
<i>Dawei Zhou, Guohai Liu, Congli Mei, Xingke Jiang and Haixia Xu</i>	
TCD Data Compression Technology Based on DCT and MWT.....	2947
<i>Guiyou Chen, Shaohua Qin and Xingwei Zhou</i>	
A Portable Membrane-based Analysis System for Rapid and Sensitive Detection of Bacteria.....	2951

*Jian Liu, Hui Shang, Xinpei Wang and Changchun Liu*

<b>Regulatory Networks of Integer Nonlinear Programming (RNINLP): A Model to Analyze Genetic Regulatory Networks of Breast Cancer Metastasis.....</b>	<b>.....2955</b>
<i>Wanchun Luo, Lihong Gong, Kaichun Ren and Dong Yi</i>	
<b>Simulation and Measurement of Extracellular Microelectrode Array In-vivo.....</b>	<b>.....2959</b>
<i>Ying Xu, Yong Yang, Bin Han and Ping Luo</i>	
<b>Multi-class surface EMG classification using support vector machines and wavelet transform.....</b>	<b>.....2963</b>
<i>Han Liu, Yun-wei Huang and Ding Liu</i>	
<b>Ray Casting Algorithm for Virtual Surgery Simulation of Mandibular Reconstruction.....</b>	<b>.....2968</b>
<i>Yue Zhao, Xiaoyu Cui, Yadong Chen and Ying Cheng</i>	
<b>SVM and Statistical Technique Method Applying in Primary Open Angle Glaucoma Diagnosis.....</b>	<b>.....2973</b>
<i>Lijun Cheng and Yongsheng Ding</i>	
<b>Research of Portable Community-Oriented Health Monitoring Terminal.....</b>	<b>.....2979</b>
<i>Genghuang Yang, Xiong Su, Li Zhao, Shigang Cui, Weihua Pei, Hongda Chen and Qingguo Meng</i>	
<b>Eye-moving Assisted EEG Acquisition and EEG Feature Detection.....</b>	<b>.....2985</b>
<i>Yao Sun, Zhizeng Luo and Jun Meng</i>	
<b>Research of Multi-parameter Measuring System based on MEMS Electrodes Modified Nanoparticles.....</b>	<b>.....2990</b>
<i>Liyang Jiang, Xiaopin Xie, Feifei Yao, Qinghua Chen and Guangzhao Cui</i>	
<b>An Improved Ant Colony Algorithm and Its Application in TSP.....</b>	<b>.....2994</b>
<i>Fengcai Huo, Weijian Ren, Ruijun Ran, Yingnan Liu and Dongyan Sui</i>	
<b>Design and Study on Control System of Water Jet Seeder by Controlling Seed and Water Respectively.....</b>	<b>.....2998</b>
<i>Zidong Yang, Ruicheng Du and Tianwei Bai</i>	
<b>A Visualization Method of Cardiovascular Flow Velocity Vector Field Based on Color Doppler Image Information.....</b>	<b>.....3002</b>
<i>Shenghua Xie, Lixue Yin and Jing Lu</i>	
<b>A Novel Intelligent Fuzzy Agent Based on Input-output Association.....</b>	<b>.....3008</b>
<i>Hui Li, Qingfan Zhang and Peiyong Duan</i>	
<b>Research on a New Type of Ship Main Engine Remote Control Simulation System.....</b>	<b>.....3013</b>

*Yang Yang, Chen Guo, Zhipeng Shen and Jianbo Sun*

Research on Stepper Motor Control Based on Single Chip and Serial Communication..... <i>Xiaohua Zhang and Bingji Xu</i>	.....3019
Analyzing Inland-orientation of Port Supply Chain based on Advertising-R&D Model..... <i>Gang Dong, Qinmin Wu, Daoli Zhu, Jin Li and Xueqian Li</i>	.....3024
Empty Container Repositioning - A Review..... <i>Cong Liu</i>	.....3028
A Novel Evolving Network Model with Widely Weighted Dynamics..... <i>Junfen Mu, Hexu Sun, Jiaping Pan and Jin Zhou</i>	.....3034
Pinning Control of the Nearest-Neighbor Coupled Networks Based on Topology Structure..... <i>Degang Xu, Chunhua Yang and Weihua Gui</i>	.....3040
Study on Profits of Power Supply Chain Under the Stochastic Demand..... <i>Xun Dou, Yang Li, Ruping Shao and Chaogai Xue</i>	.....3046
Research in Deformation Monitor of Goods Shelf Based on Digital Analytical Method..... <i>Chengxin Yu, Mingzhi Chen, Na Xu and Su Liu</i>	.....3051
System dynamics simulation of used productions recovery logistics network for manufacturing companies..... <i>Tengda Guo and Mengjun Li</i>	.....3055
A Macro-Location Model of Logistics Node and its Application..... <i>Liyang Zhang, Yan Sun and Jian Ma</i>	.....3062
Low-power UHF Handheld RFID Reader Design and Optimization..... <i>Hua Li, Hong-jun Wang, Zhen Shang, Qing-hua Li and Wei Xiao</i>	.....3068
Application of RFID in Agricultural Seed Quality Tracking System..... <i>Hua Li, Hong-jun Wang, Zhen Shang, Qing-hua Li and Wei Xiao</i>	.....3073
An Improved Multiple Ant Colony System for The Collection Vehicle Routing Problems with Intermediate Facilities..... <i>Jie Liu, Dan Liu, Min Liu and Yanfeng He</i>	.....3078
A Hybrid Broyden Family Method and Its Applications in Isothermal Steady Simulation for Gas Transmission Pipeline..... <i>Bo Xu, Jianting Li, Zhu Zhao and Deji Wang</i>	.....3084

Detection of Lymphangiectasia Disease from Wireless Capsule Endoscopy Images with Adaptive Threshold.....	3088
<i>Lei Cui, Chao Hu, Yuexian Zou, Shuang Song, Qing He and Max Q.-h. Meng</i>	
Degree Preserving Based Crossover of Genetic Algorithms for Constrained Optimization Problems.....	3094
<i>Chenggang Cui and Tiejun Wu</i>	
A Colour Constancy Algorithm Based on Neural Network and Application.....	3100
<i>Shengxian Cao, Bangkui Du, Jiawei Sun, Fan Liu, Shanrang Yang and Zhiming Xu</i>	
Airport Unexploded Ordnances Identification Based on Artificial Neural Network and Fuzzy Support Vector Machines.....	3104
<i>Lei Cai, Xuexia Zhang and Lianchang Li</i>	
Fuzzy Virtual Torque Approach for Coverage Control of Nonholonomic Mobile Robots.....	3109
<i>Alireza Dirafzoon, Saba Emrani, S. M. Amin Salehizadeh and M. Bagher Menhaj</i>	
Electromagnetic Transient Numerical Integration Methods.....	3115
<i>Yu Du</i>	
Binary Ant Colony Algorithm with Balanced Search Bais.....	3120
<i>Gang Hu, Weiqing Xiong and Baochuan Jiang Jiang</i>	
An Algorithm for Topology Reconstruction of Scattered Point Cloud in Reverse Engineering.....	3126
<i>Xueming He, Minmin Ni, Chenggang Li, Ying Xue and Yi Lu</i>	
An Adaptive Particle Swarm Optimization Algorithm for Reactive Power Optimization in Power System.....	3132
<i>Enqi Wu, Yue Huang and Dan Li</i>	
Particle Swarm Optimization Using Dynamic Neighborhood Topology for Large Scale Optimization.....	3138
<i>Min Han and Jianchao Fan</i>	
Integrated Intelligent Optimization Based on Cultural Algorithm.....	3143
<i>Zhuoqian Liu and Xingsheng Gu</i>	
Parameter Estimation of Disk Drive Servo System Using A Hybrid Simplex Differential Evolution Algorithm.....	3149
<i>Yaonan Wang, Lianghong Wu and Xiaofang Yuan</i>	
Clustering Research of Fabric Deformation Comfort Using Bi-swarm PSO Algorithm.....	3156
<i>Dongyun Wang, Lina Zhang and Ping Zeng</i>	

Study on Q-learning Algorithm Based on ART2.....	.....3161
<i>Minghai Yao, Jiahe Li, Qinlong Gu, Liping Tang and Xinyu Qu</i>	
Nonlinear Model Predictive Control with the Integration of Support Vector Machine and Extremal Optimization.....	.....3167
<i>Peng Chen and Yongzai Lu</i>	
Improved Boosting Algorithm with Adaptive Filtration.....	.....3173
<i>Yunlong Gao, Feng Gao and Xiaohong Guan</i>	
Boiler Tube Leakage Acoustic Localization Base on AGA.....	.....3179
<i>Peng Wang, Liansuo An, Guoqing Shen, Shi Jie and Yongxing Lv</i>	
Pursuit-Evasion Games with Multi-Pursuer vs. One Fast Evader.....	.....3184
<i>Shiyuan Jin and Zhihua Qu</i>	
Multi-objective Reinforcement Learning Algorithm for MOSDMP in Unknown Environment.....	.....3190
<i>Yun Zhao, Qingwei Chen and Weili Hu</i>	
High-Class Evaluation Method Based on Game Situation.....	.....3195
<i>Wei Zhou, Ming Hui Liu and Shouping Guan</i>	
A New Method to Predict Enrollments Based on Fuzzy Time Series.....	.....3201
<i>Liang Zhao</i>	
Bidding Strategy Based on Adaptive Particle Swarm Optimization for Electricity Market.....	.....3207
<i>Jianhua Zhang, Yingxin Wang, Rui Wang and Guolian Hou</i>	
Approximate Termination Condition Analysis for Ant Colony Optimization Algorithm.....	.....3211
<i>Zhaojun Zhang, Zuren Feng and Zhigang Ren</i>	
Immune Evolutionary Algorithm and Neural Network for Modeling and Predicting Chaotic Time Series.....	.....3216
<i>Xiulan Wen, Xiaochun Zhu, Dongxia Wang and Danghong Sheng</i>	
The GA to the Optimal Design for Crane Girder and Research on its Optimization Performances.....	.....3220
<i>Xiaoning Fan, Gening Xu and Ruigang Yang</i>	
Dynamic Optimization with an Improved $\theta$ -PSO Based on Memory Recall.....	.....3225
<i>Weimin Zhong, Jianliang Xing, Yi Liang and Feng Qian</i>	
A New Method to Design Section Area Curve of Ship Based on Niche ACO.....	.....3230
<i>Xiang-yin Meng and Sheng Huang</i>	

<b>Dynamic Floating Function: A Novel Test Problem Generator for Non-stationary Environments.....</b>	<b>.....3236</b>
<i>Yi Liang, Weimin Zhong and Feng Qian</i>	
<b>Hand-eye Calibration for Robot Measuring System Based on Adaptive Differential Evolution.....</b>	<b>.....3241</b>
<i>Aiguo Li, Zi Ma and Defeng Wu</i>	
<b>Research on the Fouling Prediction of Heat Exchanger Based on Relevance Vector Machine.....</b>	<b>.....3246</b>
<i>Lingfang Sun, Rina Saqi and Honggang Xie</i>	
<b>Two Sub-Swarms Evolutionary Particle Swarm Optimization Based on Team Progress Learning.....</b>	<b>.....3250</b>
<i>Shanhe Jiang, Ridong Zhang and Qishen Wang</i>	
<b>An Improved Cooperative PSO Algorithm.....</b>	<b>.....3256</b>
<i>Ming Li, Wei Li and Chengwu Yang</i>	
<b>A Global Convergence PSO Training Algorithm of Neural Networks.....</b>	<b>.....3261</b>
<i>Ming Li, Wei Li and Chengwu Yang</i>	
<b>MCP Forecasting and Risk Considered Genco's Bidding Strategies in Electricity Market.....</b>	<b>.....3266</b>
<i>Haifeng Zhang, Zhixi Kang, Jiang Wu and Feng Gao</i>	
<b>Parameter Selection of Support Vector Machine based on Chaotic Particle Swarm Optimization Algorithm.....</b>	<b>.....3271</b>
<i>Jingming Peng and Shuzhou Wang</i>	
<b>A Learning Strategy for Multi-robot Based on Probabilistic Evolutionary Algorithm.....</b>	<b>.....3275</b>
<i>Jiancong Fan, Yongquan Liang and JiuHong Ruan</i>	
<b>A Quantum Particle Swarm Optimization for Solving the Capacitated Vehicle Routing Problem.....</b>	<b>.....3281</b>
<i>Zhengchu Wang, Muxun Zhou, Xiufeng Li, Chun Fang and Feixiang Jin</i>	
<b>Adaptive Edge Enhancement Based on Anisotropic Image Interpolation.....</b>	<b>.....3286</b>
<i>Shenghsien Hsieh, Chinghan Chen and Yuanwei Tseng</i>	
<b>Quality Prediction for Flotation Column Based on DEPSO and RBF.....</b>	<b>.....3291</b>
<i>YanJun Leng, Yalin Wang, Weihua Gui and Chunhua Yang</i>	
<b>Binary ant Colony Algorithm with Congestion Control Strategy for the</b>	

<b>0/1 Multiple Knapsack Problems.....</b>	<b>.....3296</b>
<i>Weiqing Xiong, Ping Wei and Baochuan Jiang</i>	
<b>Active Learning Based Spam Filtering Method.....</b>	<b>.....3302</b>
<i>Wei Zhang, Feng Gao, Di Lv and Feng Xue</i>	
<b>A (1+epsilon)-Approximate Algorithm for k-means Problem Based on Balancing Constraint.....</b>	<b>.....3307</b>
<i>Sheng Zhang and Shouqiang Wang</i>	
<b>Research on Web Association Rules Mining Structure with Genetic Algorithm.....</b>	<b>.....3311</b>
<i>Yaling Tang and Feng Qin</i>	
<b>Multi-Objective Mean Particle Swarm Optimization Algorithm.....</b>	<b>.....3315</b>
<i>Shengyu Pei and Yongquan Zhou</i>	
<b>Design and Implementation on Cultural Algorithm in Unit Commitment Optimization.....</b>	<b>.....3320</b>
<i>Muxun Zhou, Zhengchu Wang, Yunxia Luo and Wanliang Wang</i>	
<b>TSK Interval Type-2 Fuzzy Neural Networks for Chaotic Time Series Prediction.....</b>	<b>.....3325</b>
<i>Liang Zhao</i>	
<b>Optimal Design of Water-supply Pipe Network Based on Improved Particle Swarm Optimization Algorithm Considering Reliability.....</b>	<b>.....3331</b>
<i>Cheng Shen, Tingchao Yu and Tuqiao Zhang</i>	
<b>Analysis and Optimization on Power Transfer Capability of Contactless Power Transfer Systems with Multi-load.....</b>	<b>.....3336</b>
<i>Chenyang Xia, Yue Sun, Yugang Su and Xin Dai</i>	
<b>A Parametric Solution of Second-Order Vibration Matrix Equations and Its Control Applications.....</b>	<b>.....3342</b>
<i>Guosheng Wang, Tianqing Chang, Bing Liang and Feng Liu</i>	
<b>A Stateflow Based Simulation of UAV Multi-mode Flight Control.....</b>	<b>.....3347</b>
<i>Bo Liu and Ping Li</i>	
<b>Sliding Control of Nonlinear Distributed Parameter Systems Based on Iterative Approximation.....</b>	<b>.....3353</b>
<i>Chunyan Du, Guansheng Xing, Aiguo Wu and Dapeng Zhang</i>	
<b>An Adaptive Sliding Mode Variable Structure Control Method For Projective Synchronization of Chaotic Systems with Perturbations.....</b>	<b>.....3359</b>
<i>Zehui Xie, Wei Deng, Yanmin Wu and Yanfeng Wang</i>	
<b>Study on the Time-delay Robust Quadratic Stabilization for A Class of</b>	



Discrete Switched Systems.....	.....3363
<i>Jixue Zhang and Rui Gao</i>	
Dynamic Inverse Control of Nonlinear Missile Based on LS-SVM.....	.....3367
<i>Zhifeng Yang, Humin Lei, Xingzhong Xu, Ping Wu and Qiangliang Li</i>	
Terminal Sliding Mode Attitude Control for Satellite.....	.....3372
<i>Guangfu Ma, Yueyong Lv, Qinglei Hu and Chuanjiang Li</i>	
Robust $H^\infty$ Output Feedback Control of Discrete-time Switched Systems Via a New Linear Matrix Inequality Formulation.....	.....3377
<i>Jiao Li, Yuzhong Liu, Rui Mei and Bo Li</i>	
Variable Structure Control with Sliding Mode for A Class of Hydraulic Nonlinear System.....	.....3383
<i>Chao Jia, Aiguo Wu, Chunyan Du and Wenpeng Zhai</i>	
Investigation of The State Feedback Control Strategy Based on Hybrid Magnetic Levitation for TR Train.....	.....3388
<i>Zhiyuan He</i>	
Structural Properties of Composite Systems Analysis Software Development and Algorithm.....	.....3393
<i>Guanmin Liu and Kaisheng Lu</i>	
Research on Traffic Signal Control Strategy Based on Bus Priority for Related Intersections.....	.....3399
<i>Zhilin Lu and Yan Ye</i>	
Research on Robust Decentralized Connective stabilization Control for Power Systems Expanded Capacity on Line.....	.....3404
<i>Xiaohua Li and Wenbo Wu</i>	
Design and Simulation of Satellite Formation Flying Reconfiguration Controlling Method.....	.....3410
<i>Yibo Li, Yanmei Liu, Qi Song and Jin Xu</i>	
Observer-Based Output Feedback Robust Control of Uncertain Discrete-time Switched Systems.....	.....3414
<i>Jiao Li, Yongchun Xu, Feng Zhang and Weiwei Wang</i>	
Study on Dynamic Scheduling Stimulation of Steelmaking and Continuous Casting.....	.....3419
<i>Wei Liu, Liangliang Sun, Yutao Qi, Binglin Zheng and Tianyou Chai</i>	
Research on Robust Connective Stabilization for a Class of Large Scale Systems with Arbitrary Expanding Construction.....	.....3424

*Xiaohua Li and Xin Tong*

Dynamic Equilibrium State Controllability of Linear Time-invariant Systems.....	3430
<i>Dehui Qiu, Qinglin Wang and You Zhou</i>	
Dynamic Optimization of PID Control Parameters of Complex Magnetic Suspension Electromechanical Coupling System.....	3435
<i>Fangzhen Song, Hui Liu, Bo Song and Huimin Feng</i>	
Robust Control for Uncertain T-S Systems with Pre-specified Sector Regional Pole Constraints.....	3441
<i>Ling Qin</i>	
The Research of INS's Error Analysis for Underwater Vehicle in Complex Sea Conditions.....	3445
<i>Jianhua Cheng, Junyu Shi, Xinzhe Wang and Jianming Dong</i>	
Nonlinear Unknown Input Observer Design by LMI for Lipschitz Nonlinear Systems.....	3450
<i>Zhong-yu Shen, Jin Zhao, Jie Xu and Xing-sheng Gu</i>	
An Approach of The Grey Modeling Based on $ax+b$ , $(\sin x)/x$ Transformation.....	3455
<i>Yi Shao, Yong Wei and Hai-jun Su</i>	
The Diving Depth Asymptotic Stability Control of AUV with Control Constraint.....	3461
<i>Yuesheng Luo, Xiuping Wen, Xingyan Zhang, Lirong Fu and Junwei Wang</i>	
UKF-STF Tracking with Correlated Noises for the Nonlinear System.....	3466
<i>Wenbin Li and Quanbo Ge</i>	
Stability Analysis for a Class of Fractional-Order System with Commensurate Order.....	3472
<i>Dongfeng Wang, Xiaoyan Wang and Pu Han</i>	
Optimal Control for Multi-agent Systems Based on Local Information.....	3479
<i>Zhenguang Yang, Guixia Chen and Shulei Cui</i>	
Non-Fragile Robust Control Of Aeration Process Of Sewage Treatment.....	3485
<i>Hua Meng, Xuan Lv, Jian-hua Zhang and Xue-li Wu</i>	
Finite-horizon Robust $H^\infty$ Filter Design for Discrete Systems with Convex Polytopic Uncertainty.....	3490
<i>Liqiang Yao, Xingping Wang and Yanrong Song</i>	
Research on Nonlinear Filtering for UAV RP Navigation System.....	3496
<i>Dongli Yuan, Qingbiao Xi, Xia Mu and Yaohong Qu</i>	

Research on Stability Analysis for Non-Linear Control System with Time-Delay and Parameter-Perturbation.....	.....3501
<i>Xiaojiang Zhang, Xueping Dong and Hongjun Wang</i>	
Haar Wavelet-Based Simulation of the Fractional-order Systems.....	.....3506
<i>Yuanlu Li, Huamin Ge and Weiwei Zhao</i>	
Optimal Liquidation Strategy for An Institutional Investor Holding N Kinds of Stocks.....	.....3510
<i>Guixia Chen and Xiuhong Wang</i>	
Variable Structure Excitation Control for Generator Based on Inverse System Method.....	.....3515
<i>Chunwen Li, Lingzhi Cao, Yujie Zhao, Yuan Chang and Changbo Xu</i>	
Modeling and Simulation for the Permanent Magnet Linear Synchronous Motor based on Space Vector Pulse Width Modulation.....	.....3520
<i>Yuan Xue, Jun Cheng, Xiangyang Gao and Min Zou</i>	
Safe Approaching to Non-Cooperative Spacecraft Using Potential Function Guidance Based Fuzzy Logic System.....	.....3526
<i>Dawei Zhang, Shenmin Song, Run Pei and Baoqun Zhang</i>	
Robust Control for Discrete-Time Networked Control Systems.....	.....3532
<i>Dongxiao Wu, Jun Wu and Sheng Chen</i>	
Master-servant Structured Synchronization Scheme and Its Application in Multi-Pole Table-Lift.....	.....3538
<i>Chaoying Liu, Hongying Cheng and Yongjian Chen</i>	
Mean-Square Exponential Stability Analysis for Stochastic Systems of Neutral-Type.....	.....3542
<i>Junhong Wang, Yun Chen and Wei Xing Zheng</i>	
Observer-Based H <sub>∞</sub> Control for Uncertain Neutral Systems.....	.....3548
<i>Yun Chen, Junhong Wang and Weixing Zheng</i>	
Multiloop Nonlinear IMC Strategy Design Under PLS Framework Using ARX-Neural Network Model.....	.....3554
<i>Bin Hu, Zhengshun Fei, Zhao Zhao and Jun Liang</i>	
The Successive Approximation Procedure for Finite-Time Optimal Control of Bilinear Systems with Disturbances.....	.....3560
<i>De-xin Gao and Pei-peí Yang</i>	
Using SDE to Achieve the Stable and Statistical Analyses for TCP/RED Flows.....	.....3565

*Hua Fan and Xiuming Shan*

A Fast Generalized Predictive Control Algorithm with Non-overshoot.....	3572
<i>Aiping Yang</i>	
Input-to-state Stability and Optimal Control of A Class of Switched Systems.....	3576
<i>Zhiming Fang, Zhengrong Xiang and Qingwei Chen</i>	
Application and Comparison of Two Methods for Alignment of FOG SINS.....	3581
<i>Tao Ma and Yanbin Gao</i>	
Robust and Nonblocking Supervisory Control of Continuous Timed Discrete Event Systems.....	3585
<i>Fei Wang and Jiliang Luo</i>	
Research on Hybrid Adaptive Fuzzy Control for the Fermentation Process.....	3590
<i>Shouping Guan, Xin Zhang and Suna Jia</i>	
Robust Integral Sliding Mode Control for Uncertain Singular Time-Delay Systems.....	3596
<i>Min Li and Qiqiang Li</i>	
Fixed-Point Smoothing for Linear Discrete-Time Systems with Multiple Delayed Measurements.....	3602
<i>Hongguo Zhao, Xiaochun Guo and Peng Cui</i>	
Robust H <sub>∞</sub> Filtering for Nonlinear Discrete Time-delay Stochastic Systems with Intermittent Measurements.....	3607
<i>Huaicheng Yan, Max Q.-h. Meng and Hao Zhang</i>	
Analysis of Windup in Brushless DC Motor Speed Regulating System and Its Control.....	3613
<i>Zhaoxia Xiao and Hongwei Fang</i>	
Applications of Approximate Optimal Control Based on Sensitivity Approach to Jacket Offshore Platforms.....	3617
<i>Yan-jun Liang and Gong-you Tang</i>	
Nonsmooth Control Design of Mechanical Systems with Friction in the Sense of Filippov.....	3622
<i>Yu Yao, Xin Huo, Kai Zheng and Baoqing Yang</i>	
Delay-Dependent Robust H <sub>∞</sub> Stability Analysis for Uncertain Singular System with Markovian Jumping Parameters.....	3627
<i>Hongqian Lu, Chunmei Duan and Meiyu Sun</i>	
A Descriptor System Approach to Guaranteed Cost Control for Nonlinear Neutral Systems.....	3632

*Heli Hu, Shusheng Gu, Qingling Zhang and Hong Niu*

Simulation Analysis of PID Control System Based on Desired Dynamic Equation.....	.....3638
<i>Min Zhang, Jing Wang and Dong-hai Li</i>	
Research on performance robustness of PID control for TITO process with time delays.....	.....3645
<i>Zengrong Hu, Jing Wang, Donghai Li and Weiqi Li</i>	
Research of SINS Monitor Technique Based on Single Axis To-and-fro Rotation.....	.....3651
<i>Jian-hua Cheng, Junyu Shi, Xuhong Cheng and Xinzhe Wang</i>	
A BMI Approach to The Cooperative Control of Multi-agent Systems and Optmization.....	.....3656
<i>Xiaohong Nian, Saijun Su and Huan Pan</i>	
Semi-Global Robust Finite Time Stabilization of Non-Holonomic Chained Form Systems with Perturbed Terms.....	.....3662
<i>Jiankui Wang, Yuanyuan Zhao, Xingguo Song and Guoshan Zhang</i>	
Output Tracking for Nonlinear Singular Systems.....	.....3668
<i>Jing Wang, Liulin Cao, Qibing Jin and Shuqian Lin</i>	
A Less Conservative Delay-dependent Stability for Uncertain Singular Linear Systems with Time-delays.....	.....3673
<i>Zhaohui Jiang, Weihua Gui and Yongfang Xie</i>	
An Information Theoretic Approach to Model Reduction Based on Frequency-domain Cross-Gramian Information.....	.....3679
<i>Jinbao Fu, Chongliang Zhong, Yalin Ding and Jiufei Zhou</i>	
H2-optimal Digital Control of Piezoelectric Actuators.....	.....3684
<i>Jingyang Peng and Xiongbiao Chen</i>	
Impulsive Control of a Class of Discrete Chaotic Systems with Parameter Uncertainties.....	.....3691
<i>Kexue Zhang and Xinzhi Liu</i>	
Station-keeping Preliminary Design for a communication satellite.....	.....3696
<i>Lenin A. Luna Díaz</i>	
Research on High-speed Permanent Magnet Synchronous Motor Fuzzy-PID Control.....	.....3702
<i>Hong Cui and Fengxiang Wang</i>	
Estimating the Domain of Attraction for a Class of Markovian Jump Systems with Actuators Saturation.....	.....3706
<i>Weike Shang, Yu Kang and Hongsheng Xi</i>	

Sliding Mode Control Based on Fuzzy Approaching Law of Hybrid Suspension System..... <i>Hua Li, Bo Wang and Shunyuan Zhou</i>	.....3712
Research of Temperature Predictive Control Based on LSSVM Optimized by Improved PSO for Thick Steel Plate Roller Hearth Normalizing Furnace..... <i>Jing Li and Jing Wang</i>	.....3717
Design of A New Fractional-order QFT Controller Based on Automatic Loop Shaping..... <i>Meng Li and Dingyu Xue</i>	.....3722
Wide-area Damping Controller Based on Model Prediction And Sliding Mode Control..... <i>Ke Luo, Yutian Liu and Hua Ye</i>	.....3728
Robust Connective Stabilization Method And Application for Expanding Construction of Large-Scale Systems..... <i>Wenbo Wu, Xiaohua Li and Yuanwei Jing</i>	.....3732
Design of Human Motion Detection and Tracking Robot Based on Pyroelectric Infrared Sensor..... <i>Xiaohu Lv and Yongxin Liu</i>	.....3737
Controls of Capital Requirement to Behavior of Banks — Empirical Tests in the China..... <i>Li Ma, Xian Huang and Junxun Dai</i>	.....3741
Design of Robust Roll Angle Control System of Unmanned Aerial Vehicles Based on Atmospheric Turbulence Attenuation..... <i>Jie Ke, Zhongjian Li and Weikun Zhong</i>	.....3746
Research of Fuzzy Control System about Greenhouse Supplement Light Lamps Based on Single-chip Microcomputer..... <i>Yuehua Huang, Lei Wu and Jie Zhu</i>	.....3751
Passivity-based Controller Design of Electric Dehydrator..... <i>Dawei Zhang, Zhishan Liang and Jianlu Li</i>	.....3755
Robust Stability of Uncertain Stochastic Fuzzy Systems with Time-varying Delays..... <i>Mingang Hua and Juntao Fei</i>	.....3761
Main Steam Temperature's Adaptive Control with Kautz Model..... <i>Mingzhu Xu, Yiping Jiang, Jinzhi Liu and Shenshan Li</i>	.....3765
Network Parameter Design of PINS Azimuth Fine Alignment..... <i>Lin Zhao, Wenting Rong and Xuhong Cheng</i>	.....3769

<b>Study on the Technology of Multiline Spectrum Control in Hybrid Vibration Isolation System.....</b>	<b>.....3773</b>
<i>Shifeng Hu, Shijian Zhu, Qiwei He and Jinjun Lou</i>	
<b>Stability and Stabilization of Stochastic Systems by Feedback Control.....</b>	<b>.....3777</b>
<i>Huiying Sun, Weihai Zhang and Meng Li</i>	
<b>Simultaneous H2 design of Structural and Controller Parameters with State-feedback.....</b>	<b>.....3782</b>
<i>Xie Wei and Yi Cheng</i>	
<b>Exact Observability/Exact Detectability and Spectrum Assignment of Stochastic Systems.....</b>	<b>.....3786</b>
<i>Huiying Sun and Meng Li</i>	
<b>Research on Catastrophe Control Approach.....</b>	<b>.....3791</b>
<i>Liping Tang, Wanfang Chai, Taotao Ruan, Zhongwang Lou and Xiaoming Zhu</i>	
<b>Performance Assessment and Monitoring of MPC with Mismatch Based on Covariance Benchmark.....</b>	<b>.....3795</b>
<i>Yuhong Wang and Xuejian Wang</i>	
<b>Strictly Passive Static Output Feedback Control for Discrete Singular System.....</b>	<b>.....3801</b>
<i>Cuihong Wang</i>	
<b>Research on Multi-objective Control of Missile Using a Neural-Fuzzy Combiner.....</b>	<b>.....3805</b>
<i>Wu Peng, Wenlong Song and Dingning Jiao</i>	
<b>Adaptive Control of Nonlinearly Parameterized System with Unknown Dead-zone Input.....</b>	<b>.....3811</b>
<i>Xiaojing Wu, Xueli Wu and Xiaoyuan Luo</i>	
<b>Improved Robust Reliable Controller Design for Neutral Delay system.....</b>	<b>.....3816</b>
<i>Chunmei Wang, Xueli Wu and Yang Li</i>	
<b>Probability Density Function and Fuzzy System Based on a Set of Input-Output Data.....</b>	<b>.....3820</b>
<i>Yuntao Wang, Xuehai Yuan and Hongxing Li</i>	
<b>On Stability of a Class of Output Tracking Systems under Model Predictive Control.....</b>	<b>.....3825</b>
<i>Xue-hui Liang and Katsuhiko Yamada</i>	
<b>Chattering Free SMC with Robust Observer and Its Application to Inverted Pendulum.....</b>	<b>.....3831</b>
<i>Xiaoyu Zhang and Zhiwei Du</i>	

<b>The Study on the Ultrasonic Testing and Contour Measurement of Scroll-Type Profile.....</b>	<b>.....3835</b>
<i>Yanying Wang and Zhigang Huang</i>	
<b>Optimal Disturbance Rejection for The Status Delay Systems with Time Delay in Control Action.....</b>	<b>.....3839</b>
<i>Yandong Zhao and Sunan Ge</i>	
<b>Anti-Windup Compensator Design for T-S Fuzzy Systems with Delayed State and Saturating Input.....</b>	<b>.....3844</b>
<i>Yanbin Luo, Qiuxuan Wu and Zhejing Bao</i>	
<b>Adaptive Backstepping Control of Permanent Magnet Synchronous Servo Motor Based on dSPACE.....</b>	<b>.....3850</b>
<i>Qian Yang, Weiguo Liu and Guangzhao Luo</i>	
<b>Research on Current Loop of Vector Control For Interior Permanent Magnet Synchronous Motor.....</b>	<b>.....3856</b>
<i>Xinzhong Ding, Chengrui Zhang, Ke Wang and Yongqiang Wang</i>	
<b>Study on Sliding Mode Variable Structure Control for Gyro Stabilized System.....</b>	<b>.....3860</b>
<i>Dexin Xu, Yanbin Gao, Zhenfan Tan and Jianhui Zeng</i>	
<b>A Robust Filtering for Neutral Delay System with Polytopic Uncertain.....</b>	<b>.....3864</b>
<i>Xuejun Li and Shuyou Yu</i>	
<b>Dynamic Inversion Control based on Backstepping for Underwater High-speed Vehicle.....</b>	<b>.....3868</b>
<i>Yuntao Han, Xiaojun Bi and Tao Bai</i>	
<b>A Comparison of Rate-Limit Phase Compensator to Prevent Category II Pilot Induced Oscillations.....</b>	<b>.....3872</b>
<i>Jie Meng, Jiankang Zhang and Haojun Xu</i>	
<b>Study on Control System of Permanent Magnet Loader for Gearbox Noise Test.....</b>	<b>.....3878</b>
<i>Lezhi Ye, Desheng Li, Jiliang Liu and Xiaobo Hou</i>	
<b>Impulsive T-S Fuzzy Control for Unified Chaotic System.....</b>	<b>.....3882</b>
<i>Zhiming Chen, Jianzhong Cao and Jinqiu Huang</i>	
<b>Suboptimal Control for Singularly Perturbed Large-scale Systems with Time-delay.....</b>	<b>.....3887</b>
<i>Baolin Zhang, Feilong Cao and Dexin Gao</i>	
<b>Computation of H Infinity Norm for Discrete-time Symmetric Descriptor Systems.....</b>	<b>.....3892</b>
<i>Shuping Wang and Guoshan Zhang</i>	



Feedback LPV Control of a Class of Nonlinear Matrix Second Order Systems.....	.....3898
<i>Yang Zhang, Yong Wang and Guoqing Zhang</i>	
Trajectory Control of Underactuated Hovercraft.....	.....3904
<i>Jingbo Zhao and Jinmei Pang</i>	
Asymptotical Stability Analysis of “PD+” Controller for Spacecraft Attitude Tracking System.....	.....3908
<i>Shenmin Song, Baoqun Zhang, Xiqing Wei and Xinglin Chen</i>	
Sliding Model Synchronization Controller Design for Chaotic Neural Network with Time-varying Delay.....	.....3914
<i>Ran Zhen, Xueli Wu and Jianhua Zhang</i>	
Asymptotic Stability of Stochastic Delay Lotka-Volterra Model with Fractional Brownian Motion.....	.....3920
<i>Qimin Zhang and Xining Li</i>	
Study of Rollover Angle and Rollover Angular Velocity Threshold of Vehicles in Steady-state Steering.....	.....3925
<i>Ying Zhu, Zhiping Guo, Wei Zhou, Mingxin Zhu and Wenliang Li</i>	
On Synchronization of Two Identical Novel Hyperchaotic Systems with Fully Unknown Parameters.....	.....3929
<i>Xichang Han, Wei Deng, Weihua Tian and Lihua Miao</i>	
Anticontrol of Chaos for PMSM Systems with Unknown Parameters via Adaptive Control Method.....	.....3934
<i>Yan Zhao, Tiejian Zhang, Xichang Han and Qiuye Sun</i>	
Passivity-based Adaptive Integral Sliding Mode Control of Uncertain Nonlinear Systems.....	.....3939
<i>Zhitao Liu, Hongye Su and Shuwen Pan</i>	
Exponentially Weighted Input-to-state Stability for Discrete Switched System.....	.....3945
<i>Fenglan Sun, Zhi-hong Guan and Jie Chen</i>	
Yet Another User Input Method: Accelerometer Assisted Single Key Input.....	.....3949
<i>Chunming Gao, Robert Pastel and Jindong Tan</i>	
The Evaluation of SaaS in Enterprise Based on Rough Set.....	.....3955
<i>Jun Zhang and Shunliang Huang</i>	
A Knowledge Discovery and Data Mining Process Model in E-Marketing.....	.....3960
<i>Huifang Zeng, Ding Pan and Renfa Zhang</i>	

<b>Application of Information Push Technology in Residential Building Performance Assessment System.....</b>	<b>.....3965</b>
<i>Xiaohong Deng</i>	
<b>An Effective ID-based Mobile Business System.....</b>	<b>.....3969</b>
<i>Maocai Wang, Guangming Dai, Hanping Hu and Yun Wang</i>	
<b>Power System Reactive Power Optimization Based on Improved PSO.....</b>	<b>.....3974</b>
<i>Wei Liu, Bingkun Gao and Xinlan Liang</i>	
<b>Research on Molten Iron Logistics Balance Model in Iron-steel Correspondence Scheduling.....</b>	<b>.....3980</b>
<i>Hui Huang, Wen Xu, Wei Zhou, Binglin Zheng and Tianyou Chai</i>	
<b>Network Online Comments and Sentiment Features Analysis.....</b>	<b>.....3986</b>
<i>Hongjiang Wu, Dan Mou, Qinke Peng and Yongxuan Huang</i>	
<b>Study on Structural System Reliability for Commercial Motor-vehicles of Passenger Transport Frame Structure.....</b>	<b>.....3992</b>
<i>Guosheng Zhang, Wei Wang, Daqian Zhang, Wei Zhou and Tianxia Zhang</i>	
<b>PSO Algorithm-based Optimization of Plug-in Hybrid Electric Vehicle Energy Management Strategy.....</b>	<b>.....3997</b>
<i>Jian Wu, Na-xin Cui, Cheng-hui Zhang and Wen-hui Pei</i>	
<b>Study on Bi-level Programming Model for Traffic Control on Massive Activities.....</b>	<b>.....4003</b>
<i>Liangzhi Zhang, Lutao Bai, Minai He and Lei Jia</i>	
<b>Study on the Minimum Principle of Hybrid Impulsive and Switching Systems with Ekeland's Variational Principle.....</b>	<b>.....4008</b>
<i>Rui Gao, Yungang Liu and Jixue Zhang</i>	
<b>A Study on Reconfiguration of Enterprise Information System Based on Object-based Knowledge Mesh.....</b>	<b>.....4014</b>
<i>Haiwang Cao, Chaogai Xue, Dan Wang and Lichao Yan</i>	
<b>Virtual Simulation Method Based Reliability Analyses on Vehicular Driving Axle.....</b>	<b>.....4019</b>
<i>Liangyu Lei</i>	
<b>Optimal Tracking Control for MIMO Systems with Stability Degree Constraint Subjected to Sinusoidal Disturbances.....</b>	<b>.....4024</b>
<i>Dexin Gao, Xiaoyan Yang and Baolin Zhang</i>	
<b>Fast Aggregating Control of Swarm System with Single-step Optimization.....</b>	<b>.....4029</b>
<i>Shiming Chen</i>	

<b>A Component Based Hybrid Petri Net Approach for the Modeling of Production and Energy Coupling System in Process Industry.....</b>	<b>.....4034</b>
<i>Yiru Dai, Jian Wang and Zhuping Wang</i>	
<b>Delay Model for Signal Controlled Intersections.....</b>	<b>.....4040</b>
<i>Lin Li, Jianmin Xu, Sibohuang and Kai Lu</i>	
<b>Improving Wafer Fabrication Performance by Hierarchical Colored Timed Petri-Net and SA-based Approach.....</b>	<b>.....4045</b>
<i>Zhengcai Cao, Yingtao Zhao and Fei Qiao</i>	
<b>Improved Ant Colony Algorithm for Multi-depot Bus Scheduling Problem with Route Time Constraints.....</b>	<b>.....4050</b>
<i>Ming Wei, Wenzhou Jin, Weiwei Fu and Xiaoni Hao</i>	
<b>A Risk Programming Model Based on Markov Process in a Virtual Enterprise.....</b>	<b>.....4054</b>
<i>Guanjie Jiang and Min Huang</i>	
<b>Demand Shedding with Thermal Mass in Office Buildings.....</b>	<b>.....4060</b>
<i>Qing Ma and Qiqiang Li</i>	
<b>Applied Research of Improved Hybrid Discrete PSO for Dynamic Job-shop Scheduling Problem.....</b>	<b>.....4065</b>
<i>Shufeng Wang, Xiaocheng Xiao, Fei Li and Ce Wang</i>	
<b>A Modified PSO Algorithm for Aero-engine Non-linear Programming Model.....</b>	<b>.....4069</b>
<i>Yonghua Wang, Benwei Li, Tao Sun, Keyi Jiang and Xiuxia Wang</i>	
<b>Multi-moving-window Neural Network for Modeling of Purified Terephthalic Acid Solvent System.....</b>	<b>.....4074</b>
<i>Yuan Xu and Qunxiong Zhu</i>	
<b>Robust Dynamic Real-time Optimization under Parametric Uncertainty for Plant-wide Processes.....</b>	<b>.....4078</b>
<i>Yan Zhang</i>	
<b>Research on Optimal Load in Calculating Wind Power Penetration.....</b>	<b>.....4084</b>
<i>Hong Yang, Jianxin Liu, Zhong Li and Zhenbing Zhao</i>	
<b>Dynamic Optimization of Multivariable Endothermic Reaction in Cascade CSTR.....</b>	<b>.....4088</b>
<i>Yang Chen, Zhijiang Shao, Jixin Qian, Kexin Wang, Zhiliang Zhan and Zuhua Xu</i>	
<b>Study on Flight-String Optimization Based on Partheno-Genetic Algorithm.....</b>	<b>.....4093</b>
<i>Yaohua Li and Na Tan</i>	

<b>Application of Synergic Electric Power Supply in HEV.....</b>	<b>.....4097</b>
<i>Haoming Zhang and Shenping Ding</i>	
<b>Design of Monitoring and Controlling System for Airfield Lighting Based on Computer.....</b>	<b>.....4101</b>
<i>Changyong Zhang, Jianshu Gao and Gang Wang</i>	
<b>Design and Application of Acetonitrile Refining Process and Computer Intelligent Control System.....</b>	<b>.....4107</b>
<i>Xiaofang Sun, Yijun Cai, Luyue Xia and Haitian Pan</i>	
<b>The Grain Depot Temperature Measurement System's Research Based on Wireless Sensor Networks.....</b>	<b>.....4112</b>
<i>Yawei Zhao, Yang Yu and Mingbo Yuan</i>	
<b>Load Torque Observer Effect On HEV Dynamic Performance.....</b>	<b>.....4116</b>
<i>Hongyi Li, Haoming Zhang and Zengliang Liu</i>	
<b>Study on Soft Sensor for Lysine Fermentation Based on BP Neural Network.....</b>	<b>.....4120</b>
<i>Hongyi Li, Haoming Zhang and Yinhua Wang</i>	
<b>Design and Research for the Composite Magnetic Field Control System of Aluminum Electromagnetic Continuous Roll-casting.....</b>	<b>.....4125</b>
<i>Yuhua Ling, Xinrong Yang, Yunyun Ji, Hongyan Li and Liqing Liao</i>	
<b>Registration of Point-Set Inspected by Spherical Tipped Probe.....</b>	<b>.....4131</b>
<i>Yuqing Chen, Zi Ma and Defeng Wu</i>	
<b>A New Real-time Ethernet for Numeric Control.....</b>	<b>.....4137</b>
<i>Ke Wang, Chengrui Zhang, Xinzhong Ding, Shuai Ji and Tianliang Hu</i>	
<b>Fuzzy Logic Based Dissolved Oxygen Control for SBR Wastewater Treatment Process.....</b>	<b>.....4142</b>
<i>Liping Fan and Kosta Boshnakov</i>	
<b>Research and Design of Embedded Data Acquisition and Monitoring System Based on PowerPC and CAN Bus.....</b>	<b>.....4147</b>
<i>Daogang Peng, Hao Zhang, Jiannian Weng, Hui Li and Fei Xia</i>	
<b>The Design of Alarm and Control System for Electric Fire Prevention Based on MSP430F149.....</b>	<b>.....4152</b>
<i>Xinjian Xiang and Ming Li</i>	
<b>Research on Axial Drilling Emendation Method for Semi-automated Balancing Machine.....</b>	<b>.....4157</b>
<i>Xiang Liao and Dongchu Liao</i>	

<b>Pipeline Damage Locating Based on GPS Fiducial Clock Synchronization and Clock Subdivision Technology.....</b>	<b>.....4161</b>
<i>Jianying Tian and Honghua Zhao</i>	
<b>Controller Performance Assessment of Batch Processes Based on Dynamic Time Warping.....</b>	<b>.....4165</b>
<i>Yijun Cai, Mengfei Zhou, Tao Zou and Luyue Xia</i>	
<b>The System for Testing Electrical Performance of Power Generating Sets Based on Technique of AC Sampling.....</b>	<b>.....4169</b>
<i>Lu Wang and Wusong Wen</i>	
<b>On-line Monitoring Methodology for Die Forging Quality Based on the Piezoelectric Effect.....</b>	<b>.....4173</b>
<i>Wenzhong Shen and Changsheng Ai</i>	
<b>Review of On-line Defects Detection Technique for Above Ground Storage Tank Floor Monitoring.....</b>	<b>.....4178</b>
<i>Liyi Sun and Yibo Li</i>	
<b>A Research of the Zirconia Element Surface Coating Technology: The Application of TRIZ Method.....</b>	<b>.....4182</b>
<i>Hsing-hsin Huang and Chang-huai Yu</i>	
<b>Automobile Intelligent Control System Based on Effective Idling Stop.....</b>	<b>.....4188</b>
<i>Daxing Huang, Ren He and Kai Liu</i>	
<b>A Multi-Channel Telemetry Unit for Monitoring Distribution Switching Station.....</b>	<b>.....4193</b>
<i>Weiqing Tao, Qiaoyun Zhang, Yefu Jin and Lin Li</i>	
<b>Stationarity and Normality Testing for Silicon Content in Molten Iron of Blast Furnace.....</b>	<b>.....4197</b>
<i>Shihua Luo, Bin Zhou and Jian Huang</i>	
<b>Review of Multivariate Statistical Process Monitoring.....</b>	<b>.....4201</b>
<i>Xiang Xie, Hongbo Shi and Wen Yang</i>	
<b>Research on Multi-Motor Synchronous System Based on CAN.....</b>	<b>.....4209</b>
<i>Zhihong Wang, Qingwei Chen, Xiaobo Zhang and Yifei Wu</i>	
<b>The Disturbance Accommodating Control for Variable-pitch Variable-speed Wind Turbine Speed Regulation.....</b>	<b>.....4215</b>
<i>Shitao Wang, Xiaoguang Jin, Dehua Zhang and Zhengyu Lu</i>	
<b>Realization of Heat Management System Based On Low Voltage Power Line Carrier.....</b>	<b>.....4220</b>
<i>Yanping Li, Jianbin Qiao and Tao Wang</i>	

<b>An Implementation of Intelligent Monitoring System for Food Processing.....</b>	<b>.....4225</b>
<i>Yi Yang, Ke Zhang and Yi Chai</i>	
<b>Dual-torch Welding Machine CNC System Based on 6K4 Controller.....</b>	<b>.....4231</b>
<i>Xing Sun, Jinggang Yi, Yazhou Xing and Haiyong Jiang</i>	
<b>Development on the Residual Capacity of Battery On-line Measuring Instrument of DC System.....</b>	<b>.....4236</b>
<i>Liwei Li, Shuzhe Bao and Gentao Wang</i>	
<b>Study on Control System of Grease Lubrication.....</b>	<b>.....4240</b>
<i>Bo Su and Li Wang</i>	
<b>Rare Earth Extraction Process Control Method Based on Ion Characteristic Color Detection.....</b>	<b>.....4244</b>
<i>Hui Yang, Baohua Sun, Lusheng Zhong, Rongxiu Lu and Shasha Meng</i>	
<b>A Remote Control System on Traffic Lights Based on IEC61131-3 Standard Language.....</b>	<b>.....4250</b>
<i>Xiaofeng Ye, Bin Sun, Weiwei Lin and Wenjun Li</i>	
<b>Flowmeter Automatic Verification System Based on Virtual Instrument.....</b>	<b>.....4256</b>
<i>Fei Qian, Zhifei Li, Bin Sun and Yongmei Huang</i>	
<b>Design of Process Supervisory System for Coal-bed Methane Power Generation.....</b>	<b>.....4261</b>
<i>Jianyan Tian, Lin Zhang and Meiping Zhang</i>	
<b>A Distributed Corrosion Detect System Based on Compact RIO.....</b>	<b>.....4266</b>
<i>Jian Li, Li Zhang, Jie Min and Shizhe Song</i>	
<b>Wireless Video Monitoring System Based on Image Restoration Technology.....</b>	<b>.....4271</b>
<i>Ping Chen, Zhiqiang Wang and Qiao Wang</i>	
<b>Research of Ethernet Communication Technology for Motion Control.....</b>	<b>.....4276</b>
<i>Mingzhe Liu, Aidong Xu and Wei Zhao</i>	
<b>The Family Safety Monitoring System Based on Ethernet and Bluetooth.....</b>	<b>.....4281</b>
<i>Huanbing Gao, Liyan Yuan and Tao Wang</i>	
<b>Research of Spectrum Decision and Adaptive Reconstruction Technology in Cognitive Radio.....</b>	<b>.....4286</b>
<i>Hong Jiang, Yong Liu, Yuqing Huang and Chunmei Chen</i>	
<b>Similarity Design on Heavy Duty Grippers.....</b>	<b>.....4291</b>
<i>Qunming Li, Qinghua Qin and Yonghong Wu</i>	

<b>Dynamic Division of Trust Grade Based on Interval-valued Fuzzy Sets Theory.....</b>	<b>.....4297</b>
<i>Hai-juan Zhang</i>	
<b>Study of Networked Control Systems Based on Implicit Generalized Predictive Control Algorithm.....</b>	<b>.....4301</b>
<i>Pu Han, Chao Li and Ze Dong</i>	
<b>Research on the Networked Control System Technology Applied in Intelligent Building.....</b>	<b>.....4307</b>
<i>Qingquan Cui, Dong Wei and Zhixin Chen</i>	
<b>NMF-based Method of Text Classification.....</b>	<b>.....4312</b>
<i>Fuzhen Sun and Kun Zhang</i>	
<b>Efficient Matching of Semantic Web Services Based on Service Hierarchy.....</b>	<b>.....4317</b>
<i>Fuzhen Sun and Haihua Zhu</i>	
<b>Industrial Network Optimization Design Based on 0-1 Programming.....</b>	<b>.....4322</b>
<i>Yonggang Ma, Guozhen Tan, Dong Pan and Jixiang Yang</i>	
<b>Artificial Neural Network for Screw Life Prediction.....</b>	<b>.....4328</b>
<i>Hongli Gao, Mingheng Xu, Xixi Wu, Min Zhao, Haifeng Huang and Zhiping Guo</i>	
<b>Soft-sensor Model of Mill Load Based on Rough Set and RBF Neural Network.....</b>	<b>.....4333</b>
<i>Yong Zhang and Yukun Wang</i>	
<b>Robust Control for Linear System Based on Gradient Flow Neural Network.....</b>	<b>.....4337</b>
<i>Zhigang Yu, Yongliang Shen, Shenmin Song and Laijun Sun</i>	
<b>Leader-following Consensus of Multi-agent Systems with and without Time-delay.....</b>	<b>.....4342</b>
<i>Huijuan Yan and Lixin Gao</i>	
<b>Study on Improved Mixed Traffic Scheduler And Feedback Scheduling Applied for Network Control Systems.....</b>	<b>.....4348</b>
<i>Qi Liu and Feng Kong</i>	
<b>Quantized H<sub>2</sub> Filtering for Markovian Jump Linear Systems over Networks with Non-accessible Mode Information.....</b>	<b>.....4352</b>
<i>Tao Liu, Qijun Chen and Hao Zhang</i>	
<b>Research and Design of Wireless Data Multihop Communication System Based on CC1100.....</b>	<b>.....4358</b>
<i>Yawei Zhao, Yang Yu and Lei Chen</i>	
<b>State Observation Design for Time-Delay Neural Networks Systems.....</b>	<b>.....4362</b>
<i>Yuan Zhang, Chen Guo and Shubo Liu</i>	

<b>Network Scheduling and Optimal Guaranteed Cost Control Co-Design.....</b>	<b>.....4366</b>
<i>Jinbiao Chen and Bicheng Lei</i>	
<b>Research on Power Load Forecasting Based on Combined Model of Markov and BP Neural Networks.....</b>	<b>.....4372</b>
<i>Dongxiao Niu, Hui Shi, Jianqing Li and Cong Xu</i>	
<b>Observer-based Control for Networked Control Systems with network induced delay and packet dropout.....</b>	<b>.....4376</b>
<i>Chong Jiang, Dexin Zou and Qingling Zhang</i>	
<b>Output Tracking-based H<sub>∞</sub> Control of Networked Control Systems with Packet Disordering.....</b>	<b>.....4380</b>
<i>Jinna Li, Haibin Yu, Qingling Zhang and Xiangdong Dang</i>	
<b>A Platform Based on Inverted Pendulum for NCSs.....</b>	<b>.....4386</b>
<i>Lisheng Wei, Yinhua Shen, Ming Jiang, Qigong Chen and Minrui Fei</i>	
<b>Stabilization of Networked Control Markovian Jump Linear Systems with Unobservable Jump Parameter.....</b>	<b>.....4390</b>
<i>Yu Kang and Yi Liu</i>	
<b>Structural Properties and Stabilization Analysis of Networked Control System.....</b>	<b>.....4395</b>
<i>Liankun Sun, Zhenkai Wan and Guiling Zhang</i>	
<b>Design of the Simulation Platform for Networked Control Systems Based on DTHMM.....</b>	<b>.....4400</b>
<i>Yuan Ge, Shuang Cong, Qigong Chen, Ming Jiang and Weiwei Shang</i>	
<b>The Output Tracking Control for a Kind of Uncertain Networked Systems.....</b>	<b>.....4407</b>
<i>Wei Wang</i>	
<b>H<sub>∞</sub> Output Tracking Control for Nonlinear Discrete-Time Systems in Random Network Environment.....</b>	<b>.....4413</b>
<i>Xiaobo Chi, Xinchun Jia, Lei Li and Bo Liu</i>	
<b>A Novel Design and Realization of the Vehicular Driving Navigation System based on VANET.....</b>	<b>.....4419</b>
<i>Yi Wu, Zhenhong Shao, Wenfeng Li, Lianfeng Shen and Xiao Lin</i>	
<b>Stability and Controller Design for Networked Control System with Bi-Feedback.....</b>	<b>.....4424</b>
<i>Xiangdong Dang and Qingling Zhang</i>	
<b>Robust Adaptive Control of Cohen-Grossberg Neural Networks with Discontinuous Activation Functions.....</b>	<b>.....4430</b>
<i>Xiru Wu, Yaonan Wang, Wenming Cao and Lihong Huang</i>	



Distributed H-inf Formation Control for Discrete-time Multi-agent Systems.....	.....4436
<i>Nani Han, Xiaoyuan Luo and Xinping Guan</i>	
640Mbps High-Rate Frame Multiplexer and Its Multi-channels Control Rule for CCSDS Principal Network.....	.....4442
<i>Yikang Yang, Xue Li and Lei Liu</i>	
Study on Prediction Method for Generation and Consumption of Coke Oven Gas.....	.....4446
<i>Ying Liu, Jun Zhao, Wei Wang, Chun-yang Sheng, Liqun Cong and Weimin Feng</i>	
Optimization Method of Slab Discharge Decision Model Based on Quantum-behaved discrete Particle Swarm.....	.....4452
<i>Feng-juan Liu, Jun Zhao, Wei Wang and Xiao-ping Zhang</i>	
A Geometric Method for Assembly Tolerance Analysis Based on CAD System.....	.....4458
<i>Fang Liu, Guo-lei Zheng, Hong-yong Zheng, Yi Qiu and Weiping Wang</i>	
Application Research of Machine Vision Technique in Intelligent Empty Bottle Inspection System.....	.....4462
<i>Sile Ma, Huiquan Wang, Zengben Hao, Li Bai and Hailiang Yu</i>	
Research of Power Lithium Battery Intelligent Management System Based on DSP2812.....	.....4467
<i>Haoming Zhang, Zengliang Liu and Shenping Ding</i>	
Label Checking System of Flat Bottles Based on Siemens PLC.....	.....4472
<i>Sile Ma, Qingmei Chen, Guangliang Li, Xiaohu He and Huiquan Wang</i>	
Researches on Modeling and Intelligent Optimization Method of Scheduling for the Process of Alumina Ore-burden Energy Saving Oriented.....	.....4477
<i>Erwei Yin, Fengxing Zou, Zheng Gao and Fantian Zou</i>	
The Control System Design of the Digital Fiber Drawing Machines.....	.....4482
<i>Weisheng Liu and Zhiqin Huang</i>	
Programming Advanced Control Functions for Enhanced Intelligence of Industrial Robots.....	.....4486
<i>Frank Cheng</i>	
Optimal Control of Decentralized Dynamic Output Feedback for Large-scale Systems with Time Delays.....	.....4491
<i>Xin He, Jiakuan Xia, Shixuan Lu and Bo Yao</i>	
Life Originated Design Automation Technology.....	.....4497
<i>Yandong Wang, Zhenya Wang, Heshan Liu and Kezheng Huang</i>	

<b>The Methodology for PDM Applications: from Manufacturing Requirement Specification to Product Database Implementation.....</b>	<b>.....4503</b>
<i>Feng Wu</i>	
<b>Study on the Function Surface-Based Growth Design Theory of Conceptual Structure.....</b>	<b>.....4508</b>
<i>Jinyong Yang</i>	
<b>Near Optimal Path Planning for Vehicle with Heading and Curvature Constraints.....</b>	<b>.....4514</b>
<i>Defu Zhang, Nengjian Wang, Lijie Zhou and Qinhui Liu</i>	
<b>A Novel Approach to Architecture of Radar Fault Diagnosis System Based on Mobile Agents.....</b>	<b>.....4520</b>
<i>Zhijia Li and Chongjun Wang</i>	
<b>Positioning Control of Feed Table Based on an Integrated Friction Model.....</b>	<b>.....4525</b>
<i>Tao Zhang, Huanbing Gao and Cungen Liu</i>	
<b>Modeling and Shifting Transient Process Simulation of Electric Propulsion System of UUV.....</b>	<b>.....4529</b>
<i>Ding Wang, Shunyi Xie, Xiaohu Liu and Zhirong Guo</i>	
<b>An Optimal Control Framework of Traffic Signals Based on Dynamical Sub-area Partition for Urban Main-roads.....</b>	<b>.....4533</b>
<i>Lilin Zang, Xiangxu Meng, Lei Jia and Liang Zhao</i>	
<b>Hybrid MATLAB and LabVIEW to Implement an Intelligent Foundation Fieldbus Control System.....</b>	<b>.....4539</b>
<i>Yang Ding, Bin Sun, Yongmei Huang, Weiwei Lin and Fei Qian</i>	
<b>An Applied Research of Linear Interpolation Fuzzy PID Control Method in Aircraft Landing Gear Shock Absorber System.....</b>	<b>.....4544</b>
<i>Tao Sun and Zhe Yu</i>	
<b>Large Rotating Machinery Local Fault Prediction Based on Sensor Information Fusion.....</b>	<b>.....4550</b>
<i>Jianghong Sun, Yunbo Zuo and Xiaoli Xu</i>	
<b>CNC Screw Life Prediction Based on DFNN Performance Model.....</b>	<b>.....4554</b>
<i>Baiquan Huang, Mingheng Xu, Hongli Gao, Min Zhao, Xixi Wu and Jiming Yan</i>	
<b>Terry Let-off Control System of Terry Loom.....</b>	<b>.....4560</b>
<i>Qihong Zhou, Ge Chen and Limin Mao</i>	
<b>Neural Network Smith Predictive compensable Fuzzy PID Control for Distributed System of Aeroengine.....</b>	<b>.....4564</b>
<i>Kailong Cai and Mingwu Tu</i>	

<b>Adaptive Fuzzy Control Based on Variable Universe and Its Application to Humidity Control in Tobacco First Baking.....</b>	<b>.....4570</b>
<i>Guolin Che and Hua Lai</i>	
<b>Short-Term Passenger Flow Forecast of Urban Rail Transit Based on BP Neural Network.....</b>	<b>.....4574</b>
<i>Ran Yang and Bin Wu</i>	
<b>Modeling Ni-MH Battery Based on Immune Evolutionary Network.....</b>	<b>.....4578</b>
<i>Bo Cheng, Min Ye, Yanlu Zhou, Junping Wang and Binggang Cao</i>	
<b>Flywheel Energy Storage Control Based on Recurrent Fuzzy Neural Network.....</b>	<b>.....4584</b>
<i>Bo Cheng, Wei Zhang, Min Ye, Junping Wang and Binggang Cao</i>	
<b>Ethernet-Based Remote Distributed Control System for Central Air Conditioner.....</b>	<b>.....4590</b>
<i>Chunhua Zhang, Zhenhua Li, Huayi Wang, Bin Song and Yunta Xiong</i>	
<b>Research and Simulation of Variable Universe Adaptive Fuzzy Control Algorithm in Active Control of Structural Vibration.....</b>	<b>.....4596</b>
<i>Shuangye Chen, Yawei Chen and Weijing Zhang</i>	
<b>A TOC Combining ACO Sequencing Method for The Semiconductor Manufacturing Fabrication.....</b>	<b>.....4602</b>
<i>Li Li, Pan Gu, Fei Qiao and Ying Wu</i>	
<b>Research on Implementation of Fuzzy Logic Control Arithmetic Based on FPGA.....</b>	<b>.....4608</b>
<i>Yi He, Changbin Li, Zheyang Lang, Aiguo Wu and Zhou You</i>	
<b>Leveling Technology Based on NN and Adaptive Fuzzy Control of Hydraulic System.....</b>	<b>.....4614</b>
<i>Qiang Gao, Hongxia Pan and Bo Liu</i>	
<b>Modeling and Short-Term Forecasting of the Electricity Price Based on Fuzzy Box-Jenkins.....</b>	<b>.....4619</b>
<i>Ning Cai, Jun Meng, Wenjun Yan, Zhejing Bao and Peiran Li</i>	
<b>Variable Structure Control for Affine Systems Based on Sigmoid Variable Rate Reaching Law.....</b>	<b>.....4623</b>
<i>Yunlong Liu, Cunchen Gao and Xiao Liang</i>	
<b>Lateral and Longitudinal Dynamic Coupling Control for Vehicles Lane Changing.....</b>	<b>.....4628</b>
<i>Wei Li and Jianmin Duan</i>	
<b>Single Inverted Pendulum System Design Based on Genetic Algorithm and Reduced Fuzzy Control.....</b>	<b>.....4633</b>
<i>Hongwei Li and Qingyou Liu</i>	

<b>Controller Design for Large Time-delay Objects.....</b>	<b>.....4639</b>
<i>Jianxiong Ye, Hua Zhang, Jian Feng Xie and Hong Li Li</i>	
<b>Decentralized Adaptive Iterative Learning Control for Uncertain Interconnected Systems with State Delay.....</b>	<b>.....4643</b>
<i>Lili Sun and Tiejun Wu</i>	
<b>Lightning Prediction Method Based on Class-Weighted Dual v-Support Vector Machine.....</b>	<b>.....4649</b>
<i>Xianlun Tang, Ziming Li, Minghui Xiang, Zexin Wu and Zhong Wang</i>	
<b>Fuzzy Control Method of the Intelligent Hydraulic Impactor.....</b>	<b>.....4654</b>
<i>Guoping Yang, Cuiping Liang, Liang Wang and Chongchong Ding</i>	
<b>Coordinated Nonlinear Sliding Mode Control of STATCOM and Generator Excitation Based on T-S Model.....</b>	<b>.....4658</b>
<i>Jingfeng Mao, Guoqing Wu, Aihua Wu, Guoxiang Wu and Xudong Zhang</i>	
<b>Research on Particle Filtering Based on Genetic Algorithm.....</b>	<b>.....4663</b>
<i>Ping Wang, Jinghai Zhang and Guodong Cui</i>	
<b>Research on Speed Intelligent Control Based on Neural Networks for Large Marine Main Diesel Engine.....</b>	<b>.....4667</b>
<i>Wei Meng and Chen Guo</i>	
<b>Traffic State Identification Methods Based on Cloud Computing Model.....</b>	<b>.....4671</b>
<i>Weining Liu, Qinglu Ma, Dihua Sun and Yufang Dan</i>	
<b>Optimization of Feeding Rate for Alcohol Fermentation by Quantum-behaved Particle Swarm Optimization.....</b>	<b>.....4677</b>
<i>Ke-zhong Lu, Hai-bo Li and Ru-chuan Wang</i>	
<b>Research on Precise Locating Method of Ball Mill Control Based on Prediction.....</b>	<b>.....4681</b>
<i>Weixing Jing and Changsheng Ai</i>	
<b>Study on Multiple Resonant Points Control Strategy of Contactless Power Transfer System Using Neural Network.....</b>	<b>.....4686</b>
<i>Yue Sun, Yanling Li, Xin Dai, Yugang Su and Chunsen Tang</i>	
<b>Neural Network Based Decoupling Control of Lifting of 7500T Floating Crane Vessel.....</b>	<b>.....4691</b>
<i>Weifeng Shi and Zuohan Zhou</i>	
<b>Researching of the Out-of-step Preventing Controlling strategy of Permanent Magnet Linear Synchronous Motor Based on Fuzzy Control.....</b>	<b>.....4697</b>

*Fuzhong Wang, Penghui Jing and Le Fan*

Power System Reactive Power Optimization Based on the Immune Ant Colony Algorithm.....	4702
<i>Anzhao Cao, Xinyun Xia and Lingchun Li</i>	
Traffic Flow Forecasting Based on Ant Colony Neural Network.....	4706
<i>Qingle Pang and Min Zhang</i>	
Fuzzy Sliding Mode Control of Hydraulic Cylinders Driving a Quadruped Robot.....	4711
<i>Chunlan Wang, Yibin Li, JiuHong Ruan and Xuewen Rong</i>	
Swarm Intelligence Applied Basic Research on Ecological Environment Protection in the “Three-River Headwaters” Region: A Survey.....	4716
<i>Zhibin Xue</i>	
Short-term Forecast Research Based upon Multi-robot Soccer Match.....	4722
<i>Jianguo Wang, Xinguang Guo, Jianwu Bao and Yilong Zhang</i>	
Geospatial Database Updating Actively of GECA Rules-based Controlling.....	4726
<i>Xiaoya An, Qun Sun, Xiaopeng Zhang and Chang Liu</i>	
A New Intelligent Decoupling Controller Based on BP Neural Network PID with Predictive Compensation and the Research on its Application to An Air-cushioned Head.....	4731
<i>Haipeng Pan and Yuying Xu</i>	
Neutral Network Compensator Based Cascade Control for Ball and Beam System.....	4736
<i>Jun Hou, Liangyong Wang, Tianyou Chai, Zheng Fang and Mingkun Gao</i>	
A Robust Compound Controller for Electric-driven Simulation Turntable.....	4741
<i>Hang Zhang and Guangyu Xi</i>	
Research on Pneumatic ABS Generalized Predictive Control.....	4746
<i>Taixiong Zheng, Fulei Ma, Yong Yang and Guoying Jiang</i>	
Research and Application of Intelligent Control Software for Flotation Reagent Process.....	4750
<i>Zengxian Geng, Linghang Meng, Zhijian Ye, Heng Yue and Tianyou Chai</i>	
Calculation and Control of Equivalent Superheat for 300kA Prebake Aluminum Electrolysis.....	4755
<i>Shuiping Zeng, Jinhong Li, Yuqian Wei and Danyang Cao</i>	
Internal Model Control for Hysteretic Nonlinear Systems Based on Support Vector Regression.....	4761
<i>Wenguang Zhang, Jianqin Mao and Yanhua Ma</i>	

<b>Time-optimal Control Based on Hybrid Genetic Algorithm.....</b>	<b>.....4766</b>
<i>Ruiyan Zhao and Shurong Li</i>	
<b>LMI Design Approach to Robust Fuzzy Sliding-mode Observer in Dynamical Uncertain systems.....</b>	<b>.....4770</b>
<i>Jin Zhao, Zhongyu Shen, Xingsheng Gu and Chunmei Xia</i>	
<b>Self-Organization Stochastic Fuzzy Control Based on OCPFA and Applied on Self-Balanced Robot.....</b>	<b>.....4775</b>
<i>Jianxian Cai and Xiaogang Ruan</i>	
<b>VSCF Wind Turbine Control Strategy For Maximum Power Generation.....</b>	<b>.....4781</b>
<i>Yunqi Xiao and Pengxiao Jia</i>	
<b>Position-Velocity Based Force Feedback Scheme of Master-Slave Hydraulic Servo Control System.....</b>	<b>.....4787</b>
<i>Zhuxin Zhang, Dingxuan Zhao and Jingwei Hou</i>	
<b>Delay-Dependent Robust <math>H^\infty</math> Control of Nonlinear Systems Based on Observer.....</b>	<b>.....4792</b>
<i>Miaoxin Wang, Jizhen Liu and Miaomiao Ma</i>	
<b>Decoupling Control for Doubly Fed Hydro-generator System Based on CMAC &amp; PID.....</b>	<b>.....4798</b>
<i>Aiwen Guo and Jinping Li</i>	
<b>Research on Robust Tracking Control Based PTC for Flight Simulator.....</b>	<b>.....4802</b>
<i>Zhenghua Liu, Han Li and Jingjing Wang</i>	
<b>Accuracy Enhancement of Integrated Systems Based on Intelligent Information Fusion Technology.....</b>	<b>.....4806</b>
<i>Yugang Hou</i>	
<b>Adaptive Fuzzy Sliding Mode Control for Robotic Manipulators.....</b>	<b>.....4811</b>
<i>Daoxiang Gao, Zengqi Sun and Wen Wang</i>	
<b>Adaptive Nonlinear Control for A Class of Pure-Feedback Systems.....</b>	<b>.....4817</b>
<i>Daoxiang Gao, Zengqi Sun and Li Chen</i>	
<b>Decentralized Networked Stabilization for Interconnected Nonlinear Systems: A Fuzzy Control Approach.....</b>	<b>.....4823</b>
<i>Dedong Yang and Kaiyuan Cai</i>	
<b>Ship Roll Stabilisation Using Supervision Control Based on Inverse Model Wavelet Neural Network.....</b>	<b>.....4829</b>
<i>Hui Li, Chen Guo and Xiaofang Li</i>	

<b>The Controllability and Observability of the Event-based Control System.....</b>	<b>.....4834</b>
<i>Yibin Chen, Ning Xi, Hongyi Li and Yuechao Wang</i>	
<b>Modeling and Analysis of Shift Schedule for Automatic Transmission Vehicle Based on Fuzzy Neural Network.....</b>	<b>.....4839</b>
<i>Guanghui Li and Jianjun Hu</i>	
<b>FXLMS Algorithm Based Multi Channel Active Vibration Control of Piezoelectric Flexible Beam.....</b>	<b>.....4845</b>
<i>Yong Shao, Zhiyuan Gao, Shouwei Gao, Jincong Yi and Xiaojin Zhu</i>	
<b>Fast Algorithm of Output Increment Feedback Predictive Control with Input Constraints.....</b>	<b>.....4851</b>
<i>Aiping Yang</i>	
<b>A Novel Gasoline Generators Speed Governing System based on an Improved Fuzzy Adaptive PID Controller.....</b>	<b>.....4855</b>
<i>Pan Duan and Kaigui Xie</i>	
<b>Multi-objective Robust Optimization Based on NSGA-II and Degree of Robustness.....</b>	<b>.....4859</b>
<i>Jie Qiang, Rongbin Qi and Feng Qian</i>	
<b>A Novel Data-driven Control Strategies of Dynamic Thermal Comfort for Inhabited Environment.....</b>	<b>.....4865</b>
<i>Peiyong Duan and Hui Li</i>	
<b>Variable Universe Adaptive Fuzzy PI Control Used in VSCF Wind Power Generator System.....</b>	<b>.....4870</b>
<i>Guolian Hou, Liping Hu and Jianhua Zhang</i>	
<b>Research on Fault Diagnosis of Wind Turbine Control System Based on Artificial Neural Network.....</b>	<b>.....4875</b>
<i>Guolian Hou, Pan Jiang, Zhentao Wang and Jianhua Zhang</i>	
<b>Dynamic Fuzzy Neural Intelligent Control for Ship Course Tracking.....</b>	<b>.....4880</b>
<i>Di Guo, Yang Wang and Chen Guo</i>	
<b>A Feedback LMS Adaptive Algorithm for Active Vibration Control.....</b>	<b>.....4885</b>
<i>Shouwei Gao, Quanzhen Huang, Yong Shao, Enyu Jiang and Xiaojin Zhu</i>	
<b>One Rod Inverted Pendulum Controller Design Based on Self-Adaptive Fuzzy PID with Fuzzy.....</b>	<b>.....4891</b>
<i>Yuejuan Han and Yongxin Liu</i>	
<b>Reliable Controller Optimal Design of Decentralized Dynamic Output Feedback for Large-scale Systems.....</b>	<b>.....4895</b>

<i>Xin He, Jiakuan Xia, Shixuan Lu and Bo Yao</i>	
Coordinated Control of Multiple Autonomous Underwater Vehicle System.....	.....4901
<i>Dapeng Jiang, Yongjie Pang and Zaibai Qin</i>	
An Analytical Design of Improved PID Neural Network Controller for AQM.....	.....4907
<i>Ping Hou and Zhiquan Wang</i>	
Application of Artificial Neural Network to the Prediction of Pb-AI Composite Properies.....	.....4911
<i>Yuhui Li, Jie Zhen, Peixian Zhu and Shenggang Zhou</i>	
The Control Strategy and Application for Dynamic Quantitative Weighing System Based on Embedded Linux.....	.....4917
<i>Pan Hu, Lanzhen Liang and Jianing Hu</i>	
Using an Adaptive Differential Evolution Algorithm to Calibrate an Industry Robot and External Axle.....	.....4922
<i>Jin Huang, Defeng Wu, Zi Ma and Ying Hu</i>	
The Research and Application of Wavelet-Support Vector Machine on Short-term Wind Power Prediction.....	.....4927
<i>Jie Shi, Yongqian Liu, Yongping Yang, Shuang Han and Peng Wang</i>	
Fuzzy Sliding Mode Control of the Arc Furnace Electrode Regulator System.....	.....4932
<i>Ping Guan, Jichao Li and Xiaohe Liu</i>	
Adaptive Noise Smoothing Method with Neural Networks.....	.....4937
<i>Yunxia Liu, Guoshi Yang and Jingyu Luo</i>	
Adaptive Control Design for A Class of Uncertain Time-varying Anti-Synchronization Chaotic Systems.....	.....4942
<i>Lin Lei, Wei Xiang and Fang Zhu</i>	
A Study of SMO buffeting Elimination in Sensorless Control of PMSM.....	.....4948
<i>Jun Liu, Gang Wang and Jinshou Yu</i>	
Intelligent Fuzzy Immune PID Controller Design for Multivariable Process Control System.....	.....4953
<i>Zheng Li</i>	
Fuzzy DTC for Induction Motor with Optimized Command Stator Flux.....	.....4958
<i>Hongkui Li</i>	
Discrete-Time Fuzzy Variable Structure Control for Buildings with Delay Time in Control.....	.....4962



<i>Zhijun Li, Zichen Deng and Zhiping Gu</i>	
Adaptive Backstepping Controller Design for Permanent Magnet Synchronous Motor.....	.....4968
<i>Ming Yang, Xingcheng Wang and Kai Zheng</i>	
Design and Realization of Autopilot System Based on ARM for Small Vessel.....	.....4973
<i>Weigang Pan, Fengyu Zhou, Hairong Xiao, Yaozhen Han and Changshun Wang</i>	
Nonlinear Active Disturbance Rejection Controller Research of Main Engine for Ship.....	.....4978
<i>Weigang Pan, Guiyong Yang, Hairong Xiao, Yaozhen Han and Changshun Wang</i>	
Multiform Optimization of Predictive Functional Control Based on Kautz Model.....	.....4982
<i>Mingzhu Xu, Yiping Jiang, Jie Wen and Cunzhi Pan</i>	
Fuzzy Sliding Mode Control with Compensator for Building Structure.....	.....4986
<i>Zhijun Li, Zichen Deng and Zhiping Gu</i>	
Analytical Hierarchy Process and ANN Applied in Gas Discharging Fuzzy Model.....	.....4992
<i>Ruiyang Chen, Shufang Wang and Zhiyong Yang</i>	
Kalman filtering for systems with multiple packet dropouts.....	.....4996
<i>Yanping Xu and Wu Wang</i>	
Hybrid Intelligent Control of Raw Meal Silo Weight with Time Delay in Raw Meal Supply Process.....	.....5002
<i>Jinghui Qiao, Tianyou Chai, Jieqing Zhang, Xiuping Zheng and Zheng Fang</i>	
Multi-objective Optimization of Oversaturated Signalized Intersection based on Fuzzy Logic.....	.....5008
<i>Yanfang Shou and Jianmin Xu</i>	
Design of a Wearable Vibrotactile Display Waist Belt.....	.....5014
<i>Fei Hao and Ai-guo Song</i>	
A Kind of Adaptive Immune Genetic Algorithm Based on Chaos and Its Application.....	.....5018
<i>Weijian Ren, Qiong Wang, Wei Lv and Li Zhang</i>	
Nonlinear Double Control Strategy Research with Fuzzy Internal Model Control and PID Control Based on Fuzzy Modeling.....	.....5022
<i>Yugang Hou, Yao Meng, Xiangzhong Meng and Wanli Wang</i>	
Research on Bilateral Control Strategy of Tele-operation 4-DOF Manipulators with Force Tele-presence.....	.....5027
<i>Guang Wen, Dingxuan Zhao and Hongyan Zhang</i>	

<b>Global Asymptotically Stability of Cellular Neural Networks with Time-varying Delay.....</b>	<b>.....5031</b>
<i>Guozhuang Liang, Xueli Wu and Wenxia Du</i>	
<b>A Novel Active Noise Control using Neural Networks without the Secondary Path Identification.....</b>	<b>.....5037</b>
<i>Xinghua Zhang and Xuemei Ren</i>	
<b>Urban Arterial Traffic Intelligent Coordination Control Technique and Its Application.....</b>	<b>.....5042</b>
<i>Xiangjie Kong, Feng Xia, Chuang Lin and Guojiang Shen</i>	
<b>A Novel Nonlinear Combination Model Based on Support Vector Machine for Stock Market Prediction.....</b>	<b>.....5048</b>
<i>Fangqiong Luo, Jiansheng Wu and Kesong Yan</i>	
<b>Fuzzy Backstepping Control for Strict-Feedback Nonlinear Systems with Mismatched Uncertainties.....</b>	<b>.....5054</b>
<i>Zibin Xu and Jianqing Min</i>	
<b>A New Delay-Dependent Stability Criterion of Fuzzy Systems with Interval Time-varying Delay.....</b>	<b>.....5058</b>
<i>Xingxu Yang, Xiefu Jiang and Xiaohua Ge</i>	
<b>Iterative Learning Control in Large Scale HVAC System.....</b>	<b>.....5063</b>
<i>Xiuying Yan, Qingchang Ren and Qinglong Meng</i>	
<b>Hybrid Destination Registration Elevator Group Control System with Artificial Immune Optimization Algorithm.....</b>	<b>.....5067</b>
<i>Yuge Xu, Fei Luo and Xiaolan Lin</i>	
<b>The Fault-tolerant Stability for Uncertain Linear Large-scale Systems with Unknown Time-Delays Based on State Observer.....</b>	<b>.....5072</b>
<i>Zhanmin Yang</i>	
<b>Global Optimization of VAV Air Conditioning System.....</b>	<b>.....5077</b>
<i>Xiuying Yan, Qingchang Ren and Qinglong Meng</i>	
<b>Dissolved Oxygen Generic Model Control of Wastewater Treatment Process Based on Immune Optimization Least Squares Support Vector Machine.....</b>	<b>.....5082</b>
<i>Hongtao Ye, Fei Luo and Yuge Xu</i>	
<b>Fuzzy Control Using Genetic Algorithm for Gas Collectors of Coke Oven.....</b>	<b>.....5087</b>
<i>Hongxing Li and Bingzhang Luo</i>	
<b>Adaptive Torque Control Using RBF Neural Networks for Nonlinear DC</b>	

Chassis Dynamometer Drive.....	5093
<i>Qi-chang Duan, Yong Zeng, Pan Duan and Xiao-gang Huang</i>	
Chaos control of fractional order Lü system via RBF neural network sliding mode controller.....	5099
<i>Xiaomei Yan and Ding Liu</i>	
A Neuroendocrine Regulation Principle-Based Intelligent Cooperative Decoupling Controller For PANCf Coagulation Bath.....	5105
<i>Xiao Liang, Yongsheng Ding, Kuangrong Hao and Huaping Wang</i>	
Optimal Control Solving of Polymer Flooding Based on Real-coded Genetic Algorithm.....	5111
<i>Yang Lei, Shurong Li and Xiaodong Zhang</i>	
Adaptive Tracking Control of a Class of Nonlinear Time-Delay Systems with NN Actuator Saturation Compensation.....	5115
<i>Zhaobing Liu, Huaguang Zhang and Derong Liu</i>	
A New Hybrid Elevator Group Control System Scheduling Strategy Based on Particle Swarm Simulated Annealing Optimization Algorithm.....	5121
<i>Luo Fei, Xiaocui Zhao and Yuge Xu</i>	
Adaptive Synchronization of Chaotic Neural Networks with Time Delay.....	5125
<i>Xueli Wu, Jianhua Zhang and Zhe Zhao</i>	
Delay-dependent L <sub>2</sub> -L <sub>∞</sub> Filtering for Stochastic Networked Control System with Missing Measurements.....	5131
<i>Hao Zhang, Qijun Chen and Huaicheng Yan</i>	
Intelligent Vibration Control of Piezo-electric Truss Structure Using GA-based Fuzzy Neural Network.....	5136
<i>Kai Zheng, Xinghui Dong and Dongsheng Wang</i>	
Hybrid Multi-attribute Decision Making Based on Vague Sets.....	5140
<i>Haixia Wang, Aiping Yang and Wenzhan Dai</i>	
Variant Design Process Programming of Assembly based on Dimension Constraint Complexity.....	5145
<i>Xinsheng Xu, Dan Li and Xin Cheng</i>	
The Research on Conflict Redistribution of Evidential Reasoning.....	5150
<i>Jian Gao, Weitai Liang and Jingjing Yan</i>	
Metadata Management Based On Lifecycle for DW 2.0.....	5154
<i>Renfa Zhang and Ding Pan</i>	

<b>Multi-objective Decision Making Based on Particle Filter.....</b>	<b>.....5158</b>
<i>Xiaoyu Zhang and Shiqiang Hu</i>	
<b>Leader-Follower Strategies for Continuous Singular Bilinear System.....</b>	<b>.....5162</b>
<i>Huainian Zhu, Jinghan Zhi, Chengke Zhang, Ning Bin and Peihong Sun</i>	
<b>The Probability Distribution Calculation of Wind Power Penetration.....</b>	<b>.....5167</b>
<i>Hong Yang, Jianxin Liu and Qiaolin Ding</i>	
<b>Mining Association Rules in Medical Data Based on Concept Lattice.....</b>	<b>.....5171</b>
<i>Wei Wang and Yaohua Wu</i>	
<b>Pricing Model of Traffic Demand Management Based on Cumulative Prospect Theory.....</b>	<b>.....5175</b>
<i>Yuyin Liu, Weiming Liu, Yaomin Hu and Jie Li</i>	
<b>Optimum on Technological Process Based on Genetic Algorithms.....</b>	<b>.....5181</b>
<i>Ruili Zeng, Yunkui Xiao, Wei Zhang, Wenjun Dai and Jianmin Mei</i>	
<b>A Synthesize Trust Degree Evaluation Method in Distributed System.....</b>	<b>.....5186</b>
<i>Li Ma, Yong-mei Zhang and Lan Ma</i>	
<b>The Study of Information Dissemination Laws in Emergency Management.....</b>	<b>.....5191</b>
<i>Yahui Wang, Wanhua Qiu, Xiaojing Wang and Xuejun Hao</i>	
<b>Real Time Traffic Control Framework Based on Simulated Human Intelligence for Emergency Evacuation.....</b>	<b>.....5196</b>
<i>Guiyan Jiang, Zhengyan Wu, Chunqin Zhang and Qiao Li</i>	
<b>Research on a Neural-network-based Forecasting Algorithm for Retail Industry.....</b>	<b>.....5201</b>
<i>Yuefang Gao, Yongsheng Liang, Fei Tang, Zhiwei Ou, Yunjian Peng and Jin Liang</i>	
<b>Design of the Speech Interface for Robot's Operation.....</b>	<b>.....5206</b>
<i>Wancheng Huang</i>	
<b>Semantics Driven Process Control Mechanism for Decision-making.....</b>	<b>.....5210</b>
<i>Bo Zhang and Yang Xiang</i>	
<b>Analytic Hierarchy Process and Fuzzy Evaluation of Passengers' Satisfactory Degree for QoS of Railway Passenger Transportation.....</b>	<b>.....5215</b>
<i>Pan Deng and Chuansheng Zhang</i>	
<b>Impact Analysis of Facilities Management Outsourcing – through A Case Study of Cisco HQ Building.....</b>	<b>.....5221</b>
<i>Yu Ma and Kecheng Liu</i>	

Enterprise Credit Confidence Assessment based on TSVM.....	.....5228
<i>Jian Zhao</i>	
Research on the Collaborative Filtering Recommendation Algorithm in Ubiquitous Computing.....	.....5233
<i>Zhiqiang Wei, Lian'en Qu, Dongning Jia, Wei Zhou and Mijun Kang</i>	
Dynamic Multi-Project Selection Planning with Inheritance-Constraints and Its Immune Genetic Optimization.....	.....5238
<i>Zhuhong Zhang and Hong Lei</i>	
Multi-Constrained Fast Trajectory Optimization of Glide Phase for Hypersonic Vehicle.....	.....5243
<i>Zhongjie Meng, Jianzhong Dong, Panfeng Huang and Jie Yan</i>	
Trajectory Planning Based on Passive Tracking with Multi-constraints.....	.....5248
<i>Zhongjie Meng, Panfeng Huang and Jie Yan</i>	
Groundwater Water Quality Evaluation Based on Fuzzy Pattern Recognition Model.....	.....5253
<i>Lili Mu, Xuefeng Yu, Xiaowei Zhang and Zhonghua Li</i>	
Cooperative Control for UCAVs Path Planning.....	.....5259
<i>Changpeng Pan, Wen Ye, Jie Chen and Jiuzhi Guo</i>	
The Management Software Research of City Lights Remote Management System.....	.....5264
<i>Jianyi Lin, Chao Wu and Junda Zhang</i>	
A Self-adaptive Algorithm for Small Targets Detection in Clutter Scene Inspired by Insects Compound Eye.....	.....5268
<i>Min Li, Huibing Wang, Chenrong Huang, Lizhong Tu and Jinling Zhou</i>	
Research on the Intelligent Rear Under-run Protection System for Trucks.....	.....5274
<i>Hong-fei Liu, Tao Peng, Hong-guo Xu, Li-dong Tan and Li-li Su</i>	
Continuous Path Detection Method of Intelligent Track-searching Vehicle Based on Photoelectric Sensor.....	.....5279
<i>Hongke Xu, Xunzhao Guo, Chuncheng Ma and Changbao Wen</i>	
Fuzzy Variable Based Step-size Self-optimizing Control Implementing to a Resonance Liquid Reactor.....	.....5283
<i>Mingsan Ouyang and Yongjian Ding</i>	
A Method for Data Exchange between Feature-based CAD Models.....	.....5287
<i>Jing Liu, Ming Wei, Jun Zhang, Kun Wen and Zhengming Chen</i>	
Reactive Power and Voltage Control Based on Improved Particle Swarm	

Optimization in Power System.....	5291
<i>Xiuhua Wu, Zailin Piao, Yongliang Liu and Haiyan Luo</i>	
Fuzzy Tuning of Brain Emotional Learning Based Intelligent Controllers.....	5296
<i>Naghmeh Garmsiri and Farid Najafi</i>	
Research on Self-organizing Cooperation Evolvment Model of Fault Diagnosis Grid based on Complicated Network.....	5302
<i>Yanling Han and Shouqi Cao</i>	
A New Type of Adaptive Fuzzy PID Controller.....	5306
<i>Yuanhui Yang, Wailing Yang, Mingchun Wu, Qiwen Yang and Yuncan Xue</i>	
Self-tuning of PID Parameters Based on the Modified Particle Swarm Optimization.....	5311
<i>Guoming Huang, Dezhaowu, Wailing Yang and Yuncan Xue</i>	
Multi-Level Integration Model of Supply Chain Network.....	5315
<i>Qiuzhong Zhou and Qinchun Fan</i>	
Profit Allocation in the Cooperation among the Enterprises under the Risks of Supply Chain.....	5319
<i>Na Xu, Lei Zhang, Dong Wei and Peng Liu</i>	
Model for Congestion Dynamics on Complex Networks with Traffic-Awareness Routing Strategy.....	5325
<i>Binglin Dou and Shiyong Zhang</i>	
Research on Computational Architecture for Railway Emergency Management System Based on ACP Theory.....	5331
<i>Ge Guo, Fuzhang Wang, Ping Li and Chunhuang Liu</i>	
Research in Reservoir Optimal Operation Based on Modified Ant Colony Optimization.....	5337
<i>Zhengchu Wang, Muxun Zhou, Jun Li, Jian Fan and Baishao Zan</i>	
Accelerated GPU Computing Technology for Parallel Management Systems.....	5343
<i>Feng Cui, Changjian Cheng, Feiyue Wang, Wei Wei, Lefei Li and Yumin Zou</i>	
Active Defects Detection and Localization Using Acoustic Emission Method.....	5348
<i>Liyang Sun, Yibo Li, Congqing Li, Lijing Wang and Jinliang Wu</i>	
Radar Velocity-measuring System Design and Computation Algorithm Based on ARM Processor.....	5352
<i>Yi Zeng, Jianmin Xu and Deng Peng</i>	
Incremental Phase Measurement of Conoscopic Holography Measurement System.....	5358

*Shuyan Ren, Li Zhao, Jing Li and Li Yang*

Measurement of Magnetic Medium Density Using Phasor Method.....	5362
<i>Licun Qiu and Guangbin Xu</i>	
Simulation Study of Coils Sensor Preferences in Magnetic Induction Tomography.....	5367
<i>Yi Lv, Xu Wang and Jingjing Jin</i>	
SOPC Technology Applied on Automatic Mechanical Transmission Control Unit Design.....	5371
<i>Sheng-bo Qi, Cheng-rui Zhang, Zhen-jun Qi and Qi-sheng Jiang</i>	
Boxed Milk Quality Fast Detection Instrument Parameters Identification Based on Wavelet Transform Method.....	5376
<i>Xin Wang, Yiqun Wang and Xianjiang Shi</i>	
Design and Decoding of Dot-distribution Coded Targets.....	5381
<i>Qiqiang Feng, Zongchun Li and Guangyun Li</i>	
Study on Method of Improvement About Annubar Flowmeter Base on Numerical Simulation.....	5385
<i>Kang Yang, Dailiang Xie, Shan Tao, Zhongdi Su, Hongjun Zhang and Weiguo Zhao</i>	
Application of Hopfield Network Integrating with SA Operator in Fitting of Micro-drill's Main Lips.....	5390
<i>Dongyuan Ge, Xifan Yao and Wenjiang Xiang</i>	
Research on the Algorithm of Visual Particles Inspection Based on Machine Vision.....	5395
<i>Bin Guo, Dailiang Xie and Jia Cheng</i>	
The Research on Digit Recognition Algorithm for Automatic Meter Reading System.....	5399
<i>Zongjian Zhang, Guanghua Chen, Jianwei Li, Yinglin Ma and Na Ju</i>	
Design and Implementation of MVB Protocol Analyzer.....	5404
<i>Quanli Liu, Junjian Guo and Wei Wang</i>	
Design and Implementation of Train-Borne Announcement System Controller.....	5409
<i>Quanli Liu, Fangfang Yuan and Wei Wang</i>	
Realization of the Ground Resistance Detector Based on Different Frequency Signals in DC System.....	5414
<i>Liwei Li, Shuzhe Bao and Jianfeng Zheng</i>	
Research on Power Source of Electromagnetically Induced Acoustic Emission Technique Based on DSP.....	5418
<i>Suzhen Liu, Hongwei Wang, Chuang Zhang, Liang Jin and Qingxin Yang</i>	

Experimental Study and Computational Simulation on A New Kind of Differential Pressure Flow-Sensor.....	5422
<i>Guo-wei Liang, Ping-ping Shen and Yun-yan Ge</i>	
Development of Thermal Gas Mass Flowmeter.....	5426
<i>Pingping Shen, Guowei Liang, Weiguo Zhao and Songying Yang</i>	
Research on the Online Monitor of BOD Based on Process Neural Network.....	5430
<i>Jiping Xu, Zaiwen Liu and Xiaoyi Wang</i>	
Rapid Measurement for Moisture Content of Bio Oil Based on Near Infrared Spectroscopy.....	5434
<i>Yan Yao, Wenjun Li, Dailiang Xie, Jianqiang Zhang and Wenhao Yang</i>	
Design of the Pesticide Residues Detection Instrument Based on RBFNN.....	5438
<i>Zhiqiang Wang, Ping Chen and Zhi Zhou</i>	
Embedded Password Input System for Receiving the Telecommand of the Mobile and Its Preliminary Implementation.....	5443
<i>Hongkang Yan, Shan Wu, Shihai Xiang and Xinzhuo Zhao</i>	
A New Design of Battery Charger Supplying Step-constant Current Employing Complementary Switches Controlled by Integration-Feedback Circuit.....	5449
<i>Xiao-hong Wang, Yong-qing Wang, Li-xin Liang and Zhen-jiang Si</i>	
Research on Ultrasonic Phased Array System for Automatic Defect Detection of Pipeline Girth Welds.....	5454
<i>Xianglin Zhan, Jian Li and Shijiu Jin</i>	
Derivation of Diffusion Coefficient of N <sub>2</sub> Gas in Rubber Based on Measurement Using Laser Heterodyne Interferometry.....	5460
<i>Yaxiong Gu and Seiichi Washio</i>	
An Approach for Close-Form Solution of Multilateration Equations.....	5464
<i>Xinxin Pei, Zhigang Huang, Jun Zhang, Yanbo Zhu and Wei Liu</i>	
UML-Based Modeling of Expressway Monitoring System.....	5469
<i>Tao Zhang, Huanbing Gao and Jingyu Li</i>	
Kiln Temperature Wireless Data Acquisition System Based on nRF905.....	5473
<i>Guoqiang Zhang, Wei Wang, Yu Zhang and Peng Wang</i>	
Design and Application of Cement Fluidized Pneumatic Conveying.....	5479
<i>Xiaoliang Fan and Haiming Zheng</i>	
Simulation and Design of Ultrasonic Flow Sensor.....	5484



*Weiguo Zhao, Pingping Shen, Songying Yang, Guowei Liang, Kangwei Lin and Wenjun Li*

<b>A Novel Adaptive Interference Canceller Based on Empirical Mode Decomposition.....</b> <i>Sheng Liu and Lanyong Zhang</i>	<b>.....5488</b>
<b>Design and Application of Miner Lamp Charging Management Circuit.....</b> <i>Guoqiang Zhang, Wei Wang and Faliang Chang</i>	<b>.....5494</b>
<b>Research on PZT Bimorph Microgripper System.....</b> <i>Chang Liu, Xinhan Huang and Min Wang</i>	<b>.....5498</b>
<b>Research of High Performance AC Servo Feed System for NC Machine Tool.....</b> <i>Tao Zhao, Mulan Wang, Chao Pan and Youbin Wang</i>	<b>.....5503</b>
<b>New Type of Piezoelectric Pump with Built-in Self Test.....</b> <i>Zunqiang Fan, Jingshi Dong, Zhigang Yang and Wei Zheng</i>	<b>.....5508</b>
<b>A Framework for a PC-based Virtual Prototype of an Integrated Simulation Platform.....</b> <i>Dong Wang, Weiqiang Zhang, Shoutong Qin and Yuchao Cao</i>	<b>.....5512</b>
<b>The Analysis and Virtual Simulation on the Electro-hydraulic Control System for an Electro-hydraulic Control Axis-fixed Transmission.....</b> <i>Dong Wang, Weiqiang Zhang, Dalei Li and Yong Zhang</i>	<b>.....5517</b>
<b>High-Speed and Large-Range Scanning Control of a Piezoelectric Stack Actuated Platform.....</b> <i>Li Cheng, Cheng-jin Zhang and Guilin Zhang</i>	<b>.....5523</b>
<b>An Automatic Vacuum Microgripper.....</b> <i>Xinhan Huang, Chang Liu and Min Wang</i>	<b>.....5528</b>
<b>Analyzing Way For Elastic Body in MBS Based on Superelement Method.....</b> <i>Zhichun Sun, Zhili Zhou and Yan Li</i>	<b>.....5533</b>
<b>Research on A Logging Harvester and Kinematics Analysis of Its Manipulator.....</b> <i>Xiuli Guo, Huaimin Lu and Zhiqiang Zhao</i>	<b>.....5538</b>
<b>Model Order Hypothetical Verification of Discrete Preisach Plane: Theory and Atomic Force Microscope Experiment Results.....</b> <i>Lei Miao, Wenlin Zhang, Lili Pei, Zemin Jiang, Yingkui Du and Shujia Qin</i>	<b>.....5542</b>
<b>Fault Diagnosis and Adaptive Reconfiguration Control for Actuator Loop in Aeronautic Propulsion system.....</b> <i>Kailong Cai, Wuwen Yao and Ping Zou</i>	<b>.....5546</b>

Study of AR Model Based on EMD in Flow Regime Identification of Gas-Liquid Two-Phase Flow.....	5552
<i>Hongzhen Bai, Yongmei Huang, Erpeng Wang, Bin Sun and Fei Qian</i>	
Modeling and Simulation of the Strip Tension of the Pay-off Reel.....	5557
<i>Rui Bai, Bin Yuan and Chunxia Wang</i>	
Set Membership Identification Using SLLE and NMC.....	5562
<i>Wei Chai, Xianfang Sun and Junfei Qiao</i>	
Modeling for Piezoelectric Smart Materials Based on Intelligent Method.....	5568
<i>Dingyu Xue, Zhen Chen, Lina Hao, Xinhe Xu and Yanmei Liu</i>	
Modeling and Simulation of Steam Turbine Based on Multi-Modules High Temperature Gas-Cooled Reactor.....	5572
<i>Zhengxi Chen, Yuwen Li, Yuan Chang and Chunwen Li</i>	
Dynamics Analysis and Simulation for Manipulator with Five Degree of Freedom.....	5576
<i>Chengjun Ding, Xinjing Jiao, Ping Duan and Bingqing Liu</i>	
Lateral Collision Risk Analysis in Air Traffic.....	5582
<i>Rongling Lang and Dongbin Li</i>	
Robust Diagnosis of Incipient Faults Based on Sliding Mode Observer.....	5587
<i>Jing He and Changfan Zhang</i>	
An Approach of Modeling on Dynamic Performance Evaluation for Offroad Vehicle.....	5592
<i>Junshu Han, Zhenhai Gao, Shulin Tan and Xiangdong Cui</i>	
The Simulation of Dynamic Gateway Strategy for Connection of Ad Hoc Network with Internet.....	5598
<i>Ying Dong, Yong Wang, Licui Zhang, Dawei Wang and Yongjian Yang</i>	
Combined Method for Traffic Incident Detection Based on Wavelet Analysis And Catastrophic Theory.....	5604
<i>Jinqiao Feng, Liping Shen, Lidong Zhang and Wei Liu</i>	
Simulation for Hybrid System Model of Simulated Moving Bed Process.....	5610
<i>Ling Li, Decheng Yuan and Yuanwei Jing</i>	
Information Fusion Diagnosis Research Based on Fiber CAN Communication in Vehicle.....	5615
<i>Weirong Jiang, Haibo Huang and Tao Zuo</i>	
Fault Detection for Chemical Process Based on Improved MSPCA.....	5620
<i>Luyue Xia, Haitian Pan, Yijun Cai, Xiaofang Sun and Li Yu</i>	

Neural Network Based Combining Prediction Model and Its Application in Ship Motion Prediction.....	5624
<i>Xiuyan Peng, Zhonghui Hu and Tengfei Li</i>	
A Method of Fault Diagnosis Based on PCA and Bayes Classification.....	5628
<i>Xiangrong Shi, Jun Liang, Lubin Ye and Bin Hu</i>	
A LTSA and Artificial Immune Based Early Fault Detection for Reciprocating Compressor.....	5632
<i>Gang Li, Jian Zhuang, Hongning Hou and Dehong Yu</i>	
Frequency Identification of Fractional Systems Based on Gain and Phase Data.....	5636
<i>Jun Lin and Shoutao Li</i>	
A Modeling Method of Complex Multi-medium Interacted Process System based on Polychromatic Sets.....	5642
<i>Xinlin Huang, Jianmin Gao, Fumin Chen and Yanqing Lv</i>	
On Parameter Identifiability of Linear Multivariable Systems with Communication Access Constraints.....	5647
<i>Lijuan Wang and Hui Zhang</i>	
Modeling and Optimized Controlling of Fermentation Process Based on QPSO and LSSVM.....	5653
<i>Ke-zhong Lu, Hai-bo Li and Ru-chuan Wang</i>	
Eight Lumps Kinetic Model for Residual Oil Catalytic Cracking.....	5658
<i>Wei Li, Hongye Su, Ouguan Xu and Jian Chu</i>	
Identification with ARMA Model Application to Modeling of Track Geometry Irregularity.....	5666
<i>Ying Li, Weidong Wang, Shibin Wei and Shuai Yuan</i>	
Robust Identification of Fuzzy Model on $H^\infty$ Error Estimation.....	5670
<i>Hongwei Wang, Jia Wang and Hong Gu</i>	
Orthogonal Optimized-choice Algorithm for Non-linear Systems Identification Based on Fuzzy Model.....	5676
<i>Jia Wang, Hongwei Wang and Hong Gu</i>	
Mathematics Model of the AMT Clutch Control System in Farm Tractor.....	5682
<i>Zhichun Sun, Yunye Xie, Yongjun Li and Guangwei Cheng</i>	
Dynamic Modeling and Abnormal Simulation of Rectifying Tower.....	5686
<i>Wende Tian, Suli Sun, Chunli Wang and Chuankun Li</i>	

Study of Abnormal Events Relevance in Process Industry Based on Sequences Pattern Mining.....	5692
<i>Yanqing Lv, Jianmin Gao, Zhiyong Gao and Yingsheng Ji</i>	
Method and Research on Chinese Predicate Recognition Based on Feature.....	5698
<i>Chengmin Wang and Jun Peng</i>	
Modeling and Fault Diagnosis for Coupled-tank Based on Rough Set Theory.....	5702
<i>Yun Gao</i>	
Design of Intelligent Fault Diagnosis System Based on Naval Vessel's Cooling System of Diesel Engine.....	5708
<i>Xinglong Zhou, Feng Gao and Jingbo Zhao</i>	
Nonlinear Dynamic Process Monitoring Based on Lifting Wavelets and Dynamic Kernel PCA.....	5712
<i>Qing Yang, Feng Tian and Dazhi Wang</i>	
The Improvement and Application of Acoustic Emission Inspection Algorithm for Metal Vessel.....	5717
<i>Ping Chen, Zhiqiang Wang, Qiao Wang and Zhi Zhou</i>	
Robust Sensor Fault Diagnosis Based on Right Eigenvector Assignment.....	5722
<i>Ju-fen Wu, Jin Zhao, Zhong-yu Shen and Li-ming Di</i>	
Fault Detection for LTI Systems Based on Non-fragile $H^\infty$ Filter.....	5727
<i>Moshu Qian, Bin Jiang and Dongsheng Du</i>	
Convergence of Self-tuning Riccati Equation for Systems with Unknown Parameters and Noise Variances.....	5732
<i>Gui-li Tao and Zi-li Deng</i>	
Research and Implementation of A multi-Fault Diagnosis Method Based on Case-based Reasoning.....	5737
<i>Lu Yang, Zhihua Gan and Xiuli Chai</i>	
Identification for the GaN Amplifier in OFDM Communication System*.....	5742
<i>Yan Wang, Ying Li, Jiakai Wang and Yuanming Ding</i>	
Neural Networks Preisach Model and Inverse Compensation for Hysteresis of Piezoceramic Actuator.....	5746
<i>Jie Geng, Xiangdong Liu, Xiaozhong Liao and Zhilin Lai</i>	
Research on the CPN Modeling Strategy for the Ship-board C4ISR System.....	5753
<i>Ming-hu Zhang, Hui-chuan Wang, Shijun Lv, De-hu Wang, Jian Song and Yi Huang</i>	

Subspace Identification of Countercurrent Rare Earth Extraction Process Based on Nonlinear State-space Models.....	.....5757
<i>Lusheng Zhong, Xiaoping Fan and Hui Yang</i>	
Oscillation Criteria of Second-Order Nonlinear Delay Dynamic Equations on Time Scales.....	.....5762
<i>Zhenlai Han, Shurong Sun, Chenghui Zhang and Tongxing Li</i>	
Nonlinear Hammerstein Model Identification of SOFC using Improved GEO Algorithm.....	.....5767
<i>Haibo Huo, Yanxiang Wu, Weihong Wang, Xinghong Kuang, Shihong Gan and Yuqing Liu</i>	
Dynamic Modeling of Five-bar Manipulator With Structurally Flexible Linkages.....	.....5774
<i>Hong Wang, Yanwen Xing, Yanjie Li and Zexiang Li</i>	
Study on the Stateflow-Based Dynamically Simulating Model of Fuzzy Reasoning Petri Nets.....	.....5780
<i>Shiwang Hou</i>	
Fault Diagnostics of Blast Furnace Based on NN-DPSO-SVM.....	.....5786
<i>Limei Liu, Anna Wang, Mo Sha and Zhe Wang</i>	
Research on The Application Analysis Technology for Cooperative Fault Diagnosis.....	.....5790
<i>Wei Li</i>	
Multivariable Nonlinear Model of Ultrasonic Motor Based on Hammerstein Model and Uniform Design.....	.....5794
<i>Jiantao Zhang, Tiemin Zhang, Zhiyang Xie and Wei Wu</i>	
Neural Network Parameter Optimization and Fault Diagnosis Based on Orthogonal Experiments.....	.....5800
<i>Zigui Li and Bijuan Yan</i>	
Gear Fault Diagnosis of Wind Turbine Based on Discrete Wavelet Transform.....	.....5804
<i>Yanping Guo, Wenjun Yan and Zhejing Bao</i>	
Sliding Observer Approach for Sensorless Operation of PMSM Drive.....	.....5809
<i>Niaona Zhang, Yibo Guo and Dejiang Zhang</i>	
Simulation of System Identification and Decoupling Control of Rotary Lime Kiln System.....	.....5814
<i>Xian-xi Luo, Ming-zhe Yuan and Hong Wang</i>	
Multi-Model-Based Flight Control System Reconfiguration Control in the Presence of Input Constraints.....	.....5819
<i>Yuying Guo, Youmin Zhang and Bin Jiang</i>	

<b>Dynamic Analysis of a Parallel Kinematic Planer.....</b>	<b>.....5825</b>
<i>Hongjun Liu, Shuai Li and Yingzhi Wei</i>	
<b>A UKF Algorithm Based on The Singular Value Decomposition of State Covariance.....</b>	<b>.....5830</b>
<i>Yulong Ma, Xingang Zhao, Zhiqian Wang, Jianda Han and Yuqing He</i>	
<b>The Multiple Models Predictive Control of Component Content for the Rare Earth Extraction Procession.....</b>	<b>.....5836</b>
<i>Hui Yang, Shasha Meng, Xin Wang, Baohua Sun and Lusheng Zhong</i>	
<b>On Line Estimation of Color Values (B*) In Pet Process Using Gaussian Process Regression.....</b>	<b>.....5842</b>
<i>Na Luo and Feng Qian</i>	
<b>Analysis of Control Characteristics of Clearance Control Magnetic Dynamic Absorber.....</b>	<b>.....5846</b>
<i>Fangzhen Song, Hui Liu, Bo Song, Haiyan Shao and Huimin Feng</i>	
<b>Fuzzy Modeling of Thermal Process Based on Chaos Genetic Algorithm.....</b>	<b>.....5851</b>
<i>Shuangxin Wang, Zhiqin Wang and Zhaoxia Li</i>	
<b>Design of Aircraft Cable Intelligent Fault Diagnosis and Location System Based on Time Domain Reflection.....</b>	<b>.....5856</b>
<i>Xudong Shi, Jianzhong Zheng, Tao Jing and Liwen Wang</i>	
<b>Application for Fault Diagnosis of Loopers Based on Evolutionary KPCA-LSSVM.....</b>	<b>.....5861</b>
<i>Huaitao Shi and Jianchang Liu</i>	
<b>Early Warning Technology for Cracking Severity Based on Improved Cultural Differential Algorithm.....</b>	<b>.....5866</b>
<i>Yunxia Pu and Mandan Liu</i>	
<b>Modeling of Wastewater Treatment Process Using Recurrent Neural Network.....</b>	<b>.....5872</b>
<i>Qili Chen, Wei Chai and Junfei Qiao</i>	
<b>Fault Feature Extraction of Rotating Machinery Based on Wavelet Transform and Self-organizing Map Network.....</b>	<b>.....5877</b>
<i>Maofa Gong, Xiaoming Zhang, Qingxue Liu, Zidong Zhao and Xiaoli Zhang</i>	
<b>Soft Sensor for Polypropylene Melt Index Based on Improved Orthogonal Least Squares.....</b>	<b>.....5881</b>
<i>Huage Tian, Xuemin Tian and Xiaogang Deng</i>	
<b>An Adaptive Particle Filter Based on Posterior Distribution.....</b>	<b>.....5886</b>
<i>Ping Tan and Zixing Cai</i>	

Short-Time Wind Speed Prediction for Wind Farm Based on Improved Neural Network..... <i>Xiaojuan Han, Xiyun Yang and Juncheng Liu</i>	.....5891
A New Polynomial Division Algorithm and Its Application in Control Performance Assessment..... <i>Baolin Tian, Maying Yang and Haibo Wang</i>	.....5895
T-S Fuzzy Identification for Main Steam Temperature System Using Improved Particle Swarm Optimization..... <i>Ming Sun, Xuehou Wang and Pu Han</i>	.....5900
Analysis of Transformer Winding Vibration Based on Modified Empirical Mode Decomposition..... <i>Weihua Xiong, Junfeng Li and Haipeng Pan</i>	.....5906
Kinematics Model Of Unmanned Driving Vehicle..... <i>Xiaoping Ren and Zixing Cai</i>	.....5910
A New Neural Network Soft Sensing Method Based on the Multi-resolution Data Fusion..... <i>Baochang Xu, Dingyuan Zhang and Xionglin Luo</i>	.....5915
Improvement of Background Value and Its Application in Non-equidistance GM (1, 1) Modeling..... <i>Wei Xiong, Aiping Yang and Wenzhan Dai</i>	.....5919
GM (1,1) Model Based on Arccot(x) Transformation and Its Application..... <i>Wei Xiong, Aiping Yang and Wenzhan Dai</i>	.....5924
Hybrid Model to Evaluate the Aircraft Landing Environment..... <i>Huaxin Wu, Xiubin Zhao and Chuanjin Dai</i>	.....5929
Performance Analysis of Robust Fault Estimation for a Class of Nonlinear Systems..... <i>Lingya Meng and Bin Jiang</i>	.....5933
Application of Statistical Parameter Identification in Battery Management System..... <i>Jinlong Zhang and Chaoying Xia</i>	.....5938
Short-Term Forecasting of Wind Turbine Power Generation Based on Genetic Neural Network..... <i>Weidong Xin, Yibing Liu and Xingpei Li</i>	.....5943
Characteristics of Variable Parameters in Rotor System with Rub-Impact Fault..... <i>Yong Yang, Shuai Zhang, Qingkai Han and Yanhuai Qu</i>	.....5947

<b>Cutting Tool Wear Identification Based on Wavelet Package and SVM.....</b>	<b>.....5953</b>
<i>Tao Xu and Tao Wang</i>	
<b>Consensus of Multi-agent Systems Based on Controllability under Leader-follower Topology.....</b>	<b>.....5958</b>
<i>Fang Yu, Jingmei Zhang and Changyin Sun</i>	
<b>Agent-oriented Architecture for Intelligent Service Robot.....</b>	<b>.....5964</b>
<i>Wei Xie, Jiachen Ma, Mingli Yang and Kui Luo</i>	
<b>Wireless Sensor Networks Design for Multi-Agent Systems.....</b>	<b>.....5968</b>
<i>Hailong Liu, Guiqing Zhang, Bin Shen and Lin Zhang</i>	
<b>Research of Algorithms for Aircraft Ground Deicing Operation Scheduling Model.....</b>	<b>.....5973</b>
<i>Zhi-wei Xing and Yi Li</i>	
<b>Multi-Agent Based Combat Simulation and Effectiveness Evaluation of Long-distance Firepower of Tank.....</b>	<b>.....5978</b>
<i>Hongbing Ye, Chunliang Chen and Shouhua Chen</i>	
<b>Coordination Based on Multi-Agent and Its Application of Urban Intersection Traffic Coordination Control.....</b>	<b>.....5982</b>
<i>Xinhai Xia and Lunhui Xu</i>	
<b>A Semi-Supervised Weighted Clustering Framework Facing to Hybrid Attributes Data Streams.....</b>	<b>.....5988</b>
<i>Xinquan Chen</i>	
<b>An Affinity Propagation Algorithm Embedded in Optimizable Dissimilarity Measure.....</b>	<b>.....5994</b>
<i>Xinquan Chen</i>	
<b>Rapid Pre-Integrated Perspective Volume Rendering Algorithm of Medical Data Sets.....</b>	<b>.....5999</b>
<i>Bin Li, Lifanfang Tian, Shanxing Ou and Lifei Wang</i>	
<b>Study On Monitoring Of Smoke Ringelmann Black Degree Bassed DSP And ANN.....</b>	<b>.....6004</b>
<i>Xinzong Bao, Shuxiang Ye, Guangying Ge and Cunwei Tian</i>	
<b>A Novel Steganography Algorithm Based on Curvelet Transform against JPEG Attacks.....</b>	<b>.....6009</b>
<i>Yuqiang Cao, Weiguo Gong, Sen Bai and Jianfu Li</i>	
<b>Fast and Precise Detection of Straight Line with Improved Hough Transform.....</b>	<b>.....6014</b>
<i>Qian Cao, Ku Wang and Han Li</i>	
<b>Face Detection Method Based on Skin Color and Facial Features.....</b>	<b>.....6018</b>
<i>Youlian Zhu, Lifang Zhai and Chen Wei</i>	



<b>Histogram Equalization Algorithm for Variable Gray Level Mapping.....</b>	<b>.....6022</b>
<i>Youlian Zhu and Cheng Huang</i>	
<b>Measurement of Plant Height Based on Stereoscopic Vision Under the Condition of A Single Camera.....</b>	<b>.....6026</b>
<i>Han Li, Ku Wang, Qian Cao and Haoyi Bian</i>	
<b>Anti-occlusion Tracking Algorithm Based on LSSVM Prediction and Kalman-meanshift.....</b>	<b>.....6031</b>
<i>Huixuan Fu, Sheng Liu and Feng Sun</i>	
<b>Research on the Automatic Visual Inspection Model Based on Extenics.....</b>	<b>.....6037</b>
<i>Fenghua Ding, Mingxing Lin, De Wu and Dawei Li</i>	
<b>Research on Strip Surface Defect Classifier Used The RBF Neural Network Based on PCA.....</b>	<b>.....6042</b>
<i>Yi Gao and Xiaoming Fang</i>	
<b>Research on Planet Rover Robot Arm Vision Localization.....</b>	<b>.....6048</b>
<i>Hongwei Gao, Yang Yu and Bin Li</i>	
<b>Research of an Improved Dense Matching Algorithm Based on Graph Cuts.....</b>	<b>.....6053</b>
<i>Hongwei Gao, Liang Chen, Xiaoyang Liu and Yang Yu</i>	
<b>Driver Fatigue Detection Based on Mouth Information.....</b>	<b>.....6058</b>
<i>Lingling Li, Yangzhou Chen and Le Xin</i>	
<b>A New Hierarchical Cluster Validity Index Based on IB Method.....</b>	<b>.....6063</b>
<i>Lingling Niu, Zhengzheng Lou and Yangdong Ye</i>	
<b>Segmentation of Brain MR Images Based on an Effective Fuzzy Clustering Algorithm.....</b>	<b>.....6069</b>
<i>Yong Yang</i>	
<b>Algorithm Research on detection Region Tracking of Bottle Mouth Image in Intelligent Empty Bottle Inspection System.....</b>	<b>.....6073</b>
<i>Sile Ma, Bin Huang, Yanli Wu, Junmei Guo and Jinfeng Yang</i>	
<b>Flotation Froth Images Velocity Feature Extraction and Analysis Based on Fourier-Mellin Transform and Gray-template Matching.....</b>	<b>.....6078</b>
<i>Xuemin Mu, Jinping Liu, Zhaohui Tang, Weihua Gui and Chunhua Yang</i>	
<b>A SIFT-kalman Information Fusion Tracking Algorithm Based on PCA.....</b>	<b>.....6084</b>
<i>Kai Zhou, Ruixia Fan and Weixing Li</i>	
<b>A IHS-WT Remote Sensing Image Fusion Method Based on Dynamic Weighting of Regional Multi-features.....</b>	<b>.....6089</b>
<i>Chengyun Liu, Zhenxue Chen, Faliang Chang, Jianguang Xu and Bingkun Yin</i>	

<b>Feature Extraction of Label Character Based on Projection Transformation.....</b>	<b>.....6094</b>
<i>Guoping Li, Huaguan Liu and Changsheng Ai</i>	
<b>Application of the Improved PrefixSpan Algorithm in Intrusion Detection.....</b>	<b>.....6099</b>
<i>Qingsen Xie and Tianqi Yang</i>	
<b>Hair-color Model and Adaptive Contour Templates Based Head Detection.....</b>	<b>.....6104</b>
<i>Min Zhao, Dihua Sun and Wanmei Fan</i>	
<b>An Improved SIFT Feature Matching Algorithm.....</b>	<b>.....6109</b>
<i>Yuning Hua, Jing Lin and Chao Lin</i>	
<b>Kernel Based Multiple Targets Tracking.....</b>	<b>.....6114</b>
<i>Yongzhong Wang, Quan Pan and Yan Liang</i>	
<b>A New Algorithm for Moving Objects Detection Based on Background and Consecutive Frames Subtraction.....</b>	<b>.....6121</b>
<i>Weihua Xiong, Junbin Guan and Haipeng Pan</i>	
<b>Map Building Based on Line Feature Matching.....</b>	<b>.....6125</b>
<i>Leimin Li, Ming Han, Yuqing Huang and Li Xu</i>	
<b>Classification method of Power Quality Disturbances Based on RVM.....</b>	<b>.....6130</b>
<i>Yue Shen, Guohai Liu and Hui Liu</i>	
<b>Classification of Power Quality Disturbances Based on Random Matrix Transform and Sparse Representation.....</b>	<b>.....6136</b>
<i>Yue Shen, Guohai Liu and Hui Liu</i>	
<b>Recognition for Multiple Robots Linear Formation.....</b>	<b>.....6142</b>
<i>Ying Zhang and Xuebo Chen</i>	
<b>Real-Time Page Checking Algorithm Based on Constant Scale SIFT.....</b>	<b>.....6147</b>
<i>Huang Wei, Yunkuan Wang, Minxiao Ding, Bin Li and Shaohong Wu</i>	
<b>Research on Supervised Classification of Fully Polarimetric SAR Image Using BP Neural Network Trained by PSO.....</b>	<b>.....6152</b>
<i>Jie Yu, Yan Li, Zhongshan Zhang and Jingchao Jiang</i>	
<b>An Attitude Estimation Method for MAV Based on the Detection of Vanishing Point.....</b>	<b>.....6158</b>
<i>Weijie Xu, Ping Li and Bo Han</i>	
<b>The Nonmetric Estimation of Center of Distortion Based on Concentric Circles Pattern.....</b>	<b>.....6163</b>
<i>Jun-fang Wu and Gui-xiong Liu</i>	

<b>Feature Enhancing Based Hole Filling Algorithm for 3D Mesh Model.....</b>	<b>.....6168</b>
<i>Rui Wang, Guoqing Liu, Lingxia Liu and Junshan Li</i>	
<b>An Adaptive Method for Chinese License Plate Location.....</b>	<b>.....6173</b>
<i>Shangqin Mao, Xinhua Huang and Min Wang</i>	
<b>Multi-Pattern Recognition of Facial Expression Based on Feature Perception.....</b>	<b>.....6178</b>
<i>Hongwei Chen, Yantao Tian, Chuan Wan and Shuaishi Liu</i>	
<b>Exploration and Improvement of Ostu Threshold Segmentation Algorithm.....</b>	<b>.....6183</b>
<i>Qidan Zhu, Liqiu Jing and Rongsheng Bi</i>	
<b>Research of Kernel Particle Filtering Target Tracking Algorithm Based on Multi-feature Fusion.....</b>	<b>.....6189</b>
<i>Hongxia Chu and Kejun Wang</i>	
<b>Vehicle License Plates Detection Algorithms Based on Visual Saliency Attention Mechanisms.....</b>	<b>.....6195</b>
<i>Zhenxue Chen, Chengyun Liu, Faliang Chang and Chunsheng Liu</i>	
<b>Multiple index improvement of K-means Clustering Based on Learning Rate Automatically Choice.....</b>	<b>.....6199</b>
<i>Bin Zeng, Chao Luo, Lixiao Jiang and Kai Zeng</i>	
<b>Research on LED Die Geometric Parameter Measurement Based on Shape Recognition and Sub-Pixel Detection.....</b>	<b>.....6204</b>
<i>Lingyun Xue, Jiale Fang, Wei Huang and Meng Li</i>	
<b>A Method of Spatial Calibration for Camera and Radar.....</b>	<b>.....6211</b>
<i>Dezhi Gao, Jianmin Duan, Xining Yang and Banggui Zheng</i>	
<b>A Novel Label Protuberant Characters Recognition Method Based on WPT and Improved SVD.....</b>	<b>.....6216</b>
<i>Wenke Han, Changhou Lu, Jianmei Li and Huaibo Song</i>	
<b>A Moving Object Tracking Method Based on Mean Shift Rectification.....</b>	<b>.....6221</b>
<i>Jun Niu and Yibin Li</i>	
<b>Object Kinematic Model: A novel approach of adaptive background mixture models for video segmentation.....</b>	<b>.....6225</b>
<i>Jin Yu, Xuan Zhou and Feng Qian</i>	
<b>Multi-camera Target Relay Tracking Strategy Based on Multi-subblock Feature Matching.....</b>	<b>.....6229</b>
<i>Faliang Chang, Guoqiang Zhang, Panpan Zhang and Jiangbao Li</i>	

Helicopter Blades Observation System with A Moving Camera.....	6234
<i>Mai Jiang, Chengtao Cai, Jun Lu and Qidan Zhu</i>	
A Novel Finger Vein Pattern Extraction Method Using Oriented Filtering Technology.....	6240
<i>Kejun Wang, Hui Ma, Oluwatoyin P Popoola and Xuefeng Li</i>	
Lane Segmentation in Traffic Monitoring Systems Based on Probability Map.....	6245
<i>Juncheng Liu and Miaoxin Wang</i>	
A Novel Approach for Multi-pose Face Detection by Using Skin Color and FloatBoost.....	6250
<i>Quanbin Li, Xiaoming Wang and Jingao Liu</i>	
Gear Fault Detection and Diagnosis Based on Bi-spectrum Analysis.....	6254
<i>Hui Li</i>	
Contrast Enhancement for Images of Raised Characters on Region of Interest.....	6258
<i>Jianmei Li, Changhou Lu, Fengqin Zhang and Wenke Han</i>	
Application of Support Vector Machine (SVM) on Serial Number Identification of RMB.....	6262
<i>Wenhong Li, Wenjuan Tian, Xiyao Cao and Zhen Gao</i>	
Gabor Feature Representation Method Based on Block Statistics and Its Application to Facial Expression Recognition.....	6267
<i>Shuaishi Liu, Yantao Tian and Chuan Wan</i>	
Face recognition based on improved PCA reconstruction.....	6272
<i>Zhenhai Wang and Xiaodong Li</i>	
Targets Detection under Nature Background Based on Feature Saliency.....	6277
<i>Chengyun Liu, Zhenxue Chen, Faliang Chang and Lei Wang</i>	
A New Method of Moving Shadow Elimination Combining Texture and Chrominance of Moving Foreground Region Based on Criterion.....	6282
<i>Zhigang Liu, Fei Zhao and Hua Yang</i>	
An Improved Fourth Order Nonlinear Diffusion Method For Image Denoising.....	6287
<i>Bibo Lu, Zhonghua Lin and Qiang Liu</i>	
Linear Relaxation for Global Pose Estimation.....	6291
<i>Wenjuan Ma, Shuhan Shen and Yuncai Liu</i>	
Estimation of Crowd Density Using Multi-Local Features and Regression.....	6295

*Yaobin Mao, Junyan Tong and Wenbo Xiang*

<b>Study on Single Camera Vision Measurement Using Coplanar Features.....</b>	<b>.....6301</b>
<i>Lijuan Qin</i>	
<b>Gabor Wavelets and General Discriminant Analysis for Ear Recognition.....</b>	<b>.....6305</b>
<i>Xiaoyun Wang and Weiqi Yuan</i>	
<b>Quantification of Posterior Fossa Structures in Fetal Brain MR Images.....</b>	<b>.....6309</b>
<i>Pim Moeskops, Shouliang Qi, Han Van Triest, Jun Zhang and Yan Kang</i>	
<b>View Invariant Hand Gesture Recognition using 3D Trajectory.....</b>	<b>.....6315</b>
<i>Ruifeng Yuan, Jun Cheng, Pengcheng Li, Guang Chen, Can Xie and Qi Xie</i>	
<b>An Improved Pedestrian Detection Algorithm Based on AdaBoost Cascading Structure.....</b>	<b>.....6321</b>
<i>Tang Yi, Weiming Liu and Jianwei Wu</i>	
<b>An Improved Feature Extraction Method for Individual Offline Handwritten Digit Recognition.....</b>	<b>.....6327</b>
<i>Qinghui Wang, Aiping Yang and Wenzhan Dai</i>	
<b>Research on Positioning Large Quantities of Cells.....</b>	<b>.....6331</b>
<i>Cheng Sun, Xin Zhao, Mingzhu Sun and Guizhang Lu</i>	
<b>Human Action Recognition Based on Projection and Mass Center Movement Features.....</b>	<b>.....6337</b>
<i>Xiaoyan Sun and Jingjing Wang</i>	
<b>Recognition of Corners of Planar Pattern Image.....</b>	<b>.....6342</b>
<i>Zhongshi Wang, Zhongge Wang and Yingbin Wu</i>	
<b>Fingerprint Image Enhancement Using a Fast Gabor Filter.....</b>	<b>.....6347</b>
<i>Jingjing Wang and Xiaoyan Sun</i>	
<b>Optimizing the Number of Decomposition Levels for Wavelet-Based Multifocus Image Fusion.....</b>	<b>.....6351</b>
<i>Yifeng Niu, Lincheng Shen, Lizhen Wu and Yanlong Bu</i>	
<b>Object Detection and Segmentation Based on Shape Learning and Dynamic Bayesian Network.....</b>	<b>.....6357</b>
<i>Qinkun Xiao, Xiangjun Liu, Song Gao and Haiyun Wang</i>	
<b>Object Detection Based on Contour Learning and Template Matching.....</b>	<b>.....6361</b>
<i>Qinkun Xiao, Xiaojuan Hu, Song Gao and Haiyun Wang</i>	
<b>Improved NMF Algorithm Based Color Face Recognition.....</b>	<b>.....6366</b>
<i>Xiaoming Bai and Chengzhang Wang</i>	

Structure-based Recognition of Handwritten Chemical Operators.....	.....6371
<i>Jufeng Yang, Kai Wang and Guangshun Shi</i>	
Automatic Facial Expression Recognition Using Local Binary Pattern.....	.....6375
<i>Wencheng Wang, Faliang Chang, Jianguo Zhao and Zhenxue Chen</i>	
Combination of Improved Katz and Mutual Information for Speech Recognition Based on Lattice.....	.....6379
<i>Lei Zhang, Dong Lu and Xuezhi Xiang</i>	
A Similarity Measure between General Type-2 Fuzzy Sets and Its Application in Clustering.....	.....6383
<i>Gao Zheng, Jian Xiao, Jing Wang and Zhenbo Wei</i>	
Omnidirectional Camera Calibration Based on an Approximate Factorization Method.....	.....6388
<i>Haijiang Zhu, Xuejing Wang and Chong Yi</i>	
Application Research on Condition Monitoring of Power-Shift Steering Transmission with Hypersphere Support Vector Machine.....	.....6394
<i>Yuan Zhu, Yingfeng Zhang, Bo Li and Biao Ma</i>	
A Robust Audio Digital Watermarking In Complex Cepstrum Domain Based on Chaos Theory Against STIRMARK.....	.....6398
<i>Yanling Zhao, Xiaoshi Zheng, Na Li, Lufang Liao and Chengzhong Yang</i>	
The Design of CAN and TCP/IP-based Robotic Multifunctional Nursing Bed.....	.....6402
<i>Huanbing Gao, Shouyin Lu and Li Wei</i>	
Line Object Extraction and Image Matching Based on an Intelligent Image Card.....	.....6408
<i>Han Xiao, Kui Yuan, Wenhao He and Wei Zou</i>	
Obstacles Avoidance of Artificial Potential Field Method with Memory Function in Complex Environment.....	.....6414
<i>Yuqing Huang, Hong Hu and Xingqiang Liu</i>	
Research on Obstacle Avoidance Control for Multi-Mobile Robots Formation in Complex Environment.....	.....6419
<i>Feng Zhang, Zhe Sun and Meiju Liu</i>	
The Kinematic Self-calibration Method and Simulation of One Palletizing Robot.....	.....6424
<i>Dunmin Lu, Chuanqing Zhang, Yuezhen Fan, Xiangdong Yang and Ken Chen</i>	
Control System Design of The Wheel-Paddle-Leg Integration Amphibious Robot.....	.....6428
<i>Wei Guo, Yuanlin Yu and Jiancheng Yu</i>	

<b>Trajectory Tracking Control of Mobile Robots Using the Cascaded System Theory.....</b>	<b>.....6433</b>
<i>Jian Gao, Weisheng Yan, Demin Xu, Mingyong Liu and Ningning Zhao</i>	
<b>Application of Wireless Communication Module Based on nRF905 in Battery Quick Change of Electric Vehicle.....</b>	<b>..... 6437</b>
<i>Jinrui Nan</i>	
<b>Adaptive Behavior Analysis of WMR Based on Chaotic Phase-space Reconstruction.....</b>	<b>.....6441</b>
<i>Caihong Li, Yibin Li, Yong Song, Fengying Wang and Yingli Song</i>	
<b>Research on the Structure Singular Value Robust Control of Underwater Vehicle.....</b>	<b>.....6446</b>
<i>Kaizhou Liu, Wei Guo, Xiaohui Wang and Xisheng Feng</i>	
<b>Study on Chaotic Prediction of Adaptive Behavior for Wheeled Mobile Robot.....</b>	<b>.....6451</b>
<i>Yibin Li, Caihong Li and Yong Song</i>	
<b>Research on Mobile Robot Behaviors Based on Chaotic Neural Network.....</b>	<b>.....6456</b>
<i>Yanchun Du, Yibin Li and Guiyue Wang</i>	
<b>The Obstacle Avoidance System for Mobile Robot Based on Binocular Stereo Vision.....</b>	<b>.....6461</b>
<i>Yongguo Zhao, Xianlun Hou, Lei Jia and Sile Ma</i>	
<b>Fault Tolerant Control on Omnidirectional Soccer Robot With Motor Failure.....</b>	<b>.....6466</b>
<i>Aolin Tang, Qixin Cao and Chuntao Leng</i>	
<b>Design of Digital Image Acquisition System Based on TMS320F2812 and AL422B.....</b>	<b>.....6470</b>
<i>Minfeng Zhang, Zhongyu Shen, Jin Zhao and Shichao Wu</i>	
<b>Vertical Modeling and Autonomous Landing of a Mini Unmanned Helicopter.....</b>	<b>.....6474</b>
<i>Wenda Sun, Ping Li, Yu Xu, Zhou Fang and Xin Hou</i>	
<b>A Hybrid Control Method for Elderly Companion Robot Based on Behavior-based Reaction and RNNPB Model.....</b>	<b>.....6480</b>
<i>Min Xu, Yong Tao and Hongxing Wei</i>	
<b>Manipulator Trajectory Planning Based on the Cubic Triangular Bezier Spline.....</b>	<b>.....6485</b>
<i>Yanjun Wang, Wenlong Xu and Nongliang Sun</i>	
<b>Hopping Control of a One-Legged Robot.....</b>	<b>.....6489</b>
<i>Qizhi Zhang, Yali Zhou and Qiuling Zhao</i>	
<b>Research and Realization of the Chinese Massage Robot Based On Three-Dimensional Model.....</b>	<b>.....6493</b>
<i>Tao Wang, Zhaotong Liu and Yanping Li</i>	
<b>Research and Realization of the Robot Massage Evaluation System Based</b>	

on Fuzzy Set Theory.....	6498
<i>Tao Wang, Taixue Bei and Yanping Li</i>	
The Research on Robot Path Planning with Multi-constrains.....	6502
<i>Xiao-qin Zhang and Yu-qing Huang</i>	
Visual Servo Control of Intelligent Wheelchair Mounted Robotic Arm.....	6506
<i>Zhiping Zhu, Aixue Ye, Feng Wen, Xiaoming Dong, Kui Yuan and Wei Zou</i>	
Adaptive Binocular Robotic Visual Tracking Algorithm Based on Mixture Kernel Support Vector Machine.....	6512
<i>Yanxi Yang, Yi Gao and Yi Deng</i>	
Stable Control Strategy of the Underactuated Biped Robot.....	6518
<i>Zhihuan Zhang</i>	
$H^\infty$ Robust Control of Self-Balancing Two-Wheeled Robot.....	6524
<i>Xiaogang Ruan and Jing Chen</i>	
Based On Force Sensing-Controlled Human-Machine Interaction System For Walking Assistant Robot.....	6528
<i>Fei Shi, Qixin Cao, Chuntao Leng and Hongbing Tan</i>	
Non-holonomic Path Planning of Space Robot Based on Newton Iteration.....	6534
<i>Gang Chen, Qingxuan Jia, Hanxu Sun and Xiaodong Zhang</i>	
Design of Path Planning Based Cellular Neural Network.....	6539
<i>Yan Cao, Xiaolan Zhou, Shuai Li, Feng Zhang, Xinwei Wu, Aomei Li and Lei Sun</i>	
Kinematic Modeling of A HWLV with Legged Mode.....	6545
<i>Xingguang Duan, Honghua Zhao and Ge Yang</i>	
Research on Active SLAM with Fusion of Monocular Vision and Laser Range Data.....	6550
<i>Fengchi Sun, Yuan Zhou, Chao Li and Yalou Huang</i>	
Navigation Strategy for Local Autonomous Obstacles-Overcoming Based on Magnetic Density Detection for Inspection Robot of Single Split High Voltage Transmission Lin	6555
<i>Gongping Wu, Tuo Zheng, Zhenglie Huang, Huan Liu and Cheng Li</i>	
Kinematics Analysis of Morphing Process in Multi-module Robot Systems.....	6562
<i>Yanqiong Fei and Yong Wang</i>	
Obstacle Detection and Recognition in Natural Terrain for Field Mobile Robot Navigation.....	6567
<i>Jiang Zhu, Yaonan Wang, Hongshan Yu, Haixia Xu and Yiqian Shi</i>	



Family Environmental Service Oriented Multiple object Tracking Based on Multi-cue Method.....	6573
<i>Jianqin Yin, Guohui Tian and Yinghua Xue</i>	
Switching-Time Computation for Time-optimal Trajectory Planning of Wheeled Mobile Robots.....	6578
<i>Zhenyu Han and Shurong Li</i>	
Architecture of Predictive Control for a Stewart Platform Manipulator.....	6584
<i>Fabian Lara, Joao Mauricio Rosario and Didier Dumur</i>	
Motion Control of A Passive Robot for Dancing with A Male Dancer.....	6590
<i>Zhao Liu, Chenglong Fu, Ken Chen, Yoshinori Koike, Yasuhisa Hirata and Kazuhiro Kosuge</i>	
Optimization Synthesis of Realizing Track of RRRPR Type Five-bar Mechanism Based on Genetic Algorithm.....	6596
<i>Jin-tang Yang, Jian-yi Kong and Gong-fa Li</i>	
A Case Study of Transverse Function Approach in Control of Wheeled Mobile Robots.....	6600
<i>Jingyu Lin and Ziguang Lu</i>	
Repetitive Control of Rehabilitation Robot with Multi-Channel Periodic Input Signal.....	6605
<i>Xiaoke Fang, Xing Li, Jianhui Wang and Liang Dong</i>	
Self-organizing Neural Sliding Mode Control for Multi-link Robots.....	6610
<i>Xiaojiang Mu and Qingliang Li</i>	
Introduction of a Unique Robotic Hand: SIA- I Hand.....	6614
<i>Qingyang Yu, Yuwang Liu, Bin Li and Weijia Zhou</i>	
Posture-Based Virtual Force Feedback Control for Teleoperated Manipulator System.....	6619
<i>Pu Shi, Jianning Hua and Yiwen Zhao</i>	
ISILON-An Intelligent System for Indoor Localization and Navigation Based on RFID and Ultrasonic Techniques.....	6625
The Research of Iterative Learning Control Method on Linear Voice Coil Motor and Application in Flip Chip.....	6631
<i>Haichen Qin, Z.p Yin, Jianzhou Quan and Bo Peng</i>	
Real-time Facial Expressions Recognition System for Service Robot Based-on ASM and SVMs.....	6637
<i>Ke Wang, Ruifeng Li and Lijun Zhao</i>	
The Task Allocation Model based on Reputation for the Heterogeneous	

<b>Multi-robot Collaboration System.....</b>	<b>.....6642</b>
<i>Zhiguo Shi, Junming Wei, Xujian Wei, Kun Tan and Zhiliang Wang</i>	
<b>A New Object Search and Recognition Method Based on Artificial Object Mark in Complex Indoor Environment.....</b>	<b>..... 6648</b>
<i>Yinghua Xue, Guohui Tian, Rongkuan Li and Haitao Jiang</i>	
<b>Kinematic Self-Identification of a Redundantly Actuated Parallel Manipulator using Differential Evolution.....</b>	<b>.....6654</b>
<i>Weiwei Shang, Shuang Cong and Yuan Ge</i>	
<b>Analysis of a New Parallel Robot.....</b>	<b>.....6660</b>
<i>Mengli Wu, Liwen Wang and Wei Zhang</i>	
<b>Development of A Guidance and Control System for An Underwater Plume Exploring AUV.....</b>	<b>.....6666</b>
<i>Yu Tian and Aiqun Zhang</i>	
<b>A Localization System for Mobile Robots Based Vision.....</b>	<b>.....6671</b>
<i>Lan Wang and Guowen Zhao</i>	
<b>A Hybrid Method For Robot Navigation Based on MR Code Landmark.....</b>	<b>.....6676</b>
<i>Xiaoming Dong, Kui Yuan, Zhiping Zhu and Feng Wen</i>	
<b>Multi-Robot Task Allocation and Scheduling based on Fish Swarm Algorithm.....</b>	<b>.....6681</b>
<i>Taixiong Zheng and Jiongqiu Li</i>	
<b>Discrete-Time Quasi-Sliding Mode Control of Underwater Vehicles.....</b>	<b>.....6686</b>
<i>Shaowei Zhang, Jiancheng Yu and Aiqun Zhang</i>	
<b>Design and Implementation of Motion Control for Teleoperated Mobile Manipulators.....</b>	<b>.....6691</b>
<i>Lei Dai and Zhijun Li</i>	
<b>Image-Based Grasp Synthesis Using Genetic Algorithm.....</b>	<b>.....6697</b>
<i>Ze Yu and Jason Gu</i>	
<b>Monocular Vision-based Path Identification of a Spherical Robot.....</b>	<b>.....6703</b>
<i>Qin Zhang, Qingxuan Jia and Hanxu Sun</i>	
<b>The Target Recognition of Mobile Robot Based on the Fuzzy Control of Multi-Sources Information.....</b>	<b>.....6708</b>
<i>Bingqin Liu, Xinjing Jiao, Ping Duan and Chengjun Ding</i>	
<b>The Design and Realization of A Image Processing System Based on DSP and USB.....</b>	<b>.....6714</b>
<i>Cungen Liu, Liyan Yuan and Yanping Li</i>	

High Resolution Radar Range Imaging Method Using Bandwidth Extrapolation.....	.....6719
<i>Lan Chen and Jie Chen</i>	
A Fast Eigenspace-based Beamforming Algorithm Based on Forward-Backward Smoothing.....	.....6724
<i>Shuyan Ni, Naiping Cheng and Zhengzhong Ni</i>	
The Research on the Stochastic Resonance Based of Feedback FitzHugh-Nagumo Neural Network.....	.....6729
<i>Ke Chen, Yingle Fan, Lishuo Geng and Yi Li</i>	
Experimental Study of Coupling Low-frequency Fiber-optic Vibration Sensor.....	.....6735
<i>Jian Xu and Bin Ma</i>	
Negative Weighted Repeated Pseudo-median Filter.....	.....6740
<i>Shaoqiang Liu, Lei Chen, Danlong Hong, Xiaoping Fan and Zhifang Liao</i>	
The Design of Digital Filter Based on Improved EMD.....	.....6744
<i>Pu Han, Lei Meng, Baohai Huang and Qindao Li</i>	
Research on Combined Denoising Based on Wavelet Packet Transform for EMAE Signal.....	.....6748
<i>Chuang Zhang, Suzhen Liu, Qingxin Yang and Liang Jin</i>	
Lifting Wavelet De-noising for Stealing Oil Signal of Pipeline.....	.....6753
<i>Ying-chun Li, Jie Zhang, Yan-jie Ming and Yan Hou</i>	
A Novel Data Fusion Method Based on Measurements Summation for Multisensor System.....	.....6757
<i>Quanbo Ge, Tingliang Xu and Xiaoliang Feng</i>	
Study of Coupling Single-mode Fiber-optic Sensor for Strain and Vibration Measuring.....	.....6762
<i>Bin Ma and Jian Xu</i>	
The Calculation and Analysis on Ground Wave Field Strength of MW & SW Brand in Mixed Path.....	.....6767
<i>Yang Liu, Wei Wang, Rong Zhao and Meng Gai</i>	
Scheduling Design of Automotive TTCAN Control System Based on Average Loading.....	.....6772
<i>Shuju Wang, Tianxia Zhang, Guosheng Zhang and Liquan Yao</i>	
Parameters Estimation of LFM Signal Based on Fusion of Signals with the Same Length and Known Frequency-difference.....	.....6776
<i>Wei Xiao, Yaqing Tu, Liangbing Liu, Yuwen Mao and Hua Xu</i>	
Multiple Adaptive Notch Filters Based A Time-varying Frequency	

Tracking Method for Coriolis Mass Flowmeter.....	6782
<i>Fen-hua Su, Ya-qing Tu, Hai-tao Zhang, Hua Xu and Ting-ao Shen</i>	
The Full Beer Bottle Detection of Beer Filling Production Line.....	6787
<i>Sile Ma, Haixiang Wang, Zengben Hao, Xiaojun Chen and Xueying Shen</i>	
MMLC Mobile Clustering Routing Scheme Based on LEACH in Wireless Sensor Network.....	6793
<i>Fen Nie and Zhengfang Fu</i>	
Design and Implementation of Industrial Wireless Network System Based on WIA-PA.....	6799
<i>Miao Yang, Wei Liang and Weijie Xu</i>	
Blind Source Separation Based on Improved Natural Gradient Algorithm.....	6804
<i>Ce Ji, Peng Yu and Yang Yu</i>	
Blind Detection of QAM with a Complex Discrete Hopfield Network.....	6808
<i>Yun Zhang and Zhi-yong Zhang</i>	
Analysis and Comparison of Wireless Smart Camera Network Platforms.....	6813
<i>Weijie Xu, Wei Liang and Miao Yang</i>	
A Two-Stage Hybrid Space-Time Adaptive Processing Approach.....	6820
<i>Xiaoqin Wen, Qiaoqiao Wang, Shue Bi and Linru You</i>	
Conjugate Gradient Implementation Method of Multistage Wiener Filter.....	6825
<i>Xiaoqin Wen, Qiaoqiao Wang, Linru You and Chongzhao Han</i>	
Dynamic non-Average-Slot MAC Layer Protocol for Wireless Sensor Networks.....	6830
<i>Jie Zhang, Bo Jing, Liming He and Yong Sun</i>	
Wireless Sensor Networks Prototype System for PHM.....	6836
<i>Jie Zhang, Bo Jing and Liming He</i>	
Design and Implementation of Low Cost Integrated Navigation System for Mini Autonomous Helicopter.....	6842
<i>Yu Xu, Qinyuan Ren, Wenda Sun and Ping Li</i>	
Application of Electronic Nose Technology in Detection of Combustible Gas.....	6848
<i>Zhiqiang Wang, Ping Chen and Xiaoqing Yang</i>	
Approaches to Non-linearity Compensation of Pressure Transducer Based on HGA-RBFNN.....	6853
<i>Zhiqiang Wang, Ping Chen and Mingbo Zhao</i>	
The Impact on Performance of Timeslot Allocation and its Optimization in Wireless Network.....	6858

*Jindong Zhao, Longchang Liu and Zhenjun Liang*

The Sequential Likelihood Ratio Test VSMM Algorithm for Maneuvering Target Tracking.....	6864
<i>Xiang-yu Huang and Dong-liang Peng</i>	
Study on Electro-optics Modulator in Brillouin-distribution Fiber Sensing System.....	6868
<i>Tianying Chang, Lei Jia, Qingmei Sui, Jing Wang and Hongliang Cui</i>	
Coding with Low Density Block Angular Generator Matrix.....	6873
<i>Bruno Jesus, Jose Vieira, Paulo Ferreira and Huiyuan Wang</i>	
Research on Calibration System Error of 6-Axis Force/Torque Sensor Integrated in Humanoid Robot Foot.....	6878
<i>Baoyuan Wu, Zhongcheng Wu and Fei Shen</i>	
Research and Design of Railway Clearance Measurement System Based on Non-Contact Sensors.....	6883
<i>Yu Liu, Hongmei Shi, Liqiang Zhu and Xining Xu</i>	
The Study on Measurement Characteristics of Fluidic Flowmeters Sensors with CFD.....	6887
<i>Dailiang Xie, Ning Cheng, Shan Tao, Ting Fang and Guowei Liang</i>	
Self-tuning Reduced Dimension Measurement Fusion Kalman Filter.....	6891
<i>Yuan Gao and Zili Deng</i>	
The Self-Tuning Distributed Information Fusion Wiener Filter for the ARMA Signals.....	6897
<i>Guili Tao, Wei Wang and Zili Deng</i>	
The Application of Chaotic Duffing Oscillators to Ballistocardiograph Signal Detection.....	6903
<i>Fangfang Jiang, Xu Wang, Jingjing Jin and Dan Yang</i>	
Self-tuning Information Fusion Kalman Filter for the ARMA Signal and Its Convergence.....	6907
<i>Jinfang Liu and Zili Deng</i>	
A Lattice Network Based Canonic Realization of IIR Digital Filters.....	6913
<i>Heping Gao, Gang Li, Chaogeng Huang and Liping Chang</i>	
Self-recovery Method Based on Auto-Associative Neural Network for Intelligent Sensors.....	6918
<i>Guojian Huang, Guixiong Liu, Gengxin Chen and Tiequn Chen</i>	
Complex Morlet Wavelet Amplitude and Phase Map Based Bearing Fault Diagnosis.....	6923

*Hui Li*

<b>Study of A Coupling Fiber-optic Sensor for Vibration Measurement.....</b>	<b>.....6927</b>
<i>Jian Xu and Bin Ma</i>	
<b>Self-Calibration Level Fusion Method Based on Distribution Diagrams and Grouping Estimation Algorithm.....</b>	<b>.....6932</b>
<i>Yuanze Liu, Jiawei Zhang and Mingbao Li</i>	
<b>Key Technique Analysis of Data Fusion with Infrared Sensor in Defense System.....</b>	<b>.....6938</b>
<i>Hui Chen, Xiaolin Feng and Chaorong Liu</i>	
<b>Microenvironment Information Acquisition and Processing in Farmland Water Potential Soft-sensing.....</b>	<b>.....6943</b>
<i>Lei Han, Shengli Lu, Liguang Tian, Ruiwu Chen and Zhihai Wang</i>	
<b>L-Shape Array-based 2-D DOA Estimation Using Parallel Factor Analysis.....</b>	<b>.....6949</b>
<i>Ding Liu and Junli Liang</i>	
<b>Research on Location and Speed Detection for High Speed Maglev Train Based on Long Stator.....</b>	<b>.....6953</b>
<i>Song Xue, Chunhui Dai and Zhiqiang Long</i>	
<b>Research on Optimization of Terahertz Emitter in Terahertz Communication System.....</b>	<b>.....6959</b>
<i>Mingliang Li and Cong Wang</i>	
<b>A Distributed Sensor Deployment Algorithm of Mobile Sensor Network.....</b>	<b>.....6963</b>
<i>Yong Zhang and Li Wang</i>	
<b>Distributed Infrared Biometric Sensing for Lightweight Human Identification Systems.....</b>	<b>.....6969</b>
<i>Tong Liu, Yaqi Chu, Jun Liu, Min Liu and Guoli Wang</i>	
<b>A Simulation Platform of Multi-sensor Multi-target Tracking System Based on STAGE.....</b>	<b>.....6975</b>
<i>Yiming Wang and Dongliang Peng</i>	
<b>A New Signal Processing Method of ZPRA Based on Geomagnetic Sensor.....</b>	<b>.....6979</b>
<i>Guoxing Shi, Shuxing Yang and Zhong Su</i>	
<b>The Design and Realization of High-precision Time Synchronization Protocol in Wireless Sensor Networks based on FTSP.....</b>	<b>.....6983</b>
<i>Fuqiang Wang, Peng Zeng and Haibin Yu</i>	
<b>Research of Aircraft Cable Fray Fault Detecting Method Based on Hilbert Huang Transformation.....</b>	<b>.....6988</b>

*Xudong Shi, Lu Zhang, Tao Jing and Liwen Wang*

<b>An Archimedes Curve-based Mobile Anchor Node Localization Algorithm in wireless sensor networks.....</b>	<b>6993</b>
<i>Hua Xu, Yaqing Tu, Wei Xiao, Yuwen Mao and Tingao Shen</i>	
<b>New Flaw Feature Extraction Method for Ultrasonic Phased Array Nondestructive Testing.....</b>	<b>6998</b>
<i>Jian Li, Xianglin Zhan and Shijiu Jin</i>	
<b>Stochastic Event Capture Using Mobile Sensors under Linear Case.....</b>	<b>7004</b>
<i>Qidan Zhu, Yebin Wu, Shanshan Yao, Jun Lu and Liqiu Jing</i>	
<b>An Interactive-Rapid and Energy-efficient Distributed Node Localization Scheme for Sensor Networks.....</b>	<b>7010</b>
<i>Liang Xue, Xinping Guan and Zhixin Liu</i>	
<b>A Novel Energy-Efficient Data Gathering Algorithm for Wireless Sensor Networks.....</b>	<b>7016</b>
<i>Jing Yang, Zetao Li, Yi Lin and Wei Zhao</i>	
<b>Modulation Coefficient Analysis in Optical Fiber Methane Gas Sensor Based on Wavelength Modulation Spectroscopy.....</b>	<b>7021</b>
<i>Jianian Cao, Keke Zhang, Rui Yang and Zhuo Wang</i>	
<b>A Coal Mine Personnel Global Positioning System Based on Wireless Sensor Networks.....</b>	<b>7026</b>
<i>Zhigao Liu, Chunwen Li, Qingqing Ding and Danchen Wu</i>	
<b>A Particle Filtering Method for Odor-Source Localization in Wireless Sensor Network with Mobile Robot.....</b>	<b>7032</b>
<i>Yong Zhang and Li Wang</i>	
<b>Research on A LMS Adaptive Filtering Algorithm for Acoustic Emission Signal Processing.....</b>	<b>7037</b>
<i>Lin Xu, Yumei Kang, Bing Shi, Dong Zheng and Liye Yu</i>	
<b>The Key Technologies of a Distributed Temperature Monitoring System Based on 1-Wire Bus.....</b>	<b>7041</b>
<i>Chengliang Zhang, Xianying Feng and Lei Li</i>	
<b>A Support Vector Machines for the Polymerization Rate of Vinyl Acetate.....</b>	<b>7046</b>
<i>Jiangping Huang, Zhigao Zhu and Huihui Tao</i>	
<b>Optimization of Large Scales Ocean Sampling for Minimization of the Kriging Variance.....</b>	<b>7050</b>
<i>Xinke Zhu, Jiancheng Yu and Xiaohui Wang</i>	

<b>A Dynamic Nonlinear Transform Arithmetic for Improving the Properties Chaos-based PRNG.....</b>	<b>.....7055</b>
<i>Ziqi Zhu and Hanping Hu</i>	
<b>Fault Detection for Networked Switched Systems with Random Communication Delays.....</b>	<b>.....7061</b>
<i>Fenghuang Cai, Wu Wang, Yanping Xu and Xiaofei Jiang</i>	
<b>Near Space Hypersonic Vehicle longitudinal motion Control Based on Markov Jump System Theory.....</b>	<b>.....7067</b>
<i>Shiguo Hu, Yangwang Fang, Bingsong Xiao, Youli Wu and Di Mou</i>	
<b>Set Finite-time Stability of A Class of Switched Systems.....</b>	<b>.....7073</b>
<i>Xiangze Lin, Haibo Du and Shihua Li</i>	
<b>Decentralized <math>H^\infty</math> State Feedback Control for A Class of Switched Linear Interconnected Systems.....</b>	<b>.....7079</b>
<i>Yanrong Song, Xingping Wang and Shudong Zhang</i>	
<b>Guaranteed Cost Control for A Class of Uncertain Switched Linear Systems.....</b>	<b>.....7085</b>
<i>Shudong Zhang, Xingping Wang and Liqiang Yao</i>	

Author Index