## 2014 26th Chinese Control and **Decision Conference**

(CCDC 2014)

Changsha, China 31 May – 2 June 2014

Pages 1-771



**IEEE Catalog Number: CFP1451D-POD ISBN**:

978-1-4799-3709-7

## Copyright © 2014 by the Institute of Electrical and Electronic Engineers, Inc All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

\*\*\*This publication is a representation of what appears in the IEEE Digital Libraries. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number: CFP1451D-POD ISBN 13: 978-1-4799-3709-7

#### **Additional Copies of This Publication Are Available From:**

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400 Fax: (845) 758-2633

Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com



### **Technical Programme**

Session	SatA01: Adaptiv	ve Control (I)
Date/Time	Saturday, 31 May 2014 / 13:10-15:10	
Venue	Room01	
Chair	Yan Li, Shandon	g Univ.
Co-Chair	Bi Zhang, Northe	eastern Univ.
13:10 - 13:30	SatA01-1	Adaptive Fault-Tolerant Control of Automotive Suspension with Actuator Saturation and L <sub>2</sub> -Disturbances 1 Wei Guan, Qian Li and Ling Guo
13:30 - 13:50	SatA01-2	An Identification Based Optimization of Fractional-Order Iterative Learning Control 7  Yan Li, Yang Zhao, Yang Quan Chen and Hyo-Sung Ahn
13:50 – 14:10	SatA01-3	Self-Adaptive PID Optimal Control of Wind Energy Conversion System 13 Wu Dinghui, Li Yiyang, Ji Zhi-Cheng, Shen Yanxia and Pan Tinglong
14:10 – 14:30	SatA01-4	Pitch Angle Control Based on Renforcement Learning 18 Qin Bin, Li Pengcheng, Wang Xin and Zhu Wanli
14:30 – 14:50	SatA01-5	Adaptive Dynamic Surface Controller Design of Variable-Speed Pump Controller System with Parametric Uncertainties 22  Li Xiao-Lin, Wang Xiang-Zhou and Wang Yu
14:50 – 15:10	SatA01-6	Adaptive Control for Hammerstein Systems with Dead-Zone Nonlinearity an Bounded Noise 28 Bi Zhang and Zhizhong Mao

C	Catalog B. Land Candral (f)
Session	SatA02: Robust Control (I)
Date/Time	Saturday, 31 May 2014 / 13:10-15:10
Venue	Room02
Chair	Lu Ming, Beijing Institute of Control Engineering
Co-Chair	Xiaomei Liu, Southeast Univ
13:10 - 13:30	SatA02-1 A Novel Approach for Rejection of Cosine Disturbances 33  Zeshao Chen and Yiheng Wei
13:30 - 13:50	SatA02-2 Delay-Dependent $H_{\infty}$ Control for Lurie Type Singular Time-Delay Systems 39 Xiaomei Liu, Kanjian Zhang, Shengtao Li, Shumin Fei and Haikun Wei
13:50 – 14:10	SatA02-3 L <sub>1</sub> -Induced Performance Analysis for Continuous Positive Time-Delay Systems 4-Cuihong Wang, Zhuanxia Yang and Huili Yang
14:10 – 14:30	SatA02-4 Tuning Fractional Order Proportional Integral Controllers Based on Vector in the Complex Plane for First Order Systems 49 Chunyang Wang, Nianchun Cai, Lu Wang and Wenting Jiang
14:30 – 14:50	SatA02-5 Dynamics of Discrete-Time Linear Systems with Decaying Disturbances 55  Xingwen Liu

Session	SatA03: Optin	nal Control and Optimization (I)	
Date/Time	Saturday, 31 M	Saturday, 31 May 2014 / 13:10-15:10	
Venue	Room03	Room03	
Chair	Chongliang Hu	Chongliang Huang, North China Electric Power Univ.	
Co-Chair	Zhiqiang Geng	Zhiqiang Geng, Beijing Univ. of Chemical Tech.	
13:10 - 13:30	SatA03-1	Subcarrier and Power Allocation for OFDM-Based Relay Cognitive Radio System 67 Lina Fan, Jinkuan Wang and Jing Gao	
13:30 - 13:50	SatA03-2	An Optimal Model for Emergency Resource Dispatching Based on Simulated Annealing Algorithm 71 Li Lei, Li Ziruo, Lai Xiaolin and Yu Xuecai	
13:50 - 14:10	SatA03-3	Adaptive Particle Swarm Optimization Algorithm Based on Dynamic Link Matrix and Its Application 74 Xia Li-Rong, Li Run-Xue and Geng Zhi-Qiang	
14:10 – 14:30	SatA03-4	Optimal Scheduling of Wind Farm with Storage and Forecasting Based on Improved Genetic Algorithms 80 Juncheng Liu, Chongliang Huang and Pengfei Li	
14:30 – 14:50	SatA03-5	Research on the Evaluation Method of Design Scheme of Solar House 86 Han Li, Yue Liu, Yuting Bian and Ruonan Xu	
14:50 – 15:10	SatA03-6	PID Control Strategy for UAV Flight Control System Based on Improved Genetic Algorithm Optimization 92 Feng Lin, Haidong Duan and Xiaoguang Qu	

Session	SatA04: Non	linear Systems (I)	
Date/Time	Saturday, 31 M	Saturday, 31 May 2014 / 13:10-15:10	
Venue	Room04	Room04	
Chair	Xin Yu, Jiang	Xin Yu, Jiangsu Univ.	
Co-Chair	Dongsheng D	Dongsheng Ding, Zhejiang Univ.	
13:10 – 13:30	SatA04-1	Global Output Feedback Control of Nonlinear Systems with Uncertain Supply Rates 98 Xin Yu, Tairen Sun and Guohai Liu	
13:30 – 13:50	SatA04-2	Fractional-Order Integral State Space Modeling and Quasi State Analysis via Block Operational Matrix Scheme 103 Dongsheng Ding, Donglian Qi and Qiao Wang	

13:50 – 14:10	SatA04-3	FPGA Implementation of Nonlinear Model Predictive Control 108 Fang Xu, Hong Chen, Weiwei Jin and Yueting Xu
14:10 – 14:30	SatA04-4	Stochastic Observer Design for Markovian Jump Lur'e Differential Inclusion System 114 Jun Huang, Lei Yu and Lining Sun
14:30 – 14:50	SatA04-5	Generalized Projective Synchronization of an Array of Non-Identical Coupled Chaotic Systems 119 Huichao Gong, Xiangyong Chen, Chunhua Xu, Yuanwei Jing and Jianlong Qiu
14:50 – 15:10	SatA04-6	Constrained Robust Output Regulation for a Class of Nonlinear Systems with Unknown Control Direction 124  Jianglin Lan and Weijie Sun

Session	SatA05: De	cision-Making Theory and Method (I)	
Date/Time	Saturday, 31	Saturday, 31 May 2014 / 13:10-15:10	
Venue	Room05		
Chair	Guanjie Jian	ng, Northeastern Univ.; Liaoning Univ. of Tech.	
Co-Chair	Wenxue Geng, Luoyang Tech. on Electron-Optic Control Lab.		
13:10 - 13:30	SatA05-1	Negotiation Based Project Risk Management Framework 130 Guanjie Jiang, Min Huang, Ruiyou Zhang and Xingwei Wang	
13:30 - 13:50	SatA05-2	Study on Tactical Decision of UAV Medium-Range Air Combat 135 Geng Wen-Xue, Kong Fan'e and Ma Dong-Qian	
13:50 – 14:10	SatA05-3	Research on Coupling Degree Model and Application of IT Resources and IT Application Capabilities 140 Yupeng Liu, Lei Shi and Wei Liu	
14:10 - 14:30	SatA05-4	Analysis of the Key Influencing Factors of the Food Industrial Enterprises' Integrity & Credit in China Based on DEMATEL Method 145 Li Hongwei, Yang Caili and Tao Min	
14:30 – 14:50	SatA05-5	Stochastic Zero-Sum Differential Games and $H_{\infty}$ Control of Discrete-Time Markov Jump Systems 151 Zhou Haiying, Zhu Huainian and Zhang Chengke	
14:50 – 15:10	SatA05-6	Modeling for Project Scheduling with Multi-Skilled Workforce Constraints and Uncertainty 157 Chen Di, Liu Shi-Xin and Wang Yi-Fan	

Session	SatA06: Neu	ral Networks (I)
Date/Time	Saturday, 31	May 2014 / 13:10-15:10
Venue	Room06	
Chair	Hongbing Zer	ng, Hunan Univ. of Tech.
Co-Chair	Hongjie Xing	s, Hebei Univ.
13:10 - 13:30	SatA06-1	Further Results on Passivity Analysis of Neural Networks with Time-Varying Delay Hong-Bing Zeng, Shen-Ping Xiao, Chang-Fan Zhang and Gang Chen
13:30 – 13:50	SatA06-2	Analysis of G-Type Model Exploited for Online ZLE Solving 166 Yunong Zhang, Zhengli Xiao, Ke Chen, Mingzhi Mao and Xun Liu
13:50 – 14:10	SatA06-3	WASP Neuronet Activated by Bipolar-Sigmoid Functions and Applied to Glomerular-Filtration-Rate Estimation 172  Yunong Zhang, Sitong Ding, Xun Liu, Jinrong Liu and Mingzhi Mao
14:10 – 14:30	SatA06-4	Training RBFNN with Reglarized Correntropy Criterion and Its Application to Foreign Exchange Rate Forecasting 178  Yan-Jun Liu and Hong-Jie Xing
14:30 – 14:50	SatA06-5	A Neural Network Algorithm for Fast Pruning Based on Remarkable Analysis 184 Li Fujin, Huo Meijie, Ren Hongge and Zhao Wenbin
14:50 – 15:10	SatA06-6	Soft Sensor Modeling of Mill Level Based on Deep Belief Network 189 Muchao Lu, Yan Kang, Xiaoming Han and Gaowei Yan

Session	SatA07: Fault Diagnosis and Fault-Tolerant Control (I)	
Date/Time	Saturday, 31 May 2014 / 13:10-15:10	
Venue	Room07	
Chair	Tao Wang, Nan	njing Univ.of Aeronautics and Astronautics
13:10 - 13:30	<b>SatA07-1</b>	<b>Design and Research of an ARINC 429 Bus Testing System</b> 194 <i>Yunlin Luo and Xiaoqing Zhao</i>
13:30 – 13:50	SatA07-2	TS Fuzzy Approach for Fault Detection in Nonlinear Systems with Immeasurable State Variables 199 Muhammad Abid, Talal Hussain and Abdul Qayyum Khan
13:50 - 14:10	SatA07-3	Analysis on Shaft Torsion Response of 600MW Steam Turbine Unit Under Quick Load Regulation 204 An Hong-Wen, Ma Zhi-Yong, Li Zhuang, Zhong Cai-Mao and Liu Ying
14:10 – 14:30	SatA07-4	Fault Detection Based on Finite Impulse Response Adaptive Filter for Satellite Attitude Control Systems 209 Wang Tao, Cheng Yuehua, Jiang Bin and Qi Ruiyun
14:30 – 14:50	SatA07-5	Research on Restraining the End Effect of EMD Based on Grey Prediction Model 214 Yong-Tao Zong, Yan-Xia Shen, Zhi-Cheng Ji, Ding-Hui Wu and Ting-Long Pan

# 14:50 – 15:10 SatA07-6 A Self-Adaptive Analysis Method of Fault Diagnosis in Roller Bearing Based on Local Mean Decomposition 218 Wang Jiying and Liu Zhenxing

Session	SatA08: The Fi	nalist of Zhang Si-Ying Outstanding Youth Paper Award
Date/Time	Saturday, 31 May 2014 / 13:10-15:10	
Venue	Room08	
13:10 - 13:30	SatA08-1	Dynamic Boundary Stabilization of Euler-Bernoulli Beam Through a Ko Damped Wave Equation 223 Lu Lu and Jun-Min Wang
13:30 – 13:50	SatA08-2	Output Swarm Stability for High-Order Linear Swarm Systems 229  Jianxiang Xi, Xiaogang Yang, Yukun Qiao and Yanhong Zhang
13:50 – 14:10	SatA08-3	Fault Subspace Selection and Analysis of Relative Changes Based Recommodeling for Multi-Fault Diagnosis 235 Chunhui Zhao
14:10 – 14:30	SatA08-4	Mean-Field Backward Stochastic Differential Equations with Uniformly Generators 241 Guo Hancheng and Ren Xiuyun
14:30 – 14:50	SatA08-5	Transmission Data Compression of Remote Networked Control Systems Reduction Method 247 Libin Bai and Sheng-Guo Wang

Session	SatA09: Cooperative Control in Complex Networks and Multi-Agent Systems (Invited Session)	
Date/Time	Saturday, 31 Ma	y 2014 / 13:10-15:10
Venue	Room09	
Chair	Wenwu Yu, RM	IT University
Co-Chair	Guanghui Wen, Southeast Univ.	
13:10 - 13:30	SatA09-1	Distributed Adaptive Coordinated Tracking for Coupled Nonholonomic Moreobots 253  Yilong Qiu, Fei Chen and Linying Xiang
13:30 – 13:50	SatA09-2	Averaging Method for Consensus of Fast Switching Multi-Agent Networks we Communication Delay 258  Qiang Jia and Wallace K. S. Tang
13:50 – 14:10	SatA09-3	Leader-Following Control of Second-Order Integrator Systems Using Binary Information 263  Junjie Fu and Jinzhi Wang
14:10 - 14:30	SatA09-4	Node-to-Node Consensus of Multi-Agent Systems with Switched Pinning Lin Guanghui Wen, Wenwu Yu, Jingyao Wang, Dabo Xu and Jinde Cao

xxvii

14:30 - 14:50	SatA09-5	Stochastic Consensus of Linear Multi-Agent Systems: Communication Noises and
		Markovian Switching Topologies 274
		Long Cheng, Yunpeng Wang, Zeng-Guang Hou and Min Tan
14:50 - 15:10	<b>SatA09-6</b>	Time Synchronization in WSNs with Noise: A Consensus Based Approach 280
		Yifei Lang, Chuan Wang and Ying Wan

Session	SatA10: Advances in Switched Systems and Switching Control (Invited Session)		
Date/Time	Saturday, 31 Ma	Saturday, 31 May 2014 / 13:10-15:10	
Venue	Room10		
Chair	Dan Ma, Northe	Dan Ma, Northeastern Univ.	
Co-Chair	Jie Lian, Dalian University of Technology		
13:10 - 13:30	SatA10-1	Robust Reliable Guaranteed-Cost $H_{\infty}$ Control for Delta Operator Switched Linear Systems 286 Hao Hu, Bin Jiang and Hao Yang	
13:30 – 13:50	<b>SatA10-2</b>	Stabilization for Switched Linear Systems Subject to Network-Induced Dela $Dan\ Ma$	
13:50 – 14:10	SatA10-3	Positive $l_1$ Observer Design for Positive Switched Systems with Time-Varying Delays via Delta Operator Approach 299  Shuo Li, Zhengrong Xiang and Hamid Reza Karimi	
14:10 – 14:30	SatA10-4	Observer-Based Sliding Mode Control for Switched Stochastic Systems Und Asynchronous Switching 305 Xiaona Wang, Can Li, Jie Lian and Feng Zhang	
14:30 – 14:50	SatA10-5	Cooperative Output Regulation Problem of a Class of Linear Multi-Agent S with Switched Exosystems 311 Hongwei Jia, Xia Wang and Jun Zhao	
14:50 – 15:10	SatA10-6	Stabilization of a Class of State-Constrained Nonlinear Switched Systems in Lower Triangular Form 317  Ben Niu and Yanli Liu	

Session	SatA11: Planning and Optimization (Invited Session)	
Date/Time	Saturday, 31 May 2014 / 13:10-15:10	
Venue	Room11	
Chair	Neng-Fa Zhou, City University of New York	
Co-Chair	Roman Bartak, Charles University	
13:10 - 13:30	SatA11-1	Energy-Aware Scheduling Model and Optimization for a Flexible Flow Sho Problem 323 Min Dai, Dunbing Tang, Haitao Zhang and Jun Yang
13:30 – 13:50	SatA11-2	A Controller for Autonomous Landing of AR.Drone 329 Roman Barták, Andrej Hraško and David Obdržálek
		xxviii

2014 The 26th Chinese Control and Decision Conference (2014 CCDC)

13:50 – 14:10	SatA11-3	On Scheduling Pseudo Just-in-Time Jobs on Single Machine 335 Yuka Kawamata and Shao-Chin Sung
14:10 – 14:30	SatA11-4	Unifying Constraint Satisfaction and Recommendation for Amusement Park Navigation 341 Hayato Ohwada, Hiroki Igarashi, Tsukasa Tanaka and Hiroyuki Nishiyama
14:30 – 14:50	SatA11-5	Solving Several Planning Problems with Picat 346 Neng-Fa Zhou and Hakan Kjellerstrand
14:50 – 15:10	SatA11-6	My First Look at Picat as a Modeling Language for Constraint Solving and Planning 351  Håkan Kjellerstrand

Session	SatAIS: Interactive Session
Date/Time	Saturday, 31 May 2014 / 13:10-15:10
Venue	Room12
SatAIS-01	Time Series Predictive Wavelet Neural Network Control Method 359 Liu Jing-Wei, Wang Pu, Liu Hong and Yang Lei
SatAIS-02	System Control and DC Voltage Control Method for STACOM Based on Hybrid Multilevel H-Bridge Converter 365  Zaifu Wang, Aimin Zhang, Hang Zhang and Jingjing Huang
SatAIS-03	Multi-Sensor Fusion Based on Unscented Strong Tracking Information Filter (Wen Tao, Tang Xian-Feng and Ge Quan-Bo
SatAIS-04	Adaptive Conversion of the Leader in Multi-Robot Obstacle Avoidance 375 Yan Jia, Wang Xiaonanr and Yang Xin
SatAIS-05	Multivariable Inverse Control for Glutamic Acid Fermentation Process 378 Guan Shou-Ping, Wang Wen-Long and You Fu-Qiang
SatAIS-06	Maneuver Target Tracking Algorithm Based on Intelligent Fuzzy Adaptive Filtering 383 XiaoLu Wu, XiaoHu Fan, LiYing Liu and GuanChao Wei
SatAIS-07	Extreme Learning Machine-Based Stable Adaptive Control for a Class of Nonlinear System 387 Haisen Ke and Wenrui Li
SatAIS-08	Robust Adaptive Observer for Fractional Order Nonlinear Systems: An LMI Approach 392 Chuang Li and Jingcheng Wang
SatAIS-09	Research on Adaptive Feedforward Control Strategy of Engine Based on GT-Power and Simulink Simulation 398  Li Kunying and Xiao Bing
SatAIS-10	Adaptive Second-Order Leader-Following Consensus of Nonlinear Multi-Agent Systems with Time-Varying Delay 402 Hongjie Li, Lihua Xu, Libin Xiao and Li Lin
SatAIS-11	Developing Support System for Cover Design with Interactive Evolutionary Computation 408 Fei Yu, Yuanxiang Li, Li Kuang and Zhijie Li

SatAIS-12	Reinforcement Learning Control for Gas Collector Pressure of Coke Ovens 414 Qin Bin, Dai Leqiang, Li Pengcheng, Zhu Wangli and Wang Xin
SatAIS-13	Momentum Management of Chinese Space Station Based on Robust H <sub>∞</sub> 418 Lin Yue, Jia Ying-Min, Gao Ya-Nan and Fan Song-Tao
SatAIS-14	μ-Synthesis Non-Fragile Robust Design for a Fan Control System 423 Qinghai Heng, Jing Lu, Li Li and Huan Cao
SatAIS-15	H <sub>2</sub> Controller Design of Linear Systems with Time-Varying Uncertainties and Input Quantization 428  Bo-Chao Zheng, Yuan-Lu Li and Ning Sun
SatAIS-16	Multiobjective H <sub>2</sub> /H <sub>∞</sub> Synthesis via Group-Preserving Scheme 433 Liu Bin, Sun Jiuqiang, Cui Yangyang and Li Wei
SatAIS-17	Static and Reduced-Order Stabilizers Based on Improved State Coordinates Transformations 439 Haibin Shi
SatAIS-18	Robust H <sub>∞</sub> Control for Uncertain Continuous-Time Singular Systems with Circular Pole Constraints 443  Meng Lingqi and Ge Zhaoqiang
SatAIS-19	<b>Quantized H</b> <sub>∞</sub> <b>Control for Stochastic Nonlinear Networked Systems</b> 447 <i>Huaicheng Yan, Hongbo Shi, Hao Zhang and Haitao Zhao</i>
SatAIS-20	Stabilization Control for LPV Systems with Time Delay and Actuator Saturation 453 Xiaochao Dou, Rui Zhang and Ying Zhang
SatAIS-21	A Sharper Parameter Bound for Belgian Chocolate Stabilization Problem 459 Wang Li and Wensheng Yu
SatAIS-22	Some Remarks on Simultaneous Stabilization Problems of Linear Systems 463 Qiang Guan, Guannan He, Wang Li and Wensheng Yu
SatAIS-23	H <sub>∞</sub> Controller Design for a Ball and Plate System Using Normalized Coprime Factors 467  Hai-Qi Lin, Shi-Gang Cui, Li-Hui Geng and Yong-Li Zhang
SatAIS-24	Robust Controller Design for a Morphing Aircraft Based on SRAD 473  Zhang Jie and Wu Sen-Tang
SatAIS-25	Based on Single-Stage Multiplier CPS-SPWM Chain SVG System 479 Yong Zhang and Shengli Bao
SatAIS-26	Intelligent Decoupling for Flatness and Gauge Control System in Hot Strip Rolling 483  Boqun Li, Chunlian Jiang, Xiangwen Fan and Daqing Zhang
SatAIS-27	A Hybrid Model for Furnace Exit Gas Temperature Monitoring Based on CM-LSSVM-PLS 488 Liu Zhengfeng, Wang Jingcheng, Shi Yuanhao, Wang Bohui and Zhang Langwen
SatAIS-28	Ammonia Control of a Wastewater Treatment Process Using Model Predictive Control 494 Xiaoxin Liu, Yuanwei Jing, Jiahe Xu and Siying Zhang
SatAIS-29	Tuning Method of Proportional Differential Controller for Delay-Time System Based on Polynomial Approximation 499 Ling Xu, Feng Ding, Dengfeng Liu and Baoguo Xu

SatAIS-30	Sliding Mode Control for Discrete Time Switched Systems with Uncertain Parameters and Time Delay 505  Yang Li, Xueli Wu, Jianhua Zhang and Quanmin Zhu
SatAIS-31	<b>Fuzzy Discrete-Time Sliding Mode Control on Interconnected Power System</b> 513 <i>Xuejiao Guo and Xiangjie Liu</i>
SatAIS-32	Research on Trajectory Tracking of Crawler Robot Based on Sliding Mode Control 518 Guodong Li and Xiaolong Li
SatAIS-33	Multi-Model Back-Stepping Sliding Mode Control of Robotic Manipulators 524  Jiang Yinling, Yu Di and Wang Haixing
SatAIS-34	Soft Variable Structure Control with Differential Equation for Generalized Systems 530 Ruiping Xu, Yunlong Liu, Cunchen Gao and Shuqin Wang
SatAIS-35	Sliding Mode Control for Discrete Time-Delay Nonlinear Systems with Uncertainty and Packet Loss 536 Chen Dongyan, Kan Mingming and Hu Jun
SatAIS-36	Robust Sliding Mode Control of Three-Phase Voltage Source PWM Rectifier with Uncertainties and Disturbances 542 Gangquan Si, Weili Zhao, Lixin Jia and Yanbin Zhang
SatAIS-37	Chattering Avoidance High Order Sliding Mode Control for BDFM 547 Zhongrong Duan, Guoyong Huang, Zongkai Shao, Jiande Wu and Xiaodong Wang
SatAIS-38	<b>Application of Fuzzy Optimization Control in NSV Anti-Disturbance</b> 552 Gao Qian and He Nai-Bao
SatAIS-39	Reasearch on Finite Time Control Method Based on Terminal Sliding Mode for Spacecraft Attitude 555 Zheng Yan and Cao Wei
SatAIS-40	Research on Some Control Issues in the Czochralski Process of Solar Grade Mono-Crystal Silicon 559 Liu Ding and Zhang Jing
SatAIS-41	Novel Approach to Cluster Synchronization of Delayed Neural Networks 565  Xin Biao Lu, Bu Zhi Qin and Jing Tang
SatAIS-42	Cluster Synchronization in Complex Dynamical Networks Via Comparison Principle 570 Xuyang Lou, Qian Ye and Baotong Cui
SatAIS-43	Global Convergence of a Class of Nonlinear Dynamical Networks 576  Ao Dun, Di Liang and Haijing Liu
SatAIS-44	A Hybrid Pareto-Based Algorithm for Multi-Objective Resource Allocation Problem 581 Jun-Qing Li, Quan-Ke Pan and Kun Mao
SatAIS-45	Second-Order Leader-Following Consensus of Nonlinear Multi-Agent Systems via Adaptive Pinning Control 586 Hongjie Li, Lihua Xu, Libin Xiao and Li Lin
SatAIS-46	Coordinating Multi-layer MPC for Complex Water Systems 592 Congcong Sun, Vicenç Puig and Gabriela Cembrano
SatAIS-47	Simulation of Fractional Order Control Based on IPMC Model 598 Chen Lanfeng and Xue Dingyu

xxxi

SatAIS-48	Maximum Likelihood Stochastic Gradient Parameter Estimation Algorithm for
	Multi-Input Multi-Output Systems 602
	Junhong Li, Ping Jiang and Yi Yang
SatAIS-49	Composite Single Neural PID Controller Based on Fuzzy Self-Tuning Gain and
	RBF Network Identification 606
	Xing Bo-Yang, Yu Li-Ye and Zhou Zhong-Kai
SatAIS-50	An Alternative Scheme for Adaptive Backstepping Control 612
	Zhengqiang Zhang, Xiqiang Cao, Mingxia Zhang and Mingxing Zhang

Session	SatB02:Comple	ex Networks and Systems (I)
Date/Time	Saturday, 31 Ma	ay 2014 / 15:30-17:30
Venue	Room02	
Chair	Jun Zhou	
Co-Chair	Bin Ye	
15:30 – 15:50	SatB02-1	Random Matrix Analysis of Spectral Properties in Directed Complex Networks 616 Bin Ye, Kangwei Zuo and Jiajia Jia
15:50 – 16:10	SatB02-2	Controllability and (Ir-) Reducibility of Floquet Factorizations in Continuous-Time Periodic Systems 621  Jun Zhou
16:10 - 16:30	SatB02-3	A Quantum Dynamics Approach to Spectral Analysis in Small-World Complex Networks 627 Bin Ye and Shuai Xu
16:30 – 16:50	SatB02-4	Synchronization Analysis of Linear Complex Networks with Time Delays Li Hailong, Xi Jianxiang, Song Haisong and Cao Yaoqin
16:50 – 17:10	SatB02-5	An Efficient Compressed Sensing-Based Cross-Layer Congestion Control Scheme for Wireless Sensor Networks 637 Chengtie Li, Jingkuan Wang, Bin Wang and Yinghua Han
17:10 – 17:30	SatB02-6	Improving Controllability of Complex Networks by Rewiring Links Regularly 642 Jiuqiang Xu, Jinfa Wang, Hai Zhao and Siyuan Jia

Session	SatB03: Optimal Control and Optimization(II)		
Date/Time	Saturday, 31 May 2014 / 15:30-17:30		
Venue	Room03		
Chair	Jing Fang, Tongji Univ.		
Co-Chair	Zhaoying Li, Beihang Univ.		
15:30 – 15:50	SatB03-1 Launch Vehicle Ascent Trajectory Optimization Based on Modified Gauss		

**Pseudospectral Method** 646 Zhang Qiuhong, Li Zhaoying and Li Huifeng

xxxii

15:50 – 16:10	SatB03-2	Trajectory Optimization of a Cruise Missile Using the Gauss Pseudospectral Method 652 Hu Yi and Chen Wanchun
16:10 – 16:30	SatB03-3	<b>Design of a P-D Feedback Controller for Continuous-Time Descriptor Systems</b> 658  Mengjuan Cao and Fucheng Liao
16:30 – 16:50	SatB03-4	Application of Genetic Algorithms in Football Field Lighting for Energy-Saving  664  Hui Xiao, Jing Fang, Ping Zhu and Qi Kang
16:50 – 17:10	SatB03-5	Set Divisions and Customer Point Collaborations-Based Heuristic Vehicle Routing with Appointment Time Window 670 Xu Zhengzheng and Tang Jiafu
17:10 – 17:30	SatB03-6	Finite-Time Convergent Guidance and Control Based on Integrated Model 676 Lin Lin, Songyan Wang, Tao Chao and Ming Yang

Session	SatB04: Nonli	near Systems (II)	
Date/Time	Saturday, 31 M	Saturday, 31 May 2014 / 15:30-17:30	
Venue	Room04		
Chair	Yuan Gao, Jili	n Univ.	
Co-Chair	Xiongjun Wu,	Shanghai Jiao Tong Univ.	
15:30 – 15:50	SatB04-1	Launch Control Strategy for AMT Vehicles Based on ADRC 681 Gao Yuan, Liu Qifang, Li Chao and Chen Hong	
15:50 – 16:10	<b>SatB04-2</b>	Saturated Scheduling Anti-Windup Design: Static Case 687 Xiongjun Wu and Kun Cai	
16:10 – 16:30	SatB04-3	On Pullback Attractors in $H^2$ for Non-Autonomous Reaction-Diffusion Equation $Hongyan\ Li$ and $Weisi\ Zhang$	
16:30 – 16:50	SatB04-4	Prediction for Chaotic Time Series of Optimized BP Neural Network Base Modified PSO 697 Li Song, Hao Qing, Yue Ying-Ying and Liu Hao-Ning	
16:50 – 17:10	SatB04-5	Finite-Time Stabilization of Fractional-Order Systems with Model Uncerta and External Disturbances 703 Xiaomin Tian, Shumin Fei and Lin Chai	
17:10 - 17:30	SatB04-6	Path Following Control of Non-Minimum Phase VTOL Aircraft via Minim Distance Projection Method $708$ Shanwei Su	
17:30 – 17:50	<b>SatB04-7</b>	Robust Nonlinear Control Design For Scaled Yak-54 Unmanned Aerial Ve Ussama Ali, M. Zamurad Shah, Aamer Iqbal Bhatti and Raza Samar	

Session	SatB05: Decision	SatB05: Decision-Making Theory and Method (II)		
Date/Time	Saturday, 31 Ma	ay 2014 / 15:30-17:30		
Venue	Room05			
Chair	Channi Liu, Hui	nan Univ.		
Co-Chair	Qifa Jiang, Yuni	nan Univ. of Finance and Economics		
15:30 – 15:50	SatB05-1	Evaluation and Selection of Suppliers Under Multi-Product Purchase Based on Fuzzy Multi-Objective Integer Programming Model 719  Ling Hu and Zhuangpin Wei		
15:50 – 16:10	SatB05-2	A Solution to Seasonal Adjustment Forecasting for Hydraulic SMEs in Investment Decision-Making 724  Jiang Qifa		
16:10 – 16:30	SatB05-3	Board of Directors Characteristics and Internal Control Quality: Evidence from Chinese-Listed Companies 730 Hui Lei and Channi Liu		
16:30 – 16:50	SatB05-4	Research on Port Cooperation Game-Theory Based on Productivity Restrain 736  Huang Xiaoling and Gao Xiaonan		
16:50 – 17:10	SatB05-5	Spare Parts Consumption Rolling Forecasting Model Based on Grey LSSVM 742 Shenyang Liu, Qi Gao, Yang Ge, Zhiwei Li and Zhirong Li		
17:10 – 17:30	SatB05-6	Model Construction and Mechanism Analysis on the Power Systems of Enhance the Competitiveness of Innovative Enterprises 745 Wang Yumei and Wang Shuai		

Session	SatB06: Neural Networks (II)			
Date/Time	Saturday, 31 M	Saturday, 31 May 2014 / 15:30-17:30		
Venue	Room06			
Chair	Penghua Li, Ch	Penghua Li, Chongqing Univ. of Posts & Telecommunications		
Co-Chair	Tengfei Zhang, Nanjing Univ. of Posts and Telecommunications			
15:30 – 15:50	SatB06-1	Speaker Identification Based on Gammatone Cepstral Coefficients and General Regression Neural Network 751 Penghua Li, Fangchao Hu, Yinguo Li and Baomei Qiu		
15:50 – 16:10	SatB06-2	Nonlinear Internal Model Control Based on Fuzzy Rough Granular Neural Networks 757 Zhang Tengfei, Tan Yaliang and Fumin Ma		
16:10 – 16:30	SatB06-3	Hysteretic Neural Network and Its Application in the Prediction of the Wind Speed Series 762 Wang Hongfei, Xiu Chunbo, Li Yanqing, Cheng Yi and Chen Yimei		
16:30 – 16:50	SatB06-4	An Improved Artificial Immune Network for Multimodal Function Optimization 766 Li Zhonghua, Li Jianming and Zhou Jieying		
16:50 – 17:10	SatB06-5	Constrained Graph Concept Factorization for Image Clustering 772 Yuqing Shi, Shiqiang Du and Weilan Wang		

Session	SatB07: Fault	Diagnosis and Fault-Tolerant Control (II)
Date/Time	Saturday, 31 M	ay 2014 / 15:30-17:30
Venue	Room07	
Chair	Yuntao Shi, No	rth China Univ. of Tech.
Co-Chair		al South Univ., and Hunan Engineering Laboratory for Advanced Control and mation Changsha
15:30 - 15:50	SatB07-1	Hybrid Model Predictive Control and Fault Detection of Wind Energy Con- System Based on Mixed Logical Dynamic 782 Shi Yun-Tao, Qiao Shu-Juan, Hou Yan-Jiao, Li Zhi-Jun and Sun De-Hui
15:50 – 16:10	<b>SatB07-2</b>	Multiple Incipient Faults Prognosis for CCBII Braking System 789 Yingze Yang, Rui Bin, Zhiwu Huang, Yufu Qin and Jiandui Yi
16:10 - 16:30	SatB07-3	A Parametric Design Method of Finite Time State Observers in Linear Time Invariant Systems 795 Guo-Sheng Wang, Fan Xia, Bing Liang, Feng Guo and Liu Feng
16:30 – 16:50	SatB07-4	Rolling Bearing Fault Diagnosis Based on Wavelet Energy Spectrum, PCA : PNN 800 Keyong Shao, Miaomiao Cai and Guofeng Zhao
16:50 – 17:10	SatB07-5	Research on Fault Diagnosis Method for Complex Equipment Based on VP NBNC 805 Chao Zhang, Liang Liu, Xi Wang, Yang Yu and Yong Zhou
17:10 – 17:30	<b>SatB07-6</b>	Fault Diagnosis Method for Complex Equipment Using Cased-Based Reason Chao Zhang, Xi Wang, Yang Yu, Liang Liu and Yong Zhou

Session	SatB08: Motion	Control (I)
Date/Time	Saturday, 31 Ma	y 2014 / 15:30-17:30
Venue	Room08	
Chair	Baomei Qiu, Che	ongqing Univ.of Posts & Telecommunications
Co-Chair	Jing He, Hunan	Univ.of Tech. and Natiaonal Univ.of Defense Tech.
15:30 – 15:50	SatB08-1	Control and Design of Small Aerial Photography Stabilized Platform 816 Baomei Qiu, Penghua Li, Peipei Chen and Yinguo Li
15:50 – 16:10	SatB08-2	A Multi-Motor Synchronous Control Algorithm for Artificial Potential Field with Adjacent Attractive Force 820 Changfan Zhang, Mangang Niu, Han Wu, Jing He and Yuanyuan Xiao
16:10 – 16:30	SatB08-3	Optimization Method Based Swing-Up Control and Visual Validation for Rail Length-Limited Parallel-Coupled Cart-Pendulums System 826 Mengqi Xue and Minrui Fei

16:30 – 16:50	SatB08-4	A Practical Approach to Motion Control for Planar Multi-Rigid-Body Systems Rongqi Shi and Jie Peng	834
16:50 – 17:10	SatB08-5	Design and Analysis of Plug-in Repetitive Controller for Zero-Following Performance 840	
		Zeyuan Li, Wennong Zhang, Hiroshi Nakamura, Minoru Koga and Xiang Xu	
17:10 – 17:30	SatB08-6	<b>Study on BDFG Control Strategy with Unbalanced Loads</b> 847  Zhang Shuai and Liu Huikang	

Session	SatB09: Netv Session)	worked Agents: Coordinated Sensing, Localization and Control (Invited
Date/Time	Saturday, 31	May 2014 / 15:30-17:30
Venue	Room09	
Chair	Xiangke Wan	ng, National University of Defense Technology
Co-Chair	Changbin Yu	, The Australian National University
15:30 – 15:50	SatB09-1	Null-Steering Beamforming in Uncertain Environment 853 Jian Hou and Zhiyun Lin
15:50 – 16:10	SatB09-2	Distributed Robust Leaderless Consensus of Lipschitz Nonlinear Multi-Agent Systems with Matching Uncertainties 858 Zhongkui Li, Yu Zhao and Zhisheng Duan
16:10 - 16:30	SatB09-3	Autonomous Target Localization Using Quadrotor 864 Yun Hou and Changbin Yu
16:30 – 16:50	SatB09-4	A Time Synchronization Method of Wireless Sensor Networks Based on the Simulated Annealing Algorithm 870 Fuqiang Wang, Xiaoming Wu, Yong Pang, Changbin Yu, Yifan Hu and Xiangzhi Liu
16:50 – 17:10	SatB09-5	A Novel Approach to NLOS Identification in Sensor Localization 876 Wenye Meng, Baoqi Huang and Guanglai Gao
17:10 – 17:30	SatB09-6	Nonlinear Consensus Under Directed Graph via the Edge Laplacian 881 Zhiwen Zeng, Xiangke Wang and Zhiqiang Zheng
17:30 – 17:50	SatB09-7	A Particle Swarm Algorithm Based Routing Recovery Method for Mobile Sink Wireless Sensor Networks 887 Yi-Fan Hu, Xiao-Ming Wu, Fu-Qiang Wang and Hua Han

Session	SatB10: Stab	ility and Control of Networked Control Systems (Invited Session)	
Date/Time	Saturday, 31 I	May 2014 / 15:30-17:30	
Venue	Room10		
Chair	Xi-Ming Sun,	Dalian University of Technology	
Co-Chair	Huawen Ye, O	Central South University	
15:30 – 15:50	SatB10-1	A New Stability Criterion for Networked Predictive Control System with Varying Controller Gains Scheme 893 Sheng-Li Du, Xi-Ming Sun, Wei Wang and Chong-Quan Zhong	
15:50 – 16:10	SatB10-2	Fuzzy-Model-Based Stabilization of Nonlinear Networked Control Systems Jianan Huang, Bing Tang, Defeng He and Yun Zhang	898
16:10 – 16:30	SatB10-3	Continuous-Time Markov Chains Based $H_{\infty}$ Control of Networked Control Systems 906 Qing-Kui Li, Ning Yang, Wei-Wei Gao and Mei Li	
16:30 – 16:50	SatB10-4	Set Stability of Boolean Networks via Quotient Mappings 912 Wang Pan and Guo Yuqian	
16:50 – 17:10	SatB10-5	The Flocking and Formation of Multiple Agents Based on Multiple Virtual Leaders 918 Siming Li and Huawen Ye	
17:10 – 17:30	SatB10-6	Controller Design for Observer-Based Continuous-Time Networked Contro Systems with Packet Dropout and Delay 923 Wang Tian-Bao, Wang Yu-Long, Zhang Jian and Feng Yi-Fu	l

Session	SatB11: On the Session)	Robust and Adaptive Control for the Hypersonic Flight Vehicles (Invited
Date/Time	Saturday, 31 May	<i>y</i> 2014 / 15:30-17:30
Venue	Room11	
Chair	Bin Meng, Beijin	g Institute of Control Engineering
Co-Chair	Hong-Fei Sun, Xi	iamen Univ
15:30 – 15:50	SatB11-1	Research Progresses on Characteristic Model-Based Control of Hypersonic Flight Vehicles 929 Meng Bin
15:50 – 16:10	SatB11-2	On the Feedback Linearization Control for Hypersonic Flight Vehicle Analogy <b>X20</b> 934 Gong Yulian and Meng Bin
16:10 - 16:30	<b>SatB11-3</b>	Robust Adaptive Tracking Control for Air-Breathing Hypersonic Vehicles 93 Zhiling Yang, Bin Meng and Hongfei Sun
16:30 – 16:50	SatB11-4	Tracking Control for Air-Breathing Hypersonic Vehicles Based on Active Disturbance Rejection Control Technique 944  Yan Jinke and Sun Hongfei

16:50 – 17:10	SatB11-5	Distributed Adaptive Attitude Consensus of Networked Spacecraft on Directed Graphs 950 Lijiao Wang
17:10 – 17:30	SatB11-6	Current Research and New Trends on Flight Control of Air-Breathing Hypersonic Cruise Vehicles 956 Li Gongjun

Session	SatBIS: Interactive Session
Date/Time	Saturday, 31 May 2014 / 15:30-17:30
Venue	Room12
SatBIS-1	Analysis Based on the Shortest Path Method of Equipment Replacement 962  Zhao Ping and Li Laifeng
SatBIS-2	An Improved Harmony Search Algorithm with Dynamic Control Parameters for Continuous Optimization Problems 966  Biao Zhang, Huihui Yan, Junhua Duan, J. J. Liang, Hong-Yan Sang and Quan-Ke Pan
SatBIS-3	The Application of Ascending Iterative Optimization Algorithm 972 Xu Yi
SatBIS-4	The Research and Application of Laying Photovoltaic Battery with the Optimal Obliquity 976  Jie Zhang, Lianjie Shan, Feng Li and Tingyu Gao
SatBIS-5	The Study of Two Stage Optimization Model of PV Installation Design 980 Jie Zhang, Chao Yin, Menggang Jiao and Wenyu Liu
SatBIS-6	Gain Estimates and Exponential ISS for a Class of Hybrid Dynamical Networks 9 Bin Liu, Chunxia Dou and Dong-Nan Liu
SatBIS-7	A Predictive Current Control Strategy for Grid Side Converter in Doubly-Fed Wind Power System 991 Shen Yang, Zhang Li, Chen Hui, Lu Xianfeng and Qian Zhong
SatBIS-8	The Basic Properties and Algorithm of a Linear Bilevel Programming Model with Multiple Followers 994  Shengyue Deng, Yangjin Cheng and Xinfan Wang
SatBIS-9	Improved Ant Colony Based Multi-Objective Multi-Task Routing for 4PL Under Non-Reusable Capacity 1000 Ren Liang and Huang Min
SatBIS-10	Two Modified PRP Conjugate Gradient Methods with Sufficient Descent Property for Unconstrained Optimization 1005  Yubin Zhou, Zhongbo Sun, Xudong Shi and Yinghui Teng
SatBIS-11	Solving Multiobjective Optimal Reactive Power Dispatch Using Improved Multiobjective Particle Swarm Optimization 1010  Yujiao Zeng and Yanguang Sun
SatBIS-12	<b>Application of Quantum-Behaved Particle Swarm Optimization Algorithm</b> 1016 Wang Shanli, Long Jun and Wei Zhiyi
SatBIS-13	Optimization Chemical Control in Integrated Pest Management 1022  Hongjun Guan

SatBIS-14	Prediction Model of Non-Stationary Time Series Parameters for a Complex Blending Process 1027 Lijun Xi, Lingshuang Kong, Shenping Xiao and Gang Chen
SatBIS-15	Combining CA and PSO to Solve Flexible Job shop Scheduling Problem 1031 Zhou Wei, Bu Yan-Ping and Zhou Ye-Qing
SatBIS-16	An Improved NSGA-II to Solve Multi-Objective Optimization Problem 1037 Yaping Fu, Min Huang, Hongfeng Wang and Guanjie Jiang
SatBIS-17	Guidance Law Modeling Based on the Ideal Line-of-Sight with Constraint of the Terminal Flight Angle and Acceleration 1041  Li Hao and She Haoping
SatBIS-18	Research on Partner Selection Problem of Virtual Enterprise Based on Improved Genetic Algorithm 1047 Zhou Wei, Bu Yan-Ping and Zhou Ye-Qing
SatBIS-19	<b>Feedback-Assisted Iterative Learning Control Based on a Nonlinear Fuzzy Model</b> 1053 <i>Ke Xi and Xiangjie Liu</i>
SatBIS-20	Nonlinear Multivariable Supervisory Predictive Control for Drum-Type Boiler- Turbine System 1058 Yubin Jia and X. J. Liu
SatBIS-21	Reactive Power Optimization of Electric Power System Incorporating Wind Power Based on Parallel Immune Particle Swarm Optimization 1064 Wang Tianhong, Yuan Guili, Zhu Lei and Yu Tong
SatBIS-22	The UAV Dynamic Path Planning Algorithm Research Based on Voronoi Diagram 106 Xia Chen and Xiangmin Chen
SatBIS-23	A Fast Weight Optimization Method in $H_{\infty}$ Loop-Shaping Design for Single Input Single Output System 1072 Liu Yuyan and Zhou Shiliang
SatBIS-24	An Off-Line Approach to Dynamic Output Feedback Robust Model Predictive Control with Ellipsoidal Estimation Error Set 1078  Xubin Ping, Ning Sun and Baocang Ding
SatBIS-25	A Comparison of Accuracy and Efficiency of Three Control Strategy Design Methods for Low Energy Moon Return Mission 1084 Liu Yue, Jing Wuxing and Xiao Yingying
SatBIS-26	Opposition-Based Learning Harmony Search Algorithm with Mutation for Solving Global Optimization Problems 1090  Hao Wang, Haibin Ouyang, Liqun Gao and Wei Qin
SatBIS-27	Optimal Guidance Law in Quantum Mechanics 1095 Ciann-Dong Yang, Lieh-Lieh Cheng and Ming-Hsien Hsia
SatBIS-28	The Optimization Model and Algorithm Study of Photovoltaic Cells Installation and Design 1101 Ru Qu, Ruonan Xu, Yuting Bian and Yue Liu
SatBIS-29	<b>Application of Quorum Sensing to PSO and MOPSO for Convergence Promotion</b> 1106 Shan Cheng, Gang Hu and Tian-Ya Qin
SatBIS-30	Research of Urban Green Space Distribution Based on Convex Programming Model 1111 Yue Xiao-Ning, Wu Meng-Xiang and Ding Yue

SatBIS-31	Comparative Study on Several PSO Algorithms 1117 Weichang Jiang, Yating Zhang and Ruihua Wang
SatBIS-32	Research of Harmony Search Algorithm Based on Variable Metric Method 1120 Qi Wei and Liu Xuwang
SatBIS-33	A New Sample Update Strategy Based on Kringing 1124 Chen Yuanyuan, Bai Junqiang and Wang Dan
SatBIS-34	An Improved Quantum Particle Swarm Optimization and Its Application in System Identification 1132  Huang Yu, Xiao Tiantian and Han Pu
SatBIS-35	Some Necessary and Sufficient Conditions for Containment Control of the Second-Order Multi-Agent Systems 1135  Bin Qi, Baotong Cui and Xiaojiao Zhang
SatBIS-36	Finite-Time Attitude Consensus Tracking with Terminal Sliding Mode Observer 1141 Xinsheng Wang, Huaqiang Zhang and Changxi Li
SatBIS-37	Consensus of Multi-Agent Nonlinear Dynamic Systems Under Slow Switching Topology 1147 Junwei Wang, Kairui Chen and Yun Zhang
SatBIS-38	Mean Square Synchronization of Nonlinear Multi-Agent Systems under Measurement Noises 1153 Wenhui Liu, Feiqi Deng, Jiarong Liang and Hongwei Ren
SatBIS-39	A New Consensus Protocol for High Order Multi-Agent Systems 1159 Li Changbin, Du Chunyan and He Yi
SatBIS-40	Synchronization Control of Multi-Finger Dexterous Hand Based on Iterative Learning Control Scheme 1162  Lei Chen, Ming-Feng Ge, Ding-Xin He, Zhi-Hong Guan and Yan-Wu Wang
SatBIS-41	A Kind of Soft Sensing Method for Biomass Concentration of Phytoplankton in Seawater 1167  Zhang Ying and Shi Jia
SatBIS-42	Primary Research on the System Identification Method of Pitching and Heave Motion of Composite Trimaran 1172 Zhu Feng and Yang Songlin
SatBIS-43	Research on Measurement of Infrared Spectral Radiant Intensity of Aero-Engine Exhaust System 1177  Yanmei Liu, Li Fu, Jianhui Xi and Yan Ren
SatBIS-44	New Self-Calibration Schemes for Accelerometers of Platform 1181 Li Chan, Cao Yuan, Ding Zhi-Jian and Cai Hong
SatBIS-45	Identification of MIMO Hammerstein-Wiener System 1186 Jing Bai, Zhizhong Mao, Feng Yu and Yajun Wang
SatBIS-46	MIMO System Identification with Extended MADALINE Neural Network Trained by Levenberg-Marquardt Method 1191  Wenle Zhang
SatBIS-47	A Novel Approach for Modelling of an Injector Powered Transonic Wind Tunnel 1197 Wei Rui, JianHua Qin and YongYi Ma
SatBIS-48	Gradient-Based Iteration for a Class of Matrix Equations 1201  Huamin Zhang and Rui Ding

SatBIS-49	Attitudes Decoupling Control and Disturbance Compensation of the Hypersonic Vehicle 1206
	Yan Zhiqiang, Mu Jianhua, Qu Jishuang and Xia Weiwei
SatBIS-50	Research of Optimized Adaptive Kalman Filtering 1212
	Xu Fuzhen. Su Yongaing and Liu Hao

Session	SunA01: Process Control (I)		
Date/Time	Sunday, 01 Ju	ne 2014 / 10:20-12:20	
Venue	Room01		
Chair	Wen Tan, Nor	th China Electric Power Univ.	
Co-Chair	Yan Liu, Nort	Yan Liu, Northeastern Univ.	
10:20 - 10:40	SunA01-1	Levant Differentiator Based Output-Feedback Control for Slosh Super-Twisting Algorithm 1215  Jyoti Prakash Mishra and Shailaja R. Kurode	
10:40 - 11:00	SunA01-2	Complex Process Operating Optimality Assessment and Nonoptimal Identification Using Modified Total Kernel PLS 1221  Yan Liu, Yuqing Chang, Fuli Wang, Ruicheng Ma and Honglin Zhang	
11:00 – 11:20	SunA01-3	Adaptive EWMA Controller based on Dynamic Modeling in Semico Manufacturing 1228 Ge Cuicui, Chen Liang and Wang Feilong	
11:20 - 11:40	SunA01-4	Multivariable Decoupling Control for a Benchmark Boiler 1233 Damiran Ulemj, Caifen Fu and Wen Tan	
11:40 – 12:00	SunA01-5	Multivariable PID Controller Design for a Benchmark Boiler 1238 Damiran Ulemj, Caifen Fu and Wen Tan	
12:00 – 12:20	SunA01-6	Design and Implementation of a Microwave Heating System Based of Loop Control Strategy 1243  Yupeng Yuan, Shan Liang, Qingyu Xiong, Jiaqi Zhong and Zhihui Wang	

Session	SunA02: Robu	ast Control (II)
Date/Time	Sunday, 01 Jun	e 2014 / 10:20-12:20
Venue	Room02	
Chair	Junli Wu, Huaq	qiao Univ.
Co-Chair	Fangfang Hu, H	Harbin Institute of Tech.
10:20 - 10:40	SunA02-1	Model Predictive Control for Drum Water Level of Boiler Systems 1249 Junli Wu, Kaiyong Jiang, Hamid Reza Karimi and Xiaojie Su
10:40 - 11:00	SunA02-2	Robust Fault-Tolerant Attitude Control of Three-Axis Stabilized Satellite 12 Chen Xueqin, Hu Fangfang, Sun Yahui and Sun Rui
11:00 - 11:20	SunA02-3	Decentralized Fuzzy Guaranteed Cost Tracking Control with Poles Assignmen for Bank-to-Turn Missile 1260 Shi Kun and Liang Xiao-Geng

11:20 – 11:40	SunA02-4	Delay-Interval-Dependent Robust Stabilization for Uncertain Stochastic System with Multiple Time-Delays 1266 Huihui Zhang and Jianwei Xia
11:40 – 12:00	SunA02-5	Integral Sliding Mode Output Control of Delta Operator Systems with Insensitivity to Sampling Time Jitter 1272 Li-Ying Hao, Hui Li, Xiang-Gui Guo, Jinyan Song and Hongshuai Pang
12:00 – 12:20	SunA02-6	Integral Sliding Mode Fault-Tolerant Control Against Actuator Nonsymmetric Deadzone and Unmatched Disturbances 1278  Li-Ying Hao, Hui Li, Xiang-Gui Guo, Jinyan Song and Hongshuai Pang

Session	SunA03: Opt	imal Control and Optimization (III)
Date/Time	Sunday, 01 Ju	ne 2014 / 10:20-12:20
Venue	Room03	
Chair	Junwei Li, He	nan Univ.
Co-Chair	Zhe Gao, Liao	ning Univ.
10:20 - 10:40	SunA03-1	Fractional-Order Particle Swarm Optimization 1284 Zhe Gao, Junxiu Wei, Chao Liang and Ming Yan
10:40 - 11:00	SunA03-2	Transportation and Effect on Economic Growth Based on Optimal Cont Theory 1289 Yushun Tan, Senfa Chen, Yuanyuan Zhang and Jinliang Liu
11:00 - 11:20	SunA03-3	<b>Aerodynamic Optimization Utilizing Control Theory</b> 1293 Xiaoliang Zhang and Junqiang Bai
11:20 - 11:40	SunA03-4	Tracking Guidance Strategy for Low-Thrust Transfer Trajectory Based NMPC Theory 1299 Hai-Bin Shang, Shuai Wang, Ting Jin and Huang Xiang-yu
11:40 - 12:00	SunA03-5	New Structure of Kalman Filter Base on Adaptive Genetic Algorithm for Radar Networking 1305  Yan Mingming and Pan Wei
12:00 - 12:20	SunA03-6	Chaotic Particle Swarm Optimization Algorithm Based on Adaptive Iner Weight 1310 Jun-Wei Li, Yong-Mei Cheng and Ke-Zhe Cheng

Session	SunA04: Intelligent Systems (I)
Date/Time	Sunday, 01 June 2014 / 10:20-12:20
Venue	Room04
Chair	Feng Liu, Tsinghua Univ.
Co-Chair	Zhongliang Zhang, Northeastern Univ.

10:20 – 10:40 SunA04-1 Online and Model-Free Supplementary Learning Control Based on Approximate Dynamic Programming 1316

Wentao Guo, Feng Liu, Jennie Si and Shengwei Mei

xlii

10:40 - 11:00	SunA04-2	The Application of Adaptive Genetic Algorithms in Single-Resistant Radar Jamming 1322  Pan Wei, Liu Sili and Dong Hongzhi
11:00 – 11:20	SunA04-3	The Application of Data Mining in Cigarette Sensory Quality Evaluation: An Experimental Study 1328 Zhang Zhongliang, Tang Jianguo, Luo Xinggang, Tang Jiafu, Meng Zhaoyu and Qiao Danna
11:20 - 11:40	SunA04-4	Non-Integer Norm Regularized Logistic Regression 1333 Liu Jianwei, Sun Zhengkang and Luo Xionglin
11:40 – 12:00	SunA04-5	Multi-Objective Comprehensive Learning Particle Swarm Optimization Based on Summation of Normalized Objectives and Diversified Selection 1339 Bo Zheng, B. Y. Qu, J. J. Liang and Hui Song
12:00 – 12:20	SunA04-6	Research on Water Level Measurement Based on Image Recognition for Industrial Boiler 1344 Sun Bin, Changsheng Zhang, Lun Li and Jianping Wang

Session	SunA05: Decision	n-Making Theory and Method (III)
Date/Time	Sunday, 01 June 2	014 / 10:20-12:20
Venue	Room05	
Chair	Quande Qin, Shenz	zhen Univ.
Co-Chair	Jianlong Zhang, Sh	hanxi Prov. Water Conservancy Construction and Development Centers
10:20 – 10:4	0 SunA05-1	A Fuzzy Two-Stage Project Portfolio Selection Model Addressing Financial and Non-Financial Factors 1349  Quande Qin, Jinpeng Li and Li Li
10:40 – 11:0	0 SunA05-2	Water Supply Route Optimization for Reservoir Emergency Based on Improved Ant Colony Algorithm 1354  Du Xiang-Run, Zhang Jian-Long and Feng Min-Quan
11:00 – 11:2	0 SunA05-3	Survivability Evaluation of Network Combat System Based on Gray Theory 136 Wang Kaiyun, Huang He, Jia Peng, Luo Ying and Jang Hong
11:20 – 11:4	0 SunA05-4	<b>Robust Operation Optimization in Cold Rolling Production Process</b> 1365  Hong Yue and Wang Xianpeng
11:40 – 12:0	0 SunA05-5	An Approach to Deriving Interval Weights from Interval Fuzzy Preference Relations Based on Multiplicative Transitivity 1371 Hao Wang and Zhou-Jing Wang
12:00 – 12:2	0 SunA05-6	UAV Real-Time Path Planning Using Dynamic RCS Based on Velocity Vector Field 1376  Meng Guanglei, Guo Jinlong, Sun Fengqin and Tian Feng

Session	SunA06: Fault	Diagnosis and Fault-Tolerant Control (III)	
Date/Time	Sunday, 01 June	e 2014 / 10:20-12:20	
Venue	Room06		
Chair	Ziyang Qi, Hari	bin Institute of Tech.	
Co-Chair	Jun Guo, Beijin	g Univ. of Tech.	
10:20 – 10:40	SunA06-1	Modeling of Hemispherical Resonator Gyro Resonator Deformation Under Acceleration 1381 Yi Guoxing, Xie Yangguang, Wang Changhong, Qi Ziyang and Fang Zhen	
10:40 – 11:00	SunA06-2	Study on Automatic Diagnostic of Elevator Brake Coil Wearing 1386 Jun Guo and Jinwei Fan	
11:00 – 11:20	SunA06-3	The Fault Diagnosis Research for the Underwater Vehicle System Based on SOFCMAC 1390 Ting Zhu and Daqi Zhu	
11:20 – 11:40	SunA06-4	Fault Detection Using Unknown Input Observers for Heavy-Haul Trains Yu Zhiheng, Peng Jun, Liu Weirong, Qin Yufu and Yi Jiandui	1
11:40 – 12:00	SunA06-5	Steel Surface Defect Detection and Localization Based on SVD and Two-Side Compressive Measurements 1401  Jingli Gao, Chenglin Wen and Meiqin Liu	
12:00 – 12:20	SunA06-6	Researches on Brittle Seam Mining Based Enterprise Situation Assessment and Prediction Mechanism in Hi-Tech Enterprise Cooperation-Competition Network 1407 Yi Zhuo and Shijun Yao	

Session	SunA07: Socia	l Economy Systems
Date/Time	Sunday, 01 June	e 2014 / 10:20-12:20
Venue	Room07	
Chair	Xin Tong, North	heastern Univ.
Co-Chair	Kongguo Zhu, A	Library of Shandong Youth Univ. of Political Scie.
10:20 - 10:40	SunA07-1	Correlation Analysis of Carbon Emissions and Influencing Factors in China 1413  Tong Xin and Chen Kai
10:40 - 11:00	SunA07-2	Simulating Approach Based Optimal Manpower Planning in an Employee Leasing Center and the Approximate Algorithm 1418 Zhang Xiufu, Hao Gang, Gou Zhijing, Sun Bin and Sun Junqing
11:00 – 11:20	SunA07-3	Analysis of the Factors Affecting the Credit Risk of China's Listed Companies 1424 Wei Dong, Wang Yu-Yan and Zhang Zhi-Xin
11:20 – 11:40	SunA07-4	Research on the Improvement Effect of Lean Thinking to Construction Safety  Management 1428  Kongguo Zhu and Jinggang Lv

11:40 – 12:00	SunA07-5	On Labor Force Unemployment of Each Region in Harbin in China 1434 Wei Wang, Yonggang Ye and Jirong Zhao
12:00 – 12:20	SunA07-6	<b>Type Selection of Tourism Supply Chain and Its Safeguard Mechanism</b> 1438 <i>Danhong Chen</i>

Session	Sun A08: Cont	rol Applications (I)
		••
Date/Time	Sunday, 01 Jun	e 2014 / 10:20-12:20
Venue	Room08	
Chair	Rongqi Shi, Tsi	inghua Univ.
Co-Chair	Yan Liu, Chine	se Academy of Scie.
10:20 - 10:40	SunA08-1	Design of Active Disturbance Rejection Control System for Morphing Fl. Dynamics 1443 Rongqi Shi and Jie Peng
10:40 - 11:00	SunA08-2	A Study on the Sync Guidance of the Multi-Lasers with the Micro-Vision Liu Yan, Liu FangFang and Zou Wei
11:00 – 11:20	SunA08-3	Local Hopf Bifurcation Analysis of Logistic Population Dynamics Models Two Delays 1454 Sreelakshmi Manjunath and Gaurav Raina
11:20 - 11:40	<b>SunA08-4</b>	Simulation of the Ship Burble in a Cooperative Carrier Approach Patter Ran Dong and Guihua Xia
11:40 – 12:00	SunA08-5	Study of FPGA-Based Visual Detection for Pointer Dial 1467 Bin Sun, Changsheng Zhang, Ziyu Liu, Bin Qian and HanPing Zhang
12:00 – 12:20	SunA08-6	Partial Feed-Forward Decoupling Based PI Control of CFBB Combustio System 1473 Liu Ji-Zhen and Zhong Zhen-Fang

Session	SunA09: Robo	t Control (I)	
Date/Time	Sunday, 01 June	e 2014 / 10:20-12:20	
Venue	Room09		
Chair	Ji Xiang, Zhejia	ng Univ.	
Co-Chair	Xuezhu Wang, Univ. of Chinese Academy of Scie.		
10:20 - 10:40	SunA09-1	Kinematic Control for Redundant Manipulators with Time Dependent Constraints: General-Weighted Least-Norm Method 1478 Pei Jiang, Ji Xiang and Wei Wei	
10:40 - 11:00	SunA09-2	Adaptive Backstepping Control of Flexible Joint Robots with Friction Compensation Based on LuGre Model 1484  Xuezhu Wang, Hongyi Li, Yuechao Wang and Jianning Hua	
11:00 – 11:20	SunA09-3	Multi-Smart Car Control System Design and Research Based on ZigBee 149 Chuan Wang, Zhongyu Shen, Engang Tian and Qiwen Zheng	

11:20 – 11:40	SunA09-4	A Kinematics Analysis for a 5-DOF Manipulator 1495 Jinyan Lu, De Xu and Peng Wang	
11:40 – 12:00	SunA09-5	A Fast Human Detection Algorithm of Video Surveillance in Emergencies Ma Juan, Hu Rongchun and Li Jian	1500
12:00 – 12:20	SunA09-6	Receding Horizon Control for Mobile Robot Path Planning in Unknown Dynamic Environments 1505  Yang Chen, Lei Cheng, Huaiyu Wu and Yanhua Yang	

Session	SunA10: Electr	ric Vehicles and Intelligent Transportation
Date/Time	Sunday, 01 June	e 2014 / 10:20-12:20
Venue	Room10	
Chair	Chenghui Zhan	g, Shandong Univ.
Co-Chair	Wenlong Yao,	Dalian Maritime Univ.
10:20 - 10:40	SunA10-1	Full Speed Range Control of IPMSM for Electric Vehicles Based on Hamiltonian Theory 1510  Xudong Liu, Ke Li, Chenghui Zhang and Jing Sun
10:40 - 11:00	SunA10-2	Study on EV Charging Station Location Planning Based on the Load Balance Principle with Agent-Based AnyLogic Simulation 1515 Ruifeng Shi, Shiyao Zheng, Chaoqun Zhang and Li Zhang
11:00 - 11:20	SunA10-3	<b>Road Boundary Detection Based on Information Entropy</b> 1520 Xiao Hu, Chao Huang and Wei Cai
11:20 – 11:40	SunA10-4	Ship Electrical Propulsion Control System Based on Improved Model- Free Adaptive Control 1526 Yao Wen-Long, Liu Yuan, Zhang Jun-Dong, Chi Rong-Hu, Shao Wei and Zhang Gui-Chen
11:40 – 12:00	SunA10-5	A Nonlinear Control Allocation Algorithm for DYC in Distributed-Motor Drive Electric Vehicles Using S-SQP 1530 Xiong Lu, Chen Yuanlong and Jin Chi
12:00 – 12:20	SunA10-6	Optimal Planning of the Clutch Slipping Control for Gear Shift of 2- Speed Electric Vehicle 1538 Qiong Liang, Nana Tang, Bingzhao Gao and Hong Chen

Session	SunA11: Intellig	gent Building Control and Management (Invited Session)
Date/Time	Sunday, 01 June	2014 / 10:20-12:20
Venue	Room11	
Chair	Yahui Wang, Be	ijing Univ. of Civil Engineering and Architecture
Co-Chair		
10:20 - 10:40	SunA11-1	A Rapid and Low-Cost North-Finder Design with Error Compensation 1544 Fangzhou Zheng, Shugui Wu, Xiao Lin and Yaping Dai
10:40 - 11:00	SunA11-2	An Adaptive Genetic Algorithm Based on Arctangent Function 1550 Ting Yu, Jiang-Qiang Hu, Jian-Chuan Yin and Xing-Xing Huo
11:00 - 11:20	SunA11-3	A FDD Model of VAV Systems Based on Neural-Networks and Residual Statistics 1555  Han Qi and Wei Dong
11:20 – 11:40	SunA11-4	Resource Constrained Project Scheduling Problem Based on Improved Ant Colony Algorithm 1560 Jun Yan, Chunyan Zhao and Haiying Dong
11:40 – 12:00	SunA11-5	The City Gas Emergency Dispatching Strategy Based on Multi-Agent 1564 Wei Xufeng, Liu Chao and Wang Yahui
12:00 – 12:20	SunA11-6	Comparative Study on Permanent Magnet Synchronous Motor Control System in Elevator 1568 Nie Mu-Han and Ma Hong-Yan

Session	SunAIS: Interactive Session
Date/Time	Sunday, 01 June 2014 / 10:20-12:20
Venue	Room12
SunAIS-01	Non-Destructive Detection on the Fertility of Injected SPF Eggs in Vaccine Manufacture 1574 Qi-Lei Xu and Feng-Ying Cui
SunAIS-02	An ARM-Based Embedded Gesture Recognition System Using a Data Glove 1580 Wang Jingqiu and Zhang Ting
SunAIS-03	The Design of Aviation Battery Charging and Discharging System Based on DSP 1585 Cai Chengtao, Yang Chao and Lv Xiaolong
SunAIS-04	<b>Delay-Range-Dependent Stability for Uncertain Stochastic Systems with Time-Varying Delay</b> 15 Tao Liu
SunAIS-05	Hopf Bifurcation Analysis and Control of a New Lorenz-Like System 1597  Zhang Zhonghua

SunAIS-06	Neural Network Adaptive State Feedback Control of a Magnetic Levitation System 1602 Shi-Tie Zhao and Xian-Wen Gao
SunAIS-07	Permanent Magnet Synchronous Motor Direct Torque Control Based on Particle Filter Observer 1606 Wang Xu, Xing Yan, Yu Hong-Liang and Yang Dan
SunAIS-08	I&I Stabilization Based Novel Nonlinear Adaptive TCSC Control Algorithm for Improving Transient Stability 1610  Zhang Lei, Zhang Aimin and Jing Junfeng
SunAIS-09	Study on the Mathematical Model of Virus Infection in Pest Management 1616  Jingjin Zhang and Zhongyi Xiang
SunAIS-10	Quantized Feedback Stabilization of Nonlinear Cascaded Systems with Dynamic Uncertainties 1620 Tengfei Liu and Zhong-Ping Jiang
SunAIS-11	Chaos Control for the Buck-Boost Converter by Improving the Correlation 1626  Jia Meimei and Zhang Guoshan
SunAIS-12	Formation Control of Robot Swarm Based on Community Division and Multilevel Topology Design via Pining 1631 Shiming Chen, Xianda Ding and Xiaoling Chen
SunAIS-13	Mach Number Prediction Models Based on Ensemble Neural Networks for Wind Tunnel Testing 1637 Zhi Wei Jin, Li Zhao and Zheng Zhou Rao
SunAIS-14	Stability Analysis of Switched Nonlinear Systems with an Improved Mode-Dependent Average Dwell Time Method 1641 Ren Ling, Guo Rongwei, Zhao Ping and Li Bin
SunAIS-15	Synchronization of Chua's Circuits Based on Strictly Positive Realness 1645 Niu Hong, Zhang Guoshan and Wang Jiankui
SunAIS-16	Characteristic Models and AILC Design of Time-Varying Nonlinear Systems 1650  Mingxuan Sun, Jie Zhang and Hongbo Bi
SunAIS-17	Anti-Windup Compensator Design for Fuzzy Descriptor System with Delayed State and Saturating Input 1656 Yanbin Luo, Qiuxuan Wu and Aipeng Jiang
SunAIS-18	Target Tracking Based on Particle Filter Algorithm with Multiple Cues Fusion 1660  Tao Zhang and Shumin Fei
SunAIS-19	Finite-Time Input-to-State Stability of Multi-Agent Systems with Switching Topologies 1666 Xiaoli Wang, Yumin Chen and Qian Sun
SunAIS-20	Analysis of Population Controllability and Prediction of Population Structure Based on Constraint System 1672 Yue Xiao-Ning, Meng Zhao-Jia and Xie Feng-Dan
SunAIS-21	Trajectory Tracking Control for Intelligent Vehicle Based on the Euler-Lagrange Systems 1677 Chuang Guo, Longfei Dong and Yanrong Ge
SunAIS-22	Clustering Analysis Based on Adaptive Genetic Algorithm for Performance Assessment 1682 Gao Xiangpeng, Wang Jianhua and Liang Shan
SunAIS-23	Gaussian Mixture Model with Semantic Distance for Image Classification 1687 Wei Wu, Guanglai Gao and Jianyun Nie
SunAIS-24	Intelligent Collaborative Urban Traffic Management System Based on SOA and Cloud Computing 1692 Fuquan Sun, Xi Yu, Shixin Liu and Fuqiang Lu
SunAIS-25	Output Strictly Passive and Input Strictly Passive of Neutral Systems 1696  Jichun Wang, Qingling Zhang, Dong Xiao, Jingjing Bao and Huiying Zhang

SunAIS-26	<b>A Group Division Method Based on Collaborative Learning Elements</b> 1701 Chen Long and Yang Qing-Hong
SunAIS-27	Online Actuator Reassignment for Fault Tolerant Flight Control 1706  Lunlong Zhong and Félix Mora-Camino
SunAIS-28	Research of Brain MRI Image Segmentation Algorithm Based on FCM and SVM 1712  Jun Xiao and Yifan Tong
SunAIS-29	The Shapley Value of Cooperative Game with Stochastic Payoffs 1717 Cheng-Guo, Quan-Lin Li and Shi-Yong Li
SunAIS-30	A Novel Algorithm for Divisible Resource Allocations under PSP Auction Mechanism 1723  Xingyu Shi, Suli Zou and Zhongjing Ma
SunAIS-31	Nash Equilibrium Flow in a Routing Game with Random Queues 1729  Tatiana Tatarenko and Ivan Popov
SunAIS-32	Lot Release Strategy Semiconductor Assembly and Testing Based on the Degree of Constraint of the Minimum Spanning Tree 1735  Zhang Guohui, Liu Chang, Yao Lili and Shi Haibo
SunAIS-33	Risk Response Strategy Research of Water and Sediment Regulation System Running Schemes in the Yellow River 1740  Zhao Jing, Yixin Zhao, Huang Qiang and Wenjun Tian
SunAIS-34	Three Stability Criteria for Delayed Stochastic Genetic Regulatory Networks and their Conservativeness Analysis 1745  Jing Wang, Shaochun Cui, Xian Zhang and Yantao Wang
SunAIS-35	<b>Application of Wireless Sensor Network in the Monitoring System of Boiler</b> 1751 Gang Wu, Chengdong Wu and Shichun Xu
SunAIS-36	The Detectability of Discrete-Time Stochastic Linear Systems with Markovian Jump and Multiplicative Noises 1755 Wenhui Liu, Feiqi Deng, Xuekui Yan and Yinwei Zhao
SunAIS-37	Input/Output-to-State Stable Property of Switched Stochastic Nonlinear Systems by an Improved Average Dwell Time Method 1759 Ren Ling, Guo Rongwei, Zhao Ping and Li Bin
SunAIS-38	A HFID-Based Online Testing Technique for Internal Pressure of Vacuum Breaker 1764 Liu Shuguang, Guo Qian and Wu Xuexing
SunAIS-39	Research on Active Heave Compensation for Offshore Crane 1768 Liu Shuguang, Guo Qian and Zhao Wenpu
SunAIS-40	Reliability Assessment of Nuclear Power Plant Digital Instrumentation and Control System I: Challenges and Research Status of Reliability Assessment Methodology 1773 Zhou Shiliang, Jiang Ruitao and Liu Yuyan
SunAIS-41	Reliability Assessment of Nuclear Power Plant Digital Instrumentation and Control System II: Challenges from Uncertainty of Failure Data and Complexity of System and Corresponding Research Status 1779 Zhou Shiliang and Liu Yuyan
SunAIS-42	Distributed Nested Rotating Consensus Problem of Multi-Agent Systems 1785  Peng Lin, Wanting Lu and Yongduan Song
SunAIS-43	Consensus Analysis of a Class of Second-Order Multi-Agent Systems with Nonuniform Time-Delays and Dynamically Changing Topologies 17; 2  Hui Gao and Yongduan Song

SunAIS-44	An Electricity Charge Strategy Based on Dynamic Rewards and Punishment Li Yan-Ping, Yu Dan, Xu Dai-Dai and Li Xin
SunAIS-45	Power Management and Control for Photovoltaic System Based on SWOT Model 1801 Xiaohong Ma, Shaowu Li, Qing Ai, Kunyi Chen and Dongshan Geng
SunAIS-46	Research on Meta-Model of Driver Behavior in Agent-Based Traffic Evacuation Simulation 1805 Shengcheng Yuan, Yi Liu, Gangqiao Wang, Yi Liu and Hui Zhang
SunAIS-47	Coordinated Control of Traffic Flow in Complex-Arterial Networks Under The Big Data Background 1811 Lin Feng, Feng Yuan-Jing, Li Kang and Zhang Ming
SunAIS-48	The Energy Efficiency Monitoring and Operation Optimization of Central Air Conditioners 1818 Zhou Yu, Yan Jun-Wei and Lin Hai-Jie
SunAIS-49	An Advanced Adaptive Backstepping Control Method for STATCOM 1822 Zhang Chao, Zhang Aimin, Zhang Hang, Wang Nan, Ren Zhigang, Huang Jingjing and Geng Yingsan
SunAIS-50	Model Reference Adaptive Control Based on Lyapunov Stability Theory 1828 Tang Minan, Cao Jie, Yang Xiaoxiao, Wang Xiaoming and Gu Baohui

Session	SunB01: Process	Control (Chinese) (II)	
Date/Time	Sunday, 01 June 2	Sunday, 01 June 2014 / 13:20-15:20	
Venue	Room01		
Chair	Qiuxia Sun, Shane	dong University of Science and Tech.	
Co-Chair	Yuyan Liu, North	China Electric Power Univ.	
13:20 - 13:40	SunB01-1	The Influence of Unknown Parameters in AR(2) Process to the Control Chart's Performance 1834 Qiuxia Sun and Qisheng Gao	
13:40 – 14:00	SunB01-2	The Structure and Parameters Optimization of ADRC for Steam Generator Water Level 1839 Liu Yuyan, Zhou Shiliang and Song Bing	
14:00 – 14:20	SunB01-3	Modified Internal Model Controller Design Based on OKID for Multivariable System with Time Delays 1845 Zhou Zhigang and Xie Linbo	
14:20 – 14:40	SunB01-4	The Principle and Simulation Research of a Fast Algorithm of Multivariable Predictive Control 1851  Hao Pan, Yu Cao, Tao Zou, Haibin Yu and Mingzhe Yuan	
14:40 – 15:00	SunB01-5	Sectional Optimization of Oxygen Content in Flue Gas Based on PSO 1857 Liwen Yang, Jingcheng Wang and Yuanhao Shi	
15:00 – 15:20	SunB01-6	Research on Calibration Method of Infrared Test Equipment (Calibration Method of Infrared Radiometer and Infrared Thermal Imager) 1863 Wei Guan, Ling Guo and Li Fu	

Session	SunB02: Sensor N	Network Systems (I)
Date/Time	Sunday, 01 June 20	014 / 13:20-15:20
Venue	Room02	
Chair	Ying Zhang, Shang	ghai Maritime Univ.
Co-Chair	Weirong Liu, Cent Automation Chang	eral South Univ. Hunan Engineering Laboratory for Adanced Control and Intelligent span
13:20 - 13:40	SunB02-1	Energy-Efficient Sensor Scheduling Scheme for Target Tracking in Wireless Sensor Networks 1869  Jianming Xiao, Weirong Liu, Yun He and Gaorong Qin
13:40 - 14:00	SunB02-2	On Deployment Optimization Strategy for Hybrid Wireless Sensor Networks 1875 Zhang Ying and Zhao Wei
14:00 – 14:20	SunB02-3	An Efficient and Hybrid Key Management for Heterogeneous Wireless Sensor Networks 1881 Zhang Ying and Ji Pengfei
14:20 – 14:40	SunB02-4	Joint Sleep Scheduling and Opportunistic Transmission in Wireless Body Area Networks 1886 Hong Li, Bo Yang, Wenbin Yu, Xinping Guan, Xiaohui Gong and Guangjun Yu
14:40 – 15:00	SunB02-5	Ring-Based Security Energy-Efficient Routing Protocol for WSN 1892 Liu Mengyao, Zhang Yanyan and Xia Li
15:00 – 15:20	SunB02-6	Sensor Scheduling Based on Predicion 1898 Yan Dongmei

Session	SunB03: Identification and Estimation (I)		
Date/Time	Sunday, 01 June 2	2014 / 13:20-15:20	
Venue	Room03		
Chair	Wenzhong Gao, d	Univ. of Denver	
Co-Chair	Linru You, South China Univ. of Tech.		
13:20 - 13:40	SunB03-1	GNSS Coverage Performance for Medium-High Earth Orbital Satellites Zhao Xiaofang, Wang Haihong, Wu Xiangjun, Wang Jie and Chen Zhonggui	1902
13:40 – 14:00	SunB03-2	Multi-Objective Robust H <sub>∞</sub> Observer Design for One-Sided Lipschitz Nonlinear Uncertain Systems 1907 Muhammad Abid, Muhammad Shoaib and Abdul Qayyum Khan	

14:00 – 14:20	SunB03-3	Integrated Modeling for Gas Mixing Process Based on Mechanism and Subspace Identification 1912 Yuan Cao, Weihua Cao, Yan Yuan, Min Wu and Yongyue Zhang
14:20 – 14:40	SunB03-4	Dynamic Model and Parameters Identification of Piezoelectric Stack Actuators 1918 Peidong Li, Jie Fu, Yuan Wang, Zhiwei Xing and Miao Yu
14:40 – 15:00	SunB03-5	Stochastic Gradient Algorithm for State Space System with d-Step Delay 1924 Ya Gu and Rui Ding
15:00 – 15:20	SunB03-6	Motion Simulation and Analysis During Initial Rotor Position Identification for PMSM Based on High Frequency Voltage Injection 1929 Zhaobin Huang, Linru You and Zhaodong Wang

Session	SunB04: Discre	te Event Systems
Date/Time	Sunday, 01 June	2014 / 13:20-15:20
Venue	Room04	
Chair	Chao Lu, Northe	eastern Univ.
Co-Chair	Liang Feng, Nan	ıkai Univ.
13:20 - 13:40	SunB04-1	Hybrid Model of Multi-Agent and DEDS for Steelmaking-Continuous Casting-Hot Rolling Manufacturing Process Simulation 1936 Duan Xu, Chao Lu, Wei Zhou and Shixin Liu
13:40 – 14:00	SunB04-2	<b>Autonomy and Coordination Mechanism in Virtual Production Systems</b> 19 <i>Liang Feng</i>
14:00 – 14:20	SunB04-3	Consensus of Double-Integrator Discrete-Time Multi-Agent System Based on Second-Order Neighbors' Information 1946 Huan Pan and Wenjuan Qiao
14:20 – 14:40	SunB04-4	Partial Stability of Probabilistic Boolean Network 1952 Zhiqiang Li, Jinli Song and Jian Yang
14:40 – 15:00	SunB04-5	Asymptotic Behavior of Sampling Zero Dynamics for a 3-DOF Tandem-Rotor Model Helicopter 1957 Shan Liang, Cheng Zeng, Jiaqi Zhong and Yongsheng Sun
15:00 – 15:20	SunB04-6	Using <i>p</i> -Invariants to Transform Inadmissible Constraints into Admissible Constraints 1963 S. M. Saeed Damadi, Ali Doustmohammdi and Ahmad Afshar

Session	SunB05: Netw	orked Control Systems (I)	
Date/Time	Sunday, 01 Jun	e 2014 / 13:20-15:20	
Venue	Room05		
Chair	Nan Xiao, East	China Univ. of Scie. and Tech.	
Co-Chair	Zhou Gu, Nanj	ing Forestry Univ. and Southeast Univ.	
13:20 - 13:40	SunB05-1	Stabilization of LTI Systems Over Finite-State Fading Channels 1971 Nan Xiao, Yugang Niu and Lihua Xie	
13:40 – 14:00	<b>SunB05-2</b>	Gain-Scheduled $H_{\infty}$ Control for Networked Superheated Steam Temperature Baochun Zhuang, Guangtao Shi and Zhou Gu	197
14:00 – 14:20	SunB05-3	H <sub>∞</sub> Control for Multi-Rate Networked Control Systems with both Time-Delay and Packet-Dropout 1983  Qixin Zhu, Binbin Xie and Yonghong Zhu	
14:20 – 14:40	SunB05-4	Quantized Control for Networked Control Systems with Communication Delay and Packet Dropouts 1989 Chong Jiang	
14:40 – 15:00	SunB05-5	Fuzzy-Model-Based Robust Stability of Nonlinear Networked Control Systems with Input Missing 1995 Xiangyang Jia, Bin Tang, Defeng He and Shiguo Peng	
15:00 - 15:20	SunB05-6	Adaptive Fuzzy Coordinated Tracking Control of Networked Unknown Lagrange Systems 2003 Chen Gang, Feng E-ning, Lin Qing and Ling Rui	

Session	SunB06: Signal Processing (I)	
Date/Time	Sunday, 01 June 2014 / 13:20-15:20	
Venue	Room06	
Chair	Wei Xie, South China Univ. of Tech.	
Co-Chair	Hongjian Zhang, Air Force Military Representative Office in Shanghai Area.	
13:20 - 13:40	SunB06-1	Overview on Image Super Resolution Reconstruction 2009  Lu Ziwei, Wu Chengdong, Chen Dongyue, Qi Yuanchen and Wei Chunping
13:40 – 14:00	<b>SunB06-2</b>	A Robust Object Tracking Method Based on Sparse Representation 2015 Yuanchen Qi, Chengdong Wu, Dongyue Chen and Ziwei Lu
14:00 – 14:20	SunB06-3	Adaptive Fractional Differential Algorithm Based on Otsu Standard 2020 Bo Li and Wei Xie

14:20 – 14:40	SunB06-4	Multisensor Multitarget Tracking Based on a Matrix Reformulation of the GM- PHD Filter 2026 Hongjian Zhang, Yuewu Zhang, Bei Ye and Jin Wang
14:40 – 15:00	SunB06-5	<b>Image Feature Detection Based on Phase Congruency by Monogenic Filters</b> 2033 Wang Lijuan, Zhang Changsheng, Liu Ziyu, Sun Bin and Tian Haiyong
15:00 - 15:20	<b>SunB06-6</b>	State-Machine-Based Filtering Method for Vehicle Speed Detection 2039 Wang Jian-Qun, Wu Qing-Yang and Cao Ning

Session	SunB07: Control Applications (II)		
Date/Time	Sunday, 01 June 2014 / 13:20-15:20		
Venue	Room07		
Chair	Yan Ji, Jilin Univ.		
Co-Chair	Xin Wang, Hunan University of Technology		
13:20 – 13:4	0 SunB07-1	Integrated Control of Active Front Steering and Direct Yaw Moment Based on Model Predictive Control 2044  Yan Ji, Hongyan Guo and Hong Chen	
13:40 – 14:0	0 SunB07-2	Nonlinear Fuzzy Supervisory Predictive Control Based on Genetic Algorithm 2050 Li Suzhen, Liu Xiangjie and Yuan Gang	
14:00 – 14:2	0 SunB07-3	Stability and Bifurcation Analysis of a Lotka-Volterra Time Delayed System Sreelakshmi Manjunath and Gaurav Raina	
14:20 – 14:4	0 SunB07-4	Vector Control of Three-Phase Voltage Source PWM Rectifier Based on Fractional-Order Controller 2064 Chaojun Wu and Yanbin Zhang	
14:40 – 15:0	0 SunB07-5	Nonlinear Model Predictive Control Based on T-S Fuzzy Model for a PWR Nuclear Power Plant 2070  Mengyue Wang and X. J. Liu	
15:00 – 15:2	0 SunB07-6	Stability and Hopf Bifurcation Analysis of the Mackey-Glass and Lasota Equations 2076  Sreelakshmi Manjunath and Gaurav Raina	

Session	SunB08:	Intelligent Automation	
Date/Time	Sunday, 0	Sunday, 01 June 2014 / 13:20-15:20	
Venue	Room08		
Chair	Xiang Lu,	, Civil Aviation Univ. of China	
Co-Chair	Rui Xu, B	Rui Xu, Beijing Institute of Tech.	
13:20 - 13:40	SunB08-1	Extraction and Evaluation Model for the Basic Characteristics of MIDI File Music 2083  Zhao Wei, Li Xiaoli and Li Yang	
13:40 – 14:00	SunB08-2	Attitude Navigation for Deep Space Explorer based on Mission Planning 2088 Fanyu Zhao, Pingyuan Cui, Rui Xu and Zhaoyu Li	
14:00 – 14:20	SunB08-3	Research on HVPL for Visual Detection of Bicolor Water Level Gauge 2094 Bin Sun, Changsheng Zhang, Ziyu Liu, Haiyong Tian and Hanping Zhang	
14:20 – 14:40	SunB08-4	The Application in Detection of Defects in Compound Material with Ultrasonic Phased Array Technology 2100 Yunlin Luo, Xiang Lu, Kun Wang and Li Wang	
14:40 – 15:00	SunB08-5	Infrared Image Registration of Damage in the Aircraft Skin Based on Lie Group Machine Learning 2104 Yunlin Luo, Zhanxiao Yan, Kun Wang and Li Wang	
15:00 – 15:20	SunB08-6	A Study of Intelligent Vehicle Motion Control System Based on Multi-Sensor Information Fusion 2109  Lan Yanting and Huang Jinying	

Session	SunB09: Robot Control (II)			
Date/Time	Sunday, 01 Jun	Sunday, 01 June 2014 / 13:20-15:20		
Venue	Room09	Room09		
Chair	Zhiwei Liang, Nanjing Univ. of Posts and Telecommunications			
Co-Chair	Fangzheng Xue, Chongqing Univ.			
13:20 - 13:40	SunB09-1	Quasi-Harmonic Approach to Non-Holonomic Robot Motion Control with Concave Obstacles Avoidance 2113  D. Necsulescu and G. Nie		
13:40 - 14:00	SunB09-2	Omnidirectional Walk of Biped Robots in RoboCup3D Simulation Environmen Ping Shen, Zhiwei Liang and Xuejun Li	t 2	
14:00 – 14:20	SunB09-3	<b>A Partitioning-Based Task Allocation Strategy for Police Multi-Agents</b> 2124 <i>Linag Zhiwei, Yang Xiang and Deng Yao</i>		
14:20 – 14:40	SunB09-4	Alignment Condition-Based Adaptive Iterative Learning Control for Robot Manipulators 2129  Qiang Chen and Fangzheng Xue		
14:40 – 15:00	SunB09-5	<b>Position Deviation Based Second-Order Consensus in Multiple Vehicle Systems</b> <i>Jie Quan and Guoping Jiang</i>	2	

Session	SunB10: Sma	art Grids (I)		
Date/Time	Sunday, 01 June 2014 / 13:20-15:20			
Venue	Room10	1		
Chair	Zaiyue Yang, Zhejiang Univ.			
Co-Chair	Wenjie Tang, Southeast Univ.			
13:20 - 13:40	SunB10-1	Optimal Scheduling of Electric Vehicle Using Dual Decomposition 2144  Jinfeng Yang and Zaiyue Yang		
13:40 – 14:00	SunB10-2	Research on Fault Location Algorithm for Double Transmission Line on the Same Tower Based On the Conductor's Relation of Electromagnetic Couplin Kunyi Chen, Qin Ai, Shaowu Li, Dongshan Geng and Yongchao Yang		
14:00 – 14:20	SunB10-3	Research of Immune Algorithms for Reconfiguration of Distribution Networ with Distributed Generations 2156 Gu Cailian, Ji Jianwei and Liu Li		
14:20 – 14:40	SunB10-4	Research on Intellectualization of 126kV SF6 Circuit Breaker 2161 Wang Huan, Lv Tao-Mei and Tao Jiang-Ping		
14:40 – 15:00	SunB10-5	Study of the Location of TCSC for Improving ATC Considering N-1 Security Constraints 2166 Wenjie Tang, Wenjing Pan, Kaifeng Zhang and Cheng Liu		
15:00 – 15:20	SunB10-6	A New Strategy of Reactive Power Compensation Device of Indirect Current Control 2171  Wang Xu, Yu Hongliang, Xing Yan and Yang Dan		

Session	SunB11: Intelligent Building Control and Management (Invited Session)	
Date/Time	Sunday, 01 June 2014 / 13:20-15:20	
Venue	Room11	
Chair	Yahui Wang, Beijing University of Civil Engineering and Architecture	
Co-Chair		
13:20 - 13:40	SunB11-1	Research of Power System Steady-State Model with Distributed Photovolta Based on Digsilent 2175 Gu Cailian, Ji Jianwei and Liu Li
13:40 – 14:00	SunB11-2	A Multi-Flooding Data Transmission Mechanism for Low-Duty-Cycle Wire Sensor Network 2181  Le Tian
14:00 – 14:20	SunB11-3	Study on Emergency Management Simulation Command System for Gas System Based on Cybernetics 2185 Wang Ya-Hui, Gao Shunli, Wu Bo, Li Xia-Xi, Sun Jian-Min and Wang Jian-Ling

14:20 – 14:40	SunB11-4	Based on Agent Technology of Gas Pipeline Leakage Urgent Repairing Simulation Exercises and Practical Countermeasure Analysis 2190 Yan Qian and Yahui-Wang
14:40 – 15:00	SunB11-5	Using Multiple Views for Gait-Based Gender Classification 2194 De Zhang and Yahui Wang
15:00 –15:20	SunB11-6	Optimization of Least-Squares Localization Algorithm in WSN 2198 Zhang Yu-Ting and Tan Zhi

Session	SunBIS: Interactive Session
Date/Time	Sunday, 01 June 2014 / 13:20-15:20
Venue	Room12
SunBIS-1	Optimal Patient Routing Policies at Diagnosis-Stage in Outpatient Department Non-Preemptive Queues 2203  Huabo Zhu, Dan Chen, Jun Gong and Jiafu Tang
SunBIS-2	The Research and Application on the Optimal Location Model of Project 2208  Jie Zhang and Chengxiang Hu
SunBIS-3	Analysis on the Optimum Selection of Science and Technology Industrialization Projects Based on AHP- Fuzzy Comprehensive Evaluation 2211 Lihua Jiang and Kongguo Zhu
SunBIS-4	Variable Probability Based Bidirectional RRT Algorithm for UAV Path Planning 2217 Wu Xinggang, Guo Cong and Li Yibo
SunBIS-5	Comprehensive Evaluation of Regional Development Level of Resources Inequalities 2223  Jiameng Guo, Mingyue Qu and Kewu Peng
SunBIS-6	<b>Dynamic Comprehensive Evaluation Method with the Feature of Reward and Punishment</b> 22. <i>Yi Zhang, Jiameng Guo, Lei Yi and Kewu Peng</i>
SunBIS-7	Track Initiation Algorithm for Maneuvering Target Using Radial Velocity Measurements 223 Yuan Junquan, Yin Shuai, Jiang Jin and Wang Licai
SunBIS-8	A Consensus Model for Conflict Problems in Distributed Command and Control Decision Making 2236  Huang Hai-Yan, Shi Jing, Bao Guang-Yu and Liu Xiao-Ming
SunBIS-9	Spare Parts Varieties Level Configuration Based on Grey Situation Decision 2241 Ren Xi, Zhao Jian-Jun and Yang Li-Bin
SunBIS-10	Cloud Services Optimization Problem on Energy Utility Resource Allocation 2244 Ming-Hai Jiao, Ping Yan, Chen Li, Qiang Wang and Yan-Jing Wei
SunBIS-11	Improving Churn Prediction in Telecommunications Using Complementary Fusion of Multilayer Features Based on Factorization and Construction 2250  Qiuhua Shen, Hong Li, Qin Liao, Wei Zhang and Kone Kalilou
SunBIS-12	Optimal Hierarchical Allocation in Deregulated Electricity Market Under PSP Auction Mechanism 2256 Zhongjing Ma and Yingying Cui
SunBIS-13	Research on the Task Process Reliability Modeling of SOS 2262 Wen Tianjian and Pan Xin

SunBIS-14	Technology Research & Development Decision Based on Relative Advancement Degree of Difficulty in Large Project 2267 Wen-Bing Chang, Wei Liu, Sheng-Han Zhou and Shao-Qi Zhou
SunBIS-15	The Method of Risk Evaluation for Equipment Development Based on Triangular Fuzzy Number and TOPSIS 2272 Shao-Qi Zhou, Wen-Bing Chang, Sheng-Han Zhou and Wei Liu
SunBIS-16	Emergency Capability Evaluation for the Ship at Sea Based on FSPA Algorithm 2277 Ou Yang, Liu Zhengjiang and Cao Liang
SunBIS-17	Optimal $H_{\infty}$ Fusion Controller Design for a Class of Discrete-Time Systems with Missing Measurements 2281 Xiuying Li and Shuli Sun
SunBIS-18	Design of Embedded Network Controller Based on ARM 2287 Lingyan Xue, Liping Zheng and Rui Liu
SunBIS-19	Research of an Adaptive PI Admission Control of Web Service 2290 Zhu Zijie, Gao Xiang and Chunhui Zhang
SunBIS-20	Output Quantized Feedback with Bounded System Noise 2294 Yuqiang Long, Qiang Ling, Zhe Yan, Feng Li and Song Wang
SunBIS-21	MODBUS-Based Data Share of Multi-Touch Screen and Its Application In Coals Blending Automatic Shooting Control System of Jiexiu Coal Washing Factory 2298  Guojun Zhang and Zehua Chen
SunBIS-22	<b>Development of Simulation-Based Software Design Solution</b> 2302 Konstantin Aksyonov, Eugene Bykov and Olga Aksyonova
SunBIS-23	The Research on Transmission Delay Compensating Based on Internet 2307  Guangquan Fu
SunBIS-24	<b>An Improved Congestion Avoidance Control Model for TCP Vegas Based on Ad Hoc Networks</b> 2310 <i>Ying Luo, Minyong Yin, Hong Jiang and Shaoliang Ma</i>
SunBIS-25	Finite-Time Stabilizabled Controller Design for a Class of Neutral Time-Delayed Systems via State Feedback 2315  Xia Chen, Jun Song and Shuping He
SunBIS-26	Modeling Research on Ground-Coupled Heat Pump System Based on Artificial Neural Network 2320 Yating Zhang, Weichang Jiang and Ruihua Wang
SunBIS-27	The Ship Motion Prediction Approach Based on BP Neural Network to Identify Volterra Series Kernels 2324 Xiuyan Peng, Zhiguo Men, Xingmei Wang and Shuli Jia
SunBIS-28	Output Feedback Adaptive Dynamic Surface Control for a Class of Uncertain Nonlinear Systems 2329  Yang Jingyu and Wang Qiangde
SunBIS-29	A Cerebellar Neuronal Network Model Applying to DIVA Model 2335 Wu Yuanyuan and Zhang Shaobai
SunBIS-30	A Neural Network Based Model Predictive Control for Wind Tunnel 2340  Ning Du, Xiu Hong Long and Li Zhao
SunBIS-31	A Pruned Cooperative Co-Evolutionary Genetic Neural Network and Its Application on Stock Market Forecast 2344  Xingcheng Pu, Yanqin Lin and Pengfei Sun

SunBIS-32	The Design of Neural Network Controller of a Class of Nonlinear Systems with Unknown Actuator Hard-Nonlinear 2350 Fang Hui and Lu Donghong
SunBIS-33	The High Precise Optimization Algorithm and Rational Construct Study of Multi-Layered Feed-Forward Neural Network 2354  Hou Xiang-Lin, Liu Ya-Li and Li Qi
SunBIS-34	Research on Case-Based Reasoning Search Method 2360 Hongru Li, Chaoyue Zhao and Wei Wu
SunBIS-35	Analysis and Design of Fuzzy-PID Controller with Generalized Linear Membership Function 2365 Huang Weihua, Zhang Zheng and Fang Kangling
SunBIS-36	Observer Design of Discrete-Time T-S Fuzzy Systems via an Efficient Multi-Instant Fuzzy Observer 2370  Hongxia Zhang and Xiangpeng Xie
SunBIS-37	Research on Evaluation of City Public Emergency Capability Based on The Fuzzy Set Theory 2375 Sun Yan
SunBIS-38	<b>Design and Application of High Precision Fuzzy Controller</b> 2379 Yong He, Jianyong Li and Qi Kuang
SunBIS-39	Temperature Modeling of PEM Fuel Cell Based on Fuzzy Strategy 2383 Yan Qun, Li Qing, Zhang Peichang and Yu Datai
SunBIS-40	A Logistic-Interpolation-Based Fuzzy Controller for Electrode Regulation of Submerged Arc Furnace 2388 Shiliang Zhang, Hui Cao, Wanjun Lei and Yanbin Zhang
SunBIS-41	Finite-Time H <sub>\infty</sub> Fuzzy Control for Continuous-Time and Discrete-Time Nonlinear Systems 2393  Dedong Yang
SunBIS-42	Extending UML for the Modeling of Fuzzy Self-Adaptive Software Systems 2400 Deshuai Han, Qiliang Yang and Jianchun Xing
SunBIS-43	A Simple and Efficient Diagonal Maze-Solver for Micromouse Contests and Intelligent Mobile Robot Education 2407  Juing-Huei Su, Hsin-Hsiung Huang and Chyi-Shyong Lee
SunBIS-44	Iterative Learning Control Algorithm for a Class of Singular Systems with Multiple Time- Delays 2412 Hu Ting, Tian Senping and Luo Yanbo
SunBIS-45	The Teaching Experiment of Speech Recognition Based on HMM 2416  Mingjia An, Zhengtao Yu, Jianyi Guo, Shengxiang Gao and Yantuan Xian
SunBIS-46	Implementation of the Line Maze Robot with Diagonal Motion Control 2421  Hsin-Hsiung Huang, Juing-Huei Su, Chyi-Shyong Lee, Jheng-Yan Syu, Shih-Wei Chao and Yi-Wei  Chang
SunBIS-47	Flux Observer of Induction Motor Based on "Assumed Inherent Sensor" Inversion 2426 Liu Guohai, Wang Manlu, Ding Yuhan, Mei Congli, Jiang Hui and Cheng Jinxiang
SunBIS-48	A Noble Cross-Layer Protocol for QoS Optimization in Wireless Sensor Networks 2430  Ji Peng, Jiang Jingqi, Sun Qiushuo and Zhang Songyang

Session	SunC01: Variable Structure Control (Chinese)		
Date/Time	Sunday, 01 June	Sunday, 01 June 2014 / 15:40-17:40	
Venue	Room01		
Chair	Liang Wu, Beiha	ang Univ.	
Co-Chair	Bin Zhou, National University of Defense Tech.		
15:40 – 16:00	SunC01-1	A Nonlinear Adaptive Control Approach for an Activated Sludge Process Using Neural Networks 2435 Lin Mei-Jin and Luo Fei	
16:00 – 16:20	SunC01-2	Sliding Mode Attitude Controller Design of a Small-Scale Helicopter 244 Bin Zhou, Shuai Tang, Peng Li and Zhiqiang Zheng	
16:20 – 16:40	SunC01-3	Sliding Mode Control of Pitch Angle for Direct Driven PM Wind Turbine Wang Xin, Zhu Wanli, Qin Bin and Li Pengcheng	
16:40 – 17:00	SunC01-4	Stability Probability in Sliding Mode Control of Second Order Markovian Jump Systems 2453  Qing Zhu, Xinghuo Yu, Aiguo Song, Shumin Fei, Zhiqiang Cao and Yuequan Yang	
17:00 – 17:20	SunC01-5	Guidance Law Accounting for Second-Order Dynamics of Missile Autopilot and Impact Angle Constraints 2459 Wu Liang, Wang Weihong and Xiong Shaofeng	
17:20 – 17:40	SunC01-6	Research on Chattering and Limit Cycle Adjusting for Output Feedback SMC Based on Frequency Domain Analysis 2465  Shen Yu	

Session	SunC02: Sens	or Network Systems (II)	
Date/Time	Sunday, 01 Jun	ne 2014 / 15:40-17:40	
Venue	Room02		
Chair	Wenchao Chei	Wenchao Chen, Civil Aviation Univ. of China	
Co-Chair	Li Duan, Nava	l Univ.of Engineering	
15:40 – 16:00	SunC02-1	The Design of Mission-Oriented Management System for Multi-Sensors Network in Network-Centric Warfare 2470 Jia-Qi Xu, Li Duan and Qi-Yuan Li	
16:00 - 16:20	SunC02-2	Research on Non-Destructive Measuring Moisture Content for Packaged Tea Based on the LC Resonant Sensor 2476 Rao Ning and Han An-Tai	
16:20 - 16:40	SunC02-3	A Kind of Routing Algorithm for Heterogeneous Wireless Sensor Networks Based on Affinity Propagation 2481 Zhang Ying and Ji Changgang	

16:40 – 17:00	SunC02-4	Design of a Monitoring System of Airport Boarding Bridge Based on ZigBee Wireless Network 2486 Jihong Zhang and Wenchao Chen
17:00 – 17:20	SunC02-5	Trust-Based QoS Routing Algorithm for Wireless Sensor Networks 2492  Junwei Wang and Haifeng Wang
17:20 – 17:40	SunC02-6	<b>Posture Recognition for the Elderly Based on Wireless Sensor Networks</b> 2496 <i>Ye Shang, Zhigang Liu and Jinkuan Wang</i>

Session	SunC03: Identification and Estimation (II)		
Date/Time	Sunday, 01 Jun	ne 2014 / 15:40-17:40	
Venue	Room03		
Chair	Zhizhong Mao,	, Northeastern Univ.	
Co-Chair	Wenfeng Tan,	Wenfeng Tan, National Univ. of Defense Tech.	
15:40 – 16:00	SunC03-1	Effect of Shock Absorbers' Deformation on RLG's Bias Temperature Modeling Tan Wen-Feng, Hu Chun-Sheng and Wang Xing-Shu	
16:00 - 16:20	SunC03-2	A Unified Observer for High Order Disturbances in Time Series Expansion 2 Qing Liang, Zhen Wang, Jinwen Pan and Yiheng Wei	
16:20 – 16:40	SunC03-3	An Identification Algorithm for Hammerstein-Wiener System with Dead Zone Nonlinearity Using Gradient Method 2511  Hyok Chan Hong and Zhizhong Mao	
16:40 - 17:00	SunC03-4	Adaptive Parameter Estimation with Guaranteed Prescribed Performance 25 Juan Yang, Jing Na, Xing Wu and Yu Guo	
17:00 – 17:20	SunC03-5	The Research of Underwater Image De-noising Method Based on Adaptive Wavelet Transform 2521 Lei Fei and Wang Yingying	
17:20 – 17:40	SunC03-6	<b>KPCA-ARX Time-Space Modeling for Distributed Parameter System</b> 2526 <i>Yang Jingjing and Tao Jili</i>	

Session	SunC04: Decision Supporting System and Production Planning and Scheduling (I)	
Date/Time	Sunday, 01 June	2014 / 15:40-17:40
Venue	Room04	
Chair	Dingwei Wang, Northeastern Univ.	
Co-Chair	Wenyan Tang, Hunan Univ. of Technology	
15:40 – 16:00	SunC04-1	Scheduling a Constrained Hybrid Flow Shop Problem by Heuristic Algorithm 2532  Yanhui Yu and Tieke Li
16:00 – 16:20	SunC04-2	Mixed Packing Strategy for Mass-Product Distributions and Its Minimum Unpacking Problem 2538  Dingwei Wang

16:20 - 16:40	SunC04-3	A Surgery Block-Scheduling Strategy with Stochastic Demand 2544 Wang Yu and Tang Jiafu
16:40 – 17:00	SunC04-4	A Job Shop Scheduling System Based on Parallel Control Mechanism 2548 Yanhong Wang, Yehong Zhang, Qan Zhang and Hongxia Yu
17:00 – 17:20	SunC04-5	Resource Conflict Resolution Method for Software Projects Using Fuzzy Critical Chain 2554 Yan Guo and Chao Dong
17:20 – 17:40	SunC04-6	Research on China's Food Industry Security early Warning Based on Prospect Theory 2560 Kangning Zheng and Kai Yang

Session	SunC05: N	Networked Control Systems (II)	
Date/Time	Sunday, 01	Sunday, 01 June 2014 / 15:40-17:40	
Venue	Room05		
Chair	Yuanqing 2	Xia, Beijing Institute of Tech.	
Co-Chair	Bo Xiao, W	Vuhan Univ. of Scie. and Tech.	
15:40 – 16:00	SunC05-1	Stabilization of Networked Control Systems with Packet Loss and Channel Uncertainty 2566  Jianjun Dong and Yuanqing Xia	
16:00 - 16:20	SunC05-2	Multivariable Optimal Performance under Packet Loss For Networked Control System Bo Xiao, Bin Liu, and Meng-Meng Wang	
16:20 - 16:40	SunC05-3	Research on Cross-Communication Based on Real-Time Ethernet POWERLINK Haiya Xu, Yan Gao, Kemin Liu, Bo Zhu and Chao Zhang	
16:40 – 17:00	SunC05-4	Optimal Control of Linear Discrete-Time Systems with Quantization Effects Weizhou Su, Jie Chen, Minyue Fu and Tian Qi	
17:00 – 17:20	SunC05-5	Local Hopf Bifurcation Analysis of Compound TCP with an Exponential RED Queue Management Policy Sai Prasad and Gaurav Raina	
17:20 – 17:40	SunC05-6	Research on the Test of Maintenance Support Force System Based on the Theory of Complex Network  Han Zhen, Lu Yu and Gu Ping	
17:40 – 18:00	SunC05-7	Stability and Hopf Bifurcation Analysis of TCP with a RED-Like Queue Management Policy Sai Prasad and Gaurav Raina	

Session	SunC06: Data Processing (I)	
Date/Time	Sunday, 01 June 2014 / 15:40-17:40	
Venue	Room06	
Chair	Ziyang Qi, Harbin	n Institute of Tech.
Co-Chair	Shengnan Cui, No	ortheastern Univ.
15:40 – 16:00		A Hybrid Forecasting Approach for HRG Parameters Based on Output Tin Series Qi Ziyang, Li Qinghua, Yi Guoxing and Fang Haibin
16:00 – 16:20	SunC06-2	Time Series Forecasting of Medicare Fund Expenditures Based on Historic Data — Taking Dalian as an Example Qu Gang, Cui Shengnan and Tang Jiafu
16:20 – 16:40	SunC06-3	Feature Extraction by Correntropy Based Average Neighborhood Margin Maximization Lin-Na Ma, Hong-Jie Xing and Shun-Yan Hou
16:40 - 17:00	SunC06-4	Wind Turbine Gearbox Forecast Using Gaussian Process Model Xueru Wang, Jin Zhou and Peng Guo
17:00 – 17:20	SunC06-5	Algorithm for Attribute Relative Reduction Based on Generalized Binary Discernibility Matrix  Zhang Tengfei, Yang Xingxing and Fumin Ma
17:20 – 17:40	SunC06-6	Multilinear Mean Component Analysis for Gait Recognition Yawei Tian, Xianye Ben, Peng Zhang and Menglei Sun
Session	SunC07: Con	atrol Applications (III)
Date/Time	Sunday, 01 Ju	ne 2014 / 15:40-17:40
Venue	Room07	
Chair	Lei Yuan, Jilii	n Univ.
Co-Chair	Rongzi Yao, Jilin Univ.	
15:40 – 16:00	SunC07-1	The Design of TCS Controller for Four Wheel Independent-Drive Electric Vehicle Based on ADRC Lei Yuan, Hong Chen and Bingtao Ren
16:00 – 16:20	SunC07-2	Torque Tracking Control of Permanent Magnet Synchronous In-Wheel Mot for Electric Vehicle Rongzi Yao, Xiaohua Xie and Hong Chen
16:20 – 16:40	SunC07-3	A Kaldor-Kalecki Model of Business Cycles: Stability and Limit Cycles Sreelakshmi Manjunath, Debayani Ghosh and Gaurav Raina
16:40 – 17:00	SunC07-4	Improved Virtual Flux Observer Based on Orthogonal Feedback Compensation Suitable for Direct Power Control Application Xiao Xiong, Zhang Yongjun, Wang Jing, Zhang Yongkang, Chen Tiezhu and Zhan Xiaoqing

Longhu Quan, Zhanshan Wang and Xiuchong Liu

**Estimation and EKF** 

17:00 - 17:20

**SunC07-5** 

Sensorless Control of SPMSM Using Complex Number Model Based Position

Session	SunC08: Plan	ning, Scheduling and Coordination (I)		
Date/Time	Sunday, 01 Jur	Sunday, 01 June 2014 / 15:40-17:40		
Venue	Room08	Room08		
Chair	Xingquan Zuo	Xingquan Zuo, Beijing Univ. of Posts and Telecommunications		
Co-Chair	Cheng Zhu, National Univ. of Defense Tech.			
15:40 – 16:00	SunC08-1	A Multi-Objective Genetic Algorithm Based Bus Vehicle Scheduling Approacheng Chen and Xingquan Zuo		
16:00 – 16:20	SunC08-2	Hybrid Appointment for a Single-Physician Clinic with No-Shows and Overbooking Pingping Cao and Jiafu Tang		
16:20 – 16:40	SunC08-3	Multi-Vehicle Coordination and Flexible Scheduling Based on Simulated Annealing Algorithm Cheng Zhu, Luohao Tang and Weiming Zhang		
16:40 – 17:00	SunC08-4	Rolling Horizon Scheduling Procedure for SWRO Desalination Plant Under Uncertain Freshwater Demand Jian Wang, Lekai Lian, Xiaolong Wang, Shu Jiangzhou and Ping Li		
17:00 – 17:20	SunC08-5	Optimized Decision of the Bounded Rationality Newsboy Under CVaR Yongmei Liu and Sixuan Chen		
17:20 – 17:40	SunC08-6	Research on the Problem of Scheduling Multi-Product Batches in the Procest Industry  Tang Qi and Zhang Qing-Shan		

Session	SunC09: Perc	SunC09: Perception Systems (Chinese)	
Date/Time	Sunday, 01 Jun	Sunday, 01 June 2014 / 15:40-17:40	
Venue	Room09	Room09	
Chair	Hongpeng Wa	Hongpeng Wang, Nankai Univ.	
Co-Chair	Qixin Zhu, Suzhou Univ. of Scie. and Techn.; East China Jiaotong Univ.		
15:40 – 16:00	SunC09-1	A Multi-Gait Approach for Humanoid Navigation in Cluttered Environments G. Brooks, P. Krishnamurthy and F. Khorrami	
16:00 – 16:20	SunC09-2	Speed Estimation for Robotic Fish Based on Pressure Sensor Qixin Zhu, Kun Zhong and Guangming Xie	
16:20 – 16:40	SunC09-3	Research on Intrinsic Motivation of Robot Based on Central Nervous System Shi Tao, Yang Weidong and Ren Hongge	
16:40 – 17:00	SunC09-4	A Visual Saliency Detection Algorithm Based on Channel Selecting in Transform Domains Shen Yifeng, Niu Yifeng and Shen Lincheng	

lxiv

17:00 – 17:20	SunC09-5	3D Irregular Object Recognition for Twist-Lock Handling System Shuang Ma, Changjiu Zhou, Liandong Zhang, Wei Hong and Yantao Tian
17:20 – 17:40	SunC09-6	Robust Hand Posture Recognition Based on RGBD Images Liang Dong, Hongpeng Wang, Ziyi Hao and Jingtai Liu

Session	SunC10: Rer	SunC10: Renewable Energies (I)		
Date/Time	Sunday, 01 Ju	Sunday, 01 June 2014 / 15:40-17:40		
Venue	Room10			
Chair	Zhiyong Li, C	Zhiyong Li, Central South Univ.		
Co-Chair	De Zhang, Tsinghua Univ.			
15:40 – 16:00	SunC10-1	Lyapunov Stability Analysis for Self-Excitation of Induction Generators Haitao Li and Ziguang Lu		
16:00 – 16:20	SunC10-2	Precise Sun-Tracking Control of Heliostats Based on a Sun's Image Reference System Zhu Xuemei, Mi Xiaoling, Lin Kaizhi and Huang Wenjun		
16:20 – 16:40	SunC10-3	Power Oscillation Damping Controller Based on Active Disturbance Rejection Control Technique for DFIG-Based Wind Turbine Generators Zhang De, Mei Shengwei, Liu Feng and Sun Jian		
16:40 – 17:00	SunC10-4	A New MPPT Control Method of Photovoltaic Grid-Connected Inverter System Li Sheng-Qing, Zhang Bin, Xu Tian-Jun and Yang Jun		
17:00 – 17:20	SunC10-5	Short Term Photovoltaic Power Generation Forecasting Using RBF Neural Network Zhiyong Li, Yunlei Zhou, Cheng Cheng, Yao Li and Kexing Lai		
17:20 – 17:40	SunC10-6	Suppressing Method for Photovoltaic Power Station DC Component Injection Li Shengqing, Yang Jun, Xu Tianjun and Zhang Bin		

Session	SunC11: Intelligent Building Control and Management (Invited Session)	
Date/Time	Sunday, 01 June 2014 / 15:40-17:40	
Venue	Room11	
Chair	Yahui Wang, Beijing University of Civil Engineering and Architecture	

37-62'6'38-22'''''	-	""C'P qxgrlEnwwgt kpi 'Cri qt kyj o 'Dcugf 'qp'Rct vkerg'Uy cto 'Qr vko k¦ cvkqp'hqt'' ""Y kt grgun'Ugpuqt 'P gwy qt mu "\j cq''Llpi . 'Vkcp''Ng. "cpf "\j cq''Uj wckdkpi
16:00 – 16:20	SunC11-2	A Two-Stage Approach on Island Partitioning of Power Distribution Networks with Distributed Generation Ruliang Dong, Qiang Yang and Wenjun Yan
16:20 – 16:40	SunC11-3	Research of Intelligent Coordinated Control in Indoor Environment Based on MAS  Yifei Chen, Kai Qi, Baicheng Liu, Ge Li and Qiaoxue Dong
16:40 – 17:00	SunC11-4	Multi-Objective Optimal Analysis of Comfort and Energy Management for Intelligent Buildings Nan Wang, Fang Fang and Meifang Feng

17:00 – 17:20	SunC11-5	Research and Application of Intelligent Building Energy Management System  Lin Jiaquan and Zhang Renqiang
17:20 – 17:40	SunC11-6	Building Energy and Control System Modeling And Simulation Using Modelica Dong He, Qingyu Xiong, Weiren Shi, Xin Shi and Jiaqi Zhang

Session	SunCIS: Interactive Session		
Date/Time	Sunday, 01 June 2014 / 15:40-17:40		
Venue	Room12		
SunCIS-1	Multimode Process Monitoring Based on Correlative Principal Components and Differential Geometry Feature Extraction  Zhou Funa, Zhang Yu and Yang Shuna		
SunCIS-2	Conditions Identification Model Based on LLNFM and RBR in Cement Raw Meal Calcination Process  Jinghui Qiao and Tianyou Chai		
SunCIS-3	Multi-Level PCA and Its Application in Fault Diagnosis Wang Chunxia, Hu Jing and Wen Chenglin		
SunCIS-4	Software-Hardware Interaction Analysis Based on Petri Net Yi Zhaoxiang, Mu Xiaodong, Zhao Peng and Yi Yaqiao		
SunCIS-5	Amplitude Envelope Analysis for Feature Extraction of Power Plant Blower Bearing Failure Pan Zuo-Wei, An Hong-Wen, Liang Shuang-Yin and Liu Yi-Bing		
SunCIS-6	Application of Simulation-Based Software Design Solution  Konstantin Aksyonov, Eugene Bykov, Olga Aksyonova and Wang Kai		
SunCIS-7	Robust Fault Estimation Scheme for Heavy-Haul Trains Equipped with ECP Brake Systems ufu Qin, Jun Peng, Xiaoyong Zhang, Yingze Yang and Fu Jiang		
SunCIS-8	INU Fault Diagnosis Based on Genetic Wavelet Neural Network Yunlin Luo, Qingtian Dai, Li Wang and Kun Wang		
SunCIS-9	Actuator Fault Detection Based on Robust Adaptive Observer for CCBII Braking System Jiandui Yi, Zhiwu Huang, Weirong Liu, Yingze Yang, Xiaoyong Zhang and Jianfeng Liu		
SunCIS-10	Robust Adaptive $H_{\infty}$ Fault-Tolerant Control for Uncertain Linear Systems Against Actuator Failures Li-Bing Wu, Zhi-Guo Zhang, Da-Qing Zhang and Gui-Zhi Li		
SunCIS-11	Fault Diagnosis of Gas Turbine Based on Support Vector Machine Weihong Hu, Jiyuan Liu, Jianguo Cui, Yang Gao, Bo Cui and Liying Jiang		
SunCIS-12	Fault Tolerant Control for UAV with Finite-Time Convergence Qiang Qu, Shan Gao, Daobo Huang, Jinsong Mei and Bin Zhai		
SunCIS-13	Observer-Based Fault Detection for Rail Vehicle Suspension Systems Yue Wang, Zehui Mao and Bin Jiang		
SunCIS-14	Multi-Mode Data-Based Joint Fault Detection Method Jing Hu, Chenglin Wen and Ping Li		
SunCIS-15	μ-Analysis Control Adaptation for Online Stator and Rotor Fault Diagnosis in Induction Machines Chady Nohra		

SunCIS-16	The Mixed Fault Detection Method for Rolling Bearings Based on ICA-Teager Jun Ma, Jiande Wu, Xiaodong Wang and Yugang Fan
SunCIS-17	$\mathbf{H}_{\infty}$ Deconvolution Filter Design for Time-Delay Systems via Equivalent Transformation Fuqiang You and Hui Li
SunCIS-18	Robust Fault-Tolerant Cooperative Control of Multi-Agent Systems with Actuator Faults Chen Gang and Song Yongduan
SunCIS-19	Fault Estimation for Time-Varying Control Systems with Aperiodic Sample Li Ning and Feng Jian
SunCIS-20	Design of Photovoltaic Building Lightning Protection Equipment Monitoring and Early Warning System Fu-Yan Guo, Yue Wang and Min-De Huang
SunCIS-21	Research on Correlation between Science Popularization and Technological Progress Based on Panel Data
	Rongrong Ren, Nian Zheng, Gang Xing, Meng Zhao and Yi Tang
SunCIS-22	Grey Regressive Prediction Method of Urban Life Water Consumption Liu Bao-Zheng and Wang Ding-Wei
SunCIS-23	A Study on China's FDI in ASEAN Zhang Tonggong, Zhang Lu and Lin Hanchuan
SunCIS-24	An Empirical Study on the Relationship between Executive Rewards and Merger and Acquisition of Chinese Listed Companies  Zhen-Ming Gao and Xin-Tian Zhuang
SunCIS-25	A Study on the Investment Environment of India — Based on the Questionnaires from the Related Chinese Enterprises  Zhang Tonggong, Zhang Lu and Lin Hanchuan
SunCIS-26	Optimization of Storage Performance for Generic Tiered Warehouse by Genetic Algorithm Shu-An Liu, Jiawei Sun and Qing Wang
SunCIS-27	A Method for Wide Density Salt and Pepper Noise Removal Qiao Jihong, Chen Lei and Chen Yan
SunCIS-28	Optimal Site Selection for Soft Landing on Asteroid Jian-Geng Li, Jia Zhen and Xiao-Gang Ruan
SunCIS-29	Modeling Research of MEMS Gyro Drift Based on Kalman Filter Ruan Xiao-Gang and Yu Miao-Miao
SunCIS-30	Motion Descriptor Based on Aligned Cluster Analysis Qinkun Xiao and Zhonghua Zheng
SunCIS-31	Study on Characteristic Dimension and Sparse Factor in Non-Negative Matrix Factorization Algorithm  Hou Mo, Yang Mao-Yun, Qiao Shu-Yun, Wang Gai-Ge and Gao Li-Qun
SunCIS-32	L <sub>3/2</sub> Sparsity Constrained Graph Non-Negative Matrix Factorization for Image Representation Shiqiang Du, Yuqing Shi and Weilan Wang
SunCIS-33	A Novel Blind Multi-Target Beam-Forming Algorithm in Guidance Data Link System Wei Xufang, Wu Cuisheng and Yao Changhong
SunCIS-34	Mixed Noise Reduction Method Based on Fuzzy Morphological Filtering Zhu Youlian, Huang Cheng, Zhai Lifang and Pan Lingjiao
SunCIS-35	An Effective Color Image Fusion Algorithm of Visual and Infrared Night Images Wang Yajie, Shi Xiangbin, Li Fei and Ye Yongsheng

SunCIS-36	Research of Feature Extraction Algorithm Based on Steady-State Visual Evoked Potentia Liqing Geng and Pengju Cui		
SunCIS-37	Estimate the Densities of Pollutions in Water Quality Monitoring Systems Based on UV/vi Spectrum  Tianrong Rao, Qiang Ling, Binfeng Yu and Haibo Ji		
SunCIS-38	A Regularized Estimation Method for MR Inhomogeneity Correction  Zhaohui Li, Qiang Ling, Kaikai Song and Feng Li		
SunCIS-39	An Improved MRI Denoising Algorithm Based on Wavelet Shrinkage Kaikai Song, Qiang Ling, Zhaohui Li and Feng Li		
SunCIS-40	A Multiple Autocorrelation Analysis Method for Motor Imagery EEG Feature Extraction Xiangzhou Wang, An Wang, Shuhua Zheng, Yingzi Lin and Mingxin Yu		
SunCIS-41	Flame Region Detection Using Color and Motion Features in Video Sequences Miao Ligang, Chen Yanjun and Wang Aizhong		
SunCIS-42	A Speech Endpoint Detection Algorithm Based on Wavelet Transforms Cao Yali, La Dongsheng, Jia Shuo and Niu Xuefen		
SunCIS-43	Recognition of Sub-Health State Based on Principal Component Analysis Li Wan-Bing, Quan Hong-Wei and Peng Dong-Liang		
SunCIS-44	Vibration Style Ladle Slag Detection Method Based on Discrete Wavelet Decomposition Dengfeng Chen, Haiyan Xiao and Qichun Ji		
SunCIS-45	Multi-Model Self-Tuning Weighted Fusion Kalman Filter Wenqiang Liu and Guili Tao		
SunCIS-46	Spectrum Sensing for Cognitive Network Based on Principal Component Analysis and Random Forest Xin Wang, Zhi-Gang Liu, Jin-Kuan Wang, Bin Wang and Xi Hu		
SunCIS-47	Deep Boltzmann Machines Based Vehicle Recognition Aiqin Hu, Hong Li, Fan Zhang and Wei Zhang		
SunCIS-48	An Improved Harris Corner Detection Algorithm For Low Contrast Image Liang Sun, Shuang-Oing Wang and Jian-Chun Xing		

Session	MonA01: Robust Control (III) (Chinese)		
Date/Time	Monday, 02 Jun	Monday, 02 June 2014 / 08:00-10:00	
Venue	Room01	Room01	
Chair	Yuanyuan Zou, East China Univ. of Science and Tech.		
Co-Chair	Zhaoping Du, Jiangsu University of Science and Tech.		
08:00 - 08:20	MonA01-1	An Analysis and Design Method for Actuator Saturation Linear Systems with Disturbance Chen Dongyan, Wang Junming, Zeng Xiaokang and Shi Yujin	
08:20 - 08:40	MonA01-2	Different Robust Control Methods of a Combustion System Qinghai Heng, Jing Lu, Huan Cao and Li Li	
08:40 - 09:00	MonA01-3	Multi-Time Scale Hierarchical Predictive Control for Energy Management of Microgrid System with Smart Users Jun Xu, Yuanyuan Zou and Yugang Niu	

lxviii

09:00 - 09:20	MonA01-4	The Active Disturbance Rejection Control with a Load Torque Observer for Secondary Regulation Hydraulic Speed System Yajun Zhou, Xiangzhou Wang and Shuhua Zheng
09:20 - 09:40	MonA01-5	$\mathbf{H}_{\infty}$ Filtering for Nonlinear Systems Based on Prey-Predator Model with Stage Structure and External Disturbance Zhaoping Du, Yuhua Si and Songlin Hu
09:40 - 10:00	MonA01-6	Design of Flight Control System for Tiltrotor Conversion Using QFT Lu Ke, Wang Zhengzhong and Cheng Qiyou

Session	MonA02: Optimal Control and Optimization (IV) (Chinese)			
Date/Time	Monday, 02 June 2014 / 08:00-10:00			
Venue	Room02			
Chair	Dexin Gao, Qingdo	ao Univ. of Scie. & Tech.		
Co-Chair	Ju Zhang, Zhejiang	Ju Zhang, Zhejiang Univ. of Tech.		
8:00 - 08:20	MonA02-1	Multi-Objective Two-Level Optimal Approach for Discrete Bilinear Systems with Sinusoidal Disturbances Gao De-Xin, Yang Qing and Wang Min		
08:20 - 08:40	MonA02-2	Explicit Model Predictive Control of 3-DOF Helicopter Zhang Ju and Cheng Xinyan		
08:40 - 09:00	MonA02-3	Dual-Rate Inferential Predictive Control for Systems with Time-Delay Li Shengtao, Liu Xiaomei, Zhang Wenying, Dong Xiujuan and Jing Yuanwei		
09:00 - 09:20	MonA02-4	The Optimizing Design for LED Color Mixing Based on Artificial Fish Swarm Algorithm Luan Xinyuan and Liu Tingzhang		
09:20 - 09:40	MonA02-5	Improved Particle Swarm Optimization Algorithm in Dynamic Environment Changcheng Xiang, Xuegang Tan and Yi Yang		
09:40 - 10:00	MonA02-6	First-Order Contiguity Constraint on Traffic Analysis Zone Delineation Problem Wang Linqing and Tang Jiafu		

Session	MonA03: Nonlinear Systems (III) (Chinese)
Date/Time	Monday, 02 June 2014 / 08:00-10:00
Venue	Room03
Chair	Jianhua Zhang, East China Univ. of Scie. and Tech.
Co-Chair	Zhonghua Zhang, Northeast Dianli Univ.
08:00 - 08:20	MonA03-1 Nonlinear Filtering Based Joint Estimation of Parameters and States in

Nonlinear Filtering Based Joint Estimation of Parameters and States in Polynomial Systems

Qiang Jiang and Jianhua Zhang

lxix

08:20 - 08:40	MonA03-2	Initial Alignment of Large Misalignment Angle in Strapdown Inertial Navigation System Based on Gaussian Process Regression Zhao Xi-Jing, Wang Li-Xin, He Zhi-Kun, Zhang Bo and Zhao Han
08:40 - 09:00	MonA03-3	$\mathbf{H}_{\infty}$ Filtering for a Class of Stochastic Time-Delay Nonlinear Systems Feng Zhao, Qingling Zhang, Chao Liu and Zedong Li
09:00 - 09:20	MonA03-4	Backstepping Based Direct Power Control for Rectifier Huang Jingjing, Zhang Aimin, Sun Yuangang, Zhang Hang, Zhang Chao and Ren Zhigang
09:20 - 09:40	MonA03-5	A Controller Design for Spacecraft Attitude Maneuvering with Control Saturation Based on $L_2$ -Gain Shi Zhong, Wang Hui, Li Li and Hu Qing-Lei
09:40 - 10:00	MonA03-6	Chaos Control of Oscillator Circuit Based on Adaptive Backstepping Method Zhang Zhonghua

Session	MonA04: Hybi	onA04: Hybrid Systems		
Date/Time	Monday, 02 Jun	Monday, 02 June 2014 / 08:00-10:00		
Venue	Room04			
Chair	Guangdeng Zon	Guangdeng Zong, Qufu Normal Univ.		
Co-Chair	HuanXin Li, Ch	HuanXin Li, China Univ. of Petroleum		
08:00 - 08:20 08:20 - 08:40	MonA04-1  MonA04-2	Finite-Time $H_{\infty}$ Control for Extended Markovian Jump Systems with Partially Known Transition Probabilities Dong Yang and Guangdeng Zong Active Fault Tolerant Control of CSTR System Based on MLD Model		
08:20 - 08:40	MUIIAU4-2	HuanXin Li and Yu-Hong Wang		
08:40 - 09:00	MonA04-3	On the Absolute Stability Approach to Quantized Feedback Control: Further Insight Xiju Zong and Xingong Cheng		
09:00 - 09:20	MonA04-4	Sensitivity Analysis of Optimal Control Problems for Switched Systems Jinjin Liu, Kanjian Zhang, Xiaomei Liu and Haikun Wei		
09:20 - 09:40	MonA04-5	Robust Fault Detection Filter Design for Linear Switched Interval Systems Jiawei Wang, Yi Shen and Miao Zhang		

Session	MonA05: Delay Systems (Chinese)
Date/Time	Monday, 02 June 2014 / 08:00-10:00
Venue	Room05
Chair	Chenxiao Cai, Nanjing Univ. of Scie. and Tech.
Co-Chair	Xiaobin Mao, Scie. and Tech. on Information Systems Engineering Laboratory

08:00 – 08:20 MonA05-1 Hopf Bifurcation Analysis for a Model of RNA Silencing with Two Delays Tingting Yu, Xian Zhang, Guodong Zhang and Min Su

08:20 - 08:40	MonA05-2	Partial Eigenvalue Assignment Problems for Time-Delayed Systems Xiaobin Mao
08:40 - 09:00	MonA05-3	Improved Robust Stability Criteria for Uncertain Discrete-Time Lur'e Systems with Interval Time-Delay Wenyong Duan, Chenxiao Cai and Zhengfan Liu
09:00 - 09:20	MonA05-4	Truncated Predictor Feedback for Periodic Linear Systems with Input Delays with Applications to the Elliptical Spacecraft Rendezvous Bin Zhou and Zhao-Yan Li
09:20 - 09:40	MonA05-5	<b>Dual-Rate Sampled-Data</b> $H_{\infty}$ <b>Control for Vehicle Active Suspension Systems</b> Wei Bai, Kai Jia, Yanping Yang and Dawei Zhang

Session	MonA06: Fau	lt Diagnosis and Fault-Tolerant Control (IV) (Chinese)		
Date/Time	Monday, 02 June 2014 / 08:00-10:00			
Venue	Room06	Room06		
Chair	Hao Yang, Nan	njing Univ.of Aeronautics and Astronautics		
Co-Chair	Xin Zhang, China Jiliang Univ.			
08:00 - 08:20	MonA06-1	Robust Fault Tolerant Control of Under-Actuated VTOL Aircraft Jiang Yuanqing, Yang Hao and Jiang Bin		
08:20 - 08:40	MonA06-2	Incipient Fault Detection Based on Empirical Likelihood Xin Zhang, Yingping Sang, Jiusun Zeng and Zhenwei Huang		
08:40 - 09:00	MonA06-3	Fault Detection of Rolling Bearing Based on EMD-DPCA Liying Jiang, Guangting Gong, Yanpeng Zhang, Zhipeng Liu and Jianguo C		
09:00 - 09:20	MonA06-4	Fault Diagnosis for Rolling Element Bearing Using EMD-DFDA Liying Jiang, Yanpeng Zhang, Guangting Gong, Zhipeng Liu and Jianguo C		
09:20 - 09:40	MonA06-5	Fault Diagnosis Method of Non-Linear Analog Circuits Based on Volter Series and SVM Huafeng He, Yicheng Chen, Zheng Yang and Huixuan Deng		
09:40 - 10:00	MonA06-6	A Fault-Tolerant Control Method for Satellite with Uncertainties and Saturation  Duan Wenjie and Wang Dayi		

Session	MonA07: Supply Chain and Logistics Management
Date/Time	Monday, 02 June 2014 / 08:00-10:00
Venue	Room07
Chair	Hali Pang, Northeastern Univ.
Co-Chair	Guihong Hu, Northeastern Univ.; Heze Univ.

08:00 – 08:20 MonA07-1 Coordinative Scheduling Problem of Single Machine Manufacturing and Delivery with Due Date Windows

Pang Hali

08:20 - 08:40	MonA07-2	Model and Algorithm for the 4PL Multi-Objects Routing Optimization Problem Based on Low Carbon Logistics Hu Guihong
08:40 - 09:00	MonA07-3	Optimization the Location of Container Depots with Environmental Constraints  He Peiqing
09:00 - 09:20	MonA07-4	Structure Choice and Equilibrium Analysis on High Timeliness Merchandise Distribution Channel Qian Wu, Fenyi Dong, Rong Zhang and Bin Liu
09:20 - 09:40	MonA07-5	A Dynamic Fuzzy Multi-Attribute Group Decision Making Method for Supplier Evaluation and Selection Ruirui Bai, Fanzhang Li and Jiwen Yang
09:40 – 10:00	MonA07-6	A Spatio-Temporal Based Parallel Insertion Algorithm for Solving Dial-A-Ride Problem Jingmei Guo and Chao Liu

Session	MonA08: Inst	rumentation Systems
Date/Time	Monday, 02 Ju	ne 2014 / 08:00-10:00
Venue	Room08	
Chair	Zhemin Wu, Harbin Engineering Univ.	
Co-Chair	Qi OuYang, Chongqing Univ.	
08:00 - 08:20	MonA08-1	Moving State Marine SINS Initial Alignment Based on Transformed Yonggang Zhang, Yulong Huang, Zhemin Wu and Ning Li
08:20 - 08:40	MonA08-2	A New Method for All-Around Identification of Two-Phase Flow Pa on SVM and ECT Yutao Wang and Shuwang Di
08:40 - 09:00	MonA08-3	Finite Element Simulation and Optimization Design of Capacitance with Loop Test Plate Bin Ji, Yutao Wang, Gang Yang and Jinfeng Yuan
09:00 - 09:20	MonA08-4	EMAT Detection Method of Spray Cooling Characteristics for Indus Nozzle Qi Ouyang, Yue Bing Zeng, Xinglan Zhang and Xi Meng Chen
09:20 - 09:40	MonA08-5	Design of Engine Data Acquisition PCI Card Based on FPGA Zhu Yang and Wang Min-Hui
09:40 - 10:00	MonA08-6	Fractional Fourier Transform for Ultrasonic Ranging Device Zheng Yong-Jun, Li He, Wang Fei and Zhu Shan-An

Session	MonA09: Space	and Underwater Robots	
Date/Time	Monday, 02 June	Monday, 02 June 2014 / 08:00-10:00	
Venue	Room09		
Chair	Shengying Zhu, I	Shengying Zhu, Beijing Institute of Tech.	
Co-Chair	Changzhong Pan, Hunan Univ. of Scie. and Tech.		
08:00 - 08:20	MonA09-1	Deep Space Moving Target Detection Based on Technology of Image Mat Xiu Ha-Ning, Zhu Sheng-Ying and Cui Ping-Yuan	
08:20 - 08:40	MonA09-2	An Efficient Neural Network Based Tracking Controller for Autonomous Underwater Vehicles Subject to Unknown Dynamics Chang-Zhong Pan, Simon X. Yang, Xu-Zhi Lai and Lan Zhou	
08:40 - 09:00	MonA09-3	Horizontal Zigzag Maneuverability of UUV in Limited Space Caoyang Yu, Xianbo Xiang and Rui Zhao	
09:00 - 09:20	MonA09-4	A Traveling Wave Fitting Method for Robotic Fish with a Multi-Joint Ca Fin Ren Guang, Wang Chao and Wang Fei	
09:20 - 09:40	MonA09-5	Networked Mars Satellite System Design and Autonomous Navigation An Subuda Menggen, Pingyuan Cui and Shengying Zhu	
09:40 - 10:00	MonA09-6	Vibration Suppressive Control of Flexible-Joint Space Manipulators Base Legendre Pseudospectral Method Guangyan Xu, Changming Sun, Hongmei Zhang, Xia Chen and Biao Zhou	

Session	MonA10: Renewable Energies (II)			
Date/Time	Monday, 02 Jur	Monday, 02 June 2014 / 08:00-10:00		
Venue	Room10	Room10		
Chair	Yang Hu, North China Electric Power Univ.			
Co-Chair	Zhiyong Li, Central South Univ.			
08:00 - 08:20	MonA10-1	LPV T-S Fuzzy Gain Scheduling Control of WTGS Below Rated Wind Spec Yang Hu, Jizhen Liu and Zhongwei Lin		
08:20 - 08:40	MonA10-2	Flexible Grid-Connection Technique of Quasi-Z Source Photovoltaic Power Generation System Based on Direct Power Control Yuxun Luo, Zhiyong Li, Xingyao He and Xuexiu Zeng		
08:40 - 09:00	MonA10-3	Energy Dynamic Optimization Model Research for Off-Grid Run Micro Gr Qing Ai, Dongshan Geng, Shaowu Li, Yongchao Yang and Kunyi Chen		
09:00 - 09:20	MonA10-4	The Influence of Groundwater Seepage on Ground Heat Exchange Gangjie Yang and Min Guo		
09:20 - 09:40	MonA10-5	Modeling and Simulation of Heat and Moisture Transfer of the Geothermal Borehole Quanwen Jiao and Yating Zhang		

## 09:40 – 10:00 MonA10-6 Modeling and Simulation of Four Boreholes Heat Transfer and Intermittent

Running Yating Zhang and Quanwen Jiao

Session	MonA11: Computer Games (Invited Session)		
Date/Time	Monday, 02 June 2014 / 08:00-10:00		
Venue	Room11		
Chair	Xinhe Xu, Northeastern Univ.		
Co-Chair			
08:00 - 08:20	MonA11-1	UCT Algorithm in Amazons Human-Computer Games Xiali Li, Liang Hou and Licheng Wu	
08:20 - 08:40	MonA11-2	Search Strategy Research and Analysis for Surakarta Chess Game Chang Liu, Jiaxin Wing and Yunpeng Zhang	
08:40 - 09:00	MonA11-3	<b>Application and Design of Computer Games System in Connect6</b> <i>Tao Jun</i>	
09:00 - 09:20	MonA11-4	The Game Method of Checkers Based on Alpha-Beta Search Strategy wi Iterative Deepening Zicheng Zhao, Songze Wu, Jiao Liang, Fuyu Lv and Changlong Yu	
09:20 - 09:40	MonA11-5	Chinese Chess Recognition Algorithm Based on Computer Vision Wu Gui and Tao Jun	
09:40 - 10:00	<b>MonA11-6</b>	The Overview for UAV Air-Combat Decision Method Li Fu, Fuhuai Xie, Dongzheng Wang and Guanglei Meng	

Session	MonAIS: Interactive Session	
Date/Time	Monday, 02 June 2014 / 08:00-10:00	
Venue	Room12	
MonAIS-01	Predictive Control of Arc Furnace Based on Genetic Algorithm Guan Ping, Liu Xiaohe and Gao Yuezhao	
MonAIS-02	A Simple Model of Human Balance Postural Control Jinzhuang Xiao, Wenhui Zhou and Hongrui Wang	
MonAIS-03	Fast Model Predictive Control of 3-DOF Helicopter Zhang Ju and Yu Rong	
MonAIS-04	Research on the Modeling and Simulation of Multi-axial Drag Lifting Work System Using the Distributed Net Modeling Approach Tang Gang, Xu Xianglian, Xu Pingting and Liu Ting	
MonAIS-05	Trajectory Planning of 6-DOF Manipulator Based on Combination Function Method Ma Shuhua, Yang Lin, Liu Zhigang and Wang Jinkuan	

lxxiv

MonAIS-06	Object Tracking via Fragment-Based Multi-task Sparse State Inference Chunjuan Bo, Rubo Zhang, Guanqun Liu and Hongguang Cao
MonAIS-07	<b>Dynamic Modeling and Control for a Morphing Aircraft</b> Zhang Jie and Wu Sen-Tang
MonAIS-08	Transition Trajectory Guidance for A Conceptual Space-Based Missile Zhengdong Hu, Xuemei Tang and Wenli Yan
MonAIS-09	Model Predictive Contouring Control for Direct Drive XY Table Zheng Hao and Wang Limei
MonAIS-10	Adaptive Zero Phase Based Internal Model Control for Direct Drive XY Table $Li\ Long$
MonAIS-11	Compensation of Dead-time Effects Based on Adaptive Voltage Disturbance Estimator in PMSM Drives Xiao Haifeng and He Yuyao
MonAIS-12	A Discrete Model Reference Sliding Mode Controller with a Disturbance Compensator and Its Application to Flight Simulator Cai Chao, Wang Wei-Hong and Zhang Wu-Long
MonAIS-13	A Research of DC Motor Dual Close-Loop PID Speed-Tuning System on the Basis of ABC Algorithm  Dongshan Geng, Kunyi Chen, Yongchao Yang, Shaowu Li and Qing Ai
MonAIS-14	Research on Static Evaluation Method for Computer Game of NoGo Yuxia Sun, Guojun Rao, Huimin Sun and Yuan Wei
MonAIS-15	Study of Strategy Selection Based on Phantom Go Li Fei, Ouyang Li, Wang Yajie and Dong Yanqiu
MonAIS-16	Research of Einstein würfelt nicht! Monte Carlo Algorithm Based on Optimized Evaluation Xiaoyan Wang, Hong Zhang, Yajie Wang, Jie Qi and Bin Zhou
MonAIS-17	The Analysis and Research on Computational Complexity Qiang Gao and Xinhe Xu
MonAIS-18	Automation Control System for 1.2Mt/a Pelletizing Plant of JINDAL SAW Co., Ltd., India Cao Pengfei, Ning Jianxin and Haribansh Yadav
MonAIS-19	Dynamic Modeling and Analysis for a New Grounding Method Zhang Zhi-Gang, Ding Wei-Dong and Li Xue-Feng
MonAIS-20	System Design For Aircraft Fuel Control And Maintenance Test-Bed Zhang Chuntang and Wang Shaokun
MonAIS-21	Control System Design and Simulation for UAV During Aerial Refueling Zhiping Liu, Mingjing Zhu and Fang Tan
MonAIS-22	A Dead-Beat Control Method for APF Based on Mixed Prediction Han Wei, Wang Dazhi, Li Yunlu and Liu Zhen
MonAIS-23	The Research and Application of Heavy Conventional Weapons Simple Guidance Technology in the Future Xuming, Liubin and Yujinlong

MonAIS-24	A New Chaotic Secure Communication Scheme Based on Shape Synchronization Yuan-Yuan Huang and Yin-He Wang
MonAIS-25	Estimation Model and Simulation for Auditory Localization with Fewer Sensors Chen Bing, Gao Yong, Yin Zuwei and Gao Wei
MonAIS-26	Design of Fuzzy Controller for Air-Conditioning Systems Based-On Semi- Tensor Product Hua Xiao-Hui, Duan Pei-Yong, Lv Hong-Li, Zhang Zhao-Sheng, Yang Xiu-Wen and Zhang Chun-Jun
MonAIS-27	Design and Implementation of the Electric Gripper Control System Based on the DSP  Zhanglei Chen, Jianming Xu, Li Yu, Yuansheng Xiong and Haitao Zhu
MonAIS-28	Neural Networks Adaptive Control of Aircraft Engine Based on Genetic Algorithm  Hongmei Zhang, Ziyun Dong and Guangyan Xu
MonAIS-29	Supervisory Predictive Control of Weighted Least Square Support Vector Machine Based on Cauchy Distribution Li Suzhen, Liu Xiangjie and Yuan Gang
MonAIS-30	DSP Based Digital Control System Implementation of Permanent Magnet Synchronous Motor Li Long
MonAIS-31	Research on Effect Airwake Acts on Glide Performance of Carrier-Based Aircraft Yu Yongtao and Zhang Zhi
MonAIS-32	Experimental Research on Microvibrations of Magnetically Suspended Momentum Wheel Cong Peng, Jiancheng Fang, Hu Liu, Yahong Fan, Meng Meng and Jiyang Zhang
MonAIS-33	Design and Implementation of the Remote Control of ICCP Systems Xiaohua Wang, Meijiao Hu, Yao Huang, Jun Gu, Shouwei Gao and Zhonghua Miao
MonAIS-34	<b>Decoupled PID Controller for Wind Tunnel System</b> <i>Tingfeng Zhang, Zhizhong Mao and Ping Yuan</i>
MonAIS-35	The Research on the Supply-Chain Management Based on E-Business Platforn Wei Liu and Zi Wang
MonAIS-36	Coordination and Incentives in a Supply Chain with Manufacturer Quality Effort  Wei Xiong
MonAIS-37	Research on Logistics Cost Control of Coal Enterprises Yi Zhang and Mengxiang Zhang
MonAIS-38	Comparison of Two Alternative Policies to Reduce No-Show in Appointment System Chongjun Yan and Jiafu Tang
MonAIS-39	An Inventory Control Model for Perishable Items with Stochastic Replenishment Interval and Stock-Dependent Selling Rate

lxxvi

MonAIS-40	Green Supply Chain Management: A State of the Art Review Wenxing Wang
MonAIS-41	Research on Wartime Aircraft Carrier SoS POL Support Strategy Based on System Dynamics Wen Tianjian, Pan Xin and Wu Yong
MonAIS-42	Collaborative Information Management in Agricultural Products Supply Chain in China: A Case Study of Wumart Wenxing Wang
MonAIS-43	Research on UWB-Based Location Technology Applied for Hazardous Chemicals Stacking Storage Lv Xin, Liu Xue-Jun, Dai Bo and Ye-Quan Wang
MonAIS-44	MBPLS-Based Rail Vehicle Suspension System Fault Detection Xiukun Wei, Ying Guo and Limin Jia
MonAIS-45	Data-Driven Thermal Efficiency Modeling and Optimization for Co-Firing Boiler Jian-Guo Wang, Juan-Juan Wang, Qian-Ping Xiao, Shi-Wei Ma, Wen-Tao Rao and Yong-Jie Zhang
MonAIS-46	Soft Sensor Approach for Optimal Operation of Cooling Tower for Energy Conservation  Jian-Guo Wang, Qian-Ping Xiao, Juan-Juan Wang, Shi-Wei Ma, Wen-Tao Rao and Yong-Jie Zhang
MonAIS-47	The Adaptive Dynamic Programming Based on the Data - A Total Least Squares Approach Zhang Bo, Zhang Da-Qing, Yu Yi-Fa and Zhang Gang-Gang
MonAIS-48	An Optimal Sparseness Approach for Least Square Support Vector Machine Jia Luo, Shihe Chen, Le Wu and Shirong Zhang

Session	MonB01: Complex Networks and Systems (II)			
Date/Time	Monday, 02 June	Monday, 02 June 2014 / 10:20-12:20		
Venue	Room01	Room01		
Chair	Guoping Jiang, Nanjing University of Posts and Telecommunications			
Co-Chair	Lili Zhang, Guangdong University of Tech.			
10:20 - 10:40	MonB01-1	Path Selection Algorithm Based on AHP for Small-World with Three-Weight Zhou Bin-Bin and Chen Xue-Bo		
10:40 - 11:00	MonB01-2	Synchronization for Nonlinearly Coupled Complex Dynamical Networks with Different Dimensional Nodes Lili Zhang, Yinhe Wang and Qinruo Wang		
11:00 - 11:20	MonB01-3	State Estimation for Nonlinear Coupled Complex Dynamical Networks with Time Delay Sun Yingyou and Jiang Guoping		

11:20 – 11:40	MonB01-4	Research on the Emergence Mechanism of Last Planner System of Lean Construction Zhu Kongguo
11:40 – 12:00	MonB01-5	From View of Complex Network: Fractal Dimension of Music Notation Ningkui Wang and Daijun Wei
12:00 – 12:20	MonB01-6	Revisiting Singular Boolean Networks Min Meng and Jun-E Feng

Session	MonB02: Co-Operative Control (Chinese)		
Date/Time	Monday, 02 Jun	Monday, 02 June 2014 / 10:20-12:20	
Venue	Room02		
Chair	Jianxiang Xi, Hi	igh-Tech Institute of Xi'an	
Co-Chair	Zhiyong Geng,	Zhiyong Geng, Peking Univ.	
10:20 - 10:40	MonB02-1	Finite Time Optimal Formation Control for Multiple Vehicles Zhiyong Geng	
10:40 - 11:00	MonB02-2	Coverage and Control of Diffusion Process Based on Centroidal Voronoi Tessellations KeCai Cao, MengJiao Lv, Xiang Gao and PingWei Fan	
11:00 - 11:20	MonB02-3	Formation Tracking Control for Multi-Agent Systems with Nonlinear Dynamics via Impulsive Control  Meng Liu, Yan-Wu Wang, Jiang-Wen Xiao and Xiao-Kang Liu	
11:20 - 11:40	MonB02-4	Observer-Based Finite-Time Tracking Control for Formations of Mobile Robots  Tairen Sun, Xin Yu and Guohai Liu	
11:40 – 12:00	MonB02-5	Consensus-Based Formation Control with Dynamic Role Assignment Zhongqi Sun and Yuanqing Xia	
12:00 – 12:20	MonB02-6	Second-Order Consensus of Discrete-Time Multi-Agent Systems via One-S Delayed Data Guang-Hui Xu, Ji-Shi Zhang, Rui-Quan Liao, Ding-Xue Zhang and Zhi-Hong	

Session	MonB03: Intelligent Systems (II) (Chinese)		
Date/Time	Monday, 02 June 2014 / 10:20-12:20		
Venue	Room03		
Chair	Zhifu Li, South China Univ. of Tech.		
Co-Chair	Hexu Sun, Hebei Univ. of Tech.		

10:20 – 10:40 MonB03-1 Monotonically Convergent Feedback-Forward Iterative Learning Control for Linear Discrete-Time Systems

Zhifu Li and Yueming Hu

lxxviii

10:40 – 11:00	MonB03-2	Improved Differential Evolution Algorithm and Its Application in Complex Function Optimization  Xiao Gang Dong, Yan Liu and ChangShou Deng
11:00 – 11:20	MonB03-3	Predictive Image Based Visual Servoing of Manipulators with Multiple Constraints Liu Weipeng, Chen Haiyong, Sun Hexu and Xing Guansheng
11:20 – 11:40	MonB03-4	A Novel Method for Face Recognition Zhu Sonhao, Hu Xuewei, Sun Wei and Hu Ronglin
11:40 – 12:00	MonB03-5	Video Abstraction via Learning the Progress of Story Zhu Sonhao, Liu Jiawei and Hu Ronglin
12:00 – 12:20	MonB03-6	A Novel Approach for Improving Image Annotation Quality Zhu Sonhao, Liu Jiawei and Hu Ronglin

Session	MonB04: Distributed Parameter Systems		
Date/Time	Monday, 02 Jur	Monday, 02 June 2014 / 10:20-12:20	
Venue	Room04		
Chair	Lu Lu, Beijing	Lu Lu, Beijing Inst. of Tech.	
Co-Chair	Leping Bao, Southeast Univ.		
10:20 - 10:40	MonB04-1	An Architecture Model of Cloud Manufacturing Based on Multi-Agent Technology Han Zhang, Ruifeng Guo and Cong Geng	
10:40 - 11:00	<b>MonB04-2</b>	Asymptotical Stabilization of Linear Distributed Parameter Switched Syste Leping Bao and Shumin Fei	
11:00 - 11:20	MonB04-3	Mobile Sensor Networks for Sampled-Data Control of a Class of Distribute Parameter Systems  Xueming Qian and Baotong Cui	
11:20 - 11:40	<b>MonB04-4</b>	Exponential Stability for Linearized Korteweg-De Vries-ODE System Lu Lu, Dong-Xia Zhao and Lin-Hong Yao	
11:40 – 12:00	MonB04-5	Stabilization for Boundary Controlled Cascaded Heat-ODE System with T Dependent Coefficient Zhongcheng Zhou	

Session	MonB05: Decision-Making Theory and Method (IV) (Chinese)		
Date/Time	Monday, 02 June 2014 / 10:20-12:20		
Venue	Room05		
Chair	Daizhan Cheng, Shandong Univ.		
Co-Chair	Renzi Yang, Southeast Univ.		
10:20 - 10:40	MonB05-1 Convergence of Potential Networked Evolutionary Games		

Convergence of Potential Networked Evolutionary Games Yuanhua Wang, Ting Liu and Daizhan Cheng

lxxix

10:40 - 11:00	MonB05-2	Integer Programming Based Optimal Side Jets Ignition Combination for Advanced Missile Attitude Control Wang Zhenchao, Yang Lingyu, Zhang Jing and Shen Gongzhang
11:00 - 11:20	MonB05-3	The Evaluation Method of Knowledgeable Manufacturing System Based on Knowledge Mesh Yang Ren-Zi and Wang Jing
11:20 - 11:40	MonB05-4	Emergency Response Decision-Making Based on HTN Planning Qi Chao and Wang Hongwei
11:40 – 12:00	MonB05-5	The Research on Inventory Cost of Tool Based on Life Cycle Li Dong, Penf Hui, Liu Chang and Jiang Li-Ping
12:00 – 12:20	MonB05-6	An Equipment Requirements Development Method Based on Antagonism Seminar Ma Guo-Pu and Ding Yong

Session	MonB06: Faul	t Diagnosis and Fault-Tolerant Control (V) (Chinese)		
Date/Time	Monday, 02 Jun	ne 2014 / 10:20-12:20		
Venue	Room06			
Chair	Shuai Tan, Nor	Shuai Tan, Northeastern Univ.		
Co-Chair	Ling Zhao, Cha	ongqing Jiaotong Univ., and Chongqing Univ.		
10:20 - 10:40	MonB06-1	Online Monitoring for Multiple Mode Processes Based on Gaussian Mi Model Tan Shuai, Chang Yuqing, Wang Fuli, Peng Jun and Wang Shu		
10:40 - 11:00	MonB06-2	Parameter Optimization Algorithm of SVM for Fault Classification in Converter Zhao Jin, Wu Chaorong, Huang Chengguang and Wu Feng		
11:00 – 11:20	MonB06-3	Fault Diagnosis for Gearbox Based on EMD and Multigractal Zhao Ling, Chu Xiaoyan and Huang Darong		
11:20 - 11:40	MonB06-4	The Rolling Bearing Fault Diagnosis Based on LMD and LS-SVM Yongxia Bu, Jiande Wu, Jun Ma, Xiaodong Wang and Yugang Fan		
11:40 – 12:00	MonB06-5	Fault Diagnosis of Industrial Process Based on KICA and LSSVM Xiaoya Zhang, Xiaodong Wang, Yugang Fan and Jiande Wu		
12:00 – 12:20	MonB06-6	Hierarchical Method of Fault Diagnosis Based on Extended SDG Yingjie Liu, Gang Xie, Yunyun Yang, Zehua Chen and Qinglong Chai		

Session	MonB07: Con	MonB07: Control Applications (IV)		
Date/Time	Monday, 02 Ju	Monday, 02 June 2014 / 10:20-12:20		
Venue	Room07			
Chair	Lingshuang Ko	Lingshuang Kong, Hunan University of Technology		
Co-Chair	Wenyan Tang, Hunan University of Technology			
10:20 - 10:40	MonB07-1	Research on Modelling and Control of Three-Level PWM Rectifier System Gao Shi-Hong and Qian Xiao-Long		
10:40 - 11:00	MonB07-2	The Study of Single-Phase PWM Rectifier Based on PR Control Strategy Wang Helin, Cheng Qiming, Li Ming, Chen Gen and Deng Liang		
11:00 - 11:20	MonB07-3	Implementation of an Improved UKF Algorithm in Electronic Whiteboard Positioning Yu Jianjun, Zhang Yingkun, Ruan Xiaogang, Sun Yongfang		
11:20 - 11:40	MonB07-4	The Design and Implementation of ECM Control System Chen Mei, Qiu Ya, Chen Wei and Zheng Tao		
11:40 – 12:00	MonB07-5	Analysis of the Impact of Translating Cowl on Hypersonic Vehicle Performance Liqian Dou, Yuye Shen and Ran Ji		
12:00 – 12:20	MonB07-6	Self-Adaptive Fuzzy PID Control Algorithm Used in Liquid Mixing Device Ma Fengying and Li Huanling		

ession	MonB08: Mobile R	obotics (Chinese)		
Date/Time		Monday, 02 June 2014 / 10:20-12:20		
Venue	Room08			
Chair	Ruilei Zhang, Nanjing Univ. of Scie. and Tech.			
Co-Chair	Zi Yang, East China Normal Univ.			
10:20 - 10:40	MonB08-1	Design of Inductively Wireless Power Transmission Apparatus Yunlong Zhu and Lei Yu		
10:40 - 11:00	MonB08-2	RGB-D Sensor Based Mobile Robot SLAM in Indoor Environment Lyu Qiang, Liu Feng, Wang Xiaolong and Wang Guosheng		
11:00 - 11:20	MonB08-3	A Method of Map Building Based on Sonar and Human-Robot Interaction Liu Shuhua, Zhao Yu and Li Runmin		
11:20 - 11:40	MonB08-4	A SRT-Based Path Planning Algorithm in Unknown Complex Environment Zou Yiping, Guo Jian, Zhang Ruilei and Chen Qingwei		
1:40 - 12:00	MonB08-5	Block-Guided Theta* Path Planning Algorithm Zi Yang and Wensheng Yu		
12:00 - 12:20	MonB08-6	The Review and Implementation of Multi-Robot System Simulation Software Zhang Ruilei, Zou Yiping, Xu Zhihao and Chen Qingwei		

Session	MonB09: Modeling, Control and Simulations of Biological Systems (I)			
Date/Time	Monday, 02 June 2014 / 10:20-12:20			
Venue	Room09	Room09		
Chair	Huan Geng, No	ortheastern Univ.		
Co-Chair	Chao Liu, Northeastern Univ.			
10:20 – 10:40	MonB09-1	Dynamical Analysis of a Differential-Algebraic Bioeconomic Model with Stage Structure and Maturation Delay Chao Liu, Yuanke Li and Can Tong		
10:40 - 11:00	MonB09-2	Fast 3D Skeleton Extraction of Airways and Applications to Virtual Bronchoscopy Huan Geng, Jinzhu Yang, Wenjun Tan, Yuliang Yuan, Fangfang Han and Dazh Zhao		
11:00 - 11:20	MonB09-3	The Analysis of the Associated Shannon Entropy on the Populations with Homologous Genotypes Mating and Homologous Phenotypes Mating Hongyan Zhang and Hongli Zhang		
11:20 - 11:40	MonB09-4	Target Detection Based on a Model of Visual Attention for UAV Geng Wang		
1:40 - 12:00	MonB09-5	Finite Element Analysis Model of Wheat Lodging Resistance Qicheng Xu, Zhen Yuan and Changchun Sun		
12:00 – 12:20	MonB09-6	Mechanical Model of Wheat and Analysis of Root Lodging Qicheng Xu, Changchun Sun and Zhen Yuan		

Session	MonB10:	MonB10: Traffic Control		
Date/Time	Monday, 02	Monday, 02 June 2014 / 10:20-12:20		
Venue	Room10	Room10		
Chair	Chuang Gu	Chuang Guo, Beijing Univ. of Tech.		
Co-Chair	Rui Chai, E	Rui Chai, Beijing Institute of Tech.		
10:20 - 10:40	MonB10-1	Robot Fish Detection Based on a Combination Method of Three-Frame- Difference and Background Subtraction Lan Yongtian, Ji Zhijian, Gao Junwei and Wang Yaowei		
10:40 - 11:00	MonB10-2	Research of Cross-Correlation Tracking Algorithm Based on Variabl Template Huiying Dong, Tengguang Jiang, Yanjie Cai and Qifu Zhang		
11:00 - 11:20	MonB10-3	Changing Lane Probability Estimating Model Based on Neural Network Jianqun Wang, Rui Chai and Qingyang Wu		
11:20 - 11:40	MonB10-4	A Route-Choice Method Based on Zone Traffic Signal Coordination Control Ding Xiaoqing, Dong Honghui and Huang Shihong		
		lxxxii		

1:40 – 12:00	MonB10-5	On Optimization of Highway Electrical Equipment Maintenance Investment Zhigang Shi, Xiujun Yang and Zhenwei Chen
12:00 - 12:20	MonB10-6	Leader-Follower and Cascade System Based Formation Control of Nonholonomic Intelligent Vehicles
		Chuang Guo, Jiali Qin, Yanrong Ge and Yangzhou Chen

Session	MonB11: Co	MonB11: Computer Games (Invited Session)	
Date/Time	Monday, 02 J	June 2014 / 10:20-12:20	
Venue	Room11		
Chair	Xinhe Xu, No	ortheastern Univ.	
Co-Chair			
10:20 - 10:40	MonB11-1	The Design and Optimization of Connect6 Computer Game System Chang Liu, Bingke Wu and Sichen Wu	
10:40 - 11:00	MonB11-2	Applying Determinized MCTS in Chinese Military Chess Chenjun Xiao, Tan Zhu, Chao Lin, Xinhe Xu and Jiao Wang	
11:00 - 11:20	MonB11-3	Analysis of Search Algorithm in Computer Game of Amazons Qiu Hongkun, Zhang Peng, Wang Yajie, Wu Jiehong and Li Fei	
11:20 - 11:40	MonB11-4	The Computer Game Model of Dou Dizhu Mei Xian, Zhang Dianlong, Sun Deqiang, Zhang Boya, Du Shijin and Zhang Hongbo	
1:40 - 12:00	MonB11-5	The Overview of Aircraft Landing Gear Co-Simulation Based on Virtual Prototype Technology Li Fu, Chaoran Yang, Dongzheng Wang and Wei Hu	
12:00 – 12:20	MonB11-6	A New Storage Structure Design of Surakarta Chess Based on Location Yicong Zhang	

Session	MonBIS: Interactive Session
Date/Time	Monday, 02 June 2014 / 10:20-12:20
Venue	Room12
MonBIS-1	3D Chinese Mouth Animation with Adaptive Encoding Yu Haitao and Ge Shuiying
MonBIS-2	Dynamic Tracking of Ceramic Ring Detection System Based on Image Processing Liu Yuxue and Lu Linji
MonBIS-3	Online Object Tracking Based on Sparse Subspace Representation Wang Bao-Yun, Chen Fei and Deng Ping
MonBIS-4	Three-Dimensional Path Planning for UAV Based on Improved PSO Algorithm Qiang Wang, An Zhang and Linghui Qi
MonBIS-5	Visual Tracking Based on Local Patches Wang Baoyun, Zhou Lei and Deng Ping

lxxxiii

MonBIS-6	A Recognition Method of Plate Shape Defect Based on RBF-BP Neural Network Optimized by Genetic Algorithm Xiaohua Li, Tao Zhang, Zhe Deng and Jing Wang		
MonBIS-7	Urban Water Demand Forecasting by LS-SVM with Tuning Based on Elitist Teaching- Learning-Based Optimization  Gang Ji, Jingcheng Wang, Yang Ge and Huajiang Liu		
MonBIS-8	A Khmer Named Entity Recognition Method by Fusing Language Characteristics  Pan Huashan, Yan Xin, Yu Zhengtao and Guo Jianyi		
MonBIS-9	BTP Prediction of Sintering Process by Using Multiple Models  Jialin Wang, Xiaoli Li, Yang Li and Kang Wang		
MonBIS-10	Study on the Plant-Wide Modeling of Gold Hydrometallurgical Process Qingyun Yuan, Fuli Wang, Dakuo He, Runda Jia and Cong Wang		
MonBIS-11	Simulation Based Correlation Analysis on Performance Issues of Semiconductor Wafer Fabrication Facilities  Xingwei Pan, Li Li, Zhongbo Chen and Pengde Jia		
MonBIS-12	A Study on the Effect of Water Vapor Condensation on the Stratospheric Airship Ascending Process  Zhenzhen Li, Xiaomin Wang and Xianwu Lin		
MonBIS-13	Dynamic Soft Sensor Modeling Based on State Detection and Impulses Response Template Zhi Fan, Jie Cao and Yujie Wei		
MonBIS-14	Research on the Separation Process Model of Pressure Swing Adsorption for CO 2 /N 2 with Zeolite Molecular Sieve Liying Liu, Tao Du, Xin Fang, Shuai Che and Wenjun Tan		
MonBIS-15	Modeling and Simulation for Boiler Combustion Control System of 1000MW Ultra- Supercritical Unit Hou Guolian, Jiang Pengcheng, Zheng Xiaobin and Zhang Jianhua		
MonBIS-16	The Battlefield Environment of Two-Dimensional Posture Display Based on UML Wang Yun Cheng, Wu Shan Ming, Ding Zhi Fang, Zhou Chun Hua and Chen Chu Xiang		
MonBIS-17	The Research and Design Of 3D Web Guide System Based On WebGL Cui Peng		
MonBIS-18	Multi-Fingerprints Joint Indoor Positioning Algorithm in WLAN Based on Kalman Filter and Database of Partitioned AP ID  Zhang Hui-Qing, Xu Jian-Bo and Zhang Jing-Li		
MonBIS-19	The Design and Implementation of a Guard Against Theft and Alarm System with Embedded Telephone Access and KEELOQ Technique Yang Xu and Li Shun		
MonBIS-20	Design and Implementation of a Portable Intelligent Electrocardiograph Chen Nankai, Wang Yaonan and Lu Xiaoqing		
MonBIS-21	Architectures for Train Condition Monitoring Network Tian Yin, Dong Hong-Hui, Jia Li-Min, Qin Yong and Xia Xian-Peng		
MonBIS-22	A Survey on the Node Failure Handling of P2P Networks Ge Jia, Fu Xiao-Dong, Gao Tian-Yu, Chen Bin-Bin and Fan Hong-Bo		
MonBIS-23	Distributed Malware Detection Based on Binary File Features in Cloud Computing Environment Xiaoguang Han, Jigang Sun, Wu Qu and Xuanxia Yao		

lxxxiv

MonBIS-24	Evolution of Planning and Scheduling for Steel Plants Based on Simulation-Based Optimization  Pin Wang, Oing Liv. Page Wang, Estiming Via and Vineburn Liv.
MonBIS-25	Bin Wang, Qing Liu, Bao Wang, Feiming Xie and Xinchun Lu  A QoS-Based Scheduling Algorithm for Instance-Intensive Workflows in Cloud
	Environment
M DIC 46	Huifang Li, Siyuan Ge and Lu Zhang
MonBIS-26	Dealing with Vehicle Routing Problem Under Multi-Objective Using Improved Genetic Algorithm  Hui Liu and Yongduan Song
MonBIS-27	Research on ESNI Algorithm for Image Recognition of Boiler Water Level Gauge Liu Ziyu, Zhang Changsheng, Sun Bin, Qian Bin, Tian Haiyong and Zhang Hanping
MonBIS-28	Research and Application of Embedded Technology in Remote Network Monitoring System of Coal Mine Zhang Xiaodong, Tan Yuegang and Hou Yan
MonBIS-29	Intelligent System for Monitoring and Controlling of the Grain Condition Based on ARM9 Qidi Zhao, Yanju Liu, Yang Yu, Jianhui Song and Guang Zhou
MonBIS-30	Calibration and Error Compensation of Magnetometer  Zhiping Liu and Mingjing Zhu
MonBIS-31	Design of the Power Supply for the Pulsed Electric Current Sintering Jiangtao Shi, Lei Yao, Binbin Ni, Qi Chen, Jianfeng Xie and Xiaotao Han
MonBIS-32	Design of Particle Velocity Measurement System Based on Spatial Filtering Effect of Capacitive Sensor Shen Daoqing, Yang Gang, Wang Yutao and Guo Tingting
MonBIS-33	Modeling and Analysis of Permanent Magnetic Driver with Notched Conductive Plate Gao Qing-Zhong, Lin Sheng and Chen Fu
MonBIS-34	Integration Framework with Semantic Aspect of Heterogeneous System Based on Ontology and ESB  Ke Shi, Feng Gao, Qing Xu and Guoyan Xu
MonBIS-35	Researches on Manufacturing Cloud Service Composition & Optimization Approach Supporting for Service Statistic Correlation  Hui-Fang Li, Rui Jiang and Si-Yuan Ge
MonBIS-36	Study of Manufacturing Cloud Service Matching Algorithm Based on OWL-S Huifang Li, Lu Zhang and Rui Jiang
MonBIS-37	Context-Aware Workflow Modeling Approach Using OWL Pengfei Wang, Huifang Li and Baihai Zhang
MonBIS-38	The Balance Control of Two-Wheeled Robot Based on Bionic Learning Algorithm Ren Hongge, Wang Zhilong, Li Fujin and Huo Meijie
MonBIS-39	Forward Position Solution of 3-RPS in-Parallel Manipulator Based on Particle Swarm Optimization  Zhang Hongli, Ren Tiantian and Pazilai Mahemuti
MonBIS-40	Analysis on Two Modeling Results of Modular Self-Reconfigurable Robots Wenting Yuan, Qiuxuan Wu and Bichuan Liu
MonBIS-41	Virtual Reality Simulator for the EAST Blanket Remote Handing System Su Xing and Lu Junguo
MonBIS-42	Embedded Control System Design and Experimental Analysis of Bionic Quadruped Robot Wang Peng, Yu Zhiwei, Zhou Cheng and Dai Zhendong

lxxxv

MonBIS-43	High Efficient Walking of Compass-Like Biped Robots with Foot Rotation  Zidong Wang, Gangfeng Yan, Chong Tang and Zhiyun Lin
MonBIS-44	Coordinated Attitude Control for Tethered Space Robot Xiudong Xu, Panfeng Huang, Jun Ma and Bingzong Xu
MonBIS-45	Attitude Control of Coaxial Tri-Rotor UAV Based on Linear Extended State Observer Zhimin Chen, Zhihong Peng and Fan Zhang
MonBIS-46	Transition Flight Control Using Adaptive Neutral Network Dynamic Inversion for Canard Rotor/Wing UAV Wendong Gai, Jing Zhang, Liangsong Huang and Yuxia Li
MonBIS-47	Formation Control of Multiple Wheeled Mobile Robots via Leader-Follower Approach Tao Peng and Shan Li
MonBIS-48	Control Strategy Design for Smart Car Auto-Tracing with Visual Hui Zhang and Yongxin Liu

Session	MonC01: Com	MonC01: Complex Networks and Systems (III) (Chinese)	
Date/Time	Monday, 02 Jur	Monday, 02 June 2014 / 13:20-15:20	
Venue	Room01		
Chair	Zhiwei Liu, Wu	han Univ.	
Co-Chair	Dingjuan Wu, S	South China University of Tech.	
13:20 - 13:40	MonC01-1	A Study on the Evolution Model of the Integration of Informatization and Industrialization  Dingjuan Wu and Yanming Sun	
13:40 - 14:00	MonC01-2	Stabilizability of a Class of Linear Singularly Perturbed Systems via Outpu Feedback Hongwang Yu and Baoshang Zhang	
14:00 - 14:20	MonC01-3	Negative Imaginary Balancing for Mode Reduction of LTI Negative Imaginary Systems Kun Tu, Xin Du and Peibing Fan	
14:20 - 14:40	MonC01-4	Impulsive Synchronization for Uncertain Delayed Complex Dynamical Networks with Minimal Coupling Strength Wu-Hua Chen, Zhiyong Jiang, Jiacheng Zhong and Xiaomei Lu	
14:40 - 15:00	MonC01-5	Containment Control for Second-Order Multi-Agent Systems via Impulsive Algorithms Using Position-Only Measurements Zhou Hong, Wang ZhenHua, Li Wei, Feng Kuo and Liu Zhi-Wei	
15:00 - 15:20	MonC01-6	Projective Synchronization of Two Time-Delay Impulsive Coupling Comple Networks Zhou Hong, Li Wei, Qin Yu-Zhen, Feng Kuo and Liu Zhi-Wei	

Session	MonC02: Ide	MonC02: Identification and estimation(III) (Chinese)	
Date/Time	Monday, 02 Ju	Monday, 02 June 2014 / 13:20-15:20	
Venue	Room02		
Chair	Yingwei Zhan	g, Northeastern Univ.	
Co-Chair	Tianhong Pan,	Tianhong Pan, Jiangsu Univ.	
13:20 - 13:40	MonC02-1	PLS-Based Fault-Relevant Reconstruction Zhang Yingwei and Tang Nan	
13:40 – 14:00	MonC02-2	Fuzzy Identification Base on Cat Swarm Optimization Algorithm Sun Xu and Xu Xuesong	
14:00 – 14:20	MonC02-3	Application of Nonlinear System Identification in Servo System Model Xi Lei, Yu Tao and Qiu Xuanyu	
14:20 – 14:40	MonC02-4	Multi-Asset Allocation Based on Financial Market Microstructure Mor Yemei Qin, Hui Peng, Yanhui Xi and Xiaohong Chen	
14:40 – 15:00	MonC02-5	Study on Operation Energy Efficiency Model of Chiller Based on SVR Yan Jun-Wei, Zhou Yu and Zhou Xuan	
15:00 – 15:20	MonC02-6	Statistical Model Identification for Cogeneration System Using Statisti Analysis Tianhong Pan, Yanqing Han and Dongliang Xu	

Session	MonC03: Intelligent Systems (III) (Chinese)		
Date/Time	Monday, 02 Ju	ne 2014 / 13:20-15:20	
Venue	Room03		
Chair	Maopeng Ran,	Beihang Univ.	
Co-Chair	JianHua Zhang	JianHua Zhang, East China Univ. of Scie. and Tech.	
13:20 – 13:40	MonC03-1	A Dynamic Search Space Particle Swarm Optimization Algorithm Based on Population Entropy Ran Maopeng, Wang Qing and Dong Chaoyang	
13:40 – 14:00	<b>MonC03-2</b>	Application of Differential Evolution Optimization Based Gaussian Mixture Models to Speaker Recognition  Zhou Hong and Zhang JianHua	
14:00 – 14:20	MonC03-3	Path Tracking Controller Design for Intelligent Vehicle in Non-Single Straigh Road Conditions Dehao Han, Lei Li, Xinchun Jia and Bo Yang	
14:20 – 14:40	MonC03-4	Relevance Model Based Image Segmentation Zhu Sonhao, Liu Jiawei, Luo Qingqing and Hu Ronglin	
14:40 – 15:00	MonC03-5	A Novel Approach for Image Classification Zhu Sonhao, Liu Jiawei and Hu Ronglin	
15:00 – 15:20	MonC03-6	The Design and Simulation of Traffic Monitoring System Based on RFID Qiu Xinyun and Xiao Xiao	

## lxxxvii

Session	MonC04: Stochastic Systems		
Date/Time	Monday, 02 Jui	Monday, 02 June 2014 / 13:20-15:20	
Venue	Room04		
Chair	Guojia Li, Nort	heastern Univ.	
Co-Chair	Na Duan, Jiangsu Normal Univ.		
13:20 – 13:40	MonC04-1	Design and Simulation on RFID-Enabled Hybrid Pull/Push Control Strates for Multi-Echelon Inventory of Supply Chain Li Guojia and Wang Dingwei	
13:40 – 14:00	<b>MonC04-2</b>	Output-Feedback Control for More General Class of Stochastic Nonlinear Systems with SiISS Inverse Dynamics Huifang Min and Na Duan	
14:00 – 14:20	MonC04-3	An Approach of Bayesian Filtering for Stochastic Boolean Dynamic System Hongbin Ma, Dong Wang, Hongsheng Qi and Mengyin Fu	
14:20 – 14:40	MonC04-4	Output-Feedback Stabilization for Large-Scale Stochastic Nonlinear System with Unknown Control Coefficients Fang Liu and Wuquan Li	
14:40 – 15:00	MonC04-5	Stochastic Stability of Boolean Networks with Markov Jump Yunqi Zhao and Fei Long	
15:00 - 15:20	MonC04-6	Stochastic Stability of Discrete-Time Markovian Jump Antilinear Systems Yang-Yang Qian, Ai-Guo Wu and Wanquan Liu	

Session	MonC05: Decision-making Theory and Method (V) (Chinese)	
Date/Time	Monday, 02 June 2	014 / 13:20-15:20
Venue	Room05	
Chair	Guangming Li, Nat	tional Univ. of Defense Tech.
Co-Chair	Honghua Wu, Univ. of Jinan	
13:20 - 13:40	MonC05-1	Fuzzy Markov Chains Based on the Fuzzy Transition Probability Guangming Li and Baoxin Xiu
13:40 – 14:00	MonC05-2	The Relational Degree Model Based on Curvature and Application Wu Honghua, Mu Yong and Deng Lixia
14:00 – 14:20	MonC05-3	Air Combat Game Method Based on Multi-UAV Consensus Informa Xia Chen and Yifei Wang
14:20 – 14:40	MonC05-4	Multi-Criteria Direct Clustering Method Based on Hesitant Fuzzy S Wang Xiao-Kang
14:40 – 15:00	MonC05-5	Linguistic Aggregation Operators under Interval Confidence Levels Xin-Fan Wang, Jian-Qiang Wang and Wu-E Yang
15:00 - 15:20	MonC05-6	Integrated Support Analysis of Military Aircraft Base on Fuzzy The Jianguo Cui, Cheng Wang, Yiwen Qi, Fan Cui and Liying Jiang

## lxxxviii

Session	MonC06: Signal Processing (II) (Chinese)		
Date/Time	Monday, 02 June 2014 / 13:20-15:20		
Venue	Room06		
Chair	Lei Xia, Air For	Lei Xia, Air Force Communications Officer School in Dalian	
Co-Chair	Jianhui Xi, Shen	yang Aerospace Univ.	
13:20 - 13:40	MonC06-1	Non-Search Fractal Image Compression Algorithm Research Shiping Li and Lei Xia	
13:40 – 14:00	MonC06-2	Research on Acoustic Emission Source Location Method Based on Cross Correlation Analysis without Measuring Sonic Speed Jianhui Xi, Baofeng Xiao, Hongshan Ma and Qi Wang	
14:00 – 14:20	MonC06-3	Research on Moving Target Detection Algorithm Based on MRA and Wa Threshold Jingjing Wang, Xiaodong Wang, Jiande Wu, Yugang Fan and Guoyong Huan	
14:20 – 14:40	MonC06-4	Measurement Partition Algorithm Based on Density Analysis and Spectr Clustering for Multiple Extended Target Tracking Jinlong Yang, Fengmei Liu, Hongwei Ge and Yunhao Yuan	
14:40 – 15:00	MonC06-5	Image Fusion Based on Constant Parameters Color Transfer in Linear C Space Weixing Li, Yating Xiao, Feng Pan and Qi Gao	
15:00 – 15:20	<b>MonC06-6</b>	Ear Recognition Based on Weighted Wavelet Transform and DCT Tian Ying, Zhang Debin and Zhang Baihuan	

Session	MonC07: Contr	rol Applications (V) (Chinese)
Date/Time	Monday, 02 June	e 2014 / 13:20-15:20
Venue	Room07	
Chair	Ming Xu, Beihai	i Univ.
Co-Chair	Deying Gu, Northeastern Univ.at Qinhuangdao	
13:20 - 13:40	MonC07-1	<b>Drag-Free Controller Design of the Ultra-Low-Orbital Flight</b> <i>Yan Wei, Ming Xu and Shanshan Du</i>
13:40 – 14:00	MonC07-2	The Application of Fuzzy Predictive Control to Temperature Control Heating Oil Furnace Gu Deying and Ren Liangchao
14:00 – 14:20	MonC07-3	The Research of Control Algorithm and Topology for High Voltage F Converter Based on Modular Multilevel Converter Zheng Zheng and Cui Can
14:20 – 14:40	MonC07-4	Software Implementation of Autonomous Orbital Control for Forma Ming Xu, Shanshan Du and Kai Yu
14:40 – 15:00	MonC07-5	Traction/Braking Control Design for High Speed Trains Based on Fo Estimation- An More Implementable Approach Wenhao Liao, Yongduan Song and Wenchuan Cai

Session	MonC08: Plann	ing, Scheduling and Coordination (II) (Chinese)	
Date/Time	Monday, 02 June	Monday, 02 June 2014 / 13:20-15:20	
Venue	Room08		
Chair	Huangang Wang	, Tsinghua Univ.	
Co-Chair	Xun Xiao, Xi'an	Jiaotong Univ.	
13:20 - 13:40	MonC08-1	Cyclic Scheduling of Cluster Tools with Equipment Front-End Module and Multifunctional Load Locks Wang Hao, Wang Huan-Gang and Xu Wen-Li	
13:40 – 14:00	MonC08-2	Aggregated Hydro Unit Based Model for Short-Term Hydro Generation Scheduling Qiaozhu Zhai, Xun Xiao and Xuan Li	
14:00 – 14:20	MonC08-3	Fast Iterated Local Search Algorithm with High Order Neighborhood for N Wait Flowshop Scheduling Problem Chuyang Wang	
14:20 - 14:40	MonC08-4	Genetic Algorithm Based Scheduling Model of Continuous Casting Crystalli Copper Electroplating Zhen Zhao, Haihong Wang and Naiping Hu	
14:40 – 15:00	MonC08-5	Research on PN-Based Scheduling Stability for Reentrant Medical Testing System  Dai Wanyi, Liu Weidong, Zhang Mei and Hu Yueming	
15:00 - 15:20	MonC08-6	An MILP Approach for a Profit-Based Unit Commitment Problem with Emissions Penalty Ping Che and Gang Shi	

Session	MonC09: Modeling, Control and Simulations of Biological Systems (II)	
Date/Time	Monday, 02 June	2014 / 13:20-15:20
Venue	Room09	
Chair	Lingxiao Geng, Beijing Univ. of Tech.	
Co-Chair	Chao Liu, Northeastern Univ.	
13:20 - 13:40	MonC09-1	Support Vector Machine Dynamic Modeling Method and Its Application Fermentation Process Lingxiao Geng and Xuejin Gao
13:40 – 14:00	MonC09-2	Global Stability Analysis and Optimal Taxation Control for a Harvested Predator System with Prey Refuge Chao Liu and Jingmei Guo

14:00 – 14:20	MonC09-3	Rapid Compositional Analysis of Sawdust Using Sparse Method and Near Infrared Spectroscopy Wang Changyue, Yao Yan, Liu Huijun and Wang Jingjun
14:20 – 14:40	MonC09-4	Leaf Shape Polymorphism and its Relationship to Other Characteristics of Wild Soybean (Glycine Soja) in China Xuefei Yan, Wei Guo, Bei Sun, Ling Zhang, Xiaodong Liu, Hongkun Zhao, Min Gao and Jiandong Li
14:40 – 15:00	MonC09-5	Asymptotical Behavior of Parameter Estimation in Prediction Error Framework Caiyun Chen and Zhibin Yan
15:00 – 15:20	MonC09-6	Stage-Based Variable Sampling Period Modeling and On-Line Monitoring Strategy for Uneven-Length Batch Processes  Yajun Wang, Zhizhong Mao, Mingxing Jia and Jing Bai

Session	MonC10: Smart Grids (II) (Chinese)	
Date/Time	Monday, 02 June 2014 / 13:20-15:20	
Venue	Room10	
Chair	Zhongjing Ma, Beij	ing Institute of Tech.
Co-Chair	Weisheng Xu, Tong	rji Univ.
13:20 - 13:40	MonC10-1	Short-Time Voltage Variance Detection of Micro-Grid with Direct-Drive Wind Power Generation  Zhou Jian-Ping and Zhu Jian-Ping
13:40 – 14:00	MonC10-2	An Adaptive Droop Voltage Control for DC Microgrid Systems Zhongjing Ma and Wencai Jiang
14:00 – 14:20	MonC10-3	Study of the Reactive Power Control Strategy for Single-Phase Gird-Connected Inverter Li Feng-Feng, Wu Qiu-Xuan, Wang Yue-Sheng, Xie Ying-Jiao, Cui Lei-Lei a Li-Yuhua
14:20 – 14:40	MonC10-4	A SPLL Technique under Unbalanced and Seriously Distorted Grid Vol Conditions Cun-Lu Dang and Xiao-Gang Zhao
14:40 – 15:00	MonC10-5	Demand-Side Response of Smart Clients under Real-Time Pricing Wei-Hui Shao, Wei-Sheng Xu, Zhi-Yu Xu and Zheng-Yang Zeng
15:00 – 15:20	MonC10-6	Improved DV-Hop Localization Algorithm for Wireless Nodes in the Sm Grid Li Changyun, Zhao Peizhe and Zeng Yu

Session	MonC11: Motion Control (II) (Chinese)	
Date/Time	Monday, 02 June 2014 / 13:20-15:20	
Venue	Room11	
Chair	Deying Gu, Northea	astern Univ.at Qinhuangdao
Co-Chair	Hua Chen, Hohai U	niv.Changzhou Campus
13:20 - 13:40	MonC11-1	Speed Control of BLDCM Based on Compensated Fuzzy Neural Network Gu Deying and Zhang Jinquan
13:40 – 14:00	MonC11-2	Further Results of Semiglobal Saturated Stabilization for Nonholonomic Mobile Robots Hua Chen, Junfeng Chen, Yan Lei, Weixu Chen and Yawei Wang
14:40 – 15:00	MonC11-3	A Novel Control Method Based on Fuzzy Optimization Algorithm of Ship Lateral Motion Control  Xiuyan Peng, Shuli Jia and Yakun Yu
15:00 – 15:20	MonC11-4	On Sliding Mode Control of Permanent Magnet Synchronous Moto Lin Weijie, Liu Dongliang, Wu Qiuxuan and Zhao Xiaodan
14:00 – 14:20	MonC11-5	Dynamic Modeling and Trajectory Tracking Control of Tunnel Box Machine Huajiang Liu, Jingcheng Wang, Langwen Zhang, Ling Fei and Guangle Zhao
14:20 – 14:40	MonC11-6	Control Method of Sensorless Brushless DC Motor Based on Neura Network Zhang Jinquan and Gu Deying

Session	MonCIS: Interactive Session
Date/Time	Monday, 02 June 2014 / 13:20-15:20
Venue	Room12
MonCIS-1	Cooperative Search Algorithm for AUVs Based On Bio-Inspired Model Zhengwen Rui and Daqi Zhu
MonCIS-2	Real-Time Rear of Vehicle Detection from a Moving Camera Qing Xu, Feng Gao, Ke Shi and Guoyan Xu
MonCIS-3	A Method About State-Space Representation and Location Estimation by Computational Geometry  Yi Zhang, Mengyin Fu and Meiling Wang
MonCIS-4	Novel SLAM Algorithm for UGVs Based BBO-CEPF Kuifeng Su, Tianqing Chang and Lei Zhang
MonCIS-5	Optimal Line Feature Generation from Low-Level Line Segments under RAN Framework  Li Haifeng and Chen Rong
MonCIS-6	A Collision Response Algorithm for 3D Virtual Reality Minimally Invasive Surgery Simulator Shao-Hua Mi, Zeng-Guang Hou, Fan Yang, Xiao-Liang Xie and Gui-Bin Bian
	xcii

MonCIS-7	Tree Structures Segmentation of Coronary Arteries using CURVES Method for Interventional Surgical Simulation Fan Yang, Zengguang Hou, Shaohua Mi, Guibin Bian and Xiaoliang Xie
MonCIS-8	Design of Upper Extremity Motor Function Mirror Rehabilitation System for Post-Stroke Patients Based on FES Zhao Xingang, An Lipeng and Ye Dan
MonCIS-9	Flexible Tip-Steerable Needle Control with Tissue Uncertainty Xingang Zhao, Lingguo Kong, Dan Ye, Yiwen Zhao and Zhenwei Wu
MonCIS-10	Gaze Tracking System for Teleoperation  Mingxin Yu, Xiangzhou Wang, Yingzi Lin and Xiaoping Bai
MonCIS-11	DIVA Model Based on the Constant Delay Mechanism Feng Song and Zhang Shaobai
MonCIS-12	A Coordinated Control Strategy for Rotating Motion of the Hub-Spoke Tethered Space Robot Formation System Jun Ma, Panfeng Huang and Xiudong Xu
MonCIS-13	Underwater Acoustic Source Localization Method Based on TDOA with Particle Filtering Xu Yaosong, Wang Dandan and Fu Hua
MonCIS-14	Research of MCU-Based Robot Fish with Caudal Fin Yawei Qu, Songlin Chen and Jie Ma
MonCIS-15	Studies on the Collaborative Mission Planning of Multiple Space Robots Based on Multiple Agent Models Wu Zhihuan, Yin Hang, Yan Hui and Gao Yongming
MonCIS-16	Modeling and Control of Dynamic Network SIR Based on Community Structure Degang Xu and Xiyang Xu
MonCIS-17	Modeling of Dissolved Oxygen Concentration in Activated Sludge Process Based on Generalized Dynamic Fuzzy Neural Networks  Yuge Xu, Yongtao Zhang, Meijin Lin and Fei Luo
MonCIS-18	<b>Dynamics of a Stochastic Ratio-Dependent Leslie System</b> Caifeng Fan, Zuoliang Xiong and Lifeng Wu
MonCIS-19	Enhancing the Effectiveness of Fungicides by Optimizing Their Combinations Xiang Wang, Jia Ma, Xiaowei Li, Xiaodong Zhao, Zongli Lin, Jie Chen and Zhifeng Shao
MonCIS-20	Evolution and Simulation Analysis on the Population of Han and Minority Groups in China Wang Xuezhong, Guo Bin, Ji Qingxiang, Zhang Jing, He Jinli and Zhang Hongli
MonCIS-21	A Multi-MEMS Sensors Information Fusion Algorithm Shi Jingwei, Zhou Yongjie, Zhang Haiyun, Zhang Tao, Wang Leigang, Ren Wei, Luan Mengkai and Liu Huifeng
MonCIS-22	Mechanical Analysis and Control of a Novel Nanopositioner Du Zhiyuan, Liu Pengbo, Yan Peng and Zhen Zhang
MonCIS-23	Optimal Parameter for Permanent Magnet Linear Servo System Using Load Disturbance Compensation  Zhitao Wu, Jianying Xu and Liancheng Zhu
MonCIS-24	Research on the Space Vector Modulation Method of Three-Phase PWM Rectifier Shou-Tao Li, Ya-Bin Fu, Wei Jiang and Hai-Ying Qi

MonCIS-25	Design and Simulation of a Novel Wireless Passive SAW Soil Pressure Sensor Wang Xiaobo, Xie Liqiang, Li Juelong, Xing Jianchun and Kang Shuai			
MonCIS-26	Simulation of Ground Rheostatic Braking in Mid-to-Low Speed Maglev Train Bang An, Sikai Liu and Shaoke Liu			
MonCIS-27	Study on the Experiment of Ultracapacitor in HES for HEV Wang Qi, Sun Yu-Kun and Huang Yong-Hong			
MonCIS-28	A New Control Scheme for 4WID Electric Vehicle Using DSP and CPLD Guohai Liu, Xiaochun Xu, Qian Chen and Ying Xie			
MonCIS-29	Fault Diagnosis of Subway Auxiliary Inverter Based on EEMD and GABP Liang Cheng, Junwei Gao, Bin Zhang, Ziwen Leng and Yong Qin			
MonCIS-30	Implementation of Path Planning Method of Intelligent Vehicle Based on MapX Jianmin Duan, Huiqin Ge and Junqin Yao			
MonCIS-31	Estimation of Li-Ion Battery State of Charging and State of Healthy Based on Unsented Kalman Filtering Chen Ning, Hu Xiaojun, Gui Weihua and Zou Jiachi			
MonCIS-32	A Study of the High-Speed Vehicle Real-Time Accurate Positioning Algorithm Yunlin Luo, Antao Ming, Huaikun Xiang and Lanqiu Cheng			
MonCIS-33	A Traffic Flow Prediction Algorithm Based on Adaptive Particle Filter Mengfei Wen, Wentao Yu, Jun Peng and Xiaoyong Zhang			
MonCIS-34	Ontology-Driven Tunnel Construction Information Retrieval and Extraction <i>Hu Min and Huang Zhewen</i>			
MonCIS-35	Effective Voltage Flicker Detection Approach Based on a New Modified S- Transform Algorithm Huang Yong-Hong, Xu Jun-Jun, Shi Hui and Zhang Yun-Shuai			
MonCIS-36	Selective Harmonic Compensation Scheme for Active Power Filters Using Generalized Predictive Control  Geng Tao, Wang Menglu and Sun Jianyan			
MonCIS-37	Game Theory Applied on Step-Priced Micro Grid Hong Huang and Xiaozhong Liao			
MonCIS-38	Constant Pressure Water Supply System Based on Smart700 Configuration Chunyang Wang and Guoxu Ding			
MonCIS-39	The Study of Frequency Optimal Control Method of Photovoltaic-Diesel Hybrid Isolated Microgrid System Mi Yang, Tian Yue, Zhang Han and Wang Limin			
MonCIS-40	Control Strategy for Photovoltaic Grid-Connected Inverter with LCL Filter Zhang Guoyue, Yin Ke, Wu Yue and Qi Donglian			
MonCIS-41	Study of Modeling and Intelligent Control on AGC System with Wind Power Hou Guolian, Zheng Xiaobin, Jiang Pengcheng and Zhang Jianhua			
MonCIS-42	Improvement on the Grid Connected Control Strategy of Direct Drive Permanent Magnet Wind Power System Wu Lijuan, Wu Haotian and Li Xuesong			
MonCIS-43	Control Strategy Research of Wayside Supercapcitor Energy Storage System for Urban Rail Transit Zongyu Gao, Jianjun Fang, Yinong Zhang, Di Sun, Lan Jiang and Xiaoling Yang			

MonCIS-44	Quasi Proportional-Resonant Control of Single-Phase Photovoltaic Grid- Connected System with LCL Filter Yumei Liu, Rui Bai, Daoqian Wang, Wenge Ma and Zifeng Zhang
MonCIS-45	<b>Proportional-Resonant Control Method of Three-Phase Grid-Connected Inverter</b> <i>Yumei Liu, Rui Bai, Daoqian Wang, Wenge Ma and Lin Wang</i>
MonCIS-46	Research on Wet Air Oxidation Sludge Treatment System Using Non-Grid-Connected Wind Power Shi Jian Zhong and Gu Weidong
MonCIS-47	Active Damping Control Strategy for Grid-Connected Inverters by Splitting the Capacitor of LCL Filter Ling Lu, Ye Yongqiang, Zhuang Chao and Wang Jianhong
MonCIS-48	Output Feedback PD Power-Level Control for Modular High Temperature Gas- Cooled Reactors Zhe Dong

Session		MonD	01: Complex Networks and Systems (IV) (Chinese)
Date/Time		Monday, 02 June 2014 / 15:40-17:40	
Venue		Room0	01
Chair		Shuohao Li, National University of Defense Tech.	
Co-Chair		Chunxi	a Fan, Nanjing University of Posts and Telecommunications
15:40 – 16:00	MonD	01-1	An Incremental Structure Learning Approach for Bayesian Network Shuohao Li, Jun Zhang, Boliang Sun and Jun Lei
16:00 – 16:20	MonD	01-2	Synchronization of Directed Complex Dynamical Networks Based on Distributed Event-Triggered Communications  Liu Jie and Fan ChunXia
16:20 – 16:40	MonD	01-3	Power Grids Vulnerability Analysis Based on Combination of Degree and Betweenness Xuezhong Guan, Jinlong Liu, Zhe Gao, Di Yu and Miao Cai
16:40 – 17:00	MonD	01-4	The Maximum Power Control of Direct-Drive Wind Turbine Qin Bin, Jiang Xuexiang, Zhao Yulin and Tang Qing
17:00 – 17:20	MonD	01-5	Exponential Synchronization of Stochastic Complex Dynamical Networks with Impulsive Perturbations and Markovian Switching Anding Dai, Wuneng Zhou, Yichao Zheng and Shengchao Su
17:20 – 17:40	MonD	01-6	Adaptive Pinning Synchronization of Complex Networks Based on Output Feedback Control Wan Youhong and Xu Ji

Session	MonD02: Sens	MonD02: Sensor Network Systems (III) (Chinese)		
Date/Time	Monday, 02 Jur	Monday, 02 June 2014 / 15:40-17:40		
Venue	Room02			
Chair	Guangming Zhu	u, Zhejiang Univ.		
Co-Chair	Yuan Hu, East	Yuan Hu, East China Univ. of Scie. and Tech.		
15:40 – 16:00	MonD02-1	Congestion Control for Wireless Sensor Networks: A Survey Hu Yuan, Niu Yugang and Gan Fenghao		
16:00 – 16:20	MonD02-2	A Novel WIFI Indoor Positioning Method Based on Genetic Algorithm and Twin Support Vector Regression Wenhua Le, Zhanbin Wang, Jingcheng Wang, Guanglei Zhao and Haoxuan Mi		
16:20 – 16:40	MonD02-3	A Distributed Localization Scheme Based on Mobility Prediction for Underwater Wireless Sensor Networks Guangming Zhu, Rongxin Jiang, Li Xie and Yaowu Chen		
16:40 – 17:00	MonD02-4	Energy-Saving Routing Protocol for Wireless Sensor Networks Yan Zeng and Lei Wang		
17:00 – 17:20	MonD02-5	The Improvement of 3D Wireless Sensor Network Nodes Localization Li-Jun Peng and Wen-Wei Li		
17:20 – 17:40	MonD02-6	Human Body Detection of Wireless Sensor Network Based on RSSI Haijing Wang, Wei Wang and Huanshui Zhang		

Session	MonD03: Decision Supporting System and Production Planning and Scheduling (II) (Chinese)			
Date/Time	Monday, 02 June 2	014 / 15:40-17:40		
Venue	Room03			
Chair	Zhen-Yuan Liu, Hi	Zhen-Yuan Liu, Huazhong Univ. of Scie. and Tech.		
Co-Chair	Yue Zhai, Dalian Inst. of Scie. and Tech.			
15:40 - 16:00 16:00 - 16:20	MonD03-1 MonD03-2	Project Scheduling with Time Window Constraints on Multi-Skill Resources  Jing Tian, Zhenyuan Liu and Wenmin Yu  Customer Point Collaboration-Based Multi-Trip Vehicle Scheduling		
16:20 - 16:40	MonD03-3	Algorithm to Pickup and Delivery Service to Airport Xu Zhengzheng and Tang Jiafu An Approach with Decomposition on Time Windows for Resource- Constrained Project Scheduling Jing Tian, Zhenyuan Liu and Wenmin Yu		
16:40 - 17:00	MonD03-4	Urban Emergency Intelligent Decision System in Rough Set on Two Fuquan Sun, Xi Yu, Shixin Liu and Fuqiang Lu		
17:00 – 17:20	MonD03-5	Research on Scheduling of Cluster Tools with Residency Time Lu Rui		

Session	MonD04: Nonlin	ear Systems (IV) (Chinese)		
Date/Time	Monday, 02 June	Monday, 02 June 2014 / 15:40-17:40		
Venue	Room04			
Chair	Shuqian Zhu, Sha	Shuqian Zhu, Shandong Univ.		
Co-Chair	Jun Dong, Air For	ce Engineering Univ.		
15:40 - 16:00	MonD04-1	Finite-Time Stability and Stabilization for a Class of Nonlinear Discrete-Time Singular Switched Systems  You Xu, Shuqian Zhu and Shuping Ma		
16:00 - 16:20	MonD04-2	Chaotic Synchronization Between Fractional-Order Financial System and Financial System of Integer Orders  Dong Jun, Zhang Guangjun, Wang Shaoying and Li Qiongyao		
16:20 - 16:40	MonD04-3	An Optimization Tuning Method of Nonlinear Non-Minimum Phase Systems and Application to Chemical Process Wancheng Wang and Xiaoxiao Jin		
16:40 - 17:00	MonD04-4	Stability Analysis of Nonlinear Self-Excited Vibration in Cold Rolling Main Driv System Yang Xu, Li Qing, Peng Kaixiang, Tong Chaonan and Ding Dawei		
17:00 - 17:20	MonD04-5	Research and Verification on Swing-Up Control Algorithm of Rotary Inverted Pendulum  Haohua Qin, Wei Shao and Lantian Guo		

Global Sliding Mode Control Based on Observer for TCP Network

Tao Zhong, Jing Yuanwei, Ye Chengyin and Jiang Nan

Session	MonD05: Networked Control Systems (III) (Chinese)			
Date/Time	Monday, 02 June	2014 / 15:40-17:40		
Venue	Room05	Room05		
Chair	Zhihong Guan, Huazhong Univ. of Scie. and Tech.			
Co-Chair	Chen Peng, Nanjing Normal Univ.			
15:40 – 16:00	MonD05-1	On Event-Triggered Algorithm Design for Distributed Coordination of Mu Agent Systems Shi Wang and Yuan Fan		
16:00 – 16:20	MonD05-2	A Survey on Networked Control Systems Subject to Limited Network Resources Guo Cancan, Peng Chen, Zhang Jin and Peng Dacheng		

17:20 - 17:40

**MonD04-6** 

xcvii

16:20 - 16:40	MonD05-3	Optimal Tracking Performance of MIMO Networked Control Systems with Communication Constraints Chao-Yang Chen, Ming Chi, Zhi-Hong Guan, Xian-He Zhang and Xi-Sheng Zhan
16:40 – 17:00	MonD05-4	Optimal Linear Estimators for Systems with Multiple Random Measurement Delays and Packet Dropouts Yu Luyang, Ma Jing and Sun Shuli
17:00 – 17:20	MonD05-5	The Stability Analysis for a Class of Time-Delay Networked Control Systems Shenping Xiao, Lixin Guo and Liyan Wang
17:20 – 17:40	MonD05-6	Iterative Learning Control for Networked Stochastic Systems with Random Measurement Losses  Dong Shen and Youqing Wang

Session	MonD06: Data Processing (II) (Chinese)			
Date/Time	Monday, 02 Jun	Monday, 02 June 2014 / 15:40-17:40		
Venue	Room06			
Chair	You Li, Nationa	You Li, National Univ. of Defense Techn.		
Co-Chair	Jiaojiao Hua, Shenyang Aerospace Univ.			
15:40 – 16:00	MonD06-1	Shaft Orientation Error Compensation of Single-Axis Rotation INS in Ship Deformation Measurement System Li You, Wang Xing-Shu and Huang Zong-Sheng		
16:00 – 16:20	MonD06-2	An Improved TANC Classification Algorithm Based on C4.5 Zhao Xiao-Qiang and Yang Jia-Min		
16:20 - 16:40	MonD06-3	An Improved IWO-FCM Data Mining Algorithm Zhao Xiaoqiang and Zhou Jinhu		
16:40 – 17:00	MonD06-4	Life Trend Analysis of Aircraft Air Refrigerator Based on Neighborhood Rough Set and SVM Jianguo Cui, Jiaojiao Hua, Qingtian Wang, Xiao Cui, Haigang Liu and Liying Jiang		
17:00 – 17:20	MonD06-5	Real Time Correction Methods of Hydrodynamic with $H\infty$ Filter Xiaoliang Feng, Xiaoliang Wang and Chenglin Wen		
17:20 – 17:40	MonD06-6	Event Dynamic Transition Model in TCA Based on the Attribute Partial Diagram Yanyan Zhang, Xiaomin Wang and Jianbo Liu		

Session	MonD07: Cont	onD07: Control Applications (VI) (Chinese)		
Date/Time	Monday, 02 Jur	onday, 02 June 2014 / 15:40-17:40		
Venue	Room07	oom07		
Chair	Rongfu Zhou, H	Rongfu Zhou, PanZhihua Univ.; Univ.of Electronic Scie.and Tech.		
Co-Chair	Yongduan Song	Yongduan Song, Beijing Jiaotong Univ.; Chongqing Univ.		
15:40 – 16:00	<b>MonD07-1</b>	The Control Application of Fuzzy PID in Combustion System Rongfu Zhou and Shulin Tian		
16:00 – 16:20	MonD07-2	A Barrier Lyapunov Function (BLF) Based Approach for Antiskid Traction/Braking Control of High Speed Trains Wanqing Yang, Wenchuan Cai and Yongduan Song		
16:20 – 16:40	MonD07-3	Microgrid Control Strategy Research Xiao Donglin and Wang Baohua		
16:40 – 17:00	MonD07-4	Design and Implementation of the Moving Workpiece Sorting System Based on Lab VIEW Haitao Zhu, Jianming Xu, Defeng He, Kexin Xing and Zhanglei Chen		
17:00 – 17:20	<b>MonD07-5</b>	Strapdown Scene Matching Location Approach for Aircraft with Attitude Variances Xiaogang Yang, Jianxiang Xi, Jianyong Wang and Shiwei Chen		
17:20 – 17:40	<b>MonD07-6</b>	Railway Crossing Intelligent Safety Alarming System Design Based on PLC Zhang Zhi-Gang, Li Xue-Feng and Gan Yan-Li		

Session	MonD08: Network	a-Based Systems (Chinese)	
Date/Time	Monday, 02 June 2014 / 15:40-17:40		
Venue	Room08		
Chair	Jun Bao Kunming, Univ. of Scie. and Tech. Engineering Research Center for Mineral Pipeline Transportation of Yunnan Province		
Co-Chair	Caimei Huang, Northeastern Univ. at Qinhuangdao		
15:40 – 16:00	MonD08-1	A Novel Method for Extracting Entity Data from Deep Web Precisely Yu Hai-Tao, Guo Jian-Yi, Yu Zheng-Tao, Xian Yan-Tuan and Yan Xin	
16:00 - 16:20	MonD08-2	Design of Reverse Search Car System for Large Parking Lot Based on NFC Technology Huang Cai-Mei, He Zhi-Kun, Yang Yue-Feng, Wu Jian and Yang Ruo-Nan	
16:20 - 16:40	MonD08-3	Design of Pipeline Displacement Detecting System Based on ZigBee Wireles Sensor Networks * Jun Bao, Jiande Wu, Xiaodong Wang, Yugang Fan and Guoyong Huang	
16:40 - 17:00	MonD08-4	The Controller Design for Singular Networked Control System with Delay and Data Packet Dropout Liu Li-Li, Li Jing-Hao, Zhang Qing-Ling and Guo Mei-Shan	
17:00 – 17:20	MonD08-5	Research and Analysis of Denial of Service Performance Based on Service-Oriented Architecture Zhao Yuntao, Meng Yizhou, Huang Yingchun, Dai Yue and Yang Jian	

Session	MonD09: Multi-	I agged Robot Systems (Chinese)		
Session	Widiboy. Williti-	MonD09: Multi-Legged Robot Systems (Chinese)		
Date/Time	Monday, 02 June 2014 / 15:40-17:20			
Venue	Room09			
Chair	Sha Sheng, Beijing Institute of Tech.			
Co-Chair	Yeqing Zhang, Bo	eijing Institute of Tech.		
15:40 – 16:00	MonD09-1	Review and Analysis of Quadruped Robots with Articulated Spine Li Bin, Rong Xuewen and Li Yibin		
16:00 – 16:20	MonD09-2	Central Pattern Generators with Biology Observation for the Locomotic Control of Hexapod Robots  Dong Liu, Weihai Chen, Zhongcai Pei, Jianhua Wang and Zhifeng Li		
16:20 – 16:40	MonD09-3	The Gait Planning Theory and Technology Research on the Wheel-Foo Multi-Joint Mobile Robot  Zhang Yeqing, Luo Qingsheng, Wang Meiling, Wu Fan and Wu Di		
16:40 – 17:00	MonD09-4	A Novel Biped Robot System Based on PMAC Kai Zhang, Bo Tu, Danpu Zhao and Xianqing Tai		
17:00 – 17:20	MonD09-5	Design of Quadruped Robot Based on Coupling Driving Leg Mechanism and Optimization of Crawling Gait Sheng Sha and Pan Shaopeng		

Session	MonD10: Energy Management Systems (Chinese)
Date/Time	Monday, 02 June 2014 / 15:40-17:40
Venue	Room10
Chair	Xi Li, Huazhong Univ. of Scie. and Tech.
Co-Chair	Ningyun Lu, Nanjing Univ. of Aeronautics & Astronautics

15:40 – 16:00	MonD10-1	A Distributed Equalization Control Approach for Series Connected Battery Strings Rui Ling, Qiang Dan, Jie Zhang and Gang Chen
16:00 – 16:20	MonD10-2	Modeling and Analysis of SOFC Thermal-Electrical Management System with an Air Bypass Valve Jianhua Jiang and Xi Li
16:20 - 16:40	MonD10-3	Real-Time Estimation of Cruise Duration for Electric-Powered Micro-UAVs Liu Shengnan, Li Qiao, Lu Ningyun and Jiang Bin
16:40 – 17:00	MonD10-4	Regional Energy Management System Considering Demand Response Jun Liu, Ying-Xin Xie, Yin Liu, Feng-Yu Wang and Mao-Mao Wu

17:00 – 17:20	MonD10-5	Isolated Voltage Balancing in Super-Capacitor Energy Storage System Zuo Xuewen and Li Guo-Zheng
17:20 – 17:40	MonD10-6	An Auto Regression Compression Method for Industrial Real Time Data Tiecheng Pu and Jing Bai

Session		MonD1	1: Fuzzy Systems (Chinese)		
Date/Time M		Monday	Monday, 02 June 2014 / 15:40-17:40		
Venue		Room1	1		
Chair Sh		Shengta	engtao Li, Shandong Normal Univ.		
Co-Chair	Chair Guo Zh		ang, Luoyang Institute of Scie. and Tech.		
15:40 - 16:00	Mor	nD11-1	State Feedback Predictive Control Based on T-S Fuzzy Model and State Estimator Liu Xiaomei, Li Shengtao, Zhang Kanjian, Dong Xiujuan and Jing Yuanwei		
16:00 – 16:20	Mor	nD11-2	Decentralized Control for a Class of Discrete-Time Fuzzy Bilinear Interconnected Large-Scale Systems Chen Wenqing, Zhang Guo and Zhang Yanhua		
16:20 – 16:40	Mor	nD11-3	Research on Lime Kiln Temperature System Based on Fuzzy PID Algorithm and Optimal Control Li Shaoming, Yang Peng, Yang Fan and Zhang Guoli		
16:40 – 17:00	Mor	nD11-4	Observer-Based Direct Adaptive Fuzzy Control for SISO Nonlinear Systems with Unknown Control Direction Wuxi Shi, Hongquan Wang, Furong Li and Xiangyu Wei		
17:00 – 17:20	Mor	nD11-5	PubMed State Lines Prediction Based on Interval Type-2 Fuzzy Set Tan Dan, Mo Hong and Wu Zhanlin		
17:20 – 17:40	Mor	nD11-6	A Reduction Algorithm of Fuzzy Time Series Model Based on a Kind of New Fuzzy Sets Chen Gang, Li Jinling and Wang Pengfei		

Session	MonDIS: Interactive Session
Date/Time	Monday, 02 June 2014 / 15:40-17:40
Venue	Room12
MonDIS-1	Fusion Filtering Method Based on Pseudo-measurement Model Library for Multisensor Systems with Delay Measurements  Ye Haihong, Wen Chenglin and Feng Xiaoliang
MonDIS-2	Mixture of Topic Model for Multi-document Summarization Liu Na, Li Ming-Xia, Lu Ying, Tang Xiao-Jun, Wang Hai-Wen and Xiao Peng
MonDIS-3	A Fractional-order Edge Detection Operator for Medical Image Structure Feature Extraction Dan Tian, Jingfei Wu and Yajie Yang
MonDIS-4	Survey of Dual Waveband Colorimetric Temperature Measurement Technology Ren Yan, Zhou Xiaomin and Fu Li

MonDIS-5	New Local Density Definition Based on Minimum Hyper Sphere for Outlier Mining Algorithm using in Industrial Databases  Yiwei Yuan, Yanbin Zhang, Hui Cao and Rui Yao
MonDIS-6	Normal and Reverse Order Serial Models for Huge Image Database Based on Formal Concept Analysis  Jianbo Liu, Xiaomin Wang, Yanyan Zhang and Jingfei Yang
MonDIS-7	Optimal Data Clustering by using Artificial Immune Network with Elitist Learning Li Zhonghua, Fang Xianshu and Zhou Jieying
MonDIS-8	Study on Cement Clinker Burning Energy Efficiency Yu Hongliang, Yao Chuanbo and Wang Xiaohong
MonDIS-9	Empirical Analysis on How to Alleviate the Financial Constraints of Chinese Small and Medium-sized Enterprises  Dongmei Wang and Ruijie Kang
MonDIS-10	The Efficiency Assessment of Internal Accounting Controls: A New Perspective on the Financial Firms in China Degui Zhu and Liqiongyu Zhu
MonDIS-11	An Information Management System for FCC Units in Petrochemical Plants Xu Hongxia and Cheng Congli
MonDIS-12	Merging Several Business Process Variants Huifang Li, Harbi Mohamed El-Amine and Hachou Mohamed
MonDIS-13	Research of Stability Augmentation Hybrid Controller for Quadrotor UAV Qingji Gao, Fengfa Yue and Dandan Hu
MonDIS-14	Optimal Formation of Robots by the Continuous-Discrete PSO Algorithm in Three Dimensional Space Jun Liu, Hongbin Ma, Tianyun Shi and Ping Li
MonDIS-15	A Motor Learning Model Based on the Basal Ganglia in Operant Conditioning Yuanyuan Gao and Hongjun Song
MonDIS-16	Static Stability Analysis of a Joint Double-Tracked Robot Chengguo Zong, Shigong Jiang, Wenzeng Guo, Fuquan Dai and Xueshan Gao
MonDIS-17	LQR Controller Design for Two-wheeled Robot with a Movable Seat Wenzeng Guo, Xueshan Gao, Shigong Jiang, Chengguo Zong and Fuquan Dai
MonDIS-18	Real-time and Robust Odometry Estimation using Depth Camera for Indoor Micro Aeria Vehicle Zheng Fang and Lei Zhang
MonDIS-19	A Novel Access Point Selection Strategy for Indoor Location with Wi-Fi Haoxuan Miao, Zhanbin Wang, Jingcheng Wang, Langwen Zhang and Zhengfeng Liu
MonDIS-20	Object Localization and Tracking Based on Multiple Sensor Fusion in Intelligent Home Jianqin Yin, Guohui Tian and Guodong Li
MonDIS-21	A New Algorithm Detects Pilot Fatigue Based on Machine Vision Zhizhi Guo, Qianxiang Zhou, Zhongqi Liu, Yixuan Lv and Yun Tian
MonDIS-22	Improved Active Contour Model by Using the Honey Bee Mating Optimization Zhonghai Li, Xiang Man and Jianguo Cui
MonDIS-23	The Combination of SfM and Monocular SLAM Haoyin Zhou and Tao Zhang
MonDIS-24	Research on Asteroid Autonomous Navigation Based on Feature Matching Algorithm Li Jiangeng, Tang Haibo, Ruan Xiaogang, Wei Ruoyan and Jia Zhen

MonDIS-25	Image Registration Research Based on SUSAN-SURF Algorithm Zhang Huiqing and Gao Lin
MonDIS-26	An UAV Navigation Aided with Computer Vision Zhang Chenghao, Chen JiaBin, Song ChunLei and Xu JianHua
MonDIS-27	Visual Servo with Template Update for a Deformable Moving Object Chi-Cheng Cheng and Cheng-Te Chou
MonDIS-28	Event-Triggered Control of Two-Dimensional Discrete-Time Systems in Fornasini-Marchesini (FM) Second Model Jianying Wang, Xin Du and Dawei Ding
MonDIS-29	Mining Status-Set Sequential Pattern Based on Frequent Itemset for Failure Prediction in a Temporal Database with Multiple Status Items Monitored Yingying Yuan, Yiyong Xiao, Jie Zhang and Yun Tian
MonDIS-30	Research on the Coupling Empirical of Knowledge Innovation, Talent Development and Technological Innovation  Luo Gongli, Wang Yumei and Bian Weijun
MonDIS-31	Innovation Capacity and Economic Growth Study Based on Gray Correlation Analysis— Comparative Study of Shandong Province and Guangdong Province Ren Yan
MonDIS-32	How Does Knowledge Learning Mediate Between HR Flexibility and Product Innovation Performance $Ling\ Xu$
MonDIS-33	Malware Variant Detection Using Similarity Search Over Content Fingerprint Ban Xiaofang, Chen Li, Hu Weihua and Wu Qu
MonDIS-34	Study on the Algorithms for Shaping a Team's Internal Complex Scientific Research Networks Limei Zhao
MonDIS-35	A Prediction Study on E-commerce Sales Based on Structure Time Series Model and Web Search Data  Dai Wei, Peng Geng, Liu Ying and Li Shuaipeng
MonDIS-36	An Efficient Algorithm for Influence Maximization Under Linear Threshold Model Shengfu Zhou, Kun Yue, Qiyu Fang, Yunlei Zhu and Weiyi Liu
MonDIS-37	An Evolutionary Game Approach to Analyzing Bid Evaluation Behaviors for Multi-Attribute Reverse Auction Liu Xuwang, Qi Wei and Wang Dingwei
MonDIS-38	Model and Algorithm of Winner Determination Problem in Multi-Item E-Procurement with Variable Quantities  Na Wang and Dingwei Wang
MonDIS-39	Hybrid Method for Human Eye Detection Di Zhu, Siyu Xia, Xin Zhou and Jihui Zheng
MonDIS-40	A Comparative Study of Face Recognition Algorithms on R1 Face Database Bai Limin, Jia Mingxing, Qiao Shengyang and Wu Qiang
MonDIS-41	Research of Three-Dimensional Localization Algorithm Based on DV-Hop AC-PSO