## 目录 (Contents)

### 大会报告 (Plenary Lectures)

<table>
<thead>
<tr>
<th>讲座标题</th>
<th>作者</th>
<th>页码</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyber-Physical Systems Design Using Dissipativity</td>
<td>ANTSAKLIS Panos J., MCCOURT Michael, YU Han, WU Po, ZHU Feng</td>
<td>1</td>
</tr>
<tr>
<td>System Identification and Control: a Fruitful Cooperation over Half a Century, and More</td>
<td>BITTANTI Sergio, GARATTI Simone</td>
<td>6</td>
</tr>
<tr>
<td>Grinding Mill Modeling and Control: Past, Present and Future</td>
<td>CRAIG Ian</td>
<td>16</td>
</tr>
<tr>
<td>Can One Hear the Shape of a Concept?</td>
<td>GONG Weibo</td>
<td>22</td>
</tr>
<tr>
<td>Biological Control Mechanisms for Oscillation and Locomotion</td>
<td>IWASAKI Tetsuya</td>
<td>27</td>
</tr>
<tr>
<td>Application of Supernetwork in Systems Analysis</td>
<td>WANG Zhongtuo</td>
<td>31</td>
</tr>
</tbody>
</table>

### 系统理论与控制理论 (Systems Theory and Control Theory)

<table>
<thead>
<tr>
<th>讲座标题</th>
<th>作者</th>
<th>页码</th>
</tr>
</thead>
<tbody>
<tr>
<td>仿人思维控制研究 (I)</td>
<td>WANG Peijin</td>
<td>33</td>
</tr>
<tr>
<td>Human Thinking Simulated Cybernetics (I)</td>
<td>WANG Peijin</td>
<td>37</td>
</tr>
<tr>
<td>仿人思维控制研究 (II)</td>
<td>WANG Peijin</td>
<td>37</td>
</tr>
<tr>
<td>Human Thinking Simulated Cybernetics (II)</td>
<td>WANG Peijin</td>
<td>37</td>
</tr>
<tr>
<td>Quadratic L2 Gain Performance LPV Realization of Parametric Transfer Functions</td>
<td>XIE Wei</td>
<td>42</td>
</tr>
<tr>
<td>$H_\infty$ Output Tracking Control for a Class of Cascade Switched Nonlinear Systems</td>
<td>DONG Xiaoxiao, WANG Mingshun, DIMIROVSKI Georgi, ZHAO Jun</td>
<td>47</td>
</tr>
<tr>
<td>On $H_\infty$ Fixed-Interval Smoothing for Linear Continuous Time-Delay Systems</td>
<td>ZHAO Hongguo, CUI Peng, YANG Deyun</td>
<td>52</td>
</tr>
<tr>
<td>Infinite Time Linear Quadratic Differential Games for Discrete-Time Singular Systems</td>
<td>WU Tongxin, FENG Jun-e</td>
<td>57</td>
</tr>
<tr>
<td>Iterative Convergence Analysis of Subpositive Definite Linear Systems over Quaternion Field</td>
<td>HUANG Jing-pin, MA Lu-lu</td>
<td>62</td>
</tr>
<tr>
<td>General Logical Expression of $k$-valued and Mix-valued Pseudo-logical Functions</td>
<td>LIU Zhenbin, WANG Yuzhen</td>
<td>66</td>
</tr>
<tr>
<td>Observers for the Class of Differentiable Lipschitz Nonlinear Systems</td>
<td>XU Fengbao, XU Mingyue, ZHOU Qingxin</td>
<td>72</td>
</tr>
<tr>
<td>Delay-dependent Memory State-feedback $H_\infty$ Control for Singular Markovian Jump Time-delay Systems</td>
<td>GAO Huanli, LIU Fuchun</td>
<td>76</td>
</tr>
<tr>
<td>Global Stability and Controllability of Switched Boolean Networks</td>
<td>LI Hai-tao</td>
<td>82</td>
</tr>
<tr>
<td>Gain Scheduling Output Feedback Controller Design for Saturated Linear Plants</td>
<td>BAN Xiao Jun, WU Fen</td>
<td>89</td>
</tr>
<tr>
<td>Stability Analysis of Periodic Positive Systems with Delays</td>
<td>LIU Xingwen</td>
<td>95</td>
</tr>
<tr>
<td>线性系统逆系统控制在能观标准型实现下的初值条件</td>
<td>LIU Tian, GAO Feng</td>
<td>101</td>
</tr>
<tr>
<td>初值条件</td>
<td>LIU Tian, GAO Feng</td>
<td>101</td>
</tr>
<tr>
<td>综合的多变量模型预测系统性能评价、监控与诊断方法</td>
<td>ZHANG Tong, SUN Yannan, LI Changxian, WANG Qinglin</td>
<td>107</td>
</tr>
</tbody>
</table>
Subharmonic Bifurcations from Normally Nonhyperbolic Periodic Manifolds

MENG Yanshuang, ZHOU Lingli 112

LaSalle-type Theorem for Neutral Stochastic Functional Differential Equations with Markovian Switching

WANG Tong, DING Yongsheng, ZHANG Lei 117

Multiple-model Estimation for Nonlinear Markov Jump Systems with One-step Random Observation Delays

ZHAO Shunyi, LIU Fei 123

Output Impulsive Synchronization in Complex Dynamical Networks with Coupled Delays

XIA Qing, JIANG Guoping 128

Consensus of a Class of Multi-Agent Systems Based on Directed Graph: Fixed and Switching Topology

WANG Qiang, WANG Yuzhen 134

Optimal Finite-horizon Control Problem of Context-sensitive Probabilistic Boolean Networks with Perturbation

LIU Zhenbin, WANG Yuzhen 140

Robust $H_\infty$ Filter for Time-Varying Delay Systems with Saturation

HONG XIAOFANG, WANG Yuzhen, YANG Renming 146

On Controllability of Linear Systems from a Graph-theoretic Perspective

QI Xiao 152

$H_\infty$ Deconvolution Fixed-Lag Smoothing for Linear Systems with Multiplicative Noises

LU Xiao, WANG Xi, WANG Haixia 155

Further Results on Control of Singularly Perturbed Time-Delayed Systems with Nonlinear Uncertainties

MAKKI Bahador, MAKKI Baharak 160

On the Effects of Redundant Control Inputs in Discrete-time Systems

DUAN Zhisheng, HUANG Lin, JIANG Zhong-Ping 165

The Time-sharing Hierarchical Control of Discrete-time Large-scale Systems: Fixed Switching Case

WO Songlin, SHI Guodong, ZOU Yun 171

Some Indices of the Steady-State and an Optimization Problem of A Warm Standby System with Priority

MA Lixia, XU Genqi 177

$H_\infty$ Control for Systems with Two Classes of Disturbances

ZHANG Huanshi, WANG Hongxia, WANG Xuan 183

Research and Implementation of the Controller Parameters Fast Generated Method

WANG Mingshun, BAI Jingbing, MA Chao, LIU Mingda 189

Hopf-Type Bifurcation and Synchronization of a Fractional Order Van Der Pol Oscillator

XIAO Min, ZHENG Wei Xing 193

A Data Fusion Algorithm for Multi-sensor Dynamic System Based on Interacting Multiple Model

CHEN Zhifeng, CAI Yunze, XU Xiaoming 199

Non-Fragile Static Output Feedback Controller Design for Linear Continue-Time Systems with Delay

LIU Zhenwei, ZHANG Huaguang, SUN Qiuye 204

Model Reduction of Linear System Using Restrictive Padé-type and Routh Approximations

WU Beibei, JI Peixun, BAI Dongdong 210

Overcoming Eight Drawbacks of the Basic Separation Principle of State Space Control Design

TSUI Chia-Chi 213

Data-driven Kalman Filter for Linear Continuous-time Parametric Uncertain Systems with Non-uniformly Sampled Data

HE Pingsheng, MA Hongbin, YANG Chenguang, FU Mengyin 219
Extremum Seeking Control for Systems with Time-Varying Extremum  
DARABI SAHNEH Faryad, HU Guoqiang, XIE Lihua 225
CHEN Hua, XU Chao 232
Controllability Analysis of Multi-valued Logical Control Networks  
LI Zhiqiang, YANG Jian, SONG Jinli 237
Stochastic Input/output-to-state Stability of Switched Nonlinear Systems with Stable and Unstable Subsystems  
ZHAI Dihua, KANG Yu, ZHAO Ping, MENG Haofei 243
A Dynamic Output Feedback Protocol for $H_{\infty}$ Consensus Control of Multi Agents with Nonlinear Dynamics  
LI Zhenxing, JI Haibo 249
Capability of the Extended State Observer for Minimum Phase Plants with Unknown Orders and Uncertain Relative Degrees  
ZHAO Chunzhe, YANG Xiaoxia, XIONG Jiang, LIN Xiaoran 255
Investigation on Structural Controllability of Electrical Network by Rational Function Matrices  
FENG Xiaoyu 261
Calculus of Pseudo-Boolean Functions  
ZHAO Yin, CHENG Daizhan 267
Solution of the Almost Disturbance Decoupling Problem by State Feedback  
ZOU Runmin, MALABRE Michel 273
Structural Analysis of a Helicopter Dynamic Model Using the Special Coordinate Basis Decomposition  
WANG Biao, CHEN Ben M. 279
Hierarchical Control Design of Multi-Agent Networks with Approximate Simulation  
TANG Yutao, HONG Yiguang 285
Constrained Target Tracking Based on Moving Horizon Estimation  
WEI Shan-bi, YANG Hongwei, CHAI Yi 291
Active Disturbance Rejection Control for Permanent Magnet Linear Motor  
HU Tao, XUE Wenchao, HUANG Yi 296

非线性系统及其控制 (Nonlinear Systems and Control)

Variational Method to the Second-order Impulsive PDE with Non-periodic Boundary Value Problems (I)  
LI Haichun, LIU Bo, ZHAO Peiyu 302
Variational Method to the Second-order Impulsive PDE with Non-periodic Boundary Value Problems (II)  
ZHAO Bing, GUO Jinting, LIU Bo, LI Haichun 307
Small Unmanned Helicopter Flight Controller Design by Use of Integral MPC and Adaptive Backstepping  
ZHAO Hongbo, PEI Hailong, HE Yuebang 312
Output Feedback Stabilization for Stochastic Upper Triangular Nonlinear Systems  
AI Weiqing, ZHAI Junyong, ZHA Wenting, FEI Shumin 318
Robust Global Practical Stabilization of a Class of Large-Scale Interconnected Nonlinear Systems with Mismatched Interconnections  
FU Qin 324
Polytopic LPV Gain-scheduled Control for a Flexible Air-breathing Hypersonic Vehicle  
HUANG Yiqing, SUN Changyin, QIAN Chengshan, ZHANG Ruimin, ZHANG Jingmei 329
A Nonlinear Control Approach for a Class of Nonlinear Systems Based on SOS Techniques  
ZHOU Yanru, ZENG Jianping 335
Adaptive Neural Switching Control with Average Dwell-time Technique  
YU Lei, FEI Shumin 339
Further Results on the Set Invariance Approach to Stability Analysis of Linear Systems under Saturated Linear Feedback  
LI Yuanlong, LIN Zongli 343
一类受扰非线性系统的自适应动态面控制
Adaptive Dynamic Surface Control for Perturbed Nonlinear Systems
.................................................. SHI Xiaocheng, ZHANG Tianping, YI Yang 349

非线性控制
Nonlinear Control of an Intensified Continuous Mini-reactor
........................................... LI Shi 355

近似输出调节
Approximate Output Regulation of Spherical Inverted Pendulum by Neural Network Enhanced Design
............................................ PING Zhaowu 361

跟踪输出约束的切换非线性系统在严格反馈形式
Tracking of Output-constrained Switched Nonlinear Systems in Strict-feedback Form
........................ SU Qingyu, WANG Mingshun, DIMITROVSKI Georgi, DONG Xiaoxiao, ZHAO Jun 367

输出反馈控制
Output Feedback Control of Rigid-Body Attitude with Input Saturation
.......................................................... HU Jinchang, ZHANG Honghua 373

燃煤电厂球磨制粉系统智能自校正控制
A Intelligent Self-Tuning Control for Ball Mills Pulverizing Systems in Coal-Burning Power Plants
.......................................................... LIU Limin 379

船舶混沌运动控制中的脉冲控制策略研究
On Impulsive Control Strategy for Chaotic Ship Steering Control
................................. HUANG Qian, LI Tian Wei, YANG Shao Qiong, LI Zheng You, GUO Jiao 384

基于模糊树方法的率依赖滞后回差系统建模与控制
Modeling and Control of Rate-dependent Hysteresis Based on Hammerstein-like System by Using Fuzzy Tree Method
.......................................................... ZHANG Wei, ZHANG Zhen, MAO Jianqin, ZHOU Kemin 390

高超声速飞行器制导控制关键技术及其发展趋势
Key Techniques and Development Trend of Guidance and Control for Hypersonic Vehicle
.......................................................... XIE Daocheng, ZENG Qinghua, WANG Zhongwei 396

Hopf 跃迁控制
Hopf Bifurcation Control for Some Nonlinear Torsional Vibration System with Delayed Feedbacks
.......................................................... ZHANG Wenming, WANG Bohua, LI Haibin, HE Minjia, LIU Shuang 402

构造性稳定性
Constructive Stabilization for a Class of Switched Nonlinear Systems in Non-Triangular Form
.......................................................... LONG Lijun, ZHAO Jun 408

鲁棒输出调节
Robust Output Regulation for Nonlinear Systems Containing Nonpolynomial Nonlinearity with Nonlinear Exosystems
.......................................................... SUN Weijie, QIAO Yupeng 414

自适应调整策略设计
Adaptive Adjustment Strategy Designs for Couplings Against Nonlinear Networks
.......................................................... JIN Xiao-zheng, ZHAO Yue, LI Yanping 420

磁流变阻尼器的车辆悬架系统混沌分析与控制
Analysis and Control for Chaos Motion of Vehicle Suspension System with Magneto-rheological Dampers
.......................................................... ZHANG Hailong, MIN Fuhong, WANG Enrong 425

 Practical Synchronization of Horizontal Platform Systems with Parameter Mismatch via Output Feedback Control
.......................................................... MA Mihua, ZHOU Jin, CAI Jianping 429

Convergence of Nonlinear Active Disturbance Rejection Control for MIMO Systems
.......................................................... ZHOU Zhiliang, GUO Baozhu 434

Homogeneous S-Lemma and Its Application to Asymptotic Stability of a Class of Switched Nonlinear Systems
.......................................................... ZHANG Kuize, ZHANG Lijun 442

 Improved Backstepping Control for Large Angle Maneuvers of Spacecraft
.......................................................... MA Kemao, ZHANG Jiawei, YANG Yafei 448

Non-fragile Adaptive Fault-tolerant Controller Design for an Airbreathing Hypersonic Vehicle
.......................................................... SUN Haibin, LI Shihua, SUN Changyin 453

一类脉冲时滞抛物方程组边值问题的振动准则
Oscillation Criteria of Solutions for a Class of Impulsive Delay Parabolic Equations About Boundary Value Problems
.......................................................... LIU Junhong, YANG Wanli 459
Generalized Prandtl-Ishlinskii Model for Rate-Dependent Hysteresis: Modeling and Its Inverse Compensation for Giant Magnetostrictive Actuator .......................... ZHANG Zhen, CHEN Qingwei, MAO Jianqin 462

Impulsive Synchronization of Networked Lagrange Systems .... WU Xingjie, ZHOU Jin, XIANG Lan 467

Dynamic Surface Control for Constrained Electrostatic Micro-actuators with Uncertain Time Delays ................................................. WU Xiaoqing, WU Xueli, LUO Xiaoyuan 473

The Adaptive Fuzzy Feedback Control for Hypersonic Vehicle .... GUAN Ping, XUE Li, LIU Xiao He 479

Adaptive Fault-tolerant Tracking Control of 4WS4WD Road Vehicles: A Fully Model-independent Solution .................................................... LI Danyong, SONG Yongduan 485

基于奇异摄动理论的柔性机械臂控制及关节惯量分析
Control and Joint Inertia Analysis of Flexible Manipulator Based on Singular Perturbation Theory ......................................................... WANG Sanxiu, YU Li, XU Jianming 493

Almost Sure State Estimation for a Class of Nonlinear Stochastic Markovian Jump Systems ................................................................. KAN XIU, SHU Huisheng, SHEN Bo, LI Zhenna 498

Dissipative Control of Time-delay Chaotic Systems via DOBC Approach ................................. GAO Yanbo 504

Non-smooth Control for Generalized Projective Synchronization of Two Nonlinear Gyros ................................................................. MIN Fuhong, ZHANG Hailong, SHAO Shuyi, WANG Enrong 509

A Kind of Modified Generalized Synchronization of Chaotic Systems ........ GAO Weixun, XU Yuhua 515

Adaptive Stabilizing Controller Design for a Class of Uncertain Feedforward Nonlinear Systems .............................................. SHANG Fang, LIU Yungang, ZHANG Xianfu 519

Robust Stability Criterion for Uncertain Neural Networks with Time Delay ........................................ SU Yongfeng, DONG Yali, WEI Jun 524

State Feedback Control for A Class of Stochastic Nonlinear Systems with SIISS Inverse Dynamics .............................. DUAN Na 530

再入飞行器滑翔段在线模型预测校正制导法
An On-line Re-entry Guidance Law Employing Model Predictive Algorithm for Entry Vehicle ............................................................ ZHANG Da, CHANG Songtao, WANG Yongji 536

Nonlinear Robust Control: An SOS-Based Approach .............................. HUANG Wenchao, SUN Hongfei, ZENG Jianping 542

基于新型终端滑模的临近空间飞行器姿态控制
Attitude Control for Near Space Vehicle Based on New Terminal Sliding Mode Control .............................................................. WANG Peng, LIU Luhua, WU Jie, TANG Guojian 547

Asymptotical Synchronization of Chaotic Lur’e Systems Equipped with Sampling Controller ........................................................ ZHANG Chuan-Ke, HE Yong, JIANG Lin, WU Min, WU Qing-Hua 552

基于复合机构的再入弹头非线性 Backstepping 控制
Nonlinear Backstepping Control of Reentry Warhead with Hybrid Actuators ................................................................. WANG Zhen, WU Zhong 557

Energy-Shaping for Time Delay Hamiltonian Control Systems .............................. CAI Liangcheng, HE Yong, WU Min 562

基于不确定性的高超声速飞行器气动力/推力矢量复合控制研究
One Nearspace Hypersonic Aircraft Nonlinear Neumatic/Thrust Vectoring Composite Control Design Based on Uncertain ....................... CHEN Jie, TAO Jian, SONG Chao 567

发电机励磁系统的非线性大干扰抑制控制器设计
Nonlinear Large Disturbance Attenuation Controller Design for the Generator Excitation Systems ......................................................... JIANG Nan, LIU Ting, ZHANG Tie, JING Yuanwei 573
Interaction Between Signals at Different Intrinsic Frequencies of Chain-connected Neural Network


Smooth Second Order Sliding Mode Control for Reusable Launch Vehicle in Reentry Phase

 Tian Bailing, Zong Qun, Wang Fang, Wang Jie 583

Design of Stabilizing Controllers for Nonlinear Systems

Cai Guang-bin, Hu Chang-hua, Duan Guang-ren 589

Robust Global Asymptotic Stabilization of Underactuated Surface Vessels with Parameter Uncertainties

Xie Wenjing, Ma Baoli 595

Optimal Composite Nonlinear Feedback Control for a Gantry Crane System

Yu Xiao, Lan Weiyao 601

Baseball/Flightgear/Atlas 的过失速机动飞行控制律可视化仿真研究

Visual Simulation Research of Post-stall Maneuverability Flight Control Laws Based on Matlab/Flightgear/Atlas

Cen Fei, Sun Haisheng, Liu Zhitao, Nie Bowen 607

一种改进的基于耦合分析的桥式吊车轨迹规划方法

An Improved Coupling Analysis-Based Motion Planning Approach for Underactuated Overhead Cranes

Sun Ning, Fang Yongchun 613

Adaptive Backstepping Actuator Failure Compensation for a Class of Nonlinear Systems under Relaxed Conditions

Zhang Zhengqiang, Shao Hanyong, Shen Hao, Zong Guandeng 619

Output Feedback Stabilization of Nonholonomic Systems with Unknown Time Delays

Wu Yuanyuan, Diao Zhihua, Wu Yuqiang 625

一种随机非线性系统的自适应跟踪控制

Adaptive Tracking Control for A Class of Stochastic Nonlinear Systems

Wang Fei, Zhang Tianping, Zhu Baicheng 631

Stabilization of Switched Nonlinear Systems with Input Constraints Using Convex Optimization

Zhao Guanglei, Wang Jingcheng 637

一类包含输入饱和的随机非线性系统的自适应镇定

Adaptive Stabilization for a Class of Stochastic Nonlinear Systems with Input Saturation

Ma Yike, Ji Haibo 643

Fuzzy Tracking Control for Nonlinear Time-Delay Systems Subject to Actuator Saturation

Zhang Baoyong, Xu Shengyuan, Du Baozhu 648

Output Feedback Control for Nonlinear Nonaffine Discrete-Time Systems and Application

Zhang Yan, Xie Feng, Xu Weifeng, Yang Peng 654

Adaptive Synchronization Control for Uncertain Master-Slave Dynamical System with Time Delay and Stochastic Disturbance

Wang Tianbo, Zhou Wuneng, Zhao Dejun, Zhao Shouwei 660

磁浮球系统控制策略研究综述

A Survey of Control Strategy for Magnetic Suspension Ball System

Fang Xianwei, Zhang Jinggang 665

一类有未知控制系数和零动态的高阶非线性系统的自适应控制

Adaptive Control for a Class of High-Order Nonlinear Systems with Unknown Control Coefficients and Zero Dynamics

SUN Zong-Yao, SUN Wei, ZHANG Xinghui 671

Construction of Lyapunov Function Near Bifurcations with Application to Rotating Stall

Dong Wanqing, WANG Yong 677

含间隙非线性的模块化系统辨识及鲁棒逆补偿控制

Robust Inverted Compensation Control for Hammerstein Systems with Backlash Nonlinearities

Li Dongwu, Ren Xuemei, Lv Xiaohua 683
Global Practical Output Tracking via Output-Feedback for Cascade Systems with More Uncertainties

Robust Stabilization of Ship Course by Convex Optimization

Adaptive Neural Network Control for a Class of Nonaffine Discrete-time Systems

Research and Application of Nonlinear Control Techniques For Quad Rotor UAV

Robust Stabilization of Ship Course by Convex Optimization

Adaptive Output Tracking for High-Order Uncertain Nonlinear Systems

Adaptive Robust Parallel Simultaneous Stabilization of Two Uncertain Port-Controlled Hamiltonian Systems Subject to Input Saturation

Adaptive Dynamic Surface Tracking Control for DC-DC Boost Converter

Stabilization of More General High-Order Nonholonomic Systems Within Finite Settling Time
On Global Anti-synchronization of Chaotic Parametrically Excited Pendulum under Linear Feedback Control .................................................. CHEN Yun, WU Xiaofeng, ZHAO Xiaolong 808
Finite-Time Stabilization of Stochastic Nonholonomic Systems .......................................................... GAO Fangzheng, YUAN Fushun, YAO Hejun 812
Output Feedback Stabilization of Nonholonomic Systems with Nonlinear Unmeasured Dynamics .................................................. ZHAO Yan, WU Yuqiang 818
Global Finite-time Stabilization of a Class of Inherently Nonlinear Systems .......................................................... MA Li, DING Shihong, DA Feipeng 824
Nonlinear Disturbance Observer Based Robust Tracking Control for a PMSM Drive Subject to Mismatched Uncertainties .................................. YANG Jun, LIU Huixian, LI Shihua, CHEN Xisong 830
On Higher-Order Truncated Predictor Feedback for Linear Systems with Input Delay .................................................. ZHOU Bin, LI Zhao-Yan, LIN Zongli 836
Adaptive Fuzzy Attitude Tracking Control of Spacecraft with Input Magnitude and Rate Constraints .......................................................... SHI Xiaoping, YUAN Guoping, LI Long 842
Distributed Adaptive Regulation Algorithm of Networked Euler-Lagrange System with Input and Communication Delays ........ LIU Yuan, WANG Shicheng, MIN Haibo, LIU Zhiguo, ZHANG Jinsheng, SUN Dawei 847
Finite Time Tracking Control of a Nonholonomic Mobile Robot with External Disturbances .......................................................... OU Meiying, SUN Haibin, LI Shihua 853
N-soliton Evolution for a Nonlinear Dispersive Long Wave System .......................................................... MA Yulan, XIONG Lingchun, CHEN Liling, WANG Wei, LI Bangqiang 859
近空间高速飞行器多模型最优控制器设计 Multi-model Optimal Controller Design for Near Space High-speed Vehicle .......................................................... LI Huifeng, YU Guangxue 864
Comparative Analysis of Three Nonlinear Controllers for Boost Converters and Switching Design .......................................................... HE Qin, LONG Lijun, ZHAO Jun 870
Dynamic Anti-windup Design for Anticipatory Activation: Enlargement of the Domain of Attraction .......................................................... WU Xiongjun, LIN Zongli 876
Adaptive Block Dynamic Surface Control of BTT Missiles .......................................................... HOU Mingzhe, DU Haoming, TAN Feng, JIANG Canghua 882
Variable Structure Control Design for Time-delay Nonlinear Systems Using Fuzzy Logic .......................................................... WANG Xiuhong, YANG Zhenguang 887
一类增长依赖于不可测状态非线性系统量化输出反馈控制设计 Quantized Output Feedback Control Design for A Class of Nonlinear Systems with Unmeasured States Dependent Growth ................................ MAN Yongchao, LIU Yonggang, YAN Xuehua 891
Unbiased Measurement Model Conversion for Tracking with Multiple Radars or Sonars .......................................................... MAO Yanhui, LI X. Rong, DUAN Zhansheng, LAN Jian 897
船舶动力定位系统的鲁棒自适应非线性控制器设计 Robust Adaptive Nonlinear Controller Design for Dynamic Positioning System of Ships .......................................................... DU Jialu, YANG Yang, LI Guangqiang, LI Wenhua 904
基于动态面和逆推法的船舶航向跟踪自适应非线性控制器设计 Adaptive Nonlinear Controller Design for Course-Tracking of Ships Based on Dynamic Surface Control and Backstepping ................................ ZHAO Jie, DU Jialu, YU Shuanghe, LIU Yuming 910
Initialized High Gain Observer Design for a Class of Nonlinear Differential-Algebraic Equation Subsystems .......................................................... ZANG Qiang, ZHOU Ying, LU Kai, SUN Ning, ZHANG Kaifeng, DAI Xianzhong 916
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonlinear Cascaded Control of a Small Unmanned Helicopter and Stability Analysis</td>
<td>ZHOU Hongbo, LIU Fuchun, YU Xiaofeng, DING Chaoyi</td>
</tr>
<tr>
<td>Study on the Properties of Chaotic Control Map</td>
<td>WANG Hongqing</td>
</tr>
<tr>
<td>Design of Fractional Order QFT Controller for Nonlinear Systems</td>
<td>MENG Li, DIAO Fen</td>
</tr>
<tr>
<td>Automatic Berthing Control of Underactuated Surface Ships in Restricted Waters Based on Nonlinear Adaptive Control Method</td>
<td>LIU Yang, GUO Chen</td>
</tr>
<tr>
<td>Output Feedback Stabilization for a Class of Switched Nonlinear Systems under Arbitrary Switchings</td>
<td>FU Fengyu, JIANG Canghua, DUAN Guang-Ren</td>
</tr>
<tr>
<td>A New Approach to Fault Detection Observer Design of Nonlinear Time-Delay Systems via Fuzzy Lyapunov Functions</td>
<td>LIU Guojun, CAO Yong-Yan, CHEN Jianliang</td>
</tr>
<tr>
<td>$H_{\infty}$ State Estimation for a Unified Chaotic System with Uncertainty</td>
<td>LIU Meiqin, ZHANG Senlin, FAN Zhen, ZHENG Shiyou</td>
</tr>
<tr>
<td>Modeling and Controller-Designing of a Novel Driven Airship</td>
<td>WU Yilin, LIU Yu</td>
</tr>
<tr>
<td>Based on Fuzzy Self-Adaptive Control of One Class of Uncertain Systems via Fuzzy Adaptive Control</td>
<td>MA Kemao, MENG Guizhi, ZHANG Jiawei</td>
</tr>
<tr>
<td>Sliding Mode Control of Parallel Robot by Optimizing Switching Gain Based on RBF Neural Network</td>
<td>GAO Guoqin, DING Qinqin, WANG Wei</td>
</tr>
<tr>
<td>Robust Backstepping Sliding-mode Controller for A Class of Nonlinear System and Its Application to Quadrotor Helicopter</td>
<td>HE Yong, LI Chunjuan</td>
</tr>
<tr>
<td>Nonlinear Robust Attitude Tracking Control of an Underactuated 3 Degree-of-freedom Helicopter</td>
<td>LIU Xiang, XIAN Bin, GUO Jianchuan, ZHAO Bo, DIAO Chen</td>
</tr>
<tr>
<td>Asymptotic Tracking Control for Air Breathing Hypersonic Vehicles via a Nonlinear Robust Adaptive Methodology</td>
<td>ZHANG Yao, XIAN Bin, DIAO Chen, ZHAO Bo, GUO Jianchuan</td>
</tr>
<tr>
<td>Nonlinear Control for an Underactuated Quadrotor Unmanned Aerial Vehicle with Parametric Uncertainties</td>
<td>DIAO Chen, XIAN Bin, GU Xun, ZHAO Bo, GUO Jianchuan</td>
</tr>
<tr>
<td>Sliding Mode Control of Hysteresis Nonlinear System Based on Inverse Compensation</td>
<td>ZHAO Fei, ZHAO Xinhong, PAN Haipeng</td>
</tr>
<tr>
<td>Passive Control for Uncertain Neutral Systems via State Feedback with Memory</td>
<td>HU Heli, ZHANG Tieyan, ZHANG Xiaolue, WANG Dezun, ZHAO Dan</td>
</tr>
<tr>
<td>Input-Output Linearization and Stabilization Analysis of Internal Dynamics of Buck-Boost Converters</td>
<td>SHUAI Dingxin</td>
</tr>
<tr>
<td>Optimal Zero-Sliding Midcourse Guidance with an Observer for Missiles</td>
<td>YEH Fu-Kuang, KOU Kuang-Yang, HUANG Chia-Wei</td>
</tr>
<tr>
<td>Global Adaptive Output Regulation for a Class of Nonlinear Systems with iISS Inverse Dynamics</td>
<td>XU Dabo, HUANG Jie, JIANG Zhong-Ping</td>
</tr>
<tr>
<td>Based on Backstepping Method and ISS Stable High-Speed Flight Control</td>
<td>LIAO Fei, JI Haibo, YU Binfeng</td>
</tr>
</tbody>
</table>
A Novel Second-order DFP-based Volterra Filter and Its Applications to Chaotic Time Series Prediction  
ZHANG Yu Mei, BAI Shu Lin, CHEN Ping, QU Shi Ru 1036

Inner and Outer Loop Nonlinear Controller Design of Miniature Unmanned Helicopters  
HE Yuebang, PEI Hailong, ZHOU Hongbo 1040

Robust Analysis for the Distributed Network with the Subsystems of Lure Systems  
AO Dun, LEI Fei, GAO Qiang 1046

L∞ Adaptive Fault Tolerant Control for Singular Lipschitz Systems Subject to Actuator Saturation  
WANG Yijing, YANG Wenlong, ZUO Zhiqiang 1050

Fuzzy-approximation-based Adaptive Control Design of Pure-feedback Stochastic Nonlinear Systems  
WANG Huanqing, CHEN Bing, LIN Chong 1056

On Anti-interference for Near Space Vehicle  
HE Naibao, GAO Qian 1062

Modified Generalized Projective Synchronization of Incommensurate Fractional Order Chaotic Systems  
SONG Chao, CAO Jinde 1065

Iterative Learning Control of Hysteresis Nonlinearity System  
WANG Wei, ZHAO Xinlong 1070

Research on Centrality of Node Importance in Scale-free Complex Networks  
WU Xuguang, ZHANG Minqing, HAN Yiliang 1073

On Synchronizability of Weighted Scale-free Networks Considering Triangle Formation  
WANG Dan, LI Yanping, JIN Xiao-zheng, HAO Binbin 1078

Optimal Robust Decentralized Control Design for Fuzzy Complex Systems  
XIONG Dan, CHEN Y.H., ZHAO Han, HUANG Jin 1083

Collective Formation of Flocks with Population Density Information: Asymmetry Interactions and Motifs  
TIAN Wenqiang, LI Xiang 1089

Synchronization of Complex Dynamical Networks with Stochastic Delays  
YI Jingwen, WANG Yan-Wu, XIAO Jiang-Wen, SONG Yang 1095

Leader-following Consensus in Second-order Multi-agent Systems with Sampled Data  
GONG Qingsong, ZHAO Liying, LIU Kun 1101

An Operation Decision-making Synchronization Model Base on Situation Interaction in Time Viewpoint  
ZOU Zhigang, LIU Fu-Xian, XIA Lu 1107

Synchronization Between Two Complex Dynamical Networks with Time Delay Coupling and Circum-  
stance Noise  
GU Yu, FAN Chumxia, WEI Qingyang, ZHOU Ying 1113

Collective Emergence in a Multi-agent Network with Adaptive Games  
WANG Yu, LI Xiang 1119

Convergence Analysis of Heterogeneous Deffuant-Weisbuch Model  
ZHANG Jiangbo, HONG Yiguang 1124

Robust Filtering for a Class of Nonlinear Systems via Quadratic Boundedness  
LU Pingli, YANG Ying 1130

H∞ Synchronization of a Class of Complex Networks  
LU Pingli, YANG Ying 1136
Supernetwork Model of Operational System-of-systems for Capability Emergence
................................................................. XIA Lu, XING Qing-hua, ZOU Zhigang 1142
Synchronization of Mobile Autonomous Agents with M-nearest-neighbor Rule
................................................................. CHEN Chen, CHEN Ge, GUO Lei 1147
What Strategies Can Induce Cooperation Between Heterogeneous Players?
................................................................. WANG Xin, MU Yifen, HAN Jing 1153
An Internal Model Approach for Synchronization of Linear Multi-Agent Systems Using Relative Outputs
................................................................. XIANG Ji, WEI Wei 1158
Disturbance Decoupling Control with Stability of Switched Nonlinear Systems
................................................................. WANG Min, LIAN Jie 1164
Delay-dependent Synchronization Stability for Delayed Complex Dynamical Networks with Stochastic Coupling ................................................................. LI Hongjie 1168
Distributed Control of Networked Linear Systems via Observer-Based Consensus Algorithms
................................................................. NI Wei, WANG Xiaoli, XIONG Chun 1174
Algebraic Analysis and Criterion for Blocking Detection of Multiprocess Systems
................................................................. YI Peng, XU Xiangru, HONG Yiguang 1179
简单忆阻混沌电路的拓扑马蹄寻找与混沌判定
Detect Topological Horseshoes in the Simplest Memristor-Based Chaotic Circuit for Chaos Verification
................................................................. LI Qingdu, FENG Xin, HU Shiyi 1185
Epidemic Spreading in Partial Dynamic Networks .......................... ZHOU Yinzu, ZHOU Jie 1190
Adaptive Synchronization of Complex Networks with Neutral-type Nodes .... ZHANG Yijun, QU Yi 1195
时变论域下员工行为的语言动力学轨迹
Linguistic Dynamic Orbits of Employee Behavior on Time-varying Universe .... MO Hong 1201
基于数据的线性跟踪微分滤波器的频域设计
Frequency Domain Design for Data-based Linear Tracking Differentiator Filter
................................................................. WANG Lijun, LI Qing, TONG Chaonan, YIN Yixin, DONG Jie 1206
加权短信网络上的谣言传播行为研究
Research of Rumor Spreading on Weighted Short Message Networks
................................................................. LIU Xing-hong, ZHANG Haifeng, QIN Xiao-wei, CHEN Feng 1211
带有耦合时延的复杂网络的牵制同步研究
On Pinning Synchronization of Complex Dynamical Network with Coupling Delay
................................................................. LU Zibao, GUO Ge 1217

分布参数系统 (Distributed Parameter Systems)

Computational Method for the Optimal Control Problem for the Korteweg-de Vries Equation
................................................................. CHENG Xingong, ZONG Xiju, ZHANG Yongfeng 1223
Boundary Control of a Flexible Marine Riser
................................................................. LIU Yu, GAO Hongxia, ZHAO Zhijia, WU Xinsheng 1228
GE-Semigroup Methods for the Stability of the Singular Distributed Parameter Systems
................................................................. GE Zhaoqiang 1234
Well-posed-ness of the M/G/1 Retrial Queue with Server Breakdowns and Repairs
................................................................. ZHENG Fu, XU Shuangshuang, LI Xin 1240
Disturbance Decoupling Problem for Infinite Dimensional Systems \hspace{1cm} ZHOU Xiuxiang 1245

Asymptotic Behavior of a Planar Flexible Network with Thermal Effects \hspace{1cm} HAN Zhongjie, XU Genqi 1248

Boundary Unique Continuation for Stochastic Parabolic Equations \hspace{1cm} LI Hongheng, LV Qi 1254

Superstability of Wave Equations on a Tree-shape Network \hspace{1cm} LIU Dongyi, XU Genqi 1257

Stabilization of Coupled PDE-ODE System with Spatially Varying Coefficient \hspace{1cm} LI Jian, LIU Yungang, YAN Xuehua 1263

Motion Equations for a Nonlinear Plate and a Nonlinear Shell \hspace{1cm} LI Shun, YAO Pengfei 1269

Rechability-based Control of Batch Crystallization Processes \hspace{1cm} ZHANG Kun, XU Chengzhong 1274

Adaptive Simultaneous Coefficient Identification of a Stable One-dimensional Heat Equation \hspace{1cm} ZHAO Zhi-Xue, GUO Bao-Zhu 1280

Modeling and Control Design for a Multi-cable Mooring System \hspace{1cm} HE Wei, GE Shuzhi Sam, ZHANG Shuang 1285

Classification of Linear Control Systems with Observation \hspace{1cm} LI Jing, ZHANG Zhixiong 1291

一类带有年龄结构和接种的SVIR传染病模型分析

Analysis for an Age-Structured SVIR Epidemic Model with Vaccination \hspace{1cm} CHONG Guofu, CAI Liming 1296

Nonlinear Model Reduction for Simulation and Control of Temperature Distribution in Air Conditioned Rooms \hspace{1cm} LI Kangji, SU Hongye, CHU Jian 1301

Reliability of Two-dissimilar-unit Parallel System with Delay in Repair \hspace{1cm} GAO Chao, QIAO Xing, MA Dan 1307

A New Definition of Dissipativity and Its Applications \hspace{1cm} WU Zhaojing, GAO Xiangyun 1313

Stability Analysis for a Class of Switched Neutral Systems via Multiple Generalized Lyapunov Functional Scheme \hspace{1cm} LI Tai-Fang, WANG Mingshu, DIMITROVSKI Georgi, ZHAO Jun, MA Ruicheng 1319

改进的区间时变时滞线性系统时滞相关稳定性判据

Improved Delay-dependent Stability Criteria for Linear System with Interval Time-varying Delay \hspace{1cm} WANG Jian-an 1325

Exponential Stabilization for Uncertain T-S Fuzzy Systems with Time-delay and Nonlinear Perturbation \hspace{1cm} WEI Jun, DONG Yali, SU Yongfeng 1330

Stability of the First Order Singular System under Two Classes of Feedback Control \hspace{1cm} LIU Feng, LUO Yinsheng, WO Songlin, DAI Gaili 1336

Well-Posedness and Asymptotic Stability of Nonlinear Equations with Delay and Application in Descriptor Systems \hspace{1cm} WU Jiancheng, LIU Feng, WO Songlin, CHEN Xiaoju 1340

Master-slave Synchronization of Chaotic Lur’e Systems under Delayed Impulsive Control \hspace{1cm} CHEN Wu-Hua, WEI Dan, WANG Zipeng, LU Xiaomei 1345

An Iteration Method for Exponential Stability of Linear Time-varying Singularly Perturbed Systems \hspace{1cm} LU Xiaomei, CHEN Wu-Hua 1351

Outer-Synchronization of Complex Networks with Time-Varying Coupling Delay \hspace{1cm} SONG Wenjie, WANG Dongming, JI Yan 1357

On Almost Sure Stability and Stabilization of Stochastic Delay Systems with Markovian Switching \hspace{1cm} YANG Hua, SHU Huisheng, KAN XIU, CHE Yan 1362
Revisited Criteria for Absolute Stability of Systems with State-dependent Nonlinearities

.......................... LI Rong, LIU Chao 1368

Stability of a Stage Structured Predator-prey System with Delay Dependent Parameters

.......................... HU Baoan, LIU Junfeng, JU Tao 1373

Analysis of Event-triggered Control for Lurie Systems

.......................... CHEN Xia, HAO Fei 1377

Input-to-state Stability for a Class of Nonlinear Switched Systems by Minimum Dwell Time Method

.......................... GUO Rongwei, WANG Yuzhen 1383

Stability Criteria for Time-Varying Delay System with Nonlinear Perturbations

.......................... LI Boren 1387

$H_\infty$ Stabilization for a Set of Nonlinear Systems in Canonical Form

.......................... CAI Xiushan 1391

$H_\infty$ Control for Network Control Systems with Stochastic Sampling

.......................... WU Junli, KARIMI Hamid Reza, LI Jianhui, DU Xu, YANG Rongni 1397

随机时滞系统基于观测器的有限时间控制

Observer-Based Finite-time Control for Stochastic Delayed Systems

.......................... CHEN Yun, LI Qingqing, XUE Anke 1403

一类含分布时滞动态网络的指数稳定性

Exponential Stability of a Class of Dynamical Networks with Distributed Delays

.......................... LOU Xuyang, YE Qian, CUI Baotong 1407

The Application of Puiseux-Newton Diagram on the Asymptotic Analysis of Multiple Imaginary Characteristic Roots of LTI Delay Systems

.......................... CAI Tiaoyang, ZHANG Huaguang, YANG Feisheng, LIU Zhenwei 1413

Robust Stabilization of Uncertain Descriptor System with Interval Time-Varying State and Input Delays

.......................... YANG Rui, PEI Daowu 1419

Robust Stabilization of a Class of Nonlinear Descriptor Systems

.......................... SUN Liying, WANG Yuzhen 1424

A Note on Stability and Stabilization of Discrete-time Systems with Time-varying Delay

.......................... SUN Jian, CHEN Jie 1430

Static Output Feedback Control for Positive Systems via LP Approach

.......................... MENG Min, ZHU Shuqian, ZHANG Chenghui 1435

不确定非线性广义时滞切换系统的鲁棒容错控制

Robust Fault-Tolerant Control for Nonlinear Switched Singular Systems with Uncertainties and Time-delay

.......................... ZHAO Zhiwu, REN Xiaojun 1441

Existence and Design of Strongly Stabilizing Controller for the Acrobot

.......................... XIN Xin, JUURI Kousuke 1446

New Results of Stability Analysis for Systems with Two Additive Time-varying Delays

.......................... ZHU Xunlin, DU Xin 1452

Finite-time Stabilization of Switched Linear Systems with Saturating Actuators

.......................... LIN Xiangze, ZOU Yun, LI Shihua 1458

一类不确定非线性系统的鲁棒稳定性分析

Robust Stability Analysis for a Class of Uncertain Discrete-time Linear Systems

.......................... REN Junchao, FANG Zheng, ZHANG Qingling, LI Xiaoqian, LIU Zhilai 1464

单级倒立摆有限时间控制器设计

Finite Time Controller Design for Single Inverted Pendulum System

.......................... SHENG Jie, HAN Keyong, SHAO Chenhui 1468

$L_2$ Disturbance Attenuation for a Class of Neutral Hamiltonian Systems with Time-Delay and Uncertainties

.......................... PANG Guochen, SUN Weiwei, WANG Pan 1473

Sampled-Data Adaptive Control of Linear Continuous Switched Systems with Stochastic Disturbance

.......................... LIU Feng, SONG Yongduan, MA Xiaoping 1479
Nonlinear Control Synthesis of Ship Roll by Convex Optimization  
YU Jiafeng, WANG Jian, LI Qinsheng 1484

Stabilization of Discrete-Time Switched Linear Systems  
ZHU Yanli, SUN Yuangong 1488

Delay-Partitioning Approach to Stability of Discrete-Time Systems with Interval Time-Varying Delay  
LEE Li, TSAI Hsing-Jen 1493

On Stability of Linear Systems with Time-varying Delay  
MENG Haofei, KANG Yu, ZHAI Dihua 1499

随机系统 (Stochastic Systems)

Exponential Stability for Stochastic Systems with Hysteresis Switching  
WU Zhaojing, ZHANG Hui 1505

Delay-segment-dependent Robust Stability for a Class of Discrete Stochastic Markovian Jumping Systems with Interval Time Delay and Uncertainties  
XIA Jianwei, LI Yongmin 1511

Adaptive State-feedback Stabilization of Stochastic Uncertain Nonholonomic Systems  
ZHANG Dongkai, WANG Chaoli, CHEN Hua, YANG Fang 1517

Stability in Terms of Two Measures for Impulsive Stochastic Functional Differential Systems with Infinite Delays  
YAO Fengqi, DENG Feiqi, SHEN Hao 1523

Finite-time Stability and Input-to-state Stability of Stochastic Nonlinear Systems  
KANG Yu, ZHAO Ping 1529

Fault-Tolerant Control for Discrete-Time Stochastic Systems with Randomly Occurring Faults  
WEI Guoliang, WANG Licheng, LI Wangyan 1535

Reliable $H_\infty$ Control for Discrete-time Stochastic Systems with Mixed Time-varying Delays  
CHEN Guici, SHEN Yi, YU Shengchun 1541

Mean-Field Backward Doubly Stochastic Differential Equations and Its Applications  
DU Heng, PENG Ying, WANG Ye 1547

Almost Sure Exponential Stability of Linear Impulsive Stochastic Differential Systems  
CHENG Pei, DENG Feiqi 1553

Robust Mixed $H_\infty/L_2$ Filter Design for Markovian Jump Time-Delay Systems  
LI Lin, JIA Yingmin 1558

$H_\infty$ Guaranteed Cost Control for a Class of Discrete-Time Stochastic Systems with Sector Nonlinearities and Mixed Time Delays  
HU Yanmei, WANG Yantao, ZHANG Xian 1563

Guaranteed Cost Control for Several Delays Stochastic Systems with Uncertain Nonlinear Perturbations  
GUO Shaocong, ZHAO Long, SU Lianqing, LI Yi, XING Zirui, QIU Jiqing 1569

$L_\infty$-Stability of Discrete-Time Kalman Filter with Incorrect Covariances  
ZHOU Zhenwei, FANG Hai-Tao 1574

基于 T-S 模糊模型的非线性随机系统的 $H_\infty$ 控制

$H_\infty$ Control for Nonlinear Stochastic Systems Based on T-S Fuzzy Model  
GAO Ming, SHENG Li, ZHANG Weihai 1580

Stability of Stochastic Distributed Parameter Switched Systems  
DAI Xisheng, DENG Feiqi, LUO Wenguang 1585

Minimum Entropy Control?  
ZHOU Jinglin, ZHU Haijiang, WANG Jing 1590

Robust $H_\infty$ finite-time control of switched stochastic systems with time delay  
CHEN Guoxin, XIANG Zhengrong 1596

Refined Exponential Stability for Stochastic Markovian Jump Systems with Nonlinearity and Time-varying Delays  
YUAN Meng, ZHANG Xian 1602
Continuous Output Feedback Stabilization for A Class of Stochastic High-order Nonlinear Systems .......................................................... ZHANG Jian, LIU Yungang 1608
Optimal Linear Estimation for Multiplicative Noise Systems with Time Delay and Its Duality .......................................................... SONG Xinmin, YAN Xuehua, YUAN Decheng 1614
Necessary Condition for Optimal Control of Fully Coupled Forward-Backward Stochastic System with Random Jumps .................. SHI Jingtao, WU Zhen 1620
Maximum Principle for Backward Stochastic Systems Associated with Lévy Processes under Partial Information .................................. MENG Qingxin, ZHANG Fu, TANG Maoning 1628
Stability and Exact Observability of Discrete-Time Markov Jump Systems with Multiplicative Noise ...................................................... HOU Ting, ZHANG Weihai, MA Hongji 1634
Novel Statistic Information Control Framework for Non-Gaussian Stochastic Systems with Dead-Zone Input ........................................... YI Yang, LIU Yunlong, CAO Songyin 1640
Network-based $H_\infty$ Control for Stochastic Time-delay Systems via Average Dwell Time Approach ........................................... FAN Rongrong, ZHANG Xiaomei, LU Guoping 1645
Zero-Sum Stochastic Differential Games of Mean-Field Type and BSDEs ...................... XU Ruimin 1651
Recursive LQ Problem for Delay Systems Involving Continuous and Impulse Controls .................................................. CHEN Li, WU Zhen 1655
A POMDP-based Caching Algorithm for RAM of Streaming Media Servers ........................................ WU Xumin, YIN Baoqun, ZHANG Guorong, ZHANG Haipeng 1659
Adaptive Frequency Carriers On/off Based Energy-saving Control for Base Stations in Wireless Access Networks ................................ JIANG Qi, TANG Hao, XI Hongsheng 1665
On Practical Stability of Switched Stochastic Systems ....................................................... ZHAO Ping, ZHAO Yan, WANG Zhonghua 1669
On Performance Improvements of an Inverted Pendulum with Noisy Delay Feedback Controller ................................................................. XUE Peng 1672
Robust mixed $H_2/H_\infty$ filtering for uncertain stochastic systems with interval time-varying delays ........................................ MAO Weihua, DENG Feiqi, WU Anhua 1676
Composite DOBC and $H_\infty$ Control for Markovian Jump Nonlinear Systems ......................................... YAO Xiuming, LIU Jia 1684
Inverse Optimal Stabilization for More General High-order Stochastic Nonlinear Systems ........................................... WANG Hui, LI Wuquan 1690

系统建模与辨识 (System Modeling and Identification)

Wiener 系统辨识中有限阶次的渐近性分析 ................................................................. WANG Jianhong 1695
最小方差控制中的参数递推辨识 ................................................................. WANG Jianhong 1701
基于最小二乘支持向量机的大型带式输送机建模 ................................................................. CHEN Wei, LI Xin 1707
Multi-Modeling for Nonlinear Distributed Parameter Processes Using Spatio-Temporal Kernel ................................................................. QI Chenkun, LI Hanxiong, LI Shaoyuan, ZHAO Xianchao, GAO Feng 1712
A Novel Multi-sensor Multiple Model Particle Filter ................................... HU Zhentao, LIU Xianxing, LI Jie 1718
Multi-resolution 3D Terrain Modeling Based on Scale Space Hierarchical Clustering Algorithm

Bi Haixin, Chen Jie, Zhang Juan 1723

Multi-innovation Stochastic Gradient Learning Identification Algorithm

Bi Hongbo, Sun Mingxuan, He Haigang 1727

Chaotic Signal Design for Frequency Domain Identification

Li Jiangang, Tan Zhihong, Zhang Dongjun 1733

Modeling for Liquid-Level Control System in Beer Fermentation Process

Bi Shujiao, Dong Fong 1739

Co-evolutionary Genetic Optimization Based Ordinary Differential Equations Identification for Multi-input Multi-output Chaotic Systems

Zhou Shiliang, Liu Yuyan 1745

Integrated Approach to Hypersonic Vehicle Modeling

Su Xiaofeng, Jia Yingmin, Du Junping, Yu Fashan 1752

DC Programming Based Ellipsoid Bounding Algorithm for Guaranteed State Estimation

Zhou Bo, Dai Xianzhong 1759

Parameter Estimation of Hammerstein Model Based on Wavelet Packet

Li Zhenqiang, Luo Wenguang, Ye Hongtao, Kanae Shunshoku 1765

Modified Gath-Geva Clustering Based Linear T-S Fuzzy Model Identification for Multi-input Multi-output Chaotic Systems

Liu Yuyan, Zhou Shiliang 1771

Research on Relationship Between Drogue Position and Interference Force for Probe-Drogue Aerial Refueling System Based on Link-connected Model

Wei Zibo, Quan Quan, Cai Kai-Yuan 1777

Identification for Dual-rate Systems with Colored Noises Using FIR-RELS Methods

Liu Yong-hua, Liu Xing, Zhang Yong, Cui Gui-mei 1783

Kinetic Model Parameter Estimation by Hybrid Differential Evolution Algorithm

Zhao Chao, Xu Qiaoling, An Aimin, Li Xuelai 1788

Improved Cubature Kalman Filter and Its Application

Wei Xiqing, Song Shenmin, Zhang Baoqun 1794

Lever Arm Estimation for the Strap Down Inertial Navigation System in the Swing Environment and Its Applications

Mu Yu-Yao, Fang Hai-Tao 1799

Least Squares-based Identification Methods for a Class of Multivariable Systems with Autoregressive Noises

Liu Yanjun, Lu XianLing, Ding Rui 1805

Reconstruction of Crash Pulse of a Vehicle Involved in Central Localized Collision Based on Morlet Wavelets

Pawlus Witold, Karimi Hamid Reza, Robbersmyr Kjell Gunnar 1811

Research on Modeling of Water Supply System Based on VVVF Speed Regulation

Wu Qinghui 1817

Analysis and Simulation of Winding Tension Control System in Shaftless Web Press

Yang Mei 1826
Recursive Identification for Wiener-Hammerstein Systems with Non-Gaussian Input

CHEN Xi, FANG Hai-Tao 1831

Recursive Identification for Multivariate EIV Linear Systems ........ MU Bi-Qiang, CHEN Han-Fu 1837

基于系统辨识的垂直/短距飞机垂直起降过程升力损失建模

Modeling of VSTOL Aircraft Lift Lose in Hover Based on System Identification Method

TU Zhan, ZHU Jihong 1843

考虑目标高度信息的 OTHR 坐标变换

Coordinate Transformation for OTHR with Target Height

FENG Xiaoxue, LIANG Yan, ZHOU Lin, JIAO Lianmeng 1854

一类时变 ARMAX 系统的学习辨识

Learning Identification of a Class of Time-Varying ARMAX Systems

SUN Mingxuan, CHEN Baixia, BI Hongbo 1860

双凸极永磁电机运行特性的分析

Analysis of Mechanical Properties of Doubly Salient Permanent Magnet Motor

SUN Qiang, WANG Jun 1866

Neural Network Modeling of a Doubly Fed Induction Generator Wind Turbine System

WANG Lin, KONG Xiaobing, LIU Xiangjie 1871

A Predictor Form State-Space Identification Algorithm Using Multivariate Linear Regression

CHENG Yiping 1877

一种基于特制激励信号的线性对象频域模型集辨识方法

Identification of Frequency Domain Model Set for Linear System Based on Tailored Excitation Signals

LI Fei, XIONG Zhihua 1881

基于最大功率点的太阳电池参数辨识方法

An Identification Method of Solar Cell Parameters Based on Maximum Power Point

WANG Bing, ZHOU Jian-liang, ZHANG Yi-Ming 1887

钻孔应变时间序列的群子统计与定量模拟

The Quantitative Simulation and Anomaly Analysis of Sub-cluster Statistics About Borehole Strain Time Series

WU Anxu 1892

考虑热传递的容腔压力控制系统的建模

Modeling of a Pressure in a Container Control System Considering Heat Transfer

WANG Bo, WANG Tao, FAN Wei, WANG Yu 1897

一种基于广义熵优化的非线性随机模型参数估计方法

Parameter Estimation for Nonlinear Stochastic Model Using Generalized Entropy Optimization Principle

LIU Yunlong, GUO Lei, ZHANG Yumin 1901

GPS 载体姿态测量算法仿真验证系统研究与设计

Research and Realization of GPS Based Attitude Determination Simulation and Verification System

YUAN Shuming, CHENG Jian-hua, WANG Jing 1906

通用高超声速飞行器的六自由度建模与仿真

Six-DOF Modeling and Simulation of Generic Hypersonic Vehicle ....... ZHANG Hongmei, HU Wei 1912

基于 T-S 模糊神经网络的软传感器应用于海洋藻类生长状态监测

Soft Sensor Based on T-S Fuzzy Neural Network Applied in State Monitoring of Algae Growth in Seawater

ZHANG Ying, LU Li, ZHAN Ran 1918
基于混合学习算法的水下航行体系统建模研究
Neural Network Identification of Underwater Vehicle with Hybrid Learning Algorithm
................................................................. WANG Jianguo 1922

Periodic Signal Modeling Using the Gradient-based Iterative Estimation Algorithm
................................................................. LI Xiangli, ZHOU Lincheng, PAN Feng, DING Ruifeng 1926

Decomposition Based Iterative Estimation Algorithm for Autoregressive Moving Average Models
................................................................. HU Huiyi, DING Ruifeng 1932

船舶动力定位海洋环境扰动的建模与仿真
Modeling and Simulation of Marine Environmental Disturbances for Dynamic Positioned Ship
.............................. LI Wenhua, DU Jialu, SUN Yuqing, CHEN Haiquan, ZHANG Yindong, SONG Jian 1938

Parameter Estimation for OEMA Models with Dual-Rate Input-Output Data
................................................................. DING Jie, YIN Jun, ZHU Songhao 1944

Dynamic and Relative Calibration of Temperature Sensors under Uncertain Parameters
................................................................. CANUTO Enrico, OSPINA José, ACUNA-BRAVO Wilber 1948

船舶动力定位海洋环境扰动的建模与仿真
Modeling and Simulation of Marine Environmental Disturbances for Dynamic Positioned Ship
.............................. LI Wenhua, DU Jialu, SUN Yuqing, CHEN Haiquan, ZHANG Yindong, SONG Jian 1938

Parameter Estimation for OEMA Models with Dual-Rate Input-Output Data
................................................................. DING Jie, YIN Jun, ZHU Songhao 1944

Dynamic and Relative Calibration of Temperature Sensors under Uncertain Parameters
................................................................. CANUTO Enrico, OSPINA José, ACUNA-BRAVO Wilber 1948

A Wax Deposition Rate Model for Multiple Crude Oil
................................................................. ZHANG Jinfang, JIANG Yuanzheng, LI Yanqin 1956

Numerical Simulations for Adaptive Optics System ...... YANG Xiaoxia, YIN Yumei, WANG Xianjun 1962

基于改进遗传算法的粗糙集知识约简方法
Rough Set Knowledge Reduction Approach Based on Improving Genetic Algorithm
................................................................. YAN Feng, GUI Weihua, CHEN Yong, XIE Yongfang, REN Huifeng 1967

Benchmark Operating Points Determining Method of Operating Trajectory LPV Model Based on Gap Metric
................................................................. SHEN Hua, ZHAO Jun, XU Zuhua 1972

Li-ion Polymer Battery SOC Estimation Using Bayesian Filtering
................................................................. ZHAO Qi, WENZL Heinz, BOHN Christian 1978

交叉指传感器结构参数的正交优化设计
Orthogonal Optimization Design of Structural Parameters for Interdigital Sensor
................................................................. ZHANG Huifeng, HUANG Yunzhi 1985

Speed Sensorless Control for Induction Motor Based on State Observer
................................................................. WANG Hongyu, YE Hao, SUN Jinhao 1990

一类非均匀采样系统的滤波器设计
Design of Filters for a Class of Non-uniform Sampling Systems  .... LIN Honglei, MA Jing, SUN Shuli 1995

基于极大似然方法的高超声速飞行器参数辨识
Parameter Identification for Hypersonic Vehicle Based on Maximum-likelihood Method
................................................................. YAO Jie, WANG Jianghong 2000

飞机颤振模态参数的辅助变量方差辨识及渐近分析
Instrumental Variable Covariance Method and Asymptotic Analysis for the Aircraft Flutter Model Parameter Identification .......................... YAO Jie, WANG Jianghong 2005

基于改进量子粒子群算法的航空发动机部件性能退化参数估计
Aeroengine Deviation Parameters Nonlinear Estimation Using Improved Quantum-behaved PSO Algorithm .................................. YIN Dawei, CHANG Bin, YAN Xianrong, FENG Yubo 2013

Subspace-based Identification for Fractional Order Time Delay Systems
................................................................. ZHU Zhuting, LIAO Zeng, LIANG Shu, PENG Cheng, WANG Yong 2019

Automatic Calibration and In-Motion Alignment of an Odometer-aided INS
................................................................. WANG Qingzhe, FU Mengyin, XIAO Xuan, DENG Zhihong 2024
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicting Chaotic Time Series Using Relevance Vector Machine Regression</td>
<td>YE Meiyng, SONG Lina, XU Yousheng</td>
<td>2029</td>
</tr>
<tr>
<td>Bidirectional Structural Mapping Models for Constructing Rule-based Systems</td>
<td>YUAN Jie, SHANG Wenli, JIANG Bo, LOU Yi</td>
<td>2034</td>
</tr>
<tr>
<td>Dynamic Modeling of Hysteresis Nonlinearity Based on Improved Particle Swarm Optimization Algorithm</td>
<td>ZHAO Xinlong, ZHAO Fei, ZHOU Xinyang</td>
<td>2039</td>
</tr>
<tr>
<td>Recursive Local Polynomial Regression Estimation and Its Applications</td>
<td>CHEN Xing-Min</td>
<td>2043</td>
</tr>
<tr>
<td>Tracking Control for a Class of Switched Nonlinear Systems with Full State Constraints</td>
<td>NIU Ben, DIMIROVSKI Georgi, ZHAO Jun</td>
<td>2049</td>
</tr>
<tr>
<td>An Average Reward Performance Potential Estimation with Geometric Variance Reduction</td>
<td>LI Yanjie</td>
<td>2061</td>
</tr>
<tr>
<td>Early Measure of Synchronization Operations in Supermarket Refrigeration Systems</td>
<td>CHEN Liang, WANG Ting, LIAN De-Hong</td>
<td>2066</td>
</tr>
<tr>
<td>Safety Protection Control for Aeroengines Based on Finite Times of Controller Switches</td>
<td>CHEN Chao, WANG Mingshun, DIMIROVSKI Georgi, ZHAO Jun</td>
<td>2071</td>
</tr>
<tr>
<td>Passive Control for Discrete Singular Bilinear System with Time-delay</td>
<td>ZHANG Xiu Hua, ZHANG Qingling</td>
<td>2077</td>
</tr>
<tr>
<td>Global Stabilization of a Class of Switched Nonlinear Systems under a Pre-given Switching Law</td>
<td>MA Ruicheng, WANG Mingshun, DIMIROVSKI Georgi, ZHAO Jun</td>
<td>2082</td>
</tr>
<tr>
<td>Minimal Sensor Activation for Co-Detectability of Multi-Agent Discrete Event Systems</td>
<td>SHU Shaolong, HUANG Zhiqiang, LIN Feng</td>
<td>2088</td>
</tr>
<tr>
<td>A Method of Piecewise Affine Model Identification and Predictive Control Based on Data-driven</td>
<td>SHI Yuntao, YANG Zhen-an, LI ZhiJun, LIU DaQian</td>
<td>2094</td>
</tr>
<tr>
<td>Cutting Transition Network Stability and L -gain Analysis for Switched Neutral Recurrent Neural Networks</td>
<td>LIAN Jie, GE Yanli, ZHANG Kai</td>
<td>2100</td>
</tr>
<tr>
<td>On the Existence and Uniqueness of Solutions of Switched Hamiltonian Systems</td>
<td>ZHU Liying, FENG Gang</td>
<td>2106</td>
</tr>
<tr>
<td>Non-fragile Guaranteed Cost Control for a Class of Uncertain Switched Fuzzy Systems</td>
<td>LUO Jinming, DIMIROVSKI Georgi, ZHAO Jun</td>
<td>2112</td>
</tr>
<tr>
<td>Passivity-based Control of A Class of Markovian Jump Delayed Systems</td>
<td>WANG Jing, SHEN Hao, YAO Fengqi</td>
<td>2117</td>
</tr>
<tr>
<td>Exponential $H_{\infty}$ tracking control for switched neutral system with time-varying delay</td>
<td>LIU Shilong, XIANG Zhengrong</td>
<td>2122</td>
</tr>
<tr>
<td>Computation for Supremal Simulation-Based Controllable and Strong Observable Subautomata</td>
<td>SUN Yajuan, LIN Hai, LIU Fuchun</td>
<td>2128</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Decentralized Bisimilarity Control of Discrete Event Systems</td>
<td>SUN Yajuan, LIN Hai, CHEN Ben M.</td>
<td>2134</td>
</tr>
<tr>
<td>Stabilization and $L_\infty$-Gain Control for Switched Linear Systems with Actuator Saturation</td>
<td>CHEN Yonggang, XIN Yuning, FEI Shumin, ZHANG Kanjian</td>
<td>2140</td>
</tr>
<tr>
<td>Adaptive Gaussian Particle Filter for Nonlinear State Estimation</td>
<td>KONG Liang, KONG Lingfu, WU Peiliang</td>
<td>2146</td>
</tr>
<tr>
<td>Bi-decomposition Analysis and Algorithm of Automata Based on Semi-tensor Product</td>
<td>ZHANG Yanqiong, XU Xiangru, HONG Yiguang</td>
<td>2151</td>
</tr>
<tr>
<td>On Computation of Coordinator in Blocking Decentralized Supervisory Control of State Tree Structures</td>
<td>CHAO Wujie, GAN Yongmei, WANG Zhaoan</td>
<td>2157</td>
</tr>
<tr>
<td>Sub-optimal Aggregation of Switched Linear Systems</td>
<td>ZHU Geng, SUN Zhendong</td>
<td>2163</td>
</tr>
<tr>
<td>Event-Based Optimization Control of Conveyor-Serviced Production Station</td>
<td>CHEN Yingjun, TANG Hao, PEI Rong, ZHOU Lei</td>
<td>2167</td>
</tr>
<tr>
<td>Hierarchical and Distributed Control of Networked Vehicle Systems Using Discrete Event/Hybrid System Theory</td>
<td>CHEN Wen, LIN Feng, SHU Shaolong, WANG Xiaonian</td>
<td>2172</td>
</tr>
<tr>
<td>Finite Time Observer Design for Linear Switched System</td>
<td>CHENG Gang, BOUTAT Driss, BARBOT Jean-Pierre</td>
<td>2178</td>
</tr>
<tr>
<td>Decentralized Supervisory Control of Discrete-Event Systems Based on State Tree Structures</td>
<td>CHAO Wujie, GAN Yongmei, WANG Zhaoan, WONHAM W. Murray</td>
<td>2184</td>
</tr>
<tr>
<td>The Stabilization Control for a Kind of Hybrid Systems</td>
<td>WANG Wei</td>
<td>2191</td>
</tr>
<tr>
<td>Optimal Control for Switched Systems with Impulsive Effects</td>
<td>LIU Bin, LIU Dongnan, DOU Chunxia</td>
<td>2197</td>
</tr>
<tr>
<td>Piecewise Continuous Observer Design for a Class of Linear Systems with Sampled Delayed Output</td>
<td>WANG Haoping, TIAN Yang, CHRISTOVOV Nicolai, VASSEUR Christian</td>
<td>2203</td>
</tr>
<tr>
<td><strong>最优控制</strong> (Optimal Control)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linear Quadratic Optimal Sampled-Data Control of Linear Continuous Switched Systems with Stochastic Disturbance</td>
<td>ZHANG Lu, LIU Feng, SONG Yongduan</td>
<td>2209</td>
</tr>
<tr>
<td>基于降阶观测器的时变时滞系统动态输出反馈 $H_\infty$ 优化控制</td>
<td>Dynamical output feedback $H_\infty$ optimal controller of time-varying delay system via lower-order</td>
<td></td>
</tr>
<tr>
<td>Control量受约束连续 Markov 跳变系统最优控制</td>
<td>DENG Jiu-ying, WANG Qinruo, LEE Wei-chen, XIONG Jianbin</td>
<td>2214</td>
</tr>
<tr>
<td>Optimal Control for Markov Jumping System with Constrained Control Input</td>
<td>WU Yanrui, WU Youli, FANG Yangwang, HU Shiguang, ZHANG Yihan</td>
<td>2220</td>
</tr>
<tr>
<td>Optimal Impulsive Control of Delay Systems Based on Partial Information</td>
<td>LIU Xiao-mei, ZHANG Kanjian, CHENG Kang, FEI Shumin, WEI Haikun</td>
<td>2224</td>
</tr>
<tr>
<td>一类具有非线性参数扰动的中立型时滞系统的保成本控制</td>
<td>ZHANG Yafei, LIANG Jinling, HU Jianqiang, MIAO Chunfang</td>
<td>2228</td>
</tr>
<tr>
<td>Guaranteed Cost Control for a Class of Delayed Neutral Systems with Nonlinear Perturbations</td>
<td>LIU Chunling, MU Zhichun</td>
<td>2234</td>
</tr>
<tr>
<td>基于案例推理的工业过程区域优化控制方法及应用</td>
<td>ZHOU Wei, BU Yanping</td>
<td>2238</td>
</tr>
</tbody>
</table>
基于模糊混沌理论的免疫优化算法及其应用
Immune Optimization Algorithm Based on Fuzzy Logic and Chaos Theory and Its Application

WANG Wan-hui, PAN Hai-peng, XIAO Liang 2242

An Approach for Time-Free Optimal Two-Impulse Trajectories Using Primer Vector Theory and Mathieu Transformation

LI Mao-deng, WANG Dayi, HUANG Xiang-yu 2246

On-line Reentry Trajectory Optimization of Hypersonic Vehicle Based on Improved Gauss Pseudospectral Method

SUN Yong, DUAN Guang-Ren, ZHANG Maorui 2254

一类时滞捕食系统的稳定性与最优收获策略
Stability and Optimal Harvesting Policy for a Stage Structured Predator-prey System with Delay

HU Bao-an, LIU Jun-feng, XIA Aisheng 2260

Multi-object Optimization Performance of Networked Control Systems

ZHANG Xian-he, ZHAN Xisheng, WU Jie, XU Chun-qing 2265

Positive Realness and Optimality Problem for Rectangular Descriptor Systems

LI Le, YANG Ying, ZHANG Guoshan 2270

Optimal Weighted Performance of the Generalized Linear Control System with Uncertainty

WANG Bao-xian, GUAN Zhi-Hong, YUAN Fushun, DING Li 2276

一类新的修正PRP共轭梯度法及其全局收敛性
Global Convergence of A New Modified PRP Conjugate Gradient Method

LI Yong 2287

Optimal Formation Control for Multi-Agents Systems with External Disturbances

YANG Xi-Xin, TANG Gong-You, LI Yang, WANG Pei-dong 2291

The Fast Convergence Analysis of Finite-time Consensus for Multi-agent Systems with Switching Topology

LI Rui, SHI Yingjing, Tan Sheldon X.-D. 2296

Optimal Control for Semi-active Suspension with Inerter

HU Yinlong, LI Chanying, CHEN Michael Z. Q. 2301

空间飞行器大角度姿态机动最优保性能控制
Optimal Guaranteed Cost Control of Spacecraft Large Angle Attitude Maneuvers

MA Qingliang, YANG Hai Yan, YUE Ruihua, CAO Xiangyu 2307

Optimal Tracking Control Problem for Linear State and Control Time-delay Systems

ZHAO Yan-Dong, XIA Lin, LIU Xiang-Mei 2312

A Novel Analysis for Tactical Missile Autopilot Topologies

FAN Jun-fang, SUN Bao-cai, SU Zhong, DONG Si-yu 2316

An Optimal Control Approach to Robust Control of Spacecraft Rendezvous System on Elliptical Orbit

GAO Xiang-yu, YAO Wei, LIU Hao 2321

SLQC for Discrete-Time Markovian Jump Stochastic Linear Systems

SUN Huiying, ZHANG Xuelei, FENG Chunyu 2326

Improved Successive Approximation Procedure for Optimal Control of Nonlinear Systems with Disturbances

SUN Liang, DONG Rui 2331

再入动力学的性质及其在轨迹优化中的应用
Properties of Reentry Dynamics and Their Application in Trajectory Optimization

WANG Zeguo, MENG Bin 2336
优化与调度 (Optimization and Scheduling)

印染热定型过程的煤耗建模及其基于改进遗传算法的求解
Coal Consumption Modeling of Heat-setting Process and Its Solution with Improved Genetic Algorithm
REN Jia, ZHOU Xinyang 2342

一个基于改进分布算法的求解问题
An Estimation of Distribution Algorithm with Efficient Constructive Repair/Improvement Operator for the Dynamic Weapon-Target Assignment
XIN Bin, CHEN Jie 2346

求解贴片机贴装过程优化的改进禁忌搜索算法
A Modified Tabu Search Algorithm for Component Placement Process Optimization of Multi-head Surface Mounting Machine
CHEN Tiemei, LUO Jiaxiang, DU Juan, HU Yueming 2352

求解多目标路径规划问题的改进遗传算法
A Multistage Optimization Method Based on WALKSAT and Clustering for the Hard MAX-SAT Problems
ZENG Guo-Qiang, ZHANG Zhengjiang, LU Yong-Zai, DAI Yuxing, ZHENG Chongwei 2358

求解多机三维航路实时重规划的路标图构建方法
Optimal Control of Customer Admission to an Open Jackson Network
XIA Li 2362

一种加快局部收敛速度的改进和声搜索算法
Improved Harmony Search Algorithm with Better Local Convergence Speed
LI Shurong, CHEN Guoxia, LEI Yang, ZHANG Qiang, WU Yuxiao 2368

开放式实时系统任务调度的资源隔离机制
Resource Isolation Policy for Task Scheduling Strategy in Open Real-Time Systems
LIU Xiao-Yan, ZHONG Liang, ZHANG Jing, FU Xiaodong 2374

隐身三维航路规划中的 A* 搜索单步扩展算法
Single Step Extension Method for A * Algorithm Used in Stealth 3-Dimensional Route Planning Penetration
WU Jian, DAI Jiyang, ZHOU Jiqiang 2380

用于隐身多机三维航路实时重规划的路标图构建方法
An Efficient Improved Differential Evolution Algorithm
ZOU Dexuan, GAO Liqun 2385

基于项目特性的关键链缓冲调整策略研究
Project Characteristics Based Buffer Sizing to Critical Chain Scheduling
GUO Ze, ZHENG Zheng, LIN Shumin, YANG Ruifeng 2400

基于群体邻域搜索的带批处理机作业车间调度
Swarm-based Neighborhood Search Algorithm for Job Shop Scheduling with Batch Processing Machines
ZHANG Qiongfang, LEI Deming, ZHANG Nianyu 2421

基于粒子群算法和混沌搜索的协同优化
Collaborative Optimization Based on Particle Swarm Optimization and Chaos Searching
LI Ying, WANG Jingsheng, WEI Lixin 2427

基于群体领域搜索的带批处理机作业车间调度
Dynamic-Priority-Based Real-Time Charging Management for Plug-in Electric Vehicles in Smart Grid
HAN Peng, WANG Jinkuan, HAN Yinghua 2432
带个人偏好的多级别护士排班问题研究
Nurse Scheduling with Multi-grades and Individual Preferences
............................................................... WANG Changyu, SHEN Yindong, CHEN Kai 2437
A Knowledge Based Method of Optimized Target Assignment in Ground to Air Defence
............................................................... XING Qing-hua, LIU Fu-Xian, SHANG Chang-an 2443
考虑时间代价及硬时间窗的 UCAVs 多任务分配
Multi-task Allocation of UCAVs Considering Time Cost and Hard Time Window Constraints
............................................................... ZHANG Jian, PENG Zhihong, LI Bo 2448
Optimization of Wind Power Capacity in an Electricity Grid ............ XU Meng, ZHUAN Xiangtao 2453
Tuning of Optimal and Robust PID Controller for Open-Loop Unstable First-Order Plus Time Delay Systems .................................................. WANG Yuan-Jay 2459
Dynamic Voltage Decoupling Control of Power System Based on Wide Area Measurement Information
............................................................... CUI Ting, SUN Yuanzhang, XU Jian, HUANG Lei 2465
堆取料机作业多目标优化方法及应用
A Multi-Objective Optimization Method and Application to Stacker-Reclaimer Job
............................................................... ZHOU Jinni, ZHONG Qianyi, CAI Yan, WU Min 2471
Multi-Agent System for Flexible Job-shop Scheduling Problem Based on Human Immune System
............................................................... XIONG Wei, FU Dongmei 2476
State Transition Algorithm for Traveling Salesman Problem
............................................................... YANG Chunhua, TANG Xiaolin, ZHOU Xiaojun, GUI Weihua 2481
Path Planning for Unmanned Air Vehicles Using an Improved Artificial Bee Colony Algorithm
............................................................... LAI Lei, QU Shiru 2486
基于并行禁忌算法的供应链分销网络设计优化
Optimization Design of Distribution Network in Supply Chain Based on Parallel Tabu Search
............................................................... ZHANG Xiaopan, YUAN Yan-bin, YUAN Xiao-hui 2498
Time Optimal Planning of Trajectories for a Similar-SCARA Parallel Manipulator with Limbs of Embedding Structures .................. ZHANG Jianjun, WANG Xiaohui, XU Chuang, LI Weimin 2503
A Hybrid Harmony Search Algorithm Combined with Differential Evolution for Global Optimization Problems .................................................. CHEN Jing, WANG Ya-min, LI Jun-qing 2509
Simulation Study of Magnetic Resonance Imaging Examination Reservation Processes for Stroke Patients
............................................................... GENG Na, XIE Xiaolan 2514
Optimal Demand Response Using Mechanism Design in the Smart Grid
............................................................... CAO Jun, YANG Bo, CHEN Cailian, GUAN Xinping 2520
集装箱班轮航线优化调度问题的研究
On the Optimal Scheduling Problem of the Routing Programming for Container Liner Ship
............................................................... FENG Meiling, CHEN Chen, SUN Junqing, LIU Fenglian 2526
A New Family Sufficient Descent Conjugate Gradient Methods for Unconstrained Optimization
............................................................... SUN Zhongbo, ZHU Tianxiao, WENG Shiyou, GAO Haiyin 2532
Optimal Charging Schedule of PHEV Taxi with Time-Varying Price ...... SUN Lihao, YANG Zaiyue 2537
A Scheduling Algorithm of Particle Swarm Optimization with Segmental Pheromone Heuristics
WEI Yingzi, HAO Pingbo, ZHOU Yue, WANG Hong

Task Allocation for Multi-Satellite Cooperation Based on Estimation of Distribution Algorithm
WANG ShiXing, WU Jinhua, TIAN Liang

Robust Control (Robust Control)

Sensor Fault-tolerance Control of a Flexible Air-breathing Hypersonic Flight Vehicle
LEI Zhengdong, YANG Jianying, ZHAO Yangyang

Composite DOBC and Robust Adaptive Fuzzy Control for A Class of Nonlinear Systems
WEI Xinjiang, CHEN Nan, ZHANG Huifeng

Nonlinear Guaranteed Cost Control for a Class of Uncertain Time-delay Singular System
GUO Xiao Yan, GE Zhaoqiang

Decentralized Non-fragile Robust $H_{\infty}$ and Guaranteed Cost Control for Uncertain Singular Large-scale Systems
WO Songlin, HAN Xiaoxin

The Stability for Uncertain Nonlinear Neutral Systems with Time-delays
YANG Zhanmin, WANG Shuying, ZHANG Qinghai

Robust Poles Assignment for a Kind of Second-order Linear Time-varying Systems
ZHANG Long, DUAN Guang-Ren

Robust Control for Longitudinal and Lateral Dynamics of Small Scale Helicopter
ROY Tushar K., POTA Hemanshu R., GARRATT Matt, TEIMOOONRI Hamid

Multi-objective Robust Control of Flexible-link Manipulators Based on Fuzzy Singularly Perturbed Model with Multiple Perturbation Parameters
YUAN Yuan, SUN Fuchun, LIU Huaping, WANG Qinyi

Full-order and Reduced-order Observer for Lipschitz Singular Systems with Delay: the Unified LMI Approach
TANG Hongji, LI Haiping, ZHOU Ruijuan, ZHANG Xiaomei

An Improved GIMC Structure
HUANG Yuanzheng, XIE Wei

Robust Stability Analysis for Uncertainty Linear Systems with State Saturation
CHEN Dongyan, LI Xingwei, SHI Yujing

Acceleration Autopilot Design for Portable Missile Based on PDLF-LPV Method
CHEN Xianxiang, SONG Jianmei, CAI Gaohua
Robust Passive Control of Uncertain Singular Systems with A Time-varying Delay ........................................... YU Dandan, ZHANG Xian, LI Yanjiang 2641

$H_\infty$ Control for Markovian Jump Nonlinear Systems with Partially Known Transition Probabilities and Saturating Actuator ........................................... SONG Gongfei, XU Shengyuan 2647

New Analysis on Robust $H_\infty$ Exponential Stability of Uncertain Neutral Systems with Time-Varying Delays and Uncertain Nonlinear Perturbations SUO Xiuyun, LI Yi, QIU Jiqing, ZHAO Long, XING Zirui 2652

Robust $H_\infty$ Guaranteed Cost Control for Uncertain Delayed Switched Singular Systems ................................... YANG Kun, SHEN Yanxia, JI Zhi-cheng 2658

Robust $H_\infty$ Control for Discrete-Time Uncertain Descriptor Markov Jump Systems with Actuator Saturation .................. CHEN Naixun, MA Shuping 2662

Attitude Control of Solar Sail Spacecraft with Saturation ....................................................................................... WEI Yiheng, ZHU Min, PENG Cheng, WANG Yong 2668

$H_\infty$ Control of Markov Jump Linear Systems with Unknown Transition Rates and Input Quantization .................... YE Dan, ZHENG Bochao, YANG Guang-Hong 2673

Robust Control for a Class of Continuous-time Systems with Interval Time-varying Delay .................................................. SHEN Hao, WANG Jing, ZHANG Zhengqiang, YAO Fengqi 2697

Robust Decentralized Control for a 3-DOF Helicopter ............ YU Yao, LU Geng, ZHONG Yisheng 2708

Positive Real Method for Robust Control Problems ..................... LIU Kang-Zhi, YAO Yu 2715

Robust Stability for Two Kinds of Uncertain Fractional-order Systems with Structured and Unstructured Uncertainties .......................... JIAO Zhuang, ZHONG Yisheng 2721

Robust Attitude Control of Small-scale Unmanned Helicopter .................................................................................. WANG Xiafu, CHEN You, LU Geng, ZHONG Yisheng 2726

Stabilization of Singular Markovian Jump Systems via Switching Probability Rate Design ............................................ WANG Guoliang 2732

Experimental Results on Robust Tracking Control of a Lab Helicopter under Wind Disturbances .......................... LIU Hao, LU Geng, ZHONG Yisheng 2737

QFT Fractional Order Controller for Non-minimum Phase Hydro Power Plant ......................................................... MENG Li, DIAO Fen 2743

Modified Adaptive Backstepping Control for SVC with Time-Delay ................................................................. ZHANG Rui, SUN Li-Ying, ZHANG Lei 2749

Robust $H_\infty$ Infinity Control of Networked Control Systems with Randomly Varying Delay and Missing Measurements ...................................................... LI Hongjie 2753

New Impulse (Noncausality) Test for Descriptor Systems by Möbius Transformation ............................................................. WANG Qing, LAM Edmund Y., NGAI Wong 2759
On Fault Detection of NCSs Subject to Limited Communication Capacity

Robust Controller Design for Uncertain Nonlinear Systems via Adaptive Fuzzy PID Approach

Calculation of All Robust PID Type Controllers for Unstable High-Order Time Delay Systems Based on Gain and Phase Margin Specifications

Robust Constrained Control for a Class of Uncertain System Based on Disturbance Observer

Calculation of All Robust PID Type Controllers for Unstable High-Order Time Delay Systems Based on Gain and Phase Margin Specifications

Robust Control of Holonomic Constrained Robotic Manipulators WithStochastic Time Delays

Synthesis of Markovian Jump Time-Delay Systems with Partially Unknown Transition Rates

Stability Regions of $H_{\infty}$ PID Parameters for Model Uncertainty System with Time Delay

Local Mode Dependent Decentralized $H_{\infty}$ Control of Uncertain Markovian Jump Large-scale Systems

Stability and Stabilization of Networked Control Systems WithTime-varying Sampling Periods

Robust $H_{\infty}$ Control for Discrete-Time Fuzzy Systems with Markovian Jumps and Multiplicative Noises

Structured $H_{\infty}$ controller design for unmanned helicopters using $H_{\infty}$ extended static output feedback control

Robust $H_{\infty}$ Control for Discrete-Time Fuzzy Systems with Markovian Jumps and Multiplicative Noises

A Composite Disturbance Observer and $H_{\infty}$ Control Scheme for Flexible Spacecraft with Time-varying Input Delay

Robust Passive Control for Nonlinear Systems with Time-Varying Delay and Polytopic Uncertainty

Positive Real Analysis on the Uncertain Discrete-time Singular System

Pinning Synchronization of Complex Networks with Time-varying Coupling Strength Varying in a Range

Influence of Wind on TV-guided Projectile and Error Correction

Effectiveness Evaluation for Earth Observation Satellite System Based on Analytic Hierarchy Process and ADC Model

A Study on Pulse Engine Correction Strategy of a Mortar Projectile
Adaptive Control and Learning Control

Adaptive Dynamic Surface Control with Unmodeled Dynamics
ZHANG Tianping, LU Yao, ZHU Qing, SHEN Qikun 2859

Neural Adaptive Flocking Control of Networked Underactuated Autonomous Surface Vehicles in the Presence of Uncertain Dynamics
PENG Zhouhua, WANG Dan, LAN Weiyao, SUN Gang, YAN Langtao 2865

Adaptive Dynamic Surface Control for Coordinated Target Tracking of Autonomous Surface Vehicles Using Neural Networks
WANG Dan, PENG Zhouhua, SUN Gang, WANG Hao 2871

A Mode and Control Adaptive Almost Surely Asymptotically Synchronization for Stochastic Time Delay Neural Network with Markovian Switching
ZHOU Wuneng, GAO Yan, SUN Yuqing, DING Xiangwu, TONG Dongbing, JI Chuan 2877

Mixed $H_2/H_\infty$ Robust Adaptive Control of Hypersonic Vehicles Based on the Characteristic Model
HUANG Huang, WANG Yong 2883

LMI Approach to Robust Monotonically Convergent Iterative Learning Control for Uncertain Linear Discrete-time Systems
LI Zhifu, YUAN Peng, HU Yueming, GUO Qiwei, MA Ge 2889

Parameter Adaptive Control for Spacecraft Formation Flying with a Non-cooperative Target
GAO Youtao, XU BO, ZHOU Jianhua 2895

Adaptive Iterative Learning Control for Discrete-time Nonlinear Systems with Unknown Control Direction
YU Miao, HUANG Chao, PENG Junmin, YE Xudong 2906

Adaptive Control Algorithm Based on Clone Selection Optimization
HU Jiangqiang, HAN Min, YIN Jianchuan, LI Tieshan, WANG Hongzhen, LI Zeyu 2911

Inverse Model-Based Iterative Learning Control for Active Control of Repetitive Impulsive Noise with a Non-minimum Phase Secondary Path
ZHOU Yali, YIN Yixin, ZHANG Qizhi 2917

ILC Algorithm for a Class of Linear Singular Systems with Multiple Time-Delays
TIAN Senping, XU Jiaxi, TIAN Huiping 2922

Optimal Control of Unknown Discrete-Time Nonlinear Systems with Constrained Inputs Using GDHP Technique
LIU Derong, WANG Ding, LI Hongliang 2926

Neural-Network-Based Optimal Control for Discrete-Time Nonlinear Systems Using General Value Iteration
LI Hongliang, LIU Derong, WANG Ding 2932

Computational Adaptive Optimal Control with an Application to Blood Glucose Regulation in Type 1 Diabetics
JIANG Yu, JIANG Zhong-Ping 2938

A Novel Direct Adaptive NN Dynamic Surface Control
LIU Shu-guang, SUN Xiu-xia, ZHANG Xianglin, TANG Qiang, DONG Wenhan 2944

Adaptive Decoupling Control for Multivariable Systems with Input Amplitude Constraints
FU Yue 2949

Iterative Learning Control for a Class of Nonlinear System with Random Packet Dropouts
BU Xuhui, YU Fashan, HOU Zhongsheng, ZHANG Hongwei 2954
AILC for Nonlinearly Parameterized Systems with Unknown Distributed Time-Varying Delays and Unknown Control Direction .................................................. TANG Shu, LI Junmin 2960

一种基于Schweitzer变换的平均报酬强化学习算法
An Average-Reward Reinforcement Learning Algorithm based on Schweitzer’s Transformation ................................................................. LI Jianjun, REN Jiangong, LI Yanjie 2966

基于特征模型的变结构控制
Variable Structure Control Based on the Characteristic Model ........ LI Xuanling, YANG Huizhong 2971

基于数据扩充的ADRC翼伞航迹跟踪控制
Parafoil Trajectory Tracking Control Based on Data Expansion ADRC ......................................................... GAO Haitao, SUN Qinglin, KANG Xiaofeng, SUN Mingwei, CHEN Zengqiang 2975

Direct Adaptive Neural Networks Control for a Class of Uncertain Nonlinear Systems with Prespecified Tracking Performance .................. YANG Pengsong, SUN Xuxia, DONG Wenhan, YU Xiuduan 2981

Adaptive Generalized Backstepping Control Based on Sliding Mode Observer of Air-breathing Hypersonic Vehicle ...................................... HU Chaofang, WANG Lin 2987

Synchronization of Nonlinear Energy Resource Systems Based on Partial States ................................................. SUN Yonghui, XU Yanzhe, WEI Zhinong, SUN Guoqiang 2993

A Discrete-Time Direct Adaptive Multiple-Model Control Scheme ................................. TAN Chang, TAO Gang, QI Ruiyun 2997

An Adaptive Actuator Failure Compensation Scheme for Spacecraft ................................................................. YAO Xuelian, TAO Gang, QI Ruiyun 3003

Adaptive ILC for a Class of Nonlinear Discrete-time Systems without Matching Conditions on Initial State and Reference Trajectory ...... CHI Ronghu, HOU Zhongsheng, JIN Shangtai, WANG Danwei 3009

A Discrete-Time Adaptive Iterative Learning from Different Reference Trajectory for Linear Time-Varying Systems ............ CHI Ronghu, WANG Danwei, HOU Zhongsheng, JIN Shangtai, ZHANG Dexia 3013

Fault-Tolerant Autolanding Controller Design Using Neural Network ................................................. BAI Jian-Ming, RONG Haijun 3017

具有QoS保证的分层视频传输算法
Scalable Video Transmission Algorithm with QoS Guarantee ............... ZHU Hongzhou, YANG Jian 3023

Adaptive Switching Control of a Class of Nonlinear Systems Based on Multiple Models ......................................................... ZHANG Yanxia 3027

基于模拟场计算模型的自适应uEAC控制器研究
Research of Adaptive uEAC Controller Based on Analog Field Computation Model ................................................................. LI Weixing, ZHAO Lusheng, LONG Ting, ZHANG Rui, PAN Feng 3031

迭代学习控制的收敛性改进
Convergence Improvement of Iterative Learning Control ................................................................. CHEN Pengnian, QIN Huashu, FANG Xueyi 3035

On Capability of Sampled-Data Feedback for a Class of Semi-Parametric Uncertain Systems ......................................................... JIANG Tiantian, GUO Lei 3041

Adaptive Dynamic Tracking Control for Uncertain Nonholonomic Mobile Robots Based on Visual Servoing ................................... YANG Fang, WANG Chaoli, CHEN Hua, ZHANG Dongkai 3047

一类P型模糊迭代学习控制器设计
A Class of P-type Fuzzy Iterative Learning Control Design ................................. ZHANG Xining, LIU Chenglin, LIU Fei 3052

Adaptive Dynamic Feedback Tracking Control for the Nonholonomic Mobile Robots with Uncertainties ................................................ LIANG Zhenying, WANG Chaoli, XU Feng, PAN Yalei 3057
具有降阶模型的多模型鲁棒自适应控制
Multiple Models Robust Adaptive Controller of Reduced Model

................................................. WANG Xin, WANG Zhenlei, ZHENG Yihui, LI Lixue, LI Jiazhen, YANG Hui 3063

增强学习的研究进展及其在多机器人系统中的应用
A Survey of Reinforcement Learning Research and Its Application for Multi-Robot Systems

.......................................................... YANG Yuequan, JIN Lu, CAO Zhiqiang, TANG Hongru, XIA Yang, NI Chumbo 3068

Adaptive $H_\infty$ Control of Time-Delay Hamiltonian Systems with Parametric Uncertainties and Disturbances
.......................................................... SUN Weiwei, WANG Pan, PANG Guocheng 3075

Automated Nanomanipulation with AFM by Using L1 Adaptive Controller
.......................................................... YANG Qimin, LUO Jie, CAO Chengyu, LU Jiangang, SUN Youxian 3081

Sampled-data Output Tracking of PSF Nonlinear Systems with Unknown Coefficient
......................................................... ZHANG Jian, XIN Xiaoshuai, ZOU Jianxiao 3087

Optimal Iterative Learning Control for Product Qualities in Batch Processes Based on Generalized Hinging Hyperplanes
.......................................................... YU Xiaodong, XIONG Zhihua, HUANG Dexian, JIANG Yongsheng 3093

Identification of Hammerstein Models Concerning General Disturbances
........................................... LU Changlong, QIU Ping 3099

New Structures with Integral Action for Resource Constrained Control Systems
.......................................................... STEFFEN Thomas, HAUPT Andreas, LITZ Lothar 3106

Robust Adaptive Control for a Class of Uncertain Switched Nonlinear Systems with Application to Near Space Vehicle
.......................................................... ZHANG Qiang, WU Qingxian, JIANG Changsheng, WANG Yufei 3113

变结构控制 (Variable Structure Control)

Fast Smooth Second Order Sliding Mode Control Design for Near-Space Hypersonic Vehicle’s Re-entry Attitude
.......................................................... ZHANG Ruimin, SUN Changyin, ZHANG Jingmei, HUANG Yiqing, QIAN Chengshan 3143

Approximated Modeling and Sliding Mode Control for Systems with Multiple Time Delays
.......................................................... XIE Linbo, WU Zhihui, SHIEH Leang-San, PENG Li 3149

一类不确定离散时间系统的最优积分滑模控制
Optimal Integral Sliding Mode for Uncertain Discrete Time Systems

.......................................................... SUN Nana, NIU Yuguang, CHEN Bei 3155

Adaptive Exponential Time-Varying Sliding Mode Control for Hypersonic Cruise Vehicles
.......................................................... WANG Liang, LIU Xiangdong, CONG Binglong, CHEN Zhen 3160

Launch Vehicle Pitch Control via GPI Observer-based Sliding Mode Technique
.......................................................... OU Liuli, ZHAO Dangjun, WANG Yongji, LIU Lei 3166

轧机液压伺服系统自适应模糊滑模切换控制
Adaptive Fuzzy Switching Control Based on Sliding Mode for Hydraulic Servo System of Rolling Mill
.......................................................... MIAO Qing, FANG Yi Ming, SHAO Pengzhen, DENG Fei 3171
Sliding Mode Control for Linear Uncertain Switched Systems
LIU Yonghui, NIU Yugang, HO Daniel 3177

A Class of Uncertain Chaotic Systems Using the Fast Terminal Sliding Mode Control
BAI Yongqiang, A Lata, LI Xiaofang 3182

Wind Power Grid Integration Using Neural Network and Sliding Mode Control
LIU Qing-song, QIAN Su-xiang 3187

Sliding Mode and LMI Based Control for Fractional Order Unified Chaotic Systems
LAN Yong-Hong, HE Lv-Jun 3192

Sliding Mode Variable Structure Control Theory: A Survey
YANG Jie, WANG Qinglin, LI Yuan 3197

Small Satellite Attitude Control Based on Variable Structure Control and RBF Network
RAN Dechao, CHEN Xiaoqian, YANG Weiwei, CAO Lu 3203

Feasibility Criteria of Sliding Mode Controllers for Time-Delay Systems
MU Xiaoxia, ZHENG Guojie, LI Juntao, LI Wenlin 3207

A New Sliding Mode Control of Manipulator Handling a Flexible Payload Based on Distributed Parameter System
LIU Shuyang, LIU Keping, LI Yuanchun 3212

Output Feedback Sliding Mode Control of Uncertain Discrete-time Systems
YANG Pengsong, SUN Xiu-xia, DONG Wen-han, SUN Biao, JIA Nin 3218

Research on Online and Real-time Path Planning of UCAV by Tracking and Controlling in Multi-restriction
HUANG Han Qiao, HUANG Chang Qiang, ZHAO Hui, CAO Lin Ping, WENG Xing Wei 3223

Adaptive Sliding Mode Control on Single-machine Infinite-bus Power Systems
LIN Zhiwei, ZHANG Zhuo, HUANG Hong, KAN Jun 3229

Robust Neural Control for Switched Systems with Unmodeled Dynamics and External Disturbances
YU Lei, FEI Shumin 3235

Application of the Error Function in Analyzing the Learning Dynamics Near Singularities of the Multi-layer Perceptrons
GUO Weili, WEI Haikun, ZHAO Junsheng, LI Weiling, ZHANG Kanjian 3240

Stochastic Global Exponential Stability of Neutral-Type Impulsive Neural Networks with Both Markovian Jumping and Mixed Time Delays
GAO Yan, ZHOU Wueng, ZHAO Jing, TONG Dongbing, JI Chuan 3244

Short-Term Load Forecasting Using Hybrid Quantized Elman Neural Model
LI Penghua, CHAI Yi, XIONG Qingyu, ZHANG Ke, CHEN Liping 3250

Research on Neural Networks Learning Algorithm Based on PSO and COA
WANG Chen, CHEN Zengqiang 3255

A High Performance Neural Network for Solving Quadratic Programming with Hybrid Constraints
XU Xianyun, YANG Yongqing, GAO Yun 3261
Exponential Stability of Delayed Reaction-diffusion Neural Networks with Markovian Jumping Parameters Based on State Estimation

LIU Yan, SUN Duoqing, MA Huijuan 3267

时滞反应扩散神经元模型的分岔与控制

WANG Ling, ZHAO Hongyong 3273

Neural Network Sliding Mode Control of MEMS Triaxial Gyroscope Based on RBF Sliding Gain Adjustment

FEI Juntao, DING Hongfei, YANG Yuzheng, HUA Mingang 3279

基于 K- 均值聚类的聚合过程转化速率 RBF 神经网络预测

RBF Neural Network Prediction of Convention Velocity in Polymerizing Process Based on K-means Clustering

WANG Jie-sheng, ZHU Jing, GUO Qiuping 3285

无轴承同步磁阻电机神经网络逆解耦控制

Decoupling Control Based on Neural Network Inverse for Bearingless Synchronous Reluctance Motor

WANG Yi, CAO Li, FENG Dongmei, DIAO Xiaoyan, ZHU Huangqiu 3291

A Discrete-time Recurrent Neural Network with Global Exponential Stability for Constrained Linear Variational Inequalities

LIU Qingshan, YANG Wankou 3296

资源分配网络及其在传感器温度补偿中的应用

Study of RAN and Its Application in Temperature Compensation for Sensors

PAN Guofeng, HE Ping, ZHOU Yatong, GAO Weixiang 3335

改进的 GA-BP 多步预测控制应用研究

Application Research of the Multi-step Predictive Control Based on Improved GA-BP

LI Hong, LI Yanling 3341

Attraction Region and Stability Analysis of Cohen-Grossberg Neural Networks

YUAN Kun, FEI Shumin, CAO Jinde 3346

The Application of Improved BP Neural Network in the Engine Fault Diagnosis

LU Di, WANG Jie 3352

Application of Fuzzy Neural Network Optimized by MEA to Transformer Fault Diagnosis

GAO Jinlan, GAO Qian, BAI Lili 3356
p-attracting and p-quasi-invariant Sets for a Kind of Discrete-time Cohen-Grossberg Neural Networks with Impulses and Time-varying Delays ..........................  QIN Fajin, YAO Xiaojie 3361

Synchronization of Neutral Stochastic Neural Networks with Mixed Time Delays

..................................................  WANG Tianbo, ZHOU Wuneng, ZHAO Dejun, ZHAO Shouwei 3366

pth Moment Exponential Synchronization of Impulsive Cohen-Grossberg Neural Networks with Variable Coefficients and Time-Varying Delays under Noise Perturbation .... QIN Fajin, YAO Xiaojie 3371

Exponential P-stability of Impulsive Stochastic Cohen-Grossberg Neural Networks with Variable Coefficients and Mixed Delays ...........................................  YAO Xiaojie, QIN Fajin 3377

Soft Sensing Modeling Based on Dynamic Fuzzy Neural Network for Penicillin Fermentation

..................................................  HUANG Yonghong, CHENG Hao, HUANG Li, SUN Lina 3383

Hopf Bifurcation for a Class of Neutral Three Neurons Network

..................................................  LIU Ming, ZHANG Chunrui, XU Xiaofeng 3389

Delay-Dependent Filtering of Static Neural Networks with Time-Varying Delay

..................................................  HUANG He, CHEN Xiaoping 3392

Modified Particle Swarm Optimization Based Algorithm for BP Neural Network for Measuring Aircraft Remaining Fuel Volume ...........................................  GAO Na, QU Zhihong 3398

Molten Steel Breakout Prediction Based on Genetic Algorithm and BP Neural Network in Continuous Casting Process .................  JI Cheng, CAI Zhaozhen, TAO Naibiao, YANG Jilin, ZHU Miaoyong 3402

Remote Synchronization of Coupled Dynamic Networks with Neutral-type Neural Network Nodes

..................................................  ZHANG Yijun, QU Yi 3407

基于在线学习和 ADRC 的发电机励磁与汽门系统 ANN 逆鲁棒控制方法
An Online Learning and Active Disturbance Rejection Control-based ANN-Inversion Robust Control Scheme of Excitation and Valve System for Turbogenerator

..................................................  XU Qinghong, HUANG Jiacai, LI HongSheng 3413

模糊系统与模糊控制 (Fuzzy Systems and Fuzzy Control)

Robust Stability Analysis of Uncertain Switching Fuzzy Systems with Time-varying Delays

..................................................  YU Guanjie, MAO Yanbing, ZHANG Hongbin, QIN Yan 3419

基于元胞自动机的城市混合路口交通流的研究
Research on Urban Mixed Intersections Traffic Flow Base on Cellular Automaton

..................................................  LIU Runjie, HE Dandan, SHEN Jinyuan, YANG Qiuchen 3423

自动倒车模糊样条插值控制
Fuzzy Spline Interpolative Control for Automatic Truck Backer-upper

..................................................  YANG Wenguang, ZHAO Hailiang, LIU Haisheng, GAO Yanhui 3428

Decentralized Control Design for Fuzzy Large-scale Systems: High-order Uncertainty Bound

..................................................  XIONG Dan, CHEN Y.H., ZHAO Han, HUANG Jin 3432

Local Stabilization for Continuous-time Takagi-Sugeno Fuzzy Model: A Bounded Control Method

..................................................  WANG Likui, YE Yuxia 3438

$H_{\infty}$ Dynamic Output Feedback Control for T-S Fuzzy Systems with Local Nonlinear Models

..................................................  DONG Jiuxiang, YANG Guang-Hong 3443

Adaptive Fuzzy Control of Nonlinear Systems Based on Multiple Inputs T-S Fuzzy Bilinear Model

..................................................  SHI Naizheng, LI Junmin, YANG Lunle 3449

非线性系统的自适应混合控制策略
Adaptive Hybrid Control of Nonlinear Systems ..........................  GUO Haigang, YANG Wancai 3455
电热连续结晶机的多变量模糊控制研究
On Multivariable Fuzzy Control of Electro-refining Successive Crystallization Machine
  ------------------------------ FENG Lihui, ZHANG Xiaoping, SHEN Qianghua 3460
Backstepping Adaptive Tracking Fuzzy Control for Ship Course Based on Compensated Tracking Errors
  ------------------------------ REN Junsheng, ZHANG Xianku 3464

基于进化-客观聚类的Mamdani模糊建模方法
A Mamdani Fuzzy Modeling Method via Evolution-Objective Cluster Analysis
  ------------------------------ WANG Na, HU Chaofang, SHI Wuxi 3470

一种混沌系统的模糊跟踪控制方法
A Fuzzy Tracking Control Scheme for Chaotic Systems
  ------------------------------ LIU Yuyan, ZHOU Shiliang 3476

一种混沌系统的模糊跟踪控制方法
A New Adaptive Fuzzy Sliding Mode Controller for Trajectory Tracking of MEMS Triaxial Gyroscope
  ------------------------------ FEI Juntao, WANG Shitao, HOU Shixi, HUA Mingang 3482

一种混沌系统的模糊跟踪控制方法
Construction and Optimization of Fuzzy Relation Matrices Model Based-on Semi-tensor Product
  ------------------------------ LV Hongli, CHENG Daizhan, FENG Jun-e, DUAN Peiyong 3488

一种混沌系统的模糊跟踪控制方法
A Novel Adaptive Fuzzy Generalized Predictive Control for a Class of Nonlinear Systems
  ------------------------------ SHI Wuxi, MA Yingxin, CHEN Yuchan, GUO Ziguang 3494

一种混沌系统的模糊跟踪控制方法
$H_\infty$ Consensus of Nonlinear Multi-agent Systems Based on T-S Fuzzy Models
  ------------------------------ ZHAO Yan, KARIMI Hamid Reza, LI Bing, GAO Huijun 3499

一种混沌系统的模糊跟踪控制方法
On Local Non-quadratic Guaranteed Cost Control for Continuous-time Takagi-Sugeno Models
  ------------------------------ PAN Juntao, XIN Yun-bing, GUERRA Thierry Marie, FEI Shumin, JAADARI Abdelhafidh 3505

一种混沌系统的模糊跟踪控制方法
Controller Design of Multi-variables Fuzzy Control Systems
  ------------------------------ GE Aidong, WANG Yuzhen, WEI Airong 3511

超磁致位移驱动器的模糊PID控制研究
Research of Fuzzy PID Control for Giant Magnetostrictive Actuator
  ------------------------------ ZHANG Fan, MA Zhixin, GAO Shang 3517

超磁致位移驱动器的模糊PID控制研究
基于模糊PID的酸洗温度控制系统设计
Design of the Picking Temperature Control System Based on Fuzzy-PID
  ------------------------------ HU Hailiu, FANG KangLing 3522

超磁致位移驱动器的模糊PID控制研究
基于模糊PID的酸洗温度控制系统设计
Disturbance Attenuation to T-S Fuzzy Model of Lurie System under Actuator Saturation
  ------------------------------ XIONG Ping, HE Hanlin, TU Jianjun 3525

超磁致位移驱动器的模糊PID控制研究
Disturbance Attenuation to T-S Fuzzy Model of Lurie System under Actuator Saturation
Delay-dependent Exponential Stabilization of Nonlinear Systems with Time Delay via Fuzzy Impulsive Control
  ------------------------------ PENG Shiguo 3530

超磁致位移驱动器的模糊PID控制研究
Delay-dependent Exponential Stabilization of Nonlinear Systems with Time Delay via Fuzzy Impulsive Control
SIRMs Connected Type-2 Fuzzy-Genetic Backing Up Control of the Truck-Trailer System
  ------------------------------ LI Chengdong, ZHANG Xiaolu, YI Jian-qiang 3536

风力发电系统的模糊极值搜索控制
Wind Power Generation System Using Fuzzy Extreme Seeking Control
  ------------------------------ CHEN Qi, WANG ShiHu, WANG LinGao 3542

风力发电系统的模糊极值搜索控制
Wind Power Generation System Using Fuzzy Extreme Seeking Control
基于模糊PI的四旋翼飞机姿态控制方法的研究
A Research on Quadrotor Attitude Control Based on Fuzzy-PI Method
  ------------------------------ CHENG SIYUAN, ZHANG Ting, CHANG Yanchun, CHEN Jianliang, SHU Junyi, LIU Jin 3548

基于模糊PI的四旋翼飞机姿态控制方法的研究
A Research on Quadrotor Attitude Control Based on Fuzzy-PI Method
Nonfragile $H_\infty$ Filtering for Discrete-time T-S Fuzzy Systems
  ------------------------------ DING Dawei, LI Xiaoli, SHI Zhiguo, GUO Xiang-Gui 3552
模糊控制在井下供电电源中的应用
Application of Fuzzy PID Controlling Technique in Downhole Power Supply
.......................... ZHANG Xinchao, LI Peng-Feng, CHEN Hongxin, HOU Zengguang 3558

直线倒立摆的模糊自适应 PID 数字控制
Self-adaptive Fuzzy PID Digital Control Method for Linear Inverted Pendulum ........................ LI Ming 3563

Further Study on Robust $H_\infty$ Control for Uncertain Fuzzy Neutral Systems with Distributed Delays
.......................... LI Yongmin, XIA Jianwei, CHEN Yonggang, BAO Leping 3568

机器人手臂在动态环境下的模糊 PID 控制
Fuzzy PID Control of Robot Arms in a Dynamic Environment
.......................... DING Zhenhuan, QIAN Kunhong, ZHU Feng, XIE Zhen 3574

模糊控制理论在专家系统中的应用

Robust Control for Discrete-Time Fuzzy Descriptor System with Time-Delay
.......................... HAN Chunsong, WU Chunfeng, WU Ligang, ZENG Qingshuang 3584

Dissipativity Analysis for Nonlinear Descriptor Time-Delay Systems
.......................... HAN Chunsong, WU Chunfeng, WU Ligang, ZENG Qingshuang 3590

模式识别与信号处理 (Pattern Recognition and Signal Processing)

HHT 在心音身份识别中的应用
Identity Recognition Using Heart Sound Based on HHT ........................ ZHOU Hongbiao 3596

New Color Filter Arrays and Performance Analysis ........ TIAN Qichuan, YANG Xiaofei, TIAN Maoxin 3601

雷达信号的 HHT 滤波方法研究
Radar Signal Filter Design Base on HHT Method ........................ LIU Lijun, SHEN Yi, WANG Yan 3611

矩形对称二维 FIR 滤波器约束最小二乘设计的高效算法
An Efficient Algorithm for Constrained Least-Square Design of Quadrantally Symmetric Two-Dimensional FIR Filters .......................... HONG Xiao-Ying, LAI Xiaoping, ZHAO Ruijie 3617

Transcale Fusion and Estimation of 2-D Multisensor Dynamic Systems
.......................... ZHAO Lin, JIA Yingmin, DU Junping, ZHANG Jun 3623

Improving Range Precision of LFMCW Radar by Spectrums Fusion of Multi-Section Co-Frequency Sinusoids ........................ XIAO WEI, TU Yaqing, SHEN Yanlin, ZHAN Qidong, ZHANG Lei 3629

基于双目立体视觉的人机交互式系统研究
Human-computer Interaction System Based on Binocular Stereo Vision
.......................... LIANG Guangjun, HU Yueming, LI Zhifu, WU Xuedong 3640

A Fast Registration Algorithm Based on Combination of SURF Descriptor and Energy Minimization for Detecting New-type Surface Mount Components
.......................... GAO Hongxia, CHEN Xinyuan, CHU Fuguo, MAI Qian 3645
Using MMI Criterion to Realize Language Identification of Minority Languages

CHENG Yang, YANG Jian, KUI Liping 3651

Cells Tracking Based on Camshift and Active Contour Model

LIU Ningxia, DING Xianting, SUN Mingzhu, ZHAO Xin, LU Guizhang 3656

Recursive Feature Elimination and Least Square Support Vector Machine Approaches to Operator Functional State Feature Selection and Classification

YIN Zhong, ZHANG Jianhua, XIA Jiajun 3662

Video Flame Detection Based on Color and Contour Features

HUANG Fuzhen, WU Haitao 3668

Feature Extraction Using Kernel Inverse FDA

SUN Zhongxi, SUN Changyin, WANG Zhenyu, YANG Wankou 3672

Semi-supervised Learning Using Random Subspace Based Linear Embedding Repulsion Graph

ZHOU Dake, ZHANG Changshuai 3676

On Vision Servo Tracking and Control Based on Multi-Cue Adaptive Integration

LI Jing, WANG Junzheng, WANG Lipeng 3681

Application of EEMD and Hilbert Marginal Spectrum in Speech Emotion Feature Extraction

XU Xiaoming 3708

A Method of Analyzing Image Distortion Based on Conjugate Nodal Plane

ZHANG Chuming, XIE Yongchun 3690

A Hierarchical Segmentation Image Method

WANG Yongxiong, SU Jianbo 3696

Data Processing Algorithm of MEMS Inclinometer Based on Improved Sage-Husa Adaptive Kalman Filter

BAI Yongqiang, HAN Junhui, QI Xianghai 3702

Discriminant Improved Local Tangent Space Alignment with Adaptively Weighted Complex Wavelet for Face Recognition

ZHANG Qiang, CAI Yunze, XU Xiaoming 3708

Trend Model Estimation of Stock Time Series Based on Outliers

ZHANG Qingjiang, GAN Ju, CHE Wengang 3714

A Nonlinear Signal Filtering Smoothing Algorithm for Ship Dynamic Positioning

XIONG Jianbin, WANG Qinruo, LIU Yijun, YE Baoyu, WU Haoyi 3718

L-Infinity Norm Minimization in the Multiview Triangulation

YANG Min 3723

The Corner Matching Based on Improved Singular Value Decomposition for Motion Detection

KANG Meng, GAN Minggang, CAI Tao 3727

Prosody Phrase Break Prediction in Vietnamese Using Decision Tree

KUI Liping, YANG Jian, CHENG Yang, HE Bin 3733
基于P300的脑机接口家电集成控制
Home Appliances Integrated Control System Based on P300 Brain-computer Interfaces
................................................................. ZOU Heliang, LI Yuanqing 3737

基于超声波传感器的脑控轮椅的辅助避障系统
An Assistive System Based on Ultrasonic Sensors for Brain-controlled Wheelchair to Avoid Obstacles
................................................................. LIU Tian, LI Yuanqing, WANG Hongtao 3741

结合Gabor重构和双谱分析的齿轮故障特征提取
Gear Fault Feature Extraction Based on the Combination of Gabor Reconstruction and Bispectral Analysis ....................................... ZHOU Yanbing, LI Yibing, XIN Weidong, HU Jiantao 3745

基于形态学和自适应滤波的心电信号基线矫正
Removal of Baseline Drift from ECG Signals Based on Morphology and Adaptive Filter ............................................... ZHAO Lulu, XU Lin, YANG Yuliang 3750

A Robust Converted Measurement Kalman Filter for Target Tracking
................................................................. JIAO Lianmeng, PAN Quan, FENG Xiaoxue, YANG Feng 3754

OTHR回波信号的多路径效应研究
On Multi-paths Effect of OTHR Return Signals .......... FENG Xiaoxue, LIANG Yan, JIAO Lianmeng 3759

Text Categorization Using SVM with Exponent Weighted ACO ................. LA Lei, GUO Qiao 3763

基于视觉的力检测研究进展
Development of Vision-Based Force Measurement .............................................. LI Fudong, XU De, SHI Yali, ZHANG Zhengtao 3769

三维人耳形变模型建模及识别方法研究
3D Ear Reconstruction and Identification Method Research Based on Morphable Model ............................................... WANG Shuai, MU Zhichun, LI Chen, ZHANG Feng 3774

基于局部特征匹配的三维人耳识别方法研究
Research of 3D Ear Recognition Based on Local Feature Matching ....... WEN Maorui, MU Zhichun 3779

A Quantitative Performance Evaluation Index for Image Fusion: Normalized Perception Mutual Information ..................................... YAN Liping, LIU Yulei, XIAO Bo, XIA Yuanqing, FU Mengyin 3783

情景感知系统的数据挖掘模型研究
Research on Data Mining Model Based on Context-Aware System ................................................................. YANG Wenyi, YE Dan, XIAO Bo, LIN Zhiqing, LU Yueming 3789

Real-Valued Sparse Representation Method for DOA Estimation with Uniform Linear Array ................................................................. DAI Jisheng, WU Zhen, TANG Zheng 3794

Optimal Post-filter Design in Oversampled Lapped Transforms ............... SHENG Yuxia, PAN Yu 3798

基于时频相关性的运动想象脑电特征提取方法
The Feature Extraction of Motor Imagery EEG Based on the Time-frequency Correction ................................................................. WANG Dongyang, JIN Jing, WANG Xing-yu 3803

旅游网络资源监控系统个性化检索子系统的研究与实现
Study and Implementation of Personalized Retrieve Subsystem in Internet Resource Monitoring System for Tourism ................................................................. DU Ming, DU Junping 3806

Cross Media Image Retrieval Based on SIFT and Temporal-Spatial Context Semantic ................................................................. HAN Pengcheng, DU Junping 3812

Ensemble Tracking Based on Randomized Trees ............ GU Xingfang, MAO Yao-bin, KONG Jianshou 3818

Recurrence Quantification Analysis of EEGs for Mental Fatigue Evaluation ................................................................. CHEN Lanlan, ZOU Junzhong, ZHANG Jian 3824
Eye Localization for Embedded System ........................ LEO Chao, SU Jianbo 3828
A Topic Detection Approach Based on Multi-level Clustering
................................................................. SONG Yang, DU Jumping, HOU Lisha 3834
Selection Algorithm of Gabor Kernel for Face Recognition ............... LI Xiaodong, YUAN Wei 3839
Sparse Coding Algorithm for the Visual Art Style Classification
................................................................. WAN Cuialan, PU Yuanyuan, LIU Yuqing, XU Dan 3844
The Realization of BCI Multi-dimension Control Based on Time-frequency Coding
.................................................. XU Peng, ZHANG YangSong, HU Jun, LI PeiYang, LIU TieJun, YAO Dezhong 3850
Robust Face Recognition via Automatic Grouping Sparse Representation
................................................................. XIAO Liang, DAI Bin, FANG Yuqiang 3853
An Ear Template Protection Method .................................. YUAN Li, MU Zhichun 3858
A Conceptual Semantic Similarity Calculation Model Based on Tourism Domain Ontology
................................................................. LI Zhaolong, DU Jumping 3863
Extended Target Tracking Using Star-Convex Model with Nonlinear Inequality Constraints
................................................................. SUN Lifan, LAN Jian, LI X. Rong 3869
Multi-scale Analysis of Single-point Wind Signals in Outdoor Near-surface Environments
................................................................. WANG Yang, MENG Qing-hao, LI Hui-xia, ZENG Ming 3880
A Matching Pursuit Based Similarity Measure for Face Recognition .......... CHEN Caikou, HOU Yu 3886
A Robust Face Recognition Approach Against Variant Illumination
................................................................. ZHOW Lijian, LIU Wanquan, WANG Ying 3891
Minority Identification for Imbalanced Dataset ........................ LIU Tong, LIANG Yongquan, NI Weijian 3897
SVM-based Land/Sea Clutter Identification with Multi-Features
................................................................. JIN Zhenlu, PAN Quan, LIANG Yan, CHENG Yongmei, ZHOW Wentian 3903
Intrinsic Fluctuations Can Reduce Trail-to-trail Variability in fNIRS Signal
................................................................. HU Xiaosu, HONG Keum-Shik, GE Shuzhi Sam 3909
Human Activity Recognition Based on Event Histogram and KL Transform
................................................................. YIN Jianqin, TIAN Guohui, WANG Xinran 3912
A Near-infrared Quality Assessment Method for Palm-dorsa Vein Image
................................................................. LI Qi, CUI Jianjiang, XUE Dingyu, JIA Xu 3917
Scientific Understanding of Visual Art ........................... ZHANG Yi, PU Yuanyuan, XU Dan 3922
Research on Intelligent Forecasting Method of Medium and Long-term Electricity Load

Research on the Recognition Method for Obscured Apple in Natural Environment

Off-line Signature Verification Based on Modified Dynamic Time Warping Algorithm

Locality-based Linear Discriminant Projection

Novel Pattern Recognition Algorithm for Real-time Measuring Coal Dust with Bimodal Peak Distribution

Mixed Filter for Noise Suppression in an Ultrasonic Image

A Video Tracking Algorithm for UAV Based on Differential Evolution Particle Filter

Retrieving Image via the Integration of Semantic Annotations and Visual Features

Coordinating Eye-Hand Action via Partially-Observable Markov Decision Processes

Content-based Image Clustering via Multi-view Visual Vocabularies

Telemetry Processing for 3D Visualization in the First Rendezvous and Docking Mission

Real-time Tracking of Underwater Moving Target

An Iterative Multi-stage MR Image Correction Method

A Graph-Based Segmentation Method for 3D Ultrasound Images

A Parameter-Automatically-Optimized Graph-based Segmentation Method for Breast Tumors in Ultrasound Images

A Domain Knowledge Uncertainty Reasoning Method Combining Bayesian Network with Conditional Event Algebra

Ultrasound Elasticity Imaging of Thyroid Using Analytic Minimization
A Comparative Study of Two Classes of Efficient Lattice Filters with Structure Robustness Consideration

Spatial-temporal Method for Image Denoising Based on BLS-GSM in Curvelet Transformation

A Fast and Effective Preprocessing Method for Video Copy Detection

Independence Verification for Reference Signal under Neck of Human Body in EEG Recordings

LI Gang, HE Xiongxiong, HUANG Chaogeng 4021
LIU Jinping, GUI Weihua, TANG Zhaohui, MU Xuemin, ZHU Jianyong 4027
LI Jun, HONG Shuang, MA Shuchao, LU Menghan 4033
HU Sanqing, CAO Yu, CHEN Shihui, KONG Wanzeng, ZHANG Jianhai, LI Xun, ZHANG Yanbin 4038

预测控制 (Predictive Control)

乙烯裂解炉的反应管出口温度的多模型预测控制方法研究

The Multi-model Predictive Control Method Research on the Outlet Temperature Control of Ethylene Cracking Furnace ........................ PANG Qiang, TANG Lixin, YUAN Mingzhe, WANG Xianpeng 4044

基于外时延BP神经网络和简化粒子群算法的过热蒸汽预测优化控制

Superheated Steam Temperature Predictive Optimal Control Based on External Time-Delay BP Neural Network and a Simpler PSO Algorithm ........................ MA Liangyu, GE Yinping 4050

多约束状态过程的区间预测控制

Zone Control with Model Predictive Control for Much Constrained States Process ........................ L.UO Xiong-lin, ZHOU Xiaolong, WANG Shubin, XU Feng 4062

多变量线性系统快速增量输出反馈预测控制

Fast Incremental Output Feedback Predictive Control for Multi-variables Linear Systems ........................ HE DeFeng 4091
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Control for Network Equipment via Adaptive Forecast-based Port Rate Regulation</td>
<td>FU Ling, XI Hongsheng, ZHU Li-yue, HU Han</td>
<td>4126</td>
</tr>
<tr>
<td>Constrained MPC of Uncertain Discrete-Time Markovian Jump Linear Systems</td>
<td>LU Jianbo, LI Dewei, XI Yugeng</td>
<td>4131</td>
</tr>
<tr>
<td>Based on Constrained MPC of Uncertain Discrete-Time Markovian Jump Linear Systems</td>
<td>LU Jianbo, LI Dewei, XI Yugeng</td>
<td>4131</td>
</tr>
<tr>
<td>Prediction of Stream Based on Discrete Differential Evolution Algorithm and On-line Least Squares Support Vector Machine</td>
<td>JIANG Lin, YIN Zhengwen, MAO Ying, XIANG Fenhong, ZHANG Yunsheng</td>
<td>4137</td>
</tr>
<tr>
<td>Model Predictive Control Based on Observer for Engine Idle Speed Control</td>
<td>LI Shu, LI Yanzhi, HU Yunfeng, DONG Xingwen</td>
<td>4142</td>
</tr>
<tr>
<td>Based on Velocity Variation Particle Swarm Optimization Based Predictive Control for Aero-engine</td>
<td>XIAO Lingfei, ZHU Yue, SHEN Tao</td>
<td>4148</td>
</tr>
<tr>
<td>Constrained Distributed Model Predictive Control Strategy Based on Agent Coordination</td>
<td>YANG Danxuan, WANG Mengling, SHI Hongbo</td>
<td>4152</td>
</tr>
<tr>
<td>A Research on Estimating the Birth Population with Time Varying Restriction Strategy</td>
<td>YUE Xiaoning</td>
<td>4156</td>
</tr>
<tr>
<td>On Parameter Design for Predictive Control with Adaptive Disturbance Model</td>
<td>WANG Wenbo, ZHAO Jun, XU Zuhua</td>
<td>4160</td>
</tr>
<tr>
<td>Self-tuning Weighted Measurement Fusion Predictive Control</td>
<td>LI Yun, HAO Gang, ZHAO Ming, XING Zong Xin, CUI Chong Xin, ZHANG Yu Ru</td>
<td>4166</td>
</tr>
<tr>
<td>Predictive Control Algorithm Based on Type-2 T-S Fuzzy Model and Chaotic Particle Swarm Optimization Algorithm</td>
<td>ZHANG Enkui, SU Baili, ZHANG Xianxia</td>
<td>4172</td>
</tr>
<tr>
<td>Model Predictive Control of 2-axis Solar Tracker for Solar Energy System</td>
<td>WANG Wei, LI Shaoyuan</td>
<td>4177</td>
</tr>
<tr>
<td>Online Predictive Control Based Trajectory Optimization of Tethered Foils for Wind Energy Generator</td>
<td>SUN Mingwei, LIU Donghui, QUAN Sheng, CHEN Zengqiang</td>
<td>4183</td>
</tr>
<tr>
<td>A Comparative Study on Output Feedback MPC for Constrained LPV Systems</td>
<td>DING Baocang, XI Yugeng, PING Xubin</td>
<td>4189</td>
</tr>
<tr>
<td>A General Reformulation of Output Feedback MPC for Constrained LPV Systems</td>
<td>DING Baocang, PING Xubin, XI Yugeng</td>
<td>4195</td>
</tr>
<tr>
<td>Look-ahead Path Information Based Receding Horizon Control for Backing-up Tractor-Trailer Systems</td>
<td>BIN Yang, SHIM Taehyun, FENG Nenglian</td>
<td>4201</td>
</tr>
<tr>
<td>A Multi-objective Predictive Control Method for Model Mismatch</td>
<td>SHI Hongyan, WANG Liang, WANG Guo-gang</td>
<td>4207</td>
</tr>
<tr>
<td>Stabilized Neighborhood Optimization Based Distributed Model Predictive Control for Distributed System</td>
<td>ZHENG Yi, LI Shaoyuan, WU Jie, ZHANG Xianxia</td>
<td>4212</td>
</tr>
<tr>
<td>The Predictive Control for a Class of Nonlinear Systems Based on Dynamic Approximate Hammerstein Model</td>
<td>ZHU Hongyan, WANG Shigang, WANG Ying, LIU Siming</td>
<td>4218</td>
</tr>
<tr>
<td>For the Class of Nonlinear Systems Based on Dynamic Approximate Hammerstein Model</td>
<td>ZHU Hongyan, WANG Shigang, WANG Ying, LIU Siming</td>
<td>4218</td>
</tr>
<tr>
<td>Vehicle Yaw Stability Control Based on MPC</td>
<td>GUO Hongyan, ZHANG Huayu, CHEN Hong, LIU Zhihai</td>
<td>4222</td>
</tr>
</tbody>
</table>
A Predictive Functional Control Algorithm for Multivariable Systems with Time-delay ................................. ZHOU Lei, FEI Shumin, HUANG Jiacai, ZHAI Junyong 4228
显式模型预测控制综述  
A Review of Explicit Model Predictive Control ................................. ZHANG Ju, WAN senlin 4233
PSS 并联微动平台的滑模预测控制  
Sliding Mode Predictive Control of PSS Parallel Micro-stage  
................................................................. SHEN Hao, WANG Xin, WANG Jun 4239
Prediction of Chaotic Time Series Based on Incremental Method for Bayesian Network Learning  
................................................................. LI Chunying, YANG Youlong, ZHANG Hengwei 4245
基于 LabView FPGA 模块的三相逆变器电流预测控制  
Current Predictive Control for Three-Phase Voltage Source Inverter Based on Labview FPGA Module  
................................................................. XUE Wendong, LI Po, WANG Zhi, ZHONG Qiang, HONG Yongqiang 4250
Predictive Compensation for Networked Cascade Control Systems with Uncertainties  
................................................................. YANG Hongguang, KANG Yu, KUANG Sen 4256

运动控制 (Motion Control)

基于微分几何的无轴承同步磁阻电机解耦控制  
The Decoupling Control of Bearingless Synchronous Reluctance Motor Based on Differential Geometry  
................................................................. CAO Li, FENG Dongmei, DIAO Xiaoyan, ZHU Huangqiu 4261
Output Feedback Stabilization Control for Underactuated Mechanical Systems  
................................................................. XU Liang, HU Qinglei, MA Guangfu 4267
The Improved EKF Velocity Estimation Algorithm for PMSM and Experimental Assessment  
................................................................. HE Dongwei, PENG Xianfu, JIANG Xuecheng, ZHOU Jiehua 4273

基于滑道式 UUV 收放装置的波浪补偿控制技术研究  
On Wave Compensation Control Technology of Stinger-principle-based Launch and Recovery Device for UUV  
................................................................. YAN Zheping, SUN Haitao, ZHANG Honghan, LI Malan, DENG Lirong 4278

基于虚拟向导的自主水下航行器鲁棒自适应路径跟踪控制  
Robust Adaptive Path Following Control for Autonomous Underwater Vehicles with Virtual Guidance  
................................................................. WANG Hongjian, CHEN Ziyin, BIAN Xinqian, JIA Heming, XU Guozhuo 4283

The Identification Model for Ship Motion PID Control Using Wavelet Neural Network  
................................................................. ZHANG Wenjun, LIU Zhengjiang, ZHU Jinshan 4289

A New Flux-Weakening Control Strategy Considering Voltage Saturation for IPMSM Drives  
................................................................. WANG Aimeng, JIA Xingwang, ZHANG Li 4295

基于 CCC 路径规划的撞击时间与撞击角度控制  
Impact Time and Impact Angle Control Based on CCC Path Planning  
................................................................. ZHANG Youan, ZHANG You-gen, LI Heng 4300

Decoupling Control for Nonlinear Models of 4WS Vehicles with Varying Longitudinal Velocity Performance  
................................................................. LI Mingxing, JIA Yingmin, DU Junping, ZHANG Jun 4306

欠驱动船舶的定点镇定与航迹控制研究综述  
Suvery on Control of Underactuated Ships: Point Stabilization and Path Tracking  
................................................................. XIANG Xianbo, XU Guohua 4312

Application of Cyclic Pursuit Strategy to Formation Reconfiguration of Spacecraft Clusters  
................................................................. HU Min, ZENG Guoqiang 4318
An Autonomously Hopping-off Micro Raised-flapping-wing Air Vehicle

GUO Jianglong, CHEN Shuping, LI Long, YUAN Zhongqiu, WANG Yang, MA Mingxu 4322

基于扰动观测器的自主车纵向速度控制器设计与实验

Design and Experiments of ALV Longitudinal Speed Controllers Based on A Disturbance Observer

WANG Jian, SUN Zhenping, XU Xin, LIU Daxue, WU Jun 4328

Optimal Configuration Design of Redundant Flywheels and Hardware-in-the-loop Simulation

TANG Shengyong, WU Jinjie, LIU Kun, ZHANG Yulin 4334

高超声速飞行器的再入非线性鲁棒控制

A Nonlinear Robust Control Method for Reentry Hypersonic Vehicles 4344

基于旋转变压器的伺服电机位置及速度观测器设计

Design of Angular Position and Velocity Observer for Servo Motors with Resolvers

WU Zhong, WU Yuntao 4350

Optimized Model Reference Adaptive Motion Control of Robot Arms with Finite Time Tracking

YANG Chenguang, MA Hongbin, FU Mengyin, SMITH Alex 4356

高精度跟踪系统中引入力矩修正的多闭环控制策略

Multi-closed Loops Strategy Combined with Torque Correction for High Precision Tracking System

LI Jinying, FU Chengyu, XIA Yunxia 4361

永磁同步直线电机矢量控制系统中复合模糊免疫 PID 控制器设计

The CFI-PID Controller Design of PMLSM Vector Control System

XU Zhishu, CAI Tao, WANG GuangHui, XU Xing 4366

不对称欠驱动水面船舶的全局渐近镇定与跟踪

Global Asymptotic Stabilization and Tracking of Asymmetrical Underactuated Surface Vessels

SUN Hailing, MA Baoli 4372

Model Based Control of Micro-positioning Stages

TAN Yonghong, XIE Yangqiu, DONG Ruili, HE Hong 4378

Control Testbed Design for a Miniature Autonomous Helicopter

ZHOU Lingkang, CAO Li, WANG Yi, DIAO Xiaoyan, ZHU Huangqiu 4339

基于模糊小脑模型神经网络的船舶航速控制方法研究

Ship Speed Control Method Based on Fuzzy-Cerebellar Model Articulation Controller

WANG Yuchao, FU Huixuan, LIU Fanning 4396

Adaptive Neural Control of Wheeled Inverted Pendulum Models

YANG Chenguang, LI Zhijun 4400

Practical Stabilization of Uncertain Nonholonomic Mobile Robots Based on Visual Servoing Model with Uncalibrated Camera Parameters

CHEN Hua, WANG Chaoli, LI Baojun, WANG Baolei 4406

基于永磁同步电机调速系统的模型预测控制方法

Model Predictive Control Method Based on Permanent Magnet Synchronous Motor Speed Regulation System

FAN Zhonghua, LI Shihua 4412

平流层飞艇平面几何路径跟踪控制

Planar Geometric Path Following Control for Stratospheric Airship 4418
Stochastic Source Seeking with Tuning of Forward Velocity
LIU Shujun, FRIHAUF Paul, KRSTIC Miroslav 4424

State Estimation of Bearingless Permanent Magnet Synchronous Motor Using Improved UKF
XU Bo, ZHU Huangqiu, JI Wei 4430

Speed Sensorless Control of Bearingless Permanent Magnet Synchronous Motor
XU Bo, JI Wei, ZHU Huangqiu 4434

Acceleration Feedback Control of a Five-bar Parallel Manipulator
SHANG Weiwei, CONG Shuang, JIANG Shilong 4439

基于 GPS 导航的无人测绘船控制策略的研究
LI Xin, JIA Guixi, WEN Shiyun, FENG Jiankui, SONG Jiatai 4445

基于自适应动态碰撞检测的工业机器人运动规划算法研究
JIN Mingjie, LOU Yunjiang, LIU Guanfeng, LING Qiang 4450

Global Sliding Mode Based Trajectory Tracking Control for Underactuated Surface Vessels with Uncertain Dynamics
MENG Wei, GUO Chen, LIU Yang, ZHANG Shanshan 4456

Robust Control of Quadrotor Unmanned Air Vehicles
BAI Yongqiang, LIU Hao, SHI Zongying, ZHONG Yisheng 4462

离轴式拖车移动机器人的直线路径跟踪控制
LIU Yu, MA Baoli 4468

AUV 水下对接导航定位技术研究
ZHAO Shen, QIAO Chun-jie, WANG Yueke 4474

Reactive Navigation of Nonholonomic Mobile Robots in Dynamic Uncertain Environments with Moving and Deforming Obstacles
MATVEEV Alexey, WANG Chao, SAVKIN Andrey 4480

A General Motion Simulation Description of Multi-axis CNC Machine Tools
BU Ping, LI Jiangang, HUANG Liang 4486

轮式移动机器人位置镇定和跟踪的统一控制
LIANG Guangye, YE WenJun, XIE Qing 4496

吊车系统的输入整形防摆控制器设计及鲁棒性分析
LIANG Yanyang, XIONG Wei 4502

通用型运动体控制虚拟现实仿真平台的设计与实现
MENG Yanpeng, WANG Yong, DAI Ye, WU Xiaojin, ZHOU Jianliang 4507

Sensorless Vector Control of PMSM Using Sliding Mode Observer and Fractional-Order Phase-Locked Loop
HUANG Jiacai, LI HongSheng, XU Qinghong, LIU Di 4513

B-spline-based Neuro-Fuzzy Velocity Field Navigation and Control for a Nonholonomic Mobile Robot
YE WenJun 4519

Using in Vivo Subject-Specific Musculotendon Parameters to Investigate Control Strategy Changes After Stroke: an EMG-Driven Model of Elbow Joint
LI Le, MAO Yurong, LIU Peng, HUANG Dongfeng 4525
一种克服转速环采样时滞的永磁同步电机控制方法
A Robust Control Scheme for a Permanent Magnet Synchronous Motor with Speed Loop Sample Delay

非线性建模和动态仿真实现
Non-linear Modeling and Dynamic Simulation of 8/6 Poles SRM

控制设计方法 (Control Design)

输入受限下双励磁同步发电机组哈密顿控制
Bounded Hamiltonian Control of Dual-Excited Synchronous Generators

无轴承无刷直流电机悬浮原理及控制系统设计
Suspension Principle and Control System Design for Bearingless Brushless DC Motor

基于 dSPACE 的飞行器姿态控制半实物仿真研究
Research on Hardware-in-the-loop Simulation for Attitude Control of Vehicles with dSPACE Emulator

RC 电路系统的自抗扰控制
Active Disturbance Rejection Controller for RC Circuit System

循环流化床燃烧系统的 PID 控制器设计
Design of the PID Controller for Circulating Fluidized Bed Boiler Combustion System

自抗扰控制与广义预测控制的性能鲁棒性比较研究
Performance Robustness Comparison of ADRC and GPC

耦合不确定的 TC 控制
TC on Uncertain Coupling

基于积分时变滑模的冷带轧机速度跟踪自适应反步控制
Speed Tracking Adaptive Backstepping Control of Cold Strip Rolling Mill Based on Integral and Time-Varying Sliding Mode

The Application of GPS/SINS Integration Based on Kalman Filter

Integrated Missile Guidance and Control Using Adaptive Sliding Mode Approach

Robust Formation Flight Control System Design for Multi-UAVs

Output-Feedback Stabilization for a Class of Nonlinear Systems with Unknown Control Coefficients

Integrated Missile Guidance and Control Using Adaptive Sliding Mode Approach
基于 DRFNN 逆的交流主动磁轴承解耦控制
Decoupling Control of AC Active Magnetic Bearings Based on DRFNN Inverse
TAO Tao, DIAO Xiaoyan, ZHANG Weiyu, YANG Yifei, ZHU Huangqiu 4628

Generalized Eigenvalue Minimization Used in Robust Temperature Control Design for Air-handling Units
HUANG Gongsheng, ZHOU Pei 4634

四旋翼无人机驱动器的控制研究
Speed Controller Design for the Actuators of a Quadrotor Unmanned Aerial Vehicle
HUANG Guoping, XIAN Bin, ZENG Wei, DIAO Chen, GUO Fang 4640

车辆稳定控制中的合力计算与分配方法研究
Research on Force Calculation and Distribution in Vehicle Stability Control
LIU Yue, FANG Min, WANG Hongbo 4652

基于弱控制 Lyapunov 函数的视觉伺服系统镇定控制器设计
Weak Control Lyapunov Functions-Based Stabilization Controllers Design of Visual Servo Systems
FU Maiomiao, HE DeFeng, XU Jianming, XING Kexin 4694

挠性复杂卫星姿态快速机动下的自适应变结构控制
Adaptive Variable Structure Control of Fast Maneuver of Attitude for the Complex Flexible Satellite
SHEN Shaoping 4728
### Improvement on MISC Computer Memory Architecture Based on Forth

**Zhang Lieping, Li Xiao-jing** 4734

### Integrated Guidance and Control Based on Backstepping and High-Gain Observers

**Yuan Binfeng, Yan Han, Ji Haibo** 4739

### Robust Inversion Feedforward and $H_{\infty}$ Mixed Sensitivity Feedback Based 2DOF MIMO Control

**Peng Chao, Zou Qingze, Zou Jianxiao, Li Kai** 4745

### On Stability Augmentation for Camera Optical Axis Based on Attitude of Air Ship

**Hu Wei, Zhang Hongmei, Liu Gui** 4750

### A PLC-Based Fuzzy PID Controller for Pressure Control in Coke-oven

**Chen Wei, Xing Meixiang, Fang Kangling** 4754

### IMC-based Model Reference Adaptive Control for IPM Machines

**Zhou Ronghui, Zhao Tong, Li Yong, Shen Xiangming** 4759

### Revisit of First Order Unstable Time Delay Systems with P and PI Controllers: A Digital Control Approach

**Leng Tongtong, Yan Peng** 4764

### A Robust Composite Control for Basic DC-DC Converters

**Feng Chieh-chuan** 4769

### Mixed $H_2 = H_1$ Control Design for Wind Turbine System with Pole Placement Constraints

**Bakka Tore, Karimi Hamid Reza** 4775

### Saturating Controller Design of UAVs Based on Markovian Jump Model

**Fang Chengquan, Zhu Jin, Wang Linpeng, Xi Hongsheng** 4781

### Disturbance Adaptive Control for an Underactuated Spherical Robot Based on Hierarchical Sliding-mode Technology

**Yue Ming, Liu Baoyin** 4787

### Nonlinear Boundary Tracking Control for Mobile Robot

**SUN Tairen, LI Liangliang, HE Yuebang** 4792

### Differential Magnetic Localization Method for the Microrobot with Two Cylindrical Permanent Magnets

**Xu Jiansheng, SONG Tao** 4798

### A Clustering Based Hierarchical Image Feature Location Method for Complex Shaped Work-piece

**Qi Yuhuan, JING Fengshui, TAN Min, Diao Wenqiao** 4803

### Combining Features for Adaptive Terrain Classification Based on ART Neural Network

**Xu Zhangjian, SONG Meng, LI Shuhun, SUN Fengchi** 4808

### Subsumption Architecture Based Mobile Robot Gas Source Localization in Time-Variant-Airflow Environment

**Jiang Ping, Zhang Yong** 4814

### Velocity Variation Space Based Multiple Agents Motion Planning for Mobile Robot

**Huang Jiawei, ZHONG Xunyu, PENG Xiafu** 4820

### Motion Planning of Free-Floating Space Robot Based on Gauss Pseudo-spectral Method

**LIU Haitao, YANG Leping, ZHANG Qingbin, ZHU Yanwei, REN Xianhai** 4825

### Depth Estimation from a Single Image and Method of Manufacturing 3D Photo

**CHEN Xinwei, LIU Jingtai, SHI Tao, QIAN Hall, ZHANG Sen** 4830
Temporal Attention Control System for Multiple Objects Tracking  
  ZANG Xuelian, BRSCIC Drazen, WANG Wei, KUHNLENZ Kolja 4836

Robust Backstepping Tracking Control for Mobile Robots  
  MA Huichao, LI Shurong, CHENG Haiyang 4842

Behavior Based Rescue Robot Audio Navigation and Obstacle Avoidance  
  LIU Zuojun, LI Guangyao, YANG Peng, CHEN Chu, LIU Feng 4847

Realization and Kinematic Analysis of A Bionic Hopping Robot  
  CHEN Shuping, YUAN Zhongqiu, LIU Tao, DENG Xun, SHI Lichun, GUO Jianglong, MA Mingxu, DI Junping 4852

Different-Level Simultaneous Resolution of Robot Redundancy with End-Effector Path Tracked and with Joint Velocity and Acceleration Both Minimized  
  ZHANG Yunong, LI Kene, GUO Dongsheng, CAI Binghuang 4856

四旋翼无人机自主控制系统研究  
  ZHANG Yao, XIAN Bin, YIN Qiang, LIU Yang, WANG Fu 4862

无人机跟踪地面非合作目标的分段引导与控制方法  
  WANG Xun, KONG Weiwei, ZHANG Daibing, ZHU Hua-yong 4868

基于单目视觉的移动机器人系统物体捡拾作业控制  
  YANG Tangwen, HAN Jianda, QIN Yong, RUAN Qiuqi, SUN Zengqi 4878

一种基于高分辨率卫星地图的建筑物轮廓自动提取方法  
  LI Haifeng, XIANG Jilei, LIU Jingtai 4884

WSN 中基于移动机器人的 V-BLAST 接收  
  CHEN Wenbai, LI Wei, ZHANG Xiaopin 4890

基于 MPF 的分布式移动机器人与无线传感器节点同时定位算法  
  WU Xiaolin, YUAN Jing, SUN Fengchi, CHEN Huan, HUANG Shuzi 4904

一种多机器人协作 SLAM 方法  
  LEI Jun, LUO Min, CHEN Zhi Chu 4916
Based on multi-sensor information fusion, the obstacle detection algorithm for mobile robots was studied.

Obstacle Detection Algorithm for Mobile Robot Based on Multi-sensor
LIU Haibo, DONG Yu-jie, HUANGFU Cai-hong, WANG Fuzhong 4920

Vibration Damping in Manipulation of Deformable Linear Objects Using Sliding Mode Control
DING Feng, HUANG Jian, WANG Yongji, MAO Lifei 4924

Real-Time Map Building and Autonomous Motion Planning for Unmanned Ground Vehicles
JIANG Nan, LIU Yisha, ZHUANG Yan, WANG Wei 4930

An Autonomous Target-Tracking Algorithm Based on Visual Feature
ZHAO Kun, SUN Fengchi, YUAN Jing 4936

Double Time-Scale Flight Controller Design for a Small-Scale Unmanned Helicopter
SUN Xiuyun, FANG Yongchun, SUN Ning 4942

Semantic Service Modeling and Automatic Service Discovery for Component-based Robotic System
QIAN Kun, MA Xudong, FANG Fang, SHU Chaoyang 4948

SAM-FNN Training Based on Particle Filter
DONG Guocheng, LIU Hongyun, ZHOU Biao-zhuang, CUI Yan, SONG Pei 4954

Switched Adaptive Control for a Class of Robot Manipulators
NIU Ruishan, WANG Xia, ZHAO Jun, ZHOU Chao 4974

Design a Combined Active and Passive Robotic System for Laser-based Therapies
LIU Xin-ge 4979

A Practical Service Robot System for Greeting Guests
WANG Haixia, ZHANG Fuyou, FAN Xianghua, LU Xiao 4997

Development of the Ground Control Station for a Quadrotor Unmanned Aerial Vehicle Based on Java Programming
LIU Yang, XIAN Bin, WANG Fu, LIU Shibo, GU Xun 5002

Hardware-in-Loop Simulation Testbed for Quadrotor Aerial Vehicles
ZHAO Bo, XIAN Bin, ZHANG Yao, ZENG Wei, DIAO Chen 5008
Path Planning in Environment with Moving Obstacles for Mobile Robot

Mechanism Research of 3D Printing Based on Virtual Running

Stability Analysis on Bionic Quadruped Robot Based on the Geometric Model

The Microscopic Penetration System Driven by the Ultrasonic Vibration of the Piezoelectric Ceramics

Multiple Features Fusion Targets Tracking Method Based on Particle Filter

Effectiveness of Infotaxis Algorithm for Searching in Dilute Conditions

A Novel Target Shape Recognition Method for Aerial Robot Based on Minimum Circle-Cover Matching

Research on Behavior Planning Model of Lunar Rover Based-on Situation Calculus

Modeling and Analysis of Wheel Mobile Robot for High-speed Precise Drift

Mission Planning Technology of Mobile Robots Based on SD*Lite

Learning from Stable Adaptive NN Output Feedback Control of Uncertain Ship Dynamics

Position Estimation for Manipulators Based on Multisensor Fusion

UKF Based Moving Target Localizing and Tracking Method in 3D Environments

A New MCMC Algorithm Fusion with Distributed Perception for Mobile Robot Self-localization

Design and Co-simulation for Tomato Harvesting Robots
Feature Completeness in Visual Servoing ............................. MA ZHE, SU Jianbo 5109
一种改进的 Sage-Husa 自适应滤波算法
An Improved Sage-Husa Adaptive Filtering Algorithm ...... ZHU Zheng, LIU Shiron, ZHANG Botao 5113
一种多机器人追捕 - 逃避问题中的动态路径规划方法
A Dynamic Path Planning in Multi-Robots Pursuit-Evasion Problem
.................................................. PENG Gang, ZHAO Jin, HUANG Xin-han, XIA Chun 5118
Attitude Stabilization of a Quad-rotor UAV Based on Rotor Speed Sensing with Accelerometer Data
Estimation via Kalman Filtering ........................................ GONZALEZ Ivan 5123
A New Method to Design Robotic Hand Based on Cross-Axis Flexural Pivots
.......................................................... ZHENG Yi, LI Yangmin 5129
Implementation of Obstacle Avoidance Technique for Indoor Coaxial Rotorcraft with Scanning Laser
Range Finder .................................................. LUO DeLin, WANG Fei, WANG Biao, CHEN Ben M. 5135
Cubature MCL: 基于 Cubature 粒子滤波的移动机器人蒙特卡洛定位算法
Cubature MCL: Mobile Robot Monte Carlo Localization Based on Cubature Particle Filter
.......................................................... LI Qingling, SONG Yu 5141
Vision-Based Triangular Formation Control of Mobile Robots ......... COOK Joshua, HU Guoqiang 5146
基于机器视觉的板-球迷宫控制系统研究
On Machine Vision Based Ball and Plate Labyrinth System
........................................................... LI Yuan, WANG Qinglin, LIN Qinwu, DENG Nanhua 5152
基于模糊神经网络的上肢康复机器人增强学习控制
Reinforcement Learning Adaptive Control for Upper Limb Rehabilitation Robot Based on Fuzzy Neural
Network ...................................................... MENG Fancheng, DAI Yaping 5157
Uncalibrated Dynamic Eye-in-hand Visual Tracking of Robots by Observing Unknown Static Objects
........................................................... LIANG Xinwu, WANG Hesheng, CHEN Weidong 5162
Accuracy Synthesis of a 3-RPS Parallel Robot Based on Manufacturing Costs
.......................................................... YAO Taike, ZHOU Xi, ZHOU Feng, ZHANG Limin, WANG Yong 5168
微型扑翼飞行器系统设计与实现
The Design and Implementation of Micro Flapping Wing Air Vehicle .......... JIANG Zhe, SU Gang 5173
Bias Analysis and Reduction for Underwater Localization Problem
........................................................... WANG Peng, JI Yiming, ABHAYAPALA Thushara 5178
基于柔性铰链缩小机构的三维微动平台的研究
Study on Micro-displacement Worktable Based on the Compliant Mechanism of Motion Reduction
........................................................... WANG Shuai, SU Gang 5183

故障诊断与可靠控制 (Fault Diagnosis and Reliable Control)
水下航行体螺旋桨的鲁棒故障诊断
Thruster Robust Fault Diagnosis of Underwater Vehicle .................. WANG Jianguo 5187
基于滑模观测器的有限时间航天器飞轮故障重构
Finite Time Reaction Wheel Fault Reconstruction Based on Slide Mode Observer for Spacecraft
........................................................... ZHANG Ai-hua, HU Qinglei, HUO Xing, XIAO Bing 5192
Fault-tolerant $H_{\infty}$ Filter Designs of Linear Systems with Unparametrizable Bias-sensor Faults
........................................................... JIN Xiao-zheng, CHE Weiwei 5198
Adaptive Fault-tolerant Tracking Control for a Class of Time-delayed Chaotic Systems with Saturation Input Containing Sector ........................................ SHEN Qikun, JIANG Bin, ZHANG Tianping 5204
Active Robust Fault-tolerant $H_\infty$ Control Design Based on an Adaptive Fault Observer .................................................. LIU Lijun, SHEN Yi, ZHANG Miao 5209
Model-based Sensor Fault Detection and Isolation in Gas Turbine ................................................................. ZHOU Jian, MATHEWS H. Kirk, BONANNI PIERINO, SHI Ruijie 5215
A Design Approach of Multi-observer-based Multi-fault Estimation for Over-actuated Systems ................................... YIN Zhixia, YANG Pu, JIANG Bin, HUA Lianghao 5219
基于人工智能故障诊断发展趋势 The Developing Tendency of the Fault Diagnoses Based on Artificial Intelligence ................................................. TANG Hongcheng 5225
电能质量扰动信号相空间重构图像的主成分分析与识别方法 Principal Component Analysis and Identification of Power Quality Disturbance Signal Phase Space Reconstructed Images ........ LUAN Jiayu, BI GuiHong, WANG Hairui, WANG Xi, CHEN Shilong 5229
具有执行器失效的网络控制系统容错控制 Fault Tolerant Control of Networked Control System with the Failure Actuator ..................... WEN Liyan, PENG Chen, XUAN Hui-Ming, ZHANG Jin 5234
电动轮汽车测试系统中基于模糊Petri网的故障诊断 A Method for Fault Diagnosis in Test System of Electric Motor Wheels Based on Fuzzy Petri Net ........................................ JIN Tianxu, ZHANG Ge 5240
A Novel and Simple Design Scheme to Fault Detector for Linear Systems Using Compensator ................................. ZHANG Jilie, ZHANG Huaguang, WANG Junyi, ZHAO Mo 5245
On Fault Line Detection in Neutral Grounding System via Arc-suppression Coil Based on Fuzzy Theory ..................... LI Bo 5250
基于模糊C均值多分类器组的轴承故障诊断方法 Bearing Fault Diagnosis Based on Multiple Classifiers Group of Funzy C Means ................................................ LI Xinbin, SUN Xi, CHEN Yunqiang 5254
$H_\infty$ Fuzzy Filter Design for Singular Nonlinear Stochastic Systems with Time-delay .................................. ZHANG Aiqing, FANG Huajing 5260
执行器故障非线性时滞系统鲁棒 $H_\infty$ 容错控制 Robust $H_\infty$ Fault-tolerant Control for Nonlinear Time-delay Systems Against Actuator Fault .................................. LI Na, LUO Xiaoyuan, XI Kui, GUAN Xingting 5265
Run-to-Run Fault Detection Based on ARX Model and PCA for Semiconductor Manufacturing Processes ................. WANG Yan, ZHENG Ying, XU Chengjie 5271
冗余结构的共因失效计算模型研究 Common Cause Failure Model of Redundant Structure ........ JIN Jianghong, ZHANG Shoutang, HU Bin 5275
Simplification of Raw Data Set During the Fault Detection Process .............................................................. LI Jinna, LI Yuan, WU Huiying, ZHANG Qingling 5280
Reconfigurability Analysis for Satellite Attitude Control System ............................................................................ FAN Wen, CHENG Yuehua, JIANG Bin, LIU Wenjing 5285
Fault Diagnosis of Wind Turbine Rolling Bearing Based on Wavelet and Hilbert Transforms .................................. ZHENG Xia Xia, XU Haosong 5290
基于观测器的开架式水下机器人推力器故障诊断和管理 Observer Based Thrusters Fault Diagnosis and Management for the Open-frame Underwater Robot ................................. HUANG Hai, WAN Lei, PANG Yongjie 5294
Based on fuzzy clustering, data-driven fault diagnosis techniques in practice have several issues and solutions. ZHOU Xiaopeng, QI Ruiyun

Adaptive failure compensation design for hypersonic vehicle based on dynamic surface backstepping control. HUANG Yuhai, QI Ruiyun, JIANG Bin, TAO Gang

Fault estimation for linear continuous-time systems with actuator failures. LIU Ming, KARIMI Hamid Reza

Fault pattern recognition using dynamic independent component based sparse kernel classifier. DENG Xiaogang, TIAN Xue-Min

Quantitative detection for actuator faults of nonlinear systems. KANG Haobo, MA Hongjun, YANG Guang-Hong

Evidence generating methods in fusion diagnosis of vibration isolation system. LIANG Qing, MA Liyao, YANG Chengpeng, KE Xiaolu, WANG Yong

On the motor fault diagnosis based on wavelet transform and ANN. WANG Wancheng, HUANG Qin, ZHANG Yuan

Robust reliable control design for near space hypersonic vehicle dynamical systems. GAO Zhifeng, QIAN Moshu, LIN Jinxing

Time-frequent feature analysis of gearbox vibration with shaft angle error. XIN Weidong, LIU Yibing, LI Zhuang

Process monitoring and fault diagnosis based on a hybrid modeling technique. SUN Dong, LU Ningyun, GUO YAN, JIANG Bin

Tiny fault diagnosis for bilinear systems with single input. YU Yang, LI Juan, LI Sheng-Duo

A stable fault detection observer design in finite frequency domain. CHEN Jianliang, CAO Yong-Yan

Comparison of magnetic flux leakage (MFL) and acoustic emission (AE) techniques in corrosion inspection for pressure pipelines. SUN Li Ying, LI Yi Bo, SUN Libo, LI Lingge

Research of fault diagnosis for three-phase inverter based on the geometric space theory. HOU Yan-dong, JIN Yong, CHENG Qianshuai

On designing fault detection filter for discrete-time nonlinear Markovian jump systems with missing measurements. LI Yueyang, ZHONG Malying, YUAN Shuai

FTC of flying wing UAV with sliding mode and control allocation. LI Hongzeng, HU Changhua, HE Huafeng, KONG Xiangyu, MA Qingliang

An integrated algorithm on disturbance rejection and fault diagnosis for a class of stochastic distribution systems. ZHANG Yumin, LIU Yunlong, LIU JIA

Adaptive fault detection and diagnosis for a class of nonlinear uncertain systems with on-line learning. CAO Songyin, YANG JIAN, LI Xiaofeng
Reliable Analysis of Monitoring Power and Power Interruption Controller in Underground Refuge System
MA Fengying 5406

Research of Feature Extraction and Fault Diagnosis for Sensor Signal
SHAN Yugang, HU Wei-Guo, WANG Hong, YUAN Jie 5412

Condition-based Maintenance for Multi-Component Systems Using Proportional Hazards Model
GE En-shun, LI Qing-min, LI Hua 5418

A New Real-time Sensor Drift Performance Degradation Monitor Method for Non-linear Systems Based on Particle Filter
LIU Bin, XU Zhengguo 5423

Design and Implementation of a Fault Diagnosis System
LEI Jinhong, NIU Junying, DENG Chen 5427

Communications Network Systems

An Optimization Dispatch Strategy of MVB Master Frames Based on Multiple Mechanism
DENG Jiang-Ming, CHEN Te-fang, TANG Jianxiang 5432

Fiber Transmission of Optical Sub-carrier in Separate Terahertz Wireless Communication System
LI Mingliang, WANG Cong, KANG Huixing 5438

Comparative Analysis of Frequency Estimation Methods
SU Dan, TU Yaqing, LI Ming, LUO Jianyuan 5442

An Improved Maximum Uniform SIR Power Control in Ad Hoc Networks
ZHAO Shunli, YIN Xun He, WEI Xueye, WANG Jun 5454

A New Indoor Location Technology Using Back Propagation Neural Network and Improved Centroid Algorithm
ZHANG Huiqing, SHI Xiaowei, CAO Luguang, DENG Guihua 5460

Access Control Based on Performance Estimation and Client Clustering in Large-Scale Distributed Systems
JIANG Xiaofeng, XI Hongsheng, SHANG Weike 5464

Pricing-Based Spectrum Sharing in Cognitive Radio Networks
WANG Xiaocheng, GUAN Xinping, MA Kai, LIU Zhixin 5476

LandRoom: a distributed storage system that improves LandHouse’s throughput under high concurrency
SUN Liangsheng, WANG Lei, DING Caiwei 5481

Improved Weighted Cooperative Sensing Algorithm Based on Distributed Optimization in Cognitive Radio Networks
JIANG Fu, PENG Jun, ZHU Zhengfa 5487

Research on a Multipath Routing for Multihop Cellular Network
LIU Ling, TAN Xiaobin, XU Peng, WEN Hong 5493
Power Allocation for Proportional QoS Adjustment with Weighted Sum Power Constraint

Optimal Regulation via WSAN with Measurement Noise

An Efficient Distributed Joint Power and Admission Control Algorithm

A Dynamic Model of BitTorrent-like P2P File-Sharing System

Admission Control Scheme for Distributed Service Systems Based on Model and Prediction

基于 B/S 架构和缓存设计的三维吊装仿真

Three-Dimensional Hoisting Simulation Based on B/S Structure and Cache Design

电子标识无线供电特性与实验装置研究

Research on Characteristic and Experiment Device of Wireless Power Transfer

一种基于观测器的鲁棒主动队列管理算法

An Observer-based Robust Active Queue Management Scheme

自由空间光通讯 ATP 系统关键技术研究

Research on the Key Technology of ATP System for Free Space Optical Communication

可靠机会路由

Reliable Opportunistic Routing

网络编码/ARQ 混合自适应错误控制方案用于无线网络传输

An Adaptive Pre-distortion Method Based on Orthogonal Polynomials

Aeronautical Channel Modeling and Simulation

Distributed Channel Allocation Scheme Based on LTE System in Smart Grid

External Interference Avoidance Scheme with Sub-band Hopping in Smart Grid

基于 Zigbee 的光伏发电装置集中控制系统设计

Design a Centralized Management System for Tracking PV Generation Installations Based on Zigbee
基于 LabVIEW 的聚光跟踪型光伏发电无线监控系统设计
Wireless Monitor System of the Focusing and Tracking Photovoltaic Generation System Based on LabVIEW
CAO Yinxiang, GU Juping, MAO Jingfeng, LUO Laiwu, CHEN Kaian, MIAO Yangyang, LIU Xuanxuan

计算机控制系统 (Computer Control System)

嫦娥二号整轨月图特征点并行化自动提取与匹配
Auto and Parallel Disposing of Feature Points Extracting and Matching of Orbits of Chang’E 2 Selenograph
YANG Sheng, LI Xuejun, YANG Ahua, XIE Jianwei, LIU Tao, WANG Jae, GONG Xuejing, WANG Linxu

基于影像坡型的月图准稠密匹配与实现
Quasi-dense Matching of Selenograph Based on Image Waves
.......................... YANG Sheng, LI Xuejun, XIE Jianwei, ZHAO Shuang, GONG Xuejing

基于 ZigBee 的广域危险环境无线监测预警系统
The Wireless Monitoring and Warning System in the Wide-area Dangerous Environment Based on ZigBee
.......................... DUAN Ping, ZHU Zhihui, DING Chengjun

研究基于 Perman Magnet Linear Synchronous Motor 的操作控制
Research on the Operation Control for Rope-less Hoist System Driven by Permanent Magnet Linear Synchronous Motor
.......................... ZHANG Hongwei, WANG Xinhuai, YU Fashan

基于 ARM9 的智能喷药系统的设计与实现
Design of Intelligent Spraying System Based on ARM9
.......................... SU Haipeng, SU Qiaoping, SONG Liang Tu, SUN Wenjuan

涡轮流量计实时监测系统的研究与设计
Turbine Flow Meter Real-Time Monitoring System Research and Design
.......................... WU Jing, YAO Kaixue

基于 Kalman Filter 的四旋翼姿态估计与控制
Quadrotor Aircraft Attitude Estimation and Control Based on Kalman Filter
.......................... WANG Shaohua, YANG Ying

嵌入式教育系统基于 Ocmt NXT 无人驾驶倒立摆机器人
The Embedded Educational System Using NXT Wheeled Inverted Pendulum Robot in OCMT
.......................... KUSHIDA Naoki, YAMASHITA Seiya, KIMURA Junso, DAI Fengzhi

热轧实验机组轧件微跟踪实现与应用
Implementation and Application of Plate Micro-tracking in Experimental Mill for Hot Flat Rolling
.......................... GAO Yang, NIU Wenyong, SUN Tao, LI Jianping, WANG Haiming, ZHANG Hui, FU Tianliang

基于 VMIC 的卷筒电机实时模拟与仿真
VMIC Based Real-time Simulation for Torque System of Coiler
.......................... JING Peng, LIU Yinghuang, TONG Chaonan, HU Changjun

等效解码复杂度基于 DVS 算法的视频解码
Equivalent Decoding Complexity Based DVS Algorithm for Video Decoding
.......................... CAO Yuji, YANG Jian, YUN Chao

石油运输管线电伴热控制系统设计
Design of Electric Heat-tracing Control System for Oil Pipeline
.......................... CHEN ShuangYe, LUO Chen, ZHENG Dongyue

电动汽车用永磁同步电动机数字控制系统实验研究
Experimental Study of Permanent Magnet Synchronous Motor Digital Control System for Electric Vehicle
.......................... ZOU Bencun, SONG Wenlong, SUN Dan, ZHU Liangkuan
CANopen 协议在温室小气候环境监测系统中的应用

The Application of CANopen Protocol in Monitoring and Control System of Greenhouse Microclimate

SUN Xingshuai, QIN Linlin, SHI Chun, WU Gang 5675

基于 CAN 总线的现代温室测控系统的设计及实现

Design and Implementation of the Measurement and Control System Based on CAN Bus in Modern Greenhouse

JIANG Yongxiang, QIN Linlin, SHI Chun, WU Gang 5679

基于 WebAccess 液压同步顶升控制系统的应用

Design and Application of Hydraulic Synchronous Lift Control System Based on WebAccess

LV Guofang, LI Zhonghao 5684

网络化控制系统 (Networked Control Systems)

基于无线远程控制的智能交通信号灯监控系统的设计与应用

Design and Realization of Intelligent Traffic Light Monitor and Control System Based on Wireless Control

TIAN Hai, ZHANG Yong, CUI Gui-mei 5687

一类网络化控制系统的混合控制策略研究

Control and Decision for a Class of Networked Control Systems

LV Zilong, ZHU Jin, WANG Linpeng, WANG Bing 5692

间断量化卡尔曼滤波和 LQG 控制基于 Lloyd-Max 量化器

SHEN Zhiping, CHEN Junyong 5698

基于输入时延的网络控制系统的分析与控制

Analysis and Control of Networked Control Systems Based on Input Delay

SUN Yeguo 5704

稳定性与性能分析基于信噪比受控频道的扰动观测器

FENG Yiwei, LIU Zhongmin, LUO Dongsong 5709

基于 Ethernet-CAN 的车载网络数据采集系统的应用

Design and Implementation of a Data Acquisition System for Vehicle Network Based on Gateway of Ethernet-CAN

WANG Yewei, WANG Honglei 5715

A New Delay-dependent Stabilization Method for Networked Control Systems

LI HongBo, YANG Hongjiu, SUN Fuchun, SUN Zengqi 5720

基于广义特征值的非一致采样系统稳定性分析

Stability Analysis of Non-uniform Sampling Systems Based on the Generalized Eigenvalue Problem

CAI Tiaoyang, WANG Yingchun, LIU Zhenwei, YANG Feisheng 5742

基于输入触发器的非线性网络控制系统设计

Observer-Based Control for Linear System with Event-Triggered Sensor

ZHANG Jinhui, ZHAO Danyang, WANG Daokuan 5747

均方稳定化基于组合控制的无线局域网系统

MU Qianqian, LONG Fei, LI Bin 5753

网络化预测控制 MIMO 过程控制与模型不确定性校正

HU Wenshan, ZHOU Hong, DENG Qijun, WANG Fanrong 5756

基于输入触发器的非一致采样系统的分析与控制

Output Feedback Stabilization of Networked Control Systems with Random Packet Dropouts

QIU Li, XU Bugong, LI Shanbin 5731

Observer-Based Control for Linear System with Event-Triggered Sensor

ZHANG Jinhui, ZHAO Danyang, WANG Daokuan 5747

A Novel Controller Design Approach for Nonlinear Networked Control Systems

LIU Zhili, ZHAO Zhong, ZHANG Jinhui 5758

有限时间追踪控制应用于网络机械系统

Finite-time Tracking Control for Networked Mechanical Systems

ChEN Gang, YU Ming 5764
Stabilization of Wireless Networked Control System with Multi-Packet Transmission Policy ................................. LI Jianning, SU Hongye, WU Zhengguang, CHU Jian 5770
Stability Analysis for Time-varying Networked Control Systems with Multi-input and Multi-output .............................. SUN Yeguo 5775
Globally Convergent Attitude Controlled Synchronization of Networked Spacecraft on Strongly Connected Graphs ........................................ WANG Hanlei, TAN Shuping 5780
Performance Limitation Analysis of Networked Control Systems ................................................................. WU Jie, ZHAN Xisheng, GAO Hongliang, ZHANG Xianhe 5786
Kalman Filtering with Scheduled Measurements - Part II: Stability and Performance Analysis ............................... YOU Keyou, XIE Lihua 5791
Design of Nonlinear Consensus Protocols under Directed Communication Topologies ......................................... XU Yaojin, TIAN Yuping 5797
Linear Quadratic Optimal Control for Discrete-time LTI Systems with Random Input Gains ............................ ZHENG Jianying, CHEN Wei, SHI Ling, QIU Li 5803
Cognitive Radio Power Allocation Based on Artificial Bee Colony Algorithm .................................................. LI Xinbin, SHI Aiwu, LIU Lei 5809
A Programmable Controller Architecture for Regular Expression String Matching ................................................ CHU Zhong, LI Qiyue, LI Jie, WANG Jianping 5814
Web-based 3D Laboratory for Control Engineering Education ........................................................................ HU Wenshan, ZHOU Hong, LIU Guoping 5820
H∞ Control for a Class of Singular Networked Control Systems with Input Disturbance ...................................... QIU Zhanzhi, YANG Fan 5826
Quantized Output Feedback Stabilization for Discrete-Time Nonlinear Systems in a Networked Environment ......................... JIANG Shun, FANG Huajing 5832
Differential-Passivity Based Controlled Synchronization of Networked Robots with Additive Disturbances ............... WANG Hanlei 5838
Co-design of Dynamic Scheduling and Quantized Control for Networked Control Systems with Communication Constraints .................... REN Jun, ZHOU Chuan, CHEN Qing-wei, LI Jing 5844
Stabilizing and Tracking Control of Multiple Pendulum-Cart Systems over a Shared Wireless Network ........................ CHENG Hui, CHEN Yousheng, WONG Wingshing, YANG Qiong, SHEN Lianfeng, BAILLIEUL John 5849
Research on Real-time Performance Improvement of Embedded Wireless Network Measurement and Control Platform ................................................................. DING Jian, CHENG Jian 5855
Constrained Model Predictive Control of Networked Systems with Time-Invaring Input Delay ................................. DAI Li, XIA Yuanqing, FU Mengyin 5867
LQG Control with Fixed-Rate Uniform Quantization for SISO Systems ........................................................... CHAI Li, FU Minyue 5873
From Networked Control Systems to Cloud Control Systems ........................................................................... XIA Yuanqing 5878
One-channel Networked Data Fusion with Communication Constraint .............................................................. BIAN Xiaolei, XIA Yuanqing, YAN Liping, FU Mengyin 5884
Observer-Based Networked Predictive Control of Uncertain Systems with Multiple Distributed Delays

Design and Implementation of an Integrated Experimental Control Platform Using Rapid Control Prototyping Methods

具有随机通讯时延的大系统 $H_\infty$ 控制器设计

$H_\infty$ controller design for large-scale systems with random communication delays

Dynamic Quantized Feedback Stabilization of Stochastic System

A Design of One Bit Processing Based Model Predict Control

HNMSim: A 3D Multi-purpose Hybrid Networked Multi-agent Simulator

K-means Based Delay Quantization and Prediction in Networked Control Systems

Design of H-infinity Controller for Networked Systems with One-Step Random Delays and Multiple Packet Dropouts

The Designing of $H_\infty$ Controller for the Singular Networked Control System with Time-Delay

A Web-based Virtual Simulation Platform

无线传感器执行器网络簇的多采样率静态输出反馈控制器设计

Design of Multirate Static Output Feedback Controller in Cluster of Wireless Sensor and Actor Networks

Optimal Control of Linear Discrete-Time Systems with Multiplicative Noises

Switched Feedback Control for Wireless Networked Control System with Adaptive Sampling Rate

Optimal Filtering for Networked Systems with Markovian Communication Delays

Quantized $H_\infty$ Filtering for Discrete-time Networked Systems with Mixed Delays and Missing Measurements

Detection of Deception Attacks on the Backward Channel of Networked Control Systems

Noise Processing of Quantized Control on CAN Network

Based on the Spectral Decomposition Dealing with Neutral Delay System of Chemical Process

Stability Analysis for a Class of Discrete-Time Markovian Jumping Systems with Input Quantization

多智能体系统与分布式控制 (Multi-Agent Systems and Distributed Control)

Lower Bound for the Second Smallest Eigenvalue of Directed Rooted Graph Laplacian
Agreement for Networked Multi-agent Systems with Noisy Communications  
LI Dequan, WANG Xiaofan 5998

Path Following for Multiple Underactuated Autonomous Underwater Vehicles with Formation Constraints  
WANG Yintao, YAN Weisheng 6004

Heading Consensus with Collision Avoidance for a Class of Multi-vehicle Systems  
YUAN Lijun, ZHU Jiandong, YANG Zhanmin 6010

Distributed Coverage Control under Generalized Locational Optimization Framework  
XU Jun, HU Jinwen, XIE Lihua, LUM Kai Yew 6015

Decentralized Control of Heterogeneous Multi-agents in Collective Circular Motion  
CHEN Zhiyong, ZHANG Hai-Tao 6021

Consensus of Second-order Sampled Multi-agent System with Delays  
XIE Dongmei, WANG Shaokun 6027

Practical Consensus of Networked Agents with Uncertain High-Order-Nonlinear Dynamics  
PENG Junmin, YE Xudong 6032

Social Learning with Bounded Confidence and Uninformed Agents  
LIU Qipeng, WANG Xiaofan 6038

Finite-time Leader-following Consensus Problem of Multi-agent Systems  
SUN Yongzheng, ZHAO Long, LIU Mei, WENG Wenting, MENG Qingxin 6043

Controllability of Discrete-time Consensus Protocol under Fixed and Switched Leaders  
YANG Wen, WANG Xiaofan 6047

Formation Tracking Control and Formation Stabilization Control of Multiple Nonholonomic Mobile Robots  
CAO Ke-cai, LIU Chunxiang 6053

Output Regulation of Nonlinear Multi-agent Systems Based on Dynamic Neural Networks  
LIU Jia, CHEN Zengqiang, LIU Zhongxin, YANG Peng 6059

Action Utility Forecasting Based Role Implementation in Robot Soccer System  
JIA Yubo, YANG Maying 6065

Bounded Consensus Tracking of Multi-Agent Systems with Communication Delay and Sampling Delay  
LI Li, FANG Huajing 6071

Stability Analysis of Improved Local Swarms  
WANG Liangshun, FANG Huajing 6075

Leader Follower Multi-Agents Network with Discrete-time Rendezvous via Swarm Social System Strategies  
SONG Yunzhong, ZHAO Wei 6081

Design of Federate Simulation Member Based on MAS Modeling Theory  
PAN Changpeng, WU Fu-Chu, ZHANG Hai-feng, CHEN Jie 6087

Survey on the Formation Control of Multi-Agent System  
HU Zhiwei, LIANG Jia-hong, CHEN Ling, WU Bing 6092

Leader-follower Synchronization for Complex Dynamical Networks via Sampled-data Control  
HE Wangli, QIAN Feng, HAN Qing-Long 6099

Distributed Coordinated Formation Control of Multiple Spacecraft with and without Velocity Measurements  
ZHANG Baoqun, SONG Shenmin, ZHENG Zhong, WEI Xiqing 6105

Formation Tracking for Nonlinear Agents with Unknown Second-Order Locally Lipschitz Continuous Dynamics  
WANG Xiangke, QIN Jiahu, LI Xun, ZHENG Zhiqiang 6112
Maximum Allowable Delay Bound for Consensus of General Linear Multi-Agent Systems

Leader-following Consensus of Second-order Multi-agent Systems with Time-delay and Nonlinear Dynamics

Coordinated Tracking in Mean Square for a Multi-agent System with Noise Perturbations

Consensus of Discrete Multi-agent Systems under Switching Topologies

Sampled-Data Based Average Consensus with Logarithmic Quantizers

Synchronization of Complex Dynamical Networks with Diverse Time-varying Coupling Delays

Consensus of a Group of Multiple Integrator Agents Using Bounded Control

Experimental Verification of a Multi-robot Distributed Control Algorithm with Containment and Group Dispersion Behaviors

Consensus of a Group of Multiple Integrator Agents Using Bounded Control

Event-triggered Output Regulation for Linear Multi-agent Systems

Distributed Finite Horizon $H_{\infty}$-Consensus Filtering via Sensor Networks with Markov Switching Topology

On Consensus of Linear Multi-Agent Systems with Switching Topologies: A Dynamic Output Feedback Approach

Distributed Robust Output Regulation for Multi-agent Systems with Polytopic Uncertainty

Consensus of Multi-Agent Systems with Lipschitz Nonlinear Dynamics and Intermittent Communications

Average Sampled-Data Consensus Driven by Edge Events

Collision-free Consensus in Second-order Multi-agent Dynamical Systems

Based on Gaussian Regression for Multi-agent Systems in Continuous Spaces

Distributed Finite-Time Containment Control for Second-Order Multi-Agent Systems

Consensus of Multi-Agent Systems with Lipschitz Nonlinear Dynamics and Intermittent Communications

Collision-free Consensus in Second-order Multi-agent Dynamical Systems

Finite-time Attitude Cooperative Control for Roll Channels of Multiple BTT Missiles

Finite-time Consensus Tracking for Nonlinear Multi-Agent Systems under Undirected and Directed Communication Topologies

Reaching Consensus at A Preset Time: Single-Integrator Dynamics Case

Distributed Robust Output Regulation for Multi-agent Systems with Polytopic Uncertainty

Consensus of Multi-Agent Systems with Lipschitz Nonlinear Dynamics and Intermittent Communications

Average Sampled-Data Consensus Driven by Edge Events

Collision-free Consensus in Second-order Multi-agent Dynamical Systems

Finite-time Attitude Cooperative Control for Roll Channels of Multiple BTT Missiles
Event-Triggered Control of Multi-Agent Systems by Combined Measurement Approach ................................................. FAN Yuan, FENG Gang, WANG Yong 6250
On Swarm Controllability of Linear Dynamical Multi-Agent Systems .......................................................... CAI Ning, MA Haiying, WANG Caixia, LIU Minghua 6256
Consensus for Multi-Agent Dynamic Systems: an LQR Perspective ........................................................... ZHANG Dongmei, WANG Xingang, MENG Li 6261
Finite Time Consensus for Multiple Non-Holonomic Agents with Communication Delay .......................... WANG Jiankui, QIU Zhihui, ZHANG Guoshan, YANG Weichao 6267
Multi-agent Systems Reaching Optimal Consensus Based on Simple Bernoulli Decisions ....................... SHI Guodong, JOHANSSON Karl Henrik 6273
Second-order Consensus in Multi-agent Dynamical Systems with Sampled Data ................................................. YU Wenwu, ZHOU Lei 6279
Admissible Consensualization for Singular Swarm Systems with Time Delays .............................................. XI Jianxiang, MENG Fanlin, SHI Zongying, ZHONG Yisheng 6303
Swarm Stability Analysis of Nonlinear Time-Varying Heterogeneous Dynamical Multi-Agent Systems .......... CAI Ning, MA Haiying, LIU Minghua, WANG Caixia 6292
Containment Analysis and Design for High-order Linear Time-invariant Singular Swarm Systems with Time Delays ................................................ DONG Xiwang, XI Jianxiang, SHI Zongying, ZHONG Yisheng 6296
Stackelberg Games of Large Population Multi-Agent Systems: Centralized and Distributed Strategies ................. WANG Bingchang, ZHANG Ji-Feng 6309
Reaching Consensus at A Preset Time: Double-Integrator Dynamics Case .................................................... CAI Yong, XIE Guangming, LIU Huiyang 6309
A Localized K-connectivity Topology Control Algorithm in Multi-agent Networks ........................................ BAI Yongqiang, WANG Qiang, CHEN Jie, FANG Hao 6315
Sarymsakov Matrices and Their Application in Coordinating Multi-agent Systems ........................................... XIA Weiguo, CAO Ming 6321
Distributed Receding Horizon Control for Nonholonomic Multi-vehicle System with Collision Avoidance ............... WANG Peng, DING Baocang, ZOU Tao 6327
Theoretical and Experimental Study of Air-Ground Cooperative Navigation .................................................. GU Feng, WANG Zheng, SONG Qi, CHEN Shengfu, HE Yuqing, HAN Jianda 6333
Second-order Event-triggered Multi-agent Consensus Control ................................................................. HU Jiangping 6339
Observer-based Synchronization and Unknown Input Recovery for Discrete-Time Lipschitz Nonlinear Systems ...................................................... ZHANG Wei, SU Housheng, WANG Miaomiao, ZHU Fanglai 6345
Adaptive Flocking of Multi-agent Systems with Locally Lipschitz Nonlinearity .................................................. ZHANG Ningzi, SU Housheng, CHEN Michael Z. Q., WANG Xiaofan 6351
Leader-Following Consensus for Singular Swarm Systems ............................................................................... MENG Fanlin, XI Jianxiang, SHI Zongying, ZHONG Yisheng 6357
Obstacle Avoidance for Multi-Agent Systems Based on Stream Function and Hierarchical Associations ................. BAI Yongqiang, XIAO Wenzhi, FANG Hao, LI Jixiang, CUI Jing 6363
Formation Control of Car-like Autonomous Vehicles under Communication Delay ........................................... YUAN Liping 6368
Decentralized Formation Flight Control of Multiple Fixed-Wing UAVs with a Virtual Leader ......................... XU Zihao, SCHRÖETER Martin, NECSULESCU Dan, MA Lei, SCHILLING Klaus 6376
On Consensus Speed of the Leader-following Multi-agent System

ZHANG Xiaoyong, ZHANG Guoshan 6384

Motion Planning of Multi-robot Formation Based on Representation Space

CHAI Ruizhi, SU Jianbo 6389

Adaptive Second-order Consensus of Multi-agent Systems with Nonlinear Dynamics and Time-varying Delays

LIU Bo, WANG Xiaoling, ZHANG Jie, SU Housheng 6395

Consensus Control of High-order Multi-agent Systems with Delays under Undirected Communication Topology

PAN Huan, NIAN Xiaohong, GUO Ling 6401

Position and Attitude Tracking for a Formation of Three Agents

WANG Lin, MARKDAHL Johan, HU Xiaoming, WANG Xiaofan 6406

一种基于虚拟领航者的集群柔性编队控制算法

PENG Jian-liang, DAI Tong-wei, FANG Qi-sheng, ZHAO Fei-hu 6411

Chaos and Community Evolution in Social Learning with Multiple True States

FANG Aili, WANG Lin, ZHAO Jiuhua 6415

Topologies Construction and Leaders Location in Multi-agent Controllability

JI Zhijian, LIN Hai 6421

Distributed Cooperative Control for Stretching Process of Web Production System

LI Xiaoli, REN Lihong, LIU Hao 6427

Finite-Time Containment Control for Multi-Agent Systems with Single-Integrator Dynamics

CAI Yong, LIU Huiyang, XIE Guangning 6433

多航天器系统分布式有限时间姿态调节控制

MA Guangfu, ZHANG Haibo, MEI Jie 6439

Cooperative Control for Relative Translation of Modular Spacecraft without Velocity Measurements

LIU Fucheng, MA Guangfu, MEI Jie 6445

Containment Control for Multiple Unknown Second-order Nonlinear Systems under a Directed Graph Based on Neural Networks

MEI Jie, REN Wei, MA Guangfu 6450

Global Stochastic Exponential Consensus of Multi-agent Networks

LIU Weikai 6456

Cooperative State Estimation in Vision-Based Robot Formation Control via A Consensus Method

COOK Joshua, HU Guoqiang, FENG Zhi 6461

大规模多智能体仿真平台设计方法的研究

XU Yang, LI Xiang, TAN Ruochen, CHEN Zheng 6467

Composite Robust Disturbance Observer Based Control for Multi-Agent Systems with Nonlinear Coupling

YANG Hongyong, HAN Chao, ZOU Hailin 6472

Leader-Following Rendezvous with Connectivity Preservation of a Class of Multi-agent Systems

DONG Yi, HUANG Jie 6477

Distributed Output Regulation of Nonlinear Multi-Agent Systems Based on Networked Internal Model

XU Dabo, HONG Yiguang 6483

传感器网络 (Sensor Networks)

基于虚拟锚节点的节点定位技术研究

XUE Xiao-song, SHEN Yan Xia, WU Dinghui 6489
Distributed Filtering for A Class of Nonlinear Systems with Limited Communication Capacity  
DONG Hongli, WANG Zidong, LIANG Jinling, HE Xiao 6493

Decentralized Quantized Multi-target Tracking in Wireless Sensor Networks  
ZHANG Zhi, LI Jianxun, HAN Shan, ZHU Qiang 6499

Energy Efficient Clustering and Data Rate Allocation in Heterogeneous Wireless Sensor Networks  
WANG Puhong, XUE Liang 6503

Finite-Horizon Distributed $H_\infty$ State Estimation with Stochastic Parameters and Nonlinearities Through Sensor Networks  
DING Derui, WANG Zidong, ZHANG Sunjie, SHU Huisheng 6508

基于数据汇聚的传感器网络分层拓扑推断算法  
LIU Runjie, CHEN Yuan Yuan, SHEN Jinyuan, ZHAO Xu Dong 6514

Periodic Oscillations in Epidemical Models of Tree-based Wireless Sensor Networks  
MENG Tao, LI Qiao, WANG Peng, XIE Juntang 6519

基于神经网络的质量流量测量数据融合研究  
WANG Hongbo, MA Peiyong, TANG Zhiguo 6525

三维空间中欠驱动飞行器在轨编队控制  
CHEN Yang-yang, TIAN Yuping 6529

Effective Target Group Tracking Algorithm for Wireless Sensor Network  
ZHANG Chun, FEI Shumin, ZHOU Xingpeng 6535

Distributed Optimal Kalman Filtering for Collaboration Estimation in Wireless Sensor Networks  
LIU Yonggui, XU Bugong 6540

Scheduling Algorithm Tracking-oriented Based on GDF  
YAN Dongmei, WANG Jinkuan, LIU Li 6546

多信道多接口无线 mesh 网络中基于改进 01 整数规划的信道分配策略  
TAN Xiaobin, WEN Hong, XIONG He, LIU Ling 6550

多信道多接口无线 mesh 网络中针对多播的信道分配问题研究  
NI Husheng, XU Wujun, LI Yuanyuan, TAO Mengyue, SONG Shichao, FAN Hong 6556

分布式融合算法在无线传感器执行器网络中的动态特性分析  
YANG Chunxi, WU Xinyu, LI Caidui, HUANG Jian 6562

Dynamic Collaborative Processing Based on Event-driven Task Allocation in Wireless Sensor and Actuator Networks  
MO Lei, XU Bugong 6567

An Improved Method of Self-Adaptive Localization for Wireless Sensor Network in Dynamic Indoor Environment  
NI Husheng, XU Wujun, LI Yuanyuan, TAO Mengyue, SONG Shichao, FAN Hong 6574

Kalman Fixed-Point Smoothing for Wireless Sensor Systems with Multiplicative Noises  
LU Xiao, WANG Haixia 6578

Multi-Channel Interference Avoidance Scheme for ZigBee Network in Smart Grid Application  
ZENG Peng, WANG Xu, WANG Yang, ZHANG Qiong, LI Dewei 6582

Distributed Consensus Filtering Based on Event-driven Transmission for Wireless Sensor Networks  
LI Wenshuang, ZHU Shanying, CHEN Cailian, GUAN Xinping 6588

一种能量消耗平衡的线性无线传感器网络调度策略分析  
The Analysis of a Scheduling Strategy with Energy Balance for Linear Wireless Sensor Networks  
WANG Zhengjie, ZHAO Xiaoguang, QIAN Xu 6594
Joint Node Localization and Error Correction in Wireless Sensor Networks .......................................... LUO Jun, SHI Chun, SHI Wei, LING Qing 6600
A CDS-Based Topology Control Algorithm in Energy Efficient Clustering ............................................ ZHENG Wei, GAO Shouwei, QIU Liang, ZHANG Weidong 6605
Distributed Gas-Source Localization Based on MMSE Estimation with Cooperative Sensor Networks ................................. ZHANG Yong, MENG Qing-hao, WU Yuxiu, ZENG Ming 6611
一种改进的卡尔曼滤波算法在自稳平台中的应用
An Improved Kalman Filter Algorithm in the Application of Self-Stabilization Platform .............................. ZHANG Hua, WU Qiong, ZHANG Ting, LI Xinghe, ZHANG Chengchun 6617
车用自组织网络广播协议性能研究
Study on Properties of Broadcasting Protocol in VANETs ................................................................. LIU Hongfei, LI Lijun, MA Baohong, PAN Chaoyang, SUN Dongye 6621
WIA-PA 与 EtherNet/IP 互联及在水处理行业的应用
Interconnection of WIA-PA and EtherNet/IP and Application in Water-treatment Industry .......................... XIAO Jinchao, ZENG Peng, ZHANG Qiong, LI Dewei 6626
基于 IEEE 802.15.4 的实验室监控系统设计
Design of Laboratory Monitoring System Based on IEEE 802.15.4 ..................................................... ZHAO Zhi Wei, YAN Wenkai, LIU Zhixin, Guan Xin-ping 6644
基于无线传感网络的湖库水环境污染源定位方法
Pollution Source Localization in Lake Environment Based on Wireless Sensor Networks .......................... YANG Jun, CHAI Li, LUO Xu 6649
The Improved Unscented Kalman Particle Filter Based on MCMC and Consensus Strategy ........................ LIU Xiangyu, WANG Yan 6655
新能源中的控制技术 (Control Techniques in New Energy)
基于多重分形特征负荷序列聚类的分时段无功优化
Reactive Power Optimization Based on Multiple-fractal Feature Cluster ................................................. ZONG Xiju, CHENG Xingong, LI Mei, ZHANG Yongfeng 6672
Modified Hill Climbing Method for Active Yaw Control in Wind Turbine .............................................. WU Xin, LIU Yanping, TENG Wei 6677
Load Balancing and Reactive Power Compensation Based on Capacitor Banks Shunt Compensation in Low Voltage Distribution Networks .......................... ZHOU Jianguo, SUN Qiuye, ZHANG Huaguang, ZHAO Yan 6681
LPV Robust Gain-Scheduling Control for Doubly Fed Induction Generator Wind Energy Conversion System
WU Dinghui, LI Yiyang, SHEN Yanxia, JI Zhicheng 6687

Analysis of Offshore Support Structure Dynamics and Vibration Control of Floating Wind Turbines
LUO Ningsu 6692

Load Frequency Control of Wind Diesel Hybrid Power Systems via Predictive Control
HOU Junrui, HAO Yuchun, TAN Wen 6698

Real-time Measurement System for Deep Soil Parameters of Geothermal Borehole
JIAN Dawei, ZHANG Yating, ZHANG Ye 6704

Analysis of Flyback Current-Fed Push-Pull DC-DC Converter Operating in Open Loop Control System
YUAN Youchen 6709

Capacitor-charging Soft Switching DC/DC Transformer
YUAN Youchen 6715

On Control Strategy of Z-source Inverter for Grid Integration of Direct-driven Wind Power Generator
SUN Qu, WANG Yongyu 6720

Physically-Based Power-Level Control of Modular High Temperature Gas-Cooled Reactors — Part I: Self-Stability Analysis
DONG Zhe 6724

Physically-Based Power-Level Control of Modular High Temperature Gas-Cooled Reactors — Part II: Controller Design and Simulation
DONG Zhe 6730

A Novel Approach to Control PMSG-based Wind Energy Systems
ZHANG Jianhua, TIAN Ye, REN Mifeng, ZHANG Jinfang, HOU Guolian 6736

Application of Fuzzy Fractional Order Controller in Wind Power Converter
LI Jiangyan, LIU Fucai, HAN Huishan 6741

An Adaptive LVRT Control for DFIG Wind Power System
ZHANG Jian, XUE Ancheng, CHEN Jinmei, BI Tianshu, WANG Ningbo, MA Yanhong 6747

Model and Transient Analysis of Stator Inter-turn Short-circuit Fault in DFIG
QIAN Yanping, ZHU Ligui, WANG Bing 6752

Research of Lithium Battery’s Equalizer Circuit Based on flying capacitor
YUAN Lijuan, WANG Yinghai 6758

Photovoltaic Grid-connected Control System Based on Multi-peak Maximum Power Point Tracking Algorithm
ZHANG Yuanming 6762

A Seamless Operation Mode Transition Control Strategy for A Microgrid Based on Master-Slave Control
WANG Chengshan, LI Xialin, GUO Li, LI Yunwei 6768

A New Method to Coordinate the PI Controllers’ Parameters of Doubly-fed Induction Generator
XUE Ancheng, ZHANG Jian, CHEN Jinmei, BI Tianshu 6776

A Intelligent Patrol System Based on GIS, GPS, GPRS Technology for High Voltage Transmission Line Inspection
LIANG Huijun, WANG Shouwei, LI Bitao 6781

Output Current Reconstruction of Two Stage Matrix Converter
LI Gang 6784
风力发电机液压变桨距分数阶比例积分控制器设计
Fractional Order Proportional Integral (FOPI) Controller Design for the Hydraulic Variable Pitch Wind Turbine System  .......... QIAN Yanping, ZHANG Ning, WANG Bing, WANG Wancheng 6789
超导储能系统低温杜瓦恒压零挥发测控系统设计
基于思维进化算法的模糊神经网络在变速风力发电控制中的应用
Application of Mind Evolutionary Computation Based Fuzzy Neural Network in Variable-speed Wind Turbines .......... LIU Qing-song, QIAN Su-xiang, XIONG Yuansheng 6798
基于预测函数控制的风筝机组最大发电控制
Maximum Generation Control of Kite Generator Based on Predictive Functional Control  .......... SUN Qu, YU Hao-jie, SUN Yu 6804
节能减排与新能源接入环境下的电力系统智能调度
Smart Scheduling of Power System under Energy Saving Policy and Renewable Energy Integration  .......... WEI Wei, MEI Shengwei, LIU Feng, CHEN Liang 6809
基于扩展卡尔曼滤波算法的锂离子电池 SOC 估计
Estimation of Li-ion Battery State of Charge Based on Extended Kalman Filtering  .......... MA Yan, BAI Qingwen, LIANG Liang, CHEN Hong 6815
基于参数在线辨识的改进卡尔曼滤波锂电池 SOC 估算方法
A Novel SOC Estimation Method for Li-Ion Batteries Based on Improved Kalman Filter with Parameter Online Identification .......... XIONG Yong-hua, YANG Yan, HE Yong, WU Min, AN Jianqi 6820
基于双线性模型的智能电网短期负荷滚动预测
Bilinear Models-Based Short-Term Load Rolling Forecasting of Smart Grid  .......... SONG Xiu-lan, HE DeFeng, YU Li 6826
基于局部形相似校正的区域负荷超短期预测
Very Short-term Load Forecasting of Local Loads Based on Local Shape Similarity Corrective Changing  .......... WU Shunyu, LIU Shirong, NING Kanghong, PENG Mingwei 6830
控制策略的大型双馈发电机风场对电网频率调节
Control Strategy of Large-scale DFIG-based Wind Farm for Power Grid Frequency Regulation  .......... CAO Zhangjie, WANG Xiaoru, TAN Jin 6835
滑动模式控制的风力能量发电系统用PMSG和输入-输出线性化
Sliding Mode Control of Wind Energy Generation Systems Using PMSG and Input-Output Linearization  .......... LI Xiangjun, XU Wei, YU Xinghuo, FENG Yong 6841
轴承的内部电阻估计用于风能发电系统
Study on Measuring and Control System of AC Radial-axial Hybrid Magnetic Bearing Used in Wind Energy Generation System .......... NI Wei, WU Qinghai, JIN DeFei, HE Xiaofeng, ZHANG Tao 6847
锂离子电池的寿命影响
Online Monitoring of Lithium-ion Battery Aging Effects by Internal Resistance Estimation in Electric Vehicles .......... LIU Guangming, OUYANG Minggao, LU Languang, XU Liangfei, LI Jianqiu 6851
研究了两种APU配置之间的比较
Research on Comparison Between Two Kinds of Configuration APU Applied to Series HEV  .......... WU Xiaogang, LU Languang 6856
低电压穿越与主动阻尼
Low Voltage Ride Through with Active Damping for Doubly-Fed Induction Generator  .......... XIE Zhen, YU Zhen, SONG Haihua 6861
能量管理策略的比较
Comparison of Energy Management Strategies for a Range Extended Electric City Bus  .......... XU Liangfei, YANG Fuyuan, HU Mingyin, LI Jianqiu, OUYANG Minggao 6866
纯电动车辆复合能源系统架构及控制策略研究

Active Disturbance Rejection Control for Chaotic Permanent Magnet Synchronous Generator for Wind Power System .............................. REN Lina, LIU Fucai, JIA Yafei 6878

基于 ECO4 的列车综合节能建模与优化研究
ECO4-Based Modeling and Optimization for Trains Synthetical Energy Saving ................................. TANG Jianxiang, CHEN Te-fang, DENG Jiang-Ming 6883

水平油水两相流平行弦丝电导传感器测量特性
The Measurement Characteristics of Parallel-Wire Conductance Probe Used in Horizontal Oil-Water Two-Phase Flow ........................ LIANG Xinghe, JIN Ningde, ZHANG Yu, DU Meng, ZHAI Lusheng 6888

水平油水两相流局部流动特性：CFD 模拟与测量比较
Local Characteristics of Horizontal Oil-Water Two-Phase Flow: A Comparision of CFD Simulation and Measurement ........................ GU Ming, JIN Ningde, ZHU Lei, GAO Zhongke, ZHAI Lusheng 6894

水平油水两相流同轴过流式电容传感器敏感场特性
The Sensitivity Field Characteristics of Coaxial Capacitance Sensor Used in Oil-Water Two-Phase Flow............................... ZHANG Hao, ZHAI Lusheng, JIN Ningde 6912

水平油水两相流局部流动特性：CFD 模拟与测量比较
Local Characteristics of Horizontal Oil-Water Two-Phase Flow: A Comparision of CFD Simulation and Measurement ........................ GU Ming, JIN Ningde, ZHU Lei, GAO Zhongke, ZHAI Lusheng 6894

基于 Fuzzy-PID 控制和随机调制的有源功率因数调节器的研究
On Rapid Response Active Power Factor Regulator Based on Fuzzy-PID Control and Randomized Modulation ........................ XIANG Luping, WANG Bin, CHENG Yan, YANG Lian 6907

油水两相流局部含率超声传感器敏感场特性
The Sensitivity Field Characteristics of Coaxial Capacitance Sensor Used in Oil-Water Two-Phase Flow............................... ZHANG Hao, ZHAI Lusheng, JIN Ningde 6912

基于 Fuzzy-PID 控制和随机调制的有源功率因数调节器的研究
On Rapid Response Active Power Factor Regulator Based on Fuzzy-PID Control and Randomized Modulation ........................ XIANG Luping, WANG Bin, CHENG Yan, YANG Lian 6907

油水两相流局部含率超声传感器敏感场特性
The Sensitivity Field Characteristics of Coaxial Capacitance Sensor Used in Oil-Water Two-Phase Flow............................... ZHANG Hao, ZHAI Lusheng, JIN Ningde 6912

内嵌贴片式两相流相含率超声传感器敏感场特性
The Sensitivity Field Characteristics of Embedded Patch Type Ultrasonic Sensor in Two-Phase Flow Holdup Measurement ........................ LI Deming, ZHAI Lusheng, JIN Ningde 6918

基于趋势分解的电力系统区域负荷建模与预测方法
A Modeling and Forecasting Method of Regional Load of Power Systems Based on Trend Decomposition ................................. ZHANG Kaifeng, TENG Xianliang, WANG Ying 6963
内埋式永磁同步电机无速度传感器弱磁控制
Flux Weakening Control for Sensorless IPMSM

.......................................................... CHEN Ning, ZHANG Yue, GUI Weihua, YU Shouyi 6969

Event-triggered Algorithm of Demand Response in Power Grid Based on Social Welfare Maximization

.......................................................... CAO Wei, YANG Bo, CHEN Cailian, GUAN Xinpeng 6974

A Concentration Measurement Method for Flue Gas of Nature Gas Combustion Base on Spectral Analysis

.......................................................... CAO Hui, HU Luona, ZHOU Yan, ZHANG Yanbin 6980

电动叉车直流电机换向片间短路的快速测量
Fast Short Circuit Measurement of DC Motor Commutating Segment for Electric Forklift

.......................................................... XIANG Bo, ZHOU Ping, LIU Lijun, XIANG Yang 6984

数据驱动建模与控制 (Data Driven Modeling and Control)

火电厂球磨机负荷的在线局部学习软测量方法
Online Local Learning Soft-sensing Method for Ball Mill Load of Power Plant

.......................................................... WANG Wei, CHANG Hao, ZHANG Hang, LUO Dayong 6994

基于 KFA-KPLS 的钢材力学性能预报模型
Modeling for Prediction Steel Mechanical Property Based on KFA-KPLS

.......................................................... WANG Ling, FU Dongmei, LI Qing 7005

火电厂球磨机负荷的在线局部学习软测量方法
Online Local Learning Soft-sensing Method for Ball Mill Load of Power Plant

.......................................................... WANG Wei, CHANG Hao, ZHANG Hang, LUO Dayong 6994

最少方差估计基于移动机器人基于多机器人优化算法
Least Square Estimation Based Mobile Robot Gas Source Localization in Stable-Airflow Environment

.......................................................... JIANG Ping, ZHANG Yong 7000

基于 KFA-KPLS 的钢材力学性能预报模型
Modeling for Prediction Steel Mechanical Property Based on KFA-KPLS

.......................................................... WANG Ling, FU Dongmei, LI Qing 7005

数据驱动控制非圆柱转动工具系统
Data-driven Control for Noncircular Turning Tool Servo System

.......................................................... CAO Rong-min, HOU Zhongsheng, ZHOU Huixing, GUAN Jingli 7009

高超声速飞行器气动模型数据拟合方法研究
Data Fitting Method on Hypersonic Vehicle Aerodynamic Modeling

.......................................................... TAO Yang, ZONG Qun, ZENG Fanlin 7038

多模型系统加权函数的全局优化算法
Global Optimized Algorithm for Weighted Function of Multi-model System

.......................................................... CHEN Shan, PAN Tian-Hong 7052
A Soft Sensor for Carbon Content of Spent Catalyst in a Continuous Reforming Plant Using LSSVM-GA

Closed-Loop Glycemic Control for Critically Ill Subjects Based on Data-Driven Model Predictive Control

Research of Flotation Dosing Control Method Based on SVM and Image Processing Technology

Model-free Adaptive Control for Magnetic Levitation Ball System

A Data-Driven Design of Optimal ILC for Nonlinear Systems

A Novel Optimal Terminal Iterative Learning Control Approach for Linear Time-varying Systems

Data-based Cement Decomposition Furnace Temperature Optimal Control

Modeling Hot Metal Silicon Content in Blast Furnace Based on Locally Weighted SVR and Mutual Information

An Improved LSSVM Based on Multi-scale Wavelet Kernel Function

A Self-tuning AFM Imaging Method Based on Data-Driven Mechanism

Dynamic Model Based Optimization Control for Combustion Process of Coke Oven

Overview on Icing Prediction Models and Decision-making Methods of De-icing for Power Transmission Line

Data-driven Control for Single Inverted-Pendulum System

Quantum Control and Information

State Transfer and Coherence Maintain Based on DFS in Open Quantum Systems

Stabilizing Control of Quantum Systems with Uncertainties

Model Transformation-based Eigenstate Control of Quantum Systems

Nuclear Spin Gyroscope Based on an Atomic Comagnetometer
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamical Trajectory Tracking Control in Quantum Systems</td>
<td>ZHU Yaping, CONG Shuang, LIU Jianxiu</td>
<td>7154</td>
</tr>
<tr>
<td>Phase Control Strategies in Coherent Anti-Stokes Raman Scattering</td>
<td>GAO Fang, WEI Lingmin, SHUANG Feng</td>
<td>7160</td>
</tr>
<tr>
<td>Identification of Quantum Closed Systems via the Quantum Process Tomography</td>
<td>ZHU Weiwei, SCHIRMER Sophie, XIE Hongwei, ZHANG Ming</td>
<td>7166</td>
</tr>
<tr>
<td>Deterministic Teleportation of an Arbitrary Two-qubit State via a Six-qubit Cluster State</td>
<td>LI Hui, LI Chunwen</td>
<td>7172</td>
</tr>
<tr>
<td>Hybrid Control of Uncertain Quantum Systems via Fuzzy Estimation and Quantum Reinforcement Learning</td>
<td>CHEN Chunlin, JIANG Frank, DONG Daoyi</td>
<td>7177</td>
</tr>
<tr>
<td>Genetic Algorithm Parameters Selection Based on Optimal Computing Budget Allocation Method</td>
<td>WANG Yong Ming, ZHAO Guang Zhou, YIN Hong Li</td>
<td>7183</td>
</tr>
<tr>
<td>Evolutionary Game Analysis of Strategic Selections in Technology Innovation of Software Outsourcing</td>
<td>XIONG Weiqing, CHEN Cheng</td>
<td>7188</td>
</tr>
<tr>
<td>The Optimization of Micro-perforated Panel Absorber Based on Self-adaption Niche Genetic Algorithm</td>
<td>SI Chengyong, TIAN Hongjun, WANG Lei, WU Qidi</td>
<td>7195</td>
</tr>
<tr>
<td>Path Planning of Mobile Robots Based on Specialized Genetic Algorithm and Improved Particle Swarm Optimization</td>
<td>LI Qing, ZHANG Chao, XU Yinmei, YIN Yixin</td>
<td>7204</td>
</tr>
<tr>
<td>Reactive Power Optimization Based on Particle Swarm Optimization and Simulated Annealing Cooperative Algorithm</td>
<td>CHEN ShuangYe, REN Lei, XIN Fengqiang</td>
<td>7210</td>
</tr>
<tr>
<td>A Novel Adaptive Danger Model Algorithm</td>
<td>HONG Lu, YANG Jing</td>
<td>7216</td>
</tr>
<tr>
<td>Stock Market Forecasting Model Based on Semi-parametric Smoothing Regression</td>
<td>WANG Lingzhi, QIN Fajin</td>
<td>7220</td>
</tr>
<tr>
<td>Improving Genetic Algorithm and Its Application on Operation Optimization of PS Converter</td>
<td>YAN Feng, GUI Weihua, CHEN Yong, XIE Yongfang, REN Huifeng</td>
<td>7224</td>
</tr>
<tr>
<td>Efficient Variable Neighborhood Search for Identical Parallel Machines Scheduling</td>
<td>CHEN Jing, LI Jun-qing</td>
<td>7228</td>
</tr>
<tr>
<td>Distance Detection Method in Virtual Three-Dimensional Hoisting Environment</td>
<td>AN Jianqi, WANG Wei, WU Min, HE Yong</td>
<td>7233</td>
</tr>
</tbody>
</table>
基于Arena的供应链多级库存控制协调的仿真优化
Simulation and Optimization of Multi-Echelon Inventory Control and Coordination in Supply Chain
Based on Arena ....................................................... LI Huixian, SUN Junqing, YANG Zhe 7239

Dynamic Stiffness Analysis of Feedback Spring Pole in Jet Pipe Electro-hydraulic Servo-valve
 ..........................................................  YIN Yao Bao, PHAM Xuan Hong Son, ZHANG Xi 7245

交通系统 (Transportation Systems)
Model-independent Solution for Active Contact Force Control of Pantographs in High-Speed Trains
 ............................................................ SONG Yongduan, LI Chunhui, FAN Lingling 7250

基于GPS轨迹的矢量路网地图自动生成方法
A GPS-Track-Based Method for Automatically Generating Road-Network Vector Map
 ............................................................ KONG Qingjie, SHI Wenhuan, LIU Yuncai 7256

高速公路救援资源的两阶段协作优化配置研究
On Optimal Allocation of Highway Rescue Resources Based on Two-stage Collaboration
 ............................................................ SHI Zhigang, YANG Xiujun 7261

陆用惯导系统在运动间对准方法研究
On INS In-motion Alignment for Land Vehicles
 ............................................................ WANG Qingzhe, FU Mengyin, XIAO Xuan, CAI Shanjun 7265

The Analysis on Evaluation Indicators of Commercial Drivers Selection
 ............................................................ CHEN Xue-mei, WEI Zhong-hua, GAO Li 7270

基于二层随机Hough变换的禁令交通标志分割方法
The Segmentation of Ban Traffic Signs Based on Two-step Randomized Hough Transform
 ............................................................ ZHOU Xin, YE Zhencheng, QIAN Feng 7274

交通系统建模研究综述
Overview of Traffic System Modeling Research .......................... CHENG Zi-long, QIU Xiao-gang 7279

A Novel Energy Efficient Operation Strategy for a Train Based on Model-Free Adaptive Predictive Control
 ............................................................ YANG Wen, YIN Chenkun, HOU Zhongsheng 7286

Hybrid Feedback Control of Vehicle Longitudinal Acceleration ....... XIA Zhongpu, ZHAO Dong-bin 7292

基于情景感知的行车导航服务推荐系统的关键技术
On Key Technology of Service Recommendation System for Car Navigation
 ............................................................ LI Songhui, SUN Junqing, YANG Zhe, ZHANG Xuan 7298

On the Evacuation Path Allocation Model in Subway Station
 ............................................................ ZHONG Lingling, LI Yan, WANG ZiYang, JIA Limin 7304

Planetary Landing: Modelling and Control of the Propulsive Descent
 ......................................................... CANUTO Enrico, MOLANO-JIMENEZ Andres, ACUNA-BRAVO Wilber,
PEREZ-MONTENEGRO Carlos, MALAN Stefano 7309

基于层次分析法的高速公路诱导信息有效性评价研究
On Highway Induction Information Validity Evaluation Based on AHP ............ SHI Zhigang 7317

基于多传感器的车辆外围轮廓检测和车型识别系统
A Vehicle External Contour Detection and Identification System Based on Multi-Sensors
 ............................................................ FAN Dashuai, ZHANG Jun, WANG Hanning, JIN HuiYu 7321

Characteristic Model-based Golden Section Adaptive Control for High-speed Train
 ............................................................ GAO Shigen, DONG Hairong, QI Shuhui, NING Bin 7326
Real-Time Lane Detection for Intelligent Vehicles Based on Monocular Vision ............................... XU Fangfang, WANG Bo, ZHOU Zhiqiang, ZHENG Zhihui 7332
Port Traffic Signal Control Method Based on Gradient Descent and PSO Algorithm ................................. ZHANG Jun, GE Meijing, SUN Meina, XUE Juntao, YANG Zhengling, LU Xiaodong 7338
An IPSO-Based Model Free Control for Freeway Ramp Metering ........................................................ LI Xiuying, JIN Xufu, HAN Zhigang 7343
车载导航监控系统的研究与实现
Study and Application of Vehicle Navigation System with Monitor Center ............................................ WEI Henghua, WANG Min, BAO Yuanlu 7348

系统生物学 (Systems Biology)

Modularity and Centrality in an sRNA Network ................................. YING Long, DING Dewu 7352
Effects of Extremely Low-frequency Magnetic Fields on Neuron Activity ............................................. JIANG Xiu-yu, WANG Jiang, YI Guo-sheng, DENG Bin, WEI Xile, HAN Chun-Xiao 7355
A Model of the Endogenous Electrical Field Effect: Can Ephaptic Transmission Cause Neuronal Synchronization Independently? ................................. ZHOU Yue, WEI Xile, LU Meili, DENG Bin, WANG Jiang, CHE Yan-Qiu 7360
The Research Based on the Motion Law of Human Body to Capture Data of Movement Fusion ......................... YU Yecheng, YUE Zhigang, WANG Shuntang 7366
A Flexible Novel Approach to Learn Epistasis Based on Ant Colony Optimization ........................................ LI ShuSen, CHEN Jun, JIAO Qingju, YAO Lixiu, SHEN Hong-Bin 7370
Global Relative Input-Output Sensitivities of the Feed-Forward Loops in Genetic Networks ............................ WANG Pei, LU Jinhu, ZHANG Yuhuan, OGORZALEK Maciej 7376

基于多干扰数据的基因调控网络结构辨识
Gene Regulatory Network Inference from Multifactorial Perturbation Data ........................................ XIONG Jie, ZHOU Tong 7382

Vibrational Resonance on Modular Neuronal Networks ............................... LIU Chen, WANG Jiang, YU Haitao, DENG Bin, WEI Xile 7388
Dynamics of the extended subthalamic-pallidal complex in deep brain stimulation for Parkinson’s disease .......... XUE Zhi-qin, WANG Jiang, YU Haitao 7393

微生物发酵过程的细胞密度在线检测与底物浓度实时控制
Cell Density Online Detection and Substrate Concentration Real-time Control of Microbial Fermentation Process .................................. GUO Qingqiang, LIN Jianqiang, LI Qiqiang 7398
Estimating and Adjusting the Abnormal Hodgkin-Huxley Neuron with External Electric Field .......................... WANG Meng, WANG Jiang, JIA Chenhui, WEI Xile, DENG Bin, CHE Yan-Qiu 7403

GRN Topology Identification Using Likelihood Maximization and Relative Expression Level Variations .......................... ZHOU Tong, XIONG Jie, WANG Yali 7408

三碱基密码子复平面模型及其函数关系
A Mathematical Model and the Functional Relationship of Three-base Codons in the Complex Plane ................. YANG Runtao, GAO Rui, ZHANG Chengjin 7415

Integrating Multiple Gene Semantic Similarity Profiles to Infer Disease Genes ....................................... HE Peng, JIANG Rui 7420

The Endogenous Electrical Field Effect on Pyramidal Neural Network with Low Calcium ............................. ZHOU Yue, WEI Xile, LU Meili, DENG Bin, WANG Jiang, CHE Yan-Qiu 7426
Understand the Noise of CI Expression in Phage λ Lysogen ..................................................................... ZHU Hongyuan, CHEN Tianqi, LEI Xue, TIAN Wei, CAO Youfang, AO Ping 7432
Inferring Gene Regulatory Network for Cell Reprogramming  

................................................. DUREN Zhana, WANG Yong, SAITO SHIGERU, HORIMOTO Katsuhisa 7437

启动子序列模式发现的高斯混合模型  
Gaussian Mixture Model for Automatic Motif Finding in Promoter Sequences  
................................................. GUO Shuo, YUAN Decheng, HUANG Mingzhong 7443

离散双线性系统与人口模型  
On Discrete-time Bilinear Systems and Population Models .......... TIE Lin, CAI Kai-Yuan, LIN Yan 7449

Effects of Chemical Synapse Type and Time Delay on Vibrational Resonance in Coupled Neurons  
................................................. YUAN Chunhua, WANG Jiang, DENG Bin 7453

Determine Measurement Set for Parameter Estimation in Biological Systems Modelling  
................................................. YUE Hong, JIA Jianfang 7457

系统规模对于多细胞合成系统群体行为的效果  
The Effect of System Size on Collective Behavior in a Synthetic Multicellular System  
................................................. YI Qizhi, DU Yan 7463

无抑制作用代谢网络在多平衡态性质意义上的强连通分解  
A Strong Connectivity Decomposition Method for Analyzing the Multi-Equilibrium Property of Metabolic Networks with No Inhibition .......... BI Wenjian, GUO Jin, ZHAO Yanlong, ZHANG Ji-Feng 7469

控制在社会、经济系统中的应用 (Control in Social and Economical Systems)

HIV 在静脉吸毒人群中传播的群落小世界网络模型  
A Cave Small World Network Model for HIV Transmission Among Intravenous Drug Users  
................................................. LUAN Jiayu, BI GuiHong, WANG Hairui 7475

Active Non-fragile Control for Offshore Steel Jacket Platforms  
................................................. HUANG Zuowu, ZHANG Baolin, MA Hui 7481

Transmission Congestion Control Research in Power System Based on Immune Genetic Algorithm  
................................................. LIU Bin, JIANG Nan, LIU Ting, JING Yuanwei 7487

On Fault Line Selection System in Distribution Network  
................................................. LI Bo 7493

Credit Ration by Control of Cognition Difference  
................................................. MA Li, LIU Yang, NIU Yong 7497

人民币假币流通建模及其前决策多目标监控方法  
Circulation Model for Counterfeit Currency of RMB and Its Pre-decision Multi-objective Supervision Method  
................................................. ZHENG Tao, ZHOU Wei-rong, CHEN Wei, CHEN Mei, LI Xin 7502

LQ Optimal Control for Improved Metzlerian Model  
................................................. LIU Xinghua, XIA Yu, XI Hongsheng 7507

基于期权、价格补贴契约与技术创新的供应链协调分析  
Analysis on Supply Chain Coordination Based on Option, Price-Subsidy Contract and Technology Innovation  
................................................. SUN Duoqing, JIANG Tingting, DU Meng, LIU Lijing, WEN Jing 7513

Overview of Linguistic Dynamic Systems Based on Perception Information  
................................................. ZHAO Liang 7519

Differential Price Decision and Coordination of Closed-Loop Supply Chain  
................................................. YANG Hua, MA Xiaomiao, CHEN Hong Jun 7525

消费偏好对市场细分的闭环供应链定价的影响分析  
On Consumer Preferences’ Impacting on the Pricing Policies of the Closed-loop Supply Chain with Market Segmentation  
................................................. ZHANG Xuan, YUAN Jing, SUN Junqing, JIANG Xin 7530

Stabilization and Finite-time Stabilization of A Novel Chaotic System via Single Input Controller  
................................................. LI Shengzheng, HAO Mingju 7536
Stabilization and Synchronization of Newton-Leipnik System via a Simple Adaptive Feedback Controller

LI Shengzheng, HAO Mingju 7539

高速轨道交通控制技术及应用进展

Overviews of Controlling Technology in High-Speed Rail Transportation

NIAN Xiaohong, JIANG Ming, LIU Zhaoyi 7542

Recommendation on Social Network Based on Graph Model

LI Jun, MA Shuchao, HONG Shuang 7548

工业系统 (Industrial Systems)

Evaluation of Tobacco Mixing Uniformity Based on Chemical Composition

LI Junli, YIN Gengyun, ZHANG Guanghui 7552

三相并联 APF 最优控制策略设计与比较

Design and Comparison of Optimization Control Strategy for Three-phase Shunt APF

RONG Yuanjie, XU Changbo, LI Chunwen 7556

On Quality Control Strategy in Last Stand of Tandem Cold Rolling Mill

ZHANG Xin, ZHANG Dian-hua, CHENG Ping-wen, LI Xu, SUN Jie 7562

基于逆向工程的自由曲面数字化研究

CHEN Zhihong, FANG Hairong, FANG Yuefa 7565

A New Discrete Spectrum Correction Method for Ultra-Low Frequency Signals with Negative Frequency Contribution

MAO Yuwen, TU Yaqing, NIU Penghui 7570

烧结配料多目标模糊满意优化的 BC-PSO 算法

A BC-PSO Algorithm of Multi-Objective and Fuzzy Satisfactory Optimization for Sintering Burden

CHEN Xiaoxia, WU Min, CAO Weihua, LI Yong 7576

测量数据剔除粗大误差与平滑处理的一种算法

LIU Zongbao, GAO Shiqiao, DU Jingqing 7582

A Distributed Control System for the Different Types of Air Compressors

WANG Yi, CAO Maoyong, ZHU Deping, HU Lijun 7588

Short-Term Wind Speed Prediction Method Based on Time Series Combined with LS-SVM

HAN Xiaojuan, ZHANG Xilin, CHEN Fang, SONG Zhihui, WANG Chengmin 7593

Fuzzy Logic Based Multivariable Supervisory Control of a Complicated Industrial Process

HAN Laiji, XIANG Bo, ZHOU Ping 7598

等温锻造液压机四角调平系统的模糊控制

Fuzzy Control of Four-point Leveling System of Isothermal Forging Hydraulic Press

DU Chunyan, XING Guansheng, JIA Chao 7603

三相不控整流发电机功率分配控制策略设计

Power Allocation Control Strategy for Three-phase Synchronous Generator- Uncontrollable Rectifier Systems

GUO Wentao, ZHANG Xuemin, MEI Shengwei, QIN Boyu 7609

基于速度前馈的张力液压缸伺服阀流量控制

Flow Control of Servo Valves for Tension Cylinders Based on Speed Feedforward

LI Jianping, SUN Tao, NIU Wenyong, ZHANG Chun-yu 7615

海洋钻机自动升沉补偿系统的研究

Research on Active Heave Compensation for Offshore Rig

WANG Lin, LIU Shuang 7619
油箱振动试验台的研制
The Development of Tank Shaking Table
SHEN Wei, WANG Junzheng

Underground Electromagnetic Measure and Filter Based on Time-frequency Analysis Applied in Coal Mine Monitoring System
MA Fengying

系统工程 (Systems Engineering)

延期支付且允许缺货条件下的库存控制
An Inventory Control System under Permissible Delay in Payment and Shortage
PAN Yi-Qian, HUANG Hai

双渠道供应链的定价决策研究
Study on Pricing of Dual-Channel Supply Chain
LI Meiying, PANG Guoying, WEI Jie, LI Yaling, FENG Mingyong

Identification of Linear Parameter Varying System Using Flexible Least Squares
ZENG Jiushun, JIN Yang, LUO Shihua

低压电流互感器自动检定系统时间模型研究与分析
On Time Model of Auto Verification System of Low-Voltage Current Transformer
ZHANG Jing, DAI Jie, XIAO Jiang-Wen

基于系统动力学的我国大豆安全研究
Research on Soybean Security of China Based on System Dynamics
ZHU Ting, DUAN Jiaxi, GAO Minghe, ZHANG Chuqun

基于虚拟现实技术的电能计量实训仿真研究
Simulation Research on Electric Energy Measurement System Based on Virtual Reality Technique
XIAO Di, YUAN Tianqi, WANG Zhiwei, XIAO Jiang-Wen

电能表自动检定流水线的控制系统设计
Design on Control System of Automatic Test Line for Meter
WANG Yi, YUAN Tianqi, XIAO Jiang-Wen

制导武器仿真转台动态频响指标研究
On Dynamic Frequency Index of Flight Motion Table Used in Guided Weapon’s Simulation
DONG Guangling, YAO Yu, HE Chi, WANG Xingdan

A Service-Oriented Architecture for the Transportation Cyber-Physical Systems
LI Yong-Fu, SUN Dihua, LIU Weining, ZHANG Xuebo

基于有限关联策略的分布式仿真时间管理研究
A Research on Time Management of Distributed Simulation Based on Limited Correlation Strategy
LU Chao, ZHANG Juan

飞行管理体系架构与关键技术进展
Development of the Architecture and Key Technology on FMS
YU Liang, CHENG Yongmei, CHEN Kezhe, CHENG Cheng

Differential Pricing under Trading in Old Goods for New Based on Market Segmentation
WANG Lisha, ZHAO Jing

雷达与 ESM 航迹关联方法综述
A Survey on Radar/ESM Track Association
YAN Xiefei

An Improved Multi-objective Scatter Search Approach for Solving Selective Disassembly Optimization Problem
GUO Xiwang, LIU Shixin, WANG Dazhi, HOU Chunming
Dependent Function Interval Parameters Training Algorithm Based on DBSCAN Clustering

LI Yang, XIE Guang Qiang, LI Xiaomei, LIU Hua 7709


HE Tuanying 7713

General Synchronization of Multi-valued Logical Networks

YANG Zhengdong, ZHAO Jingwei, LI Rui, CHU Tianguang 7717