

Table of Contents

| | | |
|--|--|-----|
| Logical Approach to Livelock and Deadlock of Deterministic Finite State Machines: Modelling and Finding | YAN Yongyi, YUE Jumei, CHEN Zengqiang | 1 |
| Further Results About the Internal Model Principle and Trajectory Tracking Control in Linear Dynamical Systems | ZHOU Jun, FENG Lu, QIAN Hui Min, SHAO Zhen | 7 |
| Sliding Mode Control for Trajectory Tracking of Mobile Robots | YU HuaCheng, SHENG Ning, AI Zidong | 13 |
| A Novel Stability Criterion for Nonlinear Networked Control Systems Using an Improved Triple-integral Inequality | XU Yao, WANG Renren, LU Hong Qian, SONG Xingxing, CHEN Hongwei | 18 |
| H^∞ State Estimation for Discrete-Time Nonlinear Complex Networks with Sensor Saturations and Fading Channels: The Partial-Nodes-Based Case | XU Qingqing, ZHI Yufu, LI Qi | 23 |
| Dynamic Event-Triggered H^∞ State Estimation of Time-Delayed Neural Networks with Stochastic Parameters and Measurement Outliers | XU Yue, CHEN Kaige, LI Qi | 29 |
| Exact Controllability and Duality Method for Stochastic Game-Based Systems | ZHAO Boyang, LIU Feng, NIU Yuguang, PENG Xin | 35 |
| Designing Stabilizing Controller for Linear Delay Systems | HU Guangda | 40 |
| Finite Input and Given Time Critical Observabilities of Finite State Machines Based on the Semi-tensor Product of Matrices | HE Deng, YAN Yongyi, YUE Jumei | 46 |
| Design of Fractional Order Controller for Microgrid Based on Model Analysis | LI Peike, ZHENG Min, ZHONG Daxing, ZHENG Yang, ZHANG Guangfeng | 52 |
| An Improved Dissipativity Criterion for Singular Systems with Time-varying Delays via a State Decomposition Method | LI Yang, HE Yong | 58 |
| Extended State Observer Based Resource Allocation Method for Second-order Multi-agent Systems with Time-varying Disturbances | DUAN Shuqing, CHEN Sen, ZHAO Zhiliang | 64 |
| State Estimation for Stochastic Systems with Coding-Decoding Scheme and Packet Dropouts | DU Hongling, HUAI Wuxiang, SHENG Li | 70 |
| Stability Analysis of Time-delay Systems via Parameter-dependent Free-matrix-based Double Integral Inequality | YUFENG Tian, WANG Zhanshan | 76 |
| Simultaneous Estimation of Unknown Input and State for Measurement Delay Systems Based on Kalman Filter | GAO Ling, GUAN Yu, SONG Xinmin | 81 |
| Oscillation and Asymptotic Behavior of Third-Order Neutral Differential Equations with Damping, Unbounded Neutral Coefficients and Distributed Deviating Arguments | SUN Yibing, ZHAO Yige | 87 |
| The Existence and Uniqueness of Positive Solution for Nonlinear Singular Fractional Differential Equations with Integro-differential Boundary Value Conditions | WANG Wen, ZHANG Ling-Ling | 93 |
| Research on Consensus of UAV Formation Trajectory Planning Based on Improved Potential Field | WANG Ning, DAI Jiyang, JIN Ying | 99 |
| Structural Control of Floating Offshore Wind Turbines with Inerter-based Low-order Mechanical Networks | LI Zengmei, CHEN Michael Z. Q., HU Yinlong | 105 |
| Attitude Control of Spacecraft Formation Flying Based on Nonsingular Fast Terminal Sliding Mode Control with Adaptive Fuzzy Tuning Technique | ZHANG Nan, ZHANG Ying, ZHANG Rui | 112 |
| Stability Analysis of Fractional-order Neural Networks with Delays Based on LMI | HU Xiaofang, TANG Meilan, LIU Xinge | 118 |

| | | |
|---|---|-----|
| Weak Stabilization of K-Valued Logical Networks | LIU Zejiao, ZHONG Jie, LIU Yang | 124 |
| Dynamic Consensus of Third-Order Delayed Networked Multi-agent Systems with Switching Topology | LI Chang-jiang, CAO Xinxin, MO Jiao-Mei, LOU Yunfei | 130 |
| A New Method Based on Semi-tensor Product of Matrices for Solving Generalized Lyapunov Equation on the Quaternion Skew-field | WANG Dong, LI Ying, DING Wenxv | 136 |
| Special Arrowhead Least Squares Solution of the Quaternion Generalized Sylvester Matrix Equation | DING Wenxv, LI Ying, WANG Dong, WEI Anli | 142 |
| Partial Anti-synchronization in a Class of Chaotic Systems | WU Cong, LEE Shengzheng, DONG Zhen, GUO Rongwei | 148 |
| Design of Observer-based LQG Controller via Simulated Annealing Algorithm | HE Dong, MIAO Zibo | 154 |
| The Minimal Norm Least Squares Tridiagonal (Anti-)Hermitian Solution of the Quaternion Stein Equation | ZHAO Yuan, LI Ying, ZHAO Jianli, WANG Dong | 159 |
| Capability Analysis of Linear Extended State Observer under Model Mismatch for LADRC Control | CHEN Yuantai, DU XIAN, WEN Si-Xin, SUN Xi-Ming, LIU Yanyan | 165 |
| Asynchronous H_∞ Control of Discrete-time Switched Delay Systems with Mode-dependent Average Dwell Time | DEKYI Yutso, LIU Xingwen, CHEN Hao | 171 |
| A Fundamental Matrix Based Approach to Design Prediction Schemes for Discrete-time Systems with State and Input Delays | WU Ai-Guo | 177 |
| Stability Analysis of Linear Systems with Two Additive Time-varying Delays via the Extended Reciprocally Convex Matrix Inequality | YAN Chen, ZHANG Chuan-Ke, ZHOU Xi-Zi | 183 |
| Risk Assessment of Electromagnetic Spectrum Utilization Based on Analytic Hierarchy Process (AHP) and Borda Method | LI You, ZHU Xuan, WU Bing, JIANG Shuiqiao, LIU Han | 189 |
| Time-varying Group Formation-tracking Control for Heterogeneous Multi-agent Systems with Switching Topologies and Time-varying Delays | ZHOU Shiyu, WEI Xiaobao, DONG Xiwang, HUA Yongzhao, REN Zhang | 194 |
| Event-Triggered Time-Varying ADRC Approach for Pneumatic Parallel Manipulator | CUI Congfeng, GU Shaomeng, ZHANG Jinhui | 200 |
| Semi-tensor Product Approach to Approximation of the Constrained Joint Spectral Radius | ZHANG Haoyue, SONG Yang, DENG Li | 206 |
| Predictor-Based Active Anti-Disturbance Control for Multi-Rate Control Systems with Delayed Sampled-Data | SUN Jiankun, ZENG Zhigang | 212 |
| Stable Interaction Control of Networked Lagrangian Systems with Uncertain Dynamics | LI Yipeng, WANG Hanlei, JIANG Tiantian | 218 |
| An Improved Differential Evolution Biogeography-Based Optimization Algorithm | WANG Ning, WEI Lisheng | 224 |
| Double Closed-loop Fuzzy Control and VR Simulation of Single Inverted Pendulum | XU Weichuan, CHANG Xuan, ZHANG Hesheng, ZHU Xiaojin | 230 |
| On Property Analysis of Optimal Solutions for Two Typical Motion Planning Problems | FENG Zixin, XUE Wenchao, QI Hongsheng | 234 |
| On the Bandwidth of the Extended State Observer | ZHAO Yutao, HUANG Yi | 241 |
| UDE-based Robust Control for a Class of Nonaffine Nonlinear Systems with Uncertainties and Output Constraint | CHEN Tian, ZHANG Sainan, GE Shuzhi Sam | 247 |
| Saturation Functions Based Control for Series Elastic Actuator with Feedback Linearization | ZHA Tianjun, LI Peiwen, XU Yucheng, GONG Xinru, SUN Lei | 253 |

| | | |
|--|--|-----|
| An Associatively Recursive Dynamic Backstepping Control Design for Pure-feedback Nonlinear Systems | ZHANG Sheng, DU Xin, HU Fangfang, HUANG Jiangtao | 260 |
| Active Disturbance Rejection Control Based on RBF Neural Network for Active Power Filter | LIU Lunhaojie, FEI Juntao, WANG Zhe | 268 |
| The Analysis of Similarities and Differences Between ADRC and PID Controller for AMB System | REN Gui-ping, YU Ziheng, WU Yue, CHEN Shifeng, LI Xianglei, ZHANG Hai-Tao | 274 |
| Passive Localization Method Based on Range-Parameterised Cubature Kalman Filter | WANG Shoufeng, LI Hui, WANG Baobao | 280 |
| Geometry Control on SE(3) for a Small Size Unmanned Helicopter | GU Xun, XIAN Bin | 285 |
| Fuzzy Adaptive Tracking Control for a Class of Uncertain Nonlinear Systems with Input Dead-Zone | WU Yang, ZHANG Guoshan, WU Libing | 291 |
| Stabilization of the Overhead Crane System via Saturation Technique | QI Xianting, YE Huawen, LI Chengkun | 297 |
| Asymptotic Adaptive Motion Control of Hydraulic Systems | YANG Xiaowei, YAO Jianyong, DENG Wenxiang, YUAN Shusen, LIANG Xianglong | 302 |
| Synergetic Excitation Controller Design for Damping Chaos in a Seven Dimensional Power System | WANG Jiangbin, LIU Ling, LIU Chongxin | 308 |
| Trajectory Tracking Control for Mecanum-wheel Cambered Mobile Robots Based on Online Adaptive Critic Optimal Controller ... | QIN Yong, DIAN Songyi, GUO Bin, XIANG Guofei, FANG Hongwei, WANG Haipeng, ZHANG Xu | 314 |
| Robust Output Tracking for Discrete Quasilinear Systems with Random Disturbance | ZHANG Da-Wei, LIU Guo-Ping | 320 |
| Adaptive neural network H^∞ tracking control for a class of nonlinear fractional order systems | WU Yu, LI Xiaohua, LI Ping | 326 |
| Control of an Underactuated Reusable Launch Vehicle by Partial Feedback Linearization | YE Linqi, LI Jiayi, WANG Changliang, LIU Houde, LIANG Bin | 332 |
| Controllability and Reachability of K-valued Logical Control Networks with Time Delays in States | MU Tiantian, FENG Jun-e, LI Yiliang | 338 |
| Data-based Optimal Control Design with Reinforcement Learning for Nonlinear PDE Systems | ZHENG Yuqing, ZHANG Guoshan | 345 |
| Image-Based Visual Servoing Control for Automatic Carrier Landing | LIU Simin, ZHENG Zewei, GUAN Zhiyuan, LIN Kang | 351 |
| \mathcal{H}_∞ Control for Nonlinear Switched Systems with Mixed Time-Varying Delays Based on Dynamic Event-Triggered Scheme and Average Dwell Time Method | ZHAO Xinyu, HAN Jingjing, CHEN Hao, ZHANG Zhenzhen, ZHONG Shouming | 357 |
| Formation Control of Unmanned Vessels with Saturation Constraint Based on Backstepping | WANG Yuchao, WANG Shichuan, FU Huixuan, LI Zhongkai | 363 |
| Zhang Neurodynamics for Cholesky Decomposition of Matrix Stream Using Pseudo-Inverse with Trans- pose of Unknown | ZENG Xiu, YANG Min, GUO Jinjin, LING Yihong, ZHANG Yunong | 368 |
| Some Results on the Small-time Global Controllability of Affine Nonlinear Systems | SUN Yimin | 374 |
| An Adaptive Integral Sliding Mode Control Method for Overhead Cranes with Monocular Visual Feedback | YOU Zhiteng, XU Weimin, XU Xianxian, ZHU Xinlei, HU Qiang | 379 |
| Time-varying Sliding Mode Controller Design with Super-twisting Algo- rithm for Synchronous Control of Double-Containers for Overhead Cranes | ZHU Xinlei, XU Weimin, YOU Zhiteng, HU Qiang, XU Xianxian | 385 |

| | | |
|---|---|-----|
| A Lyapunov Krasovskii Functional for Input-to-State Stability of Infinite-Delayed Systems | XU Xiang, FENG Gang | 391 |
| Preassigned Finite-Time Control of High-Order Nonlinear Systems with Time-Varying Powers and Full-State Constraints | XIE Ruiming, LIU Yungang | 397 |
| Synchronization of Multiple Delayed Fractional-order Memristive Fuzzy Cellular Neural Network via Interval Matrix Method | YAO Xueqi, ZHONG Shouming | 403 |
| Adaptive Backstepping PID Control for Boiler-turbine Units | WANG Si, ZHANG Xianfu, WEI Airong, LIU Shuai | 409 |
| Circular Formation Control for the Cooperative Ground Target Tracking of Unmanned Aerial Vehicle | JIA Jiangbo, CHEN Xin, ZHANG Min, WANG Weizhen, LI Zhen | 414 |
| Extended-State-Observer-Based Tracking Control for Motor-drive Systems with State Constraints and Unknown Disturbances | CHENG Yun, REN Xuemei, ZHANG Lufeng, WANG Pengbiao | 421 |
| Predefined-Time Attitude Tracking Control of a Rigid Spacecraft | WANG Wencong, HOU Mingshan, LIU Bojun, QIAO Siyu, WU Zhonghua | 427 |
| Sampled-Data Control of Nonlinear Multi-Agent Systems | XU Xiaoyu, LI Wuquan | 433 |
| Collision Free Curved Path Following for Small Fixed-Wing UAVs | WANG Yajing, WANG Xiangke, YU Yangguang, HU Wenxin, SHEN Lincheng | 439 |
| Finite-Time Asynchronous Strict Passive Control for Fuzzy Markov Jump Systems via Output Feedback | CHEN GuoZhen, XIANG Zhang, HE Shuping | 445 |
| Predictive Control of Inventory Management in Supply Chain Systems with Uncertain Demands and Time Delays | YANG Yi, PENG Chen, LI Qingkui | 450 |
| Adaptive Fault-tolerant Control of Robotic Manipulators with Given Transient and Steady-state Performance and Dynamic Uncertainties | LYU Weizhi, LU Wenyuxuan, XU Gang, ZHAI Di-Hua, XIA Yuanqing | 456 |
| Global Output-Feedback Stabilization for Nonlinear Systems with Polynomial Growth | LIANG Lei, YAN Xuehua, BI Shuhui, WANG Xiaohong | 462 |
| An Universal Control Strategy for Planar 2-DoF Underactuated Manipulator with One Passive Joint | HUANG Zixin, ZHOU Yaosheng, CHEN Zhen, WANG Wei, WANG Lejun | 468 |
| Tracking Control for Full-State Constrained Wheeled Robot System with Unknown Dead-Zone Input | WANG Zhen, HUA Changchun, CHEN Jiannan, LUO Xi | 473 |
| Function Approximation Technique Based Immersion and Invariance Control for Motor Servo System | CHEN Wei, HU Jian, NIE Weirong | 479 |
| Adaptive Uncertainty and Disturbance Estimator Based Model Reference Adaptive Dynamic Sliding Mode Control for Overhead Cranes | HU Qiang, XU Weimin, XU Xianxian, YOU Zhiteng, ZHU Xinlei | 484 |
| Active Interactive Genetic Control for Lower Limb Rehabilitation Robots with Uncertainties | CHEN Jinfeng, LI Ying, ZENG Jianping | 491 |
| Adaptive Fuzzy Preassigned Finite-Time Tracking of High-Order Nonlinear Systems with Full-State Constraints | WU You, XIE Xue-Jun | 497 |
| DOB Tracking Control Algorithm for Unmanned Aerial Vehicles with T-S Disturbance Modeling | XU Lubing, YE YangFei, YI Yang, ZHENG Weixing | 503 |
| Event-based Adaptive Compensation Control of Nonlinear Cyber-physical Systems under Actuator Failure and False Data Injection Attack | WANG Pengbiao, REN Xuemei, CHENG Yun, HU Shuangyi | 509 |
| Super-twisting Finite Time Control for Third Order Nonlinear Systems | LIU Xinjian, LI Jianxiong, LI Zhi, FANG Yi Ming | 515 |

| | | |
|--|---|-----|
| Adaptive Sliding Mode Finite-time Control for Quadrotor UAV with Unknown External Disturbances and Drag Coefficients | WU Xiaojing, ZHENG Wenyan | 520 |
| Relations of Controllability and Observability Between Continuous-Time Linear System and Its Projective System | LIU Yuna, LI Haitao | 526 |
| Non-uniform Trajectory Tracking Adaptive Iterative Learning Control for Nonlinear Pure-feedback Systems with Initial State Error Based on RBF-neural Network | ZHANG Chunli, TIAN Xu | 532 |
| Fixed-time Backstepping Control for the Speed System of Cold Strip Main Rolling Mill Based on Extended State Observers | LI Qing-hua, WANG Xin, ZHOU Lin, LIU Le, ZHAO Zhi Wei | 540 |
| Synchronization of Complex Networks with Simple Fixed-time Semi-intermittent Control | LI Na, WANG Pei | 546 |
| A Matrix Approach to Dynamic Coloring Problem | XU Meirong, SUN Liying | 552 |
| Exact Solutions of a Generalized $(2+ 1)$ -dimensional Soliton Equation via Bell Polynomials | WANG Dan, LIU Shuli, GENG Yong, WANG Xiaoli | 557 |
| Application of Energy Shaping of Port-Hamiltonian System to Chaos Synchronization | ZHENG Bin, CAI Jianping, ZHOU Jin | 561 |
| Existence and Uniqueness for Nonlinear Fractional Differential Systems | ZHAO Yige, SUN Yibing | 567 |
| Approximation-based Adaptive NN Control for Nonstrict-Feedback Nonlinear Systems with Input Delay | MA Jiali, WANG Jiaqi | 571 |
| PMSM Control Based on the New Nonsingular Fast Terminal Sliding Model Control Algorithm | WANG Peng, LI Shurong, ZHU Huaijun | 577 |
| Stability Analysis of a Flexible Biped Robot in Periodic Walking | LIAO Fakang, ZHOU Yali, ZHANG Qizhi | 583 |
| Stability for Positive Switched Systems with Distributed Time-varying Delays | LIU Zhi, ZHANG Xianfu, ZHANG Ancai, YU Chen | 590 |
| Grasping Control of PUMA 560 Based on Path Planning | ZHONG Peng, WU Zhaojing, CUI Mingyue | 595 |
| Projective Synchronization Problem of a New 6D Hyper-chaotic System | LI Yanping, QIN Jingru, LEE Shengzheng, CHEN Maoxin, GUO Rongwei, DONG Zhen | 600 |
| Finite-Time Disturbance Attenuation Tracking Control of Flexible-Joint Robots Based on CTSMC | TAN Xin, WANG Huiming, PENG Weiwei | 604 |
| Trajectory Tracking Control for Quadrotor Helicopter by Controlled Lagrangian Method | LIU Ce | 610 |
| A Robust Output Regulation Approach for Trajectory Tracking Control of Ball and Plate System | LI Kunpeng, PING Zhaowu, HUANG Yunzhi, LU Jun-Guo | 617 |
| Command Filter Backstepping Based Trajectory Tracking Control of Underactuated Surface Vessels | WEI Ziping, DU Jialu, TAN Cong, LI Jian | 623 |
| Nonlinear Analysis and Control of the Fractional-order Buck-Boost DC/DC Converter | LEI Tengfei, FU Haiyan, HUANG MingJian | 629 |
| Safety-Critical Model Reference Adaptive Control of Switched Nonlinear Systems under Arbitrary Switching | HUANG Chunxiao, YANG Liying, LONG Lijun | 634 |
| Deadlock Avoidance and Solution Time Optimization for Discrete-time Control Systems via Control Barrier Functions | HU Tengfei, LONG Lijun | 639 |
| Pth Input-to-state Stability of Stochastic Bidirectional Associative Memory Neural Networks with Infinite Delays | ZHOU Weisong, SHI Dan, CHEN Jiachang, ZHU Wei | 645 |
| Adaptive Neural Network Control of Nonlinear MIMO Systems with Unmeasured States and Unknown Control Coefficient | WANG Sanxia, WANG Linqi, YANG Wenjing, WANG Xueliang, XIA Jianwei | 651 |

| | | |
|---|--|-----|
| A Discontinuous Finite-Time Consensus Tracking Algorithm for Single Integrator Multi-Agent System with External Disturbance | YAO Zhaozhan, KUANG Ye, LIU Chang, GUO Yuru, RAO Hongxia | 657 |
| Control Methods of Municipal Solid Wastes Incineration Process: A Survey | DING Haixu, TANG Jian, QIAO Junfei | 662 |
| Reliable finite-time estimation for Nonlinear Systems Over Unreliable Communication Channel | LIN Weiqun, ZHONG Chenwei, GUO Yating, ZHANG Zeqi, RAO Hongxia | 668 |
| Integral Backstepping and Lyapunov Calm Control Design for Magnetic Levitation System | WANG Yichuan, ZHOU Danfeng, LI Jie, SONG Mengxiao, YANG Qing | 674 |
| Design of an Improved LADRC Controller for a Dual-joint Robotic Arm System | DONG Jiashun, WU Huaiyu, CHEN Zhihuan | 679 |
| New Results in Stabilization of Uncertain Nonholonomic Systems: A Self-Triggered Control Approach | ZHANG Pengpeng, LIU Tengfei, JIANG Zhong-Ping | 686 |
| Adaptive Dynamic Surface Control of UAV Based on RBF Neural Network | TIAN Zengwu, ZHOU Yimin | 694 |
| On Stability Analysis of Active Disturbance Rejection Disturbance Control for General MIMO Motion Control Systems | SONG Xiaojing, XUE Wenchao, SONG Kang, LIN Ping | 700 |
| Finite-time Attitude Control of Rigid Spacecrafts Using Immersion and Invariance | YANG Yuhao, LU Hongqian, ZHANG Xu, HUANG Xianlin | 706 |
| Micro-vibration Active Control Based on FXAPA Algorithm | CHANG Xuan, XU Weichuan, SHAO Muyao, GAO Zhiyuan, ZHU Xiaojin | 712 |
| State Estimation for Multi-layer Complex Dynamical Networks with Time-varying Delay | LI Kun, WANG Xinwei, JIANG Guo-Ping | 717 |
| Analysis of Transient Stability of Coupled Kuramoto Oscillators with Asymmetric Time Delays and Phase Shifts | XIONG Helang, ZHANG Hua | 724 |
| An Improved Solution to Identify Spatial Invasion on Metapopulation Networks with SI Model | PENG Yinyin, HU Bo, FENG Hui, LI Xiang, LI Cong | 730 |
| Identifying Influential Spreaders in Complex Networks by an Improved Spectralrank Algorithm | LIU Chunfang, WANG Pei, CHEN Aimin | 736 |
| Evolution OfWeighted External Owned Accounts Trading Networks on Ethereum | CHEN Yunjie, RONG Zhihai | 742 |
| Research on Link Prediction Based on Compatibility of Chinese Medicinal Materials | WU Chencheng, ZHOU Yinzuo, CHEN Weilun | 747 |
| A Link Prediction Similarity Index Based on Enhanced Local Path Method | CHEN Weilun, ZHOU Yinzuo | 753 |
| Prospect Theoretic Analysis on Weighted Vertex Cover of Networks | HU Yuanyuan, CHEN Jie, TANG Changbing | 758 |
| Detection of Influential Nodes Using Neighbor Closeness in Complex Networks | DAI Jinying, LI Cong, LI Xiang | 764 |
| Price of fairness for zero-determinant strategies in Iterated Prisoner' s Dilemma | WU Miao, TANG Changbing | 770 |
| Evolution of the Physics Citation Network with Motifs | ZENG Xiangwei, RONG Zhihai | 776 |
| Modeling Multi-type Information Propagation Based on Multi-layer Networks | CHEN Libin, FENG Yuan, ZENG Chengyi, LIU HongFu, CHEN Jing | 781 |
| Optimal Disintegration Strategy in Multiplex Networks:From an Edge-based Attack Perspective | WANG Chen, FENG Yuan, ZENG Chengyi, LIU HongFu | 788 |

| | | |
|---|---|-----|
| Partial Anti-synchronization Problem of a New 6D Hyper-chaotic System | QIN Jingru, YI Xiaofeng, GUO Rongwei, ZHOU Jin | 795 |
| Mean Square Consensus under Coopetitive Social Networks with Communication Noise | CAI Hanzhe, YUAN Fanli, LIANG Haili, ZHOU Zhao | 800 |
| Spectral Bisection Community Detection Method for Urban Road Networks | GUO Lu, CUI Ying, LIANG Haili, ZHOU Zhao | 806 |
| Topology Identification of Multiple Output Coupled Neural Networks with and without Parameter Uncertainties | LIU Xiaolu, WU Hanyu, REN Shun-Yan, HUANG Yanli | 812 |
| PD Control for Passivity of Coupled Reaction-diffusion Neural Networks with Multiple State Couplings | LIANG Rongguo, REN Shun-Yan, WANG Jin-Liang | 818 |
| Robust Finite-time Passivity and Synchronization of Coupled Complex-valued Memristive Neural Networks with Parameter Uncertainty | WU Fang, HUANG Yanli | 824 |
| Observer Design for Space-Varying Delayed Distributed Parameter Systems | ZHANG Xu, WANG Zi-Peng, ZHAO Feng-Liang, LI Qianqian | 830 |
| Topology Identification for Multi-layer Complex Dynamical Networks with Intra-layer Coupling Time Delay | HUANG Zhiheng, WANG Xinwei, JIANG Guo-Ping | 835 |
| Dynamic Analysis of the Software Rejuvenation System with Degradation Levels | HUO Huixia, CHEN Zhuoqian, XU Houbao | 843 |
| Output Feedback Stabilization of an ODE-transport Cascade System | PAN Lina, WANG Jun-Min | 849 |
| Active Disturbance Rejection Control and Disturbance Observer-based Control Approach to 1-d Flexible String System | ZHAI Yin-Guang, ZHOU Hua-Cheng | 855 |
| Event-triggered Control of Large-scale Interconnected Systems Subject to Time Delay | LIU Chuan-xin, KANG Wen, WANG Xiaonan | 861 |
| L2-Well-posedness and Regularity of 1-d Wave Equations on a Three-edge-tree-shaped Network | LIU Dongyi, QI Qi, XU Genqi | 867 |
| Constrained Adaptive Control for Heat Equations with Disturbances | XU Zaihua, LIU Yungang, LI Jian, MAN Yongchao | 873 |
| Multi-robot Formation Control and Implementation | CHEN Hao, QI Jie, DONG Yuqin, ZHONG Sanguan | 879 |
| Robust Non-Fragile Event-Triggered Sampled-Data Control for Uncertain Distributed Parameter Systems | ZHAO Feng-Liang, WANG Zi-Peng, ZHANG Xu, LI Qianqian | 885 |
| Trajectory Tracking Control and Vibration Control for a Rigid-Flexible Wing System | TANG Xinyue, WANG Tingting, FU Qiang, ZHANG Chunhua, HE Wei | 891 |
| Tracking Control of a Wave Equation with Boundary Disturbance: Combining ADRC and Differential Flatness | ZHANG Yu-Long, WANG Jun-Min | 897 |
| Observer Design for Parabolic PDE System Based on Mobile Sensor with Random Measurement Delays | LV Guili, ZHANG Jianzhong, LI Xiaoqian | 903 |
| A Distributed Dual Proximal Algorithm for Non-Smooth Composite Onstrained Optimization and Its Application | RAN Liang, HU Jinhui, LIU Hongli, LI Huaqing | 908 |
| Novel Dwell-time Dependent Stability Results for Impulsive Systems | SHAO Hanyong, WANG Huimin, YUAN Guangxia | 914 |
| Stability Analysis for Fractional-like Linear Systems | ZHAO Hongguo, CUI Peng, FENG Ling | 920 |
| Further Stability Analysis for Load Frequency Control of Power Systems with Time-Varying Delays | FENG Wenxi, LUO Fei, ZHANG Xianyong, DUAN Wenyong | 926 |

| | | |
|---|--|------|
| Stabilization of Positive Periodic Piecewise Linear Systems | ZHENG Yan, WANG Yaonan | 932 |
| On Contraction and Incremental Stability of a Class of Switched Filippov Systems | LANG Yingying, LU Wenlian | 938 |
| New Criteria for Global Exponential Stability of Discrete-Time High-Order Neural Networks with Time-Varying Delays | DONG Zeyu, YANG Xin, WANG Xin, ZHANG Xian | 944 |
| Distributed PID Controller Design and Stability Analysis for the Vehicle Platoon with Communication Delay and Input Delay | ZHU Xu, ZHANG Ze Hua | 950 |
| Robust Stability and Stabilization of Uncertain Systems with Time-varying Delays via Delay-partition | WANG Long, HAN Jingjing, ZHANG Zhenzhen, LIU Xingwen, ZHONG Shouming, CHEN Hao | 956 |
| Set Stability of Switched Boolean Networks with Restricted Successors | CHEN Yuxia, GUO Yuqian, GUI Weihua | 962 |
| A Novel Asymmetric LKF Method to Stability for T-S Fuzzy Systems with Time-varying Delay | SHENG Zhaoliang, LIN Chong, CHEN Bing | 968 |
| Adaptive Dynamic Event-Triggered Control for Switched Systems | WANG Yuzhong, ZHAO Jun | 973 |
| Set Stability of Boolean Networks from Initial Set to Destination Set | LIU Wen, LI Changxi, FU Shihua, ZHAO Jianli, GUO Lijuan | 978 |
| Robust H^∞ Control for Linear Switched Uncertain Systems with Input Quantization | WANG Xiaomei, ZHAO Jun | 984 |
| The Analysis of Exact Frequency Spectra and Stability of First-order Neutral Systems with Two Delays | QIAN Haochen, GAO QINGBIN | 989 |
| Exact Stability Analysis of LTI Systems with Multiple Distributed Delays Based on the Dixon Resultant | CAI Jiazhi, ZHANG Xujie, GAO QINGBIN | 994 |
| On Uniform Stability of Nonlinear Measure Differential Equations | CAO Yueju | 1000 |
| Event-triggered Control for Sampled-Data Set Stabilization of Switched Delayed Logical Control Networks | LIANG Yan, SONG Changxin, KONG Xiangshan, YANG Xinrong, LI Haitao | 1005 |
| Projective Synchronization in a New 5D Hyper-chaotic System | YI Xiaofeng, LI Yanping, LU Xiaodan, HU Yaping, GUO Rongwei, ZHOU Jin | 1011 |
| Stabilization of a Four-Dimensional Chaotic System with No Equilibria via a Novel Precise Constant-Control Approach | SUN Changchun, XU Qicheng | 1015 |
| Region of Attraction Estimation for Island DC Microgrid with Large Shifting Load: the Mixed Potential Theory Approach | WANG Yijing, ZHANG Yangzhen, ZUO Zhiqiang | 1021 |
| Suppressing Stick-Slip Vibration of Drill-String System Subject to Actuator Saturation | HE Zhaoqing, LU Chengda, WU Min, GAO Jun | 1027 |
| Global Exponential Stability Analysis of Neural Networks with an Interval Time-varying Delay via an Extended Free-matrix-based Double Integral Inequality | ZHANG Fen, LI Zhi, ZHANG Yanbang | 1032 |
| State Feedback H_∞ Performance of Fractional Order Systems | ZHANG XueFeng, SUN DengRui | 1038 |
| On Evolutionarily Stable Strategies | ZHANG Xiao, HAO Yaqi, CHENG Daizhan | 1044 |
| A Spectrum Characterization of Feedback Capability for Unknown Markovian Jump Linear Systems | LIU Nian, GUO Lei | 1050 |
| Rule Designs for Optimal Online Game Matchmaking | XU Mingkuan, YU Yang, WU Chenye | 1055 |
| Linear Quadratic Stackelberg Stochastic Differential Games: Closed-Loop Solvability | LI Zixuan, SHI Jingtao | 1063 |
| Stability Analysis of a Class of Stochastic Nonlinear Systems with Model Uncertainties Based on Neural Networks | SUN Gonghao, HUANG Hanqiao, XIONG Wei, WANG Meng, ZHU Yue | 1071 |

| | | |
|---|--|------|
| Adaptive Control for Stochastic Nonlinear Systems with Dead Zone Output | LIU Yanli, KANG Haobo, MA Hongjun | 1077 |
| Reachable Set Estimation of a Class of Human-in-the-Loop Control Systems | ZHANG Xiu-Mei, WU Huai-Ning | 1083 |
| Event-triggered-based Control for Continuous-time Nonlinear Markov Jump Systems Satisfying Incremental Quadratic Constraints | MA Xiang, ZHANG Yueyuan, HUANG Jun, CHEN Yiyang | 1088 |
| Anti-disturbance Control of Stochastic Nonlinear Systems Based on Extended State Observer | WANG Chunxiao, ZHANG Zhongcai, WU Yuqiang, HENG Guo | 1093 |
| Event-Triggered Finite-Time Stabilization of High-Order Stochastic Nonlinear Systems with Inverse Dynamics | LIN Huaiyue, JIANG Anqi, LI Kuo, HUA Changchun | 1099 |
| Fault-tolerant Control for Nonlinear Singular Markov Jump Systems with Time-delay | FU Lei, GUO Kang, LI Fei, ZHOU Zhen | 1105 |
| Mixed H_2/H_∞ control for stochastic continuous-time systems with input delay | YU Xiaoqing, KONG Shulan | 1111 |
| Observer-based adaptive sliding mode control for \hat{I}^o stochastic switched systems against actuator degradation | MA Tengyu, LI Li, WANG Weihua, LI Longsuo | 1117 |
| Semi-global Finite-time Synchronization of Stochastic Complex Networks | LI Liangliang, JIANG Wenlin | 1124 |
| Finite-Time Boundedness of Impulsive Memristive Neural Networks with Markovian Jumping Parameters | LIU Xiangyu, ZHANG Baoyong, WANG Ting | 1130 |
| Adaptive Finite-time Almost Sure Tracking of Drill-Bits Driven by a Lévy Process | CHEN Liyan, ZONG Xiaofeng | 1136 |
| Distributed Non-Fragile State Estimation for Discrete Nonlinear Systems with Parameter Uncertainties | XU Ping, WU Huaiyu, ZHENG Xiujuan | 1142 |
| Event-triggered Control for Stochastic Systems under Dual Network Attacks | SUN Wenbo, XING Shuangyun, YUE Xishun, CHANG Chunling | 1148 |
| Graph Models for Security Monitoring of Streets and Balance Communication of WSNs | YAN Yongyi, YUE Jumei, HE Deng | 1154 |
| STP Approach to Formulate K-Externally Stable Sets of Graphs | YUE Jumei, YAN Yongyi, CHEN Zengqiang | 1160 |
| Gradient-based and Multi-innovation Gradient-based Iterative Algorithms for Single-diode Photovoltaic Cell Models | WANG Junwei, JI Yan, LIU Haibo | 1166 |
| Support Vector Regression Ship Motion Identification Modeling Based on Grey Wolf Optimizer | MENG Yao, ZHANG Xiufeng, LIU Zhaochun, WANG Xiaoxue | 1172 |
| A Two-Step Kinematic Calibration Method Based on Biological Characteristics for Exoskeleton | GUO Wenxin, QIN Weiwei, LIU Gang, LIANG Zhuo, SONG Tainian | 1177 |
| Theoretical Modeling of Eddy Current Magnetic Field and Magnetic Field Measurement Array Topology Methods | ZHU Haokui, ZHANG Yuan-wen, HUANG Huan | 1183 |
| Optimal Attitude Sensor Placement and Modal Frequency Identification of Large Space Structure | NI Zhiyu, WU Chenchen, WU Shunan, ZHANG Yu-hang | 1189 |
| Laguerre-Gramian-based Model Order Reduction of Bilinear Systems | DAI Liu, XIAO Zhi-Hua, ZHANG Renzheng | 1195 |
| Mass-property Identification System for Three-axis Air Bearing Table Based on Simulated Annealing Algorithm and Fading Memory Filter | WANG Zhenyu, LI Zening, XU Xu, MA Guangcheng, XIA Hongwei | 1201 |

| | | |
|--|---|------|
| A New Improved Bouc-Wen Model of Piezoelectric Ceramics Actuators | HU Jinyu, DONG Ruili, TAN Yonghong | 1207 |
| Prediction Method of Dioxin Emission Concentration Based on PCA and Deep Forest Regression | XU Wen, TANG Jian, XIA Heng, SUN Zijian | 1212 |
| 无 | | |
| Fractional Adaptive Kalman Filter with Colored Correlated Noise | WANG Xinhe, SUN Xiao-Jun | 1218 |
| Optimization of Deep Belief Network and Its Application on Equivalent Modeling for Micro-Grid | DAI Yan, MA Xuemin, HU Ziyu, LI Zihan, LI Yulin | 1224 |
| Parameter Identification of Hypersonic Vehicle Based on LSTM Algorithm | ZHANG Sihua, LIU Shiyue, WEI Fuhua | 1230 |
| Aerodynamic Parameters Identification for High-Spinning Projectile Based on Geomagnetic Data | ZHOU Zijun, WANG Liangming, FU Jian, AN Liangliang | 1236 |
| Comparison of Three Filters Space Objects Parameters Estimation via Astrometric and Photometric Data | LI Lingwei, GUO Yiming, WU Xiwei, WU Cihang, XIAO Bing | 1243 |
| Flow Pattern Identification of Gas-liquid Two-phase Flow Using Dual-modality Sensor | SUN Bixiao, TAN Chao, SHI Xuewei, REN Shangjie, DONG Feng | 1249 |
| Parameter Identification of Lithium Battery Model Based on Improved Fireworks Algorithm | LI Jiange, WU Yong, HE Xiuzhu | 1255 |
| A Novel Drilling Rate of Penetration (ROP) Prediction Method Using Data Pre-processing Techniques and T-S Fuzzy Inference | WANG Xiang, GAN Chao, CAO Weihua | 1261 |
| Deep Learning-based Spatial Modeling Method for 3D Formation Drillability Field | PENG Lei, GAN Chao, CAO Weihua | 1267 |
| Closed-loop Indirect Identification of a Quadrotor Generalized Attitude Model Using Outdoor Flight Data | GENG Li-Hui, LIU Jin-Cang, LIU Xiao-You, ZHAO Shu-Hai | 1271 |
| Correlation Analysis Based Direct Identification of a Quadrotor Generalized Attitude Model Using Out- door Flight Data | LIU Jin-Cang, GENG Li-Hui, LIU Xiao-You, CHANG Yun-Wei | 1276 |
| Modeling and Simulation Analysis of Triaxial Gyro Stabilized Platform | LI Xueling, LI Zonglong, ZHANG Yong, XI Xiaopeng | 1281 |
| Particle Swarm Optimization Algorithm-based Identification of Fractional-order Magnetic Levitation Systems | LIU Tianxin, YANG Qing, TAN Yiqiu, LI Jie, CHEN QIANG | 1287 |
| Zonotopic Particle Filtering Based State Estimation Algorithm and Its Application on Temperature Recognition for Lithium Battery | WANG Ziyun, WANG Peiyu, ZHAN Yacong, ZHANG Shuai, WANG Yan, JI Zhicheng | 1292 |
| Parameter Estimation for Generalized Time-varying System with Moving Average Noise | JIANG Anning, JI Yan | 1297 |
| Research on Multi-step Prediction of Inlet NOx Concentration Based on VMD-ARIMA Model | ZHAO Zheng, MA Yijie | 1303 |
| Epidemic Dynamics Analysis of COVID-19 Using a Modified SEIR Model with Symptom Classifications | MENG Yuan, GUO Yixuan, LIU Xueyi, WANG Yikang, ZHANG Bao-Lin | 1309 |
| Review of VSG for Industrial Process Data Regression Modeling | WANG Dandan, TANG Jian, QIAO Junfei | 1316 |
| Hybrid Integrated Modeling of Thermal Field Temperature in Cz Silicon Single Crystal Growth Process Based on VMD-CNN-LSTM-ELM | WAN Yin, LIU Ding, REN Junchao | 1322 |
| Numerical Simulation of Municipal Solid Waste Incineration Process Based on Chemical Process Simu- lation Software | ZHUANG Jiabin, TANG Jian, QIAO Junfei | 1328 |

| | | |
|--|--|------|
| UD Decomposition Based Adaptive UKF for Nonlinear Estimation of States and Parameters | JIANG Ziya, WANG Gao | 1332 |
| Heat Transfer Characteristics Analysis and Structure Optimization of Perforated Louver Fins | XIE Qiyue, LIANG Chao | 1338 |
| Reverse Engineering Gene Regulatory Networks Based on Dynamic Threshold Condition Mutual Information with Resampling Strategy | XU Jie, YANG Guanxue, LIU Guohai, YANG Guanxiao | 1343 |
| Topology Identification of Complex Networked System via Group Sparse Penalized Nonlinear Least Squares | YANG Guanxue, YANG Guanxiao, CHEN Xu, WANG Zhaowei | 1348 |
| Recursive Parameter Estimation Methods Based on Gradient Search for Estimating System Parameters of First-order Inertial Control Systems | XU Ling | 1353 |
| A Review of Semi-supervised Learning for Industrial Process Regression Modeling | XU Wen, TANG Jian, XIA Heng | 1359 |
| Model Reference Adaptive Parameter Identification of PMSM Based on Single-Loop Model Predictive Control | LIU Huibo, ZHANG Chong, HUANG Qianzhu | 1365 |
| A Spatiotemporal 3D Fuzzy Modeling Method for A Rapid Thermal Processing System | YAN Runbin, ZHANG Xian-Xia | 1373 |
| Establishment of Aero-Engine Improved On-Board Adaptive Model with Contracted Kalman Filter Estimation | LIU Zhidan, GOU Linfeng, FAN Ding, SUN Chujia | 1379 |
| Bouc-Wen Hysteresis Model Identification by Improved Jaya Algorithm for Piezoelectric Ceramic Actuator | WANG Yiru, SHAO Muyao, HUANG Jiaqi, CHANG Xuan, GAO Zhiyuan | 1384 |
| On the Convergence of Least Squares Estimator for Nonlinear Autoregressive Models | LIU Zhaobo, LI Changying | 1389 |
| Mean Square Stability of Discrete-Time Linear Systems with Random Impulsive Disturbance | LONG Jiamei, GUO Yuqian, GUI Weihua | 1395 |
| Secure Control of Networked Switched Systems with Random DoS Attacks via Event-triggered Approach | LIU Yonghui | 1399 |
| MLD Based Model and Validation of DM-PHEV in Mode Transition Process | LIANG Cong, XU Xing, WANG Feng | 1405 |
| Exponential Synchronization of Switched Cellular Neural Networks via AED-ADT Method | MA Xuan, HOU Linlin, SUN Haibin, REN Hangli | 1413 |
| Global Finite-Time Stability for Stochastic Impulsive Systems via Comparison Approach | GAO Qin, ZHOU Xiao-Qi, LIU Bin, LIU Dongnan | 1419 |
| Socially Optimal Nash Equilibrium of Switched Linear Quadratic Differential Games | HUANG Yabing, ZHAO Jun | 1425 |
| Complete Controllability of Piecewise Time-Varying Impulsive Systems with Multiple Input Delays | YAN Jiayuan, HU Bin, CHEN Long, ZHANG Dingxue, GUAN Zhi-Hong | 1431 |
| Adaptive Aperiodic Intermittent Control for Nonlinear Active Suspension Systems | ZENG Qiang, MA Dan, ZHAO Jun | 1437 |
| Asynchronous Switching Control of Dual-machine Power Systems with the Generator Tripping | WANG Ronghao | 1442 |
| Switching Controller Design for Stochastic Switched Fuzzy Systems | YANG Hong, ZHANG Yu, YANG Chao, ZHANG Le, LI Liangjie | 1449 |
| Adaptive finite-time H^∞ control for singular Markov jump systems with mode-dependent delays | LI Xin, MU Xiaowu | 1455 |

| | | |
|--|--|------|
| On State-based Evolutionary Games | LIU Zequn, JI Zhengping, CHENG Daizhan | 1461 |
| Asymptotic Stability Analysis for Switched Systems under Spatio-temporal Specifications | LIU Qian, LONG Lijun | 1469 |
| Event-triggered Adaptive Fuzzy Decentralized Control for Switched Nonlinear Systems | WANG Fenglan, WANG Jie, LONG Lijun | 1474 |
| Observer-based Optimal Control for a Class of Impulsive Switched Systems | LIU Xiaomei, LI Shengtao | 1480 |
| Path Planning Method for Mobile Robot Based on Multiple Improved PSO | HE Jingjing, LI Xun, MA Wenzhe, YUN Xin, YAN Dong | 1485 |
| Optimal Stackelberg-Nash Strategy for One Leader and Two Followers | JU Pei-jun, LEI Jing, LI Tongxing, LI Xiaoqian | 1491 |
| The Team Winning Analysis Model Based on Network and Entropy Weight | XIA Weihao, FU Yinghao, SHI Jingliang, WU Honghua, WANG Jihui | 1496 |
| A Robust Optimal Cooperation Method for Nonlinear Uncertain Systems | SUN Jianfeng, CHEN Xuesong | 1503 |
| Solution of Delayed Mixed H_2/H_∞ Problem with Continuous-time System based on Nash Game Approach | LI Xiaoqian, JU Pei-jun, JING Zonglei | 1508 |
| IBMF-based Global Optimization Control on Energy Conservation of a Central Air-conditioning System | FENG Zengxi, YANG Yalong, ZHAO Anjun, ZHAO Jintong, CHEN Haiyue, LI Shiyan | 1513 |
| Control Design of GOOGOL' s Mobile Two-Wheeled Self-Balancing Robot Based on TP Model Transformation and Non-fixed-time Step Sampling Method | SHI Bao, CHANG Fei, HUANG Sharina, ZHAO Guoliang, LI Yilong | 1520 |
| Modeling and Solving of the Missile Pursuit-Evasion Game Problem | QI Dingding, LI Longyue, XU Hailong, YE Tian, ZHAO Huizhen | 1526 |
| Electric Vehicle Charging Station Planning Based on Immune Algorithm and Voronoi Diagram | LI Yongjing, PEI Wenhui, XU Di | 1532 |
| Location Selection of Electric Vehicle Charging Station Based on Improved Immune Algorithm | XU Di, PEI Wenhui, LI Yongjing | 1538 |
| Control for Multiplicative Noise Systems with Packet Dropouts and Multiple Delays | LV Chuanzhi, LU Xiao, WANG Haixia, LIANG Xiao, SONG Shibin, NIE Jun | 1544 |
| Koopman-Based Optimal Tracking Control of Nonlinear Dynamical Systems | LOU Xuyang, MA Ling, YE Qian | 1550 |
| Optimal Tracking Control for Robotic Manipulator Using Actor-critic Network | HU Yong, CUI Lingguo, CHAI Senchun | 1556 |
| Multi-objective PI Controller Tuning Using NSGA-II with Preferability | ZHANG Tao, YIN Xiaokang | 1562 |
| Existence and Uniqueness of Positive Solutions for Multi-point Boundary Value Problems of Fractional Differential Equations Involving Derivatives | ZHAO Xin, ZHANG Ling-Ling | 1569 |
| Indirect Hp-pseudospectral Method for Nonlinear Quadratic Optimal Control Problem | LIU Yuxian, LI Yan, QIU Yuqing, LANG Jinxi | 1575 |
| Trajectory Optimization of High-speed Kinetic Energy Anti-tank Missile with Pulse Correction | MA Jun, MIAO Haochun, LI Haiqing, ZHANG Yijie | 1581 |
| Reinforcement Learning Method Based Load Shifting Strategy with Demand Response | JIN Lingwu, CHEN Zhen, LI Jinwei, YE Tao | 1586 |

| | | |
|---|--|------|
| Research on Sensorless Control System of Permanent Magnet Synchronous Motor for CNC Machine Tool | HUO Jiaxin, JI Hanjie, YANG Peihao | 1592 |
| A Pursuit-Evasion Problem of Multiple Pursuers from the Biological-inspired Perspective | WANG Jianan, LI Guilu, LIANG Li, WANG Dandan, WANG Chunyan | 1596 |
| An Autonomous Maneuver Decision Method Using Receding Horizon Optimization Scheme | HAO Qinzhi, WEI Zhenglei, XIE Lei, DONG Kangsheng, WANG Xiaofei, XUAN Yongbo | 1602 |
| Optimal Preview Controller Design for Multirate Systems Based on Adaptive Dynamic Programming | WANG Di, YE Jiayu, GAO Suixiang, YANG Siliang | 1608 |
| A Human Learning Optimization Algorithm with Link Prediction Strategy | DU Jiaojie, WANG Ling, FEI Minrui | 1614 |
| Optimal Railway Safety Supervision Trajectory by SPSO Algorithm | LIU Jun | 1620 |
| Improving NSGA-II by a Local Search Strategy with Gaussian Mutation | ZHANG Zhijun, LU Baiquan | 1628 |
| Nonsmooth Nonconvex Optimization Problem Based on an Improved Porcellio Scaber Algorithm | MIAO Peng, WU Deyu, CHEN Li | 1634 |
| A Novel Constructive Heuristic for Flowshop Group Scheduling Problems to Minimize Total Flow Time | HE Xuan, LIU Yu-Fan, PAN Quanke, YU Yang, LI Yuan-Zhen | 1639 |
| A Novel Resource-Leveling Approach for Prefabricated Construction Project Based on Genetic Algorithm | YU Miao, WANG Yang, XU Xiaoqing | 1645 |
| Multi-subpopulation Coevolutionary Algorithm with Adaptive Cauchy-Polynomial Mutation | CUI Xingyu, ZHANG Huifeng, HE Jiawei | 1651 |
| Constrained Optimal Controller Design for Urban Metro Traffic Regulation | LUO Jiate, TONG Yin | 1657 |
| A Hybrid Algorithm for Job Shop Scheduling Problem with Consideration of Work Timetable | HU Jinjin, XIONG Hegen, YANG Guangcan | 1663 |
| Design of Hybrid Simulated Annealing Algorithm for UAV Scheduling Based on Coordinated Task Scheduling | WU Lijie, SUN Qi, XU Haitao, SONG Xiaochen, ZHANG Yang | 1669 |
| Prediction-free Online Dispatch of Remote Wind-Storage Plant Considering Transmission Congestion | QI Tengyun, GUO Zhongjie, LIU Jianping, WEI Wei, XU Fei, MEI Shengwei | 1675 |
| Scheduling of AA-CAES Based Energy Hub with Wind Power Generation: A Multi-stage Robust Optimization Approach | BAI Jiayu, WEI Wei, XUE Xiaodai, MEI Shengwei | 1681 |
| An Equilibrium Model of Power System with Peer-to-Peer Energy Transaction | PAN Dong, XIE Yuguang, ZHENG Boshen, WEI Wei, MEI Shengwei | 1687 |
| Predefined-Time Distributed Optimization Problem Subject to Equality Constraint of Second-Order Multi-Agent Systems | LI Shiling, NIAN Xiaohong, DENG Zhenhua, CHEN Zhao, LEI Chongxin | 1692 |
| Solvability Region of AC Power Flow with Volatile Renewable Generation and Operating Constraints | MA Qianli, WEI Wei, CHAI Wei, MEI Shengwei | 1698 |
| Evacuation Problem under the Nuclear Leakage Accident | YAO Canqi, CHEN Shibo, YANG Zaiyue | 1703 |
| Research on Task Allocation of Ground-Air Collaborative Cluster Based on Two Improved Firefly Algorithms | GAO Ya, MA Rui, MA Guangcheng, XIA Hongwei, MA Changbo | 1709 |
| Variable Observation Duration Scheduling Problem for Agile Earth Observation Satellite Based on Quantum Genetic Algorithm | ZHI Hui, LIANG Weikui, HAN Peng, GUO Yanning, LI Chuanjiang | 1715 |
| Elimination Mechanism-based PSO Algorithm for Cloud Workflow Scheduling with Budget Constraints | WANG Yizhu, LI Huifang, LIN Zhiwei, XIA Yuanqing | 1721 |

| | | |
|--|--|------|
| Optimal Satellite Formation Reconfiguration Using Pseudospectral Method and Co-evolutionary Particle Swarm Optimization | ZHANG Shumei, BAO Xiaoli, XIANG Mingliang, ZHANG Xiuyun | 1727 |
| Optimal Scheduling Method of Multi-Energy Hub Systems Based on Bayesian Game Theory | XU Jing, PANG Huizhen, ZHANG Bingzhe, LI Qixian, HUANG Yu | 1733 |
| Energy Storage Sizing for Transmission Capacity Constrained Photovoltaic Power Plant: A Fractional Programming Approach | FENG Yinying, WEI Wei, XUE Xiaodai, CHEN Laijun, MEI Shengwei | 1739 |
| Effective Heuristics for the Distributed Permutation Flowshop Scheduling Problem with Release Dates | HAN Biao, LIU Yu-Fan, PAN Quan-Ke, LI Yuan-Zhen | 1744 |
| Penalty Methods for Distributed Optimization with Inequality and Equality Constraints | XIA Zicong, LIU Yang | 1750 |
| An Effective Discrete Invasive Weed Optimization Algorithm for Multi-AGVs Dispatching Problem in a Matrix Production Workshop | LI Zhongkai, SANG Hongyan, ZHANG Xujin, LI Junqing, GUO Hengwei | 1756 |
| An Improved Ensemble Deep Learning Model for Water Leakage Detection | ZHANG Shuwei, BAI Miaoshun, WANG Jingcheng, XU Haotian, WU Shunyu | 1762 |
| Optimal Scheduling of Microgrid with Variable Current for Energy Storage | WANG Qiang, LI Xiaowen, ZHANG Ruyi, QI Zhiyuan | 1768 |
| Sizing Shared Energy Storage for the Integration of Renewable Generation: A Coalition Game Based Approach | WANG Chuan, WEI Wei, XUE Xiaodai, CHEN Laijun, MEI Shengwei | 1774 |
| Bare Bones Particle Swarms with Linear Variable Weight | ZHANG Lihao, CAI Yuan-Li, DENG Yifan | 1780 |
| A Fully Distributed Optimization Method for Reserve Capacity of Multi-Area Interconnected Power Systems Considering Reserve Sharing | XIANG Li, SHAO Shi Biao, WU Jiang, GAO Feng, FENG Xue, WANG Jiahua | 1785 |
| Resource Scheduling Base on Bayesian Cramer-Rao Lower Bound for Multi-Target Tracking in Netted Colocated MIMO Radar Systems | LIAO Sijian, PENG Zhihong, CAI Junqi | 1791 |
| Research on Radiator Structure Optimization Using Fireworks Algorithm Based on Elite Opposition-Based Learning | HE Xiuzhu, WU Yong, LI Jiange | 1797 |
| Multi-task Allocation of Multi-UAV Coalition Based on Improved Quantum Genetic Algorithm | LIU Pengfei, WANG Bing, LIU Wenjie, ZHANG Lan | 1802 |
| Problem Specific Genetic Differential Evolution Algorithm for Multi-skill Resource-constrained Project Scheduling of Collaborative Multi-Robot Systems for Search and Rescue | SUN Jingbo, PENG Zhihong, CAI Junqi | 1808 |
| Research on Multi-AGVs Scheduling Based on Genetic Particle Swarm Optimization Algorithm | TAO Qiuyun, SANG Hongyan, GUO Hengwei, HAN Yuyan | 1814 |
| On Ground Penetrating Radar Fast Imaging Method Based on Compressed Sensing | WANG Guangjun, QI Xinzhaohao, WANG ZhaoHui, DING Chengxiang | 1820 |
| Multi-edge Server Load Balancing Offloading Method Based on Ant Colony Algorithm | WANG Yijie, FU Jingqi, ZHANG Yue | 1826 |
| Optimal Dispatch Strategy of Microgrid Energy Storage Based on Improved Sparrow Search Algorithm | ZHENG Yulin, LIU Fang | 1832 |
| The Loss-Averse Newsvendor Problem with Random Supply Capacity and Reference Point | LIU Wei, ZHAO Han, SONG Shiji, WANG Huachang | 1838 |
| Iterative Recurrence Model for Calculating Effectiveness of Defense in the Multiple Shooting Mode | LI Longyue, SHANG Changan, DONG Tao, ZHAO Huizhen, GUO Pengsong | 1844 |

| | | |
|--|---|------|
| Combining Electricity Load Forecasting and Dynamic Economic Dispatch by a Time Fusion Framework | ZOU Dexuan | 1850 |
| Multi-objective Optimization of Greenhouse Light Environment Based on NSGA-II Algorithm | YUAN Qingyun, LIU Tan | 1856 |
| Optimal Configuration of ES Capacity under the Access of EV in V2G Mode | XU Changcheng, WAN Youhong, ZHANG Shuaishuai, HE Weiwei | 1862 |
| Architecture Design and Implementation of UUV Mission Planning | WEI Dunwen, HAO Pengfeng, MA Hongjiao | 1869 |
| Solving Wasserstein Robust Two-stage Stochastic Linear Programs via Second-order Conic Programming | WANG Zhuolin, YOU Keyou, SONG Shiji, ZHANG Yuli | 1875 |
| Long-term Auction for Inner-Dependent Task Offloading in Blockchain-Enabled Edge Computing | LIU Tonglai, XU Yi, ZHANG Zikai, WU Jigang | 1881 |
| Design of Intelligent Dispatching System for Port Gantry Crane | SUN Chenxi, LIU Dong, KANG Shuyi, HUI Boxu | 1887 |
| A New Hybrid Algorithm for the Continuous Site Inspection Points Location-Assignment-Path Planning Problem | YUE Haiyang, REN Xiaoqiang, WANG Xiaofan | 1893 |
| An Improved Fast Search Multi-objective Genetic Algorithm for Airline Crew Scheduling Problems | ZHANG Chenyue, GU Chaochen, GONG Yueming, WU Kaijie, XIA HaoYuan, ZHANG Fei | 1900 |
| Research and Application for Hydraulic Cylinder Workshop Scheduling Considering on Time Delivery Rate | XU Mengying, LU Jianfeng, ZHU Feng, YU Fenghua, HAN Tiaojuan, XU Mengxia | 1905 |
| A Multi-robot Task Allocation and Path Planning Method for Warehouse System | MEI Yulin, LI Sheng, CHEN Chen, HAN Andong | 1911 |
| Research on Optimal Operation of Multi-medium Coupling Model of Iron and Steel Enterprise for Multi-condition Scenarios | ZHANG Ziheng, WU Dinghui, HU Hongtao, MA Rui Jie | 1917 |
| Compact Harris Hawks Optimization Algorithm | YU Zhihao, DU Jialu, LI Guangqiang | 1925 |
| Facility Layout in Horizontal Cylindrical Space Based on Adaptive Gradient Descent Algorithm | YUAN Peng, MIAO Yiran, HUANG Deqing, HAO Junkai, QIN Na | 1931 |
| A Hybrid Imperialist Competitive Algorithm for the Outpatient Scheduling Problem with Switching and Preparation Times | YU Hui, LI Junqing, HAN Yuyan, SANG Hongyan | 1937 |
| Hierarchical Task Assignment of Multiple UAVs with Improved Firefly Algorithm Based on Simulated Annealing Mechanism | WEI Yali, WANG Bing, LIU Wenjie, ZHANG Lan | 1943 |
| Performance Improvement of TFRC Congestion Control Algorithm in Wireless Network Streaming Media Transmission | LI Kang, YUAN Yan, CHEN Yitao, Z Zc | 1949 |
| Research on Logistics Planning of Discrete Manufacturing Workshop Based on Plant Simulation | XU Mengxia, ZHANG Hao, CHEN Xiang, WANG Xue, XIA Luyao | 1954 |
| Online Optimal Transmission Scheduling of an Energy Harvesting Sensor for Remote State Estimation | XIANG Haoxiang, ZHONG Chenwei, YANG Jingwen, QIU Xinan, RAO Hongxia | 1960 |
| Human Learning Optimization with Self-tuning Random Learning Strategy | HU Xuelian, HUANG Bowen, WANG Ling | 1966 |
| Dynamic Resource Scheduling Based on Improved Genetic Algorithm | GUI Yuanyuan | 1972 |
| An Evolutionary Multi-Layer Extreme Learning Machine for Data Clustering Problems ... | WU Xian, ZHOU Tianfang, YI Kaixiang, FEI Minrui, CHEN Yayu, DING Jialan, ZHOU Wenju | 1978 |
| Research on the Attraction Level of Talents Based on Fuzzy Evaluation | SHEN Yunchang, LU Huacai, ZHANG Chenyan | 1984 |

| | | |
|---|---|------|
| Hybrid Energy Storage Control Strategy Based on Energy Prediction for Photovoltaic Microgrid | GAO Wengen, YU Yue, WANG Ning, LU Huacai | 1990 |
| Optimized Dispatching of Seawater Pumping-Storing/Wind/Solar Hybrid Power Generating System | LIU Yuyu, LIU Ding, LU Kang | 1997 |
| An Iterated Local Search Algorithm for Distributed Permutation Flowshop Group Scheduling Problems with Total Flowtime Minimization | ZHAO Hui, LIU Yu-Fan, PAN Quan-Ke, LI Yuan-Zhen | 2003 |
| An Iterated Greedy Algorithm for Distributed Flowshop Group Scheduling Problem with Total Tardiness Criterion | WANG Zhi-Yuan, YU Chengmin, PAN Quan-Ke, LI Yuan-Zhen | 2009 |
| Tracking Control for Fractional-order Uncertain Systems Based on the Indirect Lyapunov Method | LIU Ruijuan, QIN Zhiqiang, NIE Zhuoyun | 2015 |
| Event-triggered H^∞ Control for Networked Control Systems with Packet Dropout Compensation | WANG Tian-Bao, SUN MingXin | 2020 |
| Robust Steady-state Kalman Filter for Descriptor System with Uncertain-variance Noise and Packet Dropout | LIU Wentao, RAN Chenjian, DOU Yinfeng, GAO Yuan, SHEN Hao | 2027 |
| H^∞ Consensus for Discrete-time Multi-agent Systems Subject to Distributed Delay and Switching Topolo- gies | ZHANG Bojun, HUANG Hanqiao, XU Xinpeng, CHENG Haoyu, WEI Yali | 2033 |
| Some Insights on Data-Based Frequency-Weighted Model Reduction | HAN Xue, LI Xiumin, ZHOU Kemin | 2039 |
| PID Controller Design Based on BPNN for Helicopter Vibration Attenuation | JI Wei, TIAN Bailing, ZONG Qun | 2045 |
| Application of Active Disturbance Rejection Control in Tank Gun Control System | ZHAO Wenjun, XIA Yuanqing, SONG Haiping, SUN Zhongqi, XU Yifeng | 2051 |
| H Control of Double Pendulum Overhead Crane Based on T-S Fuzzy Model | SHAO Xuejuan, LIU Liqin, ZHANG Jinggang, CHEN Zhimei, ZHAO Zhicheng | 2057 |
| H-infinity Piecewise Control for 2-D Parabolic PDE Systems with Collocated Piecewise Observation | GUO Runsheng, SUN Kangkang, QIU Jianbin | 2063 |
| Robust Guaranteed Cost Control for Polynomial Fuzzy Systems via Relaxed Sum-of-Squares Approach | LI Lizhen, WU Qianjun, CHAI Yuan | 2068 |
| Synchronization of Fractional-order Chaotic Systems with Model Uncertainty and External Disturbance | ZHANG Yaru, WU Cong, DONG Zhen, ZHONG Laijun, GUO Rongwei | 2074 |
| Roll Controller Design for Miniature Air-to-Ground Missile Based on ADRC | WANG Mingguang, LI Guang, ZHAO Lingxue, WEI Lixia | 2079 |
| Active Disturbance Rejection Control for Permanent Magnet Synchronous Motor with Noise: Analysis of Parameter Characteristics of Extended State Observer | LI Yinsheng, CHEN Yongjun | 2085 |
| Robust Decoupling Control of Web Tension and Velocity in Unwinding System | XIONG Tao, ZHOU Gan, ZOU Dangdang, LI Zicheng | 2091 |
| A Sensorless Haptic Force Estimation Method and Its Application to Uncertain Robotic Manipulators | WEI Yanran, ZHU Yukai, WANG Chenliang, XU Jianwei, GUO Lei | 2097 |
| UCAV Waypoint Tracking Guidance Method Based on Output Feedback Adaptive Theory | ZHANG Senyu, ZHOU Huan, HUANG Hanqiao | 2103 |
| A Novel Hippocampus Classification Method Based on the Subfields Selection and Sparse Linear Dis- criminant Analysis | WANG Xiangying, WANG Shiyuan | 2109 |
| Robust Energy Trading for Interconnected Microgrids under Uncertain Electricity Price | HU Hengdu, WANG Bing, YANG Shiqin | 2115 |

| | | |
|--|--|------|
| Adaptive Back-stepping Based Control for Active Suspension Systems with Prescribed Performance | GUO Huijun, LIANG Jintao | 2121 |
| Attitude Control for an Unmanned Helicopter Using Passivity-Based Iterative Learning | ZHANG Xu, XIAN Bin | 2127 |
| Nonlinear Trajectory Tracking Control of Underactuated Unmanned Underwater Vehicles under Stochastic Disturbances | WANG Man, LI Qingwei, LIU Chao, HE Jiafan | 2133 |
| Research on Sapphire Furnace Temperature Control Strategy Based on Active Disturbance Rejection Control | SONG Xubo, SHI Xinguo, ZHAI Bo, CHENG Xingong, ZONG Xiju, GE Hao, ZHENG Jiangtao | 2139 |
| Optical-Flow-Based Visual Servoing for Robotic Moving Control Using Closed-Loop Joints | YANG ZeTao, ZHONG Xungao, MIAO Chunxiao, ZHAO Jing, ZHONG Xunyu | 2145 |
| Research on UAV Adaptive Control Method Based on Genetic Programming | FENG Qi, YU Jianyu | 2150 |
| Decentralized Zero-sum Games for Nonlinear Systems Based on Off-policy Learning Scheme | LUO Hao, MU Chaoxu, YU Lifu, WANG Ke | 2155 |
| Data-Based Iterative DHP Optimal Tracking Control with a Wastewater Treatment Application | ZHAO Huiling, WANG Ding, ZHAO Mingming, REN Jin | 2161 |
| Trajectory Tracking Control Based on RTO Enforcing SCFO for Lower Limb Rehabilitation Robot | CHU Qinghao, ZHANG Jun, CHEN Zhaoxin | 2167 |
| Research on Image Processing Application of Improved Adaptive Filter Based on LPSO Algorithm | YIN YUHENG, GUO Yangang, DENG Liwei, CHAI Borong | 2174 |
| Neural-Network-Based Self-Learning Disturbance Rejection Design for Continuous-Time Nonlinear Constrained Systems | LI Menghua, WANG Ding, QIAO Junfei, XU Xin | 2179 |
| Optical Disc Location Based on Similarity to Improved Harris Algorithm | DENG Liwei, WANG Yue, HAN Jing | 2185 |
| Event-Driven Optimal Regulation with SNAC Framework for Constrained Nonlinear Plants | HU Lingzhi, WANG Ding, ZHAO Mingming, REN Jin | 2190 |
| A non-fragile Approach to H^∞ ILC of Linear Discrete-time Systems with Uncertain Learning Gain | LI Lingchun, ZHANG Guangming, OU Meiyong, WU Changlin | 2196 |
| Adaptive Output Feedback Control of Nonlinear System with Input Constraints Using HOSM Observer | ZHU Rusong | 2202 |
| Disturbance Monitoring and Compensation in Soft Sensing of Mill Load in Thermal Power Plant | SHI Jianquan, CHEN Huihui, GUO Zhang | 2208 |
| A New Iterative Learning Control Algorithm for A Class of Single Link Manipulator System with Time-iteration-varying Parameters | LI Siqi, ZHANG Guoshan, ZHANG Yi | 2214 |
| Disturbance Rejection Based Engine Speed Control with Rotational Inertia Online Estimation | XIE Hui, ZHANG Yuanyuan, SONG Kang, SHAO Can | 2220 |
| Design of Constant Temperature Building Heating System Based on Fuzzy Adaptive PID Control | HE Zhengxing, LIU Xichang, SUN Haiyi | 2226 |
| Learning-based Attitude Takeover Control for Noncooperative Space Targets with Unknown Dynamics | MA Guangfu, LIU Yuhan, LV Yueyong, WANG Pengyu | 2233 |
| Output Feedback Design with Dynamic Surface for Nonlinear Systems with Unmodeled Dynamics | TANG Liqiang, ZHU Hufei, YANG Yongliang, ZOU Wencheng, XU Cheng-Zhong, YIN Yixin | 2239 |
| Online Adaptive Vibration Control and Fault Diagnosis Based on System Identification Strategy for Offshore Platforms | JIANG Xuena, MA Hui | 2245 |

| | | |
|--|--|------|
| A Youla Parameterized Adaptive FIR Feedforward Noise Control Algorithm with Acoustic Coupling | LI Feng, WU Zhizheng, YUE Tengfei, XU Tingyue | 2251 |
| Multiple Model Adaptive Control of Quadrotor with Uncertain Load | CHEN Wei, WANG SiFeng | 2257 |
| Establishment of a Self-learning Mechanism for Multi-time Scale Forecasting of Concrete Distributor Transport Capacity | LI Dong, ZHANG Yaxin, YU Wenda, ZHANG Lu | 2263 |
| Formation Control Using Simplified Reinforcement Learning for Multi-agent Systems with State Delay | SHAO Wentai, CHEN Yutao, HUANG Jie | 2269 |
| An Adaptive Control Scheme for Longitudinal Dynamics of A Twin Otter Aircraft | YANG Haiping, ZHANG Yanjun, ZHANG Zhengqiang | 2275 |
| Adaptive Sliding Mode Control for Random Teleoperation System with Time-Varying Delay | JIAN Haitao, ZHENG Shiqi, ZHAO Chenghao, LI Haiming, WANG Shihao | 2280 |
| Formation Control of Nonlinear Multi-Agent Systems with Actuator and Communication Attacks | WANG Shihao, ZHENG Shiqi, ZHAO Chenghao, JIAN Haitao, LI Haiming | 2286 |
| Event-Triggered Attack-Tolerant Control for Quadrotor UAV | LI Haiming, ZHENG Shiqi, ZHAO Chenghao, JIAN Haitao, WANG Shihao | 2292 |
| Convergence of a Stochastic Adaptive MPC | CHEN Hui, GUO Lei | 2298 |
| Synthesis of Controllers for Co-Safe Linear Temporal Logic Specifications Using Reinforcement Learning | REN Xiaohua, YIN Xiang, LI Shaoyuan | 2304 |
| Permanent Magnet Synchronous Motor Torque Control Based on Fuzzy Adaptive Sliding Mode Algorithm | ZHANG Binbin, LU Shuang, CHEN Chaobo, WANG Kun, YANG Congkun | 2310 |
| Dual-motor Driven Control of Microgravity Simulation System Based on Dynamic Friction Compensation | LI Bin, WANG Yuxin, LI Peng, XU Wenli | 2315 |
| Nonsingular Fixed-time Sliding Mode Control for Second-order Systems with Unknown Disturbance | TIAN Ye, LU Pingli, QING Jiang, DU Changkun, LIU Haikuo | 2321 |
| Vector Control of High-Speed Permanent Magnet Synchronous Motor Based on Improved Sliding Mode Observer | HE Yanzhao, WANG Zhenyan, GUO Yanlong | 2327 |
| Finite-Time Robust Synchronization of Delayed Competitive Neural Networks via Sliding-Mode Control | TAN Xingxing, WANG Leimin, CHEN Xili, CHENG Jiajun, JIANG Shan | 2333 |
| Research on Integrated Roll and Yaw Control Strategy for AUV Diving Near Surface | QI Zhigang, SU Yi | 2339 |
| Study on Sliding Mode Variable Structure Control Strategy for Grid-side Converter in $\alpha \beta$ Coordinate System | CUI Yue, YAN Shaomin, LU Yonghao, GAO Xiaojie, CAI Yuhan | 2344 |
| Fixed-Time Nonsingular Terminal Sliding Mode Control with Compound Sliding Surface | LI Huijie, CAI Yuan-Li | 2348 |
| Sliding Mode Control for Continuous Stirred Tank Reactor with Mis- matched Disturbances: A Genetic-Algorithm-Optimized GESO Approach | ZHOU Sai, WANG Shuhan, MA Shu-Min, LU Qi, SONG Jun, QING Xiang-yun | 2354 |
| Frequency Regulation of Microgrid with Inverter Air Conditioners Based on Sliding Mode Control | GE Shaoyun, HE Xingtang, LIU Hong, SONG Kuizheng | 2360 |
| Cascade Sliding Mode Control Based on Extended State Observer Method for a DC-DC Buck Converter | WANG Shuwang, LI Juan, ZHANG Luyao, LI Shengquan | 2366 |
| A Global Fast Terminal Sliding Mode Backstepping Control for MEMS Micromirror | LI Yurong, QIN Yi, WANG Fujie, GUO Fang, YEOW John T W | 2372 |
| A Novel SOSM Control Method by Using Adaptive Fuzzy Technique | ZHANG Binbin, DING Shihong, MEI Keqi | 2376 |

| | | |
|--|---|------|
| State-of-Charge and State-of-Energy Estimation for Lithium-ion Batteries Using Sliding-Mode Observers | FENG Yong, FAN Bai, CHEN Xue, HAN Fengling | 2382 |
| Adaptive Discrete-Time Quasi-Sliding Mode Control of Induction Motors | FENG Yong, CHEN Xue, FAN Bai, HAN Fengling | 2386 |
| Research of a New Cloud Agent Game Model | JIANG Ping, LI Haixia, CHEN Jiejie | 2391 |
| A Survey on Perspective-n-Point Problem | PAN Shi Ye, WANG Xin Mei | 2396 |
| Heuristic Scheduling Method with the Importance of Earlier Tasks for Deadline Constrained Workflows in Clouds | YANG Liwen, XIA Yuanqing, YE Lingjuan | 2402 |
| Credible Web Service Composition Based on Improved Multi-objective Particle Swarm Optimization | LIU Feng, HAN Min, LIU Jianwei | 2408 |
| An Improved C2oDE Based on Stochastic Ranking | SI Chengyong, SHEN Jianqiang, WANG Chaofeng, WANG Lei | 2414 |
| Fuzzy Logic Algorithm of Projectile Electromechanical Actuator Control System | YIN Hongqiao, YI Wenjun, LI Cuicui, WANG Kangjian, GUAN Jun | 2419 |
| Robust Fault Estimation for a Class of T-S Fuzzy Singularly Perturbed Systems with State Time Delays | SUN Chao, ZENG Qiuyuan, HUANG Sheng-Juan, YI SuHuan | 2424 |
| Design and Implementation of a Logic Reasoning System Based on Intuitionistic Fuzzy Rough Set | YE Tian, LI Longyue, GUO Pengsong | 2430 |
| Adaptive Fuzzy Finite-Time Backstepping Control of Nonlinear Systems with Input Constraint and Hysteresis Nonlinearity | LI Mengmeng, LI Yuan, WANG Qinglin | 2436 |
| Research on Tension Control System of Winding Machine Based on Fuzzy PID Algorithm | DENG Liwei, SUO Hongfei, REN Haonan | 2442 |
| Deep Convolutional Fuzzy Systems of Stock Value Prediction Based on AFS Theory | GUO Mingxiang, PAN Xuejun, SONG Shifan, JIA Wenjuan, LIU Xiaodong | 2448 |
| Adaptive Fuzzy Control Scheme with Guaranteed Performance for Uncertain Nonlinear Systems Preceded by Preisach Operator ... | HUANG Kai, LAI Guanyu, HUANG Weijun, WANG Junwei, CHEN Kairui | 2454 |
| Passivity and Feedback Passification for Discrete-Time Switched Interval Type-2 Fuzzy Systems | ZHANG Siyuan, ZHAO Jun | 2460 |
| Sliding Mode Control of High Speed Train with Additional Resistance | SHI Rui, CUI Yanliang, SHI Guangtian, JI Juanjuan | 2465 |
| Forecasting Approach in Fuzzy Time Series Based on Information Granules | ZHAO Kaixin, DAI Yaping, JI Ye, SUN Jiayi | 2471 |
| Nonfragile Fuzzy Tracking Control for Nonlinear Systems with Input and Output Dynamic Quantization | LI Zhi-Min, QI Jianling, LIU Guobao | 2477 |
| A Compound Control Method for Coagulant Dosing in Waterworks | WU Junfei | 2483 |
| Application of Small Disturbance Instability Based on Random Response Surface Method in Wind Power System | YANG Liu, ZHANG Huaguang, GAO Zhiyun | 2487 |
| Temperature Estimation of Cement Rotary Kiln Based on Moving Horizon Estimation | LI Zhaogang, ZHAO Jianyu, LI Shi | 2493 |
| A Full-Process Quantitative Analysis Method of the Content of Antimony Sulfide Based on Raman Spectrum | LI Zhou, XU Degang, CAI Yaoyi, ZHANG Lei, WAN Kun | 2498 |
| Design of a Prediction and Optimization System for Plate Shape in Roller Quenching Process | ZHANG Wen, WU Min, CHEN Cong, DU Sheng, CHEN Luefeng | 2504 |
| A Novel Control for a Continuous Stirred Tank Reactor | XIN Li-Ping, YU Bo, YU Jinpeng | 2510 |

| | | |
|--|---|------|
| Operating Performance Assessment of Plant-wide Processes Based on Hierarchical Multiblock Performance-Relevant Kernel Independent Component Analysis | LIU Yan, CHU Fei, WANG Fuli, HE Dakuo | 2514 |
| Liquid Crystal Phased Array Beam Deflection Control with Triple-step Method | WANG Zishuo, WANG Chunyang, LIANG Shuning, WANG Zeng | 2520 |
| Fuzzy Model Predictive Control for Wastewater Treatment Process under Multi-Operating Conditions | CHENG Ming, HAN Guang, LI Wenlu, WANG Xiaoxue, SUN Xiaoyun, ZHENG Haiqing | 2526 |
| Anti-swing Design of an Overhead Crane Based on Optimal Preview Control | LI Ruiji, TANG Weiqiang, GAO Haiyan | 2532 |
| Continuous Crystallization Process Control with Deep Galerkin Method | XIA Hao, WANG Weijie, PANG Yan | 2537 |
| Steady Power Control for Isolated Microgrid Based on Battery SOC | FEI Hao | 2543 |
| Water Level Control of Steam Generator in Nuclear Power Plant Based on Intelligent MFAC-PID | DU Yonglu, LI Haotian, FEI Minrui, WANG Ling, ZHANG Pinggai, ZHAO Wanqing | 2549 |
| U-net Based Deep-Learning Image Monitoring of Crystal Size Distribution During L-Glutamic Acid Crystallization | HUO Yan, LIU Tao, JIANG Zhenyu, FAN Ji | 2555 |
| Double Loop Energy-Saving Control for Single-Effect LiBr/H ₂ O Absorption Refrigeration System | LIU Zhengchang, WU Aiguo, WEN Haitang | 2561 |
| Feedforward-based Generalized Predictive Control for Outlet Temperature of Calciner | CHEN Wei, GAO Xiang, CHEN Xipeng, CHENG Yong, CHU Biao, ZHANG Hongtu | 2568 |
| Discrete-time 2DOF Control Design with a Generalized Predictor for Stable and Integrating Processes with Time Delay | ZHOU Yongzhi, HAO Shoulin, LIU Tao | 2574 |
| A Just-in-time Learning Based Integrated IMC-ILC Control Strategy for Batch Processes | ZHOU Chengyu, JIA Li | 2580 |
| Batch Cooling Crystallization Processes Optimization of β -L-glutamic Acid based on Moving Horizon State Estimation | WANG Yao, CUI Yan, LIU Tao, SUN Feiran | 2586 |
| Dynamic Feedforward Control for Mach Number in Wind Tunnel | YU Wenshan, ZHANG Ming, RAO Zhengzhou, WEI Zhi, LIU Gang | 2592 |
| Constant Temperature Control System Based on RNA Virus Detection | LIU Chunxiao, LI Xiaobo, CHEN Haoming, YAN Yun, WEI Dong, ZHU Jin | 2598 |
| Minimum Airflow Rate Algorithm for VAV Systems | XING Tian, ZHAO Qianchuan, ZHANG Jili | 2604 |
| Robust MPC for Asymmetric Input and State Constraints | ZHANG Shuangxi, CAI Yuan-Li | 2610 |
| Dual Mode Predictive Control of Buck-boost Converters Based on State Estimation | LI Shuao, ZHAO Jianyu, JIANG Ping, LI Shi | 2616 |
| MPC Based Controller Design of Battery Integrated Modular Multilevel Converter | XU Fang, GUO Zhongyi, LIU Qifang, CHEN Hong, QU Yali | 2622 |
| Short-term Traffic Flow Prediction Based on Improved Deep Echo State Network | LI Changwu, REN Xiao, ZHANG Qingyong, XIA Huiwen, CHEN Jiahua, GAO Yutong | 2628 |
| Predictive Functional Control for Linear Motor Speed System Based on Repetitive Sliding Mode Observer | ZHOU Lei, LIN Jian, WAN Qi | 2633 |
| The Quadrotor Position Control Based on MPC with Adaptation | LIU Mingcheng, ZHANG Fubiao, LANG Shuaipeng | 2639 |
| Study on a Single-loop MPC Strategy for Grid-side Converter | LU Yonghao, YAN Shaomin, CUI Yue, GAO Xiaojie, CAI Yuhan | 2645 |

| | | |
|--|--|------|
| Research on Dq-based Model Predictive Control Strategy for Three-phase Converter | GAO Xiaojie, YAN Shaomin, LU Yonghao, CUI Yue, CAI Yuhan | 2649 |
| Model Predictive Current Control Based on Finite-control-set for Permanent Magnet Toroidal Motor | LIU Xin, WANG Zhengyang, WANG Xiaoyuan | 2653 |
| Research on Prediction of Boiler Combustion Energy Efficiency Based on Deep Reinforcement Learning | JIANG Hui, CAI Ziyun, ZHANG TengFei, PENG Chen | 2658 |
| Design and Research of Temperature Control System Based on Generalized Predictive Control | YU Jingya, YANG Yi, HAN Qingqing, GU Haiqin, GAO Long, REN Xiaolin | 2663 |
| Vehicle State Estimation Based on Recurrent Neural Network | DONG Ge, CHE Guangxu, TIAN Mengjian, ZHAO Haiyan, GAO Bingzhao | 2669 |
| Static Output Feedback Model Predictive Control for Uncertain Linear Systems | ZHANG Shuzhan, ZHAO Dongya, SPURGEON Sarah | 2674 |
| A Novel Event Triggered Model Predictive Control Method for VAV Air Conditioning System | HE Ning, CHEN Qing Qing | 2680 |
| Linear Estimation of Wireless Sensor Networks with Unknown Inputs in the Presence of Data Packet Drops | LIU Ke | 2686 |
| Further Results on Performance Limits Analysis of Nonlinear Model Predictive Control Based on Value Iteration | CAI Xin, LIANG Bowen | 2692 |
| Research on Blood Glucose Data Prediction Based on I-GWO-KELM Algorithm | CHEN Xiaoyu, MA Xin, SHI Li | 2698 |
| Stable Economic Model-Predictive Control for T-S Fuzzy Systems with Persistent Disturbances | ABDELBAKY Mohamed Abdelkarim, LIU Xiangjie, KONG Xiaobing | 2703 |
| Furnace Temperature Prediction Using Optimized Kernel Extreme Learning Machine | ZHANG Pinggai, JIANG Yiyu, WANG Mengzhen, FEI Minrui, WANG Ling | 2711 |
| Modeling and Control of Intermediate Point Temperature of A 1000MW Ultra Supercritical Power Plant | MI Hanyu, PENG Chen, CHENG Chuanliang | 2716 |
| A Novel Robust Event-triggered MPC with State Feedback for Aero-engines | HU Yingjie, BIAN YuTao, GOU Linfeng, FAN Ding | 2723 |
| Enhanced Gaussian Process Regression for Active Learning Model-based Predictive Control | REN Rui, LI Shaoyuan | 2731 |
| Model Predictive Control of Markov Jump Linear Systems: an Error-based Self-triggered Approach | HE Peng, WEN Jiwei, LUAN Xiaoli, LIU Fei | 2737 |
| The Autonomous Path Planning Algorithm for the USV under Complex Battlefield Situations | CHEN XIAO, LIU Wei, SONG Shuang | 2742 |
| A Practical Path Planning and Control Method for Move-to-Move Attitude Maneuvers | LEI Yongjun, LU Dongning, WANG Lijiao | 2748 |
| A Novel Heading Control Strategy for Unmanned Surface Vehicle | MU Dongdong, WANG Guofeng, FAN Yunsheng | 2756 |
| An Adaptive Step-climbing Method for a RHex-style Robot | SONG Xingguo, ZHANG Xiaolong, HAN Minhan, MENG Xiangyin | 2761 |
| Fault Diagnosis of Permanent Magnet Synchronous Motor Based on Improved Probabilistic Neural Network | DAI Xuesong, ZHANG Yuxian, QIAO Likui, SUN Deyuan | 2767 |
| The Global Control of First Order Rotary Parallel Double Inverted Pendulum System | YU Junhao, ZHANG Xiaohua | 2773 |

| | | |
|---|--|------|
| Rigid-flexible Coupling Positioning Stage Driven by Ball Screw with Dual Feedback Based on Active Disturbance Rejection Control | WEI Shengqiang, HAO Peng, LIN Jun-Xiang, YANG Zhijun | 2779 |
| Research on Motion Driving and Tracking Control of 3-DOF Parallel Stabilized Platform | JIANG Shuo, WANG Junzheng, WANG Shou Kun, ZHAO Jiangbo | 2784 |
| High-Precision Beam Steering Mechanism Control Based on Model Compensation and Neural Network | WANG Xinyu, HE Haiyan, LIN Zhe, HU Qinglei | 2790 |
| A New Repetitive Motion Planning Scheme Based on Gradient Descent for Omnidirectional Mobile Robot Manipulators | LI Xuanxian, YANG Hanyao, LIU Qingping, SHAO HUI, GUO Dongsheng | 2796 |
| An Easy-implemented Optimization Method of Trajectory Planning Based on Polynomial Interpolation | CHEN Guangrong, MA Ming, GUO Sheng, HOU Bowen, WANG Junzheng | 2802 |
| Multiple Demonstrations Based Trajectory Generation for Mobile Agent Using DMPs with T-S Fuzzy Model | JIANG Fan, WU Huai-Ning | 2808 |
| On Intelligent Ship Tracking Control Method Based on Hierarchical MPC | TENG Yanbin, LIU Zhengfeng | 2814 |
| ESO-based Sliding Mode Controller with A Novel Reaching Law for Cable Arrangement System | LI Xiufeng, MA Ling | 2820 |
| On the System-bias Reduction for Autonomous Tractor Tracking Controls | XUE Mengqi, YUAN Hongliang | 2825 |
| Decoupling Control of Permanent Magnet Synchronous Motor Based on Predictive Current Compensation | LIU Pai, FANG Xiaoyu, LI Ze, GUO Yuanbo, ZHANG Xiaohua | 2831 |
| Research on Active Disturbance Rejection Control of Hydraulic Servo System in Complex Initial States | MENG Fanliang, YAN Hao | 2837 |
| On Disturbance Rejection for Gimbal Servo System of Flexible Mounting Control Moment Gyroscope | TAO Zhenyu, YANG Jun, LI Shihua, CHEN Congyan | 2842 |
| Research and Design of Fractional-Order PID Controller for Inertial Stabilized Platform via Internal Model Control | ZHANG Yaqiong, GUO Jiandu, LIU YI, ZHOU Jing, SUN Yu | 2848 |
| Singularity Avoidance Strategies for Target Tracking Visual Servo Systems | LEI Wenxiao, ZHOU Dong, LI Peng, SUN Guanghui | 2855 |
| High Order Observer with Integral Sliding Mode Controller for Permanent Magnet Synchronous Motor | LIU Jingyu, ZHOU Yingjiang, JIANG Guo-Ping, LI Cheng | 2860 |
| Longitudinal and Lateral Coordinated Motion Controller Design for an Electric Racing Car | CHEN Tianxing, HUANG Huateng, HOU Zhiwei, MO Zhenjie, FENG Ziyou | 2866 |
| Finite-time Disturbance Observer Based Active Anti-disturbance Control for Disturbed Inverted Pendulum System | LU Xueying, HOU Huazhou, LI Shihua | 2873 |
| Development Status of the LOS Guidance Strategy and Realization of the USV Path Tracking Control | WANG Lian, CHEN XIAO, LUO Rong, WANG Liang, XIAO Yujie | 2879 |
| Mechanical Resonance Suppression Based on Self-tuning Notch Filter for Servo System | LU Shaowu, CHANG He, ZHANG Shenghui, NING Bowen | 2887 |
| Adaptive Backstepping Path Following Control of Autonomous Ground Vehicles with Sideslip Effects | LI Surui, WANG Heng, QUAN Wei, LI Qing, WANG Xuanzhi | 2891 |
| High-fidelity Positioning and Tracking of AGVs Based on Kalman Filter | ZHANG Wei, WANG Wenjie, GONG Liang, LIU Chengliang | 2897 |
| A Networked Cluster Flight Control System for Robot-pigeons | HOU Weiyang, LIU Zijun, WANG Zhenlong, SONG Jianxi, DING Yingqiang | 2902 |

| | | |
|--|--|------|
| Sparse Representation of Vibration Signals of Rolling Bearing Based on K-SVD Combined with DCT | SUN Hongchun, ZHANG Zihan | 2908 |
| Fuzzy-Logic Adapted for LMS Algorithm Based on Q-Gradient | LU Lu, YANG Xiaomin | 2914 |
| A Hybrid Spatial Prediction Algorithm for Lossless Compression of CT and MRI Medical Images | SONG Xiaoying | 2918 |
| Oil-gas-water Three-phase Flow Status Identification and Monitoring Based on Multi-Sensor Signal | WU Wentao, ZHANG Shumei, DONG Feng | 2923 |
| Flow Status Monitoring for Oil-Gas-Water Three-Phase Flow via Slow and Steady Feature Analysis and Empirical Mode Decomposition | LI Linghan, ZHANG Shumei, DONG Feng | 2929 |
| Discharge Current Filtering of High Voltage Pulse Power Supply Based on Singular Value Decomposition of Toeplitz Matrix | YANG Yang, LI Changping | 2935 |
| Data Processing Based on Glomerular Microcircuits for Electronic Noses | LIU Yingjie, BIAN Qingqing, TONG Jie, WEN Hao, ZHAN Chunyi | 2940 |
| Robust Time-varying Kalman Smoothers with Uncertain Noise Variances | QI Wenjuan, SHENG Zunbing | 2946 |
| Research on Real-Time Reentry Trajectory Reconstruction Base on Multiple Model | HUANG Pu, ZHANG Chongyang, LI Haiyue, SHI Feng | 2951 |
| Guaranteed Cost Robust Centralized Fusion Kalman Estimator for Systems with Moving Average Colored Measurement Noise, Missing Measurements and Uncertain Noise Variances | YANG Chunshan, ZHAO Ying, WANG Jianqi, JI Jianbo | 2956 |
| Unmanned Vehicle 3D Lidar Point Cloud Segmentation | GUO Rui, JIANG Zheyi, GAO Rui, YANG Wenkun, GAO Yuxin, CHEN Xiaofeng, ZHI Yongfeng, GUO Liang | 2964 |
| Fusion of Infrared and Visible Images Based on Visual Contrast in Human Vision Space | YANG Rao, MIAO Ling-juan, ZHOU Zhiqiang, CUI Saijia, LIN Yusen | 2969 |
| Oil-gas-water Three-phase Flow Regimes Identification Based on Flow Characterization in Time- frequency Domain | ZHANG Shuo, SHI Xuewei, WU Hao, DONG Feng | 2975 |
| Paired Dictionary Learning Based MR Image Reconstruction from Undersampled K-Space Data | LIU Jiaodi, SHENG Yuxia, YANG Jun, XIONG Dan | 2981 |
| Surface Defects Classification Using Transfer Learning and Deep Sparse Coding | HUANGPENG Qizi, HUANG Wenwei, DUAN Xiaojun | 2987 |
| An Improved MSRCR Low Illumination Image Enhancement Algorithm Combined with Residual Fusion | WANG Kui, HUANG Fuzhen | 2993 |
| Median Complementary Ensemble Empirical Mode Decomposition and Its Application to Time-frequency Analysis of Industrial Oscillations | LIU Songhua, HE Bingbing, CHEN Qiming, LANG Xun, ZHANG Yufeng | 2999 |
| Energy-aware Blockchain for Multiple Autonomous Underwater Vehicles Cooperative Operation | LI Xinbin, GUO Yingzheng, YAN Lei, XU Xianglin | 3005 |
| An Improved KNN Based Decision Algorithm for Vertical Handover in Heterogeneous Wireless Networks | GUO Shiwei | 3011 |
| A Hybrid Method for Estimation of PEMFC State of Health | ZHOU Su, ZHAO Peng, FAN Lei | 3017 |
| Image Stitching Method of Aerial Image Based on Feature Matching and Iterative Optimization | SUN Yue, LV Yueyong, SONG BIN, GUO Yanning, ZHOU Lifan | 3024 |
| High-precision Image Mosaic Algorithm Based on Adaptive Homography Transform | CHEN Tong, GUO Jianfeng, XIE Xueli, XI Jianxiang | 3030 |

| | | |
|--|---|------|
| Joint Detection and Parameter Estimation under Unknown Prior Probability | ZHU Wenyan, ZHU Hongyan | 3036 |
| Linear Optimal Estimators for Stochastic Uncertain Systems with Time-correlated Noises | LIU Sihong, XU Liling, MA Jing | 3042 |
| Linear Optimal Filter for Descriptor Systems with Time-Correlated Measurement Noise | XU Liling, LIU Sihong, MA Jing | 3048 |
| A Fine Anti-Noise Algorithm Based on Matrix Block Variational Estimation in Underwater Navigation | HUANG Haoqian, TANG Jiacheng, WANG Bing, LI Guanghui, HAN Yiming | 3054 |
| Adaptive Fault-tolerant Federated Filter with Fault Detection Method Based on Combination of LSTM and Chi-square Test | XIAO Xuan, LIU Jiaxin | 3059 |
| Detection of Weak Signal Amplitude of Winding Deformation Based on Duffing Oscillator | LI Shengmin, HE Yuanyuan, CHE Yueyue, SUN Xuxia | 3065 |
| Robust Student's T-based Rauch-Tung-Striebel Smoother for Non-stationary Heavy-tailed Measurement Noises | ZHU Fengchi, XUE Chao, HUANG Yulong, ZHANG Yonggang | 3071 |
| Underdetermined Speech Source Separation Based on Hybrid Clustering | PENG Qiu, ZHANG Yiqiong, WANG Yuduo | 3077 |
| Dynamic Rod Worth Estimation with Extended Kalman Filter and Background Current Elimination | XIA Hao, YANG Junqi, BAO Chao | 3082 |
| Design of UAV Single Object Tracking Algorithm Based on Feature Fusion | LI Changze, LIU Xiaoxiong, ZHANG Xingwang, QIN Bin | 3088 |
| Impact Signal Detection and Recovery Based on the Novel Potential Well Model | JIAO Shangbin, ZHANG Qing, LEI Shuang, ZHANG Dingxin, WANG Qing | 3093 |
| High-Quality Sonar Image Generation Algorithm Based on Generative Adversarial Networks | WANG Zhengyang, GUO Qingchang, LEI Min, GUO Shuxiang, YE Xiufen | 3099 |
| A Novel Signal Processing Algorithm for Measurement While Drilling (MWD) System | CHENG ShiLong, HU Yule | 3105 |
| Sparse Representation Based Image Super-resolution Combining Rotation Strategy and Nonlocal Self-similarity | WANG Di, LI Juan, CHEN Jianliang | 3110 |
| Intelligent Illuminance Fusion Algorithm Based on NN-DS | LI Fenna, WANG Wenqing, WANG Kejun | 3115 |
| An Infrared / Radar Fusion Tracking Algorithm Based on Adaptive Fault Tolerant Filtering | PENG Siting, LI Lei, MA Yichao | 3121 |
| Blind Equalization under Noisy Environment Using Bias-compensated RLS Method | ZHANG Zhen, JIA Lijuan, KANAE Shunshoku, YANG Zi-Jiang | 3127 |
| Noise Reduction Method of Transient Electromagnetic Signal Based on VMD-ICA | WANG Guangjun, WANG ZhaoHui, JIANG Hui, CUI Lan, DING Chengxiang, QI Xinzhao, CHENG Yutao | 3132 |
| Denoising Surface Electromyography Signals Based on Complementary Ensemble Empirical-Mode Decomposition and Multi-Scale Entropy | WANG Rennong, ZHAO JUAN, LIU Zhen-Tao, FENG Wang, SHE Jinhua | 3138 |
| Network Measures and Brain Connectivity Analysis of EEG Signal of Alzheimer's Patients Using SVM | WANG Ruofan, YIN Yiyang, GUI Ying, WANG Haodong, SHI Lianshuan | 3143 |
| A MDP-based Adaptive Spread Spectrum Parameter Algorithm under Train-to-Train Communication | SONG Xiyang, SONG Haifeng, WU Xingtang, DONG Hairong | 3149 |

| | | |
|--|---|------|
| Recognition of Alzheimer' s Brain Network Using Hybrid PSO-SVM Frame | WANG Ruofan, WANG Haodong, YANG Zhongyou, GUI Ying, YIN Yiyang, WANG Wei | 3155 |
| Wait-time Aware TDMA MAC Protocol for Underwater Acoustic Sensor Networks | WANG Sifan, GUO Yingzheng, YAN Lei, ZHAO Haihong, LI Xinbin | 3161 |
| Multi-source Information Fusion Based Train On-line Operation Data Monitoring and Analyzing | ZHANG Minjie, SONG Haifeng, WANG Tao, SUN Pengju, DONG Hairong | 3167 |
| Source Localization Using TDOA and FDOA Measurements with Sensor Information Uncertainties | QU Xiaomei, LIU Tao | 3173 |
| State Estimation Algorithms for Linear Systems with Strong Disturbance | PU Shi, YU Xingkai, LI Jianxun | 3179 |
| Denosing Method for GyroWheel Signal Based on Iterative CEEMDAN-IT | CHEN Shuo, HUO Xin, ZHAO Hui, YAO Yu | 3185 |
| An Improved Six-position Calibration Method of Accelerometer | WANG Yanhui, ZHAO Hongyu, YANG Ning, SHI Xin, WANG Litong, QIU Sen, WANG Zhelong, CHEN Ye | 3191 |
| Application of Bare Bones Sine Cosine Algorithm in Infrared Spectrum Analysis | LI Yujun, DU Jinghang, JIAO Shangbin, CHENG Xiaoli, ZHANG Qing, WANG Qing | 3197 |
| Robust Multilayer Parallel Covariance Intersection Fusion Predictor for MultiChannel AR Sig- nal with Colored Noises and Uncertain Noise Variances and Unknown Cross-Covariances | YANG Zhibo, WANG Xuemei | 3203 |
| Inverse Covariance Intersection Fusion Steady-state Kalman Filter for Uncer- tain Systems with Missing Measurements and Linearly Correlated White Noises | WANG Xuemei, TAO Guili, ZOU Xuelan, HONG Liang | 3209 |
| A Novel Conflict Evidence Combination Method Based on Proof by Contradiction and Complete Frame of Discernment | YU Shuang, WANG Xin | 3214 |
| Real-time Localization Measure and Perception Detection Using Multi-sensor Fusion for Automated Guided Vehicles | SONG Di, TIAN Guang-Mao, LIU Jiaqi | 3219 |
| Research on Classification of Motor Imagination EEG Signals Based on Multi-domain Features | FANG Xiaoke, LI Xiaobin, XU Jiacan, WANG Jianhui | 3225 |
| Hybrid Classification by Integrating Expert Knowledge and Data: Literature Review | MA Haonan, JIAO Lianmeng, PAN Quan | 3231 |
| Lower Limb Continuous Motion Estimation Based on Binary Cuckoo Search and Random Forest Regres- sion | WANG Fei, FAN Zhibo, LU Jian | 3236 |
| Double-factor Fading Memory Kalman Filter for Compensating Model Uncertainty | FU Fangwenchang, ZHOU Jie | 3242 |
| EEG Decoding of Motor Imagery Mode Based on WPT-CSP | WANG Xueting, ZHAO Huaqi, LI Guojing, HE Lili, SU Xiaoguang, WANG Yuchun, XU Binshan, LI Chunjuan, YAO Wei | 3247 |
| High-precision Solar Image Registration Using Normalized Cross-correlation and Intensity | YU Lan, FENG Song | 3253 |
| 无 | | |
| Fusion Incremental Kalman Estimator for Singular Systems under Poor Observation Condition | MA Guangpeng, SUN Xiao-Jun, ZHANG Bo | 3258 |
| Robust Diffusion Affine Projection Generalized Maximum Correntropy Criterion Algorithm over Net- works | MIAO Deshui, JIA Lijuan, ZHANG Jinchuan | 3263 |

| | | |
|--|---|------|
| Dynamic Compensation for Environmental Magnetic Interference in Pedestrian Dead Reckoning Using MEMS Sensors | WANG Genlei, ZHANG Senlin, LIU Meiqin | 3269 |
| Robust Weighted Measurement Fusion Kalman Filter for Uncertain Multi-sensor Descriptor System with Colored Measurement Noises | TAO Guili, WANG Xuemei, LIU Wenqiang, ZHANG Jianfei, YU Haiying | 3275 |
| Distributed Kalman Predictor with Different Consensus Gains over Sensor Networks | JIN Hao, SUN Shuli | 3283 |
| Fusion Filtering for Stochastic Systems with Correlated Noises and Deception Attacks | TIAN Tian, SUN Shuli, LIN Honglei | 3289 |
| Study on Total Variational Denoising Algorithm Based on Penalty Term of Exponential Function | LV Donghao, DING Yan, ZHANG Yong, REN Yan | 3295 |
| An Optimal Smooth Model Based EEG Analysis Method | CHEN Chao, SHANG Tianxu, BELKACEM Abdelkader Nasreddine, ZHANG Shanting, LU Lin, LI Penghai | 3299 |
| Target Recognition Method for Carrier Aircraft Fleet Based on Improved D-S Evidence Theory | SUN Lifan, ZOU Jie, YANG Zhe | 3305 |
| Data-Driven Prediction of Sinter Composition Based on Multi-Source Information and LSTM Network | BAI Xuehan, CHEN Cailian, LIU Wei, ZHANG Haifeng | 3311 |
| Design of Camera Equipment Arrangement and Attitude Calculation for Aircraft Attitude Measurement | ZHANG Monan, YU Wenbin | 3317 |
| Electroencephalogram Emotion Recognition Using Variational Modal Decomposition Based Dispersion Entropy Feature Extraction | HU SiJun, LIU Zhen-Tao, DING Xue-Wen | 3323 |
| Robust Detection of Lighting LEDs by Analyzing the Geometric Structure of the Tunnel Interior Environment in Vehicle-Mounted Video Sequences | XIN Le, SHI Zeyu, CHEN Yangzhou | 3327 |
| Motor Imagery Multi-classification Based on Canonical Correlation Analysis Feature Fusion | YANG Zhuoyuan, GUO Sitong, HONG Yunqi | 3334 |
| A Multispectral and Panchromatic Image Fusion Method Based on NSST and PCA | MI Pengbo, YANG Yi, ZHANG Sixian, ZHANG Meng, JIANG Qinghua | 3340 |
| Recursive Marine PCS Estimation with Set-valued Observations via Space-based Imaging Constellations | DIAO Jingdong, ZHOU Qingrui | 3346 |
| Improving EEG-based Alzheimer's Disease Identification with Generative Adversarial Learning | SONG Zhenxi, WANG Jiang, YI Guosheng, DENG Bin | 3351 |
| A Video-Based Method to Classify Abnormal Gait for Remote Screening of Parkinson's Disease | YANG Yuchen, SUN Yubo, YU Ningbo | 3357 |
| Underwater Target Threat Assessment Method Based on Bayesian Network | LI Danyi, LIU Meiqin, ZHANG Senlin | 3363 |
| Research of INS/CNS/SMN Adaptive Integrated Navigation Algorithm for Sea Area .. | TIAN Zhaoxu, CHENG Yongmei, LIU Nan, YAO Shun, BAI Weijin, ZHUANG Ruowang, DAI Li | 3368 |
| Simulation and Frequency Selection of Improved ITS Aviation Channel Model Based on Nakagami-m Function | ZENG Yuxi, TU Xiaowei, YANG Qinghua, LIU Pengyin | 3374 |
| Dark Image Enhancement Based on Virtual Exposure Fusion | LV Rong, SHAO Yong, ZAN Peng, YAO Yufan, LIU Huafeng | 3380 |
| Pitch and Roll Estimation Using Inertial Measurement Unit for Flight Simulator | CHEN Qi, YANG Qinghua, TU Xiaowei, ZENG Yuxi | 3385 |

| | | |
|---|--|------|
| Temporal Relations Extraction and Analysis of Log Events for Micro-service Framework | ZUO Yuan, ZHU Xiaozhou, QIN Jiangyi, WEN Yao | 3391 |
| Aerial Battlefield Targets Grouping Based on DTW-DBSCAN Algorithm | ZHUANG Shao, CHEN Chen | 3397 |
| Unsupervised Time Series Anomaly Detection Using Moving Memorial Dynamic Filter | DUAN Jufang, XU Xiangyang, WANG Yi | 3403 |
| An Improved Non-negative Latent Factor Model via Momentum-Based Additive Gradient Descent Method | LI Ming, SONG Yan, WANG Chongjing, CHU Yanfang | 3409 |
| Research on Optimization of Purchase Management of Fresh Agricultural Products E-Commerce Supply Chain | GUO Weidong | 3415 |
| Global Clustering Method of Metagenome Sequences Based on Tetranucleotide Frequency | LIU Xiao, DENG Li, SONG Yang, ZHANG Chen | 3422 |
| Research on Early Warning of Small Leakage Faults in Primary Circuit Based on Data Mining | BAI Xiuchun, QIAN Hong | 3427 |
| Analysis of the Relative Motion Characteristics of Millimeter-level Satellite Formations under the Influence of Earth Oblateness Relative Perturbation | LIU Chunyang, WANG Jing Ji, YIN Junxiong, JIANG Zehua, ZHOU Wei | 3435 |
| Real-time Optimized ESEKF-SLAM Algorithm for ArUco Landmark Array | XING Boyang, LIU Yufei, WANG Zhirui, LIANG Zhen Jie, ZHAO Jianxin, SU Bo, JIANG Lei | 3442 |
| Adaptive Integrated Navigation Algorithms for Advanced Avionics Systems of High-Dynamic Aircrafts | ZHU Yixiao, LIU Tingxin, ZUO Siqi, NEUSYPIN Konstantin A., PROLETARSKY Andrey | 3448 |
| Quaternion Based Attitude Determination Method of Cubature Kalman Filter | ZHOU Ning, LI Li, CHEN Riqing, WANG Qiping, LU Jiyong | 3456 |
| Initial Alignment Method for Rotating Strapdown Inertial Navigation System Based on Fuzzy Adaptive Kalman Filter | QI Pei, LI Guanyu, QIAN Weixing, YANG Han, MA Yuhao, HU Diyu, JI Haotian | 3462 |
| Prediction-Correction Guidance Algorithm for High Velocity Reentry Capsules | CHEN Junshou, WANG Ao, TAN Wei, HE Yufan, QIANG Wen, WANG Bin, LI Haiyue | 3468 |
| Prescribed-time Group Consensus Cooperative Guidance | MA Wenhui, FANG Yangwang, WANG Zhikai, FU WenXing, LIANG Xiaogeng | 3474 |
| WiFi-based Indoor Localization Using Clustering and Fusion Fingerprint | LUO Minhui | 3480 |
| Magnetometer Error Compensation Algorithm Based on Improved Particle Swarm Optimization Algorithm ... | HUANG Haoqian, WANG Peng, SHEN Hanyi, LI Guanghui, HAN Yiming, TANG Jiacheng | 3486 |
| A Deep Reinforcement Learning Method with Action Switching for Autonomous Navigation | WANG Zuowei, LIAO Xiao-zhong, ZHANG Fengdi, XU Min, LIU Yanmin, LIU Xiangdong, ZHANG Xi, DONG Rui Wei, LI Zhen | 3491 |
| Hierarchical Trajectory Planning for AGVs with a Local Adaptive Search Space | LIU Chun, LU Jieying, LI Junhui | 3497 |
| An Improved ICCP Gravity Matching Algorithm Based on Mahalanobis Distance | WANG Yu, DENG Zhihong, ZHANG Wenzhe, ZHAO Shengwu | 3503 |
| Observability for 3-D Range-only Positioning System | LI Hongrui | 3509 |
| Phased Array Radar Seeker Pointing Error Compensation Using Multiple-model Extended Kalman Filters | WANG Qi, LIAO Zhizhong, YAN Fei | 3515 |
| Research on Redundancy-based Integrated Train Positioning | QIAO Fangbo, BAO Liu, SHENG Zhao | 3521 |

| | | |
|---|--|------|
| Research on Target Recognition of Spinning Strapdown Image | ZHAO Chunbo, FAN Jun-fang, CHEN Qili, LI Huihui | 3529 |
| Cooperative Line-of-sight Guidance Laws for Active Aircraft Defense in Three-Dimensional Space | TAN Gaoyong, LUO Hongbing, JI Haibo, LIAO Fei, WU Wenhua | 3535 |
| Mars Ascent Vehicle Tracking Guidance Law Design Added by Sliding Mode Control in the Coasting Phase | LI Kun, GUO Minwen, MA Guangfu, ZHI Hui, GUO Yanning | 3541 |
| Intercept Strategy for Maneuvering Target Based on Deep Reinforcement Learning | WANG Xu, CAI Yuan-Li, FANG Yizhong, DENG Yifan | 3547 |
| A Predictor-corrector Entry Guidance Method Using Gaussian Integration | HUANG Hanbin, YANG Ye, WU Hao, LIANG Luyang | 3553 |
| Research of Target Localization Method Based on Improved EKF for Photoelectric Reconnaissance Platform | XU Shengyang, QU Yaohong, WANG Wenlong, SONG Xuejian, ZHU Xiaoping | 3558 |
| Filtering Algorithm of Out-of-Sequence Measurement Based on Sequential Filtering | WANG Wenlong, QU Yaohong, XU Shengyang, ZHU Xiaoping | 3564 |
| Robust Elliptically Contoured Distribution Based Kalman Filter for INS/DVL Integrated Navigation | XUE Chao, HUANG Yulong, LI Xiaofeng, HUANG Xuejun, ZHANG Yonggang | 3570 |
| Extracting the Navigation Path of an Agricultural Plant Protection Robot Based on Machine Vision | HE Chuangxin, CHEN Qingtai, MIAO Zhonghua, LI Nan, SUN Teng | 3576 |
| Eigenvalue-based Controllability Analysis of Mars Entry Guidance | YOU Anhua, HU Yuhui, ZHU Yixiao, NEUSYPIN Konstantin A., SELEZNEVA Maria | 3582 |
| Lidar Odometry Key Frame Selection Based on Displacement Vector Similarity | OU Fang, LI Yunhui, MIAO Zhonghua, ZHOU Jin | 3588 |
| A High-Accuracy Velocity Algorithm of SINS Based on Polynomial of Specific Force | YANG Xiaokang, YAN Gongmin, LI Sihai | 3594 |
| A New Map-matching Algorithm Based on Similarity of the Curved Road Section | HUANG Hongliang, ZHANG Hai, XIA Jizhe, JIANG Liuyang | 3600 |
| High-Precision In-flight Attitude Estimation Algorithm for Missile | XIE Jia, GONG Yinghui, CHEN Fang, GUO Zhenxi, ZHANG Jianfei, TANG Mao | 3605 |
| Improved Sliding Mode Tracking Guidance for Mars Powered Descent Phase | LI Guangsheng, ZHANG Ying, ZHANG Rui | 3610 |
| Performance Evaluation of Multiple Missiles Based on Information Entropy and IAHP | WU Liquan, LI Chaoyong, CHEN Sai | 3615 |
| Bathymetric Data Fitting Based on Fourier Series of Linear Complementarity | ZHANG Ruichen, BIAN Shaofeng, JI Bing | 3621 |
| Research on Trajectory Optimization of Quadrotor Flying Through Narrow Gap | YIN Qian, FEI Qing, LIU Renjie | 3627 |
| Penetration Trajectory Optimization of Hypersonic Gliding Vehicles with Multiple Constraints | SHEN Zhipeng, YU Jianglong, DONG Xiwang, LI Qingdong, REN Zhang | 3633 |
| SNR Estimation for X-ray Pulsar Based on Wavelet-aided Random Forest | WU Da Liang, WU Jin, LIU Jin, KANG Zhiwei | 3639 |
| Cooperative Interception Against Highly Maneuvering Target with Acceleration Constraints for Multiple Heterogeneous Missiles | BAI Wenlu, CHEN Ziyang, YU Jianglong, DONG Xiwang, JIANG Hong | 3645 |
| Battlefield Situation Deduction and Maneuver Decision Using Deep Q-Learning | SHI Minghui, DONG Xiwang, HAN Liang, LI Qingdong, REN Zhang | 3651 |

| | | |
|--|--|------|
| Map Matching Algorithm Based on Trajectory Feature Identification | HAN Yongqiang | 3657 |
| Research on Surface Target Strike Process Planning Based on Monte Carlo Algorithm | LIU Wei, LV Mingwei, ZHANG Shaoqing, SONG Yike, HU Jinwen | 3662 |
| Shrinking Horizon MPC Strategy for Impact Time and Angle Guidance | WANG Pengyu, GU Yue, GUO Yanning, MA Guangfu | 3667 |
| Design of Transfer Alignment Optimization Algorithm Based on Modified Adaptive Kalman Filter | ZHANG Wei, WU Zhen-hua, NIE Rui | 3673 |
| Distributed Leaderless Cooperative Guidance for Multiple Missiles with Time Delay and Switching Topologies | ZHANG Peng, ZHANG Xiaoyu, DONG Fei | 3681 |
| Cooperative Guidance Strategy with a Leader-follower Structure | SHI Zhixin, YU Jianglong, WEI Jiahong, DONG Xiwang, LI Qingdong, REN Zhang | 3687 |
| Multi-sensor Measurement Information Fusion for Maneuvering Target Recognition and Tracking | ZHANG Zheng, HAN Liang, DONG Xiwang, LI Qingdong, REN Zhang | 3693 |
| Context-Awareness Assisted PPP/INS Integrated Navigation Enhancement Algorithm | ZHANG Qieqie, ZHAO Long, WANG Bin, WANG Binghao | 3699 |
| Research on Notch Optimization Active Disturbance Rejection Passive Elastic Control Method for Hypersonic Flexible Vehicle | YAO Deqing, WEI Yiyin, CUI Naigang | 3705 |
| Accuracy and Integrity Assessment of GBAS Position Domain Trials Based on BDS | HU Jie, BAO Fan, ZHU Yixian, ZHANG Lin | 3709 |
| Weapon Target Assignment Strategy for Multi-missile Cooperative Guidance with Auction Algorithm | LI Qingze, DONG Xiwang, LI Qingdong, YU Jianglong, REN Zhang | 3715 |
| Trajectory Planning for Hypersonic Vehicles with Reinforcement Learning | CHI Haihong, ZHOU Mingxin | 3721 |
| A Multi-Sensor Fusion Algorithm for Pedestrian Navigation Using Factor Graphs | AN Langping, PAN Xianfei, CHEN Ze, WANG Mang, TU Zheming | 3727 |
| Deep Reinforcement Learning Based Missile Guidance Law Design for Maneuvering Target Interception | DU Mingjian, PENG Chi, MA Jianjun | 3733 |
| Research on Integrated Navigation Method of High-speed Spinning Flying Body Based on EKF | DONG Yi-ping, LIU Ning | 3739 |
| Finite-time Adaptive Cooperative Guidance for Multiple Missiles | SHI Pengfei, YU Jianglong, CHEN Ziyan, DONG Xiwang, REN Zhang | 3745 |
| Landing Trajectory Generation Using Gauss Pseudo-spectral Method | MU Lingxia, YU Jichi, ZHANG Youmin, ZHANG Lidong, XIE Guo, ZHANG Yuan, XUE Xianghong | 3751 |
| Orbit Determination and Orbit Uncertainty Estimation Using Neural Network Based Modified State Observer | ZHOU Bochao, LI Yong | 3756 |
| Simulation Research on Aerodynamic Parameters of Miniature Ammunition | WANG Haisen, FAN Jun-fang, CHEN Shiwei, MU Qingdong | 3762 |
| Autonomous Navigation for Solar L2 Halo Orbiters Based on LiAISON Method | YE Zipeng, ZHOU Qingrui, WANG Hui, SU Bo | 3768 |
| A Distributed-Centralized Dynamic Task Allocation Algorithm for UAVs Tracking Moving Targets | HAO Ning, HOU Yi, TIAN Chungeng, YAO Haodi, HE Fenghua | 3774 |
| TMS320F28335 Online Program Upgrade Realization Method | GUAN XingPing, HU Tao, XU ZhaoYan | 3780 |
| Design of Lightweight Adaptive Headlamp System Based on STM32 | HUO Zhihao, JIN Weidong, TANG Peng | 3786 |

| | | |
|---|--|------|
| A Smooth Sliding Mode Controller Using a State Observer for Position Control of the Stewart-Gough Platform | SHI Haochen, LIU Weidong | 3792 |
| Sliding Mode Control for Robot Manipulators with Actuator Faults | LIAN Zhibo, ZHAI Junyong | 3797 |
| Model Free Adaptive Control Algorithm Based on ReOSELM for Autonomous Driving Vehicles | ZHANG Xiaofei, MA Hongbin, WANG Zhichao, FAN Mingyu, ZHAO Bolin | 3803 |
| Design and Implementation of a Control and Monitoring Scheme for Spacecraft Obstacle Avoidance | CHI Chuanguo, LIU Guo-Ping, ZHANG Ji, PANG Zhonghua, HOU Bingzhi | 3810 |
| Micro-flow Calibration System Based on a New Diverter Valve Design | SUN Lijun, LIU Weibin, WANG Tao | 3816 |
| Active Disturbance Rejection Control Design for the Hydraulic Actuator on Weeding Machine | LIU Fuchun, YANG Yang, WANG Lei | 3822 |
| Research on Indoor Multi-degree-of-freedom Ski Training System | LI Boyang, FEI Qing, CAO Hongqing | 3828 |
| An Improved Distributed Secondary Control to Attain Concomitant Accurate Current Sharing and Voltage Restoration in DC Microgrids | LI Dan-Yun, ZHAO Dashuang | 3834 |
| Research on Auto-follow Row Assist Technology of Cotton Picker with Adaptive Speed | HE Chuangxin, WU Chao, LI Nan, MIAO Zhonghua | 3840 |
| Research on Unmanned Surface Vessel for Meteorological Detection | WU Changwen, LI Baokui, FEI Qing, HUANG Xiaosong, FANG Xuyang | 3845 |
| Stabilization of Delayed Boolean Control Networks via Ledley Antecedence Solution | PAN Yanan, FU Shihua, LI Changxi, ZHAO Jianli, GUO Peilian | 3851 |
| Research on High Power Density Driving Technology Based on Airborne Brushless DC Motor with Three-phase Continuous Current | ZHAO Jun, AI TIE ZHU, YAN Wen, ZHANG Qianqian, YU YONG | 3857 |
| Robust Design of Uncertain Repetitive Control System | JIANG Xinghua, LI Xiaoli, YU Pan | 3864 |
| Observer Design for A Class of Nonlinear Systems with Incremental Quadratic Constraints | ZHAO Yujie, LIN Cong, MENG Lingxin, CAI Xiushan | 3870 |
| Multi-target Recognition Method Based on Heatable Marker | SUN Tao, WANG Shang, ZHANG Hui, ZHAO Yongguo, XIAO Yongfei | 3876 |
| Simultaneous Stabilization of Multiple N-degree-of-freedom Robot Systems | ZHANG Haiying, YANG Renming, ZHANG Chunfu, LI QI, SHI Xin | 3882 |
| Time-Optimal Trajectory Planning for Industrial Robot Based on Improved Hybrid-PSO | SHI Buhai, ZENG Haifeng | 3888 |
| Path Planning for Mobile Robots with Courteous Behaviors in Domestic Environments | YU Hao, KUANG Zongxin, SUN Fengchi, YUAN Jing, LIU Mingming, XIE Maoqiang | 3894 |
| An Evaluation Approach of Multi-person Movement Synchronization Level Using OPenPose | ZENG Huanyu, CHEN Wanmi | 3900 |
| Robust Tracking Control of Manipulator Based on Trajectory Planning | YE XiPeng, ZHAO Duo | 3906 |
| Observer-critic-based Event-triggered Decentralized Optimal Control of Modular Robot Manipulators | PAN Qiang, MA Bing, DONG Bo, ZHOU Fan, REN Xiaolin, LI Yuanchun | 3912 |
| Human Motion Intention Estimation-Based Decentralized Robust Control of Modular Robot Manipulators | WANG Yuexi, AN Tianjiao, CHEN Jingchen, REN Xiaolin, LI Hongwen, DONG Bo | 3919 |
| Multi-Objective Path Planning Based on Parallel Elite Particle Swarm Optimization Algorithm | WANG Huimin, REN Yan, HUANG Xiaowen, ZHAO Liyun, YUE Meixia, WENG Kai, GAO Wei, LIU Ning, LV Donghao | 3926 |

| | | |
|---|--|------|
| Prudent Policy Gradient with Auxiliary Actor in Multi-degree-of-freedom Robotic Tasks | LI Xiangjian, LIU Huashan, CHENG Xin, DONG Menghua | 3932 |
| Adaptive Impedance Control in Uncertain Environment for Uncertain Manipulator | WANG Xingbo, ZHANG Yan, LU Chuang | 3937 |
| Detection and Grasping of Texture-Less Objects Based on 3D Template Matching | MIAO Chunxiao, ZHONG Xungao, ZHONG Xunyu, YANG ZeTao, XU Min | 3943 |
| Design of Early Warning System of Robot for Monitoring Agglomerate Fog on the Highway Based on Beidou Short Message and IOT | YAO Zhentao, WANG Jun, LIU Wei, YUAN Wang, WANG Hao | 3949 |
| Target Recognition and Tracking Based on Scale Adaptive Kernel Correlation Filter for Dynamic Per- spective of Robots . | WANG Yusheng, XIE Jialong, ZHAI Hongye, ZHANG Botao, ZHONG Chaoliang | 3955 |
| Inertial Positioning Technology and Caliper Inspection Based Pipeline Deformation Detection | SONG Hua, HUANG Huiyin, YANG Yan, WU Xun, YAN Xuejiao, XIE Zhe, YIN Chuangrong, CHEN Guan hao | 3961 |
| MPC-based Intelligent Car for Tobacco Warehouse Inspection | JI Chao, LUAN Tiantian, TANG Zhaojun, SUN Mingxiao, CAO Daxiu | 3967 |
| Locomotion Energy Consumption Model for Robotic Fish with Caudal Fin Propulsion | SHEN Yan, DENG Tian, LI Lilin, SHI Kuirui, WANG Kai | 3973 |
| Gait Self-learning for Damaged Robots Combining Bionic Inspiration and Deep Reinforcement Learning | ZENG Ming, MA Yu, WANG Zhijing, LI Qi | 3978 |
| Research and Realization of Target Following and Autonomous Obstacle Avoidance Algorithm of Quadruped Robot | LI Zhi, LI Bin, LIANG Qixing, LIU Weilong, HOU LanDong, RONG Xuewen | 3984 |
| Model Predictive Control Based Path Following of an Amphibious Robot | LI Dongyue, PAN Jie, LIU Jincun, WANG Ming, YU Junzhi | 3990 |
| Turning Control of a Tuna-Like BAUV for a Minimum Turning Radius | DU Sheng, YU Junzhi, WU Zhengxing, CHEN Di, WANG Ming | 3996 |
| Improved Closed-loop Detection Algorithm Based on Dynamic Increase or Decrease Mechanism | LIU Jinhui, ZHANG Yukun, DING Lingmei, CHEN Mengyuan, YUAN Xuechao | 4002 |
| Pruning-Based YOLOv4 Algorithm for Underwater Gabage Detection | TIAN Manjun, LI Xiali, KONG Shihan, WU Licheng, YU Junzhi | 4008 |
| Soft Manipulator Control via Gain-scheduling Strategy | WU Ke, ZHENG Gang | 4014 |
| Reinforcement Learning-Based Formation Control of Autonomous Underwater Vehicles with Model In- terferences | CAO Wenqiang, YAN Jing, YANG Xian, LUO Xiaoyuan | 4020 |
| Adaptive Tracking Control of Autonomous Underwater Vehicle under Stochastic Environmental Distur- bances | PENG Silian, YANG Xian, YAN Jing, LUO Xiaoyuan | 4026 |
| Overall Locomotion Control of a Quadruped Robot with Running Trot Gait | ZENG Pengpeng, YUAN Long, DONG Zhongliang, ZHITONG Zhang, AN Honglei | 4032 |
| Design of the Soft Pressure Sensor Based on Liquid Metal | LI Li, YU Siqi, LIU Haixiao, TIAN Wenqian, SUN Wei | 4039 |
| Laser Scan Matching Based on Normal Distribution Transform Using Efficient Point Cloud Segmentation | YU Zhenbiao, YANG Liang, DENG Chunjian | 4044 |
| Optimization Method of Learning from Demonstration Based on Incremental GMR-GP | XIA Zhiqiang, ZHAI Di-Hua, WU Haocun, XIA Yuanqing | 4050 |
| Mask Detection Based on Efficient-YOLO. | LI Yi, YAN Jiayuan, HU Bin | 4056 |
| An SEMG-Driven Identification of Human Upper Limb Stiffness and Its Application in Variable Impedance Control | HU Leyun, XU Tinghan, ZHAO Ziyun, ZHAI Di-Hua, XIA Yuanqing | 4062 |

| | | |
|--|--|------|
| A Rigid-flexible Coupling Three-finger Soft Gripper for Fruit Picking | LI Li, TIAN Wenqian, OUYANG Zhikang, YU Siqi, SUN Wei | 4068 |
| Cooperative Manipulation in Unknown Environment with Distributed Control | XU Hao, HOU Yongjin, LUO Jia-Wei, WU Tianyu, WU Yue, CHEN Shifeng, LI Xianglei, ZHANG Hai-Tao | 4073 |
| Constrained Path-Planning Control of Unmanned Surface Vessels via Ant-Colony Optimization | GAO Ming-Yuan, HU Binbin, LIU Bin, QIU Ning, ZHANG Hai-Tao | 4079 |
| A Real-Time Visual-Inertial Monocular Odometry by Fusing Point and Line Features | LI Chengwei, YAN Liping, XIA Yuanqing | 4085 |
| Operational Safe Control for Reinforcement-Learning-Based Robot Autonomy | ZHOU Xu | 4091 |
| Scale Recovery Using Vanishing Points for Indoor Mobile Vehicles with Monocular Vision | HUANG Siyu, PARK Sunghun, SHI Zongying, ZHONG Yisheng | 4096 |
| An Improved Ant Colony Optimization Algorithm in Mobile Robot Path Planning | LI Hui, YANG Kang, LUO Wanbo, DONG Bo, QIN Wei, CONG Shuofeng | 4102 |
| Development and Cleaning Cycle Optimization of Photovoltaic Module Cleaning Robot | JIANG Lilei, ZHAO Bo, CAO Shengxian, FAN Siyuan, SUN Tian Yi | 4108 |
| Mechanical Structure and Control Methods for Lower-Limb Rehabilitation Robots | GE Wangyang, JIANG Ruoyu, ZHAO JUAN, LIU Zhen-Tao, YANG Zhaohui, SHE Jinhua | 4114 |
| A Soft Robotic Glove for Hand Rehabilitation Using Pneumatic Actuators with Jamming Structure | CAO Xudong, MA Kaiwei, JIANG Zhenjiang, XU Fengyu | 4120 |
| Pose Estimation Algorithm of 3C Parts Based on Virtual 3D Sensor for Robot Assembly | YANG Xiansheng, XIE Yixin, ZHANG Nan, WANG Yao, LOU Yunjiang | 4126 |
| Reinforcement Learning Control for Robot Arm Grasping Based on Improved DDPG | QI Guangjun, LI Yuan | 4132 |
| Head-free, Human Gaze-driven Assistive Robotic System for Reaching and Grasping | YANG Bo, HUANG Jian, SUN Menglin, HUO Jun, LI XiaoLong | 4138 |
| Research on Target Recognition Technology of Caragana Automatic Harvesting Robot | GUO Jian, GUAN Chenxi, TAN Dingzhong, JIANG Chao, PU Jiangkun, ZHANG Tao | 4144 |
| Mobile Robot Automatic Aiming Method Based on Binocular Vision | XIANG Honglian, CHENG Lei, WU Huaiyu, CHEN Yang, GAO Yingnan | 4150 |
| UGV Autonomous Driving System Design for Unstructured Environment. | ZHANG Jingqin, HOU Jun, HU Jinwen, ZHAO Chunhui, XU Zhao, CHENG Changwei | 4157 |
| A LiDAR and Camera Fusion-based Approach to Mapping and Navigation | ZHANG Min, TANG Di, LIU Cong, XU Xiaobin, TAN Zhiying | 4163 |
| Robust Visual SLAM Algorithm for Dynamic Indoor Environments | FANG Lijin, WANG KeQi, WAN Yingcai | 4169 |
| Transverse Function Control for Underactuated MSV with Stochastic Disturbances under Output Error Constraints | ZOU Yujun, CHEN Lin, DONG Chao, DAI Shi-Lu | 4175 |
| Intelligent Vehicle Pedestrian Tracking Based on YOLOv3 and DASiamRPN | HE Chuangxin, ZHANG Xu, MIAO Zhonghua, SUN Teng | 4181 |
| Path Tracking Control of Tracked Paver Based on Improved Pure Pursuit Algorithm | WANG Shuai, FU Shanshan, LI Bin, WANG Shou Kun | 4187 |
| Bone Cutting Status Detection Based on Vibration Sensor Array | WANG Jinggang, XIA Guangming, DAI Yu, ZHANG Jianxun | 4193 |

| | | |
|--|---|------|
| Locating, Mapping and Motion Planning of Smart Wheelchair | YAO Mengyang, LIU Yi, XU Chi | 4198 |
| Online Optimization of Normalized CPGs for a Multi-Joint Robotic Fish | TONG Ru, WU Zhengxing, WANG Jian, TAN Min, YU Junzhi | 4205 |
| Path Planning for Lunar Rover Based on Bi-RRT Algorithm | WANG Yiming, YUAN Qiufan, GUO Yanning, HAN Weidi | 4211 |
| Weed Detection Based on the Fusion of Multiple Image Processing Algorithms | MIAO Zhonghua, YU Xiaoyou, LI Nan, HE Chuangxin, SUN Teng | 4217 |
| An Underwater Maneuvering Target Tracking Method with Compensation Mechanism under Short-term Sensor Failure | RUAN Li, WANG Hongjian, WANG Ying, HE Juyi, LIU Chaowei, NIU Shaoyuan | 4223 |
| An Improved State Estimator for the High-Speed AUV with NN | GUO Kejian, LIN Xiaobo, HAO Chengpeng, LIU Jian | 4230 |
| An End-to-End Trajectory Planning Strategy for Free-floating Space Robots | WANG Shengjie, CAO Yuxue, ZHENG Xiang, ZHANG Tao | 4236 |
| Logistics Service System for Agricultural Robot Based on Multi-Machine Cooperation | MIAO Zhonghua, LI Zhao, LI Nan, HE Chuangxin, SUN Teng | 4242 |
| Manipulator Motion Planning Based on Actor-Critic Reinforcement Learning | LI Qiang, NIE Jun, WANG Haixia, LU Xiao, SONG Shibin | 4248 |
| Multi-UAV Cooperative 3D Coverage Path Planning Based on Asynchronous Ant Colony Optimization | LI Hui, CHEN Yang, CHEN Zhihuan, WU Huaiyu | 4255 |
| Bionic Body Wave Control for an Eel-Like Robot Based on Segmented Soft Actuator Array | DANG Ronghao, GONG Haisong, WANG Yuxin, HUANG Tianyi, SHI Zhuofan, ZHANG Xinwen, WU Yunfeng, SUN Yi, QI Peng | 4261 |
| Design of Vision Control System of Tomato Picking Robot | HE Chuangxin, DENG Chunyu, LI Nan, MIAO Zhonghua | 4267 |
| Fault-Tolerant Torque Control of a Four-Wheeled Redundantly-Actuated Mobile Robot | LI Pengcheng, WANG Shuting, LUO Nianmeng, JIANG Liquan, JIN Jian, XIE Yuanlong | 4273 |
| Bee-Dance-Inspired UAV Trajectory Pattern Design for Target Information Transfer without Direct Com- munication | LI Yue, YAN Gao, YIN Beibei, QUAN Quan | 4279 |
| Iterative Super-Twisting Sliding Mode Control of Autonomous Mobile Robot | WU Hao, WANG Shuting, JIANG Liquan, LI Pengcheng, MENG Jie, XIE Yuanlong | 4285 |
| Local Path Planning Based on Improved Dynamic Window Approach | LI Yong, ZHU Qidan | 4291 |
| CNN Based Relocalization Method for Indoor Moving Robot with Planar State Constraint | YANG Aolei, CHEN Yanling, JIN Hongzhou, CHEN Ling, CHEN Renjun, XU Yulin | 4296 |
| MOD-SLAM: Visual SLAM with Moving Object Detection in Dynamic Environments | HU Jiarui, FANG Hao, YANG Qingkai, ZHA Wenzhong | 4302 |
| Data Calibration Algorithm for Artificial Lateral Line Sensor of Robotic Fish on Improved LSTM | OU Yaming, ZHANG Zhuoliang, ZHOU Chao, ZHOU Bo | 4308 |
| Strain Detection System for High-rise Building Pile Foundation Based on Distributed Optical Fiber Sensor | CHEN Danjiang, ZHANG Zhenyi, LIU Yutian | 4315 |
| Bearing Fault Classification Based on Convolutional Neural Network and Uncertainty Analysis | RUAN Diwang, GENG Shu, YAN Jianping | 4319 |
| Fault Tree Analysis of Fuel Cell Power Generation Unit in Closed Environment | WANG ZHEN, GAO YONG, PAN Jianxin | 4327 |
| Fault Detection Based on Canonical Correlation Analysis with Rank Constrained Optimization | ZHANG Yuhan, XIU Xianchao, YANG Ying, LIU Wanquan | 4333 |

| | | |
|--|---|------|
| Multipoint Optimal Minimum Entropy Deconvolution and Teager Energy Operator for the Incipient Fault Diagnosis of Planetary Gearbox | LIU Feng | 4339 |
| Remaining Useful Life Prediction of Lithium-ion Batteries Based on Phase Space Reconstruction and Optimized LSTM Network | QIAN Qizheng, ZHANG Yong, ZHENG Xiujuan, JIN Xie, HAO Weiguang | 4344 |
| Augmented System Observer-based Robust Fault-estimation Scheme for Nonlinear Systems | GAO Sheng, MA Guangfu, GUO Yanning, ZHANG Wei | 4350 |
| An Enhanced Transient Feature Extraction Algorithm and Its Application in Fault Diagnosis | ZHAO Jie, CHEN Zhigang, ZHONG Xinrong, CHE Haoyang, YU Yue | 4356 |
| Fault Detection in Finite Frequency Domain for Networked Multi-Rate Systems under Stochastic Communication Protocol | HAN Yuxin, SHENG Li | 4362 |
| Fault Diagnosis and Fault-tolerant Control for Non-linear UAV System Subject to Sensor and Actuator Faults | WANG Zailin, YAO Lina | 4368 |
| Fault Diagnosis of Liquid Rocket Engine Thrust Chamber Based on Improved Augmented Particle Filter | ZENG Yangzhi, SHAO Xiaodong, HU Qinglei, HU Haifeng, PAN Hao | 4374 |
| Sparse Sensor Array Based Damage Monitoring and Assessment for Large-scale Structures | QIU Wen, BAO Cheng, BAO Qiao, HU Weiwei, WANG Qiang | 4380 |
| Fault Diagnosis of Rolling Bearing Based on TVD-VMD | JIANG Yunlong, CHEN Zhigang, YU Yue, CAI Chunyu, ZHONG Xinrong | 4385 |
| A Robust Fault-tolerant Control for Active Suspensions Subject to Markov Type Actuator Faults | LUO Jibo, PANG Hui, LIU Minhao, YAO Rui | 4391 |
| Fault Tolerant Control for a Hexacopter Based on Optimal Adaptive Control Allocation | LANG Shuaipeng, ZHANG Fubiao, SUN Zhiwen | 4397 |
| Fault Diagnosis for Underactuated Surface Vessel | MAO Ruiqi, CUI Rongxin | 4403 |
| A Feature Extraction Method Using Multiscale CLAE for Intelligent Fault Diagnosis | HAO Ziqi, YANG Qingyu, SONG Pengtao | 4409 |
| Rolling Bearing Fault Diagnosis Based on Improved VMD and GA-ELM | MENG Lingyu, LIU Mingliang, WEI Pengying, QIN Huabin | 4414 |
| Fault Detection and Classification for Sensor Faults of UAV by Deep Learning and Time-Frequency Analysis | HUANG Jing, LI Mengna, ZHANG Youmin, MU Lingxia, AO Zihang, GONG Haihua | 4420 |
| Recursive Innovational Component Statistical Analysis for Fault Detection in Dynamic Processes | SI Yabin, MA Xin, LI Bing, TANG Yaohua, WANG Youqing | 4425 |
| Actuator Fault Estimation Based on Adaptive Iterative Learning Algorithm for Nonlinear Periodic Systems | LIU Yaqi, FANG Yi Ming, LIU Le, LI Xingda | 4431 |
| Fault Diagnosis Strategy of Electro-Mechanical Flight Actuator Using Fuzzy Disturbance Observer | YANG Zhenshu, MAO Qi | 4437 |
| Primary Air Fan Fault Warning Based on Universal Gravitation Neural Network and Deviation Degree | LI Jintuo, YUAN Zhi | 4443 |
| Distributed Actuator Fault Detection of LDTV Systems Using Relative Output Measurements | WANG Ping, YU Chengpu | 4449 |
| Zonotopic Kalman Filtering Based Fault Diagnosis Algorithm for Linear System with State Constraints | ZHAN Yacong, WANG Ziyun, WANG Yan, JI Zhicheng | 4455 |
| A Rapid Damage Assessment Method Based on Association Rules of Feature Factors | DING Kailun, HU Weiwei, BAO Qiao, WANG Qiang | 4462 |
| Event-Triggered Fault Detection for State-Saturated Systems with Time-Delay and Nonlinearities | CHEN Weilu, HU Jun, CHEN Dongyan, YU Xiaoyang, WU Zhihui | 4468 |

| | | |
|--|--|------|
| Research on Duffing Chaotic Theory Based Nonlinear Lamb Wave Extraction and Damage Detection | ZHU Siyu, HU Weiwei, BAO Qiao, WANG Qiang | 4474 |
| Enhancing Comprehensive Contribution Plot for Fault Isolation of Distributed Systems | MOU Tianhao, LI Shaoyuan, ZOU Yuanyuan | 4479 |
| Backstepping Based Actuator Failure Compensation of Rigid-Flexible Coupled Systems | ZHAO Dong, JIANG Bin, REN Wenjing | 4485 |
| Fault Detection and Isolation for Wastewater Treatment Plants Using Interval Prediction and Bayesian Reasoning | LIU Tong, CHAI Wei | 4491 |
| A Classification Method of Photovoltaic Modules Shaded Area Based on Weighted K-nn | XIA Lin, LI Chenxi, ZHANG Kanjian, WEI Haikun | 4497 |
| Fault Diagnosis of Electric Vehicle Charging Station Based on Empirical Wavelet Transform and Entropy | ZHAO Rui, LIN Jinxing, GAO Hui, CHEN Liangliang | 4504 |
| Multidimensional Reconstruction-Based Contribution for Multiple Faults Isolation with K-Nearest Neighbor Strategy | LIU Yuanle, XU Chengjie, WANG Yanwei, YANG Weidong, ZHENG Ying | 4510 |
| Cooperative Adaptive Fault-Tolerant Control for Multi-agent Systems with Deception Attacks | LI Ting, LIU Chun, WANG Xiaofan | 4516 |
| Intelligent Fault Diagnosis of Vibrating Screen in Flow Supply Chain Based on Convolutional Neural Network | LI Zhipeng, PENG Chen | 4522 |
| Learning Observer Based Sensor Fault-Tolerant Control of Distributed Grid-Connected Inverter | ZHOU Xiang, MAO Jingfeng, WU Aihua | 4530 |
| Piecewise Linear Control for Continuous-Time Markov Jump PWA Systems Based on Adaptive Fault-Tolerant Strategy | XU Nuo, ZHU Yanzheng, CHEN Xinkai, YANG Ting | 4536 |
| Observer-based Actuator Fault Diagnosis for Vehicle Electronic Stability Control Four-Wheel Steering System | WANG Hongwei, WANG Qianyu, HAN Jie, ZHANG Haotian | 4541 |
| Design of H-/H ∞ Observer for Vehicle Stability System with Sensor Faults | WANG Hongwei, ZHANG Haotian, HAN Jie, WANG Qianyu | 4546 |
| Adaptive Observer-Based Fault Reconstruction Method for Unmanned Surface Vehicles | FU Shasha, CHEN Liheng | 4551 |
| A New Structural Damage Evaluation Method Based on Modified Extreme Learning Machine | HE Can, WU Xiaochen, WANG Ronghao | 4557 |
| Fault Location for Spacecraft ACS System Using the Method of Transfer Learning | HE Manli, CHENG Yuehua, WANG Ze, GONG Jianglei, YE ZhengYu | 4561 |
| Fault Prediction for Solar Array Based on Long Short-Term Memory and Autoencoder | XUE Qi, CHENG Yuehua, JIANG Bin, HAN Xiao Dong | 4567 |
| Sensor Fault Detection in Nonlinear System Using Adaptive Weighted Fusion Algorithm | QIN Fan, YAN Shuya, FANG Yi Ming, LI Jianxiang | 4573 |
| A New Fault Detection Method from Data-Based Dissipativity Theory | LI Wangyan, BAO Jie, WEI Guoliang | 4579 |
| A Hybrid Semi-parametric Model for Robust Fault Detection Based on GMDH Neural Network | WANG Yipeng, ZHANG Yu, HAO Yong, DU Yan, WANG Shuo, ZHOU Junfeng | 4585 |
| Takagi-Sugeno Fuzzy Model-based Fault Tolerant Control for Unmanned Marine Vehicles with Thruster Faults | HAO Li-Ying, ZHANG Yuqing, ZHANG He | 4591 |
| Novel Geometric and Adaptive Approaches to Fault-tolerant Control for Linear Systems | LIU He, LI Xiaojian | 4597 |

| | | |
|---|---|------|
| Fault Root Diagnosis Based on Partial Symbol Transfer Entropy | CHEN Rui, WANG Jian-Guo, CAI Xuezhi, YAO Yuan, LIU Jianlong | 4603 |
| Research of Diagnosing Causes of Turbine Faults Based on PSO-LightGBM Algorithm | WANG Jianqi, QIAN Hong, SU Xiaoyan, ZHANG Dongliang | 4608 |
| Aeroengine Performance Prediction Based on Fuzzy Information Granulation and Optimized SVM | LI Huihui, GOU Linfeng, LI Huacong, YANG Jiang, SUN Chujia | 4616 |
| Robust Adaptive Diagnosis for Multiple Faults of Aeroengine Actuator | YANG Jiang, GOU Linfeng, LI Huihui | 4623 |
| Fault Diagnosis of Spacecraft Attitude Control System Based on Dual-strong Tracking Square-root Cubature Kalman Filter | YANG Ze, MA Jie, YANG Baoqing | 4630 |
| Fault Diagnosis and Reliable Configuration of Uncertain Strip Area Based on MPSO-SVM | LI MoChen, YAO Bo, WANG Fuzhong | 4636 |
| Fault Diagnosis Expert System for Top Drive System Based on FTA | LIU Shuguang | 4642 |
| An Audio-based Intelligent Fault Classification System for Belt Conveyor Rollers | YANG Mingjin, PENG Chen, LI Zhipeng | 4647 |
| Neutral-point Balance Control Strategy of Three-level NPC Inverter Based on Proportional Resonant Algorithm | WANG Heng, XUE Yanping, CHEN Chaobo, LI Jichao | 4653 |
| Research on Question Answering System for COVID-19 Based on Knowledge Graph | DING Kai, HAN Hongqi, LI Linna, YI Menglin | 4659 |
| Pain Assessment Using Facial Action Units and Bayesian Network | GUO Wenqiang | 4665 |
| Detection of Sequential Alarm Patterns in Complex Industrial Facilities Using ClaSP and Top-K Algorithms | WANG Zhuang, HU Wenkai, CAO Weihua, WU Min | 4671 |
| Safety Analysis of Cryogenic Loading System Based on Knowledge Graph | LIU Yunling, CHAI Yi, LIN Wenyi, LI Xinyi | 4677 |
| A Method of Generating Chinese Pop Music Melody | ZHENG Mingxiao | 4683 |
| Simulation System of Automobile Rear Axle Assembly Line Based on Cyber-Physical System | YANG Muchen, LIU Lilan, GAO Zenggui, WEI WenTao, CHANG Yuxing | 4690 |
| Security Protection in Cooperative Control of Multi-agent Systems | SUN Shuai, MO Yilin | 4696 |
| Resilient Event-triggered Control for Cyber-physical Systems under Stochastic-sampling and Denial-of-service Attacks | XIE Xuhuan, LIU Yonggui, XU Bugong | 4702 |
| Event-Triggered Control for Inter-Vehicle Communications of Cyber-Physical Transportation Systems | JIANG Fengyao, LIU Xudong, ZHANG Liguo | 4709 |
| Speed Planning for Autonomous Vehicles at Intersections | LI Kuo, JIA Qing-Shan | 4715 |
| Research on the Technology of Information Fusion for the Redundancy Guidance for Aircraft Automatic Carrier Landing | WANG Wenzhe, LV Mingwei, YANG Yaotong, ZHANG Shaoqing, HU Jinwen | 4721 |
| A Resilient Defense Strategy Against False Data Injection Attack in Smart Grid | XU Zheng, MA Qiang, LIN Lin, NIE Qi-Gui, LIU Xin, YANG De-Fu, LI Jian | 4726 |
| Tampering Detection of LiDAR Data for Autonomous Vehicles | TAO Long, XIE Antai, REN Xiaoqiang, WANG Xiaofan | 4732 |
| Attack Effect Observer-Based Security Control for Cyber-Physical Systems Subjected to False Data Injection Attack | MIAO Phillip, DONG Lewei | 4738 |
| An Approach to Safety Analysis of Train Control Systems with Coloured Petri Nets | WU Daohua, LIU Jintao | 4744 |

| | | |
|---|---|------|
| Robust Reliability Design for Nonlinear Networked Control Systems | HUO Zhihong, ZHANG Zhixue, XU Chang, ZENG Namei | 4751 |
| Model Predictive Control of Unmanned Mine Vehicle Trajectory Tracking | XIN Peng, WANG Zhiwen, SUN Hongtao, ZHANG Bin | 4757 |
| A Leader-follower Formation Strategy for Networked Multi-agent Systems Based on the PI Predictive Control Method | CAO Lei, LIU Guo-Ping, ZHANG Da-Wei | 4763 |
| Quantized Set-membership Filtering for Automatic Guided Vehicles with Unknown-but-bounded Noises | YANG Hao, ZHANG Yilian, GU Wei | 4769 |
| A New Periodic Event-triggered Control Scheme with Guaranteed Minimum Inter-event Times | YU Hao, CHEN Tongwen | 4775 |
| Mean Square Stabilization of a Scalar Nonlinear System with I.i.d. Feedback Dropouts Based on Periodic Event-triggering | LIU Yuan, SHENG Jie, WANG Song, LI Feng, XU Jun, LING Qiang | 4781 |
| Intelligent Attack Method Research on the Pressure Control System of Pressurizer | LI Qixian, ZHANG Bingzhe, GAO Shan, PANG Huizhen, WANG Dongfeng | 4786 |
| Quasi-Synchronization of Heterogeneous Lur e Networks with Impulsive Feedback Control | JIN Chongfang, SHI Sangli, WANG Zhengxin, HE Wangli, JIANG Guo-Ping | 4792 |
| Adaptive Fault-Tolerant Consensus Tracking of Multiagent Systems via Event-Triggered Control | WANG Yifeng, ZHAO Guanglei, ZHU Lingchen, LIU Shuang | 4798 |
| Scale-free Design for Delayed Regulated Synchronization of Discrete-time Heterogeneous Multi-agent Systems Subject to Unknown Non-uniform and Arbitrarily Large Communication Delays | NOJAVANZADEH Donya, LIU Zhenwei, SABERI Ali, STOORVOGEL Anton | 4804 |
| Algebraic Analysis and Control of Networked Opacity with Bounded Communication Delays | XU Qian, ZHANG Zhipeng, XIA Chengyi, CHEN Zengqiang | 4810 |
| Event-triggered Optimal Control for the NCSs with Time Delays | LI Guitong, WANG Luyao, YANG Rongni | 4815 |
| Realization of a Data-based Adaptive Networked Tracking Control in NetCon System | ZHAO Ye, TONG Shiwen | 4819 |
| The Privacy-Preserving for Multi-Agent System with Antagonistic Interactions | HONG Xudong, ZHANG Jing, LU Jianquan | 4825 |
| Sampled-Data-Based Dissipative Load Frequency Control for Multi-Area Power Systems with Transmission Delays | ZHAO Xin, WANG Yajing, YANG Tao, ZOU Suli, MA Zhongjing | 4830 |
| Design and Implementation of Cloud-based Networked Control Experimental Instrument for Control Engineering Education | YE Shengwang, LIU Guo-Ping, HU Wenshan, LEI Zhongcheng | 4836 |
| Formation Tracking for Multi-agent Systems Based on Dynamic Event-triggered | YUE Lu, WEI Airong, MU Rui | 4842 |
| Event-triggered Predictive Control in Bilateral Channels of Networked Control Systems | ZHANG Tian-Yong, SUN Jian, LIU Guoping | 4848 |
| Modeling and Control of Stochastic Wireless Network System on a Digraph | YU Shuzheng, KONG Shulan | 4854 |
| Neural Network Based Sampling Control of Networked Bilateral Teleoperation Systems | HE Wei, ZHANG Yijun, WANG Yifan | 4859 |
| Event-Triggered Control Strategy Design to Guarantee Desired Control Performance | LAN Shaojie, LONG Fei, ZHAN Keyu, SHENG Jie, LI Feng, LING Qiang | 4865 |
| Non-fragile H_∞ State Estimation for Event-triggered Nonlinear Networked Systems Subject to Deception Attacks | ZHA LIjuan, LIU Jinliang, CAO Jinde | 4871 |

| | | |
|--|---|------|
| Event-triggered Secure Control for Networked Positive Systems under DoS Attacks | LIU Jiao, KANG Le, KONG Xiangna, LI Hongchao | 4877 |
| Dynamic Event-Triggered Vehicle Platooning Control: Trade-off Between Communication Efficiency and Platoon Performance | GE Xiaohua, HAN Qing-Long, WANG Zidong, DING Derui | 4883 |
| Fault Detection for Networked Singularly Perturbed Systems under New Dynamic Event-Triggered Mechanism | ZHAN Chi, WAN Xiongbo | 4889 |
| H2/H ∞ networked control for high-speed train with parameter uncertainty and data transmission time-varying delay | JI Juanjuan, CUI Yanliang, SHI Guangtian, SHI Rui | 4895 |
| Output-based Event-triggered Control of Nonlinear Systems under Deception Attacks | LI Fuqiang, GAO Lisai, GU Xiaoqing, ZHENG Baozhou | 4901 |
| Finite-Time State Estimation for Discrete-Time Nonlinear Singularly Perturbed Complex Networks under New Event-Triggered Mechanism | YANG Chao, WAN Xiongbo | 4907 |
| Adaptive Event-triggered State Estimation for T-S Fuzzy Systems with Stochastic Cyber-attacks | YAN Qian, LIU Jinliang | 4913 |
| PTSC: a New Notion for Structural Controllability under Structured Perturbations | ZHANG Yuan, XIA Yuanqing | 4919 |
| A New Dynamic Event-Triggered Mechanism Based Model Predictive Control for Systems with Polytopic Uncertainties | WEI Fan, WAN Xiongbo | 4925 |
| Distributed Adaptive Consensus Tracking Control for Stochastic Nonlinear Multi-agent Systems with Quantized Input | HU Zilun, YANG Jianying | 4931 |
| A High Speed Wireless Synchronous Exposure System Based on TDMA | WANG Yehao, YANG Qinghua, WANG Chuang, TU Xiaowei | 4937 |
| Leader-following Group Consensus of Multi-agent Systems with Different Time Delays | YAN Zheping, PAN Xiaoli, YANG Zewen | 4943 |
| Multi-Agent Formation Adjustment under Flocking Control Algorithms with Expected Topological Matrices | ZENG Debin, ZHOU Jun, LU Xin-biao, QIAN Hui Min | 4949 |
| Mission Planning for Satellite Cluster Reconfiguration Facing Obstacle Threats | LIU Yaguang, MA Zheng, ZHOU Liang, LUO Jianjun, GUO Botao, LI Ran | 4955 |
| Consensus in Multi-agent Systems with Multiple Disturbances and Time Delay via Proportional-integral Control | SUN Fenglan, SHEN Yunhao | 4960 |
| Bearing Measurement Based Formation Maneuver Control | XIAO Zhixuan, FAN Xiaoping, YANG Xiaowu | 4966 |
| Distributed Event-Triggered Random Gradient-Free Optimization Algorithm for Multiagent Systems | HU Xiaojing, ZHANG Huifeng, ZHUO Qingze | 4972 |
| Real-time Virtual Simulation Platform for Multi-UVA Hunting Target Using Deep Reinforcement Learning | ZHU Kangrui, ZONG Qun, ZHANG Ruilong | 4978 |
| Distributed Adaptive Dynamic Programming Formation Control of Multiple Quadrotor-UAV System | CAI Siyuan, DOU Liqian, SU Xiaotong | 4984 |
| Intelligent Control of Collective Motion Based on Deep Learning | LIU Lei, ZHANG Hao Xiang, SUN ZhuoWen | 4990 |
| Fixed-Time Output Feedback Consensus for Multi-agent Systems with Input Saturation and Uncertain Disturbance | MA Xiang, DAI Keren, LI Qingyu, YU Hang, WANG Xiaofeng, ZHANG He | 4996 |
| Deep Reinforcement Learning Approach for Flocking Control of Multi-agents | ZHANG Han, CHENG Jin | 5002 |

| | | |
|---|--|------|
| Convergence Rate Improvement for High-Order Nonlinear Multi-Agent Systems by Reset Mechanism | CUI Hailong, ZHAO Guanglei, MI Jie, WANG Zhen, LIU Shuang | 5008 |
| Weighted Bipartite Containment Motion of Impulsive Cooperative-competitive Harmonic Oscillators | ZHAO Liyun, REN Yan | 5014 |
| The Controllability and Strong Structural Controllability of Laplacian Dynamics | QU Jijun, JI Zhijian, LIU Yungang | 5019 |
| Distributed Hierarchical MPC Based on Evolutionary Game for Formation Control with Collision and Obstacle Avoidance | DAI Li, ZHOU Xiaoting, SUN Zhongqi, XIA Yuanqing | 5026 |
| Circle Formation Control for Mobile Sensor Networks with Bounded Position Measurement Errors | FENG Xiaoshuang, QU Yi, FAN Yuan, SONG Cheng | 5032 |
| Decentralized Control of Multiple Agents with Unknown Control Directions | PENG Junmin, LI DuanShuai, LIU Yi, QIAO Zhijun, XIAO Shen-ping, QIN Bin | 5038 |
| Finite-time Attitude Coordinated Control for Spacecraft Formation Flying Using Consensus Algorithm | XIE Xiong, SHENG Tao, CHEN Zhijun, HE Liang | 5044 |
| Event-triggered Prescribed Performance Control for Nonlinear Multi-agent Systems with Input Saturation | SHI Zhengqing, ZHOU Chuan, GUO Jian, SU Bo | 5050 |
| Scale-free Protocol Design for H-infinity Almost Output and Reg- ulated Output Synchronization of Heterogeneous Multi-agent Systems | NOJAVANZADEH Donya, LIU Zhenwei, SABERI Ali, STOORVOGEL Anton | 5056 |
| Bipartite Consensus for Multi-Agent Systems with Differential Privacy Constraint | ZUO Zhiqiang, TIAN Ran, WANG Yijing | 5062 |
| Fixed-Time Cooperative Guidance for Salvo Attack: A Leader-Followers Approach | JIN Nan, CUI Lei, ZUO Zhiqiang, WANG Song | 5068 |
| Leader-following Attitude Consensus Control for Multi-UUV Systems with Input Constraints and Error Constraints | JIANG Yunbiao, WANG Fuyong, SADER Malika, CHEN Zengqiang, DUAN Feng, LIU Zhongxin | 5074 |
| Bipartite Consensus of Nonlinear Multi-agent Systems under Multi-layer Signed Graphs | MA Guodong, REN Jie, ZHAO Min, LU Guoping | 5080 |
| Collision Avoidance Control with Motion Information for Multiple Tractor-trailer Vehicles | ZHANG Wenxue, STIPANOVIC Dusan, ZHOU Di | 5086 |
| Consensus-based Vehicle Platoon Control with Communication Noises | LI Haifeng, CHEN Zhenping, FU Baochuan, WU Zhengtian, JI Xinhui | 5093 |
| Leader-following Consensus of Multiple Uncertain Euler-Lagrange Systems Subject to Unknown Distur- bances over Switching Networks | WANG Tianqi, HUANG Jie | 5099 |
| H^∞ consensus control of asynchronously switched multi-agent systems with average dwell time | XU Linpeng, WANG Bolan, HUANG Hanqiao, CHENG Haoyu, SONG Ruijia | 5105 |
| H_2 Almost State Synchronization of Homogeneous Multi-agent Systems—A Scale-free Design | LIU Zhenwei, SABERI Ali, STOORVOGEL Anton, NOJAVANZADEH Donya | 5111 |
| Remote Monitoring Algorithm for Unmanned Surface Vessel: A System Based on Classification and Learning | MA Longfei, WANG Hsiucheng, LIU Fenghua, LI Kaiyuan | 5117 |
| A PE Game with One Superior Hunter and Multi-pursuer Against an Evader | HAO Tang, ZHANG Weidong, SUN Min, LIN Bin, HU Zhihuan | 5124 |
| Improved Distributed Optimization Algorithm for Continuous Time Multi-agent Systems with Time- Varying Cost Function | HU Haokun, MO Lipo | 5131 |

| | | |
|--|--|------|
| Consensus of Multi-agent Systems with Unknown Control Directions by Uniting Dynamic and Switching Adaptive Feedback | YU Linzhen, LIU Yungang | 5136 |
| Robust Consensus of Multi-agent Systems under Switching Networks and Exosystem Measurement Constraint | LIU Tiantian, HUANG Wenchao, HUANG Yanwei, CHEN Shaobin | 5142 |
| Reachable Set Estimation of Multi-agent Systems under Semi-Markov Switching Topology with Partially Unknown Rates | TIAN Binbin, WANG Jinhua, HUANG Wenchao, HUANG Yanwei | 5148 |
| A Distributed Implementation of Steady-State Kalman Filter | YANG Xu, YAN Jiaqi, MO Yilin, YOU Keyou | 5154 |
| Distributed Consensus Control of Nonlinear Multiagent Systems Satisfying Incremental Quadratic Constraints | QIAN Yuchen, MIAO Zhonghua, ZHU Xiaojin, HE Chuangxin | 5160 |
| Efficient Multi-Robot Coverage of an Unknown Environment | CHEN Zihao, PENG Zhihong, JIAO Lei, GUI Yuanyuan | 5166 |
| An Accelerated Gossip-Based Distributed Gradient Method | REN Xiaoxing, LI Dewei, XI Yugeng, SHAO Haibin | 5172 |
| Consensusability of Continuous-time Multi-agent Systems with Multiplicative Noises | QU Cuiyun, WANG Zhongmei | 5178 |
| Asynchronous Event-Trigger Consensus of Leaderless Homogeneous Nonlinear Networked Lagrangian Systems | FU Yuliang, LI Xiaolei, LUO Xiaoyuan, LI Shaobao | 5182 |
| Distributed Quantized Control with Dynamic Event-Based Communication under Directed Graphs | XU Tao, LV Yuezhu, LV Xiaoxu, DUAN Zhisheng | 5188 |
| Lag-Consensus of Leader-Following Multiagent Systems by Pinning Control and Data Sampling | LIU Tingjin, LIU Duyu, LIU Xingwen | 5194 |
| External Consensus of Multi-agent Systems Based on Equivalent Input Disturbance | DOU Yanning, LEI Qi | 5200 |
| Distributed Aggregative Game for High-order Systems under Disturbances | LI Xinni, ZHANG Yanqiong, TIAN Yuping | 5206 |
| Cooperative Tracking of Hypersonic Target with Bearing-Only Measurements | WANG Xiaofeng, LI Chaoyong | 5212 |
| Leader-Following Consensus of Singular Nonlinear Multi-Agent Systems with Unknown External Disturbances | LIU Tianya, SHENG Andong, QI Guoqing, LI Yinya | 5217 |
| Fast Consensus of Multi-agent Systems by Second-order Graph Filters | RAN Qian, YI Jingwen, CHAI Li | 5222 |
| Consensus Analysis of Discrete-time Multi-agent Systems in Switching Networks: a Time-varying Lyapunov Function Method | WANG Bo, TIAN Yuping, HAN Zhimin | 5228 |
| Leader-following Consensus of Switched Linear Multi-agent Systems under Arbitrary Switching Signal | CHEN Yangzhou, CHEN Bing, ZHAN Jingyuan | 5234 |
| Containment Control Problem of Linear Multi-agent Systems with External Disturbance | LUO Huan, YE Qibiao, CHEN Wenhai, GAO Lixin | 5240 |
| Privacy-preserving Leader-following Consensus with Continuous-time Dynamics | LI Haoran, XU Hongyuan, NI Yuan-Hua, DUAN Feng, CHEN Zengqiang | 5246 |
| A Distributed Event-triggered Generalized Nash Equilibrium Seeking Algorithm | CAI Xin, XIAO Feng, WEI Bo | 5252 |
| Event-triggered Consensus Control for Multi-agent Systems with Markov Switching Topologies | LI Shanglin, CHEN Yangzhou, ZHAN Jingyuan | 5258 |

| | | |
|---|--|------|
| Resilient Consensus of Second-order Discrete-time Multi-agent Systems under Malicious Attack | BAI YUQI, WANG Jinzhi | 5264 |
| An Accelerated Distributed Online Gradient Push-Sum Algorithm in Time-varying Networks | FANG Runyue, LI Dequan, SHEN Xiuyu | 5269 |
| Formation Tracking for Linear Multiagent Systems Based on Adaptive Disturbance Observer | ZHANG Zixuan, DONG Wei, WANG Chunyan, WANG Jianan, DING Zhengtao | 5275 |
| Loose Formation Control of Multi-Agent Systems Based on Piecewise Function | QIU Huaxin, WANG Xiaochu, ZHOU Qingrui, SUN Changhao | 5282 |
| Decentralized Pairwise-Workloads Balancing Algorithm for Networked Multi-agent Systems | WANG Xiaochu, ZHOU Qingrui, SUN Changhao, QIU Huaxin | 5289 |
| Semi-global Leader-following Output Consensus of Heterogeneous Systems with Position and Rate-limited Actuators via State Feedback | ZHOU Panpan, CHEN Ben M. | 5295 |
| Semi-global Leader-following Output Consensus of Discrete-time Heterogeneous Linear Systems with Position and Rate-limited Actuators via State Feedback | ZHOU Panpan, CHEN Ben M. | 5303 |
| Cooperative Training over Networks via Consensus-based Algorithms | LI Zhongguo, LIU BO, DONG Zhen, DING Zhengtao | 5309 |
| A Nearly Optimal Multi-agent Formation Control with Reinforcement Learning | PENG Jiangwen, MU Chaoxu, WANG Ke | 5315 |
| Distributed MPC Algorithm for Linear Discrete Systems with Communication Noise | ZHAO Duqiao, LIU Ding, LIU Linxiong, ZHANG Xia | 5321 |
| Experimental Verification of Formation Control in Nonholonomic Multi-mobile Robots | WANG Dongdong, ZHOU Jin, HE Chuangxin, MIAO Zhonghua | 5327 |
| Differentially Private Coordination of Second-Order Multi-Agent Systems via Dynamic Encoding-Decoding | ZHANG Wenjun, LIANG Yong, WANG Bingchang | 5332 |
| Robust Event-Triggered Consensus of Uncertain Network Systems | ZHANG Shiqi, LI Zhongkui | 5338 |
| Remote State Estimation over a Packet-delaying Network without Packet Acknowledgment | SHI Hao, HE Lidong | 5344 |
| Event-Triggered Fault-tolerant Model Predictive Control of Nonlinear Multi-agent System with Time Delay and Parameter Uncertainty | WANG Linglong, LI Jianxiong, LIU Xinjian, FANG Yi Ming | 5350 |
| Affine Formation Control for Multi-Agent Systems Within an Appointed Settling Time | GAO Kai, ZHOU Yuan, ZHAO Yu | 5356 |
| Fully Distributed Event-triggered Leader-follower Tracking Control for Multi-agent Systems over Directed Switching Networks | CHENG Yi | 5362 |
| Secure Consensus Control for Multi-Agent Systems with Multi-sensor Multi-rate Sampling under DoS Attacks | WANG Yue, JIA Xinchun, LV Teng, SHANG Zhenzhong, LIU Bo | 5367 |
| Policy Evaluation for Reinforcement Learning over Asynchronous Multi-agent Networks | SHA Xingyu, ZHANG Jiaqi, YOU Keyou | 5373 |
| A Robust Clock Synchronization Scheme for Wireless Sensor Networks Against DoS Attacks | ZHANG Xuxin, CHEN Shiyu, ZHAO Bingya, ZHANG Ya | 5379 |
| Distributed Optimization for High-order Multi-agent Systems via Event-triggered Control | TANG Yutao, LIU Huaihui, LI Ruonan, ZHU Kui | 5385 |
| Sheepdog Driven Algorithm for Sheep Herd Transport | LIU Yu, LI Xin, LAN Meiqi, HE Yaqi, CAI He, GAO Huanli | 5390 |
| Finite-Time Output Consensus for Nonlinear Multi-Agent Systems under Directed Graph | QIANG Zeng, JI Haibo | 5396 |

| | | |
|--|--|------|
| Receding Horizon Defense Strategy for Reach-Avoid Games with Uncertainties via Pairwise Outcomes | DENG Ruiliang, YAN Rui, ZHANG Weixian, SHI Zongying, ZHONG Yisheng | 5401 |
| A Self-Organized Line Marching Formation Control Algorithm | LIU Yu, HE Yuheng, ZHEN YingNan, GUO Shuping, GAO Huanli, CAI He | 5407 |
| Privacy Preserving Discrete-Time Average Consensus by Injecting Edge-based Perturbations | XIONG Yi, LI Zhongkui | 5413 |
| Bipartite Tracking Consensus for General Linear Multi-Agent Systems with Asynchronous Communica- tions over Signed Networks | CHEN Runyao, CHEN Lulu, SHAO Jinliang, ZHENG Wei Xing | 5419 |
| Fully Distributed Adaptive Finite-Time Leader-Following Consensus for Uncertain Nonlinear Multiagent Systems | ZHAO Le, LIU Yungang, LI Fengzhong | 5425 |
| Predefined-Time Containment Control for Multi-agent Systems via Sliding Mode Control | WANG Luxiang, LIU Xiaoyang, HU Yuanfa, HU Xiaoting | 5431 |
| Time-Varying Formation Tracking Control for Multi-UAV Systems with Directed Graph and Communi- cation Delays . | MA Zhenwei, QI Juntong, WANG Mingming, WU Chong, GUO Jinjin, YUAN Songbo | 5436 |
| Circle Flocking of Swarm Robots Based on Relative Position Measurement | ZHANG Baolin, YAN Jieyi, WANG Donghai, LIU Yu, GUO Shuping, GAO Huanli, CAI He | 5442 |
| Synchronous CODA Opinion Dynamics over Social Networks | TANG Kun, ZHAO Yiyi, ZHANG Jiangbo, HU Jiangping | 5448 |
| Fully Distributed Finite-time Consensus Control of Autonomous Underwater Vehicles | CHEN Bo, HU Jiangping, GHOSH Bijoy | 5454 |
| Cooperative Event Triggered Control for Multi-Robot Systems with Collision Avoidance | LI Xiaoduo, YIN Xiang, LI Shaoyuan | 5460 |
| A Cooperative Kalman Consensus Filter via Indirectly State Vector Fusion | CHEN Weiqiang, MEI Jie, MA Guangfu, WU Weiren | 5466 |
| Event-triggered Sliding Mode Control for First-order Nonlinear Multi-agent System | FENG Jianlin, HAO Fei, XIA Xinglu, ZHANG Pengyu, YAN Yingxin | 5472 |
| Cooperative Driven Algorithm for Sheep Herd Trajectory Tracking by Two Sheepdogs | DONG Qizhang, JIANG Mingjun, XU Xinhang, LIU Yu, HE Yaqi, CAI He, GAO Huanli | 5478 |
| Generalized Nash Equilibrium Seeking Strategy for Multi-cluster Games | ZHAO Yan, CHEN Tao, LIU Yangyang, DENG Zhenhua, HU Yang | 5484 |
| Decentralized Localization for Multi-agent Systems Based on Asynchronous Communication | LU Lei, HU Jinwen, PAN Quan, ZHAO Chunhui, XU Zhao, JIA Caijuan | 5489 |
| Distributed L_2 - L_∞ consensus of multi-agent systems with nonconvex constraints | OUYANG Lujie, ZENG Chuyu | 5495 |
| Optimal Consensus with Inexact First-order Information | ZHU Kui, TANG Yutao | 5499 |
| Research on Multi-UUV Pursuit-Evasion Games Strategies under the Condition of Strongly Manoeuvrable Evader | HAN YuChen, WANG Hongjian, YU Dan, WANG Zhao | 5504 |
| Event-Triggered Consensus of Unknown Heterogeneous Multi-Agent Systems with Unmodeled Dynamics under Directed Topology | YANG Ruohan, LI Yue | 5512 |
| Efficient Double-Layered Formation Control for Multi-Agent Systems | TIAN Guoqing, CHEN Yutao, HUANG Jie | 5518 |
| Varying-coefficient Based Distributed Formation Control of Multiple UAVs | ZHANG Hepeng, DI Jian, YAN Han, WANG Xinghu, JI Haibo | 5524 |
| Distributed Adaptive Sliding Mode Control for Takagi-Sugeno Fuzzy Multiagent Systems | JIN Zhenghong, LI Jiawen, LIU Tengfei | 5529 |

| | | |
|--|---|------|
| Decentralized Formation Tracking and Disturbance Suppression for Collaborative UAVs Transportation | HU SIJIE, ZHAO Xizhen, REN Yi, XU Dabo | 5535 |
| Distributed Cooperative Control of Position-constrained Nonlinear Systems under a Directed Graph | XU Luyan, WANG Chaoli | 5540 |
| Distributed Formation Tracking Control for Underactuated AUVs Based on Polar Coordinates Transformation with Disturbances | WANG Zhengkun, ZHANG Lijun | 5547 |
| Output Consensus of Multi-agent Systems with Linear Dynamics via Asynchronous Intermittent Control | XU Haichuan, ZENG Wang, XU Chengjie | 5553 |
| Connectivity Preserving Design Strategy for Distributed Adaptive Cooperative Control of Networked Uncertain Nonholonomic Mobile Robots with Unknown Control Directions | XU Yujing, WANG Chaoli, JIANG Yang | 5559 |
| Distributed Synchronous Formation Reconfiguration via Low-Thrust | SHAO Jiang, SONG Yingying, ZHOU Qingrui, YE Dong, SUN Zhaowei | 5567 |
| Phase Transition of Collective Moving Directions by Tweaking the Diversity of Different Leaders | WANG Biao, ZHOU Wei, LI Chunguang, ZHOU Tao, ZHANG Hai-Tao | 5573 |
| Multi-Agent Consensus with Event-Triggered Communication and Relative Output Sensing | LI Xianwei, LI Shaoyuan, ZHENG Wei Xing | 5579 |
| A Primal-Dual Algorithm for Distributed Stochastic Optimization with Equality Constraints | DU Kaixin, CHEN Xing-Min | 5586 |
| Collision-Free Trajectory Generation for Multiple UAVs with Sensing Constraints | LI Ruocheng, YANG Qingkai, ZHAO Weipeng, FANG Hao | 5592 |
| Distributed Formation Control of Multi-Agent via Abstraction | LI Huanhuan, LIU Tengfei, JIANG Zhong-Ping | 5598 |
| Distributed Optimization Design of Multi-Agent Systems with Nonidentical Packet Losses | JI Ma, YU Xiao, LAN Weiyao | 5604 |
| Predictive Control for Consensus Problem of Multi-agents System with Communication Management | WANG Jie, LI Shaoyuan, ZOU Yuanyuan | 5610 |
| Enhancing Convergence Efficiency of Self-propelled Agents Using Diffusion Concept | CHEN Yurong, ZHANG Xian-Xia, YU Yinsheng | 5616 |
| Distributed Containment Control of Markov Jump Multi-agent Systems under Asynchronous Communications | MA Chao, JI Yidao, HANG Fu, WU Wei | 5621 |
| Smooth Finite-Time Distributed Control of Multi-Agent Systems with Communication Noises | WU Yanzhi, LIU Lu | 5626 |
| Fully Distributed Event-triggered Cooperative Output Regulation of Linear Parameter-varying Systems | FU Chengcheng, ZHANG Hao, WANG Zhuping | 5631 |
| Iterative Learning Control for Multi-Agent Systems with Finite-Leveled Sigma-Delta Quantizer and Input Saturation | ZHANG Ting, LI Junmin | 5637 |
| Wireless Sensor Network Localization Using SDP Relaxation | WU Gang, LV Shuangshan, WU Wanqiang | 5645 |
| Energy Efficiency Time Synchronization Protocol for Wireless Sensor Networks | WANG Fuqiang, WU Xiaoming, LIU Zhiyong | 5649 |
| Accurate Parameter Estimation of Time-varying Nuclear Radiation Field with Mobile Sensors | CHEN Bo, LI Zhicheng, YANG Zaiyue | 5655 |
| A Sensor Selection Method for Nonlinear Localization in the Presence of Sensor Errors | MA Wen, ZHU Hongyan | 5661 |

| | | |
|---|---|------|
| A UHD MIPI CSI-2 Image Acquisition System Based on FPGA | LIU Fuchun, WANG Lei, YANG Yang | 5668 |
| A Payload Swing Angle Measurement Method Based on Monocular Vision for Overhead Cranes under Illumination Change | XU Xianxian, XU Weimin, YOU Zhiteng, HU Qiang, ZHU Xinlei | 5674 |
| Distributed Filtering for a Class of Saturated Nonlinear Systems with Measurement Outliers | LI Jiaying, HU Jun, WU Zhihui, HUANG Jinpeng, CAO Zhipeng | 5680 |
| LoRa-based Smart Grid Neighborhood Area Network Resource Access and Address Allocation Mechanism | ZHU ZiHao, LI Xiaohui, FAN Changlin, ZHAO Min | 5686 |
| A High-Adaptability Indoor Localization Algorithm for Large-Scale BLE Sensors | YIN Cunyi, JIANG Hao, CHEN Jing, MIAO Xiren | 5691 |
| A WiFi Indoor Positioning Strategy Based on Two-step Fingerprint Matching | PEI Yujie, WANG Bing, ZHANG Lan | 5696 |
| An Improved Opportunistic Routing Protocol for Underwater Wireless Sensor Networks | LI Pengfei, HU Yifan, GAI Xiaobin | 5702 |
| Experimental Comparison of ATS Algorithm for Wireless Sensor Network | ZHU Dezheng, LU Zhaonan | 5708 |
| RV-SFAMA-MA: RTS-VBF Algorithm Used in a Slotted-Based MAC Protocol for Underwater Acoustic Networks with an Acknowledgement Scheduling Algorithm | WU Ziye, LIU Meiqin, ZHANG Senlin | 5714 |
| Design of QCM Frequency Acquisition Module for the Detection of RNA Viruses | NI Yihao, YAN Yun, XIE Yushan, LIU Chunxiao, LI Xiaobo, ZHU Jin | 5721 |
| Design of a Quartz Crystal Microbalance Driving Circuit Based on Detection of RNA Virus | WEI Dong, CHEN Haoming, XIE Yushan, NI Yihao, LI Xiaobo, ZHU Jin | 5728 |
| Distributed Localization of Networked Agents in GPS-Denied 3D Environments | XIA Yinqiu, HE Chengyang, YU Chengpu | 5735 |
| Design of an Electroluminescent Device Based on Metal-Insulator-Semiconductor Structure | WANG Zaoji, ZHU Jin, YIN Yanping, YUAN Huining, LI Dayi, SUN Kai | 5741 |
| Dynamic Economic/Emission Dispatch Considering Renewable Energy and PEVs | LEI Yao, LI Jiajun, LIANG Huijun | 5746 |
| A Fuzzy C-means Based User Clustering Method for Demand Response Regulation | LI Liang, WANG Liang, MA Hongwei, HAN Peidong, LI Ziyang, TIAN Ye | 5752 |
| Dual-Passivity-based Control Based on Capacitor Current Feedback Method for Grid-connected Inverter with LCL Filter to Suppress Peak Resonance and Improve Power Quality . | LI Tao, LI Yongli, LI Song | 5758 |
| Operation Strategy for Community Integrated Energy Systems Considering Wind and Solar Power Con- sumption | LIU Xinghua, XIE Shenghan, GENG Chen, CAO Hui | 5764 |
| Reliability Evaluation of Hybrid Wind-photovoltaic-hydro Power Generation System Based on Multiple Operating Scenarios | XIE Xiaojun, WU Qiong, DONG Guowei, ZHANG Ruigang, YANG Bo, WANG Meng | 5770 |
| Short-term Wind Power Forecasting Model Based on Random Forest Algorithm and TCN | ZHA Wenting, LIU Jie, LI Yalong, LIANG Yingyu | 5776 |
| Multi-objective Optimization of Integrated Energy System Based on Weighted Fuzzy Algorithm | SUN Zhihao, WANG Ruiqi, LU Jun, GUO Guanghua, FAN Yunpeng, LI Ke | 5782 |
| Fuzzy PI Control for Grid-side Converter of DFIG-based Wind Turbine System | LIU Shuang, HAN Yaozhen, DU Cuiqi, LI Shuzhen, ZHANG Haitao | 5788 |
| Design of Solar Dish/Stirling Rotation Control System with Dual Axis Solar Tracker | ZHOU Zhijie, CHEN Jiaying, HU Zhuohuan, NIE Daolin, WEN Chulin | 5794 |

| | | |
|--|--|------|
| Ultra-short-term Solar PV Power Forecasting Based on Cloud Displacement Vector Using Multi-channel Satellite and NWP Data | GAO Rui, ZHANG Xuemin, ZHEN Zhao, MEI Shengwei | 5800 |
| Research on SOC Estimation of EMU Battery Based on BA-PF | TIAN Dongdong | 5806 |
| Prediction of SOC and SOH of EMU Battery Based on DAUKF | KANG Daoxin | 5810 |
| A Study on SOH Estimation of EMU Battery Based on Improved Particle Filter | XU Chao | 5816 |
| Distributed Power Generation Virtual Synchronous Generator Control Design and Analysis | TANG Shuai, MAO Longbo, WANG Wenqiang, GENG Haoxiang, WANG Weijun | 5822 |
| Battery State of Health Estimation Based on Multiple Linear Regression by Particle Swarm Optimization | HUANG Peng, GU Pingwei, CAO Xuebin, JIANG Kun, DUAN Bin, ZHANG Chenghui | 5830 |
| A Fast Capacity Estimation Approach for Retired Lithium-ion Batteries | CAO Xuebin, ZHOU Zhongkai, DUAN Bin, GU Pingwei, SHANG Yunlong, ZHANG Chenghui | 5836 |
| Study on the Effect of High Temperature and High-Current Rate on Fast Charging of Lithium-ion Batteries | YIN Peixin, WANG Nan, SHANG Yunlong, GU Pingwei, DUAN Bin, ZHANG Chenghui | 5841 |
| A Study of Charging Demand Estimation Model of Electric Passenger Vehicles in Beijing | ZHOU Ruijie, PING Zhendong, WANG Guiping, LI Li, LI Guangze, ZHANG Bo | 5847 |
| Power Optimization of Hydrogen Fuel Cell Vehicle Based on Genetic and Fuzzy Algorithm | YANG Hangqu | 5853 |
| Deadbeat Predictive Control Strategy Based on UDE for Dual-Buck Grid-Connected Inverter | LIU Ruolin, LI Donghui, YAO Lele | 5857 |
| An Improved Continuous Control Set-model Predictive Control for Three-phase Grid-connected Inverter | LI Donghui, FU Shizhen, YAO Lele | 5863 |
| Modeling of Fuel Cell Operating Condition Estimation Based on Transfer Learning | HU Lingyan, WANG Shuo, WANG Qingpeng, LIU Lin, YU Yunjun, WU Xiao-long, LI Xi | 5869 |
| The Overview of Dynamic EV Path Planning | ZHOU Yimin, LUO Qingsong | 5874 |
| Data-Driven Wind Turbine Wake Decomposition and Evolution Analysis: A Frequency Characteristics-based Clustering Procedure | CHEN Zhenyu, LIN Zhongwei, LIU Jizhen, LI Gengda, HU Feng | 5881 |
| Observer Based Decoupling Control Research of Fuel Cell Air Supply System | JIANG Weihai, SUN Boqi | 5887 |
| Multi-Voltage Grade Bus Control Strategy Based on Load Growth for DC Microgrid | YANG Hongyu, ZHANG Nannan | 5893 |
| State of Health Estimation Based on Constant Current Charging Profiles | HUANG Yusha, QIN Linlin, WU Gang | 5899 |
| Confidence Intervals of Six Distance Indices Estimated by Numerical Simulations | YANG Zheng-Ling, WANG Han, LIAN Sheng, WANG Ru-Xue, ZHANG Jun | 5905 |
| An Improved Model Predictive Control Method for Wave Energy Converters | WANG Zhenchun, LUAN Feng, WANG Nianguo | 5911 |
| Research on the Characteristics of Compensation Networks in Wireless Charging System for Electric Vehicle Based on Magnetic Coupling Resonance | YANG Fan, ZHANG Huifen | 5917 |
| Optimization of High-Efficiency Half-bridge LLC Resonant Converter | SUN Sizhou, FU Jingqi | 5922 |
| A Long Short-term Memory Based Wind Power Prediction Method | HUANG Yufeng, DING Min, FANG ZHIJIAN, WANG Qingyi, TAN Zhili, LI Dan-Yun | 5927 |
| Building Energy Optimization Based on Biased ReLU Neural Network | LI Hongyi, LIANG Xinglong, XU Jun | 5933 |

| | | |
|--|--|------|
| Indirect Power Control of DFIG Based Wind Turbine Using Fractional Order Intelligent Proportional Integral Sliding Mode Controller | MOHAMED Mutasim, WANG Haoping, TIAN Yang | 5939 |
| Power Forecasting of Wind Turbines Based on Multi-Input Predictors and Wind Speed Variation Trends | DAI Xiaoran, LIU Guo-Ping, HU Wenshan, ZHANG Hailong | 5945 |
| Theory-guided Output Feedback Neural Network (Tg-OFNN) for Short-term Wind Power Forecasting | HUANG Yi, LIU Guo-Ping, HU Wenshan | 5951 |
| Numerical and Experimental Study of Lightning Stroke to BIPV Modules | BIAN Xiaoyan, ZHANG Yao, ZHOU Qibin, CAO Ting, WEI Bengang | 5957 |
| A Capacitors Voltage Balancing Control Strategy of MMC Sub-modules Based on Dynamic Threshold for PV System | YANG Ziyang, ZHAO Jianfei, WANG Shuang, ZHANG Chenghao | 5965 |
| Research on Sliding Mode Control and Fuzzy Control Strategies of Motor Drive System for New Energy Vehicles | LIU Xiaoying, ZHAO Jianfei, WANG Shuang, XIANG Qian | 5971 |
| Heavy-Duty Vehicle Dynamics Modeling and Rollover Warning Simulation | ZHANG Hongyan, HU Haotian, ZHANG Mingxi, DU Song, CUI Qi, NI Tao, HUANG Lingtao | 5977 |
| Differential Steering Strategy for Distributed Drive Vehicle with Double Rear Steering Bridges Based on Sliding Mode Control | WEI Ruichuan, LI Junqiu, LIU Jiwei, LI Qi, HONG Yufeng | 5985 |
| Fast Terminal Sliding Mode Control for Cooperative Braking of the Vehicle Platoon | HAN Jinheng, HE Chengkun, LIU Weilong, LI Chao, ZHANG Junzhi | 5992 |
| String Stability of a Third-order Vehicle Model with Inertial Delay Parameters under Bilateral Control | ZHONG Daxing, ZHENG Min, LI Peike | 5998 |
| Minimum Fuel Consumption Strategy in Autonomous Adaptive Cruise Control Scenarios | HU Hanyang, HE Chengkun, MA Haitong, ZOU Chonghao, WU Haoran, ZHANG Xiaolong, ZHANG Junzhi | 6004 |
| Distributed Vehicle Platoon Control with Leader Selection Strategy | OUYANG Zikai, LI Zhicheng, CHEN Shibo, YANG Zaiyue | 6010 |
| Time-event Hybrid-triggered Control for Vehicle Platoons with Communication Delay | CHEN Xingwen, YAN Maode, YANG Panpan, LIU Xiaomin | 6016 |
| Cooperative Lane-Changing Strategy for Intelligent Vehicles | SUN Manman, CHEN Zhenping, LI Haifeng, FU Baochuan | 6022 |
| Analysis of a Markovian Queuing Model for High-Speed Signal-Free Intersections | DAI Hanwen, JIN Li | 6028 |
| An Online Energy Management Strategy for Fuel Cell Hybrid Vehicles | ZHANG Yu, CHEN Ming, CAI Shuo, HOU Shengyan, YIN Hai, GAO Jinwu | 6034 |
| An Optimal Scheduling Method Using Multi-agent A* for Autonomous Shuttle Bus | PENG Jiali, SHANGGUAN Wei, ZHANG Lu, CAO Yue | 6040 |
| Dynamic Safe Area Detection Method for Autonomous Vehicles in Hub Airport | PANG Xiaoyu, SHANGGUAN Wei, CAO Yue, CHAI Linguo, QIU Weizhi | 6046 |
| Anomaly Detection in Sequence Data Based on MSM-H with EXPoSE | GENG Renkang, SUN Bin, MA Liyao, ZHAO Qin-jun, SHEN Tao | 6052 |
| Game-based Haptic Shared Control Considering Driver-Automation Conflict | GUO Hongyan, SHI Wanqing, LIU Jun, YANG Xiaoping | 6058 |
| Dissipation of Stop-and-Go Waves of Mixed Autonomous Vehicle Flow with Reinforcement Learning | MA Zibo, LIU Xudong, ZHANG Liguang | 6064 |
| A Velocity Tracking Control Method for Electric Vehicle Based on Model Predictive Control | MA LiLing, FENG Shan hao, CHEN Tao, WANG Shou Kun, WANG Junzheng | 6070 |

| | | |
|---|--|------|
| A Coupled Sliding Mode Control Strategy for Vehicle Platoons with Extended State Observer | XU Yuanyuan, LI Mengjie, ZHENG Xinquan, LUO Xiaoyuan | 6076 |
| Energy-efficient Medium-speed Maglev Train Control Based on Resistance Fitting | SHI Junyu, YUE Wenjin, WANG Yiwei, ZHONG Weifeng | 6081 |
| Dynamic Path Planning for Formula Autonomous Racing Cars ... | LIU Yanbo, LIU SHIJI, SUN Weiqi, XU Wenchao, XIONG Xin, LING Qu, HAO Li, HOO Forge | 6087 |
| An Iterative Optimization Algorithm for Vehicle Speed Prediction Considering Driving Style and Historical Data Effects | XIE Hui, HU Dong, SONG Kang | 6094 |
| Semi-active Suspension Control Strategy of High-speed Train Based on Second-order Sliding Mode | WANG Xinyue, HUANG Deqing | 6101 |
| Cooperative Decision Making of Lane-change for Automated Vehicles Considering Human-like Driving Characteristics | HANG Peng, CHEN Lv, HUANG Chao, HU Zhongxu | 6106 |
| Research on the High-Precision Unmanned Operation Control Algorithm of the Vibroseis Vehicle | LI Bin, WANG Shou Kun, WANG Shuai, WANG Junzheng, LIU Shangfei | 6112 |
| Air Gap Data Analysis of Linear Motor for Urban Rail Train | HAN Andong, LI Sheng, LIU Bufan, MEI Yulin | 6118 |
| Decentralized Optimal Control of Connected and Automated Vehicles at Merge Areas | WU Zhuoqun, LIU Xudong, ZHANG Liguo | 6124 |
| Distributed Optimization of Regional Traffic Signals via Deep Reinforcement Learning | CUI Tongchao, LIU Xudong, ZHANG Liguo | 6130 |
| Distributed Velocity and Input Constrained Tracking Control of Multiple High-speed Trains with Disturbances | HU Qijie, ZENG Chuyu | 6136 |
| Intelligent Intersection Scheduling Based on Vehicle Traffic Priority | RUAN Zhengxin, CHEN Sicong, LI Yuanlong, SHI Liangren | 6142 |
| Diverting Bus Service from Conventional to Customized: an Empirical Study in Beijing | CHANG Yi, SHANG Hua-yan | 6148 |
| Platoon Control of Automatic Vehicles Based on Deep Deterministic Policy Gradient | LUO Xiaoyuan, CHEN Tian, LI Mengjie, LI Shaobao | 6154 |
| Event-triggered Control for Automatic Train Operation with Prescribed Tracking Performance | YUE Zheng, DONG Hairong, GAO Shigen, XUN Jing | 6160 |
| A Study on Fake and Real Lane Change Behavior Prediction Based on Discrete Hidden Markov Model | JIN Xianjian, WANG Qikang, YAN Zeyuan, YANG Hang, LI Zhiwei, WANG Zhaoran | 6166 |
| Development of Robust Constrained Control Strategy for Active Suspension System of Electric Vehicle with In-Wheel-Motor | JIN Xianjian, WANG Jiadong, YAN Zeyuan, LI Zhiwei, WANG Zhaoran | 6172 |
| Research on Dynamic Planning Method of Collision Avoidance Route Based on Ship Kinematics | WANG Lipeng, ZHOU Chenkun, ZHANG Zhi, MA Shan, MA Wenlong | 6178 |
| Experimental Characterization and Modeling of Dynamic Hysteresis for Magnetostrictive Actuator | YI Sicheng, YAN Yuchao, LIU Zhigang, NING Lei, SUN Jun | 6184 |
| A Weighted Voting Ensemble Prediction Model for Adjusting Burden Distribution Matrix of Blast Furnace | WU Jiangxiao, ZHANG Sen, XIAO Wendong | 6190 |
| Soft Measurement Modeling of Turbidity in Flocculation Process of Drinking Water Treatment Using Gaussian Process Regression | CHANG Xiao | 6196 |
| A Deep Neural Networks Based on Multi-task Learning and Its Application | ZHAO Mengru, ZHANG Yuxian, QIAO Likui, SUN Deyuan | 6201 |

| | | |
|---|---|------|
| Improved SPSA-based Control and Its Application to Lithium Bromide System | DONG Na, WU Zhiqiang, FENG Yu | 6207 |
| On-line Prediction Method of Ferrous Concentration in Iron Removal Process by Goethite | LIU Mei, CAI Yuan-Li | 6213 |
| Condition Time Series Prediction of Aero-Engine Gas-Path Performance Based on Self-Attention Mechanism | ZHOU Heyang, ZHANG Shuo, ZHAO Xudong | 6219 |
| A Novel Variable Relational Network Construction Method for Plant-wide Monitoring in Chemical Production | ZHOU Xiaoyu, ZHU Li, SUN Xudong, LI Zhuohan | 6225 |
| Adaptive Event-Triggered Control of Virtual Player for Social Motor Coordination in Joint Actions | GUO Bowen, ZHAI Chao | 6231 |
| Graph-theoretic System Decomposition Based on Modified Cosine-based Similarity | LU Luheng, YANG Shipin, ZHANG Yinqiang, GUO Peizhi, LI Lijuan | 6237 |
| A Novel Control Method Combining Multi-Level Dimension Reduction and NSGA-II for Octane Number | LI Guangze, ZHANG Huimin, FAN Linqian, CHU Qingling, ZHOU Ruijie | 6243 |
| A Deep Learning-based Remaining Useful Life Prediction Approach for Engineering Systems | ZHAO Yuyu, WANG Yuxiao | 6249 |
| Deep Deterministic Policy Gradient-based Combustion Optimization Method for Coal-fired Boiler | BAO Xuqi, LI Yiguo, ZHU Chuanpeng | 6255 |
| Interior Light Environment Modeling and Smart Lighting Decision-based Control Using Personnel Distributions | ZHAO Xiaoxue, LI Junqing, NING Chenguang, DUAN Peiyong | 6261 |
| Case Weighted Similarity Measure Optimization Method Based on Black Hole Cuckoo Search Algorithm | YAN Aijun, LI Jiakuan | 6269 |
| Feature Weight Optimization Method Based on T-Memetic Algorithm | YAN Aijun, GUO Yidong | 6275 |
| State of Health Estimation for Power Battery Based on Support Vector Regression and Particle Swarm Optimization Method | YANG Rui, ZHANG Xiangwen, LIU Gengfeng, HOU Shaoyang | 6281 |
| 不是中文稿, 应为英文稿 | | |
| Terminal Temperature Prediction of Molten Steel in VD Furnace Based on XGBoost and LightGBM Algorithms | ZHOU Wang-feng, WANG Jian-Guo, DENG Longfei, YAO Yuan, LIU Jianlong | 6289 |
| A Fourier Space Basis Function Based 3D Modeling Method for Distributed Parameter Systems | ZHANG Xian-Xia, LI Zhiyuan, YAN Runbin | 6295 |
| State Transfer of Two-level Quantum System Feedback Control Based on Online State Estimation | CONG Shuang, TANG Yaru, LI Kezhi | 6301 |
| Controlled Cyclic Joint Remote State Preparation of Arbitrary Single-qubit States | XU Zhihang, JIANG Min | 6307 |
| Quantum-behaved PSO-based Lyapunov Control of Closed Quantum Systems | SONG Liu, KUANG Sen | 6312 |
| A Tutorial on Quantum Approximate Optimization Algorithm for Maximum Independent Set Problem | YANG Mingyu, GAO Fang, WU Guojian, WEI Dai, SHUANG Feng | 6317 |
| Fully Automatic Batch Cell Microinjection Based on Exception Diagnosis | HUANG Jiaying, DING ChenGuang, QIN Yanding, LIU Yaowei, ZHAO Xin, SUN Mingzhu | 6323 |
| A Quantum Convolutional Neural Network for Image Classification | LV Yanxuan, GAO Qing, LU Jinhu, OGORZALEK Maciej, ZHENG Jin | 6329 |
| Quantum Graph Convolutional Neural Networks | ZHENG Jin, GAO Qing, LV Yanxuan | 6335 |
| Exploring Quantum Engineering from Resource Perspective | TANG Zenglin, DAI Hong-Yi, ZHANG Ming | 6341 |

| | | |
|---|---|------|
| Tradeoff Relations for Two-valued Qubit Measurements | XING Huarui, CHENG Shuming, LIU Lijun | 6347 |
| An Unsupervised Feature Learning for Quantum-classical Convolutional Network with Applications to Fault Detection | DOU Tong, WANG Kaiwei, ZHOU Zhenwei, YANG Shilu, CUI Wei | 6351 |
| Research of LMD-STFT Algorithm Based on Wavelet Packet in Rectal Dynamic Function Diagnosis . ZAN Peng, ZHAO Yutong, SUI Jinke, YANG Banghua, ZHANG Guofu, ZHONG Hua, XU Huiyan | | 6356 |
| Analysis of Postoperative Rehabilitation Function Based on Rectal Pressure Signal Processing . ZAN Peng, ZHONG Hua, SUI Jinke, YANG Banghua, ZHANG Guofu, ZHAO Yutong, XU Huiyan | | 6362 |
| ROI Selected by Pixel2Pixel for Measuring Heart Rate Based on IPPG | WU Zhengzhen, LI Xin | 6367 |
| Gene Selection from Biological Data via Group Lasso for Logistic Regression Model: Effects of Different Clustering Algorithms | CHEN Shunjie, WANG Pei | 6374 |
| Empirical Saddlepoint Approximation and Its Application to Genome-Wide Association Studies | MA Yuzhuo, BI Wenjian, ZHANG Ji-Feng | 6380 |
| the Magnetostatic Simulation and Determination of Magnetic Components for an External Ventricular Drainage Device | YAN Rongguo, WANG Jiahui | 6386 |
| Improved Reaction-diffusion Model-based Study on Pathogenesis and Treatment of Virus-induced Lung Airway Epithelium Diseases | JIA Yiqing, ZHAO Qili, ZHAO Xin | 6392 |
| System Simulation of the Eco-environment Effects on the Coastal Zone of Bohai Bay, China | ZHOU Juan, ZHU Yanzhong, CAI Wenqian, LIN Kuixuan, YU Wang, LIU Lusan | 6398 |
| Fundus Image Classification Based on Transfer Learning | JIANG Minshuai, WANG Shujing | 6405 |
| Analysis of Enzymatic Regulatory Five-Element Model | LIN Haipeng, SHI Wenxin, HAN Jing | 6410 |
| A New Flame Image Edge Detection Algorithm for Reconstruction of the Internal Temperature Field in the Furnace | TAO Wang, PENG Chen, WEI Wang, GANG Yusen, ZENG De-liang | 6416 |
| An Integrated Method for Lithium-ion Batteries Remaining Useful Life Prediction Based on Unscented Particle Filter and Relevance Vector Machine | JIANG Meng, LIU Zhenxing, ZHANG Yong, HE Jie, CHEN Yujie | 6423 |
| Vision Based Real-time High-accuracy Automatic Counting with Applications for Smart Pharmacy | WU Haotian, WANG Yuran, MA Hongbin, LI Baokui, JIN Ying | 6429 |
| Multi-Batch Production Scheduling for Distributed Serial Lines with Unreliable Machines and Finite Buffers | HUANG Longzhu, JIA Zhiyang, CHEN Jingchuan, WANG Xiaohan | 6436 |
| Design of Multi Frequency Electrical Capacitance Tomography System | WANG Yibo, TAN Chao, REN Shangjie, DONG Feng | 6442 |
| Product Change Propagation with Complex Network for Multiple Change Sources | WANG Faguang, ZHANG Song, WANG Hongmei, ZHANG Yong, SUN Xiaoyan | 6448 |
| A New Evaluation Method of the Node Importance in Complex Product Design Networks | ZHENG Ruizhao, ZHANG Yong, WANG Yu-Long, PENG Chen | 6453 |
| Electrical Resistance Tomography Image Reconstruction Based on Res2net4 Network | YANG Wancheng, TAN Chao, REN Shangjie, DONG Feng | 6459 |
| A Web Page Query Technology Based on ASP.NET and SQL Server | ZHAO Guangshun, MENG Qingjin, BI Jianxue | 6466 |
| Electrodes Optimization for Magnetic Inductive Flowmeter in Partially Filled Conduit | SUN Lijun, YUGUANG Ye | 6470 |
| Transient Electromagnetic Transmitter Circuit with Speedy Shutoff Based on Passive Constant Voltage Clamping | WANG Guangjun, DING Chengxiang, CUI Lan, WANG ZhaoHui, JIANG Hui, QI Xinzhaoh, MIN Deshun | 6476 |

| | | |
|---|---|------|
| An Effective Two-stage Screen Positioning Method Based on Improved Binary SIFT Descriptor | LUO Bai, PENG Xiwei, TANG Jin, CHEN Xin | 6481 |
| A Recovery Strategy in Manufacturing Supply Chains for Long-term Supply Disruption | CHEN Jingze, WANG Hongfeng | 6487 |
| Grade Prediction Modeling for Froth Flotation Based on NARX-NN and Ensemble Learning | WANG Xiaoli, CAO Siyu, HUANG Lei, YANG Yang, YANG Chunhua, XIONG Wei | 6493 |
| Event-Triggered Change Control for Production Inventory Systems with Average Dwell Time | GAO Xue-Feng, FAN Jia-Hui, LIU Wei, PENG Chen, LI Qingkui | 6499 |
| The Research on Judgment Method of Powder Mixing Uniformity Based on PSO-SVDD | PENG Hongli, TIAN Jianyan, QIAN Jiang | 6507 |
| H^∞ Consensus of Multiagent-Based Supply Chain Systems With Zero-Sum Graphical Game Theoretic Method | GONG Zhen-Yu, GAO Shan-Shan, LIU Yong-Ze, LI Qingkui, PENG Chen | 6512 |
| Deterministic Communication Based on TSN and OPC UA Embedded Server | LUO Zhiyong, HUANG Diandian, WANG Yao, HE Yuchen | 6518 |
| An Evolved Dispatching Rule Based Scheduling Approach for Solving DJSS Problem | XU Binzi, TAO Liang, DENG Xiongfeng, LI Wei | 6524 |
| Robust Fuzzy Association Rule Mining Based on Neighbors-Considered Clustering with Amended Membership Function | WU Jinxian, DAI Li, ZOU Weidong, XIA Yuanqing | 6532 |
| NSGA-II Based Trajectory Optimization on 3D Point Cloud for Spray Painting Robots | ZHANG Yadi, ZHANG Shanhuai, MA Xin | 6539 |
| Multi-condition Recognition Method Based on LSTM-GRU for Heating Processes | ZHU Qingyi, CAO Weihua, SONG Wenshuo | 6544 |
| Research on Satellite Cable Laying and Assembly Guidance Technology Based on Augmented Reality | YANG Hailong, LI Shuai, ZHANG Xiaojun, SHEN Qun | 6550 |
| Optimization of Machining Feature Sequencing Based on Bi-level Directed Acyclic Graphs | XIA HaoYuan, GU Chaochen, ZHANG Chenyue, WANG Lin | 6556 |
| Research on the Fuzzy PID Controller of Force Servo Hydraulic Press System | ZHOU Mingjian, FANG Yuanjie, WANG Junjie, LIU Liqing, LIU Nailei, ZHOU Qi | 6562 |
| Shoe Sole Contour Extraction Based on Two-dimensional Maximum Entropy Threshold Segmentation | GU Zhengyan, WEI Lisheng | 6568 |
| Solution Concentration Diffusion Prediction Using RBF Neural Network | WANG Wenhan, PENG Jubo, ZHANG Jiatao, BAI Hailong, ZHU Xiaojin, ZHANG Hesheng | 6574 |
| Analysis of the Application of Humanistic Principle in the Grass-roots Management of the Army | LI Gaohang, ZHANG Xiaonan, LI Gaoyuan | 6578 |
| Cost Factors in the Customer-to-customer Sharing When the Customers Are Heterogeneous | ZHANG Zichen, ZHENG Xiaoyu, LIU Hongtao | 6584 |
| Based on the Application of Improved Delphi Method and Analytic Hierarchy Process in Epidemic Prevention and Control | CHEN Chongchong, LI Ruiyao, YAO Xueling | 6589 |
| A High-precision Two-window Three-spectral Line Interpolation Harmonic Detection Algorithm | PENG Yonglong, MA Xihao, LI Yabin, FENG Hailong | 6595 |
| A Multi-population Coevolution Multi-objective Particle Swarm Optimization Algorithm | HE Jiawei, ZHANG Huifeng, CUI Xingyu | 6599 |
| Air Defense Firepower Allocation Method Based on Improved Ant Colony Algorithm | LONG Yang, SUN Donglai, MENG Guanglei | 6606 |

| | | |
|--|--|------|
| An Improved Traffic Signal Control Method Based on Multi-agent Reinforcement Learning | XU Jianyou, ZHANG Zhichao, ZHANG Shuo, MIAO JiaYao | 6612 |
| Soot Blowing Optimization for Coal-fired Boilers with Ash Accelerated Deposition Model Based on Gamma Process | SHI Yuanhao, ZHANG Zehui, LI Mengwei, WEN Jie, CUI Fangshu | 6617 |
| Blind Separation of Heart Sound Convulsive Mixtures Utilizing Independent Vector Analysis | XIE Yuan, XIE Kan, XIE Shengli | 6623 |
| Frequency Properties of ADRC | ZHAO Yutao, HUANG Yi | 6628 |
| Multiple Linear Regression Based Silica Melting Process via Partial Differential Equations | ZHOU Jinming, SHI Longmei | 6634 |
| Study on Parameter Performance of Electrostatic Spraying System for Plant Protection | LIN Zhen, LIANG Shengkai, PAN Jiazhen, XIE Jinye | 6639 |
| Simulation Research on Liquid Film Thickness of Horizontal Gas-liquid Two-phase Flow Based on Ul- trasonic Method | WANG Mi, ZHENG Dandan | 6646 |
| Analysis of High Precision Moment of Inertia Measurement Method Based on Torsion Pendulum Method | LI Haoyue, XU Yong, DING Jiuhui, ZHAI Kangrui | 6651 |
| Research on Control Strategy and Experiment of Hybrid Crane | LI Chuanhao, ZHANG Wei, WANG Yanchun, LI Bo, SUN Xiuliang, LIU Chunjiang | 6656 |
| Research on Verification and Validation of Turbofan Engine Performance Model | LIU Kui, WANG Pan, LI Qing | 6662 |
| Design of License Plate Recognition Platform in Micro Traffic Environment | LEI Wang, XU Jianmin, CHEN SiYi | 6668 |
| Pose Measurement of Small-size Aircraft Based on Machine Vision | LI Yunhui, OU Fang, MIAO Zhonghua, HUO Ju | 6673 |
| Fuzzy Comprehensive Evaluation of Performance on Urban Water Supply System | MENG Mei, ZHAO Pingwei, BAI Miaoshun, WANG Jingcheng | 6679 |
| Mechanism Design and Performance Analysis of Bionic Quadruped Robot with Spine | CHEN Guangrong, MA Ming, GUO Sheng, LU HuaFeng, CAI Benguang | 6685 |
| A Data-based Performance Evaluation Method for Aircraft Attitude Control System | WANG Yuxiao, ZHAO Yuyu | 6691 |
| Analysis on the Evolution of Strategic Emerging Industry Innovation Network Based on Improved Local World Model | LI Peizhe, PEI Shanshan | 6697 |
| Robust Multi-Objective Optimization for Gas Turbine Operation Based on Kriging Surrogate Model | XIA Hao, JIA Peilin, MA Liang | 6704 |
| A Novel RUL Prediction Method for Lithium-ion Batteries via Hybrid Modeling and BAS Based Particle Filter | HE Ning, QIAN Cheng, LI Ruoxia | 6710 |
| Modeling and Simulation of Power Grid Voltage Harmonic Detection Method Based on the Improved Wavelet Packet Transform | GUO Jian, JIANG Chao, GUAN Chenxi, ZHANG Tao, PU Jiangkun | 6716 |
| Route Optimization of Sea Test for Acoustic Countermeasure Based on Genetic Algorithm | CHEN Yingchun, SUI Mingxu | 6722 |
| MEC-Sim: an Extensible Simulator for Mobile Edge Computing System | LI Zhonghua, XIE Tao, HE Guannan | 6729 |
| Efficiency Analysis and Reconfiguration Control Method of Small Satellite Remote Sensing Formation Constellation | FENG Xiaohui | 6736 |
| Research on Surplus Torque Restrain of Electrical Load Simulator Based on Compound Control | LI Bing, GAO Yeye, JIANG Tongyang, LUO Fei, GANG Hu, YANG Kai | 6744 |

| | | |
|---|---|------|
| Robust Energy Management Approach for a Microgrid Considering Uncertainties | CHEN Tengpeng, CAO Yuhao, CHEN Xuebing, SUN Yuhao | 6749 |
| A Revised Social Force Model Considering the Velocity Difference Between Pedestrians | LI Shiyue, ZHANG Lei, WANG Qianling | 6755 |
| Matlab/Simulink Based Modeling and Simulation of Motorized Spindle Drive System | YAN Shi, FAN Liting, DE XIN Meng, CHENG Zhongjiang | 6761 |
| A General Platform of Hardware-in-the-loop Simulation for Integrated Design | XU Hao, ZHANG Xinyan, LIANG Ying | 6766 |
| A Homomorphic Cryptography Based Privacy-preserving Consensus Algorithm with Event-triggering in Distributed Energy Management | ZHUO Qingze, ZHANG Huifeng, HU Xiaojing | 6772 |
| A Consensus-based Decentralized Algorithm for Service Restoration in Active Distribution Networks | CAI Sheng, XIE Yunyun, ZOU Yun, WU Hao, SHEN Li | 6778 |
| Power Harmonic Detection Method Based on Dual HSMW Window FFT/apFFT Comprehensive Phase Difference | SHAO Yong, YAO Yufan, LIU Huafeng, LV Rong, ZAN Peng | 6784 |
| Reinforcement Learning Based Vulnerability Analysis of Data Injection Attack on Smart Grids | LUO Weifeng, XIAO Liang | 6788 |
| Adaptive Robust Unscented Kalman Filter for Power System Dynamic State Estimation | LIU Xinghua, GUAN Jianwei, GAO Xiang, WANG Yuanzhe | 6793 |
| Modeling and Stability Analysis of DC Microgrid with Constant Power Loads | WANG Yijing, WEI Fengxuan, ZUO Zhiqiang | 6799 |
| A Fault Location Method by Multi-point Monitoring for Distribution Network Based on HHT Transformation and Traveling Wave Theory | LIAN Wenli, WU Tuo, LI Meng, YANG Chenguang, SI Gangquan | 6806 |
| Resilient LFC Design of Power System with Delay and DoS Attacks | CHENG Zihao, YUE Dong, HU Songlin, YULONG Xu | 6812 |
| Distributed Algorithm-based Equilibrium Analysis for Downward Regulation Market with Demand Response | HUANG Lidan, ZHANG Shaohua, WANG Xian, MA Jingjie | 6817 |
| A Preprocessing and Feature Extraction Method of Ground-based Cloud Images for Photovoltaic Power Prediction | LU Zhiying, WANG Kaixuan, LI Xin | 6823 |
| Coordination and Optimization of Multi-controller Parameters in Power System Based on a Sphere Artificial Immune Algorithm | MIAO Yu, DU Weijie, LI Jinglin | 6829 |
| Optimal Dispatch Method of Park-level Integrated Energy Internet Based on Average-Consensus ADMM Distributed Algorithm | WANG Yan, LUO Ping, ZHANG Jiahao, LU Qiang | 6834 |
| Analysis on the Effects of STATCOM for Prevention of Voltage Instability | WANG Hailin, WANG Zhiming | 6840 |
| Load Frequency Control of Water-Fire-Storage-Two Region Interconnected Power System Based on Improved Particle Swarm Optimization Algorithm | ZHANG Yan, ZHANG Cheng | 6846 |
| Harmonics Detection Based on Dual Observer Method for Distorted Grid | LI Po, HE Ying, LI Jinghui | 6851 |
| Decentralized Integrated Energy Management for Residential Users Based on Evolutionary Game | XIN Wang, ZOU Suli, MA Zhongjing | 6856 |
| Distributed Algorithm for Stochastic Energy Management with Non-convex Constraint | YANG Fei, ZOU Suli, MA Zhongjing | 6862 |
| Optimization Method for a Class of Integrated Energy System with Compressed Air Energy Storage | MEN Jiakai, QIU Jianlong, CHEN Xiangyong, WANG Zhipeng, YAO Xiurong | 6868 |

| | | |
|--|---|------|
| Detection of Cotter Pins Missing of Connection Fittings on Transmission Lines of Power System | WANG Hongchao, SHAO Yunfeng, ZOU Suli, MA Zhongjing, ZHAO Shuruo | 6873 |
| A Reweighted 1-Minimization Algorithm for Joint Topology and Line Parameter Identification in Electric Grid | WANG Zhiyue, ZHOU Wei, LI Junlin, CHEN Zhiyong, CHEN Shifeng, ZHANG Hai-Tao | 6880 |
| Detection of Smart Meter Anomaly with Error Tolerance Based on Tikhonov Regularization | CHEN Lidan | 6886 |
| Distributed Adaptive Protocols Design Based Load Frequency Control for Multi-area Interconnected Power System | ZHANG Shengnan, LIU Zhenwei, ZHANG Huaguang, WANG Junyi | 6892 |
| Distributed Load Control Approach with Dynamic Switching Communication Topologies | QIN Xin, CHEN Zhen, HU Xiaojing, YE Tao | 6898 |
| A Predictive Control Method with Few Voltage Sensors for Vienna Rectifiers | LI Po, ZHANG Shurong, JIN Wentao, LI Xiang | 6903 |
| An Improved Dynamic State Estimation Algorithm of Smart Grid under Packet Losses | LI Xue, YU Liangdi, DU Dajun | 6909 |
| Distributed Switching-Topology-Tolerant Control for DC Microgrids under Brownian Fluctuations | LAI Jingang, LU Xiaoqing | 6915 |
| Optimal PMU Placement Method for Distribution Systems Considering State Estimation Error | CHEN Tengpeng, REN He, CHEN Xuebing, SUN Yuhao | 6921 |
| Genetic Algorithm-based Location and Control Strategy of Grid-connected BESS | ZHUANG Jilong, GE Jian, ZHANG Kanjian, WEI Haikun | 6927 |
| Dynamic Adjustment of Electric Spring Voltage Compensation Range Based on Fixed Series Compensation | ZOU Yun, CHEN Michael Z. Q. | 6933 |
| Optimal Price Incentive Strategy Based on Chance-constrained Programming for Virtual Power Plants Participating in Demand Response | MENG Hongmin, ZHANG Zhizhi, XING Xiaowen, LIU Di, LIU Zesan, XU Zhenan, ZHANG Wei | 6939 |
| Energy Storage Technology in Multiple Microgrids: A Survey | CHENG Yiling, ZHANG TengFei, XU Junjun | 6945 |
| A Review on Optimal Control Strategy of Islanded Multi-Microgrids | YANG Zexun, ZHANG TengFei, WU Juai | 6951 |
| Distributed Control for Bounded Time-Varying Power Sharing of Grid-Connected DDG Cluster | SUN Yutong, SU Youfeng, CAI He | 6957 |
| Multi-objective Optimal Dispatch of Integrated Energy System Based on ϵ Constraint Method | HUANG Liwan, LI Ming | 6963 |
| Cooperative Charging Control of PEVs in Constrained Distribution Network Considering Solar Power Generation | LUO Yao, LIU Hui, LIAO Shengyi, SHANG Zhicheng | 6969 |
| Analysis of Electricity Experience for Users in Multi-area Interconnected Power System with Gas Station Network Attacked | LI Xue, ZHANG Zhouong, BU Siqi | 6975 |
| Multiobjective Distributed Secondary Control of Battery Energy Storage Systems in Islanded AC Microgrids | ZHOU Lihua, DU Dajun, FEI Minrui, LI Kang | 6981 |
| Recent Advances on Microgrid Structure and Control Strategy | ZHANG Yu, FEI Minrui, DU Dajun | 6986 |
| Design of Intelligent Power Capacitor with Synchronous Switching | LIU Shuguang | 6992 |
| A New Ordered Pooling Network Based on Multi-scale Fusion Feature for Medical Image Recognition | QIAN Kui, TIAN Lei | 6998 |

| | |
|--|------|
| Traffic Accident Severity Prediction Based on Oversampling and CNN for Imbalanced Data SHANGGUAN Anqi, MU Lingxia, XIE Guo, WANG Chenglan, YANG Jing, FEI Rong, HEI Xinhong | 7004 |
| Camera Lens Defect Enhancement Algorithm Based on Improved Gamma Transform ZHANG Hongtu, HUA Chun-jian, MA Jinke | 7009 |
| A Scale Adaptive and Anti-occlusion Tracking Algorithm with Feature Fusion LI Le, LIAO Haoyu, BAI Yongqiang | 7015 |
| Feature Extraction and Classification of Steel Plate Surface Defects Based on Principal Component Analysis YAN Junhong | 7021 |
| Image Denoising Using an Improved Generative Adversarial Network with Wasserstein Distance WANG Qian, LIU Han, XIE Guo, ZHANG Youmin | 7027 |
| Image Detection Method Based on Improved Canny Algorithm ZHU Xiang-yang, TANG Minan, ZHANG Kaiyue, WANG Qianqian | 7033 |
| A Variational Model for Low-light Image Enhancement with Two Weight Matrices CHEN Pengyi, WANG Yong | 7040 |
| A Typhoon Center Location Method on Satellite Images Based on Deep Reinforcement Learning WANG Ping, YANG Xin, JI Zhong, HOU Jinyi, WANG Cong, CHEN Haoyi | 7046 |
| An Auto-focus Method for Microscopic Images Based on QSOM Neural Network ZHAO Dawei, GAO Jian, YANG Wenbo | 7054 |
| Deep Multi-view Subspace Clustering Network with Exclusive Constraint MA Rui, ZHOU Zhiping | 7062 |
| Improved Gesture Detection Algorithm Based on YOLOv3 ZHAN Jinfeng, LIU Weidong, YANG Weirong | 7068 |
| Weakly-Supervised Temporal Action Localization by Background Suppression LIU Mengxue, GAO Xiangjun, GE Fangzhen, LIU Huaiyu, LI Wenjing | 7074 |
| Application of SVM Based on Improved Particle Swarm Optimization Algorithm in Epileptic Seizure Detection HE Danting, FU Jingqi | 7082 |
| A New Method for Anomaly Detection and Diagnosis of Ocean Observation System Based on Deep Learning YAN Qin, LU Zhiying, DING Xudong | 7088 |
| Long-term Stable Target Tracking Algorithm Based on Improved Staple LIAO Haoyu, LI Le, BAI Yongqiang | 7094 |
| A New Feature Selection Algorithm Based on Deep Q-Network LI Xinqian, YAO Jie, REN Jia, WANG Liqiang | 7100 |
| Visual Object Detection: A Review WANG Zuyi, JIAO Bowen, XU Li | 7106 |
| Severe Convection Weather Identification Model Based on Rough Set Theory and Artificial Fish Swarm Algorithm GUO Jianlin, LU Zhiying, WANG Chenyi, WU Haopeng, DING Xudong | 7113 |
| An Analysis of SEMG-based Gestures Classification with Different Influencing Factors HUA Shaoyang, WANG Congqing, XU Bin | 7119 |
| Face Detection and Recognition in Complex Environments WU Haopeng, LU Zhiying, REN Tengwei, GUO Jianlin | 7125 |
| Design of Upper Limb Rehabilitation Training System Combining BCI and AR Technology YAO Yuan, YANG Banghua, XIA Xinxing, ZAN Peng, GAO Shouwei, MENG Xia | 7131 |
| Supervoxel-based Graph Clustering for Accurate Object Segmentation of Indoor Point Clouds YU Jingyuan, TU Xiaowei, YANG Qinghua, LIU Liyong | 7137 |

| | | |
|--|---|------|
| A Novel Illumination Invariant Feature Extraction Method Based on Improved LG Face | CHEN Xin, PENG Xiwei, TANG Jin, LUO Bai | 7143 |
| A Non-intrusive Load Decomposition Method Based on Data Modeling | LIANG Yan-ming, ZHU Na, CHANG Xiaojun, ZHAO Haiyang, CHEN Chunliang, LIU Qian | 7148 |
| Attention-based Dynamic Filters for Anchor-free Instance Segmentation | ZHANG Tong, ZHANG Guoshan, YAN Min, ZHANG Yueming | 7156 |
| Dense Blocks-Incorporated Capsule Networks for Image Classification on Complex Datasets | ZENG Ru, SONG Yan, WANG Chongjing, CHU Yanfang | 7162 |
| Obstacle Avoidance Based on Component Separation-refusion Algorithm for Blind People | REN Xinzhen, YAO Fulong, ZHOU Tianfang, GU Xiaogang, ZHOU Wenju | 7168 |
| Enhanced Recognition Algorithm for Facial Expressions under Deflection Angles | LIU Yanru, QIFAN Yang, XIE Wei | 7174 |
| Hand Gesture Recognition Using SEMG Signals Based on CNN | LI Bo, YANG Banghua, GAO Shouwei, ZAN Peng | 7180 |
| Multi-human Parsing Based on Dynamic Convolution | YAN Min, ZHANG Guoshan, ZHANG Tong, ZHANG Yueming | 7185 |
| EEG Based Eye Movements Multi-Classification Using Convolutional Neural Network | ZHUANG Haodong, YANG Banghua, LI Bo, ZAN Peng, MA Baiheng, MENG Xia | 7191 |
| Large Receptive Field Boundary Matching Networks for Generating Better Proposals | XU Lei, LIU Jiexi, CHEN Bo | 7196 |
| Restoration Algorithm of Blurred UAV Aerial Image Based on Generative Adversarial Network | GONG Yuanhao, LI Yongfu, ZHU Hao | 7201 |
| A Moving Object Detection Algorithm for Removing Ghost and Shadow ... | TANG Minan, LIU Weili | 7207 |
| Bar Code Positioning Technology under Complex Background Based on Morphology and Gradient | NI Xiangrong, ZHOU Wenju, LI Yang, REN Xinzhen | 7213 |
| Improvement of Non-frontal Face Skin Color Model Based on YCgCr Color Space | SUN Yigang, SHEN Tianfei, XU Zhengqi | 7218 |
| An End Points Self-Containment Method to Improve Density-Based Clustering | ZHANG Ke, WANG Lu, YIN Zhifeng, CHEN Jun, ZHOU Gan, CAO Shenying | 7223 |
| MRI-Trans-GAN: 3D MRI Cross-Modality Translation | ZHAO Pu, PAN Hong, XIA Siyu | 7229 |
| Study on the Influence of Positive Emotion on the Recognition Accuracy of Motor Imagery | ZOU Wenhui, YANG Banghua, GAO Shouwei, XIA Xinxing, ZAN Peng | 7235 |
| LSTM-Based Visibility Detection for Airport Images in Time Series | HAN Xiaofei, ZHOU Tianfang, HE Yu, CHEN Yayu, CHEN Rongfei, ZHOU Wenju | 7241 |
| Flight Motion Recognition Method Based on Multivariate Phase Space Reconstruction and Approximate Entropy | QU Jinyao, LV Ming, YANG Yufei, TANG Yihao | 7247 |
| Visibility Detection and Prediction of Foggy Highway Based on Lane Line Detection and Winters Additive Model | HE Yu, DING Jun, TENG Huaqiang, HAN Xiaofei, CHEN Yayu, ZHOU Wenju | 7254 |
| Regional Forecast of Heavy Precipitation and Interpretability Based on TD-VAE | LU Zhiying, DING Xudong, YAN Qin, GUO Jianlin | 7260 |
| Classification of Myocardial Infarction Based on ECG Signals and Multi-network Stacking Model | ZHAO Tianqi, DENG Muqing, LIN Peng, WANG Jianzhong, CAO Jiuwen | 7266 |
| Fusion of Shallow and Deep Features for Gait Recognition Through Multiple Walking Views | YU Xuedong, DENG Muqing, LIN Peng, WANG Jianzhong, CAO Jiuwen | 7271 |

| | | |
|---|---|------|
| Research on Intent-Slot Recognition Algorithm Based on Knowledge Graph and User Topic | HAO Nan, XIE Pengwei, CHEN Bo | 7276 |
| Head-Body Correlation for Robust Crowd Human Detection | WANG Yijing, ZHANG Lei, ZUO Zhiqiang | 7282 |
| Pedestrian Detection Based on Center, Temperature, Scale and Ratio Prediction in Thermal Imagery | LU Chen, ZHANG Senlin, LIU Meiqin | 7288 |
| A Decomposed Projective Method Based on FBT-VMD and T-ELM for Facial Emotion Recognition | CHEN Rongfei, FEI Zixiang, ZHOU Wenju, HAN Xiaofei, TENG Huaqiang | 7294 |
| A Review of Image-Based Pavement Crack Detection Algorithms | WU Junxian, ZHANG Yujia, ZHAO Xiaoguang | 7300 |
| CNN-based Model for Cell Extraction from PV Modules with EL Images for PV Defects Detection | HU Xiaochen, TANG Wuqin, BI Jianghai, CHEN Sijiang, YAN Wenjun | 7307 |
| Map Feature Based Trajectory Prediction with Multi-class Traffic Participants | ZUO Zhiqiang, ZHANG Xiao, WANG Yijing | 7312 |
| Research on the Recognition Algorithm of Body Posture ELM Registration Model Based on Kinect | YU Weibo, ZHU Meifang, WANG Shicheng | 7318 |
| Visual Sensing Algorithm for Soft Manipulator Based on Self-Organizing Map | HAN Weidi, ZHANG Haibo, ZHANG Yong, LV Yueyong, YANG Yafei | 7325 |
| Robust Graph Learning for Multi-view Clustering | HUANG Yixuan, XIAO Qingjiang, DU Shiqiang | 7331 |
| A Robust Rail Positioning Method for Turnout and Non-turnout Sections | SU Shixiang, TONG Shuzhen, LU Xiaobo, WEI Yun | 7337 |
| Fast Planar Surface Detection in Point Clouds Using Voxel-grid-center-constrained Iterative Adaptive Plane Extraction | LIU Liyong, TU Xiaowei, YANG Qinghua, YU Jingyuan | 7343 |
| Land Cover Classification Based on PSPNet Using Remote Sensing Image | YU Ge, ZHANG Xi | 7349 |
| Adaptive Underwater Sonar Image Target Detection | JI Yongqiang, XIE Lan, SHI YuHao | 7355 |
| A Survey on Unsupervised Transfer Clustering | WANG Feng, JIAO Lianmeng, PAN Quan | 7361 |
| Action Recognition Algorithm Based on 2D Human Pose Estimation Method | YU Chongkai, CHEN Wenjie, LI Ye, CHEN Chen | 7366 |
| A 4PCS Coarse Registration Algorithm Based on ISS Feature Points | YANG Zhongfan, WANG Xiaogang, HOU Jin | 7371 |
| Aggregation Operators and Distance Measures for Probabilistic q -Rung Orthopair Hesitant Fuzzy Sets and Their Applications | YIN Wenjing, ZHENG Tingting, LI Longmei | 7376 |
| A Survey on Interpretable Clustering | YANG Haoyu, JIAO Lianmeng, PAN Quan | 7384 |
| Segmentation Method for Back Electrodes in Solar Cells | XIAO Huaxi, XU Jiaming, WU Yilin, WANG Huan, LIU Yu | 7389 |
| RD-GRF for Automatic Classification of Surface Defects of Lithium-ion Battery Electrodes | NI Junyi, WU Yilin, XU Jiaming, LIU Yu | 7395 |
| Res-SVDNet: A Metric Learning Method for Few-shot Image Classification | ZHANG He, LIANG Lili | 7400 |
| Detection of Rail Bottom Damage Based on BLS | ZHOU Fengguang, ZHAO Qin-jun, SUN Bin, XU Qinhua, SHEN Tao | 7406 |
| Multimodal Information-Based Broad and Deep Learning Model for Emotion Understanding | LI Min, CHEN Luefeng, WU Min, PEDRYCZ Witold, HIROTA Kaoru | 7410 |

| | | |
|--|---|------|
| Semi-supervised Image Annotation with Parallel Graph Convolutional Networks | SHAO Qianqian, WANG Mengke, LI Jiaoyue, LIU Weifeng, ZHANG Kai, LIU Baodi | 7415 |
| Enhanced Full-Resolution Residual Network for Image Super-Resolution | LI Jiaoyue, ZHAO Lifei, SHAO Qianqian, LIU Weifeng, ZHANG Kai, LIU Baodi | 7421 |
| Design of Label Information Recognition System Based on Vision | MIAO Zhonghua, SUN Chenchen, LI Nan, HE Chuangxin, SUN Teng | 7427 |
| Real Time 3D Hand Gesture Recognition by Weighted Depth Difference Motion History Image in Networked HCI | LUO Haoyang, WANG Haikuan, ZHOU Wenju, LIU Kangli, FU Jingqi | 7435 |
| Nonnegative Matrix Factorization with Hypergraph Based on Discriminative Constraint and Nonsymmetric Reformulation | PAN Sigang, YANG Lei | 7441 |
| 无 | | |
| Associate Semantic-Instance Segmentation of 3D Point Clouds Based on Local Feature Extraction | CHEN Hui, CHEN Wanlou | 7447 |
| Face Recognition Based on Principal Component Analysis and Support Vector Machine Algorithms | ZHANG Yanbang, ZHANG Fen, GUO Lei | 7452 |
| Modeling and Analysis of Networked Evolutionary Games with Weight via Semi-tensor Product Method | ZHU Rui, CHEN Zengqiang, ZHANG Jianlei, LIU Zhongxin | 7457 |
| Network Topology and Stability in Chinese Credit System | WANG Yingli, CHEN Xiangyin, CAI Junling | 7463 |
| LiDAR-Inertial Based Localization and Perception for Indoor Pursuit-Evasion Differential Games | LAI Haowen, LIANG WenHao, YAN Rui, SHI Zongying, ZHONG Yisheng | 7468 |
| Comparison of Community Detection Algorithms on Contracts Networks | XIONG Peichen, WEI Ping, CHEN Hao | 7474 |
| Distributed Nash Equilibrium Seeking for Non-cooperative Convex Games with Local Constraints | LIU Fei, WANG Qing, DONG Xiwang, REN Zhang | 7480 |
| Environmental Adaptability Promotes Cooperation in the Evolutionary Game | SHANG Lihui, LUO Huiting | 7486 |
| Research on the Impact of Key Resource Acquisition on the Growth Performance of New Venture Based on Dynamic Capabilities | GUO Weidong | 7492 |
| UAV-assisted Abnormal Vehicle Behavior Detection in Internet of Vehicles | XU Qichao, ZHAO Lifeng, SU Zhou | 7500 |
| Discrimination of Unknown Complex Network Based on the Information of Local Nodes | LIU Siyuan, JIN Yue, WU Yongjun, LI Kun, ZHANG Jianlei | 7506 |
| Distributed No-Regret Learning for Stochastic Aggregative Games over Networks | LEI Jinlong, YI Peng, LI LI | 7512 |
| Study on the Competition Modes of Demand Response Aggregators Participated in the Electricity Market | AN Xuena, MA Jingjie, LI Xue | 7520 |
| Agent Pricing Strategy and Energy Using Optimization Based on Stackelberg Game | FAN Libo, ZHU Yongsheng, DONG Yan, ZHANG Mingming, LIU Pengyang, NIE Caijing, MIAO Yang | 7526 |
| Subgraph Analysis of Chinese Guarantee Network | WANG Yan, YE Haoming, WANG Yingli, YANG Xiaoguang | 7532 |
| Analysis on Stability of Three-loop Autopilot with an Acceleration Feedback Augmentation Loop | WANG Hui, LI Tao, TANG Daoguang, FAN Jun-fang, YUAN Yifang, ZANG Luyao, WANG Wugang, XIAO Chunyan | 7538 |

| | | |
|--|---|------|
| Quadrotor Controller Construction via Ensemble Fixed-Size LS-SVMs | WU Shichong, WU Wenhua, LIAO Fei, FU Zaiming | 7544 |
| Adaptive Supervisory-main Attitude Controller for Missiles Steered by Aerodynamic Fins and Reaction Jets | DU LiQiang, LIAO Fei | 7550 |
| Large Angle Super Agile Attitude Maneuver Control of Small Satellite Using Reaction Wheels | FAN Guowei, ZHANG Jiabao, ZHAO Huanyu, LV Xueying | 7557 |
| Observer Based Robust Trajectory Tracking Control for a Tilt Trirotor UAV | XIE Tian, XIAN Bin | 7563 |
| A Novel Partial Integrated Guidance and Control Scheme Based on Three Dimensional Relative Dynamics | WANG Jianhua, YUN Cheng Hu, CUI Zejie, CHENG Long | 7569 |
| Asymptotic Nonlinear Sampled-Data Relative Pose Tracking for Two Rigid Bodies Motion Coordination | SUN Liang, WANG Jinwei, JIANG Jingjing | 7575 |
| Trajectory Tracking Control for Miniature Helicopter with Command Attitude Simplification | LIU Ce | 7581 |
| Fractional-order Nonsingular Fast Terminal Sliding Mode Control for Quadrotor with Uncertainties and Input Saturation | LI Xin, CHANG Fei, ZHAO Guoliang, HUANG Sharina | 7587 |
| Identification of Unknown Inertia Parameters of Spacecraft and Spacecraft Hovering | DUAN Guangquan, LIU Guo-Ping, PANG Zhonghua | 7595 |
| Deep Reinforcement Learning-Based Backstepping Control of Air-Breathing Hypersonic Vehicles with Ac- tuator Constraints | WANG Guan, AN Hao, GUO Ziyi, YU Changli, XIA Hongwei, WANG Changhong | 7599 |
| Observer Based Path Following Control for a Stratospheric Airship with Modeling Uncertainties and Actuator Saturation | LI Dong, HUO Wei | 7604 |
| Nonlinear Robust Attitude Controller Design of Flexible UCAVs with Unknown Sensor Noises | HE Jiafan, WANG Man, LI Qingwei, LIU Chao, FANG Feng, FEI Aiguo | 7611 |
| A Feedback Linearization Control of Morphing Missiles | GUAN Genhua, HU Hui, CHENG Zhongtao, LIU Lei, WANG Bo, FAN Huijin, LI Jufeng | 7616 |
| Integral-backstepping-based Attitude Control for UAH with Immeasurable States | WANG Chao, HUO Xin, MA Kemao, XIE Ruiqiang, LIU Qingquan | 7622 |
| Fault Diagnosis and Fault-Tolerant Attitude Control of Spacecraft Based on Combined Observer | LI Yuandong, FANG Yizhong, SHAO Meng-han, CHEN Xuning, SHAO Xiaodong, HU Qinglei, ZHENG Jianying | 7627 |
| Adaptive Fault Tolerant Attitude Control for Heavy-lift Launch Vehicles with Input Nonlinearities | MEI Hantong, GUO Yunhe, YANG Junyan, ZHOU Ge, LI Yang | 7633 |
| Intelligent Optimal Pulse-Jet Control for Dual-Spin Projectiles | YANG Zhen, FU Jian, WANG Liangming, CHEN Zhi | 7639 |
| Adaptive Attitude Control for A Kind of Rotating Rockets with Improved Disturbance Observer | CHENG Yongheng, WANG Liangming, FU Jian, CHEN Zhi | 7645 |
| Open Source Modular Simulation Platform for Space Manipulator Dynamics and Control | WU Chengjie, SONG Jianmei, SHE Haoping, HUANG Liangwei | 7652 |
| Exact Tracking Control of Hypersonic Flight Vehicles with Full State Constraints | LI Yajing | 7658 |
| Design of Active Disturbance Rejection Attitude Controller for Vertical Launched Missile | LI Hongfeng, WANG Liangming | 7665 |
| UAV Visual Target Tracking: Research Status, Algorithms and Future Prospect | CHEN Lin, LIU Yungang, LI Wenjuan, YU Linzhen | 7671 |

| | | |
|---|---|------|
| Stochastic Heuristic Algorithms for Multi-UAV Cooperative Path Planning | ZHAO Chang, LIU Yungang, YU Linzhen, LI Wenjuan | 7677 |
| Characteristic Model Based Robust H^∞ Control for Spacecraft Rendezvous and Proximity Operations | LU Yao, JIA Yingmin | 7683 |
| Incremental Nonlinear Control for Aircraft with Sensors Measurement Compensation | LI Yu, LIU Xiaoxiong, MING Ruichen, ZHANG Weiguo | 7689 |
| An Adaptive Backstepping Flight Control Method Considering Disturbance Characteristics | MING Ruichen, LIU Xiaoxiong, LI Yu, ZHANG Weiguo | 7695 |
| Finite-time Formation Control of Fixed-Wing Aircraft under Constrained Velocity and Acceleration | ZHU Disha, YANG Jianying | 7701 |
| Line-of-sight Tracking Control Scheme for Integrated Satellite with CMGs Vibration Isolation Platform | WU Han, LEI Jin, HU Qinglei, LIU Yueyang, WANG Huanjie, PAN Fei | 7707 |
| UAV Path Planning with No-Fly-Zone Constraints by Convex Optimization | CHEN Xi, LIN Zhe, HE Haiyan, HU Qinglei, CAO Ruihao | 7713 |
| Fixed-time Attitude Stabilization for Spacecraft Based on Active Disturbance Rejection Method | WANG Yuhang, JIA Yingmin | 7718 |
| Torque-Limited Attitude Control for Rigid Spacecraft with Motion Constraints | BAI Zhining, LIU Yueyang, HU Qinglei | 7724 |
| an Incremental Back-Stepping Control Method for Compound Lift Unmanned Aerial Vehicle | TAN Jiyun, WANG Yin | 7730 |
| An ESO-based Attitude Control Method for Non-affine Hypersonic Flight Vehicles | LU Yao, LIU Xiaodong, JIA Zhiqiang | 7736 |
| Fault-tolerant Model Predictive Control for Hypersonic Vehicle Based on Sum of Squares | YANG Xiaohe, LV Weijie, HU Chaofang, HU Yongtai | 7742 |
| Robust Adaptive Tracking Control of a Quadrotor Helicopter with Uncertainties | CHEN Zhao, NIAN Xiaohong, XU Pengcheng, WU Haoyuan | 7748 |
| Optimal Trajectory Planning Algorithm for VSCMG Based on Mode Scheduling | CHENG Zhaoyang, NIE Zhanghai, ZHONG Chao, ZHU He, ZHANG Qiwen | 7754 |
| Landing Control for Quadrotors Based on Active Disturbance Rejection Control and Visual Servo | PENG Liu, XIN Yu, YANG Jun | 7760 |
| High-Order Disturbance Observer-Based Attitude Control with Prescribed Performance for Hypersonic Vehicle | YANG Guanghui, WANG Xinming | 7766 |
| Skip Trajectory Characteristics Analysis for Hypersonic Glide Vehicles | LI Guanghua | 7772 |
| Impact Time Constrained Cooperative Guidance Law Design via Line-of-Sight Shaping | CHEN Yadong, DING Xiangjun, WANG Jianan, WANG Chunyan, SHAN Jiayuan | 7777 |
| Collision Detection and Avoidance for Multi-UAV Based on Deep Reinforcement Learning | WANG Guanzheng, LIU Zhihong, XIAO Kun, XU Yinbo, YANG Lingjie, WANG Xiangke | 7783 |
| A Novel Robust Finite-time Stable Trajectory Tracking Scheme for Fixed Wing Unmanned Aerial Vehicles | ZHANG Zonggang, YANG Wenlong, SHI Zongying, ZHONG Yisheng | 7790 |
| Design of Transition Mode Attitude Controller for a Tilt-rotor UAV Based on MPC Method | XI Yexun, HUANG Huaping, TIAN Zunhua, HE Guang | 7797 |
| Attitude Control for Rigid Spacecraft via Disturbance Observer Based Terminal Sliding Mode Controller | XU Yutian, DONG Rui-Qi, HUANG Jing, WU Ai-Guo | 7803 |
| ADRC Based on Artificial Neural Network for a Six-rotor UAV | XI Lin, SHAO Yunfeng, ZOU Suli, MA Zhongjing | 7809 |

| | | |
|--|---|------|
| Cascade Control of Spacecraft Formation with Communication Delay | CUI Shihang, LI Yong | 7816 |
| Guidance Algorithm for Reentry Vehicle Considering Target Maneuvering and No-fly Zone Constraints | CHEN Zhishi, WANG Hao, QUAN Shenming, CHAO Tao | 7822 |
| Nonlinear Robust Trajectory Tracking Control for a Three-rotor UAV with Unknown Time-varying External Disturbances | HAO Wei, MA Wenlai, DU Yujie | 7828 |
| Adaptive Control of Hypersonic Vehicles with Parametric Uncertainties and Angular Velocity Constraints | JI Xuan'an, WANG Wei, CHENG Zhongtao, WANG Bo, LIU Lei | 7834 |
| An UCAV Intelligent Combat System for Distributed Combat Network | SUN Houjun, XU Jiwen, YANG Lingyu | 7840 |
| Disturbance Compensation Based Backstepping Control for Hypersonic Vehicle | CHI Haihong, WANG Lianghua, LIU Xingyi | 7845 |
| Steering Law for Non-redundant Control Moment Gyroscopes | ZHU He, HUANG Jingmei, WANG Jing Ji, LIU Xiao, YIN Junxiong | 7851 |
| Modeling and Active Disturbance Rejection Controller Design for Longitudinal Attitude of a Tail-sitter Aircraft | HOU Jiajia, XIA Xinglu, YANG Ding, WANG Ying, JIANG Zhichao, FENG Jianlin | 7857 |
| Three-Dimensional Path Planning of UAV Based on Improved Artificial Potential Field | XIE Haitao, QU Yaohong, FAN Guangpei, ZHU Xiaoping | 7862 |
| Spacecraft Formation Control Based on Adaptive Backstepping Terminal Sliding Mode | YUE Yang, FAN Jinlong, CHEN Hua, YANG Zhiying, WAN Bei | 7868 |
| Adaptive RBF Neural Network Control of a Small-scale Coaxial Rotor Unmanned Aerial Vehicle | LIU Jinpeng, LU Xingju, PENG Chi, MA Jianjun | 7874 |
| Autonomous Aerial Refueling Formation Flight Control Based on Finite-time Control under Wind Field Disturbance | DUAN You, QU Yaohong, ZHAO Wenbi | 7880 |
| Trajectory Tracking Control of UAV Based on Non-singular Fixed-time Terminal Sliding Mode | LIU Renjie, GENG Qingbo, FEI Qing, YIN Qian | 7886 |
| Attitude Coordinated Control for Spacecraft Formation with Measurement Uncertainties | ZHANG Jian, WU Wenjie, LIU Long, XIE Wenbo | 7892 |
| Reduced-Order Fixed-Time Control for Under-actuated Spacecraft Hovering | CAO Yi, CHEN Zhijun, BAI Yuzhu, ZHAO Yong | 7897 |
| Revisit to B-dot Rate Damping Algorithm | XIA Xiwang, LI Zhao, ZHANG Yonghe, NUO Xu | 7903 |
| A Digital Twin Platform for Multi-rotor UAV | YANG Yuanlin, MENG Wei, LI Hongyi, LU Renquan, FU Minyue | 7909 |
| An Adaptive Tracking Control of Quadrotor UAV Based on Interference Estimation | QIN Chao | 7914 |
| Improved Firefly Algorithm for Optimization of Aero-engine Controller Based on PIDNN | JIANG Zongting, GOU Linfeng, SUN Chujia, MENG Zhang | 7921 |
| A Trajectory Prediction Algorithm for HFVs Based on LSTM | SUN Lihan, YANG Baoqing, MA Jie | 7927 |
| R(2+1)D-based Two-stream CNN for Human Activities Recognition in Videos | HUANG Min, QIAN Huimin, HAN Yi, XIANG Wenbo | 7932 |
| Improved Image Captioning via Semantic Feature Update | TIAN Peng, MO Hongwei, JIANG Laihao | 7938 |
| Prediction Model of Heart Failure Disease Based on GA-ELM | ZHANG Shaofeng, ZHOU Weimin | 7944 |
| Edge-guided Adversarial Network Based on Contrastive Learning for Image-to-Image Translation | ZHU Chen, LAI Ru, BI Luzheng, WANG Xuyang, DU Jiarong | 7949 |

| | | |
|--|---|------|
| Guidance Module Network for Video Captioning | ZHANG Xiao, LIU Chunsheng, CHANG Faliang | 7955 |
| Study on Two-stage Fractional Order Gradient Descend Method | ZHU Zhiguang, LI Ang, WANG Yong | 7960 |
| Detection of Helmet Wearing Based on Improved Yolo V3 | LI Shengkai, GAO Lin, YUE Yaobin | 7965 |
| Contextual Information Fusion for Small Object Detection | CHEN Jun, CHEN XiaoQiang, LUO Linbo, WANG Ganbei | 7971 |
| A New Compression Method for Deep Neural Networks with Accuracy Improvement | XIAO Wang, LIU Han | 7976 |
| A New Accelerator for Convolution Neural Network | WU Fan, SONG Jie, ZHUANG Haoran | 7982 |
| ADFNet: A Two-branch Robotic Grasping Network Based on Attention Mechanism | XIE Pengwei, HAO Nan, CHEN Bo | 7986 |
| Experimental Research on Knuckle Pattern Recognition Algorithm Based on Transfer Learning | CHEN Hongli, LIU Lingfeng, XIA Xiaojing | 7992 |
| Multiple Reception Field Network with Attention Module on Bone Fracture Detection Task | WANG Mengxuan, ZHANG Guoshan, GUAN Bin, XIA Mingyang, WANG Xinbo | 7998 |
| Tactile Glove- Decode and Classify the Human Grasping Process | CUI Zijian, GAO Tianshi, WANG Jiang, DENG Bin | 8004 |
| Fuzzy Neural Networks Control of Flexible Robotic Manipulator Based on Lumped Spring-Mass Model | ZHANG Hongmei, LI Xianhui, XU Guangyan, LIU Hao | 8010 |
| Triplet Loss Based Metric Learning for Cervical Cell Classification | CHANG Jianfang, DONG Na, FENG Qingyue, LIU Xinyu | 8016 |
| An Attention-based RGBD Dual-branch Gesture Recognition Network | CHEN Bo, XIE Pengwei, HAO Nan | 8022 |
| An Algorithm for Cigarette Capsules Defect Detection Based on Lightweight Faster RCNN | LI Longfei, LI Mengdi, HU Huaizhong | 8028 |
| A Multi-Correlation Stereo Matching Network for Disparity Estimation | MEI Jianqiang, GUAN Shengxiao | 8035 |
| Water Level Prediction Based on Improved Spectral Residual Preprocessing and Convolution Neural Network | LAN Zixuan, LI Jun, SHU Wenjie, XU GaoWu, NIE Jun, LIU Shengqiang | 8040 |
| Fraud Identification of Financial Reports Based on Neural Network Algorithm | ZHANG Xinyue, SU Jie, ZHOU Ling | 8045 |
| Localization of Optic Disc in Fundus Images Based on Yolov3 | JIANG Tianci, ZHOU Zhi Wei, YAO Jun | 8050 |
| An Illegal Target Intrusion Detection System of Railway Based on Deep Learning and Hough Transform | HE Gangdi | 8056 |
| Deep Neural Networks for Semantic Segmentation of Lung Nodules | WU Liangsheng, LI Chentong, MA Jingqi, LU Xingjian, LEI Huan | 8061 |
| Thighbone Fracture Detection Based on Fused Deep Learning Method | GUAN Bin, ZHANG Guoshan | 8066 |
| An Improved Mobilenet-SSD Approach for Face Detection | TANG Jin, PENG Xiwei, CHEN Xin, LUO Bai | 8072 |
| Residual Net Use on FSRCNN for Image Super-Resolution | ZHANG Jinlu, LIU Mingliang, WANG Xiaohang, CAO Chengcheng | 8077 |
| Face Attributes Extraction with Muti-Task Learning and Knowledge Distillation | XU GaoWu, LI Jun, DU Yang, SHU Wenjie, LAN Zixuan | 8083 |

| | | |
|---|--|------|
| Loop Closure Detection Using KPCA and CNN for Visual SLAM | DAI Kun, CHENG Lan, YANG Rui, YAN Gaowei | 8088 |
| Development of Input Variable Selection and Structural Optimization Algorithm for Recurrent Neural Network | ZHANG Mengyan, SUI Lin, SUN Kai | 8094 |
| Improved Deep Learning Optimization Algorithm Based on Variable Speed Integral Control | TIAN Xia, YANG Xinhao, ZHANG Ke, LI Ze | 8100 |
| Interrelated Fusion CNN with Statistical Grouping Among Multipatches for Occluded Facial Expression Recognition | TANTAI Shuyu, MA Xin | 8105 |
| Research on UWB/IMU Location Fusion Algorithm Based on GA-BP Neural Network | YANG Kang, LIU Man-lu, XIE Yu, ZHANG Xinglang, WANG Weidong, GOU Songlin, SU Haoxiang | 8111 |
| Cross Different Time Periods Detection Algorithm Based on YOLOv4 | FAN Jiaqi, HUO Tianjiao, WEI Zhenqi, WANG Jiachen, LI Xin, GAO Bingzhao | 8117 |
| Adaptive Binarization Method for Binary Neural Network | LIU Zhongwei, ZHANG Hesheng, SU ZhenHua, ZHU Xiaojin | 8123 |
| Image Deblurring Algorithm by Using Conditional Generation Adversarial Network | SU ZhenHua, ZHANG Hesheng, LIU Zhongwei, ZHU Xiaojin | 8128 |
| Short-Term and Mid-Term Population Projections Especially of Germany via WASD Neural Network: Theoretical Parts | YUAN Zhiwen, FENG Siyuan, YE Chengxu, ZHANG Yunong | 8134 |
| ES-CycleGAN: an Improved CycleGAN for VI-to-IR Translation | SU Tong, PAN Feng, CAO Jingying | 8139 |
| Transfer Learning-Based Segmentation of Kidney Stone on Endoscopic Image | LI Rui, ZHAO Yu, DAI Yu, CHEN Gongping, ZHANG Jianxun, CUI Liang, YIN Xiaotao, GAO Xiaofeng, LI Ling | 8145 |
| PSA-GRU:Modeling Person-Social Twin-Attention Based on GRU for Pedestrian Trajectory Prediction | YAN Xue, YANG Jinfu, SONG Lin, LIU Yubin | 8151 |
| High-definition Processing of Remote Sensing Images Based on CUT-CycleGAN | DENG Liwei, ZHANG Yuanzhi, WANG Xiaofei | 8158 |
| Study on the Prediction of Short-term Power Load Based on ECGWO-WDESN Combined Model | XIA Huiwen, CAO AO, ZHANG Qingyong | 8163 |
| Missing Value Imputation and Prediction of River Water Quality Based on GRU-Autoencoder with Input-decay | SHU Wenjie, LI Jun, LAN Zixuan, XU GaoWu, NIE Jun, LIU Shengqiang | 8169 |
| Infrared Target Detection Based on Deep Learning | WU Yifan, PAN Feng, AN Qichao, WANG Jiacheng, FENG Xiaoxue, CAO Jingying | 8175 |
| Ship Detection Based on Improved YOLO Algorithm | FU Huixuan, ZHANG Rui, NING Xiangyun, WANG Yuchao | 8181 |
| BP Neural Network and PID Combined Control Applied to Vehicle Active Suspension System | WANG Mingxiang, PANG Hui, WANG Peng, LUO Jibo | 8187 |
| Futures Price Forecasting Based on the Feature Fusion LSTM Model Using Long-Term Price Patterns | SONG Shifan, PAN Xuejun, GUO Mingxiang, LANG Qi, LIU Xiaodong | 8193 |
| Garbage Classification Algorithm Based on Deep Learning | TIAN Zhen, SUN Danfeng, LI Jinsen, MA Guangcheng, XIA Hongwei | 8199 |
| Information Fusion of Topological Structure and Node Features in Graph Neural Network | ZHANG Hongwei, WANG Can, XIA Yuanqing, YAN Tijin | 8204 |
| An Integrated Model Combining CNN-GRU with ARIMA for Pressure Prediction of Water Supply Network | WANG Bo, BAI Miaoshun, WANG Jingcheng | 8210 |

| | | |
|--|---|------|
| Rotation-fused Consistency Semi-supervised Learning Object Detection | XU Peiyi, CUI Lingguo, CHENG Zhonghao, CHAI Senchun | 8216 |
| Development of a Novel Variable Selection Algorithm for LSTM with LASSO | WU Xiuliang, CAO Maoyong, SUN Kai, MA Fengying | 8222 |
| The Temperature Prediction of Hydro-generating Units Based on Temporal Convolutional Network and Recurrent Neural Network | LI Junyan, WU Yuechao, LI Yanjun, XIANG Ji, ZHENG Bo | 8228 |
| Pose Measurement and Tracking of Non-cooperative Satellite Based on Stereo Vision | BAI Wuchen, SHI Lingling, XIAO Xiaolong, SUN Weichen, JIN Xin | 8234 |
| Traffic Signs Detection and Segmentation Based on the Improved Mask R-CNN | QIAN Huimin, MA Yilong, CHEN Wei, LI Tao, ZHUO Yi, XIANG Wenbo | 8241 |
| Chinese Character Style Transfer Based on the Fusion of Multi-scale Content and Style Features | ZHOU Xiaoxue, ZHANG Ziyang, CHEN Xin, QIN Mengxi | 8247 |
| Fast Training Methods and Their Experiments for Deep Learning CNN Models | JIANG Shanshan, WANG Sheng-Guo | 8253 |
| Text Classification under Attention Mechanism Based on Label Embedding | YUAN Guorui, LI Jun, LAN Zixuan, SHU Wenjie, XU GaoWu | 8261 |
| Determination of Effective Response Time Window to Visual Object in Object-oriented Task of Birds | NIU Xiaoke, YANG Shangfei, JIANG Zhenyang, PENG Yanyan, YANG Hong | 8267 |
| Risk Assessment of Power System Cascading Outages Based on Deep Reinforcement Learning | SONG Yuhao, HUANG Shaowei, ZHANG Zhimei, CHEN Ying, MEI Shengwei | 8273 |
| Remaining Useful Life Prediction for Turbofan Engine Using SAE-TCN Model | ZHANG Yiming, LIU Xiaofeng | 8280 |
| Research on CNN for Anti-missile Object Detection Algorithm Based on Improved Attention Mechanism | SONG Tainian, QIN Weiwei, LIANG Zhuo, QIN Qingqiang, LIU Gang | 8286 |
| Remote Sensing Image Retrieval by Multi-Scale Attention-Based CNN and Product Quantization | CHU Jun, LI Linhao, XIAO Xiaowu | 8292 |
| A Fine Grained Forecasting Method for Minute-Level Urban Water Demand | WU Shunyu, ZHAO Pingwei, BAI Miaoshun, WANG Jingcheng, LAN Yang | 8298 |
| Modular Neural Network Based on Biased Selection of Boundary Region Samples | ZHANG Mengtao, MA FuMin, LV Jie, ZHOU Xiaowei | 8304 |
| Specific Emitter Identification via Squeeze-and-Excitation Neural Network in Frequency Domain | PENG Yinan, ZHOU Yuan | 8310 |
| A Lightweight and Effective Deep Learning Model for Gaussian Noise Removal | LI Dazi, YU Wenjie | 8315 |
| Motion Transfer Based on Front and Back View for Rehabilitative Exercise | GE Yuting, SHE Jinhua, XU Chi | 8321 |
| A New Zeroing Neural Network with Tolerance to Harmonic Noise for Solving Time-Variant Linear Equation | LI Zihao, LIU Qingping, NIE Zhuoyun, YAN Laicheng, GUO Dongsheng | 8328 |
| State Estimation for Delayed Positive Neural Networks under False Data Injection Attack | WANG Yifan, ZHANG Yijun, HE Wei | 8334 |
| Ship Instance Segmentation in Foggy Scene | SUN Yuxin, SU Li, CUI Haohao, CHEN Yusheng, YUAN Shouzheng | 8340 |
| UUV Trajectory Prediction Based on GRU Neural Network | LIU Yue, WANG Hongjian, ZHANG Kai, REN Jingfei | 8346 |

| | | |
|--|--|------|
| Multi-Domain Image Super-Resolution Generative Adversarial Network for Low-Resolution Person Re-Identification | CHEN Siwen, WU Huaiyu, CHEN Yang | 8353 |
| Workpiece Surface Defect Detection Based on Prototype Network with Blur Pooling | TAN Ling, GUO Weiyu, WANG JingQiu | 8360 |
| A Deep Reinforcement Learning Method for Lion and Man Problem | XING Jiebang, ZENG Xianlin | 8366 |
| Short-term Wind Power Prediction Based on Empirical Mode Decomposition and Deep Learning | XU Rui, BAO Gang | 8372 |
| Effect of local excitation–inhibition ratio on word recognition in hierarchical spiking neural network | YE Ting, WANG Jiang, LI Kai, GAO Tianshi, YI Guosheng | 8380 |
| Decoupling Classification and Localization for Single Stage 3D Vehicle Detection from Point Clouds | HE Yunqian, XIA Guihua, FENG Hongchao | 8386 |
| Path Planning Technology of Unmanned Vehicle Based on Improved Deep Reinforcement Learning | ZHANG Kai, WANG Luhe, HU Jinwen, XU Zhao, GUO Chubing | 8392 |
| Adaptive Optimal Tracking Control for Uncertain Unmanned Surface Vessel via Reinforcement Learning | CHEN Lin, WANG Min, DAI Shi-Lu | 8398 |
| Simulated Annealing Strategy in Chaotic Neural Network with Chebyshev Polynomials | XU Yaoqun, YANG Zhenhua, ZHEN Xinxin | 8404 |
| An Attention Mechanism-based Method for Predicting Traffic Flow by GCN | WU Wenyu, FAN Xiumei, XUE Yaqiong, HUANG Yusheng | 8410 |
| Feature Extraction for Side Scan Sonar Image Based on Deep Learning | TANG Yanghua, WANG Hongjian, XIAO Yao, WEI Gao, WANG Zhao | 8416 |
| Self-Supervised Monocular Depth Estimation with Multi-constraints | YANG Xinpeng, ZHANG Sen, ZHAO Baoyong | 8422 |
| Human Behavior Recognition Method Based on WiFi Channel Status Information | ZHOU Yangyang, CUI Zhe, LU Xiao, WANG Haixia, SHENG Chunyang, ZHANG Zhiguo | 8428 |
| Pose Estimation of Non-cooperative Spacecraft Based on Convolutional Neural Network | YANG Xinghao, SONG Jianmei, SHE Haoping, LI Haichao | 8433 |
| Model Compression Based on YOLOv3 Object Detection Algorithm from the Perspective of UAV | WU Bing, XUE Zhijun, CHEN Wenjie | 8439 |
| Face SSD: A Real-time Face Detector Based on SSD | YE Bin, SHI YunLin, LI Huijun, LI Liuchuan, TONG Shuo | 8445 |
| Non-Fourier Heat Conduction Based on Self-Adaptive Weight Physics-Informed Neural Networks | SHI Shuyan, LIU Ding, ZHAO Zhongdan | 8451 |
| Locational Marginal Price Forecasting Using Transformer-based Deep Learning Network | LIAO Shengyi, WANG Zhuo, LUO Yao, LIANG Haiyan | 8457 |
| Human Pose Estimation Based Pre-training Model and Efficient High-Resolution Representation | WEN Jinchen, CHI Jianning, WU Cheng Dong, YU Xiaosheng | 8463 |
| Fault Diagnosis of Rolling Bearing Based on Edge Calculation | TANG Dandan, WU Dinghui, LU Shenxin, MA Rui Jie | 8469 |
| An LSTM-Attention-based Method to Muscle Fatigue Detection by Integrating Multi-Source SEMG Signals | CHEN Xilai, LIU Meiqin, ZHANG Senlin | 8475 |
| Deep Conditional Generative Adversarial Network for History Matching with Complex Geologies. | LV Yunxue, MA Xiaopeng, LIU Baodi, LI Jiaxing, ZHANG Kai, LIU Weifeng | 8481 |

| | |
|---|------|
| Image Classification of Time Series Based on Deep Convolutional Neural Network . CAO Wenjie, ZHANG Cheng, XIONG Zhenzhen, WANG Ting, CHEN Junchao, ZHANG Bengong | 8488 |
| Semantic Segmentation Using Generative Adversarial Network CHEN Wenxin, ZHANG Ting, ZHAO Xing | 8492 |
| Sorting and Identification Method of Camellia Seeds Based on Deep Learning XIAO Zhang, YUAN Fengwei | 8496 |
| Data Room Management System Based on Target Detection Algorithm Z Zc, CAO Weihua, LI Kang, CHEN Yitao | 8502 |
| Interactive Multi-Channel Network for Fast Clothing Style Transfer WANG Qixiang, WANG Shujing | 8506 |
| Improved Visual Odometer Based on Two-stream Convolutional Networks ZHOU YuChen, LU Guan, CHEN Xi, XU Yiming, WANG Li | 8510 |
| Rapid Temporal Information Identification in Paper Worksheets Using Light-Weight Convolutional Neural Networks WU Minjie, ZHANG Wei, HAN Yi, MAO Yao-bin | 8514 |
| Image Classification Using Convolutional Neural Network Based on Feature Selection for Edge Computing HAO Pingchang, ZHANG Liyong | 8520 |
| Distilling the Long-Range Knowledge for Real-Time Semantic Segmentation WANG Yunnan, CAI Meng, LI Jianxun | 8527 |
| An Introduction to Domain Adaptive Object Detection from Synthesis to Reality XUE Zhijun, CHEN Wenjie, LI Jing | 8533 |
| Water Surface Object Detection Based on Neural Style Learning Algorithm ZHENG Kai, GONG Peiyong, JIANG Yi, LIU Jia | 8539 |
| Intelligent Maneuver Decision Method of UAV Based on Reinforcement Learning and Neural Network ZHOU Huan, ZHANG Senyu, SUN Chu, RU Changjian | 8544 |
| Research on Model for Vital Signs Estimation Based on Convolutional Neural Network WANG Hua, HUANG DongGe, MIAO Zhonghua, CUI Xiutao | 8550 |
| Optimization of the Ice Storage Air Conditioning System Operation Based on Deep Reinforcement Learning LI Mingte, XIA Fei, XIA Lin | 8554 |
| Image Segmentation of Wafer Cutting Path Based on RFB-Unet YU Yang, WANG Wenhan, ZHU Xiaojin, ZHANG Hesheng | 8560 |
| An LSTM-based Fleet Formation Recognition Algorithm LIN Zhaochen, ZHANG Xinran, HAO Ning, HE Fenghua | 8565 |
| The Application of Centroid Tracking Algorithm in Video Action Recognition WANG Hua, WANG Zhiming, MIAO Zhonghua, CUI Xiutao | 8570 |
| Unsupervised Domain Adaptation with Multi-kernel MMD HUANG Juntao, QI Hongsheng | 8576 |
| A More Research on PolyLaneNet: No Share Top-y XU Weipeng, SU Shi, XIE Renhao, WANG Xuedong, LI Qing, HUANG Hongcheng | 8582 |
| Security Analysis of Cyber-Physical System under False Data Injection Attacks LIU Ruirui, YU Hao, HAO Fei | 8586 |
| Reinforcement Learning Based Fast Worm Detection for Smart Grids NING Baifeng, XIAO Liang | 8592 |
| Defense Against Advanced Persistent Threats in Smart Grids: A Reinforcement Learning Approach DENG Wei, XIAO Liang | 8598 |
| Optimal SINR-based DoS Attacks Against Remote State Estimation HUA Jinxing, HAO Fei | 8604 |
| CP-ABE with Efficient Revocation Based on the KEK Tree in Data Outsourcing System WANG Xi Kun, SUN Xin | 8610 |

| | | |
|---|--|------|
| Data Augmentation in Network Intrusion Detection Based on S-DCGAN | SU Mengwei, CHAI Senchun | 8616 |
| Recursive Secure Filtering for State-Saturated Systems with False Data Injection Attacks | WANG Fan, LI Hao, CARLOS Silvestre | 8622 |
| An Effective Network Repair Strategy Against Both Random and Malicious Edge Attacks | ZHAO Jianda, SUN Shiwen, SHEN Hao, XIA Chengyi | 8628 |
| Network Analysis of Chebyshev Polynomial in a Fixed-precision Digital Domain | LU Xiaoxiong, LI Chengqing, TAN Kai | 8634 |
| Research on Multidimensional Mutation Strategy Method of Fuzzing Test | DING Tianwen, FU Jingqi, SHEN Renliang | 8639 |
| A Honeypot-based Attack Detection Method for Networked Inverted Pendulum System | XU BaoYue, DU DaJun, ZHANG Changda, ZHANG Jin | 8645 |
| A Review of Enabling Physical-Layer Technologies for Terahertz Communications | XIE Haiyao, WANG Feifei, ZHANG Yihao, YU Shanping | 8651 |
| Comparative Review of Logistics Park Planning Among China, Japan and Germany: Response to Territorial Development in China | LIU Caixia, LI Dao Sheng | 8655 |
| Research on the Systemic Poverty Reduction Effect of Inclusive Finance and Agricultural Insurance | LI Zixiao, ZHANG Dongling, ZHANG Jinghua | 8661 |
| Optimal Sliding Mode Recruitment Schemes of Enterprise Knowledge Workers System | MA Yang-Shun, ZHANG Bao-Lin, YANG Yuxiang | 8667 |
| A Fuzzy Mean Semi-absolute Deviation-semi-variance-proportional Entropy Portfolio Selection Model with Transaction Costs | MENG Xiaolian, SHAN Yue | 8673 |
| Generate Xi' an Drum Music Based on Compressed Coding | WANG Haochen, LI Jiabao, LIN Yuxuan, WEN Ru, WU Jiang | 8679 |
| Optimal Mean-Variance Portfolio with Liability Based on Discontinuous Stochastic Process and A No-shorting Constraint | YAN Wei | 8684 |
| Patterns and Portfolio Based on Stock Multiplex Networks | CHEN Yurui, SHU Zichen, WANG Lin | 8692 |
| CreditBC: Incorporating Blockchain to Credit Management for Cross-domain Service | ZOU Qingquan, LONG Chengnian, WEI Lijun | 8698 |
| First Class for Students Majoring in Automation: Algorithm and Practice Based on Self-leveling Quadrotor | GUAN Yu, LI Peng, MU Guodong | 8704 |
| Big Data Assessment Methods for Students' Online Laboratory Work Based on NCSLab | XIAO Hui, HU Wenshan, LIU Guo-Ping | 8709 |
| From Virtual Simulation to Digital Twins in Online Laboratories | LEI Zhongcheng, ZHOU Hong, HU Wenshan, LIU Guo-Ping, GUAN Shiqi, FENG Xingle | 8715 |
| Surface Texture Recognition Network Based on Flexible Electronic Skin | WANG Yafei, HE Bin, ZHOU Yanmin, LU Runze, WANG Zhipeng, LU Ping, YAN Zhe | 8721 |
| Robust Incremental Kalman Predictor | ZHANG Bo, SUN Xiao-Jun | 8727 |
| Robust Predictive Trajectory Tracking Control Method for Wheeled Mobile Robot | CHEN Chen, LI Sheng, XU Wenzhe, MEI Yulin, ZHANG Xueting | 8781 |
| Observer-based Event-triggered Predictive Control under DoS Attacks | YANG Xiuping, PENG Chen | 8868 |
| A Comparison of Logit and Probit Models Using Monte Carlo Simulation | MA Jun, LI Congying | 8963 |

Research on Early Diagnosis of Mild Cognitive Impairment Based on EEG Entropy Features

..... LI Xin, YANG Changjie 9041