



## 工业过程及控制系统

- 改进 K-means 算法优化 RBF 神经网络的出水氨氮预测.....乔俊飞, 孙玉庆, 韩红桂 (375)
- 板带轧制凸度与厚度鲁棒解耦控制器设计.....高玉峰, 童朝南, 高兴华 (380)
- 反向响应过程 PID 控制回路性能评估.....郑克波, 栾小丽, 刘飞 (386)
- 基于 T-S 模糊神经网络的 PM<sub>2.5</sub> 预测研究.....乔俊飞, 蔡杰, 韩红桂 (391)
- 基于 Kringing 近似模型的非线性预测函数控制.....符莎, 施惠元, 赵民新, 欧阳海鹏, 王尚明 (396)

## 安全监控系统

- 基于贝叶斯 ICA 的多工况非高斯过程故障检测.....邓晓刚, 徐莹 (402)
- 基于正弦阈值滤波的步进电机转子位置检测.....郑雪钦, 高镭源 (408)
- 基于水平集演化与遗传优化的缺陷检测算法.....王志坚 (413)
- 多线并发电力系统的非对称故障分析方案.....王珏, 杨文刚 (417)
- 基于 SVD 和 SVDD 的轴承故障诊断.....刘英杰, 范玉刚, 吴建德 (423)

## 运动体控制系统

- 变截式 L 定子纵振模态驱动的直线超声电机.....贺红林, 余九, 廖永林, 何文丛, 凌普 (428)
- 基于改进型 ABC 算法的异步电机参数估计方法.....李宏娟, 徐格宁, 姚艳萍 (436)
- 具有时变延时及执行器饱和的自主车队控制.....吴利刚, 周倩 (442)
- 自平衡机器人内在动机小脑操作学习控制.....陈静, 李冰, 李莉, 李宗帅 (448)
- 基于极端学习机的并联机器人运动学研究.....陈平, 张宏立 (454)

## 建模与仿真

- 基于加权极端学习机的瓦斯涌出量预测模型.....谢国民, 谢鸿, 付华, 闫孝姮 (459)
- 基于示功图的抽油井动液面软测量机理建模.....李翔宇, 高宪文, 侯延彬 (464)
- 分布式参数系统的随机梯度辨识.....陈晶, 刘艳君 (472)

## 人工智能驱动的自动化

- 基于 QPSO-ELM 的过程神经网络及时间序列预测.....刘志刚, 许少华, 李盼池, 冯永强 (477)
- 基于改进差分进化算法的滑模控制参数整定.....黄健, 周端 (484)
- 基于虚拟样本的加权稀疏表示人脸识别研究.....项晓丽, 武圣, 龙伟, 武和雷 (488)
- 基于量子粒子群优化设计的分数阶 PI<sup>λ</sup>D<sup>μ</sup> 控制器.....张欣, 仲崇权 (493)

## 工业互联网

- 一种高精度无线网络衰落信道直接预测算法.....张建军, 杜莉, 宋玉娥 (499)
- 基于折半运算的带符号阶乘展开式标量乘算法.....庞根明 (504)
- 混合网络的资源分配与虚拟机部署优化算法.....邹裕, 覃中平 (509)
- 随机网络空模型负特征谱平分 DAG 相似分区.....贾羽, 金磊, 张梅 (518)
- 智能小车任务执行系统的 Petri 网设计方法.....罗怀菊, 赵琦, 罗继亮 (522)
- 一种整数上的 PACDP 全同态加密改进.....石云, 陈钟, 管彦允 (527)

## 工业过程管理与决策系统

- 基于模型预测控制的动态多属性决策方法.....张敏敏, 李宏光, 宿翀 (535)

Prediction of Effluent Ammonia Nitrogen Based on Improved K-means Algorithm Optimizing RBF Neural Network.....*QIAO Jun-fei, et al(375)*

Design of Robust Decoupling Controller for Plate and Strip Rolling Crown and Thickness.....*GAO Yu-feng, et al(380)*

Performance Assessment of PID Control Loops for Inverse Response Process.....*ZHENG Ke-bo, et al(386)*

Study on Prediction of PM<sub>2.5</sub> Based on T-S Fuzzy Neural Network.....*QIAO Jun-fei, et al(391)*

Nonlinear Predictive Functional Control Based on Kringing Approximation Model.....*FU Sha, et al(396)*

Multimode Non-Gaussian Process Fault Detection Based on Bayesian-ICA.....*DENG Xiao-gang, et al(402)*

Position Detection of Stepper Motor Rotors Based on Sine Threshold Filtering.....*ZHENG Xue-qin, et al(408)*

Workpiece Defect Detection Based on Level Set and Genetic Algorithm.....*WANG Zhi-jian(413)*

An Unbalanced Simultaneous Fault Analysis Schema of Multi-conductor Electrical Systems.....*WANG Jue, et al(417)*

Bearing Fault Diagnosis Based on SVD and SVDD.....*LIU Ying-jie, et al(423)*

Research on the Ultrasonic Linear Motor Driven by an L-shaped Stator.....*HE Hong-lin, et al(428)*

A Parameter Estimation Method for Asynchronous Motors Based on Improved ABC Algorithm.....*LI Hong-juan, et al(436)*

Autonomous Platoon Control with Actuator Saturation and Time-varying Delay.....*WU Li-gang, et al(442)*

Intrinsic Motivation Cerebellar Instrumental Learning Control for Self-Balancing Robots.....*CHEN Jing, et al(448)*

Kinematics Research of Parallel Robots Based on Extreme Learning Machine.....*CHEN Ping, et al(454)*

Prediction of Gas Emission Based on Weighted Extreme Learning Machine.....*XIE Guo-min, et al(459)*

Soft-sensor Mechanism Modeling for Dynamic Fluid Level of Beam Pumping Systems Based on Dynamometer Card.....*LI Xiang-yu, et al(464)*

Stochastic Gradient Algorithm for Distributed Parameter Systems.....*CHEN Jing, et al(472)*

Research and Time Series Prediction of Process Neural Networks Based on Quantum Particle Swarm and Extreme Learning Machine.....*LIU Zhi-gang, et al(477)*

Sliding Mode Control Parameter Setting Based on Improved Differential Evolution Algorithm.....*HUANG Jian, et al(484)*

Research of Face Recognition of Weighted Sparse Representation Based on Virtual Samples.....*XIANG Xiao-li, et al(488)*

Fractional Order PI<sup>λ</sup>D<sup>μ</sup> Controller Design Based on Quantum Particle Swarm Optimization.....*ZHANG Xin, et al(493)*

A Direct Prediction Algorithm for Wireless Network Fading Channels with High Accuracy.....*ZHANG Jian-jun, et al(499)*

The Scalar Multiplication Algorithm of Signed Factorial Expansion Based on Point Halving.....*PANG Gen-ming(504)*

Resource Allocation and Virtual Machine Placement Optimization Algorithm for Hybrid Networks.....*ZOU Yu, et al(509)*

MSRN-DAG: Random Network Space Model Negative Characteristic Spectrum Shared DAG Similarity Partition.....*JIA Yu, et al(518)*

A Design Method of Mission Execution Systems for Smart Vehicles via Petri Nets.....*LUO Huai-ju, et al(522)*

High Efficiency Fully Homomorphic Encryption Scheme over Integer Based on PACDP.....*SHI Yun, et al(527)*

A Model Predictive Control Based Approach for Dynamic Multi-attribute Decision Making.....*ZHANG Min-min, et al(535)*