

# 控制理论与应用

第34卷 第1期 2017年1月

## 目 次

### 综述与评论

直拉硅单晶生长过程建模与控制研究综述 ..... 刘 丁, 赵小国, 赵 跃 (1)

### 论文与报告

Wiener系统的变聚点样条逼近递推贝叶斯算法 ..... 景绍学, 李正明 (13)

基于角度邻域的多目标差分进化算法 ..... 赵志伟, 杨景明, 呼子宇, 车海军 (22)

并行卡尔曼滤波器的多信道序列规划算法 ..... 陆诗远, 颜钢锋, 林 澈, 郑荣濠 (33)

新的证据冲突度量方法 ..... 包甜甜, 谢新连, 魏照坤 (41)

基于EasyEnsemble的化工过程故障诊断性能改进 ..... 夏丽莎, 杨玉英, 方华京 (49)

线性离散随机系统输入和状态的多步估计方法及应用 ..... 吉浩日, 席裕庚, 李德伟, 薛 蕾 (54)

具有尾缘襟翼风力机的恒功率反步法控制 ..... 卢经纬, 张 臻, 梁宇坤, 张文广 (61)

状态空间模型的双层结构预测控制算法 ..... 谢亚军, 丁宝苍, 陈 桥 (69)

含输入死区系统的滤波误差初始修正迭代学习控制 ..... 严求真, 孙明轩, 蔡建平 (77)

切换系统的同时故障估计与容错控制 ..... 王佳伟, 沈 毅, 王振华 (85)

混合多目标粒子群优化算法在热精轧负荷分配优化中的应用 ..... 黄佩秋, 刘建昌, 谭树彬, 王洪海 (93)

浊度大时滞过程的预测自抗扰控制器设计 ..... 唐德翠, 高志强, 张绪红 (101)

基于单应性矩阵的工业机器人视觉伺服切换控制 ..... 曹 雨, 刘 山 (109)

切换系统多面体区域的生存性判别 ..... 吕剑峰, 高 岩 (120)

### 短 文

基于Elman模型的高速列车速度跟踪控制 ..... 杨 辉, 刘 盼, 李中奇 (125)

水声多诱饵对抗环境鱼雷导引方法 ..... 禹 亮, 程咏梅, 陈克喆, 赵会升, 李 松 (131)

\* \* \* \*

《控制理论与应用》征稿简则 ..... (140)

# CONTROL THEORY & APPLICATIONS

Vol. 34 No. 1 Jan. 2017

## CONTENTS

### Survey and Reviews

- A review of growth process modeling and control of Czochralski silicon single crystal  
..... LIU Ding, ZHAO Xiao-guo, ZHAO Yue (1)

### Papers and Reports

- Variable knots spline approximation recursive Bayesian algorithm for identification of Wiener systems  
..... JING Shao-xue, LI Zheng-ming (13)
- Multiobjective differential evolution algorithm based on angle neighbourhood  
..... ZHAO Zhi-wei, YANG Jing-ming, HU Zi-yu, CHE Hai-jun (22)
- Improved multi-channel scheduling algorithm for parallel Kalman filters  
..... LU Shi-yuan, YAN Gang-feng, LIN Che, ZHENG Rong-hao (33)
- Novel approach for measuring the conflict between evidence  
..... BAO Tian-tian, XIE Xin-lian, WEI Zhao-kun (41)
- Fault diagnosis performance improvement for chemical process based on EasyEnsemble method  
..... XIA Li-sha, YANG Yu-ying, FANG Hua-jing (49)
- A multi-step input and state estimation for the linear discrete-time stochastic system and its application to the anaerobic digestion process  
..... KIL Ho-Il, XI Yu-geng, LI De-wei, XUE Lei (54)
- Backstepping control of constant power for wind turbines with trailing edge flaps  
..... LU Jing-wei, ZHANG Zhen, LIANG Yu-kun, ZHANG Wen-guang (61)
- Double-layered model predictive control of state-space model  
..... XIE Ya-jun, DING Bao-cang, CHEN Qiao (69)
- Filtering-error rectified iterative learning control for systems with input dead-zone  
..... YAN Qiu-zhen, SUN Ming-xuan, CAI Jian-ping (77)
- Simultaneous fault estimation and fault tolerance control for switching systems  
..... WANG Jia-wei, SHEN Yi, WANG Zhen-hua (85)
- Application of the hybrid multi-objective particle swarm optimization algorithm in load distribution of hot finishing mills  
..... HUANG Pei-qiu, LIU Jian-chang, TAN Shu-bin, WANG Hong-hai (93)
- Design of predictive active disturbance rejection controller for turbidity  
..... TANG De-cui, GAO Zhi-qiang, ZHANG Xu-hong (101)
- Switching control for homography-based mobile robot visual servoing  
..... CAO Yu, LIU Shan (109)
- Determining the viability of a polytope for a switched system  
..... LÜ Jian-feng, GAO Yan (120)

### Brief Papers

- Speed tracking control for high-speed train with an Elman model  
..... YANG Hui, LIU Pan, LI Zhong-qi (125)
- Torpedo guidance method of the decoy jamming environment  
..... YU Liang, CHENG Yong-mei, CHEN Ke-zhe, ZHAO Hui-sheng, LI Song (131)