

《控制理论与应用》

第34卷 (2017年) 总目次

第1期

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)

第2期

综述与评论

非最小相位系统跟踪控制综述.....叶林奇, 宗 群, 田栢苓, 王 芳 (141)

论文与报告

- 输入约束下多旋翼飞行机器人的大范围镇定控制.....姜 军, 杨丽英, 何玉庆, 韩建达, 徐卫良 (159)
基于区间矩阵的四旋翼无人机鲁棒跟踪控制.....孙妙平, 刘静静, 年晓红, 王海波 (168)
基于干扰观测器的一类不确定非线性系统自适应二阶动态terminal滑模控制.....张 强, 袁铸钢, 许德智 (179)
基于迭代Reference Governor的自由活塞发动机活塞运动控制.....宫 洵, 胡云峰, 杨荣彬, 陈 虹 (188)

- 一类不确定运动系统的空间迭代学习控制..... 刘娇龙, 董新民, 薛建平, 王海涛 (197)
- 海洋柔性立管输出反馈边界控制..... 赵志甲, 刘 屿, 郭 芳, 吴忻生, 邬依林 (205)
- 一类广义Logistic映射的分形特征与同步..... 胡昌全, 刘树堂 (215)
- 基于自组织模糊神经网络的出水总磷预测..... 乔俊飞, 周红标 (224)
- 城市电网谐波电流耦合机理分析与研究..... 江友华, 钱 彦, 曹以龙 (233)
- 普通Petri网最大可达数的两段式死锁控制策略..... 李绍勇, 肖兴达, 蔡 颖, 厚彩琴, 韩喜莲, 马兵善 (243)

短 文

- 带有滑模观测器的多智能体一致性控制..... 金治群, 牛玉刚, 邹媛媛 (251)
- 离散时间切换线性系统的最小状态超调设计(英文)..... 程福亨, 孙振东 (260)
- 基于高阶控制器设计的线性自抗扰控制参数调整..... 傅彩芬, 谭 文 (265)
- 时延转移概率部分未知的网络控制系统鲁棒 H_∞ 故障检测..... 王燕锋, 王培良, 蔡志端 (273)

* * * *

- CMCIC2017中国测控技术与仪器大会征文通知..... (280)

第3期

综述与评论

- 自抗扰控制: 研究成果总结与展望..... 李 杰, 齐晓慧, 万 慧, 夏元清 (281)

论文与报告

- 基于间接自适应鲁棒的永磁同步电机电流控制器设计..... 陶瑞超, 马 杰, 赵 辉 (296)
- 凿岩机器人钻臂定位控制交叉精英反向粒子群算法..... 黄开启, 陈荣华, 丁问司 (303)
- 一种新型线性二阶滤波器的研究与应用..... 李 军, 万文军, 王越超 (312)
- 风力发电系统传感器故障诊断..... 沈艳霞, 杨雄飞, 赵芝璞 (321)
- 一种基于时频控制方法的控制器设计与实验..... 武秀恒, 杜岳峰, C. Steve. SUH, 毛恩荣, 宋正河 (329)
- 基于最大熵马尔科夫模型的绩效评价方法..... 朱 磊, 牛绿茵, 宋士吉, 张玉利 (337)
- 基于改进的动态因果图推理算法的复杂工业过程运行状态在线评价..... 常玉清, 韩泽峰, 邹筱瑜 (345)
- 可逆冷带轧机速度张力系统的模糊自适应动态面反步控制..... 刘 乐, 韩 宇, 方一鸣, 张纯江 (355)

短 文

- 主动粘弹性控制抗冲击扰动..... 李书培, 宋立伟 (367)
- 严格反馈非线性系统的自适应神经网络输出反馈控制..... 孙国法, 田 宇, 王素珍 (375)
- 执行机构部分失效的挠性航天器多界依赖容错控制..... 李 涛, 张 斌, 乔建忠 (383)
- Buck型变换器输出跟踪的自适应动态规划算法..... 李 健, 沈艳军, 刘允刚 (393)
- 带强连通分支的多智能体系统可控包含控制..... 陈世明, 王 培, 李海英, 赖 强 (401)
- 高炉料面的分类与案例匹配算法..... 曹 铭, 张 森, 尹怡欣, 肖文栋 (408)

第4期

论文与报告

- 多源扰动下光电跟踪系统连续非奇异终端滑模控制..... 冒建亮, 李 奇, 朱海荣 (413)
- 基于滚动时域优化的轮式移动机器人路径跟踪问题研究(英文)..... 刘 洋, 于树友, 郭 洋, 高炳钊, 陈 虹 (424)
- 离散多平衡点正切换系统有限区间稳定与镇定..... 刘 志, 张宪福, 王玉振 (433)

匹配条件不满足时线性系统未知输入观测器设计	张建成, 朱芳来 (441)
含多正弦扰动的航天器无拖曳控制系统性能极限研究	邹 奎, 苟兴宇, 范 达 (449)
k 轨道任务分配问题的可解性条件: 图论方法(英文)	岳菊梅, 陈增强, 闫永义, 金 鑫 (457)
针对延迟容忍用户的智能电网需求响应	董齐芬, 俞 立, 宋文战, 洪 榛 (467)
针对气动肌肉仿生肘关节抖振现象的Kalman-PID控制	杨 辉, 郝丽娜, 陈 洋, 薛帮灿 (477)
自适应广义滑模观测器之状态估计和故障重构	穆凌霞, 余 翔, 李 平, 王新民 (483)
装配线物料搬运的拉格朗日松弛算法	周炳海, 胡理嫚 (491)
油藏注水开发低阶模型及最优控制仿真研究	徐明海, 孙宪航, 巩 亮, 贾欣鑫, 王 政, 李会明 (499)
自抗扰控制和高频信号注入的内嵌式永磁同步电机无位置传感器控制	孙佃升, 章跃进 (508)
基于滤波反步法的三相永磁同步电机伺服控制	陈子印, 林 喆, 康建兵, 贾鹤鸣, 于 飞 (515)
对称离散事件系统事件重标记观测器性质研究	焦 亭, 甘永梅, 肖国春, WONHAM W M (525)
考虑发动机排气背压阈值的柴电混合动力汽车最优控制	隗寒冰, 刘小飞, 彭志远 (533)

短 文

基于集员估计的室内移动机器人多传感器融合定位	周 波, 钱 堃, 马旭东, 戴先中 (541)
基于干扰观测器的一类奇异系统 H_∞ 控制	蔡 壮, 张国良, 宋海涛, 田 琦 (551)

第 5 期

综述与评论

果蝇优化算法研究进展	王 凌, 郑晓龙 (557)
------------	----------------

论文与报告

插电式混合动力汽车车速预测及整车控制策略	连 静, 刘 爽, 李琳辉, 周雅夫, 杨 帆, 袁鲁山 (564)
通讯信息约束下具有全局稳定性的分布式系统预测控制(英文)	郑 毅, 李少远, 魏永松 (575)
基于卡尔曼滤波器组的多重故障诊断方法研究	符方舟, 王大轶, 李文博 (586)
考虑作动器动态补偿的飞机增量滤波非线性控制	周池军, 朱纪洪, 袁夏明, 雷虎民 (594)
不确定时滞关联大系统的全局稳定模糊容错控制	郭 涛, 陈为胜 (601)
带相关噪声、随机观测滞后和丢失的随机不确定系统的最优线性估值器	王 欣, 孙书利 (609)
高通量筛选系统的双子代数建模	李丹菁 (619)
N连接糖基化过程的动态图建模	杨岱巍, 王 晶, 周靖林, 吴海燕, 靳其兵 (627)
多端高压直流输电系统自适应无源控制	杨 博, 黄琳妮, 张孝顺, 余 涛 (637)
模型参数失配有界下的扩展集员估计方法	宋莎莎, 赵忠盖, 刘 飞 (648)
卫星姿态的状态转移控制	谭天乐 (655)

短 文

控制饱和约束下的自主水面船编队	付明玉, 余玲玲, 焦建芳, 徐玉杰 (663)
融合概率分布和单调性的支持向量回归算法	张 青, 颜学峰 (671)
三类不动点与一类随机动力系统的稳定性	王春生, 李永明 (677)
一类3阶非线性系统的非奇异终端滑模控制	蒲 明, 蒋 涛, 刘 鹏 (683)
带有非线性扰动的时变时滞系统的稳定性准则	武 斌, 王长龙, 徐锦法, 胡永江 (692)

第 6 期

论文与报告

改进型环形耦合结构的多缸比例同步控制	高 川, 黄叙辉, 芮 伟, 蒋婧妍, 杜 宁 (701)
--------------------	-------------------------------

- 时滞状态反馈下离散时滞系统 H_∞ 控制器失效时间分析..... 聂宏, 桑红 (709)
- 具有多项式时间复杂性的离散事件系统安全诊断..... 刘富春, 罗莘 (717)
- 垂直起降无人机基于图像的目标跟踪控制..... 刘锦涛, 高丽, 吴文海, 李静 (723)

短 文

- 柴油机碳烟颗粒物的分形生长分析与凝聚控制..... 刘平, 李敬, 侯加林 (732)
- 考虑滑模抖振的永磁同步电机反电势双级观测器..... 魏海峰, 韦汉培, 张懿 (738)

“智能科学与大数据工程”专题报告

- 图像分类卷积神经网络的特征选择模型压缩方法(英文)..... 邹月娴, 余嘉胜, 陈泽晗, 陈锦, 王毅 (746)
- 结合灰色预测的动态概率矩阵分解(英文)..... 宛袁玉, 王昌栋, 赵知临, 赖剑煌 (753)
- 多重约束非负矩阵分解的非平稳噪声语音增强(英文)..... 邹月娴, 刘诗涵, 王迪松 (761)
- 编码选择哈希算法解决大规模图像检索问题(英文)..... 田星, 陆筱怡, 吴永贤, 黄家健 (769)
- 针对蛋白质复合体检测的自学习图聚类(英文)..... 朱佳, 武兴成, 林雪琴, 肖丹阳, 肖菁, 黄晋, 贺超波 (776)
- 基于融合欧氏距离与Kendall Tau距离度量的谱聚类算法(英文)..... 光俊叶, 邵伟, 孙亮, 张道强 (783)
- 基于多层卷积神经网络特征和双向长短时记忆单元的行为识别(英文)
..... 葛瑞, 王朝晖, 徐鑫, 季怡, 刘纯平, 龚声蓉 (790)
- 多特征融合的实时人手跟踪算法(英文)..... 李逢, 桑农, 王洪智, 颜轶, 高常鑫, 刘乐元 (797)
- 基于聚类和支撑向量机的胃癌患者住院费用建模(英文)..... 周涛, 陆惠玲, 王文文, 王惠群 (803)
- 基于层次化及最小二乘的精确图像配准(英文)..... 李杰, 刘怡光, 都双丽, 徐振宇 (811)
- 姿态和表情变化下的三维人脸标志点定位(英文)..... 梁艳, 章云 (820)
- 基于堆栈式消噪自编码器的分块目标跟踪(英文)..... 戴铂, 侯志强, 余旺盛, 李明, 王鑫, 金泽芬芬 (829)
- 基于姿态对齐的行人重识别方法(英文)..... 王金, 刘洁, 高常鑫, 桑农 (837)
- 基于稀疏表示的帕金森功能连接模式定位(英文)..... 陈勇斌, 李远清 (843)

第7期

综述与评论

- 汽车传动系统平顺性驾驶品质控制..... 高炳钊, 洪金龙, 陈虹 (849)

论文与报告

- 基于同步的多旋翼无人机非线性模型自适应参数辨识..... 江紫亚, 何玉庆, 韩建达 (867)
- 考虑可靠性影响的受限系统可重构性量化评价..... 屠园园, 王大轶, 李文博 (875)
- 非全包裹超空泡航行体建模与姿轨控制..... 李洋, 刘明雍, 杨盼盼, 彭星光 (885)
- 非完整移动机器人目标环绕动态反馈线性化控制..... 易国, 毛建旭, 王耀南, 郭斯羽, 缪志强 (895)
- 面向航空发动机装配线的知识化制造系统重调度和自重构..... 万晓琴, 严洪森 (903)
- 区间化时变时延的网络化切换系统建模与控制..... 刘斌, 刘义才 (912)
- 振动与力加载耦合的电液伺服控制..... 沈刚, 李戈, 侯冬冬, 朱真才, 李翔 (921)
- 考虑随机时滞的非线性网控系统鲁棒 L_2-L_∞ 控制..... 李艳辉, 吴迪 (931)
- 高炉料面特征提取与聚类分析..... 张海刚, 张森, 尹怡欣, 张晓娟 (938)
- Canopy-Kmeans聚类和组合优化的铁矿预配料智能调度..... 曹跃, 王雅琳, 何海明, 杨卜菘, 桂卫华 (947)
- 自适应扰动估计的相关积分优化方法及应用..... 陈杰, 赵众 (956)

短 文

- 双量子系统最大纠缠态制备的两种控制方法..... 商燕, 王海涛, 隋岩, 丛爽 (965)
- 基于虚拟网络的拥塞控制及能耗均衡路由协议..... 张军龙, 牛玉刚 (974)

- 基于秩一摄动理论配置Lyapunov指数的新算法..... 于永进, 陈旭, 程学珍 (980)
 带有时变计算时延的倒立摆视觉实时控制研究..... 杜大军, 李汪佩, 詹斌, 费敏锐 (986)

第 8 期

论文与报告

- 面向大规模网络化系统的分布式预测控制(英文)..... 魏永松, 郑毅, 李少远, 朱全民 (997)
 涡轮增压汽油机气路预测模型的建立与预测控制(英文)..... 陈欢, 胡云峰, 于树友, 孙鹏远, 陈虹 (1008)
 微分代数系统结构化分析..... 李光远, 冯勇 (1019)
 基于积分滑模的航天器有限时间姿态容错控制..... 马广富, 于彦波, 李波, 胡庆雷 (1028)
 基于要素矩阵触发的管道异常分布式检测..... 胡旭光, 马大中, 孙秋野, 王占山, 李晓瑜 (1035)

“智能微电网与可再生能源系统的关键技术”专题

- 微电网系统建模的挑战(前言)..... 杨苹, 陈敬峰, 彭嘉俊, 曾智基, 赵卓立, 梅生伟 (1046)

论文与报告

- 虚拟同步机逆变器等效方式及滤波电路影响分析..... 徐华电, 苏建徽, 杨向真, 杜燕, 施永 (1053)
 多源多变换微电网系统建模与动态稳定分析方法..... 赵卓立, 杨苹, 许志荣, 王月武 (1062)
 直流微电网分布式控制的时滞稳定化设计..... 杨建, 原文宾, 聂雨雯, 柳张杰, 韩华, 董密 (1074)
 基于一致性的并联虚拟同步发电机分布式协同控制..... 陈来军, 王余阳, 郑天文, 陈天一, 梅生伟 (1084)
 三电平有源中点钳位型微网储能变流器直流侧中点电压优化控制策略..... 胡存刚, 邓娜, 张云雷, 王群京, 罗方林 (1092)
 含高渗透率风电的微网系统鲁棒经济调度方法..... 陈皓勇, 王勇超, 禚培正, 梁子鹏, 华栋 (1104)
 单三相光储型多微网黑启动恢复策略..... 许志荣, 杨苹, 曾智基, 彭嘉俊, 郑成立 (1112)
 电网企业参与的分布式能源运营模式及发展空间研究..... 廖志伟, 王妍, 王路 (1120)

* * * *

- 第13届智能控制与自动化世界大会(WCICA2018)征文通知..... (1127)
 第37届中国控制会议(CCC2018)征文通知..... (1128)

第 9 期

论文与报告

- 采用预测控制的地铁节能优化控制算法..... 汪仁智, 李德伟, 席裕庚 (1129)
 具有执行器容错的汽车主动悬架系统有限频率 H_∞ 控制..... 郑晓园, 张皓, 王祝萍, 陈启军 (1136)
 控制力矩陀螺框架伺服系统期望补偿自适应鲁棒控制..... 王璐, 郭毓, 钟晨星, 吴益飞, 郭健 (1143)
 计及时滞的互联电网负荷频率控制最优分数阶PID控制器设计..... 左剑, 王子琪, 李银红, 段献忠 (1151)
 多输出非线性系统在数据截断协议下的时滞多采样率输出反馈镇定(英文)..... 沈童, 钱斌, 张道远 (1161)
 小型无人直升机的无模型自适应鲁棒控制设计..... 潘晓龙, 鲜斌 (1171)
 Tennessee-Eastman过程的学习型案例推理故障诊断方法..... 严爱军, 王英杰, 王殿辉 (1179)
 四旋翼飞行器自适应动态面轨迹跟踪控制..... 王宁, 王永, 余明裕 (1185)
 多通道约束下的网络控制系统的最优跟踪性能..... 陈超洋, 桂卫华, 关治洪, 池明, 周少武 (1195)
 布尔控制网络的输出稳定与镇定..... 李志强, 肖会敏 (1201)
 具有时滞的柔性关节多机械臂协同自适应位置/力控制..... 李树荣, 尹怀强 (1208)
 基于周期观测的幅值可变双抛物线电流控制技术研究..... 安巧静, 朱长青, 赵月飞, 谷志锋, 严雪飞, 杨清熙 (1215)

短 文

- 具有未知动态的船舶编队输出反馈控制····· 林安辉, 蒋德松, 曾建平 (1222)
 压水堆功率跟踪自适应保性能控制器设计····· 王俊玲, 李翠莹, 栾秀春, 杨志达, 周 杰 (1230)
 融合人脸五官信息的深度年龄估计····· 李云飞, 卢朝阳, 李 静 (1236)
 一阶时滞系统线性自抗扰控制器参数稳定域分析····· 李大宇, 于文龙, 靳其兵 (1244)
 考虑机器检修的热轧钢管批量计划方法····· 吴子轩, 李铁克, 张文新, 王柏琳 (1250)

* * * *

- 《控制理论与应用》征稿简则····· (1260)

第 10 期

综述与评论

- 随机复杂网络同步控制研究进展综述····· 任红卫, 邓飞其 (1261)

论文与报告

- 多级耦合非线性系统的流控制····· 路 萍, 李少远 (1275)
 含有摩擦补偿的全方位移动机器人自抗扰控制····· 王圣翔, 任 超, 马书根 (1285)
 感应耦合电能传输系统稳定域的分析····· 孙 跃, 陈 宇, 唐春森, 蒋 成, 葛学健 (1293)
 倾转式三旋翼无人机非线性鲁棒控制设计与实验验证····· 金 鑫, 鲜 斌 (1303)
 舰载机纵向容错着舰系统设计····· 朱齐丹, 孟 雪 (1311)
 含高阶干扰的非仿射非线性系统自适应跟踪控制····· 孙海滨, 宗广灯, 侯林林 (1321)
 一类光电跟踪系统中事件触发机制的设计及应用····· 梁 苑, 戚国庆, 李银伢, 盛安冬 (1328)
 单轴联结式并联混合动力汽车分层切换控制设计····· 付主木, 李东卫, 宋书中, 王晓红 (1339)
 高超声速飞行器有限时间饱和跟踪控制····· 孙经广, 宋申民, 陈海涛, 李学辉 (1349)
 基于新型蛙跳算法的低碳柔性作业车间调度····· 艾子义, 雷德明 (1361)
 基于状态观测与教学优化算法的多变量系统历史数据驱动辨识····· 董 泽, 尹二新 (1369)
 具有极大时间约束的轨道交通系统的周期分析····· 王彩璐, 陶跃钢, 李志军, 杨 鹏 (1380)

短 文

- 基于控制周期计算的锌液净化除铜过程优化控制····· 张凤雪, 阳春华, 周晓君, 桂卫华 (1388)
 一类非线性切换系统的自适应神经动态面控制····· 王加朋, 胡跃明, 罗家祥 (1396)
 一种基于时-空-频联合选择与相关向量机的运动想象脑电信号分析算法
 ····· 王洪涛, 李 霆, 黄 辉, 贺跃帮, 刘旭程 (1403)

第 11 期

“量子估计与控制”专刊

- 前言····· (1409)

综述与评论

- 量子系统上的弱值测量: 理论、实现、应用及开放性问题····· 陈 希, 戴宏毅, 张 明 (1410)
 量子机器学习····· 陆思聪, 郑 昱, 王晓霆, 吴热冰 (1429)

石墨烯量子点和量子比特	魏 鹏, 葛晓贞, 李 娜, 席在荣 (1437)
量子态估计简介及其在超导电路电动力学系统中的应用	杨 阳, 齐 波, 崔 巍 (1446)

论文与报告

基于量子系综分类的量子系统哈密顿量辨识	陈春林 (1460)
朗道-齐纳跃迁过程中Rabi振荡的不同实现方法	李守志, 操德文, 王耀雄, 双 丰, 高 放 (1465)
弱测量在提高量子参数估计精度中的应用	刘丽君 (1471)
量子非马尔科夫特性的度量与调控	宋洪婷 (1477)
在噪声情况下远程制备四比特团簇态	吴娜娜, 姜 敏 (1484)
量子投影滤波	吴征天, 高 庆, 张国峰 (1494)
求解量子系统时间最优控制问题的同伦算法研究	薛拾贝, 吴热冰 (1500)
给定环境下稳定开放量子系统的哈密顿量方法	闫家臻, 匡 森, 陈蒙西, 丛 爽 (1506)
基于两步测量方法及其最少观测次数的任意量子纯态估计	杨靖北, 丛 爽, 陈 鼎 (1514)
光纤量子通信网络路由选择协议	袁小虎, 李春文 (1522)

* * * *

《控制理论与应用》征稿简则	(1528)
---------------------	--------

第 12 期

综述与评论

深度强化学习进展: 从AlphaGo到AlphaGo Zero	唐振韬, 邵 坤, 赵冬斌, 朱圆恒 (1529)
---------------------------------------	---------------------------

论文与报告

航天器姿态输出反馈抗干扰跟踪控制	龚立纲, 王 青, 董朝阳, 王昭磊 (1547)
组合导航后验方差异步融合算法	张恒浩, 史 静 (1561)
超像素特征的运动目标检测算法	胡昭华, 张维新, 邵晓雯 (1568)
新息序列驱动的无人机控制系统数据攻击检测	肖佳平, 蒋建春, 余春东 (1575)
目标空间聚类的差分头脑风暴优化算法	吴亚丽, 付玉龙, 王鑫睿, 刘 庆 (1583)
随机需求车辆路径问题及混合变邻域分散搜索算法求解	李 阳, 范厚明, 张晓楠, 杨 翔 (1594)
具有多优先级的多变量实时在线决策支持系统	郑洪宇, 曾 静, 邹 涛, 胡静涛, 于海斌 (1605)
并联脉宽调制整流器非线性 L_2 增益环流抑制控制	谷志锋, 王会勇, 朱长青, 王文婷 (1614)
线性参变过驱动系统鲁棒控制分配策略	张慎鹏, 张登峰, 王执铨 (1621)
具有时延和数据丢失的直线电机迭代学习控制	周 颖, 何 磊, 郑 凤 (1631)
具有输入未建模动态的纯反馈非线性系统自适应控制	张天平, 葛继伟, 夏晓南 (1637)
具有群集行为的时变函数分布式优化(英文)	杨正全, 张 青, 陈增强 (1648)

短 文

单边Lipschitz的Lur'e型微分包含系统的非脆弱同步设计	施敏杰, 黄 俊, 陈 良, 韩正之 (1654)
--	---------------------------

* * * *

《控制理论与应用》征稿简则	(1662)
---------------------	--------

Control Theory & Applications

Vol. 34 2017 CONTENTS

No. 1

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-II, 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)

No. 2

Survey and Reviews

Tracking control of nonminimum phase systems: an overview ····· YE Lin-qi, ZONG Qun, TIAN Bai-ling, WANG Fang (141)

Papers and Reports

Large scale stabilization of multicopter flying robot with input constraint
······ JIANG Jun, YANG Li-ying, HE Yu-qing, HAN Jian-da, XU Wei-liang (159)

Robust tracking control of a quad-rotor unmanned aerial vehicle via interval matrix
······ SUN Miao-ping, LIU Jing-jing, NIAN Xiao-hong, WANG Hai-bo (168)

An adaptive second order terminal sliding mode control for a class of uncertain nonlinear systems using disturbance observer
······ ZHANG Qiang, YUAN Zhu-gang, XU De-zhi (179)

Piston motion control of free piston engine based on iterative Reference Governor
······ GONG Xun, HU Yun-feng, YANG Rong-bin, CHEN Hong (188)

Spatial iterative learning control for a class of uncertain motion systems ····· LIU Jiao-long, DONG Xin-min, XUE Jian-ping, WANG Hai-tao (197)

Boundary output feedback control for a flexible marine riser ····· ZHAO Zhi-jia, LIU Yu, GUO Fang, WU Xin-sheng, WU Yi-lin (205)

Fractal features and synchronization of a class of generalized Logistic map ····· HU Chang-quan, LIU Shu-tang (215)

Prediction of effluent total phosphorus based on self-organizing fuzzy neural network ····· QIAO Jun-fei, ZHOU Hong-biao (224)

Coupling mechanism analysis and study on harmonic current of multi-harmonic sources ····· JIANG You-hua, QIAN Yan, CAO Yi-long (233)

- A two-stage deadlock control policy with maximally reachable number for ordinary Petri nets
 LI Shao-yong, XIAO Xing-da, CAI Ying, HOU Cai-qin, HAN Xi-lian, MA Bing-shan (243)

Brief Papers

- Consensus for multi-agent systems with sliding-mode observer JIN Zhi-qun, NIU Yu-gang, ZOU Yuan-yuan (251)
 Minimum state-overshooting design for discrete-time switched linear systems CHENG Fu-heng, SUN Zhen-dong (260)
 Parameters tuning of linear active disturbance rejection control based on high order controller design FU Cai-fen, TAN Wen (265)
 Robust H-infinity fault detection for networked control systems with partly unknown time-delay transition probabilities
 WANG Yan-feng, WANG Pei-liang, CAI Zhi-duan (273)

No. 3

Survey and Reviews

- Active disturbance rejection control: theoretical results summary and future researches LI Jie, QI Xiao-hui, WAN Hui, XIA Yuan-qing (281)

Papers and Reports

- Current controller design of permanent magnet synchronous motor based on indirect adaptive robust control
 TAO Rui-chao, MA Jie, ZHAO Hui (296)
 Crossover elite opposition-based particle swarm optimization algorithm for positioning control of rock drilling robotic drilling arm
 HUANG Kai-qi, CHEN Rong-hua, DING Wen-si (303)
 Research and application of a new type of linear second-order filter LI Jun, WAN Wen-jun, WANG Yue-chao (312)
 Sensor fault diagnosis for wind turbine system SHEN Yan-xia, YANG Xiong-fei, ZHAO Zhi-pu (321)
 On the design and physical validation of a time-frequency controller
 WU Xiu-heng, DU Yue-feng, C. Steve. SUH, MAO En-rong, SONG Zheng-he (329)
 Performance evaluation based on maximum entropy Markov model ZHU Lei, NIU Lü-yin, SONG Shi-ji, ZHANG Yu-li (337)
 Online assessment of complex industrial processes operating performance based on improved dynamic causality diagram
 CHANG Yu-qing, HAN Ze-feng, ZOU Xiao-yu (345)
 Fuzzy adaptive dynamic surface backstepping control for the speed and tension system of reversible cold strip rolling mill
 LIU Le, HAN Yu, FANG Yi-ming, ZHANG Chun-jiang (355)

Brief Papers

- Viscoelastic active control for pulse disturbance LI Shu-pei, SONG Li-wei (367)
 Adaptive neural output feedback control for strict feedback nonlinear system SUN Guo-fa, TIAN Yu, WANG Su-zhen (375)
 Multi-bound-dependent fault-tolerant control for flexible spacecraft under partial loss of actuator effectiveness
 LI Tao, ZHANG Bin, QIAO Jian-zhong (383)
 Adaptive dynamic programming algorithms for the output tracking of Buck converter systems LI Jian, SHEN Yan-jun, LIU Yun-gang (393)
 Controllable containment control of multi-agent systems with strongly connected sub-graph
 CHEN Shi-ming, WANG Pei, LI Hai-ying, LAI Qiang (401)
 Classification and case matching algorithm on blast furnace burden surface CAO Ming, ZHANG Sen, YIN Yi-xin, XIAO Wen-dong (408)

No. 4

Papers and Reports

- Continuous nonsingular terminal sliding mode control of optical-electronic tracking system subject to multiple disturbances
 MAO Jian-liang, LI Qi, ZHU Hai-rong (413)
 Receding horizon control for path following problems of wheeled mobile robots
 LIU Yang, YU Shu-you, GUO Yang, GAO Bing-zhao, CHEN Hong (424)
 Stability and stabilization for discrete-time positive switched multiple equilibria systems on finite time intervals
 LIU Zhi, ZHANG Xian-fu, WANG Yu-zhen (433)
 Linear system unknown input observer design when the observer matching condition is not satisfied ZHANG Jian-cheng, ZHU Fang-lai (441)
 Performance limitations for spacecraft drag-free control system in the presence of multi-sinusoidal disturbance
 ZOU Kui, GOU Xing-yu, FAN Da (449)
 Solvability of k -track assignment problem: a graph approach YUE Ju-mei, CHEN Zeng-qiang, YAN Yong-yi, JIN Xin (457)
 Demand response for delay tolerant consumers in smart grid DONG Qi-fen, YU Li, SONG Wen-zhan, HONG Zhen (467)

- Kalman-PID control for chattering phenomena of bionic elbow joint actuated by pneumatic artificial muscles
 YANG Hui, HAO Li-na, CHEN Yang, XUE Bang-can (477)
- State estimation and fault reconstruction from an adaptive descriptor sliding mode observer
 MU Ling-xia, YU Xiang, LI Ping, WANG Xin-min (483)
- Lagrangian relaxation algorithm for material handling problems of assembly lines ZHOU Bing-hai, HU Li-man (491)
- Simulation study on reduced-order model and optimal control of water flooding reservoir
 XU Ming-hai, SUN Xian-hang, GONG Liang, JIA Xin-xin, WANG Zheng, LI Hui-ming (499)
- Sensorless control for interior permanent magnet synchronous motor based on active disturbance rejection control and high frequency signal injection technique SUN Dian-sheng, ZHANG Yue-jin (508)
- Servo control of three-phase permanent magnet synchronous motor based on command filtered backstepping
 CHEN Zi-yin, LIN Zhe, KANG Jian-bing, JIA He-ming, YU Fei (515)
- Study on relabeling observer property in symmetric discrete-event systems JIAO Ting, GAN Yong-mei, XIAO Guo-chun, WONHAM W M (525)
- The optimal control of plug-in diesel hybrid electric vehicle with considering the threshold of exhaust back pressure
 WEI Han-bing, LIU Xiao-fei, PENG Zhi-yuan (533)

Brief Papers

- Multi-sensor fusion for mobile robot indoor localization based on a set-membership estimator
 ZHOU Bo, QIAN Kun, MA Xu-dong, DAI Xian-zhong (541)
- H-infinity control for a class of singular systems via disturbance observer based control method
 CAI Zhuang, ZHANG Guo-liang, SONG Hai-tao, TIAN Qi (551)

No. 5

Survey and Reviews

- Advances in fruit fly optimization algorithms WANG Ling, ZHENG Xiao-long (557)

Papers and Reports

- Plug-in hybrid electric vehicle speed prediction and control strategy
 LIAN Jing, LIU Shuang, LI Lin-hui, ZHOU Ya-fu, YANG Fan, YUAN Lu-shan (564)
- Global stabilizing distributed model predictive control systems with limited communication ZHENG Yi, LI Shao-yuan, WEI Yong-song (575)
- Multiple fault detection and isolation based on Kalman filters FU Fang-zhou, WANG Da-yi, LI Wen-bo (586)
- Incremental filtered nonlinear control for aircraft with actuator dynamics compensation
 ZHOU Chi-jun, ZHU Ji-hong, YUAN Xia-ming, LEI Hu-min (594)
- Fuzzy fault-tolerant control for global stabilization of uncertain time-delay large-scale systems GUO Tao, CHEN Wei-sheng (601)
- Optimal linear estimator for stochastic uncertain systems with correlated noises, random measurement delays and losses
 WANG Xin, SUN Shu-li (609)
- Dioid-based modeling of high throughput screening systems LI Dan-jing (619)
- Dynamic graph modelling for N-linked glycosylation YANG Dai-wei, WANG Jing, ZHOU Jing-lin, WU Hai-yan, JIN Qi-bing (627)
- Adaptive passive control for multi-terminal high voltage direct current systems YANG Bo, HUANG Lin-ni, ZHANG Xiao-shun, YU Tao (637)
- Extended set membership filtering method for process with bounded-mismatch parameters SONG Sha-sha, ZHAO Zhong-gai, LIU Fei (648)
- State transition control of satellite attitude TAN Tian-le (655)

Brief Papers

- Formation control of autonomous surface vessels with saturation constraint FU Ming-yu, YU Ling-ling, JIAO Jian-fang, XU Yu-jie (663)
- Improved support vector regression algorithm combining with probability distribution and monotone property
 ZHANG Qing, YAN Xue-feng (671)
- Three kinds of fixed points and stability of a class of stochastic dynamic systems WANG Chun-sheng, LI yong-ming (677)
- Nonsingular terminal sliding mode control for a class of 3-order nonlinear systems PU Ming, JIANG Tao, LIU Peng (683)
- Stability criteria for time-varying delay systems with nonlinear perturbations WU Bin, WANG Chang-long, XU Jin-fa, HU Yong-jiang (692)

No. 6

Papers and Reports

- Multiple electric cylinders proportion synchronization control based on improved cycle-coupling structure
 GAO Chuan, HUANG Xu-hui, RUI Wei, JIANG Jing-yan, DU Ning (701)

- H-infinity controller failure time analysis for a class of discrete time-delay systems under delayed state feedback ····· NIE Hong, SANG Hong (709)
 Polynomial-time verification of safe diagnosability of discrete-event systems ····· LIU Fu-chun, LUO Ping (717)
 Image-based target tracking control for vertical take-off and landing UAVs ····· LIU Jin-tao, GAO Li, WU Wen-hai, LI Jing (723)

Brief Papers

- The analysis and its agglomeration control of soot particles fractal growth ····· LIU Ping, LI Jing, HOU Jia-lin (732)
 Double-stage back electromotive force observer of permanent magnet synchronous motor considering sliding mode chattering
 ····· WEI Hai-feng, WEI Han-pei, ZHANG Yi (738)

Special issue of Intelligence Science and Big Data Engineering

- Convolutional neural networks model compression based on feature selection for image classification
 ····· ZOU Yue-xian, YU Jia-sheng, CHEN Ze-han, CHEN Jin, WANG Yi (746)
 Dynamic probabilistic matrix factorization with grey forecast ····· WAN Yuan-yu, WANG Chang-dong, ZHAO Zhi-lin, LAI Jian-huang (753)
 Enhancing speech corrupted by nonstationary noise using nonnegative matrix factorization with multiple constraints
 ····· ZOU Yue-xian, LIU Shi-han, WANG Di-song (761)
 Bit selection hashing for large scale image retrieval ····· TIAN Xing, LU Xiao-yi, WING W Y NG, HUANG Jia-jian (769)
 A self-learning graph clustering approach for protein complexes detection
 ····· ZHU Jia, WU Xing-cheng, LIN Xue-qin, XIAO Dan-yang, XIAO Jing, HUANG Jin, HE Chao-bo (776)
 Spectral clustering with mixed Euclidean and Kendall Tau metrics ····· GUANG Jun-ye, SHAO Wei, SUN Liang, ZHANG Dao-qiang (783)
 Action recognition with hierarchical convolutional neural networks features and bi-directional long short-term memory model
 ····· GE Rui, WANG Zhao-hui, XU Xin, JI Yi, LIU Chun-ping, GONG Sheng-rong (790)
 Real-time and robust hand tracking using multiple features
 ····· LI Feng, SANG Nong, WANG Hong-zhi, YAN Yi, GAO Chang-xin, LIU Le-yuan (797)
 A new model for hospitalization expenses of Gastric cancer based on clustering and support vector machine
 ····· ZHOU Tao, LU Hui-ling, WANG Wen-wen, WANG Hui-qun (803)
 Precise image matching via multi-resolution analysis and least square optimization ····· LI Jie, LIU Yi-guang, DU Shuang-li, XU Zhen-yu (811)
 3D facial landmark localization under pose and expression variations ····· LIANG Yan, ZHANG Yun (820)
 Local patch tracking algorithm based on stacked denoising autoencoder
 ····· DAI Bo, HOU Zhi-qiang, YU Wang-sheng, LI Ming, WANG Xin, JIN Ze-fenfen (829)
 Ensemble of pose aligned features for person re-identification ····· WANG Jin, LIU Jie, GAO Chang-xin, SANG Nong (837)
 Pattern localization of functional connectivity in Parkinson's disease based on sparse representation ····· CHEN Yong-bin, LI Yuan-qing (843)

No. 7

Survey and Reviews

- Drivability control of automotive drivetrain ····· GAO Bing-zhao, HONG Jin-long, CHEN Hong (849)

Papers and Reports

- Synchronization based adaptive parameter identification for nonlinear modeling of multi-rotor unmanned aerial vehicles
 ····· JIANG Zi-ya, HE Yu-qing, HAN Jian-da (867)
 Reconfigurability evaluation for a class of constrained systems in consideration of reliability ····· TU Yuan-yuan, WANG Da-yi, LI Wen-bo (875)
 Modeling and attitude-orbit control for incomplete-encapsulated supercavitating vehicles
 ····· LI Yang, LIU Ming-yong, YANG Pan-pan, PENG Xing-guang (885)
 Circumnavigation of a target with nonholonomic mobile robots via dynamic feedback linearization
 ····· YI Guo, MAO Jian-xu, WANG Yao-nan, GUO Si-yu, MIAO Zhi-qiang (895)
 Rescheduling and self-reconfiguration of knowledgeable manufacturing system oriented to aircraft engine assembly line
 ····· WAN Xiao-qin, YAN Hong-sen (903)
 Modeling and control of networked switched systems with partitioned time-varying delay ····· LIU Bin, LIU Yi-cai (912)
 Electro-hydraulic servo control system with coupling between vibration and force loading
 ····· SHEN Gang, LI Ge, HOU Dong-dong, ZHU Zhen-cai, LI Xiang (921)
 Robust L_2 - L_∞ control for nonlinear networked control systems with random time delays ····· LI Yan-hui, WU Di (931)
 Feature extraction and clustering of blast furnace burden surface ····· ZHANG Hai-gang, ZHANG Sen, YIN Yi-xin, ZHANG Xiao-juan (938)
 Intelligent scheduling in pre-burdening of iron ore: Canopy-Kmeans clustering algorithm and combinatorial optimization
 ····· CAO Yue, WANG Ya-lin, HE Hai-ming, YANG Bu-song, GUI Wei-hua (947)
 Correlation integral optimization method and application in adaptive disturbance estimation ····· CHEN Jie, ZHAO Zhong (956)

Brief Papers

- Two control methods for the maximum entangled states preparations of a double quantum system
 SHANG Yan, WANG Hai-tao, SUI Yan, CONG Shuang (965)
- Congestion control and energy balanced routing protocol via virtual grid ZHANG Jun-long, NIU Yu-gang (974)
- A new method of placing Lyapunov exponents via rank one perturbation YU Yong-jin, CHEN Xu, CHENG Xue-zhen (980)
- Research of visual real-time control for an inverted pendulum with time-varying computational delay
 DU Da-jun, LI Wang-pei, ZHAN Bin, FEI Min-rui (986)

No. 8

Papers and Reports

- Distributed predictive control for large-scale networked systems WEI Yong-song, ZHENG Yi, LI Shao-yuan, ZHU Quan-min (997)
- Airpath prediction model and predictive control of turbocharged gasoline engine
 CHEN Huan, HU Yun-feng, YU Shu-you, SUN Peng-yuan, CHEN Hong (1008)
- Structural analysis for differential algebraic systems LI Guang-yuan, FENG Yong (1019)
- Integral-type sliding mode finite-time fault tolerant control for spacecraft attitude control MA Guang-fu, YU Yan-bo, LI Bo, HU Qing-lei (1028)
- Pipeline anomaly distributed detection based on element-matrix trigger mechanism
 HU Xu-guang, MA Da-zhong, SUN Qiu-ye, WANG Zhan-shan, LI Xiao-yu (1035)

Special issue of Key Technologies of Smart Microgrids and Renewable Energy Systems

- Modeling challenges for microgrids (Preface) YANG Ping, CHEN Jing-feng, PENG Jia-jun, ZENG Zhi-ji, ZHAO Zhuo-li, MEI Sheng-wei (1046)

Papers and Reports

- Analysis of influences of equating ways and filter circuits for virtual synchronous generator-based inverter
 XU Hua-dian, SU Jian-hui, YANG Xiang-zhen, DU Yan, SHI Yong (1053)
- Modeling and dynamic stability analysis method of microgrids with multiple energy resources and multiple conversions
 ZHAO Zhuo-li, YANG Ping, XU Zhi-rong, WANG Yue-wu (1062)
- The design of delay stability in DC microgrids with distributed control
 YANG Jian, YUAN Wen-bin, NIE Yu-wen, LIU Zhang-jie, HAN Hua, DONG Mi (1074)
- Consensus-based distributed control for parallel-connected virtual synchronous generator
 CHEN Lai-jun, WANG Yu-yang, ZHENG Tian-wen, CHEN Tian-yi, MEI Sheng-wei (1084)
- Optimal control strategy of neutral-point potential for three-level active neutral-point-clamped microgrid energy storage converter
 HU Cun-gang, DENG Na, ZHANG Yun-lei, WANG Qun-jing, LUO Fang-lin (1092)
- Robust economic dispatch method of microgrid containing high proportion of wind power
 CHEN Hao-yong, WANG Yong-chao, XUAN Pei-zheng, LIANG Zi-peng, HUA Dong (1104)
- Black start strategy for photovoltaic energy storage system multi-microgrids with three-phase/single-phase
 XU Zhi-rong, YANG Ping, ZENG Zhi-ji, PENG Jia-jun, ZHENG Cheng-li (1112)
- Research on business model and development capability of distributed energy with power grid enterprise's participation
 LIAO Zhi-wei, WANG Yan, WANG Lu (1120)

No. 9

Papers and Reports

- Metro energy saving optimization algorithm by using model predictive control WANG Ren-zhi, LI De-wei, XI Yu-geng (1129)
- Finite frequency H-infinity control for active vehicle suspension systems subject to actuator faults
 ZHENG Xiao-yuan, ZHANG Hao, WANG Zhu-ping, CHEN Qi-jun (1136)
- Desired compensation adaptive robust control for control moment gyroscopes gimbal servo system
 WANG Lu, GUO Yu, ZHONG Chen-xing, WU Yi-fei, GUO Jian (1143)
- Optimal fractional-order PID controller design for interconnected power grid load frequency control considering time-delay
 ZUO Jian, WANG Zi-qi, LI Yin-hong, DUAN Xian-zhong (1151)
- Multi-rate sampled and delayed output feedback stabilization for multi-output nonlinear systems under data truncation protocol
 SHEN Tong, QIAN Bin, ZHANG Dao-yuan (1161)
- Model-free adaptive robust control design for a small unmanned helicopter PAN Xiao-long, XIAN Bin (1171)
- Fault diagnosis method using learning case-based reasoning for Tennessee-Eastman process YAN Ai-jun, WANG Ying-jie, WANG Dian-hui (1179)

- Adaptive dynamic surface trajectory tracking control of a quadrotor unmanned aerial vehicle ····· WANG Ning, WANG Yong, ER Meng-joo (1185)
- Optimal tracking performance of networked control systems under multi-constraints
····· CHEN Chao-yang, GUI Wei-hua, GUAN Zhi-hong, CHI Ming, ZHOU Shao-wu (1195)
- Output stability and stabilization of Boolean control networks ····· LI Zhi-qiang, XIAO Hui-min (1201)
- Adaptive position/force control for coordinated multiple flexible-joint manipulators with time delay ····· LI Shu-rong, YIN Huai-qiang (1208)
- The control of dual parabola algorithm technology with variable amplitude based on period observation
····· AN Qiao-jing, ZHU Chang-qing, ZHAO Yue-fei, GU Zhi-feng, YAN Xue-fei, YANG Qing-xi (1215)

Brief Papers

- Ship formation control via output feedback with unknown dynamics ····· LIN An-hui, JIANG De-song, ZENG Jian-ping (1222)
- Load-following adaptive guaranteed cost control of pressurized water reactors
····· WANG Jun-ling, LI Cui-ying, LUAN Xiu-chun, YANG Zhi-da, ZHOU Jie (1230)
- Deep age estimation by fusing facial information ····· LI Yun-fei, LU Zhao-yang, LI Jing (1236)
- Stability region analysis of linear active disturbance rejection controllers for first order systems with time delay
····· LI Da-zi, YU Wen-long, JIN Qi-bing (1244)
- Methods of hot-rolled batch planning for seamless steel tube with machine maintenance
····· WU Zi-xuan, LI Tie-ke, ZHANG Wen-xin, WANG Bai-lin (1250)

No. 10

Survey and Reviews

- Review on synchronization control in stochastic complex networks ····· REN Hong-wei, DENG Fei-qi (1261)

Papers and Reports

- The flow control of nonlinear system with coupled multistage ····· LU Ping, LI Shao-yuan (1275)
- Active disturbance rejection control with friction compensation for an omnidirectional mobile robot
····· WANG Sheng-xiang, REN Chao, MA Shu-gen (1285)
- Analysis on the regions of stability for inductive coupled power transfer systems
····· SUN Yue, CHEN Yu, TANG Chun-sen, JIANG Cheng, GE Xue-jian (1293)
- Nonlinear robust control of a tilt tripple-rotor unmanned aerial vehicle with experimental verification ····· JIN Xin, XIAN Bin (1303)
- Fault tolerant control for longitudinal carrier automatic landing system with application to aircraft ····· ZHU Qi-dan, MENG Xue (1311)
- Adaptive tracking control for nonaffine nonlinear system with high-order disturbances ····· SUN Hai-bin, ZONG Guang-deng, HOU Lin-lin (1321)
- Design and application of event-triggered mechanism for a kind of optical-electronic tracking system
····· LIANG Yuan, QI Guo-qing, LI Yin-ya, SHENG An-dong (1328)
- Hierarchical switching control design for single-axle parallel hybrid electric vehicles
····· FU Zhu-mu, LI Dong-wei, SONG Shu-zhong, WANG Xiao-hong (1339)
- Finite-time tracking control of the hypersonic vehicle with input saturation
····· SUN Jing-guang, SONG Shen-min, CHEN Hai-tao, LI Xue-hui (1349)
- A novel shuffled frog leaping algorithm for low carbon flexible job shop scheduling ····· AI Zi-yi, LEI De-ming (1361)
- Historical data driven identification for multivariable systems based on state observation and teaching-learning-based optimization algorithm
····· DONG Ze, YIN Er-xin (1369)
- Periodic analysis for railway transport systems with maximum timing constraints ····· WANG Cai-lu, TAO Yue-gang, LI Zhi-jun, YANG Peng (1380)

Brief Papers

- Optimal control based on control period calculation for copper removal process of zinc solution purification
····· ZHANG Feng-xue, YANG Chun-hua, ZHOU Xiao-jun, GUI Wei-hua (1388)
- Adaptive neural dynamic surface tracking control for a class of switched nonlinear systems
····· WANG Jia-peng, HU Yue-ming, LUO Jia-xiang (1396)
- A motor imagery analysis algorithm based on spatio-temporal-frequency joint selection and relevance vector machine
····· WANG Hong-tao, LI Ting, HUANG Hui, HE Yue-bang, LIU Xu-cheng (1403)

No. 11

Special issue on Quantum estimation and control

- Preface ····· (1409)

Survey and Reviews

- Weak-value measurements at quantum systems: theory, realizations, applications and open problems
 CHEN Xi, DAI Hong-yi, ZHANG Ming (1410)
- Quantum machine learning LU Si-cong, ZHENG Yu, WANG Xiao-ting, WU Re-bing (1429)
- Graphene quantum dots and qubits The flow control of nonlinear system with coupled multistage
 WEI Peng, GE Xiao-zhen, LI Na, XI Zai-rong (1437)
- A brief overview of quantum state estimation and its application in circuit quantum electrodynamics YANG Yang, QI Bo, CUI Wei (1446)

Papers and Reports

- Hamiltonian identification for quantum systems via quantum ensemble classification CHEN Chun-lin (1460)
- Realizing Rabi oscillations between Landau-Zener transitions with different methods
 LI Shou-zhi, CAO De-wen, WANG Yao-xiong, SHUANG Feng, GAO Fang (1465)
- Usefulness of weak measurements in improving the precision of quantum parameter estimation LIU Li-jun (1471)
- Quantification and manipulation of quantum non-Markovianity SONG Hong-ting (1477)
- Remote preparation of four-qubit cluster states in noisy environment WU Na-na, JIANG Min (1484)
- Quantum projection filtering WU Zheng-tian, GAO Qing, ZHANG Guo-feng (1494)
- Time optimal control of quantum systems: a homotopic algorithm approach XUE Shi-bei, WU Re-bing (1500)
- Hamiltonian method for the stabilization of open quantum systems with given dissipations
 YAN Jia-zhen, KUANG Sen, CHEN Meng-xi, CONG Shuang (1506)
- Estimation of arbitrary quantum pure states based on the two-step measurement method and the minimum observations
 YANG Jing-bei, CONG Shuang, CHEN Ding (1514)
- Routing protocol of fiber quantum communication network YUAN Xiao-hu, LI Chun-wen (1522)

No. 12

Survey and Reviews

- Recent progress of deep reinforcement learning: from AlphaGo to AlphaGo Zero
 TANG Zhen-tao, SHAO Kun, ZHAO Dong-bin, ZHU Yuan-heng (1529)

Papers and Reports

- Output feedback tracking control of spacecraft attitude with disturbance rejection
 GONG Li-gang, WANG Qing, DONG Chao-yang, WANG Zhao-lei (1547)
- Integrated navigation algorithm with posterior variance and asynchronous fusion ZHANG Heng-hao, SHI Jing (1561)
- Moving object detection algorithm with superpixel features HU Zhao-hua, ZHANG Wei-xin, SHAO Xiao-wen (1568)
- Data attack detection for an unmanned aerial vehicle control system using innovation sequences
 XIAO Jia-ping, JIANG Jian-chun, SHE Chun-dong (1575)
- Difference brain storm optimization algorithm based on clustering in objective space WU Ya-li, FU Yu-long, WANG Xin-rui, LIU Qing (1583)
- Two-phase variable neighborhood scatter search for the capacitated vehicle routing problem with stochastic demand
 LI Yang, FAN Hou-ming, ZHANG Xiao-nan, YANG Xiang (1594)
- A multi-variable real-time online decision support system with multi-priority
 ZHENG Hong-yu, ZENG Jing, ZOU Tao, HU Jing-tao, YU Hai-bin (1605)
- Circulating-current nonlinear L_2 -gain attenuation control of parallel pulse width modulation rectifiers
 GU Zhi-feng, WANG Hui-yong, ZHU Chang-qing, WANG Wen-ting (1614)
- Robust control allocation strategy for linear parameter-varying over-actuated systems
 ZHANG Shen-peng, ZHANG Deng-feng, WANG Zhi-quan (1621)
- Iterative learning control for linear motor system with time delay and data dropout ZHOU Ying, HE Lei, ZHENG Feng (1631)
- Adaptive control of pure-feedback nonlinear systems with input unmodeled dynamics ZHANG Tian-ping, GE Ji-wei, XIA Xiao-nan (1637)
- Distributed velocity optimization of time-varying functions with flocking behavior YANG Zheng-quan, ZHANG Qing, CHEN Zeng-qiang (1648)

Brief Papers

- Design of non-fragile synchronization of one-sided Lipschitz Lur'e differential inclusion system
 SHI Min-jie, HUANG Jun, CHEN Liang, HAN Zheng-zhi (1654)