



ISSN 1001-0920  
CODEN KYJUEF

控制与决策

# 控制与决策

*Control and Decision*

Vol.33 No.5

第33卷

第5期

Vol. 33

No. 5

2018年



中国·沈阳  
Shenyang, China



纪念专刊

2018

万方数据

# 控制与决策

*Kongzhi yu Juece*

第33卷 第5期 2018年5月

(30<sup>th</sup> CCDC 纪念专刊)

## 目次

### 综述与评论

- 基于区间观测器的动态系统故障诊断技术综述 ..... 杨光红, 张志慧 (769)
- 一种统一的鲁棒自适应控制方法及近期自适应控制结果综述 ..... 温长云, 周靖, 王薇, 黄江帅, 樊慧津 (782)
- 网络稳定性与控制的小增益原理: 回顾与近期进展 ..... 姜钟平, 刘腾飞 (809)
- 饱和约束控制系统的吸引域估计 ..... 林宗利, 李元龙 (824)
- 因果关系与因果控制初探 ..... 郭雷, 王成红, 王岩 (835)
- 高速列车牵引系统故障诊断与预测技术综述 ..... 姜斌, 吴云凯, 陆宁云, 冒泽慧 (841)
- 有色冶金过程不确定优化方法探讨 ..... 阳春华, 韩洁, 周晓君, 张润东, 桂卫华 (856)
- 滤波器组框架理论及其在图信号处理中的应用 ..... 柴利, 易静文, 盛玉霞 (866)
- 进化高维多目标优化算法研究综述 ..... 刘建昌, 李飞, 王洪海, 李田军 (879)
- 鲁棒与最优控制在伺服系统中的应用 ..... 苏为洲, 闻成 (888)
- 基于声呐图像的水下目标检测、识别与跟踪研究综述 ..... 郭戈, 王兴凯, 徐慧朴 (906)
- 脉冲神经网络: 模型、学习算法与应用 ..... 程龙, 刘洋 (923)
- 智慧能源——人工智能技术在电力系统中的应用与展望 ..... 孙秋野, 杨凌霄, 张化光 (938)
- 混杂奇异摄动系统的研究综述 ..... 王燕舞, 杨武 (950)
- 受限布尔网络发展现状 ..... 冯俊娥, 于永渊, 李海涛 (960)

### 信息与动态

- 序言 ..... (I)
- 主编题词 ..... (III)
- 专刊特邀专家简介 ..... (IV)
- 下期要目 ..... (968)
- 《控制与决策》第六届编辑委员会 ..... (封4)

期刊基本参数: CN21-1124/TP \* 1986 \* m \* A4 \* 200 \* zh \* P \* ¥30.00 \* 2000 \* 15 \* 2018-05

责任编辑: 郑晓蕾

英文审校: 滕蓉

# Control and Decision

Vol. 33 No. 5 May 2018

## CONTENTS

### Surveys and Reviews

- Review of interval observer based fault diagnosis techniques for dynamic systems ..... YANG Guang-hong, ZHANG Zhi-hui (769)
- A unified conventional approach for robust adaptive control systems and some reviews on recent developments in adaptive control  
..... WEN Chang-yun, ZHOU Jing, WANG Wei, HUANG Jiang-shuai, FAN Hui-jin (782)
- A small-gain principle for network stability and control: An overview and recent results ..... JIANG Zhong-ping, LIU Teng-fei (809)
- Estimation of domain of attraction for linear systems with actuator saturation ..... LIN Zong-li, LI Yuan-long (824)
- Preliminary study on causality and cause-effect control ..... GUO Lei, WANG Cheng-hong, WANG Yan (835)
- Review of fault diagnosis and prognosis techniques for high-speed railway traction system  
..... JIANG Bin, WU Yun-kai, LU Ning-yun, MAO Ze-hui (841)
- Discussion on uncertain optimization methods for nonferrous metallurgical processes  
..... YANG Chun-hua, HAN Jie, ZHOU Xiao-jun, ZHANG Run-dong, GUI Wei-hua (856)
- Filter bank frames: Theory and application in graph signal processing ..... CHAI Li, YI Jing-wen, SHENG Yu-xia (866)
- Survey on evolutionary many-objective optimization algorithms ..... LIU Jian-chang, LI Fei, WANG Hong-hai, LI Tian-jun (879)
- Applications of robust and optimal control in servo systems ..... SU Wei-zhou, WEN Cheng (888)
- Review on underwater target detection, recognition and tracking based on sonar image ..... GUO Ge, WANG Xing-kai, XU Hui-pu (906)
- Spiking neural networks: Model, learning algorithms and applications ..... CHENG Long, LIU Yang (923)
- Smart energy — Applications and prospects of artificial intelligence technology in power system  
..... SUN Qiu-ye, YANG Ling-xiao, ZHANG Hua-guang (938)
- Survey on hybrid singularly perturbed systems ..... WANG Yan-wu, YANG Wu (950)
- Recent development of Boolean networks with constraints ..... FENG Jun-e, YU Yong-yuan, LI Hai-tao (960)

Serial parameters: CN21-1124/TP \* 1986 \* m \* A4 \* 200 \* zh \* P \* ¥30.00 \* 2000 \* 15 \* 2018-05