

# 电机与控制学报

第21卷 第10期(总第156期) 2017年10月

## 目 次

基于分时电价的电动汽车群有序充电策略研究

..... 刘志珍, 杨勇, 屈东明, 王建, 黑桐 (1)

一种模块化级联 H 桥构造的三相一单相同相牵引供电系统

..... 黄小红, 李群湛, 舒泽亮 (8)

基于改进 DFT 信号重构的基波正序有功和无功电流检测 ..... 李锦彬, 陈冲 (16)

永磁同步电机非线性黄金分割自适应转速控制

..... 王永, 窦晓华, 方浩, 罗胜 (23)

电动汽车用双层永磁体 IPMSM 优化分析

..... 刘细平, 刘章麒, 李亚, 凌涛, 任志斌 (30)

改进的无功功率模型参考自适应异步电机转速辨识

..... 车海军, 王亮亮, 霍丽娇, 崔慧慧, 杨景明 (40)

某新型隐极同步电动机流场计算与分析 ..... 路义萍, 王玉萍, 孙雪梅 (47)

永磁游标直线电机磁场解析计算

..... 王明杰, 李彦彦, 焦留成, 杨存祥, 李从善 (54)

基于有源阻尼的多逆变器并网谐振抑制 ..... 何国锋, 徐德鸿 (62)

内联观测电励磁同步电机功率因数控制 ..... 尚敬, 南永辉, 刘丽, 年晓红 (69)

磁链微分反馈的双馈风力发电机无速度传感器控制

..... 张文娟, 马浩森, 高蕊 (77)

基于 iSIGHT 平台的开关电源电热耦合仿真方法

..... 周月阁, 郑会明, 卢璐, 刘守文, 刘闯 (85)

磁力耦合联轴器三维传递转矩及特性参数分析 ..... 朱姿娜, 孟焯 (94)

磁悬浮振动测试系统信号分析及振动信号的提取

..... 江东, 周卫宏, 孔德善, 刘绪坤 (102)

一类不确定非线性系统的有限时间输出调节方法

..... 刘海涛, 田雪虹, 俞国燕, 王贵, 刘焕牢 (108)

伺服系统机械谐振抑制的自适应模糊控制方法

..... 杜仁慧, 陶春荣, 张伟, 张杰, 孙晋先 (116)

期刊基本参数:CN 23-1408/TM \* 1997 \* m \* A4 \* 124 \* zh \* P \* ¥15.00 \* 2000 \* 16 \* 2017-10 \* n

责任编辑:刘素菊

英文审校:姜毓峰 郎非

# ELECTRIC MACHINES AND CONTROL

Vol. 21 No. 10 Oct. 2017

## CONTENTS

Coordinated charging strategy for electric vehicle aggregator based on time-of-use price	..... LIU Zhi-zhen, YANG Yong, QU Dong-ming, WANG Jian, HEI Tong ( 1 )
Three-phase to single phase co-phase traction power supply system based on modular multilevel cascaded H-bridge	..... HUANG Xiao-hong, LI Qun-zhan, SHU Ze-liang ( 8 )
Detection method of fundamental positive active and reactive current based on signal reconstruction with improved DFT	..... LI Jin-bin, CHEN Chong ( 16 )
Nonlinear golden-section adaptive speed control of permanent magnet synchronous motor	..... WANG Yong, DOU Xiao-hua, FANG Hao, LUO Sheng ( 23 )
Optimization and analysis of IPMSM with double-layer permanent magnet used in electric vehicle	..... LIU Xi-ping, LIU Zhang-qi, LI Ya, LING Tao, REN Zhi-bin ( 30 )
Improved reactive power model reference adaptive speed identificatin applying to induction motor	..... CHE Hai-jun, WANG Liang-liang, HUO Li-jiao, CUI Hui-hui, YANG Jing-ming ( 40 )
Calculation and analysis of fluid flow field in non-salient pole synchronous motors	..... LU Yi-ping, WANG Yu-ping, SUN Xue-mei ( 47 )
Analytical magnetic field calculation of linear permanent magnet vernier motor	..... WANG Ming-jie, LI Yan-yan, JIAO Liu-cheng, YANG Cun-xiang, LI Cong-shan ( 54 )
Resonance suppression for grid-connected multi-inverter based on active damping method	..... HE Guo-feng, XU De-hong ( 62 )
Power factor control of EESM based on interconnected observer	..... SHANG Jing, NAN Yong-hui, LIU Li, NIAN Xiao-hong ( 69 )
Speed sensorless control of doubly-fed induction generator based on flux differential feedback	..... ZHANG Wen-juan, MA Hao-miao, GAO Rui ( 77 )
Electro thermal coupling modeling for SMPS based on iSIGHT platform	..... ZHOU Yue-ge, ZHENG Hui-ming, LU Lu, LIU Shou-wen, LIU Chuang ( 85 )
3D torque calculation of magnetic coupling and its characteristic parameters analysis	..... ZHU Zi-na, MENG Zhuo ( 94 )
Maglev vibration test system signals analyses and vibration signals extraction	..... JIANG Dong, ZHOU Wei-hong, KONG De-shan, LIU Xu-kun ( 102 )
Finite-time output regulation method for a class of uncertain nonlinear systems	..... LIU Hai-tao, TIAN Xue-hong, YU Guo-yan, WANG Gui, LIU Huan-lao ( 108 )
Adaptive fuzzy control method for mechanical resonance suppression of servo systems	..... DU Ren-hui, TAO Chun-rong, ZHANG Wei, ZHANG Jie, SUN Jin-xian ( 116 )

---

**Serial parameters:** CN 23-1408 / TM \* 1997 \* m \* A4 \* 124 \* zh \* P \* ¥15.00 \* 2000 \* 16 \* 2017-10\* n

**Responsible Editor:** LIU Su-ju   **English Examiner:** JIANG Yu-feng LANG Fei