

原书缺封面

# 电机与控制学报

第 18 卷 第 6 期 (总第 116 期) 2014 年 6 月

## 目 次

电网对称故障时双馈电机虚拟电阻控制技术	程 鹏, 年 琦, 范自强	( 1 )
优化的准正弦平顶调制波 PWM 过调制新技术	王榕生	( 9 )
基于多物理场的高速永磁电机转子护套研究		
.....	张凤阁, 杜光辉, 王天煜, CAO Wen-ping	( 15 )
环氧-云母复合绝缘固化过程介电响应特性	刘 骥, 李秀婧, 魏新劳	( 22 )
四轴电机伺服控制 ASIC 芯片	刘亚静, 范 瑜, 李铁才	( 29 )
水下航行器非接触式电能传输技术研究	王司令, 宋保维, 段桂林, 杜喜召	( 36 )
无速度传感器的永磁同步电机无差拍直接转矩控制方法		
.....	王 斌, 王 跃, 王兆安	( 42 )
故障条件下的风电场无功协调控制策略	刘瑞叶, 陈 雯	( 50 )
峭度滤波器用于电机轴承早期故障特征提取		
.....	安国庆, 秦 程, 郭立炜, 梁永春	( 55 )
五相永磁同步电机容错控制策略	高宏伟, 杨贵杰, 刘 剑	( 61 )
35 kV 干式空心电抗器匝间绝缘现场试验		
.....	张 良, 吕家圣, 王永红, 聂洪岩, 陈 禾, 彭 翔, 魏新劳	( 66 )
空间矢量调制的五相 Z 源逆变器		
.....	刘洪臣, 王国立, 赵 丹, 周祺堃, 管恩慧	( 72 )
基于 PMC/SCADA 混合量测的电力系统求积分卡尔曼滤波的状态估计		
.....	闫丽梅, 崔 佳, 徐建军, 谢一冰, 祝玉松, 黄雨晴	( 79 )
永磁接触器等效磁路模型研究	薛毓强, 吴金龙	( 85 )
含微网的配网统一电能质量调节装置	李圣清, 张 彬, 栗伟周, 李永安	( 90 )
阻增量光伏动态模型研究	倪 雨, 郝帅翔	( 96 )
电机定子圆柱壳体周向模态频率计算	于慎波, 王 辉	( 102 )
液压伺服位置系统的神经网络 backstepping 控制		
.....	方一鸣, 李叶红, 石胜利, 李建雄	( 108 )
基于流固耦合的无人机主推进电机温度场研究	张炳义, 王 森, 冯桂宏	( 116 )

期刊基本参数:CN 23-1408/TM \* 1997 \* m \* A4 \* 122 \* zh \* P \* ¥15.00 \* 2000 \* 19 \* 2014-06 \* n

责任编辑:于智龙

英文审校:姜毓锋

# ELECTRIC MACHINES AND CONTROL

Vol. 18 No. 6 June 2014

## CONTENTS

Control technique of DFIG based on virtual resistance under symmetrical grid fault .....	CHENG Peng, NIAN Heng, ZHU Zi-qiang ( 1 )
A novel PWM overmodulation technique with the optimal flat top quasi-sinusoidal modulating wave .....	WANG Rong-sheng ( 9 )
Rotor containment sleeve study of high-speed PM machine based on multi-physics fields .....	ZHANG Feng-ge, DU Guang-hui, WANG Tian-yu, Wenping Cao ( 15 )
The dielectric response characteristics of curing process in Epoxy-Mica composite insulation .....	LIU Ji, LI Xiu-jing, WEI Xin-lao ( 22 )
Application specific integrated circuits of multi-axis motor servo controller .....	LIU Ya-jing, FAN Yu, LI Tie-cai ( 29 )
Study on non-contacce power transmission of underwater unmanned vehicle .....	WANG Si-ling, SONG Bao-wei, DUAN Gui-lin, DU Xi-zhao ( 36 )
Deadbeat direct torque control of permanent magnet synchronous motor without speed sensor .....	WANG Bin, WANG Yue, WANG Zhao-an ( 42 )
A reactive power coordinated control strategy during fault of wind farms .....	LIU Rui-ye, CHEN Wen ( 50 )
Kurtosis filter in feature extraction for incipient motor bearing fault diagnosis .....	AN Guo-qing, QIN Cheng, GUO Li-wei, LIANG Yong-chun ( 55 )
Fault-tolerant control strategy for five-phase permanent magnet synchronous motor .....	GAO Hong-wei, YANG Gui-jie, LIU Jian ( 61 )
Field test on the turn-to-turn insulation for 35 kV dry-type air-core reactors .....	ZHANG Liang, LU Jia-sheng, WANG Yong-hong, NIE Hong-yan, CHEN He, PENG Xiang, WEI Xin-lao ( 66 )
Five-phase Z-source inverter based on space vector modulation .....	LIU Hong-chen, WANG Guo-li, ZHAO Dan, ZHOU Qi-kun, GUAN En-hui ( 72 )
Power system state estimation of quadrature Kalman filter based on PMU/SCADA measurements .....	YAN Li-mei, CUI Jia, XU Jian-jun, XIE Yi-bing, ZHU Yu-song, HUANG Yu-qiang ( 79 )
Research on the equivalent magnetic circuit model of permanent magnet contactor .....	XUE Yu-qiang, WU Jin-long ( 85 )
Unified power quality conditioner of distribution network containing micro-grid .....	LI Sheng-qing, ZHANG Bin, LI Wei-zhou, LI Yong-an ( 90 )
Study of solar dynamic model based on resistance increment .....	NI Yu, HAO Shuai-xiang ( 96 )
Investigation of circumferential mode frequencies of circular cylindrical shells of stator in electric motor .....	YU Shen-bo, WANG Hui ( 102 )
Neural network backstepping control of hydraulic servo position system .....	FANG Yi-ming, LI Ye-hong, SHI Sheng-li, LI Jian-xiong ( 108 )
Temperature field research for main propulsion motor of unmanned aerial vehicle based on fluid-solid coupled theory .....	ZHANG Bing-yi, WANG Sen, FENG Gui-hong ( 116 )

---

**Serial parameters:** CN 23-1408/TM \* 1997 \* m \* A4 \* 122\*zh \* P \* ¥15.00 \* 2000 \* 19\* 2014-06\* n

**Responsible Editor:** YU Zhi-long    **English Examiner:** JIANG Yu-feng

原书缺封底