



ISSN 1000-6753

CN



半月刊

SEMIMONTHLY

电工技术学报

TRANSACTIONS OF
CHINA ELECTROTECHNICAL SOCIETY



中国电工技术学会主办

2018年 第14期

第33卷 Vol.33 No.14

ISSN 1000-6753



电工技术学报

2018年 第33卷 第14期

目次

电工材料

- 3149 高导热聚合物基复合材料研究进展 杜伯学 孔晓晓 肖萌 李进 钱子明
3160 铜包铝高频线圈损耗的理论计算方法 刘骥 张明泽 廖俐琳 高欢 朱东柏等
3170 塑性变形和疲劳对 304 不锈钢电磁属性的影响研究及微观结构分析 (英)
..... 解社娟 吴磊 仝宗飞 杨庆宁 陈振茂等

电工理论与新技术

- 3177 过耦合无线电能传输功率降低机理与提高方法 李阳 董维豪 杨庆新 张诚 刘柳
3185 基于 FPGA 的磁耦合谐振式无线电能传输频率跟踪控制 刘帼巾 李义鑫 崔玉龙 黄凯 边鑫磊

电力电子

- 3194 IGBT 串联动态均压特性分析与控制 丁顺 邢岩 王钧 胡海兵
3202 基于特定集电极电流下饱和压降的 IGBT 模块老化失效状态监测方法
..... 李亚萍 周维维 孙鹏菊 彭英舟 蔡杰
3213 一种基于推挽变换器的模块化电池均衡电路 刘倩怡 徐顺刚 许建平 李小龙 覃福班
3222 一种单级隔离型软开关功率因数校正变换器 章治国 刘俊良 郭强 陈艳
3231 一种隔离型三端口双向 LCLC 多谐振直流变换器 李微 王议锋 韩富强 陈博
3245 三电平变流器中点电位平衡及低开关损耗 SVPWM 策略 罗锐 何英杰 陈晖 刘进军
3255 三相六开关三电平光伏逆变器漏电流抑制 郭小强 王学惠 杨勇 关红磊 王宝诚
3264 三电平虚拟空间矢量脉宽调制算法窄脉冲抑制研究 李敏裕 马晓军 魏曙光 石昊 张运银

电力系统

- 3274 电力感应调控滤波系统滤波机理与运行特性分析 刘乾易 李勇 胡斯佳 罗隆福 曹一家
3284 考虑需求侧响应及不确定性的微电网双层优化配置方法 赵波 汪湘晋 张雪松 周金辉
3296 不平衡电网电压下柔性直流输电系统功率滑模补偿策略 刘子文 苗世洪 范志华 魏德华 涂青宇
3306 模块化多电平变流器高压直流输电系统直流故障改进控制策略 姚骏 谭义 裴金鑫 熊小伏 欧阳金鑫
3319 双馈型电源短路电流统一解析方法及特性分析研究 肖繁 张哲 赖清华 刘慧媛 刘玮
3332 含分布式电源的复杂配电网多阶段故障恢复方法 文娟 谭阳红 何怡刚 雷可君
3342 风电外送通道极限传输能力的自适应向量机估计 邱高 刘俊勇 刘友波 穆钢 刘挺坚
3353 风电机组风速-功率异常运行数据特征及清洗方法 沈小军 付雪姣 周冲成 王伟
3362 基于云智能控制器的燃料电池最大功率跟踪策略 杨德友 崔冬晓 蔡国伟
3371 风光氢综合能源系统在线能量调控策略与实验平台搭建 孔令国 蔡国伟 李龙飞 冀瑞芳
3385 空间太阳能电站高压大功率电力传输关键技术综述 侯欣宾 王立 李庆民 王健 刘吉臻

高电压与绝缘

- 3396 基于系统电力扰动的交叉互联电缆绝缘整体老化在线监测 李露露 雍静 曾礼强 王晓静 陆家明
3406 低电压上升率条件下正极性不连续先导发展特性 谢耀恒 彭平 刘赞 叶会生 段新宇

TRANSACTIONS OF CHINA ELECTROTECHNICAL SOCIETY

2018 Vol.33 No.14

Contents

- 3149 Advances in Thermal Performance of Polymer-Based Composites
..... Du Boxue Kong Xiaoxiao Xiao Meng Li Jin Qian Ziming
- 3160 Theoretical Calculation on High-Frequency Loss of Copper Clad Aluminum Coil
..... Liu Ji Zhang Mingze Liao Lilin Gao Huan Zhu Dongbai et al
- 3170 Investigation of Electromagnetic Properties of 304 Austenitic Stainless Steel with Plastic Deformation and Fatigue Damage and Microstructure Analysis Xie Shejuan Wu Lei Tong Zongfei Yang Qingning Chen Zhenmao et al
- 3177 Mechanism of Power Decreasing and Improvement Method for Wireless Power Transfer System in Over Coupled Regime
..... Li Yang Dong Weihao Yang Qingxin Zhang Cheng Liu Liu
- 3185 Frequency Tracking Control of Wireless Power Transfer Via Magnetic Resonance Coupling Based on FPGA
..... Liu Guojin Li Yixin Cui Yulong Huang Kai Bian Xinlei
- 3194 Control for Dynamic Voltage-Sharing among Series-Connected IGBTs..... Ding Shun Xing Yan Wang Jun Hu Haibing
- 3202 Condition Monitoring for IGBT Module Aging Failure on $V_{CE(on)}$ under Certain I_C Conditions
..... Li Yaping Zhou Luowei Sun Pengju Peng Yingzhou Cai Jie
- 3213 A Modularized Equalizer for Series-Connected Batteries Based on Push-Pull Converter
..... Liu Qianyi Xu Shungang Xu Jianping Li Xiaolong Qin Fuban
- 3222 A Single Stage Isolated Soft Switching Power Factor Correction Converter Zhang Zhiguo Liu Junliang Guo Qiang Chen Yan
- 3231 An Isolated Three-Port Bidirectional LCLC Multi-Resonant DC-DC Converter..... Li Wei Wang Yifeng Han Fuqiang Chen Bo
- 3245 SVPWM Scheme for Three-Level Converters with Neutral-Point Potential Balancing and Switching Loss Reduction
..... Luo Rui He Yingjie Chen Hui Liu Jinjun
- 3255 Leakage Current Attenuation of Three-Phase Six-Switch Three-Level Photovoltaic Inverter
..... Guo Xiaoqiang Wang Xuehui Yang Yong Guan Honglei Wang Baocheng
- 3264 Research on Narrow Pulse Suppression of Three-Level Virtual Space Vector Pulse Width Modulation Algorithm
..... Li Minyu Ma Xiaojun Wei Shuguang Shi Hao Zhang Yunyin
- 3274 Study on Filtering Mechanism and Operating Characteristic of the Controllably Inductive Power Filtering System
..... Liu Qianyi Li Yong Hu Sijia Luo Longfu Cao Yijia
- 3284 Two-Layer Method of Microgrid Optimal Sizing Considering Demand-Side Response and Uncertainties
..... Zhao Bo Wang Xiangjin Zhang Xuesong Zhou Jinhui
- 3296 Power Sliding Mode Compensation Strategy of VSC-HVDC under Unbalanced Grid Voltage
..... Liu Ziwen Miao Shihong Fan Zhihua Wei Dehua Tu Qingyu
- 3306 Improved Control Strategy for DC Fault in Modular Multi-Level Converter-HVDC System
..... Yao Jun Tan Yi Pei Jinxin Xiong Xiaofu Ouyang Jinxin
- 3319 Study on Unified Analysis Method and Characteristics in Fault Currents of Doubly-Fed Induction Generators
..... Xiao Fan Zhang Zhe Lai Qinghua Liu Huiyuan Liu Wei
- 3332 A Multi-Stage Service Restoration Method for Complex Distribution Networks with Distributed Generators
..... Wen Juan Tan Yanghong He Yigang Lei Kejun
- 3342 Adaptive Support Vector Machine Estimation for Total Transfer Capability of Wind Power Exporting Corridors
..... Qiu Gao Liu Junyong Liu Youbo Mu Gang Liu Tingjian
- 3353 Characteristics of Outliers in Wind Speed-Power Operation Data of Wind Turbines and Its Cleaning Method
..... Shen Xiaojun Fu Xuejiao Zhou Chongcheng Wang Wei
- 3362 A Maximum Power Point Tracking Technology for Fuel Cells Using Cloud Model Based Intelligent Controller
..... Yang Deyou Cui Dongxiao Cai Guowei
- 3371 Online Energy Control Strategy and Experimental Platform of Integrated Energy System of Wind, Photovoltaic and Hydrogen
..... Kong Lingguo Cai Guowei Li Longfei Ji Ruifang
- 3385 Review of Key Technologies for High-Voltage and High-Power Transmission in Space Solar Power Station
..... Hou Xinbin Wang Li Li Qingmin Wang Jian Liu Jizhen
- 3396 On-Line Monitoring of Insulation Overall Aging for Cross-Bonded Cables Based on System Power Disturbances
..... Li Lulu Yong Jing Zeng Liqiang Wang Xiaojing Lu Jiaming
- 3406 The Development Characteristics of the Discontinuous Leader Under the Positive Switching Impulse with Low Rate of Voltage Rising Xie Yaoheng Peng Ping Liu Yun Ye Huisheng Duan Xinyu