

DIANGONG JISHU XUEBAO

ISSN 1000-6753

电工技术学报

TRANSACTIONS OF
CHINA ELECTROTECHNICAL SOCIETY



中国电工技术学会主办

2013年第9期

第28卷 Vol.28 No.9

ISSN 1000-6753



机械工业出版社出版

万方数据

电工技术学报

2013年 第28卷 第9期

目次

电能质量分析

- 1 电气系统功率理论的发展与面临的挑战肖湘宁 罗超 陶顺
- 11 特定次谐波消除调制方式的谐波特性分析周明磊 游小杰 王琛琛等
- 21 基于载波脉宽调制技术的牵引整流器谐波特性分析方法崔恒斌 冯晓云 张杰等
- 32 一种电网谐波与间谐波分析新方法黄纯 朱智军 曹一家等
- 40 基于 IEC61970 公共信息模型的电压凹陷域分析陶顺 周双亚 肖湘宁等
- 47 基于 DRSC 窗递推 DFT 算法的电力谐波检测罗蛟 江亚群 黄纯等
- 54 车网耦合下高速铁路牵引网谐波谐振特性研究崔恒斌 冯晓云 林轩等
- 65 基于频率自适应广义积分控制器选择性谐波电流控制策略谢川 贺超 闫辉等
- 73 基于瞬时值比较的电流型有源滤波器谐振抑制方法武健 刘瑜超 李晓萌等
- 79 并联型 APF 对两类非线性负载的谐波补偿特性研究戴珂 刘聪 李彦龙等
- 86 一种 SAPF 的谐波补偿和谐振阻尼复合控制策略戴珂 段科威 刘聪等
- 95 一种应用 PIR 控制器的双馈风力发电机组电流谐波控制方法龚文明 孟岩峰 胡书举等
- 104 基于三次谐波电流注入的 AAMC 电容电压均衡策略薛英林 徐政 王峰
- 112 提高扰动下 VSC-HVDC 供电电压质量的逆变器控制方法唐欣 李建霖 滕本科
- 120 自适应特征谐波消除策略的并网逆变器电流跟踪优化方法刘景晖 郑益慧 姚钢等
- 129 基于新距离测度的电能质量测量数据压缩算法刘博 刘晓胜 徐殿国

可再生能源与分布式发电并网技术

- 137 基于集合经验模态分解和小波神经网络的短期风功率组合预测王贺 胡志坚 陈珍等
- 145 一种逆变并网型分布式电源统一模型马亚辉 李欣然 徐振华等
- 155 促进间歇性分布式电源高效利用的主动配电网双层场景规划方法曾博 刘念 张玉莹等
- 164 基于改进 Kruskal 算法的含分布式发电的配网孤岛划分算法刘宗歧 鲍巧敏 孙春山等
- 172 含分布式风电的配电网预防性重构陈春 汪汎 黎灿兵等
- 178 考虑光伏并网的配电网潮流计算王振树 林梅军 刘岩等
- 186 基于自适应比例谐振的新型并网电流控制策略刘斌 谢积锦 李俊等
- 196 风光储联合发电系统的建模及并网控制策略蔡国伟 孔令国 潘超等
- 205 基于超级电容储能与自适应功率预测模型的电梯制动能量回收系统
并网功率优化控制邓哲 周峰武 金灵辉等
- 214 考虑电网阻抗影响的大型光伏电站并网稳定性分析杨明 周林 张东霞等
- 224 电力需求侧大规模储能系统经济性评估熊雄 杨仁刚 叶林等

电力电子

- 231 一种新型基于直流电容局部充电的升压型多电平逆变器丁石川 程明 王政等

- 239 一种高升压比的 Z 源逆变器.....周玉斐 黄文新 赵健伍等
 247 基于免疫算法的逆变器无死区控制优化.....袁佳歆 费雯丽 魏亮亮等

高电压与绝缘

- 255 高海拔地区 500kV 单回输电线路空气间隙放电特性.....邓 慰 孟 刚 陈 勇等
 261 基于 FEM-FCT 算法的 SF₆/N₂ 混合气体中棒-板间隙电晕放电特性的仿真研究.....汪 泓 李 锰 潘雄峰等
 268 XLPE 电缆水树缺陷的硅氧烷注入式绝缘修复研究.....陶霁韬 周 凯 刘 凡等
 274 不同场强下金属化聚丙烯膜电容器泄漏特性.....李智威 李 化 杨佩原等

电机与电器

- 281 舵机永磁无刷直流电机控制器参数离线整定.....崔业兵 郑 健 鞠玉涛等
 288 基于反步自适应滑模控制的永磁同步电机位置伺服系统.....付培华 陈 振 丛炳龙等
 294 基于模糊自抗扰控制器的永磁同步电动机伺服系统.....黄 庆 黄守道 伍倩倩等
 302 汽轮发电机不同模型小扰动特性.....许国瑞 汤 涌 刘晓芳等
 310 一种新型高能量密度和低成本两相双凸极永磁电机(英).....周智庆 迟永滨 何嘉颖
 321 基于摄动法的交替极永磁电机偏心磁场解析计算.....周晓燕 李 琛 仇志坚等

TRANSACTIONS OF CHINA ELECTROTECHNICAL SOCIETY

2013 Vol.28 No.9

Contents

- 1 Development and Challenges of Power Theory in Electrical Power System Xiao Xiangning Luo Chao Tao Shun
- 11 Harmonic Analysis of Selected Harmonic Elimination Pulse
Width Modulation Zhou Minglei You Xiaojie Wang Chenchen et al
- 21 Harmonic Characteristic Analysis of Carrier Based Pules-Width Modulation
Traction Rectifier Cui Hengbin Feng Xiaoyun Zhang Jie et al
- 32 A Novel Power System Harmonic and Interharmonic Analysis Method Huang Chun Zhu Zhijun Cao Yijia et al
- 40 Analysis of Area of Vulnerability Based on Common Information
Model in IEC61970 Tao Shun Zhou Shuangya Xiao Xiangning et al
- 47 Power System Harmonic Parameters Estimation Based on Recursive
DFT Algorithm with DRSC Window Luo Jiao Jiang Yaquin Huang Chun et al
- 54 Research on Harmonic Resonance Characteristic of High-Speed Railway Traction Net
Considering Coupling of Trains and Traction Nets Cui Hengbin Feng Xiaoyun Lin Xuan et al
- 65 Selective Harmonic Current Control Strategy Based on Frequency
Adaptive Generalized Integrators Xie Chuan He Chao Yan Hui et al
- 73 Resonance Suppression Method of Current Source Active Power Filter Based on
Instantaneous Comparison Control Wu Jian Liu Yuchao Li Xiaomeng et al
- 79 Study on Harmonic Compensation Characteristics of Shunt APF to
Two Types of Nonlinear Loads Dai Ke Liu Cong Li Yanlong et al
- 86 A Hybrid Control Strategy of Harmonic Compensation and Resonance
Damping Based on SAPF Dai Ke Duan Kewei Liu Cong et al
- 95 A Method with PIR Controller for the Elimination of Harmonic Currents in
a DFIG Based Wind Power System Gong Wenming Meng Yanfeng Hu Shuju et al
- 104 Capacitor Voltage Balancing Strategy Base on Third Harmonic Current
Injection for the Alternate-Arm Multilevel Converter Xue Yinglin Xu Zheng Wang Feng
- 112 Enhancement of Voltage Quality in a Passive Network Supplied by a
VSC-HVDC System Under Disturbances Tang Xin Li Jianlin Teng Benke
- 120 Optimized Current Tracking Method for Grid-Connected Inverter with Adaptive
Characteristic Harmonic Elimination Liu Jinghui Zheng Yihui Yao Gang et al
- 129 Power Quality Measuring Data Compression Based on New Distance Measurement
..... Liu Bo Liu Xiaosheng Xu Dianguo
- 137 A Hybrid Model for Wind Power Forecasting Based on Ensemble Empirical Mode
Decomposition and Wavelet Neural Networks Wang He Hu Zhijian Chen Zhen et al
- 145 A Unified Model of Grid-Connected Distributed Generation through Inverters
..... Ma Yahui Li Xinran Xu Zhenhua et al
- 155 Bi-level Scenario Programming of Active Distribution Network for Promoting
Intermittent Distributed Generation Utilization Zeng Bo Liu Nian Zhang Yuying et al

- 164 Islanding Algorithm of Distribution System with Distributed Generations
Based on Improved Kruskal Alogorithm.....Liu Zongqi Bao Qiaomin Sun Chunshan et al
- 172 Preventive Reconfiguration of Distribution Networks with
Distributed Wind PowerChen Chun Wang Feng Li Canbing et al
- 178 Power Flow Algorithm for Distribution Network with Photovoltaic System
..... Wang Zhenshu Lin Meijun Liu Yan et al
- 186 Novel Grid-Connected Current Control Strategies Based on Self-Adaptive
Proportional-Resonant.....Liu Bin Xie Jijin Li Jun et al
- 196 System Modeling of Wind-PV-ES Hybrid Power System and Its Control
Strategy for Grid-Connected.....Cai Guowei Kong Lingguo Pan Chao et al
- 205 Power Optimal Control of Elevator Brake Energy Recovery System Based on Super-Capacitor Energy
Storage and Adaptive Power-Prediction Model Deng Zhe Zhou Fengwu Jin Linghui et al
- 214 Stability Analysis of Large-Scale Photovoltaic Power Plants for the
Effect of Grid ImpedanceYang Ming Zhou Lin Zhang Dongxia et al
- 224 Economic Evaluation of Large-Scale Energy Storage Allocation in
Power Demand SideXiong Xiong Yang Rengang Ye Lin et al
- 231 Design and Analysis of a Novel Pumping-Voltage Multilevel Inverter
Based on Partial Charging of DC Capacitor.....Ding Shichuan Cheng Ming Wang Zheng et al
- 239 A High Gain Z-Source Inverter..... Zhou Yufei Huang Wenxin Zhao Jianwu et al
- 247 Optimal Dead-Time Elimination for Voltage Source Inverters Based on
Immune Algorithm.....Yuan Jiaxin Fei Wenli Wei Liangliang et al
- 255 Flashover Characteristic for High Altitude 500 kV Single-Circuit
Transmission Line..... Deng Wei Meng Gang Chen Yong et al
- 261 Corona Discharge Simulations of Rod-Plate Gap in SF₆/N₂ Gas Mixtures Using
FEM-FCT Method..... Feng Wang Meng Li Xiongfeng Pan et al
- 268 The Rejuvenation of Water Tree Aged XLPE Cables Based on
Siloxane Injecting Technique..... Tao Xiantao Zhou Kai Liu Fan et al
- 274 Leakage Characteristic of Metallized Polypropylene Film Capacitors under
Different Electric Fields Li Zhiwei Li Hua Yang Peiyuan et al
- 281 Off-Line Controller Parameters Tuning for Electromechanical Actuator Systems with
Permanent Magnet Brushless DC Motor Driving.....Cui Yebing Zheng Jian Ju Yutao et al
- 288 A Position Servo System of Permanent Magnet Synchronous Motor Based on Back-Stepping
Adaptive Sliding Mode ControlFu Peihua Chen Zhen Cong Binglong et al
- 294 PMSM Servo System Based on Fuzzy Active-Disturbance Rejection Controller
..... Huang Qing Huang Shoudao Wu Qianqian et al
- 302 Small Disturbance Characteristics of the Different Turbine Generator Models
..... Xu Guorui Tang Yong Liu Xiaofang et al
- 310 A Novel Two-Phase Doubly Salient Permanent Magnet Motor with High
Power Density and Low Cost.....Zhou Zhiqing Chi Yongbin He Jiaying
- 321 Magnetic Field Calculation for Consequent-Pole Motor with Rotor Eccentricity
Based on Perturbation MethodZhou Xiaoyan Li Chen Qiu Zhijian et al