



中国电机工程学报

ZHONGGUO DIANJI GONGCHENG XUEBAO

第 37 卷

第 24 期 卷终 (总第 587 期)

2017 年 12 月 20 日

目 次

(论文电子版 <http://www.pcsee.org/CN/volumn/home.shtml>)

· 智能电网 ·

- 双馈型风电机组谐波信息的大数据聚类分析.....解大, 吴汪平, 苗洁蓉, 张延迟 (7067)
 基于转速控制的双馈风电机组一次调频辅助控制系统建模.....李世春, 黄悦华, 王凌云, 雷小林, 等 (7077)
 含风电接入多区域电力系统的分散式随机动态经济调度方法.....赵文猛, 刘明波, 周保荣, 金小明, 等 (7087)
 基于概率分布量化指标和灰色关联决策的风电功率实时预测研究.....杨茂, 黄宾阳, 江博 (7099)
 考虑运行约束的区域电力-天然气-热力综合能源系统能量流优化分析.....王伟亮, 王丹, 贾宏杰, 等 (7108)
 一种暂态电能质量扰动检测的新方法.....王燕, 李群湛, 周福林 (7121)

· 输变电技术 ·

- 基于隔直装置全局优化投切的直流偏磁治理方法.....谢志成, 林湘宁, 李正天, 郑颖, 郭倩雯, 等 (7133)
 基于 MMC-UPFC 对称分量控制的输电线路三相不平衡治理.....满九方, 郝全睿, 高厚磊, 李正, 等 (7143)
 适用于直流电网的限流混合式直流断路器.....李承昱, 李帅, 赵成勇, 许建中, 安婷 (7154)
 计及短线路同杆并架双回线的输电网混合状态估计.....刘阳升, 林济铿, 戴赛, 申丹枫, 郭凌旭, 等 (7163)

· 智能配用电 ·

- 基于模型预测控制的冷热电联供型微网动态优化调度.....吴鸣, 骆钊, 季宇, 李洋, 寇凌峰 (7174)
 考虑微网间功率交互和微源出力协调的冷热电联供型区域多微网优化调度模型.....王守相, 吴志佳, 等 (7185)
 一种基于势博弈的微电网分布式运行优化算法.....曾君, 王侨侨, 刘俊峰, 林炜, 郭华芳 (7195)
 计及多维不确定性影响的配电信息物理系统优化规划方法.....刘文霞, 徐慧婷, 陈晔, 刘宗歧 (7205)

· 发电 ·

- 凝结水节流参与的超超临界机组一次调频控制方法.....刘吉臻, 王耀函, 曾德良, 简一帆, 陈彦桥 (7216)
 600MW 煤基超临界二氧化碳发电系统回热器和预冷器的概念设计.....张一帆, 李红智, 姚明宇, 等 (7223)
 相变凝聚器内蒸汽凝结与细颗粒团聚规律研究.....王述浩, 李水清, 段璐, 史文峥, 薛建明, 刘建民 (7230)
 燃气轮机轮缘密封稳态与瞬态流动特性数值研究.....廖高良, 高庆, 周刚, 李杨, 王新军 (7237)
 6 种低雷诺数 $k-\epsilon$ 模型在三维附壁剪切流中的数值模拟与对比分析.....聂欣, 张玉洲, 张童伟, 等 (7247)

· 电力电子与电力传动 ·

- 桥臂参数不对称 MMC 的运行与控制.....董鹏, 吕敬, 蔡旭 (7255)
 耦合电感型高增益 Boost 变换器拓扑分析.....罗全明, 高伟, 吕星宇, 张阳, 谌思, 周维维 (7266)
 一种单级无桥隔离型 PFC 变换器.....王金平, 胡凡宇, 侯良奎, 吴可汗, 姜卫东 (7276)
 VIENNA 整流器中点电位振荡抑制与平衡控制研究.....丁文龙, 刘家君, 段彬, 张承慧 (7284)
 不对称电网电压下基于降阶矢量谐振器的 MMC-HVDC 直接功率控制策略.....梁营玉 (7294)

· 电机与电器 ·

- 永磁同步电机转子磁极优化技术综述.....王凯, 孙海阳, 张露锋, 刘闯, 诸自强 (7304)
 新型变极起动永磁同步电动机的参数计算及转矩分析.....田蒙蒙, 王秀和, 王道涵, 闫博 (7318)
 基于分块 Hankel 矩阵的抽水蓄能电机扩展卡尔曼滤波模型子空间循环辨识.....庄旭, 戈宝军, 陶大军 (7328)
 基于共模电压抑制的双 Y 移 30° 六相 SVPWM 方法.....郑剑, 荣飞, 黄守道, 徐业事, 罗旗舞 (7338)
 过负载启动对牵引变压器热点动态温升的影响.....王路伽, 周利军, 王东阳, 唐浩龙, 郭蕾 (7350)

· 高电压技术 ·

- 基于脉冲红外热波技术的支柱瓷绝缘子无损检测方法.....王黎明, 刘立帅, 梅红伟, 郭晨鑫, 等 (7359)
 GIS 中自由运动片状颗粒的局部放电特征.....季洪鑫, 李成榕, 庞志开, 马国明, 崔希望, 周弘扬 (7367)
 采用镓离子掺杂的高通流容量氧化锌压敏电阻.....孟鹏飞, 胡军, 邬锦波, 何金良 (7377)

· 行业信息 ·

- 《中国电机工程学报》2017 年度全年总目录..... (7384)

· 英文概述见论文电子版

期刊基本参数: CN11-2107/TM * 1964 * S * A4 * 354 * zh * P * ¥84.00 * 4000 * 32 * 2017-12 版权所有 未经许可不得转载及上网

PROCEEDINGS OF THE CHINESE SOCIETY FOR
ELECTRICAL ENGINEERING
(PROCEEDINGS OF THE CSEE)

Vol.37 No.24 EOY (Ser. 587)

Dec. 20, 2017

CONTENTS

(Electronic Journals <http://www.pcsee.org/EN/volumn/current.shtml>)

• Smart Grid •

- Big Data Clustering Analysis for the Harmonic Data of the Doubly Fed Induction Generator
.....XIE Da, WU Wangping, MIAO Jierong, ZHANG Yanchi (7067)
- Modeling Primary Frequency Regulation Auxiliary Control System of Doubly Fed Induction Generator Based on Rotor
Speed Control.....LI Shichun, HUANG Yuehua, WANG Lingyun, LEI Xiaolin, et al (7077)
- Decentralized Stochastic Dynamic Economic Dispatch for Multi-area Power Systems With Wind Power Integrated
.....ZHAO Wenmeng, LIU Mingbo, ZHOU Baorong, JIN Xiaoming, et al (7087)
- Real-time Wind Power Prediction Based on Probability Distribution and Gray Relational Decision-making
.....YANG Mao, HUANG Binyang, JIANG Bo (7099)
- Analysis of Energy Flow Optimization in Regional Electricity-Gas-Heat Integrated Energy System Considering Operational
Constraints.....WANG Weiliang, WANG Dan, JIA Hongjie, et al (7108)
- A Novel Algorithm for Transient Power Quality Disturbances Detection.....WANG Yan, LI Qunzhan, ZHOU Fulin (7121)

• Power Transmission and Transformation Technologies •

- Suppression Method for DC Bias Based on Global Optimal Switching Method of Blocking Devices
.....XIE Zhicheng, LIN Xiangning, LI Zhengtian, ZHENG Ying, GUO Qianwen, et al (7133)
- Suppression of Three-phase Unbalanced Current of Transmission Lines Based on Symmetrical Component Control of
MMC-UPFC.....MAN Jiufang, HAO Quanrui, GAO Houlei, LI Zheng, et al (7143)
- A Novel Topology of Current-limiting Hybrid DC Circuit Breaker for DC Grid
.....LI Chengyu, LI Shuai, ZHAO Chengyong, XU Jianzhong, AN Ting (7154)
- A Hybrid State Estimation Algorithm for Transmission System Considering the Short Untransposed Double-circuit Lines
.....LIU Yangsheng, LIN Jikeng, DAI Sai, SHEN Danfeng, GUO Lingxu, et al (7163)

• Smart Electric Power Distribution and Utilization Technologies •

- Optimal Dynamic Dispatch for Combined Cooling Heating and Power Microgrid Based on Model Predictive Control
.....WU Ming, LUO Zhao, JI Yu, LI Yang, KOU Lingfeng (7174)
- Optimal Dispatching Model of CCHP Type Regional Multi-microgrids Considering Interactive Power Exchange Among
Microgrids and Output Coordination Among Micro-sources.....WANG Shouxiang, WU Zhijia, et al (7185)
- An Operation Optimization Algorithm of Microgrid Based on Potential Game
.....ZENG Jun, WANG Qiaoqiao, LIU Junfeng, LIN Wei, GUO Huafang (7195)
- Cyber Physical Distribution System Optimal Planning Considering the Influence of Multi-dimensional Uncertainties
.....LIU Wenxia, XU Huiting, CHEN Ye, LIU Zongqi (7205)

• Power Generation •

- A Primary Frequency Regulation Method of USC Units Based on Condensate Throttling
.....LIU Jizhen, WANG Yaohan, ZENG Deliang, JIAN Yifan, CHEN Yanqiao (7216)
- Conceptual Design of the Recuperator and Precooler for a 600MW Fossil-based Supercritical CO₂ Power Generation System
.....ZHANG Yifan, LI Hongzhi, YAO Mingyu, et al (7223)
- Study on the Coagulation of Vapor Condensates and Fine Particulates in a Phase-change Agglomerator
.....WANG Shuhao, LI Shuiqing, DUAN Lu, SHI Wenzheng, XUE Jianming, LIU Jianmin (7230)
- Numerical Investigation on the Steady and Unsteady Flow Characteristics of Rim Seal in Gas Turbine
.....LIAO Gaoliang, GAO Qing, ZHOU Gang, LI Yang, WANG Xinjun (7237)
- Comparative Analysis and Numerical Simulation About Six Low Reynolds Number $k-\varepsilon$ Models in Near-wall Shear Flow
.....NIE Xin, ZHANG Yuzhou, ZHANG Tongwei, et al (7247)

• Power Electronics and Drives •

- Operation and Control of Modular Multilevel Converters Under Asymmetric Arm Parameter Conditions
.....DONG Peng, LÜ Jing, CAI Xu (7255)
- Topology Analysis of High Step-up Boost Converters With Coupled Inductors
.....LUO Quanming, GAO Wei, LÜ Xingyu, ZHANG Yang, CHEN Si, ZHOU Luowei (7266)
- An Isolated PFC Converter With Single-stage and Bridgeless Properties
.....WANG Jinping, HU Fanyu, HOU Liangkui, WU Kehan, JIANG Weidong (7276)
- Investigation of Neutral-Point Voltage Oscillation Suppression and Balancing Control in VIENNA Rectifiers
.....DING Wenlong, LIU Jiajun, DUAN Bin, ZHANG Chenghui (7284)
- Direct Power Control Strategy Based on Reduced Order Vector Resonant Controller for MMC-HVDC Under Unbalanced
Grid Voltages.....LIANG Yingyu (7294)

• Electric Machines and Apparatus •

- An Overview of Rotor Pole Optimization Techniques for Permanent Magnet Synchronous Machines
.....WANG Kai, SUN Haiyang, ZHANG Lufeng, LIU Chuang, ZHU Ziqiang (7304)
- Calculation of Parameters and Analysis of Torques for a Novel Pole Changing Line-start Permanent Magnet Synchronous
Motor.....TIAN Mengmeng, WANG Xiuhe, WANG Daohan, YAN Bo (7318)
- Sub Space Cycle Identification of Pumped Storage Motor Extended Kalman Filter Model Based on Block Hankel Matrix
.....ZHUANG Xu, GE Baojun, TAO Dajun (7328)
- Dual Y Shift 30° Six-phase SVPWM Method Based on Suppression of Common-mode Voltage
.....ZHENG Jian, RONG Fei, HUANG Shoudao, XU Yeshe, LUO Qiwu (7338)
- Impact of Overload Pickup on Dynamic Hot-spot Temperature Rise in Traction Transformer
.....WANG Lujia, ZHOU Lijun, WANG Dongyang, TANG Haolong, GUO Lei (7350)

• High Voltage Engineering •

- Nondestructive Testing Method of Post Porcelain Insulator Based on Pulsed Infrared Thermal Wave Technology
.....WANG Liming, LIU Lishuai, MEI Hongwei, GUO Chenyun, et al (7359)
- Partial Discharge Characteristics of Sheet Free-Movement Particle in GIS
.....JI Hongxin, LI Chengrong, PANG Zhikai, MA Guoming, CUI Xiwang, ZHOU Hongyang (7367)
- High Impulse Current Discharge Capability of ZnO Varistors by Doping Gallium Ions
.....MENG Pengfei, HU Jun, WU Jinbo, HE Jinliang (7377)

• For Extended Summaries, Please See the Electronic Journals.