



目 次

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

· 可再生能源并网技术 ·

- 面向高比例可再生能源的电力市场研究综述 肖云鹏, 王锡凡, 王秀丽, 别朝红 (663)
区域能源互联网“站-网”布局优化研究 陈娟, 黄元生, 鲁斌 (675)
开放能源市场中并网式热电联产的利润优化运行策略 解大, 罗天, 顾承红, 李国杰, 郁俊 (685)
碳交易机制下多区域综合能源系统的分散调度 瞿凯平, 黄琳妮, 余涛, 张孝顺 (697)
含电转气的电-气互联系统可靠性评估 余娟, 马梦楠, 郭林, 张淑国 (708)
考虑分布式电源稳定助增效应的电压修正反时限过电流保护方案 喻锟, 林湘宁, 李浩, 赵航, 等 (716)

· 大电网规划与运行 ·

- 基于改进差分和声搜索算法的 FACTS 设备的多目标优化配置 张涛, 徐雪琴, 冉华军 (727)
基于深度置信网络的电力系统暂态稳定评估方法 朱乔木, 党杰, 陈金富, 徐友平, 李银红, 段献忠 (735)
基于动态风电穿透功率极限的黑启动方案制定 叶茂, 刘艳, 顾雪平, 杜康 (744)
多时间尺度的多虚拟电厂双层协调机制与运行策略 刘思源, 艾芊, 郑建平, 吴任博 (753)
基于移频滤波的频率测量方法 李建闽, 滕召胜, 吴言, 王永 (762)

· 智能配用电技术 ·

- 孤岛微电网多 Agent 分布式双层控制方法 康文发, 李强, 陈民铀, 彭琮波, 陈飞雄 (770)
基于市场控制的空调负荷参与平抑微网联络线功率波动的方法 姚垚, 张沛超 (782)
基于建筑相变材料储能的微网综合能源消纳系统 魏繁荣, 林湘宁, 陈乐, 余梦琪, 张雪松, 等 (792)

· 发电 ·

- 基于传热不可逆的有机朗肯循环热力学分析 李新国, 南来福, 孟庆良, 王伟, 王竞逸 (805)
超临界 CO₂ 分流循环及联合循环的热力学分析 郑雅文, 徐进良, 杨绪飞 (814)
汽轮机转子动力特性的多因素分析及稳定性预测 曹丽华, 司和勇, 李盼, 李勇 (823)
组合弯头内气固两相流动磨损特性的数值模拟与结构优化 王宇, 何琪, 于飞, 刘明, 严俊杰 (832)
基于光学诊断技术的煤粉射流火焰着火燃烧特性研究 朱文堃, 邹高鹏, 张蕾, 孙锐, 彭江波, 于欣 (840)

· 电力电子与电力传动 ·

- CCVM-DCVM 边界模式定频 LCC 谐振变换器设计 陈一鸣, 许建平, 李兵兵, 林磊明, 马红波 (850)
星接串联 H 桥多电平静止无功发生器不平衡补偿分析 罗锐, 何英杰, 刘云峰 (861)
可最高效率工作点定位的能馈式 LED 阵列驱动接口电路 陈怡, 薛建军, 施朝霞 (870)
新型 T 源直流固态断路器技术研究 李长乐, 聂子玲, 朱俊杰, 韩一, 许杰, 孙军 (879)
一种低成本高压脉冲静电除尘电源的分析与验证 汤铭, 宁光富, 乔光尧, 陈武 (890)

· 电机与电器 ·

- 基于 Anti-Windup 的感应电机高速区最大转矩提升策略 董震, 于泳, 王勃, 张旭, 徐殿国 (899)
新型 6/8 变极起动永磁同步电动机绕组切换动态过程的研究 田蒙蒙, 王秀和, 李昌 (909)
主励磁机高频信号注入的无刷励磁同步电机低速阶段无位置传感器起动控制 杨袁钰, 魏佳丹, 等 (918)

· 高电压技术 ·

- 考虑地震作用的互联高压电气设备软母线松弛度研究 柏文, 戴君武, 宁晓晴, 周惠蒙, 杨永强 (927)
不同背景气体对介质阻挡放电降解 SF₆ 气体影响的实验研究 张晓星, 胡雄雄, 肖焰艳, 崔兆仑 (937)
典型架空输电线路分段绝缘地线取能研究 谢彦斌, 蒋兴良, 胡建林, 张志劲, 范松海, 范才进 (947)
XLPE 在电场作用下的取向对温度变化条件下水树生长的促进作用机理 李康乐, 周凯, 黄明, 等 (956)

· 行业信息 ·

- 《中国电机工程学报》喜获中国出版政府奖期刊奖 (804)

· 英文概述见论文电子版

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

Vol.38 No.3 (Ser. 590)

Feb. 5, 2018

CONTENTS

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

• Grid Integration of Renewable Energy Resources •

- Review on Electricity Market Towards High Proportion of Renewable Energy XIAO Yunpeng, WANG Xifan, WANG Xiuli, BIE Zhaohong (663)
Research on “Stations-Pipelines” Layout and Optimization of Regional Energy Internet CHEN Juan, HUANG Yuansheng, LU Bin (675)
Optimal Profit Operation Strategy of the Network-connected CHP in Open Energy Market XIE Da, LUO Tian, GU Chenghong, LI Guojie, TAI Jun (685)
Decentralized Dispatch of Multi-area Integrated Energy Systems With Carbon Trading QU Kaiping, HUANG Linni, YU Tao, ZHANG Xiaoshun (697)
Reliability Evaluation of Integrated Electrical and Natural-Gas System With Power-to-Gas YU Juan, MA Mengnan, GUO Lin, ZHANG Shuguo (708)
A Voltage Correction based Inverse-time Overcurrent Protection Scheme Considering Distributed Generation Stable Infeed Effect YU Kun, LIN Xiangning, LI Hao, ZHAO Hang, et al (716)

• Large Power Grid Planning and Operation •

- Multi-objective Optimal Allocation of FACTS Devices Based on Improved Differential Evolution Harmony Search Algorithm ZHANG Tao, XU Xueqin, RAN Huajun (727)
A Method for Power System Transient Stability Assessment Based on Deep Belief Networks ZHU Qiaomu, DANG Jie, CHEN Jinfu, XU Youping, LI Yinzhong, DUAN Xianzhong (735)
Black Start Scheme Formation Considering Dynamic Wind Power Penetration Limit YE Mao, LIU Yan, GU Xueping, DU Kang (744)
Bi-level Coordination Mechanism and Operation Strategy of Multi-time Scale Multiple Virtual Power Plants LIU Siyuan, AI Qian, ZHENG Jianping, WU Renbo (753)
Frequency Measurement Algorithm Based on Frequency Shift and Filtering LI Jianmin, TENG Zhaosheng, WU Yan, WANG Yong (762)

• Smart Electric Power Distribution and Utilization Technologies •

- A Two-Layer Distributed Control Method for Islanded Microgrids by Using Multi-Agent Systems KANG Wenfa, LI Qiang, CHEN Minyou, PENG Congbo, CHEN Feixiong (770)
A Market-based Control Method for Air Conditioner Loads to Smooth Microgrid Tie-line Power Fluctuation YAO Yao, ZHANG Peichao (782)
Microgrid Comprehensive Energy Consumption System Based on Phase Change Building Materials WEI Fanrong, LIN Xiangning, CHEN Le, YU Mengqi, ZHANG Xuesong, et al (792)

• Power Generation •

- Thermodynamic Analysis of Organic Rankine Cycle Based on Irreversibility of Heat Transfer LI Xinguo, NAN Laifu, MENG Qingliang, WANG Wei, WANG Jingyi (805)
Thermodynamic Analysis of Supercritical CO₂ Part-Flow Cycle and Combined Cycle ZHENG Yawen, XU Jinliang, YANG Xufei (814)
Study On the Multi-factors Influence on Rotor Dynamic Characteristics and Stability Prediction CAO Lihua, SI Heyong, LI Pan, LI Yong (823)
Numerical Simulation of the Erosion Characteristics and Structure Optimization of Elbows Connection for Gas-solid Flow WANG Yu, HE Qi, YU Fei, LIU Ming, YAN Junjie (832)
Pulverized Coal Stream Ignition and Combustion Characteristics Based on Multiple Optical Diagnostic Techniques ZHU Wenkun, ZOU Gaopeng, ZHANG Lei, SUN Rui, PENG Jiangbo, YU Xin (840)

• Power Electronics and Drives •

- Design of Fixed Frequency LCC Resonant Converter Operating in CCVM-DCVM Boundary Mode CHEN Yiming, XU Jianping, LI Bingbing, LIN Leiming, MA Hongbo (850)
Analysis on the Unbalanced Compensation of Star Connection Cascaded H-bridge Multilevel Static Var Generator LUO Rui, HE Yingjie, LIU Yunfeng (861)
Energy-recycle Interface Circuit for LED Matrix Driving Under Maximum-efficiency Operation Point Locating Control CHEN Yi, XUE Jianjun, SHI Zhaoxia (870)
Research on a Novel T-source Solid State Breaker for Direct Current System LI Changle, NIE Ziling, ZHU Junjie, HAN Yi, XU Jie, SUN Jun (879)
Analysis and Verification of a Low-cost High Voltage Pulse Power Supply for Electrostatic Precipitators TANG Ming, NING Guangfu, QIAO Guangyao, CHEN Wu (890)

• Electric Machines and Apparatus •

- Maximum Torque Increase Using Anti-windup for High-speed IM Control DONG Zhen, YU Yong, WANG Bo, ZHANG Xu, XU Dianguo (899)
Research on the Dynamic Process of Winding Switching for a Novel 6/8 Pole Changing Line-start Permanent Magnet Synchronous Motor TIAN Mengmeng, WANG Xiuhua, LI Chang (909)
Sensorless Starting Control of Brushless Synchronous Machines at Low Speed Based on High-frequency Signal Injection by Main Exciter YANG Yuanyu, WEI Jiadan, et al (918)

• High Voltage Engineering •

- Study on Required Flexible Conductor Slack of Connecting High-voltage Electrical Equipment Under Earthquakes BAI Wen, DAI Junwu, NING Xiaoqing, ZHOU Huimeng, YANG Yongqiang (927)
Experimental Study on the Effect of Different Dilution Gases to the Degradation of SF₆ Gas by Dielectric Barrier Discharge ZHANG Xiaoxing, HU Xiongxiong, XIAO Hanyan, CUI Zhaolun (937)
Study on Power-Tapping From Segmented Insulation Ground Wire of Typical Overhead Transmission Line XIE Yanbin, JIANG Xingliang, HU Jianlin, ZHANG Zhijin, FAN Songhai, Fan Caijin (947)
Mechanism of XLPE Orientation under the Effect of Electric Field on Promoting Water Tree Propagation under the Condition of Temperature Transformation LI Kangle, ZHOU Kai, HUANG Ming, et al (956)

• For Extended Summaries, Please See the Electronic Journals.