

ISSN 1003-8930
CODEN DXJZAA

Proceedings of the CSU-EPSSA

A Publication of the Chinese Society of Universities for
Electric Power System and its Automation

电力系统及其 自动化学报

5
2020

第32卷 第5期

Vol. 32 No.5

ISSN 1003-8930



天 津 大 学 主 办

电力系统及其自动化学报

全国高等学校电力系统及其自动化学术年会刊物

第 32 卷 第 5 期(总 196 期)

2020 年 5 月

目 次

学术论文

配电网三相直挂式柔性消弧方法与样机实验研究	郑泽胤,郭谋发,金 涛(1)
基于 VSG 的光伏逆变器零电压穿越控制策略	余向阳,曹祥丽,门闯社,等(9)
基于 RBF 神经网络的参数自适应 PID 变桨控制器的设计	张真源,刘国荣,杨小亮,等(16)
基于 PCA-GPQR 的电网负荷短期概率预测	张建文,杨 晨,冉 懿,等(24)
含柔性电热负荷响应阈值的源-荷-储协调优化模型	彭院院,周任军,方绍凤,等(30)
具有 2.414 阶收敛速率的 VSC-HVDC 系统改进潮流算法	李乾坤,韦延方,王晓卫,等(38)
级联 H 桥储能系统均衡系数能量均衡策略	郑 征,王永帅,张国澎,等(47)
VMD-SWT 联合算法在故障行波检测中的应用	付 华,刘 超,张 松,等(55)
基于改进局部拓展算法的电力系统并行恢复分区方法	魏震波,关翔友,高红均,等(62)
基于电转气技术的核电调峰源荷互动优化调度方法	隋 鑫,卢盛阳,苏安龙,等(69)
考虑空间相关性采用 LSTM 神经网络的光伏出力短期预测方法	王志远,王守相,陈海文,等(78)
基于 FPGA 的有源配电网实时仿真器高速网络通讯接口设计	赵利刚,黄冠标,翟鹤峰,等(86)
沿海地区输电线路覆冰雪规律与闪络预测研究	李隆基,文清丰,张 弛,等(93)
具备边缘计算功能的新型智能集中器架构设计	陈晓江,伍江瑶,沈桂泉,等(99)
基于形态相似距离的暂态电压稳定评估方法	施 阳,李 勇,曹一家,等(105)
PR 控制的多模块多电平电力电子变压器	叶逢春,薛 飞,徐恒山,等(113)
减小微网中不同容量并联逆变器电压频率偏移方法研究	陆善婷,张 婷,陈 扬(120)
基于多层感知机的智能软开关就地控制方法	王天昊,赵长伟,马世乾,等(125)
基于 Hausdorff 距离的配电网单相接地故障选线方法	魏 鑫,舒乃秋(133)
计及小波设计和半监督机器学习的非侵入式负载识别	张致强,周步祥,张 冰,等(143)

期刊基本参数:CN 12-1251/TM*1989*m*A4*150*zh*P*¥10.00*700*20*2020-05

Proceedings of the CSU-EPSA

Vol.32 No.5 (Sum 196)

May 2020

Contents

Theoretical Research

- Study on Three-phase Suspended Flexible Arc Suppression Method for Distribution Network and Prototype Experiment
..... ZHENG Zeyin, GUO Moufa, JIN Tao (1)
- Zero Voltage Ride Through Control Strategy for Photovoltaic Inverter Based on VSG
..... YU Xiangyang, CAO Xiangli, MEN Chuangshe, *et al* (9)
- Design of RBF Neural Network Based Parameter Adaptive PID Pitch Controller
..... ZHANG Zhenyuan, LIU Guorong, YANG Xiaoliang, *et al* (16)
- Short-term Load Probability Forecasting Based on PCA-GPQR
..... ZHANG Jianwen, YANG Chen, RAN Yi, *et al* (24)
- Source-load-storage Cooperative Optimization Model with Flexible Electric and Thermal Load Response Threshold
..... PENG Yuanyuan, ZHOU Renjun, FANG Shaofeng, *et al* (30)
- Improved Power Flow Algorithm for VSC-HVDC System with 2.414-order Convergence Rate
..... LI Qiankun, WEI Yanfang, WANG Xiaowei, *et al* (38)
- Energy Equilibrium Strategy with Equilibrium Coefficient for Cascaded H-bridge Energy Storage System
..... ZHENG Zheng, WANG Yongshuai, ZHANG Guopeng, *et al* (47)
- Application of VMD-SWT Joint Algorithm in Fault Traveling Wave Detection
..... FU Hua, LIU Chao, ZHANG Song, *et al* (55)
- Partitioning Method for Parallel Restoration of Power System Based on Improved Local Fitness Method
..... WEI Zhenbo, GUAN Xiangyou, GAO Hongjun, *et al* (62)
- Source-load Interactive Optimization Scheduling Method for Nuclear Peak Regulation Based on Power-to-gas Technology
..... SUI Xin, LU Shengyang, SU Anlong, *et al* (69)
- Short-term Photovoltaic Output Forecasting Method Using LSTM Neural Network with Consideration of Spatial Correlation
..... WANG Zhiyuan, WANG Shouxiang, CHEN Haiwen, *et al* (78)
- High-speed Network Communication Interface Design for FPGA-based Real-time Simulator of Active Distribution Network
..... ZHAO Ligang, HUANG Guanbiao, ZHAI Hefeng, *et al* (86)
- Research on Ice-snow Covering Characteristics and Flashover Prediction of Coastal-region Transmission Lines
..... LI Longji, WEN Qingfeng, ZHANG Chi, *et al* (93)
- Design of Novel Smart Concentrator Architecture with Edge Computing Function
..... CHEN Xiaojiang, WU Jiangyao, SHEN Guiquan, *et al* (99)
- Transient Voltage Stability Assessment Method Based on Morphologically Similar Distance
..... SHI Yang, LI Yong, CAO Yijia, *et al* (105)
- PR-controlled Multi-modular Multi-level Power Electronics Transformer
..... YE Fengchun, XUE Fei, XU Hengshan, *et al* (113)
- Research on Method for Reducing Voltage and Frequency Deviations of Unequal Rating Parallel Inverters in Microgrid
..... LU Shanting, ZHANG Ting, CHEN Yang (120)
- Local Control Method of Soft Open Point Based on Multi-layer Perceptron
..... WANG Tianhao, ZHAO Changwei, MA Shiqian, *et al* (125)
- Single-phase Grounding Fault Line Selection Method for Distribution Network Based on Hausdorff Distance
..... WEI Xin, SHU Naiqiu (133)
- Wavelet Design and Semi-supervised Machine Learning for Non-intrusive Load Identification
..... ZHANG Zhiqiang, ZHOU Buxiang, ZHANG Bing, *et al* (143)