

# 浙江电力

ZHEJIANG ELECTRIC POWER

ISSN 1007-1881  
CN 33-1080/TM  
CODEN ZDHAAR

07  
2023

第42卷 | 第07期

☑ 中国科技核心期刊

☑ 英国《科学文摘（网络版）》（INSPEC）来源期刊

☑ 瑞典《期刊公开获取指南》（DOAJ）来源期刊

☑ 美国《乌利希期刊指南（网络版）》（Ulrichsweb）来源期刊



主办单位：浙江省电力学会、浙江省电力试验研究院

## 目次

### ·能源互联网·

柔性直流系统联网-孤岛转换控制策略

..... 王柯, 朱海勇, 刘黎, 卢宇, 董云龙, 邹强(1)

计及多时间尺度灵活性的电-气互联系统优化调度方法

..... 孙一凡, 许子芸, 王林(9)

考虑制氢设备启停过程的综合能源微网优化调度

..... 章寒冰, 叶吉超, 吴晓刚, 张磊, 胡鑫威, 韩剑, 薄耀龙(18)

### ·输变电·

高温超导电缆研究现状及应用场景分析

..... 朱金华, 朱汉山, 王恩哲, 陈向荣(26)

CVT铁磁谐振过电压的抑制与不同故障下二次电压特征分析

..... 李博文, 贺达, 杨智, 郑一鸣, 蔺家骏, 张乔根(38)

基于MEMS传感阵列的海底电缆监测系统

..... 卢志飞, 谢龙, 何旭涛, 雷之楮, 王立军(47)

特高压钢管输电塔气动力特性的CFD数值模拟

..... 王振国, 张顺, 姜文东, 段忠东, 徐枫(57)

### ·配电网·

基于图论的配电网网格化供电单元自动划分策略

..... 刘昱煜, 戴攀, 李家桐, 朱超(66)

基于改进SAX算法与贝叶斯超参数优化的配电网负荷-馈线智能匹配方法

..... 胡苏筠, 曹琰, 张霞, 吴震旦, 胡军(76)

基于馈线故障预测的配电网抢修驻点优化选址

..... 施聚辉, 黄晓燕, 曹智博, 王涛(86)

### ·发电技术·

基于模型预测控制算法的脱硫控制系统优化

..... 陈长和, 陈朝晔, 姜志伟, 冯晓露, 蒋鹏飞(94)

基于O-DAE和SVDD的汽轮机异常检测方法

..... 许伟明, 李学敏, 张祎, Maulidi Barasa, 张培泽, 易佑中(102)

660 MW汽轮机组低压缸异常振动的分析及治理

..... 滕千里, 李卫军, 马思聪, 蔡文方, 曾文进, 张占杰(110)

变流器控制的背压式抽汽汽轮机应用研究

..... 张杰, 唐丽婷(117)

## CONTENTS

### Internet of Energy

- Control strategy of transition between grid-connected and island operation of flexible DC system  
..... WANG Ke, ZHU Haiyong, LIU Li, LU Yu, DONG Yunlong, ZOU Qiang ( 1 )
- Optimal scheduling method for electricity-gas interconnected system considering multi-time-scale flexibility  
..... SUN Yifan, XU Ziyun, WANG Lin ( 9 )
- Optimal dispatch for integrated energy microgrid considering start-up and shut-down processes of hydrogen production equipment  
..... ZHANG Hanbing, YE Jichao, WU Xiaogang, ZHANG Lei, HU Xinwei, HAN Jian, BO Yaolong ( 18 )

### Transmission and Transformation

- Research status and application scenario analysis of high temperature superconducting cable  
..... ZHU Jinhua, ZHU Hanshan, WANG Enzhe, CHEN Xiangrong ( 26 )
- Suppression of ferromagnetic resonance overvoltage in CVT and feature analysis of secondary voltage under different faults  
..... LI Bowen, HE Da, YANG Zhi, ZHENG Yiming, LIN Jiajun, ZHANG Qiaogen ( 38 )
- A submarine cable monitoring system based on MEMS sensor array  
..... LU Zhifei, XIE Long, HE Xutao, LEI Zhichu, WANG Lijun ( 47 )
- CFD numerical simulation of aerodynamic characteristics of a UHV steel tubular transmission tower  
..... WANG ZhenGuo, ZHANG Shun, JIANG Wendong, DUAN Zhongdong, XU Feng ( 57 )

### Distribution Network

- An auto division strategy for grid-based power supply unit of distribution networks based on graph theory  
..... LIU Zhaoyu, DAI Pan, LI Jiatong, ZHU Chao ( 66 )
- An intelligent load-feeder matching method of distribution networks based on an improved SAX algorithm and Bayesian hyperparameter optimization  
..... HU Suyun, CAO Ying, ZHANG Xia, WU Zhendan, HU Jun ( 76 )
- Optimal location of stationing points for distribution network repair based on feeder fault prediction  
..... SHI Juhui, HUANG Xiaoyan, CAO Zhibo, WANG Tao ( 86 )

### Generation Technology

- Optimization of desulphurization control system based on model predictive control algorithm  
..... CHEN Changhe, CHEN Zhaoye, JIANG Zhiwei, FENG Xiaolu, JIANG Pengfei ( 94 )
- A steam turbine anomaly detection method based on O-DAE and SVDD  
..... XU Weimin, LI Xuemin, ZHANG Yi, Maulidi Barasa, ZHANG Peize, YI Youzhong ( 102 )
- Analysis and treatment of abnormal vibration for low-pressure cylinder of 660 MW steam turbine units  
..... TENG Qianli, LI Weijun, MA Sicong, CAI Wenfang, ZENG Wenjin, ZHANG Zhanjie ( 110 )
- Application research and optimization of back pressure extraction steam turbine controlled by converter  
..... ZHANG Jie, TANG Liting ( 117 )

# 浙江电力

ZHEJIANG ELECTRIC POWER



ISSN 1007-1881

国内定价：每册25.00元

广告发布登记证号：浙工商广发Z-022号



9 771007 188237