



国际开放获取期刊目录数据库(DOAJ)收录

国家科技期刊开放平台收录

日本科学技术振兴机构(JST)收录

www.EnergyChina.press

ISSN 2095-8676

CN 44-1715/TK

CODEN NFNJJK

南方能源建设

第八卷

第三期

二〇二一年九月

SOUTHERN ENERGY CONSTRUCTION

Vol. 8 No. 3 Sep. 2021

南方能源建设

SOUTHERN ENERGY CONSTRUCTION

2021年 9月 第8卷 第3期 Vol. 8 No. 3



主办单位：南方电网数字传媒科技有限公司
中国能源建设集团广东省电力设计研究院有限公司

◆ 综述与进展

- 海上风电场对鸟类的影响及其危害预防 胡韧, 叶锦韶, 戚永乐 (1)
双碳目标的挑战与电力结构调整趋势展望 蔡绍宽 (8)

◆ 海上风电

- 漂浮式海上风机平台阻尼结构设计与研究
..... 陈嘉豪, 尹梓炜, 朱容宽, 马兆荣, 景雪娇, 李炎 (18)
导管架船撞损伤与剩余强度的结构有限元模拟与评估方法 任灏, 方辉, 魏鑫泽 (26)
海上风电嵌岩桩水平承载力特性数值模拟研究 张力, 黄钺, 王洪庆, 赵学亮, 张景斐 (34)
竹根沙海域单桩基础竖向承载力特性数值模拟研究 张强, 葛畅, 沈晓雷, 尚进 (44)
多波束测深系统在海上风电场测量中的应用 刘新华, 吴猛 (51)

◆ 储能技术

- 面向数据中心的储能系统应用研究 周钰, 郝为瀚 (58)
基于高温熔盐储热的火电机组灵活性改造技术及其应用前景分析
..... 李峻, 祝培旺, 王辉, 仇晓龙 (63)
利用岩土储能冷热分区增强换热性能的研究 刘铮, 欧阳鑫南, 刘少勇, 陈永安 (71)
南方区域电力营销环境下的储能市场研究 饶佳, 易斌 (78)

◆ 核能发电

- 快堆核电蒸汽管道疏水系统的设计研究 林燕, 杨道宏, 施海云 (84)

◆ 火力发电

- “花园式”城市型燃机电厂生态化设计研究 吕小兰, 廖思雄, 李育军 (89)
黄埔燃机电厂去工业化设计解析 李捷 (95)
大型燃机化学加氨系统及其安全技术研究与应用 姬晓慧 (104)
超超临界机组水汽质量控制研究 李少杰, 谈群兴 (109)
700 MW 机组调频辅助服务控制系统优化提升 李强 (114)

◆ 电网技术

- 基于深度神经网络的DFIG低电压穿越技术研究 余欣梅, 陈豪君, 王星华 (122)

◆ 信 息

- 广告目次 (88)

CONTENTS

◆ Reviews & Progress

- Impact and Harm Mitigation of Offshore Wind Farms on Birds HU Ren, YE Jinshao, QI Yongle(1)
Challenges and Prospects for the Trends of Power Structure Adjustment Under the Goal of Carbon Peak and Neutrality CAI Shaokuan(8)

◆ Offshore Wind Power

- Design and Research on the Foundation Damping Structure of Semi-Submersible Floating Offshore Wind Turbines
..... CHEN Jiahao, YIN Ziwei, ZHU Rongkuan, MA Zhaorong, JING Xuejiao, LI Yan(18)
Structural Finite Element Simulation and Evaluation Method for Ship Collision Damage and Residual Strength of the Jacket
..... REN Hao, FANG Hui, WEI Xinze(26)
Numerical Simulation Research on the Horizontal Bearing Capacity of Rock-Socketed Piles for Offshore Wind Turbines
..... ZHANG Li, HUANG Yue, WANG Hongqing, ZHAO Xueliang, ZHANG Jingfei(34)
Numerical Simulation Research on the Vertical Bearing Capacity of the Single Pile Foundation in Zhugensha Sea Area
..... ZHANG Qiang, GE Chang, SHEN Xiaolei, SHANG Jin(44)
Application of Multi-Beam Sounding System in Offshore Wind Farm Survey LIU Xinhua, WU Meng(51)

◆ Energy Storage Technology

- Research on Application of Energy Storage System for Data Center ZHOU Yu(58)
Flexible Modification Technology and Application Prospect of Thermal Power Unit Based on High Temperature Molten Salt Heat Storage
..... LI Jun, ZHU Peiwang, WANG Hui, QIU Xiaolong(63)
Research on Enhancing Heat Transfer Performance by BTES Hot and Cold Partition
..... LIU Zheng, OUYANG Xinnan, LIU Shaoyong, CHEN Yongan(71)
Research on Energy Storage Market Under the Power Marketing Environment in Southern China RAO Jia, YI Bin(78)

◆ Nuclear Power Generation

- Design Research on Steam Drain System of Fast Reactor Nuclear Power Plants LIN Yan, YANG Daohong, SHI Haiyun(84)

◆ Thermal Power Generation

- Research on Ecological Design of the Urban Gas Turbine Power Plant with the Garden Style LÜ Xiaolan, LIAO Sixiong, LI Yujun(89)
Analysis on the De-Industrialization Design of Huangpu Gas Turbine Power Plant LI Jie(95)
Research and Application of Chemical Ammonia Dosing System and Its Safety Technology for Large-Scale Combined Cycle Power Plant
..... JI Xiaohui(104)
Research on Steam-Water Quality Control for Ultra-Supercritical Power Plant LI Shaojie, TAN Qunxing(109)
Optimization and Improvement of Frequency Modulation Auxiliary Service Control System for the 700 MW Unit LI Qiang(114)

◆ Power System Technology

- Research on Low Voltage Ride Through Technology of DFIG Based on Deep Neural Networks
..... YU Xinmei, CHEN Haojun, WANG Xinghua(122)

◆ Information

- Advertisement List (88)