

目 次

· 基础研究 ·

- 通道高度对翼型翅片印刷电路板换热器流动传热性能的影响
..... 李德波, 靳万龙, 陈兆立, 陈智豪, 宋景慧, 雷贤良, 邓 磊, 车得福(837)
- 氨煤混燃气相中 NO 生成的化学反应动力学分析
..... 康志忠, 张震卓, 丁 先, 赵虎军, 孙 哲(844)

· 动力设备与系统 ·

- 基于外部冷却模块和内部凝雾模块的高位收水机械通风冷却塔性能对比研究
..... 龙国庆, 张国罡, 邓伟鹏, 孙奉仲(851)
- 水力脉动下抽水蓄能机组扭振特性辨识方法
..... 马运翔, 刘晓锋, 何小锋, 彭 辉, 曹 扬(859)
- 表面冲孔影响燃料组件热工水力特性的数值模拟
..... 李 晨, 王 会, 应起繁, 刁永发(865)

· 新能源与储能 ·

- 生物制氢原理及研究进展
..... 陈鸿伟, 付昱飞, 宋杨凡, 郭成浩, 施睿鹏, 王 猛, 徐游波(872)
- 面向风电机组运维数据的知识图谱构建方法
..... 李晓璐, 王 苛, 赵 冰, 廖文字(886)
- 仿灰鲭鲨尾鳍襟翼的翼型气动性能数值研究
..... 苏顺龙, 叶学民, 吴英明, 李春曦(895)
- 立体平板热管强化温差发电性能的实验研究
..... 李大树, 丁奕文, 张程宾(905)
- 基于模型-数据联合的光伏-光热系统储能量预测
..... 田 亮, 王冠杰(911)
- 考虑火电运行平稳性的飞轮储能辅助二次调频控制策略
..... 张文政, 王 玮, 高 嵩, 李沂洹, 陈 彪, 房 方(919)

· 数字化与智能化 ·

- 基于 SOS-LSTM 的核电站隐蔽攻击方法研究
..... 王东风, 张 雄, 黄 宇, 邓鉴湧, 郭 峰(930)
- 基于 IWOA-Transformer 的磨煤机故障预警
..... 罗 毅, 段明达(939)

· 绿色低碳 ·

- 火电机组碳排放量及碳敏感性通用矩阵模型
..... 冉 鹏, 王 静, 李 政, 刘 旭, 曾庆华, 李伟起(947)
- 醇胺溶液催化法碳捕集的能耗评估及动力学分析
..... 蒋 聪, 高 歌, 江伍凤, 李小珊, 罗 聪, 张立麒, 邬 凡(956)
- CO₂ 化学吸收系统的垂直管式降膜再沸器传热传质研究
..... 许利华, 邓 峰, 吕 勋, 李蓝茜, 王 涛, 方梦祥(964)

· 综合能源系统 ·

- 新型光煤互补发电系统热力性能及技术经济性研究
..... 王 超, 王研凯, 孙浩家, 高荣泽, 全 向, 王利民, 车得福(973)
- 核反应堆超临界二氧化碳再压缩循环优化研究
..... 侯胜亚, 薛松松, 杨其国(984)
- 基于过程拆分的半闭式超临界 CO₂ 循环热力学分析及流程优化
..... 于 良, 辛团团, 张逸飞, 许 诚(991)

CONTENTS

• Fundamental Research •

Effects of Channel Height on the Thermal-Hydraulic Performance of Airfoil Fin Printed Circuit Heat Exchanger
..... LI Debo, JIN Wanlong, CHEN Zhaoli, CHEN Zhihao, SONG Jinghui, LEI Xianliang, DENG Lei, CHE Defu (837)

Chemical Reaction Kinetics Analysis of NO Generation in Gas Phase of Ammonia-Coal Co-firing
..... KANG Zhizhong, ZHANG Zhenzhuo, DING Xian, ZHAO Hujun, SUN Zhe (844)

• Power Equipment and System •

Comparative Study on Performance of High Level Water Collection Mechanical Draft Cooling Tower Based on External Cooling and Internal Condensation Modules
..... LONG Guoqing, ZHANG Guogang, DENG Weipeng, SUN Fengzhong (851)

Identification Method of Torsional Vibration Characteristics of Pumped Storage Units Under Hydraulic Pulsation
..... MA Yunxiang, LIU Xiaofeng, HE Xiaofeng, PENG Hui, CAO Yang (859)

Numerical Simulation of Thermal and Hydraulic Characteristics of Fuel Assembly Affected by Surface Punching
..... LI Chen, WANG Hui, YING Qifan, DIAO Yongfa (865)

• New Energy Resources and Energy Storage •

Principles and Research Progress of Biohydrogen Production
..... CHEN Hongwei, FU Yufei, SONG Yangfan, GUO Chenghao, SHI Ruipeng, WANG Meng, XU Youbo (872)

Knowledge Graph Construction Method for Wind Turbine Operation and Maintenance Data
..... LI Xiaolu, WANG Ke, ZHAO Bing, LIAO Wenyu (886)

Numerical Study of Aerodynamic Performance of Bionic Flap Airfoil with Mako Shark Tail-fin
..... SU Shunlong, YE Xuemin, WU Yingming, LI Chunxi (895)

Experimental Study on Three-dimensional Flat Plate Heat Pipe Enhancing the Thermoelectric Generation Performance
..... LI Dashu, DING Yiwen, ZHANG Chengbin (905)

Energy Storage Prediction of Photovoltaic-Concentrating Solar Power System Based on Model and Data
..... TIAN Liang, WANG Guanjie (911)

Secondary Frequency Control Strategy Assisted by Flywheel Energy Storage Considering Operation Stability of Thermal Power Plant
..... ZHANG Wenzheng, WANG Wei, GAO Song, LI Yihuan, CHEN Biao, FANG Fang (919)

• Digitalization and Intelligentization •

Research on Covert Attack Method in Nuclear Power Plant Based on SOS-LSTM
..... WANG Dongfeng, ZHANG Xiong, HUANG Yu, DENG Jianyong, GUO Feng (930)

Fault Warning of Coal Mill Based on IWOA-Transformer
..... LUO Yi, DUAN Mingda (939)

• Green Energy and Low-carbon Technology •

General Matrix Model of Carbon Emissions and Carbon Sensitivity of Thermal Power Units
..... RAN Peng, WANG Jing, LI Zheng, LIU Xu, ZENG Qinghua, LI Weiqi (947)

Energy Consumption Assessment and Reaction Kinetics Analysis of Catalytic Amine-based Carbon Capture Technology
..... JIANG Cong, GAO Ge, JIANG Wufeng, LI Xiaoshan, LUO Cong, ZHANG Liqi, WU Fan (956)

Study on Heat and Mass Transfer of Vertical Tube Falling Film Reboiler in CO2 Chemical Absorption System
..... XU Lihua, DENG Feng, LÜ Xun, LI Lanxi, WANG Tao, FANG Mengxiang (964)

• Integrated Energy System •

Study on Thermal and Techno-Economic Performances of a New Solar-Coal Complementary Power Generation System
..... WANG Chao, WANG Yankai, SUN Haojia, GAO Rongze, QUAN Xiang, WANG Limin, CHE Defu (973)

Optimization of Supercritical Carbon Dioxide Recompression Cycle in Nuclear Reactor
..... HOU Shengya, XUE Songsong, YANG Qiguo (984)

Thermodynamic Analysis and Process Optimization of a Semi-closed Supercritical CO2 Cycle Using Process Splitting Method
..... YU Liang, XIN Tuantuan, ZHANG Yifei, XU Cheng (991)