

全国中文核心期刊
中国科技核心期刊
中国精品科技期刊

中国科学引文数据库(CSCD)核心期刊
RCCSE中国核心学术期刊(A)
百种中国杰出学术期刊

ISSN 1002-3364
CN 61-1111/ TM
CODEN RFEAC8



Q K 2 1 4 6 2 6 2

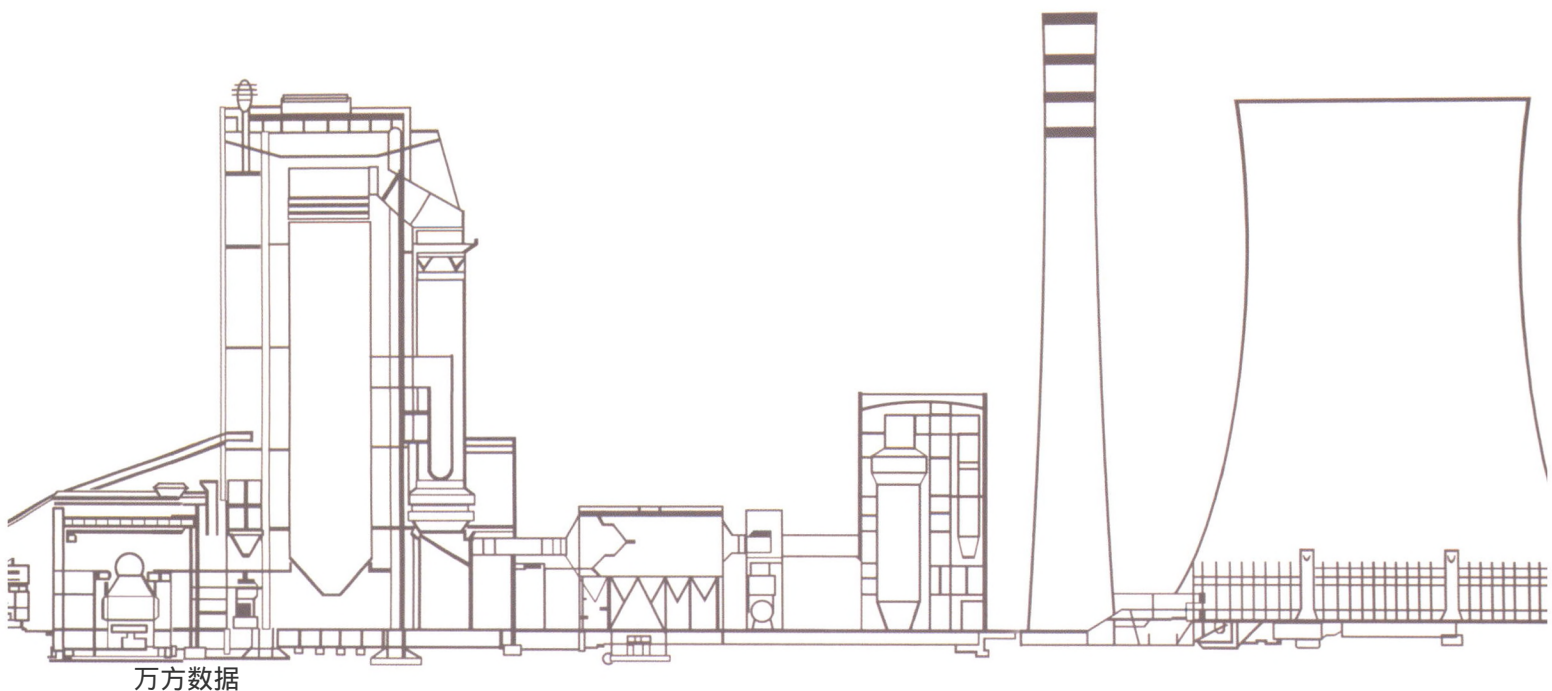
THERMAL POWER GENERATION

热力发电

2021.11

总第420期
1972年创刊
第50卷

■ 主办：西安热工研究院有限公司 中国电机工程学会



CONTENTS

目次

技术经济综述

- 01 700 ℃超超临界机组主蒸汽管道候选材料特性与服役性能研究现状
//赵子龙, 李生志, 马翔, 杨行炳, 文作伟, 李焜飞, 严靖博, 张创举
- 13 中国循环流化床燃烧技术的发展与展望//姚禹歌, 黄中, 张缦, 杨海瑞, 吕俊复, 岳光溪

新能源发电技术

- 20 煤气化燃料电池发电技术研究进展//安航, 周贤, 彭烁, 钟迪, 姚国鹏
- 27 “双碳”目标下我国氢能政策分析与思考//何青, 孟照鑫, 沈轶, 胡华为
- 37 新能源-质子交换膜电解槽电制氢容量双层规划模型研究//滕越, 赵骞, 张红, 郭建华, 袁铁江, 王正一
- 47 电网低频故障对核电机组运行安全的影响分析//陈豪, 刘鹏飞, 吴国旸, 匡波
- 54 风电-抽凝机组耦合系统供暖方案研究//张翼, 魏书洲, 任学武, 张军峰, 杨双华, 白洁, 王金星

热能科学研究

- 61 贫煤空气分级燃烧 NO_x 排放特性试验研究//王勇强, 周月桂, 韩佳宸
- 68 煤粉燃烧高温还原区喷氨脱硝技术计算模型开发与一维炉实验验证
//张波, 张国军, 张向宇, 陆续, 向小凤, 徐宏杰, 杨玉, 白文刚
- 75 预热燃烧模式下热态焦炭 NO 排放和燃尽特性实验研究//吕钊敏, 秦大川, 谭厚章, 刘兴, 王学斌, 李鹏
- 83 燃煤电站耦合生活垃圾发电技术研究//王一坤, 贾兆鹏, 魏星, 邓磊, 丹慧杰, 柳宏刚, 蔡文博
- 93 电站空冷散热器管束防冻性能实验研究//周晓慧, 王伟佳, 张宗阳, 陈磊, 周寒宇, 孔艳强, 杨立军
- 99 低压缸零出力供热工况中低压缸连通管内部流动数值模拟
//谢天, 杨荣祖, 程东涛, 张志勇, 温婷, 刘观伟, 雒青, 翟鹏程, 王汀, 于龙文
- 107 乙烯加湿燃烧特性与碳烟生成机理研究//王城景, 李智聪, 刘冰, 曾繁锦, 梁博文, 张引弟, 娄春
- 115 CFB 锅炉燃煤自脱硫试验与石灰石脱硫计算参数分析
//金森旺, 赵鹏勃, 时正海, 孙献斌, 高洪培, 王海涛, 黄中, 韩应, 刘海峰
- 122 300 MW 机组循环流化床锅炉选择性非催化还原系统模拟及优化研究
//辛胜伟, 韩平, 段彩丽, 王虎, 顾从阳, 谢国威, 邹万竹, 杜佳军
- 130 电站锅炉管内壁缺陷多通道涡流检测装置试验研究//秦明亮, 周尚峰, 李铁名, 朱洪伟, 胡志远, 李巍, 李生文
- 137 基于自适应递推最小二乘支持向量机的磨煤机一次风量软测量模型//张坚群, 张新胜

发电技术论坛

- 144 共享理念下的城市能源综合利用体系构建//陈娟, 鲁斌
- 151 脱硫废水喷雾塔粘壁和颗粒干燥特性分析及优化//陈日新, 葛仕福, 周彩玲, 田放, 蔡浩
- 158 循环水排污水处理组合工艺应用及评估//张江涛, 朱学兵, 董娟, 孙军峰
- 165 某超临界燃煤机组湿法脱硫系统降低厂用电率措施//徐鹏, 严剑文, 吴顺
- 170 基于响应曲面法的变压器油 T501 电化学测试条件优化//刘江, 薛守洪, 胡学超, 杨耀国
- 177 SCAL 型间接空冷系统循环水中溶氧量变化规律及其对 pH 值间接影响
//肖海刚, 贾兰, 黄万启, 汤自强, 王刚, 张洪博, 佟鑫

THERMAL POWER GENERATION

CONTENTS

Technical and economic review

Research status of main steam pipe candidate material characteristics and service performance for 700 °C ultra supercritical unit
..... ZHAO Zilong, LI Shengzhi, MA Xiang, YANG Xingbing, WEN Zuowei, LI Yefei, YAN Jingbo, ZHANG Chuangju(1)

Development and prospect of circulating fluidized bed combustion technology in China
..... YAO Yuge, HUANG Zhong, ZHANG Man, YANG Hairui, LYU Junfu, YUE Guangxi(13)

New energy power generation technology

Research progress on integrated gasification fuel cell power generation technology
..... AN Hang, ZHOU Xian, PENG Shuo, ZHONG Di, YAO Guopeng(20)

Analysis and thinking of hydrogen energy policies in China under “double carbon” target
..... HE Qing, MENG Zhaoxin, SHEN Yi, HU Huawei(27)

Study on double-layer planning model for hydrogen production capacity of new energy proton exchange membrane electrolyzer
..... TENG Yue, ZHAO Qian, ZHANG Hong, GUO Jianhua, YUAN Tiejia, WANG Zhengyi(37)

Operation safety analysis of nuclear power unit under power grid low frequency fault conditions
..... CHEN Hao, LIU Pengfei, WU Guoyang, KUANG Bo(47)

Heat supply schemes for a coupling system of condensing unit and wind power
..... ZHANG Yi, WEI Shuzhou, REN Xuewu, ZHANG Junfeng, YANG Shuanghua, BAI Jie, WANG Jinxing(54)

Thermal energy science research

Experimental investigation on air-staged combustion and NO_x emission characteristics of lean coal
..... WANG Yongqiang, ZHOU Yuegui, HAN Jiachen(61)

Calculation model development and one-dimensional furnace experimental verification of ammonia injection denitration technology in high temperature reduction zone of pulverized coal combustion
..... ZHANG Bo, ZHANG Guojun, ZHANG Xiangyu, LU Xu, XIANG Xiaofeng, XU Hongjie, YANG Yu, BAI Wengang(68)

Experimental study on NO emission and burnout characteristics of thermal char in preheating combustion mode
..... LYU Zhaomin, QIN Dachuan, TAN Houzhang, LIU Xing, WANG Xuebin, LI Peng(75)

Study on power generation technology of coal-fired power station coupled with domestic waste
..... WANG Yikun, JIA Zhaopeng, WEI Xing, DENG Lei, DAN Huijie, LIU Honggang, CAI Wenbo(83)

Experimental study on anti-freezing performance of finned tube bundles of air-cooled heat exchanger in power plant
..... ZHOU Xiaohui, WANG Weijia, ZHANG Zongyang, CHEN Lei, ZHOU Hanyu, KONG Yanqiang, YANG Lijun(93)

Numerical simulation of internal flow in connecting pipe of IP and LP cylinder under zero-output heating conditions of LP cylinder
..... XIE Tian, YANG Rongzu, CHENG Dongtao, ZHANG Zhiyong, WEN Ting, LIU Guanwei, LUO Qing, ZHAI Pengcheng, WANG Ting, YU Longwen(99)

Study on humidified combustion characteristics of ethylene and the soot formation mechanism
..... WANG Chengjing, LI Zhicong, LIU Bing, ZENG Fanjin, LIANG Bowen, ZHANG Yindi, LOU Chun(107)

Coal-fired self-desulfurization test and limestone desulfurization calculation parameter analysis for CFB boiler
..... JIN Senwang, ZHAO Pengbo, SHI Zhenghai, SUN Xianbin, GAO Hongpei, WANG Haitao, HUANG Zhong, HAN Ying, LIU Haifeng(115)

Simulation and optimization of SNCR system of 300 MW circulating fluidized bed boiler
..... XIN Shengwei, HAN Ping, DUAN Caili, WANG Hu, GU Congyang, XIE Guowei, WU Wanzhu, DU Jiajun(122)

Experimental study on multi-channel eddy current detection device for inner wall defects of utility boiler tubes
..... QIN Mingliang, ZHOU Shangfeng, LI Yiming, ZHU Hongwei, HU Zhiyuan, LI Wei, LI Shengwen(130)

Soft measurement model of primary air flow of coal mill based on self-adaptive recursive LSSVM
..... ZHANG Jianqun, ZHANG Xinsheng(137)

Power generation technology forum

Construction of urban energy comprehensive utilization system under the sharing conception
..... CHEN Juan, LU Bin(144)

Study on wall sticking and particle drying characteristics of desulfurization wastewater spray tower and the optimization
..... CHEN Rixin, GE Shifu, ZHOU Cailing, TIAN Fang, CAI Hao(151)

Application and evaluation of combined process of circulating cooling water blowdown treatment
..... ZHANG Jiangtao, ZHU Xuebing, DONG Juan, SUN Junfeng(158)

Measures for reducing station auxiliary power rate of WFGD system in a supercritical coal-fired unit
..... XU Peng, YAN Jianwen, WU Shun(165)

Optimization of electrochemical test conditions for transformer oil T501 based on response surface method
..... LIU Jiang, XUE Shouhong, HU Xuechao, YANG Yaoguo(170)

Variation of dissolved oxygen in circulating water of SCAL indirect air-cooling system and its indirect effect on pH value
..... XIAO Haigang, JIA Lan, HUANG Wanqi, TANG Ziqiang, WANG Gang, ZHANG Hongbo, TONG xin(177)

RELI FADIAN

热力发电



扫一扫关注我们

ISSN 1002-3364

ISSN 1002-3364
CN 61-1111/ TM

邮发代号: 国外 M3261
国内 52-103

定价: 30.00 元/期
360.00 元/年

万方数据



9 771002 336213



11>