

ISSN 0258-8013
CODEN ZDGXER

中国电机工程学报

旬刊

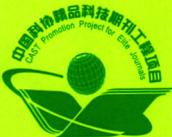
第 33 卷 第 5 期

Proceedings of the CSEE

THREE TIMES A MONTH

Vol.33 No.5

(特别关注: 发电)



2月 中旬
2013
2013-02-15 出版

ISSN 0258-8013



中国电机工程学会主办
THE CHINESE SOCIETY FOR ELECTRICAL ENGINEERING

**PROCEEDINGS OF THE CHINESE SOCIETY FOR
ELECTRICAL ENGINEERING
(PROCEEDINGS OF THE CSEE)**

Vol.33 No.5 (Ser.448)

Feb. 15, 2013

CONTENTS

(Power Generation)

Extended Summary (S1~S18)

• Thermal Engineering •

Situation of Combustion Utilization of High Sodium Coal

..... ZHANG Shouyu, CHEN Chuan, SHI Dazhong, LÜ Junfu, WANG Jian, GUO Xi, DONG Aixia, XIONG Shaowu (1)

Efficient Lignite-fired Power Generation Technology Based on Open Pulverizing Systems With Flue Gas Drying Fan Mill and Recovery of Heat and Water From Pulverizing Exhaust..... MA Youfu, GUO Xiaoke, XIAO Feng, SHI Dengyu (13)

Research on Applying Support Vector Machine to Monitor Ash Deposition of Heating Surface in a Utility Boiler

..... XIN Jing, SUN Baomin, XIAO Haiping, ZHANG Zhenxing, ZHU Xinwei, DUAN Erpeng, ZENG Juying (21)

Study on Reaction Mechanism of Co-combustion of Oil Shale Semi-coke and Corn stalks by the Absolute Reaction Rate Theory

..... WANG Qing, WANG Xudong, JIA Chunxia, LIU Hongpeng (28)

Experimental Investigation of Effect of Biomass Blending Ratio on Coal Gasification Characteristics

..... CHE Deyong , LI Jian, LI Shaohua, WANG Qingxia (35)

Cycle-life Energy Analysis of LiFePO₄ Battery for Energy Storage..... GAO Fei, YANG Kai, HUI dong, LI Dahe (41)

Inlet Flow Characteristics of Fans in Direct Dry Cooling Systems

..... ZHANG Hui, GENG Xueliang, GUO Mu, YANG Lijun, DU Xiaoze, YANG Yongping (46)

Effects of Equivalence Ratio and Velocity on NO_x Emissions in Methane Partially Premixed Flames With Acoustic Excitation

..... SHEN Zhongliang, DENG Kai, LU Bing, ZHONG Yingjie (54)

• Engineering Thermophysics •

Experimental Study on Regeneration Characteristics of CO₂-rich Blended Amine Solution Using Membrane Vacuum Regeneration Technology PAN Yili, FANG Mengxiang, WANG Zhen, LUO Zhongyang (61)

Hydrodynamic and Heat and Mass Transfer Performances of the Foam Ceramic Packing Humidifier

..... XU Zhen, LU Yuan, XIAO Yunhan (68)

Properties Optimization of Ni-Ti Biporous Wicks for Loop Heat Pipe

..... XU Jiyuan, ZOU Yong, YANG Deshuai, FAN Mingxiu (73)

• Heat Power Engineering Automatic Control •

Present Situation and Prospect of Model Predictive Control Application in Complex Power Industrial Process

..... LIU XiangJie, KONG Xiaobing (79)

• Power Mechanical Engineering •

Numerical Simulation of Wet Compression in a Transonic Compressor Stage

..... LUO Mingcong, ZHENG Qun, YUE Guoqiang, SUN Lanxin, DENG Qingfeng, QU Bin (86)

Residual Life Prediction Method for Gas Turbine HGP Component Based on Multi-environmental Time Similarity Theory

..... WAN Anping, CHEN Jianhong, SHENG Deren, HU Yacai, YAO Hua, CHEN Hui (95)

Investigation on Influences of Labyrinth Seal on Stability of High-Parameter Rotor System and Application of Axiomatic Design Method XI Wenkui, XU Jimin, ZHANG Hongtao, LU Zhouxun, YUAN Xiaoyang (102)

Research on Drag-reduction Characteristic of Non-smooth Surface Riblet Structure on Aerofoil Blade of Centrifugal Fan

..... WANG Songling, RONG Rui, WU Zhengren, ZHANG Lei (112)

Vibration Spectral Characteristics of Localized Gear Fault of Planetary Gearboxes

..... FENG Zhipeng , ZHAO Leilei , CHU Fulei (119)

Wind Turbine Tower Vibration Modeling and Monitoring Driven by SCADA Data

..... GUO Peng, XU Ming, BAI Nan, Ma Dengchang (128)

目 次 (发 电)

英文概述一览	(S1—S18)
· 热能工程 ·	
高钠煤燃烧利用现状	张守玉, 陈川, 施大钟, 吕俊复, 王健, 郭熙, 董爱霞, 熊绍武 (1)
基于炉烟干燥及水回收风扇磨仓储式制粉系统的高效褐煤发电技术.....	马有福, 郭晓克, 肖峰, 等 (13)
应用支持向量机监测电站锅炉受热面积灰研究	信晶, 孙保民, 肖海平, 张振星, 祝欣慰, 等 (21)
采用绝对反应速率理论研究油页岩半焦与玉米秸秆混烧反应机制...	王擎, 王旭东, 贾春霞, 刘洪鹏 (28)
生物质掺混比例对煤气化特性影响的试验研究	车德勇, 李健, 李少华, 王庆霞 (35)
储能用磷酸铁锂电池循环寿命的能量分析	高飞, 杨凯, 惠东, 李大贺 (41)
直接空冷风机进口空气流动特性	张辉, 耿学良, 郭牧, 杨立军, 杜小泽, 杨勇平 (46)
声场作用下甲烷部分预混火焰不同当量比和流速对 NO _x 生成的影响	沈忠良, 邓凯, 卢冰, 钟英杰 (54)
· 工程热物理 ·	
混合吸收剂膜减压再生特性的试验研究	潘一力, 方梦祥, 汪桢, 骆仲泱 (61)
泡沫陶瓷填料湿化器的流体力学和传热传质性能.....	徐震, 路源, 肖云汉 (68)
环路热管镍钛双孔隙毛细芯的性能优化	徐计元, 邹勇, 杨得帅, 范明秀 (73)
· 热工自动控制 ·	
电力工业复杂系统模型预测控制——现状与发展.....	刘向杰, 孔小兵 (79)
· 动力机械与工程 ·	
跨音速级压气机湿压缩数值研究	罗铭聪, 郑群, 岳国强, 孙兰昕, 邓庆锋, 屈彬 (86)
基于多重环境时间相似理论的燃气轮机热通道部件剩余寿命预测方法.....	万安平, 陈坚红, 等 (95)
迷宫密封对高参数转子系统稳定性的影响分析及公理设计方法应用	席文奎, 许吉敏, 张宏涛, 等 (102)
离心风机翼型叶片非光滑表面脊状结构减阻特性.....	王松岭, 戎瑞, 吴正人, 张磊 (112)
行星齿轮箱齿轮局部故障振动频谱特征	冯志鹏, 赵镭镭, 褚福磊 (119)
基于 SCADA 运行数据的风电机组塔架振动建模与监测	郭鹏, 徐明, 白楠, 马登昌 (128)
· 行业信息 ·	
《中国电机工程学报》入选“2012 中国最具国际影响力学术期刊”	(34)
关于《中国电机工程学报》录用稿件优先数字出版的说明.....	(127)
论文点评	(135)