



“中国期刊网(CNKI)”全文收录期刊
《中国核心期刊(遴选)数据库》收录期刊
《中国学术期刊综合评价数据库》来源期刊
《中文科技期刊数据库》全文收录期刊
《中国学术期刊(光盘版)》全文收录期刊
美国《化学文摘》(CA)源刊
河北省优秀期刊

ISSN 2095-2716

HUABEI LIGONG DAXUE XUEBAO ZIRANKEXUEBAN

华北理工大学

学报
自然科学版

JOURNAL OF
NORTH CHINA UNIVERSITY OF
SCIENCE AND TECHNOLOGY
NATURAL SCIENCE EDITION

Vol.44 No.3
第44卷 第3期

3
2022

华北理工大学学报（自然科学版）

2022年第3期

第44卷第3期

(总第165期)

目 次

矿业、冶金

- 基于稳健估计不同权函数的氧化铝光谱值对比 戴佳乐,汪金花(1)
铁矿粉粒度对烧结基础性能的影响 付壮壮,韩秀丽,刘磊,等(8)
活动烟罩集箱流量分配数值模拟 王彦刚,王洪利,梁精龙,等(15)
低渣比条件下高炉渣脱硫能力及其机理 陈立达,刘然,邓勇,等(23)
100t 钢包底吹氩搅拌钢液去除夹杂物数值模拟研究 赵建鹏,唐国章,曾亚南,等(31)
SPCC/AM60/SPCC 复合板热拉伸变形行为 刘泽成,郑小平,李红斌,等(39)
 K_2CO_3 活化电炉粉尘高效制备生物柴油 王晓嫚,宗佳琦,倪君禹,等(46)
基于 MGWR 模型的城市住宅用地地价驱动因素分析 刘亚静,李胜男(53)
微波辐照对活性炭吸附性能和烟气脱硫的影响 刘建爽,石焱,宋长鹤,等(63)

材料、化工

- 具有高效三相界面的阻抗谱型 NO_2 传感器 戴磊,田梦,孟维薇,等(71)

建筑、环境

- 高温后水泥基灌浆料力学性能试验研究 陈思,徐国强,张薇,等(80)
大气环境对石质文物遗址病变机理的影响研究 宋土顺,王德顺,田苗,等(86)
城市“三生”空间功能格局与分异特征分析-以辽宁省为例 杨月恒,郭力娜,姜广辉(94)
臭氧化技术深度处理市政污水实验研究 高群丽,张耀宗,孙锦程,等(103)

数理科学、计算机

基于 TSA-BP 的商品住宅价格研究 胡支滨, 秦宇, 韩阳(111)

生物、海洋

一株高活性纤维二糖酶真菌的筛选与鉴定 尹守亮, 杨镒婴, 徐黛云, 等(119)

安全与应急管理

基于 AHP 模糊综合评价法的曹妃甸港口设备安全管理评价 张子超, 何新生(126)

期刊基本参数:CN13-1419/N * 1979 * q * A4 * 132 * zh * P * ¥10.00 * 550 * 17 * 2022-07

JOURNAL OF NORTH CHINA UNIVERSITY OF SCIENCE AND TECHNOLOGY
(Natural Science Edition)

No. 3,2022

No. 3 Vol. 44

(Sum,165)

CONTENTS

Mining Engineering and Metallurgical Engineering

Comparison of Alumina Spectral Values Based on Robust Estimation with Different Weight Functions	DAI Jia-le, WANG Jin-hua(1)
Effect of Particle Size of Iron Ore Powder on Basic Properties of Sintering	FU Zhuang-zhuang, HAN Xiu-li, Liu Lei, etc(8)
Numerical Simulation on Header Flow Distribution of Movable Fume Hood	WANG Yan-gang, WANG Hong-li, LIANG Jing-long, etc(15)
Desulfurizatz Capacity of Blast Furnace Slag at Low Slag Ratio and Its Mechanism	CHEN Li-da, LIU Ran, DENG Yong, etc(23)
Numerical Simulation on Removal of Inclusions in Molten Steel with Argon Blowing at Bottom of 100t Ladle	ZHAO Jian-peng, TANG Guo-zhang, ZENG Ya-nan, etc(31)
Hot Tensile Deformation Behavior of SPCC / AM60 / SPCC Composite Plate	LIU Ze-cheng, ZHENG Xiao-Ping, LI Hong-bin, etc(39)
Efficient Preparation of Biodiesel from Electric Furnace Dust Activated by K_2CO_3	WANG Xiao-man, ZONG Jia-qi, Ni Jun-yu, etc(46)
Analysis of Driving Factors of Urban Residential Land Price Based on MGWR Model	LIU Ya-jing, LI Sheng-nan(53)
Effects of Microwave Irradiation on Adsorption Properties and Flue Gas Desulfurization of Activated Carbon	LIU Jian-shuang, SHI Yan, SONG Chang-he, etc(63)

Material and Chemical Engineering

- Impedancemetric-type NO₂ sensor with High Efficiency Three-phase Boundary
..... DAI Lei, TIAN Meng, MENG Wei-wei, etc(71)

Architectural Science and Environmental Science

- Experimental Study on Mechanical Properties of Cement-Based Grout after High Temperature
..... CHEN Si, XU Guo-qiang, ZHANG Wei, etc(80)
Effect of Atmospheric Environment on Pathological Mechanism of Stone Cultural Relic Site
..... SONG Tu-shun, Ceng Guang-you, Tian Miao, etc(86)
Analysis on Spatial Function Pattern and Differentiation Characteristics of Urban Space of Production ,
Living and Ecospace in Liaoning Province YANG Yue-heng, GUO Li-na, JIANG Guang-hui(94)
Experimental Research on Advanced Treatment of Municipal Wastewater by Ozone Oxidation Technology
..... GAO Qun-li, ZHANG Yao-zong, SUN Jin-cheng, etc(103)

Mathematical Science and Computer

- Research on Price of Commercial Housing Based on TSA-BP
..... HU Zhi-bin, QIN Yu, HAN Yang(111)

Biological Science and Marine Science

- Screening and Identification of Filamentous Fungus with Higher Cellobiase Activity
..... YIN Shou-liang, YANG Yi-ying, XU Dai-yun, etc(119)

Safety and Emergency Management

- Caofeidian Port Equipment Safety Management Evaluation Based on AHP Fuzzy Comprehensive Evalu-
tion Method ZHANG Zi-chao, HE Xin-sheng(126)