



中国科技核心期刊 河南省自然科学一级期刊
科学出版社合作期刊

ISSN1004-3918
CN41-1084/N

河南科学

HENAN SCIENCE

第 39 卷 第 12 期

Vol. 39 No. 12

2021



科学出版社
Science Press

河南省科学院 主管 主办

河南科学

2021年 第39卷 第12期

目次

环境科学与工业技术

- 基于土水分特征曲线的废弃泥固化机理研究 (1893)
吴言坤 白坤 江苏洋 杨志超 袁锐
- Cu²⁺与Pb²⁺在高岭土中的迁移和淋洗试验研究 (1899)
曹炜炜 艾英钵 沙学军 王安
- 基于溃坝洪水演进模拟的动态应急转移路线实现方法 (1906)
杨军 杨德玮 董凯 张雄杰
- 鸡蛋膜负载的银颗粒对盐酸四环素的降解研究 (1913)
吴佳娜 张紫茹 孙然 马春蕾 唐建可 王琦

材料科学与化学研究

- 二氧化硅包覆活性氧化铝粉体的制备及高温相变行为研究 (1920)
蒋豪丽 刘瑞婷 张建峰 韩晓莉 後藤孝
- BOX-BEHNKEN设计-效应面法优化黑胡椒中的胡椒碱提取工艺 (1928)
王韬 王志尧 陈飞 常霞 马艳妮 姜晓
- 菊芋叶片中绿原酸的提取工艺优化及动态含量研究 (1935)
赵俊宏 王红星 曹长青 樊燕鸽 薛宝玉
- 二硫化四乙基秋兰姆的流动化学合成技术开发 (1941)
张雁 张智亮 宋士杰 王芳晓 付顺国 成兰兴 王艳利

交通科学与建筑科学

- 基层加固透水人行步道受力性能试验研究 (1946)
李学民 孙敬文 安雪晖 宋小软 张冠方
- 三种典型悬挑脚手架支撑体系的对比分析 (1954)
耿大将 龙敏健 金学胜 刘融 杨兵
- 非均匀应力场下隧道围岩弹塑性分析统一解 (1963)
周鹏 刘永军

- 基于应变测量的隧道周边水土压力反演方法研究 (1970)
李 波 姚彦东 武 建 唐永圣
- 利用废弃陶瓷磨具再生砂制备烧结透水砖 (1976)
边华英 王学涛 薛俊杰 刘永川 杨 崇

地球科学

- 缙云抽水蓄能电站节理岩体边坡开挖稳定性综合评价 (1981)
史作言 吴小林 鲍利佳 王 健 张文涛 祁长青
- 碎石土边坡坡度对桩基地震响应的影响 (1988)
甘 俊 谭维佳 岳 宏 祝铠甲 马长政
- 河南省沿黄区域土地利用变化多情景模拟及生态系统服务价值评估 (1994)
付文静 黄璐嫦 汪 松
- 1961—2016年黄河中游区间径流变化及归因分析 (2007)
杨 旭 姬广兴 杨元达 王 超

管理科学与城市科学

- 基于 MuGNN 模型的互联网医疗知识融合研究 (2014)
廖开际 王 莹
- “双循环”新发展格局的科学内涵与实施路径 (2023)
衣建东
- 基于 GTAP 模型的中美贸易摩擦对我国天然气进口影响研究 (2030)
李宏勋 张云玲
- 基于熵权 TOPSIS 的城市青年人才吸引力分析研究 (2038)
王文寅 张登博
- 双碳背景下抽水蓄能在山东省的发展前景与规划建议 (2043)
黄 健 董 浩 高新萍

养老研究专题

- 社区人居环境宜老性研究进展——基于 CiteSpace 软件的图谱量化分析 (2049)
黄丽蒂 许欣欣 刘 莹 罗开洲
- 基于 DEMATEL-ISM 的养老 PPP 项目落地影响因素研究 (2058)
王文凯 郝生跃 兰荣娟

HENAN SCIENCE

Vol.39 No.12 2021

CONTENTS

Environmental Science and Industrial Technology

- Study on Solidification Mechanism of Dredged Sludge Based on Soil–Water Characteristic Curve (1893)
WU Yankun, BAI Kun, JIANG Suyang, YANG Zhichao & YUAN Rui
- Experimental Study on Migration and Leaching of Cu^{2+} and Pb^{2+} in Kaolin (1899)
CAO Weiwei, AI Yingbo, SHA Xuejun & WANG An
- Realization Method of Dynamic Emergency Transfer Route Based on Dam–Break Flood Routing Simulation (1906)
YANG Jun, YANG Dewei, DONG Kai & ZHANG Xiongjie
- Eggshell Membrane Templated Silver Particles for Tetracycline hydrochloride Degradation (1913)
WU Jia'na, ZHANG Ziru, SUN Ran, MA Chunlei, TANG Jianke & WANG Qi

Material Science and Chemistry Research

- Preparation and High Temperature Phase Transformation Behavior of Activated Alumina Powders Coated with Silicon Dioxide (1920)
JIANG Haoli, LIU Ruiting, ZHANG Jianfeng, HAN Xiaoli & TAKASHI Goto
- Optimization of Extraction Process of Black Pepper by BOX–BEHNKEN Design and Response Surface Methodology (1928)
WANG Tao, WANG Zhiyao, CHEN Fei, CHANG Xia, MA Yanni & JIANG Xiao
- Extraction Process Optimization and Dynamic Content of Chlorogenic Acid from *Helianthus tuberosus* Leaves (1935)
ZHAO Junhong, WANG Hongxing, CAO Changqing, FAN Yange & XUE Baoyu
- Development of Continuous–flow Synthesis Technology of Tetraethylthiuram Disulfide (1941)
ZHANG Yan, ZHANG Zhiliang, SONG Shijie, WANG Fangxiao, FU Shunguo, CHENG Lanxing & WANG Yanli

Transportation Science and Construction Science

- Experimental Study on the Mechanical Performance of the Permeable Footpath with Reinforced Substrate (1946)
LI Xuemin, SUN Jingwen, AN Xuehui, SONG Xiaoruan & ZHANG Guanfang
- Comparative Analysis of Three Typical Cantilever Scaffold Support Systems (1954)
GENG Dajiang, LONG Minjian, JIN Xuesheng, LIU Rong & YANG Bing
- Unified Solution of Elastic–Plastic Analysis of Tunnel Surrounding Rock under Non–uniform Stress Field (1963)
ZHOU Peng & LIU Yongjun
- 万方数据

- Inversion Method of Surrounding Water–Earth Pressure of Tunnel with Strain Measurement (1970)
 LI Bo, YAO Yandong, WU Jian & TANG Yongsheng
- Preparation of Sintered Permeable Brick with Recycled Aggregates from Waste Ceramic Abrasives (1976)
 BIAN Huaying, WANG Xuetao, XUE Junjie, LIU Yongchuan & YANG Chong

Earth Science

- Comprehensive Assessment on Excavation Stability of Rock Slope in Jinyun Pumped Storage Power Station (1981)
 SHI Zuoyan, WU Xiaolin, BAO Lijia, WANG Jian, ZHANG Wentao & QI Changqing
- Influence of Slope Gradient of Gravel Soil on Seismic Response of Pile Foundations (1988)
 GAN Jun, TAN Weijia, YUE Hong, ZHU Kaijia & MA Changzheng
- Multi–Scenario Simulation of Land Use Change and Ecosystem Service Value Evaluation in Area along the Yellow River in Henan Province (1994)
 FU Wenjing, HUANG Junchang & WANG Song
- Runoff Changes and Their Attributions in the Middle Reaches of the Yellow River from 1961 to 2016 (2007)
 YANG Xu, JI Guangxing, YANG Yuanda & WANG Chao

Management Science and Urban Science

- Research on Internet Medical Knowledge Fusion Based on MuGNN Model (2014)
 LIAO Kaiji & WANG Ying
- Scientific Connotation and Implementation Path of the New Development Pattern of “Dual Circulation” (2023)
 YI Jiandong
- Research on the Impact of China–US Trade Friction on China’s Natural Gas Import Based on GTAP Model (2030)
 LI Hongxun & ZHANG Yunling
- Analysis of Young Talent Attraction of Major Cities in China Based on Entropy Weight TOPSIS (2038)
 WANG Wenyin & ZHANG Dengbo
- Development Prospects and Planning of Pumped Storage Power in Shandong Province under “Carbon Peaking and Carbon Neutrality Goals” (2043)
 HUANG Jian, DONG Hao & GAO Xinpeng

Special Column of the Elderly Services

- Research Progress on the Suitability of Community Human Settlement for the Elderly: Quantitative Analysis of Atlas Based on CiteSpace (2049)
 HUANG Lidi, XU Xinxin, LIU Ying & LUO Kaizhou
- Research on Influencing Factors of Pension PPP Project Implementation Based on DEMATEL–ISM (2058)
 WANG Wenkai, HAO Shengyue & LAN Rongjuan