



目 次

· 轻工技术与工程 ·

- 磺化杯芳烃改性聚氨酯复鞣剂的合成及其性能 李文博, 马建中, 周永香, 等(1)
- “两步法”改性超细纤维合成革基布及性能研究 任龙芳, 马向东, 王少婷(8)
- 深度共熔溶剂应用于松木类木质素分离的研究 张肖肖, 娄 瑞, 董继先, 等(13)
- 碱式硫酸铝作为交联剂提高羽绒蓬松度的工艺及性能研究
..... 张 琦, 强涛涛, 陈 良(19)
- 一株发酵木糖产氢细菌的分离和产氢特性 安 丹, 徐瑞娜, 谢林花, 等(24)
- 市政污泥制备建筑外墙底漆的可行性研究 韩 卿, 陈光照(33)
- 性别与足弓类型对慢跑时足底压力中心轨迹的影响 汤运启, 张移帆, 王志康, 等(40)

· 食品科学与生物工程 ·

- 不同品种猕猴桃果实的抗氧化活性研究 赵燕妮, 李 悦, 雷 靖, 等(46)
- 传统老坛自然发酵泡菜中真菌群落结构多样性分析 吕嘉枬, 晁倩文, 刘秉坤, 等(53)
- 响应面法优化杏鲍菇粗多糖提取条件及其体外活性 龚 频, 王思远, 陈雪峰, 等(60)
- 乌头中内生真菌的分离鉴定及其抑菌活性和机制研究
..... 夏 飞, 上官晓雨, 冯思亮, 等(66)
- 黄芩提取物对嗜水气单胞菌抑菌活性和机制的研究 王 意, 张博涵, 陆一鸣, 等(73)
- 基于 JAK-STAT 信号通路的药物研究进展 王学川, 李 霄, 梁承远(79)

· 化学与化学工程 ·

两个咪唑基 d¹⁰ 过渡金属聚合物的离子热合成及其结构 刘 冰, 张 甜, 祁翠星, 等(87)

软膜型煤炭阻燃抑尘剂的制备及其应用 李晨辉, 尚青青, 来水利, 等(93)

纤维素多孔膜的制备及其性能研究 唐蕊华, 刘丽娜, 郑卓寅, 等(99)

甘肃某地褐煤中腐植酸的提取工艺研究 黄良仙, 韩星星, 马 展, 等(105)

基于光子晶体的苯酚传感器构建及其响应性能 李 露, 孟甜甜(111)

• 材料科学与工程 •

添加 MgCl₂ · 6H₂O 对负膨胀材料 Zr₂(WO₄)(PO₄)₂ 的影响 原晓艳, 李欢欢, 乔祖强, 等(115)

NBT-ST/PVDF 复合膜的储能性能的提高 王 卓, 李银博, 王梹颖, 等(119)

纳米银线基水性导电油墨的制备与性能 迟聪聪, 夏 亮, 卢金锋, 等(125)

玻璃超精细蒙砂制备工艺的研究 殷海荣, 汪枫帆, 刘存海(131)

• 机械、电气工程与信息技术 •

超临界流体 Z 型并联管组流动特性实验研究 赵 于, 胡晓玮, 刘红杨, 等(137)

变压器用散热器数值模拟和结构优化 张 勇, 马玉龙, 王永庆, 等(142)

自适应噪声抵消算法优化与 FPGA 实现 王志铎, 马令坤, 张俊涛(147)

一种结合优化后 AES 与 RSA 算法的二维码加密算法 刘海峰, 刘 洋, 梁星亮(153)

基于多特征相似性融合的半参考图像质量评价 崔 力(160)

• 物理与数学科学 •

SrCoO₃ 的电子结构、弹性及热力学性质的第一性原理计算 李文涛(165)

关于定常 Navier-Stokes 方程非协调有限元三种迭代方法的研究 高嘉伟, 张 翀, 李 剑(170)



Journal of Shaanxi University of Science & Technology

Published on Dec. 25, 2019

Vol. 37

No. 6

Sum No. 187

CONTENTS

Synthesis and properties of sulfonated calixarene modified polyurethane retanning agent	LI Wen-bo, MA Jian-zhong, ZHOU Yong-xiang, et al (1)
Study on “two-step” modification and properties of superfine fiber synthetic leather base	REN Long-fang, MA Xiang-dong, WANG Shao-ting (8)
Study on the separation of lignin from pine biomass based on deep eutectic solvent	ZHANG Xiao-xiao, LOU Rui, DONG Ji-xian, et al (13)
Study on technology and properties of improving the bulkiness of the down fibers by crosslinking agent of alkaline zirconium sulfate	ZHANG Qi, QIANG Tao-tao, CHEN Liang (19)
Isolation and hydrogen production characteristics of a hydrogen-producing bacteria using xylose	AN Dan, XU Rui-na, XIE Lin-hua, et al (24)
Feasibility study on preparation of exterior wall primer by using municipal sludge	HAN Qing, CHEN Guang-zhao (33)
Effect of gender and arch type on the trajectory of the center of pressure during jogging	TANG Yun-qi, ZHANG Yi-fan, WANG Zhi-kang, et al (40)
Study on antioxidant properties of different kiwifruit cultivars	ZHAO Yan-ni, LI Yue, LEI Jing, et al (46)
Diversity analysis of fungal community structure in natural fermented pickles of traditional altar	LV Jia-li, CHAO Qian-wen, LIU Bing-kun, et al (53)
Optimization of crude polysaccharide extraction conditions from pleurotus eryngii by response surface methodology and its vitro activities	GONG Pin, WANG Si-yuan, CHEN Xue-feng, et al (60)
Study on isolation, identification and antibacterial activity and mechanism of endophytic fungi from <i>Aconitum carmichaeli</i> debx.	XIA Fei, SHANGGUAN Xiao-yu, FENG Si-liang, et al (66)
Study on bacteriostatic activity and mechanism of <i>scutellaria baicalensis</i> against <i>Aeromonas hydrophila</i>	WANG Yi, ZHANG Bo-han, LU Yi-ming, et al (73)
Progress in drugs research based on JAK-STAT signaling pathway	WANG Xue-chuan, LI Xiao, LIANG Cheng-yuan (79)

Ionothermal syntheses and crystal structures of two d ¹⁰ imidazole-based coordination polymers	LIU Bing , ZHANG Tian , QI Cui-xing , et al (87)
Preparation and application of soft membrane coal flame retardant dust suppressant	LI Chen-hui , SHANG Qing-qing , LAI Shui-li , et al (93)
Study on preparation and characteristic of porous cellulose membrane	TANG Rui-hua , LIU Li-na , ZHENG Zhuo-yin , et al (99)
Study on the extraction technology of humic acid from the lignite in a place of Gansu province	HUANG Liang-xian , HAN Xing-xing , MA Zhan , et al (105)
Preparation of phenol sensor based on photonic crystals and its response performance	LI Lu , MENG Tian-tian (111)
Effects of MgCl ₂ • 6H ₂ O on the negative expansion material Zr ₂ (WO ₄)(PO ₄) ₂	YUAN Xiao-yan , LI Huan-huan , QIAO Zu-qiang , et al (115)
Enhanced energy storage properties of NBT-ST/PVDF composite films	WANG Zhuo , LI Yin-bo , WANG Xiao-ying , et al (119)
Preparation and properties of silver nanowires based waterborne conductive ink	CHI Cong-cong , XIA Liang , LU Jin-feng , et al (125)
Research of preparation technology of glass ultrafine frosting	YIN Hai-rong , WANG Feng-fan , LIU Cun-hai (131)
Experimental study on flow characteristics of supercritical fluid Z-parallel tube sets	ZHAO Yu , HU Xiao-wei , LIU Hong-yang , et al (137)
Numerical simulation and structural optimization of radiator for transformer	ZHANG Yong , MA Yu-long , WANG Yong-qing , et al (142)
Adaptive noise cancellation algorithm optimization and FPGA implementation	WANG Zhi-duo , MA Ling-kun , ZHANG Jun-tao (147)
A QR code encryption technique combining optimized AES and RSA algorithms	LIU Hai-feng , LIU Yang , LIANG Xing-liang (153)
Reduced-reference image quality assessment based on multi-feature similarity fusion	CUI Li (160)
First-principles calculation of electronic, elastic, phonon and thermal properties of SrCoO ₃	LI Wen-tao (165)
Study of three iterative finite element method on the stability of nonconforming Navier-Stokes equations	GAO Jia-wei , ZHANG Chong , LI Jian (170)
