



目 次

· 轻工科学与工程 ·

- γ -戊内酯/低共熔溶剂绿色体系分级木质素及其结构表征 薛白亮, 李 豫, 唐 锐, 等(1)
- TEMPO 氧化细菌纤维素基纳米复合凝胶的制备及其结构表征 钱 鑫, 徐永建(7)
- ZnO/CNFs 锂硫电池隔膜的制备及其电化学性能研究 李金宝, 黎金桂, 修慧娟, 等(13)
- 玉米芯纤维素的绿色高效提取及其特性研究 王 建, 张瑞敏, 权彩琳, 等(19)
- DES/TEMPO 法制备纳米纤维素及其性能研究 李佩燚, 雷镐哲, 简博星, 等(25)
- 壳聚糖-海藻酸钠水凝胶的制备及其在制革含 Cr(III)废水治理-复鞣填充工段的潜在应用 官小玉, 张炳原, 常金明, 等(31)
- 根际细菌对番茄幼苗生长与 Cd 解毒机制研究 郭军康, 王 敏, 吕 欣, 等(39)

· 食品科学与生物工程 ·

- 基于 GC-MS 代谢组学技术的不同品种猕猴桃果实化学成分差异性研究 赵燕妮, 张 坤, 许牡丹, 等(45)
- 低共熔溶剂对燕麦蛋白质提取的影响 朱振宝, 梁珍珍, 易建华(51)
- 组氨酸激酶 BaeS 对溶藻弧菌毒力因子和环境应激的作用 李莹玉, 贺小贤, 蒋合阳, 等(57)
- 独活中蛇床子素的提取工艺研究 孔 阳, 闫 辉, 许 江, 等(65)

· 化学与化学工程 ·

- B 掺杂碳量子点的制备及其对葡萄糖选择性分析 李 季, 张 苑, 王玉玉(72)

丝素蛋白气凝胶/聚羟基聚氨酯类玻璃高分子复合材料的制备及其性能研究	邓 依, 冯子昊, 杨正心, 等(81)
不同形貌钒酸锌的制备及其电化学性能研究	迟聪聪, 白飞飞, 王 翌, 等(89)
含芴基 Cardo 环水性聚氨酯的制备及其热性能研究	赵艳娜, 薛瑜瑜, 张 婷(97)
断控岩溶油藏层间差异及分层产量试井分析方法	尚根华, 魏 操, 曹立迎, 等(104)
• 材料科学与工程 •	
Ni ₃ S ₂ /NiV-LDH 纳米线异质结构用于高效电催化全解水反应	冯亮亮, 付常乐, 李国栋, 等(110)
碳化硅晶须生成机理研究	何天颖, 白建光, 赵 强, 等(119)
碳纤维增强微孔镁掺杂羟基磷灰石生物陶瓷的制备及其性能	魏森森, 赵雪妮, 刘 傲, 等(124)
Ni、Y 复合石墨烯作为润滑油添加剂对 GCr15 钢摩擦学行为的影响	师 晶, 赵润强, 王琬蓉, 等(133)
• 机械、电气工程与信息科学 •	
LLC 谐振变换器模糊自抗扰控制	张方辉, 邱惠敏(140)
400 Hz 飞机地面供电系统线缆参数在线辨识与 DVR 补偿控制策略	陈鹏宇, 刘宝泉, 吴泉兵(147)
基于改进的 ResNet 网络的中餐图像识别方法	王海燕, 张 渺, 刘虎林, 等(154)
基于压缩与激励机制和残差连接的 SRG 古陶瓷器形分类	杨 云, 史雯倩, 宋清漪(161)
基于多尺度分组卷积 ResNet34 的岩石识别模型	符甲鑫, 汪 琦(167)
基于 MoblieNet v2 的图像语义分割网络	王改华, 翟乾宇, 曹清程, 等(174)
基于加权网格运动统计的改进 ORB 算法	党宏社, 李俊达, 张选德(182)
• 物理与数学科学 •	
基于多混沌系统的图像加密算法	刘海峰, 周雪飞, 梁星亮, 等(188)



Journal of Shaanxi University of Science & Technology

Published on Feb. 25, 2022

Vol. 40

No. 1

Sum No. 200

CONTENTS

Fractionation and structural characterization of lignin in γ -valerolactone/deep eutectic solvents system	XUE Bai-liang, LI Yu, TANG Rui, et al(1)
Preparation and structural characterization of TEMPO-oxidized bacterial cellulose-based nanocomposite gel	QIAN Xin, XU Yong-jian(7)
Study on preparation and electrochemical performance of ZnO/CNFs lithium-sulfur battery separator	LI Jin-bao, LI Jin-gui, XIU Hui-juan, et al(13)
Study on green and efficient extraction of corncob cellulose and its characteristics	WANG Jian, ZHANG Rui-min, QUAN Cai-lin, et al(19)
Study on preparation and properties of nano-cellulose by DES/TEMPO method	LI Pei-yi, LEI Hao-zhe, JIAN Bo-xing, et al(25)
Preparation of chitosan-sodium alginate hydrogel and its potential application in Cr(III) remediation-ret- anning/filling of leather industry	GUAN Xiao-yu, ZHANG Bing-yuan, CHANG Jin-ming, et al(31)
Effect of plant growth promoting rhizobacteria on cadmium accumulation and detoxification in tomato seedlings	GUO Jun-kang, WANG Min, LV Xin, et al(39)
Study on the chemical constituents of different kiwifruit cultivars based on GC-MS metabolomics	ZHAO Yan-ni, ZHANG Kun, XU Mu-dan, et al(45)
Effect of deep eutectic solvents on oat protein extraction	ZHU Zhen-bao, LIANG Zhen-zhen, YI Jian-hua(51)
Effects of histidine kinase Baes on virulence factors and environmental stress of <i>Vibrio alginolyticus</i>	LI Ying-yu, HE Xiao-xian, JIANG He-yang, et al(57)
Study on the extraction technology of Osthole from <i>Angelica pubescens Maxim. f. biserrata</i> Shan et Yuan	KONG Yang, YAN Hui, XU Jiang, et al(65)
Preparation of B doped carbon quantum dots and selectivity analysis for glucose	LI Ji, ZHANG Yuan, WANG Yu-yu(72)

Study on preparation and properties of silk fibroin aerogel/polyhydroxyurethane vitrimer composites	DENG Yi , FENG Zi-hao , YANG Zheng-xin , et al (81)
Preparation of different morphologies of zinc vanadate and its electrochemical performance	CHI Cong-cong , BAI Fei-fei , WANG Zhao , et al (89)
Study on preparation and thermal properties of Cardo cyclic waterborne polyurethane containing fluorenyl group	ZHAO Yan-na , XUE Yu-yu , ZHANG Ting (97)
A well test approach for analyzing the interlayer difference and stratified production in thick fault-controlled karst reservoirs	SHANG Gen-hua , WEI Cao , CAO Li-ying , et al (104)
Heterostructured Ni ₃ S ₂ /NiV-LDH nanowires as highly efficient electrocatalyst for overall water splitting reaction	FENG Liang-liang , FU Chang-le , LI Guo-dong , et al (110)
Study on silicon carbide whisker formation mechanismn	HE Tian-ying , BAI Jian-guang , ZHAO Qiang , et al (119)
Preparation and properties of carbon fiber reinforced microporous magnesium doped hydroxyapatite bio-ceramics	WEI Sen-sen , ZHAO Xue-ni , LIU Ao , et al (124)
The effect of graphene wrapped Ni, Y nano-particles as lubricant additive on the friction behavior of GCr15 steel	SHI Jing , ZHAO Run-qiang , WANG Wan-rong , et al (133)
Fuzzy active disturbance rejection control for LLC resonant converter	ZHANG Fang-hui , QIU Hui-min (140)
400 Hz aircraft ground power system cable line parameter identification and DVR compensation control strategy	CHEN Peng-yu , LIU Bao-quan , WU Quan-bing (147)
Chinese food image recognition method based on improved ResNet	WANG Hai-yan , ZHANG Miao , LIU Hu-lin , et al (154)
SRG ancient ceramic shape classification based on squeeze-and-excitation and residual connection	YANG Yun , SHI Wen-qian , SONG Qing-yi (161)
Rock recognition based on multi-scale grouped convolution ResNet34	FU Jia-xin , WANG Qi (167)
Image semantic segmentation network based on MobileNet v2	WANG Gai-hua , ZHAI Qian-yu , CAO Qing-cheng , et al (174)
Improved ORB algorithm based on weighted grid motion statistics	DANG Hong-she , LI Jun-da , ZHANG Xuan-de (182)
Image encryption algorithm based on multiple chaotic systems	LIU Hai-feng , ZHOU Xue-fei , LIANG Xing-liang , et al (188)