



目 次

· 轻工技术与工程 ·

- 纳米芳纶包覆碳纤维及其纸基材料力学性能研究 姚 成, 陆赵情, 赵永生, 等(1)
- 废弃牛毛水解液制备蛋白基液体地膜的研究 李闻欣, 陈玉柔, 张素凤(6)
- 造纸废水 Fenton 深度处理工艺的升级改造 高俊玲, 魏文霞, 张安龙, 等(13)
- 适于生活废水中快速生长的微藻筛选及其培养条件优化
..... 张 波, 崔梦瑶, 张安龙, 等(21)
- 氯吡硫磷污染土壤的异位热脱附修复研究 范春辉, 吴定萌(27)

· 食品科学与生物工程 ·

- 硫酸化可得然胶抗氧化活性的初步研究 孙玉姣, 崔湘怡, 高润凝(33)
- 八月瓜果胶的性能测试研究 石兵艳, 赵 飞, 王 芸, 等(39)
- CO₂ 气氛下谷壳热解炭物化结构演变特性 王严严, 董继先, 张 斌, 等(47)
- 基于力学性能指标的芹菜纤维-淀粉可食用复合膜工艺优化
..... 党新安, 唐 鹏, 杨立军, 等(53)
- 基于荧光猝灭法探究 EGCG 与 β -酪蛋白的相互作用机制
..... 曹云刚, 陈星怡, 齐梦恬, 等(59)
- 分散固相萃取-超高效液相色谱-四极杆-静电场轨道离子阱质谱测定巴氏杀菌乳中农药残留
..... 贾 玮, 张 荣, 陈雪峰, 等(64)

· 化学与化学工程 ·

- 含苯环结构的糖类小分子胶凝剂的合成及其自组装行为研究
..... 陈香李, 高莹莹, 杨 方, 等(70)

基于静纺技术制备金属有机抗菌薄膜材料及抗菌性能研究 张亚男, 张 昱, 成 晶, 等(78)

Cu₂O 纳米粒子的可控制备及可见光催化性能研究 高 慧, 胡亚微, 杜 鑫, 等(84)

[CuI₂(BBTP)]_n的合成、晶体结构及抑菌活性 高 霞, 潘会宾, 乔成芳, 等(91)

适合海上 Q 油田的弱冻胶深部调驱性能评价 黎 慧, 代磊阳, 郑金定, 等(98)

• 材料科学与工程 •

纳米 Fe₃O₄ 负载石墨烯/BMI 树脂基复合材料的摩擦学性能 刘 超, 董雨菲, 颜红侠, 等(103)

Y_{1-x}Dy_xMnO₃ 薄膜的制备及磁性能研究 谈国强, 任茜茜, 柴正军, 等(112)

溶剂热法制备 Mn₂Mo₃O₈ 负极材料及其电化学性能 张利锋, 神克超, 蒋永韬, 等(118)

高铝硼硅酸盐玻璃的介电特性及机理 郭宏伟, 童 强, Longxing Chi, 等(124)

水热法制备 Zn_{0.2}Cd_{0.8}S/rGO 材料及其光催化性能 殷立雄, 张 峰, 李慧敏, 等(130)

氧化石墨烯调控水化产物增强增韧水泥基复合材料的研究进展 吕生华, 张 佳, 殷海荣, 等(136)

• 机械、电气工程与信息技术 •

带有源滤波功能的三相四桥臂并网逆变器仿真研究 马汇海, 杜 鹃, 孟彦京(146)

四开关 Buck-Boost 变换器同步双载波单模式控制策略 魏 青, 刘宝泉, 杨 振(153)

交直交变频器直流滤波电容的参数最小化分析 孟彦京, 高钰淇, 谢仕宏(158)

软开关条件下 DAB 变换器三重移相最小回流功率控制策略 朱自伟, 刘宝泉, 吕杨蒙(164)

一种三维图像欧拉数快速计算方法 姚 斌, 何立风, 康世英, 等(170)

• 物理与数学科学 •

带变号势和对数非线性项 Kirchhoff 问题解的存在性 赵 莉, 黄永艳(176)

时间分数阶扩散方程的二阶差分/拟小波法 郭 冲, 赵凤群(179)



Journal of Shaanxi University of Science & Technology

Published on Jun. 25, 2019

Vol. 37

No. 3

Sum No. 184

CONTENTS

Study on aramid nanofiber coated carbon fiber and its mechanical properties of paper-based material	YAO Cheng, LU Zhao-qing, ZHAO Yong-sheng, et al (1)
Study on preparation of protein-based liquid agricultural film with hydrolyzate from cowhair waste	LI Wen-xin, CHEN Yu-rou, ZHANG Su-feng (6)
Advanced treatment of papermaking wastewater by upgrading Fenton process	GAO Jun-ling, WEI Wen-xia, ZHANG An-long, et al (13)
Screening of microalgae strains with rapid growth ability in domestic wastewater and optimization of culture conditions	ZHANG Bo, CUI Meng-yao, ZHANG An-long, et al (21)
Ex-situ thermal desorption remediation on chlorpyrifos-contaminated soil	FAN Chun-hui, WU Ding-meng (27)
Preliminary study on antioxidant activity of sulfated curdlan	SUN Yu-jiao, CUI Xiang-yi, GAO Run-ning (33)
A study on the performance test of akebia trifoliata pectin	SHI Bing-yan, ZHAO Fei, WANG Yun, et al (39)
Evolution of husk char's physical and chemical structure under CO ₂ atmosphere	WANG Yan-yan, DONG Ji-xian, ZHANG Bin, et al (47)
Optimization of celery fiber-starch edible composite membrane based on mechanical properties	DANG Xin-an, TANG Peng, YANG Li-jun, et al (53)
Interaction mechanism of EGCG with β -casein assayed by fluorescence quenching	CAO Yun-gang, CHEN Xing-yi, QI Meng-tian, et al (59)
Dispersive solid phase extraction coupled with ultra performance liquid chromatography-quadrupole-orbitrap mass spectrometry for determination of pesticide residues in pasteurized milk	JIA Wei, ZHANG Rong, CHEN Xue-feng, et al (64)
Study on synthesis and self-assembly behaviors of glucose derivative containing benzene-based low-molecular-mass gelators	CHEN Xiang-li, GAO Ying-ying, YANG Fang, et al (70)
Synthesis and properties of metal organic luminous film material based on electrospinning	ZHANG Ya-nan, ZHANG Yu, CHENG Jing, et al (78)

Controllable preparation and photocatalytic activity of Cu ₂ O nanoparticles	GAO Hui , HU Ya-wei , DU Xin , et al (84)
Synthesis,crystal structure and antibacterial activity of [CuI ₂ (BBTP)] _n	GAO Xia , PAN Hui-bin , QIAO Cheng-fang , et al (91)
An assessment of the deep profile control and flooding of week gel for offshore Q oilfield	LI-Hui , DAI Lei-yang , ZHENG Jin-ding , et al (98)
Tribological properties of Nano-Fe ₃ O ₄ -coated graphene/bismaleimide (BMI) resin matrix composites	LIU Chao , DONG Yu-fei , YAN Hong-xia , et al (103)
Preparation and magnetic properties of Y _{1-x} Dy _x MnO ₃ thin films	TAN Guo-qiang , REN Xi-xi , CHAI Zheng-jun , et al (112)
Solvent thermal synthesis and electrochemical properties of Mn ₂ Mo ₃ O ₈ anode materials	ZHANG Li-feng , SHEN Ke-chao , JIANG Yong-tao , et al (118)
Dielectric properties and mechanism of high alumina borosilicate glass	GUO Hong-wei , TONG Qiang , Longxing Chi , et al (124)
Photocatalytic property of Zn _{0.2} Cd _{0.8} S/rGO materials prepared by a hydrothermal method	YIN Li-xiong , ZHANG Feng , LI Hui-min , et al (130)
Research progress of graphene oxide reinforced and toughened cement-based composites	LV Sheng-hua , ZHANG Jia , YIN Hai-rong , et al (136)
Simulation research of three-phase four-leg photovoltaic grid-connected inverter with source filtering function	MA Hui-hai , DU Juan , MENG Yan-jing (146)
Four switch Buck-Boost converter synchronous dual-carrier single-mode control strategy	WEI Qing , LIU Bao-quan , YANG Zhen (153)
Parameter minimization analysis of DC filter capacitor in AC-DC-AC converter	MENG Yan-jing , GAO Yu-qi , XIE Shi-hong (158)
Triple-phase-shifting minimum backflow power control strategy for DAB converter under soft switching conditions	ZHU Zi-wei , LIU Bao-quan , LV Yang-meng (164)
A fast algorithm for computing the Euler number in a 3D image	YAO Bin , HE Li-feng , KANG Shi-ying , et al (170)
The existence of the solutions for Kirchhoff problems with sign-changing potential and logarithmic non-linearity	ZHAO Li , HUANG Yong-yan (176)
Second order difference/quasi-wavelet method for the time fractional diffusion equation	GUO Chong , ZHAO Feng-qun (179)
