



目 次

· 轻工技术与工程 ·

- 基于分形理论的微纤维玻璃棉绝热纸的结构与性能研究 王海毅, 田耀斌, 郑新苗(1)
- 不同超声波处理方式对纤维素酸水解选择性的影响 李金宝, 吴修莉, 董慧玲, 等(5)
- 超声处理对对位芳纶纤维分散性能及成纸性能的影响
..... 张美云, 苏治平, 陆赵情, 等(12)
- 采用 Image J 软件分析硅酸钙填料在纸张中的 Z 向分布
..... 宋顺喜, 李 琳, 杨 强, 等(17)
- 表面羧基化纳米 ZnO 的制备及应用 高党鸽, 吕磊红, 吕 斌, 等(22)
- 端羟基超支化聚异氰脲酸酯-酯的合成与表征 任龙芳, 张 华, 李梦函(28)
- 核桃壳动态吸附氨氮的影响因素及动力学研究 谢林花, 丁绍兰, 董凌霄, 等(34)
- 多孔污泥炭吸附剂的制备及其表征 王家宏, 何登吉(39)
- 造纸废水特征有机污染物对活性污泥微生物活性的影响
..... 王 森, 张 丹, 王学川, 等(44)

· 材料科学与工程 ·

- 钙离子掺杂对 $\text{Ba}(\text{Fe}_{0.5}\text{Nb}_{0.5})\text{O}_3$ 陶瓷介电性能的影响
..... 王 卓, 王 春, 房明瑞, 等(50)
- 二氧化钛/氧化铝复合光催化材料的制备与性能研究 ... 刘 辉, 李梦妍, 吕 婷, 等(55)
- “蝉蛹状”Ce 掺杂纳米 ZnO 的制备及光催化性能研究
..... 刘俊莉, 惠爱平, 李 妍, 等(60)
- Ag 含量对 $\text{Ag}/\text{Sm}(\text{OH})_3$ 形貌和光催化性能的影响 ... 殷立雄, 刘长青, 冉云飞, 等(65)
- Si_3N_4 -hBN 陶瓷材料的常、热压制备和摩擦行为分析 ... 陈 威, 张 达, 艾 旭, 等(69)

· 化学与化学工程 ·

酮肼交联改性水性聚氨酯/聚丙烯酸酯的制备与性能研究	沈一丁, 郭丹慧, 王海花, 等(77)
一种阳离子双子有机硅表面活性剂的制备及其性能	黄良仙, 张 乐, 朱 雨, 等(83)
水性聚氨酯/四氧化三铁纳米复合材料的制备与性能 ...	费贵强, 张静文, 王海花, 等(88)
GCI-Z1 型泡排剂的制备及室内评价	赖小娟, 闫 蓓, 王 磊(94)
污泥基活性炭的制备及表征	刘 羽, 侯庆林, 牛志睿(99)
近井改造对低渗透稠油油藏有效动用半径的影响	陈民锋, 陈 璐, 王兆琪, 等(103)
西峰油田延长组长 8 油层组油气运移特征研究	张富昌, 林承焰, 何金先, 等(109)
致密砂岩中的油气水三相渗流规律研究	田 巍, 王 明, 朱维耀, 等(114)
· 生命科学与工程 ·	
黑果枸杞多糖的分离及 LRP-80 的单糖组成	刘树兴, 杜 丁, 郭林新, 等(119)
运动发酵单胞菌发酵苹果渣产乙醇工艺研究	李 慧, 史政豪, 龚国利, 等(123)
海红果酒多糖的结构鉴定及降血糖活性验证	花俊丽, 杨 辉, 杜 丁, 等(129)
富硒茶多糖的分离纯化及抗氧化性研究	冯丽琴, 杨芙莲, 董文宾(133)
吡啶衍生物的 3D-QSAR 研究和分子设计	全建波, 占 培, 李凌霄, 等(137)
· 机械工程 ·	
基于刚柔耦合模型的平行分度凸轮机构动力学分析	葛正浩, 张正钧, 张兴钰(142)
悬架参数对车辆平顺性的影响研究	张功学, 叶 东(147)
· 电气工程与信息技术 ·	
基于蓝牙与 MQTT 服务器的 DALI 智能照明系统设计 ...	张玉杰, 郭向阳, 李 栋(152)
一种氧气分析仪激光器的温度控制系统研究	张根宝, 程震晨(157)
关于人体颈动脉硬化斑块诊断优化仿真	杨 云, 董 雪, 齐 勇(162)
基于 WSN 的湿地水环境监测系统拓扑控制算法研究	陈 红(168)
· 物理与数学科学 ·	
具有指数型发生率的离散 SIS 模型的动力学研究	毛红艳, 曹 慧, 蔺小林(174)
异方差模型两阶段估计的一种新方法	崔 蕾, 张晓琴(179)



Journal of Shaanxi University of Science & Technology

(Natural Science Edition)

2016

Vol. 34

No. 5

Sum No. 168

CONTENTS

Study on the structure and properties of glass microfibers paper based on fractal theory	WANG Hai-yi, TIAN Yao-bin, ZHENG Xin-miao (1)
Effect of different ultrasonic treatments on selective acid hydrolysis of cellulose	LI Jin-bao, WU Xiu-li, DONG Hui-ling, et al (5)
Effect of ultrasonic treatment on the dispersion capability and sheet forming performance of para-aramid fiber	ZHANG Mei-yun, SU Zhi-ping, LU Zhao-qing, et al (12)
Characterization of filler distribution in Z direction of calcium silicate filled paper by Image J software	SONG Shun-xi, LI Lin, YANG Qiang, et al (17)
Preparation and application of surface carboxyl-functioned nano ZnO	GAO Dang-ge, LV Lei-hong, LV Bin, et al (22)
Synthesis and characterization of hydroxyl-terminated hyperbranched poly isocyanurate-ester	REN Long-fang, ZHANG Hua, LI Meng-han (28)
Study on influencing factors and kinetics of dynamic adsorption of ammonia nitrogen on walnut shell	XIE Lin-hua, DING Shao-lan, DONG Ling-xiao, et al (34)
Study on preparation of porous sludge carbon-based adsorbent and its characterization	WANG Jia-hong, HE Deng-ji (39)
The influence of characteristic organic pollutants on microbial activity of aerobic activated sludge in papermaking wastewater	WANG Sen, ZHANG Dan, WANG Xue-chuan, et al (44)
Effects of calcium-doping on the dielectric properties of Ba(Fe _{0.5} Nb _{0.5})O ₃ ceramics	WANG Zhuo, WANG Chun, FANG Ming-rui, et al (50)
Preparation and characterization of TiO ₂ /Al ₂ O ₃ composite materials	LIU Hui, LI Meng-yan, LV Ting, et al (55)
Preparation of cicada pupa-like cerium doped zinc oxide and its photocatalytic performance	LIU Jun-li, HUI Ai-ping, LI Yan, et al (60)
Influences of addition amount of Ag on morphology and photocatalytic activity of Ag/Sm(OH) ₃	YIN Li-xiong, LIU Chang-qing, RAN Yun-fei, et al (65)
The preparation of atmospheric, hot pressing and analysis of friction chemical behavior about Si ₃ N ₄ -hBN compound ceramics	CHEN Wei, ZHANG Da, AI Xu, et al (69)
Study on properties and synthesis of ketone hydrazine crosslinking modified waterborne polyurethane/polyacrylate emulsion	SHEN Yi-ding, GUO Dan-hui, WANG Hai-hua, et al (77)
Preparation and properties of the cation gemini organic silicon surfactant	HUANG Liang-xian, ZHANG Le, ZHU Yu, et al (83)

Preparation and properties of waterborne polyurethane/ferroferriic oxide nanocomposites	FEI Gui-qiang , ZHANG Jing-wen , WANG Hai-hua , et al(88)
Preparation and laboratoty evaluation of GCI-Z1 foam drainage agent	LAI Xiao-juan , YAN Bei , WANG Lei(94)
Preparation and characterization of sludge-based activated carbon	LIU Yu , HOU Qing-lin , NIU Zhi-rui(99)
The effect of near wellbore stimulation on effective drainage radius in low-permeable heavy-oil reservoirs	CHEN Min-feng , CHEN Lu , WANG Zhao-qi , et al(103)
Study on the migration of crude oil in chang-8 subsection of the Yanchang formation, Xifeng oilfield	ZHANG Fu-chang , LIN Cheng-yan , HE Jin-xian , et al(109)
Study on the oil-gas-water three-phase seepage law for tight sandstone	TIAN Wei , WANG Ming , ZHU Wei-yao , et al(114)
Isolation of polysaccharides from Lycium ruthenicum Murr. and monosaccharide composition of LRP-80	LIU Shu-xing , DU Ding , GUO Lin-xin , et al(119)
Study on producing ethanol of <i>Zymomonas mobile</i> using apple pomace	LI Hui , SHI Zheng-hao , GONG Guo-li , et al(123)
Structure and hypoglycemic activity characterization of polysaccharide from Malus micromalus Makino wine	HUA Jun-li , YANG Hui , DU Ding , et al(129)
Purification and antioxidant activities of polysaccharides from selenium enriched tea	FENG Li-qin , YANG Fu-lian , DONG Wen-bin(133)
3D-QSAR and molecular design of indole derivatives	TONG Jian-bo , ZHAN Pei , LI Ling-xiao , et al(137)
Dynamic analysis of parallel indexing cam mechanism based on rigid flexible coupling model	GE Zheng-hao , ZHANG Zheng-jun , ZHANG Xing-yu(142)
Study on the influence of suspension parameters on the vehicle ride comfort	ZHANG Gong-xue , YE Dong(147)
Design of DALI intelligent lighting system based on bluetooth and MQTT server	ZHANG Yu-jie , GUO Xiang-yang , LI Dong(152)
Study of a temperature control system of laser on oxygen analyzer	ZHANG Gen-bao , CHENG Zhen-chen(157)
Research on carotid atherosclerotic plaque diagnosis basd on SVM	YANG Yun , DONG Xue , QI Yong(162)
Topology control of wireless sensor networks oriented wetland water environment monitoring	CHEN Hong(168)
The dynamics of discrete-time SIS model with exponential occurrence rate	MAO Hong-yan , CAO Hui , LIN Xiao-lin(174)
A new method of two-stage estimation about heteroscedastic model	CUI Lei , ZHANG Xiao-qin(179)