

ISSN 1005-0930
CN 11-3242/TB

应用基础与工程科学学报

JOURNAL OF BASIC SCIENCE AND ENGINEERING

第 21 卷

Vol. 21

第 4 期

No. 4

2013

ISSN 1005-0930



9 771005 093137

中国自然资源学会主办

中文核心期刊
中国科技论文核心期刊
中国学术期刊文摘核心期刊
中国科学引文数据库核心期刊
美国《工程索引》(Ei)核心期刊

应用基础与工程科学学报

第21卷 第4期 2013年

目 次

基于 $\delta^{13}\text{C}$ 值的北京山区典型树种水分利用效率研究	余新晓, 杨芝歌, 白艳婧, 李铁涛, 黄枝英(593)
北京西山典型侧柏人工林热量平衡研究	李铁涛, 余新晓(600)
播种机械与秸秆覆盖对玉米衰老生理及产量的影响.....	徐福利, 王渭玲, 汪有科, 冯 浩(608)
通过复合菌系获取胞外木聚糖酶策略及其特性研究.....	郭 鹏, 杨 德, 周 明, 李 露, 薛淑静, 高 虹, 史德芳, 陈明利(617)
应用一种无膜生物电化学系统还原冶铋废水中 Cu(Ⅱ) 的研究	陶虎春, 王俊彦, 张丽娟, 李金波(626)
CO 对铁丝网卷还原 NO 的影响实验研究	苏亚欣, 苏阿龙, 成 豪(638)
顺直河型与分汊河型交界段洲滩演变及其对航道条件影响——以长江天兴洲河段为例	孙昭华, 冯秋芬, 韩剑桥, 曹绮欣(647)
平衡输沙条件下非均匀推移质运动特性	陈有华, 白玉川(657)
基于 SRTM DEM 数据的中国地形起伏度分析研究	陈学兄, 常庆瑞, 郭碧云, 张小军(670)
基于地震记录的震动图校正方法研究	陈 鳌, 俞言祥, 高孟潭(679)
一种三重介质溶洞与溶孔尺寸界线的确定方法.....	薛 元, 黄 林, 吴玉树, 康志江(692)
利用核磁共振研究特低渗透油藏微观剩余油分布.....	王学武, 杨正明, 李海波, 李治硕(702)
岩体脆性破裂失稳临界应力特征重化群研究.....	薛 雷, 孙 强, 王媛媛, 王四巍, 李国梁, 洪晓华(710)

- 非接触性动态位移测试方法的研发及应用验证 陈 苏, 陈国兴, 韩晓健, 戚承志, 阮 溪(725)
桥梁全寿命周期碳强度指标模糊综合评估 孙晓燕, 董伟伟, 王海龙, 王 捷(735)
响应面法优化硅藻土制备水玻璃工艺研究 王宝民, 宋 凯, 韩 瑜(748)
地下换热器结构热形变实验与数值模拟研究 朱晓林, 高 青, 于 鸣, 王有铿, 张天时(756)
实心球体外表面受热冲击作用的广义热弹性分析 王颖泽, 张小兵, 宋新南(767)
基于灵敏度附加项的多目标可靠性稳健优化设计 张瑞军, 邱继伟, 贾庆轩, 王晓伟(777)
带包覆层铁磁性金属管道局部腐蚀的脉冲涡流检测 付跃文, 康小伟, 喻星星(786)
基于 B 超成像的低含沙量测量 马志敏, 邹先坚, 赵小红, 胡向阳(796)

期刊基本参数: CN11-3242/TB * 1993 * q * 16 * 200 * zh + en * P * ¥ 15.00 * 2000 * 21 * 2013-08

应用基础与工程科学学报

Yingyong Jichu Yu Gongcheng Kexue Xuebao

(双月刊)

2013 年 第 21 卷 第 4 期

主 管 中国科学技术协会
主 办 中国自然资源学会
编 辑 出 版 《应用基础与工程科学学报》编辑部
主 编 倪晋仁
地 址 北京大学老地学楼 110 室
邮 编 100871
电 话 010-62753153
传 真 010-62756199
电 子 信 箱 jbse@vip.163.com; jbse@iee.pku.edu.cn
网 址 http://www.jbse.net
印 刷 廊坊市金虹宇印务有限公司

公 开 发 行

刊号: ISSN 1005-0930
CN 11-3242/TB

定价: 15.00 元

JOURNAL OF BASIC SCIENCE AND ENGINEERING

Volume 21

Number 4

August 2013

Contents

- Water Use Efficiency of Typical Tree Species in Beijing Mountainous Area Based on $\delta^{13}\text{C}$ *YU Xinxiao, YANG Zhige, BAI Yanjing, LI Yitao, HUANG Zhiying*(593)
- Research of the Heat Balance in a Typical *Platycladus orientalis* Plantation in the West Mountain Area of Beijing *LI Yitao, YU Xinxiao*(600)
- Effect of Sowing Machine and Straw Mulching on Leaf Senescence Physiology and Yield of Maize(*Zea mays L.*) *XU Fuli, WANG Weiling, WANG Youke, FENG Hao*(608)
- Strategy of Getting Extracellular Xylanase by A Microbial Consortium and Its Characteristics *GUO Peng, YANG De, ZHOU Ming, LI Lu, XUE Shujing, GAO Hong, SHI Defang, CHEN Mingli*(617)
- Cu(II) Reduction from Bismuth Metallurgical Wastewater by a Membrane-free Bioelectrochemical System *TAO Huchun, WANG Junyan, ZHANG Lijuan, LI Jinbo*(626)
- Experimental Study on Effect of CO on NO Reduction by iron mesh roll *SU Yixin, SU Along, CHENG Hao*(638)
- Fluvial Processes of Sandbars in the Junction Reach of Single-threaded Channel to Anabranching Channel and Its Impact on Navigation: A Case Study of the Tianxingzhou Reach of the Yangtze River *SUN Zhaohua, FENG Qiuifen, HAN Jianqiao, CAO Qixin*(647)
- Characteristics of Nonuniform Bedload Motion Under Equilibrium Sediment Transport Conditions *CHEN Youhua, BAI Yuchuan*(657)
- Analytical Study of the Relief Amplitude in China Based on SRTM DEM Data *CHEN Xuexiong, CHANG Qingrui, GUO biyun, ZHANG Xiaojun*(670)
- Research on Correction Method for ShakeMap Based on Seismic Data *CHEN Kun, YU Yanxiang, GAO Mengtan*(679)
- A Method to Determine the Size Limit Between Dissolution Pores and Vugs in Triple Medium *DI Yuan, HUANG Lin, WU Yushu, KANG Zhijiang*(692)
- Microscopic Distribution of Remaining Oil of Ultra-low Permeability Reservoir by using NMR Technique *WANG Xuewu, YANG Zhengming, LI Haibo, LI Zhishuo*(702)
- Study on the Critical Stress State of Brittle Failure of Rock Based on Renormalization Group Theory *XUE Lei, SUN Qiang, WANG Yuanyuan, WANG Siwei, LI Guoliang, PAN Xiaohua*(710)

- Development for Non-contact Displacement Test Method and Its Application Verification CHEN Su, CHEN Guoxing, HAN Xiaojian, QI Chengzhi, RUAN Bin(725)
- Comprehensive Fussy Assessment of Bridge Life-Cycle Carbon Intensity Index SUN Xiaoyan, DONG Weiwei, WANG Hailong, WANG Jie(735)
- Optimization of Preparing Waterglass from Diatomite Process by Response Surface Method WANG Baomin, SONG Kai, HAN Yu(748)
- Experiment and Numerical Simulation Study of Thermal Deformation for Underground Heat Exchanger Structure ZHU Xiaolin, GAO Qing, YU Ming, WANG Youtang, ZHANG Tianshi(756)
- Research on Generalized Thermoelastic Problems of A Solid Sphere Subjected to Thermal Shock WANG Yingze, ZHANG Xiaobing, SONG Xinnan(767)
- Multi-objective Reliability-based Robust Optimization Design Based on the Sensitivity Additional Items ZHANG Ruijun, QIU Jiwei, JIA Qingxuan, WANG Xiaowei(777)
- Detection of Localized Corrosion in Ferromagnetic Metal Pipe Under Insulation with Pulsed Eddy Current Testing FU Yuewen, KANG Xiaowei, YU Xingxing(786)
- The Measurement of Low Sediment Concentration Based on B-Mode Ultrasound Images MA Zhimin, ZOU Xianjian, ZHAO Xiaohong, HU Xiangyang(796)

JOURNAL OF BASIC SCIENCE AND ENGINEERING

(Bimonthly)

Vol. 21

No. 4

2013

Competent Authority China Association for Science and Technology

Sponsored Chinese Society of Natural Resources

Edited and Published by The Editorial Board of Journal of Basic Science and Engineering

Editor-in-Chief NI Jinren

Address Room 110, Old Geosciences Building, Peking University, Beijing 100871, P. R. China

Tel 010-62753153

Fax 010-62756199

Email jbse@vip.163.com; jbse@iee.pku.edu.cn

Website <http://www.jbse.net>

Printed by Langfang Jinhongyu Printing Co., Ltd.
