

ISSN 1006-4710  
CODEN XLDXFD

# 西安理工大学学报

XI'AN LIGONG DAXUE XUEBAO

JOURNAL OF  
XI'AN UNIVERSITY OF TECHNOLOGY



2013

第29卷 第2期  
Volume 29 Number 2

# 西安理工大学学报

2013年6月30日

第29卷 第2期

## 目 次

太赫兹波脉冲成像和连续波成像技术研究 .....	陈素果 侯磊 楼骁 董陈岗 施卫	(127)
树脂矿物床身模态参数辨识 .....	刘耀 黄玉美	(133)
非重叠多摄像机目标识别方法研究 .....	范彩霞 朱虹	(138)
一类随机非线性系统状态变量密度函数控制方法研究 .....	赵彦彦 黄姣茹 秦新强 钱富才	(144)
掺杂型纳米微球 Cr-TiO <sub>2</sub> 的原位水热合成及其光催化降解抗生素(氯霉素)性能 .....	彭超 姚秉华 韩秀萍 钮金芬 赵洁	(149)
基于贝努力映射的混沌运算研究 .....	陈曦 高勇 杨媛	(155)
基于机器视觉的印刷图像色彩在线检测系统设计 .....	李文育 张二虎 于佳 陈亚军	(159)
城市化进程中区域水土资源生态风险评价研究 .....	廖文华 解建仓 王玲 朱记伟	(165)
基于 DPSO 优化支持向量机的水轮机组振动故障诊断 .....	张欣伟 陈文献 张锋利	(172)
基于改进 PSO-LSSVM 的风电场短期功率预测 .....	余健明 马小津 倪峰 王小星	(176)
平流二次沉淀池中温差对异重流影响的数值模拟 .....	谭立新 李博 李尔康	(182)
具有拟稳定秩的环 .....	孙晓青 田径 李江华	(188)
四象限光电探测器高温输出自激失效分析 .....	何凌空 高勇	(192)
DC-DC 变换器的效率特性及其相关问题研究 .....	孙晋坤 刘庆丰 冷朝霞 王华民 同向前	(197)
可调高功率次声波信号发生器的设计 .....	乔卫东 张娜	(202)
薄壁 U 形金属阻尼器剪切刚度计算分析 .....	刘茂社 卢俊龙	(207)
金属材料弹塑性加、卸载时弹性变形大小与分布 .....	汤安民 王忠民 李智慧	(211)
基于 FPGA 的新型非对称双极脉冲磁控溅射电源的研究 .....	陈桂涛 孙天乐 孙强 钟彦儒	(216)
稳健的软子空间聚类算法 .....	郑素佩 封建湖	(221)
仿章鱼吸盘式轮胎花纹设计与有限元分析 .....	周利坤 王洪伟	(228)
有界噪声作用下 Duffing 系统脉冲控制 .....	吴宏锷 王国欣 牛玉俊	(233)
<b>管理科学</b>		
中国上市公司经理管理防御指数的设计及应用研究 .....	李秉祥 姚冰湜 李越	(238)
制造企业主导的供应商网络结构分析及实证研究 .....	李勃 李随成 张延涛	(246)

---

### 西安理工大学学者

施卫教授 .....	杨小丽 (封二)
------------	----------

---

《西安理工大学学报》征稿简则 .....	(封三)
----------------------	------

---

总编辑 杨小丽 技术编辑 王卫勋 英文审订 亢树森

期刊基本参数: CN61-1294/N \* 1978 \* q \* A4 \* 128 \* zh \* P \* 6.00 \* 1000 \* 23 \* 2013-06

# JOURNAL OF XI'AN UNIVERSITY OF TECHNOLOGY

Vol. 29 No. 2 2013

## CONTENTS

- Investigation of Terahertz Continuous Wave Imaging and Pulse Wave Imaging ..... CHEN Suguo, HOU Lei, LOU Xiao, DONG Chengang, SHI Wei (127)
- Modal Parameter Identification of Mineral Casting Machine Beds ..... LIU Yao, HUANG Yumei (133)
- Object Recognition Algorithm of Non-Overlapping Cameras ..... FAN Caixia, ZHU Hong (138)
- The Study of Stochastic Non-linear System State Variable Density Function Control Method ..... ZHAO Yanyan, HUANG Jiaoru, QIN Xinqiang, QIAN Fucai (144)
- Preparation of Cr-Doped TiO<sub>2</sub> Nanoparticle by in Situ Hydrothermal Method and Photocatalytic Degradation of Antibiotics ..... PENG Chao, YAO Binghua, HAN Xiuping, NIU Jingfen, ZHAO Jie (149)
- Research on Chaotic Calculation Based on Bernoulli Mapping ..... CHEN Xi, GAO Yong, YANG Yuan (155)
- The Design of Online Detection System for Printing Image Color Based on Machine Vision ..... LI Wenyu, ZHANG Erhu, YU Jia, CHEN Yajun (159)
- A Study of Ecological Risk Assessment of Regional Water and Land Resource in the Process of Urbanization ..... LIAO Wenhua, XIE Jianchang, WANG Ling, ZHU Jiwei (165)
- Hydraulic Generating Vibration Faults Diagnosis by Support Vector Machine Based on Particle Swarm Optimization ..... ZHANG Xinwei, CHEN Wenxian, ZHANG Fengli (172)
- Short-Term Power Forecasting of Wind Farm Based on an Improved PSO-LSSVM ..... YU Jianming, MA Xiaojin, NI Feng, WANG Xiaoxing (176)
- Numerical Simulation of the Effect of Temperature Difference on Gravity Flow in Rectangular Secondary Setting Tanks ..... TAN Lixin, LI Bo, LI Erkang (182)
- Rings with Quasi-Stable Range Conditions ..... SUN Xiaoqing, TIAN Jing, LI Jianghua (188)
- Failure Analysis of Output Self-Excitation of Four-Quadrant Photoelectric Detector at High Temperature ..... HE Lingkong, GAO Yong (192)
- A Study of Efficiency Characteristics and Related Issues of DC-DC Converter ..... SUN Jinkun, LIU Qingfeng, LENG Zhaoxia, WANG Huamin, TONG Xiangqian (197)
- Adjustable High Power Infrasound Wave Signal Generator Design ..... QIAO Weidong, ZHANG Na (202)
- Analysis of Shear Stiffness of the Thin U-Shape Metal Damper ..... LIU Maoshe, LU Junlong (207)
- The Magnitude and Distribution of Elastic Deformation of the Metal Materials in the Conditions of Elastoplastic Loading and Unloading ..... TANG Anmin, WANG Zhongmin, LI Zhihui (211)
- Research on Novel Pulsed Power Based on FPGA for Magnetron Sputtering ..... CHEN Guitao, SUN Tianle, SUN Qiang, ZHONG Yanru (216)
- Robust Soft Subspace Clustering Algorithm ..... ZHENG Supei, FENG Jianhu (221)
- Imitation Octopus Sucker-Type Tire Tread Pattern Design and Finite Element Analysis ..... ZHOU Likun, WANG Hongwei (228)
- Chaos Control of Duffing System with Bounded Noise Excitation with Periodic Impulsive Signals ..... WU Honge, WANG Guoxin, NIU Yujun (233)
- Designing of Managerial Entrenchment Index of Chinese Listed Companies and Application Analyses ..... LI Bingxiang, YAO Bingshi, LI Yue (238)
- A Positive Study and Analysis of Network Structure of Manufacturer-Dominating Supplier ..... LI Bo, LI Suicheng, ZHANG Yantao (246)