



ISSN 1001 - 0645

CODEN BLXUEV

北京理工大学

TRANSACTIONS OF
BEIJING INSTITUTE OF TECHNOLOGY

学报

BEIJING LIGONG DAXUE XUEBAO

2013 4

Vol. 33

ISSN 1001-0645



04>

9 771001 064131

万方数据

北京理工大学学报

第4期 2013年4月

第33卷 (总第218期)

目 次

· 工程力学 ·

- 基于 NESSUS 的空气隙传爆界面可靠性分析 穆慧娜 张利敏 温玉全 等 (331)
煤岩单轴压缩声发射试验分形特征分析 刘京红 姜耀东 祝捷 等 (335)
蒸气爆炸过程中压力波冲击气泡现象的数值模拟 刘雨 黄风雷 吕中杰 (339)

· 机械工程 ·

- 煤矿瓦斯旋流混合器完工况下混合均匀性研究 毛明明 刘永启 高振强 等 (343)
基于车辆地面力学沙漠沙结构性本构模型的建立 吕唯唯 顾亮 杨聪彬 等 (349)
旋转磁场-高频群脉冲电化学复合加工实验研究 郭勇 张卫民 张之敬 等 (353)

· 信息与控制 ·

- 基于物理规划的弹道多目标优化 刘莉 邢超 龙腾 (357)
包含弹体动力学的终端角约束弹道成型制导律 刘大卫 夏群利 左媞媞 等 (363)
基于二级多点逼近算法的连续体结构拓扑优化 陈坤艳 王威 (369)
机载自卫压制干扰和箔条干扰下飞机生存力研究 杨哲 李曙林 周莉 等 (375)
基于网格的运动目标检测与跟踪处理 陈国华 张爱军 黄建彪 (380)
基于分块灰度投影的无人飞行器视频稳像方法 吴浩 邓宏彬 何少阳 (385)
一种改进的遗传算法求解旅行商问题 刘荷花 崔超 陈晶 (390)
样本不均衡条件下基于自调整支持向量机的故障诊断 易辉 宋晓峰 姜斌 等 (394)

· 光学与电子 ·

- 基于被动太赫兹波图像的图像分割技术 朱维文 赵跃进 张镜水 等 (399)
基于跳频通信的短码长 Raptor 码改进方案 高飞 曾宪锋 卜祥元 (403)
TETRA 专业移动无线通信系统随机接入时延分析 宋政育 侯舒娟 吴嗣亮 (408)

· 化工与材料 ·

4,10-二硝基-2,6,8,12-四氧杂-4,10-二氮杂四环

- [5.5.0.0^{5,9}0^{3,11}]十二烷的合成 崔可建 徐志斌 石玉辉 等 (413)
细水雾抑制小尺度甲烷/空气火焰的研究 刘江虹 丛北华 (416)
神经网络模型在锂离子电池表面温度预测中的应用研究 陈实 方凯正 穆道斌 等 (421)
中碳钢温变形的力学特性 李志杰 彭艳 刘宏民 等 (425)

· 应用数学与物理 ·

- 超订下网络舱位控制的稳健联合模型及策略 李金林 徐丽萍 雷俊丽 等 (429)

· 生命科学与技术 ·

- 蛋白质分离玻璃微流控芯片的制作方法 耿利娜 全宗良 侯妮 等 (436)

期刊基本参数:CN 11-2596/T * 1956 * m * A4 * 110 * zh * P * ¥30.00 * 900 * 23 * 2013-04

TRANSACTIONS OF BEIJING INSTITUTE OF TECHNOLOGY

No. 4 2013 Apr.

Vol. 33 (Sum No. 218)

CONTENTS

Engineering Mechanics

Reliability Analysis of Air-Gap Detonation Transmission

Interface by NESSUS MU Hui-na ZHANG Li-min WEN Yu-quan, et al (331)

Fractal Characteristics of Coal Uniaxial Compression Acoustic Emission Test LIU Jing-hong JIANG Yao-dong ZHU Jie, et al (335)

Numerical Simulation of Shock Wave Impacting Bubble in Vapor Explosion LIU Yu HUANG Feng-lei LÜ Zhong-jie (339)

Mechanical Engineering

Research on the Mixing Uniformity of Coal Mine Methane Swirl Mixer

Under Given Inlet Condition MAO Ming-ming LIU Yong-qi GAO Zhen-qiang, et al (343)

Soil Structural Model for Describing Constitutive Relationship of Desert Sand Under

Moving Vehicle LÜ Wei-wei GU Liang YANG Cong-bin, et al (349)

Research on Technology of Compound ECM with High-Frequency Group

Pulse and Rotating Magnetic Field YAN Yong ZHANG Wei-min ZHANG Zhi-jing, et al (353)

Informatics and Control

Study of Multi-Objective Trajectory Optimization Based on Physical Programming LIU Li XING Chao LONG Teng (357)

Trajectory Shaping Guidance Law with Terminal Impact Angle Constraint Including

Missile Body Dynamics LIU Da-wei XIA Qun-li ZUO Ti-ti, et al (363)

Topology Optimization of Continuum Structure by Using Two-Level Multipoint Approximation CHEN Shen-yan WANG Wei (369)

Study of Aircraft Survivability Under the Conditions of Self-Defense Jamming and

Chaff Jamming YANG Zhe LI Shu-lin ZHOU Li, et al (375)

Grid-Based Moving Object Detection and Tracking CHEN Guo-hua ZHANG Ai-jun HUANG Jian-biao (380)

A UAV Video Stabilization Method Based on Sub-Block Gray Projection WU Hao DENG Hong-bin HE Shao-ying (385)

An Improved Genetic Algorithm for Solving Travel Salesman Problem LIU He-hua CUI Chao CHEN Jing (390)

Fault Diagnosis Based on Self-Tuning Support Vector Machine in Sample

Unbalance Condition YI Hui SONG Xiao-feng JIANG Bin, et al (394)

Optics and Electronics

Image Segmentation of Passive THz Image ZHU Wei-wen ZHAO Yue-jin ZHANG Jing-shui, et al (399)

Improved Scheme for Short-Length Raptor Codes Based on Frequency

Hopping Communication GAO Fei ZENG Xian-feng BU Xiang-yuan (403)

Random Access Delay Performance of TETRA Professional Mobile Radio System SONG Zheng-yu HOU Shu-juan WU Si-liang (408)

Chemical Engineering and Materials Science

Synthesis of 4,10-Dinitro-2,6,8,12-Tetraoxa-4,10-Diazatetracyclo-

[5.5.0.0^{5,9}0^{3,11}]-Dodecane CUI Ke-jian XU Zhi-bin SHI Yu-hui, et al (413)

Experimental Study of Water Mist Suppressing CH₄/Air Flame in Cup-Burner LIU Jiang-hong CONG Bei-hua (416)

Application of Neural Network Model to Predicting Surface Temperature of

Lithium-Ion Battery CHEN Shi FANG Kai-zheng MU Dao-bin, et al (421)

Mechanical Characteristics of Warm Deformation of Medium Carbon Steel LI Zhi-jie PENG Yan LIU Hong-min, et al (425)

Applied Mathematics and Physics

Robust Model and Strategy of Capacity Control with Overbooking for Airline

Hub-and-Spoke Network LI Jin-lin XU Li-ping LEI Jun-li, et al (429)

Life Science and Technology

Improvement of Microfluidic Chip Fabrication for Protein Separation GENG Li-na QUAN Zong-liang HOU Ni, et al (436)