



ISSN 1001 - 0645
CODEN BLXUEV

北京理工大学

TRANSACTIONS OF
BEIJING INSTITUTE OF TECHNOLOGY

学报

BEIJING LIGONG DAXUE XUEBAO

2012 5

Vol. 32

ISSN 1001-0645



0.5>

9 771001 064124

万方数据

北京理工大学学报

第 5 期 2012 年 5 月

第 32 卷 (总第 207 期)

目 次

· 工程力学 ·

- 甲烷/空气预混气的火焰传播过程 牛芳 刘庆明 白春华等 (441)
双排桩支护结构中圈梁空间效应的数值模拟分析 李立军 (446)

· 机械工程 ·

- AlCrN 涂层硬质合金切削高温合金耐用度对比实验 王新永 庞思勤 (450)
HMT 变速器速比跟踪控制对发动机转速的调节规律研究 魏超 胡纪滨 荆崇波等 (455)
DOC 对柴油机排放特性影响的研究 葛蕴珊 赵伟 王军方等 (460)
基于熵理论的超声波检测信号消噪与缺陷识别 闫晓玲 董世运 刘彬等 (465)
客车气压制动时延分析及其控制研究 覃涛 李刚炎 涂鸣等 (470)
双气室油气平衡悬架的设计 王勤 陈思忠 (475)
一种汽车巡航控制的分层控制算法 裴晓飞 刘昭度 马国成等 (479)
热力学效应对液氮空化流动的影响 时素果 王国玉 胡常莉 (484)

· 信息与控制 ·

- 基于数据的二阶线性扩张状态观测滤波器的研究 王丽君 苍黄林 李擎等 (488)
低轨道卫星隐蔽通信快速捕获技术研究 韩航程 安建平 尚海英 (492)
一种结合本体和焦点的问题分类方法 刘小明 樊孝忠 李方方 (498)
地理位置路由中基于信任的安全模型 张光华 黄莉静 田立勤 (503)
基于制导/估计综合设计的协同制导律 李东岩 张志峰 王飞等 (508)

· 光学与电子 ·

- 基于声压振速联合处理的矢量阵旋转不变子空间方位估计方法 姚直象 姜可宇 郭瑞等 (513)
基于微粒群算法的分布式发电优化配置 严勇 康琦 吴启迪 (517)
滑模控制对激光通信 ATP 系统跟踪性能的改善 胡贞 姜会林 佟首峰 (522)
基于逆 Radon 变换的多散射点微动检测与测量 郝宏华 傅雄军 栗苹等 (526)

· 化工与材料 ·

- 新的糖/茂钛化合物的合成及其生物活性研究 朱湛 郭炳南 王亚利等 (531)

· 应用数学与物理 ·

- 基于多 Agent 的智能质量控制系统建模方法 王秋明 刘科成 高慧颖 (535)
基于非对称 GARCH 与极值理论的商业银行信用风险度量模型 刘宁 夏恩君 张庆雷 (540)
影响装备性能电磁环境因素 GM(1, n) 模型定量分析 柯宏发 陈永光 李元左 (546)

期刊基本参数: CN 11-2596/T * 1956 * m * A4 * 110 * zh * P * ¥20.00 * 900 * 23 * 2012-05

TRANSACTIONS OF BEIJING INSTITUTE OF TECHNOLOGY

No. 5 2012 May

Vol. 32 (Sum No. 207)

CONTENTS

Engineering Mechanics

Observation of Propagating Flame of Methane-Air Mixture NIU Fang LIU Qing-ming BAI Chun-hua, et al (441)

Numerical Analysis of Ring Beam's Spatial Effects in Retaining Structure with Double-Row Piles LI Li-jun (446)

Mechanical Engineering

Wear Mechanism Analysis and Endurance Test of AlCrN Coated Carbide Tools in Cutting

High-Temperature Alloy WANG Xin-yong PANG Si-qin (450)

Research of Engine Speed Governing Rule Based on the Speed Ratio Follow-up Control

of Hydro-Mechanical Transmission WEI Chao HU Ji-bin JING Chong-bo, et al (455)

Effects of Diesel Oxidation Catalyst on Emission from Diesel GE Yun-shan ZHAO Wei WANG Jun-fang, et al (460)

De-Noising of Ultrasonic Signals Based on Entropy Theory and Recognition of

Defect in Material YAN Xiao-ling DONG Shi-yun LIU Bin, et al (465)

Bus Pneumatic Braking Circuit Delay Analysis and Control QIN Tao LI Gang-yan TU Ming, et al (470)

Design of Vehicle Twin-Accumulator Hydro-Pneumatic Balanced Suspension WANG Xun CHEN Si-zhong (475)

A Hierarchical Control Algorithm of Automobile Cruise System PEI Xiao-fei LIU Zhao-du MA Guo-cheng, et al (479)

Study of Liquid Nitrogen Cavitation Flow SHI Su-guo WANG Guo-yu HU Chang-li (484)

Informatics and Control

Data-Based Second-Order Linear Extended State Observer Filter WANG Li-jun CANG Huang-lin LI Qing, et al (488)

Fast Capture Technique for Concealing Communication of Low Earth

Orbit Satellite HAN Hang-cheng AN Jian-ping SHANG Hai-ying (492)

A Question Classification Method Combining Domain Ontology

and Question Focus LIU Xiao-ming FAN Xiao-zhong LI Fang-fang (498)

A Trust Based Secure Model for Geographical Routing ZHANG Guang-hua HUANG Li-jing TIAN Li-qin (503)

Cooperative Guidance Law Based on Integration Design of Guidance

and Estimation LI Dong-yan ZHANG Zhi-feng WANG Fei, et al (508)

Optics and Electronics

An Improved Bearing Estimation Algorithm Using Acoustic Vector Sensor Array

Based on Rotational Invariance Technique YAO Zhi-ziang JIANG Ke-yu GUO Rui, et al (513)

Optimal Allocation of Distributed Generations Based on Particle Swarm Optimization YAN Yong KANG Qi WU Qi-di (517)

Improvement of ATP System Tracking Performance of

Laser Communication Using Sliding Mode Control HU Zhen JIANG Hui-lin TONG Show-feng (522)

Detection and Measurement to Multiple Scatterers with Micro-Motion Based on

Inverse Radon Transform YAN Hong-hua FU Xiong-jun LI Ping, et al (526)

Chemical Engineering and Materials Science

Synthesis and Biological Activity of Titanocene Carbohydrate ZHU Zhan GUO Bing-nan WANG Ya-li, et al (531)

Applied Mathematics and Physics

Method of Modeling Intelligent Quality Control System Based on

Multi-Agent Technology WANG Qiu-ming LIU Ke-cheng GAO Hui-ying (535)

Model of Credit Risk Assessment in Commercial Banks Based on Asymmetric GARCH

and Extreme Value Theory LIU Ning XIA En-jun ZHANG Qing-lei (540)

Quantitative Analysis of Electromagnetic Environment Factors that Influence

the Equipment Efficiency Using GM(1, n) Model KE Hong-fa CHEN Yong-guang LI Yuan-zuo (546)