

吉林大学学报(工学版)

第36卷 增刊2 2006年9月

目 次

短纤维增强金属基复合材料弹性模量临界值计算预测

..... 金 满, 江中浩, 连建设 (1)

压铸铝合金 $AlSi_9Cu_3$ 的铁金属间化合物对高速钢刀具钻削磨损特性的影响

..... 杨晓红, 刘勇兵, 张明喆, 等 (6)

水性嵌段型纳米结构内墙漆 崔 岩, 杜云峰, 赵新明, 等 (11)

汽车保险杠树脂传递模塑工艺充模过程的数值模拟

..... 梁继才, 李 义, 李忠然, 等 (15)

用厚度阈值法改善深拉延冲压件坯料形状预测精度

..... 那景新, 闫亚坤, 庄蔚敏 (20)

车辆姿态控制系统悬架阻尼控制策略 李 静, 吴云平, 杨宗昂, 等 (24)

车辆防滑控制原型硬件在环试验 赵 健, 李 静, 吴云平, 等 (29)

最优跟踪车载式自行火炮多桥动态转向系统

..... 李炎亮, 高秀华, 李占江, 等 (36)

车内噪声品质的主观评价试验与客观量化描述

..... 王登峰, 刘宗巍, 梁 杰, 等 (41)

液化气单一燃料电控发动机的起动控制策略

..... 杨世春, 于秀敏, 唐 睿, 等 (46)

电控 LPG 发动机催化转化器快速起燃的试验研究

..... 宫长明, 邓宝清, 张永平, 等 (52)

工程车辆等比三段式液压机械的复合传动

..... 唐新星, 赵丁选, 黄海东, 等 (56)

电模拟制动器惯性台架设计 曲 波, 尹红斌, 赵小楼, 等 (62)

数控车床主轴模糊故障树分析 张英芝, 申桂香, 薛玉霞, 等 (65)

数控系统故障分析及可靠性提高措施 乔巍巍, 贾亚洲, 张海波, 等 (69)

力标准机加载过程砝码倒换控制方法 张学成, 周长明, 于立娟, 等 (73)

一种新型压电式无线发射装置 曾 平, 刘艳涛, 吴博达, 等 (78)

变正压力式压电双晶片惯性直线驱动器	曾 平, 吴博达, 王 涛, 等	(83)
超声波的减摩特性	彭太江, 杨树臣, 杨志刚, 等	(88)
视觉控制技术在压电驱动细胞注射装置中的应用	李欣欣, 肖献强, 杨志刚, 等	(91)
典型植物非光滑疏水表面的理想模型	任露泉, 王淑杰, 周长海, 等	(97)
沟槽非光滑表面流场的数值分析	封 云, 丛 苗, 金敬福, 等	(103)
基于分层强化学习的多移动机器人避障算法	祖丽楠, 田彦涛, 梅 昊	(108)
群体机器人觅食任务 Eulerian 建模与分析	梅 昊, 田彦涛, 祖丽楠	(113)
双层圆环缝隙单元准直误差对频率选择特性的影响	丛玉良, 姜桂艳, 王勋龙	(119)
改进的基于 Kalman 滤波的盲多用户检测算法	于华楠, 康 健	(122)
基于 BP 网络的植物病害彩色图像的分割技术	齐 龙, 马 旭, 张小超	(126)
基于逻辑推理和表象推理的类人机器智能——思维计算	赵宏伟, 刘萍萍, 臧雪柏, 等	(130)
基于 RSA 的三次传递不可否认签名方案	裴士辉, 赵宏伟	(134)
交通控制子区动态划分方法	杨庆芳, 陈 林	(139)
基于多智能体的交通信号控制与路径诱导的协同	卢守峰, 杨兆升, 刘喜敏	(143)
基于模糊聚类分析的车辆优化调度	鹿应荣, 杨印生, 吕 锋	(147)
公路风吹雪积雪力学原理与积雪深模型	席建锋, 李 江, 朱光耀, 等	(152)
缺陷压电结构电弹性问题断裂分析	曹宗杰, 王铭伟, 全吉成, 等	(157)
吉林杂交猪瘦肉率的主成分回归分析估算	胡铁军, 孙永海, 张学强, 等	(161)

Journal of Jilin University

(Engineering and Technology Edition)

Vol. 36 Supplement 2 Sept. 2006

Contents

- Calculation and prediction of critical elastic modulus of short fiber-reinforced metal matrix composites Jin Man, Jiang Zhong-hao, Lian Jian-she(1)
- The influences of iron-riched phases on the flank wear of HSS tools under the condition of drilling die-cast aluminum alloy Yang Xiao-hong, Liu Yong-bing, Zhang Ming-zhe, et al. (6)
- Waterborne block type nanostructural paints for interior wall Cui Yan, Du Yun-feng, Zhao Xin-ming, et al. (11)
- Numerical simulation of filling process in resin transfer molding for automobile bumper Liang Ji-cai, Li Yi, Li Zhong-ran, et al. (15)
- Improvement of blank shape prediction precision of deep drawing stamping part by thickness threshold value method Na Jing-xin, Yan Ya-kun, Zhuang Wei-min(20)
- Suspension damping control strategy for vehicle attitude control system Li Jing, Wu Yun-ping, Yang Zhong-ang, et al. (24)
- Hardware-in-the-loop test of vehicle anti-slip/anti-skid control prototype Zhao Jian, Li Jing, Wu Yun-ping, et al. (29)
- Optimal tracking multi-axle dynamic steering system of truck-howitzer Li Yan-liang, Gao Xiu-hua, Li Zhan-jiang, et al. (36)
- Subjective evaluation test and objective quantificational description of vehicle interior noise quality Wang Deng-feng, Liu Zong-wei, Liang Jie, et al. (41)
- Start control strategy in electronically controlled LPG port injection spark ignition engine Yang Shi-chun, Yu Xiu-min, Tang Rui, et al. (46)
- Experimental study on catalytic converter fast light-off of electronically controlled LPG fuel injection engine Gong Chang-ming, Deng Bao-qing, Zhang Yong-ping, et al. (52)
- Three-stage with geometric ratios hydrostatic-mechanical compound transmission for construction vehicle Tang Xin-xing, Zhao Ding-xuan, Huang Hai-dong, et al. (56)
- Design method of brake dynamometer with electric analogy of inertia Qu Bo, Yin Hong-bin, Zhao Xiao-lou, et al. (62)
- Fuzzy fault tree analysis of the principal axis of numerical control lathe Zhang Ying-zhi, Shen Gui-xiang, Xue Yu-xia, et al. (65)

- Failure analysis and reliability enhancement measures of computer numerical control system Qiao Wei-wei, Jia Ya-zhou, Zhang Hai-bo, et al. (69)
- Control method of weight rearrangement during loading process of dead weight force standard machine Zhang Xue-cheng, Zhou Chang-ming, Yu Li-juan, et al. (73)
- A novel wireless electropult powered by piezoelectricity Zeng Ping, Liu Yan-tao, Wu Bo-da, et al. (78)
- Inertial linear actuator driven by piezoelectric bimorph with changeable pressure Zeng Ping, Wu Bo-da, Wang Tao, et al. (83)
- Experimental study on ultrasonic antifriction behavior Peng Tai-jiang, Yang shu-chen, Yang Zhi-gang, et al. (88)
- Application of vision control technology to cell injection device driven by piezoelectrics Li Xin-xin, Xiao Xian-qiang, Yang Zhi-gang, et al. (91)
- Ideal models of the non-smooth hydrophobic surface of typical plants Ren Lu-quan, Wang Shu-jie, Zhou Chang-hai, et al. (97)
- Numerical simulation of turbulent flow over riblet non-smooth surface Feng Yun, Cong Qian, Jin Jing-fu, et al. (103)
- Obstacle avoidance of multi mobile robots based on hierarchical reinforcement learning Zu Li-nan, Tian Yan-tao, Mei Hao(108)
- Eulerian modeling and analysis for foraging mission of swarm robotic system Mei Hao, Tian Yan-tao, Zu Li-nan(113)
- Effect on the frequency selective performance of double layer ring aperture with unit cell aligning error Cong Yu-liang, Jiang Gui-yan, Wang Xun-long(119)
- An improved blind multi-user detection scheme based on Kalman filter Yu Hua-nan, Kang Jian(122)
- Segmentation technology of color image about plant disease based on BP neural network Qi Long, Ma Xu, Zhang Xiao-chao(126)
- Thinking computation:hominine machine intelligence based on logic inference and image inference Zhao Hong-wei, Liu Ping-ping, Zang Xue-bai, et al. (130)
- RSA-based 3-move undeniable signatures scheme Pei Shi-hui, Zhao Hong-wei(134)
- Division approach of traffic control work zone Yang Qing-fang, Chen Lin(139)
- Synergy of traffic signal control and route guidance based on multi-agent system Lu Shou-feng, Yang Zhao-sheng, Liu Xi-min(143)
- Optimal vehicle routing problem based on fuzzy clustering analysis Lu Ying-rong, Yang Yin-sheng, Lv Feng(147)
- Hydromechanical mechanism of road snowdrift deposit and its depth model Xi Jian-feng, Li Jiang, Zhu Guang-yao, et al. (152)
- Electro-elastic fracture analysis of piezoelectric materials with cracks Cao Zong-jie, Wang Ming-wei, Quan Ji-cheng, et al. (157)
- Estimation for cutability of crossbred jilin swine by principal component regress analysis Hu Tie-jun, Sun Yong-hai, Zhang Xue-qiang, et al. (161)