

合肥工业大学学报

(自然科学版)

2010年10月

总第210期

第33卷第10期

[期刊基本参数] CN 34-1083/N * 1956 * m * A4 * 160 * zh * P * ¥12.00 * 1 000 * 37 * 2010-10

目 次

· 机械与汽车工程 ·

- 面向全生命周期的产品绿色模块划分方法研究 郭卫, 刘光复, 张雷(1441)
重型牵引车全浮式驾驶室悬置参数的优化与匹配分析 陈无畏, 王磊, 陈晓新(1446)
城市道路路段立体行人过街设施设置条件研究 袁进霞, 张卫华, 丁恒, 等(1450)
基于舒适性分析的踏板装置操纵过程数字化描述 倪静, 刘明周, 胡金鑫, 等(1454)
汽车造型设计中的形态仿生研究 祝莹, 曹建中, 韦艳丽(1458)
面向需求表达的个性化产品协作式工作流建模 杨沁, 卫道柱, 潘秀琴(1462)
符合国家标准工程图中两直线点画线相交算法 罗敏雪(1468)
电冰箱生产中的价值流分析及其改善 曹国安, 万文杰, 张玺(1471)

· 材料科学与工程 ·

- 镁合金汽车减震器支撑件压铸缺陷预测研究 郑金星, 王成勇, 刘全坤, 等(1476)
宏观石墨颗粒增强工业纯铝金属基复合材料界面阻尼机制 魏健宁, 钟健松, 余里生, 等(1481)
丙-苯纳米核壳乳液的合成及应用 汪存东, 罗运军, 吕玉霞(1485)

· 电气与自动化工程 ·

- 电控液力自动变速器控制单元的设计 陈杰, 张崇巍, 孔慧芳(1488)
基于变精度粗糙集的脱机手写体汉字识别 王建平, 张大敏(1493)
基于单神经元自适应 PID 控制的水轮机调节系统研究 王华强, 周章海, 杨滁光(1497)
常压炉加热系统形式建模的验证 刘震, 方敏, 罗来豹, 等(1501)
形式验证中近似流管道的算法研究 罗来豹, 方敏, 刘震(1506)

· 计算机与信息工程 ·

- 功耗优先的 NoC 通讯架构测试方法 欧阳一鸣, 黄河, 梁华国(1510)
基于 CAN 总线的煤矿控制系统远距离传输的研究 胡庆新, 李冬(1515)
多 FPGA 验证平台引脚限制的解决方案 胡文彬, 吴剑旗, 洪一(1519)
IP 网络设备性能基准测试研究与应用 王理冬(1523)

• 土木与水利工程 •

- 弹性楼层能量反应的振型非耦合简化表达 常 磊, 叶献国, 蒋 庆(1527)
一种 3 层组合悬臂梁的理论分析 詹春晓, 刘一华(1531)
基于 ANSYS 的地震作用下群桩动力效应研究 徐雁飞, 钱德玲(1536)
土-基础-高层框架结构振动台试验及有限元分析 周 伟, 钱德玲(1540)
购物中心景观设计评估体系研究 汪晒秋, 何人可(1544)
基于支持向量机的冰塞水位预测 刘彦涛(1550)

• 资源与环境工程 •

- 巢湖烔炀河水体氮磷营养物变化特征及成因分析 廖荣明, 洪天求, 李如忠(1553)
矿区大型断层碎屑分维及其水文地质工程地质意义 葛晓光, 王 耀, 李鹏军, 等(1558)
功率超声处理甲基橙废水的实验研究 梁山景, 程建萍, 陈长琦(1563)

• 管理科学与工程 •

- 模糊贝叶斯网在通信行业客户流失预测中的应用研究 徐 草, 李 敏(1567)
基于主观折扣算子的证据理论在群决策中的应用 施 旋, 陈思凤(1572)

• 数理科学 •

- 一种低功耗恒跨导 CMOS 运算放大器的设计 杨依忠(1576)
高性能线性 CCD 开发平台的研制 梁 冰, 易茂祥, 颜天信(1579)
阳极电压对真空荧光显示器发光效率的影响 张建平, 赵 威, 王睿韬(1582)
一种新型低温漂工艺补偿基准电流源的设计 魏胜涛, 杨依忠, 徐慧芳, 等(1586)
一种有理插值曲面的有界性质和点的控制 李 侠, 檀结庆(1591)
具变号非线性项二阶 m 点边值问题的 2 个正解 沈春芳, 杨 刘(1597)

JOURNAL OF HEFEI UNIVERSITY OF TECHNOLOGY

(Natural Science)

Vol. 33 No. 10

Serial No. 210

Oct. 2010

CONTENTS

• Machinery and Automobile Engineering •

- Research on product's green module partition for whole life cycle GUO Wei, LIU Guang-fu, ZHANG Lei(1441)
Optimizing and matching analysis of suspension parameters of full-floating cab of heavy tractor CHEN Wu-wei, WANG Lei, CHEN Xiao-xin(1446)
Study of set condition of pedestrian overpass on urban road sections YUAN Jin-xia, ZHANG Wei-hua, DING Heng, et al(1450)
Research on digital describing method of control device manipulation process based on comfort analysis HU Jing, LIU Ming-zhou, HU Jin-xin, et al(1454)
Research on bionic form design in automobile modeling design ZHU Ying, CAO Jian-zhong, WEI Yan-li(1458)
Research on the cooperation workflow modeling of individualized product facing to client requirement expression YANG Qin, WEI Dao-zhu, PAN Xiu-qin(1462)
Algorithm of two intersecting dash dot lines for computer making of engineering drawings in accord with the state standard LUO Min-xue(1468)
Analysis and improvement of the value stream in fridge production CAO Guo-an, WAN Wen-jie, ZHANG Xi(1471)

• Material Science and Engineering •

- Research on die-casting defect prediction of magnesium alloy automobile shock absorber bracket ZHENG Jin-xing, WANG Cheng-yong, LIU Quan-kun, et al(1476)
Interface damping mechanism of macroscopic graphite particulates reinforced commercially pure aluminum metal matrix composites WEI Jian-ning, ZHONG Jian-song, YU Li-sheng, et al(1481)
Synthesis and application of acrylic-styrene nanometer core-shell emulsion WANG Cun-dong, LUO Yun-jun, LÜ Yu-xia(1485)

• Electrical Engineering and Automation •

- Design of transmission control unit for vehicle's automatic transmission CHEN Jie, ZHANG Chong-wei, KONG Hui-fang(1488)
Off-line handwritten Chinese character recognition based on variable precision rough set WANG Jian-ping, ZHANG Da-min(1493)
Study of the hydraulic turbine regulation system based on single neuron adaptive PID control WANG Hua-qiang, ZHOU Zhang-hai, YANG Chu-guang(1497)
Modeling and formal verification of atmospheric pressure oven heating system LIU Zhen, FANG Min, LUO Lai-bao, et al(1501)
Algorithm research on flow pipe approximation of formal verification LUO Lai-bao, FANG Min, LIU Zhen(1506)

• Computer and Information Engineering •

- Power priority test method of NoC communication architecture OUYANG Yi-ming, HUANG He, LIANG Hua-guo(1510)
Study of long-distance transmission of coal mine control system based on CAN-bus HU Qing-xin, LI Dong(1515)
Solution to IO limitation based on multiple FPGAs system HU Wen-bin, WU Jian-qi, HONG Yi(1519)
Research on benchmark testing of IP network equipment performance and its application WANG Li-dong(1523)

• Civil and Hydraulic Engineering •

- Mode-uncoupled simplified expression of story-based elastic seismic energy response CHANG Lei, YE Xian-guo, JIANG Qing(1527)

Theoretical analysis of a cantilever beam composed of three-layers	ZHAN Chun-xiao, LIU Yi-hua(1531)
Dynamic effect analysis of group piles under earthquake based on ANSYS	XU Yan-fei, QIAN De-ling(1536)
Shaking table test and finite element analysis of soil-foundation-frame structure	ZHOU Wei, QIAN De-ling(1540)
Research on evaluation system of landscape design for shopping malls	WANG Shen-qiu, HE Ren-ke(1544)
Forecasting of ice jam stage based on support vector machine	LIU Yan-tao(1550)
• Resources and Environmental Engineering •	
Variation characteristics and causes of nitrogen and phosphorus nutrients in Tongyang River	LIAO Rong-ming, HONG Tian-qiu, LI Ru-zhong(1553)
Fractal dimensions of large fault gouges in a coal mine and their hydrogeologic and engineering-geologic meanings	GE Xiao-guang, WANG Yao, LI Peng-jun, et al(1558)
Experimental study of methyl orange wastewater treatment by power ultrasound	LIANG Shan-jing, CHENG Jian-ping, CHEN Chang-qi(1563)
• Management Science and Engineering •	
Application of fuzzy Bayesian net in customer churn prediction for mobile communication industry	XU Cao, LI Min(1567)
Application of evidence theory in group decision-making based on subjective discounting operator	SHI Xuan, CHEN Si-feng(1572)
• Mathematics and Physics •	
Research and design of a low-power consumption and constant transconductance CMOS operational amplifier	YANG Yi-zhong(1576)
Design of high-performance linear CCD development platform	LIANG Bing, YI Mao-xiang, YAN Tian-xin(1579)
Effect of anode voltage on luminous efficiency of vacuum fluorescent display	ZHANG Jian-ping, ZHAO Wei, WANG Rui-tao(1582)
Design of a new low temperature coefficient and process compensated current reference source	WEI Sheng-tao, YANG Yi-zhong, XU Hui-fang, et al(1586)
Bounded property and point control of a bivariate rational interpolation surface	LI Xia, TAN Jie-qing(1591)
Double positive solutions for second-order m -point boundary value problems with sign changing nonlinearity	SHEN Chun-fang, YANG Liu(1597)