

合肥工业大学学报

(自然科学版)

2010 年 6 月

第 33 卷第 6 期

[期刊基本参数] CN 34-1083/N * 1956 * m * A4 * 160 * zh * P * ¥12.00 * 1 000 * 38 * 2010-06

目 次

· 机械与汽车工程 ·

- 基于灵敏度分析的双前桥转向系统摇臂机构的优化..... 陈朝阳, 陈 娜, 张代胜(801)
- 牛骨原生物陶瓷的制备及其性能研究 丁云飞, 张学斌, 凤 仪, 等(804)
- 网格环境下 RCFDS 资源管理与调度模型研究 张 利, 张建军, 徐 娟, 等(808)
- 液体过滤技术现状与我国的发展趋势 赵 扬, 姬忠礼, 王 湛, 等(812)

· 电气与自动化工程 ·

- 电能管理系统中智能数据网关的设计与实现 温阳东, 王 恒(818)
- CS8900A 网络接口模块的设计 金毅仁, 温阳东(822)
- 求解机组组合问题的变邻域-粒子群混合算法 季美红, 徐宁舟, 高 研, 等(827)

· 计算机与信息工程 ·

- 无线传感器网络 S-MAC 协议的节能改进 樊高雁, 张维勇, 马学森, 等(832)
- 基于低轨道卫星通信网络的路由算法探析 何琢如, 俞能海(836)
- 典型相关分析与多伯努利相关模型的图像标注 周 晓, 潘洁珠(841)
- 隐式路由协议的一种转发节点快速选择算法..... 李少林, 郑淑丽, 骆海艳(847)
- 一种改进的无线传感器网络定向扩散协议..... 骆海艳, 郑淑丽, 李少林(851)
- 一种新的时隙 ALOHA 算法 赵晓霞, 昂志敏, 郭 治(855)
- 改进的基于层次聚类的模糊聚类算法..... 李玲玲, 方 帅, 辛 浩(859)

· 土木与水利工程 ·

- 地形不对称对白鹤滩拱坝的影响..... 高 健, 吴 昉, 李 涛(863)
- HPFL 二次受力加固 RC 偏压柱试验研究..... 蒋隆敏, 尚守平, 曹 晖(868)
- 变动分流比边界在赣江下游河网模型中的应用..... 汪迎春, 郑桂富, 吴长法(873)
- 中国传统城市设计的意境结构研究..... 王树声, 李慧敏, 喜旭芳(876)
- 城市背面景观的价值实现..... 田 文(881)
- 区域给水管网的水力脆弱性评估..... 赵 元(885)
- 景观设计对城市居住区公共空间安全性的改善 何疏悦, 唐晓岚, 季建乐, 等(889)
- 实体建筑虚拟化..... 陈子伟, 石建和, 张 黎(893)

• 资源与环境工程 •

- 生态足迹在城市规划环评中的应用..... 熊鸿斌, 李远东, 谷良平(897)
- PRB 技术处理污染地下水的试验研究 许光泉, 史红伟, 何晓文(901)
- 舒家店铜矿床地质地球化学特征及成因分析..... 王 彪(906)

• 化学工程 •

- 碱性固体聚合物电解质膜的制备及性能研究 谷芝元, 鲁道荣, 许 明, 等(911)
- (S)-3-羟基- γ -丁内酯一步法合成(S)-1,2,4-丁三醇的研究 蔡征宇, 王明亮(915)

• 数理科学 •

- 函数值 Padé 逼近的一种新的行列式表示及其应用 李 勇, 朱晓临, 郑剑平, 等(918)
- 对含有不可达点的有理插值函数的研究 李慷慨, 朱晓临, 李 勇, 等(922)
- 单变量均匀静态奇数点细分格式的构造和连续性分析 谭 晔, 江 平(925)
- 网络环境下客户抱怨的贝叶斯分析及处理方法 何建民, 徐艳玲(929)
- 具连续变量的高阶非线性差分方程的振动与非振动准则 杨甲山, 李继猛(934)
- 基于 IF 模型阈值神经元的随机共振..... 王俊琦, 焦贤发(939)
- 长记忆下函数型数据非参数回归的 M 估计..... 朱东河, 凌能祥(943)
- 基于长记忆函数型数据条件中位数的相合估计 赵云云, 凌能祥(947)
- 二维扩散方程的区间拟小波数值解 曹小琴, 林 京(951)
- 一种无需运放的低温漂带隙基准源设计 沈 勇, 解光军(955)
- 两次制结提高 n^+p 型 Si 太阳能电池转换效率的研究 高 华, 杨 乐, 周光华, 等(958)

• 信息与动态 •

- 《合肥工业大学学报(自然科学版)》稿件审稿结果查询系统开通..... (817)
- 《合肥工业大学学报(自然科学版)》欢迎投稿..... (854)

JOURNAL OF HEFEI UNIVERSITY OF TECHNOLOGY

(Natural Science)

Vol. 33 No. 6

Serial No. 206

Jun. 2010

CONTENTS

• Machinery and Automobile Engineering •

- Optimization of double-front-axle steering rocker based on sensitivity analysis
..... CHEN Chao-yang, CHEN Na, ZHANG Dai-sheng(801)
- Preparation and property of the bioceramic from bovine-bone
..... DING Yun-fei, ZHANG Xue-bin, FENG Yi, et al(804)
- Research on resource management and scheduling model of RCFDS in grid
..... ZHANG Li, ZHANG Jian-jun, XU Juan, et al(808)
- Status quo of liquid filtration technology and its development trend in China
..... ZHAO Yang, JI Zhong-li, WANG Zhan, et al(812)

• Electrical Engineering and Automation •

- Design and implementation of intelligent data gateway in power management system
..... WEN Yang-dong, WANG Heng(818)
- Design of CS8900A network interface module JIN Yi-ren, WEN Yang-dong(822)
- A hybrid algorithm of VNS-PSO to solve unit commitment problem
..... JI Mei-hung, XU Ning-zhou, GAO Yan, et al(827)

• Computer and Information Engineering •

- Energy-saving improvement of S-MAC protocol for wireless sensor network
..... FAN Gao-yan, ZHANG Wei-yong, MA Xue-sen, et al(832)
- Routing algorithm analysis based on LEO satellite communication network HE Zhuo-ru, YU Neng-hai(836)
- Automatic image annotation method based on canonical correlation analysis and multiple Bernoulli relevance model
..... ZHOU Xiao, PAN Jie-zhu(841)
- A forwarder fast selection algorithm for implicit routing protocol
..... LI Shao-lin, ZHENG Shu-li, LUO Hai-yan(847)
- An improved protocol based on directed diffusion for WSN LUO Hai-yan, ZHENG Shu-li, LI Shao-lin(851)
- A novel S-ALOHA algorithm ZHAO Xiao-xia, ANG Zhi-min, GUO Zhi(855)
- An improved hierarchical fuzzy clustering algorithm LI Ling-ling, FANG Shuai, XIN Hao(859)

• Civil and Hydraulic Engineering •

- Influence of topographical asymmetry on Baihetan Arch Dam GAO Jian, WU Fang, LI Tao(863)
- Experimental investigation into the strengthening of eccentrically compressed RC column using HPFL
under twice loading JIANG Long-min, SHANG Shou-ping, CAO Hui(868)
- Application of variational distributary rate boundary in river-net model of lower reach of Ganjiang River
..... WANG Ying-chun, ZHENG Gui-fu, WU Chang-fa(873)
- Research on the artistic conception composition in traditional Chinese urban design
..... WANG Shu-sheng, LI Hui-min, XI Xu-fang(876)
- Value realization of landscape in the depth of city TIAN Wen(881)
- Hydraulic vulnerability assessment for regional water supply network ZHAO Yuan(885)
- Improvement of public space safety in urban residential areas by landscape design
..... HE Shu-yue, TANG Xiao-lan, JI Jian-le, et al(889)
- Virtualization of physical architecture CHEN Zi-wei, SHI Jian-he, ZHANG Li(893)
- Resources and Environmental Engineering •
- Application of ecological footprint in environmental impact assessment for urban planning
..... XIONG Hong-bin, LI Yuan-dong, GU Liang-ping(897)
- Experimental study of PRB technique for treating polluted groundwater
..... XU Guang-quan, SHI Hong-wei, HE Xiao-wen(901)
- Geological and geochemical characters of Shujiadian copper deposit and genesis analysis WANG Biao(906)

• **Chemical Engineering** •

Study of preparation and performance of alkaline solid polymer electrolyte membrane

..... GU Zhi-yuan, LU Dao-rong, XU Ming, et al (911)

One-step synthesis of (S)-1,2,4-butanetriol via (S)-3-hydroxy- γ -butyrolactone

..... CAI Zheng-yu, WANG Ming-liang (915)

• **Mathematics and Physics** •

A new determinantal representation for function-valued Padé approximant and its application

..... LI Yong, ZHU Xiao-lin, ZHENG Jian-ping, et al (918)

Study of rational interpolation function with unattainable points

..... LI Kang-kai, ZHU Xiao-lin, LI Yong, et al (922)

Construction and continuity analysis of uniform stationary univariate odd point subdivision schemes

..... TAN Ye, JIANG Ping (925)

Research on online customer complaint analysis and processing method based on Bayesian network

..... HE Jian-min, XU Yan-ling (929)

Oscillation and nonoscillation criteria for the higher order nonlinear difference equation with continuous variable

..... YANG Jia-shan, LI Ji-meng (934)

Stochastic resonance of an integrate-and-fire neuron model with threshold

..... WANG Jun-qi, JIAO Xian-fa (939)

Nonparametric regression M-estimation for functional data under long-memory condition

..... ZHU Dong-he, LING Neng-xiang (943)

Consistency of the conditional median for functional data under long-memory condition

..... ZHAO Yun-yun, LING Neng-xiang (947)

Study of two-dimensional diffusion equation by interval quasi-wavelet method

..... CAO Xiao-qin, LIN Jing (951)

Design of a low temperature floats bandgap reference without amplifier

..... SHEN Yong, XIE Guang-jun (955)

On improving the conversion efficiency of n^+p type silicon solar cell by means of two times junction making

..... GAO Hua, YANG Le, ZHOU Guang-hua, et al (958)