

# 吉林大学学报(理学版)

Jilin Daxue Xuebao (Lixue Ban)

第 49 卷 第 6 期 2011 年 11 月

## 目 次

### 数 学

- 一种应变重构点插值无网格方法(SC-PIM) ..... 徐旭,周敏敏,于东元,盛夏 (969)
- 二重 Fourier 级数的平行六边形求和法 ..... 王淑云,钱李新,孙雪楠,梁学章,沈卫平 (973)
- 广义 Calderón-Zygmund 算子交换子在加权 Hardy 型空间的有界性 ..... 孙杰 (979)
- $W_{nil}$ -内射模的若干性质及刻画 ..... 陈文兵,殷晓斌 (985)
- 偏 Doi-Hopf 群结构 ..... 姜秀燕,李颖,赵国传,孙凤芝 (989)
- 广义二次矩阵线性组合的秩与零度 ..... 刘淑媛,杨忠鹏,谢燕萍 (993)
- Finsler 流形间调和映射的拓扑性质 ..... 朱业成,宋卫东 (997)
- 在常规错误下具有 4 个部件冗余系统的稳定性分析 ..... 盖平,唐慧,赵志欣 (1001)
- 有闭轨 Lienard 系统的轨线结构分类 ..... 李晓月,王克 (1007)
- Jordan 李代数的次理想 ..... 温启军 (1014)
- 无约束条件的矩阵多项式的秩和 ..... 吕洪斌,杨忠鹏,李艳,林丽美,陈梅香,钟国翔 (1019)
- 一类单值化问题的求解 ..... 孙凤琪,沈永祥 (1024)
- 一类多点边值问题格林函数的正性 ..... 谢志婷 (1029)
- 带有滞量的 Lotka-Volterra 三种群互惠系统的周期解 ..... 赵宏伟 (1034)
- 集值下鞅的一类 Riesz 分解 ..... 李高明,李海鹏 (1039)
- 一般非线性规划问题的凝聚同伦内点方法 ..... 金鉴禄,谭佳伟,贺莉,刘庆怀 (1044)
- 一类非本原代换系统的拓扑熵与混沌 ..... 楚振艳,廖丽 (1053)
- 解非线性方程的一族修正 Chebyshev-Halley 迭代方法 ..... 刘天宝,吕显瑞 (1055)
- 随机微分方程 Milstein 方法的几乎必然及矩指数稳定性 ..... 张雨馨,王鹏 (1058)
- 三元多项式环中超越次数为 2 的收缩 ..... 金永 (1061)
- 单个总体方差差异的  $U$  统计量检验法 ..... 陆媛媛,宋立新 (1064)

### 计算机科学

- 基于扩展关系的信息量计算方法 ..... 张凯勇,周春光,王康平,郭东伟,翟延冬 (1068)
- 基于 Spread 业务支撑系统的拓扑构造 ..... 董立岩,殷涵,王利民,毛锐,黄乐 (1073)
- 基于核的模糊  $c$  均值聚类算法的收敛性定理 ..... 曲福恒,胡雅婷,马驹良,苑丽红,孙爽滋 (1079)
- 基于 Terminal 滑模的 Hindmarsh-Rose 神经元放电同步控制  
..... 王海洋,王江,李红利,陈颖源,王延权 (1087)
- 一种快速的无标定位算法 ..... 陈前,王甦菁,刘小华,高蕾,周春光 (1095)

## 基于 SVM-RFE 的水稻抗病基因筛选

..... 付 媛, 王 岩, 周 柚, 张 帆, 王 珏鑫, 梁艳春 ( 1101 )

一种新的处理能力优先的权值分配调度算法 ..... 刘 敏, 房至一, 王红斌, 张 希 ( 1105 )

## 物 理

### Mn 掺杂纳米晶 ZnO 的制备及其性质

..... 王丽丽, 王志军, 宋立军, 杨 睿, 金 勇, 安 涛, 苏 杭, 王永权, 李守春 ( 1110 )

## 电子科学

ADI-MRTD 算法在新型非对称共面波导滤波器中的应用 ..... 范木杰, 房少军, 李晓明 ( 1115 )

## 材料科学

加工有机晶体管电极的压力选择性剥离方法 ..... 张亚南, 张洪武 ( 1119 )

### NiO/TiO<sub>2</sub> 纳米管阵列异质结电极的制备及光电化学性能

..... 孙大春, 王丽萍, 郭 进, 李伊苻, 李明辉, 付乌有, 杨海滨 ( 1124 )

## 化 学

嗜热酯酶 EstTs1 的远源三维结构模建及分子对接 ..... 詹冬玲, 邵鸿泽, 韩葳葳, 刘景圣 ( 1131 )

## 生命科学

### 人参 SQS 基因的干扰载体构建及转化人参愈伤组织

..... 蒋世翠, 张明哲, 王 义, 孙春玉, 李校堃, 张美萍 ( 1136 )

平菇多糖提取方法的比较 ..... 张 敏, 陈瑞战, 陈瑞平, 刘志强, 孟繁磊, 李 元, 董 航 ( 1141 )

### 重组人角质细胞生长因子-2 基因的克隆、表达及活性

..... 田海山, 唐 禄, 王晓杰, 王艳芳, 官丽莉, 李校堃 ( 1150 )

## 环境科学

### 紫外光作用下冰相中 $\alpha$ -萘酚的光转化

..... 薛洪海, 郭志新, 王云凤, 李林璘, 李 哲, 康春莉 ( 1157 )

以垃圾渗滤液为燃料的微生物燃料电池产电性能 ..... 张晓艳, 滕洪辉 ( 1162 )

欢迎订阅 2012 年《吉林大学学报(理学版)》..... ( 1028 )

2009 年综合大学学报类期刊影响因子排序表..... ( 1078 )

2009 年综合大学学报类期刊总被引频次排序表..... ( 1149 )

《吉林大学学报(理学版)》征稿简则 ..... ( 封二 )

( 卷终 )

**Mathematics**

A Strain-Constructed Point Interpolation Method ( SC-PIM )  
..... XU Xu, ZHOU Min-min, YU Dong-yuan, SHENG Xia ( 969 )

Parallel Hexagon's Summation Methods of Double Fourier Series of Functions  
..... WANG Shu-yun, QIAN Li-xin, SUN Xue-nan, LIANG Xue-zhang, SHEN Wei-ping ( 973 )

Boundedness for Commutator of Generalized Calderón-Zygmund Operator on the Weighted Hardy Space  
..... SUN Jie ( 979 )

Some Properties and Characterizations on  $W_{n1}$ -Injective Modules  
..... CHEN Wen-bing, YIN Xiao-bin ( 985 )

Structures of Partial Doi-Hopf Group  
..... JIANG Xiu-yan, LI Ying, ZHAO Guo-chuan, SUN Feng-zhi ( 989 )

Rank and Nullity of Linear Combinations of Generalized Quadratic Matrices  
..... LIU Shu-yuan, YANG Zhong-peng, XIE Yan-ping ( 993 )

Some Topology Properties of Harmonic Map in Finsler Manifolds  
..... ZHU Ye-cheng, SONG Wei-dong ( 997 )

Stability Analysis of a Four-Unit Redundant System with Common-Cause Failure  
..... GAI Ping, TANG Hui, ZHAO Zhi-xin ( 1001 )

Orbit Classification of Lienard Systems with Closed Orbits ..... LI Xiao-yue, WANG Ke ( 1007 )

Subideals of Jordan Lie Algebras ..... WEN Qi-jun ( 1014 )

Sum of Ranks of Matrix Polynomials without Constraints  
..... LÜ Hong-bin, YANG Zhong-peng, LI Yan, LIN Li-mei, CHEN Mei-xiang, ZHONG Guo-xiang ( 1019 )

Solution for a Class of Single-Value Branch Problems ..... SUN Feng-qi, SHEN Yong-xiang ( 1024 )

Positiveness of Green's Function Associated to a Multi-point Boundary Value Problem  
..... XIE Zhi-ting ( 1029 )

Periodic Solution of Lotka-Volterra Facultative Mutualism System of Three Species with Several Delays  
..... ZHAO Hong-wei ( 1034 )

A Class of Riesz Decomposition for Set-Valued Submartingale ..... LI Gao-ming, LI Hai-peng ( 1039 )

Aggregate Homotopy Interior-Point Method for General Nonlinear Programming Problems  
..... JIN Jian-lu, TAN Jia-wei, HE Li, LIU Qing-huai ( 1044 )

Topological Entropy and Chaos for a Class of Non-primitive Substitution Systems  
..... CHU Zhen-yan, LIAO Li ( 1053 )

A Family of Modified Chebyshev-Halley Iterative Methods for Solving Nonlinear Equations  
..... LIU Tian-bao, LÜ Xian-rui ( 1055 )

Almost Sure and Moment Exponential Stability of Milstein Methods for Stochastic Differential Equations  
..... ZHANG Yu-xin, WANG Peng ( 1058 )

Retracts with Transcendental Degree 2 of the Polynomial Ring in Three Variables ..... JIN Yong ( 1061 )

$U$ -Statistics Testing Method in Testing Variance Differences of a Single Population  
..... LU Yuan-yuan, SONG Li-xin ( 1064 )

**Computer Science**

An Information Content Method Based on Extending Relations  
..... ZHANG Kai-yong, ZHOU Chun-guang, WANG Kang-ping, GUO Dong-wei, ZHAI Yan-dong ( 1068 )

万方数据

- Topology Construction of Business Support System Based on Spread  
 ..... DONG Li-yan, YIN Han, WANG Li-min, MAO Rui, HUANG Le ( 1073 )
- A Convergence Theorem of Kernel Based Fuzzy *c*-Means Clustering Algorithm  
 ..... QU Fu-heng, HU Ya-ting, MA Si-liang, YUAN Li-hong, SUN Shuang-zi ( 1079 )
- Unidirectional Synchronization for Hindmarsh-Rose Neurons via Terminal Sliding Mode Control  
 ..... WANG Hai-yang, WANG Jiang, LI Hong-li, CHEN Ying-yuan, WANG Yan-quan ( 1087 )
- A Fast Iris Localization Method  
 ..... CHEN Qian, WANG Su-jing, LIU Xiao-hua, GAO Lei, ZHOU Chun-guang ( 1095 )
- Disease Resistance Related Gene Screening in *Oryza sativa* Using SVM-RFE  
 ..... FU Yuan, WANG Yan, ZHOU You, ZHANG Fan, WANG Yu-xin, LIANG Yan-chun ( 1101 )
- A New Type Weights Distribution Scheduling Algorithm with Priority Processing Capability  
 ..... LIU Min, FANG Zhi-yi, WANG Hong-bin, ZHANG Xi ( 1105 )

## Physics

- Preparation and Properties of Mn Doped Nanocrystalline ZnO  
 ..... WANG Li-li, WANG Zhi-jun, SONG Li-jun, YANG Rui, JIN Yong, AN Tao, SU Hang, WANG Yong-quan, LI Shou-chun ( 1110 )

## Electronic Science

- Application of ADI-MRTD Method on New ACPW Filter  
 ..... FAN Mu-jie, FANG Shao-jun, LI Xiao-ming ( 1115 )

## Material Science

- Processing Organic Field-Effect Transistors Electrodes by Means of Stress Selective Detachment Method  
 ..... ZHANG Ya-nan, ZHANG Hong-wu ( 1119 )
- Preparation and Photoelectrochemical Property of NiO/TiO<sub>2</sub> Nanotube Arrays Heterojunction Electrode  
 ..... SUN Da-chun, WANG Li-ping, GUO Jin, LI Yi-xing, LI Ming-hui, FU Wu-you, YANG Hai-bin ( 1124 )

## Chemistry

- Remote Homology Modeling and Molecular Docking of Thermostable Esterase ( EstTs1 )  
 ..... ZHAN Dong-ling, SHAO Hong-ze, HAN Wei-wei, LIU Jing-sheng ( 1131 )

## Life Science

- Interference Vector Construction of *Panax ginseng*'s SQS Gene and Transformation Callus  
 ..... JIANG Shi-cui, ZHANG Ming-zhe, WANG Yi, SUN Chun-yu, LI Xiao-kun, ZHANG Mei-ping ( 1136 )
- Comparison among Extraction Technologies of Polysaccharide from *Pleurotus ostreatus*  
 ..... ZHANG Min, CHEN Rui-zhan, CHEN Rui-ping, LIU Zhi-qiang, MENG Fan-lei, LI Yuan, DONG Hang ( 1141 )
- Gene Clone, Expression and Its Biological Activity of Keratinocyte Growth Factor-2  
 ..... TIAN Hai-shan, TANG Lu, WANG Xiao-jie, WANG Yan-fang, GUAN Li-li, LI Xiao-kun ( 1150 )

## Environmental Science

- Photoconversion of  $\alpha$ -Naphthol under UV Irradiation in Ice  
 ..... XUE Hong-hai, GUO Zhi-xin, WANG Yun-feng, LI Lin-lin, LI Zhe, KANG Chun-li ( 1157 )
- Electricity Generation Characteristics of Microbial Fuel Cell with Landfill Leachate as Fuel  
 ..... 万方数据 ..... ZHANG Xiao-yan, TENG Hong-hui ( 1162 )