

ISSN 1001-4616

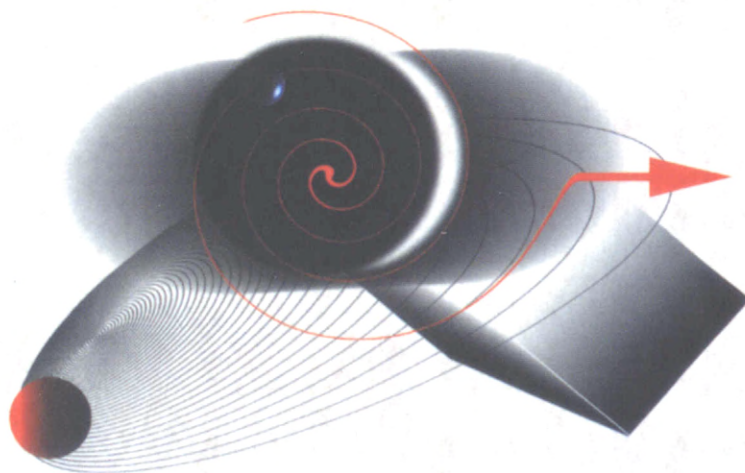
CODEN NSXZEN

# 南京师大学报

JOURNAL OF NANJING NORMAL UNIVERSITY

自然科学版

NATURAL SCIENCE EDITION



中文综合性科学技术类核心期刊

中国高校优秀科技期刊

江苏省期刊方阵优秀期刊

第35卷  
2012

1

# 南京师大学报

(自然科学版)

第 35 卷 第 1 期(总第 129 期)

2012 年 3 月

## 目 次

### · 数学 ·

- $P_1$  非协调四边形元解 Stokes 问题的多重网格算法 ..... 黄 萍,王琛玮,杨巨玲,徐丹丹 (1)
- 一维实余弦信号模型振幅的两步  $M$  估计 ..... 赵媛媛,明瑞星 (12)
- 3 类图完美匹配的计数 ..... 唐保祥,任 韩 (16)
- 二维修正的 Zakharov 方程的适定性 ..... 游淑军,宁效琦 (22)
- $L$ -模糊集与变基幂集线性算子的有界性刻画 ..... 毛铭桦 (29)

### · 物理学 ·

- 外磁场诱导下的硫化钴晶相转变 ..... 王 巍,王声乐,王登志 (34)
- 结构多位置裂缝识别的有限元方法 ..... 林 缨,李学平 (39)

### · 化学 ·

- 纳米钡/铁双金属对 2,4-二氯酚的还原脱氯研究 ..... 王 猛,吉祖峰,崔世海 (46)
- 共焦显微拉曼技术在印章形成时间鉴定方面的应用 ..... 籍 康,赵 杰 (50)
- 离子液体催化合成阻燃剂 3-羟基苯膦酰丙酸 ... 罗 轩,史红丽,周 浩,张士磊,杨锦飞,职慧珍 (54)
- 聚羧酸对  $\text{LiFePO}_4$  正极材料结构和性能的影响 ... 莫祥银,冯晓叁,俞琛捷,丁 毅,康彩荣,倪 聪 (58)

N-Cycl[3,2,2]azine 甲酰胺衍生物对金属离子的选择性研究 ..... 江玉亮,马振毛,杨安博,陈长信 (63)

新设计的碳纳米管锂盐的第一超极化率的理论研究 ..... 顾景阳,茅若晨,江丽芝,朱小蕾 (66)

## · 生命科学 ·

中国特有蝶种——库茨粉蝶(鳞翅目:粉蝶科)再描述及生物学初报(英文) ..... 李朝晖 (71)

不同启动子对禽流感病毒 H5HA 基因在马铃薯体中表达的影响

..... 黄翠香,季勤,张云峰,徐春,窦秉德 (75)

蜕皮激素对克氏原螯虾蜕皮和生长的影响 ..... 陈树桥,陈勇,周国勤,唐春萍 (80)

pDsRED-LC3 真核表达载体的构建及其在肝癌细胞系 HepG2 中的表达和定位

..... 彭琬昕,孙瑶湘,陈琛,金洁,邵根宝,王嫒 (84)

## · 地理学 ·

基于 MODIS 的太湖蓝藻水华暴发时空规律分析研究 ..... 刘晓艳,倪峰,周玉红 (89)

水体中有色可溶性有机物的测量及其变化 ..... 付宇,韦玉春,周宇 (95)

基于城市旅游理性发展的典型城市比较研究 ..... 丁蕾,金卫东 (104)

点群选取与化简算法时间复杂度研究 ..... 于艳平,沈婕,尚在颖 (111)

淤泥质潮滩沉积周期性研究综述 ..... 蔡小辉,柏春广,王建 (117)

## · 体育学 ·

大学生体质健康状况的对比分析——以南京师大学生为例 ..... 夏俊彪,程传银,周学荣 (122)

武术套路运动对青春期女性骨强度及雌激素的影响 ..... 陈玉群 (128)

---

[期刊基本参数]CN 32-1239/N \* 1955 \* q \* A4 \* 136 \* zh + en \* P \* ¥8.00 \* 1150 \* 24 \* 2012-03

---

主编:陈凌孚;副主编:陆炳新(常务),孙德泉;执行编辑:顾晓天

公开发行

**JOURNAL OF NANJING NORMAL UNIVERSITY**  
**( Natural Science Edition )**

Vol. 35 No. 1 ( Sum. 129 )

Mar, 2012

**CONTENTS**

A Multigrid Method of  $P_1$  Nonconforming Quadrilateral Finite Element for Solving Stokes Problem  
..... Huang Ping, Wang Chenwei, Yang Juling, Xu Dandan ( 1 )

Two-Step  $M$  Estimators for Parameter Amplitudes in One Dimensional Cosine Model ..... Zhao Yuanyuan, Ming Ruixing ( 12 )

The Number of Perfect Matchings in Three Types of Graphs ..... Tang Baoxiang, Ren Han ( 16 )

Well-Posedness for a Two-Dimensional Modified Zakharov Equations ..... You Shujun, Ning Xiaoqi ( 22 )

A Characterization About Boundedness of  $L$ -Fuzzy Set and Variable Basis Powerset Linear Operator ..... Mao Minghua ( 29 )

Magnetic Field Induced Phase Transition of Crystalline Cobalt Sulfides ..... Wang Wei, Wang Shengyue, Wang Dengzhi ( 34 )

Identification of Multi-Position Cracks in Structures Based on Finite Element Method ..... Lin Ying, Li Xueping ( 39 )

2,4-Dichlorophenol Degradation by Nanoscale Pd/Fe System ..... Wang Meng, Ji Zufeng, Cui Shihai ( 46 )

Application of Confocal Micro-Raman in Testing the Ageing of Inkpads and Stamp-Pad Ink ..... Ji Kang, Zhao Jie ( 50 )

Synthesis of Flame Retardants 3-( Hydroxyphenylphosphinyl ) Propionic Acid Catalyzed by Ionic Liquid  
..... Luo Xuan, Shi Hongli, Zhou Hao, Zhang Shilei, Yang Jinfei, Zhi Huizhen ( 54 )

Effect of Polycarboxylate on Structure and Performance of  $\text{LiFePO}_4$  Cathode Material  
..... Mo Xiangyin, Feng Xiaosan, Yu Chenjie, Ding Yi, Kang Cairong, Ni Cong ( 58 )

Synthesis of N-Cycl[3,2,2]azine Formyl Urea Derivatives and Studies on Its Recognizing Properties on Metal Ions  
..... Jiang Yuliang, Ma Zhenmao, Yang Anbo, Chen Changxin ( 63 )

Theoretical Study on the First Hyperpolarizability of New Lithium Salt ( Li-CNTs )  
..... Gu Jingyang, Mao Ruochen, Jiang Lizhi, Zhu Xiaolei ( 66 )

Redescription and Biology of an Endemic Chinese Butterfly: *Pieris kozlovi* ( Alpheraky, 1897 ) ( Lepidoptera: Pieridae )  
..... Li Zhaohui ( 71 )

Effect of Promoters on Expression of H5HA Avian Influenza Virus Gene in Potato Plant  
..... Huang Cuixiang, Ji Qin, Zhang Yunfeng, Xu Chun, Dou Bingde ( 75 )

Effects of Ecdysterone on the Molt and Growth of *Procambarus Clarkii*  
..... Chen Shuqiao, Chen Yong, Zhou Guoqing, Tang Chunping ( 80 )

Construction of Recombinant pDsRed-LC3 Fusion Protein and Its Expression and Localization in HepG2 Cell  
..... Peng Wanxin, Sun Yaoxiang, Chen Chen, Jin Jie, Shao Genbao, Wang Lei ( 84 )

Spatio-temporal Rules of the Blue-green Algae Blooms in the Taihu Lake Based on MODIS Data  
..... Liu Xiaoyan, Ni Feng, Zhou Yuhong ( 89 )

The Measurement and Changes of Chromophoric Dissolved Organic Matter in Water ..... Fu Yu, Wei Yuchun, Zhou Yu ( 95 )

Comparative Study of Typical Cities Based on the Smart Development of Urban Tourism ..... Ding Lei, Jin Weidong ( 104 )

A Study on the Time Complexity of Point Cluster Selection and Simplification Algorithms  
..... Yu Yanping, Shen Jie, Shang Zaiying ( 111 )

Review of Research on Sedimentary Periodicity of Tidal Mud Flat ..... Gong Xiaohui, Bai Chunguang, Wang Jian ( 117 )

Contrastive Analysis of the College Students Physical Health—With the Students in NNU as the Investigation Objects  
..... Xia Junbiao, Cheng Chuanyin, Zhou Xuerong ( 122 )

Influence of WUSHU Routine Exercise on the Bone Strength and Estrogen to the Adolescent Females ..... Chen Yuqun ( 128 )

**Chief Editor:** Chen Lingfu, **Deputy Chief Editors:** Lu Bingxin, Sun Dequan, **Executive Editor:** Gu Xiaotian