

目 次

数学

- 美式期权定价问题罚函数法的欧拉-拉格朗日分裂格式 刘焕文,黄聪(1)
一维特征值问题的下界逼近 李友爱(7)
一个求解退化约束优化问题全局和超线性收敛的可行 SQP 算法(英) 陈玉,罗智明(10)
Duffing-Van der Pol 系统的复杂动态行为(英) 冉彬,蔡雅丽,苟清明(17)
社会网络的 7-域近角色分配问题 暴宁伟,李航,王杰智(24)
不公平度量指标的可分解性研究(英) 龚志民,胡志军(29)

物理与力学

- Zn-Fe-Ti 体系中三元新相 T 的晶体结构研究 朱中喜,吴煜,苏旭平(44)
不同退火气氛下 BNT 铁电薄膜的制备及其性能研究 崔虹云,韩海生,吴云飞(48)
高性能复合砂浆钢筋网加固斗墙的试验研究 尚守平,季超群,刘涛(51)
武广客运专线路堑红粘土临界动应力疲劳试验研究 刘晓红,杨果林,方薇(57)
区间隧道纵向分区烟气控制研究(1)
——数值模拟分析 赵明桥,彭立敏,李锐,等(63)
光电传感自动计数仪控制系统的设计 黎云汉(70)

化学与化学工程

N,N' -二(2-羟基苯甲酰基)-1,3-苯二甲酰肼和 N,N' -二(2-羟基苯甲酰基)-

- 1,4-苯二甲酰肼的合成与热稳定性研究 陈朗秋,高清姣,史慎德,等(75)
共沉淀法制备 $LiMn_{2-x}Co_xO_4$ 正极材料及其电化学性能 陈权启,王国光,王建国(80)
HPLC-ICP-MS 同时检测 As 和 Se 形态的方法研究 王丙涛,林燕奎,颜治,等(88)
SVM 在醇类酯类化合物结构活性关系中的应用 李生荣(93)
巯基树脂吸附-异戊醇萃取光度法测定金 杨金辉,王劲松,周书葵,等(98)
农村面源污染控制系统的长效运行评价模型研究 刘文英,刘坚,胡正义(103)

机械工程与电子工程

- 一个基于改进 RSA 密码体制的门限代理签名方案 周萍,何大可(108)
无线传感器网络空中下载协议的研究 尹令,周皓恩,刘才兴,等(112)
基于遗传禁忌算法的 S 盒优化算法 邹茜,卢涵宇,黄伟(118)
一种基于主成分分析的时间序列趋势预测方法 彭景斌,姜小奇(123)

CONTENTS

The Eulerian-Lagrangian Splitting Scheme in the Penalty Method for
 Solving the American Option Pricing LIU Huan-wen, HUANG Cong(1)

Lower Approximation of Eigenvalues in One Dimension LI You-ai(7)

A Globally and Superlinearly Convergent Feasible SQP Algorithm for
 Degenerate Constrained Optimization Problem CHEN Yu, LUO Zhi-ming(10)

Complex Dynamical Behaviors in Duffing-Vander Pol System RAN Bin, CAI Ya-li, GOU Qing-ming(17)

Further Research of k -Threshold Close Assignment BAO Ning-wei, LI Hang, WANG Jie-zhi(24)

A Note on Decomposable Measures of Inequality GONG Zhi-min, HU Zhi-jun(29)

Investigation of Crystal Structure of Ternary Compound T in
 Zn-Fe-Ti System ZHU Zhong-xi, WU Yu, SU Xu-ping(44)

Effects of the Sintering Atmosphere on the Preparation and Ferroelectric Properties of
 $\text{Bi}_{0.15}\text{Nd}_{0.85}\text{Ti}_3\text{O}_{12}$ Thin Films CUI Hong-yun, HAN Hai-sheng, WU Yun-fei(48)

Experimental Study on Rowlock Cavity Wall
 Strengthened with HPFL SHANG Shou-ping, JI Chao-qun, LIU Wei(51)

Fatigue Study of Dynamic Triaxial Tests on Critical Dynamic Stress of Red-Clay from
 Wuhan-Guangzhou Passenger Line Cutting LIU Xiao-hong, YANG Guo-lin, FANG Wei(57)

Smoke Zoning Control in Metro Tunnel(1)
 — Numerical Simulation ZHAO Ming-qiao, PENG Li-min, LI Ni, et al(63)

Photoelectric Sensor Design of Automatic Counting LI Yun-han(70)

Research on Synthesis and Thermal Stability of $\text{N,N}'$ -Bis(2-salicyloyl)isophthalic Acid Dihydrazide and
 $\text{N,N}'$ -Bis(2-salicyloyl)terephthalic Acid Dihydrazide CHEN Lang-qi, GAO Qing-jiao, SHI Shen-de, et al(75)

Electrochemical Performance of $\text{LiMn}_{2-x}\text{Co}_x\text{O}_4$ Cathode Materials Synthesized by
 a Co-Precipitation Method CHEN Quan-qi, WANG Guo-guang, WANG Jian-ming(80)

Simultaneous Arsenic and Selenium Speciation
 Analysis Using HPLC-ICP-MS WANG Bing-tao, LIN Yan-kui, YAN Zhi, et al(88)

Application of SVM on QSAR of Alcohols and Esters LI Sheng-rong(93)

Spectrophotometric Determination of Gold Contained by Adsorption with Mercapto Group Resin and
 Extraction with Isoamyl-Alcohol YANG Jin-hui, WANG Jing-song, ZHOU Shu-kui, et al(98)

Study on Evaluation Model on Rural Non-Point Source Pollution Control System of
 Long-Effective Operation LIU Wen-ying, LIU Jian, HU Zheng-yi(103)

Threshold Proxy Signature Scheme Based on the Improving RSA Cryptosystem ZHOU Ping, HE Da-ke(108)

Research on Reprogramming Using OTA Technology in
 Wireless Sensor Network YIN Ling, ZHOU Hao-en, LIU Cai-xing, et al(112)

Genetic Tabu Search Algorithm for S -Box Optimization ZOU Qian, LU Han-yu, HUANG Wei(118)

A Time-Series Trend Forecast Method Based on Principal Component Analysis PENG Jing-bin, JIANG Xiao-qi(123)