

目次

· 材料科学 ·

CoO@ Ni-Co-S 无粘结剂电极材料非对称型超级电容器性能研究 杨景海,王三龙(1)

二丁基锡(IV)对氯苯基丙烯酸酯的合成、结构及荧光性质研究
..... 朱东升,张晓萌,姜 焕,李 叶,刘春玲(8)

光催化纳米材料降解微囊藻毒素的研究进展
..... 林英姿,朱 洋,李 昂,林 涣,刘 根(15)

Co₅₀Fe₅₀/Al₂O₃ 纳米复合材料结构的穆斯堡尔谱学研究
..... 徐仕翀,王明水,谢艾玲,李嘉宁,党子佳,刘佳琪,党俊峰(19)

基于红色 TADF 的低效率滚降暖白色有机电致发光器件
..... 董 贺,丁 硕,刘思驿,崔伟男,刘 炫,袁 曦,华 杰(24)

一个插指结构配位材料的制备与表征
..... 周 实,吕梦影,王明水,隋 微,徐仕翀,刘 博(29)

利用激子敏化层研究蓝色有机发光器件的激子扩散问题 ... 王福军,汪 津,姜文龙(33)

· 数学 ·

基于熵权法与灰色关联分析的 P2P 网贷平台发展综合评价..... 于卓熙,李梦丽(37)

临床开腹手术中基于 Logistic 回归模型对麻醉用法的分析
..... 王纯杰,戚顺欣,罗琳琳,王淑影(45)

随机增广 Lagrange 变分不等式的一种求解方法 王 炜,刘玉兵,毕天骄(53)

一种求解非光滑无约束凸规划的混合束方法
..... 沈 洁,胡 盼,李函阳,赵予嘉,姜兴睿(58)

不确定环境下期望效用最大化模型在投资组合的应用 侯为波,李帅鹏(63)

基于 ARCH(*q*) 模型的高频股票交易数据分析

..... 杨 凯,马育欣,张欣然,陈雪妮,田 源,王晓红(68)

· 物理与信息技术科学 ·

函数缺陷对波导带隙结构的调制

... 吴向尧,屈春宏,熊圣洁,马美玲,刘掌辉,王梦飞,王保亮,王艺洁,宋雨生,张晓茹(73)

级联微环电光开关阵列的理论分析

..... 汪玉海,贺可川,张 倩,张 锦,鲁慧娟,宋明星,秦政坤(81)

· 化学与环境科学 ·

内蒙紫草中分离提取异戊酰紫草素 孙艳涛,李婷婷,韩 禹,沈依兵,冯静东,赵 磊(86)

四平市生活垃圾分类现状、问题与对策研究

..... 高秀红,杨春维,田 雨,白文慧,金 健,朱 怡,刘志雄,刘美男(89)

· 生命科学 ·

中国云南省白族、彝族 mtDNA 多态性分析 于长春,蒲志良(95)

含 Cry1Ab/Ac 基因的白僵菌工程菌的构建 程云清,孙 贺(101)

烟草中稳定遗传转化的新技术 杨丽萍,王 悦,徐亚男(106)

· 计算机科学 ·

一种基于 GPU 的火焰实时模拟算法 邓定胜(110)

基于 ESI 和 InCites 的吉林师范大学科研评价与学科竞争力分析 鲍庆晗,潘淑娟(115)

· 地理科学 ·

轻度苏打盐碱地水稻高效节水灌溉模式及制度与高效洗碱-超高产组合试验研究

..... 孙广友,李红艳,罗新正(120)

吉林市 2007—2016 年土地利用类型变化及生态环境评价

..... 姜海玲,苏姣姣,郑世欣,王欣玉,王麒莹,李 爽,刘鑫婷(129)

一种计算迎风面密度的优化算法 韦 胜,黄焕春,杨 俊(136)

CONTENTS

Study on the properties of CoO@ Ni-Co-S binder free electrode materials for asymmetric supercapacitors YANG Jing-hai, WANG San-long (7)

Synthesis, structural characterization and fluorescence property of di-*n*-butyltin(IV) *p*-chlorophenyl acrylate ZHU Dong-sheng, ZHANG Xiao-meng, JIANG Huan, et al. (14)

Advances in photocatalytic degradation of microcystins by nanocatalysts LIN Ying-zi, ZHU Yang, LI Ang, et al. (18)

Mössbauer spectroscopic study on the structure of Co₃₀Fe₃₀/Al₂O₃ nanocomposites XU Shi-chong, WANG Ming-shui, XIE Ai-ling, et al. (23)

Low efficiency roll-off warm white organic light-emitting diodes based on red TADF ... DONG He, DING Shuo, LIU Si-yi, et al. (28)

Preparation and characterization of a coordination material with interdigitated architecture ZHOU Shi, LIY Meng-ying, WANG Ming-shi, et al. (32)

Research on the excitons spread problem of blue organic light-emitting device using the excitons sensitization layer WANG Fu-jun, WANG Jin, JIANG Wen-long (36)

Comprehensive evaluation of P2P lending platform development based on entropy method and grey relational analysis YU Zhuo-xi, LI Meng-li (44)

Analysis of anaesthesia in clinical open surgery based on Logistic regression model WANG Chun-jie, QI Shun-xin, LUO Lin-lin, et al. (52)

A solving method for stochastic augmented Lagrange variational inequality WANG Wei, LIU Yu-bing, BI Tian-jiao (57)

A hybrid bundle method for solving non-smooth unconstrained convex programming ... SHEN Jie, HU Pan, LI Han-yang, et al. (62)

Application of expected utility maximization model to portfolio under uncertain environment HOU Wei-bo, LI Shuai-peng (67)

Empirical analysis of high frequency stock trading data based on ARCH(*q*) model YANG Kai, MA Yu-xin, ZHANG Xin-ran, et al. (72)

Modulation of waveguide bandgap structure by function point defect ... WU Xiang-yao, QU Chun-hong, XIONG Sheng-jie, et al. (80)

Theoretical analysis of an electro-optic cascade microring switch array WANG Yu-hai, HE Ke-chuan, ZHANG Qian, et al. (85)

Isolation and extraction of isovalerylshikonin in *Arnebia guttata* Bunge SUN Yan-tao, LI Ting-ting, HAN Yu, et al. (88)

Siping city life garbage classification situation, problem and countermeasures research GAO Xiu-hong, YANG Chun-wei, TIAN Yu, et al. (94)

Analysis of mtDNA polymorphism of Bai and Yi nationalities in Yunnan province, China ... YU Chang-chun, PU Zhi-liang (100)

Construction of beauveria engineering strain containing Cry1Ab/Ac gene CHENG Yun-qing, SUN He (105)

New technology of stable transformation in tobacco YANG Li-ping, WANG Yue, XU Ya-nan (109)

A GPU-based flame real-time simulation algorithm DENG Ding-sheng (114)

An study of the scientific research evaluation and discipline competitiveness of Jilin Normal University based on ESI and InCites BAO Qing-han, PAN Shu-juan (119)

Combination Experiment and study on high efficient Irrigation model-system with high efficient of washing soda and super high yield of rice in mild soda saline-alkali soil SUN Guang-you, LI Hong-yan, LUO Xin-zheng (128)

The research of land type change and ecological environment evaluation of Jilin city from 2007 to 2016 JIANG Hai-ling, SU Jiao-jiao, ZHENG Shi-xin, et al. (135)

An optimization algorithm for calculating the frontal area ratio WEI Sheng, Huang Huan-chun, YANG Jun (140)