



中国科技核心期刊
RCCSE中国核心学术期刊(A)
湖北省优秀期刊
中国高校优秀科技期刊

ISSN 1000-2375
CN 42-1212/N

湖北大学 **学报**

自然科学版

JOURNAL OF HUBEI UNIVERSITY
NATURAL SCIENCE

6

2022

第44卷 第5期
Vol. 44 No. 6

图论研究专栏

- 单圈图的 Sombor 指标 胡文洁,高珊,杨星光(641)
The Sombor index of unicyclic graphs HU Wenjie, GAO Shan, YANG Xingguang
关于 A_α 矩阵的 Wilf 问题的求解 黄龙,高珊,赵芹,陈寒冰(646)
The Wilf's problem for the A_α matrix of a graph ... HUANG Long, GAO Shan, ZHAO Qin, CHEN Hanbing

调和分析研究专栏

- 粗糙核分数次积分及其交换子在局部“互补”广义变指数 Morrey 空间中的有界性
..... 万晓英,陶双平,杨东升(651)
Boundedness of rough fractional integral and its commutator on the local “complementary” generalized variable
exponent Morrey spaces WAN Xiaoying, TAO Shuangping, YANG Dongsheng
沿超曲面的振荡奇异积分在加权 Wiener 共合空间上的有界性 刘慧慧,唐剑,赵金虎(659)
Boundedness of oscillatory singular integrals along hypersurfaces on weighted Wiener amalgam spaces
..... LIU Huihui, TANG Jian, ZHAO Jinhu

新型有机化合物的研究专栏

- 一类新型[60]富勒烯二氢吡啶衍生物的合成反应研究
..... 彭倩娜,王兴宇,柴明顶,霍靖文,牟欢,李法宝(668)
The synthesis of novel [60] fulleroidindoline derivatives
..... PENG Qianna, WANG Xingyu, CHAI Mingding, HUO Jingwen, MOU Huan, LI Fabao
一种新颖的金属有机镉配合物的合成及荧光性质研究
..... 崔浩哲,王楠,李祎钊,曹玥,柴慧敏,蔡李鹏,王娟(676)
Synthesis and fluorescence properties of novel metal-organic Cadmium complexes
..... CUI Haozhe, WANG Nan, LI Yifan, CAO Yue, CHAI Huimin, CAI Lipeng, WANG Juan

太阳能电池性能研究专栏

阳离子组分工程提高 $\text{CH}(\text{NH}_2)_2\text{PbI}_3$ 太阳能电池性能 邢楚武, 葛观明, 王多发, 章天金 (681)

Cation component engineering increases the performance of $\text{CH}(\text{NH}_2)_2\text{PbI}_3$ solar cells

..... XING Chuwu, GE Guanming, WANG Duofa, ZHANG Tianjin

$\text{Cd}(\text{Ac})_2$ 掺杂增强 MAPbI_3 太阳能电池热稳定性 葛观明, 邢楚武, 马志军, 王多发, 章天金 (687)

Improving MAPbI_3 perovskite solar cells thermal stability by $\text{Cd}(\text{Ac})_2$ doping

..... GE Guanming, XING Chuwu, MA Zhijun, WANG Duofa, ZHANG Tianjin

化学化工与材料科学

环戊烯与四氧化锇环加成反应的机理研究 刘悦灵, 陈旺, 张干兵 (694)

The mechanism of cycloaddition reaction between osmium tetroxide and cyclopentene

..... LIU Yueling, CHEN Wang, ZHANG Ganbing

Ce 掺杂 Bi_2MoO_6 微球增强光催化还原 $\text{Cr}(\text{VI})$ 的性能研究

..... DENG Qiang, ZOU Chentao, CHEN Yan, QIN Yan, SONG Xinshan, WANG Yuhui

Enhancement of photocatalytic reduction of $\text{Cr}(\text{VI})$ by Ce doped Bi_2MoO_6 microspheres

..... DENG Qiang, ZOU Chentao, CHEN Yan, QIN Yan, SONG Xinshan, WANG Yuhui

物理科学与电子技术

Co 掺杂 $\text{Bi}_5\text{Ti}_3\text{FeO}_{15}$ 陶瓷的介电性能分析 夏珍雨, 孙奥, 何永杰, 周杨馨, 陈晓琴 (709)

Dielectric properties of Co doped $\text{Bi}_5\text{Ti}_3\text{FeO}_{15}$ ceramics

..... XIA Zhenyu, SUN Ao, HE Yongjie, ZHOU Yangxin, CHEN Xiaoqin

Co 掺杂 $\text{Bi}_{3.15}\text{Nd}_{0.85}\text{Ti}_3\text{O}_{12}$ 的介电性能分析 汤雪琴, 何永杰, 周杨馨, 孙奥, 陈晓琴, 曾令会 (715)

Dielectric properties of Co-doped $\text{Bi}_{3.15}\text{Nd}_{0.85}\text{Ti}_3\text{O}_{12}$ ceramics

..... TANG Xueqin, HE Yongjie, ZHOU Yangxin, SUN Ao, CHEN Xiaoqin, ZENG Linghui

退火 Ar 流速对 VO_2 薄膜热致变色光学性能的影响研究 王嘉威, 尤子未, 许嘉俊, 郑嘉俊, 李派 (721)

Effects of Ar flow rate on thermochromic optical properties of VO_2 films during annealing

..... WANG Jiawei, YOU Ziwei, XU Jiajun, ZHENG Jiajun, LI Pai

CONTENTS

Journal of Hubei University
Natural Science

- PbSe 量子点/ZnO 可见-近红外光电晶体管的研究 方明清, 彭明, 张磊, 屈钧斌, 李金华 (727)
PbSe QDs/ZnO visible-near infrared phototransistors
..... FANG Mingqing, PENG Ming, ZHANG Lei, QU Jun'e, LI Jinhua

计算机与信息工程

- 基于语料关联生成的知识增强型 BERT 卢嘉荣, 肖红, 姜文超, 杨建仁, 王涛 (732)
Knowledge enhanced BERT based on corpus association generation
..... LU Jiarong, XIAO Hong, JIANG Wenchao, YANG Jianren, WANG Tao
交通场景中多目标车辆快速检测与分割算法 马秀博, 孙熊伟 (742)
Multi-objective vehicle fast detection and segmentation algorithm in traffic scenes
..... MA Xiubo, SUN Xiongwei

生命科学与医药卫生

- 水稻 DUF761 基因家族的鉴定及在非生物逆境中的表达分析 张应新, 盛锋, 杜雪竹, 胡琴 (750)
Identification and expression analysis of DUF761 family under abiotic stress in rice
..... ZHANG Yingxin, SHENG Feng, DU Xuezhong, HU Qin
炭角菌次生代谢产物及药理作用研究进展 胡琳珍, 罗梦颖, 肖雪洋, 童周, 胡萍, 黄志勇 (759)
Research progress on secondary metabolites and pharmacological activities of *Xylaria*
..... HU Linzhen, LUO Mengying, XIAO Xueyang, TONG Zhou, HU Ping, HUANG Zhiyong
提高 30% 茶皂素水剂对小贯小绿叶蝉田间防治效果的研究
..... 彭亚琦, 张悦怡, 刘瑞, 徐卓, 邹亮, 彭应宝, 彭宇 (770)
Research on improving the controlling effect of 30% tea saponin water aqueous solution against *Empoasca onukii*
in the field... PENG Yaqi, ZHANG Yueyi, LIU Rui, XU Zhuo, ZOU Liang, PENG Yingbao, PENG Yu
磁湖叶绿素 a 的时空变化特征及其影响因子分析
..... 陶世鑫, 刘蓬, 刘琳, 何文杰, 李如玥, 徐银, 李海波 (774)
Spatiotemporal characteristics of chlorophyll-a and its environmental factors in Cihu Lake
..... TAO Shixin, LIU Peng, LIU Lin, HE Wenjie, LI Ruyue, XU Yin, LI Haibo
湖北大学学报(自然科学版)2022 年总目次 (I)

Vol. 44, No. 6 (Serial No. 176)

Publishing on November 5, 2022