



湖北省优秀期刊  
中国科技核心期刊  
RCCSE中国学术核心期刊  
全国优秀高校自然科学学报  
中国高校编辑出版质量优秀科技期刊

ISSN 1000-2375  
CN 42-1212/N  
CODEN HDXZEM

# 湖北大学 学报

自然科学版 *Journal of Hubei University*  
Natural Science

6 No. 6  
Vol. 40  
**2018**

HUBEI DAXUE XUEBAO  
ZIRAN KEXUE BAN

## 荧光探针设计与合成研究专栏

基于 BODIPY 荧光染料的 pH 荧光探针 ..... 袁少华, 赵诺男, 王飞翼, 杨桂春, 任君, 陈祖兴(551)  
BODIPY-based fluorescent probe for pH value detection

..... YUAN Shaohua, ZHAO Nuonan, WANG Feiyi, YANG Guichun, REN Jun, CHEN Zuxing  
一种氟离子荧光探针的设计与合成 ..... 唐辉, 付怡, 蔡明成, 任君(557)  
Design and synthesis of a fluoride ion fluorescence probe ..... TANG Hui, FU Yi, CAI Mingcheng, REN Jun

## 碳收支核算研究专栏

土地利用变化下的阿克苏河灌区碳收支核算与情景模拟 ..... 聂艳, 马泽玥, 周道峰, 张辉, 刘新华(561)  
Carbon budget estimaiton and scenario simulation based on land use change in Aksu River irrigation area

..... NIE Yan, MA Zeyue, ZHOU Xiaofeng, ZHANG Hui, LIU Xinhua  
湖北省不同类型土地整治项目施工阶段的碳排放核算 ..... 贺大为, 金贵, 望元庆, 张正昱(568)  
Carbon emissions accounting for construction of different types of land consolidation projects  
in Hubei Province ..... HE Dawei, JIN Gui, WANG Yuanqing, ZHANG Zhengyu

## 遥感技术应用研究专栏

基于 NDVI-MNDWI 特征空间的水体信息增强方法研究 ..... 孙佩, 汪权方, 张梦茹, 杨涵, 汪倩倩(574)  
A method to enhance information of water cover based on feature space of NDVI and MNDWI

..... SUN Pei, WANG Quanfang, ZHANG Mengru, YANG Han, WANG Qianqian  
基于高分一号的农田植被区土壤湿度反演研究 ..... 梁美盈, 刘秀芸, 周道峰, 聂艳(580)  
Study on soil moisture inversion in farmland vegetation area based on GF-1  
..... LIANG Meiying, LIU Xiuyun, ZHOU Xiaofeng, NIE Yan

## 污染源分析与环境质量评价专栏

基于主成分分析法的水库水质评价 ..... 李兆华, 莫彩芬, 柯杰, 陈红兵, 陈帅(586)

# 目 次

2018 年 11 月 5 日出版

Evaluation on the water quality of Wangjiaba reservoir based on principal component analysis

..... LI Zhaohua, MO Caifen, KE Jie, CHEN Hongbing, CHEN Shuai  
近两年武汉市环境空气质量时空分布特征及污染源解析 ..... 莫彩芬, 陈帅, 陈红兵, 柯杰, 陈默(593)  
Spatio-temporal distribution of air quality and source identification of pollution in Wuhan

..... MO Caifen, CHEN Shuai, CHEN Hongbing, KE Jie, CHEN Mo

## 生命科学与医药卫生

恩施川续断根的含硒量及其与土壤性质的关系 ..... 万佐奎, 温权州, 杨兰芳(601)

Selenium content of *Dipsacus asper* roots in Enshi area and its relation to soil properties  
..... WAN Zuoxi, WEN Quanzhou, YANG Lanfang  
麝香酮对姜黄素在大鼠体内药动学及脑分布的影响 ..... 童俊, 王俊俊, 陈勇(609)  
Effect of muscone on the pharmacokinetic and brain distribution of curcumin in rat

..... TONG Jun, WANG Junjun, CHEN Yong  
湖北清江流域与环神农架区域烤烟中性香气成分差异研究  
..... 何猛, 云月利, 黎根, 孙光伟, 李琳, 覃光炯, 吴风光, 何结望(615)  
Differences of neutral aroma components in flue-cured tobacco of Qingjiang River basin and  
surrounding Shennongjia area in Hubei Province ..... HE Meng, YUN Yueli,  
LI Gen, SUN Guangwei, LI Lin, QIN Guangjiong, WU Fengguang, HE Jiewang

## 化学化工与材料科学

CsPbX<sub>3</sub> (X = Cl, Br, I)/PS 复合薄膜制备及荧光性能研究

..... 张学文, 赵倩茹, 陈玲芝, 穆国鑫, 赵江, 黄浩, 胡永明, 李岳彬(621)  
Preparation and fluorescence properties of CsPbX<sub>3</sub> (X = Cl, Br, I)/PS composite thin films  
..... ZHANG Xuewen, ZHAO Qianru, CHEN Lingzhi, MU Guoxin,  
ZHAO Jiang, HUANG Hao, HU Yongming, LI Yuebin  
基于 Co<sub>3</sub>O<sub>4</sub>纳米花/rGO 复合材料的全固态柔性超级电容器研究 ..... 熊志宏, 胡泊, 张月, 胡永明(627)  
Study on all-solid-state flexible supercapacitors based on Co<sub>3</sub>O<sub>4</sub> nanoflowers/rGO composites  
..... XIONG Zhihong, HU Po, ZHANG Yue, HU Yongming  
新型金属有机框架化合物 (C<sub>5</sub>H<sub>6</sub>N)<sub>6</sub>P<sub>2</sub>W<sub>18</sub>O<sub>62</sub> 的合成、结构及电化学性能

---

本期执行编辑:胡小洋

# CONTENTS

Journal of Hubei University  
Natural Science

- ..... 何桂美, 李茜茜, 曹峰, 李晨阳, 王娟, 吴喆(631)  
A new organic framework compound ( $C_5H_6N)_6P_2W_{18}O_{62}$ : synthesis, crystal structure and electrochemical property ..... HE Guimei, LI Xixi, CAO Feng, LI Chenyang, WANG Juan, WU Zhe  
 $H_6P_2Mo_{18}O_{62}/MIL-101(Cr)-NH_2$ 的制备及其吸附性能的研究 ..... 何云鹏, 林雨虹, 龚文朋, 田超强, 杨水金, 吕宝兰(637)  
Preparation and adsorption performance of  $H_6P_2Mo_{18}O_{62}/MIL-101(Cr)-NH_2$  ..... HE Yunpeng, LIN Yuhong, GONG Wenpeng, TIAN Chaoqiang, YANG Shuijin, LYU Baolan  
碳纳米管改性密胺海绵的制备及其吸油性能 ..... 张虞, 孙鹏, 曾庆辉, 蔡瑶, 曾小平, 王大威, 曹佳栋, 吴江渝(645)  
Fabrication of carbon nanotube reinforced melamine sponge and its oil absorption properties ..... ZHANG Yu, SUN Peng, ZENG Qinghui, CAI Yao, ZENG Xiaoping,  
WANG Dawei, CAO Jiadong, WU Jiangyu  
植物油制备半硬质聚氨酯泡沫的研究进展 ..... 蒋涛, 余恺伦, 赵辉, 郝同辉, 张群朝(651)  
Progress on the research of vegetable oil based on semi-rigid polyurethane foam ..... JIANG Tao, YU Kailun, ZHAO Hui, HAO Tonghui, ZHANG Qunchao

## 基础数学与应用数学

- 二阶非线性模糊微分方程解的存在性和唯一性 ..... 陈峰, 叶国菊, 刘尉(657)  
Existence and uniqueness of solutions to nonlinear second-order fuzzy differential equation ..... CHEN Feng, YE Guoju, LIU Wei  
拟非扩张映像族的循环混杂算法及其数值实验 ..... 高兴慧, 常乐(663)  
A cyclic hybrid algorithm and its numerical realizations for a family of quasi-nonexpansive mappings ..... GAO Xinghui, CHANG Le  
创业板与主板市场非对称相依性的 GMC 研究 ..... 沈焰焰(667)  
Study on GMC of the asymmetric dependence between chinext board and the main board ..... SHEN Yanyan

湖北大学学报(自然科学版)2018年总目次 ..... ( I )