



ISSN 1000-8438
CN 11-1815/O6

大學化學

UNIVERSITY CHEMISTRY

第33卷 第9期 Vol.33 No.9

2018



中华人民共和国教育部主管
北京大学、中国化学会主办
北京大学化学与分子工程学院大学化学编辑部出版

www.dxhx.pku.edu.cn

万方数据

目 次

教育专题

- 基于大类招生培养模式的化学人才培养方案和课程体系设计 黎朝, 洪炜, 杨朝勇, 杨柳, 朱亚先 (1)
综合性大学化学专业本科人才培养方案探究 吴奕, 王杭菊, 田秋霖, 庄林 (8)
地方综合性大学化学创新人才培养课程新体系的建设 申烨华, 王尧宇, 李剑利, 常江, 张逢星 (16)
构建本科化学类专业特色培养方案改革与实践 张贊, 姜林, 苏燕, 马晓爽, 钟欣芮, 李梦龙, 郑成斌 (21)
创新型化学专业学生培养的课程体系改革与实践 惠新平, 梁永民, 沈永雯 (28)
高等师范院校化学类专业课程体系设计与教学改革 邓阳, 万坚 (33)
新工科背景下湖南大学应用化学专业教学改革研究与实践
..... 刘娅莉, 张小华, 周海晖, 何德良, 陈金华, 邓剑如, 李永军 (38)
武汉大学无机化学课程的内容选择、重点与提升 胡锴, 蔡革, 程功臻 (47)
“化学与社会”课程体系建设 蔡革, 胡锴, 程功臻 (52)

教学研究与改革

- 在基础化学实验教学过程中如何培养学生“想”的意识——以“经典合成实验”教学为例 任艳平, 吕银云, 董志强 (55)
分析化学实验课程的分层次混合式教学研究与实践 庄媛, 姚喆, 李建强, 柴成文 (62)

化学实验

- 二次生长法NaA沸石分子筛膜的合成与表征——推荐一个研究型综合实验
..... 李良清, 宋起鹏, 张进建, 代晨晨, 廉成锡, 丰洒, 李佳佳, 王金渠 (69)
一种金属有机框架纳米材料的制备及其染料吸附性能研究——推荐一个研究型综合化学实验
..... 乔正平, 尹明大, 许先芳, 黄华珍, 闫素君, 彭慧娟, 毛宗万 (75)
膜蒸馏海水淡化实验——介绍一个新型的膜分离化工实验 高明丽, 冯红艳, 蒋晨啸, 纪文根, 徐婷婷, 王钰熙 (82)
对“硫酸亚铁铵制备”实验的再认识——批判性思维教育的最好案例之一 董志强, 吕银云, 任艳平 (88)

自学之友

- 浅谈质心分数坐标在确定等径圆球密堆积空隙中的应用 张文静, 汤华彪, 朱艳艳, 魏东辉, 刘春梅, 唐明生 (95)

未来化学家

- 箭推法在高价金属(Cr, Mn, Fe)含氧酸盐氧化还原反应机理中的应用 江意达, 蒋志威, 戚博闻, 钟秉辰, 卞江 (105)

CONTENTS

Special Subject

- Design of Training Program and Curriculum for Chemistry Majors Based on the Background of Enrollment and Cultivation LI Zhao, HONG Wei, YANG Chaoyong, YANG Liu, ZHU Yaxian (1)
- Exploring the Education Scheme for Undergraduates of Chemistry Major in a Comprehensive University WU Yi, WANG Hangju, TIAN Qiulin, ZHUANG Lin (8)
- Construction of a New Curriculum System for Cultivating Innovative Chemical Talents in Local Comprehensive Universities SHEN Yehua, WANG Yaoyu, LI Jianli, CHANG Jiang, ZHANG Fengxing (16)
- Reform and Practices on the Construction of Characteristic Undergraduate Training Program for Chemistry Major ZHANG Yun, JIANG Lin, SU Yan, MA Xiaoshuang, ZHONG Xinrui, LI Menglong, ZHENG Chengbin (21)
- Teaching Reform and Practice of Curriculum for Innovative Chemistry -Majored Students HUI Xinpeng, LIANG Yongmin, SHEN Yongwen (28)
- Design of Curriculum System and the Reform of Pedagogy in the Chemistry Majors of Normal University DENG Yang, WAN Jian (33)
- Study and Practice on the Teaching Reform of Applied Chemistry Specialty in Hunan University in the Light of the New Engineering Education Goal LIU Yali, ZHANG Xiaohua, ZHOU Haihui, HE Deliang, CHEN Jinhua, DENG Jianru, LI Yongjun (38)

- Key and General Content Selection of Inorganic Chemistry in Wuhan University HU Kai, CAI Ping, CHENG Gongzhen (47)
- Establishment of Teaching System for “Chemistry and Society” Course CAI Ping, HU Kai, CHENG Gongzhen (52)

Study and Reform of Chemical Education

- How to Cultivate Students’ Consciousness of Thinking in Basic Chemical Laboratory Teaching: Taking Synthetic Experiment as an Example REN Yanping, LÜ Yinyun, DONG Zhiqiang (55)
- Research and Practice of Stratified and Blended Teaching in Analytical Chemistry Laboratory Course ZHUANG Yuan, YAO Zhe, LI Jianqiang, CHAI Chengwen (62)

Chemistry Laboratory

- Synthesis and Characterization of NaA Zeolite Membranes Prepared by the Secondary Growth Method: A Research-Based Comprehensive Experiment LI Liangqing, SONG Qipeng, ZHANG Jinjian, DAI Chenchen, LIAN Chengxi, FENG Sa, LI Jiajia, WANG Jinqu (69)

- Synthesis of Metal-Organic Framework Nanocrystals and Research on Its Adsorption of Dye QIAO Zhengping, YIN Mingda, XU Xianfang, HUANG Huazhen, YAN Sujun, PENG Huijuan, MAO Zongwan (75)
- Experiment of Membrane Distillation for Seawater Desalination: A New Membrane Separation Chemical Engineering Experiment GAO Mingli, FENG Hongyan, JIANG Chenxiao, JI Wengen, XU Tingting, WANG Yuxi (82)

- Reunderstanding of the “Preparation of Ammonium Ferrous Sulfate”: One of the Best Examples of Critical Thinking Education Experiment DONG Zhiqiang, LÜ Yinyun, REN Yanping (88)

Self Studies

- Applications of Centroid Fractional Coordinates in Locating Interstices in Close Packings of Equal Spheres ZHANG Wenjing, TANG Huabiao, ZHU Yanyan, WEI Donghui, LIU Chunmei, TANG Mingsheng (95)

Future Chemist

- Application of Arrow-Pushing Method in the Redox Mechanism of High-Valence Metallic (Cr, Mn, Fe) Oxysalts JIANG Yida, JIANG Zhiwei, QI Bowen, ZHONG Bingchen, BIAN Jiang (105)