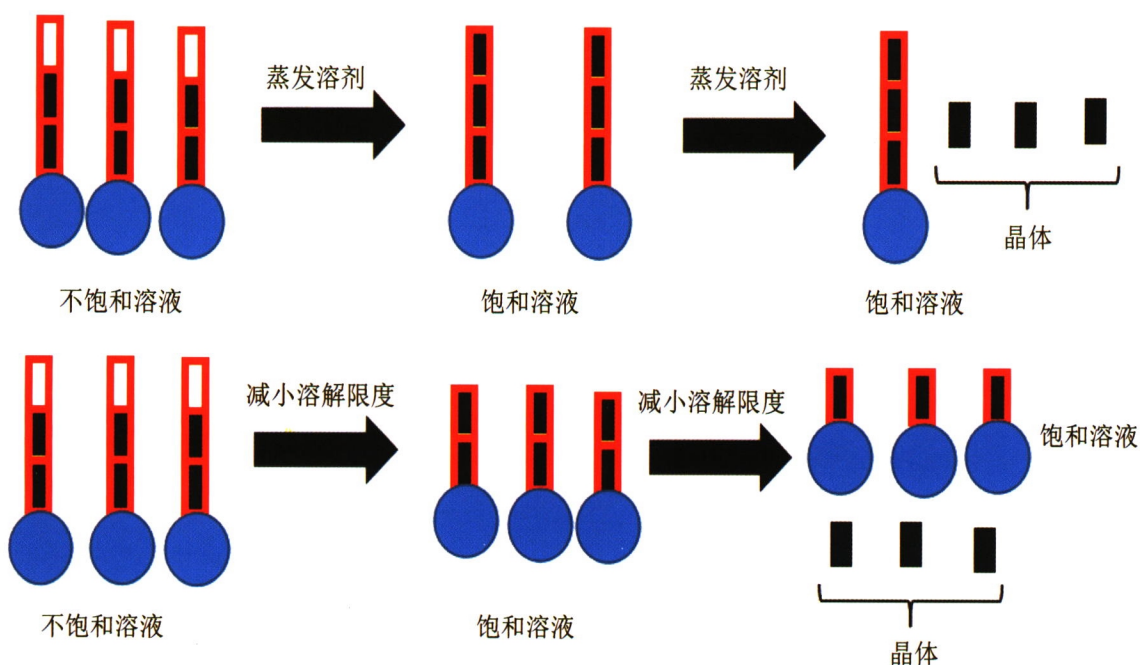


化学教育 (中英文)

Chinese Journal of Chemical Education

2021年 第42卷 第1期 Vol.42 No.1



邮发代号: 2-106

ISSN 1003-3807



9 771003 380215

HUAXUE JIAOYU

万方数据



CHINESE
CHEMICAL
SOCIETY



主管: 中国科学技术协会
主办: 中国化学会
北京师范大学

2021年1月 化学教育(中英文) 第42卷 第1期
目次

主编新年寄语	刘正平 (1)
课程·教材·评价	
促进学生无机物认识方式的持续进阶——鲁科版高中化学必修新教材无机物主题编写思路及使用建议	胡久华 王磊 (2)
彰显核心概念的认识功能,促进知识向能力和素养转化——鲁科版高中化学必修新教材第一册第二章的编写思路和使用建议	黄燕宁 王磊 (9)
成分显示理论视域下海峡两岸高中化学教材习题设计对比研究	岳翊杨 王秋 (15)
考查变量控制能力的科学探究题的命题与思考	贾艳君 李娜 (22)
优质课例	
促进学生“科学探究与创新意识”素养的发展——以“氢氧化亚铁的制备”为例	申燕 (26)
回归知识本原 构建生命课堂——以“常见物质的检验”为例	金剑锋 (31)
以实验和论证为杠杆撬动化学概念深度学习——以“分子与原子”教学为例	卢天宇 (36)
教学研究	
九年级学生三重表征转换能力的发展过程:基于眼动的证据	吴娅妮 李远蓉 王强 (42)
创建模型探讨化学概念本质的教学实践——以“饱和溶液”为例	黄海燕 (54)
基于学生核心素养培养的教学活动设计研究——以“氯的单质及化合物”单元教学为例	朱琼芬 (61)
化学涌现性及其对教学的启示	陈燕 余悦萌 (66)
教师教育	
回归“精准施训”的逻辑原点——《中小学幼儿园教师培训课程指导标准》应用解读	吴新建 张贤金 叶燕珠 汪阿恋 (71)
调研报告	
建立化学类谣言与误区素材库——化学教育和科普的重要资源	李丽萍 刘文皓 奎晓炬 (76)
信息技术与化学	
运用 Mercury 软件辅助高中晶体结构教学	康逸 陈博殷 (83)
实验教学与教具研制	
分子极性演示实验的探讨与改进	王新福 (88)
利用高吸水树脂优化3个中学化学实验	贾光弟 田雅玲 艾进达 熊华 卢天宇 (93)
钠与盐溶液反应的实验探究	李明 毛芳芳 张丽霞 盛家荣 (97)
问题讨论与思考	
亚铁离子与硫氰根反应的探究和分析	佟文丰 张立 陈子明 莘赞梅 (101)
大豆油隔绝氧气防止铁锈蚀可行性再探究	魏明贵 褚木雪子 (104)
化学史与化学史教育	
国际化学年邮票中的化学信息及其社会价值	张丹 何兆钊 王辉 (107)
论文简报	
基于思维模型建构的高三有机化学复习	吴春峰 高晓莹 邓善银 (35)
我国现行初中化学教科书视觉表征的文本研究	王磊 孙影 王洁 (60)
新教材中元素及其化合物的内容设计及教学建议——以人教版高一化学必修教材为例	晏雄 陈继文 (92)
2021年《化学教育》订阅通知	(103)
封面图片	(58)

本期责任编辑 张胥青 陈会玲

CHINESE JOURNAL OF CHEMICAL EDUCATION

2021 Vol. 42 No. 1

Sponsored by Chinese Chemical Society and Beijing Normal University

Curriculum-Teaching Materials-Assessment

- Promote Continuous Progression of Students' Recognition Methods on Inorganic Substances; The Compilation Thought and Suggestions for the Topic of Inorganic Substances in Compulsory Chemistry Textbooks of Senior High School Published by Shandong Science and Technology Press HU Jiu-Hua WANG Lei (2)
- Highlight Cognitive Function of Core Concepts and Transform Knowledge into Competence; Compilation Thought and Suggestions of the Second Chapter in the First Volume of Senior High School Compulsory Chemistry Textbook Published by Shandong Science and Technology Press HUANG Yan-Ning WANG Lei (9)
- Comparison of Exercise Design Between Chinese Mainland and Taiwan Senior High School Chemistry Textbooks Based on Component Display Theory YUE Yi-Yang WANG Qiu (15)
- Reflection on Preparation of Scientific Inquiry Question to Test Variable Control Ability JIA Yan-Jun LI Na (22)

Excellent Lesson

- Development of Students' Competencies of "Scientific Inquiry and Innovative Consciousness" in Teaching of "Preparation of $\text{Fe}(\text{OH})_2$ " SHEN Yan (26)
- Returning to the Source of Knowledge and Constructing Life Classroom; Inspection of Common Substances JIN Jian-Feng (31)
- Promoting Deep Learning of Chemical Concepts Through Experiments and Demonstration in Teaching of "Molecule and Atom" LU Tian-Yu (36)

Teaching Research

- The Development Process of the Ninth Grade Students' Triple Characterization Transformation Ability; Evidence Based on Eye Movement WU Ya-Ni LI Yuan-Rong WANG Qiang (42)
- Teaching Practice of Establishing Models to Explore the Essence of Chemical Concepts; Taking "Saturated Solution" as an Example HUANG Hai-Yan (54)
- Design of Learning Activities to Cultivate Students' Core Literacy; Unit Teaching of "Chlorine and Its Compounds" ZHU Qiong-Fen (61)
- The Emergent Properties of Chemistry and Enlightenments to Teaching CHEN Yan YU Yue-Meng (66)

Teacher Education

- Go Back to the Starting Point of Targeted Training; Practical Interpretation of the Application About *Guidelines on Training Courses for Teachers in Kindergartens, Primary Schools and High Schools* WU Xin-Jian ZHANG Xian-Jin YE Yan-Zhu WANG A-Lian (71)

Investigation Report

- Database of Chemistry-Related Social Rumors and Misunderstandings; An Important Resource for Chemistry Education and Popularization LI Li-Ping LIU Wen-Hao KUI Xiao-Xuan (76)

Information Technology and Chemistry

- Teaching of Senior High School Crystal Structure Based on Mercury Software KANG Yi CHEN Bo-Yin (83)

Experiment Teaching and Teaching Aid Development

- Discussion and Improvement on Demonstration Experiment of Molecular Polarity WANG Xin-Fu (88)
- Improvement of Three Chemistry Experiments in High School Using Super Absorbent Resin JIA Guang-Di TIAN Ya-Ling AI Jin-Da XIONG Hua LU Tian-Yu (93)
- Experiment Inquiry on the Reaction Between Sodium and Salt Solution LI Ming MAO Fang-Fang ZHANG Li-Xia SHENG Jia-Rong (97)

Discussion and Thinking of Questions

- Research and Analysis on the Reaction Between Fe^{2+} and SCN^- TONG Wen-Feng ZHANG Li CHEN Zi-Ming XIN Zan-Mei (101)
- Restudy on the Feasibility of Preventing Iron Corrosion by Soybean Oil Isolating Oxygen WEI Ming-Gui CHUMU Xue-Zi (104)

History of Chemistry and Chemical History Education

- Chemical Information and Its Social Value on Stamps of International Year of Chemistry ZHANG Dan HE Zhao-Zhao WANG Hui (107)

化学教育(中英文)

(半月刊·1980年创中文刊·2017年变更为中英文刊)

2021年 第42卷 第1期 1月2日出版

主管单位 中国科学技术协会
主办单位 中国化学会 北京师范大学
编辑出版 《化学教育(中英文)》编辑部
编辑部地址 北京师范大学化学楼217室
邮政编码 100875
电话(传真) 010-58807875
咨询信箱 hxjy-jce@263.net
投稿网址 http://www.hxjy.chemsoc.org.cn

顾问 刘知新
主编 刘正平
副主编 李艳梅 施展 孙世刚 王磊
王祖浩 杨屹 郑长龙 朱玉军(专职)
刊名题字 戴安邦
印刷装订 保定华泰印刷有限公司
总发行处 中国邮政集团公司北京市报刊发行局
订 阅 全国各地邮局

刊号 ISSN 1003 - 3807
CN 10 - 1515/O6

国内邮发代号 2-106

国外发行代号 M3070

定价 26.00元

万方数据

CHINESE JOURNAL OF CHEMICAL EDUCATION

2021 Vol. 42 No. 1

Sponsored by Chinese Chemical Society and Beijing Normal University

Curriculum-Teaching Materials-Assessment

- Promote Continuous Progression of Students' Recognition Methods on Inorganic Substances; The Compilation Thought and Suggestions for the Topic of Inorganic Substances in Compulsory Chemistry Textbooks of Senior High School Published by Shandong Science and Technology Press HU Jiu-Hua WANG Lei (2)
- Highlight Cognitive Function of Core Concepts and Transform Knowledge into Competence; Compilation Thought and Suggestions of the Second Chapter in the First Volume of Senior High School Compulsory Chemistry Textbook Published by Shandong Science and Technology Press HUANG Yan-Ning WANG Lei (9)
- Comparison of Exercise Design Between Chinese Mainland and Taiwan Senior High School Chemistry Textbooks Based on Component Display Theory YUE Yi-Yang WANG Qiu (15)
- Reflection on Preparation of Scientific Inquiry Question to Test Variable Control Ability JIA Yan-Jun LI Na (22)

Excellent Lesson

- Development of Students' Competencies of "Scientific Inquiry and Innovative Consciousness" in Teaching of "Preparation of $\text{Fe}(\text{OH})_2$ " SHEN Yan (26)
- Returning to the Source of Knowledge and Constructing Life Classroom; Inspection of Common Substances JIN Jian-Feng (31)
- Promoting Deep Learning of Chemical Concepts Through Experiments and Demonstration in Teaching of "Molecule and Atom" LU Tian-Yu (36)

Teaching Research

- The Development Process of the Ninth Grade Students' Triple Characterization Transformation Ability; Evidence Based on Eye Movement WU Ya-Ni LI Yuan-Rong WANG Qiang (42)
- Teaching Practice of Establishing Models to Explore the Essence of Chemical Concepts; Taking "Saturated Solution" as an Example HUANG Hai-Yan (54)
- Design of Learning Activities to Cultivate Students' Core Literacy; Unit Teaching of "Chlorine and Its Compounds" ZHU Qiong-Fen (61)
- The Emergent Properties of Chemistry and Enlightenments to Teaching CHEN Yan YU Yue-Meng (66)

Teacher Education

- Go Back to the Starting Point of Targeted Training; Practical Interpretation of the Application About *Guidelines on Training Courses for Teachers in Kindergartens, Primary Schools and High Schools* WU Xin-Jian ZHANG Xian-Jin YE Yan-Zhu WANG A-Lian (71)

Investigation Report

- Database of Chemistry-Related Social Rumors and Misunderstandings; An Important Resource for Chemistry Education and Popularization LI Li-Ping LIU Wen-Hao KUI Xiao-Xuan (76)

Information Technology and Chemistry

- Teaching of Senior High School Crystal Structure Based on Mercury Software KANG Yi CHEN Bo-Yin (83)

Experiment Teaching and Teaching Aid Development

- Discussion and Improvement on Demonstration Experiment of Molecular Polarity WANG Xin-Fu (88)
- Improvement of Three Chemistry Experiments in High School Using Super Absorbent Resin JIA Guang-Di TIAN Ya-Ling AI Jin-Da XIONG Hua LU Tian-Yu (93)
- Experiment Inquiry on the Reaction Between Sodium and Salt Solution LI Ming MAO Fang-Fang ZHANG Li-Xia SHENG Jia-Rong (97)

Discussion and Thinking of Questions

- Research and Analysis on the Reaction Between Fe^{2+} and SCN^- TONG Wen-Feng ZHANG Li CHEN Zi-Ming XIN Zan-Mei (101)
- Restudy on the Feasibility of Preventing Iron Corrosion by Soybean Oil Isolating Oxygen WEI Ming-Gui CHUMU Xue-Zi (104)

History of Chemistry and Chemical History Education

- Chemical Information and Its Social Value on Stamps of International Year of Chemistry ZHANG Dan HE Zhao-Zhao WANG Hui (107)

化学教育(中英文)

(半月刊·1980年创中文刊·2017年变更为中英文刊)

2021年 第42卷 第1期 1月2日出版

主管单位 中国科学技术协会
主办单位 中国化学会 北京师范大学
编辑出版 《化学教育(中英文)》编辑部
编辑部地址 北京师范大学化学楼217室
邮政编码 100875
电话(传真) 010-58807875
咨询信箱 hxjy-jce@263.net
投稿网址 http://www.hxjy.chemsoc.org.cn

顾问 刘知新
主编 刘正平
副主编 李艳梅 施展 孙世刚 王磊
王祖浩 杨屹 郑长龙 朱玉军(专职)
刊名题字 戴安邦
印刷装订 保定华泰印刷有限公司
总发行处 中国邮政集团公司北京市报刊发行局
订 阅 全国各地邮局

刊号 ISSN 1003 - 3807
CN 10 - 1515/O6

国内邮发代号 2-106

国外发行代号 M3070

定价 26.00元

万方数据