

广东化工

Guangdong Chemical Industry

第48卷 第23期 12月上半月刊
(总第457期)

1974年创刊 (半月刊)

刊号 ISSN 1007-1865
CN 44 - 1238/TQ

- 全国石油与化工行业优秀期刊一等奖
- 高、中级化工职称资格评审认定刊物
- 中国核心期刊(遴选)数据库收录期刊

主 管: 广东省科学院
主 办: 广东省石油与精细化工研究院
社 长: 麦裕良
出版发行: 《广东化工》编辑部
发行范围: 国内外公开发行
地 址: 广州市越秀区越华路116号
电 话/传 真: (020) 83302517 83336009
在线投稿: <http://www.gdchem.com>
微 信: gdcic200
电子邮箱: gdcic200@163.com
广告经营许可证号: 440000100138
印 刷: 广州一龙印刷有限公司
订 购: 全国各地邮局、所
邮发代号: 46-211
邮局全年定价:
 国内 480 元;
 国外 384 美元



出版日期: 2021年12月15日

公告: 经广东省新闻出版局批准同意,
本刊变更为半月刊。

目 次

◆ 试验与研究

- 1 钛酸铋钠纳米球的压电催化降解 RhB 性能的研究 李颖楷, 罗睿杰, 赵志成
4 BPA 纯度对熔融酯交换法合成 PC 产品性能的影响 张璐, 刘明辉, 郭垠, 等
7 高压聚乙烯装置引发剂过氧化物含量的测定方法研究 葛喜慧
10 氮化硼/天然橡胶复合材料的热性能与阻尼性能研究 刘宏超, 王启方, 汪月琼, 等
13 光稳定剂对 PP 基木塑复合材料老化性能的影响 文霞, 田大慧, 汤瑛召
16 改性柚子皮生物炭催化过硫酸盐降解盐酸四环素的研究 徐清艳
19 不同采摘时间的莞香灵芝中活性物质的变化 丁鸿燕, 吕思敏, 刘翠娟, 等
22 棉秆活性炭的制备工艺优化及其吸附性能的研究 张越锋, 闫永赞, 吕玲玲
25 影响乙苯装置提高干气量因素的研究 曾伟, 易娟, 贾金锋, 等
28 高压均质技术对椰浆风味品质的影响作用研究 罗百然, 罗秋明, 刘果, 等
31 汇聚法合成高纯度阿托伐他汀钙的工艺研究 潘琳, 易志恒, 王珊, 等
34 6 种中药材在不同乙醇浓度中的浸出行为研究 姜红宇, 涂冰伦, 张寒露, 等
37 复方养心开郁片抗抑郁的网络药理学研究 龙婷婷, 李倩, 陈雨点, 等
40 理论研究三氟取代己烯与甲基二恶唑酮的酰胺化反应 徐良成, 张祥标
43 基于 PDCA 循环理论的化工生产企业安全管理长效机制研究 林艺松, 何文忠
46 一种聚合物沥青质抑制剂的抑制机理研究 郑存川, 扶浩然
49 极耳连接电阻对叠片锂离子电池性能的影响 黄少军
52 聚丙二醇甲基丙烯酸羟乙酯的合成 王胜利, 董楠
55 涤棉印染纺织品中铅、镉成分分析标准物质研制 杨任游
58 流化床结晶技术在循环水除硬上的应用 杨占忠, 张迪, 张营, 等
61 一款保湿原料的制备及其功效探究 张可欣, 巫能富, 吴金昊
64 咪唑丁酸核壳结构磁性分子印迹聚合物的制备及其应用研究 李珊珊, 孙宇颖, 封顺, 等
67 具有铜离子识别能力的新型硫脲探针的研究 徐云龙
70 D870B 除硼树脂用于水中除硼应用研究 修慧敏, 应云杰, 徐晓东
73 煤焦油储罐火灾处置技术研究 傅柄祺, 李有东, 何立
76 汽车保险杠聚丙烯材料脱模性能研究 姚七妹, 黎造文, 赖先勤, 等
79 UPR 类实体面材线性热膨胀系数影响因素的研究 容腾, 余巧玲, 王万卷, 等
82 CO₂曝气供给对胶球藻固碳积脂效率的影响 苏杰龙, 马怡然, 唐裕芳, 等

◆ 专论与综述

- 86 纳米多孔金属基赝电容器电极的应用及进展 杜保宁, 张少飞, 孙金峰, 等

88	N-亚硝胺致癌机理及检测方法研究进展
90	壳聚糖基生物材料的应用及抗菌结构优化前景
93	迷迭香精油提取方法及活性研究进展
96	膜黄芪皂苷合成路径关键基因的挖掘和生物信息学分析
99	丙烷装船管线系统水锤分析
103	甘油葡萄糖的护肤功效评价
106	聚丙烯应力发白的研究进展

◆ 环境保护

109	焊接烟尘所致污染与工业机器人应用探讨
111	机动车尾气检测方法研究进展
113	改性高岭土的制备及对废水中铅离子的吸附性能研究
116	汉江安康段和汉中段水样重金属分析及人体健康评价
119	黑臭水体治理新技术及水质长效机制探讨
121	我国海洋环境污染监测现状探究
123	宿迁市重点河湖水质自动站监测系统项目设计研究
125	地表水中化学需氧量、高锰酸盐指数和五日生化需氧量的相关性研究分析
128	佛山市某断面手工监测与水质自动监测对比分析
131	荷正电膜及其对水中污染物去除性能研究
134	城市黑臭河道底泥集中处理设计探讨——以前海湾片区底泥处理工程为例
137	厨余垃圾性质特征及其燃料化处理技术研究进展
142	垃圾分类形势下的有机垃圾处理技术现状
144	漳州市城区黑臭水体水质状况调查及黑臭污染程度评价
147	基于生态系统构建技术的城市水环境治理机制与工程实践研究
150	关于如何判定环境风险物质的讨论
154	药品洁净区环境微生物监测分析报告

◆ 分析测试

157	离子色谱-柱后衍生-紫外可见检测法测定涂料中六价铬含量
160	基于胸腺嘧啶碱基错配和金纳米棒比色型传感器对汞离子的可视化检测
164	HPLC 法测定盐酸甲氧明有关物质
167	气相色谱—三重四级杆质谱联用仪测定芹菜中 48 种农药残留的基质效应
171	火焰原子吸收光谱仪和电感耦合等离子体发射光谱仪在水质检测中的比较分析
174	轨道交通车辆胶粘剂合格愉悦度快筛
177	双柱气相色谱法测定非甲烷总烃的不确定度评定
180	HPLC 法测定咳喘顺丸中迷迭香酸、白花前胡甲素、白花前胡乙素和橙皮苷的含量

本期基金项目论文（共 54 篇）

1	钛酸铋钠纳米球的压电催化降解 RhB 性能的研究
4	BPA 纯度对熔融酯交换法合成 PC 产品性能的影响
7	高压聚乙烯装置引发剂过氧化物含量的测定方法研究
10	氮化硼/天然橡胶复合材料的热性能与阻尼性能研究
13	光稳定剂对 PP 基木塑复合材料老化性能的影响
16	改性柚子皮生物炭催化过硫酸盐降解盐酸四环素的研究
19	不同采摘时间的莞香灵芝中活性物质的变化
22	棉秆活性炭的制备工艺优化及其吸附性能的研究
25	影响乙苯装置提高干气量因素的研究
28	高压均质技术对椰浆风味品质的影响作用研究
31	汇聚法合成高纯度阿托伐他汀钙的工艺研究
34	6 种中药材在不同乙醇浓度中的浸出行为研究
37	复方养心丹片抗抑郁的网络药理学研究
86	专论与综述纳米多孔金属基赝电容器电极的应用及进展
88	N-亚硝胺致癌机理及检测方法研究进展
90	壳聚糖基生物材料的应用及抗菌结构优化前景
93	迷迭香精油提取方法及活性研究进展
96	膜黄芪皂苷合成路径关键基因的挖掘和生物信息学分析
109	焊接烟尘所致污染与工业机器人应用探讨
111	机动车尾气检测方法研究进展
113	改性高岭土的制备及对废水中铅离子的吸附性能研究
116	汉江安康段和汉中段水样重金属分析及人体健康评价
119	黑臭水体治理新技术及水质长效机制探讨
121	我国海洋环境污染监测现状探究
123	宿迁市重点河湖水质自动站监测系统项目设计研究
125	地表水中化学需氧量、高锰酸盐指数和五日生化需氧量的相关性研究分析
128	佛山市某断面手工监测与水质自动监测对比分析
131	荷正电膜及其对水中污染物去除性能研究
134	城市黑臭河道底泥集中处理设计探讨——以前海湾片区底泥处理工程为例
137	厨余垃圾性质特征及其燃料化处理技术研究进展
142	垃圾分类形势下的有机垃圾处理技术现状
144	漳州市城区黑臭水体水质状况调查及黑臭污染程度评价
147	基于生态系统构建技术的城市水环境治理机制与工程实践研究
150	关于如何判定环境风险物质的讨论
154	药品洁净区环境微生物监测分析报告
157	离子色谱-柱后衍生-紫外可见检测法测定涂料中六价铬含量
160	基于胸腺嘧啶碱基错配和金纳米棒比色型传感器对汞离子的可视化检测
164	HPLC 法测定盐酸甲氧明有关物质
167	气相色谱—三重四级杆质谱联用仪测定芹菜中 48 种农药残留的基质效应
171	火焰原子吸收光谱仪和电感耦合等离子体发射光谱仪在水质检测中的比较分析
174	轨道交通车辆胶粘剂合格愉悦度快筛
177	双柱气相色谱法测定非甲烷总烃的不确定度评定
180	HPLC 法测定咳喘顺丸中迷迭香酸、白花前胡甲素、白花前胡乙素和橙皮苷的含量
183	钛酸铋钠纳米球的压电催化降解 RhB 性能的研究
186	BPA 纯度对熔融酯交换法合成 PC 产品性能的影响
189	高压聚乙烯装置引发剂过氧化物含量的测定方法研究
192	氮化硼/天然橡胶复合材料的热性能与阻尼性能研究
195	光稳定剂对 PP 基木塑复合材料老化性能的影响
198	改性柚子皮生物炭催化过硫酸盐降解盐酸四环素的研究
201	不同采摘时间的莞香灵芝中活性物质的变化
204	棉秆活性炭的制备工艺优化及其吸附性能的研究
207	影响乙苯装置提高干气量因素的研究
210	高压均质技术对椰浆风味品质的影响作用研究
213	汇聚法合成高纯度阿托伐他汀钙的工艺研究
216	6 种中药材在不同乙醇浓度中的浸出行为研究
219	复方养心丹片抗抑郁的网络药理学研究
222	专论与综述纳米多孔金属基赝电容器电极的应用及进展
224	N-亚硝胺致癌机理及检测方法研究进展
226	壳聚糖基生物材料的应用及抗菌结构优化前景
229	迷迭香精油提取方法及活性研究进展
232	膜黄芪皂苷合成路径关键基因的挖掘和生物信息学分析
235	焊接烟尘所致污染与工业机器人应用探讨
237	机动车尾气检测方法研究进展
239	改性高岭土的制备及对废水中铅离子的吸附性能研究
242	汉江安康段和汉中段水样重金属分析及人体健康评价
244	黑臭水体治理新技术及水质长效机制探讨
247	我国海洋环境污染监测现状探究
250	离子色谱-柱后衍生-紫外可见检测法测定涂料中六价铬含量
253	基于胸腺嘧啶碱基错配和金纳米棒比色型传感器对汞离子的可视化检测
256	HPLC 法测定盐酸甲氧明有关物质
259	气相色谱—三重四级杆质谱联用仪测定芹菜中 48 种农药残留的基质效应
262	火焰原子吸收光谱仪和电感耦合等离子体发射光谱仪在水质检测中的比较分析
265	轨道交通车辆胶粘剂合格愉悦度快筛
268	双柱气相色谱法测定非甲烷总烃的不确定度评定
271	HPLC 法测定咳喘顺丸中迷迭香酸、白花前胡甲素、白花前胡乙素和橙皮苷的含量
274	钛酸铋钠纳米球的压电催化降解 RhB 性能的研究
277	BPA 纯度对熔融酯交换法合成 PC 产品性能的影响
280	高压聚乙烯装置引发剂过氧化物含量的测定方法研究
283	氮化硼/天然橡胶复合材料的热性能与阻尼性能研究
286	光稳定剂对 PP 基木塑复合材料老化性能的影响
289	改性柚子皮生物炭催化过硫酸盐降解盐酸四环素的研究
292	不同采摘时间的莞香灵芝中活性物质的变化
295	棉秆活性炭的制备工艺优化及其吸附性能的研究
298	影响乙苯装置提高干气量因素的研究
301	高压均质技术对椰浆风味品质的影响作用研究
304	汇聚法合成高纯度阿托伐他汀钙的工艺研究
307	6 种中药材在不同乙醇浓度中的浸出行为研究
310	复方养心丹片抗抑郁的网络药理学研究
313	专论与综述纳米多孔金属基赝电容器电极的应用及进展
316	N-亚硝胺致癌机理及检测方法研究进展
318	壳聚糖基生物材料的应用及抗菌结构优化前景
321	迷迭香精油提取方法及活性研究进展
324	膜黄芪皂苷合成路径关键基因的挖掘和生物信息学分析
327	焊接烟尘所致污染与工业机器人应用探讨
329	机动车尾气检测方法研究进展
332	改性高岭土的制备及对废水中铅离子的吸附性能研究
335	汉江安康段和汉中段水样重金属分析及人体健康评价
337	黑臭水体治理新技术及水质长效机制探讨
340	我国海洋环境污染监测现状探究
343	离子色谱-柱后衍生-紫外可见检测法测定涂料中六价铬含量
346	基于胸腺嘧啶碱基错配和金纳米棒比色型传感器对汞离子的可视化检测
349	HPLC 法测定盐酸甲氧明有关物质
352	气相色谱—三重四级杆质谱联用仪测定芹菜中 48 种农药残留的基质效应
355	火焰原子吸收光谱仪和电感耦合等离子体发射光谱仪在水质检测中的比较分析
358	轨道交通车辆胶粘剂合格愉悦度快筛
361	双柱气相色谱法测定非甲烷总烃的不确定度评定
364	HPLC 法测定咳喘顺丸中迷迭香酸、白花前胡甲素、白花前胡乙素和橙皮苷的含量

- 182 高效液相色谱法同时测定盐酸瑞芬太尼原料药六种有关物质 陈鹏, 钟凯, 张瑞娟
185 水中全盐量的重量法不确定度评定及测定 季竹敏, 魏苏凤

◆ 设计与装备

- 188 300 t/a 苯达松生产工艺安全设计 陆华, 祁刚
191 活性砂反硝化滤池工艺提标改造污水处理厂 汤家祥
194 新建低温空分工厂在线分析系统的配置选型和安装调试 袁梦月

◆ 教学教改

- 196 基于 OBE 理念的制药工程探索性实验设计与实施 刘华鼐, 李芸, 叶勇
199 CFD 技术在管束传热问题教学中的应用 何奎, 郭晓娟, 黄斯珉
202 思政融入《化工单元操作》课程的探索与实践 彭德萍, 宋春雨, 卿周君
204 化学类专业《物理化学》课程思政教学探究 游歌云, 冯彬, 刘晓凤, 等
206 环境工程原理课程思政元素挖掘与实践 何克杰, 杨强斌, 刘红盼, 等
208 化工技能大赛训练提升策略“产赛研用”以南科院为例 王一男, 林木森, 吴莉莉
210 工科院校物理化学实验课程教学改革探讨 李金辉, 王燕, 王瑞祥, 等
213 虚拟仿真实验在高校环境课程教学中的应用探索 罗武辉, 孙涛, 李奇, 等
215 新形势下环境毒理学教学改革的思考 任艳芳, 何俊瑜, 张雨哲
217 基于有机化学发展史的课程思政在《有机化学》课程中的设计与实践 张逢源, 李玲
219 合肥工业大学制药工程专业本科实践教学体系与管理模式 马晓静, 王淮, 邓胜松, 等
221 材料专业创新与实践课程教学现状与改革探索 刘泉, 耿洪波, 程亚飞, 等
223 基于“共性-个性”挖掘的对比教学法在仪器分析教学中的应用 余祥英, 李玉婷, 周亚民, 等
225 疫情背景下在中药药剂学课程中融入课程思政元素的探索与实践 任孟月, 时军, 朱春娥, 等
228 高校化学实验室生物安全事故的紧急处置策略 汤海峰, 刘艳, 郑艳茹, 等
230 课程思政在高职专业课程教学改革中的探索与实践——以食品快速检测技术为例 侯红瑞, 张榕欣, 孙国勇, 等
232 基于综合创新设计性实验的中药制药专业人才培养模式的探索——以白藜芦醇的剂型设计及质量评价为例 朱春娥, 任孟月, 王岩, 等
234 化工专业有机化学实验教学中微型化实验的应用 吴绍艳, 盛希群, 张丛兰, 等
236 化学工程与工艺专业课程教学过程中落实解决复杂工程问题能力的培养 范宝安, 刘凯开, 雷杨
238 课程思政视角下的有机化学教学改革探究 王永超, 严丽君
241 课程思政融入《大气污染控制工程》的教学设计与实践 赵文昌, 刘锡尧
243 《高分子材料加工与改性技术》教学改革探索 夏胜利, 聂莹, 于佳博, 等
246 地方本科高校工业分析实验教学改革探索 陈双, 庄凰龙, 刘锡尧, 等
248 分析化学实验操作评分标准的细化探讨 尤努斯江·吐拉洪
251 以微课为载体的教学模式在药物分析教学中的应用和实践 邱净英, 谷小珂
253 化学反应工程融合课程思政教育的探索与设计 李彦君, 刘媛媛, 杜玉朋, 等
255 创新型人才培养背景下地方高校基础化学课程的教学改革与探索研究 徐凤州, 薛美香, 陈宇, 等
258 《化工热力学》教学中演绎状态方程的发展历程 向丽, 薛永萍, 童晓青, 等
261 虚实结合在核磁共振波谱分析教学中的应用 何林洪, 焦杨, 刘妍颖, 等
264 互联网远程教学模式下线上教学设计的对比分析及优化 唐海玲, 陈毅平

本刊已许可中国学术期刊(光盘版)电子杂志社在中国知网及其系列数据库产品中以数字化方式复制、汇编、发行、信息网络传播本刊全文。作者向本刊提交文章发表的行为即视为同意我社上述声明。

Guangdong Chemical Industry

Vol.48 No.23

(Series No.457)

Publication ISSN 1007 - 1865
CN 44 - 1238/TQ

Contents

◆ Experiment & research

- 1 Study on the Piezoelectric Catalytic Degradation of RhB by Sodium Bismuth Titanate Nanospheres Li Yingkai, Luo Ruijie, Zhao Zhicheng
4 Effect of Raw Material Purity on Properties of Technology of Transesterification Polycarbonate Zhang Lu, Liu Minghui, Guo Yin, Liu Tingting, Li Wanqing
7 Study on Determination Method of Initiator Peroxide Content in High Pressure Polyethylene Ge Xihui
10 Thermal Properties and Damping Characteristics of Boron Nitride/Natural Rubber Composites Liu Hongchao, Wang Qifang, Wang Yueqiong, Li Yongzhen, Li Gaorong, Yu Heping
13 Effect of Light Stabilizer on Aging Properties of PP Based Wood Plastic Composites Wen Xia, Tian Dahui, Tang Yingzhao
16 Degradation of Tetracycline Hydrochloride by Persulfate Catalyzed by Modified Pomelo Peel Biochar Xu Qingyan
19 Changes of Active Substances in Guangxi Lingzhi at Different Picking Times Ding Hongyan, Lv Simin, Liu Cuijuan, Wu Tie, Qi Yi
22 Optimization of Preparation Process and Adsorption Performance of Activated Carbon from Cotton Stalk Zhang Yuefeng, Yan Yongzan, Lv Lingling
25 Research on the Factors Affecting the Increase of Dry Gas in Ethylbenzene Plant Zeng Wei, Yi Juan, Jia Jinfeng, Kui Xiaoshan, Liao Yougui, Xue Jinzhao
28 Study on the Effect of High-pressure Homogenization Technology on the Flavor Quality of Coconut Milk Luo Bairan, Luo Qiuming, Liu Guo, Zhong Xuanyu, Liu Yujia
31 Study on the Process of Synthesis of High-purity Atorvastatin Calcium by Convergent Method Pan Lin, Yi Zhiheng, Wang Shan, Xiang Yuanyuan, Wang Fudong, Peng Dongming
34 Study on the Leaching Behavior of Six Chinese Medicinal Materials in Different Ethanol Concentrations Jiang Hongyu, Tu Binglun, Zhang Hanlu, Wu Yiman, Lu Yu, Huang Guangwen
37 Analysis on Mechanisms of Yangxinkaiyi Tablets in Treatment of Depression Based on Network Pharmacology Long Tingting, Li Qian, Chen Yudian, Peng Nian, Liu Wenshu, Li Yonghao
40 Theoretical Study on the Amidation Reaction of 6,6,6-trifluoro-1-hexene with Methyl Dioxaazolone Xu Liangcheng, Zhang Xiangbiao
43 Studies of Long-term Effective Mechanism of Safe Management in Chemical Production Enterprises Based on PDCA Cycle Theory Lin Yisong, He Wenzhong
46 Study on the Inhibition Mechanism of a Polymer Asphaltene Inhibitor Zheng Cunchuan, Fu Haoran
49 Effect of Tab-lead Resistance on Performance of Stacking Lithium-ion Battery Huang Shaojun
52 Synthesis of Polypropylene Glycol Hydroxyethyl Methacrylate Wang Shengli, Dong Nan
55 Development of Reference Materials for Analysis of Lead and Cadmium in Polyester Cotton Printed and Dyed Textiles Yang Renyou
58 Application of Fluidized Bed Crystallization Technology in Dehardening of Circulating Water Yang Zhanzhong, Zhang Di, Zhang Ying, Lin Zhijun, Jing Jianbo
61 Preparation and Efficacy of a Moisturizing Raw Material Zhang Kexin, Wu Nengfu, Wu Jinhao
64 Preparation and Application of Magnetic Molecularly Imprinted Polymer with Core and Shell Structure of Indolebutyric Acid Li Shanshan, Sun Yuying, Feng Shun, Jiang Zhigang
67 Research on a New Type of Thiourea Probe with Copper Ion Recognition Ability Xu Yunlong
70 Research on Application for Boron Removal from Water by Ion Exchange Resin D870B Xiu Huimin, Ying Yunjie, Xu Xiaodong
73 Research on Fire Disposal Technology of Coal Tar Storage Tank Fu Bingqi, Li Youdong, He Li
76 Study on the Demoulding Performance of Polypropylene Materials for Automobile Bumper Yao Qimei, Li Zaowen, Lai Xianqin, Lei Liang, Wu Zhilin, Wu Guofeng
79 Study on Influencing Factors of Linear Thermal Expansion Coefficient of Artificial Stone of UPR Solid Surface Material Rong Teng, Yu Qiaoling, Wang Wanjuan, Lin Ruihang, Liang Wanxing, Yu Chunna, Li Xiaozeng, Dai Mingbiao, Deng Pan
82 Influences of CO₂ Aeration Supplementation Mode on Carbon Fixation and Lipid Accumulation in *Coccomyxa Subellipsoidea* Su Jielong, Ma Yiran, Tang Yufang, Zhou Rong, Li Yuqin

◆ Summarize

- 86 Review of Nanoporous Metal-based Electrode for Pseudocapacitor Du Baoning, Zhang Shaofei, Sun Jinfeng, Meng Yongqiang, Li Tiantian
88 Mechanism of Carcinogenesis of Nitrosamines and Its Recent Development in Detection Lu Tingting, Zhu Xiaofang, Lin Dongxiang, Li Yan, Zhou Rong
90 The Application of Chitosan-based Biomaterials and the Prospect of Antibacterial Structure Optimization Su Wenyi, Liang Fengyan
93 Research Progress on Extraction Method and Activity of *Rosmarinus Officinalis* Essential Oil Wu Siyu, Tang Xing, Deng Yan'e, Jiang Siping, Liu Xiu, Chen Hongjun, He Yanbiao, Fang Ke, Jin Chenzhong
96 Mining and Bioinformatics Analysis of Key Genes in Biosynthesis of *Astragalus Membranaceus* Saponin Li Hui, Jiang Ming, Yu Kanchao, Cui Ying, Li Jinghui, Zhang Keyong, Liu Jicheng, Ma Wei
99 Surge Analysis of Propane Loading Pipeline System Li Junhong, Yang Xiaoting, Qin Jie, Chen Liangzhi
103 Evaluation of the Efficacy of Glycosyl Glycerol in Skin Care Zhou Shiyu, Fan Jiaying, Sheng Jiaqi, Ang Ningji
106 Research Progress on Stress Whitening of Polypropylene Chen Yezhong, Yu Fei, Wu Guofeng, Qian Zhiyun

◆ Environmental protection

- 109 Discussion on the Pollution Caused by Welding Fume and the Application of Industrial Robots Chen Yiyuan, Ou Jiafu, Zhang Zhi, Zhou Jia, Shen Juan, Fang Gang, Xu Jiyi
111 Research Progress of Motor Vehicle Exhaust Detection Methods Dong Jianhua, Ding Yangmin, Zhou Yuyang, Chen Feng
113 Research on the Preparation of Modified Kaolin Clay and Absorption to the Lead Ion in the Waste Water Jin Hong, Wu Xueqing, Yue Caixia
116 Analysis of Heavy Metals in Water Samples from Ankang and Han-zhong Sections of Hanjiang River and Evaluation of Human Health Li Tianming, Chen Shuangli
119 Discussion on New Technologies of Black-and-malodorous Water Body Treatment and Long-term Water Quality Improvement Mechanism Zou Yilong, Gou Chengjian, Zhou Yu, Li Jun, Chen Gang, Sun Tanyufei, Huang Xueping
121 Discuss on Current Marine Environmental Pollution Monitoring in China Huang Xiaomei, Xu Jiale, Xie Dandan, Lin Liru, Hu Jiehua, Chen Xin, Peng Liang
123 Design and Research on Monitoring System of Key Heart Lake Water Quality of Suqian City Zhong Jialin, Sun Buxu, Zhang Yi
125 Correlation Analysis of Chemical Oxygen Demand, Permanganate Index and Oxygen Demand after 5 Days Demand in Surface Water Huang Xumin
128 Comparative Analysis of Manual Monitoring and Automatic Water Quality Monitoring of a Section in Foshan Mai Xiuting
131 Investigation of a Positively Charged Membrane and Its Pollutant Removal Performance from Water Chen Fangmei
134 Discussion on Centralized Treatment of Urban Black and Odorous River Sediment——Taking the Sediment Treatment Project in Qianhai Bay District as an Example Chen Lichun, Lv Yingjun
137 Research Progress on Characteristics and Fuel Treatment Technology of Food Waste Deng Wangming
142 Introduction of Organic Waste Treatment Technology under the Situation of Garbage Classification Liu Jie, Chen Ting, Zhu Jing, Wang Jinjin, Bao Yechuang, Zhu Hao
144 Investigation on Water Quality of Black and Odorous Water in Zhangzhou and the Evaluation of its Pollution Degree Zhao Xiaohua
147 Research Application Mechanism and Practice of Urban Water Environment Management Based on Ecosystem Construction Technology Song Houran, Huang Jingsong, Gu Kuanhai

◆ Analysis testing

- 157 Determination of Cr(VI) in Coatings by Ion Chromatography with Post-column Derivatization and UV/Visible Spectrometer
Liu Qiong, Chen Jiwen, Feng Yan, Bao Chucai, Ye Cuiping, Xu Quanhui, Chen Jingcheng
160 Construction of Colorimetric Sensors for Visual Detection of Mercury Ions Based on Bases Mismatches of Thymine DNA and Gold Nanorod
He Zuyu, Li Puwang, Zhou Chuang, Wang Chao, Song Shuhui, Liu Yunhao, Yang Ziming
164 Determination Related Substances of Methoxamine Hydrochloride by HPLC
Huang Canzhong, Chen Guoyi, Pan Shaoyan, Wang Qin
167 Studing the Matrix Effect of Celery on 48 Pesticide and their residues by Gas Chromatography-triple Quadrupole Mass Spectrometry
Zhou Yuchun, Wang Shaolong, Zhao Wanzen, Teng Yuqiao, Sun Yakun, Sun Ya'na, Huang Hua
171 Comparison and Analysis of Flame Atomic Absorption Spectrometer and Inductively Coupled Plasma Emission Spectrometer in Water Quality Inspection
Luo Lixia
174 Fast Screening of Qualified Hedonic Tone for Rail Vehicle Adhesives
Zhang Lanlan, Huang Xuefei, Lan Qi, Wang Wei, Li Shuhua, Wang Yongxiang, Feng Miao
177 Evaluation of Uncertainty for Measurement of Nonmethane Hydrocarbons by Double Column Gas Chromatography
Li Peixian, Feng Yiming, Chen Jianxiang
180 HPLC Determination of Rosmarinic Acid, Procuredin, Procuredin and Hesperidin in Kechuanshun Pills
Gu Bingming, Yu Yinbing, Wu Weikui, Liu Jia
182 Simultaneous Determination of Six Related Substances in Remifentanil Hydrochloride by HPLC Method
Chen Peng, Zhong Kai, Zhang Ruijuan
185 Uncertainty Evaluation of Determination of Total Salinity in Water
Ji Zhumin, Wei Sufeng

◆ Design & equipment

- 188 The Safety Process Design for 300t/a Bentazone
Lu Huai, Qi Gang
191 Upgrading and Reconstruction of WWTP by Active sand Denitrification Filter
Tang Jiaxiang
194 Configuration, Selection, Installation and Commissioning of On-line Analysis System in New Low Temperature Air Separation Plant
Yuan Mengye

◆ Teaching reform

- 196 Design and Practice of Pharmaceutical Engineering Exploratory Based on OBE Model
Liu Huanai, Li Yun, Ye Yong
199 Application of CFD Technology in Tutoring of Heat Transfer of Tube Banks
He Kui, Guo Xiaojuan, Huang Simin
202 Exploration and Practice of Integrating Ideology and Politics into Chemical Unit Operation Course
Peng Deping, Song Chunyu, Qing Zhoujun
204 Research on Ideological and Political Teaching of Physical Chemistry Course for Chemistry Majors
You Geyun, Feng Bin, Liu Xiaofeng, Gan Yongle
206 The Excavation and Practice of Curriculum Politics Elements in Principle of Environmental Engineering
He Kejie, Yang Qiangbin, Liu Hongpan, Si Wantong, Xie Zhigang
208 Analysis on the Strategy of Improving the Training Efficiency of the Chemical Skills Competition
Wang Yi'nan, Lin Musen, Wu Lili
210 Discussion on Teaching Reform of Physical Chemistry Experiment Course in Engineering Colleges
Li Jinhui, Wang Yan, Wang Ruixiang, Liu Jinbiao, Xu Zhifeng
213 Application Exploration of Virtual Reality Experiment in College Environmental Courses
Luo Wuhui, Sun Tao, Li Qi, Huang Zhen, Gong Dandan, Chen Yunnen
215 Reflections on the Teaching Reform of Environmental Toxicology under the Background of New Situation
Ren Yanfang, He Junyu, Zhang Yuzhe
217 The Design and Practice of Curriculum Ideology and Politics in the Course of Organic Chemistry Based on the Development History of Organic Chemistry
Zhang Fengyuan, Li Ling
219 Practice Teaching System and Management Mode of Pharmaceutical Engineering in Hefei University of Technology
Ma Xiaojing, Wang Huai, Deng Shengsong, Zhang Hongbin, Yao Risheng
221 Material Specialized Curriculum Teaching Innovation and Practice of the Status Quo and Reform Exploration
Liu Quan, Geng Hongbo, Cheng Yafei, Yu Lei, Liu Longfei, Wei Bo
223 Application of Comparative Teaching Method Based on Generality-personality Mining in Instrumental Analysis Teaching
Yu Xiangying, Li Yuting, Zhou Yamin, Peng Min, Shao Youyuan, Li Lin
225 Exploration and Practice of Integrating Ideological and Political Elements into the Course of Pharmaceutics of Traditional Chinese Medicine under COVID-19 Epidemic Situation
Ren Mengyue, Shi Jun, Zhu Chun'e, Zhang Yan
228 Emergency Disposal Strategies for Biosafety Accidents in Chemical Laboratories of Colleges and Universities
Tang Haifeng, Liu Yan, Zheng Yanru, Meng Qingfan
230 Exploration and Practice of Curriculum Thought and Politics in Curriculum Teaching Reform of Higher Vocational Specialty ——Taking Food Rapid Detection Technology as an Example
Hou Hongrui, Zhang Rongxin, Sun Guoyong, Zuo Yingping
232 Exploration of the Talent Training Model of Traditional Chinese Medicine Pharmacy Based on Comprehensive and Innovative Designed Experiments
Zhu Chun'e, Ren Mengyue, Wang Yan, Shi Ju
234 Application of Microscale Experiments in Organic Chemistry Experiment-teaching of Chemical Engineering Specialty
Wu Shaoyan, Sheng Xiqun, Zhang Conglan, Liu Jinyan, Xu Lan
236 To Implement the Ability Training of Solving Complex Engineering Problems into Courses Teaching Reform for Chemical Engineering and Process Major
Fan Baoan, Liu Kaikai, Lei Yang
238 Research on Teaching Reform of Organic Chemistry from the Perspective of Ideological and Political Courses
Wang Yongchao, Yan Lijun
241 Curriculum Ideological and Political Integration into the Teaching Design and Practice of "Air Pollution Control Engineering"
Zhao Wenchang, Liu Xiayao
243 Exploration on Teaching Reform of "Polymer Material Processing and Modification Technology"
Xia Shengli, Nie Ying, Yu Jiaobo, He Xiaochun
246 Exploration on Teaching Reform of Industrial Analysis Experiment in Local Undergraduate Universities
Chen Shuang, Zhuang Huanglong, Liu Xiayao, Zhou Chen, Chen Feng
248 Discussion on the Refining of Scoring Standard about Analytical Chemistry Experiment Operation
Younusijiang Tulahong
251 Application and Practice of Micro-course in Pharmaceutical Analysis Teaching
Qiu Jingying, Gu Xiaoke
253 Exploration and Design of Integrating Ideological and Political Education with Chemical Reaction Engineering
Li Yanjun, Liu Yuanyuan, Du Yupeng, Zhao Yuchao
255 Teaching Reform and Exploration of Basic Chemistry Courses in Universities under the Background of Cultivating Innovative Talents
Xu Fengzhou, Xue Meixiang, Chen Yu, Lin Suying, Xie Liyan
258 Deducing The Development of Equation of State in The Teaching of Chemical Thermodynamics
Xiang Li, Xue Yongping, Tong Xiaoqing, Tang Lu, Xuan Aiguo
261 The Application of the Combination of Virtuality and Reality in the Teaching of Nuclear Magnetic Resonance Spectroscopy Analysis
He Linhong, Jiao Yang, Liu Yanying, Feng Xianjing, Ou Bingning
264 Comparative Analysis and Optimization of Online Teaching Design of Traditional Chinese Medicine Pharmaceutics under Internet Distance Teaching Mode
Tang Hailing, Chen Yiping

Sponsor and Publisher: Guangdong Petroleum and Fine Chemicals Institute
Editor: The Editorial Office of Guangdong Chemical Industry

Address: The Editorial Office of Guangdong Chemical Industry, 116 Yuehua Road, Guangzhou, 510030 China
Tel/Fax: 86-20-83336009, 86-20-833302517
E-mail: gdic200@163.com http://www.gdchem.com