国际标准连续出版物号：ISSN 1007-1865
国内统一连续出版物号：CN44-1238/TQ
半月刊 创刊于1974年

广东化工

Guangdong Chemical Industry

QK2131067

全国石油和化工行业优秀期刊一等奖
《中国核心期刊（遴选）数据库》全文收录期刊
中国学术期刊综合评价数据库统计源期刊
美国《化学文摘》（CA）重点收录期刊
《中国学术期刊（光盘版）》收录期刊
广东省优秀科学技术期刊

2021 16
8月下半月刊
第48卷（总第450期）
主办单位：广东省石油与精细化工研究院

ISSN 1007-1865
16>
9 771007 186219
万方数据

广东化工

Guangdong Chemical Industry

第 48 卷　第 16 期　8 月下半月刊
（总第 450 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
邮　　编：510030
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
出版日期：2021 年 8 月 30 日
邮局全年定价：
国内 480 元；国外 384 美元

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　Fe_3O_4@SiO_2/HDI-CNTs/PUU 纳米复合材料的制备与性能研究　林展鸿，林圣群，张歆旸，等
3　具有近红外屏蔽性能的高分子分散液晶薄膜材料性能研究　孙世俊，王倩倩，陈琪，等
5　耐候 ABS 加速老化性能研究　何超雄，陈日平，官焕祥，等
7　基于热力学平衡计算的煤炭转化过程中砷和汞的迁移转化行为研究　焦发存，刘涛，武成利，等
10　改性条件对 Si-69 改性白炭黑补强天然橡胶性能的影响　余洋，陈宜湛，张宇，等
13　有机硅密封胶力学性能影响因素研究　丁敬德，薛萌，赵世博，等
15　双金属-草酸配合物衍生铁酸镍及其吸附性能评价　杨达，陈晓含，邵雪晴，等
18　Box-Behnken 响应曲面法优化栾树果实中三萜总皂苷提取工艺研究　曹雪丽，田润昱，焉玉超，等
21　金属器件热处理循环冷却水电化学处理工程技术研究　江龙，寇宰，张同同，等
23　基于 LCR 及 PCR 技术构建高效纳米 SNP 探针　刘蕊，吴雪莉，杜枢
26　锂离子动力电池正极片制程中的极耳根部开裂的解决方法初探　郭彬彬，符远翔，葛武杰，等
28　食品能力验证中大肠埃希氏菌 O157：H7 的分离鉴定及质量控制　吴斯敏，崔碧玲，张琼丹，等
31　化学镀镍废水中镍、总磷和氨氮协同处理　李姗婷，徐文彬，肖勇俊，等
34　基于 PLA 材料的 FDM 打印结构与性能的关系研究　杨娜娜，田玉琢，白耀仙，等
37　襄阳市临床医生使用抗血栓药物现况研究　雷梦颖，朱配瑶，吉善文，等
39　原料药左炔诺孕酮有关物质的制备研究　蒋婷，刘喜荣，孙昊星，等
41　基于系统质量控制的银屑平片质量标准研究　刘满军，石会丽，高蓉，等
44　初始还原糖浓度对 2 株酵母利用玉米秸秆水解液产油的影响　周穗穗，邹义权，陈静
46　果胶提取、生物活性及食品应用的研究进展　王承福，陆廷祥，张廷磊，等
49　龙胆中龙胆苦苷的提取纯化工艺研究及其结构表征　吕庆银，王玉，胡晶晶，等
52　纤维素/钯负载催化剂的构建及应用　刘余江，王师令，莫顺航，等
55　牡丹籽粕总多酚最佳提取工艺优化及抑菌活性研究　吴永玲，李筱玲，张亦琳，等
59　以中药替代化学添加剂的中药奶茶调研及研制　卢幸甜，易丽娟，杨先国，等
61　基于黄连的荧光碳点的合成及性能研究　周莉佳，韩冰，夏世豪，等
63　电沉积制备 Ni-Co 合金镀层及耐蚀性能研究　叶淼，何欣，王海涛，等
65　降解甲醛功能石膏的界面改性技术研究　井方文，茹晓红，郅真真，等
69　食品接触材料中初级芳香胺要求比较研究　王璟
72　自制熊去氧胆酸胶囊与参比制剂体外溶出一致性评价研究　邱科先
74　基于天然产物靶向的核苷磷酰胺酯前药的合成与生物评价　刘波，孙锐
77　室外温度对高温地区电厂主厂房内的温度影响研究　冯怡苇，梁雷欣，刘刚，等
82　生活饮用水管材中塑化剂的迁移研究　覃芳敏，汪河伟，黄铖，等
84　一种耐刮擦增强 PA6 材料的制备及其吸湿行为研究　邱慧君，陈宜湛，张宇，等
87　EEMs-PARAFAC 法分析环境中 DOM 常见组分简述　顾乾恒
89　化成工艺对高功率型锂离子电池性能的影响　王猛，安冉
92　水性胶粘剂中丙烯酰胺单体的检测方法研究　肖立群
94　复杂有机污染场地中原位热脱附技术修复效果研究　席晋峰，梅志华，赵申，等
100　Frac-H 型清洁高温压裂液性能评价研究　马德敏，董丽娜，侯彬彬，等

◆ 专论与综述

102　面向建筑节能的安全型墙体保温复合材料研究进展　许争，方玉堂，刘白云，等
106　聚偏氟乙烯基电磁屏蔽材料研究进展　郭冰之，梁见莹

万方数据

109 土壤重金属污染对微生物和酶活性的影响研究进展
高亚萍，汪颖，尹心怡
111 船运液化天然气(LNG)的贸易交接计量
陈国峰，乐鸣雁，王佳莉，等
114 毛榛种质资源及在化工领域的应用进展 杜娟，芦博闻，傅宇，等
115 可溶性微针在经皮给药系统中的研究进展
陈欢欢，宋信莉，汪云霞，等
117 生物质吸附废水中亚甲基蓝的研究综述
李石雄，黄元浩，蓝海军，等
120 药品生产现场检查工作中物料系统常见问题分析及检查策略思考
招伟汉，张庆芬，江映珠，等
122 空心莲子草资源化利用研究 马逢时，刘家水，谈永进
123 化工行业跨国并购下财务风险分析 白君曼，许延明
124 光电功能晶体专利技术浅析 李志鹏，师蕙
126 万绿牌芦荟大分子原液在化妆品中的应用
王艳，钱绍祥，何林燕，等
127 常见日用含酒精消费品涉危判定探讨 张强，禹伟腾，王佳莉，等
130 冷却塔淋水填料研究进展 张健，滕越，金莎莎，等
133 石墨换热器中国专利技术分析 喻倩萍
135 落新妇苷的药理作用研究进展 杨志富，于海波，曾磊，等
136 电源结构是东莞碳达峰碳中和的关键因 苏耀琴
138 透明质酸纯化技术的专利进展 陆挺峰
140 纳米复合材料的环境安全性研究进展 唐娟娟
141 β-环糊精在饮料工业上的研究应用 王博豪
143 锂电池隔膜辊涂装置的研究进展 刘天一，张汉鸿，徐世杰，等
146 基于自组装的两亲聚合物驱油体系研究进展
李振宇，于斌，李爽，等

◆ 环境保护

148 珠江口海域沉积物中总氮总磷的空间分布特征
刘太胜，姜沄林，陆尧，等
150 水环境中抗生素污染现状及环境效应研究进展
田吉宸，曾颖，舒兴权，等
152 SZVI 协同共溶剂降解典型有机污染物的研究 张典，喻凯
155 广州市从化区突发水环境风险事件评估及对策建议 宁晓伟
157 工业园区大气挥发性有机化合物污染特征研究
张英磊，徐娇，高韩钰
163 BCR 改进法提取稀土冶炼废渣中的重金属元素 Cr、Mn、Zn 和 Pb
文旺凤，房俊旭，彭海榕
165 交错通挡板检测室在尾气遥测动态模拟实验中的应用
郭威，黄梓宸，黄彦捷，等
167 北部湾北部海底表层沉积物重金属污染评价
夏嘉，高苑，林倩妮，等
170 塑料废弃物的管理及资源化利用 朱桂丹，陕洁，尹绚，等
173 生命周期评价在电子废弃物管理中的应用前景展望
陈泓江，黎俊德，张伟浩，等
178 乌鲁木齐市秋冬季节大气中苯系物的污染特征——以北京路区域为例
宋思醒，帕丽达·牙合甫，邓文叶，等
180 铁碳+芬顿法在化学原料药生产废水工程应用
施宏方，汪林生，熊庆生，等
183 印染企业废水处理工程实例 裴小兴
185 城镇垃圾分类评价及管理机制探讨 王培明
187 活性炭吸附耦合臭氧催化氧化去除冷轧生化出水有机物研究 王湘
190 含氮杂环废水厌氧生物处理及微生物菌群分析
邵汝英，高峰，赵振华，等
194 高校节能环保校园建设的思考及建议 刘富春
195 三相生物流化床处理焦化废水过程中苯系物去除特征
韩明，陈明飞，赵玉生
197 低温等离子体技术处理持久性有机污染物的研究进展
黄舒漫，刘亚男，周荃
200 数学视角下黑龙江省地表水 pH 值影响因素分析 杨真真，刘琳
202 新无磷方案在炼油污水回用循环水系统成功应用
龚卓仪，吕骏腾，杨帆
207 太平岭核电海域冷源海洋生物应对策略研究 王希旭
210 环保监测中空气污染监测点的布设要点分析 黄海威
211 袋式除尘器失效原因分析与处理 李琦，李文选，郭彦新，等

◆ 设计与装备

213 1000MW 机组分区喷氨特性研究 陈景东，梁成思
215 浅析循环水系统节能降耗 龙智
219 基于川渝地区高温高压酸性环境特性的完井管材腐蚀机理研究
黄靖富，舒学军，蔡佳成

本期基金项目论文（共 92 篇）

1 Fe_3O_4@SiO_2/HDI-CNTs/PUU 纳米复合材料的制备与性能研究
3 具有近红外屏蔽性能的高分子分散液晶薄膜材料性能研究
7 基于热力学平衡计算的煤炭转化过程中砷和汞的迁移转化行为研究
13 有机硅密封胶力学性能影响因素研究
15 双金属-草酸配合物衍生铁酸镍及其吸附性能评价
18 Box-Behnken 响应曲面法优化栾树果实中三萜总皂苷提取工艺研究
21 金属器件热处理循环冷却水电化学处理工程技术研究
23 基于 LCR 及 PCR 技术构建高效纳米 SNP 探针
26 锂离子动力电池正极片制程中的极耳根部开裂的解决方法初探
28 食品能力验证中大肠埃希氏菌 O157:H7 的分离鉴定及质量控制
31 化学镀镍废水中镍、总磷和氨氮协同处理
34 基于 PLA 材料的 FDM 打印结构与性能的关系研究
37 襄阳市临床医生使用抗血栓药物现况研究
39 原料药左炔诺孕酮有关物质的制备研究
41 基于系统质量控制的银眉平片质量标准研究
44 初始还原糖浓度对 2 株酵母利用玉米秸秆水解液产油的影响
46 果胶提取、生物活性及食品应用的研究进展
49 龙胆中龙胆苦苷的提取纯化工艺研究及其结构表征
52 纤维素/钯负载催化剂的构建及应用
55 牡丹籽粕总多酚最佳提取工艺优化及抑菌活性研究
59 以中药替代化学添加剂的中药奶茶调研及研制
61 基于黄连的荧光碳点的合成及性能研究
63 电沉积制备 Ni-Co 合金镀层及耐蚀性能研究
65 降解甲醛功能石膏的界面改性技术研究
102 面向建筑节能的安全型墙体保温复合材料研究进展
106 聚偏氟乙烯基电磁屏蔽材料研究进展
109 土壤重金属污染对微生物和酶活性的影响研究进展
111 船运液化天然气(LNG)的贸易交接计量
114 毛榛种质资源及在化工领域的应用进展
115 可溶性微针在经皮给药系统中的研究进展
117 生物质吸附废水中亚甲基蓝的研究综述
120 药品生产现场检查工作中物料系统常见问题分析及检查策略思考
122 空心莲子草资源化利用研究
127 常见日用含酒精消费品涉危判定探讨
148 珠江口海域沉积物中总氮总磷的空间分布特征
150 水环境中抗生素污染现状及环境效应研究进展
152 SZVI 协同共溶剂降解典型有机污染物的研究
157 工业园区大气挥发性有机化合物污染特征研究
165 交错通挡板检测室在尾气遥测动态模拟实验中的应用
167 北部湾北部海底表层沉积物重金属污染评价
170 塑料废弃物的管理及资源化利用
173 生命周期评价在电子废弃物管理中的应用前景展望
178 乌鲁木齐市秋冬季节大气中苯系物的污染特征
180 铁碳+芬顿法在化学原料药生产废水工程应用
237 气相色谱—三重四级杆串联质谱分析桂花挥发油中化学成分及 8 种有机氯农药
240 变压器油中水含量的太赫兹时域光谱检测
243 四种水果中还原糖含量的测定与分析
245 QEChERS 提取和 LC-MS/MS 技术检测金银花中农药残留
249 复方参枣滴丸挥发性成分的 GC-MS 分析
253 女性在口红使用过程中的重金属暴露风险评价
263 基于人工智能和大数据技术的材料科学与工程专业课程体系的改革研究
266 高职《精细有机合成技术》课程思政全方位设计与教学实施
268 新媒体时代地方高校化工类硕士研究生科研能力现状
270 化学教学论实验教学改革初探
272 基于化学师范专业认证实验室运行机制的探析
273 高分子材料专业综合性实验设计思路的初步探讨
275 课程思政在中药学专业有机化学课程建设中的探索
276 分层教学在专升本化工原理课程教学中的探索
279 化学化工类高等数学课程思政案例的挖掘与注意事项
281 工程教育认证背景下的生物技术产品检验课程改革与实践
283 混合酸分析测定的实验设计及实践
285 高校创新创业教育与化学化工专业教育融合的实践研究
287 “四结合”的材料化学专业实习模式的构建研究
290 课程思政在无机化学教学中的初步探索
292 基于中药化学科研实践平台的本科生创新能力培养
294 基于职业能力的高职石油工程技术专业课程体系建设研究
296 基于药物化学课程群构建应用型药学人才培养模式
298 生物工程专业核心实验实训课程的整合与优化
300 基于道路工程材料实验的课程思政教学案例设计
302 药学拔尖创新人才培养模式的探讨
305 培养应用型化工人才的有机化学教学改革探讨
307 基于 BOPPPS 模型的《化工原理》课程思政设计
309 绿色化工背景下的《油水分离实验》探索研究
311 新工科背景下药物分析实验课程教学模式的探讨和思考
313 通过升学反观中职药学专业教学现状及策略探析
315 化工实训“仿真+实物”教学模式探究
317 《现代环境分析技术》课程教学改革探索
318 中学化学教学中绿色化学观念的培养
319 临床医学专业有机化学实验课程的教学反思
320 DryLab 软件在液相色谱教学中的应用
322 与时俱进的“分析化学”课程思政教学改革探讨
323 工程教育专业认证标准下《电化学基础实验》课程的教学改革
325 农林类高校化工实验室建设改革探讨
327 新时代下对教学改革与实践的几点思考
329 工程教育专业认证背景下材料类课程群实施课程思政的教学改革研究
332 基于 OBE 理念的高职化工制图课程教学改革
333 “训练-项目-竞赛”创新型人才培养模式研究及实践
344 环境工程专业教学改革中岗位需求与职业能力的探讨
348 浅谈应用型医学院校无机化学实验教学改革的探索与研究
350 药剂学线上线下实验教学中运用虚拟仿真技术的探讨
352 化工单元操作理实一体化教学改革可持续发展的研究
354 《化工制图》课程思政教学探索与实践

万方数据

223 减压塔高温段填料的腐蚀与防护 李果
226 榆树坡煤矿空巷充填系统优化 韩伟
228 甲醇合成塔环焊缝缺陷原因分析及应对措施 鲁军
230 甲醛浓缩工艺及操作探讨 彭亮亮
232 不同原料对悬浮床加氢裂化中试装置进料系统的影响 李文选，李琦，胡金余，等

◆ 分析测试

234 气相色谱-质谱法测定化妆品中二噁烷含量两种方法的不确定度评定 张江维，张弦，梁柱业，等
237 气相色谱—三重四级杆串联质谱分析桂花挥发油中化学成分及 8 种有机氯农药 魏小华，魏竹秋，章嘉晴
240 变压器油中水含量的太赫兹时域光谱检测 孔旭晖，宗鹏锦，李宗红，等
243 四种水果中还原糖含量的测定与分析 余丽梅，向平，叶丽娟，等
245 QEChERS 提取和 LC-MS/MS 技术检测金银花中农药残留 李东坡，高叶俊，任思敏，等
249 复方参枣滴丸挥发性成分的 GC-MS 分析 贤明华，郑克宁，詹锶楷，等
253 女性在口红使用过程中的重金属暴露风险评价 蒋金杏，虞素飞，姚垚
256 不同环境条件下臭氧水溶解性能的研究 冷守琴，黄飞
258 SVHC 之偏苯三甲酸酐的一种检测方案 廖晓全
261 临床测试评价二裂酵母修护和滋养头皮的功效 杨杏，卓珊珊，邱志勇

◆ 教学教改

263 基于人工智能和大数据技术的材料科学与工程专业课程体系的改革研究 柳红东，韩涛，胡荣，等
266 高职《精细有机合成技术》课程思政全方位设计与教学实施 狄宁，贺小兰，李小庆，等
268 新媒体时代地方高校化工类硕士研究生科研能力现状——以 Z 校为例 杨红艳，舒绪刚，丁姣，等
270 化学教学论实验教学改革初探 韦寿莲，王赵志，谢春生
272 基于化学师范专业认证实验室运行机制的探析 陈丽娜，景钇淇，裴苑娇，等
273 高分子材料专业综合性实验设计思路的初步探讨 如仙古丽·加玛力
275 课程思政在中药学专业有机化学课程建设中的探索 李根，黄蔓如，邱玉玲，等
276 分层教学在专升本化工原理课程教学中的探索 史德青，李成帅，张会敏
279 化学化工类高等数学课程思政案例的挖掘与注意事项 郑艳彬，宗明吉，王学勤，等
281 工程教育认证背景下的生物技术产品检验课程改革与实践 王春艳，何际芳，王莹，等
283 混合酸分析测定的实验设计及实践 邓秀琴
285 高校创新创业教育与化学化工专业教育融合的实践研究 赵丹，王毅，谭琳，等
287 “四结合”的材料化学专业实习模式的构建研究 陈修栋，刘金杭，严平，等
290 课程思政在无机化学教学中的初步探索 刘学文，胡霞，张慧，等
292 基于中药化学科研实践平台的本科生创新能力培养 李娟，李顺祥，徐菲，等
294 基于职业能力的高职石油工程技术专业课程体系建设研究 付强，汪超
296 基于药物化学课程群构建应用型药学人才培养模式 马远洋，王海君，陈颂，等
298 生物工程专业核心实验实训课程的整合与优化 王端好，仲杰，李思强，等
300 基于道路工程材料实验的课程思政教学案例设计 李志新，徐开东，王继娜，等
302 药学拔尖创新人才培养模式的探讨——以广州医科大学为例 梁璐，汪园，张羽，等
305 培养应用型化工人才的有机化学教学改革探讨 杨宇，朱茵，胡洋，等
307 基于 BOPPPS 模型的《化工原理》课程思政设计 朱东雨，王帅，蒋开祥，等
309 绿色化工背景下的《油水分离实验》探索研究——以油气储运工程专业为例 郭凯，凌晓，梁瑞
311 新工科背景下药物分析实验课程教学模式的探讨和思考 邵爱龙，陈计芳，刘俊龙，等
313 通过升学反观中职药学专业教学现状及策略探析 刘大路
315 化工实训“仿真+实物”教学模式探究 陈锦中，王金鹏，叶韬，等
317 《现代环境分析技术》课程教学改革探索 李科，董黎明，贾璇
318 中学化学教学中绿色化学观念的培养 鲁逸文，王宏社
319 临床医学专业有机化学实验课程的教学反思 江传玲，程永凤，曹殿洁，等
320 DryLab 软件在液相色谱教学中的应用 张彬彬，程永凤，刘毓婷，等
322 与时俱进的“分析化学”课程思政教学改革探讨 刘仁勇，谢成根，常文贵，等
323 工程教育专业认证标准下《电化学基础实验》课程的教学改革 马小航，马元，訾振发，等
325 农林类高校化工实验室建设改革探讨 冯欢，方从兵
327 新时代下对教学改革与实践的几点思考——以《稀土元素化学》课程为例 何建刚，乔雪玲
329 工程教育专业认证背景下材料类课程群实施课程思政的教学改革研究 李发国，岳慧君
332 基于 OBE 理念的高职化工制图课程教学改革 苏火煌
333 “训练-项目-竞赛”创新型人才培养模式研究及实践——以化学人才培养为例 侯旭锋，牛亮峰，李丹丹，等
335 本科《化工技术经济》课堂教学经验总结 段崇雄
336 新工科专业“课程思政”教学中育人元素的思考——以《环境分析化学》为例 龚丹丹，任嗣利，刘娟，等
339 医学人文教育融入生物化学教学的探索和实践 李树蕾，陈梅
341 化学·生命科学跨专业学科教学平台的建设与探讨 刘洋，汤海峰，刘艳，等
343 浅谈仪器分析课程教学资源库建设 靳斌斌
344 环境工程专业教学改革中岗位需求与职业能力的探讨 张凌，贺小春
345 地方高校化工原理实验教学改革与研究 李芬
347 以临床医学卓越计划为导向探究高校化学专业人才培养 林琳，韩语纯，徐姝玮，等
348 浅谈应用型医学院校无机化学实验教学改革的探索与研究 张杨，千苗苗，郭天宇，等
350 药剂学线上线下实验教学中运用虚拟仿真技术的探讨 陈慧芝，周郁斌
352 化工单元操作理实一体化教学改革可持续发展的研究 聂莉莎
354 《化工制图》课程思政教学探索与实践 范於菟，程凡，罗华军

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。

万方数据

Guangdong Chemical Industry

Vol.48 No.16 (Series No.450) Publication ISSN 1007 - 1865 CN 44 - 1238/TQ

Contents

◆ Experiment & research

1 Preparation and Properties of Fe_3O_4@SiO_2/HDI-CNTs/PUU Nanocomposites — Lin Zhanhong, Lin Shengqun, Zhang Xinyang, Wang Xiaosi, Shi Ruixin
3 Studies on Polymer Dispersed Liquid Crystal Films with Near Infrared Absorption Property — Sun Shijun, Wang Qianqian, Chen Qi, Gao Weijia, Lu Tao, Zhang Cuihong
5 Study on the Accelerated Aging Performance of Weather-resistant ABS — He Chaoxiong, Chen Riping, Guna Huanxiang, Fu Jinfeng, Yang Xiaoyun
7 Study on Transformation Behavior of Arsenic and Mercury during Coal Conversion Based on Thermodynamic Equilibrium Calculation — Jiao Facun, Liu Tao, Wu Chengli, Li Hanxu, Ninomiya Yoshihiko
10 Effect of Modification Conditions on Properties of Si-69 Modified Silica Reinforced Natural Rubber — Yu Yang, Chen Yizhan, Zhang Yu, Zhu Quan
13 Research on Influencing Factors of Mechanical Properties of Silicone Sealant — Ding Jingde, Xue Meng, Zhao Shibo, Yan Changqi, Lv Xingjun, Zhuang Yongjian
15 Bimetal-oxalate Complex Derived Nickel Ferrite and Its Adsorption Property — Yang Da, Chen Xiaohan, Shao Xueqing, Wei Dandi, Yang Chao
18 Study on the Extraction of Total Triterpenoids from the Fruit of *Koelreuteria Paniculata* by Box-Behnken Design-response Surface Methodology — Cao Xueli, Tian Runyu, Yan Yuchao, Zhou Dan, Dong Yun, Guo Xiao
21 Research on Engineering Technology of Electrochemical Treatment of Circulating Cooling Water for Heat Treatment of Metal Devices — Jiang Long, Kou Zai, Zhang Tongtong, Ge Yuan
23 High Efficiency Nanometer SNP Probe was Constructed Based on LCR and PCR Technology — Liu Rui, Wu Xueli, Du Shu
26 Preliminary Study on the Solution of the Root of the Pole Ear Cracking in the Process of Lithium Ion Power Battery Positive Plate — Guo Binbin, Fu Yuanxiang, Ge Wujie, Huang Hongsheng
28 Isolation and Detection of Escherichia coli O157: H7 and Quality Control in Food Proficiency Test — Wu Simin, Cui Biling, Zhang Qiongdan, Tian Guoliang
31 Co-processing of Nickel, Total Phosphorus and Ammonia Nitrogen in Electroless Nickel Plating Wastewater — Li Shanting, Xu Wenbin, Xiao Yongjun, Zhang Yanhua, He Long
34 Research on the Relationship between FDM Printing Structure and Performance Based on PLA Material — Yang Na'na, Tian Yuzhuo, Bai Yaoxian, Li Baopeng, Liu Haorui
37 The Research on the Current Situation of Antithrombotic Drugs Used by Clinicians in Xiangyang — Lei Mengying, Zhu Peiyao, Ji Shanwen, Guo Yan, Wei Ziyu, Chen Xuejiao
39 Study on Preparation of the Related Substances of Levonorgestrel — Jiang Ting, Liu Xirong, Sun Haoxing, Liu Yanfei
41 The Quality Standards Study on Yinxie Ping Tablets Based on System of Quality Control — Liu Manjun, Shi Huili, Gao Rong, Chen Hao, Du Jun, Niu Anqi, Cao Xiaoping, Cui Xiaomin
44 Effects of Initial Reducing Sugar Concentration of Corn Straw Hydrolysates on the Growth and Lipid Production of 2 Oleaginous Yeasts — Zhou Wenwen, Zou Yiquan, Chen Jing
46 The Research of Pectin Extraction, Biological Activity and Food Application — Wang Chengfu, Lu Tingxiang, Zhang Tinglei, Wang Chuanming
49 Study on Extraction and Purification of Gentiopicroside and Its Structure Characterization from *Gentiana* — Lv Qingyin, Wang Yu, Hu Jingjing, Zhang Jibin
52 Construction and Application of Cellulose/Pd Supported Catalyst — Liu Yujiang, Wang Shiling, Mo Shunhang, Li Tingting, Du Xiaoqian, Pei Xianglin
55 Study on Optimum Extraction and Antifungal Activity of Total Polyphenols from Peony Seed Meal — Wu Yongling, Li Xiaoling, Zhang Yilin, Ji Zimeng
59 Market Research and Rroduct Development Status of Chinese Herbal Milk Tea — Lu Xintian, Yi Lijuan, Yang Xianguo, Liu Yinxin
61 Synthesis and Performance of Fluorescent Carbon Quantum Dots Based on Coptis — Zhou Lijia, Han Bing, Xia Shihao, Wen Wen, Wang Mengdie
63 Study on Plating and Corrosion Resistance of Electrodeposition Preparing for Ni-CO Alloy — Ye Miao, He Xin, Wang Haitao, Qin Xiangge
65 Study on Interface Modification Technology of Gypsum with Function of Degradation Formaldehyde — Jing Fangwen, Ru Xiaohong, Zhi Zhenzhen, Li Jiacheng, Wang Yisen
69 Study on Requirements of Primary Aromatic Amines in Food Contact Materials — Wang Jing
72 Evaluation of Dissolution Consistency of Ursodeoxycholic Acid Capsule and Reference Preparation in Vitro — Qiu Kexian
74 Synthesis and Biological Evaluation of Nucleoside Phosphoramidate Prodrugs Based on Natural Product Targeting — Liu Bo, Sun Rui
77 Study on Natural Ventilation Scheme for Main Power House of Power Plant in High Temperature Area — Feng Yiwei, Liang Leixin, Liu Gang, Yu Qide, LiShuguo, Hong Yang
82 Research on Migration of Plasticizers in Drinking Water Pipes — Qin Fangmin, Wang Hewei, Huang Cheng, Luo Zhifeng, Qiu Hailun, Yuan Yongsi, Li Qinhao, Li Yongjin
84 Preparation of A Scratch-resistant Reinforced PA6 Material and Its Moisture Absorption Behavior — Qiu Huiqun,Chen Yizhan, Zhang Yu, Zhu Quan
87 Common Components of DOM in the Environment Analyzed by EEMS-PARAFAC Method — Gu Qianheng
89 Effect of Formation Process on the Performance of High-power Lithium Ion Battery — Wang Meng, An Ran
92 Study on Detection Method of Acrylamide Monomer in Waterborne Adhesive — Xiao Liqun
94 Study on Remediation Effect of In-situ Thermal Desorption Technology for Complex Contaminated Site — Xi Jinfeng, Mei Zhihua, Zhao Shen, Xu Guojie
100 Research on Performance Evaluation of Frac-H Clean High Temperature Fracturing Fluid — Ma Demin, Dong Li'na, Hou Binbin, Gao Lijun

◆ Summarize

102 Research Progress of Safety-type Wall Insulation Composite Materials for Building Energy Saving — Xu Zheng, Fang Yutang, Liu Baiyun, Cheng Min, Wang Shuangfeng
106 Research Progress of Polyvinylidene Fluoride Electromagnetic Shielding Materials — Guo Bingzhi, Liang Jianying
109 Progress on the Effects of Heavy Metal Pollution of Soil on Microbes and Enzyme Activities — Gao Yaping, Wang Ying, Yin Xinyi
111 Measurement of Liquefied Natural Gas(LNG) for Ship-Shore Custody Transfer — Chen Guofeng, Yue Mingyan, Wang Jiali, Chen Xiangyang
114 Research Progress Germplasm Resource and Chemical Application of Corylus Mandshurica — Du Juan, Lu Bowen, Fu Yu, Yu Tong, Zhou Tong, Gong Yixia, Liu Dejiang
115 Research Progress of Dissolving Microneedle in Transdermal Drug Delivery System — Chen Huanhuan, Song Xinli, Wang Yunxia, Shi Jianan, Yang Xiaoshuang, Yang Shenglei
117 Review on the Adsorption of Methylene Blue from Wastewater by Biomass — Li Shixiong, Huang Yuanhao, Lan Haijun, Feng Anqi, Liang Guichun
120 Analysis of Common Problems in Material System during on-site Inspection of Drug Production and Consideration of Inspection Strategies — Zhao Weihan, Zhang Qingfen, Jiang Yingzhu, Pang Jingcong
122 Resource Utilization of *Alternanthera Philoxeroides* (Mart.) Griseb — Ma Fengshi, Liu Jiashui, Tan Yongjin
123 Financial Risk Analysis under Cross-border Merger and Acquisition of Chemical Industry — Bai Junman, Xu Yanming
124 Patent Analysis of Photoelectronic Functional Crystals — Li Zhipeng, Shi Hui
126 Application of Evergreen-acitve Aloe Vera Gel juice in Cosmetics — Wang Yan, Qian Shaoxiang, He Linyan, Wan Qingjia, Liao Haihui
127 Discussion on the Judgment of Risk Involved in Common Daily Alcohol Consumer Goods — Zhang Qiang, Yu Weiteng, Wang Jiali, Chen Junbin, Wu Jingwu, Liu Dong
130 Research Progress of Water Drenching Fillers for Cooling Tower — Zhang Jian, Teng Yue, Jin Shasha, Miao Chunhui, Cheng Xiang, Zuo Yuxin, Sheng Fangjie, Chen Peng
133 Analysis of Chinese Patent Technology of Graphite Heat Exchanger — Yu Qianping
135 Research Progress on Pharmacological Action of Astilbin — Yang Zhifu, Yu Haibo, Zeng Lei, Xue Qing, Li Jing
136 The Structure of Power Supply is the Key Factor of Carbon Peak and Carbon Neutralization in Dongguan — Su Yaqin
138 Patent Development of Hyaluronic Acid Purification Technology — Lu Tingfeng
140 Progress in Environmental Safety of Nanocomposites — Tang Juanjuan
141 Research and Application of β-cyclodextrin in Beverage Industry — Wang Bohao
143 Research Progress of Membrane Roller Coating Device for Lithium Battery — Liu Tianyi, Zhang Hanhong, Xu Shijie, Rong Yilin
146 Research Progress of Amphiphilic Polymer Flooding System Based on Self-assembly — Li Zhenyu, Yu Bin, Li Shuang, Yu Minghong, Guo Wenjing, Wang Ningning

◆ Environmental protection

148 Spatial Distribution and Pollution Status of Total Nitrogen and Total Phosphorus in Sediments of Pearl River Estuary and Its Adjacent Area — Liu Taisheng, Jiang Yunlin, Lu Yao, Deng Hanqiang, Zhao Mengmeng
150 Research Progress on Current Pollution Status and Environmental Effects of Antibiotics in Water Environment — Tian Jichen, Zeng Ying, Shu Xingquan, Ma Limin
152 Study on Degradation of Typical Organic Pollutants by SZVI with Co-solvent — Zhang Dian, Yu Kai
155 Risk Zoning of Sudden Water Pollution of Conghua District in Guangzhou — Ning Xiaowei
157 Study on Pollution Characteristics of Volatile Organic Compounds in the Atmosphere of Industrial Zone — Zhang Yinglei, Xu Jiao, Gao Hanyu
163 Extraction of Cr, Mn, Zn and Pb from rare earth smelting slag by modified BCR — Wen Wangfeng, Fang Junxu, Peng Hairong
165 Application of Staggered Baffle Detection Chamber in Tail Gas Telemetry Dynamic Simulation Experiment Guo Wei, Huang Zichen, Huang Yanjie, Yang Yi
167 Heavy Metal Pollution Assessment in Seafloor Sediments in the Northern Beibu Gulf — Xia Jia, Gao Yuan, Lin Qianni, Song Zhiguang
170 Plastics Waste Management and Its Resource Utilization — Zhu Guidan, Shan Jie, Yin Xuan, Zeng Yongming, He Wei
173 Prospects for the Application Prospects of Life Cycle Assessment in Electronic Waste Management — Chen Hongjiang, Li Junde, Zhang Weihao, Zhu Yunshuo, Deng Jieguang, Lin Jiawei, Chen Dazhu, Wang Jin, Li Xiaohua, Liu Xinke
178 Pollution Characteristics of Benzene Series in Atmosphere of Urumqi in Autumn and Winter——A Case Study of Beijing Road Area — Song Sixing, Palida·Yahefu, Deng Wenye, Deng Kui, Zhang Xiaofang
180 Treatment of Active Pharmaceutical Ingredient Wastewater by Fe/C Micro-Electrolysis + Fenton Process — Shi Hongfang, Wang Linsheng, Xiong Qingsheng, Wang Tao, Yang Zhen, Tu Jinkai,Yu Jie
183 Examples of Wastewater Treatment Projects in Printing and Dyeing Enterprises — Pei Xiaoxing
185 Discussion on Classification Evaluation and Management Mechanism of Municipal Solid Waste — Wang Peiming
187 Removal Performance of Organics from Biochemical Effluent Ofcold Rolling Wastewater by Activated Carbon Coupled with Ozone Catalytic Oxidation — Wang Xiang
190 Anaerobic Biological Treatment of Nitrogen-containing Heterocyclic Wastewater and Microbial Community Analysis — Shao Ruying, Gao Feng, Zhao Zhenhua, Zhu Wei

万方数据

194 Thoughts and Suggestions on Energy-saving and Environmental Protection of the Campus Construction in Universities Liu Fuchun
195 The Removal Characteristic of Benzenes in Three-phase Biological Fluidized Bed Treatment of Coking Wastewater Han Ming, Chen Mingfei, Zhao Yusheng
197 Research Progress of Non-thermal Plasma Technology in the Treatment of Persistent Organic Pollutants Huang Shuman, Liu Yanan, Zhou Quan
200 Analysis of Influencing Factors of Surface Water pH Value in Heilongjiang Province from the Perspective of Mathematics Yang Zhenzhen, Liu Lin
202 New Generation None-phosphorous Treatment Application in Refinery Plant Recirculation Cooling Water System with Reused Water as Make-up Water Gong Zhuoyi, Lv Junteng, Yang Fan
207 The Study of Coping Strategies to the Cold-source Marine Organism in Taipingling Nuclear Power Plant Wang Xixu
210 Analysis on Key Points of Air Pollution Monitoring Points in Environmental Protection Monitoring Huang Haiwei
211 Failure Cause Analysis and Treatment of Bag Filter Li Qi, Li Wenxuan, Guo Yanxin, Li Shengpeng, Hu Jinyu

◆ Design & equipment

213 Research on Partitioned Ammonia Spray of 1000 MW Unit Chen Jingdong, Liang Chengsi
215 Energy Saving and Consumption Reduction of Circulating Water System Long Zhi
219 Study on Corrosion Mechanism of Completion Pipe Based on the Characteristics of High-temperature\High-Pressure\Acidic Environment in Sichuan and Chongqing Area Huang Jingfu, Shu Xuejun, Cai Jiacheng
223 Corrosion and Protection of High Temperature Section Packing in Vacuum Tower Li Guo
226 Optimization of Gob Filling System in YuShuPo Coal Mine Han Wei
228 Cause Analysis and Countermeasures of Circumferential Weld Defects in Methanol Synthesis Tower Lu Jun
230 Discussion on Formaldehyde Concentration Technology and Operation Peng Liangliang
232 Effect of Different Raw Materials on Feed System of Suspension Bed Hydrocracking Pilot Plant Li Wenxuan, Li Qi, Hu Jinyu, Wang Yabin, Wang Pengwei

◆ Analysis testing

234 Uncertainty Evaluation of Two Methods for Determination of Dioxane in Cosmetics by Gas Chromatography-Mass Spectrometry Zhang Jiangwei, Zhang Xian, Liang Zhuye, Liang Yuan
237 Compounds Analysis and Determination of 8 Organochlorine Pesticides in Oil from Osmanthus Fragrans Lour by Gas Chromatography—Triple Quadrupole Mass spectrometry Wei Xiaohua, Wei Zhuqiu, Zhang Jiaqing
240 Terahertz Time-domain Spectroscopy Detection of Water Content in Transformer Oil Kong Xuhui, Zong Pengjin, Li Zonghong, Qiu Fangcheng, Liu Ronghai, He Yunhua, Yang Xunying, Song Yufeng
243 Determination and Analysis of Reducing Sugar in Four Kinds of Fruits Yu Limei, Xiang Ping, Ye Lijuan, Liu Jing
245 Detection of pesticide residues in Flos Lonicerae by QEChERS extraction and LC-MS/MS Li Dongpo, Gao Yejun, Ren Simin, Gao Hui
249 Analysis of Volatile Components in Compound Shenzao Dripping Pills by GC-MS Xian Minghua, Zheng Kening, Zhan Sikai, Liang Jiayin, Wang Shumei
253 Study on Health Risk Evaluation from the Habits of Using Lipsticks Jiang Jinxing, Yu Sufei, Yao Yao
256 Study on the Solubility of Ozone Water under Different Environmental Conditions Leng Shouqin, Huang Fei
258 A Testing Scheme of Trimellitic Anhydride of SVHC Liao Xiaoquan
261 Clinical Test to Evaluate the Effect of Difid Yeast in Repairing and Nourishing Scalp Yang Xing, Zhuo Shanshan, Qiu Zhiyong

◆ Teaching reform

263 Research on the Reform of Curriculum System of Material Science and Engineering based on Artificial Intelligence and Big Data Technology Liu Hongdong, Han Tao, Hu Rong, Zhang Lei
266 The Ideological and Political Design and Teaching Implementation of the Course "Fine Organic Synthesis Technology" in Higher Vocational Colleges Di Ning, He Xiaolan, Li Xiaoqing, Jiang Siwei, Song Chunyu
268 Current Situation of Scientific Research Ability of Postgraduates Majoring in Chemical Engineering in Local Colleges in the New Media Era: Taking Z College as an Example Yang Hongyan, Shu Xugang, Ding Jiao, Zhao Ruirui
270 The Teaching Reform about Chemistry Teaching Theory of Experiment Wei Shoulian, Wang ZhaoZhi, Xie Chunsheng
272 Exploration on the Laboratory Operational Mechanism Based on Chemistry Teacher Professional Certification Chen Lina, Jing Yiqi, Pei Yuanjiao, Zhou Zhen
273 Preliminary Discussion on the Design of Comprehensive Experiments of Polymer Materials Courses Ruxianguli Jamali
275 Exploration of Curriculum Ideological Politics in the Course Construction of Organic Chemistry of TCM Specialty Li Gen, Huang Manru, Qiu Yulin, Yu Haiyang
276 Exploration of the Lamination Teaching of Principles of Chemical Engineering for Students Upgraded from Junior College to University Shi Deqing, Li Chengshuai, Zhang Huimin
279 The Excavation and Matters Needing Attention of Teaching Case on Course-based Ideological and Political Education about Advanced Mathematics of Chemistry and Chemical Engineering Zheng Yanbin, Zong Mingji, Wang Xueqin, Liang Lanju
281 Teaching Reform and Practice of Biotechnology Products Test under Engineering Education Certification Wang Chunyan, He Jifang, Wang Ying, Song Jianyang, Yu Haiyan
283 Experimental Design and Practice of Mixed Acid Analysis and Determination Deng Xiuqin
285 A Practical Study on the Integration of Innovation and Entrepreneurship Education and Chemistry and Chemical Engineering Education in Universities Zhao Dan, Wang Yi, Tan Lin, Chen Nali, Wang Kunjie, Feng Huixia
287 Research on the Construction of the "Four Combinations" Material Chemistry Practice Model Chen Xiudong, Liu Jinhang, Yan Ping, Zhan Changchao, Wang Yawei, Huang Huanan, Cao Xiaohua
290 Exploration of Curriculum Ideology and Politics in Inorganic Chemistry Teaching Liu Xuewen, Hu Xia, ZHang Hui, Tang Yucai
292 Cultivation of Undergraduates' Innovative Ability Based on the Research and Practice Platform of Chemistry of Chinese Materia Medica Li Juan, Li Shunxiang, Xu Fei, Peng Jiangli, Ou Yangwen
294 Research on Curriculum System Construction of Petroleum Engineering Technology Specialty in Higher Vocational Colleges Based on Professional Ability Fu Qiang, Wang Chao
296 Based on the Pharmaceutical Chemistry Course Group to Construct the Applied Pharmacy Talent Training Model Ma Yuanyang, Wang Haijun, Chen Song, Wang Jing, Cui Hongxia, Bu Ming
298 Integration and Optimization of Core Experiment and Training Curriculum for Bioengineering Major Wang Duanhao, Zhong Jie, Li Siqiang, Song Li, Wang Mingcheng
300 Case Design of Ideological and Political Teaching Based on Road Engineering Material Experiment Li Zhixin, Xu Kaidong, Wang Ji'na, Zhang Jianwu, Li Yanru
302 Discussion on the Mode of Cultivating Top Creative Talents in Pharmacy——Taking Guangzhou Medical University as an Example Liang Lu, Wang Yuan, Zhang Yu, Lei Xueping, Yu Xiyong
305 Exploration of Organic Chemistry Teaching Reform for Cultivating Applied Chemical Talents Yang Yu, Zhu Yin, Hu Yang, Yang Zhuohong
307 Teaching Design Based on BOPPPS Mode for Ideological and Political Education in Principles of Chemical Engineering Zhu Dongyu, Wang Shuai, Jiang Kaixiang, Zheng Yuying, Yang Chufen
309 Exploration and Research on "Oil Water Separation Experiment" under the Background of Green Chemical Industry—Taking Oil and Gas Storage and Transportation Engineering as an Example Guo Kai, Ling Xiao, Liang Rui
311 Discussion and Thinking on the Teaching Mode of Drug Analysis Experiment Course under the Background of New Engineering Shao Ailong, Chen Jifang, Liu Junlong, Zhang Lin, Chen Shuisheng
313 Study to Entrance of the Secondary Vocational Schools Pharmaceutical Specialty in Current Situation of Teaching and Teaching Strategy Liu Dalu
315 Research on the Teaching Mode of "Simulation + Physical Object" in Chemical Engineering Training Chen Jinzhong, Wang Jinpeng, Ye Tao, Lv Bo, Ma Yajun, Ding Xinyan
317 Exploration on Teaching Reform of Modern Environmental Analysis Technology Course Li Ke, Dong Liming, Jia Xuan
318 Cultivation of Green Chemistry Concept in Middle School Chemistry Teaching Lu Yiwen, Wang Hongshe
319 Teaching Reflection of Organic Chemistry Experiment Course for Clinical Specialty Jiang Chuanling, Cheng Yongfeng, Cao Dianjie, Yuan Ming
320 Application of DryLab Software in Liquid Chromatography Teaching Zhang Binbin, Cheng Yongfeng, Liu Yuting, ChenYueming
322 Study on Teaching Reform of Curriculum Thought and Politics with the Times in Analytical Chemistry Liu Renyong, Xie Chenggen, Chang Wengui, Liu Yishu
323 Teaching Reform of Basic Experiment of Electrochemistry under Engineering Education Accreditation Standard Ma Xiaohang, MaYuan, Zi Zhenfa, Wei Yiyong, Zhang Tianwen
325 Exploration on the Reform of Chemical Laboratory Construction in Agricultural and Forestry Universities Feng Huan, Fang Congbing
327 Some Thoughts on Teaching Reform and Practice under the New Era —Take Rare Earth Element Chemistry as an Example He Jiangang, Qiao Xueling
329 Research on the Teaching Reform of Implementing Course Ideology and Politics in the Material Curriculum Group under the Background of the Professional Certification of Engineering Education Li Faguo, Yue Huijun
332 Teaching Reform of Chemical Engineering Drawing in Vocational College Based on the OBE Ideas Su Huohuang
333 Research and Practice of "Training-Project-Competition" Innovative Talent Training Model-Taking Chemistry Talent Training as an Example Hou Xufeng, Niu Liangfeng, Li Dandan, Ju Zhiyu, Xu Zhihong
335 A Summary of the Classroom Teaching Experience of Undergraduate "Technology and Economics" Duan Chongxiong
336 Reflections on the Educational Elements in the Teaching of "Ideological and Political Course" for New Engineering Majors—Taking "Environmental Analytical Chemistry" as an Example Gong Dandan, Ren Sili, Liu Juan, Luo Wuhui, Huang Haiwei, Liu Hongxia
339 Exploration and Practice of Integrating Medical Humanities Education into Biochemistry Teaching Li Shulei, Chen Mei
341 Construction and Discussion of Interdisciplinary Teaching Platform of Chemical Life Science Liu Yang, Tang Hai Feng, Liu Yan, Xu Li Xin
343 Brief Talk on the Construction of Resource Library of Instrumental Analysis Course Jin Binbin
344 Discussion on Post Demand and Professional Ability in Teaching Reform of Environmental Engineering Specialty Zhang Ling, He Xiaochun
345 Teaching Reform and Research of Chemical Engineering Experiment in Local Universities Li Fen
347 Exploration on the Cultivation of Chemical Professionals in Colleges and Universities Guided by the Clinical Medical Excellence Program Lin Lin, Han Yuchun, Xu Shuwei, Kang Jiaxuan, Yang Guangyuan
348 Exploration and Study on Reform of Inorganic Chemistry Experiment Teaching in Applied Medicine Colleges Zhang Yang, Gan Miaomiao, Guo Tianyu, Yan Defeng, Hailiqian·Taoerdahong
350 Investigation and Discussion of Virtual Simulation Technology in Online and Offline Experiment Teaching of Pharmaceutics Chen Huizhi, Zhou Yubin
352 Research on the Teaching Reform and Sustainable Development of the Integration of Theory and Practice of Chemical Unit Operation Nie Lisha
354 Exploration and Practice of the Ideological and Political Education in Chemical Drawing Course Fan Wutu, Cheng Fan, Luo Huajun

Sponsor and Publisher: Guangdong Province 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
E-mail: gdcic200@163.com http://www.gdchem.com

万方数据

万方数据