

目 录

特 稿

- 荧光共轭聚合物在炸药探测中的应用
..... 李 彬, 杨彩霞, 夏养君, 等(1)
SiO₂ 掺杂(PEO)₄ - LiClO₄ 固体电解质的性能研究
..... 李 云, 于 涛, 毕孝国, 等(4)

专论与综述

- 杂多酸催化剂应用性研究进展 陈佳明, 庞 博, 盖红辉(7)
有机高分子絮凝剂的合成及应用研究进展
..... 贾文珍, 祝 方(9)
我国反渗透海水淡化絮凝剂研究现状
..... 张海春, 范会生, 陆阿定, 等(12)
木质素于农林业领域的综合利用
..... 廖艳芳, 余慧群, 周 海, 等(14)
功能高分子材料发展现状及展望
..... 杨北平, 陈利强, 朱明霞(17)
纳米 CaCO₃/PMMA 透明复合材料的研究思路 袁新强(19)
化学法多晶硅生产工艺研究进展
..... 念保义, 郭海琼, 何绍福(21)
油气井抗 CO₂ 腐蚀缓蚀剂的研究进展 刘小波(25)
液体烃及其混合物粘度预测方法的研究进展
..... 朱鸣岗, 田松柏(27)
有机磷农药多残留检测方法的研究进展 谢桂魁(31)
维生素 E 的合成与分析研究现状 孙月婷(34)
药物开发和分析与自然辩证法 王淑敏, 王艳珍(36)
含氧配体螯合铝络合物催化环酯聚合研究进展
..... 张 成, 魏 凯, 廖京城(38)

科学实验

- 水热法合成纳米晶勃姆石的实验研究
..... 许荣辉, 肖发新, 王 斌, 等(42)
纳米羟基磷灰石颗粒固定化漆酶的研究
..... 黄 宇, 樊艳茹, 张新慧, 等(44)
大鲛糖肽润肤霜的制备及性能评价
..... 王 睿, 李 伟, 孔 亮, 等(47)
煤用复合药剂浮选效果研究 孔小红, 康文泽(50)

- 双相(O/W)识别手性萃取分离多巴对映体研究
..... 刘永兵, 李 芳, 唐课文, 等(53)
扩链法合成赖氨酸改性聚乳酸的研究
..... 舒荣德, 陈际达, 邱智萍, 等(56)
高碳镍铝矿制备铝酸铵 旷林雄, 颜文斌, 周晓江(60)
锂离子正极材料 Li(Ni_{1/3}Co_{1/3}Mn_{1/3})O_{2-x}F_x 的合成与电化学性能
..... 莫如宝, 吉雪颜, 蒋建军, 等(63)
草酸依地普仑的合成 金俊华, 杨永林, 包存刚, 等(67)
DHPCOOH 的合成改进 谢菊冲, 李凌光, 徐 旋, 等(69)
(1R)-Cis-二溴菊酸的合成工艺研究 王富花, 张占军(71)
宫颈宁阴道泡腾片制备工艺的研究 郑 敏, 刘江华(74)
MATLAB 在折光率-组成-温度模型研究中的应用
..... 曾国勇(77)
聚醋酸乙烯酯乳液的中温合成 蒋 涛(80)
红薯叶中黄酮类化合物的超临界提取研究
..... 陈 璞, 孙兴力, 王文渊(82)
乙烯基单体改性水性聚氨酯的研究 何伟力(85)
HZSM-5 负载 CoFe₂O₄ 光催化剂的结构及光催化性能
..... 薛丽梅, 陈 彬, 张风华(88)
超临界 CO₂ 流体萃取枇杷叶中熊果苷的工艺研究
..... 杨孝辉, 郭 君, 李继睿, 等(91)
干水固化甲烷过程及反应特性研究
..... 方奇钧, 周 娜, 邵以雄, 等(94)
PVC 混合垃圾微波裂解产物热解动力学研究
..... 张 浩, 颜 杰, 李新跃, 等(97)
塔河油田奥陶系油藏中蜡的防治技术研究
..... 吕红梅, 杨 林, 方 耀, 等(100)

分析测试

- ICP-OES 分析测定川西獐牙菜中的矿质元素
..... 郑敏燕, 魏永生, 高 威, 等(103)
糖析-HPLC 法测定几种重金属离子
..... 刘蓓蕾, 张红医, 马 勇(106)
冷原子吸收光谱法测定塑料工业用重质碳酸钙中微量汞
..... 孔维雯(108)
改进 MBTH 分光光度法测定室内空气中甲醛的含量
..... 周秀芹, 李红梅(110)

广州化工

GUANGZHOU HUAGONG

《中国学术期刊综合评价数据库》统计源刊
《中国核心期刊(遴选)数据库》全文收录期刊
《中国期刊全文数据库》全文收录期刊
高、中级化工职称资格评审认定期刊

1973 年创刊(半月刊)

第 39 卷第 6 期

2011 年 3 月(下半月)

主管:广州化工集团有限公司

主办:广州化工研究设计院

广州市化工行业协会

协办:广州市化学化工学会

《广州化工》编辑部

主编:张 统

副主编:吴文莉

编辑:罗方琪 邹慧明 林珺颖

广告:茅仁旭 罗方琪

磷矿石中微量砷的测定 周自宏(113)
 测定 PB,DPH,CBZ 在血清中的药物浓度 邹海洋(115)
 原子荧光法检测鸡肉中铅、砷、汞 孙引,郑建明(117)

环境保护

河源市推行清洁生产策略研究
 陈金红,张恒军,许振成,等(120)
 含醋酸废水治理技术的研究现状及展望 罗文浩(123)
 广州大学城水体中硝基苯和苯胺的含量情况调查
 何百寅,叶雪兰,冯峰,等(125)
 流溪河从化段水质现状及污染趋势分析
 肖乡,胡开心(127)
 原子吸收法测定土壤中铜的不确定度评定
 陈海宇,严静芬(129)
 含铬工业废水的绿色回收技术 张盛,赵晓燕(131)
 氢氧化镁处理酸性含铁废水的研究 杜娜娜(134)
 烟气脱硫中几种重要的二氧化硫净化技术
 赵晓燕,张盛(136)
 盐酸储罐泄露事故定量分析 贾沛,祝启坤(139)

化工机械

离心泵的气蚀及防护措施 张健(141)
 HASTELLOY® B-3® 合金压力容器的制造技术
 兰强明(143)
 煤制油行业油品储罐的腐蚀与防护 刘子龙(147)
 氨工业管道定期检验中几个问题的探讨 张洪建(149)

生产技术

控制高压聚乙烯产品质量,减少不合格产品
 安东玲,徐海波,蒋礼(151)
 脱硫装置钙硫比偏高原因分析和处理 白华森(154)
 HPF 脱硫技术在焦炉煤气脱硫中的应用
 蒋善勇,郑长科,张凯(157)
 增产丙烯工艺的方案对比 赵长斌(159)

教学园地

物理化学实验培养学生能动性的探索
 李晓飞,全艳,武香香,等(161)
 制药工程专业有机化学教学改革探索
 袁霖,张敏,袁先友(163)

无机及分析化学教学中融入素质教育初探
 史宜望,王传虎,张玲,等(165)
 农业院校化工原理实验课教学改革的探索与实践
 邢志勇,叶非,王铭琦(167)
 “校地合作”背景下化工类人才培养模式的探讨
 尤玉静(169)
 《食品环境监测》课程教学改革初探
 杜德红,张双灵,于春娣(170)
 新升本高校金属材料专业人才培养方案的研究
 何杰军(172)
 非整比化合物的化学教学探索 李山鹰(175)
 浅析以连续化实验实施有机化学实验教学的要求
 王鹏,李敏,陈勇,等(177)
 高等院校有机化学教师能力标准构建探讨 张毅军(179)
 浅谈融入化学史知识对“无机化学”课程教学的影响
 童义平(181)
 《药物合成反应》教学方法初探 孙默然(183)
 天然产物化学课程问卷调查与分析 汪河滨,白红进(185)

化工管理

危险化学品储罐区重大危险源安全分析
 常玉锋,贾沛(187)
 甲酸钾市场及生产工艺浅析 何茜(191)
 炼厂扩建改造项目施工进度控制与质量管理 阎小利(194)
 通风方式对化工车间火灾影响的实例分析 连煜洪(196)

第八届编委会成员名单

主任:崔英德

副主任:叶家灿,白莉

秘书长:张统

委员:(排名不分先后)

钱宇、童叶翔、余林、王乐夫、何榕友、
 杨育农、马小明、郑成、麦堪成、彭峰、
 赵建青、尹国强、刘自力、李大光、杨定乔、
 黄道平、李攻科、刘国光、陈国华、董新法、
 方岩雄、刘晓国、李雪辉、陈旭东、李锡安、
 梁基照、熊亚、曾庆焕、罗国钦、余慧文

编辑出版:《广州化工》编辑部

地址:广州市白云区石井龙潭村桥东

邮编:510430

电话:(020)36372165

传真:(020)36372165

E-mail:gzhghjb@126.com

网址:www.gzhghjb.cn

印刷:广州市东扬彩色印刷有限公司

发行范围:国内外公开发售

国外发行:中国出版对外贸易公司(北京 782 信箱)

收款单位:广州化工研究设计院

开户银行:广州市工商银行石井支行

帐号:3602025309000823574

国内定价:全年 295 元

国际标准刊号:ISSN1001-9677

国内统一刊号:CN44-1228/TQ

广告经营许可证:穗工商广字 4401004002668 号

出版物经营许可证:新出发粤刊总批字第 226 号

CONTENTS

- Fluorescence Conjugated Polymer in the Application of Explosive Detection *LI Bin, YANG Cai - xia, XIA Yang - jun, et al.* (1)
- Properties of (PEO)₈ - LiClO₄ Solid Electrolytes Doped Nano - SiO₂ *LI Yun, YU Tao, BI Xiao - guo, CHENG Ming, et al.* (4)
- The Research Progress of Heteropoly Acid Catalysts *CHEN Jia - Ming, PANG Bo, GAI Hong - hui* (7)
- Research Progress on Application and Synthesis of Organic Polymer Flocculants *JIA Wen - zhen, ZHU Fang* (9)
- Research Status of Flocculants in Seawater Reverse Osmosis Desalination in China *ZHANG Hai - chun, FAN Hui - sheng, LU A - ding, et al.* (12)
- Application of Lignin in Agriculture and Forestry *LIAO Yan - fang, YU Hui - qun, ZHOU Hai, et al.* (14)
- Research and Prospect on New Functional Polymers Materials *YANG Bei - ping, CHEN Li - qiang, ZHU Ming - xia* (17)
- The Investigation Ideas of Nano - CaCO₃/PMMA Transparent Composites *YUAN Xin - qiang* (19)
- The Research Progress of Polysilicon Production by Chemical Routes *NIAN Bao - yi, GUO Hai - qiong, HE Shao - fu* (21)
- Advances in Research of Inhibitor for CO₂ Corrosion in Oil and Gas Wells *LIU Xiao - bo* (25)
- Research Progress of Liquid Hydrocarbons and Prediction Methods of its Mixtures *ZHU Ming - gang, TIAN Song - bai* (27)
- Research Progress of Multi - residue Detection Method of Organophosphorus Pesticides *XIE Gui - mian* (31)
- The Progress of Synthesis and Analysis of Vitamin E *SUN Yue - ting* (34)
- The Development and Analysis of Drug and Dialectics Nature *WANG Shu - min, WANG Yan - zhen* (36)
- An Overview on the Polymerization of Cyclic Esters Catalyzed by Complexes of Aluminium Bearing Oxygen Ligands *ZHANG Cheng, WEI Kai, LIAO Jing - Cheng* (38)
- Experimental Study on Synthesis of Boehmite (γ - AlOOH) Nanocrystals via Hydrothermal Route *XU Rong - hui, XIAO Fa - xin, WANG Bin, et al.* (42)
- Research of Immobilized Laccase on Nano - Hydroxyapatite Particles *HUANG Yu, FAN Yan - ru, ZHANG Xin - hui, et al.* (44)
- Preparation and Evaluation of Cream Containing the Glycopeptides from *Andrias davidianus* *WANG Rui, LI Wei, KONG Liang, et al.* (47)
- Study on Effect of Reagent Mixtures in Flotation of Coal Fines *KONG Xiao - hong, KANG Wen - ze* (50)
- Study on Resolution of Dopar by Two - Phase (O/W) Recognition Chiral Extraction *LIU Yong - bing, LI Fang, TANG Ke - wen, et al.* (53)
- Synthesis of Lysine Modified Polylactic Acid by Chain Extension *SHU Rong - de, CHEN Ji - da, QIU Zhi - pin, et al.* (56)
- The Reserch of Ammonium Molybdate Preparation from High Carbon Nickel Molybdenum *KUANG Lin - xiong, YAN Wen - bin, ZHOU Xiao - jiang* (60)
- Synthesis and Electrochemical Performance of Li(Ni_{1/3}Co_{1/3}Mn_{1/3})O_{2-x}F_x Cathode Materials for Lithium - Ion Battery *MO Ru - bao, JI Xue - yan, JIANG Jian - jun, et al.* (63)
- Synthesis of Escitalopram Oxadate *JIN Jun - hua, YANG Yong - lin, BAO Cun - gang, et al.* (67)
- Improved Synthesis of DHPCCOOH *XIE Ju - chong, LI Ling - guang, XU Xuan, et al.* (69)
- Research Advances in(1R) - cis - Dibromochrysanthemic Acid Synthesis Technology *WANG Fu - hua, ZHANG Zhan - jun* (71)
- Study on the Preparative Process of Gongjingming Vaginal Effervescent Tablets *ZHENG min, LIU Jiang - hua* (74)
- Application of MATLAB in the Model Research of Refractive Index - Component - Temperature *ZENG Guo - yong* (77)
- The Synthesis of PVAc at Intermediate Temperature *JIANG Tao* (80)
- Study on Extraction of Flavones from Sweet Potato Leaves by Supercritical CO₂ Fluid *CHEN Ying, SUN Xing - li, WANG Wen - yuan* (82)
- Research on Waterborne Polyurethane Emulsion Modified with Vinyl Monomers *HE Wei - li* (85)
- Structure and Absorbency of HZSM - 5 Supported CoFe₂O₄ *XUE Li - mei, CHEN Bin, ZHANG Feng - hua* (88)
- Study on Supercritical Carbon Dioxide Fluid Extraction of Ursolic Acid from *Follum Eriobotryae* *YANG Xiao - hui, GUO Jun, LI Ji - rui, et al.* (91)
- Study on Process and Characteristics of Dry Water Solidifying Methane *FANG Qi - jun, ZHOU Na, SHAO Yi - xiong, et al.* (94)
- The Study on Pyrolysis Thermodynamics of PVC Mixed Waste Product by Microwave Pyrolysis *ZHANG Hao, YAN Jie, LI Xin - yue, et al.* (97)

GUANGZHOU CHEMICAL INDUSTRY

Open Publishing

Established in 1973 (Semimonthly)

Vol. 39 No. 6

Mar. 2011

Chief Editor: ZHANG Tong

Editor:

The "GUANGZHOU CHEMICAL INDUSTRY"

Editorial Office:

(Address: Bridge (E.) Shitan Road, Shijing,
Baiyun District, Guangzhou, China)

Prevention and Control Technology of Wax in Tahe Oilfield Ordovician Reservoir	Control of High Pressure Polyethylene Product Quality and Reduce Substandard Products
..... LV Hong - mei, YANG Lin, FANG Yao, et al. (100)	..... AN Dong - ling, XU Hai - bo, JIANG Li (151)
Analysis of Mineral Elements in <i>Swertia mussotii</i> Franch. by ICP - OES	Analysis and Treatment of High Ca/S of Desulfurization Unit
..... ZHENG Min - yan, WEI Yong - sheng, GAO Wei, et al. (103)	..... BAI Hua - miao (154)
Determination of Several Heavy Metal Ions by HPLC Coupled with Sugar - induced Phase - separation	The Application of the HPF Technology in Desulfurization of Coking Gas
..... LIU Bei - lei, ZHANG Hong - yi, MA Yong (106)	..... JIANG Shan - yong, ZHENG Chang - ke, ZHANG Kai (157)
Determination of Trace Mercury Content in Heavy Calcium Carbonate by Cool Atom Absorption Spectroscopy ...	Scheme Comparison of Increasing Propylene Production Process
KONG Wei - wen (108)	..... ZHAO Chang - bin (159)
Determination of Formaldehyde in Air Indoor with Improved MBTH Spectrophotometer	Exploring the Training of Initiative in Physical Chemistry Experiments
ZHOU Xiu - qin, LI Hong - mei (110)	..... LI Xiao - fei, TONG Yan, WU Xiang - xiang, et al. (161)
Determination of Trace Arsenic in Phosphorus Ore	Explorations of the Reformation in Organic Chemistry Teaching for Pharmaceutical Engineering
..... ZHOU Zi - hong (113)	..... YUAN Ling, ZHANG Min, YUAN Xian - you (163)
Determination the Drug Concentration of PB, DPH, and CBZ in Blood	Exploring the Quality Education in Inorganic and Analytical Chemistry Teaching
ZOU Hai - yang (115)	..... SHI Yi - wang, WANG Chuan - hu, ZHANG Ling, et al. (165)
Detection of Lead, Arsenic, and Mercury in Chicken with Atomic Fluorescence Spectrometry ...	Exploration and Practice in Experimental Teaching of Chemical Engineering Principle in Agricultural University
SUN Yin, ZHENG Jian - ming (117)	..... XING Zhi - yong, YE Fei, WANG Ming - qi (167)
Launch Policy Research on Cleaner Production in Heyuan City ...	Study of Chemical Personnel Training Model for the Cooperation between School and Locality
CHEN Jin - hong, ZHANG Heng - jun, XU Zhen - cheng, et al. (120)	..... YOU Yu - jing (169)
The Research Status and Prospect of Acetic Acid Wastewater Treatment	Research of Teaching Reforms of Food Environmental Monitoring
LUO Wen - hao (123)	..... DU De - hong, ZHANG Shuang - ling, YU Chun - di (170)
Survey of Nitrobenzene and Aniline Content in Guangzhou Higher Education Mage Center's Water System	Research on Talent - cultivating Plan for Metallic Material Engineering in New Undergraduate College
..... HE Bai - yin, YE Xue - lan, FENG Feng, et al. (125)	..... HE Jie - jun (172)
The Current Situation and Pollution Trend Analysis on Water Quantity of Liuxi River in Conghua Section	Teaching Study of Nonstoichiometric Compounds
..... XIAO Xiang, HU Dan - xin (127)	..... LI Shan - ying (175)
Uncertainty Evaluation of Measurement of Copper in Soil by FAAS	Discussion on the Requirements about Organic Chemistry Experiment Teaching by Using Continuous Experiments
CHEN Hai - yu, YAN Jing - fen (129)	..... WANG Peng, LI Min, CHEN Yong, et al. (177)
Green Recycling Technology of Industrial Wastewater Containing Chromium	Discussion on the Organic Chemistry Teachers' Ability Standard Construction in Colleges and Universities
ZHANG Sheng, ZHAO Xiao - yan (131)	..... ZHANG Yi - jun (179)
Study on the Removal of Acidic Iron - containing Wastewater with Magnesium Hydroxide	Discussion on Effect of Introducing Chemical History Knowledge to Inorganic Chemistry Teaching
DU Na - na (134)	..... TONG Yi - ping (181)
Several Important Purification Technologies of Sulfur Dioxide in Flue Gas Desulfurization	Exploration on the Teaching Method of Drug Synthesis Reactions
ZHAO Xiao - yan, ZHANG Sheng (136)	..... SUN Mo - ran (183)
Quantitative Analysis of Hydrochloric Acid Leakage at Storage Tanks	Survey and Analysis of a Questionnaire on Course of Nature Product Chemistry
JIA Pei, ZHU Qi - kun (139)	..... Wang He - bin, Bai Hong - jun (185)
Centrifugal Pump Cavitation and its Prevention	Safety Analysis of Major Hazard of Dangerous Chemicals Storage Tanks
..... ZHANG Jian (141)	..... CHANG Yu - feng, JIA Pei (187)
Fabrication Technique of HASTELLOY® B - 3® Alloy Pressure Vessel	Market and Production Technology of Potassium Formate
LAN Qiang - ming (143)	..... HE Qian (191)
Corrosion and Protection of Oil Storage Tank of Coal - Oil Industry	The Schedule Control and Quality Management of Enlarging and Altering Project Construction of Refinery
LIU Zi - long (147)	..... YAN Xiao - li (194)
Investigation on Several Problems of Periodic Inspection of Industrial Ammonia Pipeline	Study on the Influences of Ventilation Systems to Chemical Plant Fire
ZHANG Hong - jian (149)	..... LIAN Yu - hong (196)

Guangzhou Research & Design Institute of
Chemical Industry
Postcode: 510430
Tel: (020) 36372165 Fax: (020) 36372165
E - mail: gzhgbjb@126.com
www. gzhgbjb. cn

Publisher :

Guangzhou Research & Design Institute of
Chemical Industry

Guangzhou Society of Chemistry
and Chemical Engineering
Guangzhou Chemical Industry Association

Journal Code ISSN 1001 - 9677
CN 44 - 1228/TQ