

## 目 次

## 评论与综述

- 聚甲氧基二甲醚的合成及工艺技术研究进展 ..... 袁梦, 张君涛, 乔英云, 刘庆, 田原宇 (1449)  
 功能化分子印迹  $\text{Fe}_3\text{O}_4$  磁性复合材料的研究进展 ..... 陈扬, 谢晟瑜, 沈昊宇, 刘芳霞, 何丽娜, 陈佳雯, 张肖杰 (1455)  
 万古霉素的衍生化及其在手性分离中的应用 ..... 廖敏, 刘智敏, 李丹, 曹甲, 许志刚 (1467)

## 研究论文

- 芦丁在聚大黄素/纳米氧化锌修饰碳糊电极上的电化学行为研究 ..... 顾玲, 闫璟, 柯苗, 刘彦平 (1476)  
 疏水缔合型絮凝剂的制备及性能研究 ..... 刘孔怡, 刘江辉, 卢继雷, 王忻怡, 张晓云 (1483)  
 $\alpha$ -烷氧基酰菁钴的合成、表征及其光催化性能研究 ..... 吴迪, 吴瑀晗, 陈伟, 潘玲玲 (1487)  
 $\text{Al}_2\text{O}_3\text{-ZnO}$  粘结剂对 Mo/ZSM-5 催化剂甲烷无氧芳构化反应性能的影响 ..... 任冬梅, 赛福生, 赵岩, 夏云生, 包德才, 王祥生 (1492)  
 EDTA 改性高吸水树脂对铜离子的吸附研究 ..... 曾一文, 郭娟, 王农 (1498)  
 基于 TG/DSC-MS 和 FTIR 的纤维素热解特性研究 ..... 项辰 (1505)  
 荚蒾普生插层复合体的制备及性质研究 ..... 谷庆阳, 马梦涵, 郑倩倩 (1511)  
 模板分子量对阳离子聚丙烯酰胺序列结构及其絮凝性能的影响 ..... 丁俊文, 赵传靓, 李伟, 郝偲言, 刘胜利, 徐斌成, 郑怀礼 (1517)  
 废弃生物质水葫芦多孔碳用于锂离子和钠离子电池负极的研究 ..... 陈立, 李晓鹏, 陈宇驰, 席祥辉, 谢均, 张永志, 肖丹 (1525)  
 MCM-41 模板制备多孔碳锂离子电池负极 ..... 陈立, 张永志, 谢均, 李梦龙 (1530)  
 多孔金属有机骨架  $[\text{Cd}_3(\text{PA-BIM})_6(\text{BF}_4)_6] \cdot 34\text{H}_2\text{O}$  的结构与可逆吸附的三维水簇网络 ..... 周俊强, 张鲲鹏, 施少敏, 金传明 (1537)

## 研究简报

- (R)-3-氨基丁醇的合成研究 ..... 毛龙飞, 郭敏, 毛伸, 姜玉钦, 李伟, 徐桂清 (1544)  
 西南石韦的化学成分研究 ..... 伏雪梅, 张菊, 晏和贵, 胡军, 陆安梅, 秦泽敏, 陈旭冰, 杨明惠 (1549)  
 颗粒污染物对变压器油粘度的影响 ..... 陈彬, 韩超, 刘阁 (1552)  
 Al-Fe-Mg 三阳离子聚硅酸絮凝剂的研发 ..... 郭明哲, 丛涛泉, 杨双春, 潘一, 张海燕 (1558)  
 香豆素-羟丙基- $\beta$ -环糊精包合物的制备研究 ..... 朱庆英, 黄益好 (1564)  
 叔丁基二苯基氢硅烷的合成方法研究 ..... 赵爱明, 倪秋洋 (1569)  
 废杨木木屑制备高孔隙率粉末活性炭研究 ..... 王佳琪, 袁梦, 田原宇 (1574)  
 铬酸钠电化学合成重铬酸钠进程监控及表征 ..... 李成未, 常香玲, 李琛 (1579)  
 硝酸铋催化三组分“一锅法”合成 N1-取代的 3,4-二氢嘧啶酮衍生物 ..... 王敏, 姜宏旭, 张顺, 潘鹤 (1584)  
 固体粉末在液体表面上的铺展性能研究 ..... 高维英, 周晓佳, 赵敏 (1590)  
 1,10-邻菲咯啉取代昔脲 Zn(II)配合物的合成、晶体结构及荧光性质 ..... 杨先炯, 张奇龙, 陈明华 (1597)  
 3-甲基-5-甲氧基苯磺酰氯的合成 ..... 吴明圆, 杨砾, 季春, 黄筑艳, 周志旭, 赵春深 (1602)  
 $\beta$ -芳氧基乙醇的合成方法改进研究 ..... 李修刚, 张玲钰, 杨航周, 黄启鹏 (1605)

中文目次(封 2) 英文目次(封 3)

# CHEMICAL RESEARCH AND APPLICATION

Vol. 29 NO. 10 Oct. 2017 Monthly

## Contents

### Reviews and Summary Accounts

Research progress on synthesis and technology of polymethoxy dimethyl ethers .....	YUAN Meng ,ZHANG Jun-tao ,QIAO Ying-yun ,LIU Qing ,TIAN Yuan-yu	(1449)
Research progress of the functionalized molecularly imprinted Fe <sub>3</sub> O <sub>4</sub> magnetic composites .....	CHEN Yang ,XIE Sheng-yu ,SHEN Hao-yu ,LIU Fang-xia ,HE Li-na ,CHEN Jia-wen ,ZHANG Xiao-jie	(1455)
Derivatives of vancomycin and its application in chiral separation .....	LIAO Min ,LIU Zhi-min ,LI Dan ,CAO Jia ,XU Zhi-gang	(1467)

### Academic Papers

Study of electrochemical behavior of rutin on a emodin/nano-ZnO modified carbon paste electrode .....	GU Ling ,YAN Jing ,KE Miao ,LIU Yan-ping	(1476)
Preparation of hydrophobic associating flocculant and its flocculation of suspensions .....	LIU Kong-yi ,LIU Jiang-hui ,LU Ji-lei ,WANG Xin-yi ,Zhang Xiao-yun	(1483)
Study on synthesis, characterization and photocatalytic degradation of $\alpha$ -alkoxy phthalocyanine cobalt .....	WU Di ,WU Yu-han ,CHEN Wei ,PAN Ling-ling	(1487)
Methane dehydroaromatization in the absence of oxygen over extruded Mo/ZSM-5 with Al <sub>2</sub> O <sub>3</sub> -ZnO .....	REN Dong-mei ,SAI Fu-sheng ,ZHAO Yan ,XIA Yun-sheng ,BAO De-cai ,WANG Xiang-sheng	(1492)
The study on adsorption for copper ion with ethylene diamine tetraacetic acid modified high water-absorbing resin .....	ZENG Yi-wen ,GUO Juan ,WANG Nong	(1498)
Research on pyrolysis characteristics of cellulose based on TG/DSC-MS and FTIR technology .....	XIANG chen	(1505)
The preparation and property investigation of naproxen intercalated composites .....	GU Qing-yang ,MA Meng-han ,ZHENG Qian-qian	(1511)
The effect of molecular weight of templates on the sequence structure and the sludge dewatering performance of P(AM-DMC) .....	DING Jun-wen ,ZHAO Chuan-liang ,LI Wei ,HAO Si-yan ,LIU Sheng-li ,XU Bing-cheng ,ZHENG Huai-li	(1517)
Research of biomass waste water hyacinth derived porous carbon as anode materials used for Li-ion and Na-ion batteries .....	CHEN Li ,LI Xiao-peng ,CHEN Yu-chi ,XI Xiang-hui ,Xie Jun ,ZHANG Yong-zhi ,XIAO Dan	(1525)
Synthesis of porous carbon anode using MCM-41 as template for lithium ion battery .....	CHEN Li ,Zhang Yong-zhi ,Xie Jun ,LI Meng-long	(1530)
Crystal structure of porous metal-organic framework[ Cd <sub>3</sub> (PA-BIM) <sub>6</sub> (BF <sub>4</sub> ) <sub>6</sub> ] · 34H <sub>2</sub> O and reversible absorption of 3D water cluster .....	ZHOU Jun-qiang ,ZHANG Kun-peng ,SHI Shao-min ,JIN Chuan-ming	(1537)

### Research Notes

Synthesis of (R)-3-amino-1-butanol .....	MAO Long-fei ,GUO Min ,MAO Shen ,JIANG Yu-qin ,LI Wei ,XU Gui-qing	(1544)
Study on chemical constituents of pyrosia gralla .....	FU Xue-mei ,ZHANG Ju ,YAN He-gui ,HU Jun ,LU An-meи ,QIN Ze-min ,CHEN Xu-bing ,YANG Ming-hui	(1549)
Research on the influence of particle pollution on viscosity of transformer oil .....	CHEN Bin ,HAN Chao ,LIU Ge	(1552)
Research and development of Al-Fe-Mg cation polysilicate flocculant .....	GUO Ming-zhe ,CONG Tao-quan ,YANG Shuang-chun ,PAN Yi ,ZHANG Hai-yan	(1558)
Preparation of coumarin and hydroxypropyl- $\beta$ -cyclodextrin inclusion complex .....	ZHU Qing-ying ,HUANG Yi-hao	(1564)
The synthetic method of t-butylidiphenylsilane .....	ZHAO Ai-ming ,NI Qiu-yang	(1569)
Preparation of highly porous powdered activated carbon from waste aspen sawdust .....	WANG Jia-qi ,YUAN Meng ,TIAN Yuan-yu	(1574)
Process monitoring and characterization of electrochemical synthesis of sodium dichromate from sodium chromate .....	LI Cheng-wei ,CHANG Xiang-ling ,LI Chen	(1579)
One-pot three components synthesis of N1-substituted 3,4-dihydropyrimidinones derivatives catalyzed by Bi(NO <sub>3</sub> ) <sub>3</sub> · 5H <sub>2</sub> O .....	WANG Min ,JIANG Hong-xu ,ZHANG Shun ,PAN He	(1584)
Study on the spreading property of solid powders over liquid surface .....	GAO Wei-ying ,ZHOU Xiao-jia ,ZHAO Min	(1590)
Syntheses, structures and luminescent properties of Zn(Ⅱ) complex with 1,10-phenanthroline substituted glycoluril .....	YANG Xian-jiong ,ZHANG Qi-long ,CHEN Ming-hua	(1597)
Synthesis of 3-methyl-5-methoxybenzenesulfonyl chloride .....	WU Ming-yuan ,YANG Shuo ,JI Chun ,HUANG Zhu-yan ,ZHOU Zhi-xu ,ZHAO Chun-shen	(1602)
Study on improvement of synthesis method for $\beta$ -aryloxy ethanol .....	LI Xiu-gang ,ZHANG Ling-yu ,YANG Hang-zhou ,HUANG Qi-peng	(1605)