



## 师资队伍

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李惠静

更新时间: 2011-9-16 10:17:21 来源: 院办 点击: 2561次

### 一、基本信息

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### 二、目前主要研究方向

1. 海洋天然产物分离分析、结构鉴定、合成、结构修饰以及构效关系研究
2. 与海洋天然产物合成相关的有机合成方法学研究
3. 高附加值原料药及中间体的研发以及专利药物的合成工艺改进
4. 催化不对称有机合成新反应和新策略研究
5. 金属催化的有机新反应研究

### 三、学习经历

1998 青岛科技大学 分析化学 学士学位  
2004 中国科学院化学研究所 有机化学 博士学位

### 四、工作经历

2004 美国奥勒冈州立大学 天然产物化学 博士后  
2009 法国巴黎大学 金属有机化学 博士后  
2011 哈尔滨工业大学威海校区海洋科学与技术学院任职 副教授

### 五、主要研究成果与获奖情况

在中国科学院分子识别与功能重点实验室、美国奥勒冈州立大学环境健康科学中心和法国巴黎大学金属催化实验室从事研究工作多年, 在电化学分析、有机合成、天然产物分离分析及结构鉴定、天然产物结构修饰和化学生物学等领域积累了较为丰富的研究经验。发展了三唑类化合物的合成新方法, 研究了其生物活性及构效关系。探索了电化学和酶化学在有机合成中的应用。利用Ga<sup>3+</sup>与手性半冠醚配体的有效结合, 成功实现了水介质中高选择性的催化不对称Mukaiyama-Aldol反应。利用有机降解方法和质谱等分析方法鉴定了啤酒花单宁酸的结构, 发展组合串联质谱新方法实现复杂、痕量且不稳定的原花色天然产物的结构鉴定。首次发现了金属Ga<sup>3+</sup>催化的一种新型串联反应, 最多一步反应可同时产生6个环, 可以快捷方便的应用于神经抑制剂的合成和复杂多环大分子化合物的合成。

### 六、主要学术兼职

1. 中国化学会会员

2.法国化学协会会员

3.美国质谱协会会员

## 七、发表论文选列

在国内外科技期刊上公开发表学术文章25篇（第一作者19篇），书籍2部（第一作者），应邀口头报告4次（第一作者），会议论文6篇（第一作者4篇）。代表性论文：

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- [2] Li Hui-Jing, Deinzer Max L.\* "The mass spectral analysis of isolated hops A-type proanthocyanidins by electrospray ionization tandem mass spectrometry" *Journal of Mass Spectrometry* 2008, 43(10), 1353–1363. (IF: 3.289)
- [3] Li Hui-Jing, Deinzer Max L.\* "Tandem mass spectrometry for sequencing proanthocyanidins" *Analytical Chemistry* 2007, 79, 1739–1748. (IF: 5.874)
- [4] Li Hui-Jing, Deinzer Max L.\* "Structural identification and distribution of proanthocyanidins in 13 different hops" *J. Agric. Food Chem.* 2006, 54, 4048–4056. (IF: 2.816)
- [5] Li Hui-Jing, Tian Hong-Yu, Wu Yan-Chao, Chen Yong-Jun, Liu Li, Wang Dong,\* Li Chao-Jun.\* "Aqueous asymmetric Mukaiyama aldol reaction catalyzed by chiral gallium lewis acid with Trost-type semi-crown ligands" *Advanced Synthesis & Catalysis* 2005, 347, 1247–1256. (IF: 5.250)
- [6] Li Hui-Jing, Zhao Jun-Ling, Chen Yong-Jun, Liu Li, Wang Dong,\* Li Chao-Jun.\* "Water-promoted direct aerobic oxidation of enol silyl ether to  $\alpha$ -hydroxyl ketones without catalyst" *Green Chemistry* 2005, 7, 61–63. (IF: 5.472)
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- [8] Li Hui-Jing, Tian Hong-Yu, Chen Yong-Jun, Wang Dong,\* Li Chao-Jun.\* "Novel chiral gallium Lewis acid catalysts with semi-crown ligands for aqueous asymmetric Mukaiyama aldol reactions" *Chemical Communications* 2002, 2994–2995. (IF: 5.787)
- [9] Li Hui-Jing, Liang-Zhong,\* Zhang Shu-Sheng\* "Synthesis of (N,N-diethylamino)ethyl caproate by using Ti(OBu)<sub>4</sub> catalyst. *Journal of Qingdao Institute of Chemical Technology* 2001, 22, 147–148.
- [10] Wu Yan-Chao,\* Li Hui-Jing, Liu Li, Demoulin Nicolas, Liu Zhe, Wang Dong, Chen Yong-Jun.\* "Hafnium triflate as an efficient catalyst for direct Friedel-Crafts reaction of chromene hemiacetals" *Advanced Synthesis & Catalysis* 2011, 353, 907–912. (IF: 5.250)
- [11] Wu Yan-Chao,\* Li Hui-Jing, Liu Li, Liu Zhe, Wang Dong, Chen Yong-Jun.\* "Cascade reaction of  $\beta,\gamma$ -unsaturated  $\alpha$ -ketoesters with phenols in trityl chloride/TFA system. Highly selective synthesis of 4-aryl-2H-chromenes and their applications" *Organic & Biomolecular Chemistry* 2011, 9, 2868–2877. (IF: 3.451)
- [12] Wu Yan-Chao,\* Li Hui-Jing, Liu Li, Demoulin Nicolas, Liu Zhe, Wang Dong, Chen Yong-Jun.\* "Facile Synthesis of Spiropyrans from Chromene Hemiacetal Esters and Bifunctional Nucleophiles" *Synlett*, 2011, (11), 1573–1578. (IF: 2.447)
- [13] Wu Yan-Chao,\* Li Hui-Jing, Yang Hua-Zheng. "A sensitive and highly selective fluorescent sensor for In<sup>3+</sup>" *Organic & Biomolecular Chemistry* 2010, 8, 3394–3397. (IF: 3.451)
- [14] Wu Yan-Chao,\* Li Hui-Jing, Liu Li, Wang Dong, Yang Hua-Zheng, Chen Yong-Jun.\* "Efficient construction of pyrazolo[1,5-a]pyrimidine scaffold and its exploration as a new heterocyclic fluorescent platform" *Journal of Fluorescence*

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[16] Pan Gebo, Li Hui-Jing, Yuan Qunhui, Chen Yongjun,\* Wan Lijun,\* Bai Chunli. Ordered arrays of semi-crown ligands on an Au(III) electrode surface: In situ STM study. *Science in China, Series B: Chemistry*. 2004, 47, 320–325. (IF: 1.042)

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## 八、著作及译著

1. Li Hui-Jing, Deinzer Max L. “Chapter 32-Proanthocyanidins in hops” in Beer in Health and Disease Prevention (Editor(s): Preedy, Victor R. Publisher: Elsevier Inc., Burlington, England), 2009, 333–348.

2. Li Hui-Jing, Deinzer Max L. “Chapter 9-Polyphenolic Compounds in Hops” in Hop Flavor and Aroma (Editor(s): Thomas H. Shellhammer. Publisher: Master Brewers Association of the Americas, Minnesota, USA), 2009, 99–121.

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