

个人简历

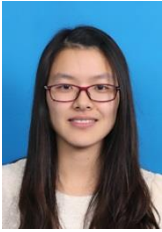
姓名: 吴磊 出生年月: 1980.1
院系: 化学系 政治面貌: 党员
性别: 男
学位: 博士
学历: 研究生
职称: 教授, 博士生导师
从事专业: 有机化学
毕业学校: 中国科学院化学研究所
研究方向: 有机合成方法学; 纳米催化材料; 天然产物(药物)全合成
职务: 副院长
电话: 025-84395351
电邮: rickywu@njau.edu.cn



个人简介

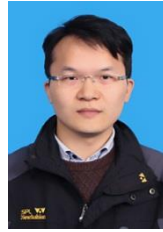
吴磊，1980年生，南京农业大学教授、博士生导师，理学院副院长。2001年本科毕业于安徽师范大学，同年考取中国科学院广州化学研究所有机化学专业，从事天然产物的全合成研究，2004年获得中国科学院理学硕士学位。2007年博士毕业于中国科学院化学研究所，师从范青华研究员。2007年11月-2010年5月在美国 Syracuse University 和 University of Notre Dame 从事博士后研究，2010年5月-2012年8月任职于哈尔滨工业大学基础与交叉科学研究院，2012年8月以高层次人才引进方式调动至南京农业大学。主要研究方向为功能有机膦化合物合成和金属纳米催化材料，先后主持国家自然科学基金(面上及青年项目)、江苏省自然科学基金(面上项目)、教育部留学回国人员科研启动项目、北京分子科学国家实验室开放基金、南京农业大学高层次人才启动基金、哈尔滨工业大学引进人才启动基金等多项科研项目，已在 *ACS Catal.*, *Org. Lett.*, *J. Org. Chem.*, *Chem. Eur. J.*, *J. Am. Chem. Soc.*, *Adv. Synth. Catal.*, *Catal. Sci. Technol.* 等国际权威期刊发表四十多篇 SCI 收录论文，H 指数为 15。第一及通讯作者论文近三十篇，累计影响因子 >130，他引 650 余次，其中影响因子大于 5.0 论文 13 篇，2 篇研究论文入选 ESI “高被引论文”。2012 年为 Bentham 出版集团 *Curr. Org. Chem.* 期刊客座编辑。受邀出版英文图书章节两章(德国 Wiley 和美国 Nova Science 出版社)。先后入选江苏省教育厅“青蓝工程”、江苏省科技厅第四期“333 高层次人才培养工程(第三层次)”以及南京市“321 计划”。为《有机化学》、《化学学报》、*Org. Lett.*, *Adv. Synth. Catal.*, *J. Org. Chem.*, *Chem. Eur. J.*, *RSC Adv.*, *Eur. J. Org. Chem.* 等国内外 SCI 期刊审稿人。

课题组成员(2017年9月):



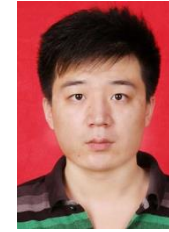
祝洁 博士

(讲师, 2015年南理工毕业)



沙强 博士

(讲师, 2016年南理工毕业)



罗凯 博士

(师资博士后, 获2016年博士生“校长奖学金”)
(2017年南京农业大学优秀博士毕业生)

2013级博士生: 季益刚 (在职博士生, 副教授, 江苏第二师范学院)

2015级博士生: 杨文超 (2017年博士生“校长奖学金”)

陈耀忠 (转博, 2015年硕士生“校长奖学金”、2016年“大北农”企业奖学金)

2016级博士生: 刘腾 (2015年研究生国家奖学金, 2016年南京农业大学优秀硕士毕业生)

2017级博士生: 夏运涛 (转博, 2017年硕士生“校长奖学金”)

2015级硕士生: 张玲

2016级硕士生: 韦凯、王晓东、马静

2017级硕士生: 孙学、刘悦、王俊柯、吴金金

已毕业学生:

2013 级学硕: 张宇(上海 EAG laboratories, 2017 年“南京农业大学优秀硕士毕业论文”获得者);

2014 级专硕: 刘腾(本组读博);

2014 级学硕: 毛矛(获 2017 年硕士生“校长奖学金”, 2017 年南京农业大学优秀硕士毕业生);

2015 级专硕: 孙晓涛(创业, 获 2017 年硕士生“校长奖学金”, 2017 年南京农业大学优秀硕士毕业生)、戴朋(留校)

科研项目

7. 主持江苏省自然科学基金（面上项目）一项；
6. 主持国家自然科学基金两项；
5. 主持南京农业大学引进人才科研启动经费；
4. 主持教育部留学回国人员启动经费；
3. 主持北京分子科学国家实验室开放基金、中国科学院分子识别与功能重点实验室开放基金；
2. 主持哈尔滨工业大学引进人才科研启动经费和校创新基金（已结束）；
1. 作为主要成员曾参与国家自然科学基金项目(No. 20325209、205322010), 国家杰出青年基金(No. 2005CCA 06600) 、美国国家自然科学基金(NSF No. 0727491)等研究工作；

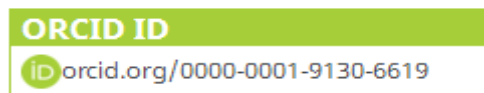
所获奖项

3. 2013 年江苏省“333 高层次人才培养工程”第三层次、南京市“321 计划”入选者（第五批）
2. 2012 年 受邀为 *Current Organic Chemistry* (IF: 3.064) 杂志客座编(Guest Editor)。
1. 2012 年 江苏省“青蓝工程”优秀青年骨干教师培养对象

教学信息

- 2016 秋季学期 研究生《高等有机化学》
- 2016 春季学期 本科生《有机化学》必修课
- 2014 春季学期 本科生《精细化学品化学》
- 2013 秋季学期 研究生《现代有机合成技术》选修课
- 2013 春季学期 本科生《有机化学》必修课
- 2012-2013 第一学期 《实验化学 II》 必修课
- 2011 年秋季学期 哈尔滨工业大学化工学院 《有机化学 II》 必修课

发表论文及专著



<http://orcid.org/0000-0001-9130-6619>

RESEARCHERID

<http://www.researcherid.com/rid/C-6655-2011>

通讯作者论文:

Year of 2017:

24. Kai Luo, Ling Zhang, Jing Ma, Qiang Sha, **Lei Wu***, Acetic Acid-Mediated Sulfonylation of Allenylphosphine Oxides: Divergent Synthesis of Bifunctionalized 1,3-Butadienes and Allenes, *Journal of Organic Chemistry*, **2017**, 82, 6978-6985. (SCI IF₂₀₁₆: 4.849)
23. Wen-Chao Yang, Peng Dai, Kai Luo, Yi-Gang Ji, **Lei Wu***, Aldehydes as Carbon Radical Acceptors: Silver Nitrate Catalyzed Cascade Decarboxylation and Oxidative Cyclization toward Dihydroflavonoid Derivatives, *Advanced Synthesis & Catalysis*, **2017**, 359, 2390-2395. (Journal Most Accessed Article in 05/2017, SCI IF₂₀₁₆: 5.646)
22. Jie Zhu[#], Mao Mao[#], Huan-Jing Ji, Jiang-Yan Xu, **Lei Wu***, Palladium-catalyzed Cleavage of α -Allenyl Aryl Ether toward Pyrazolemethylene-Substituted Phosphinyl Allenes and Their Transformations via Alkenyl C-P(O) Cleavage, *Organic Letters*, **2017**, 19, 1946-1949. (SCI IF₂₀₁₆: 6.579)
21. Xiao-Tao Sun[#], Jie Zhu[#], Yun-Tao Xia, **Lei Wu***, Palladium Nanoparticles Stabilized by Metal–Carbon Covalent Bonds as

- Expeditious Heterogeneous Catalyst for Oxidative Dehydrogenation of *N*-Heterocycles, *ChemCatChem*, **2017**, 9, 2463-2466. (SCI IF₂₀₁₆: 4.803)
20. Yi-Gang Ji, Kai Wei, Teng Liu, **Lei Wu***, Wei-Hua Zhang*, “Naked” Iridium (IV) Oxide Nanoparticles as Expedient and Robust Catalysts for Hydrogenation of Nitrogen Heterocycles: Remarkable Vicinal Substitution Effect and Recyclability, *Advanced Synthesis & Catalysis*, **2017**, 359, 933-940. (SCI IF₂₀₁₆: 5.646, Highlighted by Synfacts)
19. Kai Luo, Wen-Chao Yang, **Lei Wu***, Photoredox Catalysis in Organophosphorus Chemistry, *Asian Journal of Organic Chemistry*, **2017**, 6, 350-367. (Invited Review, SCI IF₂₀₁₆: 2.788)
18. Mao Mao[#], Ling Zhang[#], Yao-Zhong Chen, Jie Zhu, **Lei Wu***, Palladium-Catalyzed Coupling of Allenylphosphine Oxides with *N*-Tosylhydrazones toward Phosphinyl [3]Dendralenes, *ACS Catalysis*, **2017**, 7, 181-185. (SCI IF₂₀₁₆: 10.614, Open Access, Designated as ACS Editor’s Choice, 入选 Web of Science “ESI 高被引论文”)

Year of 2016:

17. Yun-Tao Xia, Xiao-Tao Sun, Ling Zhang, Kai Luo, **Lei Wu***, Metal-free Hydrogen Atom Transfer from Water: Expeditious Hydrogenation of *N*-Heterocycles Mediated by Diboronic Acid, *Chemistry-A European Journal*, **2016**, 22, 17151-17155. (SCI IF₂₀₁₅: 5.771)
16. Wen-Chao Yang, Peng Dai, Kai Luo, **Lei Wu***, Iodide/*tert*-Butyl Hydroperoxide-Mediated Benzylic C–H Sulfonylation and

Peroxidation of Phenol Derivatives, *Advanced Synthesis & Catalysis*, **2016**, 358, 3184-3190. (SCI IF₂₀₁₅: 6.453)

15. Yu Zhang[#], Jie Zhu[#], Yun-Tao Xia, Xiao-Tao Sun, **Lei Wu***, Efficient Hydrogenation of *N*-heterocycles Catalyzed by Carbon-Metal Covalent Bonds Stabilized Palladium Nanoparticles: Synergistic Effects of Particle Size and Water, *Advanced Synthesis & Catalysis*, **2016**, 358, 3039-3045. (Highlighted by Synfacts, SCI IF₂₀₁₅: 6.453)
14. Kai Luo[#], Yao-Zhong Chen[#], Li-Xian Chen, **Lei Wu***, Autoxidative C(sp²)-P Formation: Direct Phosphorylation of Heteroarenes under Oxygen, Metal-Free, and Solvent-Free Conditions. *Journal of Organic Chemistry*, **2016**, 81, 4682-4689. (SCI IF₂₀₁₅: 4.785)
13. Kai Luo[#], Yao-Zhong Chen[#], Wen-Chao Yang, Jie Zhu, **Lei Wu***, Cross-Coupling Hydrogen Evolution by Visible Light Photocatalysis Toward C(sp²)-P Formation: Metal-free C-H Functionalization of Thiazole Derivatives with Diarylphosphine Oxides, *Organic Letters*, **2016**, 18, 452-455. (SCI IF₂₀₁₅: 6.732, 入选 Web of Science “ESI 高被引论文”)
12. Yu Zhang, Mao Mao, Yi-Gang Ji, Jie Zhu, **Lei Wu***, Modular metal-carbon stabilized palladium nanoparticles for the catalytic hydrogenation of *N*-heterocycles, *Tetrahedron Letters*, **2016**, 57, 329-332. (SCI IF₂₀₁₅: 2.347)

Years of 2011-2015:

11. Yao-Zhong Chen, Ling Zhang, Ai-Min Lu, Fang Yang and **Lei Wu***, α -Allenyl Ethers as Starting Materials for Palladium Catalyzed Suzuki-Miyaura Couplings of Allenylphosphine Oxides with Arylboronic Acids, *Journal of Organic Chemistry*,

2015, 80, 673-680. (SCI IF: 4.785)

10. Teng Liu, Yun-Tao Xia, Jie Zhu, Ai-Min Lu, **Lei Wu***, Metal-free synthesis of chlorinated and brominated phosphinoyl 1,3-butadiene derivatives and its synthetic applications, *Tetrahedron Letters*, **2015**, 56, 6508-6512. (SCI IF: 2.347)
9. Teng Liu, Jie Dong, Shu-Jun Cao, Li-Cheng Guo, **Lei Wu***, Suzuki–Miyaura coupling of phosphinoyl- α -allenic alcohols with arylboronic acids catalyzed by a palladium complex “on water”: an efficient method to generate phosphinoyl 1,3-butadienes and derivatives, *RSC Advances*, **2014**, 4, 61722-61726. (SCI IF: 3.708)
8. 季益刚, **吴磊***, 范青华*, 金属/金属氧化物纳米粒子在不对称氢化和氢转移反应中的应用研究进展, *化学学报*, **2014**, 72, 798-808. (综述约稿, SCI IF: 0.874)
7. **Lei Wu***, Immobilized Catalysts for Organic Synthesis: Homogeneous & Heterogeneous, *Current Organic Chemistry*, **2013**, 17, 1235-1235 (Editorial Material).
6. **Lei Wu***, Yu Zhang, Yi-Gang Ji, Homogeneous Recyclable Catalysts Based on Metal Nanoparticles for Organic Synthesis (Invited Review). *Current Organic Chemistry*, **2013**, 17, 1288-1302. (SCI IF: 3.064)
5. Yan-fei Wang*, Zhanmin Xiao, **Lei Wu***, Metal-nanoparticles Supported on Solid as Heterogeneous Catalysts, *Current Organic Chemistry*, **2013**, 17, 1325-1333. (SCI IF: 3.064)
4. **Lei Wu***, Xiao Zhang, Qing-Qing Chen, An-Kun Zhou, A novel copper-catalyzed reductive coupling of N-tosylhydrazones with H-phosphorus oxides, *Organic & Biomolecular Chemistry*, **2012**, 10, 7859-7862. (SCI IF: 3.696)

3. **Lei Wu***, Xiǎo Zhang, Zhimin Tao, A Mild and Recyclable Nano-sized Catalyst for the Stille Reaction in Water, *Catalysis Science & Technology*, **2012**, 2, 707-710. (SCI IF: 3.575)
2. **Lei Wu***, A Facile Tandem Reactions to Access β -Hydroxy- α , α -difluoroketone Derivatives Catalyzed by Titanocene Dichloride/Magnesium. *Journal of Fluorine Chemistry*, **2011**, 132, 367-372. (SCI IF: 2.033)
1. **Lei Wu***, Jie Ling, Zong-Quan Wu, a Highly Active and Recyclable Catalyst: Phosphine Dendrimer-Stabilized Nickel Nanoparticles for the Suzuki Coupling Reaction. *Advanced Synthesis & Catalysis*, **2011**, 353, 1452-1456. (SCI IF: 6.048)

[第一作者研究论文:](#)

4. **Lei Wu**, Yan-Mei He, Qing-Hua Fan*, Controlled Reversible Anchoring of η^6 -Arene/TsDPEN-Ru(II) Complex onto Magnetic Nanoparticles: A New Strategy for Catalyst Separation and Recycling. *Advanced Synthesis & Catalysis*, **2011**, 353, 2915-2919. (SCI IF: 6.048)
3. **Lei Wu**, Jyotsana Lal, Karen A. Simon, Erik A. Burton, Yan-Yeung Luk*, Non-Amphiphilic Assembly in Water: Polymorphic Nature, Thread Structure and Thermodynamic Incompatibility, *Journal of the American Chemical Society*, **2009**, 131, 7430-7443. (SCI IF: 9.023)
2. **Lei Wu**, Zhi-Wei Li, Feng Zhang, Yan-Mei He, Qing-Hua Fan*, Air-Stable and Highly Active Dendritic Phosphine Oxide-Stabilized Palladium Nanoparticles: Preparation, Characterization and Applications in the Carbon-Carbon Bond

Formation and Hydrogenation Reactions, *Advanced Synthesis & Catalysis*, **2008**, *350*, 846-862. (SCI IF: 5.187)

1. **Lei Wu**, Bao-Lin Li, Yi-Yong Huang, Hai-Feng Zhou, Yan-Mei He, Qing-Hua Fan*, Phosphine Dendrimer-Stabilized Palladium Nanoparticles, a Highly Active and Recyclable Catalyst for the Suzuki-Miyaura Reaction and Hydrogenation. *Organic Letters*, **2006**, *8*, 3605-3608. (SCI IF: 5.128)

英文专著 (章节):

2. **Lei Wu**, Ji Liu, Baode Ma, Qing-Hua Fan*, Homogeneous Asymmetric Catalysis Using Immobilized Chiral Catalysts, (Chapter 4, BOOK TITLE: Bridging Heterogeneous and Homogeneous Catalysis: Concepts, Strategies, and Applications, Edited by Prof. Can Li), **2014**, Wiley-VCH, Page 111-148;
1. Yi-Gang Ji, **Lei Wu***, Recyclable Metal Nanoparticulate Catalysts Based on Dendrimers, (Chapter 11, BOOK TITLE: Dendrimers: Synthesis, Applications and Role in Nanotechnology) Nova Science Publishers, New York **2013**, Page 249-263;

合作论文:

9. Karen A. Simon, Gauri Shetye, Ulrich Englich, **Lei Wu**, Yan-Yeung Luk*, Noncovalent Polymerization of Mesogens Crystallizes Lysozyme: Correlation between Nonamphiphilic Lyotropic Liquid Crystal Phase and Protein Crystal Formation, *Langmuir*, **2011**, *17*, 10901-10906.

8. An-Kun Zhou, **Lei Wu**, Da-Zhi Li, Qing-Qing Chen, Xiao Zhang, A Novel Metal-free Reductive Esterification of N-Tosylhydrazones with Carboxylic Acids, *Chinese Journal of Chemistry*, **2012**, *30*, 1862-1866.
7. Karen A. Simon, Erik A. Burton, Fei Cheng, Nisha Varghese, Eric R. Falcone, **Lei Wu** and Yan-Yeung Luk*, Controlling Thread Assemblies of Pharmaceutical Compounds in Liquid Crystal Phase by Using Functionalized Nanotopography. *Chemical Materials*, **2010**, *22*, 2434.
6. Yan-Yeung Luk, **Lei Wu**, Jyotsana Lal, Karen A. Simon, Erik A. Burton, Noncovalent polymer assembly in water and their applications in materials fabrication, *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY*, **2010**, *240*, 818-ORGN.
5. Sri Kamesh Narasimhan, Deborah J. Kerwood, **Lei Wu**, Jun Li, Rosina Lombardi, Teresa B. Freedman* and Yan-Yeung Luk*, Induced Folding by Chiral Non-Planar Aromatics. *Journal of Organic Chemistry*, **2009**, *74*, 7023.
4. Shuyu Hou, Erik A. Button, **Ricky Lei Wu**, Yan-Yeung Luk, Dacheng Ren, Prolonged control of patterned biofilm formation by bio-inert surface chemistry, *Chemical Communications*, **2009**, 1207-1209.
3. Bao-Lin Li, **Lei Wu**, Yan-Mei He, Qing-Hua Fan, The Synthesis and Properties of Iridium(III)-Cored Dendrimers with Carbazole Peripherally Functionalized β -Diketonato Dendrons. *Dalton Transactions*, **2007**, *20*, 2048.
2. Yi-Yong Huang, Yan-Mei He, Hai-Feng Zhou, **Lei Wu**, Bao-Lin Li, Qing-Hua Fan, Thermomorphic system with non-fluorous phase-tagged Ru(BINAP) catalyst: Facile liquid/solid catalyst separation and application in asymmetric

hydrogenation, *Journal of Organic Chemistry*, **2006**, 71, 2874-2877.

1. Hai-Feng Zhou, Qing-Hua Fan, Yi-Yong Huang, **Lei Wu**, Yan-Mei He, Wei-Jun Tang, Lian-Quan Gu, Albert S. C. Chan, Mixture of poly(ethylene glycol) and water as environmentally friendly media for efficient enantioselective transfer hydrogenation and catalyst recycling, *Journal of Molecular Catalysis A-Chemical*, **2007**, 275, 47-53.