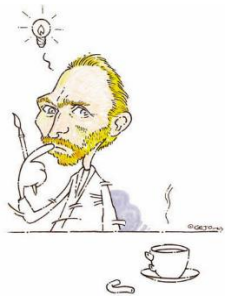
沙强/教学科研/讲师

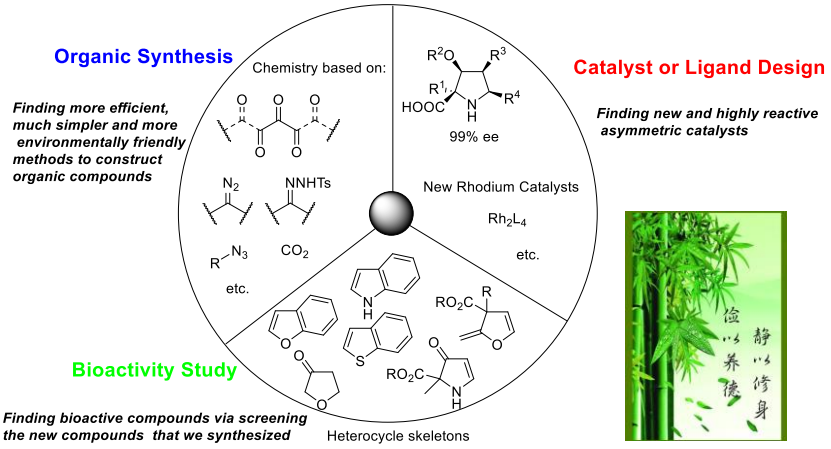
欢迎同学加入开展 SRT 或毕设！

院 系	理学院化学系
从事专业	有机化学
学 历	博士研究生
学 位	博士
实验室	理学院 407
毕业院校	南京理工大学
电子邮箱	qsha@njau.edu.cn

研 究 方 向



催化不对称合成、杂环骨架构建、卡宾化学、生物活性分子设计



研究方向汇总图

个人简介

2010 年毕业于南京理工大学制药工程专业，获得工学学士学位，随后在南京理工大学硕博连读，师从魏运洋教授，从事重氮化合物参与的合成应用研究，2016 年获得化学工程与技术博士学位。2014.09-2015.09 期间，受留学基金委全额资助赴美国马里兰大学帕克分校及德克萨斯大学圣安东尼奥分校访问交流一年，师从 Michael P. Doyle 教授，从事多羰基化合物用于新颖杂环化合物的合成研究。2016 年 7 月进入南京农业大学理学院工作，目前已以第一作者身份在 *Organic Letters, Chemical Communications, The Journal of Organic Chemistry, Advanced Synthesis & Catalysis, ChemCatChem* 等知名期刊发表十多篇 SCI 论文。此外参与了教材《药物合成反应简明教程》5.4 节的编写，发表英文综述一章。

教学信息		《有机化学》 理论课 《化工原理》 专业课 《实验化学 I》 无机及分析化学实验 《实验化学 II》 有机化学实验
科研项目		1、 中央高校基本科研业务费自主创新重点项目 (KYZ201751)，2017.01-2019.12，主持

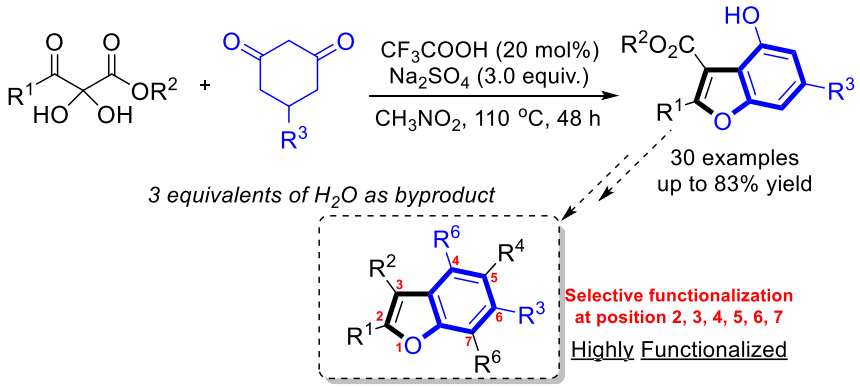
发表综述或章节

1. **Qiang Sha**, Yongming Deng, Michael P. Doyle*. The Future of Catalysis by Chiral Lewis Acids. *Topics in Organometallic Chemistry*, **2015**, doi: 10.1007/3418_2015_141.

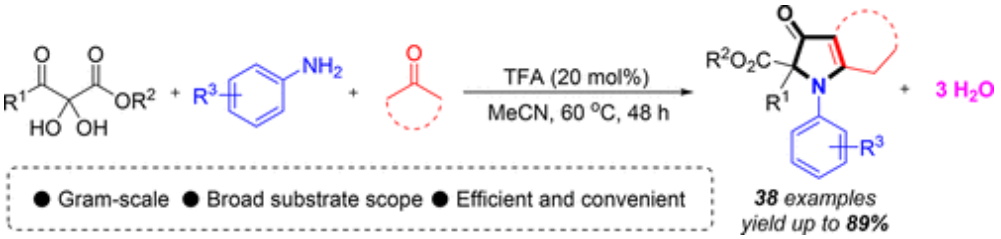
2. 参与教材《药物合成反应简明教程》5.4 节（310-335 页）的编写。《药物合成反应简明教程》，**2013** 年，科学出版社（978-7-03-038164-4），魏运洋、罗军、张树鹏主编。

发表论文

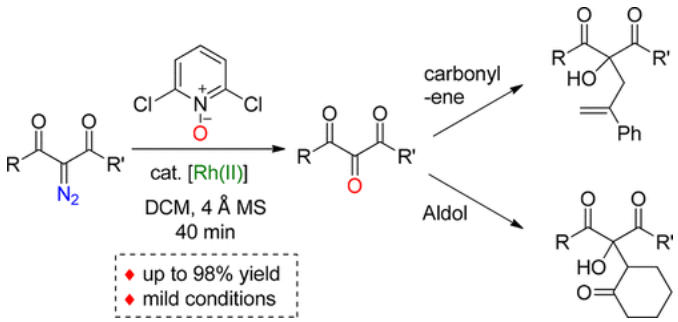
1. **Qiang Sha***[#], Haixuan Liu[#], Yuan Li. Trifluoroacetic Acid Catalyzed Cascade Reactions of 2,3-Diketoesters with Cyclohexane-1,3-diones: Strategy Towards 4- Hydroxybenzofuran Derivatives. *Advanced Synthesis & Catal*ysis, **2019**, doi: 10.1002/adsc.201900056.



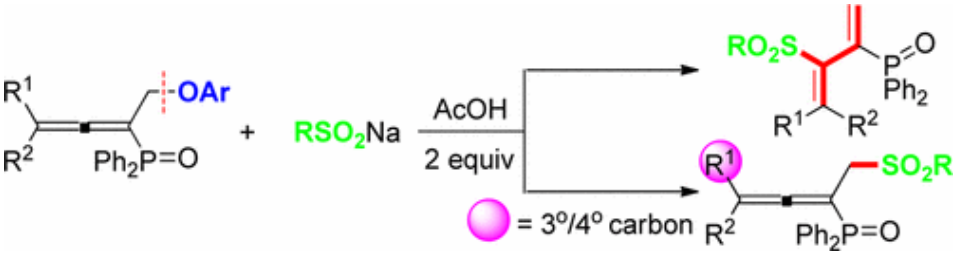
2. **Qiang Sha***, Junke Wang, and Michael P. Doyle. Synthesis of 1*H*-Pyrrol-3(2*H*)-ones via Three-Component Reactions of 2,3-Diketo Esters, Amines, and Ketones. *The Journal of Organic Chemistry*, **2018**, *83(18)*, 11288-11297.



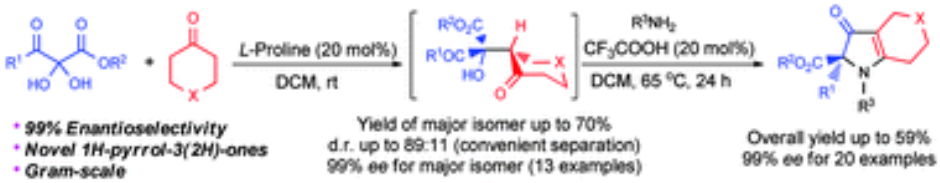
3. Yang Yu, **Qiang Sha**, Hui Cui, Kory S. Chandler, and Michael P. Doyle*. Displacement of Dinitrogen by Oxygen: A Methodology for the Catalytic Conversion of Diazocarbonyl Compounds to Ketocarbonyl Compounds by 2,6-Dichloropyridine-*N*-oxide. *Organic Letters*, **2018**, *20 (3)*, 776-779.



4. Kai Luo, Ling Zhang, Jing Ma, **Qiang Sha**, and Lei Wu*. Acetic Acid Mediated Sulfonylation of Allenylphosphine Oxides: Divergent Synthesis of Bifunctionalized 1,3-Butadienes and Allenes. *The Journal of Organic Chemistry*, **2017**, *82(13)*, 6978-6985.

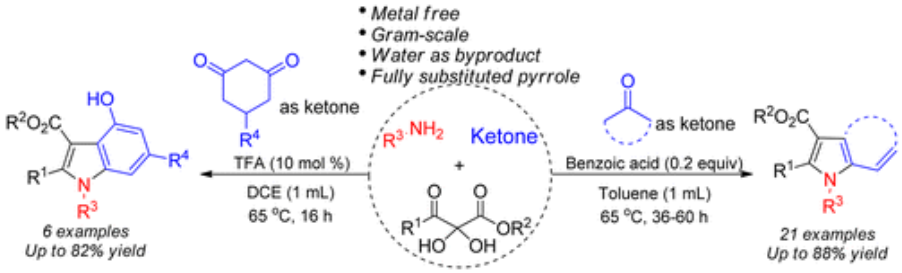


5. **Qiang Sha**, Hadi Arman, Michael P. Doyle*. Asymmetric Synthesis of 1*H*-Pyrrol-3(2*H*)-ones from 2,3-Diketoesters by Combination of Aldol Condensation with Benzilic Acid Rearrangement. *Chemical Communications*, **2016**, *52*,108-111.

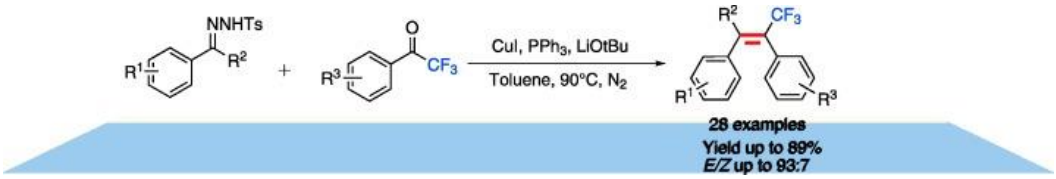


6. **Qiang Sha**, Hadi Arman, Michael P. Doyle*. Three-Component Cascade Reactions with 2,3-Diketoesters: A Novel Metal-Free Synthesis of 5-Vinyl-pyrrole and 4-Hydroxy-indole

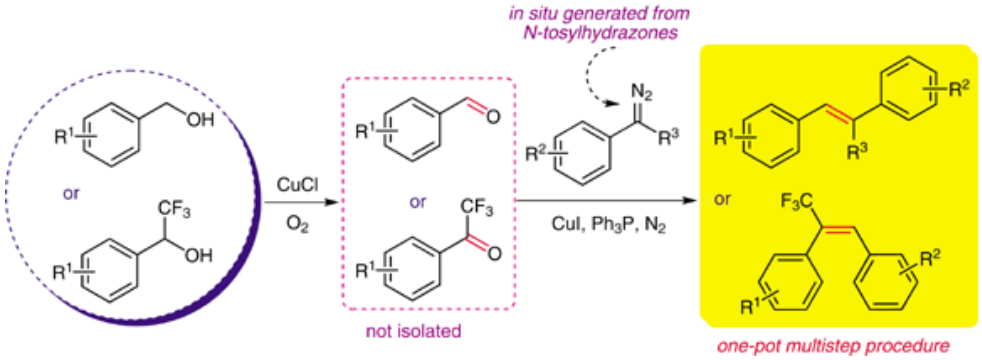
Derivatives. *Organic Letters*, **2015**, *17*, 3876-3879.



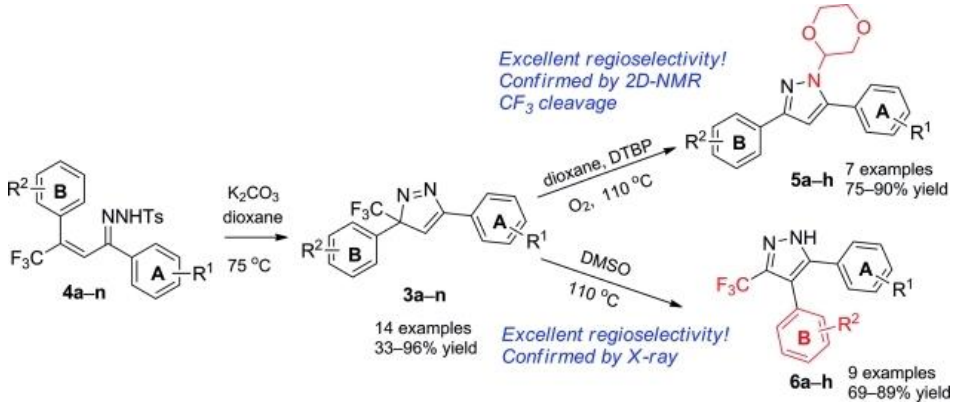
7. **Qiang Sha**, Yunyang Wei*. Copper(I)-Catalyzed Wittig Olefination Reactions of *N*-Tosylhydrazones with Trifluoromethylketones. *ChemCatChem*, **2014**, *6*, 131-134.



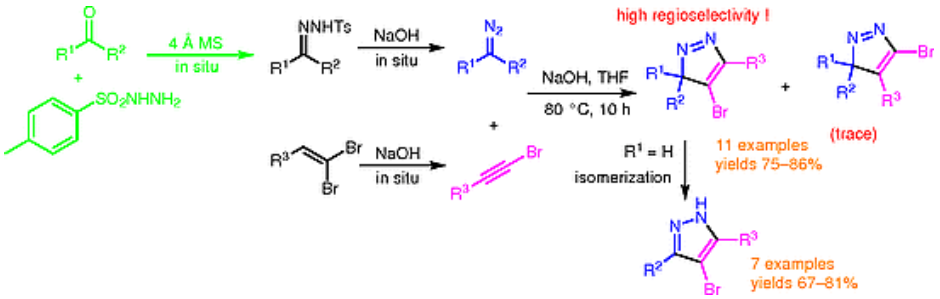
8. **Qiang Sha**, Yunyang Wei*. One-pot Multistep Synthesis of Trisubstituted Alkenes from *N*-Tosylhydrazones and Alcohols. *Synthesis*, **2014**, *46*, 2353-2361.



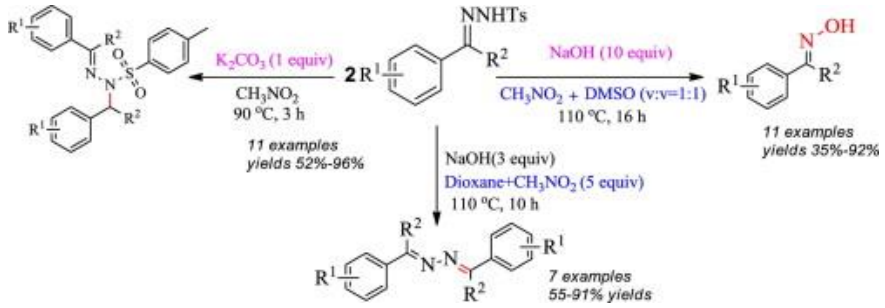
9. **Qiang Sha**, **Haixuan Liu**, Yunyang Wei*. Design and Synthesis of 3-Trifluoromethyl-3*H*-pyrazoles and Further Investigations of Their Transformation into Novel 1*H*-Pyrazoles. *European Journal of Organic Chemistry*, **2014**, *34*, 7707-7715. (Qiang Sha and Haixuan Liu contributed equally)



10. **Qiang Sha**, Yunyang Wei*. An Efficient One-Pot Synthesis of 3, 5-Diaryl-4-bromopyrazoles by 1,3-Dipolar Cycloaddition of *In Situ* Generated Diazo Compounds and 1-Bromoalk-1-ynes. *Synthesis*, **2013**, *45*, 413-420. (Highlighted by *Organic Chemistry Portal*)



11. **Qiang Sha**, Yunyang Wei*. Base and Solvent Mediated Decomposition of Tosylhydrazones: Highly Selective Synthesis of *N*-Alkyl Substituted Hydrazones, Dialkylidenehydrazines, and Oximes. *Tetrahedron*, **2013**, *69*, 3829-3835.



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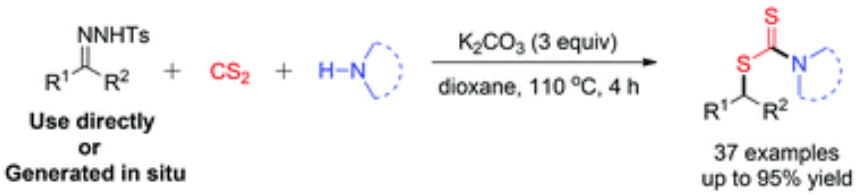

13. **<u>Qiang Sha</u>**, Yifei Ling, Wenyong Wang, Yunyang Wei*. Capture of *In Situ* Generated Diazo Compounds or Copper Carbenoids by Triphenylphosphine: Selective Synthesis of *trans*-Alkenes and Unsymmetric Azines *via* Reaction of Aldehydes with Ketone-Derived *N*-Tosylhydrazones. *Advanced Synthesis & Catal*ysis, **2013**, *355*, 2145-2150.