

姜超 简历

南京理工大学化工学院

电话: 18601406179

中国江苏南京孝陵卫 200 号, 210094

电子邮箱: chaojiang@njust.edu.cn

研究领域: 有机化学, 小分子合成, 生物医药

研究方向: 合成方法学, 过渡金属催化, 碳氢键活化, 光催化反应, 药物化学

教育经历

2004-2009 University of Rochester, 美国

博士

导师: Alison J. Frontier

1996-2004 中国科学技术大学

本科, 硕士

导师: 汪志勇

研究经历

2013.6-目前 南京理工大学化工学院

副教授

2018.9-2018.12 The Scripps Research Institute

访问研究员

2016.12-2017.3 University of Florida College of Pharmacy

访问学者

2014.7-2014.8 University of Maryland School of Pharmacy

访问学者

2011.9-2013.6 Anichem, Inc (North Brunswick, NJ, USA)

高级研究员

2009.9-2011.8 University of Illinois at Urbana-Champaign

博士后 导师: M. Christina White

研究基金和人才计划

- 2015-2017: 国家自然科学基金青年基金 (NSFC), 主要负责人。(Grant No. 21402092)
- 2018-2021: 国家自然科学基金面上项目 (NSFC), 主要负责人。(Grant No. 21772092)
- 2014-2017: 江苏省自然科学基金, 主要负责人。(Grant No. BK20140775)
- 2013-2016: 南京理工大学“紫金之星”人才计划, 自由探索专项, 主要负责人。
- 2014-2017: 江苏省高层次创新创业人才引进计划, “双创博士”和“双创团队”

部分发表论文

1. Gao, Y. D.; Yang, C.; Sonlin Bai, Liu X. L.; Wu, Q. C.; **Jiang, C.***Qi, X. B.*, “Visible-light-induced Nickel-catalyzed Cross-coupling with Alkylzirconocenes from Unactivated Alkenes” *Chem*, Dec.12, **2019**.
2. Zhao, S. F.; Ma, W. C.; Yasir, M.; Zhou, X. L.; Cheng, J. T.; **Jiang, C.*** “Palladium-Catalyzed C2-Selective Alkynylation of Indoles with Bromoalkynes” *ChemistrySelect* **2018**, 3, 13319–13322.
3. Wang, Q. M.; Yang, C.; **Jiang, C.*** “Visible-light-promoted radical acylation/cyclization of alkynoates with aldehydes for the synthesis of 3-acylcoumarins” *Org. Biomol. Chem.*, **2018**, 16, 8196-8204.
4. Fu, J. J.; Gao, Y. D.; Qi, X. B.; **Jiang, C.*** “Synthesis of Polysubstituted Pyridines and Indoles by a Palladium-Catalyzed Catellani-type Alkylation-Alkenylation Sequence” *ChemistrySelect* **2018**, 3, 10164–10168.
5. Yang, C.; Zhang, C.; Zheng, Z.; **Jiang, C.**; Luo, J.; Du, Y.; Hu, B.; Sun, C.; Christe, K. O. “Synthesis and Characterization of cyclo-Pentazolates Salts of NH_4^+ , NH_3OH^+ , N_2H_5^+ , $\text{C}(\text{NH}_2)_3^+$, and $\text{N}(\text{CH}_3)_4^+$ ” *J. Am. Chem. Soc.*, **2018**, 140, 16488.

6. Yang, C.; Wang, J.; Li, J. H.; Ma, W. C.; An, K.; He, W. **Jiang, C.*** “Visible - Light Induced Radical Silylation for the Synthesis of Dibenzosiloles via Dehydrogenative Cyclization” *Adv. Synth. Catal.*, **2018**, *360*, 3049–3054.
7. **Jiang, C.**; Zhang, L.; Sun, C. G.; Zhang, C.; Yang, C.; Chen, J.; Hu, B. C.* “Response to Comment on “Synthesis and characterization of the pentazolate anion *cyclo-N₅⁻* in (N₅)₆(H₃O)₃(NH₄)₄Cl” *Science*, **2018**, *359*, aas8953.
8. Sun, C. G.; Zhang, C.; **Jiang, C.**; Chen, Y., Du, Y. Zhao, Y.; Hu, B. C.*; Zheng, Z. S.; Christe, K. O.* “Synthesis of AgN₅ and its extended 3D energetic framework” *Nature Commun.*, **2018**, *9*:1269, DOI: 10.1038/s41467-018-03678-y.
9. Tu, D. Q.; Luo, J.; **Jiang, C.*** “Copper-mediated domino C - H iodination and nitration of indoles” *Chem. Commun.*, **2018**, *54*, 2514–2517.
10. Zeng, W. T.; Nukeyeva, M.; Wang, Q. M. and **Jiang, C.*** “Synthesis of Unnatural α -Amino Acid Derivatives via Selective o-C-H Functionalization” *Org. Biomol. Chem.*, **2018**, *16*, 598–608.
11. Gao, Y. D.; Zhu, W. Y.; Yin, L.; Dong, B.; Fu, J. J.; Ye, Z. W.; Xue, F. T.* and **Jiang, C.*** “Palladium-catalyzed direct C₂-arylation of free (N-H) indoles via norbornene-mediated regioselective C-H activation” *Tetrahedron Lett.*, **2017**, *58*, 2213–2216.
12. Liang, D. D.; Sersen, D.; Yang, C.; Deschamps, J. R.; Imler, G. H.; **Jiang, C.*** Xue, F. T.* “One-Pot Sequential Reaction to 2-Substituted-Phenanthridinones from N-Methoxybenzamides” *Org. Biomol. Chem.*, **2017**, *15*, 4390–4398.
13. Zuo, R.; Zhang, Y., **Jiang, C.**; Hackett, J. C.; Loria, R.; Bruner, S. D.; Ding, Y. S.* “Engineered P450 biocatalysts show improved activity and regiopromiscuity in aromatic nitration” *Sci. Rep.* **7**, 842; DOI:10.1038/s41598-017-00897-z (2017)
14. Liang, D.; Yu, W.; Nguyen, N.; Deschamps, J. R.; Imler, G. H.; Li, Y.; MacKerell, A. D.; **Jiang, C.**; Xue, F. T.* “Iodobenzene-Catalyzed Synthesis of Phenanthridinones via Oxidative C–H Amidation” *J. Org. Chem.* **2017**, *82*, 3589–3596.
15. Li, M.; Lv, Z.-W.; Zheng, J.-F.; Hu, J.-H.; **Jiang, C.*** Ueda, M.; Zhang, X.* and Wang, L.-J.* “Positively Charged Nanofiltration Membrane with Dendritic Surface for Toxic Element Removal” *ACS Sustainable Chem. Eng.*, **2017**, *5*, 784–792.
16. Cao, W.-W.; Peng, X.-F.; Chen, X.-Q.; Wang, X.; Jin, F.; Li, Q.; Chen, H.-N.; **Jiang, C.**; Ye, Z.-W.; and Xing, X.-D.* “Facile synthesis of cationic polymer functionalized nanodiamond with high dispersity and antibacterial activity” *J Mater Sci.*, **2017**, *52*, 1856–1867.
17. Xu, Y.-G.; Shen, C.; Lin, Q.-H.; Wang, P.-C.*; **Jiang, C.** and Lu, M.* “1-Nitro-2-trinitromethyl substituted imidazoles: a new family of high performance energetic materials†” *J. Mater. Chem. A*, **2016**, *4*, 17791–17800.
18. Yang, C.; Cheng, G. Y.; Huang, B. F.; Xue, F. T.* and **Jiang, C.*** “Metal-free regioselective construction of indolin-3-ones via hypervalent iodine oxidation of N-substituted indoles” *RSC Adv.*, **2016**, *6*, 87134–87141.
19. Tu, D. Q.; Cheng, X. Z.; Gao, Y. D.; Yang, P. P.; Ding, Y. S.* and **Jiang, C.*** “Palladium-catalysed direct C-2 methylation of indoles” *Org. Biomol. Chem.*, **2016**, *14*, 7443–7446.
20. Le, J.; Gao, Y. D.; Ding, Y. S.* and **Jiang, C.*** “Cu-mediated C₂-dehydrogenative homocoupling of indoles via C–H activation assisted by a removable N-pyrimidyl group” *Tetrahedron Lett.*, **2016**, *57*, 1728–1731.
21. Cheng, X. Z.; Chen, Z.; Gao, Y. D.; Xue, F. T.* and **Jiang, C.*** “Aminoquinoline-assisted vinylic C–H arylation of unsubstituted acrylamide for the selective synthesis of Z olefins” *Org. Biomol.*

- Chem.*, **2016**, *14*, 3298–3306. Highlighted by “SYNFACTS 2016, 12(5), 0487.”
22. Yang, W.; Coutinho, A. L.; **Jiang, C.*** and Xue, F. T.* “Ligand-free copper-mediated N-arylation of spirocyclic lactams” *Tetrahedron Lett.*, **2015**, *56*, 5599–5603.
 23. Zhao, J.; Cheng, X. Z.; Le, J.; Yang, W.; Xue, F. T.; Zhang, X.; **Jiang, C.*** “Cu-Mediated Direct Regioselective C-2 Chlorination of Indoles” *Org. Biomol. Chem.*, **2015**, *13*, 9000–9004.
 24. Yang, W.; Sun, X. Y.; Yu, W. B.; Rai, R.; Deschamps, J. R.; Mitchell, L. A.; **Jiang, C.**; MacKerell, Jr., A. D.; Xue, F. T.* “Facile Synthesis of Spirocyclic Lactams from β -Keto Carboxylic Acids” *Org. Lett.* **2015**, *17*, 3070–3073.
 25. Carlsen, P. N.; **Jiang, C.**; Herrick, I. R.; Frontier, A. J.* “Studies toward the AB ring system of the tetrapetalone natural products” *Tetrahedron* **2015**, *71*, 5886–5896.
 26. **Jiang, C.**; Covell, D. J.; Stepan, A. F.; Plummer, M. S.; White, M. C.* “Sequential Allylic C—H Amination/Vinyl C—H Arylation: A Strategy for Amino Acid Synthesis.” *Org. Lett.* **2012**, *14*, 1386–1389.
 27. **Jiang, C.**; Frontier, A. J.* “Stereoselective Synthesis of Pyrrolidine Derivatives via Reduction of Substituted Pyrroles.” *Org. Lett.* **2007**, *9*, 4939–4942.
 28. **Jiang, C.**; Yu, ZP; Jiao, C; Wang, SJ; Li, JM; Wang, ZY*; Cui, Y.* “Luminescent Zn and Cd Coordination Polymers.” *Eur. J. of Inorg. Chem.* **2004**, 4669–4674.
 29. **Jiang, C.**; Yu, ZP; Wang, SJ; Jiao, C; Li, JM; Wang, ZY*; Cui, Y.* “Rational Design of Metal-Organic Frameworks Based on 5-(4-Pyridyl)tetrazolate: From 2D Grids to 3D Porous Networks.” *Eur. J. of Inorg. Chem.* **2004**, 3662–3667.
 30. **Jiang, C.**; Wang, Z. Y. “Synthesis, structure and interconversion of two Co(II) coordination polymers showing topological isomerism from 1-D chain to 3-D chiral network.” *Polyhedron* **2003**, *22*, 2953–2959.
 31. **Jiang, C.**; Zhu, X.; Yu Z. P.; Wang, Z. Y.* “Molecular chains: two new isomorphous coordination polymers of oxydiacetate.” *Inorg. Chem. Commun.* **2003**, *6*, 706–709.
 32. Yong, G. P.; **Jiang, C.**; Wang, Z. Y.* “A 2D Acentric Coordination Polymer:[Mn(HIDA)₂(H₂O)₂] with Strong Second-Order Nonlinear Optical Effect.” *Z. Anorg. Allg. Chem.*, **2003**, *629*, 1898–1900.

申请专利

1. 姜超, 乐俊, “一种合成 2,2'-二聚吡啶类化合物的方法”, 专利申请号: 2016101367430
2. 姜超, 曾晚婷, “一种合成苯甘氨酸类衍生物及方法”, 专利申请号: 201610659271.7
3. 姜超, 杨超, “一种合成 C2-乙酰氧基-3-吡啶酮类化合物及方法”, 专利申请号: 201610630210.8
4. 姜超, 赵树芳, “一种合成 2-三异丙基硅基乙炔吡啶类化合物的方法”, 专利申请号: 201610659879.X
5. 姜超, 高亚东, 李建华, “一种合成[a]环化吡啶类衍生物的方法”, 专利申请号: 201610961417.3
6. 姜超, 莫迪, 曾晚婷, “一种苯丙氨酸类衍生物及其合成方法”, 专利申请号: 201710086822.X
7. 姜超, 王秋梅, “一种合成苯甘氨酸烷基化衍生物的方法”, 专利申请号: 201710023850.7
8. 姜超, 亚斯, 赵树芳, “ α 炔基取代醚类化合物的合成方法”, 专利申请号: 201710769142.8
9. 洪星星, 姜超, 魏香宛, “吡啶并降冰片烷类及其衍生物的合成方法”, 专利申请号: 201710764801.9
10. 姜超, 李建华, 高亚东, “一种合成[b]-环化吡啶类衍生物的方法”, 专利申请号: 201711422887.3

会议报告

1. **Jiang, C.**; Tu, D. Q. “Copper-Mediated Domino C-H Iodination and Nitration of Indoles.” *Abstracts of Papers*, 255th ACS National Meeting, New Orleans, LA, March 18-22, **2018**.

2. **Jiang, C.**; Yang, C.; Cheng, G. Y.; Huang, B. F.; Xue, F. T. "Metal-free Regioselective Construction of Indolin-3-ones via Hypervalent Iodine Oxidation of N-substituted Indoles." *Abstracts of Papers, 254th ACS National Meeting*, Washington DC, August 20-24, **2017**.
3. **Jiang, C.**; Xue, F. T.; Cheng, X. Z.; Gao, Y. D. "Aminoquinoline-assisted vinylic C-H arylation of unsubstituted acrylamide for the selective synthesis of Z-olefins." *Abstracts of Papers, 252th ACS National Meeting*, Philadelphia, PA, August 21-25, **2016**.
4. Jacob, S.; **Jiang, C.**; Frontier, A. J. "Stereoselective synthesis of pyrrolidine derivatives via reduction of substituted pyrroles." *Abstracts of Papers, 42nd National Organic Chemistry Symposium*, Princeton University, Princeton, NJ, June 5-9, **2011**.
5. **Jiang, C.**; Frontier, A. J. "Stereoselective synthesis of pyrrolidine derivatives via reduction of substituted pyrroles." *Abstracts of Papers, 238th ACS National Meeting*, Washington DC, August 16-20, **2009**.
6. **Jiang, C.**; Frontier, A. J. "Catalytic Hydrogenation of Substituted Pyrroles: Stereoselective Synthesis of Pyrrolidine Derivatives." *SYCAM Colloquium Seminar*, University of Rochester, Rochester, NY, October 31, **2007**.
7. **Jiang, C.**; Frontier, A. J. "Diastereoselective Hydrogenation of Pyrrole Derivatives Substituted with α -Ketoester." *Abstracts of Papers, 40th National Organic Chemistry Symposium*, Duke University, Durham, NC, June 3-7, **2007**.
8. **Jiang, C.**; Wang, Z. Y. "Hydro(Solvo)Thermal Synthesis of New Metal-Organic Frameworks in Sealed Tube." *4th International Symposium on Green Chemistry in China (4th ISGCC 2001)*, Shandong University, Jinan, Shandong, China, May 20-24, **2001**.

学术活动

杂志审稿 (部分)

- *Organic Letters, The Journal of Organic Chemistry, Chemistry - An Asian Journal, ChemComm, Green Chemistry, New Journal of Chemistry, Organic & Biomolecular Chemistry, RSC Advances, ChemistrySelect, Tetrahedron Letters/Tetrahedron*

专业协会

- 中国化学会会员, 江苏省化学化工学会会员, 美国化学协会会员, 美国科学研究协会高级会员 (SIGMA XI), 江苏省生物技术协会青年专家委员会副秘书长, 江苏省双创人才联合会副秘书长, 九三学社南理工支社委员