

Jinghan Gui

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Date/Place of Birth: 30 June, 1987 / Xuancheng, Anhui, China

Gender: Male

Education and Working Experience

2023.3 – present **Professor**

State Key Laboratory of Chemical Biology

Shanghai Institute of Organic Chemistry, CAS, Shanghai, China

2016.3 – 2023.2 **Professor**

CAS Key Laboratory of Synthetic Chemistry of Natural Substances

Shanghai Institute of Organic Chemistry, CAS, Shanghai, China

2013.2 – 2016.3 **Postdoctoral Associate**

Scripps Research, La Jolla, California, United States

Advisor: Prof. Phil S. Baran

2012.7 – 2013.2 **Research Associate**

Shanghai Institute of Organic Chemistry, CAS, Shanghai, China

Advisor: Prof. Weisheng Tian

2007.9 – 2012.7 **Ph.D. Graduate Student in Organic Chemistry**

Shanghai Institute of Organic Chemistry, CAS, Shanghai, China

Advisor: Prof. Weisheng Tian

2003.11 – 2007.7 **B.S. Degree in Chemistry**

Anhui Normal University, Wuhu, Anhui, China

Advisor: Prof. Yimin Hu

Honors and Awards

- 2023, Asian Core Program Lectureship Award (Thailand)
- 2022, University of Chinese Academy of Sciences Lingyan Medal

- 2022, Chinese Academy of Sciences Youth May Fourth Medal
- 2022, Natural Product Reports Emerging Investigator Lectureship
- 2021, National Science Fund for Excellent Young Scholars
- 2021, Xplorer Prize
- 2021, Chinese Academy of Sciences Outstanding Mentor Award
- 2021, Shanghai Science & Technology 35 Talents Under 35 Award
- 2020, Chinese Chemical Society Young Chemist Award
- 2020, EurJOC Lecture Award
- 2020, Chinese Chemical Society Jingqing Emerging Chemist Award
- 2019, Thieme Chemistry Journals Award
- 2012, Zhuliyuehua Outstanding Doctoral Award, Chinese Academy of Sciences
- 2012, Eli Lilly Asia Outstanding Graduate Thesis Award (2nd place)

Representative Publications

1. Cen, K.; Bao, J.; Wang, X.; Tian, H.; Wang, Y.; Gui, J.* Bioinspired Divergent Synthesis of Aspersteroids A and B. *J. Am. Chem. Soc.* **2024**, *146*, 6481–6486.
2. Song, H.; Zhang, Z.; Cao, C.;* Tang, Z.;* Gui, J.;* Liu, W.* Biocatalytic Steroidal 9 α -Hydroxylation and Fragmentation Enable the Concise Chemoenzymatic Synthesis of 9,10-Secosteroids. *Angew. Chem. Int. Ed.* **2024**, *63*, e202319624.
3. Wang, Y.; Gui, J.* Bioinspired Skeletal Reorganization Approach for the Synthesis of Steroid Natural Products. *Acc. Chem. Res.* **2024**, *57*, 568–579.
4. Zhang, Z.; Qian, X.; Gu, Y.; Gui, J.* Controllable skeletal reorganizations in natural product synthesis. *Nat. Prod. Rep.* **2024**, *41*, 251–272.
5. Wang, X.; Huang, G.; Wang, Y.; Gui, J.* Asymmetric Total Synthesis of the Rearranged Steroid Phomarol Enabled by a Biomimetic S_N2' Cyclization. *J. Am. Chem. Soc.* **2023**, *145*, 9354–9363.
6. Yang, P.; Li, Y.-Y.; Tian, H.; Qian, G.-L.; Wang, Y.; Hong, X.;* Gui, J.* Syntheses of Bufospirostenin A and Ophiopogonol A by a Conformation-Controlled Transannular Prins Cyclization. *J. Am. Chem. Soc.* **2022**, *144*, 17769–17775.
7. Wang, Y.; Tian, H.; Gui, J.* Gram-Scale Synthesis of Bufospirostenin A by a Biomimetic Skeletal Rearrangement Approach. *J. Am. Chem. Soc.* **2021**, *143*, 19576–19586.

8. Ju, W.; Wang, X.; Tian, H.; Gui, J.* Asymmetric Total Synthesis of Clionastatins A and B. *J. Am. Chem. Soc.* **2021**, *143*, 13016–13021.
9. Li, X.; Zhang, Z.; Fan, H.; Miao, Y.; Tian, H.; Gu, Y.; Gui, J.* Concise Synthesis of 9,11-Secosteroids Pinnigorgiols B and E. *J. Am. Chem. Soc.* **2021**, *143*, 4886–4890.
10. Ning, Y.; Tian, H.; Gui, J.* Biogenesis-Guided Synthesis and Structural Revision of Sarocladione Enabled by Ruthenium-Catalyzed Endoperoxide Fragmentation. *Angew. Chem. Int. Ed.* **2021**, *60*, 11222–11226 (VIP).
11. Wang, Y.; Chen, B.; He, X.; Gui, J.* Bioinspired Synthesis of Nortriterpenoid Propindilactone G. *J. Am. Chem. Soc.* **2020**, *142*, 5007–5012.
12. Deng, J.; Ning, Y.; Tian, H.; Gui, J.* Divergent Synthesis of Antiviral Diterpenes Wickerols A and B. *J. Am. Chem. Soc.* **2020**, *142*, 4690–4695.
13. Wang, Y.; Ju, W.; Tian, H.; Sun, S.; Li, X.; Tian, W.; Gui, J.* Facile Access to Bridged Ring Systems via Point-to-Planar Chirality Transfer: Unified Synthesis of Ten Cyclocitrinols. *J. Am. Chem. Soc.* **2019**, *141*, 5021–5033.
14. Wang, Y.; Ju, W.; Tian, H.; Tian, W.; Gui, J.* Scalable Synthesis of Cyclocitrinol. *J. Am. Chem. Soc.* **2018**, *140*, 9413–9416.
15. Deng, J.; Wu, J.; Tian, H.; Bao, J.; Shi, Y.; Tian, W.;* Gui, J.* Alkynes From Furans: A General Fragmentation Method Applied to the Synthesis of the Proposed Structure of Aglatomin B. *Angew. Chem. Int. Ed.* **2018**, *57*, 3617–3621.
16. Gui, J.; Pan, C.-M.; Jin, Y.; Qin, T.; Lo, J. C.; Lee, B. J.; Spergel, S. H.; Mertzman, M. E.; Pitts, W. J.; La Cruz, T. E.; Schmidt, M. A.; Darvatkar, N.; Natarajan, S. R.; Baran, P. S.* Practical olefin hydroamination with nitroarenes. *Science* **2015**, *348*, 886–891.
17. Lo, J. C.;† Gui, J.;† Yabe, Y.; Pan, C.-M.; Baran, P. S.* Functionalized olefin cross-coupling to construct carbon-carbon bonds. *Nature* **2014**, *516*, 343–348 (†equal contribution).
18. Gui, J.;† Zhou, Q.;† Pan, C.-M.; Yabe, Y.; Burns, A. C.; Collins, M. R.; Ornelas, M. A.; Ishihara, Y.; Baran, P. S.* C-H Methylation of Heteroarenes Inspired by Radical SAM Methyl Transferase. *J. Am. Chem. Soc.* **2014**, *136*, 4853–4856 (†equal contribution).
19. Gui, J.; Wang, D.; Tian, W.* Biomimetic Synthesis of 5,6-dihydro-glaucogenin C: Construction of the Discopregnane Skeleton by Iron(II)-Promoted Fragmentation of an α -Alkoxy Hydroperoxide. *Angew. Chem. Int. Ed.* **2011**, *50*, 7093–7096.