

General

Date of Birth: 18th Oct. 1996

Place of Birth: Changsha, China

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Research Career

2024/10 – present **Postdoctoral Fellow**, WPI-ICReDD, Hokkaido University, Japan.

Supervisor: Prof. Mingoo Jin.

Education

2021/10 – 2024/09 **Ph.D.** of *Molecular Chemistry and Engineering*, Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan.

Supervisor: Prof. Hajime Ito.

Thesis: Circularly polarized luminescence active crystalline materials based on chiral NHC Au(I) complexes and control by molecular dynamics.

2018/09 – 2021/06 **M.Sc.** of *Chemical Engineering*, College of Chemistry, Xiangtan University, China.

Supervisor: Prof. Guo-Jun Deng.

Thesis: Research on accesses to dibenzofuran and indoloindole using cyclohexanone as primary reactant.

2014/09 – 2018/06 **B.Sc.** of *Pharmaceutical Engineering*, School of Chemistry and Chemical Engineering, Qufu Normal University, China.

Selected Publications

1. [P. Jiang](#); A. S. Mikherdov; H. Ito,* M. Jin,* Solid-state Dynamics of Binuclear *N*-Heterocyclic Carbene Au(I) Rotor with *para*-Phenylene Rotator, *Chemistry Letters* **2024**, 53, upae139, **DIO:** [10.1093/chemle/upae139](https://doi.org/10.1093/chemle/upae139);
2. [P. Jiang](#),[#] A. S. Mikherdov,[#] H. Ito,* M. Jin,* Crystallization-Induced Chirality Transfer in Conformationally Flexible Azahelicene Au (I) Complexes with Circularly Polarized Luminescence Activation, *Journal of the American Chemical Society* **2024**, 146, 12463-12472, **DIO:** [10.1021/jacs.4c00345](https://doi.org/10.1021/jacs.4c00345);
3. [P. Jiang](#),[#] Z. Shan,[#] S. Chen,* Q. Wang; S. Jiang; H. Zheng; G.-J. Deng,* Metal-Free Synthesis of Benzo[*a*]phenanthridines from Aromatic Aldehydes, Cyclohexanones, and Aromatic Amines, *Chinese Journal of Chemistry* **2022**, 40, 365-370, **DIO:** [10.1002/cjoc.202100670](https://doi.org/10.1002/cjoc.202100670);
4. [P. Jiang](#); S. Chen,* H. Huang; K. Hu; Y. Xia; G.-J. Deng,* Metal-free synthesis of indolo [2, 3-*b*] indoles through aerobic cascade dehydrogenative aromatization/oxidative annulation, *Green Synthesis and Catalysis* **2021**, 2, 78-81, **DIO:** [10.1016/j.gresc.2021.01.004](https://doi.org/10.1016/j.gresc.2021.01.004);
5. [P. Jiang](#); S. Chen,* Y. Xia; Q. Zhang; G.-J. Deng,* Access to dibenzofurans through dimerization/trimerization of

cyclohexanones followed by dehydroaromatization, *Organic Letters* **2020**, *22*, 8076-8081, **DIO:** [10.1021/acs.orglett.0c03023](https://doi.org/10.1021/acs.orglett.0c03023);

6. S. Chen;* [P. Jiang](#); P. Wang; Y. Pei; H. Huang; F. Xiao; G.-J. Deng,* Three-component cascade synthesis of carbazoles through [1s, 6s] sigmatropic shift under metal-free conditions, *The Journal of Organic Chemistry* **2019**, *84*, 3121-3131, **DIO:** [10.1021/acs.joc.8b02994](https://doi.org/10.1021/acs.joc.8b02994).

– equal contributions; * – corresponding author

Selected Presentations

1. [P. Jiang](#); A. S. Mikherdov; H. Ito; M. Jin: Crystallization induced ligand-to-ligand chirality transfer activating solid-state circularly polarized luminescence of *N*-heterocyclic carbene gold(I) dibenzocarbazole complexes, Oral presentation at the 73rd Conference of the Japanese Society of Coordination Chemistry (2023, Mito, Japan);
2. [P. Jiang](#); A. S. Mikherdov; H. Ito; M. Jin: Modulation of Circularly Polarized Luminescence through Molecular Rotation within Arm Branches of Binuclear Chiral *N*-Heterocyclic Carbene Au(I) Complexes in Crystalline Media, Poster Presentation at 7th ICREDD International Symposium: Rising Stars Program, (2024, Sapporo, Japan).

Awards and Scholarships

2021 State Scholarship Fund for high level abroad Ph.D. study, China Scholarship Council.

Skills

Lab skills	Synthesis and analysis of organic, coordination compounds, crystal engineering, photophysical studies.
Software	<i>Basic:</i> ChemOffice, Microsoft Office, EndNote. <i>Crystal data refinement and analysis:</i> Olex2, CrysAlis, CCDC Software, CrystalExplorer; <i>Data fitting, analysis, and visualization:</i> Igor pro, Origin, VMD; <i>Theoretical calculations:</i> Gaussian, Multiwfn, Chemcraft.
Research equipment	Single-crystal and powder X-ray diffraction, solution and solid-state NMR spectroscopy; UV-vis, fluorescence, CD, CPL, IR spectroscopies; GC, HPLC and other chromatographic analysis.

References

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Prof. Guo-Jun Deng

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