

Curriculum Vitae

PERSONAL

Name: Siqi Dong (董思琦)
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EDUCATIONAL EXPERIENCES

9/2018-6/2022 B.S., Zhengzhou University Zhengzhou, China

- Synthesis of Chiral MOFs
- Separation of enantiomers (1,1'- bi-2-naphthol)
- The mechanism of chiral recognition via Raman spectroscopy and SSNMR

9/2022-6/2025 M.S., China Academy of Engineering Physics Mianyang, China

- Synthesis of Halogen-Modified MOFs
- Separation of the noble gases (xenon and krypton)
- Gas adsorption simulation analysis by using the Materials Studio - Sorption

8/2025-NOW RA., The Hong Kong University of Science and Technology (Guang Zhou) Guangzhou, China

- Mixed matrix membranes (MMMs)
- Structure tuning and pore design
- Gas separation

PUBLICATIONS

1. **Siqi Dong**, Boyu Liu, Ka Lv, Shuanglin Hu, Zirui Liu, Zhenghao Mao*, Shunshun Xiong*, Bromine functionalized zirconium-fumarate frameworks for enhanced xenon capture and separation, *Separation and Purification Technology*, (2025) 132282

2. **Siqi Dong**¹, Bochun Zhang¹, Mohammad Wahiduzzaman, Chuting Yang, Qiang Liu, Guillaume Maurin, Shunshun Xiong*, Sujing Wang*, Xiaolin Wang*, Krypton/Xenon Separation at Room Temperature in a Flexible Coordinative Framework Sorbent, submitted

3. Boyu Liu, **Siqi Dong**, Ka Lv, Zirui Liu, Songzhu Qi, Shunshun Xiong*, Sheng Hu*, Geometrical pore engineering via ligand racemization in metalorganic frameworks for enhanced Xe capture and separation, *Journal of Materials Chemistry A*, 13 (2025) 12195 – 12202.

4. Qingqing Yan¹, Shuyi An¹, Liang Yu¹, Shenfang Li, Xiaonan Wu, **Siqi Dong**, Shunshun Xiong*, Hao Wang*, Sujing Wang* & Jiangfeng Du, A Ni₄O₄-cubane-squarate coordination framework for molecular recognition, *Nature Communications*, 15 (2024) 9911.

5. Boyu Liu, Xiaonan Wu, Qiang Liu, Youjin Gong, Songzhu Qi, **Siqi Dong**, Zhenghao Mao, Shunshun Xiong*, Sheng Hu*, Suitable Pore Confinement with Multiple Interactions in a Low-Cost Zeolitic Imidazolate Framework for Efficient Xe Capture and Separation, *Separation and Purification Technology*, 354 (2025) 128868.