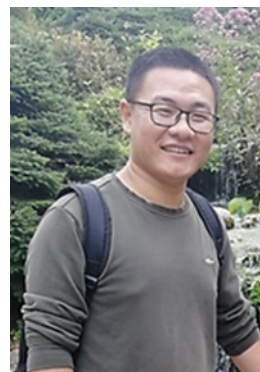


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教育经历:

2015.09-2021.06 山东大学 晶体材料研究所 工学博士

2018.10-2020.10 美国威斯康辛麦迪逊分校 访问学者

2011.09-2015.06 济南大学 材料科学与工程学院 学士

工作经历:

2021.12-至今 讲师 鲁东大学物理与光电工程学院

目前研究领域:

有机晶体的成核与生长

药物分子晶体结构的主动设计及调控

药物分子晶体结构与性质研究

承担课题:

鲁东大学人才引进项目, 2021.12-2026.12, 主持

山东省自然科学基金青年项目 (ZR2023QB252), 2024.01-2026.12, 主持

国家自然科学基金面上项目 (62275115), 2023.01-2025.12, 参与

主讲课程:

《普通物理实验》

学术成果:

相关研究成果发表在 *J. Am. Chem. Soc.*, *J. Phys. Chem. Lett.*, *ACS Appl. Mater. Interfaces*, *Cryst. Growth Des.*, *CrystEngComm*, *J. Pharm. Sci.* 等材料、化学、晶体学主流期刊, 近五年代表性论文如下:

- (1) Sun K.#, Han P.#, Yao C.*, Zhao Y., Zhang C. Zhang Y.* Jiang J., Wang L., Surface Accelerates Crystal Nucleation: The Case of Molnupiravir. Under Review. **2024 通讯作者**
- (2) Zhang Z., Zheng Y., Yao C*, Liu Z., Wang X., He Z., Xie G., Zhong H.*, Zhang Q., Zhang S.*, Revealing the underlying crystallization mechanism of perovskite crystals affected by additives with a typical surfactant span 20. Under Review. **2024 通讯作者**
- (3) Han P., Wang L.*, Song S., Yao C.*, Tao X., Xie G., Li H., Qu Y., Wang H., Gao Z., Sun Y., Wu H., Song W., Polymorphs and Solvates of Molnupiravir: Crystal Structures and Solid Forms Transformation Analysis, *Cryst. Growth Des.* **2024 通讯作者**
- (4) Li H., Wang L.*, Ye X., Yao C., Song S., Qu Y., Jiang J., Wang H., Han P., Liu Y., Tao X.*, Efficient Screening of Pharmaceutical Cocrystals by Microspacing In-Air Sublimation, *J. Am. Chem. Soc.*, 146, **2024**, 11592-11598.
- (5) Wang H., Wang L.*, Xie G., Yao C., Song S., Li H., Qu Y., Han P., Gao Z., Tao X.*, Solvates and Polymorphs of Baloxavir Marboxil: Crystal Structure and Phase Transformation Study, *Cryst. Growth Des.*, 24, **2024**, 3399-3409.
- (6) Li H., Wang L.*, Xie G., Yao C., Song S., Qu Y., Han P., Wang H., Sun Y., Wu H., Tao X.*, Cocrystals of Favipiravir: Improved Physicochemical Properties and Solution Stability Study, *Cryst. Growth Des.*, 23, **2023**, 8656-8669.
- (7) Yao C., Zhang S.*, Wang L.*, Tao X.*, Recent Advances in Polymorph Discovery Methods of Organic Crystals, *Cryst. Growth Des.*, 23, **2023**, 637-654. **第一作者**
- (8) Xie, G.; Wang, L.; Ju, D.; Yao, C.; Wang, X.; Song, S.; Qu, Y.; Li, H.; Tao, X. Thermochromism Perovskite (COOH(CH₂)₃NH₃)₂PbI₄ Crystals: Single-Crystal to Single-Crystal Phase Transition and Excitation-Wavelength-Dependent Emission. *J. Phys. Chem. Lett.* **2022**, 13, 214-221.
- (9) Yao, C.; Wang, L.; Wang, X.; Tao, X. Size-dependent solution-mediated phase transformation of piroxicam monohydrate particles. *CrystEngComm* **2021**, 23, 2928-2932. **第一作者**

- (10) Xie, G.; Wang, L.; Li, P.; Song, S.; Yao, C.; Wang, S.; Liu, Y.; Wang, Z.; Wang, X.; Tao, X. Low-Dimensional Hybrid Lead Iodide Perovskites Single Crystals via Bifunctional Amino Acid Cross-Linkage: Structural Diversity and Properties Controllability. *ACS Appl. Mater. Interfaces*. **2021**, 13, 3325-3335.
- (11) Wang, X.; Wang, L.; Yao, C.; Xie, G.; Song, S.; Li, H.; Qu, Y.; Tao, X. Novel Formulations of the Antiviral Drug Favipiravir: Improving Permeability and Tabletability. *Cryst. Growth Des.* **2021**, 21, 3807-3817.
- (12) Song, S.; Wang, L.; Yao, C.; Qu, Y.; Tao, X. Insights into the Classical and Nonclassical Crystallization Pathways in Pharmaceutical Science. In *Crystallization via Nonclassical Pathways Volume 2: Aggregation, Biomineralization, Imaging & Application*, ACS Symposium Series, Vol. 1383; American Chemical Society, **2021**, 199-227.
- (13) Yao, C.; Guzei, I. A.; Jin, Y.; Ruan, S.; Sun, G.; Gui, Y.; Wang, L.; Yu, L. Polymorphism of Piroxicam: New Polymorphs by Melt Crystallization and Crystal Structure Prediction. *Cryst. Growth Des.* **2020**, 20, 7874-7881. 第一作者
- (14) Song, S.; Wang, L.; Yao, C.; Wang, Z.; Xie, G.; Tao, X. Crystallization of Sulfathiazole in Gel: Polymorph Selectivity and Cross-Nucleation. *Cryst. Growth Des.* **2020**, 20, 9-16.
- (15) Wu, Z.; Ma, W.; Wang, L.; Yao, C.; Song, S.; Wang, X. Co-Amorphous Telmisartan-Pimelic Acid with Improved Solubility. *Mater. Sci. Forum* **2020**, 993, 776-784.
- (16) Yao, C.; Li, Y.; Wang, L.; Song, S.; Li, B.; Liu, Y.; Tao, X. Tuning the Solution-Mediated Concomitant Phase Transformation Outcome of the Piroxicam Monohydrate by Two Hydroxyl-Containing Additives: Hydroxypropyl Cellulose and H₂O. *Cryst. Growth Des.* **2019**, 19, 583-590. 第一作者

招生与培养:

目前每年招优秀本科生 3-4 名，欢迎对晶体学感兴趣的同学与我联系。