



## 个人简介

2020.9 – 至今，华东理工大学，化工学院，教授

2013.11– 2014.11, The University of California at Davis, 化工学院, 访问学者

2013.9 – 2020.8, 华东理工大学，化工学院，副教授

2009.7 – 2013.8, 华东理工大学，化工学院，讲师

2004.9 – 2009.6, 华东理工大学，化学工艺，博士

2000.9 – 2004.7, 江南大学，化学工程与工艺，学士

## 研究方向

1. 油气资源净化（脱硫、脱碳等）
2. 面向炼油向化工转型发展的低碳烃分离与高值化利用
3. 二氧化碳捕集与转化
4. 多孔材料（分子筛、有机框架、多孔液体等）开发与功能强化

## 研究成果及主要发表文章

1. Yuxiang Chen, Chuanlei Liu, Yang An, Yue Lou, Yang Zhao, Cheng Qian, Hao Jiang, Kongguo Wu, Benxian Shen, Xianghui Zhang, Fahai Cao, Di Wu\*, Hui Sun\*. Intelligent Molecular Identification Approach to High-Efficiency Solvents for Organosulfide Capture Using the Active Machine Learning Framework. *Energy & Fuels*, 2023, 37, 16, 12123 – 12135
2. Yu Chen, Hao Jiang, Qilong Peng, Diyi Fang, Chuanlei Liu, Kongguo Wu, Yuxiang Chen, Weikang Gao, Hao Wang, Guanchu Guo, Fengjing Yang, Peicheng Li, Benxian Shen, Feng Zhang, Di W\*, Hui Sun\*. Successively separating C3H6 and C2H4 from C2H4/C2H6/C3H6/C3H8 mixture in tandem fixed beds involving two zeolites LTA well-regulated via low transition-metal doping. *Chemical Engineering Journal*, 2023, 473, 145151.
3. Qilong Peng, Yu Chen, Diyi Fang, Chuanlei Liu, Kongguo Wu, Yuxiang Chen, Hao Jiang, Yuanyuan Sun, Qiumin Wu, Di Wu, Hui Sun\*. Enhancing Size-Selective Adsorption of CO2/CH4 on ETS-4 via Ion-Exchange Coupled with Thermal Treatment. *Industrial & Engineering Chemistry Research*, 2023, 62, 23, 9313 – 9324.
4. Yuxiang Chen, Chuanlei Liu, Guanchu Guo, Qiyue Zhao, Hao Jiang, Qiumin Wu, Diyi Fang, Weikang Gao, Yu Chen, Qilong Peng, Kongguo Wu, Benxian Shen, Di Wu, Fahai Cao\*, Hui Sun\*. Physical – chemical coupling machine learning approach to exploring reactive solvents for absorption capture of carbonyl sulfide. *Chemical Engineering Science*, 2023, 280, 118984.
5. Chuanlei Liu, Yuxiang Chen, Guanchu Guo, Qiyue Zhao, Hao Jiang, Kongguo Wu, Qilong Peng, Yu Chen, Diyi Fang, Benxian Shen, Haitao Shen, Di Wu, Hui Sun\*. Interpretable Machine Learning Model for Predicting Interaction Energies between Dimethyl Sulfide and Potential Absorbing Solvents. *Industrial & Engineering Chemistry Research*, 2023, 62, 12, 5274 – 5285.
6. Kongguo Wu, Chuanlei Liu, Yuxiang Chen, Hao Jiang, Qilong Peng, Yu Chen, Diyi Fang, Benxian Shen, Qiumin Wu, Liang Zhan\*, Weizhen Sun, Di Wu, Hui Sun\*. Constructing asymmetric unsaturated copper coordination in Zinc(II)/Copper(I, II)-based metal-organic framework toward productive CO2-to-methanol photocatalytic conversion from CO2-capturing solution. *Applied Catalysis A: General*, 2023, 650, 118970.
7. Yuxiang Chen, Chuanlei Liu, Guanchu Guo, Yang Zhao, Cheng Qian, Hao Jiang, Benxian Shen, Di Wu, Fahai Cao, Hui Sun\*. Machine-learning-guided reaction kinetics prediction towards solvent identification for chemical absorption of carbonyl sulfide. *Chemical Engineering Journal*, 2022, 444, 136662.
8. Yang Zhao, Yuxiang Chen, Cheng Qian, Hao Wang, Hao Jiang, Cheng Niu, Junhao Gai, Qiyue Zhao, Yue Lou, Benxian Shen, Di Wu, Hui Sun\*, Yujun Tong. Constructing AgY@Cu-BTC hybrid composite for enhanced sulfides capture and moisture resistance. *Microporous and Mesoporous Materials*, 2022, 341, 112043.
9. Xianghui Zhang, Cody B. Cockreham, Zhiyang Huang, Hui Sun\*, Chen Yang, Oscar G. Marin-Flores, Baodong Wang, Xiaofeng Guo, Su Ha, Hongwu Xu, Di Wu\*. Thermodynamics of Water – Cationic Species – Framework Guest – Host Interactions within Transition Metal Ion-Exchanged Mordenite Relevant to Selective Anaerobic Oxidation of Methane to Methanol. *The Journal of Physical Chemistry Letters*, 2020, 11: 4774-4778.
10. Wang, J; Yilmaz, E; Zhang, XH; Li, HQ; Zhang, RQ; Guo, XF; Sun, H\*; Wang, BD; Wu, D\*. Hydration Energetics of a Diamine-Appended Metal-Organic Framework Carbon Capture Sorbent. *Journal of Physical Chemistry C*, 2020, 124(1): 398-403.