



Liang Zhou

Department: School of Resources and Environmental Engineering
Professional field: Environmental and Energy Catalysis
E-mail: zhouliang@ecust.edu.cn

Profile

Distinguished Associate Researcher, School of Resources and Environmental Engineering, East China University of Science and Technology, China, 2022.6-present.

Postdoctor, School of Resources and Environmental Engineering, East China University of Science and Technology, China, 2020.1-2022.6

PhD, Environmental Science and Engineering, East China University of Science and Technology, China, 2020.

BS, Environmental Engineering, Shanghai Institute of Technology, China, 2014

Research Field

1. Application of advanced oxidation technology in water pollution and air pollution control
2. Development of functional nanomaterials for energy application

Research results and main published thesis

1. L. Zhou, J. Lei*, L. Wang, Y. Liu*, J. Zhang*, Highly efficient photo-Fenton degradation of methyl orange facilitated by slow light effect and hierarchical porous structure of Fe₂O₃-SiO₂ photonic crystals. *Applied Catalysis B: Environmental*, 2018, 237: 1160-1167.
2. L. Zhou, J. Feng, B. Qiu, Y. Zhou, J. Lei*, M. Xing, L. Wang, Y. Zhou, Y. Liu*, J. Zhang*, Ultrathin g-C₃N₄ nanosheet with hierarchical pores and desirable energy band for highly efficient H₂O₂ production. *Applied Catalysis B: Environmental*, 2020, 267: 118396.
3. L. Zhou, Z. Liu, Z. Guan, B. Tian, L. Wang, Y. Zhou, Y. Zhou, J. Lei*, Y. Liu, J. Zhang, 0D/2D plasmonic Cu₂-xS/g-C₃N₄ nanosheets harnessing UV-vis-NIR broad spectrum for photocatalytic degradation of antibiotic pollutant. *Applied Catalysis B: Environmental*, 2020, 263: 118326.
4. L. Zhou, Y. Tian, J. Lei*, L. Wang, Y. Liu*, J. Zhang*, Self-modification of g-C₃N₄ with its quantum dots for enhanced photocatalytic activity. *Catalysis Science & Technology*, 2018, 8(10): 2617-2623.
5. L. Zhou, L. Wang, J. Lei*, Y. Liu*, J. Zhang, Fabrication of TiO₂/Co-g-C₃N₄ heterojunction catalyst and its photocatalytic performance. *Catalysis Communications*, 2017, 89: 125-128.
6. L. Zhou, L. Wang, J. Zhang, J. Lei*, Y. Liu*, Well-Dispersed Fe₂O₃ Nanoparticles on g-C₃N₄ for Efficient and Stable Photo-Fenton Photocatalysis under Visible-Light Irradiation. *European Journal of Inorganic Chemistry*, 2016, 2016(34): 5387-5392.
7. L. Zhou, L. Wang, J. Lei*, Y. Liu*, The preparation, and applications of g-C₃N₄/TiO₂ heterojunction catalysts--a review, *Research on Chemical Intermediates*, 2017, 43(4): 2081-2101.
8. L. Zhou, J. Lei*, F. Wang, L. Wang, M. R. Hoffmann, Y. Liu, S. In, J. Zhang, Carbon nitride nanotubes with in situ grafted hydroxyl groups for highly efficient spontaneous H₂O₂ production, *Applied Catalysis B: Environmental*, 2021, 288: 119993.
9. W. Xing, L. Zhou*, B. Chen, J. Lei*, L. Wang, J. Zhang*, α-FeOOH-MoO₃ Nanorod for Effective Photo-Fenton Degradation of Dyes and Antibiotics at a Wide Range of pH, *Chemistry-An Asian Journal*, 2020, 15, 2749-2753.
10. S. Lin, N. Zhang, F. Wang, J. Lei, L. Zhou*, Y. Liu*, J. Zhang*, Carbon Vacancy Mediated Incorporation of Ti₃C₂ Quantum Dots in a 3D Inverse Opal g-C₃N₄ Schottky Junction Catalyst for Photocatalytic H₂O₂ Production, *ACS Sustainable Chem. Eng.* 2021, 9, 1, 481-488. (Supplementary Cover Article)
11. N. Zhang, S. Lin, F. Wang, Y. Liu, J. Zhang, L. Zhou*, J. Lei*, Highly Efficient Photocatalytic H₂O₂ Production on Core-shell CdS@CdIn₂S₄ Heterojunction in Non-sacrificial system, *Research on Chemical Intermediates*, 2021, 47, 3379-33934
12. Y. Liu, Q. Zhu, M. Tayyab, L. Zhou*, J. Lei, J. Zhang*, Single-atom Pt loaded zinc vacancies ZnO-ZnS induced type-V electron transport for efficiency photocatalytic H₂ evolution. *Sol. RRL*, 2021, 5, 2100536
13. N. Ding, B. Chen, L. Zhou*, L. Wang, Y. Liu, J. Zhang, J. Lei*, Fluorinated inverse opal carbon nitride combined with vanadium pentoxide as a Z-schemephotocatalyst with enhanced photocatalytic activity. *Chinese Chemical Letters*.
14. M. Tayyab, Y. Liu, S. Min, R. Irfan, Q. Zhu, L. Zhou*, J. Lei, J. Zhang*, Simultaneous hydrogen production with the selective oxidation of benzyl alcohol to benzaldehyde by a noble-metal-free photocatalyst VC/CdS nanowires, *Chinese J. Catal.*, 2022, 43, 1165-1175