

## 沈晓凤 个人简介

### 1. 基本信息:

沈晓凤, 女, 出生于 1991 年 1 月, 博士, 环境与资源学院副教授。

地址: 浙江省杭州市西湖区留和路 318 号浙江科技大学实验大楼 603 室。

Email: shenxiaofeng@zust.edu.cn

### 2. 学习简历:

2014.09-2019.06 东华大学, 博士研究生

2010.09-2014.06 山东师范大学, 本科

### 3. 研究方向:

- (1) 高级氧化技术;
- (2) 柔性半导体滤膜状光催化剂的制备及其在流动废水处理中的研究;
- (3) 光催化降解水体中有机物和还原重金属及机理的研究;
- (4) 吸附-光催化协同处理重金属和有机污染物;
- (5) 废弃生物质的资源化利用。

### 4. 取得的研究成果:

至 2020 年 9 月, 以第一作者或者通讯作者身份在 *Applied Catalysis B: Environmental*、*Journal of Hazardous Materials*、*Separation and Purification Technology*、*Journal of Colloid and Interface Science*、*ChemCatChem* 等国际知名期刊累计发表 SCI 论文 9 篇。

### 5. 主持项目:

[1] 国家自然科学基金-青年基金, 24 万, 2021.01-2023.12, 活性炭/半导体平板的构筑及其在光催化净化流动废水中的应用。

### 6. 第一或通讯作者代表性论文:

- [1] **X. Shen**, Y. Zhang, Z. Shi, S. Shan, J. Liu, L. Zhang, Construction of C<sub>3</sub>N<sub>4</sub>/CdS nanojunctions on carbon fiber cloth as a filter-membrane-shaped photocatalyst for degrading flowing wastewater, *J. Alloy. Compd.*, 2021, 851, 156743. (SCI:二区)
- [2] **X. Shen**, J. Yang, T. Zheng, Q. Wang, H. Zhuang, R. Zheng, S. Shan, S. Li, Plasmonic p-n heterojunction of Ag/Ag<sub>2</sub>S/Ag<sub>2</sub>MoO<sub>4</sub> with enhanced Vis-NIR photocatalytic activity for purifying wastewater, *Sep. Purif. Technol.*, 2020, 251, 117347. (SCI:一区)
- [3] **X. Shen**, T. Zheng, J. Yang, Zhun Shi, Q Xue, W. Liu, S. Shan, M. Wong, Removal of Cr(VI) from acid wastewater by BC/ZnFe<sub>2</sub>O<sub>4</sub> magnetic

- nanocomposite via the synergy of absorption-photocatalysis, *ChemCatChem*, 2020, 12, 4121-4131. (SCI:二区)
- [4] **X. Shen**, Y. Zhang, G. Duoerkun, Z. Shi, J. Liu, Z. Chen, P. Wong, L. Zhang, Visible-NIR light-responsive photocatalytic activity of C<sub>3</sub>N<sub>4</sub>-Ag-Ag<sub>2</sub>O heterojunction-decorated carbon-fiber cloth as efficient filter-membrane-shaped photocatalyst, *ChemCatChem*, 2019, 11, 1-13. (IF: 4.674, SCI:二区)
- [5] **X. Shen**, L. Song, L. Luo, Y. Zhang, B. Zhu, J. Liu, Z. Chen, L. Zhang, Preparation of TiO<sub>2</sub>/C<sub>3</sub>N<sub>4</sub> heterojunctions on carbon-fiber cloth as efficient filter-membrane-shaped photocatalyst for removing various pollutants from the flowing wastewater, *J. Colloid Interface Sci.*, 2018, 532, 798-807. (IF: 5.091, SCI:二区)
- [6] **X. Shen**, T. Zhang, P. Xu, L. Zhang, J. Liu, Z. Chen, Growth of C<sub>3</sub>N<sub>4</sub> nanosheets on carbon-fiber cloth as flexible and macroscale filter-membrane-shaped photocatalyst for degrading the flowing wastewater, *Appl. Catal. B: Environ.*, 2017, 219, 425-431. (IF: 11.698, SCI:一区)
- [7] Y. Jin<sup>#</sup>, **X. Shen**<sup>#</sup>, Z. Liu, Z. Wang, B. Zhu, P. Xu, L. Luo, L. Zhang, Synthesis of NiTiO<sub>3</sub>-Bi<sub>2</sub>MoO<sub>6</sub> core-shell fiber-shaped heterojunctions as efficient and easily recyclable photocatalysts, *New J. Chem.*, 2018, 42, 411-419. (SCI:三区)
- [8] Q. Tian<sup>#</sup>, **X. Shen**<sup>#</sup>, Z. Wang, N. Yu, Z. Chen, L. Zhang, Growth of Cu<sub>2</sub>O Spherical Superstructures on g-C<sub>3</sub>N<sub>4</sub> as Efficient Visible-Light-Driven p-n Heterojunction Photocatalysts for Degrading Various Organic Pollutants, *J. Nanosci. Nanotechnol.*, 2018, 18, 1-8. (SCI:三区)
- [9] Y. Chang<sup>#</sup>, Z. Liu<sup>#</sup>, **X. Shen**<sup>#</sup>, B. Zhu, D. Macharia, Z. Chen, L. Zhang, Synthesis of Au nanoparticle-decorated carbon nitride nanorods with plasmon-enhanced photoabsorption and photocatalytic activity for degrading organic pollutant, *J. Hazard. Mater.*, 2017, 344, 1188-1197. (SCI:一区)