个人简历

王晓萌　环境科学与工程系

研究方向：环境水污染控制技术与原理

主要研究领域：酸性矿山废水处理、环境功能材料开发与应用

Email：wangxiaomeng@njau.edu.cn

一、教育背景

2015-2018，南京大学，环境工程，博士

2011-2014，南京大学，环境科学，硕士

二、工作经历

2018-至今，南京农业大学，资源与环境科学学院，师资博后

三、获奖情况

2018 年，唐孝炎环境科学创新奖

四、主持项目

1　国家自然科学基金青年项目“乙酰丙酮调控的钛凝胶同步氧化强化混凝除藻效率及机制研究”（21906085），2020.01-2022.12，主持

2　国家重点研发项目“场地土壤多金属污染长效稳定修复功能材料制备”（2020YFC1808000）2020.11-2023.10，骨干

3　江苏省自然科学基金青年项目“钛凝胶有机复配优化减缓超滤处理含藻水膜污染效果与机制研究”（BK20190547）2019.07-2022.06，主持

4　中国博士后科学基金面上项目“钛凝胶预混凝控制超滤处理含藻水膜污染的调控机制研究”（2019M651853）2019.06-2021.05，主持

5　中央高校基本科研业务费（KJQN202013），2020.01-2020.12，主持

五、发表论文

1　Xu, M., **Wang, X.***, Zhou, B., & Zhou, L. (2021). Pre-coagulation with cationic flocculant-composited titanium xerogel coagulant for alleviating subsequent ultrafiltration membrane fouling by algae-related pollutants. *Journal of Hazardous Materials*, 407, 124838.

2　**Wang, X.**, Xu, J., Xu, M., Zhou, B., Liang, J., & Zhou, L.* (2021).

High-efficient removal of arsenite by coagulation with titanium xerogel coagulant. *Separation and Purification Technology*, 258, 118047.

3 **Wang, X.**, Chen, Y., Li, T., Liang, J., & Zhou, L.* (2021). High-efficient elimination of roxarsone by MoS_2@Schwertmannite via heterogeneous photo-Fenton oxidation and simultaneous arsenic immobilization. *Chemical Engineering Journal*, 405, 126952.

4 **Wang, X.**, Jiang, H., Zheng, G., Liang, J., & Zhou, L.* (2021). Recovering iron and sulfate in the form of mineral from acid mine drainage by a bacteria-driven cyclic biomineralization system. *Chemosphere*, 262, 127567.

5 Jin, D.[1], **Wang, X.[1]**, Liu, L., Liang, J., & Zhou, L.* (2020). A novel approach for treating acid mine drainage through forming schwertmannite driven by a mixed culture of *Acidiphilium multivorum* and *Acidithiobacillus ferrooxidans* prior to lime neutralization. *Journal of Hazardous Materials*, 400, 123108.

6 **Wang, X.**, Wang, W., Zhou, B., Xu, M., Wu, Z., Liang, J., & Zhou, L.* (2020). Improving solid–liquid separation performance of anaerobic digestate from food waste by thermally activated persulfate oxidation. *Journal of Hazardous Materials*, 398, 122989.

7 **Wang, X.[1]**, Jiang, H.[1], Fang, D., Liang, J., & Zhou, L.* (2019). A novel approach to rapidly purify acid mine drainage through chemically forming schwertmannite followed by lime neutralization. *Water Research*, 151, 515-522.

8 **Wang, X.**, Gan, Y., & Zhang, S.* (2019). Improved resistance to organic matter load by compositing a cationic flocculant into the titanium xerogel coagulant. *Separation and Purification Technology*, 211, 715-722.

9 **Wang, X.**, Gan, Y., Guo, S., Ma, X., Xu, M., & Zhang, S.* (2018). Advantages of titanium xerogel over titanium tetrachloride and polytitanium tetrachloride in coagulation: A mechanism analysis. *Water Research*, 132, 350-360.

10 **Wang, X.**, Wang, X., Wei, Z., & Zhang, S.* (2018). Potent removal of cyanobacteria with controlled release of toxic secondary metabolites by a titanium xerogel coagulant. *Water Research*, 128, 341-349.

11 **Wang, X.**, Li, M., Song, X., Chen, Z., Wu, B., & Zhang, S.* (2016). Preparation and evaluation of titanium-based xerogel as a promising coagulant for water/wastewater treatment. *Environmental Science & Technology*, 50(17), 9619-9626.

12 **Wang, X.**, Yang, S.*, Li, H., Zhao, W., Sun, C., & He, H. (2014). High adsorption and efficient visible-light-photodegradation for cationic Rhodamine B with microspheric BiOI photocatalyst. *RSC Advances*, 4(80), 42530-42537.

13 Li, T., **Wang, X.**, Chen, Y., Liang, J., & Zhou, L.* (2020). Producing •OH, $SO_4^{\bullet-}$ and $^{\bullet}O_2^-$ in heterogeneous Fenton reaction induced by Fe_3O_4-modified schwertmannite. *Chemical Engineering Journal*, 393, 124735.

14 Meng, X., **Wang, X.**, Zhang, C., Yan, S., Zheng, G.*, & Zhou, L. (2021). Co-adsorption of As(III) and phenanthrene by schwertmannite and Fenton-like regeneration of spent schwertmannite to realize phenanthrene degradation and As (III) oxidation. *Environmental Research*, 110855.

15 Feng, K., **Wang, X.**, Zhou, B., Xu, M., Liang, J., & Zhou, L.* (2021). Hydroxyl,

Fe^{2+}, and *Acidithiobacillus ferrooxidans* jointly determined the crystal growth and morphology of schwertmannite in a sulfate-rich acidic environment. *ACS Omega*, 6(4), 3194-3201.

16 Wang, X., **Wang, X.**, Hui, K., Wei, W., Zhang, W., Miao, A., Lin, X., & Yang, L.* (2018). Highly effective polyphosphate synthesis, phosphate removal, and concentration using engineered environmental bacteria based on a simple solo medium-copy plasmid strategy. *Environmental Science & Technology*, 52(1), 214-222.

17 Gan, Y., **Wang, X.**, Zhang, L., Wu, B., Zhang, G., & Zhang, S.* (2019). Coagulation removal of fluoride by zirconium tetrachloride: Performance evaluation and mechanism analysis. *Chemosphere*, 218, 860-868.