

Assistant Professor (Research) Yang Wu

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Academic Qualification

Ph.D. in Environmental Science, Sun Yat-sen University, China

MSc in Environmental Engineering, University of the Chinese Academy of Sciences, China

BSc in Environmental Engineering, Beijing Institute of Technology, China

Research & Teaching Area

Environmental chemical; Water Treatment; Environmental Risk assessment.

Working Experience

- Assistant Professor, Macau University of Science and Technology (MUST) (Sep 2020 -);

Funding

- The Synthesis of Nitrogen-doped Three-dimensional Graphene and Its Desalination and Micro-Organic Pollutant Removal Performance. (The Science and Technology Development Fund, Macau SAR) (0023/2021/A) (07/2021-07/2023)

Representative publications (Complete publication refer to my webpage)

Journal Papers (First or corresponding author)

- [1] Linheng Chen, Weixi Liu, **Yang Wu***, Jumei Li*, Yibing Ma. Identification and quantification of the combined phytotoxicity of one element with various valences: Cr (III) and Cr (VI) for barley root elongation as an example. *Journal of Hazardous Materials*, 2022: 128430.

- [2] **Yang Wu**, Chengqian Sun, Xi Zhang, Li Wang, Yang Bai*, Peng Zhang*. Spatio-temporal patterns and the fluxes of regional nutrient pollution in the Pearl River basin, China. *Polish Journal of Environmental Studies*, 2022, 5(31), 1-12.
- [3] Yangjian Zhou#, **Yang Wu**#, Yu Lei, Yanheng Pan, Shuangshuang Cheng, Gangfeng Ouyang, Xin Yang*. Redox-active Moieties in Dissolved Organic Matter Accelerate the Degradation of Nitroimidazoles in $\text{SO}_4^{\cdot-}$ -based Oxidation. *Environmental Science & Technology*, 2021, 55(21): 14844-14853.
- [4] **Yang Wu**, Yu Wang, Tao Pao, Xin Yang *. Oxidation of Tetrabromobisphenol A (TBBPA) by Peroxymonosulfate: the Role of In-situ Formed HOBr. *Water Research*, 2020, 169: 115202
- [5] **Yang Wu**, Yu Wang, Zhiqiang Lin, Yingying Wang, Yao Li, Shengwei Liu, Xuchun Gui*, Xin Yang*. Three-dimensional $\alpha\text{-Fe}_2\text{O}_3$ /amino-functionalization carbon nanotube sponge for adsorption and oxidative removal of tetrabromobisphenol A. *Separation and Purification Technology*, 2019, 211: 359-367.
- [6] **Yang Wu**, Yu Wang, Rongliang Qiu, Xin Yang*, Reductive Debromination and Advanced Oxidation of Polybrominated Diphenyl Ethers (PBDEs) Using Zero-Valent Iron (ZVI) Based Materials, *Progress in Chemistry*, 2018, 30: 420-428.
- [7] **Yang Wu**, Xiaoyong Zhou, Mei Lei*, Jun Yang, Jie Ma, Tongbin Chen. Migration and transformation of arsenic: Contamination control and remediation in realgar mining areas. *Applied Geochemistry*, 2017, 77: 44-51
- [8] 吴洋, 杨军, 周小勇*, 雷梅, 高定, 乔鹏炜, 杜国栋. 广西都安县耕地土壤重金属污染风险评价. *环境科学*. 2015, 36(8): 2964-2969.
- [9] 吴洋, 杨军, 周小勇*, 雷梅, 徐婷, 宋波. 都安县玉米籽粒重金属积累特征与健康风险评价. *农业环境科学学报*. 2015, 34(11): 2048-2054.

Co-author

- [1] Yu Wang, **Yang Wu**, Yafei Yu, Tao Pan, Dantong Li, Lambropoulou Dimitra, Xin Yang *. Natural polyphenols enhanced the Cu(II)/peroxymonosulfate (PMS) oxidation: The contribution of Cu(III) and HO(*). *Water Research*, 2020, 186, 116326.
- [2] Yu Wang, Tao Pan, Yafei Yu, **Yang Wu**, Yanheng Pan, Xin Yang*. A novel peroxymonosulfate (PMS)-enhanced iron coagulation process for simultaneous removal of trace organic pollutants in water. *Water Research*, 2020, 185: 116136.

- [3] Jie Ma, Huaming Guo *, Mei Lei, Xiaoyong Zhou, Fulan Li, Yu Tian, Rongfei Wei, Hanzhi Zhang, Xi Zhang, **Yang Wu**. Arsenic Adsorption and its Fractions on Aquifer Sediment: Effect of pH, Arsenic Species, and Iron/Manganese Minerals. *Water Air and Soil Pollution*, 2015, 226: 260-275.

Patent

- [1] 杨欣, 雷宇, 程双双, **吴洋**. 一种利用探针化合物检测羟基自由基浓度的方法: 中国, ZL 202010680216.2[P] 2020-07-15. (已授权)
- [2] 杨欣, **吴洋**, 桂许春, 王玉. 一种可吸附降解四溴双酚 A 的改性碳纳米管薄膜材料及其应用方法: 中国, ZL 201810267344.7[P] 2018-03-28. (已授权)

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