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■教育经历

- 博士（2020.9-2023.12）：昆明理工大学，再生资源科学与技术专业
- 硕士（2019.9-2020.6）：昆明理工大学，环境工程专业
- 本科（2012.9-2016.6）：天津科技大学，环境科学与技术专业

■工作经历

- 2024.04一今：攀枝花学院，生物与化学工程学院，讲师
- 2016.9-2018.9：部队服役，战士/卫生员
- 2016.6-2016.9：天津经济技术开发区环境监测站，大气采样和监测员

■主持及参与科研项目

- 国家自然科学基金项目：磷石膏中高品质硫钙组分分离与苯烯烃类物质的互锁链式反应增质机制(52400156)，2025-2027 年（主持）

■出版教材或著作

- 无.

■发表学术论文

- **Fenghui Wu**, Yu Zhang, Yiting Wang, et al. Preparation of high-strength bricks by synergistic densification treatment of phosphogypsum and calcium carbide slag. Construction and Building Materials, 2025, 470: 140534. （SCI 一区一作）
- Qiang Niu, **Fenghui Wu**, Dandan Chen, et al. Outer space migration, soil first: Preparation of soil like matrix by co-pyrolysis of coal gangue and biomass. Industrial Crops & Products, 2025, 226: 120733.（SCI 一区通讯）
- **Fenghui Wu**, Guangfei Qu. Soil utilization analysis of synergistic pyrolysis products of flue gas desulfurization gypsum and biomass. Process Safety and Environmental Protection, 2024, 191: 1816-1832. （SCI 二区一作）
- **Fenghui Wu**. The treatment of phosphogypsum leachate is more urgent than phosphogypsum. Environmental Research, 2024, 262: 119849. （SCI 二区独作）
- **Fenghui Wu**, Qiang Niu, Xiao'e Chen, et al. Resource utilization of antimony tailings: Preparation of lightweight, waterproof and environmental friendly foamed concrete. Sustainable Chemistry and Pharmacy, 2025, 43: 101907. （SCI 二区一作）
- **Fenghui Wu**, Dandan Chen, Qiang Niu, et al. Current status of phosphoric acid preparation technology and future application directions of microbial methods. Sustainable Chemistry and Pharmacy, 2025, 43: 101882.（SCI 二区一作）.
- Qiang Niu, Yujiang Fan, **Fenghui Wu**, et al. Mercury's nemesis in flue gas: New green and inexpensive mercury adsorption materials prepared with CuCl2-Loaded fly ash. Sustainable Chemistry and Pharmacy, 2025, 44: 101981. （SCI 二区通讯）
- Dandan Chen, **Fenghui Wu**, Linrui Kuang, et al. One step resource utilization treatment of solid waste: Preparation of high-performance building bricks from calcium carbide slag by ultra-high mechanical pressure. Ceramics International, 2025, 51: 5736-5746.（SCI 二区通讯）

- **Fenghui Wu**, Yuanchuan Ren, Guangfei Qu*, et al. Utilization path of bulk industrial solid waste: A review on the multi-directional resource utilization path of phosphogypsum [J]. Journal of Environmental Management, 2022,313: 114957.（SCI 一区一作）
- **Fenghui Wu**, Chenyang Zhao, Guangfei Qu*, et al. A Critical Review of the Typical By-product Clean Ecology Links in the Chinese Phosphorus Chemical Industry in China: Production Technologies, Fates and Future Directions [J]. Journal of Environmental Chemical Engineering, 2021: 106685.（SCI 二区一作）
- **Fenghui Wu**, Caiyue Jin, Ruoxong Xie*, Guangfei Qu*, et al. Extraction and transformation of elements in phosphogypsum by electrokinetics [J]. Journal of Cleaner Production, 2023,385: 135688. .（SCI 一区一作）
- **Fenghui Wu**, Bangjin Chen, Guangfei Qu*, et al. Harmless treatment technology of phosphogypsum: Directional stabilization of toxic and harmful substances [J]. Journal of Environmental Management, 2022,311: 114827. （SCI 一区一作）
- **Fenghui Wu**, Xinxin Liu, Chenpeng Wang, Guangfei Qu*, et al. New dawn of solid waste resource treatment: Preparation of high-performance building materials from waste-gypsum by mechanical technology [J]. Construction and Building Materials, 2022,318: 126204.（SCI 一区一作）
- **Fenghui Wu**, Caiyue Jin, Guangfei Qu*, et al. Enhancement of phosphogypsum mechanical block with the addition of iron and aluminum salts [J]. Journal of Building Engineering, 2022: 104397. .（SCI 二区一作）
- **Fenghui Wu**, Minjie He, Guangfei Qu*, et al. Highly targeted stabilization and release behavior of hazardous substances in phosphogypsum [J]. Minerals Engineering, 2022,189: 107866. （SCI 二区一作）
- **Fenghui Wu**, Can Yang, Guangfei Qu*, et al. Study of Semi-Dry High Target Solidification/ Stabilization of Harmful Impurities in Phosphogypsum by Modification[J]. Molecules, 2022, 27, 462. （SCI 二区一作）
- **Fenghui Wu**, Minjie He, Guangfei Qu*, et al. Synergistic densification treatment technology of phosphogypsum and aluminum ash [J]. Process Safety and Environmental Protection, 2023,173: 847-858.（SCI 二区一作）
- **Fenghui Wu**, Xinxin Liu, Guangfei Qu*, et al. A critical review on extraction of valuable metals from solid waste [J], Separation and Purification Technology, 2022: 122043.（SCI 一区一作）
- **Fenghui Wu**, Xinxin Liu, Guangfei Qu*, et al. Solidification and stabilization of harmful elements in antimony tailings and synergistic utilization of multiple solid wastes [J], Cement and Concrete Composites, 2022: 104718.（SCI 一区一作）
- **Fenghui Wu**, Xinxin Liu, Guangfei Qu*, et al. High value-added resource treatment of antimony tailings: preparation of high-strength lightweight foam concrete materials [J], Process Safety and Environmental Protection, 2022,166:269-278.（SCI 二区一作）
- **Fenghui Wu**, Xinxin Liu, Guangfei Qu*, et al. High value-added resource utilization of solid waste: Review of prospects for supercritical CO2 extraction of valuable metals [J], Journal of Cleaner Production, 2022,372: 133813. （SCI 一区一作）
- 夏韬, **吴丰辉***. 利用磷石膏制备双相磷酸钙作为人造骨的应用前景. 有色金属(矿山部分), 2025. （核心通讯）
- 夏韬, **吴丰辉***, 崔庆渊. 有色金属冶炼燃烧后烟气中 CO_2 分离研究现状. 低碳化学与化学, 2025. （核心通讯）

■发明专利及软件著作权

- **吴丰辉**, 张玉(学), 任远川, 等. 利用固体废弃物制备的类土壤基质及其制备方法. 2024116074723.
- **吴丰辉**, 张玉(学), 任远川, 等. 采用阴燃技术修复连作障碍板结土壤的方法. 2024115912969.
- **吴丰辉**, 张玉(学), 任远川, 等. 一种重金属污染土壤阴燃末端闭合循环处理设备和方法. 2024115797104.
- **吴丰辉**, 王一婷(学), 任远川, 等. 环保型宠物用砂及其制备方法和回收利用方法. 2024113153282.
- **吴丰辉**, 王一婷(学), 任远川, 等. 粉状大宗固废中有毒有害物质的高靶向固化稳定化方法. 2024113153333.
- **吴丰辉**, 刘峻松(学), 郑锐(学), 等. 工农业固废制备吸附材料的方法. 2024106390777.
- **吴丰辉**, 牛强, 陈丹丹, 等. 废石膏中高活性硫钙组分的提取方法. 2024106159617
- **吴丰辉**, 陈丹丹, 牛强, 等. 废石膏基微囊相变储能材料及其制备方法. 2024106216728.
- **吴丰辉**, 陈丹丹, 牛强, 等. 一种废石膏制备 α -半水石膏在橡胶或塑料制品中的应用. 2024105620771.
- **吴丰辉**, 陈丹丹, 牛强, 等. 高钙硅铝基固废河流下游截留堵断吸附材料及其制备方法和应用. 2024105472394.

■获奖及荣誉