

主要研究项目：

1. 场地土壤重金属迁移机理及污染源贡献的定量解析，国家重点研发计划项目课题子任务，55 万元，2020.11-2024.10，主持人；
2. 场地污染物“源-流-汇”过程与源解析，国家重点研发计划项目课题，547 万元，2020.11-2024.10，项目骨干；
3. 外源 DOM 构效特征与圆锥南芥根际捕获和吸收 Pb 的微观作用机理研究，国家自然科学基金面上项目，61 万元，2019.01-2022.12，项目骨干；
4. 生物地球化学迁移理论与探测技术，国家重点研发计划项目子课题，100 万元，2016.01-2020.12，项目骨干。

代表性论文：

1. **Jian Liu**, Yiren Li, Yiheng Wang, Yanni Wang, Jianming Xu, Xingmei Liu*. Competitive adsorption of lead and cadmium on soil aggregate at micro-interfaces: Multi-surface modeling and spectroscopic studies. *Journal of Hazardous Material*. 2023, 448:130915.
2. **Jian Liu**, Yiheng Wang, Yanni Wang, Yiren Li, Hongbo Li, Jianming Xu, Xingmei Liu*. Novel insights into probabilistic health risk and source apportionment based on bioaccessible potentially toxic elements around an abandoned e-waste dismantling site. *Science of the Total Environment*. 2022, 838, 156372.
3. **Jian Liu**, Yating Shen*, Liqiang Luo. Evaluating the effect of EDTA on the internal mechanisms of uptake and translocation of Pb in *Bidens pilosa* L. *Plant and Soil*. 2022, 479(1-2):649-662.
4. **Jian Liu**, Yanni Wang, Xingmei Liu*, Jianming Xu. Occurrence and health risks of heavy metals in plastic-shed soils and vegetables across China. *Agriculture, Ecosystems and Environment*. 2021, 321:107632.
5. **Jian Liu**, Liqiang Luo*. Uptake and transport of Pb by waterlogged dropwort (*Oenanthe javanica* DC.) across the iron plaque based on micro-XRF and XANES. *Plant and Soil*. 2019, 441(1-2):191-205.