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Research Interests

- **Soil data mining**
- **Regional traceability and spatial modeling of heavy metals**
- **Cropland quality conservation**

Publication

Accurate prediction of spatial distribution of soil potentially toxic elements using machine learning and associated key influencing factors identification: A case study in mining and smelting area in southwestern China, Journal of hazardous material, 2024, DOI: 10.1016/j.jhazmat.2024.135454

The rapid increase of urban contaminated sites along China's urbanization during the last 30 years, iScience, 2023, DOI: 10.1016/j.isci.2023.108124

Understanding the driving mechanisms of site contamination in China through a data-driven approach, Environmental Pollution, 2023, DOI: 10.1016/j.envpol.2023.123105

Heavy metal pollution risk of cultivated land from industrial production in China: Spatial pattern and its enlightenment, Science of the Total Environment, 2022, DOI: 10.1016/j.scitotenv.2022.154382

Spatial and temporal variations in environmental impacts of heavy metal emissions from China's non-ferrous industry: An enterprise-specific assessment, Science of the Total Environment,2024, DOI: 10.1016/j.scitotenv.2024.172770

Soil Pollution Prediction from Enterprise for Coking Industry in China Based on Machine Learning and Scenario Analysis (CN), Environmental Science, 2023, DOI: 10.13227/j.hjkx.202211249

Permanent Prime Farmland Demarcation Around the Urban Areas Based in GIS Grid (CN), Chinese Journal of Agricultural Resources and Regional Planning, 2017, DOI: 10.7621/cjarrp.1005-9121.20170504

Suitable Interpolation Method and Reasonable Sampling Quantity of Cd Pollution Index in Soil (CN), Chinese Journal of Soil Science, 2016, DOI: 10.19336/j.cnki.trtb.2016.05.06

Source-specific health risks apportionment of soil potential toxicity elements combining multiple receptor models with Monte Carlo simulation, Science of the Total Environment, 2022, DOI: 10.1016/j.scitotenv.2021.152899