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Profile

Professor, Ph.D. Supervisor, Shanghai Pujiang Talent

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Research Field

Soil risk assessment and remediation; Environmental health of emerging contaminants

Research results and selected published papers

Select research projects：

[1] Site soil pollution and remediation (2018YFC1800600). Funded by the National Key Research and Development Program of China.

[2] Interaction mechanisms between decabromodiphenyl ethane (a novel brominated flame retardant) and earthworm (41877124). Funded by National Natural Science Foundation of China.

[3] Transformation, accumulation and toxicological mechanism of NBFRs in soil (21737005). Funded by National Natural Science Foundation of China.

[4] Molecular ecotoxicological effect and microbial degradation mechanism of PBDEs in soil (41371467). Funded by National Natural Science Foundation of China.

[5] Ecological risk evaluation of nickel in soil (2016YFD0800405). Funded by the projects of Research on Migration/Transformation and Safety Threshold of Heavy Metals in Farmland Systems, National Key Research and Development Program of China.

[6] Adsorption and degradation of antibiotics sulfadiazine and sulfamethoxazole in water (2017ZX07207002). Funded by National Water Pollution Control and Treatment Science and Technology Major Project.

[7] Toxicity and bioremediation of PBDEs and heavy metal in soil (15PJD013). Funded by Shanghai Pujiang Program.

Select publications：

[1] Siyuan Ling, Wei Zhang*, Kuangfei Lin, et al. Photodegradation of novel brominated flame retardants (NBFRs) in a liquid system: Kinetics and photoproducts. Chem. Eng. J., 2019, 362: 938-946

[2] Yu Zhang, Hongchang Zhang, Wei Zhang*, et al. Adsorption/desorption behavior and mechanisms of sulfadiazine and sulfamethoxazole in agricultural soil systems. Soil Till. Res., 2019,186: 233-241

[3] Hongjiang Peng, Wei Zhang*, Kuangfei Lin, et al. Degradation performance and mechanism of decabromodiphenyl ether (BDE209) by ferrous-activated persulfate in spiked soil. Chem. Eng. J., 2017, 307: 750-755

[4] Dongdong Wen, Xiaoqian Xia, Wei Zhang , et al. Electrokinetic remediation of chromium (Cr)-contaminated soil with citric acid (CA) and polyaspartic acid (PASP) as electrolytes. Chem. Eng. J., 2017, 316: 601-608

[5] Gehui Wang, Xiaoqian Xia, Wei Zhang*, et al. Exploring the bioavailability of nickel in a soil system: Physiological and histopathological toxicity study to the earthworms (Eisenia fetida). J. Hazard. Mater., 2020, 383: 121169

[6] Hongjiang Peng, Wei Zhang*, Kuangfei Lin, et al. Oxidation and mechanism of decabromodiphenyl ether (BDE209) by thermally activated persulfate (TAP) in a soil system. Chem. Eng. J., 2016, 306: 226-232

[7] Lin Liu, Wei Zhang*, Shuangqing Hu, et al. Kinetic and mechanistic investigations of the degradation of sulfachloropyridazine in heat-activated persulfate oxidation process. Chem. Eng. J., 2018, 346: 515-524

[8] Wei Zhang*, Lei Chen, Kuangfei Lin, et al. High throughput sequencing analysis of the joint effects of BDE209-Pb on soil bacterial community structure. J. Hazard. Mater., 2016, 301: 1-7

[9] Wei Zhang*, Kou Liu, Kuangfei Lin, et al. Impacts of BDE209 addition on Pb uptake, subcellular partitioning and gene toxicity in earthworm (Eisenia fetida). J. Hazard. Mater., 2015, 300: 737-744

[10] Jun Liang, Wei Zhang*, Kuangfei Lin, et al. The reproductive responses of earthworms (Eisenia fetida) exposed to nanoscale zero-valent iron (nZVI) in the presence of decabromodiphenyl ether (BDE209). Environ. Pollut., 2018, 237: 784-791

[11] Jing Li, Wei Zhang*, Kuangfei Lin, et al. Biological effects of decabromodiphenyl ether (BDE209) and Pb on earthworm (Eisenia fetida) in a soil system. Environ. Pollut., 2015, 207: 220-225

[12] Jun Zhao, Wei Zhang*, Kuangfei Lin, et al. The response and tolerance mechanisms of lettuce (Lactuca sativa L.) exposed to nickel in a spiked soil system. Chemosphere, 2019, 222: 399-406

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[14] Yu Zhang, Genxiang Shen, Wei Zhang*, et al. Degradation kinetics and mechanism of sulfadiazine and sulfamethoxazole in an agricultural soil system with manure application. Sci. Total. Environ., 2017, 607: 1348-1356

[15] Wei Zhang*, Youna Miao, Kuangfei Lin, et al. Toxic effects of copper ion in zebrafish in the joint presence of CdTe QDs. Environ. Pollut., 2013, 176: 158-164

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[18] Wei Zhang*, Jing Li, Kuangfei Lin, et al. The behavior and toxicological effects of decabromodiphenyl ether (BDE209) in a soil-earthworm system. Sci. Total. Environ., 2015, 537: 377-384

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[20] Xiaoqian Xia, Wei Zhang*, Kuangfei Lin, et al. Toxic responses of microorganisms to nickel exposure in farmland soil in the presence of earthworm (Eisenia fetida). Chemosphere, 2018, 192: 43-50

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