Zibo Xu

List of Publications by Year
in descending order

32 papers	2,418 citations	236925 25 h-index	434195 31 g-index
32 all docs	32 docs citations	32 times ranked	1413 citing authors

#	Article	IF	Citations
1	Biochar as both electron donor and electron shuttle for the reduction transformation of Cr(VI) during its sorption. Environmental Pollution, 2019, 244, 423-430.	7.5	258
2	Waste-derived biochar for water pollution control and sustainable development. Nature Reviews Earth & Environment, 2022, 3, 444-460.	29.7	233
3	Roles of biochar-derived dissolved organic matter in soil amendment and environmental remediation: A critical review. Chemical Engineering Journal, 2021, 424, 130387.	12.7	167
4	Contrasting impacts of pre- and post-application aging of biochar on the immobilization of Cd in contaminated soils. Environmental Pollution, 2018, 242, 1362-1370.	7.5	127
5	Critical impacts of pyrolysis conditions and activation methods on application-oriented production of wood waste-derived biochar. Bioresource Technology, 2021, 341, 125811.	9.6	121
6	Critical Impact of Nitrogen Vacancies in Nonradical Carbocatalysis on Nitrogen-Doped Graphitic Biochar. Environmental Science & Technology, 2021, 55, 7004-7014.	10.0	112
7	One-pot synthesis of nZVI-embedded biochar for remediation of two mining arsenic-contaminated soils: Arsenic immobilization associated with iron transformation. Journal of Hazardous Materials, 2020, 398, 122901.	12.4	109
8	Pyrolysis-temperature depended electron donating and mediating mechanisms of biochar for Cr(VI) reduction. Journal of Hazardous Materials, 2020, 388, 121794.	12.4	103
9	Interaction with low molecular weight organic acids affects the electron shuttling of biochar for Cr(VI) reduction. Journal of Hazardous Materials, 2019, 378, 120705.	12.4	90
10	Kaolinite Enhances the Stability of the Dissolvable and Undissolvable Fractions of Biochar via Different Mechanisms. Environmental Science & Technology, 2018, 52, 8321-8329.	10.0	84
11	Insights into the adsorption of pharmaceuticals and personal care products (PPCPs) on biochar and activated carbon with the aid of machine learning. Journal of Hazardous Materials, 2022, 423, 127060.	12.4	82
12	Contribution of different iron species in the iron-biochar composites to sorption and degradation of two dyes with varying properties. Chemical Engineering Journal, 2020, 389, 124471.	12.7	74
13	Impacts of different activation processes on the carbon stability of biochar for oxidation resistance. Bioresource Technology, 2021, 338, 125555.	9.6	74
14	Electroactive Fe-biochar for redox-related remediation of arsenic and chromium: Distinct redox nature with varying iron/carbon speciation. Journal of Hazardous Materials, 2022, 430, 128479.	12.4	67
15	Facilitated transport of cadmium by biochar-Fe_3O_4 nanocomposites in water-saturated natural soils. Science of the Total Environment, 2019, 684, 265-275.	8.0	65
16	Roles of the mineral constituents in sludge-derived biochar in persulfate activation for phenol degradation. Journal of Hazardous Materials, 2020, 398, 122861.	12.4	65
17	Unraveling iron speciation on Fe-biochar with distinct arsenic removal mechanisms and depth distributions of As and Fe. Chemical Engineering Journal, 2021, 425, 131489.	12.7	63
18	Two years of aging influences the distribution and lability of metal(loid)s in a contaminated soil amended with different biochars. Science of the Total Environment, 2019, 673, 245-253.	8.0	57

#	Article	IF	Citations
19	Evolution of redox activity of biochar during interaction with soil minerals: Effect on the electron donating and mediating capacities for Cr(VI) reduction. Journal of Hazardous Materials, 2021, 414, 125483.	12.4	57
20	Machine learning exploration of the direct and indirect roles of Fe impregnation on Cr(VI) removal by engineered biochar. Chemical Engineering Journal, 2022, 428, 131967.	12.7	50
21	Sustainable impact of tartaric acid as electron shuttle on hierarchical iron-incorporated biochar. Chemical Engineering Journal, 2020, 395, 125138.	12.7	46
22	Participation of soil active components in the reduction of Cr(VI) by biochar: Differing effects of iron mineral alone and its combination with organic acid. Journal of Hazardous Materials, 2020, 384, 121455.	12.4	43
23	Redox-induced transformation of potentially toxic elements with organic carbon in soil. , 2022, 1, .		42
24	Stabilization of dissolvable biochar by soil minerals: Release reduction and organo-mineral complexes formation. Journal of Hazardous Materials, 2021, 412, 125213.	12.4	41
25	Direct and Indirect Electron Transfer Routes of Chromium(VI) Reduction with Different Crystalline Ferric Oxyhydroxides in the Presence of Pyrogenic Carbon. Environmental Science & Technology, 2022, 56, 1724-1735.	10.0	40
26	New insights into CO2 sorption on biochar/Fe oxyhydroxide composites: Kinetics, mechanisms, and in situ characterization. Chemical Engineering Journal, 2020, 384, 123289.	12.7	28
27	Stoichiometric carbocatalysis via epoxide-like Câ˘'Sâ˘'O configuration on sulfur-doped biochar for environmental remediation. Journal of Hazardous Materials, 2022, 428, 128223.	12.4	25
28	Sorption of reactive red by biochars ball milled in different atmospheres: Co-effect of surface morphology and functional groups. Chemical Engineering Journal, 2021, 413, 127468.	12.7	23
29	Mesoporous ball-milling iron-loaded biochar for enhanced sorption of reactive red: Performance and mechanisms. Environmental Pollution, 2021, 290, 117992.	7.5	21
30	Contrasting effects of dry-wet and freeze-thaw aging on the immobilization of As in As-contaminated soils amended by zero-valent iron-embedded biochar. Journal of Hazardous Materials, 2022, 426, 128123.	12.4	20
31	Synergistic role of bulk carbon and iron minerals inherent in the sludge-derived biochar for As(V) immobilization. Chemical Engineering Journal, 2021, 417, 129183.	12.7	18
32	The shuttling effects and associated mechanisms of different types of iron oxide nanoparticles for Cu(II) reduction by Geobacter sulfurreducens. Journal of Hazardous Materials, 2020, 393, 122390.	12.4	13