

Ling Zhao

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

66

papers

2,776

citations

30

h-index

52

g-index

68

ext. papers

3,772

ext. citations

10

avg, IF

5.91

L-index

#	Paper	IF	Citations
66	Heterogeneity of biochar properties as a function of feedstock sources and production temperatures. <i>Journal of Hazardous Materials</i> , 2013 , 256-257, 1-9	12.8	206
65	The Interfacial Behavior between Biochar and Soil Minerals and Its Effect on Biochar Stability. <i>Environmental Science & Technology</i> , 2016 , 50, 2264-71	10.3	192
64	Effects of mineral additives on biochar formation: carbon retention, stability, and properties. <i>Environmental Science & Technology</i> , 2014 , 48, 11211-7	10.3	180
63	Indispensable role of biochar-inherent mineral constituents in its environmental applications: A review. <i>Bioresource Technology</i> , 2017 , 241, 887-899	11	170
62	Biochar as both electron donor and electron shuttle for the reduction transformation of Cr(VI) during its sorption. <i>Environmental Pollution</i> , 2019 , 244, 423-430	9.3	146
61	Copyrolysis of Biomass with Phosphate Fertilizers To Improve Biochar Carbon Retention, Slow Nutrient Release, and Stabilize Heavy Metals in Soil. <i>ACS Sustainable Chemistry and Engineering</i> , 2016 , 4, 1630-1636	8.3	129
60	N-doped biochar synthesized by a facile ball-milling method for enhanced sorption of CO ₂ and reactive red. <i>Chemical Engineering Journal</i> , 2019 , 368, 564-572	14.7	96
59	Chemical transformation of CO ₂ during its capture by waste biomass derived biochars. <i>Environmental Pollution</i> , 2016 , 213, 533-540	9.3	83
58	Contrasting impacts of pre- and post-application aging of biochar on the immobilization of Cd in contaminated soils. <i>Environmental Pollution</i> , 2018 , 242, 1362-1370	9.3	78
57	Mineral constituents profile of biochar derived from diversified waste biomasses: implications for agricultural applications. <i>Journal of Environmental Quality</i> , 2013 , 42, 545-52	3.4	74
56	Characterization and quantification of electron donating capacity and its structure dependence in biochar derived from three waste biomasses. <i>Chemosphere</i> , 2018 , 211, 1073-1081	8.4	73
55	Different mechanisms between biochar and activated carbon for the persulfate catalytic degradation of sulfamethoxazole: Roles of radicals in solution or solid phase. <i>Chemical Engineering Journal</i> , 2019 , 375, 121908	14.7	69
54	Physicochemical property and colloidal stability of micron- and nano-particle biochar derived from a variety of feedstock sources. <i>Science of the Total Environment</i> , 2019 , 661, 685-695	10.2	66
53	Energy Balance of a Biodrying Process for Organic Wastes of High Moisture Content: A Review. <i>Drying Technology</i> , 2013 , 31, 132-145	2.6	57
52	Biochar as simultaneous shelter, adsorbent, pH buffer, and substrate of <i>Pseudomonas citronellolis</i> to promote biodegradation of high concentrations of phenol in wastewater. <i>Water Research</i> , 2020 , 172, 115494	12.5	56
51	Interaction with low molecular weight organic acids affects the electron shuttling of biochar for Cr(VI) reduction. <i>Journal of Hazardous Materials</i> , 2019 , 378, 120705	12.8	55
50	Distribution and evolution of organic matter phases during biochar formation and their importance in carbon loss and pore structure. <i>Chemical Engineering Journal</i> , 2014 , 250, 240-247	14.7	55

49	Phosphorus-assisted biomass thermal conversion: reducing carbon loss and improving biochar stability. <i>PLoS ONE</i> , 2014 , 9, e115373	3.7	52
48	Pyrolysis-temperature depended electron donating and mediating mechanisms of biochar for Cr(VI) reduction. <i>Journal of Hazardous Materials</i> , 2020 , 388, 121794	12.8	49
47	Short-term effects of raw rice straw and its derived biochar on greenhouse gas emission in five typical soils in China. <i>Soil Science and Plant Nutrition</i> , 2013 , 59, 800-811	1.6	47
46	Endogenous minerals have influences on surface electrochemistry and ion exchange properties of biochar. <i>Chemosphere</i> , 2015 , 136, 133-9	8.4	46
45	Potassium doping increases biochar carbon sequestration potential by 45%, facilitating decoupling of carbon sequestration from soil improvement. <i>Scientific Reports</i> , 2019 , 9, 5514	4.9	43
44	Interaction of Inherent Minerals with Carbon during Biomass Pyrolysis Weakens Biochar Carbon Sequestration Potential. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 1591-1599	8.3	43
43	Pyrolysis-temperature depended quinone and carbonyl groups as the electron accepting sites in barley grass derived biochar. <i>Chemosphere</i> , 2019 , 232, 273-280	8.4	42
42	Bioleaching of spent Ni-Cd batteries by continuous flow system: effect of hydraulic retention time and process load. <i>Journal of Hazardous Materials</i> , 2008 , 160, 648-54	12.8	42
41	Contribution of different iron species in the iron-biochar composites to sorption and degradation of two dyes with varying properties. <i>Chemical Engineering Journal</i> , 2020 , 389, 124471	14.7	38
40	Different alkaline minerals interacted with biomass carbon during pyrolysis: Which one improved biochar carbon sequestration?. <i>Journal of Cleaner Production</i> , 2020 , 255, 120162	10.3	35
39	Sludge Bio-drying Process at Low Ambient Temperature: Effect of Bulking Agent Particle Size and Controlled Temperature. <i>Drying Technology</i> , 2012 , 30, 1037-1044	2.6	33
38	Roles of the mineral constituents in sludge-derived biochar in persulfate activation for phenol degradation. <i>Journal of Hazardous Materials</i> , 2020 , 398, 122861	12.8	33
37	Persulfate Oxidation of Sulfamethoxazole by Magnetic Iron-Char Composites via Nonradical Pathways: Fe(IV) Versus Surface-Mediated Electron Transfer. <i>Environmental Science & Technology</i> , 2021 , 55, 10077-10086	10.3	31
36	Comparison of bio-dissolution of spent Ni-Cd batteries by sewage sludge using ferrous ions and elemental sulfur as substrate. <i>Chemosphere</i> , 2008 , 70, 974-81	8.4	28
35	Mesoporous SBA-15 Supported Iron Oxide: A Potent Catalyst for Hydrogen Sulfide Removal. <i>Water, Air, and Soil Pollution</i> , 2008 , 193, 247-257	2.6	28
34	Toxicity characteristic leaching procedure over- or under-estimates leachability of lead in phosphate-amended contaminated soils. <i>Chemosphere</i> , 2015 , 138, 744-50	8.4	27
33	Evolution of redox activity of biochar during interaction with soil minerals: Effect on the electron donating and mediating capacities for Cr(VI) reduction. <i>Journal of Hazardous Materials</i> , 2021 , 414, 125483	12.8	27
32	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. <i>Journal of Hazardous Materials</i> , 2020 , 384, 121455	12.8	25

31	Suppressed formation of polycyclic aromatic hydrocarbons (PAHs) during pyrolytic production of Fe-enriched composite biochar. <i>Journal of Hazardous Materials</i> , 2020 , 382, 121033	12.8	25
30	Release of nutrients and heavy metals from biochar-amended soil under environmentally relevant conditions. <i>Environmental Science and Pollution Research</i> , 2018 , 25, 2517-2527	5.1	23
29	Sustainable conversion of contaminated dredged river sediment into eco-friendly foamed concrete. <i>Journal of Cleaner Production</i> , 2020 , 252, 119799	10.3	20
28	Country-level potential of carbon sequestration and environmental benefits by utilizing crop residues for biochar implementation. <i>Applied Energy</i> , 2021 , 282, 116275	10.7	20
27	Impacts of different activation processes on the carbon stability of biochar for oxidation resistance. <i>Bioresource Technology</i> , 2021 , 338, 125555	11	20
26	Nitrogen Transformation during Pyrolysis of Various N-Containing Biowastes with Participation of Mineral Calcium. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 12197-12207	8.3	18
25	Phytotoxicity of individual and binary mixtures of rare earth elements (Y, La, and Ce) in relation to bioavailability. <i>Environmental Pollution</i> , 2019 , 246, 114-121	9.3	18
24	Infiltration behavior of heavy metals in runoff through soil amended with biochar as bulking agent. <i>Environmental Pollution</i> , 2019 , 254, 113114	9.3	16
23	Interactions of CeO nanoparticles with natural colloids and electrolytes impact their aggregation kinetics and colloidal stability. <i>Journal of Hazardous Materials</i> , 2020 , 386, 121973	12.8	16
22	New insights into CO ₂ sorption on biochar/Fe oxyhydroxide composites: Kinetics, mechanisms, and in situ characterization. <i>Chemical Engineering Journal</i> , 2020 , 384, 123289	14.7	14
21	Interactions of arsenic, copper, and zinc in soil-plant system: Partition, uptake and phytotoxicity. <i>Science of the Total Environment</i> , 2020 , 745, 140926	10.2	13
20	The cation competition and electrostatic theory are equally valid in quantifying the toxicity of trivalent rare earth ions (Y and Ce) to <i>Triticum aestivum</i> . <i>Environmental Pollution</i> , 2019 , 250, 456-463	9.3	12
19	Metal chloride-loaded biochar for phosphorus recovery: Noteworthy roles of inherent minerals in precursor. <i>Chemosphere</i> , 2021 , 266, 128991	8.4	12
18	Pyrolysis temperature-dependent carbon retention and stability of biochar with participation of calcium: Implications to carbon sequestration. <i>Environmental Pollution</i> , 2021 , 287, 117566	9.3	11
17	Soil colloids affect the aggregation and stability of biochar colloids. <i>Science of the Total Environment</i> , 2021 , 771, 145414	10.2	10
16	Biomass-derived pyrolytic carbons accelerated Fe(III)/Fe(II) redox cycle for persulfate activation: Pyrolysis temperature-dependent performance and mechanisms. <i>Applied Catalysis B: Environmental</i> , 2021 , 297, 120446	21.8	10
15	Molecular weight-dependent heterogeneities in photochemical formation of hydroxyl radical from dissolved organic matters with different sources. <i>Science of the Total Environment</i> , 2020 , 725, 138402	10.2	9
14	Synergistic role of bulk carbon and iron minerals inherent in the sludge-derived biochar for As(V) immobilization. <i>Chemical Engineering Journal</i> , 2021 , 417, 129183	14.7	8

13	The shuttling effects and associated mechanisms of different types of iron oxide nanoparticles for Cu(II) reduction by <i>Geobacter sulfurreducens</i> . <i>Journal of Hazardous Materials</i> , 2020 , 393, 122390	12.8	6
12	Uptake of vegetable and soft drink affected transformation and bioaccessibility of lead in gastrointestinal track exposed to lead-contaminated soil particles. <i>Ecotoxicology and Environmental Safety</i> , 2020 , 194, 110411	7	6
11	Coherent toxicity prediction framework for deciphering the joint effects of rare earth metals (La and Ce) under varied levels of calcium and NTA. <i>Chemosphere</i> , 2020 , 254, 126905	8.4	6
10	Enhanced trichloroethylene biodegradation: Roles of biochar-microbial collaboration beyond adsorption. <i>Science of the Total Environment</i> , 2021 , 792, 148451	10.2	6
9	Bioleaching of spent Ni-Cd batteries and phylogenetic analysis of an acidophilic strain in acidified sludge. <i>Frontiers of Environmental Science and Engineering in China</i> , 2007 , 1, 459-465		5
8	The microorganism and biochar-augmented bioreactive top-layer soil for degradation removal of 2,4-dichlorophenol from surface runoff. <i>Science of the Total Environment</i> , 2020 , 733, 139244	10.2	4
7	Mesoporous ball-milling iron-loaded biochar for enhanced sorption of reactive red: Performance and mechanisms. <i>Environmental Pollution</i> , 2021 , 290, 117992	9.3	4
6	Evaluation of long-term carbon sequestration of biochar in soil with biogeochemical field model.. <i>Science of the Total Environment</i> , 2022 , 822, 153576	10.2	3
5	Direct and Indirect Electron Transfer Routes of Chromium(VI) Reduction with Different Crystalline Ferric Oxyhydroxides in the Presence of Pyrogenic Carbon.. <i>Environmental Science & Technology</i> , 2022 ,	10.3	3
4	Dynamic release and transformation of metallic copper colloids in flooded paddy soil: Role of soil reducible sulfate and temperature. <i>Journal of Hazardous Materials</i> , 2021 , 402, 123462	12.8	2
3	Development of phosphorus composite biochar for simultaneous enhanced carbon sink and heavy metal immobilization in soil.. <i>Science of the Total Environment</i> , 2022 , 154845	10.2	1
2	A review of pristine and modified biochar immobilizing typical heavy metals in soil: Applications and challenges.. <i>Journal of Hazardous Materials</i> , 2022 , 432, 128668	12.8	1
1	Ionic liquid-assisted production of high-porosity biochar with more surface functional groups: Taking cellulose as attacking target. <i>Chemical Engineering Journal</i> , 2021 , 433, 133811	14.7	0