Ling Zhao

List of Publications by Year in Descending Order

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	Evaluation of long-term carbon sequestration of biochar in soil with biogeochemical field model.. *Science of the Total Environment*, **2022**, 822, 153576	10.2	3
65	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**,	10.3	3
64	Development of phosphorus composite biochar for simultaneous enhanced carbon sink and heavy metal immobilization in soil.. *Science of the Total Environment*, **2022**, 154845	10.2	1
63	A review of pristine and modified biochar immobilizing typical heavy metals in soil: Applications and challenges.. *Journal of Hazardous Materials*, **2022**, 432, 128668	12.8	1
62	Ionic liquid-assisted production of high-porosity biochar with more surface functional groups: Taking cellulose as attacking target. *Chemical Engineering Journal*, **2021**, 433, 133811	14.7	0
61	Soil colloids affect the aggregation and stability of biochar colloids. *Science of the Total Environment*, **2021**, 771, 145414	10.2	10
60	Persulfate Oxidation of Sulfamethoxazole by Magnetic Iron-Char Composites via Nonradical Pathways: Fe(IV) Versus Surface-Mediated Electron Transfer. *Environmental Science & Technology*, **2021**, 55, 10077-10086	10.3	31
59	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	12.8	27
58	Dynamic release and transformation of metallic copper colloids in flooded paddy soil: Role of soil reducible sulfate and temperature. *Journal of Hazardous Materials*, **2021**, 402, 123462	12.8	2
57	Metal chloride-loaded biochar for phosphorus recovery: Noteworthy roles of inherent minerals in precursor. *Chemosphere*, **2021**, 266, 128991	8.4	12
56	Country-level potential of carbon sequestration and environmental benefits by utilizing crop residues for biochar implementation. *Applied Energy*, **2021**, 282, 116275	10.7	20
55	Synergistic role of bulk carbon and iron minerals inherent in the sludge-derived biochar for As(V) immobilization. *Chemical Engineering Journal*, **2021**, 417, 129183	14.7	8
54	Impacts of different activation processes on the carbon stability of biochar for oxidation resistance. *Bioresource Technology*, **2021**, 338, 125555	11	20
53	Pyrolysis temperature-dependent carbon retention and stability of biochar with participation of calcium: Implications to carbon sequestration. *Environmental Pollution*, **2021**, 287, 117566	9.3	11
52	Enhanced trichloroethylene biodegradation: Roles of biochar-microbial collaboration beyond adsorption. *Science of the Total Environment*, **2021**, 792, 148451	10.2	6
51	Biomass-derived pyrolytic carbons accelerated Fe(III)/Fe(II) redox cycle for persulfate activation: Pyrolysis temperature-depended performance and mechanisms. *Applied Catalysis B: Environmental*, **2021**, 297, 120446	21.8	10
50	Mesoporous ball-milling iron-loaded biochar for enhanced sorption of reactive red: Performance and mechanisms. *Environmental Pollution*, **2021**, 290, 117992	9.3	4

49	Molecular weight-dependent heterogeneities in photochemical formation of hydroxyl radical from dissolved organic matters with different sources. *Science of the Total Environment*, **2020**, 725, 138402	10.2	9
48	The microorganism and biochar-augmented bioreactive top-layer soil for degradation removal of 2,4-dichlorophenol from surface runoff. *Science of the Total Environment*, **2020**, 733, 139244	10.2	4
47	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	12.8	6
46	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	14.7	38
45	Different alkaline minerals interacted with biomass carbon during pyrolysis: Which one improved biochar carbon sequestration?. *Journal of Cleaner Production*, **2020**, 255, 120162	10.3	35
44	Uptake of vegetable and soft drink affected transformation and bioaccessibility of lead in gastrointestinal track exposed to lead-contaminated soil particles. *Ecotoxicology and Environmental Safety*, **2020**, 194, 110411	7	6
43	Coherent toxicity prediction framework for deciphering the joint effects of rare earth metals (La and Ce) under varied levels of calcium and NTA. *Chemosphere*, **2020**, 254, 126905	8.4	6
42	Roles of the mineral constituents in sludge-derived biochar in persulfate activation for phenol degradation. *Journal of Hazardous Materials*, **2020**, 398, 122861	12.8	33
41	New insights into CO2 sorption on biochar/Fe oxyhydroxide composites: Kinetics, mechanisms, and in situ characterization. *Chemical Engineering Journal*, **2020**, 384, 123289	14.7	14
40	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	12.8	25
39	Biochar as simultaneous shelter, adsorbent, pH buffer, and substrate of Pseudomonas citronellolis to promote biodegradation of high concentrations of phenol in wastewater. *Water Research*, **2020**, 172, 115494	12.5	56
38	Sustainable conversion of contaminated dredged river sediment into eco-friendly foamed concrete. *Journal of Cleaner Production*, **2020**, 252, 119799	10.3	20
37	Interactions of CeO nanoparticles with natural colloids and electrolytes impact their aggregation kinetics and colloidal stability. *Journal of Hazardous Materials*, **2020**, 386, 121973	12.8	16
36	Pyrolysis-temperature depended electron donating and mediating mechanisms of biochar for Cr(VI) reduction. *Journal of Hazardous Materials*, **2020**, 388, 121794	12.8	49
35	Interactions of arsenic, copper, and zinc in soil-plant system: Partition, uptake and phytotoxicity. *Science of the Total Environment*, **2020**, 745, 140926	10.2	13
34	Nitrogen Transformation during Pyrolysis of Various N-Containing Biowastes with Participation of Mineral Calcium. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 12197-12207	8.3	18
33	Suppressed formation of polycyclic aromatic hydrocarbons (PAHs) during pyrolytic production of Fe-enriched composite biochar. *Journal of Hazardous Materials*, **2020**, 382, 121033	12.8	25
32	Infiltration behavior of heavy metals in runoff through soil amended with biochar as bulking agent. *Environmental Pollution*, **2019**, 254, 113114	9.3	16

31	Physicochemical property and colloidal stability of micron- and nano-particle biochar derived from a variety of feedstock sources. *Science of the Total Environment*, **2019**, 661, 685-695	10.2	66
30	Pyrolysis-temperature depended quinone and carbonyl groups as the electron accepting sites in barley grass derived biochar. *Chemosphere*, **2019**, 232, 273-280	8.4	42
29	Interaction with low molecular weight organic acids affects the electron shuttling of biochar for Cr(VI) reduction. *Journal of Hazardous Materials*, **2019**, 378, 120705	12.8	55
28	Different mechanisms between biochar and activated carbon for the persulfate catalytic degradation of sulfamethoxazole: Roles of radicals in solution or solid phase. *Chemical Engineering Journal*, **2019**, 375, 121908	14.7	69
27	The cation competition and electrostatic theory are equally valid in quantifying the toxicity of trivalent rare earth ions (Y and Ce) to Triticum aestivum. *Environmental Pollution*, **2019**, 250, 456-463	9.3	12
26	Potassium doping increases biochar carbon sequestration potential by 45%, facilitating decoupling of carbon sequestration from soil improvement. *Scientific Reports*, **2019**, 9, 5514	4.9	43
25	N-doped biochar synthesized by a facile ball-milling method for enhanced sorption of CO2 and reactive red. *Chemical Engineering Journal*, **2019**, 368, 564-572	14.7	96
24	Phytotoxicity of individual and binary mixtures of rare earth elements (Y, La, and Ce) in relation to bioavailability. *Environmental Pollution*, **2019**, 246, 114-121	9.3	18
23	Biochar as both electron donor and electron shuttle for the reduction transformation of Cr(VI) during its sorption. *Environmental Pollution*, **2019**, 244, 423-430	9.3	146
22	Interaction of Inherent Minerals with Carbon during Biomass Pyrolysis Weakens Biochar Carbon Sequestration Potential. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 1591-1599	8.3	43
21	Contrasting impacts of pre- and post-application aging of biochar on the immobilization of Cd in contaminated soils. *Environmental Pollution*, **2018**, 242, 1362-1370	9.3	78
20	Characterization and quantification of electron donating capacity and its structure dependence in biochar derived from three waste biomasses. *Chemosphere*, **2018**, 211, 1073-1081	8.4	73
19	Release of nutrients and heavy metals from biochar-amended soil under environmentally relevant conditions. *Environmental Science and Pollution Research*, **2018**, 25, 2517-2527	5.1	23
18	Indispensable role of biochar-inherent mineral constituents in its environmental applications: A review. *Bioresource Technology*, **2017**, 241, 887-899	11	170
17	Copyrolysis of Biomass with Phosphate Fertilizers To Improve Biochar Carbon Retention, Slow Nutrient Release, and Stabilize Heavy Metals in Soil. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 1630-1636	8.3	129
16	The Interfacial Behavior between Biochar and Soil Minerals and Its Effect on Biochar Stability. *Environmental Science & Technology*, **2016**, 50, 2264-71	10.3	192
15	Chemical transformation of CO2 during its capture by waste biomass derived biochars. *Environmental Pollution*, **2016**, 213, 533-540	9.3	83
14	Endogenous minerals have influences on surface electrochemistry and ion exchange properties of biochar. *Chemosphere*, **2015**, 136, 133-9	8.4	46

13	Toxicity characteristic leaching procedure over- or under-estimates leachability of lead in phosphate-amended contaminated soils. *Chemosphere*, **2015**, 138, 744-50	8.4	27
12	Distribution and evolution of organic matter phases during biochar formation and their importance in carbon loss and pore structure. *Chemical Engineering Journal*, **2014**, 250, 240-247	14.7	55
11	Effects of mineral additives on biochar formation: carbon retention, stability, and properties. *Environmental Science & Technology*, **2014**, 48, 11211-7	10.3	180
10	Phosphorus-assisted biomass thermal conversion: reducing carbon loss and improving biochar stability. *PLoS ONE*, **2014**, 9, e115373	3.7	52
9	Heterogeneity of biochar properties as a function of feedstock sources and production temperatures. *Journal of Hazardous Materials*, **2013**, 256-257, 1-9	12.8	206
8	Energy Balance of a Biodrying Process for Organic Wastes of High Moisture Content: A Review. *Drying Technology*, **2013**, 31, 132-145	2.6	57
7	Short-term effects of raw rice straw and its derived biochar on greenhouse gas emission in five typical soils in China. *Soil Science and Plant Nutrition*, **2013**, 59, 800-811	1.6	47
6	Mineral constituents profile of biochar derived from diversified waste biomasses: implications for agricultural applications. *Journal of Environmental Quality*, **2013**, 42, 545-52	3.4	74
5	Sludge Bio-drying Process at Low Ambient Temperature: Effect of Bulking Agent Particle Size and Controlled Temperature. *Drying Technology*, **2012**, 30, 1037-1044	2.6	33
4	Comparison of bio-dissolution of spent Ni-Cd batteries by sewage sludge using ferrous ions and elemental sulfur as substrate. *Chemosphere*, **2008**, 70, 974-81	8.4	28
3	Mesoporous SBA-15 Supported Iron Oxide: A Potent Catalyst for Hydrogen Sulfide Removal. *Water, Air, and Soil Pollution*, **2008**, 193, 247-257	2.6	28
2	Bioleaching of spent Ni-Cd batteries by continuous flow system: effect of hydraulic retention time and process load. *Journal of Hazardous Materials*, **2008**, 160, 648-54	12.8	42
1	Bioleaching of spent Ni-Cd batteries and phylogenetic analysis of an acidophilic strain in acidified sludge. *Frontiers of Environmental Science and Engineering in China*, **2007**, 1, 459-465		5