Xinde Cao

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3504044/publications.pdf

Version: 2024-02-01

158 papers	19,863 citations	10979 71 h-index	10724 138 g-index
158 all docs	158 docs citations	158 times ranked	12703 citing authors

#	Article	IF	Citations
1	Accumulation of Pb, Cu, and Zn in native plants growing on a contaminated Florida site. Science of the Total Environment, 2006, 368, 456-464.	3.9	1,290
2	Dairy-Manure Derived Biochar Effectively Sorbs Lead and Atrazine. Environmental Science & Technology, 2009, 43, 3285-3291.	4.6	1,025
3	Properties of dairy-manure-derived biochar pertinent to its potential use in remediation. Bioresource Technology, 2010, 101, 5222-5228.	4.8	950
4	A review of biochar as a low-cost adsorbent for aqueous heavy metal removal. Critical Reviews in Environmental Science and Technology, 2016, 46, 406-433.	6.6	945
5	Removal of heavy metals from aqueous solution by biochars derived from anaerobically digested biomass. Bioresource Technology, 2012, 110, 50-56.	4.8	627
6	Simultaneous Immobilization of Lead and Atrazine in Contaminated Soils Using Dairy-Manure Biochar. Environmental Science & Technology, 2011, 45, 4884-4889.	4.6	503
7	Biochar derived from anaerobically digested sugar beet tailings: Characterization and phosphate removal potential. Bioresource Technology, 2011, 102, 6273-6278.	4.8	495
8	Removal of phosphate from aqueous solution by biochar derived from anaerobically digested sugar beet tailings. Journal of Hazardous Materials, 2011, 190, 501-507.	6.5	471
9	Removal of Cu, Zn, and Cd from aqueous solutions by the dairy manure-derived biochar. Environmental Science and Pollution Research, 2013, 20, 358-368.	2.7	460
10	Comparison of rice husk- and dairy manure-derived biochars for simultaneously removing heavy metals from aqueous solutions: Role of mineral components in biochars. Chemosphere, 2013, 92, 955-961.	4.2	408
11	Multifunctional iron-biochar composites for the removal of potentially toxic elements, inherent cations, and hetero-chloride from hydraulic fracturing wastewater. Environment International, 2019, 124, 521-532.	4.8	384
12	Biochar-supported zerovalent iron for removal of various contaminants from aqueous solutions. Bioresource Technology, 2014, 152, 538-542.	4.8	349
13	Immobilization of Zn, Cu, and Pb in contaminated soils using phosphate rock and phosphoric acid. Journal of Hazardous Materials, 2009, 164, 555-564.	6.5	326
14	Sorption of heavy metals on chitosan-modified biochars and its biological effects. Chemical Engineering Journal, 2013, 231, 512-518.	6.6	325
15	Mechanisms of lead, copper, and zinc retention by phosphate rock. Environmental Pollution, 2004, 131, 435-444.	3.7	322
16	Ball milling as a mechanochemical technology for fabrication of novel biochar nanomaterials. Bioresource Technology, 2020, 312, 123613.	4.8	293
17	Heterogeneity of biochar properties as a function of feedstock sources and production temperatures. Journal of Hazardous Materials, 2013, 256-257, 1-9.	6.5	287
18	The Interfacial Behavior between Biochar and Soil Minerals and Its Effect on Biochar Stability. Environmental Science & Technology, 2016, 50, 2264-2271.	4.6	268

#	Article	IF	Citations
19	Biochar as both electron donor and electron shuttle for the reduction transformation of Cr(VI) during its sorption. Environmental Pollution, 2019, 244, 423-430.	3.7	258
20	Green remediation of As and Pb contaminated soil using cement-free clay-based stabilization/solidification. Environment International, 2019, 126, 336-345.	4.8	249
21	Impacts of Phosphate Amendments on Lead Biogeochemistry at a Contaminated Site. Environmental Science & Technology, 2002, 36, 5296-5304.	4.6	241
22	Indispensable role of biochar-inherent mineral constituents in its environmental applications: A review. Bioresource Technology, 2017, 241, 887-899.	4.8	239
23	Effects of Mineral Additives on Biochar Formation: Carbon Retention, Stability, and Properties. Environmental Science & Technology, 2014, 48, 11211-11217.	4.6	233
24	Waste-derived biochar for water pollution control and sustainable development. Nature Reviews Earth & Environment, 2022, 3, 444-460.	12.2	233
25	Adsorption of sulfamethoxazole on biochar and its impact on reclaimed water irrigation. Journal of Hazardous Materials, 2012, 209-210, 408-413.	6.5	229
26	Microplastics in the soil-groundwater environment: Aging, migration, and co-transport of contaminants â€“ A critical review. Journal of Hazardous Materials, 2021, 419, 126455.	6.5	212
27	Enhanced Lead Sorption by Biochar Derived from Anaerobically Digested Sugarcane Bagasse. Separation Science and Technology, 2011, 46, 1950-1956.	1.3	206
28	A sustainable biochar catalyst synergized with copper heteroatoms and CO₂ for singlet oxygenation and electron transfer routes. Green Chemistry, 2019, 21, 4800-4814.	4.6	188
29	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.	4.6	180
30	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.	6.6	178
31	Magnetic Nanoscale Zerovalent Iron Assisted Biochar: Interfacial Chemical Behaviors and Heavy Metals Remediation Performance. ACS Sustainable Chemistry and Engineering, 2017, 5, 9673-9682.	3.2	176
32	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.	3.2	170
33	Field assessment of lead immobilization in a contaminated soil after phosphate application. Science of the Total Environment, 2003, 305, 117-127.	3.9	163
34	Highly Efficient Utilization of Nano-Fe(0) Embedded in Mesoporous Carbon for Activation of Peroxydisulfate. Environmental Science & Technology, 2019, 53, 9081-9090.	4.6	160
35	Effects of compost and phosphate on plant arsenic accumulation from soils near pressure-treated wood. Environmental Pollution, 2004, 132, 435-442.	3.7	153
36	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.	5.3	151

#	Article	IF	Citations
37	Carbonate and Magnesium Interactive Effect on Calcium Phosphate Precipitation. Environmental Science & Technology, 2008, 42, 436-442.	4.6	147
38	Phosphate-induced lead immobilization from different lead minerals in soils under varying pH conditions. Environmental Pollution, 2008, 152, 184-192.	3.7	146
39	Occurrence of contaminants in drinking water sources and the potential of biochar for water quality improvement: A review. Critical Reviews in Environmental Science and Technology, 2020, 50, 549-611.	6.6	143
40	Chemical transformation of CO2 during its capture by waste biomass derived biochars. Environmental Pollution, 2016, 213, 533-540.	3.7	140
41	Sorption and cosorption of lead and sulfapyridine on carbon nanotube-modified biochars. Environmental Science and Pollution Research, 2015, 22, 1868-1876.	2.7	139
42	Transport and retention of biochar nanoparticles in a paddy soil under environmentally-relevant solution chemistry conditions. Environmental Pollution, 2017, 230, 540-549.	3.7	138
43	Lead transformation and distribution in the soils of shooting ranges in Florida, USA. Science of the Total Environment, 2003, 307, 179-189.	3.9	133
44	Comparison of the characteristics and mechanisms of Hg(II) sorption by biochars and activated carbon. Journal of Colloid and Interface Science, 2016, 463, 55-60.	5.0	131
45	Contrasting impacts of pre- and post-application aging of biochar on the immobilization of Cd in contaminated soils. Environmental Pollution, 2018, 242, 1362-1370.	3.7	127
46	Characterization and quantification of electron donating capacity and its structure dependence in biochar derived from three waste biomasses. Chemosphere, 2018, 211, 1073-1081.	4.2	127
47	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.	3.9	126
48	Comparison of sewage sludge- and pig manure-derived biochars for hydrogen sulfide removal. Chemosphere, 2014, 111, 296-303.	4.2	123
49	Roles of Phosphoric Acid in Biochar Formation: Synchronously Improving Carbon Retention and Sorption Capacity. Journal of Environmental Quality, 2017, 46, 393-401.	1.0	123
50	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.	6.6	113
51	Critical Impact of Nitrogen Vacancies in Nonradical Carbocatalysis on Nitrogen-Doped Graphitic Biochar. Environmental Science & Technology, 2021, 55, 7004-7014.	4.6	112
52	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.	6.5	109
53	Sustainable remediation with an electroactive biochar system: mechanisms and perspectives. Green Chemistry, 2020, 22, 2688-2711.	4.6	109
54	Phosphorus Release from Dairy Manure, the Manure-Derived Biochar, and Their Amended Soil: Effects of Phosphorus Nature and Soil Property. Journal of Environmental Quality, 2014, 43, 1504-1509.	1.0	107

#	Article	IF	Citations
55	Pyrolysis-temperature depended electron donating and mediating mechanisms of biochar for Cr(VI) reduction. Journal of Hazardous Materials, 2020, 388, 121794.	6.5	103
56	Colloid Deposition and Release in Soils and Their Association With Heavy Metals. Critical Reviews in Environmental Science and Technology, 2011, 41, 336-372.	6.6	98
57	Biochar- and phosphate-induced immobilization of heavy metals in contaminated soil and water: implication on simultaneous remediation of contaminated soil and groundwater. Environmental Science and Pollution Research, 2014, 21, 4665-4674.	2.7	95
58	In vitro bioaccessibility and health risk assessment of heavy metals in atmospheric particulate matters from three different functional areas of Shanghai, China. Science of the Total Environment, 2018, 610-611, 546-554.	3.9	92
59	Interaction of organic and inorganic fractions of biochar with Pb(<scp>ii</scp>) ion: further elucidation of mechanisms for Pb(<scp>ii</scp>) removal by biochar. RSC Advances, 2014, 4, 44930-44937.	1.7	90
60	Interaction with low molecular weight organic acids affects the electron shuttling of biochar for Cr(VI) reduction. Journal of Hazardous Materials, 2019, 378, 120705.	6.5	90
61	Contrasting effects of biochar nanoparticles on the retention and transport of phosphorus in acidic and alkaline soils. Environmental Pollution, 2018, 239, 562-570.	3.7	88
62	Mineral Constituents Profile of Biochar Derived from Diversified Waste Biomasses: Implications for Agricultural Applications. Journal of Environmental Quality, 2013, 42, 545-552.	1.0	87
63	Sorption of arsenic onto Ni/Fe layered double hydroxide (LDH)-biochar composites. RSC Advances, 2016, 6, 17792-17799.	1.7	85
64	Kaolinite Enhances the Stability of the Dissolvable and Undissolvable Fractions of Biochar via Different Mechanisms. Environmental Science & Technology, 2018, 52, 8321-8329.	4.6	84
65	Pyrolysis-temperature depended quinone and carbonyl groups as the electron accepting sites in barley grass derived biochar. Chemosphere, 2019, 232, 273-280.	4.2	82
66	Country-level potential of carbon sequestration and environmental benefits by utilizing crop residues for biochar implementation. Applied Energy, 2021, 282, 116275.	5.1	81
67	Immobilization of lead in shooting range soils by means of cement, quicklime, and phosphate amendments. Environmental Science and Pollution Research, 2008, 15, 120-127.	2.7	79
68	Effects of phosphorus amendments and plant growth on the mobility of Pb, Cu, and Zn in a multi-metal-contaminated soil. Environmental Science and Pollution Research, 2012, 19, 1659-1667.	2.7	78
69	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.	6.6	75
70	Interaction of Inherent Minerals with Carbon during Biomass Pyrolysis Weakens Biochar Carbon Sequestration Potential. ACS Sustainable Chemistry and Engineering, 2019, 7, 1591-1599.	3.2	74
71	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.	6.6	74
72	Impacts of different activation processes on the carbon stability of biochar for oxidation resistance. Bioresource Technology, 2021, 338, 125555.	4.8	74

#	Article	IF	Citations
73	Biochar-supported zerovalent iron reclaims silver from aqueous solution to form antimicrobial nanocomposite. Chemosphere, 2014, 117, 801-805.	4.2	73
74	Biochar-supported carbon nanotube and graphene oxide nanocomposites for Pb(<scp>ii</scp>) and Cd(<scp>ii</scp>) removal. RSC Advances, 2016, 6, 24314-24319.	1.7	73
75	Phosphorus-Assisted Biomass Thermal Conversion: Reducing Carbon Loss and Improving Biochar Stability. PLoS ONE, 2014, 9, e115373.	1.1	71
76	Potassium doping increases biochar carbon sequestration potential by 45%, facilitating decoupling of carbon sequestration from soil improvement. Scientific Reports, 2019, 9, 5514.	1.6	69
77	Synthesis of a multifunctional grapheneâ€"carbon nanotube aerogel and its strong adsorption of lead from aqueous solution. RSC Advances, 2013, 3, 21099.	1.7	67
78	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.	6.5	67
79	Facilitated transport of cadmium by biochar-Fe3O4 nanocomposites in water-saturated natural soils. Science of the Total Environment, 2019, 684, 265-275.	3.9	65
80	Roles of the mineral constituents in sludge-derived biochar in persulfate activation for phenol degradation. Journal of Hazardous Materials, 2020, 398, 122861.	6.5	65
81	Unraveling iron speciation on Fe-biochar with distinct arsenic removal mechanisms and depth distributions of As and Fe. Chemical Engineering Journal, 2021, 425, 131489.	6.6	63
82	Endogenous minerals have influences on surface electrochemistry and ion exchange properties of biochar. Chemosphere, 2015, 136, 133-139.	4.2	62
83	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.	0.8	60
84	Different alkaline minerals interacted with biomass carbon during pyrolysis: Which one improved biochar carbon sequestration?. Journal of Cleaner Production, 2020, 255, 120162.	4.6	60
85	Impact of CeO2 nanoparticles on the aggregation kinetics and stability of polystyrene nanoplastics: Importance of surface functionalization and solution chemistry. Water Research, 2020, 186, 116324.	5.3	59
86	Chemical and photo-initiated aging enhances transport risk of microplastics in saturated soils: Key factors, mechanisms, and modeling. Water Research, 2021, 202, 117407.	5.3	59
87	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.	6.5	57
88	Converting Ni-loaded biochars into supercapacitors: Implication on the reuse of exhausted carbonaceous sorbents. Scientific Reports, 2017, 7, 41523.	1.6	54
89	Short-term effects of rice straw biochar on sorption, emission, and transformation of soil NH4 +-N. Environmental Science and Pollution Research, 2015, 22, 9184-9192.	2.7	49
90	Pyrolysis temperature-dependent carbon retention and stability of biochar with participation of calcium: Implications to carbon sequestration. Environmental Pollution, 2021, 287, 117566.	3.7	48

#	Article	IF	Citations
91	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.	10.8	48
92	Facilitated transport of anatase titanium dioxides nanoparticles in the presence of phosphate in saturated sands. Journal of Colloid and Interface Science, 2015, 451, 134-143.	5.0	47
93	Application of iron-biochar composite in topsoil for simultaneous remediation of chromium-contaminated soil and groundwater: Immobilization mechanism and long-term stability. Journal of Hazardous Materials, 2021, 405, 124226.	6.5	47
94	Sustainable impact of tartaric acid as electron shuttle on hierarchical iron-incorporated biochar. Chemical Engineering Journal, 2020, 395, 125138.	6.6	46
95	Suppressed formation of polycyclic aromatic hydrocarbons (PAHs) during pyrolytic production of Fe-enriched composite biochar. Journal of Hazardous Materials, 2020, 382, 121033.	6.5	43
96	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.	6.5	43
97	Elucidating Toxicodynamic Differences at the Molecular Scale between ZnO Nanoparticles and ZnCl₂ in <i>Enchytraeus crypticus</i> via Nontargeted Metabolomics. Environmental Science & Technology, 2020, 54, 3487-3498.	4.6	43
98	Bench-scale recovery of phosphorus from flushed dairy manure wastewater. Bioresource Technology, 2008, 99, 3036-3043.	4.8	42
99	Mobility of Pb, Cu, and Zn in the phosphorus-amended contaminated soils under simulated landfill and rainfall conditions. Environmental Science and Pollution Research, 2013, 20, 5913-5921.	2.7	41
100	An integrated approach for simultaneous immobilization of lead in both contaminated soil and groundwater: Laboratory test and numerical modeling. Journal of Hazardous Materials, 2018, 342, 107-113.	6.5	41
101	Stabilization of dissolvable biochar by soil minerals: Release reduction and organo-mineral complexes formation. Journal of Hazardous Materials, 2021, 412, 125213.	6.5	41
102	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.	4.6	40
103	Phytotoxicity of individual and binary mixtures of rare earth elements (Y, La, and Ce) in relation to bioavailability. Environmental Pollution, 2019, 246, 114-121.	3.7	38
104	Sustainable conversion of contaminated dredged river sediment into eco-friendly foamed concrete. Journal of Cleaner Production, 2020, 252, 119799.	4.6	38
105	Role of Inherent Inorganic Constituents in SO₂ Sorption Ability of Biochars Derived from Three Biomass Wastes. Environmental Science & Technology, 2016, 50, 12957-12965.	4.6	36
106	Release of nutrients and heavy metals from biochar-amended soil under environmentally relevant conditions. Environmental Science and Pollution Research, 2018, 25, 2517-2527.	2.7	36
107	Enhanced trichloroethylene biodegradation: Roles of biochar-microbial collaboration beyond adsorption. Science of the Total Environment, 2021, 792, 148451.	3.9	36
108	Biomass reduction and arsenic transformation during composting of arsenic-rich hyperaccumulator Pteris vittata L.. Environmental Science and Pollution Research, 2010, 17, 586-594.	2.7	33

#	Article	IF	Citations
109	Interactions of CeO2 nanoparticles with natural colloids and electrolytes impact their aggregation kinetics and colloidal stability. Journal of Hazardous Materials, 2020, 386, 121973.	6.5	33
110	Metal chloride-loaded biochar for phosphorus recovery: Noteworthy roles of inherent minerals in precursor. Chemosphere, 2021, 266, 128991.	4.2	33
111	Contribution of pristine and reduced microbial extracellular polymeric substances of different sources to Cu(II) reduction. Journal of Hazardous Materials, 2021, 415, 125616.	6.5	33
112	Development of phosphate rock integrated with iron amendment for simultaneous immobilization of Zn and Cr(VI) in an electroplating contaminated soil. Chemosphere, 2017, 182, 15-21.	4.2	32
113	Computational study and optimization experiment of nZVI modified by anionic and cationic polymer for Cr(VI) stabilization in soil: Kinetics and response surface methodology (RSM). Environmental Pollution, 2021, 276, 116745.	3.7	32
114	Toxicity characteristic leaching procedure over- or under-estimates leachability of lead in phosphate-amended contaminated soils. Chemosphere, 2015, 138, 744-750.	4.2	31
115	New insights into CO2 sorption on biochar/Fe oxyhydroxide composites: Kinetics, mechanisms, and in situ characterization. Chemical Engineering Journal, 2020, 384, 123289.	6.6	28
116	Protein corona-induced aggregation of differently sized nanoplastics: impacts of protein type and concentration. Environmental Science: Nano, 2021, 8, 1560-1570.	2.2	28
117	Development of phosphorus composite biochar for simultaneous enhanced carbon sink and heavy metal immobilization in soil. Science of the Total Environment, 2022, 831, 154845.	3.9	28
118	Simultaneous reduction and sequestration of hexavalent chromium by magnetic Î²-Cyclodextrin stabilized Fe3S4. Journal of Hazardous Materials, 2022, 431, 128592.	6.5	28
119	Interactions of arsenic, copper, and zinc in soil-plant system: Partition, uptake and phytotoxicity. Science of the Total Environment, 2020, 745, 140926.	3.9	27
120	Soil colloids affect the aggregation and stability of biochar colloids. Science of the Total Environment, 2021, 771, 145414.	3.9	27
121	Evaluation of long-term carbon sequestration of biochar in soil with biogeochemical field model. Science of the Total Environment, 2022, 822, 153576.	3.9	24
122	A novel lignin hydrogel supported nZVI for efficient removal of Cr(VI). Chemosphere, 2022, 301, 134781.	4.2	24
123	Evaluating the Applicability of Regulatory Leaching Tests for Assessing Lead Leachability in Contaminated Shooting Range Soils. Environmental Monitoring and Assessment, 2008, 139, 1-13.	1.3	23
124	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.	6.6	23
125	Infiltration behavior of heavy metals in runoff through soil amended with biochar as bulking agent. Environmental Pollution, 2019, 254, 113114.	3.7	21
126	Biochar-impacted sulfur cycling affects methylmercury phytoavailability in soils under different redox conditions. Journal of Hazardous Materials, 2021, 407, 124397.	6.5	21

#	Article	IF	Citations
127	Mesoporous ball-milling iron-loaded biochar for enhanced sorption of reactive red: Performance and mechanisms. Environmental Pollution, 2021, 290, 117992.	3.7	21
128	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.	6.5	20
129	The cation competition and electrostatic theory are equally valid in quantifying the toxicity of trivalent rare earth ions (Y3+ and Ce3+) to Triticum aestivum. Environmental Pollution, 2019, 250, 456-463.	3.7	19
130	Synergistic role of bulk carbon and iron minerals inherent in the sludge-derived biochar for As(V) immobilization. Chemical Engineering Journal, 2021, 417, 129183.	6.6	18
131	Further reuse of phosphorus-laden biochar for lead sorption from aqueous solution: Isotherm, kinetics, and mechanism. Science of the Total Environment, 2021, 792, 148550.	3.9	18
132	UV/ozone induced physicochemical transformations of polystyrene nanoparticles and their aggregation tendency and kinetics with natural organic matter in aqueous systems. Journal of Hazardous Materials, 2022, 433, 128790.	6.5	18
133	Commonwealth of Soil Health: How Do Earthworms Modify the Soil Microbial Responses to CeO₂ Nanoparticles?. Environmental Science & Technology, 2022, 56, 1138-1148.	4.6	17
134	Effective Modeling Framework for Quantifying the Potential Impacts of Coexisting Anions on the Toxicity of Arsenate, Selenite, and Vanadate. Environmental Science & Technology, 2020, 54, 2379-2388.	4.6	14
135	Modeling and visualizing the transport and retention of cationic and oxyanionic metals (Cd and Cr) in saturated soil under various hydrochemical and hydrodynamic conditions. Science of the Total Environment, 2022, 812, 151467.	3.9	14
136	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.	6.5	13
137	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.	3.9	12
138	Dispersion and transport of microplastics in three water-saturated coastal soils. Journal of Hazardous Materials, 2022, 424, 127614.	6.5	12
139	Ionic liquid-assisted production of high-porosity biochar with more surface functional groups: Taking cellulose as attacking target. Chemical Engineering Journal, 2022, 433, 133811.	6.6	12
140	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.	2.9	11
141	Transformation and bioaccessibility of lead induced by steamed bread feed in the gastrointestinal tract. Ecotoxicology and Environmental Safety, 2017, 137, 158-164.	2.9	10
142	New insights into the underlying influence of bentonite on Pb immobilization by undissolvable and dissolvable fractions of biochar. Science of the Total Environment, 2021, 775, 145824.	3.9	10
143	Migration and transformation of chromium in unsaturated soil during groundwater table fluctuations induced by rainfall. Journal of Hazardous Materials, 2021, 416, 126229.	6.5	10
144	Coherent toxicity prediction framework for deciphering the joint effects of rare earth metals (La and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	4.2	10

#	Article	IF	Citations
145	Colloid formation and facilitated chromium transport in the coastal area soil induced by freshwater and seawater alternating fluctuations. Water Research, 2022, 218, 118456.	5.3	10
146	A comparative and modeled approach for three biochar materials in simultaneously preventing the migration and reducing the bioaccessibility of heavy metals in soil: Revealing immobilization mechanisms. Environmental Pollution, 2022, 309, 119792.	3.7	10
147	Nano ferric oxide adsorbents with self-acidification effect for efficient adsorption of Sb(V). Chemosphere, 2021, 272, 129933.	4.2	9
148	Sorption and desorption behavior of lead on a Chinese kaolin. Environmental Earth Sciences, 2011, 63, 145-149.	1.3	8
149	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.	6.5	8
150	A <scp>COMSOLâ€PHREEQC</scp> Coupled Python Framework for Reactive Transport Modeling in Soil and Groundwater. Ground Water, 2022, 60, 284-294.	0.7	6
151	Immobilization of Heavy Metals in Contaminated Soils Amended by Phosphate-, Carbonate-, and Silicate-Based Materials: From Lab to Field. , 2018, , 535-543.		5
152	Straw return promoted the simultaneous elimination of sulfamethoxazole and related antibiotic resistance genes in the paddy soil. Science of the Total Environment, 2022, 806, 150525.	3.9	5
153	Transformation and bioaccessibility of lead during physiologically based extraction test: effects of phosphate amendment and extract fluid components. RSC Advances, 2016, 6, 43786-43793.	1.7	4
154	Biochar effects on environmental qualities in multiple directions. Chemosphere, 2020, 250, 126306.	4.2	4
155	Oil spills enhanced dispersion and transport of microplastics in sea water and sand at coastal beachheads. Journal of Hazardous Materials, 2022, 436, 129312.	6.5	4
156	Coupling mixture reference models with DGT-perceived metal flux for deciphering the nonadditive effects of rare earth mixtures to wheat in soils. Environmental Research, 2020, 188, 109736.	3.7	3
157	Effects of different modifiers on the sorption and structural properties of biochar derived from wheat stalk. Environmental Science and Pollution Research, 2022, 29, 54988-55002.	2.7	3
158	Biochar for carbon sequestration and environmental remediation in soil. , 2022, , 35-49.		0