Hao Qiu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4666745/publications.pdf

Version: 2024-02-01

88 papers	3,134 citations	136950 32 h-index	175258 52 g-index
88 all docs	88 docs citations	88 times ranked	2771 citing authors

#	Article	IF	Citations
1	Mitigation effects of silicon rich amendments on heavy metal accumulation in rice (Oryza sativa L.) planted on multi-metal contaminated acidic soil. Chemosphere, 2011, 83, 1234-1240.	8.2	256
2	Microplastics in the soil-groundwater environment: Aging, migration, and co-transport of contaminants â€“ A critical review. Journal of Hazardous Materials, 2021, 419, 126455.	12.4	212
3	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.	10.0	180
4	Cadmium tolerance of carbon assimilation enzymes and chloroplast in Zn/Cd hyperaccumulator Picris divaricata. Journal of Plant Physiology, 2010, 167, 81-87.	3.5	132
5	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.	8.0	126
6	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.	12.7	113
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 quinone and carbonyl groups as the electron accepting sites in barley grass derived biochar. Chemosphere, 2019, 232, 273-280.	8.2	82
9	The crucial role of a protein corona in determining the aggregation kinetics and colloidal stability of polystyrene nanoplastics. Water Research, 2021, 190, 116742.	11.3	69
10	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
11	Different alkaline minerals interacted with biomass carbon during pyrolysis: Which one improved biochar carbon sequestration?. Journal of Cleaner Production, 2020, 255, 120162.	9.3	60
12	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.	11.3	59
13	Chemical and photo-initiated aging enhances transport risk of microplastics in saturated soils: Key factors, mechanisms, and modeling. Water Research, 2021, 202, 117407.	11.3	59
14	Occurrence and fate of colloids and colloid-associated metals in a mining-impacted agricultural soil upon prolonged flooding. Journal of Hazardous Materials, 2018, 348, 56-66.	12.4	58
15	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
16	Cadmium stable isotope variation in a mountain area impacted by acid mine drainage. Science of the Total Environment, 2019, 646, 696-703.	8.0	56
17	Nanospecific Phytotoxicity of CuO Nanoparticles in Soils Disappeared When Bioavailability Factors Were Considered. Environmental Science & Technology, 2017, 51, 11976-11985.	10.0	51
18	Nitrogen Transformation during Pyrolysis of Various N-Containing Biowastes with Participation of Mineral Calcium. ACS Sustainable Chemistry and Engineering, 2020, 8, 12197-12207.	6.7	48

#	Article	IF	Citations
19	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.	20.2	48
20	Effects of an iron-silicon material, a synthetic zeolite and an alkaline clay on vegetable uptake of As and Cd from a polluted agricultural soil and proposed remediation mechanisms. Environmental Geochemistry and Health, 2017, 39, 353-367.	3.4	44
21	Suppressed formation of polycyclic aromatic hydrocarbons (PAHs) during pyrolytic production of Fe-enriched composite biochar. Journal of Hazardous Materials, 2020, 382, 121033.	12.4	43
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	Elucidating Toxicodynamic Differences at the Molecular Scale between ZnO Nanoparticles and ZnCl₂ in Enchytraeus crypticus via Nontargeted Metabolomics. Environmental Science & Technology, 2020, 54, 3487-3498.	10.0	43
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	Interactions and Toxicity of Cuâ€“Zn mixtures to Hordeum vulgare in Different Soils Can Be Rationalized with Bioavailability-Based Prediction Models. Environmental Science & Technology, 2016, 50, 1014-1022.	10.0	40
26	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
27	Attenuation of Metal Bioavailability in Acidic Multi-Metal Contaminated Soil Treated with Fly Ash and Steel Slag. Pedosphere, 2012, 22, 544-553.	4.0	38
28	Phytotoxicity of individual and binary mixtures of rare earth elements (Y, La, and Ce) in relation to bioavailability. Environmental Pollution, 2019, 246, 114-121.	7.5	38
29	Simultaneous attenuation of phytoaccumulation of Cd and As in soil treated with inorganic and organic amendments. Environmental Pollution, 2019, 250, 464-474.	7.5	36
30	Predicting Copper Toxicity to Different Earthworm Species Using a Multicomponent Freundlich Model. Environmental Science & Technology, 2013, 47, 4796-4803.	10.0	34
31	Interactions of cadmium and zinc impact their toxicity to the earthworm Aporrectodea caliginosa. Environmental Toxicology and Chemistry, 2011, 30, 2084-2093.	4.3	33
32	Interactions of CeO2 nanoparticles with natural colloids and electrolytes impact their aggregation kinetics and colloidal stability. Journal of Hazardous Materials, 2020, 386, 121973.	12.4	33
33	Contribution of pristine and reduced microbial extracellular polymeric substances of different sources to Cu(II) reduction. Journal of Hazardous Materials, 2021, 415, 125616.	12.4	33
34	Effect of coexisting Al(III) ions on Pb(II) sorption on biochars: Role of pH buffer and competition. Chemosphere, 2016, 161, 438-445.	8.2	28
35	Protein corona-induced aggregation of differently sized nanoplastics: impacts of protein type and concentration. Environmental Science: Nano, 2021, 8, 1560-1570.	4.3	28
36	Development of phosphorus composite biochar for simultaneous enhanced carbon sink and heavy metal immobilization in soil. Science of the Total Environment, 2022, 831, 154845.	8.0	28

#	Article	IF	Citations
37	Interactions of arsenic, copper, and zinc in soil-plant system: Partition, uptake and phytotoxicity. Science of the Total Environment, 2020, 745, 140926.	8.0	27
38	Application of low dosage of copper oxide and zinc oxide nanoparticles boosts bacterial and fungal communities in soil. Science of the Total Environment, 2021, 757, 143807.	8.0	26
39	Different dynamic accumulation and toxicity of ZnO nanoparticles and ionic Zn in the soil sentinel organism Enchytraeus crypticus. Environmental Pollution, 2019, 245, 510-518.	7.5	24
40	Evaluation of long-term carbon sequestration of biochar in soil with biogeochemical field model. Science of the Total Environment, 2022, 822, 153576.	8.0	24
41	Phytotoxicity and oxidative effects of typical quaternary ammonium compounds on wheat (Triticum) Tj ETQq1 1 0.784314 rgBT /Over	5.3	23
42	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
43	Can commonly measurable traits explain differences in metal accumulation and toxicity in earthworm species?. Ecotoxicology, 2014, 23, 21-32.	2.4	21
44	Infiltration behavior of heavy metals in runoff through soil amended with biochar as bulking agent. Environmental Pollution, 2019, 254, 113114.	7.5	21
45	Mesoporous ball-milling iron-loaded biochar for enhanced sorption of reactive red: Performance and mechanisms. Environmental Pollution, 2021, 290, 117992.	7.5	21
46	Incorporating bioavailability into toxicity assessment of Cu-Ni, Cu-Cd, and Ni-Cd mixtures with the extended biotic ligand model and the WHAM-F tox approach. Environmental Science and Pollution Research, 2015, 22, 19213-19223.	5.3	20
47	The promoted dissolution of copper oxide nanoparticles by dissolved humic acid: Copper complexation over particle dispersion. Chemosphere, 2020, 245, 125612.	8.2	20
48	Nickel-catalyzed formation of mesoporous carbon structure promoted capacitive performance of exhausted biochar. Chemical Engineering Journal, 2021, 406, 126856.	12.7	20
49	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
50	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.	7.5	19
51	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
52	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.	12.4	18
53	Commonwealth of Soil Health: How Do Earthworms Modify the Soil Microbial Responses to CeO₂ Nanoparticles?. Environmental Science & Technology, 2022, 56, 1138-1148.	10.0	17
54	Statistically significant deviations from additivity: What do they mean in assessing toxicity of mixtures?. Ecotoxicology and Environmental Safety, 2015, 122, 37-44.	6.0	16

#	Article	IF	Citations
55	Do toxicokinetic and toxicodynamic processes hold the same for light and heavy rare earth elements in terrestrial organism Enchytraeus crypticus?. Environmental Pollution, 2020, 262, 114234.	7.5	16
56	Modelling uptake and toxicity of nickel in solution to Enchytraeus crypticus with biotic ligand model theory. Environmental Pollution, 2014, 188, 17-26.	7.5	15
57	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.	10.0	14
58	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.	8.0	14
59	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
60	Development of electrostatic-based bioavailability models for interpreting and predicting differential phytotoxicity and uptake of metal mixtures across different soils. Environmental Pollution, 2017, 226, 308-316.	7.5	12
61	Dispersion and transport of microplastics in three water-saturated coastal soils. Journal of Hazardous Materials, 2022, 424, 127614.	12.4	12
62	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.	6.0	11
63	Dynamic interaction processes of rare earth metal mixtures in terrestrial organisms interpreted by toxicokinetic and toxicodynamic model. Journal of Hazardous Materials, 2021, 418, 126281.	12.4	11
64	Multiomics analyses uncover nanoceria triggered oxidative injury and nutrient imbalance in earthworm Eisenia fetida. Journal of Hazardous Materials, 2022, 437, 129354.	12.4	11
65	Timeâ€dependent uptake and toxicity of nickel to Enchytraeus crypticus in the presence of humic acid and fulvic acid. Environmental Toxicology and Chemistry, 2017, 36, 3019-3027.	4.3	10
66	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.	8.0	10
67	Migration and transformation of chromium in unsaturated soil during groundwater table fluctuations induced by rainfall. Journal of Hazardous Materials, 2021, 416, 126229.	12.4	10
68	Coherent toxicity prediction framework for deciphering the joint effects of rare earth metals (La and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	8.2	10
69	Lanthanum and cerium disrupt similar biological pathways and interact synergistically in Triticum aestivum as revealed by metabolomic profiling and quantitative modeling. Journal of Hazardous Materials, 2022, 426, 127831.	12.4	10
70	Colloid formation and facilitated chromium transport in the coastal area soil induced by freshwater and seawater alternating fluctuations. Water Research, 2022, 218, 118456.	11.3	10
71	Smart 6S roadmap for deciphering the migration and risk of heavy metals in soil and groundwater systems at brownfield sites nationwide in China. Science Bulletin, 2022, 67, 1295-1299.	9.0	10
72	Cytotoxicity and genotoxicity of lanthanides for Vicia faba L. are mediated by their chemical speciation in different exposure media. Science of the Total Environment, 2021, 790, 148223.	8.0	9

#	Article	IF	Citations
73	A Fuzzy-based Methodology for an Aggregative Environmental Risk Assessment of Restored Soil. Pedosphere, 2014, 24, 220-231.	4.0	8
74	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.	12.4	8
75	Do essential elements (P and Fe) have mitigation roles in the toxicity of individual and binary mixture of yttrium and cerium to Triticum aestivum?. Journal of Hazardous Materials, 2021, 416, 125761.	12.4	8
76	Incorporation of chemical and toxicological availability into metal mixture toxicity modeling: State of the art and future perspectives. Critical Reviews in Environmental Science and Technology, 2022, 52, 1730-1772.	12.8	8
77	A generic biotic ligand model quantifying the development in time of Ni toxicity to Enchytraeus crypticus. Chemosphere, 2015, 124, 170-176.	8.2	7
78	Metal resistant gut microbiota facilitates snails feeding on metal hyperaccumulator plant Sedum alfredii in the phytoremediation field. Ecotoxicology and Environmental Safety, 2022, 236, 113514.	6.0	7
79	Additive toxicity of zinc and arsenate on barley (Hordeum vulgare) root elongation. Environmental Toxicology and Chemistry, 2017, 36, 1556-1562.	4.3	6
80	Model-based rationalization of mixture toxicity and accumulation in Triticum aestivum upon concurrent exposure to yttrium, lanthanum, and cerium. Journal of Hazardous Materials, 2020, 389, 121940.	12.4	6
81	Bioavailability and phytotoxicity of rare earth metals to Triticum aestivum under various exposure scenarios. Ecotoxicology and Environmental Safety, 2020, 205, 111346.	6.0	6
82	Rapid reactivation of aged NZVI/GO by Shewanella CN32 for efficient removal of tetrabromobisphenol A and associated reaction mechanisms. Journal of Cleaner Production, 2022, 333, 130215.	9.3	6
83	Modeling cadmium and nickel toxicity to earthworms with the free ion approach. Environmental Toxicology and Chemistry, 2014, 33, 438-446.	4.3	4
84	Oil spills enhanced dispersion and transport of microplastics in sea water and sand at coastal beachheads. Journal of Hazardous Materials, 2022, 436, 129312.	12.4	4
85	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.	7.5	3
86	Acid deposition critical loads modeling for the simulation of sulfur exceedance and reduction in Guangdong, China. Journal of Environmental Sciences, 2009, 21, 1108-1117.	6.1	2
87	Plant intelligence in a rapidly changing world: Implementation of plant-plant communications in managed plant systems. , 2022, 2, 100008.		2
88	Editorial for Special Issue â€œElemental Concentration and Pollution in Soil, Water, and Sedimentâ€: Minerals (Basel, Switzerland), 2022, 12, 338.	2.0	0