Bing Wang

List of Publications by Citations

88 papers	1,928 citations	23 h-index	42 g-index
92 ext. papers	2,936 ext. citations	6.9 avg, IF	5.74 L-index

#	Paper	IF	Citations
88	Recent advances in engineered biochar productions and applications. *Critical Reviews in Environmental Science and Technology*, **2017**, 47, 2158-2207	11.1	202
87	Adsorption and desorption of ammonium by maple wood biochar as a function of oxidation and pH. *Chemosphere*, **2015**, 138, 120-6	8.4	153
86	Alginate-based composites for environmental applications: A critical review. *Critical Reviews in Environmental Science and Technology*, **2018**, 49, 318-356	11.1	127
85	Adsorption of emerging contaminants from water and wastewater by modified biochar: A review. *Environmental Pollution*, **2021**, 273, 116448	9.3	122
84	Sorption and desorption of Pb(II) to biochar as affected by oxidation and pH. *Science of the Total Environment*, **2018**, 634, 188-194	10.2	93
83	Reclaiming phosphorus from secondary treated municipal wastewater with engineered biochar. *Chemical Engineering Journal*, **2019**, 362, 460-468	14.7	91
82	Entrapment of ball-milled biochar in Ca-alginate beads for the removal of aqueous Cd(II). *Journal of Industrial and Engineering Chemistry*, **2018**, 61, 161-168	6.3	71
81	Biochar-supported carbon nanotube and graphene oxide nanocomposites for Pb(II) and Cd(II) removal. *RSC Advances*, **2016**, 6, 24314-24319	3.7	61
80	Phosphogypsum as a novel modifier for distillers grains biochar removal of phosphate from water. *Chemosphere*, **2020**, 238, 124684	8.4	56
79	Novel biochar-impregnated calcium alginate beads with improved water holding and nutrient retention properties. *Journal of Environmental Management*, **2018**, 209, 105-111	7.9	54
78	Application of Heterogeneous Catalytic Ozonation for Refractory Organics in Wastewater. *Catalysts*, **2019**, 9, 241	4	52
77	Ammonium retention by oxidized biochars produced at different pyrolysis temperatures and residence times. *RSC Advances*, **2016**, 6, 41907-41913	3.7	46
76	Efficient removal of Cd(II) from aqueous solution by pinecone biochar: Sorption performance and governing mechanisms. *Environmental Pollution*, **2020**, 265, 115001	9.3	44
75	Comparative study of calcium alginate, ball-milled biochar, and their composites on aqueous methylene blue adsorption. *Environmental Science and Pollution Research*, **2019**, 26, 11535-11541	5.1	44
74	Enhanced removal of hexavalent chromium by engineered biochar composite fabricated from phosphogypsum and distillers grains. *Science of the Total Environment*, **2019**, 697, 134119	10.2	41
73	Impregnation of multiwall carbon nanotubes in alginate beads dramatically enhances their adsorptive ability to aqueous methylene blue. *Chemical Engineering Research and Design*, **2018**, 133, 235-242	5.5	40
72	Preparation of MgO nanocrystals and catalytic mechanism on phenol ozonation. *RSC Advances*, **2017**, 7, 43464-43473	3.7	40

71	Bovine Milk Oligosaccharides with Sialyllactose Improves Cognition in Preterm Pigs. *Nutrients*, **2019**, 11,	6.7	35
70	Formation and mechanisms of nano-metal oxide-biochar composites for pollutants removal: A review. *Science of the Total Environment*, **2021**, 767, 145305	10.2	31
69	Adsorption of Polycyclic Aromatic Hydrocarbons from aqueous solution by Organic Montmorillonite Sodium Alginate Nanocomposites. *Chemosphere*, **2020**, 251, 126074	8.4	28
68	Invasive plants as potential sustainable feedstocks for biochar production and multiple applications: A review. *Resources, Conservation and Recycling*, **2021**, 164, 105204	11.9	28
67	Environmental-friendly coal gangue-biochar composites reclaiming phosphate from water as a slow-release fertilizer. *Science of the Total Environment*, **2021**, 758, 143664	10.2	28
66	Adsorption of acetone and cyclohexane onto CO activated hydrochars. *Chemosphere*, **2020**, 245, 125664	8.4	27
65	Distinct patterns of chemical weathering in the drainage basins of the Huanghe and Xijiang River, China: Evidence from chemical and Sr-isotopic compositions. *Journal of Asian Earth Sciences*, **2012**, 59, 219-230	2.8	22
64	Enhanced removal of ammonium from water by ball-milled biochar. *Environmental Geochemistry and Health*, **2020**, 42, 1579-1587	4.7	22
63	A Review on Ultrasonic Catalytic Microbubbles Ozonation Processes: Properties, Hydroxyl Radicals Generation Pathway and Potential in Application. *Catalysts*, **2019**, 9, 10	4	21
62	Co-adsorption performance and mechanism of nitrogen and phosphorus onto eupatorium adenophorum biochar in water. *Bioresource Technology*, **2021**, 340, 125696	11	18
61	Impacts of straw biochar additions on agricultural soil quality and greenhouse gas fluxes in karst area, Southwest China. *Soil Science and Plant Nutrition*, **2016**, 62, 526-533	1.6	17
60	Effect of biochar addition on short-term NO and CO emissions during repeated drying and wetting of an anthropogenic alluvial soil. *Environmental Geochemistry and Health*, **2017**, 39, 635-647	4.7	16
59	Treatment of overhaul wastewater containing N-methyldiethanolamine (MDEA) through modified Fe-C microelectrolysis-configured ozonation: Investigation on process optimization and degradation mechanisms. *Journal of Hazardous Materials*, **2019**, 369, 655-664	12.8	16
58	Characterization of porcine milk oligosaccharides over lactation between primiparous and multiparous female pigs. *Scientific Reports*, **2018**, 8, 4688	4.9	16
57	Immobilization of heavy metals (Cd, Zn, and Pb) in different contaminated soils with swine manure biochar. *Environmental Pollutants and Bioavailability*, **2021**, 33, 55-65	2.8	15
56	Changes in above- and below-ground nitrogen stocks and allocations following the conversion of farmland to forest in rocky desertification regions. *Agriculture, Ecosystems and Environment*, **2016**, 232, 9-16	5.7	14
55	Developmental changes in the level of free and conjugated sialic acids, Neu5Ac, Neu5Gc and KDN in different organs of pig: a LC-MS/MS quantitative analyses. *Glycoconjugate Journal*, **2017**, 34, 21-30	3	13
54	Dietary lactoferrin supplementation to gilts during gestation and lactation improves pig production and immunity. *PLoS ONE*, **2017**, 12, e0185817	3.7	13

53	Research of combined adsorption-coagulation process in treating petroleum refinery effluent. *Environmental Technology (United Kingdom)*, **2017**, 38, 456-466	2.6	12
52	MOF-derived M-OOH with rich oxygen defects by in situ electro-oxidation reconstitution for a highly efficient oxygen evolution reaction. *Journal of Materials Chemistry A*, **2021**, 9, 11415-11426	13	12
51	Biochar addition can reduce NOx gas emissions from a calcareous soil. *Environmental Pollutants and Bioavailability*, **2019**, 31, 38-48	2.8	11
50	Degradation of MDEA in aqueous solution in the thermally activated persulfate system. *Environmental Technology (United Kingdom)*, **2017**, 38, 730-736	2.6	11
49	Preparation, characterization and flocculation performance of the inorganic□organic composite coagulant polyferric chloride and polydimethyldiallylammonium chloride. *Journal of Chemical Technology and Biotechnology*, **2017**, 92, 884-892	3.5	10
48	Simultaneous reclaiming phosphate and ammonium from aqueous solutions by calcium alginate-biochar composite: Sorption performance and governing mechanisms. *Chemical Engineering Journal*, **2022**, 429, 132166	14.7	9
47	Chemical characterization in hydraulic fracturing flowback and produced water (HF-FPW) of shale gas in Sichuan of China. *Environmental Science and Pollution Research*, **2020**, 27, 26532-26542	5.1	8
46	Sulfur defect rich Mo-NiS QDs assisted by O-C[double bond, length as m-dash]O chemical bonding for an efficient electrocatalytic overall water splitting. *Nanoscale*, **2021**, 13, 6644-6653	7.7	8
45	Current Perspective of Sialylated Milk Oligosaccharides in Mammalian Milk: Implications for Brain and Gut Health of Newborns. *Foods*, **2021**, 10,	4.9	8
44	Molecular Mechanisms Underlying How Sialyllactose Intervention Promotes Intestinal Maturity by Upregulating GDNF Through a CREB-Dependent Pathway in Neonatal Piglets. *Molecular Neurobiology*, **2019**, 56, 7994-8007	6.2	7
43	Effects of long-term zinc smelting activities on the distribution and health risk of heavy metals in agricultural soils of Guizhou province, China. *Environmental Geochemistry and Health*, **2020**, 1	4.7	7
42	Activation Strategy of WS2 as an Efficient Photocatalytic Hydrogen Evolution Cocatalyst through Co2+ Doping to Adjust the Highly Exposed Active (100) Facet. *Solar Rrl*, **2021**, 5, 2100223	7.1	7
41	Sialylated milk oligosaccharides alter neurotransmitters and brain metabolites in piglets: an magnetic resonance spectroscopic (MRS) study. *Nutritional Neuroscience*, **2021**, 24, 885-895	3.6	7
40	Hydrothermal carbonization of distillers grains with clay minerals for enhanced adsorption of phosphate and methylene blue. *Bioresource Technology*, **2021**, 340, 125725	11	6
39	Fabrication and environmental applications of metal-containing solid waste/biochar composites: A review. *Science of the Total Environment*, **2021**, 799, 149295	10.2	6
38	Maternal chitosan oligosaccharide intervention optimizes the production performance and health status of gilts and their offspring. *Animal Nutrition*, **2020**, 6, 134-142	4.8	5
37	Nutrient stability and sorption of sewage sludge biochar prepared from co-pyrolysis of sewage sludge and stalks / mineral materials. *Environmental Pollutants and Bioavailability*, **2020**, 32, 12-18	2.8	5
36	Identification and quantification of contributions to karst groundwater using a triple stable isotope labeling and mass balance model. *Chemosphere*, **2021**, 263, 127946	8.4	5

35	Removal of organic pollutants by effluent recirculation constructed wetlands system treating landfill leachate. *Environmental Technology and Innovation*, **2021**, 24, 101843	7	5
34	Environmental behaviors and degradation methods of microplastics in different environmental media.. *Chemosphere*, **2022**, 134354	8.4	5
33	Biochemical Characterization and Analyses of Polysialic-Acid-Associated Carrier Proteins and Genes in Piglets during Neonatal Development. *ChemBioChem*, **2017**, 18, 1270-1278	3.8	4
32	Diurnal and spatial variations of soil NOx fluxes in the northern steppe of China. *Journal of Environmental Sciences*, **2015**, 32, 54-61	6.4	4
31	Accumulation and transport of antimony and arsenic in terrestrial and aquatic plants in an antimony ore concentration area (south-west China). *Environmental Chemistry*, **2020**, 17, 314	3.2	4
30	Effects of biochar properties on the bioremediation of the petroleum-contaminated soil from a shale-gas field. *Environmental Science and Pollution Research*, **2020**, 27, 36427-36438	5.1	4
29	Systematic Analysis of the Biochemical Characteristics of Activated Sludge During Ozonation for Lowering of Biomass Production. *Ozone: Science and Engineering*, **2017**, 39, 80-90	2.4	3
28	Variation of Soil Organic Carbon and Its Major Constraints in East Central Asia. *PLoS ONE*, **2016**, 11, e0150709	3.7	3
27	Modified nanoscale zero-valent iron in persulfate activation for organic pollution remediation: a review. *Environmental Science and Pollution Research*, **2021**, 28, 34229-34247	5.1	3
26	3D-Stretched Film Ni S Nanosheet/Macromolecule Anthraquinone Derivative Polymers for Electrocatalytic Overall Water Splitting. *Small*, **2021**, 17, e2101003	11	3
25	Photocatalytic degradation of sulfamonomethoxine by mesoporous phosphorus-doped titania under simulated solar light irradiation. *Chemosphere*, **2021**, 285, 131553	8.4	3
24	Selective adsorption behavior and mechanism of phosphate in water by different lanthanum modified biochar. *Journal of Environmental Chemical Engineering*, **2022**, 10, 107476	6.8	3
23	Nitrous oxide emissions from different land use patterns in a typical karst region, Southwest China. *Diqiu Huaxue*, **2013**, 32, 137-145		2
22	Stabilization of heavy metals in biochar derived from plants in antimony mining area and its environmental implications.. *Environmental Pollution*, **2022**, 300, 118902	9.3	2
21	Recent advances in the treatment of contaminated soils by ball milling technology: Classification, mechanisms, and applications. *Journal of Cleaner Production*, **2022**, 340, 130821	10.3	2
20	Physical separation of catalytic oxidation and reduction sites onto photocatalyst assisted by surface functional groups for enhanced hydrogen evolution. *Journal of Cleaner Production*, **2021**, 324, 129259	10.3	2
19	Functional Correlates and Impact of Dietary Lactoferrin Intervention and its Concentration-dependence on Neurodevelopment and Cognition in Neonatal Piglets. *Molecular Nutrition and Food Research*, **2021**, 65, e2001099	5.9	2
18	Visible light-driven fluoroalkylthiocyanation of alkenes via electron donor–acceptor complexes. *Organic Chemistry Frontiers*, **2021**, 8, 3076-3081	5.2	2

17	Biochar as a potential strategy for remediation of contaminated mining soils: Mechanisms, applications, and future perspectives.. *Journal of Environmental Management*, **2022**, 313, 114973	7.9	2
16	Nano-biochar: A novel solution for sustainable agriculture and environmental remediation.. *Environmental Research*, **2022**, 210, 112891	7.9	2
15	Release characteristics of phosphate from ball-milled biochar and its potential effects on plant growth.. *Science of the Total Environment*, **2022**, 821, 153256	10.2	1
14	Adsorption behavior and performance of ammonium onto sorghum straw biochar from water.. *Scientific Reports*, **2022**, 12, 5358	4.9	1
13	Removal performance, mechanisms, and influencing factors of biochar for air pollutants: a critical review. *Biochar*, **2022**, 4,	10	1
12	Pyrolysis temperature and feedstock affected Cr(VI) removal capacity of sulfidated zerovalent iron: Importance of surface area and electrical conductivity.. *Chemosphere*, **2022**, 296, 133927	8.4	0
11	2-Keto-L-Gulonic Acid Improved the Salt Stress Resistance of Non-heading Chinese Cabbage by Increasing L-Ascorbic Acid Accumulation. *Frontiers in Plant Science*, **2021**, 12, 697184	6.2	0
10	Remediation potential of immobilized bacterial strain with biochar as carrier in petroleum hydrocarbon and Ni co-contaminated soil. *Environmental Technology (United Kingdom)*, **2020**, 1-14	2.6	0
9	Phosphorus-modified biochar cross-linked Mg-Al layered double-hydroxide stabilizer reduced U and Pb uptake by Indian mustard (Brassica juncea L.) in uranium contaminated soil.. *Ecotoxicology and Environmental Safety*, **2022**, 234, 113363	7	0
8	Process intensification of the ozone-liquid mass transfer in ultrasonic cavitation-rotational flow interaction coupled-field: Optimization and application.. *Journal of Environmental Management*, **2022**, 310, 114710	7.9	0
7	Effective Sb(V) removal from aqueous solution using phosphogypsum-modified biochar.. *Environmental Pollution*, **2022**, 119032	9.3	0
6	Insights into Cr(VI) removal mechanism in water by facile one-step pyrolysis prepared coal gangue-biochar composite.. *Chemosphere*, **2022**, 134334	8.4	0
5	Removal of organochlorine pesticides and metagenomic analysis by multi-stage constructed wetland treating landfill leachate.. *Chemosphere*, **2022**, 134761	8.4	0
4	Application of biochar immobilized microorganisms for pollutants removal from wastewater: A review.. *Science of the Total Environment*, **2022**, 837, 155563	10.2	0
3	Facile Synthesis of Sodium Lignosulfonate/Polyethyleneimine/Sodium Alginate Beads With Ultra-high Adsorption Capacity for Cr(VI) Removal From Water. *Journal of Hazardous Materials*, **2022**, 129270	12.8	0
2	Catalytic liquefaction of sewage sludge to small molecular weight chemicals. *Scientific Reports*, **2020**, 10, 18929	4.9	
1	Characterization and nutritional value of hydrothermal liquid products from distillers grains. *Journal of Environmental Management*, **2022**, 316, 115275	7.9	