

Bing Wang

List of Publications by Year in descending order

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92
papers

4,231
citations

109137

35
h-index

123241

61
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92
all docs

92
docs citations

92
times ranked

3389
citing authors

#	ARTICLE	IF	CITATIONS
1	Adsorption of emerging contaminants from water and wastewater by modified biochar: A review. <i>Environmental Pollution</i> , 2021, 273, 116448.	3.7	382
2	Recent advances in engineered biochar productions and applications. <i>Critical Reviews in Environmental Science and Technology</i> , 2017, 47, 2158-2207.	6.6	318
3	Alginate-based composites for environmental applications: a critical review. <i>Critical Reviews in Environmental Science and Technology</i> , 2019, 49, 318-356.	6.6	253
4	Adsorption and desorption of ammonium by maple wood biochar as a function of oxidation and pH. <i>Chemosphere</i> , 2015, 138, 120-126.	4.2	206
5	Sorption and desorption of Pb(II) to biochar as affected by oxidation and pH. <i>Science of the Total Environment</i> , 2018, 634, 188-194.	3.9	138
6	Reclaiming phosphorus from secondary treated municipal wastewater with engineered biochar. <i>Chemical Engineering Journal</i> , 2019, 362, 460-468.	6.6	136
7	Entrapment of ball-milled biochar in Ca-alginate beads for the removal of aqueous Cd(II). <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 61, 161-168.	2.9	116
8	Phosphogypsum as a novel modifier for distillers grains biochar removal of phosphate from water. <i>Chemosphere</i> , 2020, 238, 124684.	4.2	97
9	Environmental-friendly coal gangue-biochar composites reclaiming phosphate from water as a slow-release fertilizer. <i>Science of the Total Environment</i> , 2021, 758, 143664.	3.9	97
10	Enhanced removal of hexavalent chromium by engineered biochar composite fabricated from phosphogypsum and distillers grains. <i>Science of the Total Environment</i> , 2019, 697, 134119.	3.9	93
11	Formation and mechanisms of nano-metal oxide-biochar composites for pollutants removal: A review. <i>Science of the Total Environment</i> , 2021, 767, 145305.	3.9	89
12	Application of Heterogeneous Catalytic Ozonation for Refractory Organics in Wastewater. <i>Catalysts</i> , 2019, 9, 241.	1.6	88
13	Efficient removal of Cd(II) from aqueous solution by pinecone biochar: Sorption performance and governing mechanisms. <i>Environmental Pollution</i> , 2020, 265, 115001.	3.7	83
14	Novel biochar-impregnated calcium alginate beads with improved water holding and nutrient retention properties. <i>Journal of Environmental Management</i> , 2018, 209, 105-111.	3.8	81
15	Invasive plants as potential sustainable feedstocks for biochar production and multiple applications: A review. <i>Resources, Conservation and Recycling</i> , 2021, 164, 105204.	5.3	80
16	Biochar-supported carbon nanotube and graphene oxide nanocomposites for Pb(II) and Cd(II) removal. <i>RSC Advances</i> , 2016, 6, 24314-24319.	1.7	73
17	Comparative study of calcium alginate, ball-milled biochar, and their composites on aqueous methylene blue adsorption. <i>Environmental Science and Pollution Research</i> , 2019, 26, 11535-11541.	2.7	72
18	Simultaneous reclaiming phosphate and ammonium from aqueous solutions by calcium alginate-biochar composite: Sorption performance and governing mechanisms. <i>Chemical Engineering Journal</i> , 2022, 429, 132166.	6.6	69

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19	Application of biochar immobilized microorganisms for pollutants removal from wastewater: A review. <i>Science of the Total Environment</i> , 2022, 837, 155563.	3.9	67
20	Ammonium retention by oxidized biochars produced at different pyrolysis temperatures and residence times. <i>RSC Advances</i> , 2016, 6, 41907-41913.	1.7	63
21	Bovine Milk Oligosaccharides with Sialyllactose Improves Cognition in Preterm Pigs. <i>Nutrients</i> , 2019, 11, 1335.	1.7	60
22	Preparation of MgO nanocrystals and catalytic mechanism on phenol ozonation. <i>RSC Advances</i> , 2017, 7, 43464-43473.	1.7	59
23	Impregnation of multiwall carbon nanotubes in alginate beads dramatically enhances their adsorptive ability to aqueous methylene blue. <i>Chemical Engineering Research and Design</i> , 2018, 133, 235-242.	2.7	55
24	Co-adsorption performance and mechanism of nitrogen and phosphorus onto eupatorium adenophorum biochar in water. <i>Bioresource Technology</i> , 2021, 340, 125696.	4.8	55
25	Adsorption of Polycyclic Aromatic Hydrocarbons from aqueous solution by Organic Montmorillonite Sodium Alginate Nanocomposites. <i>Chemosphere</i> , 2020, 251, 126074.	4.2	53
26	Biochar as a potential strategy for remediation of contaminated mining soils: Mechanisms, applications, and future perspectives. <i>Journal of Environmental Management</i> , 2022, 313, 114973.	3.8	53
27	Environmental behaviors and degradation methods of microplastics in different environmental media. <i>Chemosphere</i> , 2022, 299, 134354.	4.2	51
28	Enhanced removal of Cd ²⁺ from water by AHP-pretreated biochar: Adsorption performance and mechanism. <i>Journal of Hazardous Materials</i> , 2022, 438, 129467.	6.5	50
29	Enhanced removal of ammonium from water by ball-milled biochar. <i>Environmental Geochemistry and Health</i> , 2020, 42, 1579-1587.	1.8	44
30	Adsorption of acetone and cyclohexane onto CO ₂ activated hydrochars. <i>Chemosphere</i> , 2020, 245, 125664.	4.2	43
31	Immobilization of heavy metals (Cd, Zn, and Pb) in different contaminated soils with swine manure biochar. <i>Environmental Pollutants and Bioavailability</i> , 2021, 33, 55-65.	1.3	42
32	Nano-biochar: A novel solution for sustainable agriculture and environmental remediation. <i>Environmental Research</i> , 2022, 210, 112891.	3.7	41
33	A Review on Ultrasonic Catalytic Microbubbles Ozonation Processes: Properties, Hydroxyl Radicals Generation Pathway and Potential in Application. <i>Catalysts</i> , 2019, 9, 10.	1.6	39
34	Hydrothermal carbonization of distillers grains with clay minerals for enhanced adsorption of phosphate and methylene blue. <i>Bioresource Technology</i> , 2021, 340, 125725.	4.8	39
35	Facile synthesis of sodium lignosulfonate/polyethyleneimine/sodium alginate beads with ultra-high adsorption capacity for Cr(VI) removal from water. <i>Journal of Hazardous Materials</i> , 2022, 436, 129270.	6.5	38
36	Modified nanoscale zero-valent iron in persulfate activation for organic pollution remediation: a review. <i>Environmental Science and Pollution Research</i> , 2021, 28, 34229-34247.	2.7	37

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37	Fabrication and environmental applications of metal-containing solid waste/biochar composites: A review. <i>Science of the Total Environment</i> , 2021, 799, 149295.	3.9	37
38	MOF-derived M-OOH with rich oxygen defects by <i>in situ</i> electro-oxidation reconstitution for a highly efficient oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11415-11426.	5.2	34
39	Removal performance, mechanisms, and influencing factors of biochar for air pollutants: a critical review. <i>Biochar</i> , 2022, 4, .	6.2	32
40	Characterization of porcine milk oligosaccharides over lactation between primiparous and multiparous female pigs. <i>Scientific Reports</i> , 2018, 8, 4688.	1.6	31
41	Chemical characterization in hydraulic fracturing flowback and produced water (HF-FPW) of shale gas in Sichuan of China. <i>Environmental Science and Pollution Research</i> , 2020, 27, 26532-26542.	2.7	31
42	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. <i>Glycoconjugate Journal</i> , 2017, 34, 21-30.	1.4	27
43	Distinct patterns of chemical weathering in the drainage basins of the Huanghe and Xijiang River, China: Evidence from chemical and Sr-isotopic compositions. <i>Journal of Asian Earth Sciences</i> , 2012, 59, 219-230.	1.0	26
44	Current Perspective of Sialylated Milk Oligosaccharides in Mammalian Milk: Implications for Brain and Gut Health of Newborns. <i>Foods</i> , 2021, 10, 473.	1.9	25
45	Impacts of straw biochar additions on agricultural soil quality and greenhouse gas fluxes in karst area, Southwest China. <i>Soil Science and Plant Nutrition</i> , 2016, 62, 526-533.	0.8	24
46	Selective adsorption behavior and mechanism of phosphate in water by different lanthanum modified biochar. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107476.	3.3	24
47	Treatment of overhaul wastewater containing N-methyldiethanolamine (MDEA) through modified Fe ³⁺ /C microelectrolysis-configured ozonation: Investigation on process optimization and degradation mechanisms. <i>Journal of Hazardous Materials</i> , 2019, 369, 655-664.	6.5	23
48	Dietary lactoferrin supplementation to gilts during gestation and lactation improves pig production and immunity. <i>PLoS ONE</i> , 2017, 12, e0185817.	1.1	23
49	Biochar addition can reduce NO _x gas emissions from a calcareous soil. <i>Environmental Pollutants and Bioavailability</i> , 2019, 31, 38-48.	1.3	21
50	Sulfur defect rich Mo-Ni ₃ S ₂ QDs assisted by O=C=O chemical bonding for an efficient electrocatalytic overall water splitting. <i>Nanoscale</i> , 2021, 13, 6644-6653.	2.8	21
51	Activation Strategy of WS ₂ as an Efficient Photocatalytic Hydrogen Evolution Cocatalyst through Co ²⁺ Doping to Adjust the Highly Exposed Active (100) Facet. <i>Solar Rrl</i> , 2021, 5, 2100223.	3.1	21
52	Release characteristics of phosphate from ball-milled biochar and its potential effects on plant growth. <i>Science of the Total Environment</i> , 2022, 821, 153256.	3.9	21
53	Effect of biochar addition on short-term N ₂ O and CO ₂ emissions during repeated drying and wetting of an anthropogenic alluvial soil. <i>Environmental Geochemistry and Health</i> , 2017, 39, 635-647.	1.8	20
54	Recent advances in the treatment of contaminated soils by ball milling technology: Classification, mechanisms, and applications. <i>Journal of Cleaner Production</i> , 2022, 340, 130821.	4.6	20

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55	Sialylated milk oligosaccharides alter neurotransmitters and brain metabolites in piglets: an <i>in vivo</i> magnetic resonance spectroscopic (MRS) study. <i>Nutritional Neuroscience</i> , 2021, 24, 885-895.	1.5	19
56	Research of combined adsorption-coagulation process in treating petroleum refinery effluent. <i>Environmental Technology (United Kingdom)</i> , 2017, 38, 456-466.	1.2	18
57	Effects of biochar properties on the bioremediation of the petroleum-contaminated soil from a shale-gas field. <i>Environmental Science and Pollution Research</i> , 2020, 27, 36427-36438.	2.7	18
58	Identification and quantification of contributions to karst groundwater using a triple stable isotope labeling and mass balance model. <i>Chemosphere</i> , 2021, 263, 127946.	4.2	18
59	Visible light-driven fluoroalkylthiocyanation of alkenes <i>via</i> electron donor-acceptor complexes. <i>Organic Chemistry Frontiers</i> , 2021, 8, 3076-3081.	2.3	18
60	Removal of organic pollutants by effluent recirculation constructed wetlands system treating landfill leachate. <i>Environmental Technology and Innovation</i> , 2021, 24, 101843.	3.0	18
61	Changes in above- and below-ground nitrogen stocks and allocations following the conversion of farmland to forest in rocky desertification regions. <i>Agriculture, Ecosystems and Environment</i> , 2016, 232, 9-16.	2.5	17
62	Insights into Cr(VI) removal mechanism in water by facile one-step pyrolysis prepared coal gangue-biochar composite. <i>Chemosphere</i> , 2022, 299, 134334.	4.2	17
63	Effects of long-term zinc smelting activities on the distribution and health risk of heavy metals in agricultural soils of Guizhou province, China. <i>Environmental Geochemistry and Health</i> , 2023, 45, 5639-5654.	1.8	16
64	Stabilization of heavy metals in biochar derived from plants in antimony mining area and its environmental implications. <i>Environmental Pollution</i> , 2022, 300, 118902.	3.7	16
65	Effective Sb(V) removal from aqueous solution using phosphogypsum-modified biochar. <i>Environmental Pollution</i> , 2022, 301, 119032.	3.7	16
66	Degradation of MDEA in aqueous solution in the thermally activated persulfate system. <i>Environmental Technology (United Kingdom)</i> , 2017, 38, 730-736.	1.2	15
67	Preparation, characterization and flocculation performance of the inorganic-organic composite coagulant polyferric chloride and polydimethyldiallylammonium chloride. <i>Journal of Chemical Technology and Biotechnology</i> , 2017, 92, 884-892.	1.6	14
68	Adsorption behavior and performance of ammonium onto sorghum straw biochar from water. <i>Scientific Reports</i> , 2022, 12, 5358.	1.6	14
69	Nutrient stability and sorption of sewage sludge biochar prepared from co-pyrolysis of sewage sludge and stalks / mineral materials. <i>Environmental Pollutants and Bioavailability</i> , 2020, 32, 12-18.	1.3	13
70	3D-stretched Film Ni ₃ S ₂ Nanosheet/Macromolecule Anthraquinone Derivative Polymers for Electrocatalytic Overall Water Splitting. <i>Small</i> , 2021, 17, e2101003.	5.2	13
71	Photocatalytic degradation of sulfamonomethoxine by mesoporous phosphorus-doped titania under simulated solar light irradiation. <i>Chemosphere</i> , 2021, 285, 131553.	4.2	13
72	Maternal chitosan oligosaccharide intervention optimizes the production performance and health status of gilts and their offspring. <i>Animal Nutrition</i> , 2020, 6, 134-142.	2.1	12

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73	Phosphorus-modified biochar cross-linked Mg-Al layered double-hydroxide stabilizer reduced U and Pb uptake by Indian mustard (<i>Brassica juncea</i> L.) in uranium contaminated soil. <i>Ecotoxicology and Environmental Safety</i> , 2022, 234, 113363.	2.9	12
74	Molecular Mechanisms Underlying How Sialyllactose Intervention Promotes Intestinal Maturity by Upregulating GDNF Through a CREB-Dependent Pathway in Neonatal Piglets. <i>Molecular Neurobiology</i> , 2019, 56, 7994-8007.	1.9	11
75	Removal of organochlorine pesticides and metagenomic analysis by multi-stage constructed wetland treating landfill leachate. <i>Chemosphere</i> , 2022, 301, 134761.	4.2	11
76	Nitrogen removal performance and microbiological characteristics for the landfill leachate treatment in a three-stage vertical flow constructed wetlands system. <i>Environmental Technology and Innovation</i> , 2022, 28, 102728.	3.0	11
77	Functional Correlates and Impact of Dietary Lactoferrin Intervention and its Concentrationâ€dependence on Neurodevelopment and Cognition in Neonatal Piglets. <i>Molecular Nutrition and Food Research</i> , 2021, 65, e2001099.	1.5	10
78	Pyrolysis temperature and feedstock affected Cr(VI) removal capacity of sulfidated zerovalent iron: Importance of surface area and electrical conductivity. <i>Chemosphere</i> , 2022, 296, 133927.	4.2	10
79	Remediation potential of immobilized bacterial strain with biochar as carrier in petroleum hydrocarbon and Ni co-contaminated soil. <i>Environmental Technology (United Kingdom)</i> , 2022, 43, 1068-1081.	1.2	9
80	Accumulation and transport of antimony and arsenic in terrestrial and aquatic plants in an antimony ore concentration area (south-west China). <i>Environmental Chemistry</i> , 2020, 17, 314.	0.7	9
81	Physical separation of catalytic oxidation and reduction sites onto photocatalyst assisted by surface functional groups for enhanced hydrogen evolution. <i>Journal of Cleaner Production</i> , 2021, 324, 129259.	4.6	8
82	Biochemical Characterization and Analyses of Polysialicâ€Acidâ€Associated Carrier Proteins and Genes in Piglets during Neonatal Development. <i>ChemBioChem</i> , 2017, 18, 1270-1278.	1.3	5
83	Variation of Soil Organic Carbon and Its Major Constraints in East Central Asia. <i>PLoS ONE</i> , 2016, 11, e0150709.	1.1	5
84	Diurnal and spatial variations of soil NOx fluxes in the northern steppe of China. <i>Journal of Environmental Sciences</i> , 2015, 32, 54-61.	3.2	4
85	2-Keto-L-Gulonic Acid Improved the Salt Stress Resistance of Non-heading Chinese Cabbage by Increasing L-Ascorbic Acid Accumulation. <i>Frontiers in Plant Science</i> , 2021, 12, 697184.	1.7	4
86	Study on the Effect of Petroleum Components on the Elution of Oily Sludge by a Compound Biosurfactant. <i>Langmuir</i> , 2022, 38, 2026-2037.	1.6	4
87	Process intensification of the ozone-liquid mass transfer in ultrasonic cavitation-rotational flow interaction coupled-field: Optimization and application. <i>Journal of Environmental Management</i> , 2022, 310, 114710.	3.8	4
88	Nitrous oxide emissions from different land use patterns in a typical karst region, Southwest China. <i>Diqiu Huaxue</i> , 2013, 32, 137-145.	0.5	3
89	Systematic Analysis of the Biochemical Characteristics of Activated Sludge During Ozonation for Lowering of Biomass Production. <i>Ozone: Science and Engineering</i> , 2017, 39, 80-90.	1.4	3
90	The Potential for Sialic Acid and Sialylated Glycoconjugates as Feed Additives to Enhance Pig Health and Production. <i>Animals</i> , 2021, 11, 2318.	1.0	1

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91	Characterization and nutritional value of hydrothermal liquid products from distillers grains. Journal of Environmental Management, 2022, 316, 115275.	3.8	1
92	Catalytic liquefaction of sewage sludge to small molecular weight chemicals. Scientific Reports, 2020, 10, 18929.	1.6	0