

# Ming Zhang

## List of Publications by Year in descending order

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94  
papers

16,786  
citations

47006  
47  
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43889  
91  
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all docs

94  
docs citations

94  
times ranked

14640  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biochar as a sorbent for contaminant management in soil and water: A review. Chemosphere, 2014, 99, 19-33.	8.2	3,175
2	Recent advancements in supercapacitor technology. Nano Energy, 2018, 52, 441-473.	16.0	1,228
3	Heavy metals in food crops: Health risks, fate, mechanisms, and management. Environment International, 2019, 125, 365-385.	10.0	1,135
4	Engineered/designer biochar for contaminant removal/immobilization from soil and water: Potential and implication of biochar modification. Chemosphere, 2016, 148, 276-291.	8.2	959
5	Effect of biochar amendment on sorption and leaching of nitrate, ammonium, and phosphate in a sandy soil. Chemosphere, 2012, 89, 1467-1471.	8.2	713
6	Effects of feedstock type, production method, and pyrolysis temperature on biochar and hydrochar properties. Chemical Engineering Journal, 2014, 240, 574-578.	12.7	591
7	Hydrogen peroxide modification enhances the ability of biochar (hydrochar) produced from hydrothermal carbonization of peanut hull to remove aqueous heavy metals: Batch and column tests. Chemical Engineering Journal, 2012, 200-202, 673-680.	12.7	578
8	Preparation and characterization of a novel magnetic biochar for arsenic removal. Bioresource Technology, 2013, 130, 457-462.	9.6	563
9	Synthesis of porous MgO-biochar nanocomposites for removal of phosphate and nitrate from aqueous solutions. Chemical Engineering Journal, 2012, 210, 26-32.	12.7	521
10	Recent advancements in bioremediation of dye: Current status and challenges. Bioresource Technology, 2018, 253, 355-367.	9.6	409
11	Removal of arsenic, methylene blue, and phosphate by biochar/AlOOH nanocomposite. Chemical Engineering Journal, 2013, 226, 286-292.	12.7	389
12	Biochar-supported zerovalent iron for removal of various contaminants from aqueous solutions. Bioresource Technology, 2014, 152, 538-542.	9.6	349
13	Trichloroethylene adsorption by pine needle biochars produced at various pyrolysis temperatures. Bioresource Technology, 2013, 143, 615-622.	9.6	319
14	Characterization and environmental applications of clay-biochar composites. Chemical Engineering Journal, 2014, 242, 136-143.	12.7	313
15	Carbon dioxide capture using biochar produced from sugarcane bagasse and hickory wood. Chemical Engineering Journal, 2014, 249, 174-179.	12.7	303
16	Pyrolysis condition affected sulfamethazine sorption by tea waste biochars. Bioresource Technology, 2014, 166, 303-308.	9.6	279
17	Synthesis, characterization, and dye sorption ability of carbon nanotube-biochar nanocomposites. Chemical Engineering Journal, 2014, 236, 39-46.	12.7	276
18	Engineered carbon (biochar) prepared by direct pyrolysis of Mg-accumulated tomato tissues: Characterization and phosphate removal potential. Bioresource Technology, 2013, 138, 8-13.	9.6	257

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19	Evaluating biochar and its modifications for the removal of ammonium, nitrate, and phosphate in water. <i>Water Research</i> , 2020, 186, 116303.	11.3	248
20	Review of nanomaterials as sorbents in solid-phase extraction for environmental samples. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 108, 347-369.	11.4	240
21	Recent advances in photodegradation of antibiotic residues in water. <i>Chemical Engineering Journal</i> , 2021, 405, 126806.	12.7	234
22	Phosphate removal ability of biochar/MgAl-LDH ultra-fine composites prepared by liquid-phase deposition. <i>Chemosphere</i> , 2013, 92, 1042-1047.	8.2	232
23	Nanoparticle-plant interaction: Implications in energy, environment, and agriculture. <i>Environment International</i> , 2018, 119, 1-19.	10.0	212
24	Synthesis, characterization, and environmental implications of graphene-coated biochar. <i>Science of the Total Environment</i> , 2012, 435-436, 567-572.	8.0	189
25	Metal-organic frameworks as advanced sorbents for the extraction and determination of pollutants from environmental, biological, and food media. <i>TrAC - Trends in Analytical Chemistry</i> , 2017, 97, 65-82.	11.4	156
26	Remediation of soils and sediments polluted with polycyclic aromatic hydrocarbons: To immobilize, mobilize, or degrade?. <i>Journal of Hazardous Materials</i> , 2021, 420, 126534.	12.4	150
27	Impact of soybean stover- and pine needle-derived biochars on Pb and As mobility, microbial community, and carbon stability in a contaminated agricultural soil. <i>Journal of Environmental Management</i> , 2016, 166, 131-139.	7.8	144
28	Recent advances in control technologies for non-point source pollution with nitrogen and phosphorous from agricultural runoff: current practices and future prospects. <i>Applied Biological Chemistry</i> , 2020, 63, .	1.9	129
29	Effects of graphene on seed germination and seedling growth. <i>Journal of Nanoparticle Research</i> , 2015, 17, 1.	1.9	126
30	Invasive plant-derived biochar inhibits sulfamethazine uptake by lettuce in soil. <i>Chemosphere</i> , 2014, 111, 500-504.	8.2	116
31	Characterization of bioenergy biochar and its utilization for metal/metalloid immobilization in contaminated soil. <i>Science of the Total Environment</i> , 2018, 640-641, 704-713.	8.0	110
32	Acid-activated biochar increased sulfamethazine retention in soils. <i>Environmental Science and Pollution Research</i> , 2015, 22, 2175-2186.	5.3	107
33	Recent advances in photocatalytic hydrogen evolution with high-performance catalysts without precious metals. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 132, 110040.	16.4	101
34	Spatial distribution of heavy metals in crops in a wastewater irrigated zone and health risk assessment. <i>Environmental Research</i> , 2019, 168, 382-388.	7.5	90
35	Sources, distribution, bioavailability, toxicity, and risk assessment of heavy metal(loid)s in complementary medicines. <i>Environment International</i> , 2017, 108, 103-118.	10.0	78
36	Sorption of Polycyclic Aromatic Hydrocarbons to Carbohydrates and Lipids of Ryegrass Root and Implications for a Sorption Prediction Model. <i>Environmental Science &amp; Technology</i> , 2009, 43, 2740-2745.	10.0	73

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37	Effect of rhamnolipids on the uptake of PAHs by ryegrass. <i>Environmental Pollution</i> , 2008, 156, 46-52.	7.5	71
38	Recent advances in carbon nanotube sponge-based sorption technologies for mitigation of marine oil spills. <i>Journal of Colloid and Interface Science</i> , 2020, 570, 411-422.	9.4	69
39	Biochars as Potential Adsorbers of CH <sub>4</sub> , CO <sub>2</sub> and H <sub>2</sub> S. <i>Sustainability</i> , 2017, 9, 121.	3.2	68
40	Synthesis of a multifunctional graphene-carbon nanotube aerogel and its strong adsorption of lead from aqueous solution. <i>RSC Advances</i> , 2013, 3, 21099.	3.6	67
41	Bioaccumulation of potentially toxic elements by submerged plants and biofilms: A critical review. <i>Environment International</i> , 2019, 131, 105015.	10.0	65
42	Ammonium removal using a calcined natural zeolite modified with sodium nitrate. <i>Journal of Hazardous Materials</i> , 2020, 393, 122481.	12.4	65
43	Sorption Process of Date Palm Biochar for Aqueous Cd (II) Removal: Efficiency and Mechanisms. <i>Water, Air, and Soil Pollution</i> , 2016, 227, 1.	2.4	63
44	Self-assembly of needle-like layered double hydroxide (LDH) nanocrystals on hydrochar: characterization and phosphate removal ability. <i>RSC Advances</i> , 2014, 4, 28171.	3.6	57
45	A remediation approach to chromium-contaminated water and soil using engineered biochar derived from peanut shell. <i>Environmental Research</i> , 2022, 204, 112125.	7.5	57
46	Optimization of preparation conditions for biochar derived from water hyacinth by using response surface methodology (RSM) and its application in Pb <sup>2+</sup> removal. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104198.	6.7	52
47	Biochar soil amendment for sustainable agriculture with carbon and contaminant sequestration. <i>Carbon Management</i> , 2014, 5, 255-257.	2.4	48
48	Transport of micro- and nanoplastics in the environment: Trojan-Horse effect for organic contaminants. <i>Critical Reviews in Environmental Science and Technology</i> , 2022, 52, 810-846.	12.8	45
49	Biochar alters chemical and microbial properties of microplastic-contaminated soil. <i>Environmental Research</i> , 2022, 209, 112807.	7.5	43
50	Effect of SDBS-Tween 80 mixed surfactants on the distribution of polycyclic aromatic hydrocarbons in soil-water system. <i>Journal of Soils and Sediments</i> , 2010, 10, 1123-1130.	3.0	39
51	Fabrication and application of magnetic starch-based activated hierarchical porous carbon spheres for the efficient removal of dyes from water. <i>Materials Chemistry and Physics</i> , 2016, 174, 179-186.	4.0	39
52	Sorption of Polycyclic Aromatic Hydrocarbons (PAHs) to Lignin: Effects of Hydrophobicity and Temperature. <i>Bulletin of Environmental Contamination and Toxicology</i> , 2014, 93, 84-88.	2.7	37
53	Highly Effective Removal of Tetracycline from Water by Hierarchical Porous Carbon: Batch and Column Adsorption. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 20036-20046.	3.7	37
54	Sorption of pharmaceuticals and personal care products (PPCPs) from water and wastewater by carbonaceous materials: A review. <i>Critical Reviews in Environmental Science and Technology</i> , 2022, 52, 727-766.	12.8	37

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55	Thermolysis of crude oil sludge using CO <sub>2</sub> as reactive gas medium. <i>Energy Conversion and Management</i> , 2019, 186, 393-400.	9.2	36
56	Fabrication of spherical biochar by a two-step thermal process from waste potato peel. <i>Science of the Total Environment</i> , 2018, 626, 478-485.	8.0	35
57	Organo-layered double hydroxides for the removal of polycyclic aromatic hydrocarbons from soil washing effluents containing high concentrations of surfactants. <i>Journal of Hazardous Materials</i> , 2019, 373, 678-686.	12.4	35
58	Fabrication and application of hierarchical porous carbon for the adsorption of bulky dyes. <i>Microporous and Mesoporous Materials</i> , 2019, 290, 109651.	4.4	34
59	Efficient succinic acid production using a biochar-treated textile waste hydrolysate in an in situ fibrous bed bioreactor. <i>Biochemical Engineering Journal</i> , 2019, 149, 107249.	3.6	34
60	Adsorption-desorption behavior of naphthalene onto CDMBA modified bentonite: Contribution of the $\pi$ - $\pi$ interaction. <i>Applied Clay Science</i> , 2014, 100, 29-34.	5.2	33
61	Synergistic role of inherent calcium and iron minerals in paper mill sludge biochar for phosphate adsorption. <i>Science of the Total Environment</i> , 2022, 834, 155193.	8.0	33
62	Adsorption Characteristics of a Novel Carbon-Nanotube-Based Composite Adsorbent toward Organic Pollutants. <i>Industrial &amp; Engineering Chemistry Research</i> , 2015, 54, 2379-2384.	3.7	32
63	Retention and transport behavior of microplastic particles in water-saturated porous media. <i>Science of the Total Environment</i> , 2022, 808, 152154.	8.0	32
64	Effects of aging and weathering on immobilization of trace metals/metalloids in soils amended with biochar. <i>Environmental Sciences: Processes and Impacts</i> , 2020, 22, 1790-1808.	3.5	29
65	Metal oxide and carbon nanomaterial based membranes for reverse osmosis and membrane distillation: A comparative review. <i>Environmental Research</i> , 2021, 202, 111716.	7.5	29
66	Insights into the adsorption mechanism of tetracycline on hierarchically porous carbon and the effect of nanoporous geometry. <i>Chemical Engineering Journal</i> , 2022, 437, 135454.	12.7	28
67	Ozone-encapsulated colloidal gas aphrons for in situ and targeting remediation of phenanthrene-contaminated sediment-aquifer. <i>Water Research</i> , 2019, 160, 29-38.	11.3	26
68	Synthesis of fatty acid methyl esters via non-catalytic transesterification of avocado oil with dimethyl carbonate. <i>Energy Conversion and Management</i> , 2019, 195, 1-6.	9.2	25
69	Removal of phosphate from water by paper mill sludge biochar. <i>Environmental Pollution</i> , 2022, 293, 118521.	7.5	25
70	Engineered/designer hierarchical porous carbon materials for organic pollutant removal from water and wastewater: A critical review. <i>Critical Reviews in Environmental Science and Technology</i> , 2021, 51, 2295-2328.	12.8	24
71	Functionalizing biochar by Co-pyrolysis shaddock peel with red mud for removing acid orange 7 from water. <i>Environmental Pollution</i> , 2022, 299, 118893.	7.5	23
72	Role and fate of the lead during the conversion of calcium sulfate dihydrate to $\frac{1}{2}$ -hemihydrate whiskers in ethylene glycol-water solutions. <i>Chemical Engineering Journal</i> , 2019, 372, 74-81.	12.7	20

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73	Construction of biotreatment platforms for aromatic hydrocarbons and their future perspectives. Journal of Hazardous Materials, 2021, 416, 125968.	12.4	20
74	Biodegradation of hazardous naphthalene and cleaner production of rhamnolipids “ Green approaches of pollution mitigation. Environmental Research, 2022, 209, 112875.	7.5	18
75	The unique features of non-competitive vs. competitive sorption: Tests against single volatile aromatic hydrocarbons and their quaternary mixtures. Environmental Research, 2019, 173, 508-516.	7.5	17
76	The enhanced thermolysis of heavy oil contaminated soil using CO2 for soil remediation and energy recovery. Journal of CO2 Utilization, 2018, 28, 367-373.	6.8	16
77	Time-dependent desorption of anilines, phenols, and nitrobenzenes from biochar produced at 700°C: Insight into desorption hysteresis. Chemical Engineering Journal, 2021, 422, 130584.	12.7	16
78	Selective removal of phenanthrene from SDBS or TX100 solution by sorption of resin SP850. Chemical Engineering Journal, 2020, 388, 124191.	12.7	12
79	Adsorptive Removal of Trichloroethylene in Water by Crop Residue Biochars Pyrolyzed at Contrasting Temperatures: Continuous Fixed-Bed Experiments. Journal of Chemistry, 2015, 2015, 1-6.	1.9	11
80	Enhanced removal of ammonium from water using sulfonated reed waste biochar-A lab-scale investigation. Environmental Pollution, 2022, 292, 118412.	7.5	11
81	A novel high surface area spherical carbon from cassava starch. Materials Letters, 2015, 139, 262-264.	2.6	10
82	The adsorptive removal of lead ions in aquatic media: Performance comparison between advanced functional materials and conventional materials. Critical Reviews in Environmental Science and Technology, 2020, 50, 2441-2483.	12.8	10
83	Comparative evaluation for the sorption capacity of four carbonaceous sorbents to phenol. Chemical Speciation and Bioavailability, 2016, 28, 18-25.	2.0	8
84	Reduction of Na and K contents in bio-heavy oil using micro-/nano-sized CO2 bubbles. Journal of CO2 Utilization, 2019, 34, 430-436.	6.8	8
85	Re-recognizing micro locations of nanoscale zero-valent iron in biochar using C-TEM technique. Scientific Reports, 2021, 11, 5037.	3.3	7
86	Effect of Temperature, Salinity, and pH on the Adsorption of Lead by Sediment of a Tidal River in East China. , 2012, , .		6
87	Dramatic change of methylenedianiline activity and selectivity in different pore geometry of zeolites. Microporous and Mesoporous Materials, 2016, 233, 109-116.	4.4	5
88	Sorption of polycyclic aromatic hydrocarbons (PAHs) by dietary fiber extracted from wheat bran. Chemical Speciation and Bioavailability, 2016, 28, 13-17.	2.0	5
89	Analytical techniques and challenges for removal of pharmaceuticals and personal care products in water. , 2019, , 239-257.		5
90	Biochar for Anionic Contaminants Removal From Water. , 2019, , 143-160.		5

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91	Construction of carbon nanotube-based microcapsules by self-assembly. Environmental Chemistry Letters, 2014, 12, 359-364.	16.2	4
92	Facile preparation of high performance degradation of HCHO catalyst from Li-MnO <sub>2</sub> batteries. Materials Letters, 2020, 260, 126958.	2.6	4
93	Fabricate hollow Ag@POMs microtubule by a simple process. Materials Letters, 2015, 141, 128-131.	2.6	2
94	Selective sorption of PAHs from TX100 solution by resin SP850: effects of TX100 concentrations and PAHs solubility. RSC Advances, 2021, 11, 13530-13536.	3.6	2