Tao Zhang

List of Publications by Year in descending order

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Version: 2024-02-01

45 papers	2,499 citations	201575 27 h-index	315616 38 g-index
45 all docs	45 docs citations	45 times ranked	2314 citing authors

#	Article	IF	Citations
1	Polyethylene imine modified hydrochar adsorption for chromium (VI) and nickel (II) removal from aqueous solution. Bioresource Technology, 2018, 247, 370-379.	4.8	182
2	Application of Magnesium Modified Corn Biochar for Phosphorus Removal and Recovery from Swine Wastewater. International Journal of Environmental Research and Public Health, 2014, 11, 9217-9237.	1.2	177
3	Ammonium nitrogen removal from coking wastewater by chemical precipitation recycle technology. Water Research, 2009, 43, 5209-5215.	5.3	159
4	Pretreatment of ammonium removal from landfill leachate by chemical precipitation. Journal of Hazardous Materials, 2009, 166, 911-915.	6.5	153
5	Phosphorus recovery from biogas fermentation liquid by Caâ€“Mg loaded biochar. Journal of Environmental Sciences, 2015, 29, 106-114.	3.2	140
6	Effects of external additives: Biochar, bentonite, phosphate, on co-composting for swine manure and corn straw. Chemosphere, 2020, 248, 125927.	4.2	120
7	Efficient removal of lead from solution by celery-derived biochars rich in alkaline minerals. Bioresource Technology, 2017, 235, 185-192.	4.8	107
8	Enhanced adsorption of Cu(II) and Zn(II) from aqueous solution by polyethyleneimine modified straw hydrochar. Science of the Total Environment, 2021, 778, 146116.	3.9	105
9	Optimization and mechanism studies on cell disruption and phosphorus recovery from microalgae with magnesium modified hydrochar in assisted hydrothermal system. Science of the Total Environment, 2019, 646, 1140-1154.	3.9	96
10	Corn waste valorization to generate activated hydrochar to recover ammonium nitrogen from compost leachate by hydrothermal assisted pretreatment. Journal of Environmental Management, 2019, 236, 108-117.	3.8	88
11	Improving the humification and phosphorus flow during swine manure composting: A trial for enhancing the beneficial applications of hazardous biowastes. Journal of Hazardous Materials, 2022, 425, 127906.	6.5	83
12	Apricot shell- and apple tree-derived biochar affect the fractionation and bioavailability of Zn and Cd as well as the microbial activity in smelter contaminated soil. Environmental Pollution, 2020, 264, 114773.	3.7	82
13	Sustainable applications of rice feedstock in agro-environmental and construction sectors: A global perspective. Renewable and Sustainable Energy Reviews, 2022, 153, 111791.	8.2	78
14	Thermodynamic modeling of ferric phosphate precipitation for phosphorus removal and recovery from wastewater. Journal of Hazardous Materials, 2010, 176, 444-450.	6.5	73
15	Ammonium nitrogen recovery from digestate by hydrothermal pretreatment followed by activated hydrochar sorption. Chemical Engineering Journal, 2020, 379, 122254.	6.6	69
16	Phosphorus recovered from digestate by hydrothermal processes with struvite crystallization and its potential as a fertilizer. Science of the Total Environment, 2020, 698, 134240.	3.9	69
17	Mechanisms and modelling of phosphorus solidâ€“liquid transformation during the hydrothermal processing of swine manure. Green Chemistry, 2020, 22, 5628-5638.	4.6	68
18	High-efficient adsorption of phosphates from water by hierarchical CuAl/biomass carbon fiber layered double hydroxide. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 555, 314-323.	2.3	63

#	Article	IF	Citations
19	Struvite pyrolysate cycling technology assisted by thermal hydrolysis pretreatment to recover ammonium nitrogen from composting leachate. Journal of Cleaner Production, 2020, 242, 118442.	4.6	60
20	Manganese oxide-modified biochar: production, characterization and applications for the removal of pollutants from aqueous environments - a review. Bioresource Technology, 2022, 346, 126581.	4.8	60
21	Swine manure valorization for phosphorus and nitrogen recovery by catalyticâ€“thermal hydrolysis and struvite crystallization. Science of the Total Environment, 2020, 729, 138999.	3.9	53
22	Dynamics of nitrogen transformation depending on different operational strategies in laboratory-scale tidal flow constructed wetlands. Science of the Total Environment, 2014, 487, 49-56.	3.9	46
23	Microwave digestion-assisted HFO/biochar adsorption to recover phosphorus from swine manure. Science of the Total Environment, 2018, 621, 1512-1526.	3.9	46
24	Phosphorus recovery from biogas slurry by ultrasound/H2O2 digestion coupled with HFO/biochar adsorption process. Waste Management, 2017, 60, 219-229.	3.7	45
25	Modeling assessment for ammonium nitrogen recovery from wastewater by chemical precipitation. Journal of Environmental Sciences, 2011, 23, 881-890.	3.2	37
26	Effects of microorganism-mediated inoculants on humification processes and phosphorus dynamics during the aerobic composting of swine manure. Journal of Hazardous Materials, 2021, 416, 125738.	6.5	37
27	Almond and walnut shell-derived biochars affect sorption-desorption, fractionation, and release of phosphorus in two different soils. Chemosphere, 2020, 241, 124888.	4.2	33
28	Microbial inoculants and struvite improved organic matter humification and stabilized phosphorus during swine manure composting: Multivariate and multiscale investigations. Bioresource Technology, 2022, 351, 126976.	4.8	29
29	Phosphate enhance recovery from wastewater by mechanism analysis and optimization of struvite settleability in fluidized bed reactor. Scientific Reports, 2016, 6, 32215.	1.6	23
30	Phosphate recovery from animal manure wastewater by struvite crystallization and CO₂ degasification reactor. Ecological Chemistry and Engineering S, 2014, 21, 89-99.	0.3	19
31	Microwave-assisted digestion and NaOH treatment of waste-activated sludge to recover phosphorus by crystallizing struvite. Environmental Technology (United Kingdom), 2017, 38, 1211-1222.	1.2	15
32	Impact of catalytic hydrothermal treatment and Ca/Al-modified hydrochar on lability, sorption, and speciation of phosphorus in swine manure: Microscopic and spectroscopic investigations. Environmental Pollution, 2022, 299, 118877.	3.7	15
33	Innovations of phosphorus sustainability: implications for the whole chain. Frontiers of Agricultural Science and Engineering, 2019, 6, 321.	0.9	14
34	Biochar Adsorption Treatment for Typical Pollutants Removal in Livestock Wastewater: A Review. , 0, , .		13
35	Phosphorus Recovery by Struvite Crystallization from Livestock Wastewater and Reuse as Fertilizer: A Review. , 0, , .		10
36	Recovery of Phosphorus From Swine Manure by Ultrasound/H2O2 Digestion, Struvite Crystallization, and Ferric Oxide Hydrate/Biochar Adsorption. Frontiers in Chemistry, 2018, 6, 464.	1.8	10

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37	The current phosphate recycling situation in China and Germany: a comparative review. Frontiers of Agricultural Science and Engineering, 2019, 6, 403.	0.9	7
38	Ammonium Nitrogen Removal from Wastewater by Biochar Adsorption. Advanced Materials Research, 0, 726-731, 1679-1682.	0.3	3
39	Application of Biochar for Phosphate Adsorption and Recovery from Wastewater. Advanced Materials Research, 2013, 750-752, 1389-1392.	0.3	3
40	Assessment of Phosphorus Recovery from Swine Wastewater in Beijing, China. Sustainability, 2017, 9, 1845.	1.6	3
41	Effects of Organic Coexisting Impurities on Phosphorus Recovery from Animal Manure Wastewater by Struvite Crystallization. Advanced Materials Research, 0, 955-959, 1983-1986.	0.3	2
42	Adsorption and degradation of 2,4-dichlorophenoxyacetic acid in spiked soil with Fe0nanoparticles supported by biochar. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 2015, 65, 215-221.	0.3	2
43	Hydrothermal Process for Extracting Phosphate from Animal Manure. , 2019, , 377-389.		2
44	Nutrient Recovery from Piggy Wastewater by Enhancing Struvite Crystallization Process. Applied Mechanics and Materials, 0, 522-524, 579-583.	0.2	0
45	PH-sensitive dispersion of carbon nanotubes by myoglobin. AIP Conference Proceedings, 2017, , .	0.3	0