Shengsen Wang

List of Publications by Year
in descending order

50 papers	4,007 citations	147801 31 h-index	197818 49 g-index
50 all docs	50 docs citations	50 times ranked	3389 citing authors

#	Article	IF	Citations
1	Removal of arsenic by magnetic biochar prepared from pinewood and natural hematite. Bioresource Technology, 2015, 175, 391-395.	9.6	535
2	Batch and column sorption of arsenic onto iron-impregnated biochar synthesized through hydrolysis. Water Research, 2015, 68, 206-216.	11.3	448
3	Manganese oxide-modified biochars: Preparation, characterization, and sorption of arsenate and lead. Bioresource Technology, 2015, 181, 13-17.	9.6	325
4	Biochar-supported nZVI (nZVI/BC) for contaminant removal from soil and water: A critical review. Journal of Hazardous Materials, 2019, 373, 820-834.	12.4	307
5	Adsorptive removal of arsenate from aqueous solutions by biochar supported zero-valent iron nanocomposite: Batch and continuous flow tests. Journal of Hazardous Materials, 2017, 322, 172-181.	12.4	263
6	Physicochemical and sorptive properties of biochars derived from woody and herbaceous biomass. Chemosphere, 2015, 134, 257-262.	8.2	198
7	Recovery, regeneration and sustainable management of spent adsorbents from wastewater treatment streams: A review. Science of the Total Environment, 2022, 822, 153555.	8.0	174
8	Engineered biochar for environmental decontamination in aquatic and soil systems: a review. , 2022, 1, .		93
9	Formation and mechanisms of nano-metal oxide-biochar composites for pollutants removal: A review. Science of the Total Environment, 2021, 767, 145305.	8.0	89
10	Carbon defects in biochar facilitated nitrogen doping: The significant role of pyridinic nitrogen in peroxymonosulfate activation and ciprofloxacin degradation. Chemical Engineering Journal, 2022, 441, 135864.	12.7	86
11	Sorption of arsenic onto Ni/Fe layered double hydroxide (LDH)-biochar composites. RSC Advances, 2016, 6, 17792-17799.	3.6	85
12	Preparation of highly-conductive pyrogenic carbon-supported zero-valent iron for enhanced Cr(â…¥) reduction. Journal of Hazardous Materials, 2020, 396, 122712.	12.4	81
13	Sorption of arsenate onto magnetic ironâ€“manganese (Feâ€“Mn) biochar composites. RSC Advances, 2015, 5, 67971-67978.	3.6	78
14	Removal of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) from water by carbonaceous nanomaterials: A review. Critical Reviews in Environmental Science and Technology, 2020, 50, 2379-2414.	12.8	71
15	Application of biochar immobilized microorganisms for pollutants removal from wastewater: A review. Science of the Total Environment, 2022, 837, 155563.	8.0	67
16	Simultaneous reductive and sorptive removal of Cr(<scp>vi</scp>) by activated carbon supported Î²-FeOOH. RSC Advances, 2017, 7, 34687-34693.	3.6	64
17	Photocatalytic behavior of biochar-modified carbon nitride with enriched visible-light reactivity. Chemosphere, 2020, 239, 124713.	8.2	63
18	Biochar provides a safe and value-added solution for hyperaccumulating plant disposal: A case study of Phytolacca acinosa Roxb. (Phytolaccaceae). Chemosphere, 2017, 178, 59-64.	8.2	60

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19	Manganese oxide-modified biochar: production, characterization and applications for the removal of pollutants from aqueous environments - a review. Bioresource Technology, 2022, 346, 126581.	9.6	60
20	Carboxymethyl cellulose stabilized ZnO/biochar nanocomposites: Enhanced adsorption and inhibited photocatalytic degradation of methylene blue. Chemosphere, 2018, 197, 20-25.	8.2	58
21	Enhance in mobility of oxytetracycline in a sandy loamy soil caused by the presence of microplastics. Environmental Pollution, 2021, 269, 116151.	7.5	53
22	Biochar as a potential strategy for remediation of contaminated mining soils: Mechanisms, applications, and future perspectives. Journal of Environmental Management, 2022, 313, 114973.	7.8	53
23	Environmental behaviors and degradation methods of microplastics in different environmental media. Chemosphere, 2022, 299, 134354.	8.2	51
24	The sorptive and reductive capacities of biochar supported nanoscaled zero-valent iron (nZVI) in relation to its crystallite size. Chemosphere, 2017, 186, 495-500.	8.2	50
25	Preparation of biochar-interpenetrated iron-alginate hydrogel as a pH-independent sorbent for removal of Cr(VI) and Pb(II). Environmental Pollution, 2021, 287, 117303.	7.5	49
26	Modification of ordered mesoporous carbon for removal of environmental contaminants from aqueous phase: A review. Journal of Hazardous Materials, 2021, 418, 126266.	12.4	48
27	Magnetic Activated-ATP@Fe3O4 Nanocomposite as an Efficient Fenton-Like Heterogeneous Catalyst for Degradation of Ethidium Bromide. Scientific Reports, 2017, 7, 6070.	3.3	47
28	Formation of nitrogen functionalities in biochar materials and their role in the mitigation of hazardous emerging organic pollutants from wastewater. Journal of Hazardous Materials, 2021, 416, 126131.	12.4	47
29	Oxygen-Content-Controllable Graphene Oxide from Electron-Beam-Irradiated Graphite: Synthesis, Characterization, and Removal of Aqueous Lead [Pb(II)]. ACS Applied Materials & Interfaces, 2016, 8, 25289-25296.	8.0	44
30	Biomass facilitated phase transformation of natural hematite at high temperatures and sorption of Cd2+ and Cu2+. Environment International, 2019, 124, 473-481.	10.0	40
31	The contribution of lignocellulosic constituents to Cr(VI) reduction capacity of biochar-supported zerovalent iron. Chemosphere, 2021, 263, 127871.	8.2	34
32	Pinewood outperformed bamboo as feedstock to prepare biochar-supported zero-valent iron for Cr6+ reduction. Environmental Research, 2020, 187, 109695.	7.5	32
33	Carbothermal synthesis of biochar-supported metallic silver for enhanced photocatalytic removal of methylene blue and antimicrobial efficacy. Journal of Hazardous Materials, 2021, 401, 123382.	12.4	28
34	ZVI impregnation altered arsenic sorption by ordered mesoporous carbon in presence of Cr(â…¥): A mechanistic investigation. Journal of Hazardous Materials, 2021, 414, 125507.	12.4	23
35	Co-transport of Pb (II) and Cd (II) in saturated porous media: effects of colloids, flow rate and grain size. Chemical Speciation and Bioavailability, 2018, 30, 135-143.	2.0	22
36	Removal of Pb (II) and V (V) from aqueous solution by glutaraldehyde crosslinked chitosan and nanocomposites. Chemosphere, 2022, 297, 134084.	8.2	20

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37	Does biochar application in heavy metal-contaminated soils affect soil micronutrient dynamics?. Chemosphere, 2022, 290, 133349.	8.2	19
38	Preferential Nitrate Removal from Water Using a New Recyclable Polystyrene Adsorbent Functionalized with Triethylamine Groups. Industrial & Engineering Chemistry Research, 2020, 59, 5194-5201.	3.7	16
39	Carbon matrix of biochar from biomass modeling components facilitates electron transfer from zero-valent iron to Cr(VI). Environmental Science and Pollution Research, 2022, 29, 24309-24321.	5.3	16
40	Mechanism analysis of MnFe2O4/FeSX for removal of Cr(VI) from aqueous phase. Ecotoxicology and Environmental Safety, 2021, 217, 112209.	6.0	14
41	Increased structural defects of graphene oxide compromised reductive capacity of ZVI towards hexavalent chromium. Chemosphere, 2021, 277, 130308.	8.2	14
42	Pyrogenic temperature affects the particle size of biochar-supported nanoscaled zero valent iron (nZVI) and its silver removal capacity. Chemical Speciation and Bioavailability, 2017, 29, 179-185.	2.0	13
43	Effects of temperature on physicochemical properties of rice straw biochar and its passivation ability to Cu2+ in soil. Journal of Soils and Sediments, 2022, 22, 1418-1430.	3.0	13
44	Pyrolysis temperature and feedstock affected Cr(VI) removal capacity of sulfidated zerovalent iron: Importance of surface area and electrical conductivity. Chemosphere, 2022, 296, 133927.	8.2	10
45	Integration of biochar into Ag3PO4/Î±-Fe2O3 heterojunction for enhanced reactive oxygen species generation towards organic pollutants removal. Environmental Pollution, 2022, 303, 119131.	7.5	10
46	Copper Nanoparticle Loading and F Doping of Graphene Aerogel Enhance Its Adsorption of Aqueous Perfluorooctanoic Acid. ACS Omega, 2021, 6, 7073-7085.	3.5	9
47	Accelerating interlayer charge transport of alkali metal-intercalated carbon nitride for enhanced photocatalytic hydrogen evolution. Research on Chemical Intermediates, 2021, 47, 5189-5202.	2.7	9
48	The significant role of electron donating capacity and carbon structure of biochar to electron transfer of zerovalent iron. Chemosphere, 2022, 287, 132381.	8.2	8
49	High removal efficiency of tetracycline (TC) by biochar-supported zerovalent iron composite prepared by co-pyrolysis of hematite and pinewood. Environmental Pollutants and Bioavailability, 2021, 33, 247-254.	3.0	6
50	Cosorption of Zn(II) and chlortetracycline onto montmorillonite: pH effects and molecular investigations. Journal of Hazardous Materials, 2022, 424, 127368.	12.4	4