Hocheol Song

List of Publications by Year
in descending order

108 papers	7,839 citations	38660 50 h-index	53109 85 g-index
108 all docs	108 docs citations	108 times ranked	8352 citing authors

#	Article	IF	Citations
1	Cadmium stress in plants: A critical review of the effects, mechanisms, and tolerance strategies. Critical Reviews in Environmental Science and Technology, 2022, 52, 675-726.	6.6	196
2	Valorization of hazardous COVID-19 mask waste while minimizing hazardous byproducts using catalytic gasification. Journal of Hazardous Materials, 2022, 423, 127222.	6.5	33
3	Synergistic effects of blending seafood wastes as Co-pyrolysis feedstock on syngas production and biochar properties. Chemical Engineering Journal, 2022, 429, 132487.	6.6	11
4	Co-pyrolysis route of chlorella sp. and bauxite tailings to fabricate metal-biochar as persulfate activator. Chemical Engineering Journal, 2022, 428, 132578.	6.6	29
5	Valorizing plastic toy wastes to flammable gases through CO2-mediated pyrolysis with a Co-based catalyst. Journal of Hazardous Materials, 2022, 434, 128850.	6.5	3
6	Removal of toxic elements from aqueous environments using nano zero-valent iron- and iron oxide-modified biochar: a review. Biochar, 2022, 4, 1.	6.2	54
7	Sustainable valorization of styrofoam and CO2 into syngas. Science of the Total Environment, 2022, 834, 155384.	3.9	5
8	Engineered biochar for environmental decontamination in aquatic and soil systems: a review. , 2022, 1, .		93
9	Sustainable Valorization of E-Waste Plastic through Catalytic Pyrolysis Using CO₂. ACS Sustainable Chemistry and Engineering, 2022, 10, 8443-8451.	3.2	8
10	Recyclable aqueous metal adsorbent: Synthesis and Cu(II) sorption characteristics of ternary nanocomposites of Fe3O4 nanoparticles@grapheneâ€“poly-N-phenylglycine nanofibers. Journal of Hazardous Materials, 2021, 401, 123283.	6.5	28
11	Machine learning for the selection of carbon-based materials for tetracycline and sulfamethoxazole adsorption. Chemical Engineering Journal, 2021, 406, 126782.	6.6	119
12	Recycling of a spent alkaline battery as a catalyst for the total oxidation of hydrocarbons. Journal of Hazardous Materials, 2021, 403, 123929.	6.5	13
13	Valorization of plastics and goethite into iron-carbon composite as persulfate activator for amaranth oxidation. Chemical Engineering Journal, 2021, 407, 127188.	6.6	15
14	Design and fabrication of exfoliated Mg/Al layered double hydroxides on biochar support. Journal of Cleaner Production, 2021, 289, 125142.	4.6	56
15	Effect of biochar aging and co-existence of diethyl phthalate on the mono-sorption of cadmium and zinc to biochar-treated soils. Journal of Hazardous Materials, 2021, 408, 124850.	6.5	37
16	Iron-modified biochar and water management regime-induced changes in plant growth, enzyme activities, and phytoavailability of arsenic, cadmium and lead in a paddy soil. Journal of Hazardous Materials, 2021, 407, 124344.	6.5	150
17	Insights into upstream processing of microalgae: A review. Bioresource Technology, 2021, 329, 124870.	4.8	79
18	Ambient NO2 adsorption removal by Mgâ€“Al layered double hydroxides and derived mixed metal oxides. Journal of Cleaner Production, 2021, 313, 127956.	4.6	25

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19	Tuneable functionalities in layered double hydroxide catalysts for thermochemical conversion of biomass-derived glucose to fructose. Chemical Engineering Journal, 2020, 383, 122914.	6.6	28
20	Tailoring acidity and porosity of alumina catalysts via transition metal doping for glucose conversion in biorefinery. Science of the Total Environment, 2020, 704, 135414.	3.9	13
21	Efficient removal of diclofenac and cephalexin from aqueous solution using Anthriscus sylvestris-derived activated biochar. Science of the Total Environment, 2020, 745, 140789.	3.9	58
22	Facile synthesis of polyoxometalate-modified metal organic frameworks for eliminating tetrabromobisphenol-A from water. Journal of Hazardous Materials, 2020, 399, 122946.	6.5	14
23	Valorization of plastics and paper mill sludge into carbon composite and its catalytic performance for acarbon material consisted of the multi-layerzo dye oxidation. Journal of Hazardous Materials, 2020, 398, 123173.	6.5	16
24	Adsorption of As(V) and Ni(II) by Fe-Biochar composite fabricated by co-pyrolysis of orange peel and red mud. Environmental Research, 2020, 188, 109809.	3.7	59
25	A review of recent advancements in utilization of biomass and industrial wastes into engineered biochar. Journal of Hazardous Materials, 2020, 400, 123242.	6.5	149
26	Soil contamination by potentially toxic elements and the associated human health risk in geo- and anthropogenic contaminated soils: A case study from the temperate region (Germany) and the arid region (Egypt). Environmental Pollution, 2020, 262, 114312.	3.7	77
27	Zirconia-Assisted Pyrolysis of Coffee Waste in CO2 Environment for the Simultaneous Production of Fuel Gas and Composite Adsorbent. Journal of Hazardous Materials, 2020, 386, 121989.	6.5	13
28	Influence of humic acid on the long-term performance of direct contact membrane distillation. Energy and Environment, 2019, 30, 109-120.	2.7	11
29	Coupling carbon dioxide and magnetite for the enhanced thermolysis of polyvinyl chloride. Science of the Total Environment, 2019, 696, 133951.	3.9	15
30	Enhancement of syngas for H2 production via catalytic pyrolysis of orange peel using CO2 and bauxite residue. Applied Energy, 2019, 254, 113803.	5.1	20
31	Mechanistic insights into red mud, blast furnace slag, or metakaolin-assisted stabilization/solidification of arsenic-contaminated sediment. Environment International, 2019, 133, 105247.	4.8	91
32	Catalytic pyrolysis of low-rank coal using Fe-carbon composite as a catalyst. Energy Conversion and Management, 2019, 199, 111978.	4.4	20
33	Catalytic thermolysis of oak sawdust using Fe-based catalyst and CO2. Journal of CO2 Utilization, 2019, 32, 269-275.	3.3	17
34	Fabrication and environmental applications of multifunctional mixed metal-biochar composites (MMBC) from red mud and lignin wastes. Journal of Hazardous Materials, 2019, 374, 412-419.	6.5	188
35	A review on functional polymer-clay based nanocomposite membranes for treatment of water. Journal of Hazardous Materials, 2019, 379, 120584.	6.5	104
36	Production of bioplastic through food waste valorization. Environment International, 2019, 127, 625-644.	4.8	328

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37	Pyrolysis of aquatic carbohydrates using CO_2 as reactive gas medium: A case study of chitin. Energy, 2019, 177, 136-143.	4.5	17
38	Degradation of antibiotics by modified vacuum-UV based processes: Mechanistic consequences of H_2O_2 and $K_2S_2O_8$ in the presence of halide ions. Science of the Total Environment, 2019, 664, 312-321.	3.9	92
39	Aluminium-biochar composites as sustainable heterogeneous catalysts for glucose isomerisation in a biorefinery. Green Chemistry, 2019, 21, 1267-1281.	4.6	157
40	Concurrent adsorption and micro-electrolysis of Cr(VI) by nanoscale zerovalent iron/biochar/Ca-alginate composite. Environmental Pollution, 2019, 247, 410-420.	3.7	145
41	Synthesis of functionalised biochar using red mud, lignin, and carbon dioxide as raw materials. Chemical Engineering Journal, 2019, 361, 1597-1604.	6.6	68
42	Engineered biochar composite fabricated from red mud and lipid waste and synthesis of biodiesel using the composite. Journal of Hazardous Materials, 2019, 366, 293-300.	6.5	31
43	Biochar application to low fertility soils: A review of current status, and future prospects. Geoderma, 2019, 337, 536-554.	2.3	571
44	Preparation of nitrogen-doped Cu-biochar and its application into catalytic reduction of p-nitrophenol. Environmental Geochemistry and Health, 2019, 41, 1729-1737.	1.8	25
45	Sulfonated biochar as acid catalyst for sugar hydrolysis and dehydration. Catalysis Today, 2018, 314, 52-61.	2.2	92
46	Propylene carbonate and Î³-valerolactone as green solvents enhance Sn(<scp>iv</scp>)-catalysed hydroxymethylfurfural (HMF) production from bread waste. Green Chemistry, 2018, 20, 2064-2074.	4.6	85
47	Biochar influences soil carbon pools and facilitates interactions with soil: A field investigation. Land Degradation and Development, 2018, 29, 2162-2171.	1.8	89
48	Production of 5-hydroxymethylfurfural from starch-rich food waste catalyzed by sulfonated biochar. Bioresource Technology, 2018, 252, 76-82.	4.8	132
49	The potential value of biochar in the mitigation of gaseous emission of nitrogen. Science of the Total Environment, 2018, 612, 257-268.	3.9	69
50	Synthesis of cobalt-impregnated carbon composite derived from a renewable resource: Characterization and catalytic performance evaluation. Science of the Total Environment, 2018, 612, 103-110.	3.9	40
51	Fabrication of Fe/Mn oxide composite adsorbents for adsorptive removal of zinc and phosphate. Journal of Soils and Sediments, 2018, 18, 946-956.	1.5	14
52	Contrasting Roles of Maleic Acid in Controlling Kinetics and Selectivity of Sn(IV)- and Cr(III)-Catalyzed Hydroxymethylfurfural Synthesis. ACS Sustainable Chemistry and Engineering, 2018, 6, 14264-14274.	3.2	28
53	Selective Glucose Isomerization to Fructose via a Nitrogen-doped Solid Base Catalyst Derived from Spent Coffee Grounds. ACS Sustainable Chemistry and Engineering, 2018, 6, 16113-16120.	3.2	86
54	Biowaste for environmental remediation and sustainable waste management. Clean Technologies and Environmental Policy, 2018, 20, 2155-2155.	2.1	0

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55	Thermochemical conversion of cobalt-loaded spent coffee grounds for production of energy resource and environmental catalyst. Bioresource Technology, 2018, 270, 346-351.	4.8	33
56	Photo-Fenton abatement of aqueous organics using metal-organic frameworks: An advancement from benchmark zeolite. Science of the Total Environment, 2018, 644, 389-397.	3.9	17
57	Phosphoric acid-activated wood biochar for catalytic conversion of starch-rich food waste into glucose and 5-hydroxymethylfurfural. Bioresource Technology, 2018, 267, 242-248.	4.8	114
58	Effect of Mn substitution on the oxidation/adsorption abilities of iron(III) oxyhydroxides. Clean Technologies and Environmental Policy, 2018, 20, 2201-2208.	2.1	7
59	Lignin valorization for the production of renewable chemicals: State-of-the-art review and future prospects. Bioresource Technology, 2018, 269, 465-475.	4.8	298
60	Contribution of pyrolytic gas medium to the fabrication of co-impregnated biochar. Journal of CO2 Utilization, 2018, 26, 476-486.	3.3	17
61	N doped cobalt-carbon composite for reduction of p-nitrophenol and pendimethaline. Journal of Alloys and Compounds, 2017, 703, 118-124.	2.8	49
62	Metal organic framework derived Cuâ€“carbon composite: An efficient non-noble metal catalyst for reduction of hexavalent chromium and pendimethalin. Journal of Industrial and Engineering Chemistry, 2017, 52, 331-337.	2.9	32
63	Multi-metal resistance and plant growth promotion potential of a wastewater bacterium Pseudomonas aeruginosa and its synergistic benefits. Environmental Geochemistry and Health, 2017, 39, 1583-1593.	1.8	35
64	Simultaneous production of syngas and magnetic biochar via pyrolysis of paper mill sludge using CO 2 as reaction medium. Energy Conversion and Management, 2017, 145, 1-9.	4.4	80
65	Reduction of Bromate by Cobalt-Impregnated Biochar Fabricated via Pyrolysis of Lignin Using CO₂ as a Reaction Medium. ACS Applied Materials & Interfaces, 2017, 9, 13142-13150.	4.0	50
66	Co-pyrolysis of paper mill sludge and spend coffee ground using CO2 as reaction medium. Journal of CO2 Utilization, 2017, 21, 572-579.	3.3	31
67	Fabrication of magnetic biochar as a treatment medium for As(V) via pyrolysis of FeCl 3 -pretreated spent coffee ground. Environmental Pollution, 2017, 229, 942-949.	3.7	92
68	Fabrication of engineered biochar from paper mill sludge and its application into removal of arsenic and cadmium in acidic water. Bioresource Technology, 2017, 246, 69-75.	4.8	129
69	Treatment of Simulated Coalbed Methane Produced Water Using Direct Contact Membrane Distillation. Water (Switzerland), 2016, 8, 194.	1.2	9
70	Preparation of Calcined Zirconia-Carbon Composite from Metal Organic Frameworks and Its Application to Adsorption of Crystal Violet and Salicylic Acid. Materials, 2016, 9, 261.	1.3	33
71	Reduction of p-nitrophenol by magnetic Co-carbon composites derived from metal organic frameworks. Chemical Engineering Journal, 2016, 298, 183-190.	6.6	194
72	Catalytic decoloration of commercial azo dyes by copper-carbon composites derived from metal organic frameworks. Journal of Alloys and Compounds, 2016, 689, 625-631.	2.8	49

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73	Fabrication of a novel magnetic carbon nanocomposite adsorbent via pyrolysis of sugar. Chemosphere, 2016, 163, 305-312.	4.2	34
74	Use of carbon dioxide as a reaction medium in the thermo-chemical process for the enhanced generation of syngas and tuning adsorption ability of biochar. Energy Conversion and Management, 2016, 117, 106-114.	4.4	30
75	Synthesis of hydrous zirconium oxide-impregnated chitosan beads and their application for removal of fluoride and lead. Applied Surface Science, 2016, 372, 13-19.	3.1	58
76	Reduction of Nitrate in Groundwater by Fe(0)/Magnetite Nanoparticles Entrapped in Ca-Alginate Beads. Water, Air, and Soil Pollution, 2015, 226, 1.	1.1	27
77	Efficiency assessment of cascade aerator in a passive treatment system for Fe(II) oxidation in ferruginous mine drainage of net alkaline. Environmental Earth Sciences, 2015, 73, 5363-5373.	1.3	11
78	Magnetic chitosan composite for adsorption of cationic and anionic dyes in aqueous solution. Journal of Industrial and Engineering Chemistry, 2015, 28, 60-66.	2.9	154
79	Carbon dioxide assisted sustainability enhancement of pyrolysis of waste biomass: A case study with spent coffee ground. Bioresource Technology, 2015, 189, 1-6.	4.8	81
80	The influences of the amount of organic substrate on the performance of pilot-scale passive bioreactors for acid mine drainage treatment. Environmental Earth Sciences, 2015, 73, 4717-4727.	1.3	26
81	Evaluation of phosphate fertilizers and red mud in reducing plant availability of Cd, Pb, and Zn in mine tailings. Environmental Earth Sciences, 2015, 74, 2659-2668.	1.3	30
82	Effects of Heavy Metals on Biodegradation of Fluorene by a<i>Sphingobacterium</i>sp. Strain (KM-02) Isolated from Polycyclic Aromatic Hydrocarbon-Contaminated Mine Soil. Environmental Engineering Science, 2015, 32, 891-898.	0.8	23
83	Photoautotrophic hydrogen production by eukaryotic microalgae under aerobic conditions. Nature Communications, 2014, 5, 3234.	5.8	92
84	Review of biotreatment techniques for volatile sulfur compounds with an emphasis on dimethyl sulfide. Process Biochemistry, 2014, 49, 1543-1554.	1.8	51
85	The effect of granular ferric hydroxide amendment on the reduction of nitrate in groundwater by zero-valent iron. Chemosphere, 2013, 93, 2767-2773.	4.2	21
86	The effects of selected preoxidation strategies on I-THM formation and speciation. Water Research, 2012, 46, 5491-5498.	5.3	37
87	The impact of bromide/iodide concentration and ratio on iodinated trihalomethane formation and speciation. Water Research, 2012, 46, 11-20.	5.3	96
88	Pilot-scale passive bioreactors for the treatment of acid mine drainage: Efficiency of mushroom compost vs. mixed substrates for metal removal. Journal of Environmental Management, 2012, 111, 150-158.	3.8	46
89	A novel chitosan/clay/magnetite composite for adsorption of Cu(II) and As(V). Chemical Engineering Journal, 2012, 200-202, 654-662.	6.6	152
90	The effects of pH, bromide and nitrite on halonitromethane and trihalomethane formation from amino acids and amino sugars. Chemosphere, 2012, 86, 323-328.	4.2	73

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91	Enhancement of fermentative bioenergy (ethanol/hydrogen) production using ultrasonication of Scenedesmus obliquus YSW15 cultivated in swine wastewater effluent. Energy and Environmental Science, 2011, 4, 3513.	15.6	82
92	I-THM Formation and Speciation: Preformed Monochloramine versus Prechlorination Followed by Ammonia Addition. Environmental Science & Technology, 2011, 45, 10429-10437.	4.6	69
93	Enhanced Reduction of Nitrate in Groundwater by Zero-valent Iron with Activated Red Mud. Geosystem Engineering, 2011, 14, 65-70.	0.7	8
94	Adsorption of nitrate and Cr(VI) by cationic polymer-modified granular activated carbon. Chemical Engineering Journal, 2011, 175, 298-305.	6.6	112
95	Perchlorate removal from aqueous solutions by granular ferric hydroxide (GFH). Chemical Engineering Journal, 2010, 159, 84-90.	6.6	63
96	Comparative Analysis of Halonitromethane and Trihalomethane Formation and Speciation in Drinking Water: The Effects of Disinfectants, pH, Bromide, and Nitrite. Environmental Science & Technology, 2010, 44, 794-799.	4.6	112
97	Halonitromethane formation potentials in drinking waters. Water Research, 2010, 44, 105-114.	5.3	148
98	Halonitromethanes formation in wastewater treatment plant effluents. Chemosphere, 2010, 79, 174-179.	4.2	49
99	Isolation and fractionation of natural organic matter: evaluation of reverse osmosis performance and impact of fractionation parameters. Environmental Monitoring and Assessment, 2009, 153, 307-321.	1.3	31
100	Defluoridation from aqueous solutions by granular ferric hydroxide (GFH). Water Research, 2009, 43, 490-498.	5.3	259
101	Catalytic hydrodechlorination of chlorinated ethenes by nanoscale zero-valent iron. Applied Catalysis B: Environmental, 2008, 78, 53-60.	10.8	86
102	Amendment of hydroxyapatite in reduction of tetrachloroethylene by zero-valent zinc: Its rate enhancing effect and removal of Zn(II). Chemosphere, 2008, 73, 1420-1427.	4.2	28
103	HAA Formation and Speciation during Chloramination. ACS Symposium Series, 2008, , 124-140.	0.5	2
104	Effects of quenching methods on HAA determination in chloraminated waters. Journal - American Water Works Association, 2008, 100, 89-99.	0.2	13
105	Effect of amorphous silica and silica sand on removal of chromium(VI) by zero-valent iron. Chemosphere, 2007, 66, 858-865.	4.2	122
106	HAA formation during chloraminationâ€"significance of monochloramine's direct reaction with DOM. Journal - American Water Works Association, 2007, 99, 57-69.	0.2	47
107	Reduction of Chlorinated Methanes by Nano-Sized Zero-Valent Iron. Kinetics, Pathways, and Effect of Reaction Conditions. Environmental Engineering Science, 2006, 23, 272-284.	0.8	53
108	Reduction of Chlorinated Ethanes by Nanosized Zero-Valent Iron:â€‰ Kinetics, Pathways, and Effects of Reaction Conditions. Environmental Science & Technology, 2005, 39, 6237-6245.	4.6	328