Hui Wang

List of Publications by Year in descending order

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159358 214527 2,954 108 30 47 citations h-index g-index papers 109 109 109 1990 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Flotation separation of waste plastics for recycling—A review. Waste Management, 2015, 41, 28-38.	3.7	172
2	Liberation characteristic and physical separation of printed circuit board (PCB). Waste Management, 2011, 31, 2161-2166.	3.7	113
3	Biochar/MnAl-LDH composites for Cu (ΙΙ) removal from aqueous solution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 538, 443-450.	2.3	90
4	Pb(II) sorption from aqueous solution by novel biochar loaded with nano-particles. Chemosphere, 2018, 192, 1-4.	4.2	88
5	Surface modification and selective flotation of waste plastics for effective recycling——a review. Separation and Purification Technology, 2019, 226, 75-94.	3.9	87
6	Pb(II) sorption by biochar derived from Cinnamomum camphora and its improvement with ultrasound-assisted alkali activation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 556, 177-184.	2.3	80
7	Separation of polyethylene terephthalate from municipal waste plastics by froth flotation for recycling industry. Waste Management, 2015, 35, 42-47.	3.7	78
8	Superior fenton-like degradation of tetracycline by iron loaded graphitic carbon derived from microplastics: Synthesis, catalytic performance, and mechanism. Separation and Purification Technology, 2021, 270, 118773.	3.9	71
9	A critical review of control and removal strategies for microplastics from aquatic environments. Journal of Environmental Chemical Engineering, 2021, 9, 105463.	3.3	70
10	Ultrasound-assisted xanthation of cellulose from lignocellulosic biomass optimized by response surface methodology for Pb(II) sorption. Carbohydrate Polymers, 2018, 182, 21-28.	5.1	64
11	Copper-based catalyst from waste printed circuit boards for effective Fenton-like discoloration of Rhodamine B at neutral pH. Chemosphere, 2019, 230, 278-285.	4.2	58
12	Fenton treatment for flotation separation of polyvinyl chloride from plastic mixtures. Separation and Purification Technology, 2017, 187, 415-425.	3.9	57
13	Carboxyl functionalized Cinnamomum camphora for removal of heavy metals from synthetic wastewater-contribution to sustainability in agroforestry. Journal of Cleaner Production, 2018, 184, 921-928.	4.6	57
14	Surface treatment with Fenton for separation of acrylonitrile-butadiene-styrene and polyvinylchloride waste plastics by flotation. Waste Management, 2017, 67, 20-26.	3.7	54
15	Application of dissolved air flotation on separation of waste plastics ABS and PS. Waste Management, 2012, 32, 1297-1305.	3.7	52
16	Flotation separation of polyvinyl chloride and polyethylene terephthalate plastics combined with surface modification for recycling. Waste Management, 2015, 45, 112-117.	3.7	49
17	Separation of hazardous polyvinyl chloride from waste plastics by flotation assisted with surface modification of ammonium persulfate: Process and mechanism. Journal of Hazardous Materials, 2020, 389, 121918.	6.5	47
18	Is it possible to efficiently and sustainably remove microplastics from sediments using froth flotation?. Chemical Engineering Journal, 2022, 448, 137692.	6.6	47

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19	Flotability and flotation separation of polymer materials modulated by wetting agents. Waste Management, 2014, 34, 309-315.	3.7	46
20	A novel process for separation of hazardous poly(vinyl chloride) from mixed plastic wastes by froth flotation. Waste Management, 2017, 69, 59-65.	3.7	45
21	Waste printed circuit boards as novel potential engineered catalyst for catalytic degradation of orange II. Journal of Cleaner Production, 2019, 221, 234-241.	4.6	44
22	Separation of polycarbonate and acrylonitrile–butadiene–styrene waste plastics by froth flotation combined with ammonia pretreatment. Waste Management, 2014, 34, 2656-2661.	3.7	43
23	Ammonia modification for flotation separation of polycarbonate and polystyrene waste plastics. Waste Management, 2016, 51, 13-18.	3.7	43
24	Boiling treatment of ABS and PS plastics for flotation separation. Waste Management, 2014, 34, 1206-1210.	3.7	40
25	Optimization of surface treatment for flotation separation of polyvinyl chloride and polyethylene terephthalate waste plastics using response surface methodology. Journal of Cleaner Production, 2016, 139, 866-872.	4.6	37
26	Corrosion resistance of lamellar aluminium pigments coated by SiO2 by sol–gel method. Corrosion Science, 2011, 53, 161-167.	3.0	36
27	Waterâ€compatible halloysiteâ€imprinted polymer by Pickering emulsion polymerization for the selective recognition of herbicides. Journal of Separation Science, 2015, 38, 1365-1371.	1.3	34
28	Wetting behavior and mechanism of wetting agents on low-energy surface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 424, 10-17.	2.3	33
29	Application of functionalized layered double hydroxides for heavy metal removal: A review. Science of the Total Environment, 2022, 838, 155693.	3.9	33
30	Surface Reactions in Selective Modification: The Prerequisite for Plastic Flotation. Environmental Science & Environmental Sci	4.6	32
31	Floatability of polymer materials modulated by frothers. Waste Management, 2013, 33, 2623-2631.	3.7	31
32	Green flotation of polyethylene terephthalate and polyvinyl chloride assisted by surface modification of selective CaCO3 coating. Journal of Cleaner Production, 2020, 242, 118441.	4.6	31
33	Surface treatment using potassium ferrate for separation of polycarbonate and polystyrene waste plastics by froth flotation. Applied Surface Science, 2018, 448, 219-229.	3.1	30
34	Adsorption of rhodamine B on polyvinyl chloride, polystyrene, and polyethylene terephthalate microplastics in aqueous environments. Environmental Technology and Innovation, 2022, 27, 102495.	3.0	30
35	Separation of polyvinyl chloride from waste plastic mixtures by froth flotation after surface modification with sodium persulfate. Journal of Cleaner Production, 2019, 218, 167-172.	4.6	28
36	Optimization of Surface Treatment Using Sodium Hypochlorite Facilitates Coseparation of ABS and PC from WEEE Plastics by Flotation. Environmental Science & Eamp; Technology, 2019, 53, 2086-2094.	4.6	28

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37	Is froth flotation a potential scheme for microplastics removal? Analysis on flotation kinetics and surface characteristics. Science of the Total Environment, 2021, 792, 148345.	3.9	28
38	Separation of aluminum and plastic by metallurgy method for recycling waste pharmaceutical blisters. Journal of Cleaner Production, 2015, 102, 378-383.	4.6	27
39	The flotation separation of pyrite from pyrophyllite using oxidized guar gum as depressant. International Journal of Mineral Processing, 2017, 161, 78-82.	2.6	27
40	Unique metalloid uptake on microplastics: The interaction between boron and microplastics in aquatic environment. Science of the Total Environment, 2021, 800, 149668.	3.9	26
41	Crushing performance and resource characteristic of printed circuit board scrap. Central South University, 2005, 12, 552-555.	0.5	25
42	Flotation mechanisms of molybdenite fines by neutral oils. International Journal of Minerals, Metallurgy and Materials, 2018, 25, 1-10.	2.4	25
43	Carbonyl-Incorporated Aromatic Hyper-Cross-Linked Polymers with Microporous Structure and Their Functional Materials for CO ₂ Adsorption. Industrial & Engineering Chemistry Research, 2020, 59, 15955-15966.	1.8	25
44	Behavior of magnetic Fe3O4 nano-particles in magnetically assisted gas-fluidized beds. Advanced Powder Technology, 2011, 22, 427-432.	2.0	24
45	Interfacial interactions between plastic particles in plastics flotation. Waste Management, 2015, 46, 56-61.	3.7	24
46	Recovery of molybdenum and copper from porphyry ore via iso-flotability flotation. Transactions of Nonferrous Metals Society of China, 2017, 27, 2260-2271.	1.7	24
47	Model of estimating nano-particle agglomerate sizes in a vibro-fluidized bed. Advanced Powder Technology, 2013, 24, 311-316.	2.0	23
48	Separation of polyvinylchloride and acrylonitrile-butadiene-styrene combining advanced oxidation by S2O82â ⁻ /Fe2+ system and flotation. Waste Management, 2019, 91, 80-88.	3.7	23
49	Effects of additives on PVC plastics surface and the natural flotability. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 441, 544-548.	2.3	22
50	A novel process for separation of polycarbonate, polyvinyl chloride and polymethyl methacrylate waste plastics by froth flotation. Waste Management, 2017, 65, 3-10.	3.7	22
51	Flotation separation of polyethylene terephthalate from waste packaging plastics through ethylene glycol pretreatment assisted by sonication. Waste Management, 2020, 105, 309-316.	3.7	21
52	Insight into the effect of aqueous species on microplastics removal by froth flotation: Kinetics and mechanism. Journal of Environmental Chemical Engineering, 2022, 10, 107834.	3.3	21
53	Heterogeneous Fenton degradation of persistent organic pollutants using natural chalcopyrite: effect of water matrix and catalytic mechanism. Environmental Science and Pollution Research, 2022, 29, 75651-75663.	2.7	21
54	Separation of manganese from calcium and magnesium in sulfate solutions via carbonate precipitation. Transactions of Nonferrous Metals Society of China, 2016, 26, 1118-1125.	1.7	20

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55	Enhanced adsorption of Ag+ on triethanolamine modified titanate nanotubes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 537, 28-35.	2.3	20
56	Application of surface modification using sodium hypochlorite for helping flotation separation of acrylonitrile-butadiene-styrene and polystyrene plastics of WEEE. Waste Management, 2018, 82, 167-176.	3.7	20
57	Separation of acrylonitrile-butadiene-styrene and polystyrene waste plastics after surface modification using potassium ferrate by froth flotation. Waste Management, 2018, 78, 829-840.	3.7	20
58	Flotation separation of acrylonitrile-butadiene-styrene and polystyrene in WEEE based on oxidation of active sites. Minerals Engineering, 2020, 146, 106131.	1.8	20
59	Application of froth flotation in the separation of polyvinyl chloride and polycarbonate for recycling of waste plastic based on a novel surface modification. Waste Management, 2020, 110, 43-52.	3.7	19
60	Preparation of manganese sulfate from low-grade manganese carbonate ores by sulfuric acid leaching. International Journal of Minerals, Metallurgy and Materials, 2016, 23, 491-500.	2.4	18
61	Understanding the high adsorption-reduction performance of triethanolamine modified graphene oxide for silver ions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 567, 96-103.	2.3	18
62	Insights into Mechanism of Hypochlorite-Induced Functionalization of Polymers toward Separating BFR-Containing Components from Microplastics. ACS Applied Materials & Samp; Interfaces, 2020, 12, 36755-36767.	4.0	18
63	In situ Fe3O4 nanoparticles coating of polymers for separating hazardous PVC from microplastic mixtures. Chemical Engineering Journal, 2021, 407, 127170.	6.6	17
64	Purification of Pb (II) ions from aqueous solution by camphor leaf modified with succinic anhydride. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 509, 80-85.	2.3	16
65	Surface treatment by the Fe(III)/sulfite system for flotation separation of hazardous chlorinated plastics from the mixed waste plastics. Journal of Hazardous Materials, 2019, 377, 34-41.	6. 5	16
66	Ultrasonic improvement of catalytic decomposition of Rhodamine B in simulated wastewater by functional waste printed circuit boards via thermochemical conversion. Journal of Cleaner Production, 2020, 253, 119921.	4.6	16
67	Flotation separation of polystyrene and polyvinyl chloride based on heterogeneous catalytic Fenton and green synthesis of nanoscale zero valent iron (GnZVI). Journal of Cleaner Production, 2020, 267, 122116.	4.6	16
68	Potential control flotation of galena in strong alkaline media. Central South University, 2002, 9, 16-20.	0.5	15
69	Modified adsorbent hydroxypropyl cellulose xanthate for removal of Cu ²⁺ and Ni ²⁺ from aqueous solution. Desalination and Water Treatment, 2016, 57, 27419-27431.	1.0	15
70	Hydrophilic modification of polycarbonate surface with surface alkoxylation pretreatment for efficient separation of polycarbonate and polystyrene by froth flotation. Waste Management, 2020, 118, 471-480.	3.7	15
71	Microwave-assisted surface modification for the separation of polycarbonate from polymethylmethacrylate and polyvinyl chloride waste plastics by flotation. Waste Management and Research, 2017, 35, 294-300.	2.2	14
72	Galvanic coupling and its effect on origin potential flotation system of sulfide minerals. Central South University, 2004, 11, 275-279.	0.5	13

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73	Kinetics and leaching behaviors of aluminum from pharmaceutical blisters in sodium hydroxide solution. Journal of Central South University, 2015, 22, 4545-4550.	1.2	13
74	Separation of waste polymethyl methacrylate and polyvinyl chloride mixtures by flotation after Fenton oxidation. Journal of Cleaner Production, 2019, 228, 1218-1228.	4.6	13
75	Flotation separation of hazardous polyvinyl chloride towards source control of microplastics based on selective hydrophilization of plasticizer-doping surfaces. Journal of Hazardous Materials, 2022, 423, 127095.	6.5	13
76	Interfacial interaction of bio-leaching of pyrite mineral. Central South University, 2008, 15, 49-53.	0.5	12
77	Combination of sodium hypochlorite pretreatment and flotation towards separation of polycarbonate from waste plastic mixtures. Waste Management, 2019, 99, 112-121.	3.7	12
78	Ultrasound assisted Fenton-like degradation of dyes using copper doped graphitic carbon nitride. Water Science and Technology, 2021, 84, 1146-1158.	1.2	12
79	Application of two modified kaolin materials in removing micro-plastics from water. Journal of Material Cycles and Waste Management, 2022, 24, 1460-1475.	1.6	12
80	Stepwise flotation separation of WEEE plastics by polymeric aluminum chloride towards source control of microplastics. Waste Management, 2022, 149, 1-10.	3.7	12
81	A clean and efficient flotation towards recovery of hazardous polyvinyl chloride and polycarbonate microplastics through selective aluminum coating: Process, mechanism, and optimization. Journal of Environmental Management, 2021, 299, 113626.	3.8	11
82	Study of the interfacial interactions in the molybdenite floatation system. Mining Science and Technology, 2008, 18, 82-87.	0.8	10
83	Study on the Polyurethane Concrete for the Rapid Repairment of Highway Pavement. Applied Mechanics and Materials, 0, 193-194, 762-769.	0.2	10
84	Sorption of Cd(II) ion by lignocellulose biomass from leaves of camphor tree. , 0, 68, 211-219.		10
85	Surface alcoholysis induced by alkali-activation ethanol: A novel scheme for binary flotation of polyethylene terephthalate from other plastics. Journal of Cleaner Production, 2021, 314, 128096.	4.6	9
86	The exothermic HCl + OH·(H2O) reaction: Removal of the HCl + OH barrier by a single water molecule. Journal of Chemical Physics, 2014, 140, 124316.	1.2	8
87	Original potential flotation of galena and its industrial application. Central South University, 2002, 9, 91-94.	0.5	7
88	Efficient combined method of selective dissolution and evaporation for recycling waste polyvinylbutyral films. Plastics, Rubber and Composites, 2012, 41, 8-12.	0.9	7
89	Surface treatment with peroxymonosulfate for flotation separation of waste polyvinylchloride and acrylonitrile-butadiene-styrene: Optimization and mechanism. Journal of Cleaner Production, 2020, 275, 124158.	4.6	7
90	Extraction process of chlorogenic acid in flos lonicerae by enzymatic treatment. Central South University, 2002, 9, 246-249.	0.5	6

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91	Preparation of chemical manganese dioxide from manganese sulfate. Mining Science and Technology, 2010, 20, 877-881.	0.3	6
92	Treatment mechanism of chromium-containing wastewater with carbonate minerals. Desalination and Water Treatment, 2013, 51, 5444-5450.	1.0	6
93	Adsorption of Toxic Zinc by Functionalized Lignocellulose Derived from Waste Biomass: Kinetics, Isotherms and Thermodynamics. Sustainability, 2021, 13, 10673.	1.6	6
94	Synthesis and characterization of MgSO4·5Mg(OH)2·2H2O flake powders. Central South University, 2011, 18, 1871-1876.	0.5	5
95	Study on jet aeration oxidation of magnesium sulfite from magnesium-based exhaust gas cleaning system. Environmental Technology (United Kingdom), 2017, 39, 1-10.	1.2	5
96	Optimizing green ferrate (VI) modification towards flotation separation of waste polyvinylchloride and acrylonitrile-butadiene-styrene mixtures. Waste Management, 2020, 101, 83-93.	3.7	5
97	An effective approach for improving flotation recovery of molybdenite fines from a finely-disseminated molybdenum ore. Journal of Central South University, 2018, 25, 1326-1339.	1.2	4
98	Pb(II) removal from aqueous solution by cold KOH activated biochar of camphor leaves: isotherms, kinetics and thermodynamics., 0, 161, 327-336.		4
99	Removal of dianiline dithiophosphoric acid from wastewater by chelate precipitation. Desalination and Water Treatment, 2016, 57, 5100-5107.	1.0	3
100	Performance of C/C electric double layer capacitors with coal-based active carbon electrodes. Ionics, 2016, 22, 695-699.	1.2	3
101	I + (H ₂ O) ₂ → HI + (H ₂ O)OH Forward and Reverse Reactions. CCSD(T) Studies Including Spin–Orbit Coupling. Journal of Physical Chemistry B, 2016, 120, 1743-1748.	1.2	3
102	The Reaction between Bromine and the Water Dimer and the Highly Exothermic Reverse Reaction. Journal of Computational Chemistry, 2016, 37, 177-182.	1.5	3
103	Structures and properties of the potassium-doped carbon clusters KCn/KCn +/KCn \hat{a} (n = $1\hat{a}$ 10). European Physical Journal D, 2014, 68, 1.	0.6	2
104	Recovery a Refractory Oolitic Hematite by Magnetization Roasting and Magnetic Separation. Advanced Materials Research, 2011, 361-363, 305-310.	0.3	1
105	Extracting Plasticizer from Polyvinylbutyral Plastics by Supercritical Fluid. Advanced Materials Research, 0, 550-553, 908-913.	0.3	1
106	Agglomerating fluidization of nanoparticles in the vibration or magnetic field. , 2013, , .		1
107	Research on Surface Modification Technology of Water-Based Aluminum Powder Pigment. Lecture Notes in Electrical Engineering, 2021, , 573-579.	0.3	0
108	Selenium resources from the Wolverine deposit, Canada. WIT Transactions on Ecology and the Environment, 2013, , .	0.0	0