Tao Zhou

List of Publications by Year
in descending order

74 papers	3,708 citations	159585 30 h-index	128289 60 g-index
74 all docs	74 docs citations	74 times ranked	1978 citing authors

#	Article	IF	Citations
1	Hydrometallurgical recovery of metal values from sulfuric acid leaching liquor of spent lithium-ion batteries. Waste Management, 2015, 38, 349-356.	7.4	336
2	Recovery of valuable metals from waste cathode materials of spent lithium-ion batteries using mild phosphoric acid. Journal of Hazardous Materials, 2017, 326, 77-86.	12.4	329
3	Sustainable Recovery of Metals from Spent Lithium-Ion Batteries: A Green Process. ACS Sustainable Chemistry and Engineering, 2015, 3, 3104-3113.	6.7	242
4	An atom-economic process for the recovery of high value-added metals from spent lithium-ion batteries. Journal of Cleaner Production, 2016, 112, 3562-3570.	9.3	185
5	Separation and recovery of metal values from leaching liquor of mixed-type of spent lithium-ion batteries. Separation and Purification Technology, 2015, 144, 197-205.	7.9	164
6	Separation and recovery of valuable metals from spent lithium ion batteries: Simultaneous recovery of Li and Co in a single step. Separation and Purification Technology, 2019, 210, 690-697.	7.9	158
7	Organic reductants based leaching: A sustainable process for the recovery of valuable metals from spent lithium ion batteries. Waste Management, 2018, 75, 459-468.	7.4	141
8	Hydrometallurgical process for the recovery of metal values from spent lithium-ion batteries in citric acid media. Waste Management and Research, 2014, 32, 1083-1093.	3.9	137
9	Estimation of agglomerate size for cohesive particles during fluidization. Powder Technology, 1999, 101, 57-62.	4.2	123
10	Recovery of valuable metals from $LiNi0.5Co0.2Mn0.3O2$ cathode materials of spent Li-ion batteries using mild mixed acid as leachant. Waste Management, 2019, 85, 175-185.	7.4	113
11	A novel closed-loop process for the simultaneous recovery of valuable metals and iron from a mixed type of spent lithium-ion batteries. Green Chemistry, 2019, 21, 6342-6352.	9.0	102
12	Sustainable recovery of valuable metals from spent lithium-ion batteries using DL-malic acid: Leaching and kinetics aspect. Waste Management and Research, 2018, 36, 113-120.	3.9	98
13	Recovery of valuable metals from mixed types of spent lithium ion batteries. Part II: Selective extraction of lithium. Waste Management, 2018, 80, 198-210.	7.4	97
14	Gradient and facile extraction of valuable metals from spent lithium ion batteries for new cathode materials re-fabrication. Journal of Hazardous Materials, 2020, 389, 121887.	12.4	84
15	A sustainable process for the recovery of valuable metals from spent lithium-ion batteries. Waste Management and Research, 2016, 34, 474-481.	3.9	83
16	Separation and recovery of metal values from leach liquor of waste lithium nickel cobalt manganese oxide based cathodes. Separation and Purification Technology, 2015, 141, 76-83.	7.9	78
17	Pursuing green and efficient process towards recycling of different metals from spent lithium-ion batteries through Ferro-chemistry. Chemical Engineering Journal, 2021, 426, 131637.	12.7	69
18	Force balance modelling for agglomerating fluidization of cohesive particles. Powder Technology, 2000, 111, 60-65.	4.2	65

#	ARTICLE	IF	CITATIONS
19	Ultrasonic-assisted leaching of valuable metals from spent lithium-ion batteries using organic additives. Separation and Purification Technology, 2021, 257, 117930.	7.9	62
20	Effects of adding different size particles on fluidization of cohesive particles. Powder Technology, 1999, 102, 215-220.	4.2	58
21	Agglomerating vibro-fluidization behavior of nano-particles. Advanced Powder Technology, 2009, 20, 158-163.	4.1	58
22	Behavior of mixtures of nano-particles in magnetically assisted fluidized bed. Chemical Engineering and Processing: Process Intensification, 2008, 47, 101-108.	3.6	54
23	Double layer of platinum electrodes: Non-monotonic surface charging phenomena and negative double layer capacitance. Journal of Chemical Physics, 2018, 148, 044704.	3.0	40
24	Recovery of Ti and Li from spent lithium titanate cathodes by a hydrometallurgical process. Hydrometallurgy, 2014, 147-148, 210-216.	4.3	38
25	A Novel Preparation of Nano-sized Hexagonal Mg(OH)2. Procedia Engineering, 2015, 102, 388-394.	1.2	38
26	Porous spherical Na3V2 (PO4)3/C composites synthesized via a spray drying -assisted process with high-rate performance as cathode materials for sodium-ion batteries. Solid State Ionics, 2017, 308, 161-166.	2.7	35
27	In-situ recycling of coating materials and Al foils from spent lithium ion batteries by ultrasonic-assisted acid scrubbing. Journal of Cleaner Production, 2020, 258, 120943.	9.3	34
28	Synthesis and electrochemical performances of Na₃V₂(PO₄)₂F₃/C composites as cathode materials for sodium ion batteries. RSC Advances, 2019, 9, 30628-30636.	3.6	33
29	Recycling LiNi0.5Co0.2Mn0.3O2 material from spent lithium-ion batteries by oxalate co-precipitation. Vacuum, 2020, 173, 109181.	3.5	33
30	Fluidization behavior of nano-particles by adding coarse particles. Advanced Powder Technology, 2009, 20, 366-370.	4.1	32
31	Enhanced electrochemical performance of Na3V2(PO4)3 with Ni2+ doping by a spray drying-assisted process for sodium ion batteries. Solid State Ionics, 2018, 324, 183-190.	2.7	31
32	A novel preparation of nanosized hexagonal Mg(OH)2 as a flame retardant. Particuology, 2016, 24, 177-182.	3.6	30
33	Boosted electrochemical properties of porous Li2FeSiO4/C based on Fe-MOFs precursor for lithium ion batteries. Vacuum, 2020, 171, 108997.	3.5	30
34	Fluidization behavior of binary mixtures of nanoparticles in vibro-fluidized bed. Advanced Powder Technology, 2014, 25, 236-243.	4.1	29
35	Fluidization of mixed SiO 2 and ZnO nanoparticles by adding coarse particles. Powder Technology, 2014, 267, 315-321.	4.2	29
36	Agglomerating fluidization of group C particles: major factors of coalescence and breakup of agglomerates. Advanced Powder Technology, 2006, 17, 159-166.	4.1	28

#	ARTICLE	IF	CITATIONS
37	Improved sodium storage properties of Zr-doped Na3V2(PO4)2F3/C as cathode material for sodium ion batteries. Ceramics International, 2020, 46, 28490-28498.	4.8	28
38	A novel composite paint (TiO2/fluorinated acrylic nanocomposite) for antifouling application in marine environments. Journal of Environmental Chemical Engineering, 2016, 4, 2545-2555.	6.7	25
39	Probing the Reaction Interface in Liâ€“Oxygen Batteries Using Dynamic Electrochemical Impedance Spectroscopy: Dischargeâ€“Charge Asymmetry in Reaction Sites and Electronic Conductivity. Journal of Physical Chemistry Letters, 2018, 9, 3403-3408.	4.6	24
40	Hybrid polysiloxane/polyacrylate/nano-SiO2 emulsion for waterborne polyurethane coatings. Polymer Testing, 2019, 80, 106110.	4.8	24
41	Model of estimating nano-particle agglomerate sizes in a vibro-fluidized bed. Advanced Powder Technology, 2013, 24, 311-316.	4.1	23
42	Novel electrochemically driven and internal circulation process for valuable metals recycling from spent lithium-ion batteries. Waste Management, 2021, 136, 18-27.	7.4	23
43	3D porous spheroidal Na₄Mn_{0.9}Ce_{0.1}V(PO₄)₃@CeO₂/C cathode for high-energy Na ion batteries. Journal of Materials Chemistry A, 2022, 10, 10625-10637.	10.3	22
44	Modification of nano-hybrid silicon acrylic resin with anticorrosion and hydrophobic properties. Polymer Testing, 2020, 82, 106287.	4.8	21
45	é†‡ç¢±æ°´è§£ä½œç”¨ä¸‹åºŸæ—§è¡šé…¯ç“¶çš„è§£èšå›žæ”¶åˆ©ç”¨. Journal of Central South University, 2018, 25, 543-549.	3.6	20
46	Behavior of mixed ZnO and SiO2 nano-particles in magnetic field assisted fluidization. Particuology: Science and Technology of Particles, 2007, 5, 169-173.	0.4	18
47	Controlled preparation and characterization of nano-sized hexagonal Mg(OH)2 flame retardant. Particuology, 2014, 14, 51-56.	3.6	18
48	Agglomeration Mechanism of Nanoparticles by Adding Coarse Fluid Catalytic Cracking Particles. Chemical Engineering and Technology, 2016, 39, 1490-1496.	1.5	15
49	A model for estimating agglomerate sizes of non-magnetic nanoparticles in magnetic fluidized beds. Korean Journal of Chemical Engineering, 2013, 30, 501-507.	2.7	14
50	Recycling of LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Material from Spent Lithiumâ€ion Batteries Using Mixed Organic Acid Leaching and Solâ€gel Method. ChemistrySelect, 2020, 5, 6482-6490.	1.5	11
51	Tuning crystal structure of MnO2 during different hydrothermal synthesis temperature and its electrochemical performance as cathode material for zinc ion battery. Vacuum, 2021, 192, 110398.	3.5	11
52	Characteristics of non-magnetic nanoparticles in magnetically fluidized bed by adding coarse magnets. Journal of Central South University, 2011, 18, 1383-1388.	3.0	10
53	Sustainable synthesis of 5-hydroxymethylfurfural from waste cotton stalk catalyzed by solid superacid-SO4 2-/ZrO2. Journal of Central South University, 2017, 24, 1745-1753.	3.0	10
54	Agglomerate Sizes of Binary Nanoparticle Mixtures in a Vibroâ€Fluidized Bed. Chemical Engineering and Technology, 2014, 37, 20-26.	1.5	9

#	Article	IF	Citations
55	Novel synergistic flameâ€retardant system of Mgâ€“Alâ€“Coâ€“LDHs/DPCPB for ABS resins. Journal of Applied Polymer Science, 2018, 135, 46319.	2.6	9
56	Degradation of hydroxyoxime extractants by nitration and remedies with inhibitor reagent. Hydrometallurgy, 2019, 183, 142-150.	4.3	8
57	Aggregation and fragmentation of agglomerates in a fluidized bed of mixed nanoparticles by adding FCC coarse particles. Chinese Journal of Chemical Engineering, 2018, 26, 2531-2536.	3.5	7
58	Solvent extraction of Ni and Co from Ni-laterite leach solutions using a new synergistic system consisting of Versatic 10 acid, Mextral 6103H and Aliquat 336 with elemental mass balance for leaching, precipitation, solvent extraction, scrubbing and stripping. Hydrometallurgy, 2022, 208, 105822.	4.3	7
59	Equilibrium studies on reactive extraction of naproxen enantiomers using hydrophilic Î²-cyclodetrin derivatives extractants. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2011, 69, 213-220.	1.6	6
60	Characterization of silicon acrylic resin containing silica nanoparticles as candidate materials for antifouling and anticorrosion properties in seawater. Corrosion Reviews, 2020, 38, 331-338.	2.0	6
61	MextralÂ® 6103H/naphthenic acid/TOPO synergistic extraction system for recovery of nickel and cobalt from nickel laterite. Minerals Engineering, 2022, 180, 107476.	4.3	6
62	Agglomerating Vibro-fluidization Behavior of Binary Nanoparticles Mixtures. Procedia Engineering, 2015, 102, 887-892.	1.2	5
63	Fluidization of Mixed SiO2 and TiO2 Nanoparticles with FCC Coarse Particles. Procedia Engineering, 2015, 102, 815-820.	1.2	5
64	Simulation of bubbling fluidized beds with cohesive particles by incorporating a novel structureâ€Based drag model into the twoâ€fluid model. Canadian Journal of Chemical Engineering, 2017, 95, 1999-2011.	1.7	5
65	Solvent extraction-based recovery of Co from leach solutions of Cu Co ores using a Mextral 6103H-naphthenic acid- isooctanol system. Hydrometallurgy, 2021, 205, 105731.	4.3	5
66	Equilibrium Studies on Reactive Extraction of <i>Î±â€</i>Cyclohexylâ€mandelic Enantiomers Using Hydrophilic <i>Î²</i>â€Cyclodextrin Derivatives Extractants. Chinese Journal of Chemistry, 2010, 28, 1444-1450.	4.9	4
67	Preparation of aldoxime through direct ammoximation using titanium silicalite-1 catalyst. Chinese Journal of Chemical Engineering, 2022, 47, 11-17.	3.5	4
68	Chemical component analysis of volatile oil in drug pair Herba Ephedrae-Ramulus Cinnamomi by GC-MS and CRM. Central South University, 2007, 14, 509-513.	0.5	2
69	Characteristics of anthraquinone hydrogenation catalysts in a liquid-solid fluidized bed. Canadian Journal of Chemical Engineering, 2008, 86, 288-292.	1.7	2
70	Fluidization Behavior of Mixtures of Nanoparticles in Vibrated Fluidized Beds. Advanced Materials Research, 2012, 550-553, 2968-2971.	0.3	2
71	Modified model for estimation of agglomerate sizes of binary mixed nanoparticles in a vibro-fluidized bed. Korean Journal of Chemical Engineering, 2015, 32, 1515-1521.	2.7	2
72	Kinetic study on reactive extraction for chiral separation of phenylsuccinic acid enantiomers. Science China Chemistry, 2010, 53, 2399-2406.	8.2	1

#	Article	IF	Citations
73	A novel supported quaternary NiCuMgFe/Al2O3 catalyst for the synthesis of alkyl tertiary amines. Reaction Kinetics, Mechanisms and Catalysis, 2019, 126, 283-294.	1.7	0
74	Novel anticorrosive coating of silicone acrylic resin modified by graphene oxide and polyaniline. Corrosion Reviews, 2022, .	2.0	0