

Hongbin Cao

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

185
papers

7,328
citations

49
h-index

80
g-index

190
ext. papers

9,418
ext. citations

8.7
avg, IF

6.52
L-index

#	Paper	IF	Citations
185	A Critical Review and Analysis on the Recycling of Spent Lithium-Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 1504-1521	8.3	457
184	A Mini-Review on Metal Recycling from Spent Lithium Ion Batteries. <i>Engineering</i> , 2018 , 4, 361-370	9.7	270
183	Recycling of spent lithium-ion batteries in view of lithium recovery: A critical review. <i>Journal of Cleaner Production</i> , 2019 , 228, 801-813	10.3	246
182	Lithium Carbonate Recovery from Cathode Scrap of Spent Lithium-Ion Battery: A Closed-Loop Process. <i>Environmental Science & Technology</i> , 2017 , 51, 1662-1669	10.3	218
181	Organic pollutants removal in wastewater by heterogeneous photocatalytic ozonation. <i>Chemosphere</i> , 2015 , 121, 1-17	8.4	214
180	Spent lithium-ion battery recycling - Reductive ammonia leaching of metals from cathode scrap by sodium sulphite. <i>Waste Management</i> , 2017 , 60, 680-688	8.6	190
179	Efficient Catalytic Ozonation over Reduced Graphene Oxide for p-Hydroxylbenzoic Acid (PHBA) Destruction: Active Site and Mechanism. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 9710-20	9.5	157
178	2D/2D nano-hybrids of MnO ₂ reduced graphene oxide for catalytic ozonation and coupling peroxymonosulfate activation. <i>Journal of Hazardous Materials</i> , 2016 , 301, 56-64	12.8	153
177	KOH self-templating synthesis of three-dimensional hierarchical porous carbon materials for high performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 14844	13	141
176	Selective recovery of lithium from spent lithium iron phosphate batteries: a sustainable process. <i>Green Chemistry</i> , 2018 , 20, 3121-3133	10	140
175	Selective recovery of valuable metals from spent lithium-ion batteries [Process development and kinetics evaluation. <i>Journal of Cleaner Production</i> , 2018 , 178, 833-845	10.3	138
174	Dramatic coupling of visible light with ozone on honeycomb-like porous g-C ₃ N ₄ towards superior oxidation of water pollutants. <i>Applied Catalysis B: Environmental</i> , 2016 , 183, 417-425	21.8	135
173	An overview on the processes and technologies for recycling cathodic active materials from spent lithium-ion batteries. <i>Journal of Material Cycles and Waste Management</i> , 2013 , 15, 420-430	3.4	129
172	A Closed-Loop Process for Selective Metal Recovery from Spent Lithium Iron Phosphate Batteries through Mechanochemical Activation. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 9972-9980	8.3	116
171	Enhanced proton and electron reservoir abilities of polyoxometalate grafted on graphene for high-performance hydrogen evolution. <i>Energy and Environmental Science</i> , 2016 , 9, 1012-1023	35.4	109
170	Heteroatom doped graphdiyne as efficient metal-free electrocatalyst for oxygen reduction reaction in alkaline medium. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 4738-4744	13	109
169	Spent lead-acid battery recycling in China - A review and sustainable analyses on mass flow of lead. <i>Waste Management</i> , 2017 , 64, 190-201	8.6	108

168	A closed-loop process for recycling LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ from the cathode scraps of lithium-ion batteries: Process optimization and kinetics analysis. <i>Separation and Purification Technology</i> , 2015 , 150, 186-195	8.3	108
167	Fast Electron Transfer and OH Formation: Key Features for High Activity in Visible-Light-Driven Ozonation with C ₃ N ₄ Catalysts. <i>ACS Catalysis</i> , 2017 , 7, 6198-6206	13.1	101
166	Reactive Oxygen Species and Catalytic Active Sites in Heterogeneous Catalytic Ozonation for Water Purification. <i>Environmental Science & Technology</i> , 2020 , 54, 5931-5946	10.3	97
165	Super synergy between photocatalysis and ozonation using bulk g-C ₃ N ₄ as catalyst: A potential sunlight/O ₃ /g-C ₃ N ₄ method for efficient water decontamination. <i>Applied Catalysis B: Environmental</i> , 2016 , 181, 420-428	21.8	96
164	Selection of active phase of MnO for catalytic ozonation of 4-nitrophenol. <i>Chemosphere</i> , 2017 , 168, 14578-14666	14.66	96
163	Single-Atom Mn-N Site-Catalyzed Peroxone Reaction for the Efficient Production of Hydroxyl Radicals in an Acidic Solution. <i>Journal of the American Chemical Society</i> , 2019 , 141, 12005-12010	16.4	94
162	Role of oxygen vacancies and Mn sites in hierarchical Mn ₂ O ₃ /LaMnO ₃ -perovskite composites for aqueous organic pollutants decontamination. <i>Applied Catalysis B: Environmental</i> , 2019 , 245, 546-554	21.8	91
161	Comprehensive evaluation on effective leaching of critical metals from spent lithium-ion batteries. <i>Waste Management</i> , 2018 , 75, 477-485	8.6	86
160	Heterogeneous Fenton-like degradation of 4-chlorophenol using iron/ordered mesoporous carbon catalyst. <i>Journal of Environmental Sciences</i> , 2014 , 26, 1171-9	6.4	81
159	Promoting effect of nitration modification on activated carbon in the catalytic ozonation of oxalic acid. <i>Applied Catalysis B: Environmental</i> , 2014 , 146, 169-176	21.8	80
158	Is CN Chemically Stable toward Reactive Oxygen Species in Sunlight-Driven Water Treatment?. <i>Environmental Science & Technology</i> , 2017 , 51, 13380-13387	10.3	79
157	A novel process for recycling and resynthesizing LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ from the cathode scraps intended for lithium-ion batteries. <i>Waste Management</i> , 2014 , 34, 1715-24	8.6	78
156	Tailored synthesis of active reduced graphene oxides from waste graphite: Structural defects and pollutant-dependent reactive radicals in aqueous organics decontamination. <i>Applied Catalysis B: Environmental</i> , 2018 , 229, 71-80	21.8	77
155	Robust Superhydrophobic Membrane for Membrane Distillation with Excellent Scaling Resistance. <i>Environmental Science & Technology</i> , 2019 , 53, 11801-11809	10.3	74
154	Selective extraction and deep removal of tungsten from sodium molybdate solution by primary amine N1923. <i>Separation and Purification Technology</i> , 2009 , 70, 27-33	8.3	72
153	Environmentally benign process for selective recovery of valuable metals from spent lithium-ion batteries by using conventional sulfation roasting. <i>Green Chemistry</i> , 2019 , 21, 5904-5913	10	68
152	Exposure pathways, levels and toxicity of polybrominated diphenyl ethers in humans: A review. <i>Environmental Research</i> , 2020 , 187, 109531	7.9	67
151	Bipolar membrane electrodialysis for generation of hydrochloric acid and ammonia from simulated ammonium chloride wastewater. <i>Water Research</i> , 2016 , 89, 201-9	12.5	66

150	Polyoxometalate-mediated green synthesis of a 2D silver nanonet/graphene nano hybrid as a synergistic catalyst for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 11961	13	65
149	Stellated Ag-Pt bimetallic nanoparticles: an effective platform for catalytic activity tuning. <i>Scientific Reports</i> , 2014 , 4, 3969	4.9	63
148	Superoxide radical-mediated photocatalytic oxidation of phenolic compounds over Ag ⁺ /TiO ₂ Influence of electron donating and withdrawing substituents. <i>Journal of Hazardous Materials</i> , 2016 , 304, 126-33	12.8	63
147	Novel PTFE hollow fiber membrane fabricated by emulsion electrospinning and sintering for membrane distillation. <i>Journal of Membrane Science</i> , 2019 , 583, 200-208	9.6	62
146	Occurrence of both hydroxyl radical and surface oxidation pathways in N-doped layered nanocarbons for aqueous catalytic ozonation. <i>Applied Catalysis B: Environmental</i> , 2019 , 254, 283-291	21.8	61
145	High-efficient extraction of vanadium and its application in the utilization of the chromium-bearing vanadium slag. <i>Chemical Engineering Journal</i> , 2016 , 301, 132-138	14.7	61
144	ZnO@ZnS hollow dumbbells/graphene composites as high-performance photocatalysts and alcohol sensors. <i>New Journal of Chemistry</i> , 2012 , 36, 2593	3.6	60
143	Catalytic ozonation of 4-nitrophenol over an mesoporous γ -MnO ₂ with resistance to leaching. <i>Catalysis Today</i> , 2015 , 258, 595-601	5.3	59
142	Recycling of LiNiCoMnO cathode materials from spent lithium-ion batteries using mechanochemical activation and solid-state sintering. <i>Waste Management</i> , 2019 , 84, 54-63	8.6	59
141	Activated carbon electrodes: electrochemical oxidation coupled with desalination for wastewater treatment. <i>Chemosphere</i> , 2015 , 125, 205-11	8.4	57
140	Degradation and transformation of atrazine under catalyzed ozonation process with TiO ₂ as catalyst. <i>Journal of Hazardous Materials</i> , 2014 , 279, 444-51	12.8	56
139	Self-assembly of CdS quantum dots with polyoxometalate encapsulated gold nanoparticles: enhanced photocatalytic activities. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 1488-1494	13	54
138	A sustainable process for metal recycling from spent lithium-ion batteries using ammonium chloride. <i>Waste Management</i> , 2018 , 79, 545-553	8.6	52
137	Hierarchical shape-controlled mixed-valence calcium manganites for catalytic ozonation of aqueous phenolic compounds. <i>Catalysis Science and Technology</i> , 2016 , 6, 2918-2929	5.5	51
136	Metal-free catalytic ozonation on surface-engineered graphene: Microwave reduction and heteroatom doping. <i>Chemical Engineering Journal</i> , 2019 , 355, 118-129	14.7	49
135	The role of ozone and influence of band structure in WO photocatalysis and ozone integrated process for pharmaceutical wastewater treatment. <i>Journal of Hazardous Materials</i> , 2018 , 360, 481-489	12.8	48
134	g-C ₃ N ₄ -triggered super synergy between photocatalysis and ozonation attributed to promoted OH generation. <i>Catalysis Communications</i> , 2015 , 66, 10-14	3.2	46
133	Towards effective design of active nanocarbon materials for integrating visible-light photocatalysis with ozonation. <i>Carbon</i> , 2016 , 107, 658-666	10.4	45

132	Improvement of the antifouling performance and stability of an anion exchange membrane by surface modification with graphene oxide (GO) and polydopamine (PDA). <i>Journal of Membrane Science</i> , 2018 , 566, 44-53	9.6	45
131	Conversion Mechanisms of Selective Extraction of Lithium from Spent Lithium-Ion Batteries by Sulfation Roasting. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 18482-18489	9.5	43
130	Efficient reuse of anode scrap from lithium-ion batteries as cathode for pollutant degradation in electro-Fenton process: Role of different recovery processes. <i>Chemical Engineering Journal</i> , 2018 , 337, 256-264	14.7	42
129	The influence of the substituent on the phenol oxidation rate and reactive species in cubic MnO ₂ catalytic ozonation. <i>Catalysis Science and Technology</i> , 2016 , 6, 7875-7884	5.5	42
128	Macropore- and Micropore-Dominated Carbon Derived from Poly(vinyl alcohol) and Polyvinylpyrrolidone for Supercapacitor and Capacitive Deionization. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 11324-11333	8.3	42
127	Sustainable Preparation of LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ /V ₂ O ₅ Cathode Materials by Recycling Waste Materials of Spent Lithium-Ion Battery and Vanadium-Bearing Slag. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 5797-5805	8.3	41
126	Hierarchical biomimetic BiVO ₄ for the treatment of pharmaceutical wastewater in visible-light photocatalytic ozonation. <i>Chemosphere</i> , 2019 , 222, 38-45	8.4	40
125	Oxidation of amino acids by peracetic acid: Reaction kinetics, pathways and theoretical calculations. <i>Water Research X</i> , 2018 , 1, 100002	8.1	40
124	Metagenomic insights into the microbiota profiles and bioaugmentation mechanism of organics removal in coal gasification wastewater in an anaerobic/anoxic/oxic system by methanol. <i>Bioresource Technology</i> , 2018 , 264, 106-115	11	38
123	Electrochemical impedance spectroscopy and surface properties characterization of anion exchange membrane fouled by sodium dodecyl sulfate. <i>Journal of Membrane Science</i> , 2017 , 530, 220-231	9.6	37
122	Visible-Light Photocatalytic Ozonation Using Graphitic CN Catalysts: A Hydroxyl Radical Manufacturer for Wastewater Treatment. <i>Accounts of Chemical Research</i> , 2020 , 53, 1024-1033	24.3	36
121	Evaluation on end-of-life LEDs by understanding the criticality and recyclability for metals recycling. <i>Journal of Cleaner Production</i> , 2018 , 182, 624-633	10.3	36
120	Selective Recovery of Lithium from Spent Lithium-Ion Batteries by Coupling Advanced Oxidation Processes and Chemical Leaching Processes. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 5165-5174	8.3	35
119	Layer-by-layer assembly of anion exchange membrane by electrodeposition of polyelectrolytes for improved antifouling performance. <i>Journal of Membrane Science</i> , 2018 , 558, 1-8	9.6	34
118	Phenolic compounds removal by wet air oxidation based processes. <i>Frontiers of Environmental Science and Engineering</i> , 2018 , 12, 1	5.8	34
117	Carbon materials derived from chitosan/cellulose cryogel-supported zeolite imidazole frameworks for potential supercapacitor application. <i>Carbohydrate Polymers</i> , 2017 , 175, 223-230	10.3	31
116	Separation of V(V) and Cr(VI) in leaching solution using annular centrifugal contactors. <i>Chemical Engineering Journal</i> , 2017 , 315, 373-381	14.7	30
115	Electrochemical-reduction-assisted assembly of ternary Ag nanoparticles/polyoxometalate/graphene nanohybrids and their activity in the electrocatalysis of oxygen reduction. <i>RSC Advances</i> , 2015 , 5, 74447-74456	3.7	30

114	Transformation and products of captopril with humic constituents during laccase-catalyzed oxidation: Role of reactive intermediates. <i>Water Research</i> , 2016 , 106, 488-495	12.5	30
113	A combination of electro-enzymatic catalysis and electrocoagulation for the removal of endocrine disrupting chemicals from water. <i>Journal of Hazardous Materials</i> , 2015 , 297, 269-77	12.8	27
112	High activity of g-CN/multiwall carbon nanotube in catalytic ozonation promotes electro-peroxone process. <i>Chemosphere</i> , 2018 , 201, 206-213	8.4	27
111	Characterization of anion exchange membrane modified by electrodeposition of polyelectrolyte containing different functional groups. <i>Desalination</i> , 2016 , 386, 58-66	10.3	26
110	Insights into the mechanism of phenolic mixture degradation by catalytic ozonation with a mesoporous Fe ₃ O ₄ /MnO ₂ composite. <i>RSC Advances</i> , 2016 , 6, 29674-29684	3.7	25
109	Transformation of halobenzoquinones with the presence of amino acids in water: Products, pathways and toxicity. <i>Water Research</i> , 2017 , 122, 299-307	12.5	25
108	Recycling of spent lithium-ion batteries in view of green chemistry. <i>Green Chemistry</i> , 2021 , 23, 6139-6171	10	25
107	Insights into the extraction of various vanadium species by primary amine. <i>Hydrometallurgy</i> , 2017 , 173, 57-62	4	24
106	Modification and properties characterization of heterogeneous anion-exchange membranes by electrodeposition of graphene oxide (GO). <i>Applied Surface Science</i> , 2018 , 442, 700-710	6.7	23
105	Innovative Biological Process for Treatment of Coking Wastewater. <i>Environmental Engineering Science</i> , 2010 , 27, 313-322	2	23
104	Direct preparation of efficient catalyst for oxygen evolution reaction and high-purity Li ₂ CO ₃ from spent LiNi _{0.5} Mn _{0.3} Co _{0.2} O ₂ batteries. <i>Journal of Cleaner Production</i> , 2019 , 236, 117576	10.3	22
103	New insights of enhanced anaerobic degradation of refractory pollutants in coking wastewater: Role of zero-valent iron in metagenomic functions. <i>Bioresource Technology</i> , 2020 , 300, 122667	11	22
102	Reaction mechanism and metal ion transformation in photocatalytic ozonation of phenol and oxalic acid with Ag(+)/TiO ₂ . <i>Journal of Environmental Sciences</i> , 2014 , 26, 662-72	6.4	21
101	Pt-Containing Ag ₂ S-Noble Metal Nanocomposites as Highly Active Electrocatalysts for the Oxidation of Formic Acid. <i>Nano-Micro Letters</i> , 2014 , 6, 252-257	19.5	21
100	High-Performance Recovery of Vanadium(V) in Leaching/Aqueous Solution by a Reusable Reagent-Primary Amine N1519. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 3096-3102	8.3	20
99	Enhanced hole-dominated photocatalytic activity of doughnut-like porous g-C ₃ N ₄ driven by down-shifted valance band maximum. <i>Catalysis Today</i> , 2018 , 307, 147-153	5.3	20
98	Fabrication of a novel nanofibers-covered hollow fiber membrane via continuous electrospinning with non-rotational collectors. <i>Materials Letters</i> , 2017 , 204, 8-11	3.3	19
97	N-dependent ozonation efficiency over nitrogen-containing heterocyclic contaminants: A combined density functional theory study on reaction kinetics and degradation pathways. <i>Chemical Engineering Journal</i> , 2020 , 382, 122708	14.7	19

96	Lithium carbonate recovery from lithium-containing solution by ultrasound assisted precipitation. <i>Ultrasonics Sonochemistry</i> , 2019 , 52, 484-492	8.9	19
95	Rethinking Chinese supply resilience of critical metals in lithium-ion batteries. <i>Journal of Cleaner Production</i> , 2020 , 256, 120719	10.3	18
94	Comparative studies on fouling of homogeneous anion exchange membranes by different structured organics in electro dialysis. <i>Journal of Environmental Sciences</i> , 2019 , 77, 218-228	6.4	18
93	Stability of the interfacial crud produced during the extraction of vanadium and chromium. <i>Hydrometallurgy</i> , 2013 , 133, 156-160	4	18
92	Removal of chloride ions using a bismuth electrode in capacitive deionization (CDI). <i>Environmental Science: Water Research and Technology</i> , 2020 , 6, 373-382	4.2	17
91	Polymerization of micropollutants in natural aquatic environments: A review. <i>Science of the Total Environment</i> , 2019 , 693, 133751	10.2	16
90	A Highly Sensitive and Selective Hydrogen Peroxide Biosensor Based on Gold Nanoparticles and Three-Dimensional Porous Carbonized Chicken Eggshell Membrane. <i>PLoS ONE</i> , 2015 , 10, e0130156	3.7	16
89	Activated carbon enhanced ozonation of oxalate attributed to HO oxidation in bulk solution and surface oxidation: effect of activated carbon dosage and pH. <i>Journal of Environmental Sciences</i> , 2014 , 26, 2095-105	6.4	15
88	The growth of metal sulfide Au/Ag nanocomposites in a nonpolar organic solvent. <i>CrystEngComm</i> , 2013 , 15, 7740	3.3	15
87	Boron Doped ZIF-67@Graphene Derived Carbon Electrocatalyst for Highly Efficient Enzyme-Free Hydrogen Peroxide Biosensor. <i>Advanced Materials Technologies</i> , 2017 , 2, 1700224	6.8	15
86	Capacitive deionization by ordered mesoporous carbon: electrosorption isotherm, kinetics, and the effect of modification. <i>Desalination and Water Treatment</i> , 2014 , 52, 1388-1395		15
85	The crud formation during the long-term operation of the V(V) and Cr(VI) extraction. <i>Hydrometallurgy</i> , 2013 , 137, 133-139	4	15
84	Novel method for characterization of aqueous vanadium species: A perspective for the transition metal chemical speciation studies. <i>Journal of Hazardous Materials</i> , 2019 , 364, 91-99	12.8	15
83	Chloro-benquinone Modified on Graphene Oxide as Metal-free Catalyst: Strong Promotion of Hydroxyl Radical and Generation of Ultra-Small Graphene Oxide. <i>Scientific Reports</i> , 2017 , 7, 42643	4.9	14
82	Temperature-Dependent Selectivity of Hydrogenation/Hydrogenolysis during Phenol Conversion over Ni Catalysts. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 9464-9473	8.3	14
81	MnO ₂ -Functionalized Amorphous Carbon Sorbents from Spent Lithium-Ion Batteries for Highly Efficient Removal of Cadmium from Aqueous Solutions. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 10210-10220	3.9	14
80	Number of Reactive Charge Carriers A Hidden Linker between Band Structure and Catalytic Performance in Photocatalysts. <i>ACS Catalysis</i> , 2019 , 9, 8852-8861	13.1	14
79	Electrochemistry during efficient copper recovery from complex electronic waste using ammonia based solutions. <i>Frontiers of Chemical Science and Engineering</i> , 2017 , 11, 308-316	4.5	14

78	Performance prediction of ZVI-based anaerobic digestion reactor using machine learning algorithms. <i>Waste Management</i> , 2021 , 121, 59-66	8.6	14
77	Different roles of Fe atoms and nanoparticles on g-C ₃ N ₄ in regulating the reductive activation of ozone under visible light. <i>Applied Catalysis B: Environmental</i> , 2021 , 296, 120362	21.8	14
76	Transformation, products, and pathways of chlorophenols via electro-enzymatic catalysis: How to control toxic intermediate products. <i>Chemosphere</i> , 2016 , 144, 1674-81	8.4	13
75	Dendritic BiVO ₄ decorated with MnO _x co-catalyst as an efficient hierarchical catalyst for photocatalytic ozonation. <i>Frontiers of Chemical Science and Engineering</i> , 2019 , 13, 185-191	4.5	13
74	Comparison of Mg ²⁺ - and Ca ²⁺ -enhancing anaerobic granulation in an expanded granular sludge-bed reactor. <i>Science China Chemistry</i> , 2014 , 57, 1596-1601	7.9	13
73	The duet of surface and radical-based carbocatalysis for oxidative destructions of aqueous contaminants over built-in nanotubes of graphite. <i>Journal of Hazardous Materials</i> , 2020 , 384, 121486	12.8	13
72	Integrated electrospun carbon nanofibers with vanadium and single-walled carbon nanotubes through covalent bonds for high-performance supercapacitors. <i>RSC Advances</i> , 2015 , 5, 40163-40172	3.7	12
71	Properties of water blown rigid polyurethane foams with different functionality. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2008 , 23, 125-129	1	12
70	Recovery of High-Purity Vanadium from Aqueous Solutions by Reusable Primary Amines N1923 Associated with Semiquantitative Understanding of Vanadium Species. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 7619-7626	8.3	11
69	Photocatalytic Reduction Synthesis of Ternary Ag Nanoparticles/Polyoxometalate/Graphene Nanohybrids and Its Activity in the Electrocatalysis of Oxygen Reduction. <i>Journal of Cluster Science</i> , 2016 , 27, 241-256	3	11
68	Artificial photosynthesis for solar hydrogen generation over transition-metal substituted Keggin-type titanium tungstate. <i>New Journal of Chemistry</i> , 2014 , 38, 1315-1320	3.6	11
67	Investigation of solution chemistry to enable efficient lithium recovery from low-concentration lithium-containing wastewater. <i>Frontiers of Chemical Science and Engineering</i> , 2020 , 14, 639-650	4.5	11
66	Removal of Cd ²⁺ from water by Friedel-Clauss salt (FS: 3CaO x Al ₂ O ₃ x CaCl ₂ x 10H ₂ O): sorption characteristics and mechanisms. <i>Journal of Environmental Sciences</i> , 2013 , 25, 1719-25	6.4	10
65	Rapid selective extraction of V(V) from leaching solution using annular centrifugal contactors and stripping for NH ₄ VO ₃ . <i>Separation and Purification Technology</i> , 2017 , 187, 407-414	8.3	10
64	Structures and physical properties of rigid polyurethane foams with water as the sole blowing agent. <i>Science in China Series B: Chemistry</i> , 2006 , 49, 363-370		10
63	Photoinduced Release of Volatile Organic Compounds from Fatty Alcohols at the Air-Water Interface: The Role of Singlet Oxygen Photosensitized by a Carbonyl Group. <i>Environmental Science & Technology</i> , 2021 , 55, 8683-8690	10.3	10
62	Modified Structural Constraints for Candidate Molecule Generation in Computer-Aided Molecular Design. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 6937-6946	3.9	9
61	Analysis of a diverse bacterial community and degradation of organic compounds in a bioprocess for coking wastewater treatment. <i>Desalination and Water Treatment</i> , 2016 , 57, 19096-19105		9

60	Anion Exchange Nanocomposite Membranes Modified with Graphene Oxide and Polydopamine: Interfacial Structure and Antifouling Applications. <i>ACS Applied Nano Materials</i> , 2020 , 3, 588-596	5.6	9
59	In Situ Nanoreactors: Controllable Photoluminescent Carbon-Rich Polymer Nanodots Derived from Fatty Acid under Photoirradiation. <i>Macromolecular Rapid Communications</i> , 2018 , 39, e1800152	4.8	9
58	Comprehensive characterization on Ga (In)-bearing dust generated from semiconductor industry for effective recovery of critical metals. <i>Waste Management</i> , 2019 , 89, 212-223	8.6	8
57	Green Fabrication of Carbon Dots upon Photoirradiation and Their Application in Cell Imaging. <i>ACS Applied Nano Materials</i> , 2019 , 2, 3404-3413	5.6	7
56	A 1-dodecanethiol-based phase transfer protocol for the highly efficient extraction of noble metal ions from aqueous phase. <i>Journal of Environmental Sciences</i> , 2015 , 29, 146-50	6.4	7
55	Nanoparticle-free and self-healing amphiphobic membrane for anti-surfactant-wetting membrane distillation. <i>Journal of Environmental Sciences</i> , 2021 , 100, 298-305	6.4	7
54	C3N4/Mn/CNT composite as a heterogeneous catalyst in the electro-peroxone process for promoting the reaction between O3 and H2O2 in acid solution. <i>Catalysis Science and Technology</i> , 2018 , 8, 6241-6251	5.5	7
53	One-step recovery of valuable metals from spent Lithium-ion batteries and synthesis of persulfate through paired electrolysis. <i>Chemical Engineering Journal</i> , 2021 , 421, 129908	14.7	7
52	Selective Production of Jet-Fuel-Range Alkanes from Palmitic Acid over Ni/H-MCM-49 with Two Independent Pore Systems. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 21341-21349	3.9	6
51	Selectively anchored vanadate host for self-boosting catalytic synthesis of ultra-fine vanadium nitride/nitrogen-doped hierarchical carbon hybrids as superior electrode materials. <i>Electrochimica Acta</i> , 2020 , 332, 135387	6.7	6
50	Optimization of the Water Network with Single and Double Outlet Treatment Units. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 2865-2871	3.9	5
49	Kinetics of V(V) extraction in V(V)-SO4 ²⁻ (Na ⁺ , H ⁺)-primary amine N1923-sulfonated kerosene system using single drop technique. <i>Separation and Purification Technology</i> , 2019 , 215, 473-479	8.3	5
48	A review of application of annular centrifugal contactors in aspects of mass transfer and operational security. <i>Hydrometallurgy</i> , 2018 , 177, 41-48	4	5
47	Conversion of phenol to cyclohexane in the aqueous phase over Ni/zeolite bi-functional catalysts. <i>Frontiers of Chemical Science and Engineering</i> , 2021 , 15, 288-298	4.5	5
46	Extraction of V(V) and Cr(VI) from aqueous solution using primary amine extractants: extraction mechanism and oxidation of extractants. <i>Chemical Papers</i> , 2018 , 72, 109-118	1.9	5
45	Photo-triggered conversion of hydrophilic fluorescent biomimetic nanostructures for cell imaging. <i>Chemical Communications</i> , 2019 , 55, 596-599	5.8	4
44	Selective Recovery of Gallium (Indium) from Metal Organic Chemical Vapor Deposition Dust: A Sustainable Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 9646-9654	8.3	4
43	Coupling-oxidation process promoted ring-opening degradation of 2-mecapto-5-methyl-1,3,4-thiadiazole in wastewater. <i>Water Research</i> , 2020 , 186, 116362	12.5	4

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