

Xiaoguang Duan

List of Publications by Year in Descending Order

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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.

232
papers

15,941
citations

66
h-index

122
g-index

244
ext. papers

23,055
ext. citations

12.1
avg, IF

7.6
L-index

#	Paper	IF	Citations
232	Visible-light activation of persulfate ions by Z-scheme perylene diimide/MIL-101(Cr) heterojunction photocatalyst towards efficient degradation of iohexol. <i>Chemical Engineering Journal</i> , 2022 , 435, 134947	14.7	2
231	Superstructures with Atomic-Level Arranged Perovskite and Oxide Layers for Advanced Oxidation with an Enhanced Non-Free Radical Pathway. <i>ACS Sustainable Chemistry and Engineering</i> , 2022 , 10, 1899-1909	8.3	8
230	Nano-sized FeVO ₄ ·1.1H ₂ O and FeVO ₄ for peroxymonosulfate activation towards enhanced photocatalytic activity. <i>Journal of Environmental Chemical Engineering</i> , 2022 , 10, 107199	6.8	0
229	Carbon Dots Based Photocatalysis for Environmental Applications. <i>Journal of Environmental Chemical Engineering</i> , 2022 , 10, 107336	6.8	7
228	High-performance photocatalytic decomposition of PFOA by BiOX/TiO heterojunctions: Self-induced inner electric fields and band alignment.. <i>Journal of Hazardous Materials</i> , 2022 , 430, 128195	12.8	2
227	Insights into the role of dual reaction sites for single Ni atom Fenton-like catalyst towards degradation of various organic contaminants.. <i>Journal of Hazardous Materials</i> , 2022 , 430, 128463	12.8	1
226	V ₂ O ₅ nanodot-decorated laminar C ₃ N ₄ for sustainable photodegradation of amoxicillin under solar light. <i>Applied Catalysis B: Environmental</i> , 2022 , 303, 120903	21.8	18
225	Amino-functionalized NH-MIL-125(Ti)-decorated hierarchical flowerlike ZnInS for boosted visible-light photocatalytic degradation. <i>Environmental Research</i> , 2022 , 204, 112368	7.9	1
224	Visible-light-responsive Cl/S co-doped carbon nitride nanotubes for photocatalytic denitrification: A new reaction pathway dominated by photo-electrons. <i>Applied Catalysis B: Environmental</i> , 2022 , 305, 121018	21.8	2
223	Municipal solid waste derived biochars for wastewater treatment: Production, properties and applications. <i>Resources, Conservation and Recycling</i> , 2022 , 177, 106003	11.9	3
222	Kinetics and mechanism of synergistic adsorption and persulfate activation by N-doped porous carbon for antibiotics removals in single and binary solutions. <i>Journal of Hazardous Materials</i> , 2022 , 423, 127083	12.8	14
221	Co/N co-doped carbonized wood sponge with 3D porous framework for efficient peroxymonosulfate activation: Performance and internal mechanism. <i>Journal of Hazardous Materials</i> , 2022 , 421, 126735	12.8	15
220	Bismuth-based complex oxides for photocatalytic applications in environmental remediation and water splitting: A review. <i>Science of the Total Environment</i> , 2022 , 804, 150215	10.2	8
219	Peroxymonosulfate activation by FeO-MnO/CNT nanohybrid electroactive filter towards ultrafast micropollutants decontamination: Performance and mechanism. <i>Journal of Hazardous Materials</i> , 2022 , 423, 127111	12.8	11
218	S-scheme photocatalysis induced by ZnInS nanoribbons-anchored hierarchical CeO hollow spheres for boosted hydrogen evolution.. <i>Journal of Colloid and Interface Science</i> , 2022 , 620, 253-262	9.3	1
217	Emerging microplastics in the environment: Properties, distributions, and impacts.. <i>Chemosphere</i> , 2022 , 134118	8.4	1
216	Rational design of Spirulina residue-derived graphene oxide as an efficient metal-free catalyst for sulfathiazole removal. <i>Separation and Purification Technology</i> , 2022 , 290, 120862	8.3	2

215	Morphology-dependent photocatalysis of graphitic carbon nitride for sustainable remediation of aqueous pollutants: A mini review. <i>Journal of Environmental Chemical Engineering</i> , 2022 , 10, 107438	6.8	1
214	Carbon nitride-based Z-scheme heterojunctions for solar-driven advanced oxidation processes.. <i>Journal of Hazardous Materials</i> , 2022 , 434, 128866	12.8	6
213	Regulation of energetic hot carriers on Pt/TiO ₂ with thermal energy for photothermal catalysis. <i>Applied Catalysis B: Environmental</i> , 2022 , 309, 121263	21.8	1
212	Activation of peroxymonosulfate by natural pyrite for efficient degradation of V(IV)-citrate complex in groundwater.. <i>Journal of Colloid and Interface Science</i> , 2022 , 617, 683-693	9.3	1
211	Sludge-derived biochar toward sustainable Peroxymonosulfate Activation: Regulation of active sites and synergistic production of reaction oxygen species. <i>Chemical Engineering Journal</i> , 2022 , 440, 135897	14.7	1
210	Enzyme-mimicking single-atom FeN ₄ sites for enhanced photo-Fenton-like reactions. <i>Applied Catalysis B: Environmental</i> , 2022 , 310, 121327	21.8	2
209	Highly dispersive Ru confined in porous ultrathin g-CN nanosheets as an efficient peroxymonosulfate activator for removal of organic pollutants.. <i>Journal of Hazardous Materials</i> , 2022 , 435, 128939	12.8	3
208	Selective formation of reactive oxygen species in peroxymonosulfate activation by metal-organic framework-derived membranes: A defect engineering-dependent study. <i>Applied Catalysis B: Environmental</i> , 2022 , 312, 121419	21.8	1
207	Peroxymonosulfate oxidation via paralleled nonradical pathways over iron and nitrogen doped porous carbons.. <i>Science of the Total Environment</i> , 2022 , 836, 155670	10.2	0
206	Three-dimensional nitrogen-doped graphene oxide beads for catalytic degradation of aqueous pollutants. <i>Chemical Engineering Journal</i> , 2022 , 446, 137042	14.7	0
205	Accelerating radical generation from peroxymonosulfate by confined variable Co species toward ciprofloxacin mineralization: ROS quantification and mechanisms elucidation. <i>Applied Catalysis B: Environmental</i> , 2022 , 315, 121542	21.8	2
204	New Insight to Piezocatalytic Peroxymonosulfate Activation: The Critical Role of Dissolved Oxygen in Mediating Radical and Nonradical Pathways. <i>Applied Catalysis B: Environmental</i> , 2022 , 121584	21.8	0
203	Converting waste plastics into construction applications: A business perspective. <i>Environmental Impact Assessment Review</i> , 2022 , 96, 106814	5.3	0
202	Unzipping MWCNTs for controlled edge- and heteroatom-defects in revealing their roles in gas-phase oxidative dehydrogenation of ethanol to acetaldehyde. <i>Chemical Engineering Journal</i> , 2022 , 446, 137150	14.7	1
201	Challenges in radical/nonradical-based advanced oxidation processes for carbon recycling. <i>Chem Catalysis</i> , 2022 ,		3
200	Correlation of Active Sites to Generated Reactive Species and Degradation Routes of Organics in Peroxymonosulfate Activation by Co-Loaded Carbon. <i>Environmental Science & Technology</i> , 2021 , 55, 16163-16174	10.3	17
199	Carbon Nitride Based Z-scheme Photocatalyst for Non-Sacrificial Overall Water Splitting. <i>Materials Today Energy</i> , 2021 , 23, 100915	7	2
198	All-solid-state Z-scheme heterostructures of 1T/2H-MoS ₂ nanosheets-coupled V doped hierarchical TiO ₂ spheres for enhanced photocatalytic activity. <i>Materials Today Energy</i> , 2021 , 100901	7	1

197	Nitrogen-doped carbon nanotubes enhanced Fenton chemistry: Role of near-free iron(III) for sustainable iron(III)/iron(II) cycles.. <i>Water Research</i> , 2021 , 210, 117984	12.5	3
196	Predictors of Mortality in Critically Ill Patients With Antineutrophil Cytoplasmic Antibody-Associated Vasculitis. <i>Frontiers in Medicine</i> , 2021 , 8, 762004	4.9	2
195	A Machine Learning Model for Accurate Prediction of Sepsis in ICU Patients. <i>Frontiers in Public Health</i> , 2021 , 9, 754348	6	2
194	Clinical outcomes and safety of polymyxin B in the treatment of carbapenem-resistant Gram-negative bacterial infections: a real-world multicenter study. <i>Journal of Translational Medicine</i> , 2021 , 19, 431	8.5	2
193	Revisiting the Graphitized Nanodiamond-Mediated Activation of Peroxymonosulfate: Singlet Oxygenation versus Electron Transfer. <i>Environmental Science & Technology</i> , 2021 , 55, 16078-16087	10.3	18
192	Synchronous removal of emulsions and soluble organic contaminants via a microalgae-based membrane system: performance and mechanisms. <i>Water Research</i> , 2021 , 206, 117741	12.5	9
191	Active sites decoration on sewage sludge-red mud complex biochar for persulfate activation to degrade sulfanilamide. <i>Journal of Colloid and Interface Science</i> , 2021 , 608, 1983-1998	9.3	2
190	Advanced oxidation processes for water disinfection: Features, mechanisms and prospects. <i>Chemical Engineering Journal</i> , 2021 , 409, 128207	14.7	53
189	Temperature-Induced Variations in Photocatalyst Properties and Photocatalytic Hydrogen Evolution: Differences in UV, Visible, and Infrared Radiation. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 7277-7285	8.3	9
188	A novel electrocatalytic filtration system with carbon nanotube supported nanoscale zerovalent copper toward ultrafast oxidation of organic pollutants. <i>Water Research</i> , 2021 , 194, 116961	12.5	31
187	Fine-Tuning Radical/Nonradical Pathways on Graphene by Porous Engineering and Doping Strategies. <i>ACS Catalysis</i> , 2021 , 11, 4848-4861	13.1	24
186	Engineered Co ₂ AlO ₄ /CoAl ₂ O ₄ @Al ₂ O ₃ monolithic catalysts for peroxydisulfate activation: Co ³⁺ /Co ²⁺ and O ₂ defect/O ₂ lattice ratios dependence and mechanism. <i>Chemical Engineering Journal</i> , 2021 , 409, 128162	14.7	24
185	Microplastics remediation in aqueous systems: Strategies and technologies. <i>Water Research</i> , 2021 , 198, 117144	12.5	16
184	Aerobic oxidation of 5-hydroxymethylfurfural into 2,5-diformylfuran using manganese dioxide with different crystal structures: A comparative study. <i>Journal of Colloid and Interface Science</i> , 2021 , 592, 416-429	9.29	5
183	Sustainable redox processes induced by peroxydisulfate and metal doping on amorphous manganese dioxide for nonradical degradation of water contaminants. <i>Applied Catalysis B: Environmental</i> , 2021 , 286, 119903	21.8	35
182	Engineered carbon supported single iron atom sites and iron clusters from Fe-rich Enteromorpha for Fenton-like reactions via nonradical pathways. <i>Applied Catalysis B: Environmental</i> , 2021 , 287, 119963	21.8	90
181	Mechanical agitation accelerated ultrasonication for wastewater treatment: Sustainable production of hydroxyl radicals. <i>Water Research</i> , 2021 , 198, 117124	12.5	9
180	Manganese-Based Micro/Nanomotors: Synthesis, Motion, and Applications. <i>Small</i> , 2021 , e2100927	11	6

179	Carbon-based single atom catalyst: Synthesis, characterization, DFT calculations. <i>Chinese Chemical Letters</i> , 2021 ,	8.1	29
178	Persulfate Oxidation of Sulfamethoxazole by Magnetic Iron-Char Composites via Nonradical Pathways: Fe(IV) Versus Surface-Mediated Electron Transfer. <i>Environmental Science & Technology</i> , 2021 , 55, 10077-10086	10.3	31
177	Quasi-MOF derivative-based electrode for efficient electro-Fenton oxidation. <i>Journal of Hazardous Materials</i> , 2021 , 401, 123423	12.8	28
176	Enhanced removals of micropollutants in binary organic systems by biomass derived porous carbon/peroxymonosulfate. <i>Journal of Hazardous Materials</i> , 2021 , 408, 124459	12.8	16
175	Remediation of antibiotic wastewater by coupled photocatalytic and persulfate oxidation system: A critical review. <i>Journal of Hazardous Materials</i> , 2021 , 408, 124461	12.8	55
174	Graphitic Carbon Nitride-Based Z-Scheme Structure for Photocatalytic CO ₂ Reduction. <i>Energy & Fuels</i> , 2021 , 35, 7-24	4.1	42
173	Iron-doped cuprous oxides toward accelerated nonradical oxidation: Doping induced controlled facet transformation and optimized electronic structure. <i>Chemical Engineering Journal</i> , 2021 , 407, 127172	14.7	9
172	Mechanistic Investigations of the Pyridinic N-Co Structures in Co Embedded N-Doped Carbon Nanotubes for Catalytic Ozonation. <i>ACS ES&T Engineering</i> , 2021 , 1, 32-45		14
171	Biochar cathode: Reinforcing electro-Fenton pathway against four-electron reduction by controlled carbonization and surface chemistry. <i>Science of the Total Environment</i> , 2021 , 754, 142136	10.2	15
170	Synthesis of nitrogen and sulfur doped graphene on graphite foam for electro-catalytic phenol degradation and water splitting. <i>Journal of Colloid and Interface Science</i> , 2021 , 583, 139-148	9.3	14
169	Catalytic oxidation of sulfachloropyridazine by MnO: Effects of crystalline phase and peroxide oxidants. <i>Chemosphere</i> , 2021 , 267, 129287	8.4	14
168	Coupling hydrothermal and photothermal single-atom catalysis toward excellent water splitting to hydrogen. <i>Applied Catalysis B: Environmental</i> , 2021 , 283, 119660	21.8	38
167	Prussian blue analogues as heterogeneous catalysts for hydrogen generation from hydrolysis of sodium borohydride: a comparative study. <i>Chemical Papers</i> , 2021 , 75, 779-788	1.9	
166	Analysis of mRNA-lncRNA and mRNA-lncRNA-pathway co-expression networks based on WGCNA in developing pediatric sepsis. <i>Bioengineered</i> , 2021 , 12, 1457-1470	5.7	9
165	Fe containing template derived atomic Fe ^{II} to boost Fenton-like reaction and charge migration analysis on highly active Fe ^{II} sites. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 14793-14805	13	15
164	Single-atom catalysis in advanced oxidation processes for environmental remediation. <i>Chemical Society Reviews</i> , 2021 , 50, 5281-5322	58.5	164
163	Piezoelectric activation of peroxymonosulfate by MoS ₂ nanoflowers for the enhanced degradation of aqueous organic pollutants. <i>Environmental Science: Nano</i> , 2021 , 8, 784-794	7.1	21
162	Carbocatalytic ozonation toward advanced water purification. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 18994-19024	13	7

161	Molecular Engineering toward Pyrrolic N-Rich M-N ₄ (M = Cr, Mn, Fe, Co, Cu) Single-Atom Sites for Enhanced Heterogeneous Fenton-Like Reaction. <i>Advanced Functional Materials</i> , 2021 , 31, 2007877	15.6	43
160	Facile preparation of hydrophilic In ₂ O ₃ nanospheres and rods with improved performances for photocatalytic degradation of PFOA. <i>Environmental Science: Nano</i> , 2021 , 8, 1010-1018	7.1	8
159	Cobalt porphyrins supported on carbon nanotubes as model catalysts of metal-N ₄ /C sites for oxygen electrocatalysis. <i>Journal of Energy Chemistry</i> , 2021 , 53, 77-81	12	46
158	Catalytic membrane-based oxidation-filtration systems for organic wastewater purification: A review. <i>Journal of Hazardous Materials</i> , 2021 , 414, 125478	12.8	39
157	Edge-Rich Bicrystalline 1T/2H-MoS ₂ Cocatalyst-Decorated {110} Terminated CeO Nanorods for Photocatalytic Hydrogen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 35818-35827	9.5	26
156	Improving the Structure Stability of LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ by Double Modification of Tantalum Surface Coating and Doping. <i>ACS Applied Energy Materials</i> , 2021 , 4, 8641-8652	6.1	16
155	Density Functional Theory Calculations for Insight into the Heterocatalyst Reactivity and Mechanism in Persulfate-Based Advanced Oxidation Reactions. <i>ACS Catalysis</i> , 2021 , 11, 11129-11159	13.1	31
154	Impacts and mitigation measures of plastic waste: A critical review. <i>Environmental Impact Assessment Review</i> , 2021 , 90, 106642	5.3	7
153	Landfill leachate treatment by persulphate related advanced oxidation technologies. <i>Journal of Hazardous Materials</i> , 2021 , 418, 126355	12.8	11
152	Advances of piezoelectric nanomaterials for applications in advanced oxidation technologies. <i>Current Opinion in Chemical Engineering</i> , 2021 , 33, 100693	5.4	12
151	Size-Controlled Nanoscale Octahedral HKUST-1 as an Enhanced Catalyst for Oxidative Conversion of Vanillic Alcohol: The Mediating Effect of Polyvinylpyrrolidone. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021 , 631, 127639	5.1	0
150	The mechanistic difference of 1T-2H MoS ₂ homojunctions in persulfates activation: Structure-dependent oxidation pathways. <i>Applied Catalysis B: Environmental</i> , 2021 , 297, 120460	21.8	17
149	Biomass-derived pyrolytic carbons accelerated Fe(III)/Fe(II) redox cycle for persulfate activation: Pyrolysis temperature-dependence performance and mechanisms. <i>Applied Catalysis B: Environmental</i> , 2021 , 297, 120446	21.8	10
148	Oxidation of amines and their derivatives with persulfate without activation: Impact of mineral oxides and stoichiometric efficiency. <i>Chemical Engineering Journal</i> , 2021 , 426, 131930	14.7	
147	Selective production of singlet oxygen from zinc-etching hierarchically porous biochar for sulfamethoxazole degradation. <i>Environmental Pollution</i> , 2021 , 290, 117991	9.3	2
146	Origins of Electron-Transfer Regime in Persulfate-Based Nonradical Oxidation Processes. <i>Environmental Science & Technology</i> , 2021 ,	10.3	38
145	Nanocarbon-Based Catalytic Ozonation for Aqueous Oxidation: Engineering Defects for Active Sites and Tunable Reaction Pathways. <i>ACS Catalysis</i> , 2020 , 10, 13383-13414	13.1	36
144	Cobalt-based coordination polymer-derived hexagonal porous cobalt oxide nanoplate as an enhanced catalyst for hydrogen generation from hydrolysis of borohydride. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 31952-31962	6.7	4

143	Graphitic nitride-catalyzed advanced oxidation processes (AOPs) for landfill leachate treatment: A mini review. <i>Chemical Engineering Research and Design</i> , 2020 , 139, 230-240	5.5	27
142	Active sites and reaction mechanism for N-doped carbocatalysis of phenol removal. <i>Green Energy and Environment</i> , 2020 , 5, 444-452	5.7	7
141	Insight into the effect of lignocellulosic biomass source on the performance of biochar as persulfate activator for aqueous organic pollutants remediation: Epicarp and mesocarp of citrus peels as examples. <i>Journal of Hazardous Materials</i> , 2020 , 399, 123043	12.8	79
140	Potential Difference Driving Electron Transfer Defective Carbon Nanotubes toward Selective Oxidation of Organic Micropollutants. <i>Environmental Science & Technology</i> , 2020 , 54, 8464-8472	10.3	133
139	Sustainable Catalytic Processes Driven by Graphene-Based Materials. <i>Processes</i> , 2020 , 8, 672	2.9	6
138	Criteria of active sites in nonradical persulfate activation process from integrated experimental and theoretical investigations: boron-nitrogen-co-doped nanocarbon-mediated peroxydisulfate activation as an example. <i>Environmental Science: Nano</i> , 2020 , 7, 1899-1911	7.1	36
137	Simultaneous separation of multiphase emulsion mixture and catalytic degradation of BPA via microalgae residue membranes. <i>Chemical Engineering Journal</i> , 2020 , 393, 124750	14.7	10
136	Synergy of NiO quantum dots and temperature on enhanced photocatalytic and thermophoto hydrogen evolution. <i>Chemical Engineering Journal</i> , 2020 , 390, 124634	14.7	14
135	Fast and Long-Lasting Iron(III) Reduction by Boron Toward Green and Accelerated Fenton Chemistry. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 16517-16526	16.4	87
134	Efficient photocatalytic overall water splitting on metal-free 1D SWCNT/2D ultrathin C ₃ N ₄ heterojunctions via novel non-resonant plasmonic effect. <i>Applied Catalysis B: Environmental</i> , 2020 , 278, 119312	21.8	46
133	Decorated nickel phosphide nanoparticles with nitrogen and phosphorus co-doped porous carbon for enhanced electrochemical water splitting. <i>Journal of Colloid and Interface Science</i> , 2020 , 567, 393-401	9.3	13
132	Porous Carbons: Structure-Oriented Design and Versatile Applications. <i>Advanced Functional Materials</i> , 2020 , 30, 1909265	15.6	119
131	Functional carbon nitride materials for water oxidation: from heteroatom doping to interface engineering. <i>Nanoscale</i> , 2020 , 12, 6937-6952	7.7	20
130	Facile Synthesis of High-Performance Nitrogen-Doped Hierarchically Porous Carbon for Catalytic Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 4236-4243	8.3	31
129	Facet- and defect-dependent activity of perovskites in catalytic evolution of sulfate radicals. <i>Applied Catalysis B: Environmental</i> , 2020 , 272, 118972	21.8	48
128	Nonradical oxidation in persulfate activation by graphene-like nanosheets (GNS): Differentiating the contributions of singlet oxygen (¹ O ₂) and sorption-dependent electron transfer. <i>Chemical Engineering Journal</i> , 2020 , 393, 124725	14.7	47
127	Unzipping carbon nanotubes to nanoribbons for revealing the mechanism of nonradical oxidation by carbocatalysis. <i>Applied Catalysis B: Environmental</i> , 2020 , 276, 119146	21.8	48
126	Interfacial CoAl ₂ O ₄ from ZIF-67@Al ₂ O ₃ pellets toward catalytic activation of peroxymonosulfate for metronidazole removal. <i>Chemical Engineering Journal</i> , 2020 , 397, 125339	14.7	35

125	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
124	Boride-based electrocatalysts: Emerging candidates for water splitting. <i>Nano Research</i> , 2020 , 13, 293-314	10	69
123	Nanostructured manganese oxides: natural/artificial formation and their induced catalysis for wastewater remediation. <i>Environmental Science: Nano</i> , 2020 , 7, 368-396	7.1	31
122	Postsynthesis Oxygen Nonstoichiometric Regulation: A New Strategy for Performance Enhancement of Perovskites in Advanced Oxidation. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 99-109	3.9	12
121	Insights into the Electron-Transfer Regime of Peroxydisulfate Activation on Carbon Nanotubes: The Role of Oxygen Functional Groups. <i>Environmental Science & Technology</i> , 2020 , 54, 1267-1275	10.3	169
120	Biomass-derived functional porous carbons for adsorption and catalytic degradation of binary micropollutants in water. <i>Journal of Hazardous Materials</i> , 2020 , 389, 121881	12.8	40
119	Catalysis of a Single Transition Metal Site for Water Oxidation: From Mononuclear Molecules to Single Atoms. <i>Advanced Materials</i> , 2020 , 32, e1904037	24	46
118	Frontispiece: Fast and Long-Lasting Iron(III) Reduction by Boron Toward Green and Accelerated Fenton Chemistry. <i>Angewandte Chemie - International Edition</i> , 2020 , 59,	16.4	2
117	Boron carbide boosted Fenton-like oxidation: A novel Fe(III)/Fe(II) circulation. <i>Green Energy and Environment</i> , 2020 , 5, 414-422	5.7	7
116	Production, properties, and catalytic applications of sludge derived biochar for environmental remediation. <i>Water Research</i> , 2020 , 187, 116390	12.5	70
115	Electrocatalysts for acidic oxygen evolution reaction: Achievements and perspectives. <i>Nano Energy</i> , 2020 , 78, 105392	17.1	31
114	Hydroxyl radical dominated elimination of plasticizers by peroxymonosulfate on metal-free boron: Kinetics and mechanisms. <i>Water Research</i> , 2020 , 186, 116361	12.5	34
113	Synergistic Adsorption and Oxidation of Ciprofloxacin by Biochar Derived from Metal-Enriched Phytoremediation Plants: Experimental and Computational Insights. <i>ACS Applied Materials & Interfaces</i> , 2020 ,	9.5	35
112	Mechanistic investigations of N-doped graphene/2H(1T)-MoS ₂ for Li/K-ions batteries. <i>Nano Energy</i> , 2020 , 78, 105352	17.1	9
111	Selective adsorption of rare earth ions from aqueous solution on metal-organic framework HKUST-1. <i>Chemical Engineering Journal Advances</i> , 2020 , 1, 100009	3.6	18
110	Ultrafine copper nanoclusters and single sites for Fenton-like reactions with high atom utilities. <i>Environmental Science: Nano</i> , 2020 , 7, 2595-2606	7.1	8
109	Fast and Long-Lasting Iron(III) Reduction by Boron Toward Green and Accelerated Fenton Chemistry. <i>Angewandte Chemie</i> , 2020 , 132, 16660-16669	3.6	10
108	Roles of structure defect, oxygen groups and heteroatom doping on carbon in nonradical oxidation of water contaminants. <i>Water Research</i> , 2020 , 185, 116244	12.5	77

107	Iridium-based nanomaterials for electrochemical water splitting. <i>Nano Energy</i> , 2020 , 78, 105270	17.1	73
106	Graphitic Carbon Nitride Microtubes for Efficient Photocatalytic Overall Water Splitting: The Morphology Derived Electrical Field Enhancement. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 14386-14396	8.3	16
105	Catalytic degradation of antibiotics by metal-free catalysis over nitrogen-doped graphene. <i>Catalysis Today</i> , 2020 , 357, 341-349	5.3	29
104	Synergy of carbocatalytic and heat activation of persulfate for evolution of reactive radicals toward metal-free oxidation. <i>Catalysis Today</i> , 2020 , 355, 319-324	5.3	13
103	Graphitic biochar catalysts from anaerobic digestion sludge for nonradical degradation of micropollutants and disinfection. <i>Chemical Engineering Journal</i> , 2020 , 384, 123244	14.7	58
102	Structure-dependent catalysis of cuprous oxides in peroxymonosulfate activation via nonradical pathway with a high oxidation capacity. <i>Journal of Hazardous Materials</i> , 2020 , 385, 121518	12.8	50
101	High-performance porous graphene from synergetic nitrogen doping and physical activation for advanced nonradical oxidation. <i>Journal of Hazardous Materials</i> , 2020 , 381, 121010	12.8	33
100	The Intrinsic Nature of Persulfate Activation and N-Doping in Carbocatalysis. <i>Environmental Science & Technology</i> , 2020 , 54, 6438-6447	10.3	188
99	Photocatalytic activation of peroxymonosulfate by surface-tailored carbon quantum dots. <i>Journal of Hazardous Materials</i> , 2020 , 395, 122695	12.8	36
98	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
97	Peroxydisulfate activation by positively polarized carbocatalyst for enhanced removal of aqueous organic pollutants. <i>Water Research</i> , 2019 , 166, 115043	12.5	86
96	Synergy of nitrogen doping and structural defects on hierarchically porous carbons toward catalytic oxidation via a non-radical pathway. <i>Carbon</i> , 2019 , 155, 268-278	10.4	38
95	Manganese oxide integrated catalytic ceramic membrane for degradation of organic pollutants using sulfate radicals. <i>Water Research</i> , 2019 , 167, 115110	12.5	86
94	New insight to the role of edges and heteroatoms in nanocarbons for oxygen reduction reaction. <i>Nano Energy</i> , 2019 , 66, 104096	17.1	44
93	Adsorption of cerium (III) by HKUST-1 metal-organic framework from aqueous solution. <i>Journal of Colloid and Interface Science</i> , 2019 , 542, 421-428	9.3	51
92	Nickel in hierarchically structured nitrogen-doped graphene for robust and promoted degradation of antibiotics. <i>Journal of Cleaner Production</i> , 2019 , 218, 202-211	10.3	26
91	Origins of boron catalysis in peroxymonosulfate activation and advanced oxidation. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 23904-23913	13	33
90	Interfacial-engineered cobalt@carbon hybrids for synergistically boosted evolution of sulfate radicals toward green oxidation. <i>Applied Catalysis B: Environmental</i> , 2019 , 256, 117795	21.8	62

89	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
88	Recent advances in transition metal-based electrocatalysts for alkaline hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 14971-15005	13	281
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85	N-doped graphitic biochars from C-phycoyanin extracted Spirulina residue for catalytic persulfate activation toward nonradical disinfection and organic oxidation. <i>Water Research</i> , 2019 , 159, 77-86	12.5	175
84	Self-assembly of 3D MnO ₂ /N-doped graphene hybrid aerogel for catalytic degradation of water pollutants: Structure-dependent activity. <i>Chemical Engineering Journal</i> , 2019 , 369, 1049-1058	14.7	53
83	Magnetic biochar catalysts from anaerobic digested sludge: Production, application and environment impact. <i>Environment International</i> , 2019 , 126, 302-308	12.9	51
82	Novel applications of perovskite oxide via catalytic peroxymonosulfate advanced oxidation in aqueous systems for trace L-cysteine detection. <i>Journal of Colloid and Interface Science</i> , 2019 , 545, 311-316	9.3	10
81	Chemical activation of nitrogen and sulfur co-doped graphene as defect-rich carbocatalyst for electrochemical water splitting. <i>Carbon</i> , 2019 , 148, 540-549	10.4	34
80	Zn phthalocyanine/carbon nitride heterojunction for visible light photoelectrocatalytic conversion of CO ₂ to methanol. <i>Journal of Catalysis</i> , 2019 , 371, 214-223	7.3	30
79	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
78	Enhanced light-driven water splitting by fast electron transfer in 2D/2D reduced graphene oxide/tungsten trioxide heterojunction with preferential facets. <i>Journal of Colloid and Interface Science</i> , 2019 , 555, 413-422	9.3	33
77	CeO ₂ nanocrystal-modified layered MoS ₂ /g-C ₃ N ₄ as 0D/2D ternary composite for visible-light photocatalytic hydrogen evolution: Interfacial consecutive multi-step electron transfer and enhanced H ₂ O reactant adsorption. <i>Applied Catalysis B: Environmental</i> , 2019 , 259, 118072	21.8	97
76	Facile fabrication of 3D ferrous ion crosslinked graphene oxide hydrogel membranes for excellent water purification. <i>Environmental Science: Nano</i> , 2019 , 6, 3060-3071	7.1	12
75	Photocatalytic conversion of lignocellulosic biomass to valuable products. <i>Green Chemistry</i> , 2019 , 21, 4266-4289	10	93
74	sp ² /sp ³ Framework from Diamond Nanocrystals: A Key Bridge of Carbonaceous Structure to Carbocatalysis. <i>ACS Catalysis</i> , 2019 , 9, 7494-7519	13.1	50
73	Degradation of Cosmetic Microplastics via Functionalized Carbon Nanosprings. <i>Matter</i> , 2019 , 1, 745-758	12.7	140
72	Role of electronic properties in partition of radical and nonradical processes of carbocatalysis toward peroxymonosulfate activation. <i>Carbon</i> , 2019 , 153, 73-80	10.4	47

71	Activation of Peroxydisulfate on Carbon Nanotubes: Electron-Transfer Mechanism. <i>Environmental Science & Technology</i> , 2019 , 53, 14595-14603	10.3	203
70	Boosting performance of lanthanide magnetism perovskite for advanced oxidation through lattice doping with catalytically inert element. <i>Chemical Engineering Journal</i> , 2019 , 355, 721-730	14.7	78
69	Facile synthesis of N-doped 3D graphene aerogel and its excellent performance in catalytic degradation of antibiotic contaminants in water. <i>Carbon</i> , 2019 , 144, 781-790	10.4	79
68	Enhanced solar light driven activity of p-n heterojunction for water oxidation induced by deposition of Cu ₂ O on Bi ₂ O ₃ microplates. <i>Sustainable Materials and Technologies</i> , 2019 , 19, e00088	5.3	4
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66	Cobalt silicate hydroxide nanosheets in hierarchical hollow architecture with maximized cobalt active site for catalytic oxidation. <i>Chemical Engineering Journal</i> , 2019 , 359, 79-87	14.7	88
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58	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
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55	Metal-free activation of persulfate by cubic mesoporous carbons for catalytic oxidation via radical and nonradical processes. <i>Catalysis Today</i> , 2018 , 307, 140-146	5.3	91
54	Nanodiamonds in sp ² /sp ³ configuration for radical to nonradical oxidation: Core-shell layer dependence. <i>Applied Catalysis B: Environmental</i> , 2018 , 222, 176-181	21.8	157

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31	Facile assembly of Bi ₂ O ₃ /Bi ₂ S ₃ /MoS ₂ n-p heterojunction with layered n-Bi ₂ O ₃ and p-MoS ₂ for enhanced photocatalytic water oxidation and pollutant degradation. <i>Applied Catalysis B: Environmental</i> , 2017 , 200, 47-55	21.8	234
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20	A new magnetic nano zero-valent iron encapsulated in carbon spheres for oxidative degradation of phenol. <i>Applied Catalysis B: Environmental</i> , 2015 , 172-173, 73-81	21.8	198
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9	Low temperature combustion synthesis of nitrogen-doped graphene for metal-free catalytic oxidation. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 3432-3440	13	156
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5	Degradation of Microplastics by a Thermal Fenton Reaction. <i>ACS ES&T Engineering</i> ,		6
4	van der Waals type II carbon nitride homojunctions for visible light photocatalytic hydrogen evolution. <i>Nano Research</i> , 1	10	4
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