Hongqi Sun

List of Publications by Citations

290 papers	23,215 citations	88 h-index	144 g-index
295 ext. papers	28,584 ext. citations	10.7 avg, IF	7.62 L-index

#	Paper	IF	Citations
290	Metal-Free Carbocatalysis in Advanced Oxidation Reactions. *Accounts of Chemical Research*, **2018**, 51, 678-687	24.3	573
289	N-Doping-Induced Nonradical Reaction on Single-Walled Carbon Nanotubes for Catalytic Phenol Oxidation. *ACS Catalysis*, **2015**, 5, 553-559	13.1	525
288	Reduced graphene oxide for catalytic oxidation of aqueous organic pollutants. *ACS Applied Materials & Interfaces*, **2012**, 4, 5466-71	9.5	517
287	Adsorptive remediation of environmental pollutants using novel graphene-based nanomaterials. *Chemical Engineering Journal*, **2013**, 226, 336-347	14.7	508
286	Synthesis, characterization, and adsorption properties of magnetic Fe3O4@graphene nanocomposite. *Chemical Engineering Journal*, **2012**, 184, 326-332	14.7	477
285	Nitrogen-doped graphene for generation and evolution of reactive radicals by metal-free catalysis. *ACS Applied Materials & Interfaces*, **2015**, 7, 4169-78	9.5	471
284	Insights into Heterogeneous Catalysis of Persulfate Activation on Dimensional-Structured Nanocarbons. *ACS Catalysis*, **2015**, 5, 4629-4636	13.1	450
283	Sulfur and Nitrogen Co-Doped Graphene for Metal-Free Catalytic Oxidation Reactions. *Small*, **2015**, 11, 3036-44	11	412
282	Nonradical reactions in environmental remediation processes: Uncertainty and challenges. *Applied Catalysis B: Environmental*, **2018**, 224, 973-982	21.8	397
281	Occurrence of radical and nonradical pathways from carbocatalysts for aqueous and nonaqueous catalytic oxidation. *Applied Catalysis B: Environmental*, **2016**, 188, 98-105	21.8	386
280	A review on photocatalysis for air treatment: From catalyst development to reactor design. *Chemical Engineering Journal*, **2017**, 310, 537-559	14.7	335
279	Different crystallographic one-dimensional MnO2 nanomaterials and their superior performance in catalytic phenol degradation. *Environmental Science & Technology*, **2013**, 47, 5882-7	10.3	335
278	Catalytic oxidation of organic pollutants on pristine and surface nitrogen-modified carbon nanotubes with sulfate radicals. *Applied Catalysis B: Environmental*, **2014**, 154-155, 134-141	21.8	333
277	Activated carbon supported cobalt catalysts for advanced oxidation of organic contaminants in aqueous solution. *Applied Catalysis B: Environmental*, **2010**, 100, 529-534	21.8	324
276	Manganese oxides at different oxidation states for heterogeneous activation of peroxymonosulfate for phenol degradation in aqueous solutions. *Applied Catalysis B: Environmental* , **2013**, 142-143, 729-735	21.8	308
275	Surface controlled generation of reactive radicals from persulfate by carbocatalysis on nanodiamonds. *Applied Catalysis B: Environmental*, **2016**, 194, 7-15	21.8	277
274	3D-hierarchically structured MnO2 for catalytic oxidation of phenol solutions by activation of peroxymonosulfate: Structure dependence and mechanism. *Applied Catalysis B: Environmental*, **2015**, 164, 159-167	21.8	274

273	Insights into perovskite-catalyzed peroxymonosulfate activation: Maneuverable cobalt sites for promoted evolution of sulfate radicals. *Applied Catalysis B: Environmental*, **2018**, 220, 626-634	21.8	274
272	An insight into metal organic framework derived N-doped graphene for the oxidative degradation of persistent contaminants: formation mechanism and generation of singlet oxygen from peroxymonosulfate. *Environmental Science: Nano*, **2017**, 4, 315-324	7.1	272
271	Recent advances in non-metal modification of graphitic carbon nitride for photocatalysis: a historic review. *Catalysis Science and Technology*, **2016**, 6, 7002-7023	5.5	271
270	Facile synthesis of nitrogen doped reduced graphene oxide as a superior metal-free catalyst for oxidation. *Chemical Communications*, **2013**, 49, 9914-6	5.8	248
269	Facile assembly of Bi2O3/Bi2S3/MoS2 n-p heterojunction with layered n-Bi2O3 and p-MoS2 for enhanced photocatalytic water oxidation and pollutant degradation. *Applied Catalysis B: Environmental*, **2017**, 200, 47-55	21.8	234
268	Nanocarbons in different structural dimensions (0–3D) for phenol adsorption and metal-free catalytic oxidation. *Applied Catalysis B: Environmental*, **2015**, 179, 352-362	21.8	220
267	0D (MoS2)/2D (g-C3N4) heterojunctions in Z-scheme for enhanced photocatalytic and electrochemical hydrogen evolution. *Applied Catalysis B: Environmental*, **2018**, 228, 64-74	21.8	220
266	Unveiling the active sites of graphene-catalyzed peroxymonosulfate activation. *Carbon*, **2016**, 107, 371-378	7.4	219
265	Hydrothermal Synthesis of Co3O4–Graphene for Heterogeneous Activation of Peroxymonosulfate for Decomposition of Phenol. *Industrial & Engineering Chemistry Research*, **2012**, 51, 14958-14965	3.9	213
264	Facile synthesis of nitrogen-doped graphene via low-temperature pyrolysis: The effects of precursors and annealing ambience on metal-free catalytic oxidation. *Carbon*, **2017**, 115, 649-658	10.4	209
263	A new magnetic nano zero-valent iron encapsulated in carbon spheres for oxidative degradation of phenol. *Applied Catalysis B: Environmental*, **2015**, 172-173, 73-81	21.8	198
262	Insights into N-doping in single-walled carbon nanotubes for enhanced activation of superoxides: a mechanistic study. *Chemical Communications*, **2015**, 51, 15249-52	5.8	195
261	Activation of peroxymonosulfate by carbonaceous oxygen groups: experimental and density functional theory calculations. *Applied Catalysis B: Environmental*, **2016**, 198, 295-302	21.8	192
260	Co-SBA-15 for heterogeneous oxidation of phenol with sulfate radical for wastewater treatment. *Catalysis Today*, **2011**, 175, 380-385	5.3	188
259	Preparation and Characterization of Visible-Light-Driven Carbon–Sulfur-Codoped TiO2 Photocatalysts. *Industrial & Engineering Chemistry Research*, **2006**, 45, 4971-4976	3.9	186
258	Excellent performance of mesoporous Co3O4/MnO2 nanoparticles in heterogeneous activation of peroxymonosulfate for phenol degradation in aqueous solutions. *Applied Catalysis B: Environmental* , **2012**, 127, 330-335	21.8	185
257	Magnetic CoFe2O4–Graphene Hybrids: Facile Synthesis, Characterization, and Catalytic Properties. *Industrial & Engineering Chemistry Research*, **2012**, 51, 6044-6051	3.9	185
256	Fabrication of Fe3O4/SiO2 core/shell nanoparticles attached to graphene oxide and its use as an adsorbent. *Journal of Colloid and Interface Science*, **2012**, 379, 20-6	9.3	175

255	Topotactic Transformation of Metal-Organic Frameworks to Graphene-Encapsulated Transition-Metal Nitrides as Efficient Fenton-like Catalysts. *ACS Nano*, **2016**, 10, 11532-11540	16.7	174
254	Nano-Fe□encapsulated in microcarbon spheres: synthesis, characterization, and environmental applications. *ACS Applied Materials & Interfaces*, **2012**, 4, 6235-41	9.5	166
253	New insights into heterogeneous generation and evolution processes of sulfate radicals for phenol degradation over one-dimensional □MnO2 nanostructures. *Chemical Engineering Journal*, **2015**, 266, 12-20	14.7	165
252	Synthesis of porous reduced graphene oxide as metal-free carbon for adsorption and catalytic oxidation of organics in water. *Journal of Materials Chemistry A*, **2013**, 1, 5854	13	164
251	Nitrogen- and Sulfur-Codoped Hierarchically Porous Carbon for Adsorptive and Oxidative Removal of Pharmaceutical Contaminants. *ACS Applied Materials & Interfaces*, **2016**, 8, 7184-93	9.5	162
250	A comparative study of reduced graphene oxide modified TiO2, ZnO and Ta2O5 in visible light photocatalytic/photochemical oxidation of methylene blue. *Applied Catalysis B: Environmental*, **2014**, 146, 162-168	21.8	160
249	Graphene facilitated visible light photodegradation of methylene blue over titanium dioxide photocatalysts. *Chemical Engineering Journal*, **2013**, 214, 298-303	14.7	160
248	Nanodiamonds in sp2/sp3 configuration for radical to nonradical oxidation: Core-shell layer dependence. *Applied Catalysis B: Environmental*, **2018**, 222, 176-181	21.8	157
247	Efficient Catalytic Ozonation over Reduced Graphene Oxide for p-Hydroxylbenzoic Acid (PHBA) Destruction: Active Site and Mechanism. *ACS Applied Materials & Interfaces*, **2016**, 8, 9710-20	9.5	157
246	Shape-controlled activation of peroxymonosulfate by single crystal □Mn2O3 for catalytic phenol degradation in aqueous solution. *Applied Catalysis B: Environmental*, **2014**, 154-155, 246-251	21.8	157
245	Low temperature combustion synthesis of nitrogen-doped graphene for metal-free catalytic oxidation. *Journal of Materials Chemistry A*, **2015**, 3, 3432-3440	13	156
244	2D/2D nano-hybrids of □MnO□on reduced graphene oxide for catalytic ozonation and coupling peroxymonosulfate activation. *Journal of Hazardous Materials*, **2016**, 301, 56-64	12.8	153
243	N-Doped Graphene from Metal□Organic Frameworks for Catalytic Oxidation of p-Hydroxylbenzoic Acid: N-Functionality and Mechanism. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 2693-2701	8.3	152
242	A new metal-free carbon hybrid for enhanced photocatalysis. *ACS Applied Materials & Interfaces*, **2014**, 6, 16745-54	9.5	144
241	A comparative study of spinel structured Mn3O4, Co3O4 and Fe3O4 nanoparticles in catalytic oxidation of phenolic contaminants in aqueous solutions. *Journal of Colloid and Interface Science*, **2013**, 407, 467-73	9.3	143
240	Nanosized Co3O4/SiO2 for heterogeneous oxidation of phenolic contaminants in waste water. *Separation and Purification Technology*, **2011**, 77, 230-236	8.3	143
239	Excellent performance of copper based metal organic framework in adsorptive removal of toxic sulfonamide antibiotics from wastewater. *Journal of Colloid and Interface Science*, **2016**, 478, 344-52	9.3	142
238	Nitrogen-doped bamboo-like carbon nanotubes with Ni encapsulation for persulfate activation to remove emerging contaminants with excellent catalytic stability. *Chemical Engineering Journal*, **2018**, 332, 398-408	14.7	141

237	Bread-making synthesis of hierarchically Co@C nanoarchitecture in heteroatom doped porous carbons for oxidative degradation of emerging contaminants. *Applied Catalysis B: Environmental*, **2018**, 225, 76-83	21.8	141
236	Degradation of Cosmetic Microplastics via Functionalized Carbon Nanosprings. *Matter*, **2019**, 1, 745-758	12.7	140
235	Adsorptive removal of antibiotic sulfonamide by UiO-66 and ZIF-67 for wastewater treatment. *Journal of Colloid and Interface Science*, **2017**, 500, 88-95	9.3	137
234	Carbocatalytic activation of persulfate for removal of antibiotics in water solutions. *Chemical Engineering Journal*, **2016**, 288, 399-405	14.7	135
233	Heteroatom (N or N-S)-Doping Induced Layered and Honeycomb Microstructures of Porous Carbons for CO2 Capture and Energy Applications. *Advanced Functional Materials*, **2016**, 26, 8651-8661	15.6	133
232	Magnetic Fe3O4/carbon sphere/cobalt composites for catalytic oxidation of phenol solutions with sulfate radicals. *Chemical Engineering Journal*, **2014**, 245, 1-9	14.7	133
231	Facile synthesis of hierarchically structured magnetic MnO2/ZnFe2O4 hybrid materials and their performance in heterogeneous activation of peroxymonosulfate. *ACS Applied Materials & Interfaces*, **2014**, 6, 19914-23	9.5	132
230	Halogen element modified titanium dioxide for visible light photocatalysis. *Chemical Engineering Journal*, **2010**, 162, 437-447	14.7	131
229	Surface aging behaviour of Fe-based amorphous alloys as catalysts during heterogeneous photo Fenton-like process for water treatment. *Applied Catalysis B: Environmental*, **2017**, 204, 537-547	21.8	130
228	Physical and chemical activation of reduced graphene oxide for enhanced adsorption and catalytic oxidation. *Nanoscale*, **2014**, 6, 766-71	7.7	129
227	Co3O4 nanocrystals with predominantly exposed facets: synthesis, environmental and energy applications. *Journal of Materials Chemistry A*, **2013**, 1, 14427	13	128
226	Adsorption and heterogeneous advanced oxidation of phenolic contaminants using Fe loaded mesoporous SBA-15 and H2O2. *Chemical Engineering Journal*, **2010**, 164, 255-260	14.7	127
225	Surface-tailored nanodiamonds as excellent metal-free catalysts for organic oxidation. *Carbon*, **2016**, 103, 404-411	10.4	127
224	Rational Catalyst Design for N2 Reduction under Ambient Conditions: Strategies toward Enhanced Conversion Efficiency. *ACS Catalysis*, **2020**, 10, 6870-6899	13.1	126
223	Ferric carbide nanocrystals encapsulated in nitrogen-doped carbon nanotubes as an outstanding environmental catalyst. *Environmental Science: Nano*, **2017**, 4, 170-179	7.1	125
222	Effects of nitrogen-, boron-, and phosphorus-doping or codoping on metal-free graphene catalysis. *Catalysis Today*, **2015**, 249, 184-191	5.3	123
221	Porous Carbons: Structure-Oriented Design and Versatile Applications. *Advanced Functional Materials*, **2020**, 30, 1909265	15.6	119
220	One-pot hydrothermal synthesis of ZnO-reduced graphene oxide composites using Zn powders for enhanced photocatalysis. *Chemical Engineering Journal*, **2013**, 229, 533-539	14.7	119

219	Disordered Atomic Packing Structure of Metallic Glass: Toward Ultrafast Hydroxyl Radicals Production Rate and Strong Electron Transfer Ability in Catalytic Performance. *Advanced Functional Materials*, **2017**, 27, 1702258	15.6	118
218	One-pot synthesis of N-doped graphene for metal-free advanced oxidation processes. *Carbon*, **2016**, 102, 279-287	10.4	115
217	MnO2 activation of peroxymonosulfate for catalytic phenol degradation in aqueous solutions. *Catalysis Communications*, **2012**, 26, 144-148	3.2	108
216	Boosting Fenton-Like Reactions via Single Atom Fe Catalysis. *Environmental Science & Technology*, **2019**, 53, 11391-11400	10.3	105
215	Phosphorous doped carbon nitride nanobelts for photodegradation of emerging contaminants and hydrogen evolution. *Applied Catalysis B: Environmental*, **2019**, 257, 117931	21.8	105
214	Coal fly ash supported Co3O4 catalysts for phenol degradation using peroxymonosulfate. *RSC Advances*, **2012**, 2, 5645	3.7	104
213	Photocatalytic degradation of 4-chlorophenol with combustion synthesized TiO2 under visible light irradiation. *Chemical Engineering Journal*, **2007**, 128, 127-133	14.7	102
212	Oxygen Vacancies in Shape Controlled CuO/Reduced Graphene Oxide/InO Hybrid for Promoted Photocatalytic Water Oxidation and Degradation of Environmental Pollutants. *ACS Applied Materials & Interfaces*, **2017**, 9, 11678-11688	9.5	101
211	Flower-like MoS2 on graphitic carbon nitride for enhanced photocatalytic and electrochemical hydrogen evolutions. *Applied Catalysis B: Environmental*, **2018**, 239, 334-344	21.8	100
210	Research Advances in the Synthesis of Nanocarbon-Based Photocatalysts and Their Applications for Photocatalytic Conversion of Carbon Dioxide to Hydrocarbon Fuels. *Energy & Fuels*, **2014**, 28, 22-36	4.1	99
209	Monodisperse Co3O4 quantum dots on porous carbon nitride nanosheets for enhanced visible-light-driven water oxidation. *Applied Catalysis B: Environmental*, **2018**, 223, 2-9	21.8	97
208	Metal-free activation of persulfate by cubic mesoporous carbons for catalytic oxidation via radical and nonradical processes. *Catalysis Today*, **2018**, 307, 140-146	5.3	91
207	Oxygen functional groups in graphitic carbon nitride for enhanced photocatalysis. *Journal of Colloid and Interface Science*, **2016**, 468, 176-182	9.3	91
206	Laves phase precipitation in Ti-Zr-Fe-Cr alloys with high strength and large plasticity. *Materials and Design*, **2018**, 154, 228-238	8.1	89
205	Visible-light-driven TiO2 catalysts doped with low-concentration nitrogen species. *Solar Energy Materials and Solar Cells*, **2008**, 92, 76-83	6.4	89
204	Magnetic Ni-Co alloy encapsulated N-doped carbon nanotubes for catalytic membrane degradation of emerging contaminants. *Chemical Engineering Journal*, **2019**, 362, 251-261	14.7	89
203	UV-assisted construction of 3D hierarchical rGO/Bi2MoO6 composites for enhanced photocatalytic water oxidation. *Chemical Engineering Journal*, **2017**, 313, 1447-1453	14.7	88
202	Activated carbons as green and effective catalysts for generation of reactive radicals in degradation of aqueous phenol. *RSC Advances*, **2013**, 3, 21905	3.7	88

201	Manganese oxide integrated catalytic ceramic membrane for degradation of organic pollutants using sulfate radicals. *Water Research*, **2019**, 167, 115110	12.5	86
200	Template-free synthesis of N-doped carbon with pillared-layered pores as bifunctional materials for supercapacitor and environmental applications. *Carbon*, **2017**, 118, 98-105	10.4	85
199	Design and engineering heterojunctions for the photoelectrochemical monitoring of environmental pollutants: A review. *Applied Catalysis B: Environmental*, **2019**, 248, 405-422	21.8	85
198	Synthesis of Co oxide doped carbon aerogel catalyst and catalytic performance in heterogeneous oxidation of phenol in water. *Chemical Engineering Journal*, **2011**, 174, 376-382	14.7	84
197	One-pot synthesis of binary metal organic frameworks (HKUST-1 and UiO-66) for enhanced adsorptive removal of water contaminants. *Journal of Colloid and Interface Science*, **2017**, 490, 685-694	9.3	80
196	Red mud and fly ash supported Co catalysts for phenol oxidation. *Catalysis Today*, **2012**, 190, 68-72	5.3	80
195	Tailored synthesis of active reduced graphene oxides from waste graphite: Structural defects and pollutant-dependent reactive radicals in aqueous organics decontamination. *Applied Catalysis B: Environmental*, **2018**, 229, 71-80	21.8	77
194	Visible light responsive titania photocatalysts codoped by nitrogen and metal (Fe, Ni, Ag, or Pt) for remediation of aqueous pollutants. *Chemical Engineering Journal*, **2013**, 231, 18-25	14.7	77
193	Understanding of the Oxidation Behavior of Benzyl Alcohol by Peroxymonosulfate via Carbon Nanotubes Activation. *ACS Catalysis*, **2020**, 10, 3516-3525	13.1	76
192	Titanate supported cobalt catalysts for photochemical oxidation of phenol under visible light irradiations. *Separation and Purification Technology*, **2011**, 80, 626-634	8.3	76
191	Submicron sized water-stable metal organic framework (bio-MOF-11) for catalytic degradation of pharmaceuticals and personal care products. *Chemosphere*, **2018**, 196, 105-114	8.4	70
190	Room-light-induced indoor air purification using an efficient Pt/N-TiO2 photocatalyst. *Applied Catalysis B: Environmental*, **2011**, 108-109, 127-133	21.8	68
189	Effects of amino functionality on uptake of CO2, CH4 and selectivity of CO2/CH4 on titanium based MOFs. *Fuel*, **2015**, 160, 318-327	7.1	67
188	Flower-like Cobalt Hydroxide/Oxide on Graphitic Carbon Nitride for Visible-Light-Driven Water Oxidation. *ACS Applied Materials & Interfaces*, **2016**, 8, 35203-35212	9.5	65
187	Photochemical degradation of phenol solutions on Co3O4 nanorods with sulfate radicals. *Catalysis Today*, **2015**, 258, 576-584	5.3	64
186	Novel polyoxometalate@g-C□□hybrid photocatalysts for degradation of dyes and phenolics. *Journal of Colloid and Interface Science*, **2015**, 456, 15-21	9.3	63
185	Interfacial-engineered cobalt@carbon hybrids for synergistically boosted evolution of sulfate radicals toward green oxidation. *Applied Catalysis B: Environmental*, **2019**, 256, 117795	21.8	62
184	High-strength □tabilized Ti-Nb-Fe-Cr alloys with large plasticity. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 732, 368-377	5.3	62

183	Improved Corrosion Resistance on Selective Laser Melting Produced Ti-5Cu Alloy after Heat Treatment. *ACS Biomaterials Science and Engineering*, **2018**, 4, 2633-2642	5.5	60
182	Ultra-sustainable FeSiB metallic glass as a catalyst for activation of persulfate on methylene blue degradation under UV-Vis light. *Scientific Reports*, **2016**, 6, 38520	4.9	60
181	Metal-free graphene-carbon nitride hybrids for photodegradation of organic pollutants in water. *Catalysis Today*, **2015**, 258, 668-675	5.3	58
180	Metal-free melem/g-C3N4 hybrid photocatalysts for water treatment. *Journal of Colloid and Interface Science*, **2016**, 464, 10-7	9.3	58
179	Photocatalysis of C, N-doped ZnO derived from ZIF-8 for dye degradation and water oxidation. *RSC Advances*, **2016**, 6, 95903-95909	3.7	58
178	Egg-shaped core/shell Mn2O3@MnO2 as heterogeneous catalysts for decomposition of phenolics in aqueous solutions. *Chemosphere*, **2016**, 159, 351-358	8.4	54
177	Synthesis of magnetic core/shell carbon nanosphere supported manganese catalysts for oxidation of organics in water by peroxymonosulfate. *Journal of Colloid and Interface Science*, **2014**, 433, 68-75	9.3	54
176	Size dependence of uniformed carbon spheres in promoting graphitic carbon nitride toward enhanced photocatalysis. *Applied Catalysis B: Environmental*, **2017**, 204, 358-364	21.8	52
175	Preparation of cobalt/carbon-xerogel for heterogeneous oxidation of phenol. *Catalysis Today*, **2012** , 186, 63-68	5.3	52
174	Size-Tailored Porous Spheres of Manganese Oxides for Catalytic Oxidation via Peroxymonosulfate Activation. *Journal of Physical Chemistry C*, **2016**, 120, 16871-16878	3.8	52
173	Adsorption of cerium (III) by HKUST-1 metal-organic framework from aqueous solution. *Journal of Colloid and Interface Science*, **2019**, 542, 421-428	9.3	51
172	Hierarchical shape-controlled mixed-valence calcium manganites for catalytic ozonation of aqueous phenolic compounds. *Catalysis Science and Technology*, **2016**, 6, 2918-2929	5.5	51
171	Supported cobalt catalysts by one-pot aqueous combustion synthesis for catalytic phenol degradation. *Journal of Colloid and Interface Science*, **2013**, 394, 394-400	9.3	51
170	Heterostructured WO3@CoWO4 bilayer nanosheets for enhanced visible-light photo, electro and photoelectro-chemical oxidation of water. *Journal of Materials Chemistry A*, **2018**, 6, 6265-6272	13	50
169	sp2/sp3 Framework from Diamond Nanocrystals: A Key Bridge of Carbonaceous Structure to Carbocatalysis. *ACS Catalysis*, **2019**, 9, 7494-7519	13.1	50
168	Mechanism of Nitrogen-Concentration Dependence on pH Value: Experimental and Theoretical Studies on Nitrogen-Doped TiO2. *Journal of Physical Chemistry C*, **2008**, 112, 13304-13309	3.8	50
167	Mini-Review on Char Catalysts for Tar Reforming during Biomass Gasification: The Importance of Char Structure. *Energy & Fuels*, **2020**, 34, 1219-1229	4.1	50
166	Bifunctionalized Metal Organic Frameworks, UiO-66-NO2-N (N = -NH2, -(OH)2, -(COOH)2), for Enhanced Adsorption and Selectivity of CO2 and N2. *Journal of Chemical & Engineering Data*, **2015**, 60, 2152-2161	2.8	49

165	Metal-free catalytic ozonation on surface-engineered graphene: Microwave reduction and heteroatom doping. *Chemical Engineering Journal*, **2019**, 355, 118-129	14.7	49
164	Resemblance in Corrosion Behavior of Selective Laser Melted and Traditional Monolithic Ti-24Nb-4Zr-8Sn Alloy. *ACS Biomaterials Science and Engineering*, **2019**, 5, 1141-1149	5.5	49
163	Improved deformation behavior in Ti-Zr-Fe-Mn alloys comprising the C14 type Laves and phases. *Materials and Design*, **2018**, 160, 1059-1070	8.1	49
162	Unzipping carbon nanotubes to nanoribbons for revealing the mechanism of nonradical oxidation by carbocatalysis. *Applied Catalysis B: Environmental*, **2020**, 276, 119146	21.8	48
161	Superior performance of FeVO@CeO uniform core-shell nanostructures in heterogeneous Fenton-sonophotocatalytic degradation of 4-nitrophenol. *Journal of Hazardous Materials*, **2020**, 382, 121059	12.8	48
160	Enhanced performance of g-C3N4/TiO2 photocatalysts for degradation of organic pollutants under visible light. *Chinese Journal of Chemical Engineering*, **2015**, 23, 1326-1334	3.2	47
159	Efficient photocatalytic overall water splitting on metal-free 1D SWCNT/2D ultrathin C3N4 heterojunctions via novel non-resonant plasmonic effect. *Applied Catalysis B: Environmental*, **2020**, 278, 119312	21.8	46
158	Catalysis of a Single Transition Metal Site for Water Oxidation: From Mononuclear Molecules to Single Atoms. *Advanced Materials*, **2020**, 32, e1904037	24	46
157	Engineered Graphitic Carbon Nitride-Based Photocatalysts for Visible-Light-Driven Water Splitting: A Review. *Energy & Fuels*, **2021**, 35, 6504-6526	4.1	46
156	Preparation of a p-n heterojunction BiFeO3@TiO2 photocatalyst with a core shell structure for visible-light photocatalytic degradation. *Chinese Journal of Catalysis*, **2017**, 38, 1052-1062	11.3	45
155	Integrated oxygen-doping and dye sensitization of graphitic carbon nitride for enhanced visible light photodegradation. *Journal of Colloid and Interface Science*, **2016**, 476, 193-199	9.3	45
154	New insight to the role of edges and heteroatoms in nanocarbons for oxygen reduction reaction. *Nano Energy*, **2019**, 66, 104096	17.1	44
153	Deformation and strength characteristics of Laves phases in titanium alloys. *Materials and Design*, **2019**, 179, 107891	8.1	44
152	Ag2MoO4 nanoparticles encapsulated in g-C3N4 for sunlight photodegradation of pollutants. *Catalysis Today*, **2018**, 315, 205-212	5.3	44
151	Photocatalytic decomposition of 4-chlorophenol over an efficient N-doped TiO2 under sunlight irradiation. *Journal of Photochemistry and Photobiology A: Chemistry*, **2009**, 201, 15-22	4.7	44
150	Pyrolysis of palm kernel shell with internal recycling of heavy oil. *Bioresource Technology*, **2019**, 272, 77-82	9.1	44
149	Long non-coding RNA Linc00675 suppresses cell proliferation and metastasis in colorectal cancer via acting on miR-942 and Wnt/catenin signaling. *Biomedicine and Pharmacotherapy*, **2018**, 101, 769-776	7.5	43
148	Cobalt@nitrogen-doped bamboo-structured carbon nanotube to boost photocatalytic hydrogen evolution on carbon nitride. *Applied Catalysis B: Environmental*, **2019**, 254, 443-451	21.8	42

147	One-step synthesis of flour-derived functional nanocarbons with hierarchical pores for versatile environmental applications. *Chemical Engineering Journal*, **2018**, 347, 432-439	14.7	42
146	Effects of -NO2 and -NH2 functional groups in mixed-linker Zr-based MOFs on gas adsorption of CO2 and CH4. *Progress in Natural Science: Materials International*, **2018**, 28, 160-167	3.6	42
145	Combination of adsorption, photochemical and photocatalytic degradation of phenol solution over supported zinc oxide: Effects of support and sulphate oxidant. *Chemical Engineering Journal*, **2011**, 170, 270-277	14.7	42
144	Graphitic Carbon Nitride-Based Z-Scheme Structure for Photocatalytic CO2 Reduction. *Energy & Fuels*, **2021**, 35, 7-24	4.1	42
143	Functionalized UiO-66 by Single and Binary (OH)2 and NO2 Groups for Uptake of CO2 and CH4. *Industrial & Engineering Chemistry Research*, **2016**, 55, 7924-7932	3.9	40
142	Temperature dependent photocatalysis of g-CN, TiO and ZnO: Differences in photoactive mechanism. *Journal of Colloid and Interface Science*, **2018**, 532, 321-330	9.3	40
141	Heterogeneous Catalytic Oxidation of Aqueous Phenol on Red Mud-Supported Cobalt Catalysts. *Industrial & Engineering Chemistry Research*, **2012**, 51, 15351-15359	3.9	40
140	Biomass-derived functional porous carbons for adsorption and catalytic degradation of binary micropollutants in water. *Journal of Hazardous Materials*, **2020**, 389, 121881	12.8	40
139	Core/shell FeVO4@BiOCl heterojunction as a durable heterogeneous Fenton catalyst for the efficient sonophotocatalytic degradation of p-nitrophenol. *Separation and Purification Technology*, **2020**, 231, 115915	8.3	39
138	Spontaneous Formation of Noble- and Heavy-Metal-Free Alloyed Semiconductor Quantum Rods for Efficient Photocatalysis. *Advanced Materials*, **2018**, 30, e1803351	24	38
137	Solution combustion synthesis of Co oxide-based catalysts for phenol degradation in aqueous solution. *Journal of Colloid and Interface Science*, **2012**, 372, 58-62	9.3	38
136	Coupling hydrothermal and photothermal single-atom catalysis toward excellent water splitting to hydrogen. *Applied Catalysis B: Environmental*, **2021**, 283, 119660	21.8	38
135	Green Synthesis of Carbon Quantum Dots for Sensitized Solar Cells. *ChemPhotoChem*, **2017**, 1, 116-119	3.3	37
134	Electrochemical synthesis of graphene/MnO 2 in an architecture of bilayer microtubes as micromotors. *Chemical Engineering Journal*, **2017**, 324, 251-258	14.7	37
133	Three-Dimensional BiOI/BiOX (X = Cl or Br) Nanohybrids for Enhanced Visible-Light Photocatalytic Activity. *Nanomaterials*, **2017**, 7,	5.4	37
132	Fundamental Advances in Biomass Autothermal/Oxidative Pyrolysis: A Review. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 11888-11905	8.3	37
131	Improved trade-off between strength and plasticity in titanium based metastable beta type Ti-Zr-Fe-Sn alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 766, 138340	5.3	36
130	Nanocarbon-Based Catalytic Ozonation for Aqueous Oxidation: Engineering Defects for Active Sites and Tunable Reaction Pathways. *ACS Catalysis*, **2020**, 10, 13383-13414	13.1	36

129	High-speed graphene@Ag-MnO micromotors at low peroxide levels. *Journal of Colloid and Interface Science*, **2018**, 528, 271-280	9.3	36
128	Sustainable redox processes induced by peroxymonosulfate and metal doping on amorphous manganese dioxide for nonradical degradation of water contaminants. *Applied Catalysis B: Environmental*, **2021**, 286, 119903	21.8	35
127	Carbon microspheres supported cobalt catalysts for phenol oxidation with peroxymonosulfate. *Chemical Engineering Research and Design*, **2015**, 101, 15-21	5.5	34
126	Origins of boron catalysis in peroxymonosulfate activation and advanced oxidation. *Journal of Materials Chemistry A*, **2019**, 7, 23904-23913	13	33
125	Crystal transformation of 2D tungstic acid HWO to WO for enhanced photocatalytic water oxidation. *Journal of Colloid and Interface Science*, **2018**, 514, 576-583	9.3	33
124	One-pot hydrothermal synthesis of Co(OH)2 nanoflakes on graphene sheets and their fast catalytic oxidation of phenol in liquid phase. *Journal of Colloid and Interface Science*, **2013**, 402, 230-6	9.3	33
123	Structural-Phase Catalytic Redox Reactions in Energy and Environmental Applications. *Advanced Materials*, **2020**, 32, e1905739	24	31
122	Zn phthalocyanine/carbon nitride heterojunction for visible light photoelectrocatalytic conversion of CO2 to methanol. *Journal of Catalysis*, **2019**, 371, 214-223	7.3	30
121	Quasi single cobalt sites in nanopores for superior catalytic oxidation of organic pollutants. *Environmental Science: Nano*, **2018**, 5, 2842-2852	7.1	30
120	Dual-metal zeolitic imidazolate frameworks and their derived nanoporous carbons for multiple environmental and electrochemical applications. *Chemical Engineering Journal*, **2018**, 351, 641-649	14.7	30
119	Catalytic degradation of antibiotics by metal-free catalysis over nitrogen-doped graphene. *Catalysis Today*, **2020**, 357, 341-349	5.3	29
118	Novel two-dimensional crystalline carbon nitrides beyond g-C3N4: structure and applications. *Journal of Materials Chemistry A*, **2021**, 9, 17-33	13	29
117	Metal-free hybrids of graphitic carbon nitride and nanodiamonds for photoelectrochemical and photocatalytic applications. *Journal of Colloid and Interface Science*, **2017**, 493, 275-280	9.3	28
116	Rigorous and reliable operations for electrocatalytic nitrogen reduction. *Applied Catalysis B: Environmental*, **2020**, 278, 119325	21.8	28
115	Quasi-MOF derivative-based electrode for efficient electro-Fenton oxidation. *Journal of Hazardous Materials*, **2021**, 401, 123423	12.8	28
114	Nitrogen-doped Carbon Nanospheres-Modified Graphitic Carbon Nitride with Outstanding Photocatalytic Activity. *Nano-Micro Letters*, **2020**, 12, 24	19.5	27
113	Worm-like FeS2/TiO2 Nanotubes for Photoelectrocatalytic Reduction of CO2 to Methanol under Visible Light. *Energy & Fuels*, **2018**, 32, 4357-4363	4.1	27
112	Photocatalytic oxidation of water and air contaminants with metal doped BiTaO4 irradiated with visible light. *Catalysis Today*, **2012**, 192, 203-212	5.3	27

111	A comparative study of metal (Ni, Co, or Mn)-borate catalysts and their photodeposition on rGO/ZnO nanoarrays for photoelectrochemical water splitting. *Journal of Materials Chemistry A*, **2018**, 6, 24149-24156	13	27
110	Nickel in hierarchically structured nitrogen-doped graphene for robust and promoted degradation of antibiotics. *Journal of Cleaner Production*, **2019**, 218, 202-211	10.3	26
109	2D Transition Metal Dichalcogenides and Graphene-Based Ternary Composites for Photocatalytic Hydrogen Evolution and Pollutants Degradation. *Nanomaterials*, **2017**, 7,	5.4	26
108	Comparative Investigation of Photocatalytic Degradation of Toluene on Nitrogen Doped Ta2O5 and Nb2O5 Nanoparticles. *Industrial & Engineering Chemistry Research*, **2013**, 52, 3320-3328	3.9	26
107	Enhanced CO2 Adsorption and Selectivity of CO2/N2 on Amino-MIL-53(Al) Synthesized by Polar Co-solvents. *Energy & Fuels*, **2018**, 32, 4502-4510	4.1	25
106	Co@C/CoOx coupled with N-doped layer-structured carbons for excellent CO2 capture and oxygen reduction reaction. *Carbon*, **2018**, 133, 306-315	10.4	25
105	Magnetically steerable iron oxides-manganese dioxide core-shell micromotors for organic and microplastic removals. *Journal of Colloid and Interface Science*, **2021**, 588, 510-521	9.3	25
104	Surface engineering of hollow carbon nitride microspheres for efficient photoredox catalysis. *Chemical Engineering Journal*, **2020**, 381, 122593	14.7	25
103	Chapter 6:Catalytic oxidation of organic pollutants in aqueous solution using sulfate radicals. *Catalysis*,209-247	1.6	24
102	Graphitic Carbon Nitride Decorated with CoP Nanocrystals for Enhanced Photocatalytic and Photoelectrochemical H2 Evolution. *Energy & Fuels*, **2019**, 33, 11663-11676	4.1	23
101	Wet-Chemical Synthesis of InTaO4 for Photocatalytic Decomposition of Organic Contaminants in Air and Water with UV□is Light. *Industrial & Engineering Chemistry Research*, **2012**, 51, 1563-1569	3.9	23
100	Solar Photocatalytic Water Oxidation and Purification on ZIF-8-Derived C□N□ZnO Composites. *Energy & Fuels*, **2017**, 31, 2138-2143	4.1	22
99	Acidification and bubble template derived porous g-C3N4 for efficient photodegradation and hydrogen evolution. *Chinese Chemical Letters*, **2020**, 31, 2668-2672	8.1	21
98	Functional carbon nitride materials for water oxidation: from heteroatom doping to interface engineering. *Nanoscale*, **2020**, 12, 6937-6952	7.7	20
97	Application of Biochar Derived From Pyrolysis of Waste Fiberboard on Tetracycline Adsorption in Aqueous Solution. *Frontiers in Chemistry*, **2019**, 7, 943	5	20
96	Nitrogen defects/boron dopants engineered tubular carbon nitride for efficient tetracycline hydrochloride photodegradation and hydrogen evolution. *Applied Catalysis B: Environmental*, **2022**, 303, 120932	21.8	20
95	Cuprous/Vanadium Sites on MIL-101 for Selective CO Adsorption from Gas Mixtures with Superior Stability. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 11284-11292	8.3	19
94	Volatile-char interactions during biomass pyrolysis: Cleavage of C-C bond in a β-5 lignin model dimer by amino-modified graphitized carbon nanotube. *Bioresource Technology*, **2020**, 307, 123192	11	19

93	Pt-Free microengines at extremely low peroxide levels. *Chemical Communications*, **2018**, 54, 4653-4656	5.8	19
92	Facile synthesis of Co-N-rGO composites as an excellent electrocatalyst for oxygen reduction reaction. *Chemical Engineering Science*, **2019**, 194, 45-53	4.4	19
91	Corrosion behavior and mechanism of selective laser melted Ti35Nb alloy produced using pre-alloyed and mixed powder in Hank solution. *Corrosion Science*, **2021**, 189, 109609	6.8	19
90	Atomic-level design of CoOH-hydroxyapatite@C catalysts for superfast degradation of organics via peroxymonosulfate activation. *Chemical Communications*, **2018**, 54, 4919-4922	5.8	18
89	A Hydrogen-Initiated Chemical Epitaxial Growth Strategy for In-Plane Heterostructured Photocatalyst. *ACS Nano*, **2020**,	16.7	18
88	Selective adsorption of rare earth ions from aqueous solution on metal-organic framework HKUST-1. *Chemical Engineering Journal Advances*, **2020**, 1, 100009	3.6	18
87	Heterogeneous activation of peroxymonosulfate by hierarchically porous cobalt/iron bimetallic oxide nanosheets for degradation of phenol solutions. *Chemosphere*, **2020**, 256, 127160	8.4	17
86	Cascade applications of robust MIL-96 metal organic frameworks in environmental remediation: Proof of concept. *Chemical Engineering Journal*, **2018**, 341, 262-271	14.7	17
85	Visible light photocatalytic degradation of organics on nanoparticles of bi-metallic oxides. *Separation and Purification Technology*, **2012**, 89, 98-106	8.3	17
84	UVC-assisted photocatalytic degradation of carbamazepine by Nd-doped SbO/TiO photocatalyst. *Journal of Colloid and Interface Science*, **2020**, 562, 461-469	9.3	17
83	Insights into the Adsorption of VOCs on a Cobalt-Adeninate Metal-Organic Framework (Bio-MOF-11). *ACS Omega*, **2020**, 5, 15402-15408	3.9	16
82	Synthesis of carbon xerogels at varying sol gel pHs, dye adsorption and chemical regeneration. *Chemical Engineering Journal*, **2011**, 171, 1399-1405	14.7	16
81	Graphitic Carbon Nitride Microtubes for Efficient Photocatalytic Overall Water Splitting: The Morphology Derived Electrical Field Enhancement. *ACS Sustainable Chemistry and Engineering*, **2020** , 8, 14386-14396	8.3	16
80	Enhanced removals of micropollutants in binary organic systems by biomass derived porous carbon/peroxymonosulfate. *Journal of Hazardous Materials*, **2021**, 408, 124459	12.8	16
79	Hierarchically porous hydrangea-like InS/InO heterostructures for enhanced photocatalytic hydrogen evolution. *Journal of Colloid and Interface Science*, **2021**, 587, 876-882	9.3	16
78	Conversion and transformation of N species during pyrolysis of wood-based panels: A review. *Environmental Pollution*, **2021**, 270, 116120	9.3	16
77	Hematite-based nanomaterials for photocatalytic degradation of pharmaceuticals and personal care products (PPCPs): A short review. *Current Opinion in Green and Sustainable Chemistry*, **2021**, 28, 100447	7.9	15
76	Cobalt Single Atoms Embedded in Nitrogen-Doped Graphene for Selective Oxidation of Benzyl Alcohol by Activated Peroxymonosulfate. *Small*, **2021**, 17, e2004579	11	15

75	Synergy of NiO quantum dots and temperature on enhanced photocatalytic and thermophoto hydrogen evolution. *Chemical Engineering Journal*, **2020**, 390, 124634	14.7	14
74	Photocatalytic reforming of biomass for hydrogen production over ZnS nanoparticles modified carbon nitride nanosheets. *Journal of Colloid and Interface Science*, **2019**, 555, 22-30	9.3	14
73	Heterogeneous electro-Fenton catalysis with self-supporting CFP@MnO-FeO/C cathode for shale gas fracturing flowback wastewater. *Journal of Hazardous Materials*, **2021**, 412, 125208	12.8	14
72	Kinetics and mechanism of synergistic adsorption and persulfate activation by N-doped porous carbon for antibiotics removals in single and binary solutions. *Journal of Hazardous Materials*, **2022**, 423, 127083	12.8	14
71	Comment on "Activation of Persulfate by Graphitized Nanodiamonds for Removal of Organic Compounds". *Environmental Science & Technology*, **2017**, 51, 5351-5352	10.3	13
70	Synergy of carbocatalytic and heat activation of persulfate for evolution of reactive radicals toward metal-free oxidation. *Catalysis Today*, **2020**, 355, 319-324	5.3	13
69	Aligning potential differences within carbon nitride based photocatalysis for efficient solar energy harvesting. *Nano Energy*, **2021**, 89, 106357	17.1	13
68	Design and Synthesis of a New Mannitol Stearate Ester-Based Aluminum Alkoxide as a Novel Tri-Functional Additive for Poly(Vinyl Chloride) and Its Synergistic Effect with Zinc Stearate. *Polymers*, **2019**, 11,	4.5	12
67	Ultrathin nickel-cobalt inorganic-organic hydroxide hybrid nanobelts as highly efficient electrocatalysts for oxygen evolution reaction. *Electrochimica Acta*, **2019**, 318, 966-976	6.7	12
66	Efficient removal of organic pollutants by ceramic hollow fibre supported composite catalyst. *Sustainable Materials and Technologies*, **2019**, 20, e00108	5.3	12
65	Volatile-char interactions during biomass pyrolysis: Contribution of amino group on graphitized carbon nanotube to xylose evolution based on experimental and theoretical studies. *Fuel*, **2020**, 282, 118921	7.1	12
64	Removal of Phenol Using Sulphate Radicals Activated by Natural Zeolite-Supported Cobalt Catalysts. *Water, Air, and Soil Pollution*, **2013**, 224, 1	2.6	12
63	Effect of Preparation Conditions on Visible Photocatalytic Activity of Titania Synthesized by Solution Combustion Method. *Chinese Journal of Chemical Engineering*, **2007**, 15, 178-183	3.2	12
62	Grand Challenges in Environmental Nanotechnology. *Frontiers in Nanotechnology*, **2019**, 1,	5.5	12
61	Atomically dispersed cobalt on graphitic carbon nitride as a robust catalyst for selective oxidation of ethylbenzene by peroxymonosulfate. *Journal of Materials Chemistry A*, **2021**, 9, 3029-3035	13	11
60	An efficient and robust exfoliated bentonite/AgPO/AgBr plasmonic photocatalyst for degradation of parabens.. *RSC Advances*, **2020**, 10, 16027-16037	3.7	10
59	Confinement of Ag(I) Sites within MIL-101 for Robust Ethylene/Ethane Separation. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 823-830	8.3	10
58	Heterogeneous activation of peroxymonosulfate by Co-doped FeO nanospheres for degradation of p-hydroxybenzoic acid. *Journal of Colloid and Interface Science*, **2021**, 604, 390-401	9.3	10

57	Temperature-Induced Variations in Photocatalyst Properties and Photocatalytic Hydrogen Evolution: Differences in UV, Visible, and Infrared Radiation. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 7277-7285	8.3	9
56	Facile Synthesis of Di-Mannitol Adipate Ester-Based Zinc Metal Alkoxide as a Bi-Functional Additive for Poly(Vinyl Chloride). *Polymers*, **2019**, 11,	4.5	8
55	Deformation and toughness behavior of □type titanium alloys comprising C15-type Laves phase. *Materials Today Sustainability*, **2020**, 9, 100034	5	8
54	Synthesis of pentaerythritol stearate ester-based zinc alkoxide and its synergistic effect with calcium stearate and zinc stearate on PVC thermal stability. *Journal of Vinyl and Additive Technology* , **2018**, 24, 314-323	2	8
53	Superstructures with Atomic-Level Arranged Perovskite and Oxide Layers for Advanced Oxidation with an Enhanced Non-Free Radical Pathway. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 1899-1909	8.3	8
52	Ultrafine copper nanoclusters and single sites for Fenton-like reactions with high atom utilities. *Environmental Science: Nano*, **2020**, 7, 2595-2606	7.1	8
51	Functional Carbon Nitride Materials in Photo-Fenton-Like Catalysis for Environmental Remediation. *Advanced Functional Materials*,2201743	15.6	8
50	Carbon Dots Based Photocatalysis for Environmental Applications. *Journal of Environmental Chemical Engineering*, **2022**, 10, 107336	6.8	7
49	Enhanced humidity sensing of functionalized reduced graphene oxide with 4-chloro-3-sulfophenylazo groups. *Sensors and Actuators B: Chemical*, **2019**, 287, 258-266	8.5	7
48	Temperature-dependent evolution of hydroxyl radicals from peroxymonosulfate activation over nitrogen-modified carbon nanotubes. *Sustainable Materials and Technologies*, **2018**, 18, e00082	5.3	7
47	Synthesis of Magnetic Carbon Supported Manganese Catalysts for Phenol Oxidation by Activation of Peroxymonosulfate. *Catalysts*, **2017**, 7, 3	4	6
46	Photoelectrochemical Water Oxidation and Longevous Photoelectric Conversion by a Photosystem II Electrode. *Advanced Energy Materials*, **2021**, 11, 2100911	21.8	6
45	Manganese-Based Micro/Nanomotors: Synthesis, Motion, and Applications. *Small*, **2021**, e2100927	11	6
44	Porous Carbon: Heteroatom (N or N-S)-Doping Induced Layered and Honeycomb Microstructures of Porous Carbons for CO2 Capture and Energy Applications (Adv. Funct. Mater. 47/2016). *Advanced Functional Materials*, **2016**, 26, 8650-8650	15.6	6
43	Effects of inter/intralayer adsorption and direct/indirect reaction on photo-removal of pollutants by layered g-C3N4 and BiOBr. *Journal of Cleaner Production*, **2021**, 322, 129025	10.3	6
42	Synergy of intermolecular Donor-Acceptor and ultrathin structures in crystalline carbon nitride for efficient photocatalytic hydrogen evolution. *Journal of Colloid and Interface Science*, **2022**, 607, 1603-1612	9.3	6
41	Carbon nitride-based Z-scheme heterojunctions for solar-driven advanced oxidation processes.. *Journal of Hazardous Materials*, **2022**, 434, 128866	12.8	6
40	COSMO-based solvent selection and Aspen Plus process simulation for tar absorptive removal. *Applied Energy*, **2019**, 251, 113314	10.7	5

39	Hydrogenolysis of lignin to phenolic monomers over Ru based catalysts with different metal-support interactions: Effect of partial hydrogenation of C(sp2)-O/C. *Fuel*, **2021**, 302, 121184	7.1	5
38	Atomic heterojunction-induced accelerated charge transfer for boosted photocatalytic hydrogen evolution over 1D CdS nanorod/2D ZnInS nanosheet composites. *Journal of Colloid and Interface Science*, **2021**, 604, 500-507	9.3	5
37	Morphology/facet-dependent photo-Fenton-like degradation of pharmaceuticals and personal care products over hematite nanocrystals. *Chemical Engineering Journal*, **2022**, 432, 134429	14.7	4
36	Effects of pH Values on the Physicochemical Properties and Photocatalytic Activities of Nitrogen-doped TiO2. *Wuji Cailiao Xuebao/Journal of Inorganic Materials*, **2008**, 23, 387-392	1	4
35	Wastewater Remediation Technologies Using Macroscopic Graphene-Based Materials: A Perspective. *Frontiers in Nanotechnology*, **2021**, 3,	5.5	4
34	Tailoring collaborative N□O functionalities of graphene oxide for enhanced selective oxidation of benzyl alcohol. *Carbon*, **2021**, 182, 715-715	10.4	4
33	Encapsulation of cuprous/cobalt sites in metal organic framework for enhanced CH/CH separation. *Journal of Colloid and Interface Science*, **2021**, 583, 605-613	9.3	4
32	van der Waals type II carbon nitride homojunctions for visible light photocatalytic hydrogen evolution. *Nano Research*,1	10	4
31	Decomposition of benzyl phenyl ether over char-supported Ni: The effect of char structures. *Fuel Processing Technology*, **2021**, 221, 106941	7.2	4
30	One□pot synthesis of boron and nitrogen co□doped nanocarbons for efficient catalytic reduction of nitrophenols. *Chemical Engineering Journal*, **2022**, 439, 135733	14.7	4
29	Porous Nitrogen-Defected Carbon Nitride Derived from A Precursor Pretreatment Strategy for Efficient Photocatalytic Degradation and Hydrogen Evolution.. *Langmuir*, **2022**,	4	3
28	Roles of Catalyst Structure and Gas Surface Reaction in the Generation of Hydroxyl Radicals for Photocatalytic Oxidation. *ACS Catalysis*,2770-2780	13.1	3
27	Graphitic carbon nitride nanosheets via acid pretreatments for promoted photocatalysis toward degradation of organic pollutants. *Journal of Colloid and Interface Science*, **2021**, 608, 1334-1347	9.3	3
26	The effect of carbon structure in chars on Fe migration and its catalytic activity for benzyl phenyl ether decomposition. *Journal of Analytical and Applied Pyrolysis*, **2021**, 154, 105008	6	3
25	Selective oxidation of alcohols by graphene-like carbon with electrophilic oxygen and integrated pyridinic nitrogen active sites. *Nanoscale*, **2021**, 13, 12979-12990	7.7	3
24	Efficient electro-Fenton catalysis by self-supported CFP@CoFeO electrode. *Journal of Hazardous Materials*, **2022**, 423, 127033	12.8	3
23	Highly dispersive Ru confined in porous ultrathin g-CN nanosheets as an efficient peroxymonosulfate activator for removal of organic pollutants.. *Journal of Hazardous Materials*, **2022**, 435, 128939	12.8	3
22	Challenges in radical/nonradical-based advanced oxidation processes for carbon recycling. *Chem Catalysis*, **2022**,		3

21	N Evolution and Physiochemical Structure Changes in Chars during Co-Pyrolysis: Effects of Abundance of Glucose in Fiberboard. *Energies*, **2020**, 13, 5105	3.1	2
20	Carbon Nitride Based Z-scheme Photocatalyst for Non-Sacrificial Overall Water Splitting. *Materials Today Energy*, **2021**, 23, 100915	7	2
19	Quasi-solid-state self-assembly of 1D-branched ZnSe/ZnS quantum rods into parallel monorail-like continuous films for solar devices. *Nano Energy*, **2021**, 89, 106348	17.1	2
18	Mechanism of the Doping Species Controlling the UV Photocatalytic Activity of Nitrogen Doped TiO2. *Wuji Cailiao Xuebao/Journal of Inorganic Materials*, **2009**, 24, 443-447	1	1
17	Simulated biomass tar removal mechanism by a Quench Coupled with ADsorption Technology (QCADT). *Chinese Journal of Chemical Engineering*, **2020**, 28, 279-285	3.2	1
16	Direct Z-scheme SiNWs@CoO photocathode with a cocatalyst of sludge-derived carbon quantum dots for efficient photoelectrochemical hydrogen production. *Science of the Total Environment*, **2021**, 796, 148931	10.2	1
15	Intrinsic Mechanisms of Morphological Engineering and Carbon Doping for Improved Photocatalysis of 2D/2D Carbon Nitride Van Der Waals Heterojunction. *Energy and Environmental Materials*,	13	1
14	Enhanced adsorption and visible-light photocatalysis on TiO with in situ formed carbon quantum dots.. *Environmental Science and Pollution Research*, **2022**, 1	5.1	1
13	Morphology-dependent photocatalysis of graphitic carbon nitride for sustainable remediation of aqueous pollutants: A mini review. *Journal of Environmental Chemical Engineering*, **2022**, 10, 107438	6.8	1
12	Regulation of energetic hot carriers on Pt/TiO2 with thermal energy for photothermal catalysis. *Applied Catalysis B: Environmental*, **2022**, 309, 121263	21.8	1
11	Atomic H* mediated fast decontamination of antibiotics by bubble-propelled magnetic iron-manganese oxides core-shell micromotors. *Applied Catalysis B: Environmental*, **2022**, 121484	21.8	1
10	Unzipping MWCNTs for controlled edge- and heteroatom-defects in revealing their roles in gas-phase oxidative dehydrogenation of ethanol to acetaldehyde. *Chemical Engineering Journal*, **2022**, 446, 137150	14.7	1
9	Carbon nitride photocatalysts **2018**, 103-126		0
8	Nano-sized FeVO4□1.1H2O and FeVO4 for peroxymonosulfate activation towards enhanced photocatalytic activity. *Journal of Environmental Chemical Engineering*, **2022**, 10, 107199	6.8	0
7	Controllable synthesis of a hollow Cr2O3 electrocatalyst for enhanced nitrogen reduction toward ammonia synthesis. *Chinese Journal of Chemical Engineering*, **2022**, 41, 358-365	3.2	0
6	Three-dimensional nitrogen-doped graphene oxide beads for catalytic degradation of aqueous pollutants. *Chemical Engineering Journal*, **2022**, 446, 137042	14.7	0
5	Sulfate radical-based advanced oxidation processes for water decontamination using biomass-derived carbon as catalysts. *Current Opinion in Chemical Engineering*, **2022**, 37, 100838	5.4	0
4	Photocatalytic and Photoelectrochemical Nitrogen Fixation **2021**, 301-337		

3 Artificial Photosynthesis and Solar Fuels **2021**, 7-39

2 Photocatalytic Oxygen Evolution **2021**, 129-162

1 The Study on the Pathogenesis of Pediatric Lymphoma Based on the Combination of Pseudotargeted and Targeted Metabolomics. *BioMed Research International*, **2021**, 2021, 9984357 3