Zhonghua Zhu

List of Publications by Citations

312	20,424	75	132
papers	citations	h-index	g-index
326	23,194	8.1	7.16
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
312	Nanoporous graphitic-C3N4@carbon metal-free electrocatalysts for highly efficient oxygen reduction. *Journal of the American Chemical Society*, **2011**, 133, 20116-9	16.4	869
311	Ultrathin Iron-Cobalt Oxide Nanosheets with Abundant Oxygen Vacancies for the Oxygen Evolution Reaction. *Advanced Materials*, **2017**, 29, 1606793	24	821
310	Nitrogen-Enriched Nonporous Carbon Electrodes with Extraordinary Supercapacitance. *Advanced Functional Materials*, **2009**, 19, 1800-1809	15.6	664
309	Hybrid graphene and graphitic carbon nitride nanocomposite: gap opening, electron-hole puddle, interfacial charge transfer, and enhanced visible light response. *Journal of the American Chemical Society*, **2012**, 134, 4393-7	16.4	490
308	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
307	Microstructure and electrochemical double-layer capacitance of carbon electrodes prepared by zinc chloride activation of sugar cane bagasse. *Journal of Power Sources*, **2010**, 195, 912-918	8.9	396
306	Nanoporous carbon electrode from waste coffee beans for high performance supercapacitors. *Electrochemistry Communications*, **2008**, 10, 1594-1597	5.1	373
305	Phosphate removal from wastewater using red mud. *Journal of Hazardous Materials*, **2008**, 158, 35-42	12.8	329
304	A Perovskite Electrocatalyst for Efficient Hydrogen Evolution Reaction. *Advanced Materials*, **2016**, 28, 6442-8	24	315
303	Advanced synthesis of materials for intermediate-temperature solid oxide fuel cells. *Progress in Materials Science*, **2012**, 57, 804-874	42.2	306
302	Non precious metal catalysts for the PEM fuel cell cathode. *International Journal of Hydrogen Energy*, **2012**, 37, 357-372	6.7	294
301	Graphdiyne: a versatile nanomaterial for electronics and hydrogen purification. *Chemical Communications*, **2011**, 47, 11843-5	5.8	289
300	Characterisation and environmental application of an Australian natural zeolite for basic dye removal from aqueous solution. *Journal of Hazardous Materials*, **2006**, 136, 946-52	12.8	278
299	Multifunctional porous graphene for nanoelectronics and hydrogen storage: new properties revealed by first principle calculations. *Journal of the American Chemical Society*, **2010**, 132, 2876-7	16.4	277
298	Surface controlled generation of reactive radicals from persulfate by carbocatalysis on nanodiamonds. *Applied Catalysis B: Environmental*, **2016**, 194, 7-15	21.8	277
297	The physical and surface chemical characteristics of activated carbons and the adsorption of methylene blue from wastewater. *Journal of Colloid and Interface Science*, **2005**, 284, 440-6	9.3	258
296	Identification of active sites for acidic oxygen reduction on carbon catalysts with and without nitrogen doping. *Nature Catalysis*, **2019**, 2, 688-695	36.5	251

295	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
294	Metal organic framework based mixed matrix membranes: an overview on filler/polymer interfaces. *Journal of Materials Chemistry A*, **2018**, 6, 293-312	13	235
293	Uncommon Pyrazoyl-Carboxyl Bifunctional Ligand-Based Microporous Lanthanide Systems: Sorption and Luminescent Sensing Properties. *Inorganic Chemistry*, **2016**, 55, 3952-9	5.1	231
292	Hybrid Graphene/Titania Nanocomposite: Interface Charge Transfer, Hole Doping, and Sensitization for Visible Light Response. *Journal of Physical Chemistry Letters*, **2011**, 2, 894-9	6.4	230
291	Effects of acidic treatment of activated carbons on dye adsorption. *Dyes and Pigments*, **2007**, 75, 306-314	4.6	200
290	Geopolymeric adsorbents from fly ash for dye removal from aqueous solution. *Journal of Colloid and Interface Science*, **2006**, 300, 52-9	9.3	195
289	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
288	Highly defective CeO2 as a promoter for efficient and stable water oxidation. *Journal of Materials Chemistry A*, **2015**, 3, 634-640	13	169
287	Recent Progress on Advanced Materials for Solid-Oxide Fuel Cells Operating Below 500 °C. *Advanced Materials*, **2017**, 29, 1700132	24	167
286	Layer structured graphite oxide as a novel adsorbent for humic acid removal from aqueous solution. *Journal of Colloid and Interface Science*, **2009**, 333, 114-9	9.3	160
285	Dots versus antidots: computational exploration of structure, magnetism, and half-metallicity in boron-nitride nanostructures. *Journal of the American Chemical Society*, **2009**, 131, 17354-9	16.4	158
284	Ultrasmall Water-Soluble and Biocompatible Magnetic Iron Oxide Nanoparticles as Positive and Negative Dual Contrast Agents. *Advanced Functional Materials*, **2012**, 22, 2387-2393	15.6	155
283	Coal ash conversion into effective adsorbents for removal of heavy metals and dyes from wastewater. *Journal of Hazardous Materials*, **2006**, 133, 243-51	12.8	153
282	Lithium-Catalyzed Dehydrogenation of Ammonia Borane within Mesoporous Carbon Framework for Chemical Hydrogen Storage. *Advanced Functional Materials*, **2009**, 19, 265-271	15.6	148
281	A niobium and tantalum co-doped perovskite cathode for solid oxide fuel cells operating below 500 °C. *Nature Communications*, **2017**, 8, 13990	17.4	144
280	Porous MOF with Highly Efficient Selectivity and Chemical Conversion for CO. *ACS Applied Materials & Interfaces*, **2017**, 9, 17969-17976	9.5	141
279	Defective-Activated-Carbon-Supported Mn-Co Nanoparticles as a Highly Efficient Electrocatalyst for Oxygen Reduction. *Advanced Materials*, **2016**, 28, 8771-8778	24	139
278	Catalytic ammonia decomposition over Ru/carbon catalysts: The importance of the structure of carbon support. *Applied Catalysis A: General*, **2007**, 320, 166-172	5.1	139

277	Mixed matrix membranes with strengthened MOFs/polymer interfacial interaction and improved membrane performance. *ACS Applied Materials & Interfaces*, **2014**, 6, 5609-18	9.5	132
276	Surface modification of carbon fuels for direct carbon fuel cells. *Journal of Power Sources*, **2009**, 186, 1-9	8.9	125
275	High performance cobalt-free perovskite cathode for intermediate temperature solid oxide fuel cells. *Journal of Materials Chemistry*, **2010**, 20, 9619		123
274	Double-layer capacitance of waste coffee ground activated carbons in an organic electrolyte. *Electrochemistry Communications*, **2009**, 11, 974-977	5.1	123
273	Mixed matrix membranes incorporated with size-reduced Cu-BTC for improved gas separation. *Journal of Materials Chemistry A*, **2013**, 1, 6350	13	122
272	High activity electrocatalysts from metal–organic framework-carbon nanotube templates for the oxygen reduction reaction. *Carbon*, **2015**, 82, 417-424	10.4	121
271	A Surfactant-Free and Scalable General Strategy for Synthesizing Ultrathin Two-Dimensional Metal-Organic Framework Nanosheets for the Oxygen Evolution Reaction. *Angewandte Chemie - International Edition*, **2019**, 58, 13565-13572	16.4	121
270	Calcium-doped lanthanum nickelate layered perovskite and nickel oxide nano-hybrid for highly efficient water oxidation. *Nano Energy*, **2015**, 12, 115-122	17.1	120
269	Evaluation of raw coals as fuels for direct carbon fuel cells. *Journal of Power Sources*, **2010**, 195, 4051-4058	8.9	120
268	High activity and durability of novel perovskite electrocatalysts for water oxidation. *Materials Horizons*, **2015**, 2, 495-501	14.4	119
267	Defect-Induced Pt-Co-Se Coordinated Sites with Highly Asymmetrical Electronic Distribution for Boosting Oxygen-Involving Electrocatalysis. *Advanced Materials*, **2019**, 31, e1805581	24	118
266	An ab initio study on gas sensing properties of graphene and Si-doped graphene. *European Physical Journal B*, **2011**, 81, 475-479	1.2	117
265	Amphiphobic PVDF composite membranes for anti-fouling direct contact membrane distillation. *Journal of Membrane Science*, **2016**, 505, 61-69	9.6	115
264	Activated carbon becomes active for oxygen reduction and hydrogen evolution reactions. *Chemical Communications*, **2016**, 52, 8156-9	5.8	114
263	Metallic and carbon nanotube-catalyzed coupling of hydrogenation in magnesium. *Journal of the American Chemical Society*, **2007**, 129, 15650-4	16.4	114
262	Ionic Liquids as the MOFs/Polymer Interfacial Binder for Efficient Membrane Separation. *ACS Applied Materials & Interfaces*, **2016**, 8, 32041-32049	9.5	112
261	Tuning oxygen vacancies in two-dimensional iron-cobalt oxide nanosheets through hydrogenation for enhanced oxygen evolution activity. *Nano Research*, **2018**, 11, 3509-3518	10	110
260	Efficient light hydrocarbon separation and CO capture and conversion in a stable MOF with oxalamide-decorated polar tubes. *Chemical Communications*, **2017**, 53, 12970-12973	5.8	109

259	MnO2 activation of peroxymonosulfate for catalytic phenol degradation in aqueous solutions. *Catalysis Communications*, **2012**, 26, 144-148	3.2	108
258	Novel B-site ordered double perovskite Ba2Bi0.1Sc0.2Co1.7O6 for highly efficient oxygen reduction reaction. *Energy and Environmental Science*, **2011**, 4, 872-875	35.4	108
257	Characteristics of coal fly ash and adsorption application. *Fuel*, **2008**, 87, 3469-3473	7.1	102
256	An Uncommon Carboxyl-Decorated Metal-Organic Framework with Selective Gas Adsorption and Catalytic Conversion of CO. *Chemistry - A European Journal*, **2018**, 24, 865-871	4.8	101
255	Honeycomb Metal-Organic Framework with Lewis Acidic and Basic Bifunctional Sites: Selective Adsorption and CO Catalytic Fixation. *ACS Applied Materials & Interfaces*, **2018**, 10, 10965-10973	9.5	100
254	C-BN single-walled nanotubes from hybrid connection of BN/C nanoribbons: prediction by ab initio density functional calculations. *Journal of the American Chemical Society*, **2009**, 131, 1682-3	16.4	100
253	Effects of acid treatments of carbon on N2O and NO reduction by carbon-supported copper catalysts. *Carbon*, **2000**, 38, 451-464	10.4	99
252	Mixed-Matrix Membranes with Metal-Organic Framework-Decorated CNT Fillers for Efficient CO2 Separation. *ACS Applied Materials & Interfaces*, **2015**, 7, 14750-7	9.5	96
251	Enhanced gas permeability by fabricating functionalized multi-walled carbon nanotubes and polyethersulfone nanocomposite membrane. *Separation and Purification Technology*, **2011**, 78, 76-82	8.3	96
250	Factors That Determine the Performance of Carbon Fuels in the Direct Carbon Fuel Cell. *Industrial & Engineering Chemistry Research*, **2008**, 47, 9670-9677	3.9	96
249	Cobalt Oxide and Cobalt-Graphitic Carbon Core-Shell Based Catalysts with Remarkably High Oxygen Reduction Reaction Activity. *Advanced Science*, **2016**, 3, 1600060	13.6	92
248	Activated carbon monoliths with hierarchical pore structure from tar pitch and coal powder for the adsorption of CO2, CH4 and N2. *Carbon*, **2016**, 103, 115-124	10.4	89
247	Nanosheets Co3O4 Interleaved with Graphene for Highly Efficient Oxygen Reduction. *ACS Applied Materials & Interfaces*, **2015**, 7, 21373-80	9.5	87
246	In situ synthesis of zeolitic imidazolate frameworks/carbon nanotube composites with enhanced CO adsorption. *Dalton Transactions*, **2014**, 43, 7028-36	4.3	87
245	A single boron atom doped boron nitride edge as a metal-free catalyst for N fixation. *Physical Chemistry Chemical Physics*, **2019**, 21, 1110-1116	3.6	84
244	Humic acid adsorption on fly ash and its derived unburned carbon. *Journal of Colloid and Interface Science*, **2007**, 315, 41-6	9.3	84
243	Plasma-Triggered Synergy of Exfoliation, Phase Transformation, and Surface Engineering in Cobalt Diselenide for Enhanced Water Oxidation. *Angewandte Chemie - International Edition*, **2018**, 57, 16421-16425	16.4	84
242	Solvent or temperature induced diverse coordination polymers of silver(I) sulfate and bipyrazole systems: syntheses, crystal structures, luminescence, and sorption properties. *Inorganic Chemistry*, **2013**, 52, 14018-27	5.1	83

241	A Comparative Study of Oxygen Reduction Reaction on Bi- and La-Doped SrFeO[sub 3] Perovskite Cathodes. *Journal of the Electrochemical Society*, **2011**, 158, B132	3.9	83
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236	A density functional theory study on CO2 capture and activation by graphene-like boron nitride with boron vacancy. *Catalysis Today*, **2011**, 175, 271-275	5.3	74
235	Sulfur-Modified Oxygen Vacancies in Iron-Cobalt Oxide Nanosheets: Enabling Extremely High Activity of the Oxygen Evolution Reaction to Achieve the Industrial Water Splitting Benchmark. *Angewandte Chemie - International Edition*, **2020**, 59, 14664-14670	16.4	73
234	Metal□support interface of a novel Ni□CeO2 catalyst for dry reforming of methane. *Catalysis Communications*, **2013**, 31, 25-31	3.2	73
233	Investigation of Gas Permeability in Carbon Nanotube (CNT)□Polymer Matrix Membranes via Modifying CNTs with Functional Groups/Metals and Controlling Modification Location. *Journal of Physical Chemistry C*, **2011**, 115, 6661-6670	3.8	72
232	Amorphous Iron Oxide Decorated 3D Heterostructured Electrode for Highly Efficient Oxygen Reduction. *Chemistry of Materials*, **2011**, 23, 4193-4198	9.6	72
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230	Insights into hydrogen atom adsorption on and the electrochemical properties of nitrogen-substituted carbon materials. *Journal of Physical Chemistry B*, **2005**, 109, 16744-9	3.4	69
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187	Selective catalytic reduction of NO by CO over CuO supported on SBA-15: Effect of CuO loading on the activity of catalysts. *Catalysis Today*, **2011**, 166, 188-193	5.3	42
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185	SrCo0.85Fe0.1P0.05O3 perovskite as a cathode for intermediate-temperature solid oxide fuel cells. *Journal of Materials Chemistry A*, **2013**, 1, 13632	13	41
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176	KOH catalysed preparation of activated carbon aerogels for dye adsorption. *Journal of Colloid and Interface Science*, **2011**, 357, 157-62	9.3	38
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