

# Zhongwei Chen

## List of Publications by Citations

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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.

387  
papers

32,214  
citations

95  
h-index

168  
g-index

407  
ext. papers

38,014  
ext. citations

10.9  
avg, IF

7.84  
L-index

#	Paper	IF	Citations
387	30 Years of Lithium-Ion Batteries. <i>Advanced Materials</i> , <b>2018</b> , 30, e1800561	24	1694
386	A review on non-precious metal electrocatalysts for PEM fuel cells. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 3167	35.4	1495
385	Batteries and fuel cells for emerging electric vehicle markets. <i>Nature Energy</i> , <b>2018</b> , 3, 279-289	62.3	1176
384	A review of graphene and graphene oxide sponge: material synthesis and applications to energy and the environment. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 1564	35.4	860
383	Electrically Rechargeable Zinc-Air Batteries: Progress, Challenges, and Perspectives. <i>Advanced Materials</i> , <b>2017</b> , 29, 1604685	24	806
382	Supportless Pt and PtPd nanotubes as electrocatalysts for oxygen-reduction reactions. <i>Angewandte Chemie - International Edition</i> , <b>2007</b> , 46, 4060-3	16.4	720
381	Durability investigation of carbon nanotube as catalyst support for proton exchange membrane fuel cell. <i>Journal of Power Sources</i> , <b>2006</b> , 158, 154-159	8.9	526
380	A soluble and highly conductive ionomer for high-performance hydroxide exchange membrane fuel cells. <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 6499-502	16.4	510
379	Silicon-Based Anodes for Lithium-Ion Batteries: From Fundamentals to Practical Applications. <i>Small</i> , <b>2018</b> , 14, 1702737	11	433
378	One-pot synthesis of a mesoporous NiCo <sub>2</sub> O <sub>4</sub> nanoplatelet and graphene hybrid and its oxygen reduction and evolution activities as an efficient bi-functional electrocatalyst. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 4754	13	431
377	The application of graphene and its composites in oxygen reduction electrocatalysis: a perspective and review of recent progress. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 357-390	35.4	387
376	Highly active and durable core-corona structured bifunctional catalyst for rechargeable metal-air battery application. <i>Nano Letters</i> , <b>2012</b> , 12, 1946-52	11.5	350
375	Functionalized Graphene Oxide Nanocomposite Membrane for Low Humidity and High Temperature Proton Exchange Membrane Fuel Cells. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 20774-20781	38	346
374	Recent progress and perspectives on bi-functional oxygen electrocatalysts for advanced rechargeable metal-air batteries. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 7107-7134	13	337
373	Nitrogen doped carbon nanotubes and their impact on the oxygen reduction reaction in fuel cells. <i>Carbon</i> , <b>2010</b> , 48, 3057-3065	10.4	323
372	Highly Active Nitrogen-Doped Carbon Nanotubes for Oxygen Reduction Reaction in Fuel Cell Applications. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 21008-21013	3.8	322
371	Ultrathin, transparent, and flexible graphene films for supercapacitor application. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 253105	3.4	316

370	Multifunctional TiO <sub>2</sub> -C/MnO <sub>2</sub> core-double-shell nanowire arrays as high-performance 3D electrodes for lithium ion batteries. <i>Nano Letters</i> , <b>2013</b> , 13, 5467-73	11.5	305
369	Structural and chemical synergistic encapsulation of polysulfides enables ultralong-life lithium-sulfur batteries. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 2533-2538	35.4	300
368	Revisiting the Role of Polysulfides in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2018</b> , 30, e1705590	24	291
367	Interactions of multiple processes during CBM extraction: A critical review. <i>International Journal of Coal Geology</i> , <b>2011</b> , 87, 175-189	5.5	279
366	New Concepts in Electrolytes. <i>Chemical Reviews</i> , <b>2020</b> , 120, 6783-6819	68.1	267
365	Nafion/Zeolite Nanocomposite Membrane by in Situ Crystallization for a Direct Methanol Fuel Cell. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 5669-5675	9.6	258
364	Free-Standing Layer-By-Layer Hybrid Thin Film of Graphene-MnO <sub>2</sub> Nanotube as Anode for Lithium Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , <b>2011</b> , 2, 1855-1860	6.4	251
363	Graphene-Based Flexible Supercapacitors: Pulse-Electropolymerization of Polypyrrole on Free-Standing Graphene Films. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 17612-17620	3.8	234
362	Biologically inspired highly durable iron phthalocyanine catalysts for oxygen reduction reaction in polymer electrolyte membrane fuel cells. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 17056-8	16.4	230
361	Sulfonated Ordered Mesoporous Carbon as a Stable and Highly Active Protonic Acid Catalyst. <i>Chemistry of Materials</i> , <b>2007</b> , 19, 2395-2397	9.6	228
360	Advanced Extremely Durable 3D Bifunctional Air Electrodes for Rechargeable Zinc-Air Batteries. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1301389	21.8	224
359	Pomegranate-Inspired Design of Highly Active and Durable Bifunctional Electrocatalysts for Rechargeable Metal-Air Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 4977-82	16.4	218
358	Recent Progress in Electrically Rechargeable Zinc-Air Batteries. <i>Advanced Materials</i> , <b>2019</b> , 31, e1805230	24	204
357	Flexible High-Energy Polymer-Electrolyte-Based Rechargeable Zinc-Air Batteries. <i>Advanced Materials</i> , <b>2015</b> , 27, 5617-22	24	200
356	Polyaniline-derived Non-Precious Catalyst for the Polymer Electrolyte Fuel Cell Cathode. <i>ECS Transactions</i> , <b>2009</b> , 16, 159-170	1	197
355	A flexible solid-state electrolyte for wide-scale integration of rechargeable zinc-air batteries. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 663-670	35.4	194
354	Stringed Tube on cube-nanohybrids as compact cathode matrix for high-loading and lean-electrolyte lithium-sulfur batteries. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2372-2381	35.4	193
353	Development and Simulation of Sulfur-doped Graphene Supported Platinum with Exemplary Stability and Activity Towards Oxygen Reduction. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4325-4336	15.6	184

352	Interpenetrating Triphase Cobalt-Based Nanocomposites as Efficient Bifunctional Oxygen Electrocatalysts for Long-Lasting Rechargeable Zn/Air Batteries. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702900	21.8	183
351	Carbon nanotube film by filtration as cathode catalyst support for proton-exchange membrane fuel cell. <i>Langmuir</i> , <b>2005</b> , 21, 9386-9	4	182
350	Hollow Multivoid Nanocuboids Derived from Ternary NiCoFe Prussian Blue Analog for Dual-Electrocatalysis of Oxygen and Hydrogen Evolution Reactions. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1802129	15.6	180
349	Self-Assembled NiO/Ni(OH) <sub>2</sub> Nanoflakes as Active Material for High-Power and High-Energy Hybrid Rechargeable Battery. <i>Nano Letters</i> , <b>2016</b> , 16, 1794-802	11.5	175
348	Conductive Nanocrystalline Niobium Carbide as High-Efficiency Polysulfides Tamer for Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1704865	15.6	173
347	In Situ Polymer Graphenization Ingrained with Nanoporosity in a Nitrogenous Electrocatalyst Boosting the Performance of Polymer-Electrolyte-Membrane Fuel Cells. <i>Advanced Materials</i> , <b>2017</b> , 29, 1604456	24	161
346	Controllable Urchin-Like NiCo <sub>2</sub> S <sub>4</sub> Microsphere Synergized with Sulfur-Doped Graphene as Bifunctional Catalyst for Superior Rechargeable Zn/Air Battery. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1706675	15.6	160
345	Chemisorption of polysulfides through redox reactions with organic molecules for lithium-sulfur batteries. <i>Nature Communications</i> , <b>2018</b> , 9, 705	17.4	159
344	Facile Hydrothermal Synthesis of VS <sub>2</sub> /Graphene Nanocomposites with Superior High-Rate Capability as Lithium-Ion Battery Cathodes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 13044-52	9.5	159
343	Flexible Rechargeable Zinc-Air Batteries through Morphological Emulation of Human Hair Array. <i>Advanced Materials</i> , <b>2016</b> , 28, 6421-8	24	154
342	A review of composite solid-state electrolytes for lithium batteries: fundamentals, key materials and advanced structures. <i>Chemical Society Reviews</i> , <b>2020</b> , 49, 8790-8839	58.5	153
341	Sulfur Atoms Bridging Few-Layered MoS <sub>2</sub> with S-Doped Graphene Enable Highly Robust Anode for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1501106	21.8	152
340	Dual poroelastic response of a coal seam to CO <sub>2</sub> injection. <i>International Journal of Greenhouse Gas Control</i> , <b>2010</b> , 4, 668-678	4.2	146
339	Pt-Ru supported on double-walled carbon nanotubes as high-performance anode catalysts for direct methanol fuel cells. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 15353-8	3.4	146
338	Oxygen Reduction on Graphene/Carbon Nanotube Composites Doped Sequentially with Nitrogen and Sulfur. <i>ACS Catalysis</i> , <b>2014</b> , 4, 2734-2740	13.1	145
337	Electrospun porous nanorod perovskite oxide/nitrogen-doped graphene composite as a bi-functional catalyst for metal air batteries. <i>Nano Energy</i> , <b>2014</b> , 10, 192-200	17.1	145
336	Manganese dioxide nanotube and nitrogen-doped carbon nanotube based composite bifunctional catalyst for rechargeable zinc-air battery. <i>Electrochimica Acta</i> , <b>2012</b> , 69, 295-300	6.7	145
335	Nitrogen-Doped Carbon Nanotubes as Platinum Catalyst Supports for Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cells. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 21982-21988	3.8	145

334	Sulfur covalently bonded graphene with large capacity and high rate for high-performance sodium-ion batteries anodes. <i>Nano Energy</i> , <b>2015</b> , 15, 746-754	17.1	144
333	3-Dimensional porous N-doped graphene foam as a non-precious catalyst for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 3343-3350	13	142
332	Synergistic bifunctional catalyst design based on perovskite oxide nanoparticles and intertwined carbon nanotubes for rechargeable zinc-air battery applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 902-10	9.5	136
331	Recycling of mixed cathode lithium-ion batteries for electric vehicles: Current status and future outlook <b>2020</b> , 2, 6-43		136
330	Co-N Decorated Hierarchically Porous Graphene Aerogel for Efficient Oxygen Reduction Reaction in Acid. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 6488-95	9.5	136
329	Evidence of covalent synergy in silicon-sulfur-graphene yielding highly efficient and long-life lithium-ion batteries. <i>Nature Communications</i> , <b>2015</b> , 6, 8597	17.4	133
328	Highly Active Porous Carbon-Supported Nonprecious Metal <sub>N</sub> Electrocatalyst for Oxygen Reduction Reaction in PEM Fuel Cells. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 8048-8053	3.8	133
327	3D Porous Carbon Sheets with Multidirectional Ion Pathways for Fast and Durable Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702381	21.8	132
326	Defect Engineering of Chalcogen-Tailored Oxygen Electrocatalysts for Rechargeable Quasi-Solid-State Zinc-Air Batteries. <i>Advanced Materials</i> , <b>2017</b> , 29, 1702526	24	131
325	Two-Dimensional Phosphorus-Doped Carbon Nanosheets with Tunable Porosity for Oxygen Reactions in Zinc-Air Batteries. <i>ACS Catalysis</i> , <b>2018</b> , 8, 2464-2472	13.1	129
324	Strings of Porous Carbon Polyhedrons as Self-Standing Cathode Host for High-Energy-Density Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 6176-6180	16.4	127
323	The Current State of Aqueous Zn-Based Rechargeable Batteries. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 1665-1675	20.1	127
322	Implementing an in-situ carbon network in Si/reduced graphene oxide for high performance lithium-ion battery anodes. <i>Nano Energy</i> , <b>2016</b> , 19, 187-197	17.1	124
321	Determination of Iron Active Sites in Pyrolyzed Iron-Based Catalysts for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , <b>2012</b> , 2, 2761-2768	13.1	124
320	Evolution of coal permeability from stress-controlled to displacement-controlled swelling conditions. <i>Fuel</i> , <b>2011</b> , 90, 2987-2997	7.1	124
319	Ionothermal synthesis of oriented zeolite AEL films and their application as corrosion-resistant coatings. <i>Angewandte Chemie - International Edition</i> , <b>2008</b> , 47, 525-8	16.4	123
318	Polyaniline nanofibre supported platinum nanoelectrocatalysts for direct methanol fuel cells. <i>Nanotechnology</i> , <b>2006</b> , 17, 5254-5259	3.4	123
317	Effect of the effective stress coefficient and sorption-induced strain on the evolution of coal permeability: Experimental observations. <i>International Journal of Greenhouse Gas Control</i> , <b>2011</b> , 5, 1284-1293	4.2	122

316	Developing high safety Li-metal anodes for future high-energy Li-metal batteries: strategies and perspectives. <i>Chemical Society Reviews</i> , <b>2020</b> , 49, 5407-5445	58.5	121
315	Ni-Rich/Co-Poor Layered Cathode for Automotive Li-Ion Batteries: Promises and Challenges. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1903864	21.8	119
314	Nitrogen doped carbon nanotubes synthesized from aliphatic diamines for oxygen reduction reaction. <i>Electrochimica Acta</i> , <b>2011</b> , 56, 1570-1575	6.7	119
313	3D Ordered Mesoporous Bifunctional Oxygen Catalyst for Electrically Rechargeable Zinc-Air Batteries. <i>Small</i> , <b>2016</b> , 12, 2707-14	11	117
312	Enhanced Reversible Sodium-Ion Intercalation by Synergistic Coupling of Few-Layered MoS <sub>2</sub> and S-Doped Graphene. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1702562	15.6	116
311	Laminated Cross-Linked Nanocellulose/Graphene Oxide Electrolyte for Flexible Rechargeable Zinc-Air Batteries. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600476	21.8	115
310	Impact of transition from local swelling to macro swelling on the evolution of coal permeability. <i>International Journal of Coal Geology</i> , <b>2011</b> , 88, 31-40	5.5	114
309	Evaluation of stress-controlled coal swelling processes. <i>International Journal of Coal Geology</i> , <b>2010</b> , 83, 446-455	5.5	110
308	Modelling and optimization of enhanced coalbed methane recovery using CO <sub>2</sub> /N <sub>2</sub> mixtures. <i>Fuel</i> , <b>2019</b> , 253, 1114-1129	7.1	108
307	Multigrain platinum nanowires consisting of oriented nanoparticles anchored on sulfur-doped graphene as a highly active and durable oxygen reduction electrocatalyst. <i>Advanced Materials</i> , <b>2015</b> , 27, 1229-34	24	106
306	Linking gas-sorption induced changes in coal permeability to directional strains through a modulus reduction ratio. <i>International Journal of Coal Geology</i> , <b>2010</b> , 83, 21-30	5.5	104
305	Is the rapid initial performance loss of Fe/N/C non precious metal catalysts due to micropore flooding?. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 296-305	35.4	103
304	Engineered Si electrode nanoarchitecture: a scalable postfabrication treatment for the production of next-generation Li-ion batteries. <i>Nano Letters</i> , <b>2014</b> , 14, 277-83	11.5	103
303	Nitrogen-doped carbon nanotubes as air cathode catalysts in zinc-air battery. <i>Electrochimica Acta</i> , <b>2011</b> , 56, 5080-5084	6.7	102
302	Paper-based all-solid-state flexible micro-supercapacitors with ultra-high rate and rapid frequency response capabilities. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 3754-3764	13	101
301	Influence of the effective stress coefficient and sorption-induced strain on the evolution of coal permeability: Model development and analysis. <i>International Journal of Greenhouse Gas Control</i> , <b>2012</b> , 8, 101-110	4.2	101
300	Fundamental Understanding and Material Challenges in Rechargeable Nonaqueous LiO <sub>2</sub> Batteries: Recent Progress and Perspective. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1800348	21.8	101
299	CNT-threaded N-doped porous carbon film as binder-free electrode for high-capacity supercapacitor and LiS battery. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 9775-9784	13	99

298	An all-aqueous redox flow battery with unprecedented energy density. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2010-2015	35.4	99
297	Design of Highly Active Perovskite Oxides for Oxygen Evolution Reaction by Combining Experimental and ab Initio Studies. <i>ACS Catalysis</i> , <b>2015</b> , 5, 4337-4344	13.1	98
296	Dual phase Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> /TiO <sub>2</sub> nanowire arrays as integrated anodes for high-rate lithium-ion batteries. <i>Nano Energy</i> , <b>2014</b> , 9, 383-391	17.1	97
295	Nitrogen-doped hollow porous carbon polyhedrons embedded with highly dispersed Pt nanoparticles as a highly efficient and stable hydrogen evolution electrocatalyst. <i>Nano Energy</i> , <b>2017</b> , 40, 88-94	17.1	96
294	Polysulfide Regulation by the Zwitterionic Barrier toward Durable Lithium-Sulfur Batteries. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 3583-3592	16.4	95
293	Effects of non-Darcy flow on the performance of coal seam gas wells. <i>International Journal of Coal Geology</i> , <b>2012</b> , 93, 62-74	5.5	95
292	Preferentially Engineering FeN Edge Sites onto Graphitic Nanosheets for Highly Active and Durable Oxygen Electrocatalysis in Rechargeable Zn-Air Batteries. <i>Advanced Materials</i> , <b>2020</b> , 32, e2004900	24	94
291	Shape-controlled octahedral cobalt disulfide nanoparticles supported on nitrogen and sulfur-doped graphene/carbon nanotube composites for oxygen reduction in acidic electrolyte. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 6340-6350	13	93
290	A dual poroelastic model for CO <sub>2</sub> -enhanced coalbed methane recovery. <i>International Journal of Coal Geology</i> , <b>2011</b> , 86, 177-189	5.5	93
289	Dynamic electrocatalyst with current-driven oxyhydroxide shell for rechargeable zinc-air battery. <i>Nature Communications</i> , <b>2020</b> , 11, 1952	17.4	93
288	Electrocatalytic activity of nitrogen doped carbon nanotubes with different morphologies for oxygen reduction reaction. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 4799-4804	6.7	92
287	Gas Pickering Emulsion Templated Hollow Carbon for High Rate Performance Lithium Sulfur Batteries. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 8408-8417	15.6	90
286	Nanotechnology for environmentally sustainable electromobility. <i>Nature Nanotechnology</i> , <b>2016</b> , 11, 1039-1051	28.95	190
285	High Performance Hydrogen Fuel Cells with Ultralow Pt Loading Carbon Nanotube Thin Film Catalysts. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 17901-17904	3.8	89
284	Molecular sieving in a nanoporous b-oriented pure-silica-zeolite MFI monocrystal film. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 4122-3	16.4	86
283	Multidimensional Ordered Bifunctional Air Electrode Enables Flash Reactants Shuttling for High-Energy Flexible Zn-Air Batteries. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1900911	21.8	85
282	Hierarchical Defective Fe <sub>3</sub> -xC@C Hollow Microsphere Enables Fast and Long-Lasting Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2001165	15.6	85
281	Rational design of tailored porous carbon-based materials for CO <sub>2</sub> capture. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 20985-21003	13	84

280	Cationic and anionic redox in lithium-ion based batteries. <i>Chemical Society Reviews</i> , <b>2020</b> , 49, 1688-1705	58.5	84
279	Pore structure characterization of coal by synchrotron radiation nano-CT. <i>Fuel</i> , <b>2018</b> , 215, 102-110	7.1	84
278	The Dual-Play of 3D Conductive Scaffold Embedded with Co, N Codoped Hollow Polyhedra toward High-Performance LiB Full Cell. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1802561	21.8	83
277	Carbon-Coated Silicon Nanowires on Carbon Fabric as Self-Supported Electrodes for Flexible Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 9551-9558	9.5	81
276	Free-Standing Functionalized Graphene Oxide Solid Electrolytes in Electrochemical Gas Sensors. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 1729-1736	15.6	81
275	"Ship in a Bottle" Design of Highly Efficient Bifunctional Electrocatalysts for Long-Lasting Rechargeable Zn-Air Batteries. <i>ACS Nano</i> , <b>2019</b> , 13, 7062-7072	16.7	78
274	Titanium nitride-carbon nanotube core-shell composites as effective electrocatalyst supports for low temperature fuel cells. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 3727		78
273	Impact of CO <sub>2</sub> injection and differential deformation on CO <sub>2</sub> injectivity under in-situ stress conditions. <i>International Journal of Coal Geology</i> , <b>2010</b> , 81, 97-108	5.5	78
272	Perovskite-nitrogen-doped carbon nanotube composite as bifunctional catalysts for rechargeable lithium-air batteries. <i>ChemSusChem</i> , <b>2015</b> , 8, 1058-65	8.3	77
271	Oxygen Reduction Reaction Using MnO <sub>2</sub> Nanotubes/Nitrogen-Doped Exfoliated Graphene Hybrid Catalyst for Li-O <sub>2</sub> Battery Applications. <i>Journal of the Electrochemical Society</i> , <b>2013</b> , 160, A344-A350	3.9	77
270	Synthesis and Characterization of Fe <sub>2</sub> O <sub>3</sub> for H <sub>2</sub> S Removal at Low Temperature. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2015</b> , 54, 8469-8478	3.9	76
269	Platinum nanoparticles supported on stacked-cup carbon nanofibers as electrocatalysts for proton exchange membrane fuel cell. <i>Carbon</i> , <b>2010</b> , 48, 995-1003	10.4	76
268	High durable PEK-based anion exchange membrane for elevated temperature alkaline fuel cells. <i>Journal of Membrane Science</i> , <b>2012</b> , 394-395, 193-201	9.6	74
267	Activated and nitrogen-doped exfoliated graphene as air electrodes for metal-air battery applications. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 2639	13	74
266	Highly durable and active non-precious air cathode catalyst for zinc air battery. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 3673-3677	8.9	74
265	Bacterial nanocellulose/Nafion composite membranes for low temperature polymer electrolyte fuel cells. <i>Journal of Power Sources</i> , <b>2015</b> , 273, 697-706	8.9	73
264	Comparison of low-field NMR and microfocus X-ray computed tomography in fractal characterization of pores in artificial cores. <i>Fuel</i> , <b>2017</b> , 210, 217-226	7.1	73
263	Tuning Shell Numbers of Transition Metal Oxide Hollow Microspheres toward Durable and Superior Lithium Storage. <i>ACS Nano</i> , <b>2017</b> , 11, 11521-11530	16.7	72



262	Quaternized graphene oxide nanocomposites as fast hydroxide conductors. <i>ACS Nano</i> , <b>2015</b> , 9, 2028-37	16.7	72
261	Sensitivity analysis on the microwave heating of coal: A coupled electromagnetic and heat transfer model. <i>Applied Thermal Engineering</i> , <b>2017</b> , 126, 949-962	5.8	71
260	Nitrogen-doped carbon nanocones encapsulating with nickel-cobalt mixed phosphides for enhanced hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 16568-16572	13	71
259	Synthesis of Template-Free Zeolite Nanocrystals by Reverse Microemulsion-Microwave Method. <i>Chemistry of Materials</i> , <b>2005</b> , 17, 2262-2266	9.6	71
258	Flexible, three-dimensional ordered macroporous TiO <sub>2</sub> electrode with enhanced electrode-electrolyte interaction in high-power Li-ion batteries. <i>Nano Energy</i> , <b>2016</b> , 24, 72-77	17.1	71
257	Highly active Co-doped LaMnO <sub>3</sub> perovskite oxide and N-doped carbon nanotube hybrid bi-functional catalyst for rechargeable zinc-air batteries. <i>Electrochemistry Communications</i> , <b>2015</b> , 60, 38-41	5.1	70
256	Electrochemical Synthesis of Perfluorinated Ion Doped Conducting Polyaniline Films Consisting of Helical Fibers and their Reversible Switching between Superhydrophobicity and Superhydrophilicity. <i>Macromolecular Rapid Communications</i> , <b>2008</b> , 29, 832-838	4.8	70
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253	Interaction mechanism between a functionalized protective layer and dissolved polysulfide for extended cycle life of lithium sulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 9461-9467	13	66
252	Coalbed methane emissions and drainage methods in underground mining for mining safety and environmental benefits: A review. <i>Chemical Engineering Research and Design</i> , <b>2019</b> , 127, 103-124	5.5	65
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246	Hydrogen sulfide adsorption on nano-sized zinc oxide/reduced graphite oxide composite at ambient condition. <i>Applied Surface Science</i> , <b>2013</b> , 276, 646-652	6.7	63
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243	Layer-Based Heterostructured Cathodes for Lithium-Ion and Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1808522	15.6	61
242	Defect-Enriched Nitrogen Doped-Graphene Quantum Dots Engineered NiCo S Nanoarray as High-Efficiency Bifunctional Catalyst for Flexible Zn-Air Battery. <i>Small</i> , <b>2019</b> , 15, e1903610	11	61
241	Morphologically controlled Co <sub>3</sub> O <sub>4</sub> nanodisks as practical bi-functional catalyst for rechargeable zinc-air battery applications. <i>Electrochemistry Communications</i> , <b>2014</b> , 43, 109-112	5.1	61
240	Controlled growth of platinum nanowire arrays on sulfur doped graphene as high performance electrocatalyst. <i>Scientific Reports</i> , <b>2013</b> , 3, 2431	4.9	61
239	Complex evolution of coal permeability during CO <sub>2</sub> injection under variable temperatures. <i>International Journal of Greenhouse Gas Control</i> , <b>2012</b> , 9, 281-293	4.2	61
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233	Phase evolution of conversion-type electrode for lithium ion batteries. <i>Nature Communications</i> , <b>2019</b> , 10, 2224	17.4	59
232	Characterisation of mechanics and flow fields around in-seam methane gas drainage borehole for preventing ventilation air leakage: A case study. <i>International Journal of Coal Geology</i> , <b>2016</b> , 162, 123-138	5.5	59
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228	All-in-One Graphene Based Composite Fiber: Toward Wearable Supercapacitor. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 39576-39583	9.5	57
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