

# Hongen Wang

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/5678612/hongen-wang-publications-by-citations.pdf>

**Version:** 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

176  
papers

9,941  
citations

54  
h-index

95  
g-index

184  
ext. papers

11,865  
ext. citations

9.4  
avg, IF

6.55  
L-index

#	Paper	IF	Citations
176	Applications of hierarchically structured porous materials from energy storage and conversion, catalysis, photocatalysis, adsorption, separation, and sensing to biomedicine. <i>Chemical Society Reviews</i> , <b>2016</b> , 45, 3479-563	58.5	904
175	Hierarchically porous materials: synthesis strategies and structure design. <i>Chemical Society Reviews</i> , <b>2017</b> , 46, 481-558	58.5	784
174	Hierarchically Structured Porous Materials for Energy Conversion and Storage. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 4634-4667	15.6	697
173	MoSe <sub>2</sub> nanosheets perpendicularly grown on graphene with Mo–S bonding for sodium-ion capacitors. <i>Nano Energy</i> , <b>2018</b> , 47, 224-234	17.1	270
172	Tunable band gaps and p-type transport properties of boron-doped graphenes by controllable ion doping using reactive microwave plasma. <i>ACS Nano</i> , <b>2012</b> , 6, 1970-8	16.7	206
171	Probing effective photocorrosion inhibition and highly improved photocatalytic hydrogen production on monodisperse PANI@CdS core-shell nanospheres. <i>Applied Catalysis B: Environmental</i> , <b>2016</b> , 188, 351-359	21.8	161
170	Growth, patterning and alignment of organolead iodide perovskite nanowires for optoelectronic devices. <i>Nanoscale</i> , <b>2015</b> , 7, 4163-70	7.7	149
169	One-Dimensional Metal Oxide Nanotubes, Nanowires, Nanoribbons, and Nanorods: Synthesis, Characterizations, Properties and Applications. <i>Critical Reviews in Solid State and Materials Sciences</i> , <b>2012</b> , 37, 1-74	10.1	147
168	Walnut-like Porous Core/Shell TiO <sub>2</sub> with Hybridized Phases Enabling Fast and Stable Lithium Storage. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 10652-10663	9.5	145
167	Tailoring CuO nanostructures for enhanced photocatalytic property. <i>Journal of Colloid and Interface Science</i> , <b>2012</b> , 384, 1-9	9.3	135
166	Single-crystal MnO <sub>2</sub> nanorods: synthesis and electrochemical properties. <i>Nanotechnology</i> , <b>2007</b> , 18, 115616	3.4	135
165	Lamellar MoSe nanosheets embedded with MoO nanoparticles: novel hybrid nanostructures promoted excellent performances for lithium ion batteries. <i>Nanoscale</i> , <b>2016</b> , 8, 17902-17910	7.7	129
164	Bio-inspired Murray materials for mass transfer and activity. <i>Nature Communications</i> , <b>2017</b> , 8, 14921	17.4	126
163	Well shaped MnO <sub>2</sub> nano-octahedra with anomalous magnetic behavior and enhanced photodecomposition properties. <i>Small</i> , <b>2011</b> , 7, 475-83	11	117
162	Design of new anode materials based on hierarchical, three dimensional ordered macro-mesoporous TiO <sub>2</sub> for high performance lithium ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 9699	13	114
161	Design of coherent anode materials with 0D Ni <sub>3</sub> S <sub>2</sub> nanoparticles self-assembled on 3D interconnected carbon networks for fast and reversible sodium storage. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 7394-7402	13	112
160	rGO/SnS <sub>2</sub> /TiO <sub>2</sub> heterostructured composite with dual-confinement for enhanced lithium-ion storage. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 25056-25063	13	112

159	Facile synthesis of porous LiMn <sub>2</sub> O <sub>4</sub> spheres as positive electrode for high-power lithium ion batteries. <i>Journal of Power Sources</i> , <b>2012</b> , 198, 251-257	8.9	106
158	Hydrothermal synthesis of hierarchical SnO <sub>2</sub> microspheres for gas sensing and lithium-ion batteries applications: Fluoride-mediated formation of solid and hollow structures. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 2140-2148		104
157	Rapid Microwave Synthesis of Porous TiO <sub>2</sub> Spheres and Their Applications in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 10419-10425	3.8	103
156	3D interconnected macro-mesoporous electrode with self-assembled NiO nanodots for high-performance supercapacitor-like Li-ion battery. <i>Nano Energy</i> , <b>2016</b> , 22, 269-277	17.1	99
155	Ultralong Cu(OH) <sub>2</sub> and CuO nanowire bundles: PEG200-directed crystal growth for enhanced photocatalytic performance. <i>Journal of Colloid and Interface Science</i> , <b>2010</b> , 348, 303-12	9.3	98
154	Phosphorized SnO <sub>2</sub> /graphene heterostructures for highly reversible lithium-ion storage with enhanced pseudocapacitance. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 3479-3487	13	96
153	Reversible and fast Na-ion storage in MoO <sub>2</sub> /MoSe <sub>2</sub> heterostructures for high energy-high power Na-ion capacitors. <i>Energy Storage Materials</i> , <b>2018</b> , 12, 241-251	19.4	94
152	3D Ferroconcrete-Like Aminated Carbon Nanotubes Network Anchoring Sulfur for Advanced Lithium-Sulfur Battery. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1801066	21.8	92
151	Manganese dioxide nanosheet functionalized sulfur@PEDOT core-shell nanospheres for advanced lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 9403-9412	13	92
150	Hydrothermal synthesis of ordered single-crystalline rutile TiO <sub>2</sub> nanorod arrays on different substrates. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 263104	3.4	91
149	Hierarchical mesoporous urchin-like Mn <sub>3</sub> O <sub>4</sub> /carbon microspheres with highly enhanced lithium battery performance by in-situ carbonization of new lamellar manganese alkoxide (Mn-DEG). <i>Nano Energy</i> , <b>2015</b> , 12, 833-844	17.1	90
148	Engineering single crystalline Mn <sub>3</sub> O <sub>4</sub> nano-octahedra with exposed highly active {011} facets for high performance lithium ion batteries. <i>Nanoscale</i> , <b>2014</b> , 6, 6819-27	7.7	89
147	2D ZnO mesoporous single-crystal nanosheets with exposed {0001} polar facets for the depollution of cationic dye molecules by highly selective adsorption and photocatalytic decomposition. <i>Applied Catalysis B: Environmental</i> , <b>2016</b> , 181, 138-145	21.8	83
146	Emerging of Heterostructure Materials in Energy Storage: A Review. <i>Advanced Materials</i> , <b>2021</b> , 33, e2100855	11.5	80
145	Sulfur-deficient MoS <sub>2</sub> grown inside hollow mesoporous carbon as a functional polysulfide mediator. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 12068-12074	13	77
144	SnS/TiO nanohybrids chemically bonded on nitrogen-doped graphene for lithium-sulfur batteries: synergy of vacancy defects and heterostructures. <i>Nanoscale</i> , <b>2018</b> , 10, 15505-15512	7.7	77
143	Pt supported on Mo <sub>2</sub> C particles with synergistic effect and strong interaction force for methanol electro-oxidation. <i>Electrochimica Acta</i> , <b>2013</b> , 95, 218-224	6.7	77
142	High photocatalytic activity enhancement of titania inverse opal films by slow photon effect induced strong light absorption. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 15491	13	76

141	Anchoring ultrafine metallic and oxidized Pt nanoclusters on yolk-shell TiO <sub>2</sub> for unprecedentedly high photocatalytic hydrogen production. <i>Nano Energy</i> , <b>2017</b> , 38, 118-126	17.1	75
140	Hybrid photovoltaic cells based on ZnO/Sb <sub>2</sub> S <sub>3</sub> /P3HT heterojunctions. <i>Physica Status Solidi (B): Basic Research</i> , <b>2012</b> , 249, 627-633	1.3	75
139	Oxygen-deficient titanium dioxide as a functional host for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 10346-10353	13	74
138	Amorphous/crystalline hybrid MoO nanosheets for high-energy lithium-ion capacitors. <i>Chemical Communications</i> , <b>2017</b> , 53, 10723-10726	5.8	74
137	One-Pot Synthesis of Catalytically Stable and Active Nanoreactors: Encapsulation of Size-Controlled Nanoparticles within a Hierarchically Macroporous Core@Ordered Mesoporous Shell System. <i>Advanced Materials</i> , <b>2009</b> , 21, 1368-1372	24	72
136	High Efficiency CdS/CdSe Quantum Dot Sensitized Solar Cells with Two ZnSe Layers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 34482-34489	9.5	71
135	Highly porous TiO <sub>2</sub> hollow microspheres constructed by radially oriented nanorods chains for high capacity, high rate and long cycle capability lithium battery. <i>Nano Energy</i> , <b>2015</b> , 16, 339-349	17.1	70
134	Facile synthesis and electrochemical characterization of porous and dense TiO <sub>2</sub> nanospheres for lithium-ion battery applications. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 6394-6399	8.9	70
133	Large-scale fabrication of graphene-wrapped FeF <sub>3</sub> nanocrystals as cathode materials for lithium ion batteries. <i>Nanoscale</i> , <b>2013</b> , 5, 6338-43	7.7	67
132	Three-dimensionally ordered macroporous titania with structural and photonic effects for enhanced photocatalytic efficiency. <i>ChemSusChem</i> , <b>2011</b> , 4, 1481-8	8.3	67
131	Encapsulating NiS nanocrystal into nitrogen-doped carbon framework for high performance sodium/potassium-ion storage. <i>Chemical Engineering Journal</i> , <b>2020</b> , 392, 123675	14.7	65
130	Hierarchically structured porous materials: synthesis strategies and applications in energy storage. <i>National Science Review</i> , <b>2020</b> , 7, 1667-1701	10.8	64
129	Superior Pseudocapacitive Lithium-Ion Storage in Porous Vanadium Oxides@C Heterostructure Composite. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 43665-43673	9.5	61
128	Impacts of surface or interface chemistry of ZnSe passivation layer on the performance of CdS/CdSe quantum dot sensitized solar cells. <i>Nano Energy</i> , <b>2017</b> , 32, 433-440	17.1	60
127	Facile solution growth of vertically aligned ZnO nanorods sensitized with aqueous CdS and CdSe quantum dots for photovoltaic applications. <i>Nanoscale Research Letters</i> , <b>2011</b> , 6, 340	5	60
126	Facile and rapid synthesis of highly porous wirelike TiO <sub>2</sub> as anodes for lithium-ion batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 1608-13	9.5	56
125	Synthesis and electrochemical properties of MnO <sub>2</sub> microspheres. <i>Materials Chemistry and Physics</i> , <b>2008</b> , 109, 399-403	4.4	56
124	Uniform Nickel Vanadate (Ni <sub>3</sub> V <sub>2</sub> O <sub>8</sub> ) Nanowire Arrays Organized by Ultrathin Nanosheets with Enhanced Lithium Storage Properties. <i>Scientific Reports</i> , <b>2016</b> , 6, 20826	4.9	56

123	Tubular MoO <sub>2</sub> organized by 2D assemblies for fast and durable alkali-ion storage. <i>Energy Storage Materials</i> , <b>2018</b> , 11, 161-169	19.4	54
122	Tracing the slow photon effect in a ZnO inverse opal film for photocatalytic activity enhancement. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 5051	13	54
121	Hierarchy Design in Metal Oxides as Anodes for Advanced Lithium-Ion Batteries. <i>Small Methods</i> , <b>2018</b> , 2, 1800171	12.8	53
120	Carbon-bonded, oxygen-deficient TiO <sub>2</sub> nanotubes with hybridized phases for superior Na-ion storage. <i>Chemical Engineering Journal</i> , <b>2018</b> , 350, 201-208	14.7	53
119	MOF-derived nitrogen-doped core-shell hierarchical porous carbon confining selenium for advanced lithium-selenium batteries. <i>Nanoscale</i> , <b>2019</b> , 11, 6970-6981	7.7	51
118	Hierarchically structured porous TiO <sub>2</sub> spheres constructed by interconnected nanorods as high performance anodes for lithium ion batteries. <i>Chemical Engineering Journal</i> , <b>2015</b> , 281, 844-851	14.7	51
117	Probing significant light absorption enhancement of titania inverse opal films for highly exalted photocatalytic degradation of dye pollutants. <i>Applied Catalysis B: Environmental</i> , <b>2014</b> , 150-151, 411-420	21.8	51
116	Self-templated synthesis of microporous CoO nanoparticles with highly enhanced performance for both photocatalysis and lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 1394-1400	13	49
115	Mussel-inspired coating of energetic crystals: A compact core-shell structure with highly enhanced thermal stability. <i>Chemical Engineering Journal</i> , <b>2017</b> , 309, 140-150	14.7	49
114	Hierarchical Nanotube-Constructed Porous TiO <sub>2</sub> -B Spheres for High Performance Lithium Ion Batteries. <i>Scientific Reports</i> , <b>2015</b> , 5, 11557	4.9	48
113	Porous TiO <sub>2</sub> urchins for high performance Li-ion battery electrode: facile synthesis, characterization and structural evolution. <i>Electrochimica Acta</i> , <b>2016</b> , 210, 206-214	6.7	48
112	Synergistic coupling of lamellar MoSe <sub>2</sub> and SnO <sub>2</sub> nanoparticles via chemical bonding at interface for stable and high-power sodium-ion capacitors. <i>Chemical Engineering Journal</i> , <b>2018</b> , 354, 1164-1173	14.7	48
111	Hierarchical nanosheet-constructed yolk-shell TiO <sub>2</sub> /porous microspheres for lithium batteries with high capacity, superior rate and long cycle capability. <i>Nanoscale</i> , <b>2015</b> , 7, 12979-89	7.7	47
110	Enhanced Gas Sensitivity and Selectivity on Aperture-Controllable 3D Interconnected Macro-Mesoporous ZnO Nanostructures. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 8583-90	9.5	47
109	Annealed vanadium oxide nanowires and nanotubes as high performance cathode materials for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 14099	13	47
108	Understanding and suppressing side reactions in Li-ion batteries. <i>Materials Chemistry Frontiers</i> , <b>2017</b> , 1, 2495-2510	7.8	46
107	Hollow nitrogen-doped carbon/sulfur@MnO <sub>2</sub> nanocomposite with structural and chemical dual-encapsulation for lithium-sulfur battery. <i>Chemical Engineering Journal</i> , <b>2020</b> , 381, 122746	14.7	46
106	Engineering 3D bicontinuous hierarchically macro-mesoporous LiFePO <sub>4</sub> /C nanocomposite for lithium storage with high rate capability and long cycle stability. <i>Scientific Reports</i> , <b>2016</b> , 6, 25942	4.9	45

105	Facile and fast synthesis of porous TiO <sub>2</sub> spheres for use in lithium ion batteries. <i>Journal of Colloid and Interface Science</i> , <b>2014</b> , 417, 144-51	9.3	45
104	Unique walnut-shaped porous MnO <sub>2</sub> /C nanospheres with enhanced reaction kinetics for lithium storage with high capacity and superior rate capability. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 4264-4272	13.2	43
103	In-Situ Growing Mesoporous CuO/O-Doped g-CN Nanospheres for Highly Enhanced Lithium Storage. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 32957-32968	9.5	43
102	Three-Dimensional (3D) Bicontinuous Hierarchically Porous Mn <sub>2</sub> O <sub>3</sub> Single Crystals for High Performance Lithium-Ion Batteries. <i>Scientific Reports</i> , <b>2015</b> , 5, 14686	4.9	43
101	Rutile TiO <sub>2</sub> inverse opal with photonic bandgap in the UV-visible range. <i>Journal of Colloid and Interface Science</i> , <b>2010</b> , 348, 43-8	9.3	43
100	Selenium clusters in Zn-glutamate MOF derived nitrogen-doped hierarchically radial-structured microporous carbon for advanced rechargeable NaBe batteries. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 22790-22797	13	43
99	An oxygen-deficient vanadium oxide@N-doped carbon heterostructure for sodium-ion batteries: insights into the charge storage mechanism and enhanced reaction kinetics. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 3450-3458	13	41
98	Smaller Pt particles supported on mesoporous bowl-like carbon for highly efficient and stable methanol oxidation and oxygen reduction reaction. <i>Journal of Power Sources</i> , <b>2013</b> , 243, 48-53	8.9	40
97	Chemistry of Trimethyl Aluminum: A Spontaneous Route to Thermally Stable 3D Crystalline Macroporous Alumina Foams with a Hierarchy of Pore Sizes. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 3251-3258	9.6	39
96	Growing NiS <sub>2</sub> nanosheets on porous carbon microtubes for hybrid sodium-ion capacitors. <i>Journal of Power Sources</i> , <b>2020</b> , 451, 227737	8.9	38
95	Cocatalyzing Pt/PtO Phase-Junction Nanodots on Hierarchically Porous TiO for Highly Enhanced Photocatalytic Hydrogen Production. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 29687-29698	9.5	38
94	Facile synthesis of hierarchical and porous V <sub>2</sub> O <sub>5</sub> microspheres as cathode materials for lithium ion batteries. <i>Journal of Colloid and Interface Science</i> , <b>2014</b> , 418, 74-80	9.3	37
93	Enhanced performance by incorporation of zinc oxide nanowire array for organic-inorganic hybrid solar cells. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 243102	3.4	37
92	Microwave-assisted hydrothermal synthesis of porous SnO <sub>2</sub> nanotubes and their lithium ion storage properties. <i>Journal of Solid State Chemistry</i> , <b>2012</b> , 190, 104-110	3.3	36
91	Coherent TiO/BaTiO heterostructure as a functional reservoir and promoter for polysulfide intermediates. <i>Chemical Communications</i> , <b>2018</b> , 54, 12250-12253	5.8	36
90	Hierarchical TiO <sub>2</sub> /C nanocomposite monoliths with a robust scaffolding architecture, mesopore-macropore network and TiO <sub>2</sub> -C heterostructure for high-performance lithium ion batteries. <i>Nanoscale</i> , <b>2016</b> , 8, 10928-37	7.7	34
89	Facile synthesis and electrochemical characterization of hierarchical MnO <sub>2</sub> spheres. <i>Journal of Alloys and Compounds</i> , <b>2008</b> , 466, 250-257	5.7	34
88	Bronze TiO <sub>2</sub> as a cathode host for lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 48, 259-266	6.2	33

87	Phases Hybridizing and Hierarchical Structuring of Mesoporous TiO Nanowire Bundles for High-Rate and High-Capacity Lithium Batteries. <i>Advanced Science</i> , <b>2015</b> , 2, 1500070	13.6	33
86	Constructing an interface synergistic effect from a SnS/MoS <sub>2</sub> heterojunction decorating N, S co-doped carbon nanosheets with enhanced sodium ion storage performance. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 22593-22600	13	33
85	Hollow CoMoSe nanosheet arrays derived from metal-organic framework for high-performance supercapacitors. <i>Journal of Power Sources</i> , <b>2021</b> , 490, 229532	8.9	33
84	Rugated porous Fe <sub>3</sub> O <sub>4</sub> thin films as stable binder-free anode materials for lithium ion batteries. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 22692		29
83	Towards high-performance all-solid-state asymmetric supercapacitors: A hierarchical doughnut-like Ni <sub>3</sub> S <sub>2</sub> @PPy core-shell heterostructure on nickel foam electrode and density functional theory calculations. <i>Journal of Power Sources</i> , <b>2021</b> , 501, 230003	8.9	29
82	PtO nanodots promoting Ti <sub>3</sub> C <sub>2</sub> MXene in-situ converted Ti <sub>3</sub> C <sub>2</sub> /TiO <sub>2</sub> composites for photocatalytic hydrogen production. <i>Chemical Engineering Journal</i> , <b>2021</b> , 420, 129695	14.7	28
81	Probing and suppressing voltage fade of Li-rich Li <sub>1.2</sub> Ni <sub>0.13</sub> Co <sub>0.13</sub> Mn <sub>0.54</sub> O <sub>2</sub> cathode material for lithium-ion battery. <i>Electrochimica Acta</i> , <b>2019</b> , 318, 875-882	6.7	27
80	Unprecedented and highly stable lithium storage capacity of (001) faceted nanosheet-constructed hierarchically porous TiO/rGO hybrid architecture for high-performance Li-ion batteries. <i>National Science Review</i> , <b>2020</b> , 7, 1046-1058	10.8	27
79	Grain Boundaries Enriched Hierarchically Mesoporous MnO/Carbon Microspheres for Superior Lithium Ion Battery Anode. <i>Electrochimica Acta</i> , <b>2016</b> , 222, 561-569	6.7	27
78	Facile synthesis of well-shaped spinel LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> nanoparticles as cathode materials for lithium ion batteries. <i>RSC Advances</i> , <b>2016</b> , 6, 2785-2792	3.7	27
77	A flexible, hierarchically porous PANI/MnO <sub>2</sub> network with fast channels and an extraordinary chemical process for stable fast-charging lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 2741-2751	13	27
76	MoSe <sub>2</sub> nanoplatelets with enriched active edge sites for superior sodium-ion storage and enhanced alkaline hydrogen evolution activity. <i>Chemical Engineering Journal</i> , <b>2020</b> , 382, 123047	14.7	27
75	Core-Shell Structured HMX@Polydopamine Energetic Microspheres: Synergistically Enhanced Mechanical, Thermal, and Safety Performances. <i>Polymers</i> , <b>2019</b> , 11,	4.5	26
74	A MoS@SnS heterostructure for sodium-ion storage with enhanced kinetics. <i>Nanoscale</i> , <b>2020</b> , 12, 14689-14698	14.7	26
73	Fine nanoparticles of Al <sub>2</sub> O <sub>3</sub> prepared by a co-precipitation route in water/oil microemulsion. <i>Journal of Alloys and Compounds</i> , <b>2008</b> , 462, 42-46	5.7	25
72	Enhancing sodium-ion storage performance of MoO <sub>2</sub> /N-doped carbon through interfacial Mo-N-C bond. <i>Science China Materials</i> , <b>2021</b> , 64, 85-95	7.1	24
71	Insight into the positive effect of porous hierarchy in S/C cathodes on the electrochemical performance of Li-S batteries. <i>Nanoscale</i> , <b>2018</b> , 10, 11861-11868	7.7	24
70	Tunable macro-mesoporous ZnO nanostructures for highly sensitive ethanol and acetone gas sensors. <i>RSC Advances</i> , <b>2015</b> , 5, 101910-101916	3.7	23

69	Boosting Lithium-Ion Storage Capability in CuO Nanosheets via Synergistic Engineering of Defects and Pores. <i>Frontiers in Chemistry</i> , <b>2018</b> , 6, 428	5	23
68	Phase-junction Ag/TiO <sub>2</sub> nanocomposite as photocathode for H <sub>2</sub> generation. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 83, 179-187	9.1	23
67	MoSe <sub>2</sub> nanosheets as a functional host for lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 47, 241-247	12	22
66	Synthesis and electrochemical properties of LiMn <sub>2</sub> O <sub>4</sub> and LiCoO <sub>2</sub> -coated LiMn <sub>2</sub> O <sub>4</sub> cathode materials. <i>Journal of Alloys and Compounds</i> , <b>2012</b> , 517, 186-191	5.7	22
65	Coherent nanoscale cobalt/cobalt oxide heterostructures embedded in porous carbon for the oxygen reduction reaction.. <i>RSC Advances</i> , <b>2018</b> , 8, 28625-28631	3.7	22
64	Macroporous ZnO/ZnS/CdS composite spheres as efficient and stable photocatalysts for solar-driven hydrogen generation. <i>Journal of Materials Science</i> , <b>2017</b> , 52, 11124-11134	4.3	21
63	Active faceted CuO hollow nanospheres for unprecedented adsorption and visible-light degradation of pollutants. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 565, 207-217	9.3	19
62	Hollow Cu <sub>2</sub> O microspheres with two active {111} and {110} facets for highly selective adsorption and photodegradation of anionic dye. <i>RSC Advances</i> , <b>2015</b> , 5, 55520-55526	3.7	18
61	3D interconnected hierarchically macro-mesoporous TiO <sub>2</sub> networks optimized by biomolecular self-assembly for high performance lithium ion batteries. <i>RSC Advances</i> , <b>2016</b> , 6, 26856-26862	3.7	18
60	Materials with extreme properties: Their structuring and applications. <i>Vacuum</i> , <b>2012</b> , 86, 575-585	3.7	18
59	Dual interface coupled molybdenum diselenide for high-performance sodium ion batteries and capacitors. <i>Journal of Power Sources</i> , <b>2020</b> , 446, 227298	8.9	18
58	The mediated synthesis of FeF <sub>3</sub> nanocrystals through (NH <sub>4</sub> ) <sub>3</sub> FeF <sub>6</sub> precursors as the cathode material for high power lithium ion batteries. <i>Electrochimica Acta</i> , <b>2017</b> , 253, 545-553	6.7	17
57	Electrochemical fabrication and optical properties of periodically structured porous Fe <sub>2</sub> O <sub>3</sub> films. <i>Electrochemistry Communications</i> , <b>2012</b> , 20, 178-181	5.1	16
56	Facile synthesis and electrochemical properties of hierarchical MnO <sub>2</sub> submicrospheres and LiMn <sub>2</sub> O <sub>4</sub> microspheres. <i>Journal of Physics and Chemistry of Solids</i> , <b>2007</b> , 68, 1422-1427	3.9	16
55	Facile synthesis of hierarchically structured manganese oxides as anode for lithium-ion batteries. <i>Journal of Central South University</i> , <b>2019</b> , 26, 1481-1492	2.1	15
54	Facile synthesis and electrochemical characterization of Sn <sub>4</sub> Ni <sub>3</sub> /C nanocomposites as anode materials for lithium ion batteries. <i>Journal of Solid State Chemistry</i> , <b>2012</b> , 196, 536-542	3.3	15
53	Optimizing inner voids in yolk-shell TiO <sub>2</sub> nanostructure for high-performance and ultralong-life lithium-sulfur batteries. <i>Chemical Engineering Journal</i> , <b>2021</b> , 417, 129241	14.7	15
52	In Situ Structure Characterization in Slot-Die-Printed All-Polymer Solar Cells with Efficiency Over 9%. <i>Solar Rrl</i> , <b>2019</b> , 3, 1900032	7.1	14



51	Hierarchical porous flower-like TiO <sub>2</sub> -B constructed by thin nanosheets for efficient lithium storage. <i>Materials Letters</i> , <b>2017</b> , 201, 93-96	3.3	13
50	Interfacial engineering endowing energetic co-particles with high density and reduced sensitivity. <i>Chemical Engineering Journal</i> , <b>2020</b> , 387, 124209	14.7	13
49	A new catalyst for urea oxidation: NiCo <sub>2</sub> S <sub>4</sub> nanowires modified 3D carbon sponge. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 50, 195-205	12	13
48	Nitrogen-doped graphene in-situ modifying MnO nanoparticles for highly improved lithium storage. <i>Applied Surface Science</i> , <b>2019</b> , 473, 893-901	6.7	13
47	Structural engineering of tin sulfides anchored on nitrogen/phosphorus dual-doped carbon nanofibres in sodium/potassium-ion batteries. <i>Carbon</i> , <b>2022</b> , 189, 46-56	10.4	12
46	Melamine-based polymer networks enabled N, O, S Co-doped defect-rich hierarchically porous carbon nanobelts for stable and long-cycle Li-ion and Li-Se batteries. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 582, 60-69	9.3	12
45	Tin Acceptor Doping Enhanced Thermoelectric Performance of n-Type Yb Single-Filled Skutterudites via Reduced Electronic Thermal Conductivity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 25133-25139	9.5	11
44	Electronic structure at the interfaces of vertically aligned zinc oxide nanowires and sensitizing layers in photochemical solar cells. <i>Journal Physics D: Applied Physics</i> , <b>2011</b> , 44, 325108	3	11
43	Fast synthesis of monodisperse TiO <sub>2</sub> submicrospheres via a modified sol-gel approach. <i>Rare Metals</i> , <b>2008</b> , 27, 1-4	5.5	11
42	Interwoven scaffolded porous titanium oxide nanocubes/carbon nanotubes framework for high-performance sodium-ion battery. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 59, 38-46	12	11
41	Probing the electrochemical behavior of {111} and {110} faceted hollow Cu <sub>2</sub> O microspheres for lithium storage. <i>RSC Advances</i> , <b>2016</b> , 6, 97129-97136	3.7	10
40	Topological Insulator-Assisted MoSe <sub>2</sub> /Bi <sub>2</sub> Se <sub>3</sub> Heterostructure: Achieving Fast Reaction Kinetics Toward High Rate Sodium-Ion Batteries. <i>ChemElectroChem</i> , <b>2021</b> , 8, 697-704	4.3	10
39	Facile synthesis of La <sub>2</sub> Mo <sub>2</sub> O <sub>9</sub> nanoparticles via an EDTA complexing approach. <i>Rare Metals</i> , <b>2008</b> , 27, 340-344	5.5	9
38	NiS <sub>2</sub> wrapped into graphene with strong Ni-O interaction for advanced sodium and potassium ion batteries. <i>Electrochimica Acta</i> , <b>2021</b> , 369, 137704	6.7	9
37	Multilayer Deposition of Metal-Phenolic Networks for Coating of Energetic Crystals: Modulated Surface Structures and Highly Enhanced Thermal Stability. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 11091-11098	6.1	8
36	Exploiting nanostructure-thin film interfaces in advanced sensor device configurations. <i>Vacuum</i> , <b>2012</b> , 86, 757-760	3.7	8
35	Seeking a novel energetic co-crystal strategy through the interfacial self-assembly of CL-20 and HMX nanocrystals. <i>CrystEngComm</i> , <b>2020</b> , 22, 61-67	3.3	8
34	Fresh MoO <sub>2</sub> as a better electrode for pseudocapacitive sodium-ion storage. <i>New Journal of Chemistry</i> , <b>2018</b> , 42, 14721-14724	3.6	7

33	Constructing Novel RDX with Hierarchical Structure via Dye-Assisted Solvent Induction and Interfacial Self-Assembly. <i>Crystal Growth and Design</i> , <b>2020</b> , 20, 4919-4927	3.5	6
32	Amorphous red phosphorus incorporated with pyrolyzed bacterial cellulose as a free-standing anode for high-performance lithium ion batteries.. <i>RSC Advances</i> , <b>2018</b> , 8, 17325-17333	3.7	6
31	Understanding Dual-Polar-Group Functionalized COFs for Accelerating Li-Ion Transport and Dendrite-Free in Lithium Metal Anodes. <i>Energy and Environmental Materials</i> ,	13	6
30	High lithium ion battery performance enhancement by controlled carbon coating of TiO <sub>2</sub> hierarchically porous hollow spheres. <i>RSC Advances</i> , <b>2016</b> , 6, 70485-70492	3.7	6
29	TiO <sub>2</sub> /Sb <sub>2</sub> S <sub>3</sub> /P3HT Based Inorganic/Organic Hybrid Heterojunction Solar Cells with Enhanced Photoelectric Conversion Performance. <i>Journal of Electronic Materials</i> , <b>2017</b> , 46, 4670-4675	1.9	5
28	Regulating safety and energy release of energetic materials by manipulation of molybdenum disulfide phase. <i>Chemical Engineering Journal</i> , <b>2021</b> , 411, 128603	14.7	5
27	Ternary polymer solar cells by employing two well-compatible donors with cascade energy levels. <i>Dyes and Pigments</i> , <b>2021</b> , 192, 109424	4.6	4
26	Embedding tin disulfide nanoparticles in two-dimensional porous carbon nanosheet interlayers for fast-charging lithium-sulfur batteries. <i>Science China Materials</i> , <b>2021</b> , 64, 2697-2709	7.1	3
25	Enhanced Short-Wavelength Absorption and Effective Exciton Dissociation in NC70BA-Based Ternary Polymer Solar Cells. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 8432-8441	6.1	3
24	Tris(trimethylsilyl) borate as electrolyte additive alleviating cathode electrolyte interphase for enhanced lithium-selenium battery. <i>Electrochimica Acta</i> , <b>2021</b> , 393, 139042	6.7	3
23	Synchronous Defect and Interface Engineering of NiMoO Nanowire Arrays for High-Performance Supercapacitors.. <i>Nanomaterials</i> , <b>2022</b> , 12,	5.4	3
22	Lithium Storage Performance and Investigation of Electrochemical Mechanism of Cobalt Vanadate Nanowires Assembled by Nanosheets. <i>ACS Applied Energy Materials</i> ,	6.1	2
21	Phase Conversion Accelerating Zn-Escape Effect in ZnSe-CFs Heterostructure for High Performance Sodium-Ion Half/Full Batteries. <i>Small</i> , 2105169	11	2
20	Sodium-ion storage mechanisms and design strategies of molybdenum-based materials: A review. <i>Applied Materials Today</i> , <b>2021</b> , 23, 100985	6.6	2
19	Alkoxide hydrolysis in-situ constructing robust trimanganese tetraoxide/graphene composite for high-performance lithium storage. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 594, 531-539	9.3	2
18	Macro/Mesoporous Carbon/Defective TiO <sub>2</sub> Composite as a Functional Host for Lithium Sulfur Batteries. <i>ACS Applied Energy Materials</i> , <b>2022</b> , 5, 2573-2579	6.1	2
17	Copper doped CoS <sub>x</sub> @Co(OH) <sub>2</sub> hierarchical mesoporous nanosheet arrays as binder-free electrodes for superior supercapacitors. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 165115	5.7	2
16	Adsorption-Catalysis-Conversion of Polysulfides in Sandwiched Ultrathin Ni(OH) <sub>2</sub> -PANI for Stable Lithium Sulfur Batteries. <i>Small</i> , 2201822	11	2

15	Improving all ternary small-molecule organic solar cells by optimizing short wavelength photon harvesting and exciton dissociation based on a bisadduct analogue of [70]PCBM as a third component material. <i>Sustainable Energy and Fuels</i> , <b>2022</b> , 6, 744-755	5.8	1
14	NiFe-LDHs@MnO <sub>2</sub> heterostructure as a bifunctional electrocatalyst for oxygen-involved reactions and Zn-air batteries. <i>Ionics</i> , <b>2022</b> , 28, 1273	2.7	1
13	Three-dimensional ordered hierarchically porous carbon materials for high performance Li-Se battery. <i>Journal of Energy Chemistry</i> , <b>2022</b> , 68, 624-636	12	1
12	Ternary organic solar cells with double side chain fullerene derivative as guest electron acceptors in PM7:Y6 blend films. <i>Organic Electronics</i> , <b>2022</b> , 103, 106465	3.5	1
11	SnO <sub>2</sub> nano-mulberries anchored onto RGO nanosheets for lithium ion batteries. <i>Journal of Materials Research</i> , <b>2020</b> , 35, 20-30	2.5	1
10	Hierarchical Fe <sub>2</sub> O <sub>3</sub> @MoS <sub>2</sub> /C Nanorods as Anode Materials for Sodium Ion Batteries with High Cycle Stability. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 3757-3765	6.1	1
9	Pt-Modified Interfacial Engineering for Enhanced Photocatalytic Performance of 3D Ordered Macroporous TiO <sub>2</sub> . <i>Crystals</i> , <b>2022</b> , 12, 778	2.3	1
8	Ternary organic photovoltaics with good thickness tolerance by NC70BA as the third component. <i>Organic Electronics</i> , <b>2022</b> , 100, 106397	3.5	0
7	Understanding the effect of the double side chain fullerene derivative as third component materials on the charge dynamics and photovoltaic performance. <i>Solar Energy</i> , <b>2021</b> , 230, 549-557	6.8	0
6	Recent advance on Co-based materials for polysulfide catalysis toward promoted lithium-sulfur batteries. <i>Nano Select</i> ,	3.1	0
5	The chain-mail Co@C electrocatalyst accelerating one-step solid-phase redox for advanced LiSe batteries. <i>Journal of Materials Chemistry A</i> , <b>2022</b> , 10, 8059-8067	13	0
4	Gradient selenium-doping regulating interfacial charge transfer in zinc sulfide/carbon anode for stable lithium storage.. <i>Journal of Colloid and Interface Science</i> , <b>2022</b> , 619, 42-50	9.3	0
3	Inverted Nonfullerene Polymer Solar Cells with Photoannealed Cs <sub>2</sub> CO <sub>3</sub> Films as Electron Extraction Layers. <i>Advanced Electronic Materials</i> , 2101111	6.4	0
2	Two Well-Compatible Acceptors with Red-Shifted Absorption Edge and Cascaded LUMO Levels Enable Ternary Organic Photovoltaic Exhibiting Efficient Photovoltaic Performance. <i>ACS Applied Energy Materials</i> , <b>2022</b> , 5, 1076-1084	6.1	0
1	High efficiency inverted organic solar cells with photo annealing titanium oxide films as electron extract layer. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2022</b> , 642, 128698	5.1	