

# Yan-Bing He

## List of Publications by Year in Descending Order

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

183 papers	12,638 citations	62 h-index	108 g-index
191 ext. papers	15,326 ext. citations	11.6 avg, IF	6.74 L-index

#	Paper	IF	Citations
183	Revisiting the Roles of Natural Graphite in Ongoing Lithium-ion Batteries.. <i>Advanced Materials</i> , <b>2022</b> , e2106704	24	10
182	Self-Healing Mechanism of Lithium in Lithium Metal.. <i>Advanced Science</i> , <b>2022</b> , e2105574	13.6	7
181	Electron and Ion Co-Conductive Catalyst Achieving Instant Transformation of Lithium Polysulfide towards Li S. <i>Advanced Materials</i> , <b>2021</b> , e2105362	24	7
180	An Organic/Inorganic Composite Gel Electrolyte Inducing Uniformly Lithium Deposition at High Current Density and Capacity. <i>Advanced Materials Interfaces</i> , <b>2021</b> , 8, 2100790	4.6	2
179	Cation Vacancy-Boosted Lewis Acid-Base Interactions in a Polymer Electrolyte for High-Performance Lithium Metal Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 51107-51116	9.5	1
178	Lithium Metal Electrode with Increased Air Stability and Robust Solid Electrolyte Interphase Realized by Silane Coupling Agent Modification. <i>Advanced Materials</i> , <b>2021</b> , 33, e2008133	24	40
177	Insight into the Synergistic Effect of N, S Co-Doping for Carbon Coating Layer on Niobium Oxide Anodes with Ultra-Long Life. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2100311	15.6	39
176	A lithium nucleation-diffusion-growth mechanism to govern the horizontal deposition of lithium metal anode. <i>Science China Materials</i> , <b>2021</b> , 64, 2409-2420	7.1	5
175	Nitrate Additives Coordinated with Crown Ether Stabilize Lithium Metal Anodes in Carbonate Electrolyte. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2102128	15.6	22
174	Coordinated Adsorption and Catalytic Conversion of Polysulfides Enabled by Perovskite Bimetallic Hydroxide Nanocages for Lithium-Sulfur Batteries. <i>Small</i> , <b>2021</b> , 17, e2101538	11	5
173	Grain boundaries contribute to highly efficient lithium-ion transport in advanced LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> secondary sphere with compact structure. <i>SusMat</i> , <b>2021</b> , 1, 255-265		3
172	Modification strategies of Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> ceramic electrolyte for high-performance solid-state batteries. <i>Tungsten</i> , <b>2021</b> , 3, 260-278	4.6	9
171	(Oxalato)borate: The key ingredient for polyethylene oxide based composite electrolyte to achieve ultra-stable performance of high voltage solid-state LiNi <sub>0.8</sub> Co <sub>0.1</sub> Mn <sub>0.1</sub> O <sub>2</sub> /lithium metal battery. <i>Nano Energy</i> , <b>2021</b> , 80, 105562	17.1	24
170	A multifunctional artificial protective layer for producing an ultra-stable lithium metal anode in a commercial carbonate electrolyte. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 7667-7674	13	12
169	A thin and high-strength composite polymer solid-state electrolyte with a highly efficient and uniform ion-transport network. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 14344-14351	13	10
168	Lattice-Coupled Si/MXene Confined by Hard Carbon for Fast Sodium-Ion Conduction. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 7268-7277	6.1	5
167	Pore structure engineering of wood-derived hard carbon enables their high-capacity and cycle-stable sodium storage properties. <i>Electrochimica Acta</i> , <b>2021</b> , 391, 139000	6.7	1

166	Stable Interface Chemistry and Multiple Ion Transport of Composite Electrolyte Contribute to Ultra-long Cycling Solid-State LiNi Co Mn O /Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 24668-24675	16.4	26
165	Three-dimensional alloy interface between Li <sub>6.4</sub> La <sub>3</sub> Zr <sub>1.4</sub> Ta <sub>0.6</sub> O <sub>12</sub> and Li metal to achieve excellent cycling stability of all-solid-state battery. <i>Journal of Power Sources</i> , <b>2021</b> , 505, 230062	8.9	5
164	Constructing a Reinforced and Gradient Solid Electrolyte Interphase on Si Nanoparticles by In-Situ Thiol-Ene Click Reaction for Long Cycling Lithium-Ion Batteries. <i>Small</i> , <b>2021</b> , 17, e2102316	11	4
163	A Highly Efficient Ion and Electron Conductive Interlayer To Achieve Low Self-Discharge of Lithium-Sulfur Batteries.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> ,	9.5	4
162	Ultrathin and High-Modulus LiBO Layer Highly Elevates the Interfacial Dynamics and Stability of Lithium Anode under Wide Temperature Range. <i>Small</i> , <b>2021</b> , e2106427	11	4
161	Integrated Structure of Cathode and Double-Layer Electrolyte for Highly Stable and Dendrite-Free All-Solid-State Li-Metal Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 56995-57002	9.5	10
160	Building Artificial Solid-Electrolyte Interphase with Uniform Intermolecular Ionic Bonds toward Dendrite-Free Lithium Metal Anodes. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2002414	15.6	54
159	Progress on Lithium Dendrite Suppression Strategies from the Interior to Exterior by Hierarchical Structure Designs. <i>Small</i> , <b>2020</b> , 16, e2000699	11	36
158	Vertically aligned carbon nanotubes grown on reduced graphene oxide as high-performance thermal interface materials. <i>Journal of Materials Science</i> , <b>2020</b> , 55, 9414-9424	4.3	10
157	Toward real-time monitoring of lithium metal growth and dendrite formation surveillance for safe lithium metal batteries. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 7090-7099	13	3
156	Bidirectional Catalysts for Liquid-Solid Redox Conversion in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2020</b> , 32, e2000315	24	137
155	Optimized Catalytic WS <sub>2</sub> /WO <sub>3</sub> Heterostructure Design for Accelerated Polysulfide Conversion in Lithium Sulfur Batteries. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2000091	21.8	109
154	Progress and Perspective of Ceramic/Polymer Composite Solid Electrolytes for Lithium Batteries. <i>Advanced Science</i> , <b>2020</b> , 7, 1903088	13.6	179
153	Porous spherical NiO@NiMoO <sub>4</sub> @PPy nanoarchitectures as advanced electrochemical pseudocapacitor materials. <i>Science Bulletin</i> , <b>2020</b> , 65, 546-556	10.6	123
152	Structure and thermal stability of LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> after long cycling at high temperature. <i>Journal of Power Sources</i> , <b>2020</b> , 450, 227695	8.9	9
151	PbTe nanodots confined on ternary B <sub>2</sub> O <sub>3</sub> /BC <sub>2</sub> O/C nanosheets as electrode for efficient sodium storage. <i>Journal of Power Sources</i> , <b>2020</b> , 461, 228110	8.9	10
150	Highly microporous SbPO <sub>4</sub> /BC <sub>x</sub> hybrid anodes for sodium-ion batteries. <i>Materials Advances</i> , <b>2020</b> , 1, 206-214	3.3	6
149	In Situ Construction of an Ultra-Stable Conductive Composite Interface for High-Voltage All-Solid-State Lithium Metal Batteries. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 11882-11886	3.6	11

- 148 Improving thermal and mechanical properties of the alumina filled silicone rubber composite by incorporating carbon nanotubes. *New Carbon Materials*, **2020**, 35, 66-72 4.4 15
- 147 Graphene induced growth of Sb<sub>2</sub>WO<sub>6</sub> nanosheets for high-performance pseudocapacitive lithium-ion storage. *Journal of Alloys and Compounds*, **2020**, 839, 155614 5.7 9
- 146 Efforts on enhancing the Li-ion diffusion coefficient and electronic conductivity of titanate-based anode materials for advanced Li-ion batteries. *Energy Storage Materials*, **2020**, 26, 165-197 19.4 103
- 145 In-situ construction of hierarchical cathode electrolyte interphase for high performance LiNi<sub>0.8</sub>Co<sub>0.1</sub>Mn<sub>0.1</sub>O<sub>2</sub>/Li metal battery. *Nano Energy*, **2020**, 78, 105282 17.1 36
- 144 Progress and Perspective of All-Solid-State Lithium Batteries with High Performance at Room Temperature. *Energy & Fuels*, **2020**, 34, 13456-13472 4.1 15
- 143 In-situ polymerized cross-linked binder for cathode in lithium-sulfur batteries. *Chinese Chemical Letters*, **2020**, 31, 570-574 8.1 24
- 142 A Functionalized Carbon Surface for High-Performance Sodium-Ion Storage. *Small*, **2020**, 16, e1902603 11 28
- 141 In Situ Construction of an Ultra-Stable Conductive Composite Interface for High-Voltage All-Solid-State Lithium Metal Batteries. *Angewandte Chemie - International Edition*, **2020**, 59, 11784-11788 16.4 60
- 140 Graphene-Templated Growth of WS<sub>2</sub> Nanoclusters for Catalytic Conversion of Polysulfides in Lithium Sulfur Batteries. *ACS Applied Energy Materials*, **2020**, 3, 4923-4930 6.1 11
- 139 Capacity Loss Mechanism of the LiTiO Microsphere Anode of Lithium-Ion Batteries at High Temperature and Rate Cycling Conditions. *ACS Applied Materials & Interfaces*, **2019**, 11, 37357-37364 9.5 17
- 138 Cross-linked beta alumina nanowires with compact gel polymer electrolyte coating for ultra-stable sodium metal battery. *Nature Communications*, **2019**, 10, 4244 17.4 128
- 137 Abundant grain boundaries activate highly efficient lithium ion transportation in high rate Li<sub>4</sub>Ti<sub>5</sub>O<sub>12</sub> compact microspheres. *Journal of Materials Chemistry A*, **2019**, 7, 1168-1176 13 18
- 136 Expanded-graphite embedded in lithium metal as dendrite-free anode of lithium metal batteries. *Journal of Materials Chemistry A*, **2019**, 7, 15871-15879 13 46
- 135 Hierarchical N-doped graphene coated 1D cobalt oxide microrods for robust and fast lithium storage at elevated temperature. *Electrochimica Acta*, **2019**, 310, 70-77 6.7 42
- 134 Increase and discretization of the energy barrier for individual Li<sub>x</sub>Ni<sub>y</sub>Co<sub>z</sub>Mn<sub>y</sub>O<sub>2</sub> (x + 2y = 1) particles with the growth of a Li<sub>2</sub>CO<sub>3</sub> surface film. *Journal of Materials Chemistry A*, **2019**, 7, 12723-12731 13 24
- 133 Thermal design and optimization of lithium ion batteries for unmanned aerial vehicles. *Energy Storage*, **2019**, 1, e48 2.8 3
- 132 Liquid electrolyte immobilized in compact polymer matrix for stable sodium metal anodes. *Energy Storage Materials*, **2019**, 23, 610-616 19.4 21
- 131 Holey graphenes as the conductive additives for LiFePO<sub>4</sub> batteries with an excellent rate performance. *Carbon*, **2019**, 149, 257-262 10.4 29

130	An ion-conducting SnS <sub>2</sub> /SnS hybrid coating for commercial activated carbons enabling their use as high performance anodes for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 10761-10768	13	18
129	Constructing Effective Interfaces for LiAlGe(PO) Pellets To Achieve Room-Temperature Hybrid Solid-State Lithium Metal Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 9911-9918	9.5	50
128	A lightweight carbon nanofiber-based 3D structured matrix with high nitrogen-doping level for lithium metal anodes. <i>Science China Materials</i> , <b>2019</b> , 62, 87-94	7.1	41
127	LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> as both a trapper and accelerator of polysulfides for lithium-sulfur batteries. <i>Energy Storage Materials</i> , <b>2019</b> , 17, 111-117	19.4	45
126	Review and prospect of NiCo <sub>2</sub> O <sub>4</sub> -based composite materials for supercapacitor electrodes. <i>Journal of Energy Chemistry</i> , <b>2019</b> , 31, 54-78	12	178
125	An ultrathin and continuous Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> coated carbon nanofiber interlayer for high rate lithium sulfur battery. <i>Journal of Energy Chemistry</i> , <b>2019</b> , 31, 19-26	12	53
124	sp-sp hybrid-conjugated microporous polymer-derived Pd-encapsulated porous carbon materials for lithium-sulfur batteries. <i>Chemical Communications</i> , <b>2019</b> , 55, 10084-10087	5.8	4
123	Interconnected Ultrasmall VO and LiTiO Particles Construct Robust Interfaces for Long-Cycling Anodes of Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 29993-30000	9.5	12
122	Constructing Multifunctional Interphase between Li <sub>1.4</sub> Al <sub>0.4</sub> Ti <sub>1.6</sub> (PO <sub>4</sub> ) <sub>3</sub> and Li Metal by Magnetron Sputtering for Highly Stable Solid-State Lithium Metal Batteries. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901604	21.8	103
121	Evolution of the electrochemical interface in sodium ion batteries with ether electrolytes. <i>Nature Communications</i> , <b>2019</b> , 10, 725	17.4	156
120	Compact Si/C anodes fabricated by simultaneously regulating the size and oxidation degree of Si for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 24356-24365	13	23
119	Synthesis of PdM (M = Zn, Cd, ZnCd) Nanosheets with an Unconventional Face-Centered Tetragonal Phase as Highly Efficient Electrocatalysts for Ethanol Oxidation. <i>ACS Nano</i> , <b>2019</b> , 13, 14329-14336	16.7	67
118	All-Solid-State Batteries: Low Resistance Integrated All-Solid-State Battery Achieved by Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> Nanowire Upgrading Polyethylene Oxide (PEO) Composite Electrolyte and PEO Cathode Binder (Adv. Funct. Mater. 1/2019). <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1970006	15.6	9
117	Low Resistance Integrated All-Solid-State Battery Achieved by Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> Nanowire Upgrading Polyethylene Oxide (PEO) Composite Electrolyte and PEO Cathode Binder. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1805301	15.6	240
116	Li <sub>6.75</sub> La <sub>3</sub> Zr <sub>1.75</sub> Ta <sub>0.25</sub> O <sub>12</sub> @amorphous Li <sub>3</sub> OCl composite electrolyte for solid state lithium-metal batteries. <i>Energy Storage Materials</i> , <b>2018</b> , 14, 49-57	19.4	72
115	General template-free strategy for fabricating mesoporous two-dimensional mixed oxide nanosheets via self-deconstruction/reconstruction of monodispersed metal glycerate nanospheres. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 5971-5983	13	57
114	Sulfur-functionalized three-dimensional graphene monoliths as high-performance anodes for ultrafast sodium-ion storage. <i>Chemical Communications</i> , <b>2018</b> , 54, 4317-4320	5.8	16
113	Compact 3D Copper with Uniform Porous Structure Derived by Electrochemical Dealloying as Dendrite-Free Lithium Metal Anode Current Collector. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1800266	21.8	226

112	Challenges and perspectives of garnet solid electrolytes for all solid-state lithium batteries. <i>Journal of Power Sources</i> , <b>2018</b> , 389, 120-134	8.9	236
111	Transition metal assisted synthesis of tunable pore structure carbon with high performance as sodium/lithium ion battery anode. <i>Carbon</i> , <b>2018</b> , 129, 667-673	10.4	45
110	Graphene-Directed Formation of a Nitrogen-Doped Porous Carbon Sheet with High Catalytic Performance for the Oxygen Reduction Reaction. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 13508-13514	13.8	15
109	A three-dimensional multilayer graphene web for polymer nanocomposites with exceptional transport properties and fracture resistance. <i>Materials Horizons</i> , <b>2018</b> , 5, 275-284	14.4	87
108	Hierarchically structured carbon nanomaterials for electrochemical energy storage applications. <i>Journal of Materials Research</i> , <b>2018</b> , 33, 1058-1073	2.5	25
107	Progress and Perspective of Solid-State Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1707570	15.6	138
106	Different solid electrolyte interface and anode performance of CoCO <sub>3</sub> microspheres due to graphene modification and LiCoO <sub>2</sub>   CoCO <sub>3</sub> @rGO full cell study. <i>Electrochimica Acta</i> , <b>2018</b> , 270, 192-204	6.7	23
105	Controlled synthesis of anisotropic hollow ZnCo <sub>2</sub> O <sub>4</sub> octahedrons for high-performance lithium storage. <i>Energy Storage Materials</i> , <b>2018</b> , 11, 184-190	19.4	46
104	Deterioration mechanism of LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> /graphite-BiOx power batteries under high temperature and discharge cycling conditions. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 65-72	13	51
103	Effects of solvent on structures and properties of electrospun poly(ethylene oxide) nanofibers. <i>Journal of Applied Polymer Science</i> , <b>2018</b> , 135, 45787	2.9	28
102	High-Level Heteroatom Doped Two-Dimensional Carbon Architectures for Highly Efficient Lithium-Ion Storage. <i>Frontiers in Chemistry</i> , <b>2018</b> , 6, 97	5	6
101	Spherical Li Deposited inside 3D Cu Skeleton as Anode with Ultrastable Performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 20244-20249	9.5	76
100	Functional Carbons Remedy the Shuttling of Polysulfides in Lithium-Sulfur Batteries: Confining, Trapping, Blocking, and Breaking up. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1800508	15.6	117
99	Fabrication of a quasi-symmetrical solid oxide fuel cell using a modified tape casting/screen-printing/infiltrating combined technique. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 960-967	6.7	7
98	A Robust Integrated SnOx/Carbon Composite Anode for Sodium-Ion Batteries. <i>ChemistrySelect</i> , <b>2018</b> , 3, 10869-10874	1.8	6
97	Solid-State Electrolytes: Progress and Perspective of Solid-State Lithium-Sulfur Batteries (Adv. Funct. Mater. 38/2018). <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1870272	15.6	9
96	Ultra-small self-discharge and stable lithium-sulfur batteries achieved by synergetic effects of multicomponent sandwich-type composite interlayer. <i>Nano Energy</i> , <b>2018</b> , 50, 367-375	17.1	89
95	Hollow SnO nanospheres with oxygen vacancies entrapped by a N-doped graphene network as robust anode materials for lithium-ion batteries. <i>Nanoscale</i> , <b>2018</b> , 10, 11460-11466	7.7	99



94	All-solid-state flexible planar lithium ion micro-capacitors. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2001-2009	35.4	121
93	Polymer-Templated Formation of Polydopamine-Coated SnO <sub>2</sub> Nanocrystals: Anodes for Cyclable Lithium-Ion Batteries. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 1895-1898	3.6	23
92	Polymer-Templated Formation of Polydopamine-Coated SnO Nanocrystals: Anodes for Cyclable Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 1869-1872	16.4	212
91	High-Density Microporous LiTiO Microbars with Superior Rate Performance for Lithium-Ion Batteries. <i>Advanced Science</i> , <b>2017</b> , 4, 1600311	13.6	52
90	Achieving Low Overpotential Lithium-Oxygen Batteries by Exploiting a New Electrolyte Based on N,N'-Dimethylpropyleneurea. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 313-318	20.1	25
89	Dendrite-Free, High-Rate, Long-Life Lithium Metal Batteries with a 3D Cross-Linked Network Polymer Electrolyte. <i>Advanced Materials</i> , <b>2017</b> , 29, 1604460	24	461
88	Suppressing Self-Discharge and Shuttle Effect of Lithium-Sulfur Batteries with V <sub>2</sub> O <sub>5</sub> -Decorated Carbon Nanofiber Interlayer. <i>Small</i> , <b>2017</b> , 13, 1602539	11	165
87	In situ synthesis of hierarchical poly(ionic liquid)-based solid electrolytes for high-safety lithium-ion and sodium-ion batteries. <i>Nano Energy</i> , <b>2017</b> , 33, 45-54	17.1	154
86	A review of gassing behavior in Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> -based lithium ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 6368-6381	13	125
85	Influence of charge rate on the cycling degradation of LiFePO <sub>4</sub> /mesocarbon microbead batteries under low temperature. <i>Ionics</i> , <b>2017</b> , 23, 1967-1978	2.7	8
84	Recent innovative configurations in high-energy lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 5222-5234	13	104
83	Zn-substituted CoCO <sub>3</sub> embedded in carbon nanotubes network as high performance anode for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 712, 605-612	5.7	16
82	Acetic acid-induced preparation of anatase TiO <sub>2</sub> mesocrystals at low temperature for enhanced Li-ion storage. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 12236-12242	13	22
81	Theoretical Investigation of the Intercalation Chemistry of Lithium/Sodium Ions in Transition Metal Dichalcogenides. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 13599-13605	3.8	62
80	Abstract: Polymer-Templated Formation of Polydopamine-Coated SnO <sub>2</sub> Nanocrystals: Anodes for Cyclable Lithium-Ion Batteries (Angew. Chem. 7/2017). <i>Angewandte Chemie</i> , <b>2017</b> , 129, 1958-1958	3.6	1
79	Discovering a First-Order Phase Transition in the Li-CeO System. <i>Nano Letters</i> , <b>2017</b> , 17, 1282-1288	11.5	19
78	Study on the reversible capacity loss of layered oxide cathode during low-temperature operation. <i>Journal of Power Sources</i> , <b>2017</b> , 342, 24-30	8.9	28
77	A Reduced Graphene Oxide/Disodium Terephthalate Hybrid as a High-Performance Anode for Sodium-Ion Batteries. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 16586-16592	4.8	10

76	A Facile Surface Reconstruction Mechanism toward Better Electrochemical Performance of LiTiO in Lithium-Ion Battery. <i>Advanced Science</i> , <b>2017</b> , 4, 1700205	13.6	30
75	A dual-functional gel-polymer electrolyte for lithium ion batteries with superior rate and safety performances. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 18888-18895	13	58
74	A Stable Cross-Linked Binder Network for SnO <sub>2</sub> Anode with Enhanced Sodium-Ion Storage Performance. <i>ChemistrySelect</i> , <b>2017</b> , 2, 11365-11369	1.8	9
73	Synthesis of Hierarchical Sisal-Like VO with Exposed Stable {001} Facets as Long Life Cathode Materials for Advanced Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 43681-43687	9.5	35
72	Fabrication of an MOF-derived heteroatom-doped Co/CoO/carbon hybrid with superior sodium storage performance for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 15356-15366	13	255
71	Li-ion and Na-ion transportation and storage properties in various sized TiO <sub>2</sub> spheres with hierarchical pores and high tap density. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 4359-4367	13	64
70	A Novel Lithiated Silicon-Sulfur Battery Exploiting an Optimized Solid-Like Electrolyte to Enhance Safety and Cycle Life. <i>Small</i> , <b>2017</b> , 13, 1602015	11	25
69	A sliced orange-shaped ZnCo <sub>2</sub> O <sub>4</sub> material as anode for high-performance lithium ion battery. <i>Energy Storage Materials</i> , <b>2017</b> , 6, 61-69	19.4	60
68	Graphene conductive additives for lithium ion batteries: Origin, progress and prospect. <i>Chinese Science Bulletin</i> , <b>2017</b> , 62, 3743-3756	2.9	11
67	Ultrafine TiO <sub>2</sub> Decorated Carbon Nanofibers as Multifunctional Interlayer for High-Performance Lithium-Sulfur Battery. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 23105-13	9.5	167
66	Construction of a Unique Two-Dimensional Hierarchical Carbon Architecture for Superior Lithium-Ion Storage. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 33399-33404	9.5	20
65	Dense coating of Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> and graphene mixture on the separator to produce long cycle life of lithium-sulfur battery. <i>Nano Energy</i> , <b>2016</b> , 30, 1-8	17.1	164
64	Cyclized-polyacrylonitrile modified carbon nanofiber interlayers enabling strong trapping of polysulfides in lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 12973-12980	13	54
63	Chemical Dealloying Derived 3D Porous Current Collector for Li Metal Anodes. <i>Advanced Materials</i> , <b>2016</b> , 28, 6932-9	24	586
62	SiO <sub>2</sub> Hollow Nanosphere-Based Composite Solid Electrolyte for Lithium Metal Batteries to Suppress Lithium Dendrite Growth and Enhance Cycle Life. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1502214	21.8	271
61	Micron-sized Spherical Si/C Hybrids Assembled via Water/Oil System for High-Performance Lithium Ion Battery. <i>Electrochimica Acta</i> , <b>2016</b> , 211, 982-988	6.7	23
60	A robust strategy for crafting monodisperse Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> nanospheres as superior rate anode for lithium ion batteries. <i>Nano Energy</i> , <b>2016</b> , 21, 133-144	17.1	138
59	A honeycomb-cobweb inspired hierarchical core-shell structure design for electrospun silicon/carbon fibers as lithium-ion battery anodes. <i>Carbon</i> , <b>2016</b> , 98, 582-591	10.4	104



58	Monodispersed SnO <sub>2</sub> nanospheres embedded in framework of graphene and porous carbon as anode for lithium ion batteries. <i>Energy Storage Materials</i> , <b>2016</b> , 3, 98-105	19.4	55
57	Novel gel polymer electrolyte for high-performance lithium-sulfur batteries. <i>Nano Energy</i> , <b>2016</b> , 22, 278-289	17.1	289
56	Influence of over-discharge on the lifetime and performance of LiFePO <sub>4</sub> /graphite batteries. <i>RSC Advances</i> , <b>2016</b> , 6, 30474-30483	3.7	48
55	Large Polarization of Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> Lithiated to 0 V at Large Charge/Discharge Rates. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 18788-96	9.5	43
54	A Carbon-Sulfur Hybrid with Pomegranate-like Structure for Lithium-Sulfur Batteries. <i>Chemistry - an Asian Journal</i> , <b>2016</b> , 11, 1343-7	4.5	16
53	How a very trace amount of graphene additive works for constructing an efficient conductive network in LiCoO <sub>2</sub> -based lithium-ion batteries. <i>Carbon</i> , <b>2016</b> , 103, 356-362	10.4	64
52	Mesoporous Cr <sub>2</sub> O <sub>3</sub> nanotubes as an efficient catalyst for LiD <sub>2</sub> batteries with low charge potential and enhanced cyclic performance. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 7727-7735	13	24
51	Multilayer Graphene Enables Higher Efficiency in Improving Thermal Conductivities of Graphene/Epoxy Composites. <i>Nano Letters</i> , <b>2016</b> , 16, 3585-93	11.5	233
50	Sulfur confined in nitrogen-doped microporous carbon used in a carbonate-based electrolyte for long-life, safe lithium-sulfur batteries. <i>Carbon</i> , <b>2016</b> , 109, 1-6	10.4	98
49	Abuse tolerance behavior of layered oxide-based Li-ion battery during overcharge and over-discharge. <i>RSC Advances</i> , <b>2016</b> , 6, 76897-76904	3.7	55
48	Fe <sub>3</sub> O <sub>4</sub> nanoparticles encapsulated in electrospun porous carbon fibers with a compact shell as high-performance anode for lithium ion batteries. <i>Carbon</i> , <b>2015</b> , 87, 347-356	10.4	113
47	Electrode thickness control: Precondition for quite different functions of graphene conductive additives in LiFePO <sub>4</sub> electrode. <i>Carbon</i> , <b>2015</b> , 92, 311-317	10.4	34
46	Combining Fast Li-Ion Battery Cycling with Large Volumetric Energy Density: Grain Boundary Induced High Electronic and Ionic Conductivity in Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> Spheres of Densely Packed Nanocrystallites. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 5647-5656	9.6	111
45	Effects of state of charge on the degradation of LiFePO <sub>4</sub> /graphite batteries during accelerated storage test. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 639, 406-414	5.7	36
44	Hollow titanium dioxide spheres as anode material for lithium ion battery with largely improved rate stability and cycle performance by suppressing the formation of solid electrolyte interface layer. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 13340-13349	13	63
43	Hierarchical dispersed multi-phase nickel cobalt oxide mesoporous thorn microspheres as superior rate anode materials for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 20886-20891	13	21
42	Si Nanoparticles Intercalated into Interlayers of Slightly Exfoliated Graphite filled by Carbon as Anode with High Volumetric Capacity for Lithium-ion Battery. <i>Electrochimica Acta</i> , <b>2015</b> , 184, 364-370	6.7	20
41	Deterioration of lithium iron phosphate/graphite power batteries under high-rate discharge cycling. <i>Electrochimica Acta</i> , <b>2015</b> , 176, 270-279	6.7	44

40	N and S co-doped porous carbon spheres prepared using L-cysteine as a dual functional agent for high-performance lithium-sulfur batteries. <i>Chemical Communications</i> , <b>2015</b> , 51, 17720-3	5.8	109
39	A carbon sandwich electrode with graphene filling coated by N-doped porous carbon layers for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 20218-20224	13	76
38	Multilayered silicon embedded porous carbon/graphene hybrid film as a high performance anode. <i>Carbon</i> , <b>2015</b> , 84, 434-443	10.4	124
37	Electrolytes: In Situ Synthesis of a Hierarchical All-Solid-State Electrolyte Based on Nitrile Materials for High-Performance Lithium-Ion Batteries (Adv. Energy Mater. 15/2015). <i>Advanced Energy Materials</i> , <b>2015</b> , 5, n/a-n/a	21.8	2
36	In Situ Synthesis of a Hierarchical All-Solid-State Electrolyte Based on Nitrile Materials for High-Performance Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1500353	21.8	215
35	Concrete-Inspired construction of a silicon/carbon hybrid electrode for high performance lithium ion battery. <i>Carbon</i> , <b>2015</b> , 93, 59-67	10.4	71
34	Ultrafast high-volumetric sodium storage of folded-graphene electrodes through surface-induced redox reactions. <i>Energy Storage Materials</i> , <b>2015</b> , 1, 112-118	19.4	69
33	Suppression of interfacial reactions between Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> electrode and electrolyte solution via zinc oxide coating. <i>Electrochimica Acta</i> , <b>2015</b> , 157, 266-273	6.7	40
32	Electrospun core-shell silicon/carbon fibers with an internal honeycomb-like conductive carbon framework as an anode for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 7112-7120	13	78
31	Exceptional rate performance of functionalized carbon nanofiber anodes containing nanopores created by (Fe) sacrificial catalyst. <i>Nano Energy</i> , <b>2014</b> , 4, 88-96	17.1	84
30	High catalytic activity of anatase titanium dioxide for decomposition of electrolyte solution in lithium ion battery. <i>Journal of Power Sources</i> , <b>2014</b> , 268, 882-886	8.9	21
29	Silicon/carbon composite microspheres with hierarchical core-shell structure as anode for lithium ion batteries. <i>Electrochemistry Communications</i> , <b>2014</b> , 49, 98-102	5.1	45
28	Highly crystalline lithium titanium oxide sheets coated with nitrogen-doped carbon enable high-rate lithium-ion batteries. <i>ChemSusChem</i> , <b>2014</b> , 7, 2567-74	8.3	50
27	Investigation of cyano resin-based gel polymer electrolyte: in situ gelation mechanism and electrode-electrolyte interfacial fabrication in lithium-ion battery. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 20059-20066	13	65
26	Optimized synthesis of nano-sized LiFePO <sub>4</sub> /C particles with excellent rate capability for lithium ion batteries. <i>Electrochimica Acta</i> , <b>2014</b> , 130, 322-328	6.7	22
25	Correlation Between Atomic Structure and Electrochemical Performance of Anodes Made from Electrospun Carbon Nanofiber Films. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1301448	21.8	116
24	Percolation threshold of graphene nanosheets as conductive additives in Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> anodes of Li-ion batteries. <i>Nanoscale</i> , <b>2013</b> , 5, 2100-6	7.7	104
23	The effect of graphene wrapping on the performance of LiFePO <sub>4</sub> for a lithium ion battery. <i>Carbon</i> , <b>2013</b> , 57, 530-533	10.4	108

22	Effect of solid electrolyte interface (SEI) film on cyclic performance of Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> anodes for Li ion batteries. <i>Journal of Power Sources</i> , <b>2013</b> , 239, 269-276	8.9	188
21	Carbon coating to suppress the reduction decomposition of electrolyte on the Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> electrode. <i>Journal of Power Sources</i> , <b>2012</b> , 202, 253-261	8.9	119
20	Improvement of overcharge performance using Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> as negative electrode for LiFePO <sub>4</sub> power battery. <i>Journal of Solid State Electrochemistry</i> , <b>2012</b> , 16, 265-271	2.6	14
19	Could graphene construct an effective conducting network in a high-power lithium ion battery?. <i>Nano Energy</i> , <b>2012</b> , 1, 429-439	17.1	160
18	Facile synthesis of Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> /C composite with super rate performance. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 9595	35.4	285
17	Gassing in Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> -based batteries and its remedy. <i>Scientific Reports</i> , <b>2012</b> , 2, 913	4.9	238
16	Effects of current densities on the formation of LiCoO <sub>2</sub> /graphite lithium ion battery. <i>Journal of Solid State Electrochemistry</i> , <b>2011</b> , 15, 1977-1985	2.6	26
15	Flexible and planar graphene conductive additives for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 9644		250
14	Safety properties of liquid state soft pack high power batteries with carbon-coated LiFePO <sub>4</sub> /graphite electrodes. <i>Journal of Solid State Electrochemistry</i> , <b>2010</b> , 14, 751-756	2.6	11
13	Capacitance performance enhancement of TiO <sub>2</sub> doped with Ni and graphite. <i>Rare Metals</i> , <b>2009</b> , 28, 231-236	3.6	18
12	Low-temperature exfoliated graphenes: vacuum-promoted exfoliation and electrochemical energy storage. <i>ACS Nano</i> , <b>2009</b> , 3, 3730-6	16.7	633
11	Effects of Temperature on the Formation of Graphite  LiCoO <sub>2</sub> Batteries. <i>Journal of the Electrochemical Society</i> , <b>2008</b> , 155, A481	3.9	24
10	PVDF-HFP composite polymer electrolyte with excellent electrochemical properties for Li-ion batteries. <i>Journal of Solid State Electrochemistry</i> , <b>2008</b> , 12, 1497-1502	2.6	51
9	Preparation and characterization of 18650 Li(Ni <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> )O <sub>2</sub> /graphite high power batteries. <i>Journal of Power Sources</i> , <b>2008</b> , 185, 526-533	8.9	16
8	The thermal stability of fully charged and discharged LiCoO <sub>2</sub> cathode and graphite anode in nitrogen and air atmospheres. <i>Thermochimica Acta</i> , <b>2008</b> , 480, 15-21	2.9	20
7	The cooperative effect of tri(ethylchloromethyl) phosphate and cyclohexyl benzene on lithium ion batteries. <i>Electrochimica Acta</i> , <b>2007</b> , 52, 3534-3540	6.7	26
6	Constructing a highly efficient solid polymer electrolyte ion transport network in cathodes activates the room temperature performance of all-solid-state lithium batteries. <i>Energy and Environmental Science</i> ,	35.4	5
5	A relaxor ferroelectric polymer with an ultrahigh dielectric constant largely promotes the dissociation of lithium salts to achieve high ionic conductivity. <i>Energy and Environmental Science</i> ,	35.4	17

4 Progress and perspective of the cathode/electrolyte interface construction in all-solid-state lithium batteries 9

3 Progress and perspective of  $\text{Li}_1 + x\text{Al}_x\text{Ti}_{2-x}(\text{PO}_4)_3$  ceramic electrolyte in lithium batteries. *Information Materials*, 23.1 12

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