

Yan-Bing He

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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	Low-temperature exfoliated graphenes: vacuum-promoted exfoliation and electrochemical energy storage. <i>ACS Nano</i> , 2009 , 3, 3730-6	16.7	633
182	Chemical Dealloying Derived 3D Porous Current Collector for Li Metal Anodes. <i>Advanced Materials</i> , 2016 , 28, 6932-9	24	586
181	Dendrite-Free, High-Rate, Long-Life Lithium Metal Batteries with a 3D Cross-Linked Network Polymer Electrolyte. <i>Advanced Materials</i> , 2017 , 29, 1604460	24	461
180	Novel gel polymer electrolyte for high-performance lithium-sulfur batteries. <i>Nano Energy</i> , 2016 , 22, 278-289	17.1	289
179	Facile synthesis of Li ₄ Ti ₅ O ₁₂ /C composite with super rate performance. <i>Energy and Environmental Science</i> , 2012 , 5, 9595	35.4	285
178	SiO ₂ Hollow Nanosphere-Based Composite Solid Electrolyte for Lithium Metal Batteries to Suppress Lithium Dendrite Growth and Enhance Cycle Life. <i>Advanced Energy Materials</i> , 2016 , 6, 1502214	21.8	271
177	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> , 2017 , 5, 15356-15366	13	255
176	Flexible and planar graphene conductive additives for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2010 , 20, 9644		250
175	Low Resistance Integrated All-Solid-State Battery Achieved by Li ₇ La ₃ Zr ₂ O ₁₂ Nanowire Upgrading Polyethylene Oxide (PEO) Composite Electrolyte and PEO Cathode Binder. <i>Advanced Functional Materials</i> , 2019 , 29, 1805301	15.6	240
174	Gassing in Li ₄ Ti ₅ O ₁₂ -based batteries and its remedy. <i>Scientific Reports</i> , 2012 , 2, 913	4.9	238
173	Challenges and perspectives of garnet solid electrolytes for all solid-state lithium batteries. <i>Journal of Power Sources</i> , 2018 , 389, 120-134	8.9	236
172	Multilayer Graphene Enables Higher Efficiency in Improving Thermal Conductivities of Graphene/Epoxy Composites. <i>Nano Letters</i> , 2016 , 16, 3585-93	11.5	233
171	Compact 3D Copper with Uniform Porous Structure Derived by Electrochemical Dealloying as Dendrite-Free Lithium Metal Anode Current Collector. <i>Advanced Energy Materials</i> , 2018 , 8, 1800266	21.8	226
170	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> , 2015 , 5, 1500353	21.8	215
169	Polymer-Templated Formation of Polydopamine-Coated SnO Nanocrystals: Anodes for Cyclable Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 1869-1872	16.4	212
168	Effect of solid electrolyte interface (SEI) film on cyclic performance of Li ₄ Ti ₅ O ₁₂ anodes for Li ion batteries. <i>Journal of Power Sources</i> , 2013 , 239, 269-276	8.9	188
167	Progress and Perspective of Ceramic/Polymer Composite Solid Electrolytes for Lithium Batteries. <i>Advanced Science</i> , 2020 , 7, 1903088	13.6	179

166	Review and prospect of NiCo ₂ O ₄ -based composite materials for supercapacitor electrodes. <i>Journal of Energy Chemistry</i> , 2019 , 31, 54-78	12	178
165	Ultrafine TiO ₂ Decorated Carbon Nanofibers as Multifunctional Interlayer for High-Performance Lithium-Sulfur Battery. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 23105-13	9.5	167
164	Suppressing Self-Discharge and Shuttle Effect of Lithium-Sulfur Batteries with V O ₂ -Decorated Carbon Nanofiber Interlayer. <i>Small</i> , 2017 , 13, 1602539	11	165
163	Dense coating of Li ₄ Ti ₅ O ₁₂ and graphene mixture on the separator to produce long cycle life of lithium-sulfur battery. <i>Nano Energy</i> , 2016 , 30, 1-8	17.1	164
162	Could graphene construct an effective conducting network in a high-power lithium ion battery?. <i>Nano Energy</i> , 2012 , 1, 429-439	17.1	160
161	Evolution of the electrochemical interface in sodium ion batteries with ether electrolytes. <i>Nature Communications</i> , 2019 , 10, 725	17.4	156
160	In situ synthesis of hierarchical poly(ionic liquid)-based solid electrolytes for high-safety lithium-ion and sodium-ion batteries. <i>Nano Energy</i> , 2017 , 33, 45-54	17.1	154
159	Progress and Perspective of Solid-State Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2018 , 28, 1707570	15.6	138
158	A robust strategy for crafting monodisperse Li ₄ Ti ₅ O ₁₂ nanospheres as superior rate anode for lithium ion batteries. <i>Nano Energy</i> , 2016 , 21, 133-144	17.1	138
157	Bidirectional Catalysts for Liquid-Solid Redox Conversion in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2020 , 32, e2000315	24	137
156	Cross-linked beta alumina nanowires with compact gel polymer electrolyte coating for ultra-stable sodium metal battery. <i>Nature Communications</i> , 2019 , 10, 4244	17.4	128
155	A review of gassing behavior in Li ₄ Ti ₅ O ₁₂ -based lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 6368-6381	13	125
154	Multilayered silicon embedded porous carbon/graphene hybrid film as a high performance anode. <i>Carbon</i> , 2015 , 84, 434-443	10.4	124
153	Porous spherical NiO@NiMoO ₄ @PPy nanoarchitectures as advanced electrochemical pseudocapacitor materials. <i>Science Bulletin</i> , 2020 , 65, 546-556	10.6	123
152	All-solid-state flexible planar lithium ion micro-capacitors. <i>Energy and Environmental Science</i> , 2018 , 11, 2001-2009	35.4	121
151	Carbon coating to suppress the reduction decomposition of electrolyte on the Li ₄ Ti ₅ O ₁₂ electrode. <i>Journal of Power Sources</i> , 2012 , 202, 253-261	8.9	119
150	Functional Carbons Remedy the Shuttling of Polysulfides in Lithium-Sulfur Batteries: Confining, Trapping, Blocking, and Breaking up. <i>Advanced Functional Materials</i> , 2018 , 28, 1800508	15.6	117
149	Correlation Between Atomic Structure and Electrochemical Performance of Anodes Made from Electrospun Carbon Nanofiber Films. <i>Advanced Energy Materials</i> , 2014 , 4, 1301448	21.8	116

148	Fe ₃ O ₄ nanoparticles encapsulated in electrospun porous carbon fibers with a compact shell as high-performance anode for lithium ion batteries. <i>Carbon</i> , 2015 , 87, 347-356	10.4	113
147	Combining Fast Li-Ion Battery Cycling with Large Volumetric Energy Density: Grain Boundary Induced High Electronic and Ionic Conductivity in Li ₄ Ti ₅ O ₁₂ Spheres of Densely Packed Nanocrystallites. <i>Chemistry of Materials</i> , 2015 , 27, 5647-5656	9.6	111
146	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> , 2015 , 51, 17720-3	5.8	109
145	Optimized Catalytic WS ₂ /WO ₃ Heterostructure Design for Accelerated Polysulfide Conversion in Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2020 , 10, 2000091	21.8	109
144	The effect of graphene wrapping on the performance of LiFePO ₄ for a lithium ion battery. <i>Carbon</i> , 2013 , 57, 530-533	10.4	108
143	Recent innovative configurations in high-energy lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 5222-5234	13	104
142	A honeycomb-cobweb inspired hierarchical core-shell structure design for electrospun silicon/carbon fibers as lithium-ion battery anodes. <i>Carbon</i> , 2016 , 98, 582-591	10.4	104
141	Percolation threshold of graphene nanosheets as conductive additives in Li ₄ Ti ₅ O ₁₂ anodes of Li-ion batteries. <i>Nanoscale</i> , 2013 , 5, 2100-6	7.7	104
140	Constructing Multifunctional Interphase between Li _{1.4} Al _{0.4} Ti _{1.6} (PO ₄) ₃ and Li Metal by Magnetron Sputtering for Highly Stable Solid-State Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2019 , 9, 1901604	21.8	103
139	Efforts on enhancing the Li-ion diffusion coefficient and electronic conductivity of titanate-based anode materials for advanced Li-ion batteries. <i>Energy Storage Materials</i> , 2020 , 26, 165-197	19.4	103
138	Hollow SnO nanospheres with oxygen vacancies entrapped by a N-doped graphene network as robust anode materials for lithium-ion batteries. <i>Nanoscale</i> , 2018 , 10, 11460-11466	7.7	99
137	Sulfur confined in nitrogen-doped microporous carbon used in a carbonate-based electrolyte for long-life, safe lithium-sulfur batteries. <i>Carbon</i> , 2016 , 109, 1-6	10.4	98
136	Ultra-small self-discharge and stable lithium-sulfur batteries achieved by synergetic effects of multicomponent sandwich-type composite interlayer. <i>Nano Energy</i> , 2018 , 50, 367-375	17.1	89
135	A three-dimensional multilayer graphene web for polymer nanocomposites with exceptional transport properties and fracture resistance. <i>Materials Horizons</i> , 2018 , 5, 275-284	14.4	87
134	Exceptional rate performance of functionalized carbon nanofiber anodes containing nanopores created by (Fe) sacrificial catalyst. <i>Nano Energy</i> , 2014 , 4, 88-96	17.1	84
133	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> , 2015 , 3, 7112-7120	13	78
132	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> , 2015 , 3, 20218-20224	13	76
131	Spherical Li Deposited inside 3D Cu Skeleton as Anode with Ultrastable Performance. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 20244-20249	9.5	76

130	Li _{6.75} La ₃ Zr _{1.75} Ta _{0.25} O ₁₂ @amorphous Li ₃ OCl composite electrolyte for solid state lithium-metal batteries. <i>Energy Storage Materials</i> , 2018 , 14, 49-57	19.4	72
129	Concrete-Inspired construction of a silicon/carbon hybrid electrode for high performance lithium ion battery. <i>Carbon</i> , 2015 , 93, 59-67	10.4	71
128	Ultrafast high-volumetric sodium storage of folded-graphene electrodes through surface-induced redox reactions. <i>Energy Storage Materials</i> , 2015 , 1, 112-118	19.4	69
127	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> , 2019 , 13, 14329-14336	16.7	67
126	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> , 2014 , 2, 20059-20066	13	65
125	Li-ion and Na-ion transportation and storage properties in various sized TiO ₂ spheres with hierarchical pores and high tap density. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 4359-4367	13	64
124	How a very trace amount of graphene additive works for constructing an efficient conductive network in LiCoO ₂ -based lithium-ion batteries. <i>Carbon</i> , 2016 , 103, 356-362	10.4	64
123	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> , 2015 , 3, 13340-13349	13	63
122	Theoretical Investigation of the Intercalation Chemistry of Lithium/Sodium Ions in Transition Metal Dichalcogenides. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 13599-13605	3.8	62
121	A sliced orange-shaped ZnCo ₂ O ₄ material as anode for high-performance lithium ion battery. <i>Energy Storage Materials</i> , 2017 , 6, 61-69	19.4	60
120	In Situ Construction of an Ultra-Stable Conductive Composite Interface for High-Voltage All-Solid-State Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 11784-11788	16.4	60
119	A dual-functional gel-polymer electrolyte for lithium ion batteries with superior rate and safety performances. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 18888-18895	13	58
118	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> , 2018 , 6, 5971-5983	13	57
117	Monodispersed SnO ₂ nanospheres embedded in framework of graphene and porous carbon as anode for lithium ion batteries. <i>Energy Storage Materials</i> , 2016 , 3, 98-105	19.4	55
116	Abuse tolerance behavior of layered oxide-based Li-ion battery during overcharge and over-discharge. <i>RSC Advances</i> , 2016 , 6, 76897-76904	3.7	55
115	Building Artificial Solid-Electrolyte Interphase with Uniform Intermolecular Ionic Bonds toward Dendrite-Free Lithium Metal Anodes. <i>Advanced Functional Materials</i> , 2020 , 30, 2002414	15.6	54
114	Cyclized-polyacrylonitrile modified carbon nanofiber interlayers enabling strong trapping of polysulfides in lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 12973-12980	13	54
113	An ultrathin and continuous Li ₄ Ti ₅ O ₁₂ coated carbon nanofiber interlayer for high rate lithium sulfur battery. <i>Journal of Energy Chemistry</i> , 2019 , 31, 19-26	12	53

112	High-Density Microporous LiTiO Microbars with Superior Rate Performance for Lithium-Ion Batteries. <i>Advanced Science</i> , 2017 , 4, 1600311	13.6	52
111	Deterioration mechanism of LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ /graphite/BiOx power batteries under high temperature and discharge cycling conditions. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 65-72	13	51
110	PVDF-HFP composite polymer electrolyte with excellent electrochemical properties for Li-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2008 , 12, 1497-1502	2.6	51
109	Constructing Effective Interfaces for LiAlGe(PO) Pellets To Achieve Room-Temperature Hybrid Solid-State Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 9911-9918	9.5	50
108	Highly crystalline lithium titanium oxide sheets coated with nitrogen-doped carbon enable high-rate lithium-ion batteries. <i>ChemSusChem</i> , 2014 , 7, 2567-74	8.3	50
107	Influence of over-discharge on the lifetime and performance of LiFePO ₄ /graphite batteries. <i>RSC Advances</i> , 2016 , 6, 30474-30483	3.7	48
106	Expanded-graphite embedded in lithium metal as dendrite-free anode of lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 15871-15879	13	46
105	Controlled synthesis of anisotropic hollow ZnCo ₂ O ₄ octahedrons for high-performance lithium storage. <i>Energy Storage Materials</i> , 2018 , 11, 184-190	19.4	46
104	Transition metal assisted synthesis of tunable pore structure carbon with high performance as sodium/lithium ion battery anode. <i>Carbon</i> , 2018 , 129, 667-673	10.4	45
103	LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ as both a trapper and accelerator of polysulfides for lithium-sulfur batteries. <i>Energy Storage Materials</i> , 2019 , 17, 111-117	19.4	45
102	Silicon/carbon composite microspheres with hierarchical core-shell structure as anode for lithium ion batteries. <i>Electrochemistry Communications</i> , 2014 , 49, 98-102	5.1	45
101	Deterioration of lithium iron phosphate/graphite power batteries under high-rate discharge cycling. <i>Electrochimica Acta</i> , 2015 , 176, 270-279	6.7	44
100	Large Polarization of Li ₄ Ti ₅ O ₁₂ Lithiated to 0 V at Large Charge/Discharge Rates. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 18788-96	9.5	43
99	Hierarchical N-doped graphene coated 1D cobalt oxide microrods for robust and fast lithium storage at elevated temperature. <i>Electrochimica Acta</i> , 2019 , 310, 70-77	6.7	42
98	A lightweight carbon nanofiber-based 3D structured matrix with high nitrogen-doping level for lithium metal anodes. <i>Science China Materials</i> , 2019 , 62, 87-94	7.1	41
97	Suppression of interfacial reactions between Li ₄ Ti ₅ O ₁₂ electrode and electrolyte solution via zinc oxide coating. <i>Electrochimica Acta</i> , 2015 , 157, 266-273	6.7	40
96	Lithium Metal Electrode with Increased Air Stability and Robust Solid Electrolyte Interphase Realized by Silane Coupling Agent Modification. <i>Advanced Materials</i> , 2021 , 33, e2008133	24	40
95	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> , 2021 , 31, 2100311	15.6	39

94	Effects of state of charge on the degradation of LiFePO ₄ /graphite batteries during accelerated storage test. <i>Journal of Alloys and Compounds</i> , 2015 , 639, 406-414	5.7	36
93	Progress on Lithium Dendrite Suppression Strategies from the Interior to Exterior by Hierarchical Structure Designs. <i>Small</i> , 2020 , 16, e2000699	11	36
92	In-situ construction of hierarchical cathode electrolyte interphase for high performance LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ /Li metal battery. <i>Nano Energy</i> , 2020 , 78, 105282	17.1	36
91	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 & Interfaces</i> , 2017 , 9, 43681-43687	8.5	35
90	Electrode thickness control: Precondition for quite different functions of graphene conductive additives in LiFePO ₄ electrode. <i>Carbon</i> , 2015 , 92, 311-317	10.4	34
89	A Facile Surface Reconstruction Mechanism toward Better Electrochemical Performance of LiTiO in Lithium-Ion Battery. <i>Advanced Science</i> , 2017 , 4, 1700205	13.6	30
88	Holey graphenes as the conductive additives for LiFePO ₄ batteries with an excellent rate performance. <i>Carbon</i> , 2019 , 149, 257-262	10.4	29
87	Study on the reversible capacity loss of layered oxide cathode during low-temperature operation. <i>Journal of Power Sources</i> , 2017 , 342, 24-30	8.9	28
86	Effects of solvent on structures and properties of electrospun poly(ethylene oxide) nanofibers. <i>Journal of Applied Polymer Science</i> , 2018 , 135, 45787	2.9	28
85	A Functionalized Carbon Surface for High-Performance Sodium-Ion Storage. <i>Small</i> , 2020 , 16, e1902603	11	28
84	Effects of current densities on the formation of LiCoO ₂ /graphite lithium ion battery. <i>Journal of Solid State Electrochemistry</i> , 2011 , 15, 1977-1985	2.6	26
83	The cooperative effect of tri(ethylchloromethyl) phosphate and cyclohexyl benzene on lithium ion batteries. <i>Electrochimica Acta</i> , 2007 , 52, 3534-3540	6.7	26
82	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> , 2021 , 60, 24668-24675	16.4	26
81	Achieving Low Overpotential Lithium-Oxygen Batteries by Exploiting a New Electrolyte Based on N,N'-Dimethylpropyleneurea. <i>ACS Energy Letters</i> , 2017 , 2, 313-318	20.1	25
80	Hierarchically structured carbon nanomaterials for electrochemical energy storage applications. <i>Journal of Materials Research</i> , 2018 , 33, 1058-1073	2.5	25
79	A Novel Lithiated Silicon-Sulfur Battery Exploiting an Optimized Solid-Like Electrolyte to Enhance Safety and Cycle Life. <i>Small</i> , 2017 , 13, 1602015	11	25
78	Increase and discretization of the energy barrier for individual LiNi _x Co _y Mn _y O ₂ (x + 2y = 1) particles with the growth of a Li ₂ CO ₃ surface film. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 12723-12731	13	24
77	Effects of Temperature on the Formation of Graphite CoO[sub 2] Batteries. <i>Journal of the Electrochemical Society</i> , 2008 , 155, A481	3.9	24

76	Mesoporous Cr ₂ O ₃ nanotubes as an efficient catalyst for LiD ₂ batteries with low charge potential and enhanced cyclic performance. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 7727-7735	13	24
75	In-situ polymerized cross-linked binder for cathode in lithium-sulfur batteries. <i>Chinese Chemical Letters</i> , 2020 , 31, 570-574	8.1	24
74	(Oxalato)borate: The key ingredient for polyethylene oxide based composite electrolyte to achieve ultra-stable performance of high voltage solid-state LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ /lithium metal battery. <i>Nano Energy</i> , 2021 , 80, 105562	17.1	24
73	Polymer-Templated Formation of Polydopamine-Coated SnO ₂ Nanocrystals: Anodes for Cyclable Lithium-Ion Batteries. <i>Angewandte Chemie</i> , 2017 , 129, 1895-1898	3.6	23
72	Different solid electrolyte interface and anode performance of CoCO ₃ microspheres due to graphene modification and LiCoO ₂ CoCO ₃ @rGO full cell study. <i>Electrochimica Acta</i> , 2018 , 270, 192-204	6.7	23
71	Micron-sized Spherical Si/C Hybrids Assembled via Water/Oil System for High-Performance Lithium Ion Battery. <i>Electrochimica Acta</i> , 2016 , 211, 982-988	6.7	23
70	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> , 2019 , 7, 24356-24365	13	23
69	Acetic acid-induced preparation of anatase TiO ₂ mesocrystals at low temperature for enhanced Li-ion storage. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 12236-12242	13	22
68	Optimized synthesis of nano-sized LiFePO ₄ /C particles with excellent rate capability for lithium ion batteries. <i>Electrochimica Acta</i> , 2014 , 130, 322-328	6.7	22
67	Nitrate Additives Coordinated with Crown Ether Stabilize Lithium Metal Anodes in Carbonate Electrolyte. <i>Advanced Functional Materials</i> , 2021 , 31, 2102128	15.6	22
66	Liquid electrolyte immobilized in compact polymer matrix for stable sodium metal anodes. <i>Energy Storage Materials</i> , 2019 , 23, 610-616	19.4	21
65	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> , 2015 , 3, 20886-20891	13	21
64	High catalytic activity of anatase titanium dioxide for decomposition of electrolyte solution in lithium ion battery. <i>Journal of Power Sources</i> , 2014 , 268, 882-886	8.9	21
63	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> , 2015 , 184, 364-370	6.7	20
62	Construction of a Unique Two-Dimensional Hierarchical Carbon Architecture for Superior Lithium-Ion Storage. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 33399-33404	9.5	20
61	The thermal stability of fully charged and discharged LiCoO ₂ cathode and graphite anode in nitrogen and air atmospheres. <i>Thermochimica Acta</i> , 2008 , 480, 15-21	2.9	20
60	Discovering a First-Order Phase Transition in the Li-CeO System. <i>Nano Letters</i> , 2017 , 17, 1282-1288	11.5	19
59	Abundant grain boundaries activate highly efficient lithium ion transportation in high rate Li ₄ Ti ₅ O ₁₂ compact microspheres. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 1168-1176	13	18

58	An ion-conducting SnS ₂ /SnS ₂ hybrid coating for commercial activated carbons enabling their use as high performance anodes for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 10761-10768	13	18
57	Capacitance performance enhancement of TiO ₂ doped with Ni and graphite. <i>Rare Metals</i> , 2009 , 28, 231-236	3.5	18
56	Capacity Loss Mechanism of the LiTiO Microsphere Anode of Lithium-Ion Batteries at High Temperature and Rate Cycling Conditions. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 37357-37364	4.5	17
55	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
54	Zn-substituted CoCO ₃ embedded in carbon nanotubes network as high performance anode for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2017 , 712, 605-612	5.7	16
53	Sulfur-functionalized three-dimensional graphene monoliths as high-performance anodes for ultrafast sodium-ion storage. <i>Chemical Communications</i> , 2018 , 54, 4317-4320	5.8	16
52	Preparation and characterization of 18650 Li(Ni _{1/3} Co _{1/3} Mn _{1/3})O ₂ /graphite high power batteries. <i>Journal of Power Sources</i> , 2008 , 185, 526-533	8.9	16
51	A Carbon-Sulfur Hybrid with Pomegranate-like Structure for Lithium-Sulfur Batteries. <i>Chemistry - an Asian Journal</i> , 2016 , 11, 1343-7	4.5	16
50	Improving thermal and mechanical properties of the alumina filled silicone rubber composite by incorporating carbon nanotubes. <i>New Carbon Materials</i> , 2020 , 35, 66-72	4.4	15
49	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> , 2018 , 122, 13508-13514	3.8	15
48	Progress and Perspective of All-Solid-State Lithium Batteries with High Performance at Room Temperature. <i>Energy & Fuels</i> , 2020 , 34, 13456-13472	4.1	15
47	Improvement of overcharge performance using Li ₄ Ti ₅ O ₁₂ as negative electrode for LiFePO ₄ power battery. <i>Journal of Solid State Electrochemistry</i> , 2012 , 16, 265-271	2.6	14
46	Interconnected Ultrasmall VO and LiTiO Particles Construct Robust Interfaces for Long-Cycling Anodes of Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 29993-30000	9.5	12
45	Progress and perspective of Li _{1-x} Al _x Ti _{2-x} (PO ₄) ₃ ceramic electrolyte in lithium batteries. <i>Information Materials</i> ,	23.1	12
44	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> , 2021 , 9, 7667-7674	13	12
43	In Situ Construction of an Ultra-Stable Conductive Composite Interface for High-Voltage All-Solid-State Lithium Metal Batteries. <i>Angewandte Chemie</i> , 2020 , 132, 11882-11886	3.6	11
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23	Self-Healing Mechanism of Lithium in Lithium Metal.. <i>Advanced Science</i> , 2022 , e2105574	13.6	7

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17	A lithium nucleation-diffusion-growth mechanism to govern the horizontal deposition of lithium metal anode. <i>Science China Materials</i> , 2021 , 64, 2409-2420	7.1	5
16	Coordinated Adsorption and Catalytic Conversion of Polysulfides Enabled by Perovskite Bimetallic Hydroxide Nanocages for Lithium-Sulfur Batteries. <i>Small</i> , 2021 , 17, e2101538	11	5
15	Crystalline borophene quantum dots and their derivative boron nanospheres. <i>Materials Advances</i> , 2020 , 1, 206-214	3.3	5
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