Yan-Bing He

List of Publications by Year
in descending order

188 papers	17,993 citations	9786 73 h-index	14208 128 g-index
191 all docs	191 docs citations	191 times ranked	15032 citing authors

#	Article	IF	Citations
1	Chemical Dealloying Derived 3D Porous Current Collector for Li Metal Anodes. Advanced Materials, 2016, 28, 6932-6939.	21.0	751
2	Low-Temperature Exfoliated Graphenes: Vacuum-Promoted Exfoliation and Electrochemical Energy Storage. ACS Nano, 2009, 3, 3730-3736.	14.6	694
3	Dendriteâ€Free, Highâ€Rate, Longâ€Life Lithium Metal Batteries with a 3D Crossâ€Linked Network Polymer Electrolyte. Advanced Materials, 2017, 29, 1604460.	21.0	604
4	Progress and Perspective of Ceramic/Polymer Composite Solid Electrolytes for Lithium Batteries. Advanced Science, 2020, 7, 1903088.	11.2	403
5	Low Resistanceâ€“Integrated Allâ€Solidâ€State Battery Achieved by Li₇La₃Zr₂O₁₂ Nanowire Upgrading Polyethylene Oxide (PEO) Composite Electrolyte and PEO Cathode Binder. Advanced Functional Materials, 2019, 29, 1805301.	14.9	390
6	Novel gel polymer electrolyte for high-performance lithiumâ€“sulfur batteries. Nano Energy, 2016, 22, 278-289.	16.0	382
7	Challenges and perspectives of garnet solid electrolytes for all solid-state lithium batteries. Journal of Power Sources, 2018, 389, 120-134.	7.8	359
8	SiO₂ Hollow Nanosphereâ€Based Composite Solid Electrolyte for Lithium Metal Batteries to Suppress Lithium Dendrite Growth and Enhance Cycle Life. Advanced Energy Materials, 2016, 6, 1502214.	19.5	346
9	Compact 3D Copper with Uniform Porous Structure Derived by Electrochemical Dealloying as Dendriteâ€Free Lithium Metal Anode Current Collector. Advanced Energy Materials, 2018, 8, 1800266.	19.5	336
10	Facile synthesis of Li4Ti5O12/C composite with super rate performance. Energy and Environmental Science, 2012, 5, 9595.	30.8	323
11	Fabrication of an MOF-derived heteroatom-doped Co/CoO/carbon hybrid with superior sodium storage performance for sodium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 15356-15366.	10.3	317
12	In Situ Synthesis of a Hierarchical Allâ€Solidâ€State Electrolyte Based on Nitrile Materials for Highâ€Performance Lithiumâ€Ion Batteries. Advanced Energy Materials, 2015, 5, 1500353.	19.5	300
13	Porous spherical NiO@NiMoO4@PPy nanoarchitectures as advanced electrochemical pseudocapacitor materials. Science Bulletin, 2020, 65, 546-556.	9.0	292
14	Multilayer Graphene Enables Higher Efficiency in Improving Thermal Conductivities of Graphene/Epoxy Composites. Nano Letters, 2016, 16, 3585-3593.	9.1	289
15	Evolution of the electrochemical interface in sodium ion batteries with ether electrolytes. Nature Communications, 2019, 10, 725.	12.8	289
16	Gassing in Li4Ti5O12-based batteries and its remedy. Scientific Reports, 2012, 2, 913.	3.3	284
17	Flexible and planar graphene conductive additives for lithium-ion batteries. Journal of Materials Chemistry, 2010, 20, 9644.	6.7	276
18	Review and prospect of NiCo2O4-based composite materials for supercapacitor electrodes. Journal of Energy Chemistry, 2019, 31, 54-78.	12.9	275

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19	Bidirectional Catalysts for Liquidâ€“Solid Redox Conversion in Lithiumâ€“Sulfur Batteries. Advanced Materials, 2020, 32, e2000315.	21.0	274
20	Polymerâ€Templated Formation of Polydopamineâ€Coated SnO₂ Nanocrystals: Anodes for Cyclable Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2017, 56, 1869-1872.	13.8	260
21	Effect of solid electrolyte interface (SEI) film on cyclic performance of Li4Ti5O12 anodes for Li ion batteries. Journal of Power Sources, 2013, 239, 269-276.	7.8	223
22	Optimized Catalytic WS₂â€“WO₃ Heterostructure Design for Accelerated Polysulfide Conversion in Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2020, 10, 2000091.	19.5	221
23	Cross-linked beta alumina nanowires with compact gel polymer electrolyte coating for ultra-stable sodium metal battery. Nature Communications, 2019, 10, 4244.	12.8	219
24	In situ synthesis of hierarchical poly(ionic liquid)-based solid electrolytes for high-safety lithium-ion and sodium-ion batteries. Nano Energy, 2017, 33, 45-54.	16.0	205
25	Ultrafine TiO₂ Decorated Carbon Nanofibers as Multifunctional Interlayer for High-Performance Lithiumâ€“Sulfur Battery. ACS Applied Materials & Interfaces, 2016, 8, 23105-23113.	8.0	200
26	Progress and Perspective of Solidâ€State Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2018, 28, 1707570.	14.9	194
27	Suppressing Selfâ€Discharge and Shuttle Effect of Lithiumâ€“Sulfur Batteries with V₂O₅â€Decorated Carbon Nanofiber Interlayer. Small, 2017, 13, 1602539.	10.0	190
28	Constructing Multifunctional Interphase between Li_{1.4}Al_{0.4}Ti_{1.6}(PO₄)₃ and Li Metal by Magnetron Sputtering for Highly Stable Solidâ€State Lithium Metal Batteries. Advanced Energy Materials, 2019, 9, 1901604.	19.5	189
29	Could graphene construct an effective conducting network in a high-power lithium ion battery?. Nano Energy, 2012, 1, 429-439.	16.0	185
30	Dense coating of Li4Ti5O12 and graphene mixture on the separator to produce long cycle life of lithium-sulfur battery. Nano Energy, 2016, 30, 1-8.	16.0	179
31	A robust strategy for crafting monodisperse Li4Ti5O12 nanospheres as superior rate anode for lithium ion batteries. Nano Energy, 2016, 21, 133-144.	16.0	168
32	Functional Carbons Remedy the Shuttling of Polysulfides in Lithiumâ€“Sulfur Batteries: Confining, Trapping, Blocking, and Breaking up. Advanced Functional Materials, 2018, 28, 1800508.	14.9	164
33	All-solid-state flexible planar lithium ion micro-capacitors. Energy and Environmental Science, 2018, 11, 2001-2009.	30.8	160
34	A review of gassing behavior in Li₄Ti₅O₁₂-based lithium ion batteries. Journal of Materials Chemistry A, 2017, 5, 6368-6381.	10.3	157
35	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.	18.0	145
36	Multilayered silicon embedded porous carbon/graphene hybrid film as a high performance anode. Carbon, 2015, 84, 434-443.	10.3	144

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37	Carbon coating to suppress the reduction decomposition of electrolyte on the Li4Ti5O12 electrode. Journal of Power Sources, 2012, 202, 253-261.	7.8	142
38	Combining Fast Li-Ion Battery Cycling with Large Volumetric Energy Density: Grain Boundary Induced High Electronic and Ionic Conductivity in Li₄Ti₅O₁₂ Spheres of Densely Packed Nanocrystallites. Chemistry of Materials, 2015, 27, 5647-5656.	6.7	142
39	Correlation Between Atomic Structure and Electrochemical Performance of Anodes Made from Electrospun Carbon Nanofiber Films. Advanced Energy Materials, 2014, 4, 1301448.	19.5	133
40	Synthesis of PdM (M = Zn, Cd, ZnCd) Nanosheets with an Unconventional Face-Centered Tetragonal Phase as Highly Efficient Electrocatalysts for Ethanol Oxidation. ACS Nano, 2019, 13, 14329-14336.	14.6	133
41	Fe3O4 nanoparticles encapsulated in electrospun porous carbon fibers with a compact shell as high-performance anode for lithium ion batteries. Carbon, 2015, 87, 347-356.	10.3	131
42	A three-dimensional multilayer graphene web for polymer nanocomposites with exceptional transport properties and fracture resistance. Materials Horizons, 2018, 5, 275-284.	12.2	129
43	A honeycomb-cobweb inspired hierarchical coreâ€“shell structure design for electrospun silicon/carbon fibers as lithium-ion battery anodes. Carbon, 2016, 98, 582-591.	10.3	128
44	Inâ€…Situ Construction of an Ultraâ€Stable Conductive Composite Interface for Highâ€Voltage Allâ€Solidâ€State Lithium Metal Batteries. Angewandte Chemie - International Edition, 2020, 59, 11784-11788.	13.8	126
45	Stable Interface Chemistry and Multiple Ion Transport of Composite Electrolyte Contribute to Ultraâ€long Cycling Solidâ€State LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂/Lithium Metal Batteries. Angewandte Chemie - International Edition, 2021, 60, 24668-24675.	13.8	124
46	Lithium Metal Electrode with Increased Air Stability and Robust Solid Electrolyte Interphase Realized by Silane Coupling Agent Modification. Advanced Materials, 2021, 33, e2008133.	21.0	122
47	N and S co-doped porous carbon spheres prepared using <scp>l</scp>-cysteine as a dual functional agent for high-performance lithiumâ€“sulfur batteries. Chemical Communications, 2015, 51, 17720-17723.	4.1	121
48	Hollow SnO₂ nanospheres with oxygen vacancies entrapped by a N-doped graphene network as robust anode materials for lithium-ion batteries. Nanoscale, 2018, 10, 11460-11466.	5.6	121
49	Sulfur confined in nitrogen-doped microporous carbon used in a carbonate-based electrolyte for long-life, safe lithium-sulfur batteries. Carbon, 2016, 109, 1-6.	10.3	119
50	Li6.75La3Zr1.75Ta0.25O12@amorphous Li3OCl composite electrolyte for solid state lithium-metal batteries. Energy Storage Materials, 2018, 14, 49-57.	18.0	118
51	The effect of graphene wrapping on the performance of LiFePO4 for a lithium ion battery. Carbon, 2013, 57, 530-533.	10.3	115
52	Recent innovative configurations in high-energy lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 5222-5234.	10.3	115
53	A relaxor ferroelectric polymer with an ultrahigh dielectric constant largely promotes the dissociation of lithium salts to achieve high ionic conductivity. Energy and Environmental Science, 2021, 14, 6021-6029.	30.8	115
54	Percolation threshold of graphene nanosheets as conductive additives in Li4Ti5O12 anodes of Li-ion batteries. Nanoscale, 2013, 5, 2100.	5.6	113

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55	Spherical Li Deposited inside 3D Cu Skeleton as Anode with Ultrastable Performance. ACS Applied Materials & Interfaces, 2018, 10, 20244-20249.	8.0	113
56	Ultra-small self-discharge and stable lithium-sulfur batteries achieved by synergetic effects of multicomponent sandwich-type composite interlayer. Nano Energy, 2018, 50, 367-375.	16.0	109
57	Building Artificial Solidâ€Electrolyte Interphase with Uniform Intermolecular Ionic Bonds toward Dendriteâ€Free Lithium Metal Anodes. Advanced Functional Materials, 2020, 30, 2002414.	14.9	104
58	Electrospun coreâ€“shell silicon/carbon fibers with an internal honeycomb-like conductive carbon framework as an anode for lithium ion batteries. Journal of Materials Chemistry A, 2015, 3, 7112-7120.	10.3	99
59	Revisiting the Roles of Natural Graphite in Ongoing Lithiumâ€Ion Batteries. Advanced Materials, 2022, 34, e2106704.	21.0	99
60	Exceptional rate performance of functionalized carbon nanofiber anodes containing nanopores created by (Fe) sacrificial catalyst. Nano Energy, 2014, 4, 88-96.	16.0	94
61	In-situ construction of hierarchical cathode electrolyte interphase for high performance LiNi0.8Co0.1Mn0.1O2/Li metal battery. Nano Energy, 2020, 78, 105282.	16.0	93
62	Investigation of cyano resin-based gel polymer electrolyte: in situ gelation mechanism and electrodeâ€“electrolyte interfacial fabrication in lithium-ion battery. Journal of Materials Chemistry A, 2014, 2, 20059-20066.	10.3	92
63	How a very trace amount of graphene additive works for constructing an efficient conductive network in LiCoO2-based lithium-ion batteries. Carbon, 2016, 103, 356-362.	10.3	87
64	Theoretical Investigation of the Intercalation Chemistry of Lithium/Sodium Ions in Transition Metal Dichalcogenides. Journal of Physical Chemistry C, 2017, 121, 13599-13605.	3.1	87
65	A dual-functional gel-polymer electrolyte for lithium ion batteries with superior rate and safety performances. Journal of Materials Chemistry A, 2017, 5, 18888-18895.	10.3	85
66	Ultrafast high-volumetric sodium storage of folded-graphene electrodes through surface-induced redox reactions. Energy Storage Materials, 2015, 1, 112-118.	18.0	83
67	A carbon sandwich electrode with graphene filling coated by N-doped porous carbon layers for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2015, 3, 20218-20224.	10.3	83
68	Insight into the Synergistic Effect of N, S Coâ€Doping for Carbon Coating Layer on Niobium Oxide Anodes with Ultraâ€Long Life. Advanced Functional Materials, 2021, 31, 2100311.	14.9	82
69	General template-free strategy for fabricating mesoporous two-dimensional mixed oxide nanosheetsviaself-deconstruction/reconstruction of monodispersed metal glycerate nanospheres. Journal of Materials Chemistry A, 2018, 6, 5971-5983.	10.3	81
70	Abuse tolerance behavior of layered oxide-based Li-ion battery during overcharge and over-discharge. RSC Advances, 2016, 6, 76897-76904.	3.6	80
71	â€œConcreteâ€•inspired construction of a silicon/carbon hybrid electrode for high performance lithium ion battery. Carbon, 2015, 93, 59-67.	10.3	78
72	Li-ion and Na-ion transportation and storage properties in various sized TiO₂ spheres with hierarchical pores and high tap density. Journal of Materials Chemistry A, 2017, 5, 4359-4367.	10.3	78

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73	Constructing Effective Interfaces for Li_{1.5}Al_{0.5}Ge_{1.5}(PO₄)₃ Pellets To Achieve Room-Temperature Hybrid Solid-State Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2019, 11, 9911-9918.	8.0	77
74	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. Journal of Materials Chemistry A, 2015, 3, 13340-13349.	10.3	71
75	Influence of over-discharge on the lifetime and performance of LiFePO₄/graphite batteries. RSC Advances, 2016, 6, 30474-30483.	3.6	71
76	A sliced orange-shaped ZnCo 2 O 4 material as anode for high-performance lithium ion battery. Energy Storage Materials, 2017, 6, 61-69.	18.0	71
77	An ultrathin and continuous Li4Ti5O12 coated carbon nanofiber interlayer for high rate lithium sulfur battery. Journal of Energy Chemistry, 2019, 31, 19-26.	12.9	70
78	Expanded-graphite embedded in lithium metal as dendrite-free anode of lithium metal batteries. Journal of Materials Chemistry A, 2019, 7, 15871-15879.	10.3	68
79	Progress and perspective of Li_{1â€‰+}â€‰<scp>_xAl_xTi₂</scp>_{â€x}(<scp>PO₄</scp>)₃ ceramic electrolyte in lithium batteries. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 1195-1217.	17.3	68
80	Highâ€Density Microporous Li₄Ti₅O₁₂ Microbars with Superior Rate Performance for Lithiumâ€Ion Batteries. Advanced Science, 2017, 4, 1600311.	11.2	66
81	Deterioration mechanism of LiNi_{0.8}Co_{0.15}Al_{0.05}O₂/graphiteâ€“SiO_x power batteries under high temperature and discharge cycling conditions. Journal of Materials Chemistry A, 2018, 6, 65-72.	10.3	66
82	Cyclized-polyacrylonitrile modified carbon nanofiber interlayers enabling strong trapping of polysulfides in lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2016, 4, 12973-12980.	10.3	64
83	Controlled synthesis of anisotropic hollow ZnCo2O4 octahedrons for high-performance lithium storage. Energy Storage Materials, 2018, 11, 184-190.	18.0	63
84	Progress on Lithium Dendrite Suppression Strategies from the Interior to Exterior by Hierarchical Structure Designs. Small, 2020, 16, e2000699.	10.0	63
85	PVDF-HFP composite polymer electrolyte with excellent electrochemical properties for Li-ion batteries. Journal of Solid State Electrochemistry, 2008, 12, 1497-1502.	2.5	61
86	Monodispersed SnO 2 nanospheres embedded in framework of graphene and porous carbon as anode for lithium ion batteries. Energy Storage Materials, 2016, 3, 98-105.	18.0	60
87	Deterioration of lithium iron phosphate/graphite power batteries under high-rate discharge cycling. Electrochimica Acta, 2015, 176, 270-279.	5.2	59
88	Progress and perspective of the cathode/electrolyte interface construction in allâ€solidâ€state lithium batteries. , 2021, 3, 866-894.		59
89	Transition metal assisted synthesis of tunable pore structure carbon with high performance as sodium/lithium ion battery anode. Carbon, 2018, 129, 667-673.	10.3	58
90	(Oxalato)borate: The key ingredient for polyethylene oxide based composite electrolyte to achieve ultra-stable performance of high voltage solid-state LiNi0.8Co0.1Mn0.1O2/lithium metal battery. Nano Energy, 2021, 80, 105562.	16.0	58

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91	Nitrate Additives Coordinated with Crown Ether Stabilize Lithium Metal Anodes in Carbonate Electrolyte. Advanced Functional Materials, 2021, 31, 2102128.	14.9	56
92	Highly Crystalline Lithium Titanium Oxide Sheets Coated with Nitrogenâ€Doped Carbon enable Highâ€Rate Lithiumâ€Ion Batteries. ChemSusChem, 2014, 7, 2567-2574.	6.8	55
93	Hierarchical N-doped graphene coated 1D cobalt oxide microrods for robust and fast lithium storage at elevated temperature. Electrochimica Acta, 2019, 310, 70-77.	5.2	55
94	LiNi0.8Co0.15Al0.05O2 as both a trapper and accelerator of polysulfides for lithium-sulfur batteries. Energy Storage Materials, 2019, 17, 111-117.	18.0	54
95	A lightweight carbon nanofiber-based 3D structured matrix with high nitrogen-doping level for lithium metal anodes. Science China Materials, 2019, 62, 87-94.	6.3	53
96	Silicon/carbon composite microspheres with hierarchical coreâ€“shell structure as anode for lithium ion batteries. Electrochemistry Communications, 2014, 49, 98-102.	4.7	52
97	Suppression of interfacial reactions between Li4Ti5O12 electrode and electrolyte solution via zinc oxide coating. Electrochimica Acta, 2015, 157, 266-273.	5.2	51
98	Large Polarization of Li₄Ti₅O₁₂ Lithiated to 0 V at Large Charge/Discharge Rates. ACS Applied Materials & Interfaces, 2016, 8, 18788-18796.	8.0	51
99	A Functionalized Carbon Surface for Highâ€Performance Sodiumâ€Ion Storage. Small, 2020, 16, e1902603.	10.0	51
100	Holey graphenes as the conductive additives for LiFePO4 batteries with an excellent rate performance. Carbon, 2019, 149, 257-262.	10.3	50
101	Effects of state of charge on the degradation of LiFePO4/graphite batteries during accelerated storage test. Journal of Alloys and Compounds, 2015, 639, 406-414.	5.5	49
102	Progress and Perspective of All-Solid-State Lithium Batteries with High Performance at Room Temperature. Energy & Fuels, 2020, 34, 13456-13472.	5.1	44
103	Increase and discretization of the energy barrier for individual LiNi_xCo_yMn_yO₂ (x + 2y =1) particles with the growth of a Li₂CO₃ surface film. Journal of Materials Chemistry A, 2019, 7, 12723-12731.	10.3	43
104	Electrode thickness control: Precondition for quite different functions of graphene conductive additives in LiFePO4 electrode. Carbon, 2015, 92, 311-317.	10.3	42
105	Study on the reversible capacity loss of layered oxide cathode during low-temperature operation. Journal of Power Sources, 2017, 342, 24-30.	7.8	42
106	Synthesis of Hierarchical Sisal-Like V₂O₅ with Exposed Stable {001} Facets as Long Life Cathode Materials for Advanced Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 43681-43687.	8.0	42
107	Compact Si/C anodes fabricated by simultaneously regulating the size and oxidation degree of Si for Li-ion batteries. Journal of Materials Chemistry A, 2019, 7, 24356-24365.	10.3	42
108	Three-dimensional alloy interface between Li6.4La3Zr1.4Ta0.6O12 and Li metal to achieve excellent cycling stability of all-solid-state battery. Journal of Power Sources, 2021, 505, 230062.	7.8	42

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109	Effects of solvent on structures and properties of electrospun poly(ethylene oxide) nanofibers. Journal of Applied Polymer Science, 2018, 135, 45787.	2.6	40
110	Liquid electrolyte immobilized in compact polymer matrix for stable sodium metal anodes. Energy Storage Materials, 2019, 23, 610-616.	18.0	40
111	Ultrafast presodiation of graphene anodes for highâ€efficiency and highâ€rate s<scp>odiumâ€ion</scp> storage. InformaÄnÃ-MateriÄ¡ly, 2021, 3, 1445-1454.	17.3	40
112	A Facile Surface Reconstruction Mechanism toward Better Electrochemical Performance of Li₄Ti₅O₁₂ in Lithiumâ€ion Battery. Advanced Science, 2017, 4, 1700205.	11.2	37
113	In-situ polymerized cross-linked binder for cathode in lithium-sulfur batteries. Chinese Chemical Letters, 2020, 31, 570-574.	9.0	36
114	Electron and Ion Coâ€Conductive Catalyst Achieving Instant Transformation of Lithium Polysulfide towards Li₂S. Advanced Materials, 2021, 33, e2105362.	21.0	36
115	Constructing a highly efficient â€œsolidâ€“polymerâ€“solidâ€elastic ion transport network in cathodes activates the room temperature performance of all-solid-state lithium batteries. Energy and Environmental Science, 2022, 15, 1503-1511.	30.8	36
116	Improving thermal and mechanical properties of the alumina filled silicone rubber composite by incorporating carbon nanotubes. New Carbon Materials, 2020, 35, 66-72.	6.1	34
117	In situ construction of Li3N-enriched interface enabling ultra-stable solid-state LiNi0.8Co0.1Mn0.1O2/lithium metal batteries. Nano Energy, 2022, 100, 107470.	16.0	34
118	A Novel Lithiated Siliconâ€“Sulfur Battery Exploiting an Optimized Solidâ€Like Electrolyte to Enhance Safety and Cycle Life. Small, 2017, 13, 1602015.	10.0	33
119	Hierarchically structured carbon nanomaterials for electrochemical energy storage applications. Journal of Materials Research, 2018, 33, 1058-1073.	2.6	33
120	Integrated Structure of Cathode and Double-Layer Electrolyte for Highly Stable and Dendrite-Free All-Solid-State Li-Metal Batteries. ACS Applied Materials & Interfaces, 2020, 12, 56995-57002.	8.0	32
121	A multifunctional artificial protective layer for producing an ultra-stable lithium metal anode in a commercial carbonate electrolyte. Journal of Materials Chemistry A, 2021, 9, 7667-7674.	10.3	31
122	The cooperative effect of tri(Î²-chloromethyl) phosphate and cyclohexyl benzene on lithium ion batteries. Electrochimica Acta, 2007, 52, 3534-3540.	5.2	30
123	Effects of current densities on the formation of LiCoO2/graphite lithium ion battery. Journal of Solid State Electrochemistry, 2011, 15, 1977-1985.	2.5	30
124	Micron-sized Spherical Si/C Hybrids Assembled via Water/Oil System for High-Performance Lithium Ion Battery. Electrochimica Acta, 2016, 211, 982-988.	5.2	30
125	Achieving Low Overpotential Lithiumâ€“Oxygen Batteries by Exploiting a New Electrolyte Based on N,Nâ€²-Dimethylpropyleneurea. ACS Energy Letters, 2017, 2, 313-318.	17.4	30
126	Capacity Loss Mechanism of the Li₄Ti₅O₁₂ Microsphere Anode of Lithium-Ion Batteries at High Temperature and Rate Cycling Conditions. ACS Applied Materials & Interfaces, 2019, 11, 37357-37364.	8.0	29

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127	An ion-conducting SnSâ€“SnS₂hybrid coating for commercial activated carbons enabling their use as high performance anodes for sodium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 10761-10768.	10.3	29
128	A thin and high-strength composite polymer solid-state electrolyte with a highly efficient and uniform ion-transport network. Journal of Materials Chemistry A, 2021, 9, 14344-14351.	10.3	29
129	Lattice-Coupled Si/MXene Confined by Hard Carbon for Fast Sodium-Ion Conduction. ACS Applied Energy Materials, 2021, 4, 7268-7277.	5.1	29
130	Mesoporous Cr₂O₃ nanotubes as an efficient catalyst for Liâ€“O₂ batteries with low charge potential and enhanced cyclic performance. Journal of Materials Chemistry A, 2016, 4, 7727-7735.	10.3	28
131	Abundant grain boundaries activate highly efficient lithium ion transportation in high rate Li4Ti5O12 compact microspheres. Journal of Materials Chemistry A, 2019, 7, 1168-1176.	10.3	28
132	Effects of Temperature on the Formation of Graphiteâ•LiCoO[sub 2] Batteries. Journal of the Electrochemical Society, 2008, 155, A481.	2.9	27
133	Discovering a First-Order Phase Transition in the Liâ€“CeO₂ System. Nano Letters, 2017, 17, 1282-1288.	9.1	27
134	Different solid electrolyte interface and anode performance of CoCO3 microspheres due to graphene modification and LiCoO2||CoCO3@rGO full cell study. Electrochimica Acta, 2018, 270, 192-204.	5.2	27
135	Graphene-Templated Growth of WS₂ Nanoclusters for Catalytic Conversion of Polysulfides in Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2020, 3, 4923-4930.	5.1	27
136	Optimized synthesis of nano-sized LiFePO4/C particles with excellent rate capability for lithium ion batteries. Electrochimica Acta, 2014, 130, 322-328.	5.2	26
137	Polymerâ€Templated Formation of Polydopamineâ€Coated SnO₂ Nanocrystals: Anodes for Cyclable Lithiumâ€Ion Batteries. Angewandte Chemie, 2017, 129, 1895-1898.	2.0	26
138	Acetic acid-induced preparation of anatase TiO₂ mesocrystals at low temperature for enhanced Li-ion storage. Journal of Materials Chemistry A, 2017, 5, 12236-12242.	10.3	26
139	High catalytic activity of anatase titanium dioxide for decomposition of electrolyte solution in lithium ion battery. Journal of Power Sources, 2014, 268, 882-886.	7.8	25
140	Inâ€…Situ Construction of an Ultraâ€Stable Conductive Composite Interface for Highâ€Voltage Allâ€Solidâ€State Lithium Metal Batteries. Angewandte Chemie, 2020, 132, 11882-11886.	2.0	25
141	Selfâ€Healing Mechanism of Lithium in Lithium Metal. Advanced Science, 2022, 9, e2105574.	11.2	25
142	Si Nanoparticles Intercalated into Interlayers of Slightly Exfoliated Graphite filled by Carbon as Anode with High Volumetric Capacity for Lithium-ion Battery. Electrochimica Acta, 2015, 184, 364-370.	5.2	24
143	Constructing a Reinforced and Gradient Solid Electrolyte Interphase on Si Nanoparticles by Inâ€Situ Thiolâ€Ene Click Reaction for Long Cycling Lithiumâ€Ion Batteries. Small, 2021, 17, e2102316.	10.0	24
144	Hierarchical dispersed multi-phase nickel cobalt oxide mesoporous thorn microspheres as superior rate anode materials for lithium ion batteries. Journal of Materials Chemistry A, 2015, 3, 20886-20891.	10.3	23

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145	Graphene induced growth of Sb2WO6 nanosheets for high-performance pseudocapacitive lithium-ion storage. Journal of Alloys and Compounds, 2020, 839, 155614.	5.5	23
146	Capacitance performance enhancement of TiO2 doped with Ni and graphite. Rare Metals, 2009, 28, 231-236.	7.1	22
147	Sulfur-functionalized three-dimensional graphene monoliths as high-performance anodes for ultrafast sodium-ion storage. Chemical Communications, 2018, 54, 4317-4320.	4.1	22
148	A lithium nucleation-diffusion-growth mechanism to govern the horizontal deposition of lithium metal anode. Science China Materials, 2021, 64, 2409-2420.	6.3	22
149	The thermal stability of fully charged and discharged LiCoO2 cathode and graphite anode in nitrogen and air atmospheres. Thermochimica Acta, 2008, 480, 15-21.	2.7	21
150	Construction of a Unique Two-Dimensional Hierarchical Carbon Architecture for Superior Lithium-Ion Storage. ACS Applied Materials & Interfaces, 2016, 8, 33399-33404.	8.0	21
151	Coordinated Adsorption and Catalytic Conversion of Polysulfides Enabled by Perovskite Bimetallic Hydroxide Nanocages for Lithiumâ€Sulfur Batteries. Small, 2021, 17, e2101538.	10.0	21
152	Crystalline borophene quantum dots and their derivative boron nanospheres. Materials Advances, 2021, 2, 3269-3273.	5.4	20
153	Grain boundaries contribute to highly efficient lithiumâ€ion transport in advanced LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ secondary sphere with compact structure. SusMat, 2021, 1, 255-265.	14.9	20
154	Zn-substituted CoCO 3 embedded in carbon nanotubes network as high performance anode for lithium-ion batteries. Journal of Alloys and Compounds, 2017, 712, 605-612.	5.5	19
155	Preparation and characterization of 18650 Li(Ni1/3Co1/3Mn1/3)O2/graphite high power batteries. Journal of Power Sources, 2008, 185, 526-533.	7.8	17
156	A Carbonâ€Sulfur Hybrid with Pomegranateâ€like Structure for Lithiumâ€Sulfur Batteries. Chemistry - an Asian Journal, 2016, 11, 1343-1347.	3.3	17
157	Modification strategies of Li7La3Zr2O12 ceramic electrolyte for high-performance solid-state batteries. Tungsten, 2021, 3, 260-278.	4.8	17
158	Graphene conductive additives for lithium ion batteries: Origin, progress and prospect. Chinese Science Bulletin, 2017, 62, 3743-3756.	0.7	17
159	Improvement of overcharge performance using Li4Ti5O12 as negative electrode for LiFePO4 power battery. Journal of Solid State Electrochemistry, 2012, 16, 265-271.	2.5	16
160	Graphene-Directed Formation of a Nitrogen-Doped Porous Carbon Sheet with High Catalytic Performance for the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2018, 122, 13508-13514.	3.1	16
161	Structure and thermal stability of LiNi0.8Co0.15Al0.05O2 after long cycling at high temperature. Journal of Power Sources, 2020, 450, 227695.	7.8	16
162	PbTe nanodots confined on ternary B2O3/BC2O/C nanosheets as electrode for efficient sodium storage. Journal of Power Sources, 2020, 461, 228110.	7.8	16

#	Article	IF	Citations
163	Safety properties of liquid state soft pack high power batteries with carbon-coated LiFePO4/graphite electrodes. Journal of Solid State Electrochemistry, 2010, 14, 751-756.	2.5	15
164	Cation Vacancy-Boosted Lewis Acidâ€“Base Interactions in a Polymer Electrolyte for High-Performance Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2021, 13, 51107-51116.	8.0	15
165	Vertically aligned carbon nanotubes grown on reduced graphene oxide as high-performance thermal interface materials. Journal of Materials Science, 2020, 55, 9414-9424.	3.7	13
166	Pore structure engineering of wood-derived hard carbon enables their high-capacity and cycle-stable sodium storage properties. Electrochimica Acta, 2021, 391, 139000.	5.2	13
167	A Highly Efficient Ion and Electron Conductive Interlayer To Achieve Low Self-Discharge of Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2022, 14, 1783-1790.	8.0	13
168	Influence of charge rate on the cycling degradation of LiFePO4/mesocarbon microbead batteries under low temperature. Ionics, 2017, 23, 1967-1978.	2.4	12
169	A Reduced Graphene Oxide/Disodium Terephthalate Hybrid as a Highâ€Performance Anode for Sodiumâ€Ion Batteries. Chemistry - A European Journal, 2017, 23, 16586-16592.	3.3	12
170	A Stable Crossâ€Linked Binder Network for SnO₂ Anode with Enhanced Sodiumâ€Ion Storage Performance. ChemistrySelect, 2017, 2, 11365-11369.	1.5	12
171	Interconnected Ultrasmall V₂O₃ and Li₄Ti₅O₁₂ Particles Construct Robust Interfaces for Long-Cycling Anodes of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 29993-30000.	8.0	12
172	Allâ€Solidâ€State Batteries: Low Resistanceâ€“Integrated Allâ€Solidâ€State Battery Achieved by Li₇La₃Zr₂O₁₂ Nanowire Upgrading Polyethylene Oxide (PEO) Composite Electrolyte and PEO Cathode Binder (Adv. Funct. Mater. 1/2019). Advanced Functional Materials, 2019, 29, 1970006.	14.9	12
173	Highly microporous SbPO₄/BC_x hybrid anodes for sodium-ion batteries. Materials Advances, 2020, 1, 206-214.	5.4	12
174	Ultrathin and Highâ€Modulus LiBO₂ Layer Highly Elevates the Interfacial Dynamics and Stability of Lithium Anode under Wide Temperature Range. Small, 2022, 18, e2106427.	10.0	12
175	Solid-State Electrolytes: Progress and Perspective of Solid-State Lithium-Sulfur Batteries (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Ove	14.9	11
176	Toward real-time monitoring of lithium metal growth and dendrite formation surveillance for safe lithium metal batteries. Journal of Materials Chemistry A, 2020, 8, 7090-7099.	10.3	11
177	Fabrication of a quasi-symmetrical solid oxide fuel cell using a modified tape casting/screen-printing/infiltrating combined technique. International Journal of Hydrogen Energy, 2018, 43, 960-967.	7.1	10
178	Thermal design and optimization of lithium ion batteries for unmanned aerial vehicles. Energy Storage, 2019, 1, e48.	4.3	10
179	High-Level Heteroatom Doped Two-Dimensional Carbon Architectures for Highly Efficient Lithium-Ion Storage. Frontiers in Chemistry, 2018, 6, 97.	3.6	8
180	An Organic/Inorganic Composite Gel Electrolyte Inducing Uniformly Lithium Deposition at High Current Density and Capacity. Advanced Materials Interfaces, 2021, 8, 2100790.	3.7	8

#	Article	IF	Citations
181	A Robust Integrated SnO_x/Carbon Composite Anode for Sodiumâ€Ion Batteries. ChemistrySelect, 2018, 3, 10869-10874.	1.5	7
182	Lithium-ion spontaneous exchange and synergistic transport in ceramic-liquid hybrid electrolytes for highly efficient lithium-ion transfer. Science Bulletin, 2022, 67, 946-954.	9.0	7
183	spâ€“sp² hybrid-conjugated microporous polymer-derived Pd-encapsulated porous carbon materials for lithiumâ€“sulfur batteries. Chemical Communications, 2019, 55, 10084-10087.	4.1	6
184	Stable Interface Chemistry and Multiple Ion Transport of Composite Electrolyte Contribute to Ultraâ€Long Cycling Solidâ€State LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂/Lithium Metal Batteries. Angewandte Chemie, 2021, 133, 24873-24880.	2.0	6
185	Bottom-up synthesized crystalline boron quantum dots with nonvolatile memory effects through one-step hydrothermal polymerization of ammonium pentaborane and boric acid. CrystEngComm, 2022, 24, 3469-3474.	2.6	5
186	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). Advanced Energy Materials, 2015, 5, n/a-n/a.	19.5	2
187	RÃ¼cktitelbild: Polymerâ€Templated Formation of Polydopamineâ€Coated SnO₂ Nanocrystals: Anodes for Cyclable Lithiumâ€Ion Batteries (Angew. Chem. 7/2017). Angewandte Chemie, 2017, 129, 1958-1958.	2.0	2
188	Siliconâ€Sulfur Batteries: A Novel Lithiated Siliconâ€“Sulfur Battery Exploiting an Optimized Solidâ€Like Electrolyte to Enhance Safety and Cycle Life (Small 3/2017). Small, 2017, 13, .	10.0	0