Jun Lu

List of Publications by Year
in descending order

598 papers	75,041 citations	211 147 h-index	784 248 g-index
623 all docs	623 docs citations	623 times ranked	42646 citing authors

#	Article	IF	Citations
1	Na-ion batteries, recent advances and present challenges to become low cost energy storage systems. Energy and Environmental Science, 2012, 5, 5884.	30.8	3,078
2	30 Years of Lithiumâ€Ion Batteries. Advanced Materials, 2018, 30, e1800561.	21.0	3,039
3	Batteries and fuel cells for emerging electric vehicle markets. Nature Energy, 2018, 3, 279-289.	39.5	1,944
4	Two-Dimensional, Ordered, Double Transition Metals Carbides (MXenes). ACS Nano, 2015, 9, 9507-9516.	14.6	1,395
5	A comprehensive review of sodium layered oxides: powerful cathodes for Na-ion batteries. Energy and Environmental Science, 2015, 8, 81-102.	30.8	1,085
6	Aprotic and Aqueous Liâ€"O₂ Batteries. Chemical Reviews, 2014, 114, 5611-5640.	47.7	975
7	Update on Na-based battery materials. A growing research path. Energy and Environmental Science, 2013, 6, 2312.	30.8	886
8	Commercialization of Lithium Battery Technologies for Electric Vehicles. Advanced Energy Materials, 2019, 9, 1900161.	19.5	865
9	Single lithium-ion conducting solid polymer electrolytes: advances and perspectives. Chemical Society Reviews, 2017, 46, 797-815.	38.1	862
10	Automotive Li-Ion Batteries: Current Status and Future Perspectives. Electrochemical Energy Reviews, 2019, 2, 1-28.	25.5	745
11	Electrochemical reduction of nitrate to ammonia via direct eight-electron transfer using a copperâ€"molecular solid catalyst. Nature Energy, 2020, 5, 605-613.	39.5	722
12	Metalâ€"Air Batteries: Will They Be the Future Electrochemical Energy Storage Device of Choice?. ACS Energy Letters, 2017, 2, 1370-1377.	17.4	709
13	Strong Lithium Polysulfide Chemisorption on Electroactive Sites of Nitrogenâ€Doped Carbon Composites For Highâ€Performance Lithiumâ€"Sulfur Battery Cathodes. Angewandte Chemie - International Edition, 2015, 54, 4325-4329.	13.8	686
14	Evolution of redox couples in Li- and Mn-rich cathode materials and mitigation of voltage fade by reducing oxygen release. Nature Energy, 2018, 3, 690-698.	39.5	675
15	A lithiumâ€"oxygen battery based on lithium superoxide. Nature, 2016, 529, 377-382.	27.8	633
16	High temperature sodium batteries: status, challenges and future trends. Energy and Environmental Science, 2013, 6, 734.	30.8	620
17	Dissolution, migration, and deposition of transition metal ions in Li-ion batteries exemplified by Mn-based cathodes â€" a critical review. Energy and Environmental Science, 2018, 11, 243-257.	30.8	618
18	The role of nanotechnology in the development of battery materials for electric vehicles. Nature Nanotechnology, 2016, 11, 1031-1038.	31.5	581

#	Article	IF	Citations
19	New Concepts in Electrolytes. Chemical Reviews, 2020, 120, 6783-6819.	47.7	554
20	High-Performance Anode Materials for Rechargeable Lithium-Ion Batteries. Electrochemical Energy Reviews, 2018, 1, 35-53.	25.5	514
21	In-Situ-Reduced Synthesis of Ti³⁺ Self-Doped TiO₂/g-C₃N₄ Heterojunctions with High Photocatalytic Performance under LED Light Irradiation. ACS Applied Materials & Interfaces, 2015, 7, 9023-9030.	8.0	489
22	Revisiting the Role of Polysulfides in Lithiumâ€"Sulfur Batteries. Advanced Materials, 2018, 30, e1705590.	21.0	456
23	Structural defects on converted bismuth oxide nanotubes enable highly active electrocatalysis of carbon dioxide reduction. Nature Communications, 2019, 10, 2807.	12.8	456
24	Diffusion-free Grotthuss topochemistry for high-rate and long-life proton batteries. Nature Energy, 2019, 4, 123-130.	39.5	446
25	Simultaneously Dual Modification of Niâ€Rich Layered Oxide Cathode for Highâ€Energy Lithiumâ€Ion Batteries. Advanced Functional Materials, 2019, 29, 1808825.	14.9	430
26	Anatase Titania Nanorods as an Intercalation Anode Material for Rechargeable Sodium Batteries. Nano Letters, 2014, 14, 416-422.	9.1	422
27	Bridging the academic and industrial metrics for next-generation practical batteries. Nature Nanotechnology, 2019, 14, 200-207.	31.5	420
28	Silicon-based anodes for lithium-ion batteries: Effectiveness of materials synthesis and electrode preparation. Nano Energy, 2016, 27, 359-376.	16.0	415
29	Mn(II) deposition on anodes and its effects on capacity fade in spinel lithium manganateâ€"carbon systems. Nature Communications, 2013, 4, 2437.	12.8	409
30	Supported Cobalt Polyphthalocyanine for High-Performance Electrocatalytic CO2 Reduction. CheM, 2017, 3, 652-664.	11.7	406
31	Interlayer Material Selection for Lithium-Sulfur Batteries. Joule, 2019, 3, 361-386.	24.0	406
32	Progress in Mechanistic Understanding and Characterization Techniques of Liâ€S Batteries. Advanced Energy Materials, 2015, 5, 1500408.	19.5	400
33	From Charge Storage Mechanism to Performance: A Roadmap toward High Specific Energy Sodiumâ€Ion Batteries through Carbon Anode Optimization. Advanced Energy Materials, 2018, 8, 1703268.	19.5	396
34	Graphene-Based Three-Dimensional Hierarchical Sandwich-type Architecture for High-Performance Li/S Batteries. Nano Letters, 2013, 13, 4642-4649.	9.1	385
35	A nanostructured cathode architecture for low charge overpotential in lithium-oxygen batteries. Nature Communications, 2013, 4, 2383.	12.8	379
36	Ascorbic-acid-assisted recovery of cobalt and lithium from spent Li-ion batteries. Journal of Power Sources, 2012, 218, 21-27.	7.8	378

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37	In situ quantification of interphasial chemistry in Li-ion battery. Nature Nanotechnology, 2019, 14, 50-56.	31.5	373
38	A room-temperature sodiumâ€“sulfur battery with high capacity and stable cycling performance. Nature Communications, 2018, 9, 3870.	12.8	367
39	Burning lithium in CS2 for high-performing compact Li2Sâ€“graphene nanocapsules for Liâ€“SÂbatteries. Nature Energy, 2017, 2, .	39.5	349
40	Succinic acid-based leaching system: A sustainable process for recovery of valuable metals from spent Li-ion batteries. Journal of Power Sources, 2015, 282, 544-551.	7.8	343
41	Holey two-dimensional transition metal oxide nanosheets for efficient energy storage. Nature Communications, 2017, 8, 15139.	12.8	343
42	Reverse Dual-Ion Battery via a ZnCl₂ Water-in-Salt Electrolyte. Journal of the American Chemical Society, 2019, 141, 6338-6344.	13.7	338
43	State-of-the-art characterization techniques for advanced lithium-ion batteries. Nature Energy, 2017, 2, .	39.5	337
44	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
45	(De)Lithiation Mechanism of Li/SeS_{<i>x</i>} (<i>x</i> = 0â€“7) Batteries Determined by in Situ Synchrotron X-ray Diffraction and X-ray Absorption Spectroscopy. Journal of the American Chemical Society, 2013, 135, 8047-8056.	13.7	332
46	A disordered rock salt anode for fast-charging lithium-ion batteries. Nature, 2020, 585, 63-67.	27.8	326
47	In vivo integrity of polymer-coated gold nanoparticles. Nature Nanotechnology, 2015, 10, 619-623.	31.5	314
48	A Singleâ€Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2019, 58, 9640-9645.	13.8	312
49	Ultrathin Co₃O₄ Layers with Large Contact Area on Carbon Fibers as Highâ€Performance Electrode for Flexible Zincâ€“Air Battery Integrated with Flexible Display. Advanced Energy Materials, 2017, 7, 1700779.	19.5	309
50	Fast kinetics of magnesium monochloride cations in interlayer-expanded titanium disulfide for magnesium rechargeable batteries. Nature Communications, 2017, 8, 339.	12.8	304
51	Atomically Thin Mesoporous Co₃O₄ Layers Strongly Coupled with Nâ€rGO Nanosheets as Highâ€Performance Bifunctional Catalysts for 1D Knittable Zincâ€“Air Batteries. Advanced Materials, 2018, 30, 1703657.	21.0	302
52	Understanding materials challenges for rechargeable ion batteries with in situ transmission electron microscopy. Nature Communications, 2017, 8, .	12.8	301
53	Highly Efficient Nonâ€Precious Metal Electrocatalysts Prepared from Oneâ€Pot Synthesized Zeolitic Imidazolate Frameworks. Advanced Materials, 2014, 26, 1093-1097.	21.0	296
54	Recent Advances in Flexible Zincâ€Based Rechargeable Batteries. Advanced Energy Materials, 2019, 9, 1802605.	19.5	296

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55	Oxygen Release Degradation in Liâ€Ion Battery Cathode Materials: Mechanisms and Mitigating Approaches. Advanced Energy Materials, 2019, 9, 1900551.	19.5	293
56	Electrochemically activated spinel manganese oxide for rechargeable aqueous aluminum battery. Nature Communications, 2019, 10, 73.	12.8	291
57	RNA catalyses nuclear pre-mRNA splicing. Nature, 2013, 503, 229-234.	27.8	289
58	Binder-Free V₂O₅ Cathode for Greener Rechargeable Aluminum Battery. ACS Applied Materials & Interfaces, 2015, 7, 80-84.	8.0	288
59	Ultrafine Pt Nanoparticleâ€Decorated Pyriteâ€Type CoS₂ Nanosheet Arrays Coated on Carbon Cloth as a Bifunctional Electrode for Overall Water Splitting. Advanced Energy Materials, 2018, 8, 1800935.	19.5	286
60	Design strategies for nonaqueous multivalent-ion and monovalent-ion battery anodes. Nature Reviews Materials, 2020, 5, 276-294.	48.7	284
61	Advanced Na[Ni_{0.25}Fe_{0.5}Mn_{0.25}]O₂/Câ€“Fe₃O₄ Sodium-Ion Batteries Using EMS Electrolyte for Energy Storage. Nano Letters, 2014, 14, 1620-1626.	9.1	283
62	Rejuvenating dead lithium supply in lithium metal anodes by iodine redox. Nature Energy, 2021, 6, 378-387.	39.5	282
63	Cobalt in lithium-ion batteries. Science, 2020, 367, 979-980.	12.6	280
64	High temperature shockwave stabilized single atoms. Nature Nanotechnology, 2019, 14, 851-857.	31.5	278
65	Challenges in Zinc Electrodes for Alkaline Zincâ€“Air Batteries: Obstacles to Commercialization. ACS Energy Letters, 2019, 4, 2259-2270.	17.4	276
66	Selective CO₂ Reduction on 2D Mesoporous Bi Nanosheets. Advanced Energy Materials, 2018, 8, 1801536.	19.5	274
67	Free-Standing Hierarchically Sandwich-Type Tungsten Disulfide Nanotubes/Graphene Anode for Lithium-Ion Batteries. Nano Letters, 2014, 14, 5899-5904.	9.1	268
68	Structurally stable Mg-doped P2-Na_{2/3}Mn_{1âˆ’y}Mg_yO₂ sodium-ion battery cathodes with high rate performance: insights from electrochemical, NMR and diffraction studies. Energy and Environmental Science, 2016, 9, 3240-3251.	30.8	264
69	Developing high safety Li-metal anodes for future high-energy Li-metal batteries: strategies and perspectives. Chemical Society Reviews, 2020, 49, 5407-5445.	38.1	264
70	Conversion of carbon dioxide to few-layer graphene. Journal of Materials Chemistry, 2011, 21, 9491.	6.7	262
71	Naâ€Ion Batteries for Large Scale Applications: A Review on Anode Materials and Solid Electrolyte Interphase Formation. Advanced Energy Materials, 2017, 7, 1700463.	19.5	261
72	Efficient Direct Recycling of Lithium-Ion Battery Cathodes by Targeted Healing. Joule, 2020, 4, 2609-2626.	24.0	260

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73	Hard Carbon as Sodiumâ€Ion Battery Anodes: Progress and Challenges. ChemSusChem, 2019, 12, 133-144.	6.8	257
74	Conductivity and lithiophilicity gradients guide lithium deposition to mitigate short circuits. Nature Communications, 2019, 10, 1896.	12.8	256
75	Effectively suppressing dissolution of manganese from spinel lithium manganate via a nanoscale surface-doping approach. Nature Communications, 2014, 5, 5693.	12.8	255
76	Understanding Co roles towards developing Co-free Ni-rich cathodes for rechargeable batteries. Nature Energy, 2021, 6, 277-286.	39.5	255
77	Electrolytes and Interphases in Sodiumâ€Based Rechargeable Batteries: Recent Advances and Perspectives. Advanced Energy Materials, 2020, 10, 2000093.	19.5	254
78	Synergetic Effect of Ti³⁺ and Oxygen Doping on Enhancing Photoelectrochemical and Photocatalytic Properties of TiO₂/g-C₃N₄ Heterojunctions. ACS Applied Materials & Interfaces, 2017, 9, 11577-11586.	8.0	253
79	Hydrogen Storage Properties of Nanosized MgH₂âˆ'0.1TiH₂ Prepared by Ultrahigh-Energyâˆ'High-Pressure Milling. Journal of the American Chemical Society, 2009, 131, 15843-15852.	13.7	245
80	Recovery of valuable metals from spent lithium-ion batteries by ultrasonic-assisted leaching process. Journal of Power Sources, 2014, 262, 380-385.	7.8	242
81	Elucidating anionic oxygen activity in lithium-rich layered oxides. Nature Communications, 2018, 9, 947.	12.8	241
82	The Effect of Oxygen Crossover on the Anode of a Liâ€"O₂ Battery using an Etherâ€Based Solvent: Insights from Experimental and Computational Studies. ChemSusChem, 2013, 6, 51-55.	6.8	231
83	Naâ€Ion Batteriesâ€"Approaching Old and New Challenges. Advanced Energy Materials, 2020, 10, 2002055.	19.5	229
84	Surface regulation enables high stability of single-crystal lithium-ion cathodes at high voltage. Nature Communications, 2020, 11, 3050.	12.8	225
85	Heterojunction Architecture of Nâ€Doped WO₃ Nanobundles with Ce₂S₃ Nanodots Hybridized on a Carbon Textile Enables a Highly Efficient Flexible Photocatalyst. Advanced Functional Materials, 2019, 29, 1903490.	14.9	223
86	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
87	Graphene Wrapped FeSe₂ Nanoâ€Microspheres with High Pseudocapacitive Contribution for Enhanced Naâ€Ion Storage. Advanced Energy Materials, 2019, 9, 1900356.	19.5	216
88	The Recycling of Spent Lithium-Ion Batteries: a Review of Current Processes and Technologies. Electrochemical Energy Reviews, 2018, 1, 461-482.	25.5	215
89	High Electrochemical Performances of Microsphere C-TiO₂ Anode for Sodium-Ion Battery. ACS Applied Materials & Interfaces, 2014, 6, 11295-11301.	8.0	213
90	Hard Carbon Originated from Polyvinyl Chloride Nanofibers As High-Performance Anode Material for Na-Ion Battery. ACS Applied Materials & Interfaces, 2015, 7, 5598-5604.	8.0	213

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91	Recent Progress in Biomassâ€Derived Electrode Materials for High Volumetric Performance Supercapacitors. Advanced Energy Materials, 2018, 8, 1801007.	19.5	213
92	Electrode Materials for Sodium-Ion Batteries: Considerations on Crystal Structures and Sodium Storage Mechanisms. Electrochemical Energy Reviews, 2018, 1, 200-237.	25.5	213
93	An Ironâ€Decorated Carbon Aerogel for Rechargeable Flow and Flexible Znâ€"Air Batteries. Advanced Materials, 2020, 32, e2002292.	21.0	213
94	Rational Design of a Ni₃N_{0.85} Electrocatalyst to Accelerate Polysulfide Conversion in Lithiumâ€"Sulfur Batteries. ACS Nano, 2020, 14, 6673-6682.	14.6	212
95	Solid electrolytes and interfaces in all-solid-state sodium batteries: Progress and perspective. Nano Energy, 2018, 52, 279-291.	16.0	211
96	Chemisorption of polysulfides through redox reactions with organic molecules for lithiumâ€"sulfur batteries. Nature Communications, 2018, 9, 705.	12.8	207
97	Ultra-fast NH4+ Storage: Strong H Bonding between NH4+ and Bi-layered V2O5. CheM, 2019, 5, 1537-1551.	11.7	207
98	Origin of structural degradation in Li-rich layered oxide cathode. Nature, 2022, 606, 305-312.	27.8	206
99	Synthesis of closed PbS nanowires with regular geometric morphologiesElectronic supplementary information (ESI) available: XRD pattern of the PbS CNWs, FTIR spectrum of the polymer, TEM images of more PbS CNWs. See http://www.rsc.org/suppdata/jm/b1/b111187f/. Journal of Materials Chemistry, 2002, 12, 403-405.	6.7	205
100	High Volumetric Capacitance, Ultralong Life Supercapacitors Enabled by Waxberryâ€Derived Hierarchical Porous Carbon Materials. Advanced Energy Materials, 2018, 8, 1702695.	19.5	204
101	Boosting Sodium Storage in TiO₂ Nanotube Arrays through Surface Phosphorylation. Advanced Materials, 2018, 30, 1704337.	21.0	201
102	Magnetic Fieldâ€"Suppressed Lithium Dendrite Growth for Stable Lithiumâ€Metal Batteries. Advanced Energy Materials, 2019, 9, 1900260.	19.5	200
103	Simultaneous In Situ Formation of ZnS Nanowires in a Liquid Crystal Template by Î³-Irradiation. Chemistry of Materials, 2001, 13, 1213-1218.	6.7	198
104	Cation-doped ZnS catalysts for polysulfide conversion in lithiumâ€"sulfur batteries. Nature Catalysis, 2022, 5, 555-563.	34.4	198
105	Synthesis of high-entropy alloy nanoparticles on supports by the fast moving bed pyrolysis. Nature Communications, 2020, 11, 2016.	12.8	195
106	Synthesis of rod-, twinrod-, and tetrapod-shaped CdS nanocrystals using a highly oriented solvothermal recrystallization technique. Journal of Materials Chemistry, 2002, 12, 748-753.	6.7	192
107	High-Performance P2-Phase Na_{2/3}Mn_{0.8}Fe_{0.1}Ti_{0.1}O₂ Cathode Material for Ambient-Temperature Sodium-Ion Batteries. Chemistry of Materials, 2016, 28, 106-116.	6.7	192
108	Layered P2/O3 Intergrowth Cathode: Toward High Power Naâ€Ion Batteries. Advanced Energy Materials, 2014, 4, 1400458.	19.5	191

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109	Understanding Thermodynamic and Kinetic Contributions in Expanding the Stability Window of Aqueous Electrolytes. CheM, 2018, 4, 2872-2882.	11.7	187
110	Effect of the size-selective silver clusters on lithium peroxide morphology in lithiumâ€“oxygen batteries. Nature Communications, 2014, 5, 4895.	12.8	186
111	Synthesis of Porous Carbon Supported Palladium Nanoparticle Catalysts by Atomic Layer Deposition: Application for Rechargeable Lithiumâ€“O₂ Battery. Nano Letters, 2013, 13, 4182-4189.	9.1	184
112	Correlation between manganese dissolution and dynamic phase stability in spinel-based lithium-ion battery. Nature Communications, 2019, 10, 4721.	12.8	182
113	Interweaving 3D Network Binder for Highâ€Arealâ€Capacity Si Anode through Combined Hard and Soft Polymers. Advanced Energy Materials, 2019, 9, 1802645.	19.5	181
114	The influence of large cations on the electrochemical properties of tunnel-structured metal oxides. Nature Communications, 2016, 7, 13374.	12.8	180
115	Vanadium Oxide Pillared by Interlayer Mg2+ Ions and Water as Ultralong-Life Cathodes for Magnesium-Ion Batteries. CheM, 2019, 5, 1194-1209.	11.7	180
116	Bismuth chalcogenide compounds Bi2Ã—3 (X=O, S, Se): Applications in electrochemical energy storage. Nano Energy, 2017, 34, 356-366.	16.0	179
117	Regulating the spatial distribution of metal nanoparticles within metal-organic frameworks to enhance catalytic efficiency. Nature Communications, 2017, 8, 14429.	12.8	179
118	Tuning of Thermal Stability in Layered Li(Ni_{<i>x</i>}Mn_{<i>y</i>}Co_{<i>z</i>})O₂. Journal of the American Chemical Society, 2016, 138, 13326-13334.	13.7	178
119	Heteroatomâ€Doped Porous Carbon Materials with Unprecedented High Volumetric Capacitive Performance. Angewandte Chemie - International Edition, 2019, 58, 2397-2401.	13.8	178
120	In situ fabrication of porous-carbon-supported Î±-MnO2 nanorods at room temperature: application for rechargeable Liâ€“O2 batteries. Energy and Environmental Science, 2013, 6, 519.	30.8	175
121	Preparation and phase transformation of nanocrystalline copper sulfides (Cu9S8, Cu7S4 and CuS) at low temperature. Journal of Materials Chemistry, 2000, 10, 2193-2196.	6.7	174
122	Lithium-Sulfur Batteries for Commercial Applications. CheM, 2018, 4, 3-7.	11.7	174
123	Enhancing Oxygen Reduction Activity of Ptâ€based Electrocatalysts: From Theoretical Mechanisms to Practical Methods. Angewandte Chemie - International Edition, 2020, 59, 18334-18348.	13.8	174
124	High Capacity of Hard Carbon Anode in Na-Ion Batteries Unlocked by PO_{<i>x</i>} Doping. ACS Energy Letters, 2016, 1, 395-401.	17.4	172
125	Revitalising sodiumâ€“sulfur batteries for non-high-temperature operation: a crucial review. Energy and Environmental Science, 2020, 13, 3848-3879.	30.8	172
126	Anion-redox nanolithia cathodes for Li-ion batteries. Nature Energy, 2016, 1, .	39.5	171

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127	Defect Engineering of Chalcogenâ€Tailored Oxygen Electrocatalysts for Rechargeable Quasiâ€Solidâ€State Zincâ€“Air Batteries. Advanced Materials, 2017, 29, 1702526.	21.0	171
128	Amorphous MoS ₃ as the sulfur-equivalent cathode material for room-temperature Liâ€“S and Naâ€“S batteries. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13091-13096.	7.1	170
129	Insights into the Na⁺ Storage Mechanism of Phosphorusâ€Functionalized Hard Carbon as Ultrahigh Capacity Anodes. Advanced Energy Materials, 2018, 8, 1702781.	19.5	170
130	Î±-MnO2 nanotubes: high surface area and enhanced lithium battery properties. Chemical Communications, 2012, 48, 6945.	4.1	168
131	Increased Stability Toward Oxygen Reduction Products for Lithium-Air Batteries with Oligoether-Functionalized Silane Electrolytes. Journal of Physical Chemistry C, 2011, 115, 25535-25542.	3.1	166
132	Study of the dissolution behavior of selenium and tellurium in different solventsâ€"a novel route to Se, Te tubular bulk single crystals. Journal of Materials Chemistry, 2002, 12, 2755-2761.	6.7	165
133	Exceptionally High Ionic Conductivity in Na₃P_{0.62}As_{0.38}S₄ with Improved Moisture Stability for Solidâ€State Sodiumâ€Ion Batteries. Advanced Materials, 2017, 29, 1605561.	21.0	164
134	Amorphous MoS₃ Infiltrated with Carbon Nanotubes as an Advanced Anode Material of Sodiumâ€Ion Batteries with Large Gravimetric, Areal, and Volumetric Capacities. Advanced Energy Materials, 2017, 7, 1601602.	19.5	164
135	Temperature-Sensitive Structure Evolution of Lithiumâ€“Manganese-Rich Layered Oxides for Lithium-Ion Batteries. Journal of the American Chemical Society, 2018, 140, 15279-15289.	13.7	163
136	Design of surface protective layer of LiF/FeF3 nanoparticles in Li-rich cathode for high-capacity Li-ion batteries. Nano Energy, 2015, 15, 164-176.	16.0	162
137	New Insights into the Performance Degradation of Fe-Based Layered Oxides in Sodium-Ion Batteries: Instability of Fe³⁺/Fe⁴⁺ Redox in Î±-NaFeO₂. Chemistry of Materials, 2015, 27, 6755-6764.	6.7	162
138	Asynchronous Crystal Cell Expansion during Lithiation of K⁺-Stabilized Î±-MnO₂. Nano Letters, 2015, 15, 2998-3007.	9.1	161
139	Mg-Ion Battery Electrode: An Organic Solidâ€™s Herringbone Structure Squeezed upon Mg-Ion Insertion. Journal of the American Chemical Society, 2017, 139, 13031-13037.	13.7	161
140	Challenges and future perspectives on sodium and potassium ion batteries for grid-scale energy storage. Materials Today, 2021, 50, 400-417.	14.2	161
141	Dimeric [Mo₂S₁₂]^{2âˆ'} Cluster: A Molecular Analogue of MoS₂ Edges for Superior Hydrogenâ€Evolution Electrocatalysis. Angewandte Chemie - International Edition, 2015, 54, 15181-15185.	13.8	160
142	Elevatedâ€Temperature 3D Printing of Hybrid Solidâ€State Electrolyte for Liâ€Ion Batteries. Advanced Materials, 2018, 30, e1800615.	21.0	159
143	Lithiophilic 3D Porous CuZn Current Collector for Stable Lithium Metal Batteries. ACS Energy Letters, 2020, 5, 180-186.	17.4	159
144	Sonochemical Synthesis and Mechanistic Study of Copper Selenides Cu2-xSe, Î²-CuSe, and Cu3Se2. Inorganic Chemistry, 2002, 41, 387-392.	4.0	158

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145	Two-Dimensional Holey Co₃O₄ Nanosheets for High-Rate Alkali-Ion Batteries: From Rational Synthesis to in Situ Probing. Nano Letters, 2017, 17, 3907-3913.	9.1	158
146	An Effective Approach To Protect Lithium Anode and Improve Cycle Performance for Liâ€“S Batteries. ACS Applied Materials & Interfaces, 2014, 6, 15542-15549.	8.0	157
147	Mesoporous PdAg Nanospheres for Stable Electrochemical CO₂ Reduction to Formate. Advanced Materials, 2020, 32, e2000992.	21.0	153
148	Cationic and anionic redox in lithium-ion based batteries. Chemical Society Reviews, 2020, 49, 1688-1705.	38.1	152
149	A Quasiâ€Solidâ€State Flexible Fiberâ€Shaped Liâ€“CO₂ Battery with Low Overpotential and High Energy Efficiency. Advanced Materials, 2019, 31, e1804439.	21.0	151
150	Study on the Catalytic Activity of Noble Metal Nanoparticles on Reduced Graphene Oxide for Oxygen Evolution Reactions in Lithiumâ€“Air Batteries. Nano Letters, 2015, 15, 4261-4268.	9.1	149
151	In Operando XRD and TXM Study on the Metastable Structure Change of NaNi_{1/3}Fe_{1/3}Mn_{1/3}O₂ under Electrochemical Sodiumâ€Ion Intercalation. Advanced Energy Materials, 2016, 6, 1601306.	19.5	147
152	Metastable MnS Crystallites through Solvothermal Synthesis. Chemistry of Materials, 2001, 13, 2169-2172.	6.7	146
153	Freestanding three-dimensional coreâ€“shell nanoarrays for lithium-ion battery anodes. Nature Communications, 2016, 7, 11774.	12.8	143
154	Effective strategies for stabilizing sulfur for advanced lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 448-469.	10.3	143
155	Enabling high energy lithium metal batteries via single-crystal Ni-rich cathode material co-doping strategy. Nature Communications, 2022, 13, 2319.	12.8	143
156	Phosphorus: An Anode of Choice for Sodium-Ion Batteries. ACS Energy Letters, 2018, 3, 1137-1144.	17.4	141
157	Bambooâ€Like Nitrogenâ€Doped Carbon Nanotube Forests as Durable Metalâ€Free Catalysts for Selfâ€Powered Flexible Liâ€“CO₂ Batteries. Advanced Materials, 2019, 31, e1903852.	21.0	141
158	Enabling the high capacity of lithium-rich anti-fluorite lithium iron oxide by simultaneous anionic and cationic redox. Nature Energy, 2017, 2, 963-971.	39.5	140
159	A versatile functionalized ionic liquid to boost the solution-mediated performances of lithium-oxygen batteries. Nature Communications, 2019, 10, 602.	12.8	138
160	Cathode Material with Nanorod Structureâ€"An Application for Advanced High-Energy and Safe Lithium Batteries. Chemistry of Materials, 2013, 25, 2109-2115.	6.7	137
161	Fundamental Understanding and Material Challenges in Rechargeable Nonaqueous Liâ€“O₂ Batteries: Recent Progress and Perspective. Advanced Energy Materials, 2018, 8, 1800348.	19.5	137
162	A Highâ€Rate Aqueous Proton Battery Delivering Power Below âˆ'78 Â°C via an Unfrozen Phosphoric Acid. Advanced Energy Materials, 2020, 10, 2000968.	19.5	134

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