Arumugam Manthiram

List of Publications by Year
in descending order

582	77,233	384 134	693 253
papers	citations	h-index	g-index

592	592	592	32155
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rechargeable Lithiumâ€"Sulfur Batteries. Chemical Reviews, 2014, 114, 11751-11787.	23.0	3,842
2	Lithium battery chemistries enabled by solid-state electrolytes. Nature Reviews Materials, 2017, 2, .	23.3	3,057
3	Pathways for practical high-energy long-cycling lithium metal batteries. Nature Energy, 2019, 4, 180-186.	19.8	2,101
4	Challenges and Prospects of Lithiumâ€"Sulfur Batteries. Accounts of Chemical Research, 2013, 46, 1125-1134.	7.6	1,962
5	A reflection on lithium-ion battery cathode chemistry. Nature Communications, 2020, 11, 1550.	5.8	1,398
6	Lithiumâ€"sulphur batteries with a microporous carbon paper as a bifunctional interlayer. Nature Communications, 2012, 3, 1166.	5.8	1,298
7	Lithiumâ€"Sulfur Batteries: Progress and Prospects. Advanced Materials, 2015, 27, 1980-2006.	11.1	1,288
8	An Outlook on Lithium Ion Battery Technology. ACS Central Science, 2017, 3, 1063-1069.	5.3	997
9	High-voltage positive electrode materials for lithium-ion batteries. Chemical Society Reviews, 2017, 46, 3006-3059.	18.7	986
10	Nickelâ€Rich and Lithiumâ€Rich Layered Oxide Cathodes: Progress and Perspectives. Advanced Energy Materials, 2016, 6, 1501010.	10.2	946
11	High-nickel layered oxide cathodes for lithium-based automotive batteries. Nature Energy, 2020, 5, 26-34.	19.8	940
12	Materials Challenges and Opportunities of Lithium Ion Batteries. Journal of Physical Chemistry Letters, 2011, 2, 176-184.	2.1	928
13	Long-life Li/polysulphide batteries with high sulphur loading enabled by lightweight three-dimensional nitrogen/sulphur-codoped graphene sponge. Nature Communications, 2015, 6, 7760.	5.8	923
14	Plating a Dendrite-Free Lithium Anode with a Polymer/Ceramic/Polymer Sandwich Electrolyte. Journal of the American Chemical Society, 2016, 138, 9385-9388.	6.6	844
15	A new approach to improve cycle performance of rechargeable lithiumâ€"sulfur batteries by inserting a free-standing MWCNT interlayer. Chemical Communications, 2012, 48, 8817.	2.2	689
16	Spinel-type lithium cobalt oxide as a bifunctional electrocatalyst for the oxygen evolution and oxygen reduction reactions. Nature Communications, 2014, 5, 3949.	5.8	572
17	Nanostructured electrode materials for electrochemical energy storage and conversion. Energy and Environmental Science, 2008, 1, 621.	15.6	548
18	A perspective on the high-voltage LiMn1.5Ni0.5O4 spinel cathode for lithium-ion batteries. Energy and Environmental Science, 2014, 7, 1339.	15.6	546

#	Article	IF	Citations
19	Mesoporous Titanium Nitrideâ€Enabled Highly Stable Lithiumâ€Sulfur Batteries. Advanced Materials, 2016, 28, 6926-6931.	11.1	544
20	Freestanding 1T MoS₂/graphene heterostructures as a highly efficient electrocatalyst for lithium polysulfides in Liâ€“S batteries. Energy and Environmental Science, 2019, 12, 344-350.	15.6	510
21	Lithium-Sulfur Batteries: Attaining the Critical Metrics. Joule, 2020, 4, 285-291.	11.7	489
22	Vertical Co₉S₈ hollow nanowall arrays grown on a Celgard separator as a multifunctional polysulfide barrier for high-performance Liâ€“S batteries. Energy and Environmental Science, 2018, 11, 2560-2568.	15.6	486
23	A perspective on nickel-rich layered oxide cathodes for lithium-ion batteries. Energy Storage Materials, 2017, 6, 125-139.	9.5	478
24	Electrodeâ€“electrolyte interfaces in lithium-based batteries. Energy and Environmental Science, 2018, 11, 527-543.	15.6	474
25	Dualâ€Confined Flexible Sulfur Cathodes Encapsulated in Nitrogenâ€Doped Doubleâ€Shelled Hollow Carbon Spheres and Wrapped with Graphene for Liâ€“S Batteries. Advanced Energy Materials, 2015, 5, 1402263.	10.2	459
26	Bifunctional Separator with a Lightâ€Weight Carbonâ€Coating for Dynamically and Statically Stable Lithiumâ€Sulfur Batteries. Advanced Functional Materials, 2014, 24, 5299-5306.	7.8	457
27	Electron-doped superconductivity at 40 K in the infinite-layer compound Sr1â€“yNdyCu02. Nature, 1991, 351, 549-551.	13.7	456
28	Yolkâ€“Shelled C@Fe₃O₄ Nanoboxes as Efficient Sulfur Hosts for Highâ€Performance Lithiumâ€“Sulfur Batteries. Advanced Materials, 2017, 29, 1702707.	11.1	455
29	Hybrid Polymer/Garnet Electrolyte with a Small Interfacial Resistance for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2017, 56, 753-756.	7.2	449
30	Low-Cost High-Energy Potassium Cathode. Journal of the American Chemical Society, 2017, 139, 2164-2167.	6.6	446
31	Atomic Structure of a Lithium-Rich Layered Oxide Material for Lithium-Ion Batteries: Evidence of a Solid Solution. Chemistry of Materials, 2011, 23, 3614-3621.	3.2	441
32	Current Status and Future Prospects of Metalâ€“Sulfur Batteries. Advanced Materials, 2019, 31, e1901125.	11.1	422
33	Hydroxylated Grapheneâ€“Sulfur Nanocomposites for Highâ€Rate Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2013, 3, 1008-1012.	10.2	395
34	A strategic approach to recharging lithium-sulphur batteries for long cycle life. Nature Communications, 2013, 4, 2985.	5.8	376
35	Progress in Highâ€Voltage Cathode Materials for Rechargeable Sodiumâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1701785.	10.2	371
36	Progress on the Critical Parameters for Lithiumâ€“Sulfur Batteries to be Practically Viable. Advanced Functional Materials, 2018, 28, 1801188.	7.8	368

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37	LnBaCo[sub 2]O[sub 5+Î´] Oxides as Cathodes for Intermediate-Temperature Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2008, 155, B385.	1.3	365
38	Carbonized Eggshell Membrane as a Natural Polysulfide Reservoir for Highly Reversible Liâ€S Batteries. Advanced Materials, 2014, 26, 1360-1365.	11.1	351
39	Lithium insertion into Fe2(SO4)3 frameworks. Journal of Power Sources, 1989, 26, 403-408.	4.0	350
40	Impact of Microcrack Generation and Surface Degradation on a Nickel-Rich Layered Li[Ni_{0.9}Co_{0.05}Mn_{0.05}]O₂ Cathode for Lithium-Ion Batteries. Chemistry of Materials, 2017, 29, 8486-8493.	3.2	350
41	A review on the status and challenges of electrocatalysts in lithium-sulfur batteries. Energy Storage Materials, 2019, 20, 55-70.	9.5	349
42	Nanoscale design to enable the revolution in renewable energy. Energy and Environmental Science, 2009, 2, 559.	15.6	348
43	Understanding the Improvement in the Electrochemical Properties of Surface Modified 5 V LiMn_{1.42}Ni_{0.42}Co_{0.16}O₄ Spinel Cathodes in Lithium-ion Cells. Chemistry of Materials, 2009, 21, 1695-1707.	3.2	345
44	â€œWiringâ€•Feâ€N_{<i>x</i>}â€Embedded Porous Carbon Framework onto 1D Nanotubes for Efficient Oxygen Reduction Reaction in Alkaline and Acidic Media. Advanced Materials, 2017, 29, 1606534.	11.1	342
45	High-Performance Liâ€"S Batteries with an Ultra-lightweight MWCNT-Coated Separator. Journal of Physical Chemistry Letters, 2014, 5, 1978-1983.	2.1	340
46	A Polyethylene Glycolâ€Supported Microporous Carbon Coating as a Polysulfide Trap for Utilizing Pure Sulfur Cathodes in Lithiumâ€"Sulfur Batteries. Advanced Materials, 2014, 26, 7352-7357.	11.1	325
47	A free-standing carbon nanofiber interlayer for high-performance lithiumâ€"sulfur batteries. Journal of Materials Chemistry A, 2015, 3, 4530-4538.	5.2	317
48	Highâ€Energy, Highâ€Rate, Lithiumâ€"Sulfur Batteries: Synergetic Effect of Hollow TiO₂â€Webbed Carbon Nanotubes and a Dual Functional Carbonâ€Paper Interlayer. Advanced Energy Materials, 2016, 6, 1501480.	10.2	308
49	Dynamic behaviour of interphases and its implication on high-energy-density cathode materials in lithium-ion batteries. Nature Communications, 2017, 8, 14589.	5.8	306
50	High capacity double-layer surface modified Li[Li0.2Mn0.54Ni0.13Co0.13]O2 cathode with improved rate capability. Journal of Materials Chemistry, 2009, 19, 4965.	6.7	302
51	Collapse of LiNi_{1â€"<i>x</i>â€"<i>y</i>}Co_{<i>x</i>}Mn_{<i>y</i>}O₂ Lattice at Deep Charge Irrespective of Nickel Content in Lithium-Ion Batteries. Journal of the American Chemical Society, 2019, 141, 5097-5101.	6.6	299
52	Highly Reversible Lithium/Dissolved Polysulfide Batteries with Carbon Nanotube Electrodes. Angewandte Chemie - International Edition, 2013, 52, 6930-6935.	7.2	291
53	Ambient Temperature Sodiumâ€"Sulfur Batteries. Small, 2015, 11, 2108-2114.	5.2	288
54	A Mg-Doped High-Nickel Layered Oxide Cathode Enabling Safer, High-Energy-Density Li-Ion Batteries. Chemistry of Materials, 2019, 31, 938-946.	3.2	288

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55	Role of Oxygen Vacancies on the Performance of Li[Ni_{0.5â€"<i>x</i>}Mn_{1.5+<i>x</i>}]O₄ (<i>x</i> = 0, 0.05, and 0.08) Spinel Cathodes for Lithium-Ion Batteries. Chemistry of Materials, 2012, 24, 3101-3109.	3.2	283
56	A High Energy Lithiumâ€Sulfur Battery with Ultrahighâ€Loading Lithium Polysulfide Cathode and its Failure Mechanism. Advanced Energy Materials, 2016, 6, 1502459.	10.2	282
57	Understanding the Improved Electrochemical Performances of Fe-Substituted 5 V Spinel Cathode LiMn_{1.5}Ni_{0.5}O₄. Journal of Physical Chemistry C, 2009, 113, 15073-15079.	1.5	280
58	Copper-substituted Na_{0.67}Ni_{0.3â^'x}Cu_xMn_{0.7}O₂ cathode materials for sodium-ion batteries with suppressed P2â€"O2 phase transition. Journal of Materials Chemistry A, 2017, 5, 8752-8761.	5.2	272
59	A Facile Layerâ€byâ€Layer Approach for Highâ€Arealâ€Capacity Sulfur Cathodes. Advanced Materials, 2015, 27, 1694-1700.	11.1	270
60	Lithium insertion into Fe2(MO4)3 frameworks: Comparison of M = W with M = Mo. Journal of Solid State Chemistry, 1987, 71, 349-360.	1.4	265
61	Ptâ€"M (M=Fe, Co, Ni and Cu) electrocatalysts synthesized by an aqueous route for proton exchange membrane fuel cells. Electrochemistry Communications, 2002, 4, 898-903.	2.3	260
62	Mn versus Al in Layered Oxide Cathodes in Lithiumâ€Ion Batteries: A Comprehensive Evaluation on Longâ€Term Cyclability. Advanced Energy Materials, 2018, 8, 1703154.	10.2	260
63	Orthorhombic Bipyramidal Sulfur Coated with Polypyrrole Nanolayers As a Cathode Material for Lithiumâ€"Sulfur Batteries. Journal of Physical Chemistry C, 2012, 116, 8910-8915.	1.5	259
64	Electrochemically Stable Rechargeable Lithiumâ€"Sulfur Batteries with a Microporous Carbon Nanofiber Filter for Polysulfide. Advanced Energy Materials, 2015, 5, 1500738.	10.2	255
65	Functional surface modifications of a high capacity layered Li[Li0.2Mn0.54Ni0.13Co0.13]O2 cathode. Journal of Materials Chemistry, 2010, 20, 3961.	6.7	252
66	Free-standing TiO2 nanowire-embedded graphene hybrid membrane for advanced Li/dissolved polysulfide batteries. Nano Energy, 2015, 12, 240-249.	8.2	252
67	Role of Mn Content on the Electrochemical Properties of Nickel-Rich Layered LiNi_{0.8â€"<i>x</i>}Co_{0.1}Mn_{0.1+<i>x</i>}O₂ (0.0 â‰ <i>x</i>) TjETQq1 1 0.7843	[illegible]	252
68	A Carbon-Cotton Cathode with Ultrahigh-Loading Capability for Statically and Dynamically Stable Lithiumâ€"Sulfur Batteries. ACS Nano, 2016, 10, 10462-10470.	7.3	252
69	Comparison of Metal Ion Dissolutions from Lithium Ion Battery Cathodes. Journal of the Electrochemical Society, 2006, 153, A1760.	1.3	240
70	Interfacial Chemistry in Solid-State Batteries: Formation of Interphase and Its Consequences. Journal of the American Chemical Society, 2018, 140, 250-257.	6.6	239
71	Modified Highâ€Nickel Cathodes with Stable Surface Chemistry Against Ambient Air for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2018, 57, 6480-6485.	7.2	234
72	Toward Highly Reversible Magnesiumâ€"Sulfur Batteries with Efficient and Practical Mg[B(hfip)₄]₂ Electrolyte. ACS Energy Letters, 2018, 3, 2005-2013.	8.8	234

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73	A review of composite polymer-ceramic electrolytes for lithium batteries. Energy Storage Materials, 2021, 34, 282-300.	9.5	233
74	Anodeâ€Free Full Cells: A Pathway to Highâ€Energy Density Lithiumâ€Metal Batteries. Advanced Energy Materials, 2021, 11, 2000804.	10.2	232
75	Nitrogen-Doped Carbon Nanotube/Graphite Felts as Advanced Electrode Materials for Vanadium Redox Flow Batteries. Journal of Physical Chemistry Letters, 2012, 3, 2164-2167.	2.1	230
76	Designing Advanced Lithiumâ€Based Batteries for Lowâ€Temperature Conditions. Advanced Energy Materials, 2020, 10, 2001972.	10.2	225
77	A manganese oxyiodide cathode for rechargeable lithium batteries. Nature, 1997, 390, 265-267.	13.7	223
78	Long-Life Nickel-Rich Layered Oxide Cathodes with a Uniform Li₂ZrO₃ Surface Coating for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 9718-9725.	4.0	219
79	Factors Influencing the Irreversible Oxygen Loss and Reversible Capacity in Layered Li[Li1/3Mn2/3]O2âˆ'Li[M]O2(M = Mn0.5-yNi0.5-yCo2yand Ni1-yCoy) Solid Solutions. Chemistry of Materials, 2007, 19, 3067-3073.	3.2	218
80	Core-shell structured sulfur-polypyrrole composite cathodes for lithium-sulfur batteries. RSC Advances, 2012, 2, 5927.	1.7	211
81	Comparison of Microwave Assisted Solvothermal and Hydrothermal Syntheses of LiFePO₄/C Nanocomposite Cathodes for Lithium Ion Batteries. Journal of Physical Chemistry C, 2008, 112, 14665-14671.	1.5	210
82	A perspective on single-crystal layered oxide cathodes for lithium-ion batteries. Energy Storage Materials, 2021, 37, 143-160.	9.5	210
83	Influence of Cationic Substitutions on the Oxygen Loss and Reversible Capacity of Lithium-Rich Layered Oxide Cathodes. Journal of Physical Chemistry C, 2011, 115, 7097-7103.	1.5	207
84	Highâ€Nickel NMA: A Cobaltâ€Free Alternative to NMC and NCA Cathodes for Lithiumâ€Ion Batteries. Advanced Materials, 2020, 32, e2002718.	11.1	205
85	The influence of oxygen variation on the crystal structure and phase composition of the superconductor yttrium barium copper oxide (YBa2Cu3O7-x). Journal of the American Chemical Society, 1987, 109, 6667-6669.	6.6	202
86	Role of Cation Ordering and Surface Segregation in High-Voltage Spinel LiMn_{1.5}Ni_{0.5â€"<i>x</i>}M_{<i>x</i>}O₄ (M = Cr, Fe, and Ga) Cathodes for Lithium-Ion Batteries. Chemistry of Materials, 2012, 24, 3720-3731.	3.2	202
87	A Review of the Design of Advanced Binders for Highâ€Performance Batteries. Advanced Energy Materials, 2020, 10, 2002508.	10.2	202
88	Synthesis of Nanocrystalline â€‰VOâ€‰2 and Its Electrochemical Behavior in Lithium Batteries. Journal of the Electrochemical Society, 1997, 144, 520-524.	1.3	201
89	Carbon-coated high capacity layered Li[Li0.2Mn0.54Ni0.13Co0.13]O2 cathodes. Electrochemistry Communications, 2010, 12, 750-753.	2.3	201
90	Layered LnBaCo₂O_{5+Î´} perovskite cathodes for solid oxide fuel cells: an overview and perspective. Journal of Materials Chemistry A, 2015, 3, 24195-24210.	5.2	201

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91	Nanostructured Host Materials for Trapping Sulfur in Rechargeable Liâ€“S Batteries: Structure Design and Interfacial Chemistry. Small Methods, 2018, 2, 1700279.	4.6	201
92	Sodium-based batteries: from critical materials to battery systems. Journal of Materials Chemistry A, 2019, 7, 9406-9431.	5.2	199
93	1D Coâ€•and Nâ€Doped Hierarchically Porous Carbon Nanotubes Derived from Bimetallic Metal Organic Framework for Efficient Oxygen and Triâ€•iodide Reduction Reactions. Advanced Energy Materials, 2017, 7, 1601979.	10.2	194
94	Metal Sulfideâ€Decorated Carbon Sponge as a Highly Efficient Electrocatalyst and Absorbant for Polysulfide in Highâ€Loading Li₂S Batteries. Advanced Energy Materials, 2019, 9, 1900584.	10.2	194
95	Highly Solvating Electrolytes for Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2019, 9, 1803096.	10.2	193
96	Composite membranes based on sulfonated poly(ether ether ketone) and SDBS-adsorbed graphene oxide for direct methanol fuel cells. Journal of Materials Chemistry, 2012, 22, 24862.	6.7	192
97	Sulfurâ€Embedded Activated Multichannel Carbon Nanofiber Composites for Longâ€Life, Highâ€Rate Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2017, 7, 1601943.	10.2	191
98	Lithium Polyacrylate (LiPAA) as an Advanced Binder and a Passivating Agent for Highâ€Voltage Liâ€Ion Batteries. Advanced Energy Materials, 2015, 5, 1501008.	10.2	190
99	Highâ€Performance Lithiumâ€Sulfur Batteries with a Selfâ€Supported, 3D Li₂Sâ€Doped Graphene Aerogel Cathodes. Advanced Energy Materials, 2016, 6, 1501355.	10.2	183
100	3D Hierarchical Coreâ€“Shell Nanostructured Arrays on Carbon Fibers as Catalysts for Direct Urea Fuel Cells. Advanced Energy Materials, 2018, 8, 1702207.	10.2	182
101	Influence of Cation Ordering and Lattice Distortion on the Chargeâ€“Discharge Behavior of LiMn_{1.5}Ni_{0.5}O₄ Spinel between 5.0 and 2.0 V. Chemistry of Materials, 2012, 24, 3610-3620.	3.2	180
102	Effective Stabilization of a High-Loading Sulfur Cathode and a Lithium-Metal Anode in Li-S Batteries Utilizing SWCNT-Modulated Separators. Small, 2016, 12, 174-179.	5.2	175
103	Combining Nitrogenâ€Doped Graphene Sheets and MoS₂: A Unique Filmâ€“Foamâ€“Film Structure for Enhanced Lithium Storage. Angewandte Chemie - International Edition, 2016, 55, 12783-12788.	7.2	172
104	Direct growth of ternary Niâ€“Feâ€“P porous nanorods onto nickel foam as a highly active, robust bi-functional electrocatalyst for overall water splitting. Journal of Materials Chemistry A, 2017, 5, 2496-2503.	5.2	172
105	Extending the Service Life of Highâ€Ni Layered Oxides by Tuning the Electrodeâ€“Electrolyte Interphase. Advanced Energy Materials, 2018, 8, 1801957.	10.2	171
106	A hierarchical carbonized paper with controllable thickness as a modulable interlayer system for high performance Liâ€“S batteries. Chemical Communications, 2014, 50, 4184.	2.2	169
107	Soft Chemistry Synthesis and Characterization of Layered Li1-xNi1-yCoyO2-Î´ (0 â‰ x â‰ 1 and 0 â‰ y â‰ 1). Chemistry of Materials, 2001, 13, 2951-2957.	3.2	168
108	Dimensionally Modulated, Single-Crystalline LiMPO₄ (M= Mn, Fe, Co, and Ni) with Nano-Thumblike Shapes for High-Power Energy Storage. Inorganic Chemistry, 2009, 48, 946-952.	1.9	167

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109	Understanding the Shifts in the Redox Potentials of Olivine LiM_{1â ˆ'<i>y</i>}M_{<i>y</i>}PO₄ (M = Fe, Mn, Co, and Mg) Solid Solution Cathodes. Journal of Physical Chemistry C, 2010, 114, 15530-15540.	1.5	167
110	Rational Design of Statically and Dynamically Stable Lithiumâ€"Sulfur Batteries with High Sulfur Loading and Low Electrolyte/Sulfur Ratio. Advanced Materials, 2018, 30, 1705951.	11.1	167
111	Performance Enhancement and Mechanistic Studies of Room-Temperature Sodiumâ€"Sulfur Batteries with a Carbon-Coated Functional Nafion Separator and a Na₂S/Activated Carbon Nanofiber Cathode. Chemistry of Materials, 2016, 28, 896-905.	3.2	166
112	Comparison of the chemical stability of the high energy density cathodes of lithium-ion batteries. Electrochemistry Communications, 2001, 3, 624-627.	2.3	162
113	Impact of Lithium Bis(oxalate)borate Electrolyte Additive on the Performance of High-Voltage Spinel/Graphite Li-Ion Batteries. Journal of Physical Chemistry C, 2013, 117, 22603-22612.	1.5	159
114	High-capacity zinc-ion storage in an open-tunnel oxide for aqueous and nonaqueous Zn-ion batteries. Journal of Materials Chemistry A, 2016, 4, 18737-18741.	5.2	158
115	Electrodeâ€"Electrolyte Interfaces in Lithiumâ€"Sulfur Batteries with Liquid or Inorganic Solid Electrolytes. Accounts of Chemical Research, 2017, 50, 2653-2660.	7.6	158
116	Cobalt oxide-coated N- and B-doped graphene hollow spheres as bifunctional electrocatalysts for oxygen reduction and oxygen evolution reactions. Journal of Materials Chemistry A, 2016, 4, 5877-5889.	5.2	155
117	Formation and Inhibition of Metallic Lithium Microstructures in Lithium Batteries Driven by Chemical Crossover. ACS Nano, 2017, 11, 5853-5863.	7.3	155
118	MOF-derived Cobalt Sulfide Grown on 3D Graphene Foam as an Efficient Sulfur Host for Long-Life Lithium-Sulfur Batteries. IScience, 2018, 4, 36-43.	1.9	155
119	Conductive Surface Modification with Aluminum of High Capacity Layered Li[Li_{0.2}Mn_{0.54}Ni_{0.13}Co_{0.13}]O₂ Cathodes. Journal of Physical Chemistry C, 2010, 114, 9528-9533.	1.5	152
120	Long-Term Cyclability of NCM-811 at High Voltages in Lithium-Ion Batteries: an In-Depth Diagnostic Study. Chemistry of Materials, 2020, 32, 7796-7804.	3.2	152
121	Capacity Enhancement and Discharge Mechanisms of Roomâ€Temperature Sodiumâ€"Sulfur Batteries. ChemElectroChem, 2014, 1, 1275-1280.	1.7	151
122	Hollow cobalt sulfide polyhedra-enabled long-life, high areal-capacity lithium-sulfur batteries. Nano Energy, 2017, 33, 124-129.	8.2	150
123	Enhanced Cycling Stability of Hybrid Liâ€"Air Batteries Enabled by Ordered Pd₃Fe Intermetallic Electrocatalyst. Journal of the American Chemical Society, 2015, 137, 7278-7281.	6.6	149
124	Designing Lithium-Sulfur Cells with Practically Necessary Parameters. Joule, 2018, 2, 710-724.	11.7	148
125	Molybdenum Boride as an Efficient Catalyst for Polysulfide Redox to Enable Highâ€Energyâ€Density Lithiumâ€"Sulfur Batteries. Advanced Materials, 2020, 32, e2004741.	11.1	148
126	Factors Influencing the Electrochemical Properties of High-Voltage Spinel Cathodes: Relative Impact of Morphology and Cation Ordering. Chemistry of Materials, 2013, 25, 2890-2897.	3.2	147

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127	Ambientâ€Temperature Sodiumâ€“Sulfur Batteries with a Sodiated Nafion Membrane and a Carbon Nanofiberâ€Activated Carbon Composite Electrode. Advanced Energy Materials, 2015, 5, 1500350.	10.2	147
128	Ultra-lightweight PANiNF/MWCNT-functionalized separators with synergistic suppression of polysulfide migration for Liâ€“S batteries with pure sulfur cathodes. Journal of Materials Chemistry A, 2015, 3, 18829-18834.	5.2	147
129	High Capacity Surface-Modified LiCoO[sub 2] Cathodes for Lithium-Ion Batteries. Electrochemical and Solid-State Letters, 2003, 6, A16.	2.2	146
130	Stabilized Lithiumâ€“Metal Surface in a Polysulfide-Rich Environment of Lithiumâ€“Sulfur Batteries. Journal of Physical Chemistry Letters, 2014, 5, 2522-2527.	2.1	145
131	1Tâ€²â€ReS₂ Nanosheets In Situ Grown on Carbon Nanotubes as a Highly Efficient Polysulfide Electrocatalyst for Stable Liâ€“S Batteries. Advanced Energy Materials, 2020, 10, 2001017.	10.2	145
132	Cobalt-free, high-nickel layered oxide cathodes for lithium-ion batteries: Progress, challenges, and perspectives. Energy Storage Materials, 2021, 34, 250-259.	9.5	145
133	Sulfur-Polypyrrole Composite Cathodes for Lithium-Sulfur Batteries. Journal of the Electrochemical Society, 2012, 159, A1420-A1424.	1.3	141
134	Li₂Sâ€Carbon Sandwiched Electrodes with Superior Performance for Lithiumâ€Sulfur Batteries. Advanced Energy Materials, 2014, 4, 1300655.	10.2	141
135	Nanoscale networking of LiFePO4 nanorods synthesized by a microwave-solvothermal route with carbon nanotubes for lithium ion batteries. Journal of Materials Chemistry, 2008, 18, 5661.	6.7	140
136	<i>In Situ</i>-Formed Li₂S in Lithiated Graphite Electrodes for Lithiumâ€“Sulfur Batteries. Journal of the American Chemical Society, 2013, 135, 18044-18047.	6.6	140
137	3D CoSe@C Aerogel as a Host for Dendriteâ€Free Lithiumâ€Metal Anode and Efficient Sulfur Cathode in Liâ€“S Full Cells. Advanced Energy Materials, 2020, 10, 2002654.	10.2	140
138	A 3D Lithiophilic Mo₂Nâ€Modified Carbon Nanofiber Architecture for Dendriteâ€Free Lithiumâ€Metal Anodes in a Full Cell. Advanced Materials, 2019, 31, e1904537.	11.1	139
139	TiS₂â€“Polysulfide Hybrid Cathode with High Sulfur Loading and Low Electrolyte Consumption for Lithiumâ€“Sulfur Batteries. ACS Energy Letters, 2018, 3, 568-573.	8.8	138
140	Artificial dual solid-electrolyte interfaces based on in situ organothiol transformation in lithium sulfur battery. Nature Communications, 2021, 12, 3031.	5.8	138
141	Comparison of Ln[sub 0.6]Sr[sub 0.4]CoO[sub 3âˆ’Î] (Ln=La, Pr, Nd, Sm, and Gd) as Cathode Materials for Intermediate Temperature Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2006, 153, A794.	1.3	136
142	Performance Enhancement and Mechanistic Studies of Magnesiumâ€“Sulfur Cells with an Advanced Cathode Structure. ACS Energy Letters, 2016, 1, 431-437.	8.8	136
143	Phase Relationships and Structural and Chemical Stabilities of Charged Li[sub 1âˆ’x]CoO[sub 2âˆ’Î] and Li[sub 1âˆ’x]Ni[sub 0.85]Co[sub 0.15]O[sub 2âˆ’Î] Cathodes. Electrochemical and Solid-State Letters, 2003, 6, A9.	2.2	135
144	Improved Electrochemical Performance of the 5â€‚V Spinel Cathode LiMn[sub 1.5]Ni[sub 0.42]Zn[sub 0.08]O[sub 4] by Surface Modification. Journal of the Electrochemical Society, 2009, 156, A66.	1.3	135

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