Yang-Kook

List of Publications by Citations

213 papers	33,312 citations	89 h-index	181 g-index
221 ext. papers	39,169 ext. citations	16 avg, IF	7.94 L-index

#	Paper	IF	Citations
213	Sodium-ion batteries: present and future. *Chemical Society Reviews*, **2017**, 46, 3529-3614	58.5	2356
212	Challenges facing lithium batteries and electrical double-layer capacitors. *Angewandte Chemie - International Edition*, **2012**, 51, 9994-10024	16.4	2149
211	Lithium-ion batteries. A look into the future. *Energy and Environmental Science*, **2011**, 4, 3287	35.4	1906
210	Comparison of the structural and electrochemical properties of layered Li[NixCoyMnz]O2 (x = 1/3, 0.5, 0.6, 0.7, 0.8 and 0.85) cathode material for lithium-ion batteries. *Journal of Power Sources*, **2013**, 233, 121-130	8.9	1191
209	High-energy cathode material for long-life and safe lithium batteries. *Nature Materials*, **2009**, 8, 320-4	27	1155
208	An improved high-performance lithium-air battery. *Nature Chemistry*, **2012**, 4, 579-85	17.6	909
207	Aprotic and aqueous Li-O2 batteries. *Chemical Reviews*, **2014**, 114, 5611-40	68.1	841
206	Nanostructured high-energy cathode materials for advanced lithium batteries. *Nature Materials*, **2012**, 11, 942-7	27	781
205	Nickel-Rich Layered Cathode Materials for Automotive Lithium-Ion Batteries: Achievements and Perspectives. *ACS Energy Letters*, **2017**, 2, 196-223	20.1	726
204	Capacity Fading of Ni-Rich Li[NixCoyMn1-x-y]O2 (0.6 ≤ x ≤ 0.95) Cathodes for High-Energy-Density Lithium-Ion Batteries: Bulk or Surface Degradation?. *Chemistry of Materials*, **2018**, 30, 1155-1163	9.6	620
203	Comparative Study of LiNi0.5Mn1.5O4-δ and LiNi0.5Mn1.5O4 Cathodes Having Two Crystallographic Structures: Fd3 m and P4332. *Chemistry of Materials*, **2004**, 16, 906-914	9.6	603
202	A lithium-oxygen battery based on lithium superoxide. *Nature*, **2016**, 529, 377-82	50.4	520
201	Role of surface coating on cathode materials for lithium-ion batteries. *Journal of Materials Chemistry*, **2010**, 20, 7606		477
200	The lithium/air battery: still an emerging system or a practical reality?. *Advanced Materials*, **2015**, 27, 784-800	24	471
199	Synthetic optimization of Li[Ni1/3Co1/3Mn1/3]O2 via co-precipitation. *Electrochimica Acta*, **2004**, 50, 939-948	6.7	461
198	Present and Future Perspective on Electrode Materials for Rechargeable Zinc-Ion Batteries. *ACS Energy Letters*, **2018**, 3, 2620-2640	20.1	439
197	Titanium-Based Anode Materials for Safe Lithium-Ion Batteries. *Advanced Functional Materials*, **2013**, 23, 959-969	15.6	400

196	Microscale spherical carbon-coated Li4Ti5O12 as ultra high power anode material for lithium batteries. *Energy and Environmental Science*, **2011**, 4, 1345	35.4	399
195	Anatase titania nanorods as an intercalation anode material for rechargeable sodium batteries. *Nano Letters*, **2014**, 14, 416-22	11.5	376
194	Recent Progress in Rechargeable Potassium Batteries. *Advanced Functional Materials*, **2018**, 28, 1802938	15.6	362
193	A nanostructured cathode architecture for low charge overpotential in lithium-oxygen batteries. *Nature Communications*, **2013**, 4, 2383	17.4	355
192	Ruthenium-based electrocatalysts supported on reduced graphene oxide for lithium-air batteries. *ACS Nano*, **2013**, 7, 3532-9	16.7	348
191	Electrochemical Zinc Intercalation in Lithium Vanadium Oxide: A High-Capacity Zinc-Ion Battery Cathode. *Chemistry of Materials*, **2017**, 29, 1684-1694	9.6	342
190	NaVO□3HO Barnesite Nanorod: An Open Door to Display a Stable and High Energy for Aqueous Rechargeable Zn-Ion Batteries as Cathodes. *Nano Letters*, **2018**, 18, 2402-2410	11.5	341
189	Nanostructured anode material for high-power battery system in electric vehicles. *Advanced Materials*, **2010**, 22, 3052-7	24	338
188	Double carbon coating of LiFePO4 as high rate electrode for rechargeable lithium batteries. *Advanced Materials*, **2010**, 22, 4842-5	24	329
187	Reversible NaFePO4 electrode for sodium secondary batteries. *Electrochemistry Communications*, **2012**, 22, 149-152	5.1	294
186	Lithium-Oxygen Batteries and Related Systems: Potential, Status, and Future. *Chemical Reviews*, **2020**, 120, 6626-6683	68.1	279
185	High-Performance Carbon-LiMnPO4 Nanocomposite Cathode for Lithium Batteries. *Advanced Functional Materials*, **2010**, 20, 3260-3265	15.6	277
184	Li(Ni1/3Co1/3Mn1/3)O2 as a suitable cathode for high power applications. *Journal of Power Sources* , **2003**, 123, 247-252	8.9	270
183	Advanced Na[Ni0.25Fe0.5Mn0.25]O2/C-Fe3O4 sodium-ion batteries using EMS electrolyte for energy storage. *Nano Letters*, **2014**, 14, 1620-6	11.5	241
182	NaCrO2 cathode for high-rate sodium-ion batteries. *Energy and Environmental Science*, **2015**, 8, 2019-2026	35.4	239
181	Pushing the limit of layered transition metal oxide cathodes for high-energy density rechargeable Li ion batteries. *Energy and Environmental Science*, **2018**, 11, 1271-1279	35.4	225
180	High-energy-density lithium-ion battery using a carbon-nanotube–Si composite anode and a compositionally graded Li[Ni0.85Co0.05Mn0.10]O2 cathode. *Energy and Environmental Science*, **2016**, 9, 2152-2158	35.4	221
179	Aqueous rechargeable Zn-ion batteries: an imperishable and high-energy Zn2V2O7 nanowire cathode through intercalation regulation. *Journal of Materials Chemistry A*, **2018**, 6, 3850-3856	13	212

178	Synthesis and electrochemical properties of Li[Ni0.8Co0.1Mn0.1]O2 and Li[Ni0.8Co0.2]O2 via co-precipitation. *Journal of Power Sources*, **2006**, 159, 1328-1333	8.9	200
177	Structural Stability of LiNiO2 Cycled above 4.2 V. *ACS Energy Letters*, **2017**, 2, 1150-1155	20.1	197
176	Effect of Residual Lithium Compounds on Layer Ni-Rich Li[Ni0.7Mn0.3]O2. *Journal of the Electrochemical Society*, **2014**, 161, A920-A926	3.9	197
175	Improved Cycling Stability of Li[Ni0.90Co0.05Mn0.05]O2 Through Microstructure Modification by Boron Doping for Li-Ion Batteries. *Advanced Energy Materials*, **2018**, 8, 1801202	21.8	194
174	Li□O2 cells with LiBr as an electrolyte and a redox mediator. *Energy and Environmental Science*, **2016**, 9, 2334-2345	35.4	190
173	High electrochemical performances of microsphere C-TiO□ anode for sodium-ion battery. *ACS Applied Materials & Interfaces*, **2014**, 6, 11295-301	9.5	187
172	Amorphous iron phosphate: potential host for various charge carrier ions. *NPG Asia Materials*, **2014**, 6, e138-e138	10.3	180
171	Understanding the behavior of Li□xygen cells containing LiI. *Journal of Materials Chemistry A*, **2015**, 3, 8855-8864	13	169
170	Evidence for lithium superoxide-like species in the discharge product of a Li-O2 battery. *Physical Chemistry Chemical Physics*, **2013**, 15, 3764-71	3.6	164
169	Micrometer-sized, nanoporous, high-volumetric-capacity LiMn□Fe□PO□ cathode material for rechargeable lithium-ion batteries. *Advanced Materials*, **2011**, 23, 5050-4	24	163
168	Degradation Mechanism of Ni-Enriched NCA Cathode for Lithium Batteries: Are Microcracks Really Critical?. *ACS Energy Letters*, **2019**, 4, 1394-1400	20.1	161
167	Beyond Doping and Coating: Prospective Strategies for Stable High-Capacity Layered Ni-Rich Cathodes. *ACS Energy Letters*, **2020**, 5, 1136-1146	20.1	161
166	Nano/Microstructured Silicon-Graphite Composite Anode for High-Energy-Density Li-Ion Battery. *ACS Nano*, **2019**, 13, 2624-2633	16.7	159
165	Cobalt-free nickel rich layered oxide cathodes for lithium-ion batteries. *ACS Applied Materials & Interfaces*, **2013**, 5, 11434-40	9.5	158
164	Structural and Electrochemical Properties of Layered Li[Ni[sub 1□x]Co[sub x]Mn[sub x]]O[sub 2] (x=0.1□.3) Positive Electrode Materials for Li-Ion Batteries. *Journal of the Electrochemical Society*, **2007**, 154, A971	3.9	152
163	High Capacity O3-Type Na[Li0.05(Ni0.25Fe0.25Mn0.5)0.95]O2 Cathode for Sodium Ion Batteries. *Chemistry of Materials*, **2014**, 26, 6165-6171	9.6	148
162	Improvement of electrochemical and thermal properties of Li[Ni0.8Co0.1Mn0.1]O2 positive electrode materials by multiple metal (Al, Mg) substitution. *Electrochimica Acta*, **2009**, 54, 3851-3856	6.7	147
161	A contribution to the progress of high energy batteries: A metal-free, lithium-ion, silicon□ulfur battery. *Journal of Power Sources*, **2012**, 202, 308-313	8.9	146

160	High-Energy Ni-Rich Li[NixCoyMn1□□]O2 Cathodes via Compositional Partitioning for Next-Generation Electric Vehicles. *Chemistry of Materials*, **2017**, 29, 10436-10445	9.6	140
159	Extracting maximum capacity from Ni-rich Li[Ni0.95Co0.025Mn0.025]O2 cathodes for high-energy-density lithium-ion batteries. *Journal of Materials Chemistry A*, **2018**, 6, 4126-4132	13	139
158	Capacity Fading of Ni-Rich NCA Cathodes: Effect of Microcracking Extent. *ACS Energy Letters*, **2019**, 4, 2995-3001	20.1	138
157	K2V6O16□2.7H2O nanorod cathode: an advanced intercalation system for high energy aqueous rechargeable Zn-ion batteries. *Journal of Materials Chemistry A*, **2018**, 6, 15530-15539	13	132
156	Rechargeable lithium sulfide electrode for a polymer tin/sulfur lithium-ion battery. *Journal of Power Sources*, **2011**, 196, 343-348	8.9	132
155	Recent research trends in Li□ batteries. *Journal of Materials Chemistry A*, **2018**, 6, 11582-11605	13	130
154	Manganese and Vanadium Oxide Cathodes for Aqueous Rechargeable Zinc-Ion Batteries: A Focused View on Performance, Mechanism, and Developments. *ACS Energy Letters*, **2020**, 5, 2376-2400	20.1	128
153	Development of P3-K0.69CrO2 as an ultra-high-performance cathode material for K-ion batteries. *Energy and Environmental Science*, **2018**, 11, 2821-2827	35.4	121
152	Improvement of Electrochemical Performances of Li[Ni[sub 0.8]Co[sub 0.1]Mn[sub 0.1]]O[sub 2] Cathode Materials by Fluorine Substitution. *Journal of the Electrochemical Society*, **2007**, 154, A649	3.9	121
151	Quaternary Layered Ni-Rich NCMA Cathode for Lithium-Ion Batteries. *ACS Energy Letters*, **2019**, 4, 576-582	20.1	117
150	Extending the Battery Life Using an Al-Doped Li[Ni0.76Co0.09Mn0.15]O2 Cathode with Concentration Gradients for Lithium Ion Batteries. *ACS Energy Letters*, **2017**, 2, 1848-1854	20.1	115
149	Designing a High-Performance Lithium□Sulfur Batteries Based on Layered Double Hydroxides□Carbon Nanotubes Composite Cathode and a Dual-Functional Graphene□Polypropylene□Al2O3 Separator. *Advanced Functional Materials*, **2018**, 28, 1704294	15.6	115
148	Microstructure-Controlled Ni-Rich Cathode Material by Microscale Compositional Partition for Next-Generation Electric Vehicles. *Advanced Energy Materials*, **2019**, 9, 1803902	21.8	114
147	Ultrafast sodium storage in anatase TiO2 nanoparticles embedded on carbon nanotubes. *Nano Energy*, **2015**, 16, 218-226	17.1	112
146	Catalytic Behavior of Lithium Nitrate in Li-O2 Cells. *ACS Applied Materials & Interfaces*, **2015**, 7, 16590-600	9.5	111
145	Heuristic solution for achieving long-term cycle stability for Ni-rich layered cathodes at full depth of discharge. *Nature Energy*, **2020**, 5, 860-869	62.3	109
144	Aqueous Magnesium Zinc Hybrid Battery: An Advanced High-Voltage and High-Energy MgMn2O4 Cathode. *ACS Energy Letters*, **2018**, 3, 1998-2004	20.1	108
143	Self-Passivation of a LiNiO2 Cathode for a Lithium-Ion Battery through Zr Doping. *ACS Energy Letters*, **2018**, 3, 1634-1639	20.1	108

142	A lithium-ion sulfur battery based on a carbon-coated lithium-sulfide cathode and an electrodeposited silicon-based anode. *ACS Applied Materials & Interfaces*, **2014**, 6, 10924-8	9.5	108
141	Self-Rearrangement of Silicon Nanoparticles Embedded in Micro-Carbon Sphere Framework for High-Energy and Long-Life Lithium-Ion Batteries. *Nano Letters*, **2017**, 17, 5600-5606	11.5	108
140	Achieving high mass loading of Na3V2(PO4)3@carbon on carbon cloth by constructing three-dimensional network between carbon fibers for ultralong cycle-life and ultrahigh rate sodium-ion batteries. *Nano Energy*, **2018**, 45, 136-147	17.1	106
139	Advanced Concentration Gradient Cathode Material with Two-Slope for High-Energy and Safe Lithium Batteries. *Advanced Functional Materials*, **2015**, 25, 4673-4680	15.6	104
138	Suppressing detrimental phase transitions via tungsten doping of LiNiO2 cathode for next-generation lithium-ion batteries. *Journal of Materials Chemistry A*, **2019**, 7, 18580-18588	13	103
137	Highly Cyclable Lithium-Sulfur Batteries with a Dual-Type Sulfur Cathode and a Lithiated Si/SiOx Nanosphere Anode. *Nano Letters*, **2015**, 15, 2863-8	11.5	102
136	Compositionally Graded Cathode Material with Long-Term Cycling Stability for Electric Vehicles Application. *Advanced Energy Materials*, **2016**, 6, 1601417	21.8	102
135	Carbon-coated Li 4 Ti 5 O 12 nanowires showing high rate capability as an anode material for rechargeable sodium batteries. *Nano Energy*, **2015**, 12, 725-734	17.1	102
134	A transmission electron microscopy study of the electrochemical process of lithium-oxygen cells. *Nano Letters*, **2012**, 12, 4333-5	11.5	102
133	Comparison between Na-Ion and Li-Ion Cells: Understanding the Critical Role of the Cathodes Stability and the Anodes Pretreatment on the Cells Behavior. *ACS Applied Materials & Interfaces*, **2016**, 8, 1867-75	9.5	99
132	Effect of AlF3 coating amount on high voltage cycling performance of LiCoO2. *Electrochimica Acta*, **2007**, 53, 1013-1019	6.7	99
131	High-Energy Density Core–Shell Structured Li[Ni0.95Co0.025Mn0.025]O2 Cathode for Lithium-Ion Batteries. *Chemistry of Materials*, **2017**, 29, 5048-5052	9.6	98
130	Review—High-Capacity Li[Ni1-xCox/2Mnx/2]O2(x= 0.1, 0.05, 0) Cathodes for Next-Generation Li-Ion Battery. *Journal of the Electrochemical Society*, **2015**, 162, A2483-A2489	3.9	97
129	Cation Ordering of Zr-Doped LiNiO2 Cathode for Lithium-Ion Batteries. *Chemistry of Materials*, **2018**, 30, 1808-1814	9.6	97
128	A New P2-Type Layered Oxide Cathode with Extremely High Energy Density for Sodium-Ion Batteries. *Advanced Energy Materials*, **2019**, 9, 1803346	21.8	95
127	Double-structured LiMn(0.85)Fe(0.15)PO4 coordinated with LiFePO4 for rechargeable lithium batteries. *Angewandte Chemie - International Edition*, **2012**, 51, 1853-6	16.4	94
126	Effect of AlF3 Coating on Thermal Behavior of Chemically Delithiated Li0.35[Ni1/3Co1/3Mn1/3]O2. *Journal of Physical Chemistry C*, **2010**, 114, 4710-4718	3.8	93
125	Electrolyte Engineering Enables High Stability and Capacity Alloying Anodes for Sodium and Potassium Ion Batteries. *ACS Energy Letters*, **2020**, 5, 766-776	20.1	91

124	A method of increasing the energy density of layered Ni-rich Li[Ni1−2xCoxMnx]O2 cathodes (x = 0.05, 0.1, 0.2). *Journal of Materials Chemistry A*, **2019**, 7, 2694-2701	13	88
123	The dominant role of Mn2+ additive on the electrochemical reaction in ZnMn2O4 cathode for aqueous zinc-ion batteries. *Energy Storage Materials*, **2020**, 28, 407-417	19.4	84
122	Freestanding Bilayer Carbon–Sulfur Cathode with Function of Entrapping Polysulfide for High Performance Li–S Batteries. *Advanced Functional Materials*, **2016**, 26, 1225-1232	15.6	83
121	A comprehensive study of the role of transition metals in O3-type layered Na[NixCoyMnz]O2 (x = 1/3, 0.5, 0.6, and 0.8) cathodes for sodium-ion batteries. *Journal of Materials Chemistry A*, **2016**, 4, 17952-17959	13	83
120	Toward High-Safety Potassium–Sulfur Batteries Using a Potassium Polysulfide Catholyte and Metal-Free Anode. *ACS Energy Letters*, **2018**, 3, 540-541	20.1	82
119	Customizing a Li–metal battery that survives practical operating conditions for electric vehicle applications. *Energy and Environmental Science*, **2019**, 12, 2174-2184	35.4	81
118	An advanced sodium-ion rechargeable battery based on a tin-carbon anode and a layered oxide framework cathode. *Physical Chemistry Chemical Physics*, **2013**, 15, 3827-33	3.6	81
117	Degradation Mechanism of Highly Ni-Rich Li[NiCoMn]O Cathodes with > 0.9. *ACS Applied Materials & Interfaces*, **2019**, 11, 30936-30942	9.5	80
116	Ni-Rich Layered Cathode Materials with Electrochemo-Mechanically Compliant Microstructures for All-Solid-State Li Batteries. *Advanced Energy Materials*, **2020**, 10, 1903360	21.8	80
115	Electrochemical Properties of Sulfurized-Polyacrylonitrile Cathode for Lithium-Sulfur Batteries: Effect of Polyacrylic Acid Binder and Fluoroethylene Carbonate Additive. *Journal of Physical Chemistry Letters*, **2017**, 8, 5331-5337	6.4	79
114	Synthesis and improved electrochemical performance of Al (OH)3-coated Li[Ni1/3Mn1/3Co1/3]O2 cathode materials at elevated temperature. *Electrochimica Acta*, **2005**, 50, 4168-4173	6.7	78
113	Recent Progress and Perspective of Advanced High-Energy Co-Less Ni-Rich Cathodes for Li-Ion Batteries: Yesterday, Today, and Tomorrow. *Advanced Energy Materials*, **2020**, 10, 2002027	21.8	78
112	K0.54[Co0.5Mn0.5]O2: New cathode with high power capability for potassium-ion batteries. *Nano Energy*, **2019**, 61, 284-294	17.1	77
111	A highly stabilized Ni-rich NCA cathode for high-energy lithium-ion batteries. *Materials Today*, **2020**, 36, 73-82	21.8	77
110	Resolving the degradation pathways of the O3-type layered oxide cathode surface through the nano-scale aluminum oxide coating for high-energy density sodium-ion batteries. *Journal of Materials Chemistry A*, **2017**, 5, 23671-23680	13	76
109	Compositionally and structurally redesigned high-energy Ni-rich layered cathode for next-generation lithium batteries. *Materials Today*, **2019**, 23, 26-36	21.8	76
108	Nanoporous Structured LiFePO[sub 4] with Spherical Microscale Particles Having High Volumetric Capacity for Lithium Batteries. *Electrochemical and Solid-State Letters*, **2009**, 12, A181		75
107	Synthesis of Li[(Ni0.5Mn0.5)1-xLix]O2 by Emulsion Drying Method and Impact of Excess Li on Structural and Electrochemical Properties. *Chemistry of Materials*, **2006**, 18, 1658-1666	9.6	73

106	Optimized Concentration of Redox Mediator and Surface Protection of Li Metal for Maintenance of High Energy Efficiency in Li□O2 Batteries. *Advanced Energy Materials*, **2018**, 8, 1702258	21.8	71
105	Cathode Materials for Future Electric Vehicles and Energy Storage Systems. *ACS Energy Letters*, **2017**, 2, 703-708	20.1	69
104	Diverting Exploration of Silicon Anode into Practical Way: A Review Focused on Silicon-Graphite Composite for Lithium Ion Batteries. *Energy Storage Materials*, **2021**, 35, 550-576	19.4	69
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102	Novel Cathode Materials for Na-Ion Batteries Composed of Spoke-Like Nanorods of Na[Ni0.61Co0.12Mn0.27]O2 Assembled in Spherical Secondary Particles. *Advanced Functional Materials*, **2016**, 26, 8083-8093	15.6	65
101	Nanostructured lithium sulfide materials for lithium-sulfur batteries. *Journal of Power Sources*, **2016**, 323, 174-188	8.9	64
100	Superior lithium/potassium storage capability of nitrogen-rich porous carbon nanosheets derived from petroleum coke. *Journal of Materials Chemistry A*, **2018**, 6, 12551-12558	13	64
99	High performance potassium□sulfur batteries based on a sulfurized polyacrylonitrile cathode and polyacrylic acid binder. *Journal of Materials Chemistry A*, **2018**, 6, 14587-14593	13	63
98	An Alternative Approach to Enhance the Performance of High Sulfur-Loading Electrodes for Li□S Batteries. *ACS Energy Letters*, **2016**, 1, 136-141	20.1	62
97	A sustainable iron-based sodium ion battery of porous carbon□Fe3O4/Na2FeP2O7 with high performance. *RSC Advances*, **2015**, 5, 8793-8800	3.7	60
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95	The binder effect on an oxide-based anode in lithium and sodium-ion battery applications: the fastest way to ultrahigh performance. *Chemical Communications*, **2014**, 50, 13307-10	5.8	60
94	Role of AlF[sub 3] Coating on LiCoO[sub 2] Particles during Cycling to Cutoff Voltage above 4.5 V. *Journal of the Electrochemical Society*, **2009**, 156, A1005	3.9	60
93	Cobalt-Free High-Capacity Ni-Rich Layered Li[Ni0.9Mn0.1]O2 Cathode. *Advanced Energy Materials*, **2020**, 10, 1903179	21.8	60
92	High-Performance Cells Containing Lithium Metal Anodes, LiNiCoMnO (NCM 622) Cathodes, and Fluoroethylene Carbonate-Based Electrolyte Solution with Practical Loading. *ACS Applied Materials & Interfaces*, **2018**, 10, 19773-19782	9.5	60
91	Electrochemical performance of layered Li[Li0.15Ni0.275□MgxMn0.575]O2 cathode materials for lithium secondary batteries. *Journal of Materials Chemistry*, **2003**, 13, 319-322		58
90	New Class of Ni-Rich Cathode Materials Li[NixCoyB1□□]O2 for Next Lithium Batteries. *Advanced Energy Materials*, **2020**, 10, 2000495	21.8	57
89	Bioinspired Surface Layer for the Cathode Material of High-Energy-Density Sodium-Ion Batteries. *Advanced Energy Materials*, **2018**, 8, 1702942	21.8	57

88	Degradation mechanism of spinel LiAl0.2Mn1.8O4 cathode materials on high temperature cycling. *Journal of Materials Chemistry*, **2001**, 11, 2519-2522		57
87	Microstructural Degradation of Ni-Rich Li[Ni Co Mn]O Cathodes During Accelerated Calendar Aging. *Small*, **2018**, 14, e1803179	11	57
86	Simultaneous MgO coating and Mg doping of Na[Ni0.5Mn0.5]O2 cathode: facile and customizable approach to high-voltage sodium-ion batteries. *Journal of Materials Chemistry A*, **2018**, 6, 16854-16862	13	55
85	Low-Temperature Synthesis of LixMn0.67Ni0.33O2 (0.2 . *Advanced Materials*, **2005**, 17, 2834-2837	24	55
84	Toward the Sustainable Lithium Metal Batteries with a New Electrolyte Solvation Chemistry. *Advanced Energy Materials*, **2020**, 10, 2000567	21.8	53
83	Role of Li-Ion Depletion on Electrode Surface: Underlying Mechanism for Electrodeposition Behavior of Lithium Metal Anode. *Advanced Energy Materials*, **2020**, 10, 2002390	21.8	53
82	Capacity Fading Mechanisms in Ni-Rich Single-Crystal NCM Cathodes. *ACS Energy Letters*, **2021**, 6, 2726-2734	20.1	53
81	Review: A Comparative Evaluation of Redox Mediators for Li-O2Batteries: A Critical Review. *Journal of the Electrochemical Society*, **2018**, 165, A2274-A2293	3.9	51
80	Variation of Electronic Conductivity within Secondary Particles Revealing a Capacity-Fading Mechanism of Layered Ni-Rich Cathode. *ACS Energy Letters*, **2018**, 3, 3002-3007	20.1	50
79	Stabilization of Lithium-Metal Batteries Based on the in Situ Formation of a Stable Solid Electrolyte Interphase Layer. *ACS Applied Materials & Interfaces*, **2018**, 10, 17985-17993	9.5	49
78	Model-Based Design of Graphite-Compatible Electrolytes in Potassium-Ion Batteries. *ACS Energy Letters*, **2020**, 5, 2651-2661	20.1	49
77	Reducing cobalt from lithium-ion batteries for the electric vehicle era. *Energy and Environmental Science*, **2021**, 14, 844-852	35.4	49
76	Electrolyte-Mediated Stabilization of High-Capacity Micro-Sized Antimony Anodes for Potassium-Ion Batteries. *Advanced Materials*, **2021**, 33, e2005993	24	48
75	Microstructure Evolution of Concentration Gradient Li[Ni0.75Co0.10Mn0.15]O2 Cathode for Lithium-Ion Batteries. *Advanced Functional Materials*, **2018**, 28, 1802090	15.6	47
74	A 4 V Class Potassium Metal Battery with Extremely Low Overpotential. *ACS Nano*, **2019**, 13, 9306-9314	16.7	44
73	Iron–cobalt bimetal decorated carbon nanotubes as cost-effective cathode catalysts for Li–O2 batteries. *Journal of Materials Chemistry A*, **2016**, 4, 7020-7026	13	40
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71	Synthesis and electrochemical characterization of a new Se-doped spinel material for lithium secondary batteries **2001**, 31, 1149-1153		40

70	Carbon-Free TiO2 Microspheres as Anode Materials for Sodium Ion Batteries. *ACS Energy Letters*, **2019**, 4, 494-501	20.1	38
69	Additives Engineered Nonflammable Electrolyte for Safer Potassium Ion Batteries. *Advanced Functional Materials*, **2020**, 30, 2001934	15.6	37
68	Effect of nickel and iron on structural and electrochemical properties of O3 type layer cathode materials for sodium-ion batteries. *Journal of Power Sources*, **2016**, 324, 106-112	8.9	37
67	Vanadium dioxide □Reduced graphene oxide composite as cathode materials for rechargeable Li and Na batteries. *Journal of Power Sources*, **2016**, 326, 522-532	8.9	37
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64	Micro-Intertexture Carbon-Free Iron Sulfides as Advanced High Tap Density Anodes for Rechargeable Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 39416-39424	9.5	35
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62	A new P2-type layered oxide cathode with superior full-cell performances for K-ion batteries. *Journal of Materials Chemistry A*, **2019**, 7, 21362-21370	13	33
61	High-performance Ti-doped O3-type Na[Tix(Ni0.6Co0.2Mn0.2)1-x]O2 cathodes for practical sodium-ion batteries. *Journal of Power Sources*, **2019**, 422, 1-8	8.9	33
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