Dayoung Kang

List of Publications by Year
in descending order

291
papers

39,327
citations

2311

98
h-index

2812

191
g-index

306
all docs

306
docs citations

306
times ranked

28436
citing authors

#	Article	IF	Citations
1	Electrode Materials for Rechargeable Sodiumâ€Ion Batteries: Potential Alternatives to Current Lithiumâ€Ion Batteries. Advanced Energy Materials, 2012, 2, 710-721.	10.2	2,944
2	Electrodes with High Power and High Capacity for Rechargeable Lithium Batteries. Science, 2006, 311, 977-980.	6.0	2,369
3	Aqueous Rechargeable Li and Na Ion Batteries. Chemical Reviews, 2014, 114, 11788-11827.	23.0	1,183
4	Understanding the Degradation Mechanisms of LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Cathode Material in Lithium Ion Batteries. Advanced Energy Materials, 2014, 4, 1300787.	10.2	893
5	Recent Progress in Electrode Materials for Sodiumâ€Ion Batteries. Advanced Energy Materials, 2016, 6, 1600943.	10.2	815
6	Fabricating Genetically Engineered High-Power Lithium-Ion Batteries Using Multiple Virus Genes. Science, 2009, 324, 1051-1055.	6.0	688
7	Sodium Storage Behavior in Natural Graphite using Etherâ€based Electrolyte Systems. Advanced Functional Materials, 2015, 25, 534-541.	7.8	625
8	Recent Progress on Multimetal Oxide Catalysts for the Oxygen Evolution Reaction. Advanced Energy Materials, 2018, 8, 1702774.	10.2	615
9	Flexible energy storage devices based on graphene paper. Energy and Environmental Science, 2011, 4, 1277.	15.6	536
10	Highly Durable and Active PtFe Nanocatalyst for Electrochemical Oxygen Reduction Reaction. Journal of the American Chemical Society, 2015, 137, 15478-15485.	6.6	517
11	A Novel Highâ€Energy Hybrid Supercapacitor with an Anatase TiO₂â€"Reduced Graphene Oxide Anode and an Activated Carbon Cathode. Advanced Energy Materials, 2013, 3, 1500-1506.	10.2	510
12	Bendable Inorganic Thin-Film Battery for Fully Flexible Electronic Systems. Nano Letters, 2012, 12, 4810-4816.	4.5	494
13	Galvanic Replacement Reactions in Metal Oxide Nanocrystals. Science, 2013, 340, 964-968.	6.0	472
14	Large-Scale Synthesis of Carbon-Shell-Coated FeP Nanoparticles for Robust Hydrogen Evolution Reaction Electrocatalyst. Journal of the American Chemical Society, 2017, 139, 6669-6674.	6.6	451
15	Factors that affect Li mobility in layered lithium transition metal oxides. Physical Review B, 2006, 74, .	1.1	431
16	Facile Synthesis of Nb₂O₅@Carbon Coreâ€"Shell Nanocrystals with Controlled Crystalline Structure for High-Power Anodes in Hybrid Supercapacitors. ACS Nano, 2015, 9, 7497-7505.	7.3	411
17	Superior Rechargeability and Efficiency of Lithiumâ€"Oxygen Batteries: Hierarchical Air Electrode Architecture Combined with a Soluble Catalyst. Angewandte Chemie - International Edition, 2014, 53, 3926-3931.	7.2	407
18	New Iron-Based Mixed-Polyanion Cathodes for Lithium and Sodium Rechargeable Batteries: Combined First Principles Calculations and Experimental Study. Journal of the American Chemical Society, 2012, 134, 10369-10372.	6.6	395

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19	A New High-Energy Cathode for a Na-Ion Battery with Ultrahigh Stability. Journal of the American Chemical Society, 2013, 135, 13870-13878.	6.6	393
20	The Li intercalation potential of LiMPO4 and LiMSiO4 olivines with M=Fe, Mn, Co, Ni. Electrochemistry Communications, 2004, 6, 1144-1148.	2.3	390
21	Advanced Hybrid Supercapacitor Based on a Mesoporous Niobium Pentoxide/Carbon as High-Performance Anode. ACS Nano, 2014, 8, 8968-8978.	7.3	380
22	The electronic structure and band gap of LiFePO4 and LiMnPO4. Solid State Communications, 2004, 132, 181-186.	0.9	369
23	Sodium intercalation chemistry in graphite. Energy and Environmental Science, 2015, 8, 2963-2969.	15.6	369
24	Recent Progress in Organic Electrodes for Li and Na Rechargeable Batteries. Advanced Materials, 2018, 30, e1704682.	11.1	366
25	Carbon nanomaterials for advanced lithium sulfur batteries. Nano Today, 2018, 19, 84-107.	6.2	365
26	Highâ€Performance Sodiumâ€Ion Hybrid Supercapacitor Based on Nb₂O₅@Carbon Coreâ€“Shell Nanoparticles and Reduced Graphene Oxide Nanocomposites. Advanced Functional Materials, 2016, 26, 3711-3719.	7.8	363
27	Highly reversible Co3O4/graphene hybrid anode for lithium rechargeable batteries. Carbon, 2011, 49, 326-332.	5.4	357
28	Recent progress on flexible lithium rechargeable batteries. Energy and Environmental Science, 2014, 7, 538-551.	15.6	355
29	Coordination tuning of cobalt phosphates towards efficient water oxidation catalyst. Nature Communications, 2015, 6, 8253.	5.8	352
30	Scalable Fabrication of Silicon Nanotubes and their Application to Energy Storage. Advanced Materials, 2012, 24, 5452-5456.	11.1	338
31	Voltage decay and redox asymmetry mitigation by reversible cation migration in lithium-rich layered oxide electrodes. Nature Materials, 2020, 19, 419-427.	13.3	328
32	Rational design of redox mediators for advanced Liâ€“O2 batteries. Nature Energy, 2016, 1, .	19.8	321
33	Ti-substituted tunnel-type Na0.44MnO2 oxide as a negative electrode for aqueous sodium-ion batteries. Nature Communications, 2015, 6, 6401.	5.8	316
34	Reaction chemistry in rechargeable Liâ€“O₂batteries. Chemical Society Reviews, 2017, 46, 2873-2888.	18.7	314
35	Toward a Lithiumâ€“â€œAirâ€•Battery: The Effect of CO₂ on the Chemistry of a Lithiumâ€“Oxygen Cell. Journal of the American Chemical Society, 2013, 135, 9733-9742.	6.6	307
36	A combined first principles and experimental study on Na3V2(PO4)2F3 for rechargeable Na batteries. Journal of Materials Chemistry, 2012, 22, 20535.	6.7	306

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37	Exceptional catalytic effects of black phosphorus quantum dots in shuttling-free lithium sulfur batteries. Nature Communications, 2018, 9, 4164.	5.8	304
38	Enhanced Power and Rechargeability of a Liâ^'O₂ Battery Based on a Hierarchicalâ€Fibril CNT Electrode. Advanced Materials, 2013, 25, 1348-1352.	11.1	299
39	Unexpected discovery of low-cost maricite NaFePO₄as a high-performance electrode for Na-ion batteries. Energy and Environmental Science, 2015, 8, 540-545.	15.6	299
40	A Family of Highâ€Performance Cathode Materials for Naâ€ion Batteries, Na₃(VO_{1â^'<i>x</i>}PO₄)₂ F_{1+2<i>x</i>} (0 â‰) Tj ETQq0 0 0 rgBT /O 24, 4603-4614.	7.8	271
41	Fabrication of FeF₃ Nanoflowers on CNT Branches and Their Application to High Power Lithium Rechargeable Batteries. Advanced Materials, 2010, 22, 5260-5264.	11.1	270
42	Critical Role of Oxygen Evolved from Layered Liâ€"Excess Metal Oxides in Lithium Rechargeable Batteries. Chemistry of Materials, 2012, 24, 2692-2697.	3.2	255
43	Biologically inspired pteridine redox centres for rechargeable batteries. Nature Communications, 2014, 5, 5335.	5.8	254
44	Understanding the Electrochemical Mechanism of the New Iron-Based Mixed-Phosphate Na₄Fe₃(PO₄)₂(P₂O₇) in a Na Rechargeable Battery. Chemistry of Materials, 2013, 25, 3614-3622.	3.2	237
45	Ab Initio Study of the Sodium Intercalation and Intermediate Phases in Na_{0.44}MnO₂ for Sodium-Ion Battery. Chemistry of Materials, 2012, 24, 1205-1211.	3.2	223
46	Conditions for Reversible Na Intercalation in Graphite: Theoretical Studies on the Interplay Among Guest Ions, Solvent, and Graphite Host. Advanced Energy Materials, 2017, 7, 1601519.	10.2	219
47	Structural evolution of layered Li1.2Ni0.2Mn0.6O2 upon electrochemical cycling in a Li rechargeable battery. Journal of Materials Chemistry, 2010, 20, 10179.	6.7	211
48	Organic Nanohybrids for Fast and Sustainable Energy Storage. Advanced Materials, 2014, 26, 2558-2565.	11.1	210
49	Effect of High Voltage on the Structure and Electrochemistry of LiNi0.5Mn0.5O2:Â A Joint Experimental and Theoretical Study. Chemistry of Materials, 2006, 18, 4768-4781.	3.2	203
50	Effects of sulfur doping on graphene-based nanosheets for use as anode materials in lithium-ion batteries. Journal of Power Sources, 2014, 262, 79-85.	4.0	203
51	Fabrication and Electrochemical Characterization of TiO₂ Three-Dimensional Nanonetwork Based on Peptide Assembly. ACS Nano, 2009, 3, 1085-1090.	7.3	195
52	Tailoring sodium intercalation in graphite for high energy and power sodium ion batteries. Nature Communications, 2019, 10, 2598.	5.8	195
53	Carbonization of a stable Î²-sheet-rich silk protein into a pseudographitic pyroprotein. Nature Communications, 2015, 6, 7145.	5.8	192
54	All-graphene-battery: bridging the gap between supercapacitors and lithium ion batteries. Scientific Reports, 2014, 4, 5278.	1.6	185

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55	Progress in the Development of Sodiumâ€Ion Solid Electrolytes. Small Methods, 2017, 1, 1700219.	4.6	180
56	SnO2/graphene composite with high lithium storage capability for lithium rechargeable batteries. Nano Research, 2010, 3, 813-821.	5.8	178
57	Ultraconcentrated Sodium Bis(fluorosulfonyl)imide-Based Electrolytes for High-Performance Sodium Metal Batteries. ACS Applied Materials & Interfaces, 2017, 9, 3723-3732.	4.0	177
58	Anomalous Jahnâ€"Teller behavior in a manganese-based mixed-phosphate cathode for sodium ion batteries. Energy and Environmental Science, 2015, 8, 3325-3335.	15.6	175
59	Electrochemical performance and ex situ analysis of ZnMn2O4 nanowires as anode materials for lithium rechargeable batteries. Nano Research, 2011, 4, 505-510.	5.8	170
60	Graphene for advanced Li/S and Li/air batteries. Journal of Materials Chemistry A, 2014, 2, 33-47.	5.2	166
61	Exfoliation of Non-Oxidized Graphene Flakes for Scalable Conductive Film. Nano Letters, 2012, 12, 2871-2876.	4.5	163
62	Li₃BO₃â€"Li₂CO₃: Rationally Designed Buffering Phase for Sulfide All-Solid-State Li-Ion Batteries. Chemistry of Materials, 2018, 30, 8190-8200.	3.2	162
63	High Energy Organic Cathode for Sodium Rechargeable Batteries. Chemistry of Materials, 2015, 27, 7258-7264.	3.2	160
64	Toward a low-cost high-voltage sodium aqueous rechargeable battery. Materials Today, 2019, 29, 26-36.	8.3	156
65	Phase Transitions in the LiNi0.5Mn0.5O2 System with Temperature. Chemistry of Materials, 2007, 19, 1790-1800.	3.2	152
66	A new catalyst-embedded hierarchical air electrode for high-performance Liâ€"O2 batteries. Energy and Environmental Science, 2013, 6, 3570.	15.6	152
67	Synthesis of Diphenylalanine/Cobalt Oxide Hybrid Nanowires and Their Application to Energy Storage. ACS Nano, 2010, 4, 159-164.	7.3	150
68	Synergistic multi-doping effects on the Li7La3Zr2O12 solid electrolyte for fast lithium ion conduction. Scientific Reports, 2015, 5, 18053.	1.6	150
69	Redox Cofactor from Biological Energy Transduction as Molecularly Tunable Energyâ€Storage Compound. Angewandte Chemie - International Edition, 2013, 52, 8322-8328.	7.2	147
70	Nanoscale Phenomena in Lithium-Ion Batteries. Chemical Reviews, 2020, 120, 6684-6737.	23.0	142
71	A Stretchable Polymerâ€"Carbon Nanotube Composite Electrode for Flexible Lithiumâ€Ion Batteries: Porosity Engineering by Controlled Phase Separation. Advanced Energy Materials, 2012, 2, 976-982.	10.2	141
72	Reviewâ€"Lithium-Excess Layered Cathodes for Lithium Rechargeable Batteries. Journal of the Electrochemical Society, 2015, 162, A2447-A2467.	1.3	141

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73	Multi-electron redox phenazine for ready-to-charge organic batteries. Green Chemistry, 2017, 19, 2980-2985.	4.6	139
74	Redoxâ€Active Organic Compounds for Future Sustainable Energy Storage System. Advanced Energy Materials, 2020, 10, 2001445.	10.2	139
75	Multicomponent Effects on the Crystal Structures and Electrochemical Properties of Spinel-Structured M₃O₄ (M = Fe, Mn, Co) Anodes in Lithium Rechargeable Batteries. Chemistry of Materials, 2012, 24, 720-725.	3.2	138
76	Ternary metal fluorides as high-energy cathodes with low cycling hysteresis. Nature Communications, 2015, 6, 6668.	5.8	138
77	Highâ€Performance Hybrid Supercapacitor Based on Grapheneâ€Wrapped Li₄Ti₅O₁₂ and Activated Carbon. ChemElectroChem, 2014, 1, 125-130.	1.7	137
78	Going Beyond Lithium Hybrid Capacitors: Proposing a New Highâ€Performing Sodium Hybrid Capacitor System for Nextâ€Generation Hybrid Vehicles Made with Bioâ€Inspired Activated Carbon. Advanced Energy Materials, 2016, 6, 1502199.	10.2	137
79	A New Water Oxidation Catalyst: Lithium Manganese Pyrophosphate with Tunable Mn Valency. Journal of the American Chemical Society, 2014, 136, 4201-4211.	6.6	136
80	Dissolution and ionization of sodium superoxide in sodiumâ€“oxygen batteries. Nature Communications, 2016, 7, 10670.	5.8	129
81	Mineralization of Selfâ€assembled Peptide Nanofibers for Rechargeable Lithium Ion Batteries. Advanced Materials, 2010, 22, 5537-5541.	11.1	127
82	Ordered-mesoporous Nb2O5/carbon composite as a sodium insertion material. Nano Energy, 2015, 16, 62-70.	8.2	124
83	Multi-redox Molecule for High-Energy Redox Flow Batteries. Joule, 2018, 2, 1771-1782.	11.7	123
84	Exploiting Lithiumâ€“Ether Coâ€Intercalation in Graphite for Highâ€Power Lithiumâ€Ion Batteries. Advanced Energy Materials, 2017, 7, 1700418.	10.2	122
85	Combined Firstâ€Principle Calculations and Experimental Study on Multiâ€Component Olivine Cathode for Lithium Rechargeable Batteries. Advanced Functional Materials, 2009, 19, 3285-3292.	7.8	121
86	Sodiumâ€Ion Storage in Pyroproteinâ€Based Carbon Nanoplates. Advanced Materials, 2015, 27, 6914-6921.	11.1	120
87	The Role of Interlayer Chemistry in Liâ€Metal Growth through a Garnetâ€Type Solid Electrolyte. Advanced Energy Materials, 2020, 10, 1903993.	10.2	119
88	Sodiumâ€“oxygen batteries with alkyl-carbonate and ether based electrolytes. Physical Chemistry Chemical Physics, 2013, 15, 3623.	1.3	118
89	Hybrid Cellular Nanosheets for High-Performance Lithium-Ion Battery Anodes. Journal of the American Chemical Society, 2015, 137, 11954-11961.	6.6	114
90	Abnormal self-discharge in lithium-ion batteries. Energy and Environmental Science, 2018, 11, 970-978.	15.6	114

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91	Phase Stability Study of Li[sub 1âˆ’x]MnPO[sub 4] (0â‰xâ‰1) Cathode for Li Rechargeable Battery. Journal of the Electrochemical Society, 2009, 156, A635.	1.3	113
92	New Insight into Microstructure Engineering of Niâ€Rich Layered Oxide Cathode for High Performance Lithium Ion Batteries. Advanced Functional Materials, 2021, 31, 2010095.	7.8	113
93	Cu-doped P2-Na_{0.5}Ni_{0.33}Mn_{0.67}O₂ encapsulated with MgO as a novel high voltage cathode with enhanced Na-storage properties. Journal of Materials Chemistry A, 2017, 5, 8408-8415.	5.2	109
94	Carbon nanotube-amorphous FePO4 coreâ€“shell nanowires as cathode material for Li ion batteries. Chemical Communications, 2010, 46, 7409.	2.2	107
95	Neutron and X-ray Diffraction Study of Pyrophosphate-Based Li_{2â€“<i>x</i>}MP₂O₇ (M = Fe, Co) for Lithium Rechargeable Battery Electrodes. Chemistry of Materials, 2011, 23, 3930-3937.	3.2	106
96	Engineering Solid Electrolyte Interphase for Pseudocapacitive Anatase TiO₂ Anodes in Sodiumâ€Ion Batteries. Advanced Functional Materials, 2018, 28, 1802099.	7.8	106
97	Permselective metalâ€“organic framework gel membrane enables long-life cycling of rechargeable organic batteries. Nature Nanotechnology, 2021, 16, 77-84.	15.6	105
98	Visualization of regulated nucleation and growth of lithium sulfides for high energy lithium sulfur batteries. Energy and Environmental Science, 2019, 12, 3144-3155.	15.6	104
99	The potential for long-term operation of a lithiumâ€“oxygen battery using a non-carbonate-based electrolyte. Chemical Communications, 2012, 48, 8374.	2.2	100
100	A comparative study of graphite electrodes using the co-intercalation phenomenon for rechargeable Li, Na and K batteries. Chemical Communications, 2016, 52, 12618-12621.	2.2	99
101	A comparative study on Na2MnPO4F and Li2MnPO4F for rechargeable battery cathodes. Physical Chemistry Chemical Physics, 2012, 14, 3299.	1.3	98
102	Suppression of Voltage Decay through Manganese Deactivation and Nickel Redox Buffering in Highâ€Energy Layered Lithiumâ€Rich Electrodes. Advanced Energy Materials, 2018, 8, 1800606.	10.2	97
103	Exploiting Biological Systems: Toward Eco-Friendly and High-Efficiency Rechargeable Batteries. Joule, 2018, 2, 61-75.	11.7	96
104	Lithium-free transition metal monoxides for positive electrodes in lithium-ion batteries. Nature Energy, 2017, 2, .	19.8	94
105	Challenges and Strategies towards Practically Feasible Solidâ€State Lithium Metal Batteries. Advanced Materials, 2022, 34, e2104666.	11.1	93
106	Multicomponent Olivine Cathode for Lithium Rechargeable Batteries: A First-Principles Study. Chemistry of Materials, 2010, 22, 518-523.	3.2	91
107	First-Principles Study of the Reaction Mechanism in Sodiumâ€“Oxygen Batteries. Chemistry of Materials, 2014, 26, 1048-1055.	3.2	91
108	Highly stable linear carbonate-containing electrolytes with fluoroethylene carbonate for high-performance cathodes in sodium-ion batteries. Journal of Power Sources, 2016, 320, 49-58.	4.0	91

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109	Tailoring a fluorophosphate as a novel 4 V cathode for lithium-ion batteries. Scientific Reports, 2012, 2, 704.	1.6	90
110	Coupling structural evolution and oxygen-redox electrochemistry in layered transition metal oxides. Nature Materials, 2022, 21, 664-672.	13.3	89
111	Stable and Highâ€Power Calciumâ€Ion Batteries Enabled by Calcium Intercalation into Graphite. Advanced Materials, 2020, 32, e1904411.	11.1	87
112	Tailored Oxygen Framework of Li₄Ti₅O₁₂ Nanorods for High-Power Li Ion Battery. Journal of Physical Chemistry Letters, 2014, 5, 1368-1373.	2.1	86
113	Scalable Functionalized Graphene Nano-platelets as Tunable Cathodes for High-performance Lithium Rechargeable Batteries. Scientific Reports, 2013, 3, 1506.	1.6	84
114	Amorphous Cobalt Phyllosilicate with Layered Crystalline Motifs as Water Oxidation Catalyst. Advanced Materials, 2017, 29, 1606893.	11.1	84
115	Mn based olivine electrode material with high power and energy. Chemical Communications, 2010, 46, 1305.	2.2	81
116	The Reaction Mechanism and Capacity Degradation Model in Lithium Insertion Organic Cathodes, Li₂C₆O₆, Using Combined Experimental and First Principle Studies. Journal of Physical Chemistry Letters, 2014, 5, 3086-3092.	2.1	81
117	Crumpled graphene paper for high power sodium battery anode. Carbon, 2016, 99, 658-664.	5.4	81
118	Graphitic Carbon Materials for Advanced Sodiumâ€Ion Batteries. Small Methods, 2019, 3, 1800227.	4.6	81
119	Controlling Residual Lithium in Highâ€Nickel (>90â€‰%) Lithium Layered Oxides for Cathodes in Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2020, 59, 18662-18669.	7.2	81
120	Unveiling the Intrinsic Cycle Reversibility of a LiCoO₂ Electrode at 4.8-V Cutoff Voltage through Subtractive Surface Modification for Lithium-Ion Batteries. Nano Letters, 2019, 19, 29-37.	4.5	78
121	Phenoxazine as a high-voltage p-type redox center for organic battery cathode materials: small structural reorganization for faster charging and narrow operating voltage. Energy and Environmental Science, 2020, 13, 4142-4156.	15.6	78
122	Multifunctional Interface for High-Rate and Long-Durable Garnet-Type Solid Electrolyte in Lithium Metal Batteries. ACS Energy Letters, 2022, 7, 381-389.	8.8	76
123	Li₃V₂(PO₄)₃/Conducting Polymer as a High Power 4 Vâ€Class Lithium Battery Electrode. Advanced Energy Materials, 2013, 3, 1004-1007.	10.2	75
124	Extremely High Yield Conversion from Lowâ€Cost Sand to Highâ€Capacity Si Electrodes for Liâ€Ion Batteries. Advanced Energy Materials, 2014, 4, 1400622.	10.2	75
125	Deposition and Stripping Behavior of Lithium Metal in Electrochemical System: Continuum Mechanics Study. Chemistry of Materials, 2018, 30, 6769-6776.	3.2	74
126	Novel transition-metal-free cathode for high energy and power sodium rechargeable batteries. Nano Energy, 2014, 4, 97-104.	8.2	71

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127	Hollow Nanostructured Metal Silicates with Tunable Properties for Lithium Ion Battery Anodes. ACS Applied Materials & Interfaces, 2015, 7, 25725-25732.	4.0	71
128	Charge-transfer complexes for high-power organic rechargeable batteries. Energy Storage Materials, 2019, 20, 462-469.	9.5	70
129	Synthesis, Electrochemical Properties, and Phase Stability of Li2NiO2 with the Immm Structure. Chemistry of Materials, 2004, 16, 2685-2690.	3.2	69
130	First-principles study on lithium metal borate cathodes for lithium rechargeable batteries. Physical Review B, 2011, 83, .	1.1	69
131	Simple Preparation of Highâ€Quality Graphene Flakes without Oxidation Using Potassium Salts. Small, 2011, 7, 864-868.	5.2	69
132	High-performance supercapacitors based on defect-engineered carbon nanotubes. Carbon, 2014, 80, 246-254.	5.4	68
133	Hierarchical Porous Carbonized Co₃O₄ Inverse Opals via Combined Block Copolymer and Colloid Templating as Bifunctional Electrocatalysts in Liâ€“O₂ Battery. Advanced Energy Materials, 2017, 7, 1700391.	10.2	68
134	Anisotropic Surface Modulation of Pt Catalysts for Highly Reversible Liâ€“O₂ Batteries: High Index Facet as a Critical Descriptor. ACS Catalysis, 2018, 8, 9006-9015.	5.5	68
135	High-energy and durable lithium metal batteries using garnet-type solid electrolytes with tailored lithium-metal compatibility. Nature Communications, 2022, 13, 1883.	5.8	67
136	NMR, PDF and RMC study of the positive electrode material Li(Ni0.5Mn0.5)O2 synthesized by ion-exchange methods. Journal of Materials Chemistry, 2007, 17, 3167.	6.7	66
137	Synthesis of Multicomponent Olivine by a Novel Mixed Transition Metal Oxalate Coprecipitation Method and Electrochemical Characterization. Chemistry of Materials, 2010, 22, 2573-2581.	3.2	66
138	Cyclic carbonate based-electrolytes enhancing the electrochemical performance of Na4Fe3(PO4)2(P2O7) cathodes for sodium-ion batteries. Electrochemistry Communications, 2014, 44, 74-77.	2.3	66
139	Ultraâ€Thin Hollow Carbon Nanospheres for Pseudocapacitive Sodiumâ€Ion Storage. ChemElectroChem, 2015, 2, 359-365.	1.7	66
140	Highly Stable Iron- and Manganese-Based Cathodes for Long-Lasting Sodium Rechargeable Batteries. Chemistry of Materials, 2016, 28, 7241-7249.	3.2	66
141	Factors Affecting the Exfoliation of Graphite Intercalation Compounds for Graphene Synthesis. Chemistry of Materials, 2015, 27, 2067-2073.	3.2	65
142	Tailoring a New 4Vâ€Class Cathode Material for Naâ€Ion Batteries. Advanced Energy Materials, 2016, 6, 1502147.	10.2	65
143	Efficient Method of Designing Stable Layered Cathode Material for Sodium Ion Batteries Using Aluminum Doping. Journal of Physical Chemistry Letters, 2017, 8, 5021-5030.	2.1	65
144	High-Voltage Phosphate Cathodes for Rechargeable Ca-Ion Batteries. ACS Energy Letters, 2020, 5, 3203-3211.	8.8	65

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145	High-Dielectric Polymer Coating for Uniform Lithium Deposition in Anode-Free Lithium Batteries. ACS Energy Letters, 2021, 6, 4416-4425.	8.8	63
146	Conversionâ€Based Cathode Materials for Rechargeable Sodium Batteries. Advanced Energy Materials, 2018, 8, 1702646.	10.2	62
147	Investigation on the interface between Li10GeP2S12 electrolyte and carbon conductive agents in all-solid-state lithium battery. Scientific Reports, 2018, 8, 8066.	1.6	62
148	LiFePO4 with an alluaudite crystal structure for lithium ion batteries. Energy and Environmental Science, 2013, 6, 830.	15.6	61
149	Understanding Origin of Voltage Hysteresis in Conversion Reaction for Na Rechargeable Batteries: The Case of Cobalt Oxides. Advanced Functional Materials, 2016, 26, 5042-5050.	7.8	61
150	New 4V-Class and Zero-Strain Cathode Material for Na-Ion Batteries. Chemistry of Materials, 2017, 29, 7826-7832.	3.2	61
151	Bio-inspired Molecular Redesign of a Multi-redox Catholyte for High-Energy Non-aqueous Organic Redox Flow Batteries. CheM, 2019, 5, 2642-2656.	5.8	61
152	Bifunctional MnO₂-Coated Co₃O₄ Hetero-structured Catalysts for Reversible Li-O₂ Batteries. Chemistry of Materials, 2017, 29, 10542-10550.	3.2	60
153	First principles study of Li diffusion in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>I-Li</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu Physical Review B, 2009, 79, .	1.1	59
154	Theoretical Evidence for Low Charging Overpotentials of Superoxide Discharge Products in Metalâ€“Oxygen Batteries. Chemistry of Materials, 2015, 27, 8406-8413.	3.2	59
155	Design and synthesis of multigrain nanocrystals via geometric misfit strain. Nature, 2020, 577, 359-363.	13.7	59
156	A new high-voltage calcium intercalation host for ultra-stable and high-power calcium rechargeable batteries. Nature Communications, 2021, 12, 3369.	5.8	59
157	Nonâ€Electrode Components for Rechargeable Aqueous Zinc Batteries: Electrolytes, Solidâ€Electrolyteâ€Interphase, Current Collectors, Binders, and Separators. Advanced Materials, 2022, 34, e2108206.	11.1	58
158	High-Rate and High-Areal-Capacity Air Cathodes with Enhanced Cycle Life Based on RuO₂/MnO₂ Bifunctional Electrocatalysts Supported on CNT for Pragmatic Liâ€“O₂ Batteries. ACS Catalysis, 2018, 8, 2923-2934.	5.5	57
159	Enhanced Stability of Coated Carbon Electrode for Liâ€O₂ Batteries and Its Limitations. Advanced Energy Materials, 2018, 8, 1702661.	10.2	57
160	Revisiting the role of Zr doping in Ni-rich layered cathodes for lithium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 17415-17424.	5.2	56
161	Synthesis and Electrochemical Properties of Layered Li0.9Ni0.45Ti0.55O2. Chemistry of Materials, 2003, 15, 4503-4507.	3.2	55
162	A robust design of Ru quantum dot/N-doped holey graphene for efficient Liâ€“O₂batteries. Journal of Materials Chemistry A, 2017, 5, 619-631.	5.2	55

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