

# Dayoung Kang

## List of Publications by Citations

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287  
papers

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306  
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35,163  
ext. citations

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#	Paper	IF	Citations
287	Electrode Materials for Rechargeable Sodium-Ion Batteries: Potential Alternatives to Current Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 710-721	21.8	2590
286	Electrodes with high power and high capacity for rechargeable lithium batteries. <i>Science</i> , <b>2006</b> , 311, 977-803	39.3	2120
285	Aqueous rechargeable Li and Na ion batteries. <i>Chemical Reviews</i> , <b>2014</b> , 114, 11788-827	68.1	929
284	Understanding the Degradation Mechanisms of LiNi <sub>0.5</sub> Co <sub>0.2</sub> Mn <sub>0.3</sub> O <sub>2</sub> Cathode Material in Lithium Ion Batteries. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1300787	21.8	709
283	Recent Progress in Electrode Materials for Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600943	21.8	686
282	Fabricating genetically engineered high-power lithium-ion batteries using multiple virus genes. <i>Science</i> , <b>2009</b> , 324, 1051-5	33.3	627
281	Sodium Storage Behavior in Natural Graphite using Ether-based Electrolyte Systems. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 534-541	15.6	502
280	Flexible energy storage devices based on graphene paper. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 1277	35.4	497
279	A Novel High-Energy Hybrid Supercapacitor with an Anatase TiO <sub>2</sub> Reduced Graphene Oxide Anode and an Activated Carbon Cathode. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 1500-1506	21.8	451
278	Bendable inorganic thin-film battery for fully flexible electronic systems. <i>Nano Letters</i> , <b>2012</b> , 12, 4810-6	11.5	431
277	Galvanic replacement reactions in metal oxide nanocrystals. <i>Science</i> , <b>2013</b> , 340, 964-8	33.3	421
276	Recent Progress on Multimetal Oxide Catalysts for the Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702774	21.8	408
275	Highly Durable and Active PtFe Nanocatalyst for Electrochemical Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 15478-85	16.4	393
274	Large-Scale Synthesis of Carbon-Shell-Coated FeP Nanoparticles for Robust Hydrogen Evolution Reaction Electrocatalyst. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 6669-6674	16.4	369
273	Superior rechargeability and efficiency of lithium-oxygen batteries: hierarchical air electrode architecture combined with a soluble catalyst. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 3926-31	16.4	360
272	Factors that affect Li mobility in layered lithium transition metal oxides. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	354
271	The Li intercalation potential of LiMPO <sub>4</sub> and LiMSiO <sub>4</sub> olivines with M = Fe, Mn, Co, Ni. <i>Electrochemistry Communications</i> , <b>2004</b> , 6, 1144-1148	5.1	344

270	A new high-energy cathode for a Na-ion battery with ultrahigh stability. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 13870-8	16.4	343
269	Facile Synthesis of Nb <sub>2</sub> O <sub>5</sub> @Carbon Core-Shell Nanocrystals with Controlled Crystalline Structure for High-Power Anodes in Hybrid Supercapacitors. <i>ACS Nano</i> , <b>2015</b> , 9, 7497-505	16.7	340
268	Advanced hybrid supercapacitor based on a mesoporous niobium pentoxide/carbon as high-performance anode. <i>ACS Nano</i> , <b>2014</b> , 8, 8968-78	16.7	339
267	Highly reversible Co <sub>3</sub> O <sub>4</sub> /graphene hybrid anode for lithium rechargeable batteries. <i>Carbon</i> , <b>2011</b> , 49, 326-332	10.4	327
266	New iron-based mixed-polyanion cathodes for lithium and sodium rechargeable batteries: combined first principles calculations and experimental study. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 10369-72	16.4	323
265	Recent progress on flexible lithium rechargeable batteries. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 538-551	35.4	314
264	High-Performance Sodium-Ion Hybrid Supercapacitor Based on Nb <sub>2</sub> O <sub>5</sub> @Carbon Core-Shell Nanoparticles and Reduced Graphene Oxide Nanocomposites. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 3711-3719	15.6	312
263	The electronic structure and band gap of LiFePO <sub>4</sub> and LiMnPO <sub>4</sub> . <i>Solid State Communications</i> , <b>2004</b> , 132, 181-186	1.6	307
262	Scalable fabrication of silicon nanotubes and their application to energy storage. <i>Advanced Materials</i> , <b>2012</b> , 24, 5452-6	24	304
261	Sodium intercalation chemistry in graphite. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 2963-2969	35.4	287
260	Coordination tuning of cobalt phosphates towards efficient water oxidation catalyst. <i>Nature Communications</i> , <b>2015</b> , 6, 8253	17.4	283
259	Enhanced power and rechargeability of a Li-O <sub>2</sub> battery based on a hierarchical-fibril CNT electrode. <i>Advanced Materials</i> , <b>2013</b> , 25, 1348-52	24	282
258	Carbon nanomaterials for advanced lithium sulfur batteries. <i>Nano Today</i> , <b>2018</b> , 19, 84-107	17.9	267
257	Ti-substituted tunnel-type NaMnO <sub>2</sub> oxide as a negative electrode for aqueous sodium-ion batteries. <i>Nature Communications</i> , <b>2015</b> , 6, 6401	17.4	265
256	Rational design of redox mediators for advanced LiO <sub>2</sub> batteries. <i>Nature Energy</i> , <b>2016</b> , 1,	62.3	263
255	Toward a lithium-"air" battery: the effect of CO <sub>2</sub> on the chemistry of a lithium-oxygen cell. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 9733-42	16.4	262
254	A combined first principles and experimental study on Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> for rechargeable Na batteries. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 20535		253
253	Recent Progress in Organic Electrodes for Li and Na Rechargeable Batteries. <i>Advanced Materials</i> , <b>2018</b> , 30, e1704682	24	246

252	Fabrication of FeF <sub>3</sub> Nanoflowers on CNT branches and their application to high power lithium rechargeable batteries. <i>Advanced Materials</i> , <b>2010</b> , 22, 5260-4	24	242
251	Unexpected discovery of low-cost maricite NaFePO <sub>4</sub> as a high-performance electrode for Na-ion batteries. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 540-545	35.4	236
250	Reaction chemistry in rechargeable Li-O batteries. <i>Chemical Society Reviews</i> , <b>2017</b> , 46, 2873-2888	58.5	234
249	Critical Role of Oxygen Evolved from Layered Li <sup>+</sup> -excess Metal Oxides in Lithium Rechargeable Batteries. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 2692-2697	9.6	213
248	Exceptional catalytic effects of black phosphorus quantum dots in shuttling-free lithium sulfur batteries. <i>Nature Communications</i> , <b>2018</b> , 9, 4164	17.4	210
247	A Family of High-Performance Cathode Materials for Na-ion Batteries, Na <sub>3</sub> (VO <sub>1-x</sub> PO <sub>4</sub> ) <sub>2</sub> F <sub>1+2x</sub> (0 ≤ x ≤ 1): Combined First-Principles and Experimental Study. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4603-4614	15.6	206
246	Ab Initio Study of the Sodium Intercalation and Intermediate Phases in Na <sub>0.44</sub> MnO <sub>2</sub> for Sodium-Ion Battery. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 1205-1211	9.6	195
245	Biologically inspired pteridine redox centres for rechargeable batteries. <i>Nature Communications</i> , <b>2014</b> , 5, 5335	17.4	188
244	Structural evolution of layered Li <sub>1.2</sub> Ni <sub>0.2</sub> Mn <sub>0.6</sub> O <sub>2</sub> upon electrochemical cycling in a Li rechargeable battery. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 10179		184
243	Effects of sulfur doping on graphene-based nanosheets for use as anode materials in lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2014</b> , 262, 79-85	8.9	183
242	Fabrication and electrochemical characterization of TiO <sub>2</sub> three-dimensional nanonetwork based on peptide assembly. <i>ACS Nano</i> , <b>2009</b> , 3, 1085-90	16.7	183
241	Effect of High Voltage on the Structure and Electrochemistry of LiNi <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>2</sub> : A Joint Experimental and Theoretical Study. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 4768-4781	9.6	181
240	Organic nanohybrids for fast and sustainable energy storage. <i>Advanced Materials</i> , <b>2014</b> , 26, 2558-65	24	174
239	Understanding the Electrochemical Mechanism of the New Iron-Based Mixed-Phosphate Na <sub>4</sub> Fe <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> (P <sub>2</sub> O <sub>7</sub> ) in a Na Rechargeable Battery. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 3614-3622	9.6	174
238	Voltage decay and redox asymmetry mitigation by reversible cation migration in lithium-rich layered oxide electrodes. <i>Nature Materials</i> , <b>2020</b> , 19, 419-427	27	171
237	SnO <sub>2</sub> /graphene composite with high lithium storage capability for lithium rechargeable batteries. <i>Nano Research</i> , <b>2010</b> , 3, 813-821	10	171
236	Graphene for advanced Li/S and Li/air batteries. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 33-47	13	154
235	Electrochemical performance and ex situ analysis of ZnMn <sub>2</sub> O <sub>4</sub> nanowires as anode materials for lithium rechargeable batteries. <i>Nano Research</i> , <b>2011</b> , 4, 505-510	10	154

234	All-graphene-battery: bridging the gap between supercapacitors and lithium ion batteries. <i>Scientific Reports</i> , <b>2014</b> , 4, 5278	4.9	153
233	Conditions for Reversible Na Intercalation in Graphite: Theoretical Studies on the Interplay Among Guest Ions, Solvent, and Graphite Host. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1601519	21.8	151
232	Carbonization of a stable $\beta$ -sheet-rich silk protein into a pseudographitic pyroprotein. <i>Nature Communications</i> , <b>2015</b> , 6, 7145	17.4	147
231	Exfoliation of non-oxidized graphene flakes for scalable conductive film. <i>Nano Letters</i> , <b>2012</b> , 12, 2871-6	11.5	145
230	Phase Transitions in the LiNi <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>2</sub> System with Temperature. <i>Chemistry of Materials</i> , <b>2007</b> , 19, 1790-1800	9.6	137
229	Synthesis of diphenylalanine/cobalt oxide hybrid nanowires and their application to energy storage. <i>ACS Nano</i> , <b>2010</b> , 4, 159-64	16.7	135
228	A new catalyst-embedded hierarchical air electrode for high-performance LiO <sub>2</sub> batteries. <i>Energy and Environmental Science</i> , <b>2013</b> , 6, 3570	35.4	134
227	A Stretchable Polymer/Carbon Nanotube Composite Electrode for Flexible Lithium-Ion Batteries: Porosity Engineering by Controlled Phase Separation. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 976-982	21.8	128
226	High-Performance Hybrid Supercapacitor Based on Graphene-Wrapped Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> and Activated Carbon. <i>ChemElectroChem</i> , <b>2014</b> , 1, 125-130	4.3	127
225	Ultraconcentrated Sodium Bis(fluorosulfonyl)imide-Based Electrolytes for High-Performance Sodium Metal Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 3723-3732	9.5	126
224	Progress in the Development of Sodium-Ion Solid Electrolytes. <i>Small Methods</i> , <b>2017</b> , 1, 1700219	12.8	123
223	High Energy Organic Cathode for Sodium Rechargeable Batteries. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 7258-7264	12.64	122
222	Multicomponent Effects on the Crystal Structures and Electrochemical Properties of Spinel-Structured M <sub>3</sub> O <sub>4</sub> (M = Fe, Mn, Co) Anodes in Lithium Rechargeable Batteries. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 720-725	9.6	122
221	Review Lithium-Excess Layered Cathodes for Lithium Rechargeable Batteries. <i>Journal of the Electrochemical Society</i> , <b>2015</b> , 162, A2447-A2467	3.9	121
220	A new water oxidation catalyst: lithium manganese pyrophosphate with tunable Mn valency. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 4201-11	16.4	116
219	Tailoring sodium intercalation in graphite for high energy and power sodium ion batteries. <i>Nature Communications</i> , <b>2019</b> , 10, 2598	17.4	115
218	Mineralization of self-assembled peptide nanofibers for rechargeable lithium ion batteries. <i>Advanced Materials</i> , <b>2010</b> , 22, 5537-41	24	115
217	Anomalous Jahn-Teller behavior in a manganese-based mixed-phosphate cathode for sodium ion batteries. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 3325-3335	35.4	114

216	Dissolution and ionization of sodium superoxide in sodium-oxygen batteries. <i>Nature Communications</i> , <b>2016</b> , 7, 10670	17.4	114
215	Redox cofactor from biological energy transduction as molecularly tunable energy-storage compound. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 8322-8	16.4	113
214	Going Beyond Lithium Hybrid Capacitors: Proposing a New High-Performing Sodium Hybrid Capacitor System for Next-Generation Hybrid Vehicles Made with Bio-Inspired Activated Carbon. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1502199	21.8	112
213	Combined First-Principle Calculations and Experimental Study on Multi-Component Olivine Cathode for Lithium Rechargeable Batteries. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 3285-3292	15.6	112
212	Sodium-oxygen batteries with alkyl-carbonate and ether based electrolytes. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 3623-9	3.6	110
211	Sodium-Ion Storage in Pyroprotein-Based Carbon Nanoplates. <i>Advanced Materials</i> , <b>2015</b> , 27, 6914-21	24	107
210	Phase Stability Study of $\text{Li}_{1-x}\text{MnPO}_4$ Cathode for Li Rechargeable Battery. <i>Journal of the Electrochemical Society</i> , <b>2009</b> , 156, A635	3.9	106
209	Ordered-mesoporous $\text{Nb}_2\text{O}_5$ /carbon composite as a sodium insertion material. <i>Nano Energy</i> , <b>2015</b> , 16, 62-70	17.1	104
208	Ternary metal fluorides as high-energy cathodes with low cycling hysteresis. <i>Nature Communications</i> , <b>2015</b> , 6, 6668	17.4	104
207	Toward a low-cost high-voltage sodium aqueous rechargeable battery. <i>Materials Today</i> , <b>2019</b> , 29, 26-36	21.8	101
206	Hybrid Cellular Nanosheets for High-Performance Lithium-Ion Battery Anodes. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 11954-61	16.4	100
205	Synergistic multi-doping effects on the $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ solid electrolyte for fast lithium ion conduction. <i>Scientific Reports</i> , <b>2015</b> , 5, 18053	4.9	100
204	The potential for long-term operation of a lithium-oxygen battery using a non-carbonate-based electrolyte. <i>Chemical Communications</i> , <b>2012</b> , 48, 8374-6	5.8	96
203	Carbon nanotube-amorphous $\text{FePO}_4$ core-shell nanowires as cathode material for Li ion batteries. <i>Chemical Communications</i> , <b>2010</b> , 46, 7409-11	5.8	94
202	Neutron and X-ray Diffraction Study of Pyrophosphate-Based $\text{Li}_2\text{MMP}_2\text{O}_7$ (M = Fe, Co) for Lithium Rechargeable Battery Electrodes. <i>Chemistry of Materials</i> , <b>2011</b> , 23, 3930-3937	9.6	92
201	$\text{Li}_3\text{BO}_3\text{Li}_2\text{CO}_3$ : Rationally Designed Buffering Phase for Sulfide All-Solid-State Li-Ion Batteries. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 8190-8200	9.6	92
200	A comparative study on $\text{Na}_2\text{MnPO}_4\text{F}$ and $\text{Li}_2\text{MnPO}_4\text{F}$ for rechargeable battery cathodes. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 3299-303	3.6	87
199	Multi-electron redox phenazine for ready-to-charge organic batteries. <i>Green Chemistry</i> , <b>2017</b> , 19, 2980-2985	29.85	84

198	Engineering Solid Electrolyte Interphase for Pseudocapacitive Anatase TiO <sub>2</sub> Anodes in Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1802099	15.6	83
197	Cu-doped P2-Na <sub>0.5</sub> Ni <sub>0.33</sub> Mn <sub>0.67</sub> O <sub>2</sub> encapsulated with MgO as a novel high voltage cathode with enhanced Na-storage properties. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 8408-8415	13	82
196	First-Principles Study of the Reaction Mechanism in Sodium-Oxygen Batteries. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 1048-1055	9.6	82
195	Multi-redox Molecule for High-Energy Redox Flow Batteries. <i>Joule</i> , <b>2018</b> , 2, 1771-1782	27.8	81
194	Multicomponent Olivine Cathode for Lithium Rechargeable Batteries: A First-Principles Study. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 518-523	9.6	81
193	Superior Rechargeability and Efficiency of Lithium-Oxygen Batteries: Hierarchical Air Electrode Architecture Combined with a Soluble Catalyst. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 4007-4012	3.6	80
192	Scalable functionalized graphene nano-platelets as tunable cathodes for high-performance lithium rechargeable batteries. <i>Scientific Reports</i> , <b>2013</b> , 3, 1506	4.9	79
191	Tailored Oxygen Framework of Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> Nanorods for High-Power Li Ion Battery. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 1368-73	6.4	74
190	A comparative study of graphite electrodes using the co-intercalation phenomenon for rechargeable Li, Na and K batteries. <i>Chemical Communications</i> , <b>2016</b> , 52, 12618-12621	5.8	74
189	Exploiting Biological Systems: Toward Eco-Friendly and High-Efficiency Rechargeable Batteries. <i>Joule</i> , <b>2018</b> , 2, 61-75	27.8	74
188	Exploiting Lithium-Ether Co-Intercalation in Graphite for High-Power Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700418	21.8	73
187	Redox-Active Organic Compounds for Future Sustainable Energy Storage System. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2001445	21.8	73
186	Mn based olivine electrode material with high power and energy. <i>Chemical Communications</i> , <b>2010</b> , 46, 1305-7	5.8	73
185	Tailoring a fluorophosphate as a novel 4 V cathode for lithium-ion batteries. <i>Scientific Reports</i> , <b>2012</b> , 2, 704	4.9	73
184	Lithium-free transition metal monoxides for positive electrodes in lithium-ion batteries. <i>Nature Energy</i> , <b>2017</b> , 2,	62.3	72
183	The Reaction Mechanism and Capacity Degradation Model in Lithium Insertion Organic Cathodes, Li <sub>2</sub> C <sub>6</sub> O <sub>6</sub> , Using Combined Experimental and First Principle Studies. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 3086-92	6.4	71
182	Crumpled graphene paper for high power sodium battery anode. <i>Carbon</i> , <b>2016</b> , 99, 658-664	10.4	68
181	Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> /Conducting Polymer as a High Power 4 V-Class Lithium Battery Electrode. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 1004-1007	21.8	68

180	Nanoscale Phenomena in Lithium-Ion Batteries. <i>Chemical Reviews</i> , <b>2020</b> , 120, 6684-6737	68.1	67
179	Extremely High Yield Conversion from Low-Cost Sand to High-Capacity Si Electrodes for Li-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400622	21.8	66
178	Simple preparation of high-quality graphene flakes without oxidation using potassium salts. <i>Small</i> , <b>2011</b> , 7, 864-8	11	65
177	Visualization of regulated nucleation and growth of lithium sulfides for high energy lithium sulfur batteries. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 3144-3155	35.4	64
176	Ultra-Thin Hollow Carbon Nanospheres for Pseudocapacitive Sodium-Ion Storage. <i>ChemElectroChem</i> , <b>2015</b> , 2, 359-365	4.3	63
175	Highly stable linear carbonate-containing electrolytes with fluoroethylene carbonate for high-performance cathodes in sodium-ion batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 320, 49-58	8.9	63
174	The Role of Interlayer Chemistry in Li-Metal Growth through a Garnet-Type Solid Electrolyte. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1903993	21.8	62
173	Hierarchical Porous Carbonized Co <sub>3</sub> O <sub>4</sub> Inverse Opals via Combined Block Copolymer and Colloid Templating as Bifunctional Electrocatalysts in LiO <sub>2</sub> Battery. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700391	21.8	61
172	First-principles study on lithium metal borate cathodes for lithium rechargeable batteries. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	61
171	High-performance supercapacitors based on defect-engineered carbon nanotubes. <i>Carbon</i> , <b>2014</b> , 80, 246-254	10.4	59
170	Synthesis of Multicomponent Olivine by a Novel Mixed Transition Metal Oxalate Coprecipitation Method and Electrochemical Characterization. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 2573-2581	9.6	59
169	Amorphous Cobalt Phyllosilicate with Layered Crystalline Motifs as Water Oxidation Catalyst. <i>Advanced Materials</i> , <b>2017</b> , 29, 1606893	24	57
168	Abnormal self-discharge in lithium-ion batteries. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 970-978	35.4	57
167	Novel transition-metal-free cathode for high energy and power sodium rechargeable batteries. <i>Nano Energy</i> , <b>2014</b> , 4, 97-104	17.1	57
166	LiFePO <sub>4</sub> with an alluaudite crystal structure for lithium ion batteries. <i>Energy and Environmental Science</i> , <b>2013</b> , 6, 830	35.4	57
165	Hollow Nanostructured Metal Silicates with Tunable Properties for Lithium Ion Battery Anodes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 25725-32	9.5	56
164	Graphitic Carbon Materials for Advanced Sodium-Ion Batteries. <i>Small Methods</i> , <b>2019</b> , 3, 1800227	12.8	56
163	Suppression of Voltage Decay through Manganese Deactivation and Nickel Redox Buffering in High-Energy Layered Lithium-Rich Electrodes. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1800606	21.8	54



162	Understanding Origin of Voltage Hysteresis in Conversion Reaction for Na Rechargeable Batteries: The Case of Cobalt Oxides. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 5042-5050	15.6	54
161	Synthesis and Electrochemical Properties of Layered Li <sub>0.9</sub> Ni <sub>0.45</sub> Ti <sub>0.55</sub> O <sub>2</sub> . <i>Chemistry of Materials</i> , <b>2003</b> , 15, 4503-4507	9.6	52
160	Stable and High-Power Calcium-Ion Batteries Enabled by Calcium Intercalation into Graphite. <i>Advanced Materials</i> , <b>2020</b> , 32, e1904411	24	52
159	Tailoring a New 4V-Class Cathode Material for Na-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1502147	21.8	52
158	Deposition and Stripping Behavior of Lithium Metal in Electrochemical System: Continuum Mechanics Study. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 6769-6776	9.6	52
157	Theoretical Evidence for Low Charging Overpotentials of Superoxide Discharge Products in Metal-Oxygen Batteries. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 8406-8413	9.6	51
156	Factors Affecting the Exfoliation of Graphite Intercalation Compounds for Graphene Synthesis. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 2067-2073	9.6	50
155	Conversion-Based Cathode Materials for Rechargeable Sodium Batteries. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702646	21.8	50
154	Cyclic carbonate based-electrolytes enhancing the electrochemical performance of Na <sub>4</sub> Fe <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> (P <sub>2</sub> O <sub>7</sub> ) cathodes for sodium-ion batteries. <i>Electrochemistry Communications</i> , <b>2014</b> , 44, 74-77	5.1	50
153	Enhanced Stability of Coated Carbon Electrode for Li-O <sub>2</sub> Batteries and Its Limitations. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702661	21.8	49
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149	New 4V-Class and Zero-Strain Cathode Material for Na-Ion Batteries. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 7826-7832	9.6	46
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134	Direct Observation of Redox Mediator-Assisted Solution-Phase Discharging of Li-O Battery by Liquid-Phase Transmission Electron Microscopy. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 8047-8052	16.4	39
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33	Investigation of LiO <sub>2</sub> Battery Performance Integrated with RuO <sub>2</sub> Inverse Opal Cathodes in DMSO. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 5109-5115	6.1	6
32	High-Dielectric Polymer Coating for Uniform Lithium Deposition in Anode-Free Lithium Batteries. <i>ACS Energy Letters</i> , 4416-4425	20.1	6
31	Dual-Functioning Molecular Carrier of Superoxide Radicals for Stable and Efficient Lithium/Oxygen Batteries. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1904187	21.8	6
30	Thermal structural stability of a multi-component olivine electrode for lithium ion batteries. <i>CrystEngComm</i> , <b>2016</b> , 18, 7463-7470	3.3	5
29	Trackable galvanostatic history in phase separation based electrodes for lithium-ion batteries: a mosaic sub-grouping intercalation model. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 2352-2364	35.4	5
28	Tunable Redox-Active Triazenyl-Carbene Platforms: A New Class of Anolytes for Non-Aqueous Organic Redox Flow Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 37338-37345	9.5	5
27	Enhancing Bifunctional Catalytic Activity via a Nanostructured La(Sr)Fe(Co)O <sub>3</sub> @Pd Matrix as an Efficient Electrocatalyst for LiO <sub>2</sub> Batteries. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 8633-8640	6.1	5
26	In operando formation of new iron-oxyfluoride host structure for Na-ion storage from NaFeO nanocomposite. <i>Energy Storage Materials</i> , <b>2019</b> , 23, 427-433	19.4	4
25	Chemical Origins of Electrochemical Overpotential in Surface-Conversion Nanocomposite Cathodes. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1900503	21.8	4
24	Planting Repulsion Centers for Faster Ionic Diffusion in Superionic Conductors. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 18457-18462	16.4	4
23	Energy storage in in vivo synthesizable biominerals. <i>RSC Advances</i> , <b>2012</b> , 2, 5499	3.7	4
22	Versatile Redox-Active Organic Materials for Rechargeable Energy Storage. <i>Accounts of Chemical Research</i> , <b>2021</b> , 54, 4423-4433	24.3	4
21	Interfacial Engineering in a Cathode Composite Based on Garnet-Type Solid-State Li-Ion Battery with High Voltage Cycling. <i>ChemElectroChem</i> , <b>2021</b> , 8, 570-576	4.3	4
20	Highly persistent triphenylamine-based catholyte for durable organic redox flow batteries. <i>Energy Storage Materials</i> , <b>2021</b> , 42, 185-192	19.4	4
19	Stepwise Dopant Selection Process for High-Nickel Layered Oxide Cathodes. <i>Advanced Energy Materials</i> , 2200136	21.8	4



18	A bifunctional auxiliary electrode for safe lithium metal batteries. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 24807-24813	13	3
17	Energy Storage: Sodium Storage Behavior in Natural Graphite using Ether-based Electrolyte Systems (Adv. Funct. Mater. 4/2015). <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 652-652	15.6	3
16	A pπ fusion strategy to design bipolar organic materials for high-energy-density symmetric batteries. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 14485-14494	13	3
15	Unveiling the Role of Transition-Metal Ions in the Thermal Degradation of Layered NiCoMn Cathodes for Lithium Rechargeable Batteries. <i>Advanced Functional Materials</i> , <b>2022</b> , 32, 2108790	15.6	3
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12	Aqueous ionic effect on electrochemical breakdown of Si-dielectric-electrolyte interface. <i>Scientific Reports</i> , <b>2020</b> , 10, 16795	4.9	2
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