

Jang Wook Choi

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

239
papers

30,970
citations

83
h-index

174
g-index

257
ext. papers

34,842
ext. citations

13.7
avg, IF

7.74
L-index

#	Paper	IF	Citations
239	Icephobic Coating through a Self-Formed Superhydrophobic Surface Using a Polymer and Microsized Particles.. <i>ACS Applied Materials & Interfaces</i> , 2022 ,	9.5	3
238	Elastic Binder for High-Performance Sulfide-Based All-Solid-State Batteries. <i>ACS Energy Letters</i> , 2022 , 7, 1374-1382	20.1	5
237	Integrated Ring-Chain Design of a New Fluorinated Ether Solvent for High-Voltage Lithium-Metal Batteries.. <i>Angewandte Chemie - International Edition</i> , 2022 , e202115884	16.4	5
236	Fluorinated ether electrolyte with controlled solvation structure for high voltage lithium metal batteries.. <i>Nature Communications</i> , 2022 , 13, 2575	17.4	19
235	Corrosion as the origin of limited lifetime of vanadium oxide-based aqueous zinc ion batteries.. <i>Nature Communications</i> , 2022 , 13, 2371	17.4	11
234	Photochemically driven solid electrolyte interphase for extremely fast-charging lithium-ion batteries. <i>Nature Communications</i> , 2021 , 12, 6807	17.4	6
233	Lithium-Conducting Self-Assembled Organic Nanotubes. <i>Journal of the American Chemical Society</i> , 2021 , 143, 17655-17665	16.4	2
232	Zn-Imidazole Coordination Crosslinks for Elastic Polymeric Binders in High-Capacity Silicon Electrodes. <i>Advanced Science</i> , 2021 , 8, 2004290	13.6	12
231	Tetradiketone macrocycle for divalent aluminium ion batteries. <i>Nature Communications</i> , 2021 , 12, 2386	17.4	28
230	Stable Solid Electrolyte Interphase Formation Induced by Monoquat-Based Anchoring in Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2021 , 6, 1711-1718	20.1	11
229	Synergistic Composite Coating for Separators in Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , 2021 , 4, 5237-5245	6.1	4
228	Atomic-scale unveiling of multiphase evolution during hydrated Zn-ion insertion in vanadium oxide. <i>Nature Communications</i> , 2021 , 12, 4599	17.4	8
227	High-performance bifunctional electrocatalyst for iron-chromium redox flow batteries. <i>Chemical Engineering Journal</i> , 2021 , 421, 127855	14.7	8
226	Cesium Ion-Mediated Microporous Carbon for CO ₂ Capture and Lithium-Ion Storage. <i>ChemNanoMat</i> , 2021 , 7, 150-157	3.5	3
225	High transference number enabled by sulfated zirconia superacid for lithium metal batteries with carbonate electrolytes. <i>Energy and Environmental Science</i> , 2021 , 14, 1420-1428	35.4	7
224	Designing Adaptive Binders for Microenvironment Settings of Silicon Anode Particles. <i>Advanced Materials</i> , 2021 , 33, e2007460	24	17
223	Issues and Advances in Scaling up Sulfide-Based All-Solid-State Batteries. <i>Accounts of Chemical Research</i> , 2021 , 54, 3390-3402	24.3	19

222	Ionic Liquid Functionalized Gel Polymer Electrolytes for Stable Lithium Metal Batteries. <i>Angewandte Chemie</i> , 2021 , 133, 22973	3.6	3
221	Ionic Liquid Functionalized Gel Polymer Electrolytes for Stable Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 22791-22796	16.4	12
220	Electrospun Li-confinable hollow carbon fibers for highly stable Li-metal batteries. <i>Chemical Engineering Journal</i> , 2021 , 422, 130017	14.7	13
219	Switching between Local and Global Aromaticity in a Conjugated Macrocyclic for High-Performance Organic Sodium-Ion Battery Anodes. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 12958-12964	16.4	22
218	Fluorinated Aromatic Diluent for High-Performance Lithium Metal Batteries. <i>Angewandte Chemie</i> , 2020 , 132, 14979-14986	3.6	11
217	Fluorinated Aromatic Diluent for High-Performance Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 14869-14876	16.4	61
216	Recent Progress in High Donor Electrolytes for Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2020 , 10, 2001456	21.8	51
215	Opportunities and Reality of Aqueous Rechargeable Batteries. <i>Advanced Energy Materials</i> , 2020 , 10, 2001386	13.86	46
214	Highly Elastic Binder for Improved Cyclability of Nickel-Rich Layered Cathode Materials in Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2020 , 10, 2001069	21.8	36
213	Directional Change of Interfacial Electric Field by Carbon Insertion in Heterojunction System TiO ₂ /WO ₃ . <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 15239-15245	9.5	13
212	Pyrazine-Linked 2D Covalent Organic Frameworks as Coating Material for High-Nickel Layered Oxide Cathodes in Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 10597-10606	9.5	24
211	Preparation of a hydrophobic cerium oxide nanoparticle coating with polymer binder via a facile solution route. <i>Ceramics International</i> , 2020 , 46, 12209-12215	5.1	2
210	Elucidating the Extraordinary Rate and Cycling Performance of Phenanthrenequinone in Aluminum-Complex-Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 2384-2392	6.4	12
209	Aqueous zinc ion batteries: focus on zinc metal anodes. <i>Chemical Science</i> , 2020 , 11, 2028-2044	9.4	218
208	Covalent Triazine Frameworks Incorporating Charged Polypyrrole Channels for High-Performance Lithium-Sulfur Batteries. <i>Chemistry of Materials</i> , 2020 , 32, 4185-4193	9.6	29
207	Entropy for non-destructive structural analysis of LiCoO ₂ cathodes. <i>Energy and Environmental Science</i> , 2020 , 13, 286-296	35.4	7
206	Effect of Binding Affinity of Crystal Water on the Electrochemical Performance of Layered Double Hydroxides. <i>ChemSusChem</i> , 2020 , 13, 6546-6551	8.3	4
205	New High Donor Electrolyte for Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2020 , 32, e2005022	24	35

204	In Situ Deprotection of Polymeric Binders for Solution-Processible Sulfide-Based All-Solid-State Batteries. <i>Advanced Materials</i> , 2020 , 32, e2001702	24	18
203	Switching between Local and Global Aromaticity in a Conjugated Macrocyclic for High-Performance Organic Sodium-Ion Battery Anodes. <i>Angewandte Chemie</i> , 2020 , 132, 13058-13064	3.6	7
202	Marginal Magnesium Doping for High-Performance Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2019 , 9, 1902278	21.8	26
201	Fluorinated Covalent Organic Polymers for High Performance Sulfur Cathodes in Lithium-Sulfur Batteries. <i>Chemistry of Materials</i> , 2019 , 31, 7910-7921	9.6	39
200	Mixed Transition Metal Oxide with Vacancy-Induced Lattice Distortion for Enhanced Catalytic Activity of Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2019 , 9, 7099-7108	13.1	52
199	Highly Elastic Polyrotaxane Binders for Mechanically Stable Lithium Hosts in Lithium-Metal Batteries. <i>Advanced Materials</i> , 2019 , 31, e1901645	24	39
198	Crystal water for high performance layered manganese oxide cathodes in aqueous rechargeable zinc batteries. <i>Energy and Environmental Science</i> , 2019 , 12, 1999-2009	35.4	162
197	Critical role of elemental copper for enhancing conversion kinetics of sulphur cathodes in rechargeable magnesium batteries. <i>Applied Surface Science</i> , 2019 , 484, 933-940	6.7	15
196	Lewis acidity controlled heme catalyst for lithium-oxygen battery. <i>Energy Storage Materials</i> , 2019 , 19, 16-23	19.4	6
195	Mussel-Inspired Self-Healing Metallopolymers for Silicon Nanoparticle Anodes. <i>ACS Nano</i> , 2019 , 13, 8364-8373	16.7	65
194	Lithium-Salt Mediated Synthesis of a Covalent Triazine Framework for Highly Stable Lithium Metal Batteries. <i>Angewandte Chemie</i> , 2019 , 131, 16951-16955	3.6	15
193	Lithium-Salt Mediated Synthesis of a Covalent Triazine Framework for Highly Stable Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 16795-16799	16.4	43
192	A Pyrene-Poly(acrylic acid)-Polyrotaxane Supramolecular Binder Network for High-Performance Silicon Negative Electrodes. <i>Advanced Materials</i> , 2019 , 31, e1905048	24	50
191	Atomic-Scale Direct Identification of Surface Variations in Cathode Oxides for Aqueous and Nonaqueous Lithium-Ion Batteries. <i>ChemSusChem</i> , 2019 , 12, 787-794	8.3	8
190	Hydrated Intercalation for High-Performance Aqueous Zinc Ion Batteries. <i>Advanced Energy Materials</i> , 2019 , 9, 1900083	21.8	158
189	Prospect for Supramolecular Chemistry in High-Energy-Density Rechargeable Batteries. <i>Joule</i> , 2019 , 3, 662-682	27.8	42
188	Cobalt oxide-porous carbon composite derived from CO ₂ for the enhanced performance of lithium-ion battery. <i>Journal of CO₂ Utilization</i> , 2019 , 30, 28-37	7.6	17
187	Rechargeable aluminium organic batteries. <i>Nature Energy</i> , 2019 , 4, 51-59	62.3	159

186	Thiolene Click Reaction for Fine Polarity Tuning of Polymeric Binders in Solution-Processed All-Solid-State Batteries. <i>ACS Energy Letters</i> , 2019 , 4, 94-101	20.1	29
185	Superlattice Formation of Crystal Water in Layered Double Hydroxides for Long-Term and Fast Operation of Aqueous Rechargeable Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1703572	21.8	16
184	Intercalated Water and Organic Molecules for Electrode Materials of Rechargeable Batteries. <i>Advanced Materials</i> , 2018 , 30, e1705851	24	50
183	Exfoliated 2D Lepidocrocite Titanium Oxide Nanosheets for High Sulfur Content Cathodes with Highly Stable LIB Battery Performance. <i>ACS Energy Letters</i> , 2018 , 3, 412-419	20.1	78
182	The emerging era of supramolecular polymeric binders in silicon anodes. <i>Chemical Society Reviews</i> , 2018 , 47, 2145-2164	58.5	217
181	Solution-Processed Metal Coating to Nonwoven Fabrics for Wearable Rechargeable Batteries. <i>Small</i> , 2018 , 14, e1703028	11	10
180	The Synergistic Effect of Cation and Anion of an Ionic Liquid Additive for Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2018 , 8, 1702744	21.8	94
179	Li ₂ O-B ₂ O ₃ -TeO ₂ glass as a high performance anode material for rechargeable lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 6860-6866	13	13
178	Origin of unusual spinel-to-layered phase transformation by crystal water. <i>Chemical Science</i> , 2018 , 9, 433-438	9.4	23
177	Electrochemical Synthesis of Ammonia from Water and Nitrogen: A Lithium-Mediated Approach Using Lithium-Ion Conducting Glass Ceramics. <i>ChemSusChem</i> , 2018 , 11, 120-124	8.3	43
176	Mussel-Inspired Coating and Adhesion for Rechargeable Batteries: A Review. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 7562-7573	9.5	58
175	Battery Electrode Materials with Omnivalent Cation Storage for Fast and Charge-Efficient Ion Removal of Asymmetric Capacitive Deionization. <i>Advanced Functional Materials</i> , 2018 , 28, 1802665	15.6	75
174	A Colloidal-Quantum-Dot-Based Self-Charging System via the Near-Infrared Band. <i>Advanced Materials</i> , 2018 , 30, e1707224	24	9
173	Tuning the Electron Density of Aromatic Solvent for Stable Solid-Electrolyte-Interphase Layer in Carbonate-Based Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1802365	21.8	36
172	Effect of Pelletizing and Temperature in Silicon Production Using Magnesiothermic Reduction. <i>Journal of Chemical Engineering of Japan</i> , 2018 , 51, 794-799	0.8	1
171	Li-Intercalation Oxides: Atomic-Scale Observation of LiFePO ₄ and LiCoO ₂ Dissolution Behavior in Aqueous Solutions (Adv. Funct. Mater. 45/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870320	15.6	2
170	Ultrastable Graphene-Encapsulated 3 nm Nanoparticles by In Situ Chemical Vapor Deposition. <i>Advanced Materials</i> , 2018 , 30, e1805023	24	17
169	Off-Stoichiometry Induced Few-Nanometer Surface Layer for High-Performance Layered Cathode in Nonaqueous and Aqueous Electrolytes. <i>ACS Applied Energy Materials</i> , 2018 ,	6.1	1

168	Lithium-Mediated Ammonia Electro-Synthesis: Effect of CsClO ₄ on Lithium Plating Efficiency and Ammonia Synthesis. <i>Journal of the Electrochemical Society</i> , 2018 , 165, F1027-F1031	3.9	6
167	Atomic-Scale Observation of LiFePO ₄ and LiCoO ₂ Dissolution Behavior in Aqueous Solutions. <i>Advanced Functional Materials</i> , 2018 , 28, 1804564	15.6	22
166	A "Sticky" Mucin-Inspired DNA-Polysaccharide Binder for Silicon and Silicon-Graphite Blended Anodes in Lithium-Ion Batteries. <i>Advanced Materials</i> , 2018 , 30, e1707594	24	68
165	Ordered Mesoporous Titanium Nitride as a Promising Carbon-Free Cathode for Aprotic Lithium-Oxygen Batteries. <i>ACS Nano</i> , 2017 , 11, 1736-1746	16.7	104
164	Tungsten Disulfide Catalysts Supported on a Carbon Cloth Interlayer for High Performance LiS Battery. <i>Advanced Energy Materials</i> , 2017 , 7, 1602567	21.8	233
163	EEWS 2016: Progress and Perspectives of Energy Science and Technology. <i>ACS Energy Letters</i> , 2017 , 2, 592-594	20.1	
162	Delicate Structural Control of Si-SiO-C Composite via High-Speed Spray Pyrolysis for Li-Ion Battery Anodes. <i>Nano Letters</i> , 2017 , 17, 1870-1876	11.5	129
161	Stable Performance of Aluminum-Metal Battery by Incorporating Lithium-Ion Chemistry. <i>ChemElectroChem</i> , 2017 , 4, 2345-2351	4.3	15
160	The Importance of Confined Sulfur Nanodomains and Adjoining Electron Conductive Pathways in Subreaction Regimes of Li-S Batteries. <i>Advanced Energy Materials</i> , 2017 , 7, 1700074	21.8	75
159	Lithium-Sulfur Batteries: Tungsten Disulfide Catalysts Supported on a Carbon Cloth Interlayer for High Performance LiS Battery (Adv. Energy Mater. 11/2017). <i>Advanced Energy Materials</i> , 2017 , 7,	21.8	2
158	Lattice Water for the Enhanced Performance of Amorphous Iron Phosphate in Sodium-Ion Batteries. <i>ACS Energy Letters</i> , 2017 , 2, 998-1004	20.1	40
157	Stabilized Octahedral Frameworks in Layered Double Hydroxides by Solid-Solution Mixing of Transition Metals. <i>Advanced Functional Materials</i> , 2017 , 27, 1605225	15.6	42
156	Recent Progress on Spray Pyrolysis for High Performance Electrode Materials in Lithium and Sodium Rechargeable Batteries. <i>Advanced Energy Materials</i> , 2017 , 7, 1601578	21.8	92
155	Low Molecular Weight Spandex as a Promising Polymeric Binder for LiFePO ₄ Electrodes. <i>Advanced Energy Materials</i> , 2017 , 7, 1602147	21.8	20
154	Perfluoroaryl-Elemental Sulfur SNAr Chemistry in Covalent Triazine Frameworks with High Sulfur Contents for Lithium Sulfur Batteries. <i>Advanced Functional Materials</i> , 2017 , 27, 1703947	15.6	118
153	Rice husk-originating silicon-graphite composites for advanced lithium ion battery anodes. <i>Nano Convergence</i> , 2017 , 4, 24	9.2	10
152	Selection of Binder and Solvent for Solution-Processed All-Solid-State Battery. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A2075-A2081	3.9	71
151	Energy-efficient hybrid FCDI-NF desalination process with tunable salt rejection and high water recovery. <i>Journal of Membrane Science</i> , 2017 , 541, 580-586	9.6	28

150	Role of Ordered Ni Atoms in Li Layers for Li-Rich Layered Cathode Materials. <i>Advanced Functional Materials</i> , 2017 , 27, 1700982	15.6	26
149	Unveiling anomalous CO-to-N selectivity of graphene oxide. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 22743-22748	3.6	13
148	Highly elastic binders integrating polyrotaxanes for silicon microparticle anodes in lithium ion batteries. <i>Science</i> , 2017 , 357, 279-283	33.3	670
147	Nanoscale Zirconium-Abundant Surface Layers on Lithium- and Manganese-Rich Layered Oxides for High-Rate Lithium-Ion Batteries. <i>Nano Letters</i> , 2017 , 17, 7869-7877	11.5	35
146	Graphene balls for lithium rechargeable batteries with fast charging and high volumetric energy densities. <i>Nature Communications</i> , 2017 , 8, 1561	17.4	112
145	Chemical Blowing Approach for Ultramicroporous Carbon Nitride Frameworks and Their Applications in Gas and Energy Storage. <i>Advanced Functional Materials</i> , 2017 , 27, 1604658	15.6	77
144	Tuning the Phase Stability of Sodium Metal Pyrophosphates for Synthesis of High Voltage Cathode Materials. <i>Chemistry of Materials</i> , 2016 , 28, 6724-6730	9.6	12
143	Rational Sulfur Cathode Design for Lithium Sulfur Batteries: Sulfur-Embedded Benzoxazine Polymers. <i>ACS Energy Letters</i> , 2016 , 1, 566-572	20.1	88
142	A stable lithium-rich surface structure for lithium-rich layered cathode materials. <i>Nature Communications</i> , 2016 , 7, 13598	17.4	121
141	Effective Polysulfide Rejection by Dipole-Aligned BaTiO ₃ Coated Separator in Lithium Sulfur Batteries. <i>Advanced Functional Materials</i> , 2016 , 26, 7817-7823	15.6	129
140	On the Mechanism of Crystal Water Insertion during Anomalous Spinel-to-Birnessite Phase Transition. <i>Chemistry of Materials</i> , 2016 , 28, 5488-5494	9.6	44
139	Promise and reality of post-lithium-ion batteries with high energy densities. <i>Nature Reviews Materials</i> , 2016 , 1,	73.3	2575
138	5L-Scale Magnesio-Milling Reduction of Nanostructured SiO for High Capacity Silicon Anodes in Lithium-Ion Batteries. <i>Nano Letters</i> , 2016 , 16, 7261-7269	11.5	55
137	Enhanced Pseudocapacitance in Multicomponent Transition-Metal Oxides by Local Distortion of Oxygen Octahedra. <i>Angewandte Chemie</i> , 2016 , 128, 4026-4030	3.6	7
136	Enhanced Pseudocapacitance in Multicomponent Transition-Metal Oxides by Local Distortion of Oxygen Octahedra. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 3958-62	16.4	19
135	Defect-Controlled Formation of Triclinic Na ₂ CoP ₂ O ₇ for 4 V Sodium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 6662-6	16.4	55
134	Atomic thin titania nanosheet-coupled reduced graphene oxide 2D heterostructures for enhanced photocatalytic activity and fast lithium storage. <i>Electronic Materials Letters</i> , 2016 , 12, 211-218	2.9	12
133	Flexible Few-Layered Graphene for the Ultrafast Rechargeable Aluminum-Ion Battery. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 13384-13389	3.8	134

132	Optimal Activation of Porous Carbon for High Performance CO ₂ Capture. <i>ChemNanoMat</i> , 2016 , 2, 528-533	3.5	10
131	A Moisture- and Oxygen-Impermeable Separator for Aprotic Li-O ₂ Batteries. <i>Advanced Functional Materials</i> , 2016 , 26, 1747-1756	15.6	101
130	Deep eutectic solvents as attractive media for CO ₂ capture. <i>Green Chemistry</i> , 2016 , 18, 2834-2842	10	150
129	Computational Analysis of Pressure-Dependent Optimal Pore Size for CO ₂ Capture with Graphitic Surfaces. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 3978-3985	3.8	10
128	Controlled Prelithiation of Silicon Monoxide for High Performance Lithium-Ion Rechargeable Full Cells. <i>Nano Letters</i> , 2016 , 16, 282-8	11.5	283
127	Defect-Controlled Formation of Triclinic Na ₂ CoP ₂ O ₇ for 4 V Sodium-Ion Batteries. <i>Angewandte Chemie</i> , 2016 , 128, 6774-6778	3.6	5
126	Graphene Coating of Silicon Nanoparticles with CO ₂ -Enhanced Chemical Vapor Deposition. <i>Small</i> , 2016 , 12, 658-67	11	22
125	Elemental-Sulfur-Mediated Facile Synthesis of a Covalent Triazine Framework for High-Performance Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , 2016 , 128, 3158-3163	3.6	89
124	Elemental-Sulfur-Mediated Facile Synthesis of a Covalent Triazine Framework for High-Performance Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 3106-11	16.4	249
123	Sprayable Ultrafast Polydopamine Surface Modifications. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1500857	7.6	70
122	Al Doping for Mitigating the Capacity Fading and Voltage Decay of Layered Li and Mn-Rich Cathodes for Li-Ion Batteries. <i>Advanced Energy Materials</i> , 2016 , 6, 1502398	21.8	271
121	Mussel-Inspired Polydopamine Coating for Enhanced Thermal Stability and Rate Performance of Graphite Anodes in Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 13973-81	9.5	32
120	Nanoporous networks as caging supports for uniform, surfactant-free Co ₃ O ₄ nanocrystals and their applications in energy storage and conversion. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 15489-15497	13	15
119	Important Role of Functional Groups for Sodium Ion Intercalation in Expanded Graphite. <i>Chemistry of Materials</i> , 2015 , 27, 5402-5406	9.6	62
118	Silicon carbide-free graphene growth on silicon for lithium-ion battery with high volumetric energy density. <i>Nature Communications</i> , 2015 , 6, 7393	17.4	376
117	Critical Role of Crystal Water for a Layered Cathode Material in Sodium Ion Batteries. <i>Chemistry of Materials</i> , 2015 , 27, 3721-3725	9.6	142
116	An Electrochemical Cell for Selective Lithium Capture from Seawater. <i>Environmental Science & Technology</i> , 2015 , 49, 9415-22	10.3	47
115	Controlled Lithium Dendrite Growth by a Synergistic Effect of Multilayered Graphene Coating and an Electrolyte Additive. <i>Chemistry of Materials</i> , 2015 , 27, 2780-2787	9.6	158

114	Dynamic Cross-Linking of Polymeric Binders Based on Host-Guest Interactions for Silicon Anodes in Lithium Ion Batteries. <i>ACS Nano</i> , 2015 , 9, 11317-24	16.7	123
113	Anomalous Stretchable Conductivity Using an Engineered Tricot Weave. <i>ACS Nano</i> , 2015 , 9, 12214-23	16.7	30
112	Self-Terminated Artificial SEI Layer for Nickel-Rich Layered Cathode Material via Mixed Gas Chemical Vapor Deposition. <i>Chemistry of Materials</i> , 2015 , 27, 7370-7379	9.6	53
111	Initiated Chemical Vapor Deposition (iCVD) of Highly Cross-Linked Polymer Films for Advanced Lithium-Ion Battery Separators. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 18849-55	9.5	26
110	Superior lithium-ion storage properties of si-based composite powders with unique Si@carbon@void@graphene configuration. <i>Chemistry - A European Journal</i> , 2015 , 21, 2076-82	4.8	23
109	A Bendable Li-Ion Battery with a Nano-Hairy Electrode: Direct Integration Scheme on the Polymer Substrate. <i>Advanced Energy Materials</i> , 2015 , 5, 1400611	21.8	18
108	Direct Observation of an Anomalous Spinel-to-Layered Phase Transition Mediated by Crystal Water Intercalation. <i>Angewandte Chemie</i> , 2015 , 127, 15309-15314	3.6	16
107	Direct Observation of an Anomalous Spinel-to-Layered Phase Transition Mediated by Crystal Water Intercalation. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 15094-9	16.4	67
106	Multiphase LiNi _{0.33} Mn _{0.54} Co _{0.13} O ₂ Cathode Material with High Capacity Retention for Li-Ion Batteries. <i>ChemElectroChem</i> , 2015 , 2, 1957-1965	4.3	15
105	Poreless Separator and Electrolyte Additive for LithiumSulfur Batteries with High Areal Energy Densities. <i>ChemNanoMat</i> , 2015 , 1, 240-245	3.5	39
104	A half millimeter thick coplanar flexible battery with wireless recharging capability. <i>Nano Letters</i> , 2015 , 15, 2350-7	11.5	70
103	The High Performance of Crystal Water Containing Manganese Birnessite Cathodes for Magnesium Batteries. <i>Nano Letters</i> , 2015 , 15, 4071-9	11.5	339
102	Combined CO ₂ -philicity and Ordered Mesoporosity for Highly Selective CO ₂ Capture at High Temperatures. <i>Journal of the American Chemical Society</i> , 2015 , 137, 7210-6	16.4	102
101	Highly Oriented Carbon Nanotube Sheets for Rechargeable Lithium Oxygen Battery Electrodes. <i>Journal of Nanoscience and Nanotechnology</i> , 2015 , 15, 7611-4	1.3	10
100	Millipede-inspired structural design principle for high performance polysaccharide binders in silicon anodes. <i>Energy and Environmental Science</i> , 2015 , 8, 1224-1230	35.4	179
99	Improved reversibility in lithium-oxygen battery: understanding elementary reactions and surface charge engineering of metal alloy catalyst. <i>Scientific Reports</i> , 2014 , 4, 4225	4.9	126
98	A new strategy for integrating abundant oxygen functional groups into carbon felt electrode for vanadium redox flow batteries. <i>Scientific Reports</i> , 2014 , 4, 6906	4.9	106
97	Modified graphite and graphene electrodes for high-performance lithium ion hybrid capacitors. <i>Materials for Renewable and Sustainable Energy</i> , 2014 , 3, 1	4.7	26

96	Effective liquid-phase exfoliation and sodium ion battery application of MoS ₂ nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 7084-9	9.5	379
95	N-doped graphitic self-encapsulation for high performance silicon anodes in lithium-ion batteries. <i>Energy and Environmental Science</i> , 2014 , 7, 621-626	35.4	127
94	Hyperbranched Cyclodextrin polymer as an effective multidimensional binder for silicon anodes in lithium rechargeable batteries. <i>Nano Letters</i> , 2014 , 14, 864-70	11.5	230
93	Large area multi-stacked lithium-ion batteries for flexible and rollable applications. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 10862-10868	13	42
92	Enhanced durability of polymer electrolyte membrane fuel cells by functionalized 2D boron nitride nanoflakes. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 7751-8	9.5	87
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