

Ji-Guang Zhang

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.

231
papers

34,052
citations

91
h-index

183
g-index

238
ext. papers

41,812
ext. citations

16.6
avg, IF

7.6
L-index

#	Paper	IF	Citations
231	Nonsacrificial Additive for Tuning the Cathode-Electrolyte Interphase of Lithium-Ion Batteries.. <i>ACS Applied Materials & Interfaces</i> , 2022 ,	9.5	2
230	Quantitatively analyzing the failure processes of rechargeable Li metal batteries. <i>Science Advances</i> , 2021 , 7, eabj3423	14.3	17
229	Stabilizing ultrahigh-nickel layered oxide cathodes for high-voltage lithium metal batteries. <i>Materials Today</i> , 2021 , 44, 15-24	21.8	22
228	Robust Solid/Electrolyte Interphase (SEI) Formation on Si Anodes Using Glyme-Based Electrolytes. <i>ACS Energy Letters</i> , 2021 , 6, 1684-1693	20.1	29
227	Optimization of Magnesium-Doped Lithium Metal Anode for High Performance Lithium Metal Batteries through Modeling and Experiment. <i>Angewandte Chemie</i> , 2021 , 133, 16642-16649	3.6	4
226	A review on the stability and surface modification of layered transition-metal oxide cathodes. <i>Materials Today</i> , 2021 , 46, 155-182	21.8	35
225	Balancing interfacial reactions to achieve long cycle life in high-energy lithium metal batteries. <i>Nature Energy</i> , 2021 , 6, 723-732	62.3	81
224	Optimization of Magnesium-Doped Lithium Metal Anode for High Performance Lithium Metal Batteries through Modeling and Experiment. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 16506-16513	16.4	10
223	A Polymer-in-Salt Electrolyte with Enhanced Oxidative Stability for Lithium Metal Polymer Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 31583-31593	9.5	3
222	Effects of Fluorinated Diluents in Localized High-Concentration Electrolytes for Lithium Oxygen Batteries. <i>Advanced Functional Materials</i> , 2021 , 31, 2002927	15.6	24
221	Optimization of fluorinated orthoformate based electrolytes for practical high-voltage lithium metal batteries. <i>Energy Storage Materials</i> , 2021 , 34, 76-84	19.4	23
220	Electrolytes for Lithium-Ion and Lithium Metal Batteries 2021 ,		
219	Rational Design of Electrolytes for Long-Term Cycling of Si Anodes over a Wide Temperature Range. <i>ACS Energy Letters</i> , 2021 , 6, 387-394	20.1	22
218	Review Localized High-Concentration Electrolytes for Lithium Batteries. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 010522	3.9	70
217	Influence of diluent concentration in localized high concentration electrolytes: elucidation of hidden diluent-Li ⁺ interactions and Li ⁺ transport mechanism. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 17459-17473	13	5
216	Effects of fluorinated solvents on electrolyte solvation structures and electrode/electrolyte interphases for lithium metal batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	39
215	Progressive growth of the solid-electrolyte interphase towards the Si anode interior causes capacity fading. <i>Nature Nanotechnology</i> , 2021 , 16, 1113-1120	28.7	39

214	A Micrometer-Sized Silicon/Carbon Composite Anode Synthesized by Impregnation of Petroleum Pitch in Nanoporous Silicon. <i>Advanced Materials</i> , 2021 , 33, e2103095	24	28
213	Stable Solid Electrolyte Interphase Layer Formed by Electrochemical Pretreatment of Gel Polymer Coating on Li Metal Anode for Lithium-Oxygen Batteries. <i>ACS Energy Letters</i> , 2021 , 6, 3321-3331	20.1	3
212	Recent Progress in Understanding Solid Electrolyte Interphase on Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2021 , 11, 2003092	21.8	90
211	Interfacial-engineering-enabled practical low-temperature sodium metal battery.. <i>Nature Nanotechnology</i> , 2021 ,	28.7	9
210	Reversible planar gliding and microcracking in a single-crystalline Ni-rich cathode. <i>Science</i> , 2020 , 370, 1313-1317	33.3	185
209	Role of inner solvation sheath within salt-solvent complexes in tailoring electrode/electrolyte interphases for lithium metal batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 28603-28613	11.5	76
208	Designing Advanced In Situ Electrode/Electrolyte Interphases for Wide Temperature Operation of 4.5 V Li LiCoO Batteries. <i>Advanced Materials</i> , 2020 , 32, e2004898	24	42
207	Tuning the Anode-Electrolyte Interface Chemistry for Garnet-Based Solid-State Li Metal Batteries. <i>Advanced Materials</i> , 2020 , 32, e2000030	24	81
206	Optimized Electrolyte with High Electrochemical Stability and Oxygen Solubility for Lithium-Oxygen and Lithium-Air Batteries. <i>ACS Energy Letters</i> , 2020 , 5, 2182-2190	20.1	24
205	Sweeping potential regulated structural and chemical evolution of solid-electrolyte interphase on Cu and Li as revealed by cryo-TEM. <i>Nano Energy</i> , 2020 , 76, 105040	17.1	9
204	Hierarchical porous silicon structures with extraordinary mechanical strength as high-performance lithium-ion battery anodes. <i>Nature Communications</i> , 2020 , 11, 1474	17.4	142
203	Optimized Al Doping Improves Both Interphase Stability and Bulk Structural Integrity of Ni-Rich NMC Cathode Materials. <i>ACS Applied Energy Materials</i> , 2020 , 3, 3369-3377	6.1	28
202	The Role of Secondary Particle Structures in Surface Phase Transitions of Ni-Rich Cathodes. <i>Chemistry of Materials</i> , 2020 , 32, 2884-2892	9.6	26
201	Current Density Regulated Atomic to Nanoscale Process on Li Deposition and Solid Electrolyte Interphase Revealed by Cryogenic Transmission Electron Microscopy. <i>ACS Nano</i> , 2020 , 14, 8766-8775	16.7	27
200	Progress and perspectives on pre-lithiation technologies for lithium ion capacitors. <i>Energy and Environmental Science</i> , 2020 , 13, 2341-2362	35.4	66
199	Localized High Concentration Electrolytes for High Voltage Lithium-Metal Batteries: Correlation between the Electrolyte Composition and Its Reductive/Oxidative Stability. <i>Chemistry of Materials</i> , 2020 , 32, 5973-5984	9.6	41
198	Unlocking the passivation nature of the cathode-air interfacial reactions in lithium ion batteries. <i>Nature Communications</i> , 2020 , 11, 3204	17.4	28
197	Understanding and applying coulombic efficiency in lithium metal batteries. <i>Nature Energy</i> , 2020 , 5, 561-568	6.3	201

196	A lithium-sulfur battery with a solution-mediated pathway operating under lean electrolyte conditions. <i>Nano Energy</i> , 2020 , 76, 105041	17.1	14
195	Improving Lithium Metal Composite Anodes with Seeding and Pillaring Effects of Silicon Nanoparticles. <i>ACS Nano</i> , 2020 , 14, 4601-4608	16.7	34
194	Excellent Cycling Stability of Sodium Anode Enabled by a Stable Solid Electrolyte Interphase Formed in Ether-Based Electrolytes. <i>Advanced Functional Materials</i> , 2020 , 30, 2001151	15.6	27
193	High-Power Lithium Metal Batteries Enabled by High-Concentration Acetonitrile-Based Electrolytes with Vinylene Carbonate Additive. <i>Advanced Functional Materials</i> , 2020 , 30, 2001285	15.6	60
192	Thermodynamics of Antisite Defects in Layered NMC Cathodes: Systematic Insights from High-Precision Powder Diffraction Analyses. <i>Chemistry of Materials</i> , 2020 , 32, 1002-1010	9.6	26
191	Atomic to Nanoscale Origin of Vinylene Carbonate Enhanced Cycling Stability of Lithium Metal Anode Revealed by Cryo-Transmission Electron Microscopy. <i>Nano Letters</i> , 2020 , 20, 418-425	11.5	54
190	Reversible Electrochemical Interface of Mg Metal and Conventional Electrolyte Enabled by Intermediate Adsorption. <i>ACS Energy Letters</i> , 2020 , 5, 200-206	20.1	17
189	Unravelling high-temperature stability of lithium-ion battery with lithium-rich oxide cathode in localized high-concentration electrolyte. <i>Journal of Power Sources Advances</i> , 2020 , 5, 100024	3.3	13
188	Controlling Ion Coordination Structure and Diffusion Kinetics for Optimized Electrode-Electrolyte Interphases and High-Performance Si Anodes. <i>Chemistry of Materials</i> , 2020 , 32, 8956-8964	9.6	10
187	Lithium Metal Anodes with Nonaqueous Electrolytes. <i>Chemical Reviews</i> , 2020 , 120, 13312-13348	68.1	143
186	Lithium Dendrite Suppression with a Silica Nanoparticle-Dispersed Colloidal Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 37188-37196	9.5	17
185	Glassy Li metal anode for high-performance rechargeable Li batteries. <i>Nature Materials</i> , 2020 , 19, 1339-1345	13.4	86
184	Highly Reversible Sodium Ion Batteries Enabled by Stable Electrolyte-Electrode Interphases. <i>ACS Energy Letters</i> , 2020 , 5, 3212-3220	20.1	40
183	Highly stable Ni-rich layered oxide cathode enabled by a thick protective layer with bio-tissue structure. <i>Energy Storage Materials</i> , 2020 , 24, 291-296	19.4	28
182	Advanced Electrolytes for Fast-Charging High-Voltage Lithium-Ion Batteries in Wide-Temperature Range. <i>Advanced Energy Materials</i> , 2020 , 10, 2000368	21.8	81
181	Monolithic solid-electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. <i>Nature Energy</i> , 2019 , 4, 796-805	62.3	325
180	Nonflammable Electrolytes for Lithium Ion Batteries Enabled by Ultraconformal Passivation Interphases. <i>ACS Energy Letters</i> , 2019 , 4, 2529-2534	20.1	61
179	Constructing Robust Electrode/Electrolyte Interphases to Enable Wide Temperature Applications of Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 21496-21505	9.5	21

178	High-energy lithium metal pouch cells with limited anode swelling and long stable cycles. <i>Nature Energy</i> , 2019 , 4, 551-559	62.3	283
177	Injection of oxygen vacancies in the bulk lattice of layered cathodes. <i>Nature Nanotechnology</i> , 2019 , 14, 602-608	28.7	180
176	Self-smoothing anode for achieving high-energy lithium metal batteries under realistic conditions. <i>Nature Nanotechnology</i> , 2019 , 14, 594-601	28.7	300
175	High-Concentration Ether Electrolytes for Stable High-Voltage Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2019 , 4, 896-902	20.1	160
174	Silicon-Based Anodes for Advanced Lithium-Ion Batteries 2019 , 1-12		1
173	Highly Stable Oxygen Electrodes Enabled by Catalyst Redistribution through an In Situ Electrochemical Method. <i>Advanced Energy Materials</i> , 2019 , 9, 1803598	21.8	5
172	Pathways for practical high-energy long-cycling lithium metal batteries. <i>Nature Energy</i> , 2019 , 4, 180-186	62.3	1202
171	High-Performance Silicon Anodes Enabled By Nonflammable Localized High-Concentration Electrolytes. <i>Advanced Energy Materials</i> , 2019 , 9, 1900784	21.8	92
170	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. <i>Joule</i> , 2019 , 3, 1662-1676	27.8	272
169	Enhanced Stability of Li Metal Anodes by Synergetic Control of Nucleation and the Solid Electrolyte Interphase. <i>Advanced Energy Materials</i> , 2019 , 9, 1901764	21.8	63
168	Polymer-in-Quasi-Ionic Liquid Electrolytes for High-Voltage Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2019 , 9, 1902108	21.8	39
167	Origin of lithium whisker formation and growth under stress. <i>Nature Nanotechnology</i> , 2019 , 14, 1042-1048	28.7	141
166	Critical Parameters for Evaluating Coin Cells and Pouch Cells of Rechargeable Li-Metal Batteries. <i>Joule</i> , 2019 , 3, 1094-1105	27.8	219
165	A highly stable host for lithium metal anode enabled by Li ₉ Al ₄ -Li ₃ N-AlN structure. <i>Nano Energy</i> , 2019 , 59, 110-119	17.1	23
164	Localized high concentration electrolyte behavior near a lithium metal anode surface. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 25047-25055	13	43
163	Highly efficient Ru/B ₄ C multifunctional oxygen electrode for rechargeable LiO ₂ batteries. <i>Journal of Power Sources</i> , 2019 , 413, 11-19	8.9	22
162	Addressing Passivation in Lithium Sulfur Battery Under Lean Electrolyte Condition. <i>Advanced Functional Materials</i> , 2018 , 28, 1707234	15.6	111
161	Stability of polymeric separators in lithium metal batteries in a low voltage environment. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 5006-5015	13	20

160	Advancing Lithium Metal Batteries. <i>Joule</i> , 2018 , 2, 833-845	27.8	620
159	Dendrite-Free and Performance-Enhanced Lithium Metal Batteries through Optimizing Solvent Compositions and Adding Combinational Additives. <i>Advanced Energy Materials</i> , 2018 , 8, 1703022	21.8	95
158	Effects of Imide-Orthoborate Dual-Salt Mixtures in Organic Carbonate Electrolytes on the Stability of Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 2469-2479	9.5	75
157	Enhanced Cyclability of Lithium-Oxygen Batteries with Electrodes Protected by Surface Films Induced via In Situ Electrochemical Process. <i>Advanced Energy Materials</i> , 2018 , 8, 1702340	21.8	33
156	Direct Observation of the Growth of Lithium Dendrites on Graphite Anodes by Operando EC-AFM. <i>Small Methods</i> , 2018 , 2, 1700298	12.8	83
155	Hierarchically Porous Carbon Materials for CO ₂ Capture: The Role of Pore Structure. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 1262-1268	3.9	51
154	Enhanced Stability of Lithium Metal Anode by using a 3D Porous Nickel Substrate. <i>ChemElectroChem</i> , 2018 , 5, 761-769	4.3	41
153	Mechanism of Formation of Li ₇ P ₃ S ₁₁ Solid Electrolytes through Liquid Phase Synthesis. <i>Chemistry of Materials</i> , 2018 , 30, 990-997	9.6	90
152	Extremely Stable Sodium Metal Batteries Enabled by Localized High-Concentration Electrolytes. <i>ACS Energy Letters</i> , 2018 , 3, 315-321	20.1	241
151	Simultaneous Stabilization of LiNi Mn Co O Cathode and Lithium Metal Anode by Lithium Bis(oxalato)borate as Additive. <i>ChemSusChem</i> , 2018 , 11, 2211-2220	8.3	62
150	Effect of calcination temperature on the electrochemical properties of nickel-rich LiNi _{0.76} Mn _{0.14} Co _{0.10} O ₂ cathodes for lithium-ion batteries. <i>Nano Energy</i> , 2018 , 49, 538-548	17.1	120
149	High Voltage Operation of Ni-Rich NMC Cathodes Enabled by Stable Electrode/Electrolyte Interphases. <i>Advanced Energy Materials</i> , 2018 , 8, 1800297	21.8	201
148	Lifecycle comparison of selected Li-ion battery chemistries under grid and electric vehicle duty cycle combinations. <i>Journal of Power Sources</i> , 2018 , 380, 185-193	8.9	30
147	High-Voltage Lithium-Metal Batteries Enabled by Localized High-Concentration Electrolytes. <i>Advanced Materials</i> , 2018 , 30, e1706102	24	452
146	Accurate Determination of Coulombic Efficiency for Lithium Metal Anodes and Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1702097	21.8	348
145	A Localized High-Concentration Electrolyte with Optimized Solvents and Lithium Difluoro(oxalato)borate Additive for Stable Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2018 , 3, 2059-2067	20.1	164
144	Tailored Reaction Route by Micropore Confinement for Li ₃ S Batteries Operating under Lean Electrolyte Conditions. <i>Advanced Energy Materials</i> , 2018 , 8, 1800590	21.8	42
143	Observation of Solid-Liquid Interfacial Reactions Controlled Bulk Phase Transition of Ni-rich Layered Cathode. <i>Microscopy and Microanalysis</i> , 2018 , 24, 1522-1523	0.5	1

142	Minimizing Polysulfide Shuttle Effect in Lithium-Ion Sulfur Batteries by Anode Surface Passivation. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 21965-21972	9.5	16
141	Enabling High-Energy-Density Cathode for Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 23094-23102	9.5	48
140	Localized High-Concentration Sulfone Electrolytes for High-Efficiency Lithium-Metal Batteries. <i>CheM</i> , 2018 , 4, 1877-1892	16.2	348
139	Behavior of Lithium Metal Anodes under Various Capacity Utilization and High Current Density in Lithium Metal Batteries. <i>Joule</i> , 2018 , 2, 110-124	27.8	194
138	Guided Lithium Metal Deposition and Improved Lithium Coulombic Efficiency through Synergistic Effects of LiAsF6 and Cyclic Carbonate Additives. <i>ACS Energy Letters</i> , 2018 , 3, 14-19	20.1	120
137	Detrimental Effects of Chemical Crossover from the Lithium Anode to Cathode in Rechargeable Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2018 , 3, 2921-2930	20.1	51
136	Solid-Liquid Interfacial Reaction Triggered Propagation of Phase Transition from Surface into Bulk Lattice of Ni-Rich Layered Cathode. <i>Chemistry of Materials</i> , 2018 , 30, 7016-7026	9.6	50
135	Extending the limits of powder diffraction analysis: Diffraction parameter space, occupancy defects, and atomic form factors. <i>Review of Scientific Instruments</i> , 2018 , 89, 093002	1.7	13
134	Stabilization of Lithium-Metal Anode in Rechargeable Lithium-Air Batteries 2018 , 11-40		1
133	Revealing Cycling Rate-Dependent Structure Evolution in Ni-Rich Layered Cathode Materials. <i>ACS Energy Letters</i> , 2018 , 3, 2433-2440	20.1	69
132	Lean Electrolyte Batteries: Addressing Passivation in Lithium-Sulfur Battery Under Lean Electrolyte Condition (Adv. Funct. Mater. 38/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870275	15.6	5
131	The Effect of Solvent on the Capacity Retention in a Germanium Anode for Lithium Ion Batteries. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2018 , 15,	2	4
130	Electrode Edge Effects and the Failure Mechanism of Lithium-Metal Batteries. <i>ChemSusChem</i> , 2018 , 11, 3821-3828	8.3	25
129	High-Efficiency Lithium Metal Batteries with Fire-Retardant Electrolytes. <i>Joule</i> , 2018 , 2, 1548-1558	27.8	257
128	A novel approach to synthesize micrometer-sized porous silicon as a high performance anode for lithium-ion batteries. <i>Nano Energy</i> , 2018 , 50, 589-597	17.1	133
127	Lithium-Metal Batteries: High-Voltage Lithium-Metal Batteries Enabled by Localized High-Concentration Electrolytes (Adv. Mater. 21/2018). <i>Advanced Materials</i> , 2018 , 30, 1870144	24	2
126	Non-flammable electrolytes with high salt-to-solvent ratios for Li-ion and Li-metal batteries. <i>Nature Energy</i> , 2018 , 3, 674-681	62.3	357
125	Stable cycling of high-voltage lithium metal batteries in ether electrolytes. <i>Nature Energy</i> , 2018 , 3, 739-746	46.3	466

124	Coupling of electrochemically triggered thermal and mechanical effects to aggravate failure in a layered cathode. <i>Nature Communications</i> , 2018 , 9, 2437	17.4	131
123	Tailoring grain boundary structures and chemistry of Ni-rich layered cathodes for enhanced cycle stability of lithium-ion batteries. <i>Nature Energy</i> , 2018 , 3, 600-605	62.3	402
122	B4C as a stable non-carbon-based oxygen electrode material for lithium-oxygen batteries. <i>Nano Energy</i> , 2017 , 33, 195-204	17.1	55
121	Intragranular cracking as a critical barrier for high-voltage usage of layer-structured cathode for lithium-ion batteries. <i>Nature Communications</i> , 2017 , 8, 14101	17.4	436
120	Stabilization of Li Metal Anode in DMSO-Based Electrolytes via Optimization of Salt/Solvent Coordination for LiO ₂ Batteries. <i>Advanced Energy Materials</i> , 2017 , 7, 1602605	21.8	78
119	Electrolyte additive enabled fast charging and stable cycling lithium metal batteries. <i>Nature Energy</i> , 2017 , 2,	62.3	769
118	Formation of Reversible Solid Electrolyte Interface on Graphite Surface from Concentrated Electrolytes. <i>Nano Letters</i> , 2017 , 17, 1602-1609	11.5	64
117	Complete Decomposition of LiCO in Li-O Batteries Using Ir/BC as Noncarbon-Based Oxygen Electrode. <i>Nano Letters</i> , 2017 , 17, 1417-1424	11.5	79
116	Atomic Resolution Structural and Chemical Imaging Revealing the Sequential Migration of Ni, Co, and Mn upon the Battery Cycling of Layered Cathode. <i>Nano Letters</i> , 2017 , 17, 3946-3951	11.5	110
115	Design of porous Si/C/graphite electrodes with long cycle stability and controlled swelling. <i>Energy and Environmental Science</i> , 2017 , 10, 1427-1434	35.4	103
114	Improving Lithium-Sulfur Battery Performance under Lean Electrolyte through Nanoscale Confinement in Soft Swellable Gels. <i>Nano Letters</i> , 2017 , 17, 3061-3067	11.5	99
113	Wide-Temperature Electrolytes for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 18826-18835	9.5	86
112	Revealing the reaction mechanisms of Li-O batteries using environmental transmission electron microscopy. <i>Nature Nanotechnology</i> , 2017 , 12, 535-539	28.7	128
111	Multinuclear NMR Study of the Solid Electrolyte Interface Formed in Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 14741-14748	9.5	36
110	A reliable sealing method for microbatteries. <i>Journal of Power Sources</i> , 2017 , 341, 443-447	8.9	1
109	Li- and Mn-Rich Cathode Materials: Challenges to Commercialization. <i>Advanced Energy Materials</i> , 2017 , 7, 1601284	21.8	266
108	Imaging Electrochemical Processes in Li Batteries by Operando STEM. <i>Microscopy and Microanalysis</i> , 2017 , 23, 1970-1971	0.5	1
107	New Insights on the Structure of Electrochemically Deposited Lithium Metal and Its Solid Electrolyte Interphases via Cryogenic TEM. <i>Nano Letters</i> , 2017 , 17, 7606-7612	11.5	236

106	Temperature Dependence of the Oxygen Reduction Mechanism in Nonaqueous LiD ₂ Batteries. <i>ACS Energy Letters</i> , 2017 , 2, 2525-2530	20.1	20
105	Suppressing Lithium Dendrite Growth by Metallic Coating on a Separator. <i>Advanced Functional Materials</i> , 2017 , 27, 1704391	15.6	104
104	Non-encapsulation approach for high-performance LiS batteries through controlled nucleation and growth. <i>Nature Energy</i> , 2017 , 2, 813-820	62.3	256
103	Effects of Anion Mobility on Electrochemical Behaviors of LithiumSulfur Batteries. <i>Chemistry of Materials</i> , 2017 , 29, 9023-9029	9.6	28
102	Hierarchically Porous Graphitic Carbon with Simultaneously High Surface Area and Colossal Pore Volume Engineered via Ice Templating. <i>ACS Nano</i> , 2017 , 11, 11047-11055	16.7	57
101	Long term stability of Li-S batteries using high concentration lithium nitrate electrolytes. <i>Nano Energy</i> , 2017 , 40, 607-617	17.1	114
100	Lithium-Oxygen Batteries: Stabilization of Li Metal Anode in DMSO-Based Electrolytes via Optimization of SaltSolvent Coordination for LiD ₂ Batteries (Adv. Energy Mater. 14/2017). <i>Advanced Energy Materials</i> , 2017 , 7,	21.8	5
99	Li-Desolvation Dictating Lithium-Ion Battery's Low-Temperature Performances. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 42761-42768	9.5	95
98	Lithium Self-Discharge and Its Prevention: Direct Visualization through In Situ Electrochemical Scanning Transmission Electron Microscopy. <i>ACS Nano</i> , 2017 , 11, 11194-11205	16.7	36
97	Lithium Metal Anodes and Rechargeable Lithium Metal Batteries. <i>Springer Series in Materials Science</i> , 2017 ,	0.9	62
96	Characterization and Modeling of Lithium Dendrite Growth. <i>Springer Series in Materials Science</i> , 2017 , 5-43	0.9	8
95	High Coulombic Efficiency of Lithium Plating/Stripping and Lithium Dendrite Prevention. <i>Springer Series in Materials Science</i> , 2017 , 45-152	0.9	2
94	Application of Lithium Metal Anodes. <i>Springer Series in Materials Science</i> , 2017 , 153-188	0.9	1
93	Hard carbon coated nano-Si/graphite composite as a high performance anode for Li-ion batteries. <i>Journal of Power Sources</i> , 2016 , 329, 323-329	8.9	57
92	Anode-Free Rechargeable Lithium Metal Batteries. <i>Advanced Functional Materials</i> , 2016 , 26, 7094-7102	15.6	297
91	A Review of Solid Electrolyte Interphases on Lithium Metal Anode. <i>Advanced Science</i> , 2016 , 3, 1500213	13.6	962
90	Dendrites and Pits: Untangling the Complex Behavior of Lithium Metal Anodes through Operando Video Microscopy. <i>ACS Central Science</i> , 2016 , 2, 790-801	16.8	477
89	The Impact of Li Grain Size on Coulombic Efficiency in Li Batteries. <i>Scientific Reports</i> , 2016 , 6, 34267	4.9	53

88	Understanding the Effect of Additives in Li-ion and Li-Sulfur Batteries by Operando ec- (S)TEM. <i>Microscopy and Microanalysis</i> , 2016 , 22, 22-23	0.5	5
87	Tunable Oxygen Functional Groups as Electrocatalysts on Graphite Felt Surfaces for All-Vanadium Flow Batteries. <i>ChemSusChem</i> , 2016 , 9, 1455-61	8.3	52
86	Cathode Materials: Ni and Co Segregations on Selective Surface Facets and Rational Design of Layered Lithium Transition-Metal Oxide Cathodes (Adv. Energy Mater. 9/2016). <i>Advanced Energy Materials</i> , 2016 , 6,	21.8	2
85	Ultrathin Li ₄ Ti ₅ O ₁₂ Nanosheets as Anode Materials for Lithium and Sodium Storage. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 16718-26	9.5	77
84	Pursuing two-dimensional nanomaterials for flexible lithium-ion batteries. <i>Nano Today</i> , 2016 , 11, 82-97	17.9	64
83	Effects of Propylene Carbonate Content in CsPF ₆ Containing Electrolytes on the Enhanced Performances of Graphite Electrode for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 5715-22	9.5	29
82	Natural abundance ¹⁷ O, ⁶ Li NMR and molecular modeling studies of the solvation structures of lithium bis(fluorosulfonyl)imide/1,2-dimethoxyethane liquid electrolytes. <i>Journal of Power Sources</i> , 2016 , 307, 231-243	8.9	37
81	A stable nanoporous silicon anode prepared by modified magnesiothermic reactions. <i>Nano Energy</i> , 2016 , 20, 68-75	17.1	58
80	Atomic to Nanoscale Investigation of Functionalities of an Al ₂ O ₃ Coating Layer on a Cathode for Enhanced Battery Performance. <i>Chemistry of Materials</i> , 2016 , 28, 857-863	9.6	105
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