Kang Xu

List of Publications by Year in Descending Order

263 papers	35,890 citations	95 h-index	187 g-index
279 ext. papers	43,888 ext. citations	14 avg, IF	8.21 L-index

#	Paper	IF	Citations
263	Expanding the low-temperature and high-voltage limits of aqueous lithium-ion battery. *Energy Storage Materials*, **2022**, 45, 903-910	19.4	10
262	Austen Angell's legacy in electrolyte research. *Journal of Non-Crystalline Solids: X*, **2022**, 14, 100088	2.5	1
261	Beyond Local Solvation Structure: Nanometric Aggregates in Battery Electrolytes and Their Effect on Electrolyte Properties. *ACS Energy Letters*, **2022**, 7, 461-470	20.1	11
260	Ammonium enables reversible aqueous Zn battery chemistries by tailoring the interphase. *One Earth*, **2022**, 5, 413-421	8.1	2
259	Quantifying Lithium Ion Exchange in Solid Electrolyte Interphase (SEI) on Graphite Anode Surfaces. *Inorganics*, **2022**, 10, 64	2.9	
258	Navigating the minefield of battery literature. *Communications Materials*, **2022**, 3,	6	4
257	Quantitatively analyzing the failure processes of rechargeable Li metal batteries. *Science Advances*, **2021**, 7, eabj3423	14.3	17
256	Aqueous interphase formed by CO brings electrolytes back to salt-in-water regime. *Nature Chemistry*, **2021**, 13, 1061-1069	17.6	14
255	Copper-coordinated cellulose ion conductors for solid-state batteries. *Nature*, **2021**, 598, 590-596	50.4	49
254	A Thermoconductometric Study of Transient Behavior of Liquid Electrolytes at Phase Transition. *Journal of Physical Chemistry C*, **2021**, 125, 23029-23040	3.8	1
253	Quantifying and Suppressing Proton Intercalation to Enable High-Voltage Zn-Ion Batteries. *Advanced Energy Materials*, **2021**, 11, 2102016	21.8	8
252	Functionalized Phosphonium Cations Enable Zinc Metal Reversibility in Aqueous Electrolytes. *Angewandte Chemie - International Edition*, **2021**, 60, 12438-12445	16.4	23
251	Lithium Metal Batteries Enabled by Synergetic Additives in Commercial Carbonate Electrolytes. *ACS Energy Letters*, **2021**, 6, 1839-1848	20.1	53
250	Functionalized Phosphonium Cations Enable Zinc Metal Reversibility in Aqueous Electrolytes. *Angewandte Chemie*, **2021**, 133, 12546-12553	3.6	1
249	Poor Stability of Li CO in the Solid Electrolyte Interphase of a Lithium-Metal Anode Revealed by Cryo-Electron Microscopy. *Advanced Materials*, **2021**, 33, e2100404	24	37
248	Crossroads in the renaissance of rechargeable aqueous zinc batteries. *Materials Today*, **2021**, 45, 191-212	21.8	48
247	Hydrolysis of LiPF6-Containing Electrolyte at High Voltage. *ACS Energy Letters*, **2021**, 6, 2096-2102	20.1	31

246	Probing the Na metal solid electrolyte interphase via cryo-transmission electron microscopy. *Nature Communications*, **2021**, 12, 3066	17.4	21
245	Novel Low-Temperature Electrolyte Using Isoxazole as the Main Solvent for Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 24995-25001	9.5	11
244	Aqueous lithium-ion batteries **2021**, 3, 721		11
243	Fluorinated interphase enables reversible aqueous zinc battery chemistries. *Nature Nanotechnology* , **2021**, 16, 902-910	28.7	133
242	Tale of Three Phosphate Additives for Stabilizing NCM811/Graphite Pouch Cells: Significance of Molecular Structure-Reactivity in Dictating Interphases and Cell Performance. *ACS Applied Materials & Interfaces*, **2021**, 13, 29676-29690	9.5	8
241	Synthesis and Electrochemical Properties of Aluminum Hexafluorophosphate. *Journal of Physical Chemistry Letters*, **2021**, 12, 5903-5908	6.4	4
240	A Polymer-in-Salt Electrolyte with Enhanced Oxidative Stability for Lithium Metal Polymer Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 31583-31593	9.5	3
239	Electrolytes: From a Thorn Comes a Rose, and from a Rose, a Thorn. *Israel Journal of Chemistry*, **2021**, 61, 85-93	3.4	2
238	Identification of LiH and nanocrystalline LiF in the solid-electrolyte interphase of lithium metal anodes. *Nature Nanotechnology*, **2021**, 16, 549-554	28.7	64
237	A rechargeable zinc-air battery based on zinc peroxide chemistry. *Science*, **2021**, 371, 46-51	33.3	185
236	Correlating Li-Ion Solvation Structures and Electrode Potential Temperature Coefficients. *Journal of the American Chemical Society*, **2021**, 143, 2264-2271	16.4	22
235	Structural origin of the high-voltage instability of lithium cobalt oxide. *Nature Nanotechnology*, **2021**, 16, 599-605	28.7	42
234	Cation-Dependent Interfacial Structures and Kinetics for Outer-Sphere Electron-Transfer Reactions. *Journal of Physical Chemistry C*, **2021**, 125, 4397-4411	3.8	13
233	Cation- and pH-Dependent Hydrogen Evolution and Oxidation Reaction Kinetics. *Jacs Au*, **2021**, 1, 1674-1687		24
232	Stabilizing the Solid-Electrolyte Interphase with Polyacrylamide for High-Voltage Aqueous Lithium-Ion Batteries. *Angewandte Chemie - International Edition*, **2021**, 60, 22812-22817	16.4	8
231	Toward Unraveling the Origin of Lithium Fluoride in the Solid Electrolyte Interphase. *Chemistry of Materials*, **2021**, 33, 7315-7336	9.6	10
230	Stabilizing the Solid-Electrolyte Interphase with Polyacrylamide for High-Voltage Aqueous Lithium-Ion Batteries. *Angewandte Chemie*, **2021**, 133, 22994	3.6	2
229	The mystery and promise of multivalent metal-ion batteries. *Current Opinion in Electrochemistry*, **2021**, 29, 100819	7.2	3

228	Simultaneous Formation of Interphases on both Positive and Negative Electrodes in High-Voltage Aqueous Lithium-Ion Batteries. *Small*, **2021**, e2104986	11	1
227	Origin of Unusual Acidity and Li Diffusivity in a Series of Water-in-Salt Electrolytes. *Journal of Physical Chemistry B*, **2020**, 124, 5284-5291	3.4	14
226	Nonpassivated Silicon Anode Surface. *ACS Applied Materials & Interfaces*, **2020**, 12, 26593-26600	9.5	18
225	Highly safe and cyclable Li-metal batteries with vinylethylene carbonate electrolyte. *Nano Energy*, **2020**, 74, 104860	17.1	28
224	Harnessing the surface structure to enable high-performance cathode materials for lithium-ion batteries. *Chemical Society Reviews*, **2020**, 49, 4667-4680	58.5	49
223	Gel electrolyte for a 4V flexible aqueous lithium-ion battery. *Journal of Power Sources*, **2020**, 469, 228378	8.9	11
222	Energy storage emerging: A perspective from the Joint Center for Energy Storage Research. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 12550-12557	11.5	103
221	Critical Factors Dictating Reversibility of the Zinc Metal Anode. *Energy and Environmental Materials*, **2020**, 3, 516-521	13	46
220	Compositions and Formation Mechanisms of Solid-Electrolyte Interphase on Microporous Carbon/Sulfur Cathodes. *Chemistry of Materials*, **2020**, 32, 3765-3775	9.6	17
219	New Lithium Salt Forms Interphases Suppressing Both Li Dendrite and Polysulfide Shuttling. *Advanced Energy Materials*, **2020**, 10, 1903937	21.8	35
218	A 63 m Superconcentrated Aqueous Electrolyte for High-Energy Li-Ion Batteries. *ACS Energy Letters* , **2020**, 5, 968-974	20.1	106
217	Mechanism Study of Unsaturated Tripropargyl Phosphate as an Efficient Electrolyte Additive Forming Multifunctional Interphases in Lithium Ion and Lithium Metal Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 10443-10451	9.5	26
216	Uncharted Waters: Super-Concentrated Electrolytes. *Joule*, **2020**, 4, 69-100	27.8	153
215	Real-time mass spectrometric characterization of the solid-electrolyte interphase of a lithium-ion battery. *Nature Nanotechnology*, **2020**, 15, 224-230	28.7	156
214	Altering the Electrochemical Pathway of Sulfur Chemistry with Oxygen for High Energy Density and Low Shuttling in a Na/S Battery. *ACS Energy Letters*, **2020**, 5, 1070-1076	20.1	13
213	Self-Regulated Phenomenon of Inorganic Artificial Solid Electrolyte Interphase for Lithium Metal Batteries. *Nano Letters*, **2020**, 20, 4029-4037	11.5	47
212	Mobile Ions in Composite Solids. *Chemical Reviews*, **2020**, 120, 4169-4221	68.1	105
211	New Concepts in Electrolytes. *Chemical Reviews*, **2020**, 120, 6783-6819	68.1	267

210	A Lithium-Organic Primary Battery. *Small*, **2020**, 16, e1906462	11	21
209	Deciphering the paradox between the Co-intercalation of sodium-solvent into graphite and its irreversible capacity. *Energy Storage Materials*, **2020**, 26, 32-39	19.4	33
208	Improving Electrochemical Stability and Low-Temperature Performance with Water/Acetonitrile Hybrid Electrolytes. *Advanced Energy Materials*, **2020**, 10, 1902654	21.8	83
207	High-Voltage Aqueous Na-Ion Battery Enabled by Inert-Cation-Assisted Water-in-Salt Electrolyte. *Advanced Materials*, **2020**, 32, e1904427	24	128
206	Fluorinated hybrid solid-electrolyte-interphase for dendrite-free lithium deposition. *Nature Communications*, **2020**, 11, 93	17.4	164
205	Phase Diagram and Conductivity of Zn(TFSI)2□H2O Electrolytes. *Journal of Physical Chemistry C*, **2020**, 124, 25249-25253	3.8	5
204	Realizing high zinc reversibility in rechargeable batteries. *Nature Energy*, **2020**, 5, 743-749	62.3	259
203	Nanoscale Relaxation in "Water-in-Salt" and "Water-in-Bisalt" Electrolytes. *Journal of Physical Chemistry Letters*, **2020**, 11, 7279-7284	6.4	7
202	Interfacial Speciation Determines Interfacial Chemistry: X-ray-Induced Lithium Fluoride Formation from Water-in-salt Electrolytes on Solid Surfaces. *Angewandte Chemie - International Edition*, **2020**, 59, 23180-23187	16.4	12
201	Interfacial Speciation Determines Interfacial Chemistry: X-ray-Induced Lithium Fluoride Formation from Water-in-salt Electrolytes on Solid Surfaces. *Angewandte Chemie*, **2020**, 132, 23380-23387	3.6	6
200	Enhanced cycling stability of high-voltage lithium metal batteries with a trifunctional electrolyte additive. *Journal of Materials Chemistry A*, **2020**, 8, 22054-22064	13	23
199	500 Wh kg Class Li Metal Battery Enabled by a Self-Organized Core-Shell Composite Anode. *Advanced Materials*, **2020**, 32, e2004793	24	49
198	Ultrafast solid-liquid intercalation enabled by targeted microwave energy delivery. *Science Advances*, **2020**, 6,	14.3	7
197	Phase Transformation of Lithium-rich Oxide Cathode in Full Cell and its Suppression by Solid Electrolyte Interphase on Graphite Anode. *Energy and Environmental Materials*, **2020**, 3, 19-28	13	10
196	Quantifying inactive lithium in lithium metal batteries. *Nature*, **2019**, 572, 511-515	50.4	467
195	Bisalt ether electrolytes: a pathway towards lithium metal batteries with Ni-rich cathodes. *Energy and Environmental Science*, **2019**, 12, 780-794	35.4	196
194	Lithium Bis(oxalate)borate Reinforces the Interphase on Li-Metal Anodes. *ACS Applied Materials & Interfaces*, **2019**, 11, 20854-20863	9.5	33
193	Aqueous Li-ion battery enabled by halogen conversion-intercalation chemistry in graphite. *Nature*, **2019**, 569, 245-250	50.4	378

192	Reclaiming graphite from spent lithium ion batteries ecologically and economically. *Electrochimica Acta*, **2019**, 313, 423-431	6.7	53
191	Insights into the Interfacial Instability between Carbon-Coated SiO Anode and Electrolyte in Lithium-Ion Batteries. *Journal of Physical Chemistry C*, **2019**,	3.8	15
190	Identifying the components of the solid-electrolyte interphase in Li-ion batteries. *Nature Chemistry*, **2019**, 11, 789-796	17.6	181
189	Stabilizing a High-Voltage Lithium-Rich Layered Oxide Cathode with a Novel Electrolyte Additive. *ACS Applied Materials & Interfaces*, **2019**, 11, 28841-28850	9.5	36
188	Current Trends in Electrolytes. *Electrochemical Society Interface*, **2019**, 28, 47-47	3.6	1
187	Understanding and Suppressing the Destructive Cobalt(II) Species in Graphite Interphase. *ACS Applied Materials & Interfaces*, **2019**, 11, 31490-31498	9.5	11
186	Overlooked electrolyte destabilization by manganese (II) in lithium-ion batteries. *Nature Communications*, **2019**, 10, 3423	17.4	66
185	Polymer-in-Quasi-Ionic Liquid Electrolytes for High-Voltage Lithium Metal Batteries. *Advanced Energy Materials*, **2019**, 9, 1902108	21.8	39
184	A Long Journey of Lithium: From the Big Bang to Our Smartphones. *Energy and Environmental Materials*, **2019**, 2, 229-233	13	29
183	Interfacially Induced Cascading Failure in Graphite-Silicon Composite Anodes. *Advanced Science*, **2019**, 6, 1801007	13.6	45
182	Perspective Fluorinating Interphases. *Journal of the Electrochemical Society*, **2019**, 166, A5184-A5186	3.9	78
181	In situ quantification of interphasial chemistry in Li-ion battery. *Nature Nanotechnology*, **2019**, 14, 50-56	28.7	235
180	How electrolyte additives work in Li-ion batteries. *Energy Storage Materials*, **2019**, 20, 208-215	19.4	42
179	Insight on lithium metal anode interphasial chemistry: Reduction mechanism of cyclic ether solvent and SEI film formation. *Energy Storage Materials*, **2019**, 17, 366-373	19.4	59
178	A carbonate-free, sulfone-based electrolyte for high-voltage Li-ion batteries. *Materials Today*, **2018**, 21, 341-353	21.8	171
177	Highly reversible zinc metal anode for aqueous batteries. *Nature Materials*, **2018**, 17, 543-549	27	1128
176	Long cycle life and high rate sodium-ion chemistry for hard carbon anodes. *Energy Storage Materials* , **2018**, 13, 274-282	19.4	93
175	Deciphering the Ethylene Carbonate-Propylene Carbonate Mystery in Li-Ion Batteries. *Accounts of Chemical Research*, **2018**, 51, 282-289	24.3	145

174	Investigation of Ion-Solvent Interactions in Nonaqueous Electrolytes Using in Situ Liquid SIMS. *Analytical Chemistry*, **2018**, 90, 3341-3348	7.8	19
173	Highly Fluorinated Interphases Enable High-Voltage Li-Metal Batteries. *CheM*, **2018**, 4, 174-185	16.2	435
172	Breathing and oscillating growth of solid-electrolyte-interphase upon electrochemical cycling. *Chemical Communications*, **2018**, 54, 814-817	5.8	33
171	An artificial interphase enables reversible magnesium chemistry in carbonate electrolytes. *Nature Chemistry*, **2018**, 10, 532-539	17.6	209
170	Interphases in Sodium-Ion Batteries. *Advanced Energy Materials*, **2018**, 8, 1703082	21.8	137
169	Correlating Li-Solvation Structure and its Electrochemical Reaction Kinetics with Sulfur in Subnano Confinement. *Journal of Physical Chemistry Letters*, **2018**, 9, 1739-1745	6.4	16
168	Hybrid Aqueous/Non-aqueous Electrolyte for Safe and High-Energy Li-Ion Batteries. *Joule*, **2018**, 2, 927-937	27.8	194
167	How Water Accelerates Bivalent Ion Diffusion at the Electrolyte/Electrode Interface. *Angewandte Chemie - International Edition*, **2018**, 57, 11978-11981	16.4	84
166	Multinuclear magnetic resonance investigation of cation-anion and anion-solvent interactions in carbonate electrolytes. *Journal of Power Sources*, **2018**, 399, 215-222	8.9	11
165	How Water Accelerates Bivalent Ion Diffusion at the Electrolyte/Electrode Interface. *Angewandte Chemie*, **2018**, 130, 12154-12157	3.6	10
164	Non-flammable electrolyte enables Li-metal batteries with aggressive cathode chemistries. *Nature Nanotechnology*, **2018**, 13, 715-722	28.7	606
163	Converting detrimental HF in electrolytes into a highly fluorinated interphase on cathodes. *Journal of Materials Chemistry A*, **2018**, 6, 17642-17652	13	70
162	Designing Low Impedance Interface Films Simultaneously on Anode and Cathode for High Energy Batteries. *Advanced Energy Materials*, **2018**, 8, 1800802	21.8	137
161	Localized High-Concentration Sulfone Electrolytes for High-Efficiency Lithium-Metal Batteries. *CheM*, **2018**, 4, 1877-1892	16.2	348
160	High energy-density and reversibility of iron fluoride cathode enabled via an intercalation-extrusion reaction. *Nature Communications*, **2018**, 9, 2324	17.4	86
159	Thermodynamics and Kinetics of Sulfur Cathode during Discharge in MgTFSI -DME Electrolyte. *Advanced Materials*, **2018**, 30, 1704313	24	90
158	A rechargeable aqueous Zn2+-battery with high power density and a long cycle-life. *Energy and Environmental Science*, **2018**, 11, 3168-3175	35.4	182
157	Before Li Ion Batteries. *Chemical Reviews*, **2018**, 118, 11433-11456	68.1	956

156	Understanding Thermodynamic and Kinetic Contributions in Expanding the Stability Window of Aqueous Electrolytes. *CheM*, **2018**, 4, 2872-2882	16.2	119
155	Manipulating electrolyte and solid electrolyte interphase to enable safe and efficient Li-S batteries. *Nano Energy*, **2018**, 50, 431-440	17.1	84
154	Diethyl(thiophen-2-ylmethyl)phosphonate: a novel multifunctional electrolyte additive for high voltage batteries. *Journal of Materials Chemistry A*, **2018**, 6, 10990-11004	13	74
153	Phase Diagram, Conductivity, and Glass Transition of LiTFSI□H2O Binary Electrolytes. *Journal of Physical Chemistry C*, **2018**, 122, 16624-16629	3.8	35
152	Conductivity, Viscosity, and Their Correlation of a Super-Concentrated Aqueous Electrolyte. *Journal of Physical Chemistry C*, **2017**, 121, 2149-2153	3.8	54
151	Manipulating interphases in batteries. *National Science Review*, **2017**, 4, 19-20	10.8	10
150	Effects of Solvent Composition on Liquid Range, Glass Transition, and Conductivity of Electrolytes of a (Li, Cs)PF6 Salt in EC-PC-EMC Solvents. *Journal of Physical Chemistry C*, **2017**, 121, 11178-11183	3.8	9
149	Wide-Temperature Electrolytes for Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 18826-18835	9.5	86
148	Performance of wide temperature range electrolytes for Li-Ion capacitor pouch cells. *Journal of Power Sources*, **2017**, 359, 205-214	8.9	19
147	Unique aqueous Li-ion/sulfur chemistry with high energy density and reversibility. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 6197-6202	11.5	100
146	Lithium-Ion Batteries and Materials **2017**, 449-494		10
145	High-Voltage Aqueous Magnesium Ion Batteries. *ACS Central Science*, **2017**, 3, 1121-1128	16.8	168
144	Liquid Structure with Nano-Heterogeneity Promotes Cationic Transport in Concentrated Electrolytes. *ACS Nano*, **2017**, 11, 10462-10471	16.7	193
143	Flexible Aqueous Li-Ion Battery with High Energy and Power Densities. *Advanced Materials*, **2017**, 29, 1701972	24	121
142	Reversible S /MgS Redox Chemistry in a MgTFSI /MgCl /DME Electrolyte for Rechargeable Mg/S Batteries. *Angewandte Chemie - International Edition*, **2017**, 56, 13526-13530	16.4	102
141	Reversible S0/MgSx Redox Chemistry in a MgTFSI2/MgCl2/DME Electrolyte for Rechargeable Mg/S Batteries. *Angewandte Chemie*, **2017**, 129, 13711-13715	3.6	41
140	4.0□V Aqueous Li-Ion Batteries. *Joule*, **2017**, 1, 122-132	27.8	324
139	□Water-in-Salt□Electrolyte Makes Aqueous Sodium-Ion Battery Safe, Green, and Long-Lasting. *Advanced Energy Materials*, **2017**, 7, 1701189	21.8	335

138	Understanding How Nitriles Stabilize Electrolyte/Electrode Interface at High Voltage. *Journal of Physical Chemistry Letters*, **2017**, 8, 6048-6052	6.4	45
137	How Solid-Electrolyte Interphase Forms in Aqueous Electrolytes. *Journal of the American Chemical Society*, **2017**, 139, 18670-18680	16.4	227
136	Li-Desolvation Dictating Lithium-Ion Battery's Low-Temperature Performances. *ACS Applied Materials & Interfaces*, **2017**, 9, 42761-42768	9.5	95
135	Modeling Insight into Battery Electrolyte Electrochemical Stability and Interfacial Structure. *Accounts of Chemical Research*, **2017**, 50, 2886-2894	24.3	150
134	Solvation behavior of carbonate-based electrolytes in sodium ion batteries. *Physical Chemistry Chemical Physics*, **2016**, 19, 574-586	3.6	108
133	Stabilizing high voltage LiCoO2 cathode in aqueous electrolyte with interphase-forming additive. *Energy and Environmental Science*, **2016**, 9, 3666-3673	35.4	140
132	Ectopic expression of Cripto-1 in transgenic mouse embryos causes hemorrhages, fatal cardiac defects and embryonic lethality. *Scientific Reports*, **2016**, 6, 34501	4.9	5
131	Activation of Oxygen-Stabilized Sulfur for Li and Na Batteries. *Advanced Functional Materials*, **2016**, 26, 745-752	15.6	66
130	Advanced High-Voltage Aqueous Lithium-Ion Battery Enabled by "Water-in-Bisalt" Electrolyte. *Angewandte Chemie - International Edition*, **2016**, 55, 7136-41	16.4	435
129	Pre-Lithiation of Li(Ni1-x-yMnxCoy)O2 Materials Enabling Enhancement of Performance for Li-Ion Battery. *ACS Applied Materials & Interfaces*, **2016**, 8, 15361-8	9.5	26
128	In situ lithiated FeF3/C nanocomposite as high energy conversion-reaction cathode for lithium-ion batteries. *Journal of Power Sources*, **2016**, 307, 435-442	8.9	52
127	Water-in-Salt electrolytes enable green and safe Li-ion batteries for large scale electric energy storage applications. *Journal of Materials Chemistry A*, **2016**, 4, 6639-6644	13	140
126	Advanced High-Voltage Aqueous Lithium-Ion Battery Enabled by Water-in-Bisalt Electrolyte. *Angewandte Chemie*, **2016**, 128, 7252-7257	3.6	80
125	Targeted Disruption of miR-17-92 Impairs Mouse Spermatogenesis by Activating mTOR Signaling Pathway. *Medicine (United States)*, **2016**, 95, e2713	1.8	38
124	A bio-facilitated synthetic route for nano-structured complex electrode materials. *Green Chemistry*, **2016**, 18, 2619-2624	10	13
123	Pomegranate-Structured Conversion-Reaction Cathode with a Built-in Li Source for High-Energy Li-Ion Batteries. *ACS Nano*, **2016**, 10, 5567-77	16.7	67
122	Aligned Li Tunnels in Core-Shell Li(NiMnCo)O@LiFePO Enhances Its High Voltage Cycling Stability as Li-ion Battery Cathode. *Nano Letters*, **2016**, 16, 6357-6363	11.5	98
121	Prelithiation Activates Li(Ni0.5Mn0.3Co0.2)O2 for High Capacity and Excellent Cycling Stability. *Nano Letters*, **2015**, 15, 5590-6	11.5	61

120	Fluorinated Electrolytes for 5-V Li-Ion Chemistry: Probing Voltage Stability of Electrolytes with Electrochemical Floating Test. *Journal of the Electrochemical Society*, **2015**, 162, A1725-A1729	3.9	87
119	PEDOT Encapsulated FeOF Nanorod Cathodes for High Energy Lithium-Ion Batteries. *Nano Letters*, **2015**, 15, 7650-6	11.5	82
118	Effect of Al2O3 Coating on Stabilizing LiNi0.4Mn0.4Co0.2O2 Cathodes. *Chemistry of Materials*, **2015**, 27, 6146-6154	9.6	149
117	Janus Solid-Liquid Interface Enabling Ultrahigh Charging and Discharging Rate for Advanced Lithium-Ion Batteries. *Nano Letters*, **2015**, 15, 6102-9	11.5	69
116	The Role of Cesium Cation in Controlling Interphasial Chemistry on Graphite Anode in Propylene Carbonate-Rich Electrolytes. *ACS Applied Materials & Interfaces*, **2015**, 7, 20687-95	9.5	28
115	Enhancing the reversibility of Mg/S battery chemistry through Li(+) mediation. *Journal of the American Chemical Society*, **2015**, 137, 12388-93	16.4	185
114	(Invited) Challenges with Quantum Chemistry-Based Screening of Electrochemical Stability of Lithium Battery Electrolytes. *ECS Transactions*, **2015**, 69, 113-123	1	15
113	"Water-in-salt" electrolyte enables high-voltage aqueous lithium-ion chemistries. *Science*, **2015**, 350, 938-43	33.3	1717
112	Hybrid Mg2+/Li+ Battery with Long Cycle Life and High Rate Capability. *Advanced Energy Materials*, **2015**, 5, 1401507	21.8	128
111	Ion Solvation and the Search for a Correlation with Electrode Passivation. *Materials Research Society Symposia Proceedings*, **2015**, 1740, 49		
110	Confined Sulfur in Microporous Carbon Renders Superior Cycling Stability in Li/S Batteries. *Advanced Functional Materials*, **2015**, 25, 4312-4320	15.6	232
109	Anion Solvation in Carbonate-Based Electrolytes. *Journal of Physical Chemistry C*, **2015**, 119, 27255-27264	4.8	89
108	Atomic force microscopy studies on molybdenum disulfide flakes as sodium-ion anodes. *Nano Letters*, **2015**, 15, 1018-24	11.5	99
107	Dual-graphite chemistry enabled by a high voltage electrolyte. *Energy and Environmental Science*, **2014**, 7, 617-620	35.4	258
106	In situ and quantitative characterization of solid electrolyte interphases. *Nano Letters*, **2014**, 14, 1405-12	11.5	194
105	Electrolytes and interphases in Li-ion batteries and beyond. *Chemical Reviews*, **2014**, 114, 11503-618	68.1	2847
104	Enhanced electrochemical stability of high-voltage LiNi0.5Mn1.5O4 cathode by surface modification using atomic layer deposition. *Journal of Nanoparticle Research*, **2014**, 16, 1	2.3	21
103	Depolarized and fully active cathode based on Li(Ni0.5Co0.2Mn0.3)O2 embedded in carbon nanotube network for advanced batteries. *Nano Letters*, **2014**, 14, 4700-6	11.5	85

102	Free-standing Na(2/3)Fe(1/2)Mn(1/2)O(2)@graphene film for a sodium-ion battery cathode. *ACS Applied Materials & Interfaces*, **2014**, 6, 4242-7	9.5	76
101	Nonflammable electrolyte enhances battery safety. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 3205-6	11.5	47
100	Dendrite-free lithium deposition with self-aligned nanorod structure. *Nano Letters*, **2014**, 14, 6889-96	11.5	276
99	Tin-coated viral nanoforests as sodium-ion battery anodes. *ACS Nano*, **2013**, 7, 3627-34	16.7	259
98	Understanding Li(+)-Solvent Interaction in Nonaqueous Carbonate Electrolytes with (17)O NMR. *Journal of Physical Chemistry Letters*, **2013**, 4, 1664-8	6.4	206
97	Molecular Dynamics Simulations and Experimental Study of Lithium Ion Transport in Dilithium Ethylene Dicarbonate. *Journal of Physical Chemistry C*, **2013**, 117, 7433-7444	3.8	73
96	Electrospun Sb/C fibers for a stable and fast sodium-ion battery anode. *ACS Nano*, **2013**, 7, 6378-86	16.7	557
95	A Consideration of Electrolyte Additives for LiNi0.5Mn1.5O4/Li4Ti5O12Li-Ion Cells. *Journal of the Electrochemical Society*, **2013**, 160, A2014-A2020	3.9	25
94	Architecturing hierarchical function layers on self-assembled viral templates as 3D nano-array electrodes for integrated Li-ion microbatteries. *Nano Letters*, **2013**, 13, 293-300	11.5	64
93	Li+-solvation/desolvation dictates interphasial processes on graphitic anode in Li ion cells. *Journal of Materials Research*, **2012**, 27, 2327-2341	2.5	122
92	Correlating Li+ Solvation Sheath Structure with Interphasial Chemistry on Graphite. *Journal of Physical Chemistry C*, **2012**, 116, 26111-26117	3.8	135
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