

# Martin Winter

## 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.

287  
papers

13,520  
citations

55  
h-index

110  
g-index

318  
ext. papers

17,345  
ext. citations

9.4  
avg, IF

7.33  
L-index

#	Paper	IF	Citations
287	Implementation of orbitrap mass spectrometry for improved GC-MS target analysis in lithium ion battery electrolytes.. <i>MethodsX</i> , <b>2022</b> , 9, 101621	1.9	3
286	Synergistic Effects of Surface Coating and Bulk Doping in Ni-Rich Lithium Nickel Cobalt Manganese Oxide Cathode Materials for High-Energy Lithium-Ion Batteries.. <i>ChemSusChem</i> , <b>2022</b> , e202200078	8.3	
285	The Battery Component Readiness Level (BC-RL) framework: A technology-specific development framework. <i>Journal of Power Sources Advances</i> , <b>2022</b> , 14, 100089	3.3	1
284	Cost-effective technology choice in a decarbonized and diversified long-haul truck transportation sector: A U.S. case study. <i>Journal of Energy Storage</i> , <b>2022</b> , 46, 103891	7.8	1
283	Multisalt chemistry in ion transport and interface of lithium metal polymer batteries. <i>Energy Storage Materials</i> , <b>2022</b> , 44, 263-277	19.4	3
282	Comprehensive Characterization of Shredded Lithium-Ion Battery Recycling Material.. <i>Chemistry - A European Journal</i> , <b>2022</b> ,	4.8	2
281	Advanced Dual-Ion Batteries with High-Capacity Negative Electrodes Incorporating Black Phosphorus.. <i>Advanced Science</i> , <b>2022</b> , e2201116	13.6	1
280	Pre-Lithiation of Silicon Anodes by Thermal Evaporation of Lithium for Boosting the Energy Density of Lithium Ion Cells (Adv. Funct. Mater. 22/2022). <i>Advanced Functional Materials</i> , <b>2022</b> , 32, 2270127	15.6	
279	Al <sub>2</sub> O <sub>3</sub> protective coating on silicon thin film electrodes and its effect on the aging mechanisms of lithium metal and lithium ion cells. <i>Journal of Energy Storage</i> , <b>2021</b> , 44, 103479	7.8	2
278	<sup>19</sup> F MAS NMR study on anion intercalation into graphite positive electrodes from binary-mixed highly concentrated electrolytes. <i>Journal of Power Sources Advances</i> , <b>2021</b> , 12, 100075	3.3	1
277	Demonstrating Apparently Inconspicuous but Sensitive Impacts on the Rollover Failure of Lithium-Ion Batteries at a High Voltage. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 57241-57251	9.5	1
276	Beyond fluorine: sustainable ternary polymer electrolytes for lithium batteries. <i>Green Chemistry</i> , <b>2021</b> , 23, 9935-9944	10	2
275	Copper-coordinated cellulose ion conductors for solid-state batteries. <i>Nature</i> , <b>2021</b> , 598, 590-596	50.4	49
274	Solvent Co-Intercalation-Induced Activation and Capacity Fade Mechanism of Few-/Multi-Layered MXenes in Lithium Ion Batteries. <i>Small</i> , <b>2021</b> , 17, e2104130	11	0
273	Compatibility of Various Electrolytes with Cation Disordered Rocksalt Cathodes in Lithium Ion Batteries. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 10909-10920	6.1	2
272	Online sample pretreatment for analysis of decomposition products in lithium ion battery by liquid chromatography hyphenated with ion trap-time of flight-mass spectrometry or inductively coupled plasma-sector field-mass spectrometry. <i>Journal of Chromatography A</i> , <b>2021</b> , 1658, 462594	4.5	0
271	Ionic liquid plasticizers comprising solvating cations for lithium metal polymer batteries. <i>Electrochimica Acta</i> , <b>2021</b> , 398, 139333	6.7	4

270	Quantitative determination of solid electrolyte interphase and cathode electrolyte interphase homogeneity in multi-layer lithium ion cells. <i>Journal of Energy Storage</i> , <b>2021</b> , 44, 103208	7.8	5
269	Comprehensive Insights into the Porosity of Lithium-Ion Battery Electrodes: A Comparative Study on Positive Electrodes Based on LiNi <sub>0.6</sub> Mn <sub>0.2</sub> Co <sub>0.2</sub> O <sub>2</sub> (NMC622). <i>Batteries</i> , <b>2021</b> , 7, 70	5.7	0
268	Exploiting the Degradation Mechanism of NCM523    Graphite Lithium-Ion Full Cells Operated at High Voltage. <i>ChemSusChem</i> , <b>2021</b> , 14, 491	8.3	
267	Dibenzo[a,e]Cyclooctatetraene-Functionalized Polymers as Potential Battery Electrode Materials. <i>Macromolecular Rapid Communications</i> , <b>2021</b> , 42, e2000725	4.8	3
266	Understanding the Effectiveness of Phospholane Electrolyte Additives in Lithium-Ion Batteries under High-Voltage Conditions. <i>ChemElectroChem</i> , <b>2021</b> , 8, 972-982	4.3	1
265	A Thorough Analysis of Two Different Pre-Lithiation Techniques for Silicon/Carbon Negative Electrodes in Lithium Ion Batteries. <i>Batteries and Supercaps</i> , <b>2021</b> , 4, 1163-1174	5.6	4
264	New Insights into the N-S Bond Formation of a Sulfurized-Polyacrylonitrile Cathode Material for Lithium-Sulfur Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 14230-14238	9.5	11
263	Graphite Lithium-Ion Cells: On the Beneficial Impact of Li <sub>2</sub> CO <sub>3</sub> as Electrolyte Additive in NCM523    Graphite Lithium Ion Cells Under High-Voltage Conditions (Adv. Energy Mater. 10/2021). <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2170039	21.8	
262	Intrinsic differences and realistic perspectives of lithium-sulfur and magnesium-sulfur batteries. <i>Communications Materials</i> , <b>2021</b> , 2,	6	9
261	The Sand equation and its enormous practical relevance for solid-state lithium metal batteries. <i>Materials Today</i> , <b>2021</b> , 44, 9-14	21.8	16
260	Area Oversizing of Lithium Metal Electrodes in Solid-State Batteries: Relevance for Overvoltage and thus Performance?. <i>ChemSusChem</i> , <b>2021</b> , 14, 2163-2169	8.3	5
259	Mechanistic Insights into the Pre-Lithiation of Silicon/Graphite Negative Electrodes in Dry State□ and After Electrolyte Addition Using Passivated Lithium Metal Powder. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2100925	21.8	13
258	Cation-Assisted Lithium-Ion Transport for High-Performance PEO-based Ternary Solid Polymer Electrolytes. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 11919-11927	16.4	32
257	Direct Multielement Analysis of Polydisperse Microparticles by Classification-Single-Particle ICP-OES in the Field of Lithium-Ion Battery Electrode Materials. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 7532-7539	7.8	4
256	The Impact of the C-Rate on Gassing During Formation of NMC622    Graphite Lithium-Ion Battery Cells. <i>Batteries and Supercaps</i> , <b>2021</b> , 4, 1344-1350	5.6	0
255	Galvanic Couples in Ionic Liquid-Based Electrolyte Systems for Lithium Metal Batteries□ An Overlooked Cause of Galvanic Corrosion?. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2101021	21.8	6
254	Enabling Aqueous Processing for LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> -Based Positive Electrodes in Lithium-Ion Batteries by Applying Lithium-Based Processing Additives. <i>Advanced Energy and Sustainability Research</i> , <b>2021</b> , 2, 2100075	1.6	3
253	<sup>119</sup> Sn and <sup>7</sup> Li Solid-State NMR of the Binary Li <sub>15</sub> Sn Intermetallics: Structural Fingerprinting and Impact on the Isotropic <sup>119</sup> Sn Shift via DFT Calculations. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 3499-3514	9.6	1

252	Scalable Synthesis of MAX Phase Precursors toward Titanium-Based MXenes for Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 26074-26083	9.5	6
251	Lithium deposition in single-ion conducting polymer electrolytes. <i>Cell Reports Physical Science</i> , <b>2021</b> , 2, 100496	6.1	3
250	Increasing the Lithium Ion Mobility in Poly(Phosphazene)-Based Solid Polymer Electrolytes through Tailored Cation Doping. <i>Journal of the Electrochemical Society</i> , <b>2021</b> , 168, 070559	3.9	
249	Finding the sweet spot: Li/Mn-rich cathode materials with fine-tuned core-shell particle design for high-energy lithium ion batteries. <i>Electrochimica Acta</i> , <b>2021</b> , 366, 137413	6.7	7
248	Understanding all solid-state lithium batteries through in situ transmission electron microscopy. <i>Materials Today</i> , <b>2021</b> , 42, 137-161	21.8	34
247	Stabilizing Effect of Polysulfides on Lithium Metal Anodes in Sparingly Solvating Solvents. <i>Batteries and Supercaps</i> , <b>2021</b> , 4, 347-358	5.6	5
246	Si-on-Graphite fabricated by fluidized bed process for high-capacity anodes of Li-ion batteries. <i>Chemical Engineering Journal</i> , <b>2021</b> , 407, 126603	14.7	12
245	Study of electrochemical performance and thermal property of LiNi <sub>0.5</sub> Co <sub>0.2</sub> Mn <sub>0.3</sub> O <sub>2</sub> cathode materials coated with a novel oligomer additive for high-safety lithium-ion batteries. <i>Chemical Engineering Journal</i> , <b>2021</b> , 405, 126727	14.7	13
244	Enabling Mg-Based Ionic Liquid Electrolytes for Hybrid Dual-Ion Capacitors. <i>Batteries and Supercaps</i> , <b>2021</b> , 4, 504-512	5.6	5
243	Large-scale automotive battery cell manufacturing: Analyzing strategic and operational effects on manufacturing costs. <i>International Journal of Production Economics</i> , <b>2021</b> , 232, 107982	9.3	39
242	TiO <sub>2</sub> @LiTi <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> enabling fast and stable lithium storage for high voltage aqueous lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2021</b> , 484, 229255	8.9	5
241	Quasi-solid single ion conducting polymer electrolyte membrane containing novel fluorinated poly(arylene ether sulfonimide) for lithium metal batteries. <i>Journal of Power Sources</i> , <b>2021</b> , 484, 229267	8.9	12
240	Effect of Li plating during formation of lithium ion batteries on their cycling performance and thermal safety. <i>Journal of Power Sources</i> , <b>2021</b> , 484, 229306	8.9	8
239	Waste to life: Low-cost, self-standing, 2D carbon fiber green Li-ion battery anode made from end-of-life cotton textile. <i>Electrochimica Acta</i> , <b>2021</b> , 368, 137644	6.7	7
238	Exploiting the Degradation Mechanism of NCM523 Graphite Lithium-Ion Full Cells Operated at High Voltage. <i>ChemSusChem</i> , <b>2021</b> , 14, 595-613	8.3	21
237	Electrolytes: From a Thorn Comes a Rose, and from a Rose, a Thorn. <i>Israel Journal of Chemistry</i> , <b>2021</b> , 61, 85-93	3.4	2
236	Revealing the Impact of Film-Forming Electrolyte Additives on Lithium Metal Batteries via Solid-State NMR/MRI Analysis. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 252-265	3.8	13
235	Understanding the Outstanding High-Voltage Performance of NCM523  Graphite Lithium Ion Cells after Elimination of Ethylene Carbonate Solvent from Conventional Electrolyte. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003738	21.8	39

234	Post-lithium-ion battery cell production and its compatibility with lithium-ion cell production infrastructure. <i>Nature Energy</i> , <b>2021</b> , 6, 123-134	62.3	153
233	In situ polymerization process: an essential design tool for lithium polymer batteries. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 2708-2788	35.4	31
232	On the Beneficial Impact of Li <sub>2</sub> CO <sub>3</sub> as Electrolyte Additive in NCM523    Graphite Lithium Ion Cells Under High-Voltage Conditions. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003756	21.8	21
231	A rechargeable zinc-air battery based on zinc peroxide chemistry. <i>Science</i> , <b>2021</b> , 371, 46-51	33.3	185
230	Application of Gas Chromatography Hyphenated to Atmospheric Pressure Chemical Ionization-Quadrupole-Time-of-Flight-Mass Spectrometry (GC-APCI-Q-TOF-MS) for Structure Elucidation of Degradation Products Based on the Cation in Pyr14TFSI. <i>Journal of the Electrochemical Society</i> , <b>2021</b> , 168, 026501	3.9	2
229	A Systematic Study of Vinyl Ether-Based Poly(Ethylene Oxide) Side-Chain Polymer Electrolytes. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 1573-1582	4.3	10
228	Host-Guest Interactions Enhance the Performance of Viologen Electrolytes for Aqueous Organic Redox Flow Batteries. <i>Batteries and Supercaps</i> , <b>2021</b> , 4, 923-928	5.6	3
227	Case study of N-carboxyanhydrides in silicon-based lithium ion cells as a guideline for systematic electrolyte additive research. <i>Cell Reports Physical Science</i> , <b>2021</b> , 2, 100327	6.1	7
226	Solvent Co-intercalation into Few-layered TiCT MXenes in Lithium Ion Batteries Induced by Acidic or Basic Post-treatment. <i>ACS Nano</i> , <b>2021</b> , 15, 3295-3308	16.7	16
225	Polycarbonate-Based Lithium Salt-Containing Electrolytes: New Insights into Thermal Stability. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 4371-4378	3.8	2
224	Insights into the Solubility of Poly(vinylphenothiazine) in Carbonate-Based Battery Electrolytes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 12442-12453	9.5	8
223	Effective Solid Electrolyte Interphase Formation on Lithium Metal Anodes by Mechanochemical Modification. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 34227-34237	9.5	2
222	Identification of Li <sub>x</sub> Sn Phase Transitions During Lithiation of Tin Nanoparticle-Based Negative Electrodes from Ex Situ <sup>119</sup> Sn MAS NMR and Operando <sup>7</sup> Li NMR and XRD. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 7278-7287	6.1	2
221	Fast Charging of Lithium-Ion Batteries: A Review of Materials Aspects. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2101126	21.8	65
220	Evaluating the Passivation Layer of Freshly Cleaved Silicon Surfaces by Binary Silane-Based Electrolytes. <i>Batteries and Supercaps</i> , <b>2021</b> , 4, 1611	5.6	1
219	Bridging the Gap between Small Molecular Interactions and Their Effect on Phenothiazine-Based Redox Polymers in Organic Batteries. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 7622-7631	6.1	3
218	Pragmatic Approaches to Correlate between the Physicochemical Properties of a Linear Poly(ethylene oxide)-Based Solid Polymer Electrolyte and the Performance in a High-Voltage Li-Metal Battery. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 18089-18097	3.8	7
217	Re-evaluating common electrolyte additives for high-voltage lithium ion batteries. <i>Cell Reports Physical Science</i> , <b>2021</b> , 2, 100521	6.1	7

216	Viscoelastic polyborosiloxanes as artificial solid electrolyte interphase on lithium metal anodes. <i>Electrochimica Acta</i> , <b>2021</b> , 388, 138526	6.7	4
215	Styrene-Based Poly(ethylene oxide) Side-Chain Block Copolymers as Solid Polymer Electrolytes for High-Voltage Lithium-Metal Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 39257-39270	9.5	8
214	Investigation of Polymer/Ceramic Composite Solid Electrolyte System: The Case of PEO/LGPS Composite Electrolytes. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 11314-11322	8.3	5
213	Quantification of aging mechanisms of carbon-coated and uncoated silicon thin film anodes in lithium metal and lithium ion cells. <i>Journal of Energy Storage</i> , <b>2021</b> , 41, 102812	7.8	2
212	Stabilizing the Solid-Electrolyte Interphase with Polyacrylamide for High-Voltage Aqueous Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 22812-22817	16.4	8
211	Opportunities and Limitations of Ionic Liquid- and Organic Carbonate Solvent-Based Electrolytes for Mg-Ion-Based Dual-Ion Batteries. <i>ChemSusChem</i> , <b>2021</b> , 14, 4480-4498	8.3	4
210	Understanding the effect of Nb substitution on Li-Mn-rich layered oxides. <i>Electrochimica Acta</i> , <b>2021</b> , 390, 138801	6.7	1
209	A high-voltage symmetric sodium ion battery using sodium vanadium pyrophosphate with superior power density and long lifespan. <i>Journal of Power Sources</i> , <b>2021</b> , 507, 230183	8.9	3
208	Stabilizing the Solid-Electrolyte Interphase with Polyacrylamide for High-Voltage Aqueous Lithium-Ion Batteries. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 22994	3.6	2
207	Improved Lithium-Ion Transport Within the LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> Secondary Cathode Particles Through a Template-Assisted Synthesis Route. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 12560-12574	8.3	4
206	Prospects and limitations of single-crystal cathode materials to overcome cross-talk phenomena in high-voltage lithium ion cells. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 7546-7555	13	26
205	Simultaneous Formation of Interphases on both Positive and Negative Electrodes in High-Voltage Aqueous Lithium-Ion Batteries. <i>Small</i> , <b>2021</b> , e2104986	11	1
204	Solid Electrolyte Interphase Evolution on Lithium Metal Electrodes Followed by Scanning Electrochemical Microscopy Under Realistic Battery Cycling Current Densities. <i>ChemElectroChem</i> , <b>2020</b> , 7, 3590-3596	4.3	7
203	Wetting Phenomena and their Effect on the Electrochemical Performance of Surface-Tailored Lithium Metal Electrodes in Contact with Cross-linked Polymeric Electrolytes. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 17145-17153	16.4	12
202	Elimination of "Voltage Noise" of Poly (Ethylene Oxide)-Based Solid Electrolytes in High-Voltage Lithium Batteries: Linear versus Network Polymers. <i>IScience</i> , <b>2020</b> , 23, 101225	6.1	32
201	Experimental and computational studies of electrochemical anion intercalation into graphite from target-oriented designed borate-based ionic liquid electrolytes. <i>Journal of Power Sources</i> , <b>2020</b> , 469, 228397	8.9	8
200	Benetzungsvorgänge und ihr Einfluss auf die elektrochemischen Eigenschaften von oberflächenangepassten Lithium-Metall-Elektroden in Kontakt mit quervernetzten Polymer-Elektrolyten. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 17293-17302	3.6	3
199	Investigating the oxidation state of Fe from LiFePO <sub>4</sub> -based lithium ion battery cathodes via capillary electrophoresis. <i>Electrophoresis</i> , <b>2020</b> , 41, 1549-1556	3.6	2

198	Poly(Ethylene Oxide)-based Electrolyte for Solid-State-Lithium-Batteries with High Voltage Positive Electrodes: Evaluating the Role of Electrolyte Oxidation in Rapid Cell Failure. <i>Scientific Reports</i> , <b>2020</b> , 10, 4390	4.9	84
197	Galvanic Corrosion of Lithium-Powder-Based Electrodes. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2000017	21.8	33
196	Protective coatings on silicon particles and their effect on energy density and specific energy in lithium ion battery cells: A model study. <i>Journal of Energy Storage</i> , <b>2020</b> , 29, 101376	7.8	9
195	High-Voltage All-Solid-State Lithium Battery with Sulfide-Based Electrolyte: Challenges for the Construction of a Bipolar Multicell Stack and How to Overcome Them. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 3162-3168	6.1	22
194	Assessing copper oxidation states of dissolved negative electrode current collectors in lithium ion batteries. <i>Electrophoresis</i> , <b>2020</b> , 41, 1568-1575	3.6	6
193	Dual-Ion Batteries: Development of Safe and Sustainable Dual-Ion Batteries Through Hybrid Aqueous/Nonaqueous Electrolytes (Adv. Energy Mater. 8/2020). <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2070033	21.8	2
192	Mn or Mn <sup>2+</sup> ? Investigating transition metal dissolution of manganese species in lithium ion battery electrolytes by capillary electrophoresis. <i>Electrophoresis</i> , <b>2020</b> , 41, 697-704	3.6	23
191	Solid-State Lithium-Sulfur Battery Enabled by Thio-LiSICON/Polymer Composite Electrolyte and Sulfurized Polyacrylonitrile Cathode. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1910123	15.6	35
190	Is the Cation Innocent? An Analytical Approach on the Cationic Decomposition Behavior of N-Butyl-N-methylpyrrolidinium Bis(trifluoromethanesulfonyl)imide in Contact with Lithium Metal. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 2389-2398	9.6	22
189	Development of a lithium ion cell enabling in situ analyses of the electrolyte using gas chromatographic techniques. <i>Electrochimica Acta</i> , <b>2020</b> , 338, 135894	6.7	8
188	Preferential occupation of Na in P3-type layered cathode material for sodium ion batteries. <i>Nano Energy</i> , <b>2020</b> , 70, 104535	17.1	12
187	Development of Safe and Sustainable Dual-Ion Batteries Through Hybrid Aqueous/Nonaqueous Electrolytes. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1902709	21.8	37
186	Clarification of Decomposition Pathways in a State-of-the-Art Lithium Ion Battery Electrolyte through C-Labeling of Electrolyte Components. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 6128-6137	16.4	37
185	Ethylene carbonate-free electrolytes for Li-ion battery: Study of the solid electrolyte interphases formed on graphite anodes. <i>Journal of Power Sources</i> , <b>2020</b> , 451, 227804	8.9	20
184	A method for quantitative analysis of gases evolving during formation applied on LiNiMnCoO <sub>2</sub>    natural graphite lithium ion battery cells using gas chromatography - barrier discharge ionization detector. <i>Journal of Chromatography A</i> , <b>2020</b> , 1622, 461122	4.5	7
183	Toward Green Battery Cells: Perspective on Materials and Technologies. <i>Small Methods</i> , <b>2020</b> , 4, 2000039	2.8	73
182	Improving the NMC111 Polymer Electrolyte Interface by Cathode Composition and Processing. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 070546	3.9	5
181	Editor's Choice Mechanistic Elucidation of Anion Intercalation into Graphite from Binary-Mixed Highly Concentrated Electrolytes via Complementary 19F MAS NMR and XRD Studies. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 140526	3.9	8

180	Approaching Electrochemical Limits of $Mg_x Cl_y z+$ Complex-Based Electrolytes for Mg Batteries by Tailoring the Solution Structure. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 160505	3.9	6
179	Tailoring Electrolyte Additives with Synergistic Functional Moieties for Silicon Negative Electrode-Based Lithium Ion Batteries: A Case Study on Lactic Acid O-Carboxyanhydride. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 173-185	9.6	16
178	Phenothiazine-Functionalized Poly(norbornene)s as High-Rate Cathode Materials for Organic Batteries. <i>ChemSusChem</i> , <b>2020</b> , 13, 2232-2238	8.3	31
177	Enabling Natural Graphite in High-Voltage Aqueous Graphite    Zn Metal Dual-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2001256	21.8	18
176	Small Groups, Big Impact: Eliminating Li Traps in Single-Ion Conducting Polymer Electrolytes. <i>IScience</i> , <b>2020</b> , 23, 101417	6.1	11
175	Propylene carbonate-nitrile solvent blends for thermally stable gel polymer lithium ion battery electrolytes. <i>Journal of Power Sources</i> , <b>2020</b> , 478, 229047	8.9	7
174	An oxo-verdazyl radical for a symmetrical non-aqueous redox flow battery. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 22280-22291	13	13
173	Impact of single vs. blended functional electrolyte additives on interphase formation and overall lithium ion battery performance. <i>Journal of Solid State Electrochemistry</i> , <b>2020</b> , 24, 3145-3156	2.6	2
172	Conventional Electrolyte and Inactive Electrode Materials in Lithium-Ion Batteries: Determining Cumulative Impact of Oxidative Decomposition at High Voltage. <i>ChemSusChem</i> , <b>2020</b> , 13, 5301-5307	8.3	15
171	Identical Materials but Different Effects of Film-Forming Electrolyte Additives in Li Ion Batteries: Performance of a Benchmark System as the Key. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 6279-6284	9.6	14
170	Analysis of Carbonate Decomposition During Solid Electrolyte Interphase Formation in Isotope-Labeled Lithium Ion Battery Electrolytes: Extending the Knowledge about Electrolyte Soluble Species. <i>Batteries and Supercaps</i> , <b>2020</b> , 3, 1183-1192	5.6	9
169	Impact of the Crystalline LiSi Phase on the Self-Discharge Mechanism of Silicon Negative Electrodes in Organic Electrolytes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 55903-55912	9.5	8
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41	Parametrisation of the influence of different cycling conditions on the capacity fade and the internal resistance increase for lithium nickel manganese cobalt oxide/graphite cells. <i>Journal of Electroanalytical Chemistry</i> , <b>2013</b> , 707, 110-116	4.1	25
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38	How Do Reactions at the Anode/Electrolyte Interface Determine the Cathode Performance in Lithium-Ion Batteries?. <i>Journal of the Electrochemical Society</i> , <b>2013</b> , 160, A542-A548	3.9	126
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31	Influence of graphite surface modifications on the ratio of basal plane to non-basal plane surface area and on the anode performance in lithium ion batteries. <i>Journal of Power Sources</i> , <b>2012</b> , 200, 83-91	8.9	115
30	Salt Diffusion Coefficients, Concentration Dependence of Cell Potentials, and Transference Numbers of Lithium Difluoromono(oxalato)borate-Based Solutions. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2011</b> , 56, 4786-4789	2.8	26
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28	Inhibition of Self-Aggregation in Ionic Liquid Electrolytes for High-Energy Electrochemical Devices. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 19431-19436	3.8	47
27	Melting Behavior of Pyrrolidinium-Based Ionic Liquids and Their Binary Mixtures. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 12364-12369	3.8	113
26	Alloying of electrodeposited silicon with lithium – principal study of applicability as anode material for lithium ion batteries. <i>Journal of Solid State Electrochemistry</i> , <b>2010</b> , 14, 2203-2207	2.6	26
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24	Into a Future of Electromobility. <i>German Research</i> , <b>2010</b> , 32, 20-24	0.1	2
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16	Recycling of Lithium-Ion Batteries: Current State of the Art, Circular Economy, and Next Generation Recycling. <i>Advanced Energy Materials</i> , 2102917	21.8	25
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13	Advanced Block Copolymer Design for Polymer Electrolytes: Prospects of Microphase Separation. <i>Macromolecules</i> ,	5.5	1
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