Stefano Passerini

List of Publications by Year
in descending order

747	52,191	813	3031
papers	citations	118 h-index	188 g-index

792	792	792	31228
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The role of graphene for electrochemical energy storage. Nature Materials, 2015, 14, 271-279.	13.3	2,237
2	A cost and resource analysis of sodium-ion batteries. Nature Reviews Materials, 2018, 3, .	23.3	1,463
3	An Overview and Future Perspectives of Aluminum Batteries. Advanced Materials, 2016, 28, 7564-7579.	11.1	650
4	Safer Electrolytes for Lithiumâ€ion Batteries: State of the Art and Perspectives. ChemSusChem, 2015, 8, 2154-2175.	3.6	641
5	Ionicâ€Liquidâ€Based Polymer Electrolytes for Battery Applications. Angewandte Chemie - International Edition, 2016, 55, 500-513.	7.2	637
6	High temperature carbonâ€“carbon supercapacitor using ionic liquid as electrolyte. Journal of Power Sources, 2007, 165, 922-927.	4.0	552
7	The Lithium/Air Battery: Still an Emerging System or a Practical Reality?. Advanced Materials, 2015, 27, 784-800.	11.1	543
8	Hard carbons for sodium-ion batteries: Structure, analysis, sustainability, and electrochemistry. Materials Today, 2019, 23, 87-104.	8.3	537
9	Ionic liquids and their solid-state analogues as materials for energy generation and storage. Nature Reviews Materials, 2016, 1, .	23.3	511
10	Transition Metal Oxide Anodes for Electrochemical Energy Storage in Lithiumâ€and Sodiumâ€ion Batteries. Advanced Energy Materials, 2020, 10, 1902485.	10.2	511
11	Recent progress and remaining challenges in sulfur-based lithium secondary batteries â€“ a review. Chemical Communications, 2013, 49, 10545.	2.2	467
12	Ionic liquids to the rescue? Overcoming the ionic conductivity limitations of polymer electrolytes. Electrochemistry Communications, 2003, 5, 1016-1020.	2.3	443
13	All-solid-state lithium-ion and lithium metal batteries â€“ paving the way to large-scale production. Journal of Power Sources, 2018, 382, 160-175.	4.0	428
14	The mechanism of HF formation in LiPF6 based organic carbonate electrolytes. Electrochemistry Communications, 2012, 14, 47-50.	2.3	401
15	Alternative binders for sustainable electrochemical energy storage â€“ the transition to aqueous electrode processing and bio-derived polymers. Energy and Environmental Science, 2018, 11, 3096-3127.	15.6	379
16	Current research trends and prospects among the various materials and designs used in lithium-based batteries. Journal of Applied Electrochemistry, 2013, 43, 481-496.	1.5	362
17	Non-Aqueous K-Ion Battery Based on Layered K_{0.3}MnO₂and Hard Carbon/Carbon Black. Journal of the Electrochemical Society, 2016, 163, A1295-A1299.	1.3	349
18	PEO-Based Polymer Electrolytes with Ionic Liquids and Their Use in Lithium Metal-Polymer Electrolyte Batteries. Journal of the Electrochemical Society, 2005, 152, A978.	1.3	327

#	Article	IF	Citations
19	Carbon Coated ZnFe₂O₄ Nanoparticles for Advanced Lithiumâ€Ion Anodes. Advanced Energy Materials, 2013, 3, 513-523.	10.2	312
20	Anatase TiO2 nanoparticles for high power sodium-ion anodes. Journal of Power Sources, 2014, 251, 379-385.	4.0	297
21	Unfolding the Mechanism of Sodium Insertion in Anatase TiO₂ Nanoparticles. Advanced Energy Materials, 2015, 5, 1401142.	10.2	293
22	Challenges and prospects of the role of solid electrolytes in the revitalization of lithium metal batteries. Journal of Materials Chemistry A, 2016, 4, 17251-17259.	5.2	293
23	ZnFe₂O₄â€C/LiFePO₄â€CNT: A Novel Highâ€Power Lithiumâ€Ion Battery with Excellent Cycling Performance. Advanced Energy Materials, 2014, 4, 1-9.	10.2	287
24	Electrodeposited ZnO/Cu2O heterojunction solar cells. Electrochimica Acta, 2008, 53, 2226-2231.	2.6	285
25	Phase Behavior of Ionic Liquidâ^'LiX Mixtures:Â Pyrrolidinium Cations and TFSI-Anions. Chemistry of Materials, 2004, 16, 2881-2885.	3.2	282
26	Two-Dimensional Titanium Carbide/RGO Composite for High-Performance Supercapacitors. ACS Applied Materials & Interfaces, 2016, 8, 15661-15667.	4.0	275
27	Reversible Intercalation of Bis(trifluoromethanesulfonyl)imide Anions from an Ionic Liquid Electrolyte into Graphite for High Performance Dual-Ion Cells. Journal of the Electrochemical Society, 2012, 159, A1755-A1765.	1.3	274
28	Challenges and Strategies for Highâ€Energy Aqueous Electrolyte Rechargeable Batteries. Angewandte Chemie - International Edition, 2021, 60, 598-616.	7.2	272
29	Electrolytes and Interphases in Sodiumâ€Based Rechargeable Batteries: Recent Advances and Perspectives. Advanced Energy Materials, 2020, 10, 2000093.	10.2	254
30	Mixtures of ionic liquid and organic carbonate as electrolyte with improved safety and performance for rechargeable lithium batteries. Electrochimica Acta, 2011, 56, 4092-4099.	2.6	252
31	Ionic liquids in supercapacitors. MRS Bulletin, 2013, 38, 554-559.	1.7	249
32	Low Cost, Environmentally Benign Binders for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2010, 157, A320.	1.3	244
33	Cobalt Disulfide Nanoparticles Embedded in Porous Carbonaceous Micro-Polyhedrons Interlinked by Carbon Nanotubes for Superior Lithium and Sodium Storage. ACS Nano, 2018, 12, 7220-7231.	7.3	234
34	Beyond Insertion for Naâ€Ion Batteries: Nanostructured Alloying and Conversion Anode Materials. Advanced Energy Materials, 2018, 8, 1702582.	10.2	231
35	Lithiumâ€and Manganeseâ€Rich Oxide Cathode Materials for Highâ€Energy Lithium Ion Batteries. Advanced Energy Materials, 2016, 6, 1600906.	10.2	230
36	Energy Storage Materials Synthesized from Ionic Liquids. Angewandte Chemie - International Edition, 2014, 53, 13342-13359.	7.2	228

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37	Life cycle assessment of sodium-ion batteries. Energy and Environmental Science, 2016, 9, 1744-1751.	15.6	224
38	Nanoscale organization in piperidinium-based room temperature ionic liquids. Journal of Chemical Physics, 2009, 130, 164521.	1.2	221
39	Enhanced thermal stability of a lithiated nano-silicon electrode by fluoroethylene carbonate and vinylene carbonate. Journal of Power Sources, 2013, 222, 140-149.	4.0	217
40	Effect of the alkyl group on the synthesis and the electrochemical properties of N-alkyl-N-methyl-pyrrolidinium bis(trifluoromethanesulfonyl)imide ionic liquids. Electrochimica Acta, 2009, 54, 1325-1332.	2.6	210
41	Impact of the electrolyte salt anion on the solid electrolyte interphase formation in sodium ion batteries. Nano Energy, 2019, 55, 327-340.	8.2	209
42	Extraordinary Performance of Carbonâ€Coated Anatase TiO₂ as Sodiumâ€Ion Anode. Advanced Energy Materials, 2016, 6, 1501489.	10.2	205
43	High Performance Na_{0.5}[Ni_{0.23}Fe_{0.13}Mn_{0.63}]O₂ Cathode for Sodiumâ€Ion Batteries. Advanced Energy Materials, 2014, 4, 1400083.	10.2	204
44	Leveraging valuable synergies by combining alloying and conversion for lithium-ion anodes. Energy and Environmental Science, 2016, 9, 3348-3367.	15.6	202
45	Appleâ€Biowasteâ€Derived Hard Carbon as a Powerful Anode Material for Naâ€Ion Batteries. ChemElectroChem, 2016, 3, 292-298.	1.7	201
46	The passivity of lithium electrodes in liquid electrolytes for secondary batteries. Nature Reviews Materials, 2021, 6, 1036-1052.	23.3	201
47	An Advanced Lithiumâ€“Air Battery Exploiting an Ionic Liquid-Based Electrolyte. Nano Letters, 2014, 14, 6572-6577.	4.5	200
48	X-ray diffraction studies of the electrochemical intercalation of bis(trifluoromethanesulfonyl)imide anions into graphite forÂdual-ion cells. Journal of Power Sources, 2013, 239, 563-571.	4.0	197
49	Raman Investigation of the Ionic Liquid N-Methyl-N-propylpyrrolidinium Bis(trifluoromethanesulfonyl)imide and Its Mixture with LiN(SO2CF3)2. Journal of Physical Chemistry A, 2005, 109, 92-96.	1.1	196
50	Synthesis of Hydrophobic Ionic Liquids for Electrochemical Applications. Journal of the Electrochemical Society, 2006, 153, A1685.	1.3	193
51	Toward Na-ion Batteriesâ€”Synthesis and Characterization of a Novel High Capacity Na Ion Intercalation Material. Chemistry of Materials, 2013, 25, 142-148.	3.2	192
52	Doped Vanadium Oxides as Host Materials for Lithium Intercalation. Journal of the Electrochemical Society, 1999, 146, 1355-1360.	1.3	190
53	Production of high-energy Li-ion batteries comprising silicon-containing anodes and insertion-type cathodes. Nature Communications, 2021, 12, 5459.	5.8	190
54	Cycling stability of a hybrid activated carbon//poly(3-methylthiophene) supercapacitor with N-butyl-N-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide ionic liquid as electrolyte. Electrochimica Acta, 2005, 50, 2233-2237.	2.6	186

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55	Perspectives of automotive battery R&D in China, Germany, Japan, and the USA. Journal of Power Sources, 2018, 382, 176-178.	4.0	184
56	Electrochemical Properties of Polyethyleneâ€‰Oxideâ€‰â€â€‰Liâ€‰[â€‰â€‰(â€‰â€‰CFâ€‰3â€‰SOâ€‰2â€‰)â€‰2â€ Electrolytes. Journal of the Electrochemical Society, 1995, 142, 2118-2121.	1.3	181
57	Synthesis and electrochemical performance of the high voltage cathode material Li[Li0.2Mn0.56Ni0.16Co0.08]O2 with improved rate capability. Journal of Power Sources, 2011, 196, 4821-4825.	4.0	181
58	Energy and environmental aspects in recycling lithium-ion batteries: Concept of Battery Identity Global Passport. Materials Today, 2020, 41, 304-315.	8.3	181
59	Use of natural binders and ionic liquid electrolytes for greener and safer lithium-ion batteries. Journal of Power Sources, 2011, 196, 2187-2194.	4.0	180
60	Hybrid electrolytes for lithium metal batteries. Journal of Power Sources, 2018, 392, 206-225.	4.0	179
61	A New Synthetic Route for Preparing LiFePO[sub 4] with Enhanced Electrochemical Performance. Journal of the Electrochemical Society, 2002, 149, A886.	1.3	178
62	NMR Investigation of Ionic Liquidâ^'LiX Mixtures:Â Pyrrolidinium Cations and TFSI-Anions. Journal of Physical Chemistry B, 2005, 109, 22814-22819.	1.2	178
63	High Surface Area â€‰Vâ€‰2â€‰Oâ€‰5 Aerogel Intercalation Electrodes. Journal of the Electrochemical Society, 1996, 143, 2099-2104.	1.3	177
64	Solid-state Li/LiFePO4 polymer electrolyte batteries incorporating an ionic liquid cycled at 40Â°C. Journal of Power Sources, 2006, 156, 560-566.	4.0	177
65	Lithium insertion in graphite from ternary ionic liquid-lithium salt electrolytesI. Electrochemical characterization of the electrolytes. Journal of Power Sources, 2009, 192, 599-605.	4.0	176
66	Investigations on novel electrolytes, solvents and SEI additives for use in lithium-ion batteries: Systematic electrochemical characterization and detailed analysis by spectroscopic methods. Progress in Solid State Chemistry, 2014, 42, 65-84.	3.9	176
67	Suppression of aluminum current collector corrosion in ionic liquid containing electrolytes. Journal of Power Sources, 2012, 214, 178-184.	4.0	169
68	Synthesis and characterization of highly conducting gel electrolytes. Electrochimica Acta, 1994, 39, 2187-2194.	2.6	167
69	Comprehensive Insights into the Reactivity of Electrolytes Based on Sodium Ions. ChemSusChem, 2016, 9, 462-471.	3.6	167
70	Physical and Electrochemical Properties ofN-Alkyl-N-methylpyrrolidinium Bis(fluorosulfonyl)imide Ionic Liquids: PY₁₃FSI and PY₁₄FSI. Journal of Physical Chemistry B, 2008, 112, 13577-13580.	1.2	166
71	Transition-Metal-Doped Zinc Oxide Nanoparticles as a New Lithium-Ion Anode Material. Chemistry of Materials, 2013, 25, 4977-4985.	3.2	165
72	Intercalation of Polyvalent Cations into V2O5Aerogels. Chemistry of Materials, 1998, 10, 682-684.	3.2	164

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73	Electrochemical double layer capacitor and lithium-ion capacitor based on carbon black. Journal of Power Sources, 2011, 196, 8836-8842.	4.0	162
74	A Comparative Study of Layered Transition Metal Oxide Cathodes for Application in Sodium-Ion Battery. ACS Applied Materials & Interfaces, 2015, 7, 5206-5212.	4.0	162
75	Water sensitivity of layered P2/P3-Na_xNi_{0.22}Co_{0.11}Mn_{0.66}O₂ cathode material. Journal of Materials Chemistry A, 2014, 2, 13415-13421.	5.2	159
76	In-Depth Interfacial Chemistry and Reactivity Focused Investigation of Lithiumâ€“Imide- and Lithiumâ€“Imidazole-Based Electrolytes. ACS Applied Materials & Interfaces, 2016, 8, 16087-16100.	4.0	159
77	Electrochemical performance of a solvent-free hybrid ceramic-polymer electrolyte based on Li 7 La 3 Zr 2 O 12 in P(EO) 15 LiTFSI. Journal of Power Sources, 2017, 353, 287-297.	4.0	159
78	UV cross-linked, lithium-conducting ternary polymer electrolytes containing ionic liquids. Journal of Power Sources, 2010, 195, 6130-6137.	4.0	157
79	Solvent-free, PYR1ATFSI ionic liquid-based ternary polymer electrolyte systems. Journal of Power Sources, 2007, 171, 861-869.	4.0	156
80	Layered Naâ€Ion Cathodes with Outstanding Performance Resulting from the Synergetic Effect of Mixed Pâ€and Oâ€Type Phases. Advanced Energy Materials, 2016, 6, 1501555.	10.2	156
81	Strategies towards enabling lithium metal in batteries: interphases and electrodes. Energy and Environmental Science, 2021, 14, 5289-5314.	15.6	156
82	Bilayered Nanostructured V₂O₅Â·nH₂O for Metal Batteries. Advanced Energy Materials, 2016, 6, 1600868.	10.2	154
83	Comparative study of imide-based Li salts as electrolyte additives for Li-ion batteries. Journal of Power Sources, 2018, 375, 43-52.	4.0	154
84	The role of conductive polymers in advanced electrochemical technology. Electrochimica Acta, 1994, 39, 255-263.	2.6	150
85	Chemicalâ€“physical properties of bis(perfluoroalkylsulfonyl)imide-based ionic liquids. Electrochimica Acta, 2011, 56, 1300-1307.	2.6	149
86	Influence of graphite surface modifications on the ratio of basal plane to â€œnon-basal planeâ€•surface area and on the anode performance in lithium ion batteries. Journal of Power Sources, 2012, 200, 83-91.	4.0	147
87	Enabling aqueous binders for lithium battery cathodes â€“ Carbon coating of aluminum current collector. Journal of Power Sources, 2014, 248, 1000-1006.	4.0	144
88	A sodium-ion battery exploiting layered oxide cathode, graphite anode and glyme-based electrolyte. Journal of Power Sources, 2016, 310, 26-31.	4.0	144
89	Mechanism of Anodic Dissolution of the Aluminum Current Collector in 1 M LiTFSI EC:DEC 3:7 in Rechargeable Lithium Batteries. Journal of the Electrochemical Society, 2013, 160, A356-A360.	1.3	143
90	How Do Reactions at the Anode/Electrolyte Interface Determine the Cathode Performance in Lithium-Ion Batteries?. Journal of the Electrochemical Society, 2013, 160, A542-A548.	1.3	143

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91	The Role of Cation Vacancies in Electrode Materials for Enhanced Electrochemical Energy Storage: Synthesis, Advanced Characterization, and Fundamentals. Advanced Energy Materials, 2020, 10, 1903780.	10.2	138
92	Investigation on the Stability of the Lithium-Polymer Electrolyte Interface. Journal of the Electrochemical Society, 2000, 147, 4448.	1.3	136
93	Electrochemical and Physicochemical Properties of PY[sub 14]FSI-Based Electrolytes with LiFSI. Journal of the Electrochemical Society, 2009, 156, A891.	1.3	136
94	Electrolyte Solvation and Ionic Association III. Acetonitrile-Lithium Salt Mixturesâ€“Transport Properties. Journal of the Electrochemical Society, 2013, 160, A1061-A1070.	1.3	136
95	Exceptional long-life performance of lithium-ion batteries using ionic liquid-based electrolytes. Energy and Environmental Science, 2016, 9, 3210-3220.	15.6	136
96	Molecular Environment and Enhanced Diffusivity of Li⁺ Ions in Lithium-Salt-Doped Ionic Liquid Electrolytes. Journal of Physical Chemistry Letters, 2011, 2, 153-157.	2.1	134
97	A Thin and Uniform Fluoride-Based Artificial Interphase for the Zinc Metal Anode Enabling Reversible Zn/MnO₂ Batteries. ACS Energy Letters, 2021, 6, 3063-3071.	8.8	134
98	An Elegant Fix for Polymer Electrolytes. Electrochemical and Solid-State Letters, 2005, 8, A125.	2.2	133
99	Ion chromatographic determination of hydrolysis products of hexafluorophosphate salts in aqueous solution. Analytica Chimica Acta, 2012, 714, 121-126.	2.6	133
100	Development of safe, green and high performance ionic liquids-based batteries (ILLIBATT project). Journal of Power Sources, 2011, 196, 9719-9730.	4.0	132
101	Critical Insight into the Relentless Progression Toward Graphene and Grapheneâ€Containing Materials for Lithiumâ€Ion Battery Anodes. Advanced Materials, 2017, 29, 1603421.	11.1	132
102	Lithium ion insertion in porous metal oxides. Electrochimica Acta, 1999, 45, 215-224.	2.6	131
103	Decoupling segmental relaxation and ionic conductivity for lithium-ion polymer electrolytes. Molecular Systems Design and Engineering, 2019, 4, 779-792.	1.7	129
104	On the cycling stability of lithium-ion capacitors containing soft carbon as anodic material. Journal of Power Sources, 2013, 238, 388-394.	4.0	128
105	Interface Investigations of a Commercial Lithium Ion Battery Graphite Anode Material by Sputter Depth Profile X-ray Photoelectron Spectroscopy. Langmuir, 2013, 29, 5806-5816.	1.6	127
106	Side by Side Battery Technologies with Lithiumâ€Ion Based Batteries. Advanced Energy Materials, 2020, 10, 2000089.	10.2	127
107	Natural cellulose as binder for lithium battery electrodes. Journal of Power Sources, 2012, 199, 331-335.	4.0	126
108	Operando pH Measurements Decipher H⁺/Zn²⁺ Intercalation Chemistry in High-Performance Aqueous Zn/Î´-V₂O₅ Batteries. ACS Energy Letters, 2020, 5, 2979-2986.	8.8	126

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109	Unexpected performance of layered sodium-ion cathode material inÂionic liquid-based electrolyte. Journal of Power Sources, 2014, 247, 377-383.	4.0	125
110	Pectin, Hemicellulose, or Lignin? Impact of the Biowaste Source on the Performance of Hard Carbons for Sodiumâ€Ion Batteries. ChemSusChem, 2017, 10, 2668-2676.	3.6	125
111	Development of an all-solid-state lithium battery by slurry-coating procedures using a sulfidic electrolyte. Energy Storage Materials, 2019, 17, 204-210.	9.5	125
112	Investigation of thermal aging and hydrolysis mechanisms inÂcommercial lithium ion battery electrolyte. Journal of Power Sources, 2013, 242, 832-837.	4.0	124
113	Puzzling out the origin of the electrochemical activity of black P as a negative electrode material for lithium-ion batteries. Journal of Materials Chemistry A, 2013, 1, 5293.	5.2	124
114	Dendrite Growth in Mg Metal Cells Containing Mg(TFSI)₂/Glyme Electrolytes. Journal of the Electrochemical Society, 2018, 165, A1983-A1990.	1.3	124
115	From Solidâ€Solution Electrodes and the Rockingâ€Chair Concept to Today's Batteries. Angewandte Chemie - International Edition, 2020, 59, 534-538.	7.2	124
116	Melting Behavior of Pyrrolidinium-Based Ionic Liquids and Their Binary Mixtures. Journal of Physical Chemistry C, 2010, 114, 12364-12369.	1.5	122
117	Recent developments in the ENEA lithium metal battery project. Electrochimica Acta, 2005, 50, 3859-3865.	2.6	121
118	Phase Behavior of Ionic Liquidâ€“LiX Mixtures: Pyrrolidinium Cations and TFSI^{â€“} Anions â€“ Linking Structure to Transport Properties. Chemistry of Materials, 2011, 23, 4331-4337.	3.2	121
119	Complex Nature of Ionic Coordination in Magnesium Ionic Liquid-Based Electrolytes: Solvates with Mobile Mg²⁺ Cations. Journal of Physical Chemistry C, 2014, 118, 9966-9973.	1.5	121
120	Lithium insertion in graphite from ternary ionic liquidâ€“lithium salt electrolytes: II. Evaluation of specific capacity and cycling efficiency and stability at room temperature. Journal of Power Sources, 2009, 192, 606-611.	4.0	120
121	Development of ionic liquid-based lithium battery prototypes. Journal of Power Sources, 2012, 199, 239-246.	4.0	119
122	Ionic Liquid Electrolytes for Safer Lithium Batteries. Journal of the Electrochemical Society, 2017, 164, A6026-A6031.	1.3	118
123	Characterization of Solvent-Free Polymer Electrolytes Consisting of Ternary PEOâ€“LiTFSIâ€“PYR[sub 14]â€,TFSI. Journal of the Electrochemical Society, 2006, 153, A1649.	1.3	117
124	Dependency of Aluminum Collector Corrosion in Lithium Ion Batteries on the Electrolyte Solvent. ECS Electrochemistry Letters, 2012, 1, C9-C11.	1.9	117
125	PEO-LiN(SO[sub 2]CF[sub 2]CF[sub 3])[sub 2] Polymer Electrolytes: I. XRD, DSC, and Ionic Conductivity Characterization. Journal of the Electrochemical Society, 2001, 148, A1171.	1.3	115
126	Internal and External Temperature Monitoring of a Li-Ion Battery with Fiber Bragg Grating Sensors. Sensors, 2016, 16, 1394.	2.1	114

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127	Insights into the reversibility of aluminum graphite batteries. Journal of Materials Chemistry A, 2017, 5, 9682-9690.	5.2	112
128	Calcium vanadate sub-microfibers as highly reversible host cathode material for aqueous zinc-ion batteries. Chemical Communications, 2019, 55, 2265-2268.	2.2	111
129	Internal strain and temperature discrimination with optical fiber hybrid sensors in Li-ion batteries. Journal of Power Sources, 2019, 410-411, 1-9.	4.0	110
130	Ionic liquids as tailored media for the synthesis and processing of energy conversion materials. Energy and Environmental Science, 2016, 9, 49-61.	15.6	109
131	Singleâ€Ion Conducting Electrolyte Based on Electrospun Nanofibers for Highâ€Performance Lithium Batteries. Advanced Energy Materials, 2019, 9, 1803422.	10.2	109
132	Bringing forward the development of battery cells for automotive applications: Perspective of R&D activities in China, Japan, the EU and the USA. Journal of Power Sources, 2020, 459, 228073.	4.0	109
133	In Situ Xâ€Ray Absorption Spectroscopy Characterization of â€‰Vâ€‰2â€‰Oâ€‰5 Xerogel Cathodes upon Lithium Intercalation. Journal of the Electrochemical Society, 1999, 146, 2387-2392.	1.3	108
134	Dual-ion Cells Based on Anion Intercalation into Graphite from Ionic Liquid-Based Electrolytes. Zeitschrift Fur Physikalische Chemie, 2012, 226, 391-407.	1.4	108
135	Nanocrystalline TiO₂(B) as Anode Material for Sodium-Ion Batteries. Journal of the Electrochemical Society, 2015, 162, A3052-A3058.	1.3	108
136	Mg-doping for improved long-term cyclability of layered Na-ion cathode materials â€“ The example of P2-type NaxMg0.11Mn0.89O2. Journal of Power Sources, 2015, 282, 581-585.	4.0	108
137	Toward high energy density cathode materials for sodium-ion batteries: investigating the beneficial effect of aluminum doping on the P2-type structure. Journal of Materials Chemistry A, 2017, 5, 4467-4477.	5.2	108
138	Non-aqueous potassium-ion batteries: a review. Current Opinion in Electrochemistry, 2018, 9, 41-48.	2.5	108
139	Superior Lithium Storage Capacity of Î±â€MnS Nanoparticles Embedded in Sâ€Doped Carbonaceous Mesoporous Frameworks. Advanced Energy Materials, 2019, 9, 1902077.	10.2	108
140	Aerogels and Xerogels of â€‰Vâ€‰2â€‰Oâ€‰5 as Intercalation Hosts. Journal of the Electrochemical Society, 1995, 142, L102-L103.	1.3	106
141	The role of the cation aliphatic side chain length in piperidinium bis(trifluoromethansulfonyl)imide ionic liquids. Electrochimica Acta, 2011, 57, 153-159.	2.6	106
142	High flash point electrolyte for use in lithium-ion batteries. Electrochimica Acta, 2011, 56, 7530-7535.	2.6	105
143	Investigations on cellulose-based high voltage composite cathodes for lithium ion batteries. Journal of Power Sources, 2011, 196, 7687-7691.	4.0	105
144	Hysteresis Effects in the Potential-Dependent Double Layer Capacitance of Room Temperature Ionic Liquids at a Polycrystalline Platinum Interface. Journal of Physical Chemistry C, 2010, 114, 3614-3617.	1.5	104

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145	Performance of LiNi1/3Mn1/3Co1/3O2/graphite batteries based on aqueous binder. Journal of Power Sources, 2014, 248, 915-922.	4.0	104
146	Overview of energy/hydrogen storage: state-of-the-art of the technologies and prospects for nanomaterials. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 108, 2-8.	1.7	103
147	Room temperature lithium polymer batteries based on ionic liquids. Journal of Power Sources, 2011, 196, 6703-6709.	4.0	103
148	ZnO/ZnFe2O4/N-doped C micro-polyhedrons with hierarchical hollow structure as high-performance anodes for lithium-ion batteries. Nano Energy, 2017, 42, 341-352.	8.2	103
149	Structural Organization and Transport Properties of Novel Pyrrolidinium-Based Ionic Liquids with Perfluoroalkyl Sulfonylimide Anions. Journal of Physical Chemistry B, 2009, 113, 10750-10759.	1.2	102
150	Room temperature ionic liquid (RTIL)-based electrolyte cocktails for safe, high working potential Li-based polymer batteries. Journal of Power Sources, 2019, 412, 398-407.	4.0	100
151	Fe-doped SnO2 nanoparticles as new high capacity anode material for secondary lithium-ion batteries. Journal of Power Sources, 2015, 299, 398-402.	4.0	99
152	Manganese phosphate coated Li[Ni0.6Co0.2Mn0.2]O2 cathode material: Towards superior cycling stability at elevated temperature and high voltage. Journal of Power Sources, 2018, 402, 263-271.	4.0	99
153	Ionic mobility in ternary polymer electrolytes for lithium-ion batteries. Electrochimica Acta, 2012, 86, 330-338.	2.6	95
154	Characteristics of an ionic liquid electrolyte for sodium-ion batteries. Journal of Power Sources, 2016, 303, 203-207.	4.0	95
155	An electrochemical study of oxygen reduction in pyrrolidinium-based ionic liquids for lithium/oxygen batteries. Electrochimica Acta, 2012, 83, 94-104.	2.6	93
156	Homogeneous Lithium Electrodeposition with Pyrrolidinium-Based Ionic Liquid Electrolytes. ACS Applied Materials & Interfaces, 2015, 7, 5950-5958.	4.0	92
157	Natural, cheap and environmentally friendly binder for supercapacitors. Journal of Power Sources, 2013, 221, 14-20.	4.0	91
158	Thermal and electrochemical properties of PEO-LiTFSI-Pyr14TFSI-based composite cathodes, incorporating 4ÂV-class cathode active materials. Journal of Power Sources, 2014, 246, 846-857.	4.0	91
159	The Intercalation of Lithium in Nickel Oxide and Its Electrochromic Properties. Journal of the Electrochemical Society, 1990, 137, 3297-3300.	1.3	90
160	Beneficial influence of succinic anhydride as electrolyte additive on the self-discharge of 5ÂV LiNi0.4Mn1.6O4 cathodes. Journal of Power Sources, 2013, 236, 39-46.	4.0	90
161	Fluorineâ€Free Waterâ€inâ€Salt Electrolyte for Green and Lowâ€Cost Aqueous Sodiumâ€Ion Batteries. ChemSusChem, 2018, 11, 3704-3707.	3.6	90
162	High Capacity Allâ€Solidâ€State Lithium Batteries Enabled by Pyriteâ€Sulfur Composites. Advanced Energy Materials, 2018, 8, 1801462.	10.2	89

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718	Comprehensive Investigation on the Thermal Stability, Biodegradability and Fire-Induced Hazards of Pyrrolidinium-Based Ionic Liquids. ECS Meeting Abstracts, 2017, , .	0.0	0
719	Influence of Electrolyte Additives and Formation Step Protocol on the Cycling Performance of Half and Full Li-Ion Cells. ECS Meeting Abstracts, 2017, , .	0.0	0
720	(Keynote) Ionic Liquid-Based Electrolytes for Alkali Metal Batteries. ECS Meeting Abstracts, 2017, , .	0.0	0

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722	(Invited) Ion Clusters and Li Transport in [Pyr12O1][FTFSI] Ionic Liquid-Based Electrolytes. ECS Meeting Abstracts, 2018, , .	0.0	0
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730	Elucidating the Interfacial Reactions for Conversion-Alloying Materials Towards the Realization of High-Performance Lithium-Ion Full-Cells. ECS Meeting Abstracts, 2020, MA2020-01, 449-449.	0.0	0
731	High Mass Loading Copper Sulfide Based Composite Cathodes for All-Solid-State Lithium Sulfur Batteries Enables High Volumetric Capacity. ECS Meeting Abstracts, 2020, MA2020-01, 558-558.	0.0	0
732	Ultra-Stable Performance of Ni-Rich Layered Oxide Cathodes for Lithium-Ion Batteries Using Ionic Liquid Electrolyte. ECS Meeting Abstracts, 2020, MA2020-01, 219-219.	0.0	0
733	Acetate-Based Water-in-Salt Electrolyte for Aqueous Sodium-Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 568-568.	0.0	0
734	(Invited) Reducing Capacity and Voltage Decay of Co-Free Positive Electrode Materials for Lithium Batteries. ECS Meeting Abstracts, 2021, MA2021-02, 219-219.	0.0	0
735	Mechanistic Insights into the De-/Lithiation of Iron-Doped Zinc Oxide: From Fundamental Understanding to Practical Considerations. ECS Meeting Abstracts, 2020, MA2020-02, 245-245.	0.0	0
736	(Invited) Mechanistic Study of Sodium Insertion into Bio-Waste Derived Hard Carbon Anode for Sodium-Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 5-5.	0.0	0
737	Germanium Oxide Negative Electrodes - Tuning Synthesis Conditions Towards High-Energy and High-Power Lithium-Ion Cells. ECS Meeting Abstracts, 2020, MA2020-02, 249-249.	0.0	0
738	High-Performance Lithium-Ion Negative Electrodes Based on Silicon Nanowires/Graphite Composites. ECS Meeting Abstracts, 2020, MA2020-02, 248-248.	0.0	0

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739	(Invited) Tailored Design of Polymer Electrolytes for Advanced High-Capacity and High-Voltage Lithium Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 843-843.	0.0	0
740	(Battery Division Student Research Award Sponsored by Mercedes-Benz Research & Development) Sustainable High-Performance Lithium-Ion Batteries: Aqueous Processing of Cobalt-Free High-Energy Cathodes. ECS Meeting Abstracts, 2020, MA2020-02, 8-8.	0.0	0
741	Reactivity of LiNi0.5Mn1.5O4 in (Acidic) Water and Impact on the Electrochemical Performance. ECS Meeting Abstracts, 2021, MA2021-02, 353-353.	0.0	0
742	Tuning Polybenzimidazole Membrane by Immobilizing a Novel Ionic Liquid with Superior Oxygen Reduction Reaction Kinetics. Chemistry of Materials, 2022, 34, 4298-4310.	3.2	0
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746	Advanced Balancing of Next-Generation Lithium-Ion Batteries: Prelithiation of a-Silicon Nanowires Using Excess Lithium Positive Electrodes. ECS Meeting Abstracts, 2022, MA2022-01, 2434-2434.	0.0	0
747	Polysiloxane-Based Single-Ion Conducting Polymer Electrolyte for High-Performance Liâ€–NMC₈₁₁ Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 326-326.	0.0	0