Daniel Brandell

List of Publications by Year
in descending order

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202 papers	8,303 citations	57631 44 h-index	64668 79 g-index
211 all docs	211 docs citations	211 times ranked	7506 citing authors

#	Article	IF	Citations
1	Beyond PEOâ€”Alternative host materials for Li + -conducting solid polymer electrolytes. Progress in Polymer Science, 2018, 81, 114-143.	11.8	744
2	Interface layer formation in solid polymer electrolyte lithium batteries: an XPS study. Journal of Materials Chemistry A, 2014, 2, 7256-7264.	5.2	296
3	Solubility of the Solid Electrolyte Interphase (SEI) in Sodium Ion Batteries. ACS Energy Letters, 2016, 1, 1173-1178.	8.8	269
4	3D lithium ion batteriesâ€”from fundamentals to fabrication. Journal of Materials Chemistry, 2011, 21, 9876.	6.7	231
5	Boosting Rechargeable Batteries R&D by Multiscale Modeling: Myth or Reality?. Chemical Reviews, 2019, 119, 4569-4627.	23.0	204
6	Polycarbonate-based solid polymer electrolytes for Li-ion batteries. Solid State Ionics, 2014, 262, 738-742.	1.3	199
7	High-performance solid polymer electrolytes for lithium batteries operational at ambient temperature. Journal of Power Sources, 2015, 298, 166-170.	4.0	196
8	A perspective on organic electrode materials and technologies for next generation batteries. Journal of Power Sources, 2021, 482, 228814.	4.0	140
9	Ion transport in polycarbonate based solid polymer electrolytes: experimental and computational investigations. Physical Chemistry Chemical Physics, 2016, 18, 9504-9513.	1.3	129
10	Molecular dynamics studies of the NafionÂ®, DowÂ® and AciplexÂ® fuel-cell polymer membrane systems. Journal of Molecular Modeling, 2007, 13, 1039-1046.	0.8	113
11	Superlithiation of Organic Electrode Materials: The Case of Dilithium Benzenedipropiolate. Chemistry of Materials, 2016, 28, 1920-1926.	3.2	109
12	Functional, water-soluble binders for improved capacity and stability of lithiumâ€“sulfur batteries. Journal of Power Sources, 2014, 264, 8-14.	4.0	108
13	Copolymers of trimethylene carbonate and Îµ-caprolactone asÂelectrolytes for lithium-ion batteries. Polymer, 2015, 63, 91-98.	1.8	102
14	At the polymer electrolyte interfaces: the role of the polymer host in interphase layer formation in Li-batteries. Journal of Materials Chemistry A, 2015, 3, 13994-14000.	5.2	101
15	Understanding the Electrochemical Stability Window of Polymer Electrolytes in Solid-State Batteries from Atomic-Scale Modeling: The Role of Li-Ion Salts. Chemistry of Materials, 2020, 32, 7237-7246.	3.2	101
16	Why PEO as a binder or polymer coating increases capacity in the Liâ€“S system. Chemical Communications, 2013, 49, 8531.	2.2	98
17	Molecular Dynamics Modeling of Proton Transport in Nafion and Hyflon Nanostructures. Journal of Physical Chemistry B, 2010, 114, 6056-6064.	1.2	95
18	Porosity Blocking in Highly Porous Carbon Black by PVdF Binder and Its Implications for the Liâ€“S System. Journal of Physical Chemistry C, 2014, 118, 25890-25898.	1.5	95

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19	Improving the electrochemical performance of organic Li-ion battery electrodes. Chemical Communications, 2013, 49, 1945.	2.2	85
20	NafionÂ®â€“polybenzimidazole (PBI) composite membranes for DMFC applications. Solid State Ionics, 2007, 178, 581-585.	1.3	84
21	Realization of high performance polycarbonate-based Li polymer batteries. Electrochemistry Communications, 2015, 52, 71-74.	2.3	84
22	Sodiumâ€Ion Battery Electrolytes: Modeling and Simulations. Advanced Energy Materials, 2018, 8, 1703036.	10.2	83
23	Recent advances in lithium-sulfur batteries using biomass-derived carbons as sulfur host. Renewable and Sustainable Energy Reviews, 2022, 154, 111783.	8.2	83
24	The Liâ€“S battery: an investigation of redox shuttle and self-discharge behaviour with LiNO₃-containing electrolytes. RSC Advances, 2016, 6, 3632-3641.	1.7	80
25	Polymer-ionic liquid ternary systems for Li-battery electrolytes: Molecular dynamics studies of LiTFSI in a EMIm-TFSI and PEO blend. Journal of Chemical Physics, 2015, 143, 024904.	1.2	78
26	Assessing structure and stability of polymer/lithium-metal interfaces from first-principles calculations. Journal of Materials Chemistry A, 2019, 7, 8394-8404.	5.2	77
27	Initial Steps in PEO Decomposition on a Li Metal Electrode. Journal of Physical Chemistry C, 2019, 123, 22851-22857.	1.5	70
28	Modelling electrode material utilization in the trench model 3D-microbattery by finite element analysis. Journal of Power Sources, 2010, 195, 6218-6224.	4.0	69
29	LiTDI: A Highly Efficient Additive for Electrolyte Stabilization in Lithium-Ion Batteries. Chemistry of Materials, 2017, 29, 2254-2263.	3.2	69
30	How the Negative Electrode Influences Interfacial and Electrochemical Properties of LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂Cathodes in Li-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A3054-A3059.	1.3	67
31	Understanding the Capacity Loss in LiNi_{0.5}Mn_{1.5}O₄â€“Li₄Ti₅O₁₂ Lithium-Ion Cells at Ambient and Elevated Temperatures. Journal of Physical Chemistry C, 2018, 122, 11234-11248.	1.5	67
32	Sustainable Materials for Sustainable Energy Storage: Organic Na Electrodes. Materials, 2016, 9, 142.	1.3	65
33	Stability of organic Na-ion battery electrode materials: The case of disodium pyromellitic diimidate. Electrochemistry Communications, 2014, 45, 52-55.	2.3	60
34	Electrochemical-mechanical modeling of solid polymer electrolytes: Impact of mechanical stresses on Li-ion battery performance. Electrochimica Acta, 2019, 296, 1122-1141.	2.6	57
35	Waterâ€Soluble Binders for Lithiumâ€Ion Battery Graphite Electrodes: Slurry Rheology, Coating Adhesion, and Electrochemical Performance. Energy Technology, 2017, 5, 2108-2118.	1.8	56
36	Molecular dynamics simulation of the crystalline short-chain polymer system LiPF6Â·PEO6(Mwâˆ¼ 1000). Journal of Materials Chemistry, 2005, 15, 4338.	6.7	55

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37	Electrodeposition as a Tool for 3D Microbattery Fabrication. Electrochemical Society Interface, 2011, 20, 41-46.	0.3	55
38	Benzenediacrylates as organic battery electrode materials: Na versus Li. RSC Advances, 2014, 4, 38004-38011.	1.7	55
39	Allyl ethers as combined plasticizing and crosslinkable side groups in polycarbonateâ€based polymer electrolytes for solidâ€state Li batteries. Journal of Polymer Science Part A, 2016, 54, 2128-2135.	2.5	55
40	Influence of inactive electrode components on degradation phenomena in nano-Si electrodes for Li-ion batteries. Journal of Power Sources, 2016, 325, 513-524.	4.0	54
41	Polycarbonates as alternative electrolyte host materials for solid-state sodium batteries. Electrochemistry Communications, 2017, 77, 58-61.	2.3	54
42	High-Performance Light-Emitting Electrochemical Cells by Electrolyte Design. Chemistry of Materials, 2016, 28, 2618-2623.	3.2	50
43	Modelling the Polymer Electrolyte/Li-Metal Interface by Molecular Dynamics simulations. Electrochimica Acta, 2017, 234, 43-51.	2.6	50
44	Surface Layer Evolution on Graphite During Electrochemical Sodium-tetraglyme Co-intercalation. ACS Applied Materials & Interfaces, 2017, 9, 12373-12381.	4.0	49
45	Unraveling and Mitigating the Storage Instability of Fluoroethylene Carbonate-Containing LiPF₆ Electrolytes To Stabilize Lithium Metal Anodes for High-Temperature Rechargeable Batteries. ACS Applied Energy Materials, 2019, 2, 4925-4935.	2.5	49
46	A stable graphite negative electrode for the lithiumâ€“sulfur battery. Chemical Communications, 2015, 51, 17100-17103.	2.2	48
47	Environmentallyâ€Friendly Lithium Recycling From a Spent Organic Liâ€Ion Battery. ChemSusChem, 2014, 7, 2859-2867.	3.6	47
48	Nature of the Cathodeâ€“Electrolyte Interface in Highly Concentrated Electrolytes Used in Graphite Dual-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 3867-3880.	4.0	47
49	Effects of nanoparticle addition to poly(Îµ-caprolactone) electrolytes: Crystallinity, conductivity and ambient temperature battery cycling. Electrochimica Acta, 2019, 300, 489-496.	2.6	45
50	Towards room temperature operation of all-solid-state Na-ion batteries through polyesterâ€“polycarbonate-based polymer electrolytes. Energy Storage Materials, 2019, 19, 31-38.	9.5	45
51	Manganese in the SEI Layer of Li₄Ti₅O₁₂ Studied by Combined NEXAFS and HAXPES Techniques. Journal of Physical Chemistry C, 2016, 120, 3206-3213.	1.5	44
52	Molecular dynamics simulation of the LiPF6Â·PEO6structure. Journal of Materials Chemistry, 2005, 15, 1422-1428.	6.7	43
53	Finite element modelling of ion transport in the electrolyte of a 3D-microbattery. Solid State Ionics, 2011, 192, 279-283.	1.3	43
54	Functional binders as graphite exfoliation suppressants in aggressive electrolytes for lithium-ion batteries. Electrochimica Acta, 2015, 175, 141-150.	2.6	43

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55	Depth profiling the solid electrolyte interphase on lithium titanate (Li4Ti5O12) using synchrotron-based photoelectron spectroscopy. Journal of Power Sources, 2015, 294, 173-179.	4.0	43
56	Simultaneous Monitoring of Crystalline Active Materials and Resistance Evolution in Lithiumâ€“Sulfur Batteries. Journal of the American Chemical Society, 2020, 142, 1449-1456.	6.6	42
57	Restricted Ion Transport by Plasticizing Side Chains in Polycarbonate-Based Solid Electrolytes. Macromolecules, 2020, 53, 764-774.	2.2	42
58	Bridging physics-based and equivalent circuit models for lithium-ion batteries. Electrochimica Acta, 2021, 372, 137829.	2.6	42
59	Critical evaluation of the stability of highly concentrated LiTFSI - Acetonitrile electrolytes vs. graphite, lithium metal and LiFePO4 electrodes. Journal of Power Sources, 2018, 384, 334-341.	4.0	41
60	Understanding the redox process upon electrochemical cycling of the P2-Na0.78Co1/2Mn1/3Ni1/6O2 electrode material for sodium-ion batteries. Communications Chemistry, 2020, 3, .	2.0	41
61	Electrode reactions in Cuâ€“Pt coated ionic polymer actuators. Sensors and Actuators B: Chemical, 2008, 131, 340-346.	4.0	40
62	Identifying Key Properties of Electrolytes for Light-Emitting Electrochemical Cells. Chemistry of Materials, 2014, 26, 5083-5088.	3.2	40
63	A Robust, Waterâ€Based, Functional Binder Framework for Highâ€Energy Lithiumâ€“Sulfur Batteries. ChemSusChem, 2017, 10, 2758-2766.	3.6	40
64	Îµ-Caprolactone-based solid polymer electrolytes for lithium-ion batteries: synthesis, electrochemical characterization and mechanical stabilization by block copolymerization. RSC Advances, 2018, 8, 16716-16725.	1.7	40
65	Polymer-based hybrid battery electrolytes: theoretical insights, recent advances and challenges. Journal of Materials Chemistry A, 2021, 9, 6050-6069.	5.2	40
66	Cation Ordering and Oxygen Release in LiNi_{0.5â€“x}Mn_{1.5+x}O_{4â€“y} (LNMO): In Situ Neutron Diffraction and Performance in Li Ion Full Cells. ACS Applied Energy Materials, 2019, 2, 3323-3335.	2.5	39
67	Facile stitching of graphene oxide nanosheets with ethylenediamine as three dimensional anode material for lithium-ion battery. Journal of Alloys and Compounds, 2020, 818, 152912.	2.8	39
68	Transference Number in Polymer Electrolytes: Mind the Reference-Frame Gap. Journal of the American Chemical Society, 2022, 144, 7583-7587.	6.6	39
69	Evolution of the solid electrolyte interphase on tin phosphide anodes in sodium ion batteries probed by hard x-ray photoelectron spectroscopy. Electrochimica Acta, 2017, 245, 696-704.	2.6	38
70	Electrochemical elaboration of electrodes and electrolytes for 3D structured batteries. Journal of Materials Chemistry A, 2013, 1, 9281.	5.2	37
71	Graft copolymer electrolytes for high temperature Li-battery applications, using poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf bis(trifluoromethanesulfonimide). Electrochimica Acta, 2015, 175, 96-103.	2.6	37
72	Effects of Solvent Polarity on Li-ion Diffusion in Polymer Electrolytes: An All-Atom Molecular Dynamics Study with Charge Scaling. Journal of Physical Chemistry B, 2020, 124, 8124-8131.	1.2	35

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73	Elimination of Fluorination: The Influence of Fluorine-Free Electrolytes on the Performance of LiNi_{1/3}Mn_{1/3}Co_{1/3}O₂/Siliconâ€“Graphite Li-Ion Battery Cells. ACS Sustainable Chemistry and Engineering, 2020, 8, 10041-10052.	3.2	35
74	Intercalation and conversion reactions in Ni0.5TiOPO4 Li-ion battery anode materials. Journal of Power Sources, 2013, 229, 265-271.	4.0	34
75	Electrochemical-mechanical modeling of solid polymer electrolytes: Stress development and non-uniform electric current density in trench geometry microbatteries. Electrochimica Acta, 2019, 296, 1142-1162.	2.6	34
76	Poly(ether amine) and cross-linked poly(propylene oxide) diacrylate thin-film polymer electrolyte for 3D-microbatteries. Electrochemistry Communications, 2010, 12, 1498-1500.	2.3	33
77	Probing the interfacial chemistry of solid-state lithium batteries. Solid State Ionics, 2019, 343, 115068.	1.3	33
78	How Mn/Ni Ordering Controls Electrochemical Performance in High-Voltage Spinel LiNi_{0.44}Mn_{1.56}O₄ with Fixed Oxygen Content. ACS Applied Energy Materials, 2020, 3, 6001-6013.	2.5	33
79	Modelling capacity fade in silicon-graphite composite electrodes for lithium-ion batteries. Electrochimica Acta, 2021, 377, 138067.	2.6	33
80	A Molecular Dynamics study of the influence of side-chain length and spacing on lithium mobility in non-crystalline LiPF6Â·PEOx; x=10 and 30. Solid State Ionics, 2009, 180, 1272-1284.	1.3	32
81	Degradation Mechanisms in Li₂VO₂F Li-Rich Disordered Rock-Salt Cathodes. Chemistry of Materials, 2019, 31, 6084-6096.	3.2	31
82	Analyzing and mitigating battery ageing by self-heating through a coupled thermal-electrochemical model of cylindrical Li-ion cells. Journal of Energy Storage, 2021, 39, 102648.	3.9	31
83	Synthesis of high molecular flexibility polycarbonates for solid polymer electrolytes. Electrochimica Acta, 2015, 175, 247-253.	2.6	30
84	Electrolyte decomposition on Li-metal surfaces from first-principles theory. Journal of Chemical Physics, 2016, 145, 204701.	1.2	30
85	Investigating the Interfacial Chemistry of Organic Electrodes in Li- and Na-Ion Batteries. Chemistry of Materials, 2016, 28, 8742-8751.	3.2	30
86	Stable Cycling of Sodium Metal All-Solid-State Batteries with Polycarbonate-Based Polymer Electrolytes. ACS Applied Polymer Materials, 2019, 1, 825-832.	2.0	30
87	Influence of Binder Crystallinity on the Performance of Si Electrodes with Poly(vinyl alcohol) Binders. ACS Applied Energy Materials, 2021, 4, 3008-3016.	2.5	30
88	Branched polyethylene/poly(ethylene oxide) as a host matrix for Li-ion battery electrolytes: A molecular dynamics study. Electrochimica Acta, 2011, 57, 228-236.	2.6	29
89	Modelling polymer electrolytes for 3D-microbatteries using finite element analysis. Electrochimica Acta, 2011, 57, 237-243.	2.6	29
90	Optimizing the electrochemical performance of water-soluble organic Liâ€“ion battery electrodes. Electrochemistry Communications, 2013, 34, 174-176.	2.3	29

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91	Solid polymer electrolyte coating from a bifunctional monomer for three-dimensional microbattery applications. Journal of Power Sources, 2013, 238, 435-441.	4.0	29
92	Density Functional Theory Modeling the Interfacial Chemistry of the LiNO₃ Additive for Lithiumâ€“Sulfur Batteries by Means of Simulated Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 23324-23332.	1.5	27
93	Visualising the problems with balancing lithiumâ€“sulfur batteries by â€œmappingâ€•internal resistance. Chemical Communications, 2015, 51, 16502-16505.	2.2	26
94	Li-ion batteries using electrolytes based on mixtures of poly(vinyl alcohol) and lithium bis(triflouromethane) sulfonamide salt. Electrochimica Acta, 2017, 246, 208-212.	2.6	25
95	The Effect of the Fluoroethylene Carbonate Additive in LiNi_{0.5}Mn_{1.5}O₄-Li₄Ti₅O₁₂Lithium-Ion Cells. Journal of the Electrochemical Society, 2017, 164, A942-A948.	1.3	25
96	Toward Solid-State 3D-Microbatteries Using Functionalized Polycarbonate-Based Polymer Electrolytes. ACS Applied Materials & Interfaces, 2018, 10, 2407-2413.	4.0	25
97	Interactions and Transport in Highly Concentrated LiTFSIâ€based Electrolytes. ChemPhysChem, 2020, 21, 1166-1176.	1.0	25
98	Poly(benzyl methacrylate)-poly[(oligo ethylene glycol) methyl ether methacrylate] triblock-copolymers as solid electrolyte for lithium batteries. Solid State Ionics, 2018, 321, 55-61.	1.3	24
99	Electronic conductivity of polymer electrolytes: electronic charge transport properties of LiTFSI-doped PEO. Physical Chemistry Chemical Physics, 2020, 22, 7680-7684.	1.3	24
100	Conduction Mechanisms in Crystalline LiPF6Â·PEO6 Doped with SiF62- and SF6. Chemistry of Materials, 2005, 17, 3673-3680.	3.2	23
101	The Mechanism of Capacity Enhancement in LiFePO[sub 4] Cathodes Through Polyetheramine Coating. Journal of the Electrochemical Society, 2009, 156, A720.	1.3	23
102	Analysis of soluble intermediates in the lithiumâ€“sulfur battery by a simple in situ electrochemical probe. Electrochemistry Communications, 2014, 46, 91-93.	2.3	23
103	Interfacial Structures in Ionic Liquid-Based Ternary Electrolytes for Lithium-Metal Batteries: A Molecular Dynamics Study. Journal of Physical Chemistry B, 2020, 124, 9648-9657.	1.2	23
104	Polyketones as Host Materials for Solid Polymer Electrolytes. Journal of the Electrochemical Society, 2020, 167, 070537.	1.3	23
105	Artificial intelligence driven in-silico discovery of novel organic lithium-ion battery cathodes. Energy Storage Materials, 2022, 44, 313-325.	9.5	23
106	Designing the 3D-microbattery geometry using the level-set method. Journal of Power Sources, 2013, 244, 417-428.	4.0	22
107	Molecular dynamics modeling the Li-PolystyreneTFSI/PEO blend. Solid State Ionics, 2014, 262, 769-773.	1.3	22
108	Hydroxyl-functionalized poly(trimethylene carbonate) electrolytes for 3D-electrode configurations. Polymer Chemistry, 2015, 6, 4766-4774.	1.9	22

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109	Optimizing the design of 3D-pillar microbatteries using finite element modelling. Electrochimica Acta, 2016, 209, 138-148.	2.6	22
110	Mechanically Robust Yet Highly Conductive Diblock Copolymer Solid Polymer Electrolyte for Ambient Temperature Battery Applications. ACS Applied Polymer Materials, 2020, 2, 939-948.	2.0	22
111	On the Electrochemical Properties and Interphase Composition of Graphite: PVdF-HFP Electrodes in Dependence of Binder Content. Journal of the Electrochemical Society, 2017, 164, A1765-A1772.	1.3	21
112	Silicon-Nanographite Aerogel-Based Anodes for High Performance Lithium Ion Batteries. Scientific Reports, 2019, 9, 14621.	1.6	21
113	The Proton Trap Technologyâ€"Toward High Potential Quinoneâ€Based Organic Energy Storage. Advanced Energy Materials, 2017, 7, 1700259.	10.2	20
114	Improved Battery Cycle Life Prediction Using a Hybrid Dataâ€Driven Model Incorporating Linear Support Vector Regression and Gaussian. ChemPhysChem, 2022, 23, .	1.0	20
115	Conjugated Pyridine-Based Polymers Characterized as Conductivity Carrying Components in Anode Materials. Journal of Physical Chemistry C, 2014, 118, 25956-25963.	1.5	19
116	Modelling the morphological background to capacity fade in Si-based lithium-ion batteries. Electrochimica Acta, 2017, 258, 755-763.	2.6	19
117	Ionâ€Conductive and Thermal Properties of a Synergistic Poly(ethylene carbonate)/Poly(trimethylene) Tj ETQq1 1 0.784314 rgBT /Ove	2.0	19
118	Stabilization of Li-Rich Disordered Rocksalt Oxyfluoride Cathodes by Particle Surface Modification. ACS Applied Energy Materials, 2020, 3, 5937-5948.	2.5	19
119	Validity of solid-state Li<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si33.svg"><mml:msup><mml:mrow /><mml:mo>+</mml:mo></mml:msup></mml:math> diffusion coefficient estimation by electrochemical approaches for lithium-ion batteries. Electrochimica Acta, 2022, 404, 139727.	2.6	19
120	Designing Polyurethane Solid Polymer Electrolytes for High-Temperature Lithium Metal Batteries. ACS Applied Energy Materials, 2022, 5, 407-418.	2.5	19
121	A molecular dynamics study of ion-conduction mechanisms in crystalline low-Mw LiPF6Â·PEO6. Journal of Materials Chemistry, 2007, 17, 3938.	6.7	18
122	Effect of Short-Chain Amine Coatings on the Performance of LiFePO[sub 4] Li-Ion Battery Cathodes. Electrochemical and Solid-State Letters, 2009, 12, A99.	2.2	18
123	Modelling the NafionÂ® diffraction profile by molecular dynamics simulation. Journal of Power Sources, 2010, 195, 5962-5965.	4.0	18
124	3-D microbattery electrolyte by self-assembly of oligomers. Solid State Ionics, 2011, 198, 26-31.	1.3	18
125	A solid state 3-D microbattery based on Cu2Sb nanopillar anodes. Solid State Ionics, 2012, 225, 510-512.	1.3	18
126	A concentrated poly(ethylene carbonate)/poly(trimethylene carbonate) blend electrolyte for all-solid-state Li battery. Polymer Journal, 2019, 51, 753-760.	1.3	18

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127	Going Beyond Sweep Voltammetry: Alternative Approaches in Search of the Elusive Electrochemical Stability of Polymer Electrolytes. Journal of the Electrochemical Society, 2021, 168, 100523.	1.3	18
128	The role of coordination strength in solid polymer electrolytes: compositional dependence of transference numbers in the poly(Îµ-caprolactone)â€“poly(trimethylene carbonate) system. Physical Chemistry Chemical Physics, 2021, 23, 25550-25557.	1.3	18
129	Electrodeposition of thin poly(propylene glycol) acrylate electrolytes on 3D-nanopillar electrodes. Electrochimica Acta, 2014, 137, 320-327.	2.6	17
130	Electronic and Structural Changes in Ni_{0.5}TiOPO₄ Li-Ion Battery Cells Upon First Lithiation and Delithiation, Studied by High-Energy X-ray Spectroscopies. Journal of Physical Chemistry C, 2015, 119, 9692-9704.	1.5	17
131	Mechanical Stabilization of Solid Polymer Electrolytes through Gamma Irradiation. Electrochimica Acta, 2017, 230, 189-195.	2.6	17
132	Cellulose Separators With Integrated Carbon Nanotube Interlayers for Lithium-Sulfur Batteries: An Investigation into the Complex Interplay between Cell Components. Journal of the Electrochemical Society, 2019, 166, A3235-A3241.	1.3	17
133	The Surface Chemistry of Thin Lithium Metal Electrodes in Lithiumâ€Sulfur Cells. Batteries and Supercaps, 2020, 3, 1370-1376.	2.4	17
134	Polyesterâ€ZrO₂ Nanocomposite Electrolytes with High Li Transference Numbers for Ambient Temperature Allâ€Solidâ€State Lithium Batteries. Batteries and Supercaps, 2021, 4, 653-662.	2.4	17
135	The Role of LiTDI Additive in LiNi_{1/3}Mn_{1/3}Co_{1/3}O₂/Graphite Lithium-Ion Batteries at Elevated Temperatures. Journal of the Electrochemical Society, 2018, 165, A40-A46.	1.3	16
136	Decomposition of Carbonateâ€Based Electrolytes: Differences and Peculiarities for Liquids vs. Polymers Observed Using Operando Gas Analysis. Batteries and Supercaps, 2021, 4, 785-790.	2.4	16
137	State-of-charge indication in Li-ion batteries by simulated impedance spectroscopy. Journal of Applied Electrochemistry, 2017, 47, 229-236.	1.5	15
138	d8-poly(methyl methacrylate)-poly[(oligo ethylene glycol) methyl ether methacrylate] tri-block-copolymer electrolytes: Morphology, conductivity and battery performance. Polymer, 2017, 131, 234-242.	1.8	15
139	In situ Investigations of a Proton Trap Material: A PEDOT-Based Copolymer with Hydroquinone and Pyridine Side Groups Having Robust Cyclability in Organic Electrolytes and Ionic Liquids. ACS Applied Energy Materials, 2019, 2, 4486-4495.	2.5	15
140	Tuning the Electrochemical Properties of Organic Battery Cathode Materials: Insights from Evolutionary Algorithm DFT Calculations. ChemSusChem, 2020, 13, 2402-2409.	3.6	15
141	Overcoming the Obstacle of Polymerâ€“Polymer Resistances in Double Layer Solid Polymer Electrolytes. Journal of Physical Chemistry Letters, 2021, 12, 2809-2814.	2.1	15
142	Importance of the Ion-Pair Lifetime in Polymer Electrolytes. Journal of Physical Chemistry Letters, 2021, 12, 8460-8464.	2.1	15
143	Concentrated LiFSIâ€“Ethylene Carbonate Electrolytes and Their Compatibility with High-Capacity and High-Voltage Electrodes. ACS Applied Energy Materials, 2022, 5, 585-595.	2.5	15
144	Different Shades of Li₄Ti₅O₁₂ Composites: The Impact of the Binder on Interface Layer Formation. ChemElectroChem, 2017, 4, 2683-2692.	1.7	14

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145	Mechanically Stable UVâ€Crosslinked Polyesterâ€Polycarbonate Solid Polymer Electrolyte for Highâ€Temperature Batteries. Batteries and Supercaps, 2020, 3, 527-533.	2.4	14
146	How the utilised SOC window in commercial Li-ion pouch cells influence battery ageing. Journal of Power Sources Advances, 2021, 8, 100054.	2.6	14
147	Investigating oxidative stability of lithium-ion battery electrolytes using synthetic charge-discharge profile voltammetry. Journal of Power Sources Advances, 2021, 11, 100071.	2.6	14
148	Molecular dynamics simulations of EMI-BF4 in nanoporous carbon actuators. Journal of Molecular Modeling, 2012, 18, 1541-1552.	0.8	13
149	An Organic Catalyst for Liâ€“O₂ Batteries: Dilithium Quinoneâ€1,4â€Dicarboxylate. ChemSusChem, 2015, 8, 2198-2203.	3.6	13
150	Enhanced performance of organic materials for lithium-ion batteries using facile electrode calendaring techniques. Electrochemistry Communications, 2016, 68, 45-48.	2.3	13
151	Influence of state-of-charge in commercial LiNi 0.33 Mn 0.33 Co 0.33 O 2 /LiMn 2 O 4 -graphite cells analyzed by synchrotron-based photoelectron spectroscopy. Journal of Energy Storage, 2018, 15, 172-180.	3.9	13
152	Challenges and perspectives for new material solutions in batteries. Solid State Communications, 2019, 303-304, 113733.	0.9	13
153	Shortâ€range ordering in the Liâ€rich disordered rock salt cathode material Li 2 VO 2 F revealed by Raman spectroscopy. Journal of Raman Spectroscopy, 2020, 51, 2095-2101.	1.2	13
154	Correlations between precipitation reactions and electrochemical performance of lithium-sulfur batteries probed by operando scattering techniques. CheM, 2022, 8, 1476-1492.	5.8	13
155	A molecular dynamics study of short-chain ordering inÂcrystallineÂLiPF6Â·PEO6. Polymer, 2007, 48, 6448-6456.	1.8	12
156	Finite element simulations of 3D ionic transportation properties in Li-ion electrolytes. Electrochimica Acta, 2012, 65, 165-173.	2.6	12
157	Dilithium 2-aminoterephthalate as a negative electrode material for lithium-ion batteries. Solid State Ionics, 2017, 307, 1-5.	1.3	12
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