Peter Bruce

List of Publications by Year
in descending order

373 papers	78,403 citations	1301 109 h-index	429 275 g-index
408 all docs	408 docs citations	408 times ranked	38772 citing authors

#	Article	IF	Citations
1	Liâ€“O2 and Liâ€“S batteries with high energy storage. Nature Materials, 2012, 11, 19-29.	27.5	8,166
2	Nanostructured materials for advanced energy conversion and storage devices. Nature Materials, 2005, 4, 366-377.	27.5	8,114
3	Nanomaterials for Rechargeable Lithium Batteries. Angewandte Chemie - International Edition, 2008, 47, 2930-2946.	13.8	5,473
4	Challenges Facing Lithium Batteries and Electrical Doubleâ€Layer Capacitors. Angewandte Chemie - International Edition, 2012, 51, 9994-10024.	13.8	2,407
5	A Reversible and Higher-Rate Li-O ₂ Battery. Science, 2012, 337, 563-566.	12.6	1,750
6	Electrochemical measurement of transference numbers in polymer electrolytes. Polymer, 1987, 28, 2324-2328.	3.8	1,583
7	Lithium insertion into manganese spinels. Materials Research Bulletin, 1983, 18, 461-472.	5.2	1,536
8	Demonstrating Oxygen Loss and Associated Structural Reorganization in the Lithium Battery Cathode Li[Ni0.2Li0.2Mn0.6]O2. Journal of the American Chemical Society, 2006, 128, 8694-8698.	13.7	1,406
9	Synthesis of layered LiMnO2 as an electrode for rechargeable lithium batteries. Nature, 1996, 381, 499-500.	27.8	1,305
10	Reactions in the Rechargeable Lithiumâ€“O₂ Battery with Alkyl Carbonate Electrolytes. Journal of the American Chemical Society, 2011, 133, 8040-8047.	13.7	1,157
11	The Carbon Electrode in Nonaqueous Liâ€“O₂ Cells. Journal of the American Chemical Society, 2013, 135, 494-500.	13.7	1,145
12	Rechargeable Li2O2Electrode for Lithium Batteries. Journal of the American Chemical Society, 2006, 128, 1390-1393.	13.7	1,073
13	Advances in understanding mechanisms underpinning lithiumâ€“air batteries. Nature Energy, 2016, 1, .	39.5	1,050
14	The Lithiumâ€“Oxygen Battery with Etherâ€Based Electrolytes. Angewandte Chemie - International Edition, 2011, 50, 8609-8613.	13.8	1,009
15	The role of LiO2 solubility in O2 reduction in aprotic solvents and its consequences for Liâ€“O2 batteries. Nature Chemistry, 2014, 6, 1091-1099.	13.6	942
16	Degradation diagnostics for lithium ion cells. Journal of Power Sources, 2017, 341, 373-386.	7.8	930
17	Charge-compensation in 3d-transition-metal-oxide intercalation cathodes through the generation of localized electron holes on oxygen. Nature Chemistry, 2016, 8, 684-691.	13.6	898
18	Ionic conductivity in crystalline polymer electrolytes. Nature, 2001, 412, 520-523.	27.8	867

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19	Electrochemical extraction of lithium from LiMn2O4. Materials Research Bulletin, 1984, 19, 179-187.	5.2	838
20	Î±â€MnO₂ Nanowires: A Catalyst for the O₂ Electrode in Rechargeable Lithium Batteries. Angewandte Chemie - International Edition, 2008, 47, 4521-4524.	13.8	837
21	Charging a Liâ€"O2 battery using a redox mediator. Nature Chemistry, 2013, 5, 489-494.	13.6	795
22	Lithium-Ion Intercalation into TiO2-B Nanowires. Advanced Materials, 2005, 17, 862-865.	21.0	793
23	TiO2-B Nanowires. Angewandte Chemie - International Edition, 2004, 43, 2286-2288.	13.8	709
24	Ordered mesoporous metal oxides: synthesis and applications. Chemical Society Reviews, 2012, 41, 4909.	38.1	687
25	A stable cathode for the aprotic Liâ€"O2Âbattery. Nature Materials, 2013, 12, 1050-1056.	27.5	677
26	Lithiumâ€"Oxygen Batteries and Related Systems: Potential, Status, and Future. Chemical Reviews, 2020, 120, 6626-6683.	47.7	593
27	Critical stripping current leads to dendrite formation on plating in lithium anode solid electrolyte cells. Nature Materials, 2019, 18, 1105-1111.	27.5	592
28	An O2 cathode for rechargeable lithium batteries: The effect of a catalyst. Journal of Power Sources, 2007, 174, 1177-1182.	7.8	563
29	Steady state current flow in solid binary electrolyte cells. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1987, 225, 1-17.	0.1	525
30	Oxygen Reactions in a Nonâ€Aqueous Li⁺ Electrolyte. Angewandte Chemie - International Edition, 2011, 50, 6351-6355.	13.8	518
31	Mesoporous Crystalline Î²-MnO2â€"a Reversible Positive Electrode for Rechargeable Lithium Batteries. Advanced Materials, 2007, 19, 657-660.	21.0	482
32	Mechanism of Electrochemical Activity in Li2MnO3. Chemistry of Materials, 2003, 15, 1984-1992.	6.7	475
33	Superstructure control of first-cycle voltage hysteresis in oxygen-redox cathodes. Nature, 2020, 577, 502-508.	27.8	456
34	Promoting solution phase discharge in Liâ€"O2 batteries containing weakly solvating electrolyteÂsolutions. Nature Materials, 2016, 15, 882-888.	27.5	446
35	Crystal Structure of the Polymer Electrolyte Poly(ethylene oxide)3:LiCF3SO3. Science, 1993, 262, 883-885.	12.6	431
36	Polymer electrolytes. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 3187.	1.7	419

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37	Structure of the polymer electrolyte poly(ethylene oxide)6:LiAsF6. Nature, 1999, 398, 792-794.	27.8	416
38	Increasing the conductivity of crystalline polymer electrolytes. Nature, 2005, 433, 50-53.	27.8	415
39	Oxygen redox chemistry without excess alkali-metal ions in Na2/3[Mg0.28Mn0.72]O2. Nature Chemistry, 2018, 10, 288-295.	13.6	414
40	Na_{0.67}Mn_{1â^’x}Mg_xO₂ (0 â‰ x â‰ 0.2): a high capacity cathode for sodium-ion batteries. Energy and Environmental Science, 2014, 7, 1387-1391.	30.8	394
41	Reviewâ€"Manganese-Based P2-Type Transition Metal Oxides as Sodium-Ion Battery Cathode Materials. Journal of the Electrochemical Society, 2015, 162, A2589-A2604.	2.9	386
42	Ordered Mesoporous Fe2O3with Crystalline Walls. Journal of the American Chemical Society, 2006, 128, 5468-5474.	13.7	380
43	Mesoporous and nanowire Co3O4as negative electrodes for rechargeable lithium batteries. Physical Chemistry Chemical Physics, 2007, 9, 1837-1842.	2.8	376
44	TiO2(B) Nanowires as an Improved Anode Material for Lithium-Ion Batteries Containing LiFePO4 or LiNi0.5Mn1.5O4 Cathodes and a Polymer Electrolyte. Advanced Materials, 2006, 18, 2597-2600.	21.0	365
45	Liâ€"O₂ Battery with a Dimethylformamide Electrolyte. Journal of the American Chemical Society, 2012, 134, 7952-7957.	13.7	348
46	Î²-NaMnO₂: A High-Performance Cathode for Sodium-Ion Batteries. Journal of the American Chemical Society, 2014, 136, 17243-17248.	13.7	333
47	AC Impedance Analysis of Polycrystalline Insertion Electrodes: Application to Li1â€‰â^’â€‰x CoO2. Journal of the Electrochemical Society, 1985, 132, 1521-1528.	2.9	312
48	Crystal Structure Determination from Powder Diffraction Data by Monte Carlo Methods. Journal of the American Chemical Society, 1994, 116, 3543-3547.	13.7	311
49	Silicate cathodes for lithium batteries: alternatives to phosphates?. Journal of Materials Chemistry, 2011, 21, 9811.	6.7	310
50	Synthesis of Ordered Mesoporous Fe3O4and Î³-Fe2O3with Crystalline Walls Using Post-Template Reduction/Oxidation. Journal of the American Chemical Society, 2006, 128, 12905-12909.	13.7	306
51	Nanoparticulate TiO₂(B): An Anode for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2012, 51, 2164-2167.	13.8	305
52	Ionic Conductivity in the Crystalline Polymer Electrolytes PEO6:LiXF6, X = P, As, Sb. Journal of the American Chemical Society, 2003, 125, 4619-4626.	13.7	291
53	Nanotubes with the TiO2-B structure. Chemical Communications, 2005, , 2454.	4.1	290
54	First-cycle voltage hysteresis in Li-rich 3d cathodes associated with molecular O2 trapped in the bulk. Nature Energy, 2020, 5, 777-785.	39.5	282

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55	Synthesis of Ordered Mesoporous NiO with Crystalline Walls and a Bimodal Pore Size Distribution. Journal of the American Chemical Society, 2008, 130, 5262-5266.	13.7	281
56	Structure and Lithium Transport Pathways in Li₂FeSiO₄ Cathodes for Lithium Batteries. Journal of the American Chemical Society, 2011, 133, 13031-13035.	13.7	277
57	The Aâ€Œ Conductivity of Polycrystalline LISICON, Li2â€‰+â€‰2x Zn1â€‰âˆ’â€‰x GeO4, and a Model for Intergranular Constriction Resistances. Journal of the Electrochemical Society, 1983, 130, 662-669.	2.9	276
58	Energy storage beyond the horizon: Rechargeable lithium batteries. Solid State Ionics, 2008, 179, 752-760.	2.7	274
59	Plating and stripping calcium in an organicÂelectrolyte. Nature Materials, 2018, 17, 16-20.	27.5	273
60	Lithium-air and lithium-sulfur batteries. MRS Bulletin, 2011, 36, 506-512.	3.5	272
61	Influence of Size on the Rate of Mesoporous Electrodes for Lithium Batteries. Journal of the American Chemical Society, 2010, 132, 996-1004.	13.7	271
62	Anion Redox Chemistry in the Cobalt Free 3d Transition Metal Oxide Intercalation Electrode Li[Li_{0.2}Ni_{0.2}Mn_{0.6}]O₂. Journal of the American Chemical Society, 2016, 138, 11211-11218.	13.7	271
63	The lithium intercalation process in the low-voltage lithium battery anode Li1+xV1âˆ’xO2. Nature Materials, 2011, 10, 223-229.	27.5	267
64	Structurally stable Mg-doped P2-Na_{2/3}Mn_{1âˆ’y}Mg_yO₂ sodium-ion battery cathodes with high rate performance: insights from electrochemical, NMR and diffraction studies. Energy and Environmental Science, 2016, 9, 3240-3251.	30.8	264
65	Synthesis of Nanowire and Mesoporous Low-Temperature LiCoO2 by a Post-Templating Reaction. Angewandte Chemie - International Edition, 2005, 44, 6550-6553.	13.8	263
66	Hybrid electrolytes with 3D bicontinuous ordered ceramic and polymer microchannels for all-solid-state batteries. Energy and Environmental Science, 2018, 11, 185-201.	30.8	252
67	Degradation Mechanisms at the Li₁₀GeP₂S₁₂/LiCoO₂ Cathode Interface in an All-Solid-State Lithium-Ion Battery. ACS Applied Materials & Interfaces, 2018, 10, 22226-22236.	8.0	250
68	High Voltage Mg-Doped Na_{0.67}Ni_{0.3â€“<i>x</i>}Mg_{<i>x</i>}Mn_{0.7}O₂ (<i>x</i> = 0.05, 0.1) Na-Ion Cathodes with Enhanced Stability and Rate Capability. Chemistry of Materials, 2016, 28, 5087-5094.	6.7	242
69	A rechargeable lithiumâ€“oxygen battery with dual mediators stabilizing the carbon cathode. Nature Energy, 2017, 2, .	39.5	238
70	TiO₂â€(B) Nanotubes as Anodes for Lithium Batteries: Origin and Mitigation of Irreversible Capacity. Advanced Energy Materials, 2012, 2, 322-327.	19.5	234
71	TiO2â€“B nanowires as negative electrodes for rechargeable lithium batteries. Journal of Power Sources, 2005, 146, 501-506.	7.8	226
72	Macroporous Li(Ni1/3Co1/3Mn1/3)O2: A High-Power and High-Energy Cathode for Rechargeable Lithium Batteries. Advanced Materials, 2006, 18, 2330-2334.	21.0	225

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73	Visualizing plating-induced cracking in lithium-anode solid-electrolyte cells. Nature Materials, 2021, 20, 1121-1129.	27.5	221
74	Lithium Intercalation into Mesoporous Anatase with an Ordered 3D Pore Structure. Angewandte Chemie - International Edition, 2010, 49, 2570-2574.	13.8	218
75	New intercalation compounds for lithium batteries: layered LiMnO2. Journal of Materials Chemistry, 1999, 9, 193-198.	6.7	208
76	Dependence of Li₂FeSiO₄ Electrochemistry on Structure. Journal of the American Chemical Society, 2011, 133, 1263-1265.	13.7	204
77	Synthesis of Ordered Mesoporous Liâ€"Mnâ€"O Spinel as a Positive Electrode for Rechargeable Lithium Batteries. Angewandte Chemie - International Edition, 2008, 47, 9711-9716.	13.8	201
78	A Stoichiometric Nano-LiMn₂O₄ Spinel Electrode Exhibiting High Power and Stable Cycling. Chemistry of Materials, 2008, 20, 5557-5562.	6.7	198
79	TiO[sub 2](B) Nanotubes as Negative Electrodes for Rechargeable Lithium Batteries. Electrochemical and Solid-State Letters, 2006, 9, A139.	2.2	189
80	The origin of electrochemical activity in Li2MnO3. Chemical Communications, 2002, , 2790-2791.	4.1	175
81	Nano-LiNi0.5Mn1.5O4 spinel: a high power electrode for Li-ion batteries. Dalton Transactions, 2008, , 5471.	3.3	175
82	Lithium mobility in the layered oxide Li1â^'xCoO2. Solid State Ionics, 1985, 17, 13-19.	2.7	167
83	Alkali metal crystalline polymer electrolytes. Nature Materials, 2009, 8, 580-584.	27.5	165
84	The role of O2 in O-redox cathodes for Li-ion batteries. Nature Energy, 2021, 6, 781-789.	39.5	162
85	Nature of the â€œZâ€•phase in layered Na-ion battery cathodes. Energy and Environmental Science, 2019, 12, 2223-2232.	30.8	159
86	Structural Characterization of Layered LiMnO2 Electrodes by Electron Diffraction and Lattice Imaging. Journal of the Electrochemical Society, 1999, 146, 2404-2412.	2.9	156
87	Lithium manganese oxyfluoride as a new cathode material exhibiting oxygen redox. Energy and Environmental Science, 2018, 11, 926-932.	30.8	156
88	Mesoporous Mn₂O₃ and Mn₃O₄ with Crystalline Walls. Advanced Materials, 2007, 19, 4063-4066.	21.0	154
89	Ordered Crystalline Mesoporous Oxides as Catalysts for CO Oxidation. Catalysis Letters, 2009, 131, 146-154.	2.6	151
90	High voltage structural evolution and enhanced Na-ion diffusion in P2-Na_{2/3}Ni_{1/3â^'x}Mg_xMn_{2/3}O₂ (0 â‰ <i>x</i>) Tj ETQq0 0 0 rgBT /O Environmental Science, 2018, 11, 1470-1479.	30.8	148

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91	What Triggers Oxygen Loss in Oxygen Redox Cathode Materials?. Chemistry of Materials, 2019, 31, 3293-3300.	6.7	147
92	The lithium intercalation compound Li2CoSiO4 and its behaviour as a positive electrode for lithium batteries. Chemical Communications, 2007, , 4890.	4.1	142
93	Role of Electrolyte Anions in the Naâ€“O₂ Battery: Implications for NaO₂ Solvation and the Stability of the Sodium Solid Electrolyte Interphase in Glyme Ethers. Chemistry of Materials, 2017, 29, 6066-6075.	6.7	141
94	Neutron Diffraction Study of Mesoporous and Bulk Hematite, Î±-Fe₂O₃. Chemistry of Materials, 2008, 20, 4891-4899.	6.7	140
95	Structural characterization of delithiated LiVO2. Materials Research Bulletin, 1984, 19, 1497-1506.	5.2	138
96	Solid-state chemistry of lithium power sourcesâ€. Chemical Communications, 1997, , 1817.	4.1	138
97	Materials challenges in rechargeable lithium-air batteries. MRS Bulletin, 2014, 39, 443-452.	3.5	136
98	Polymer electrolyte structure and its implications. Electrochimica Acta, 2000, 45, 1417-1423.	5.2	134
99	Crystalline and Amorphous Phases in the Poly(ethylene oxide)âˆ’LiCF3SO3System. Macromolecules, 1999, 32, 808-813.	4.8	128
100	Insights into Changes in Voltage and Structure of Li₂FeSiO₄ Polymorphs for Lithium-Ion Batteries. Chemistry of Materials, 2012, 24, 2155-2161.	6.7	128
101	Overcharging manganese oxides: Extracting lithium beyond Mn4+. Journal of Power Sources, 2005, 146, 275-280.	7.8	120
102	Structure of LiN(CF3SO2)2, a novel salt for electrochemistry. Journal of Materials Chemistry, 1994, 4, 1579.	6.7	117
103	Structures of the Polymer Electrolyte Complexes PEO6:LiXF6 (X = P, Sb), Determined from Neutron Powder Diffraction Data. Chemistry of Materials, 2001, 13, 1282-1285.	6.7	116
104	Combined Neutron Diffraction, NMR, and Electrochemical Investigation of the Layered-to-Spinel Transformation in LiMnO2. Chemistry of Materials, 2004, 16, 3106-3118.	6.7	113
105	A Parametric Open Circuit Voltage Model for Lithium Ion Batteries. Journal of the Electrochemical Society, 2015, 162, A2271-A2280.	2.9	113
106	Mechanisms of Lithium Intercalation and Conversion Processes in Organicâ€“Inorganic Halide Perovskites. ACS Energy Letters, 2017, 2, 1818-1824.	17.4	111
107	Stabilizing Lithium into Crossâ€Stacked Nanotube Sheets with an Ultraâ€High Specific Capacity for Lithium Oxygen Batteries. Angewandte Chemie - International Edition, 2019, 58, 2437-2442.	13.8	111
108	Polymorphism and structural defects in Li2FeSiO4. Dalton Transactions, 2010, 39, 6310.	3.3	110

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109	Lithium Insertion into Anatase Nanotubes. Chemistry of Materials, 2012, 24, 4468-4476.	6.7	110
110	Crystal Structure of a New Polymorph of Li₂FeSiO₄. Inorganic Chemistry, 2010, 49, 7446-7451.	4.0	109
111	Ab initio solution of a complex crystal structure from powder-diffraction data using simulated-annealing method and a high degree of molecular flexibility. Physical Review B, 1997, 55, 12011-12017.	3.2	107
112	Ionic conductivity of LISICON solid solutions, Li2+2xZn1â^'xGeO4. Journal of Solid State Chemistry, 1982, 44, 354-365.	2.9	106
113	A General Monte Carlo Approach to Structure Solution from Powder Diffraction Data: Application to Poly(ethylene oxide)3:LiN(SO3CF3)2. Journal of Applied Crystallography, 1997, 30, 294-305.	4.5	106
114	Lithium insertion into Î²î—¸MnO2 and the rutile-spinel transformation. Materials Research Bulletin, 1984, 19, 99-106.	5.2	104
115	Lithium Coordination Sites in Li_{<i>x</i>}TiO₂(B): A Structural and Computational Study. Chemistry of Materials, 2010, 22, 6426-6432.	6.7	104
116	Structure and electrochemistry of polymer electrolytes. Electrochimica Acta, 1995, 40, 2077-2085.	5.2	103
117	Correlating Capacity Loss of Stoichiometric and Nonstoichiometric Lithium Manganese Oxide Spinel Electrodes with Their Structural Integrity. Journal of the Electrochemical Society, 1999, 146, 3649-3654.	2.9	101
118	The synthesis and lithium intercalation electrochemistry of VO2(B) ultra-thin nanowires. Journal of Power Sources, 2008, 178, 723-728.	7.8	100
119	The determination of transference numbers in solid polymer electrolytes using the Hittorf method. Solid State Ionics, 1992, 53-56, 1087-1094.	2.7	99
120	Nanostructuring of Î²-MnO₂: The Important Role of Surface to Bulk Ion Migration. Chemistry of Materials, 2013, 25, 536-541.	6.7	99
121	Nonstoichiometric Layered LixMnyO2 with a High Capacity for Lithium Intercalation/Deintercalation. Chemistry of Materials, 2002, 14, 710-719.	6.7	98
122	H[sub 2]O[sub 2] Decomposition Reaction as Selecting Tool for Catalysts in Liâ€"O[sub 2] Cells. Electrochemical and Solid-State Letters, 2010, 13, A180.	2.2	98
123	Layered LixMn1-yCoyO2Intercalation ElectrodesInfluence of Ion Exchange on Capacity and Structure upon Cycling. Chemistry of Materials, 2001, 13, 2380-2386.	6.7	97
124	Rate Dependent Performance Related to Crystal Structure Evolution of Na_{0.67}Mn_{0.8}Mg_{0.2}O₂ in a Sodium-Ion Battery. Chemistry of Materials, 2015, 27, 6976-6986.	6.7	97
125	⁷Li NMR Chemical Shift Imaging To Detect Microstructural Growth of Lithium in All-Solid-State Batteries. Chemistry of Materials, 2019, 31, 2762-2769.	6.7	97
126	High Capacity Naâ€"O₂ Batteries: Key Parameters for Solution-Mediated Discharge. Journal of Physical Chemistry C, 2016, 120, 20068-20076.	3.1	96

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127	The Layered Intercalation Compounds Li(Mn1â^’yCoy)O2: Positive Electrode Materials for Lithiumâ€“Ion Batteries. Journal of Solid State Chemistry, 1999, 145, 549-556.	2.9	95
128	The pursuit of rechargeable non-aqueous lithiumâ€“oxygen battery cathodes. Current Opinion in Solid State and Materials Science, 2012, 16, 178-185.	11.5	94
129	Kinetics of lithium peroxide oxidation by redox mediators and consequences for the lithiumâ€“oxygen cell. Nature Communications, 2018, 9, 767.	12.8	93
130	Effect of ion association on transport in polymer electrolytes. Faraday Discussions of the Chemical Society, 1989, 88, 43.	2.2	89
131	Achieving Ultrahighâ€Rate Planar and Dendriteâ€Free Zinc Electroplating for Aqueous Zinc Battery Anodes. Advanced Materials, 2022, 34, e2202552.	21.0	88
132	Sodium/Na Î²â€³ Alumina Interface: Effect of Pressure on Voids. ACS Applied Materials & Interfaces, 2020, 12, 678-685.	8.0	86
133	Structure of the polymer electrolyte poly(ethylene oxide)3: LiN(SO2CF3)2 determined by powder diffraction using a powerful Monte Carlo approach. Chemical Communications, 1996, , 2169.	4.1	85
134	A solid with a hierarchical tetramodal micro-meso-macro pore size distribution. Nature Communications, 2013, 4, 2015.	12.8	85
135	Overcapacity of Li[Ni[sub x]Li[sub 1/3â^’2x/3]Mn[sub 2/3â^’x/3]]O[sub 2] Electrodes. Electrochemical and Solid-State Letters, 2004, 7, A294.	2.2	82
136	The Interface between Li6.5La3Zr1.5Ta0.5O12 and Liquid Electrolyte. Joule, 2020, 4, 101-108.	24.0	81
137	Chemical intercalation of magnesium into solid hosts. Journal of Materials Chemistry, 1991, 1, 705.	6.7	79
138	Factors Influencing the Rate of Fe[sub 2]O[sub 3] Conversion Reaction. Electrochemical and Solid-State Letters, 2007, 10, A264.	2.2	79
139	Nanostructured TiO2(B): the effect of size and shape on anode properties for Li-ion batteries. Progress in Natural Science: Materials International, 2013, 23, 235-244.	4.4	79
140	Direct Detection of the Superoxide Anion as a Stable Intermediate in the Electroreduction of Oxygen in a Nonâ€Aqueous Electrolyte Containing Phenol as a Proton Source. Angewandte Chemie - International Edition, 2015, 54, 8165-8168.	13.8	78
141	Operando Monitoring of the Solution-Mediated Discharge and Charge Processes in a Naâ€“O₂ Battery Using Liquid-Electrochemical Transmission Electron Microscopy. Nano Letters, 2018, 18, 1280-1289.	9.1	77
142	Redox Chemistry and the Role of Trapped Molecular O₂ in Li-Rich Disordered Rocksalt Oxyfluoride Cathodes. Journal of the American Chemical Society, 2020, 142, 21799-21809.	13.7	77
143	Phase diagram of the LISICON, solid electrolyte system, Li4GeO4-Zn2GeO4. Materials Research Bulletin, 1980, 15, 379-385.	5.2	76
144	Direct Detection of Discharge Products in Lithiumâ€“Oxygen Batteries by Solidâ€State NMR Spectroscopy. Angewandte Chemie - International Edition, 2012, 51, 8560-8563.	13.8	75

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145	Synthesis of Tetrahedral LiFeO₂ and Its Behavior as a Cathode in Rechargeable Lithium Batteries. Journal of the American Chemical Society, 2008, 130, 3554-3559.	13.7	74
146	Nanostructured materials for advanced energy conversion and storage devices. , 2010, , 148-159.		74
147	Structural Polymorphism in Li2CoSiO4 Intercalation Electrodes: A Combined Diffraction and NMR Study. Chemistry of Materials, 2010, 22, 1892-1900.	6.7	74
148	2020 roadmap on solid-state batteries. JPhys Energy, 2020, 2, 032008.	5.3	74
149	Structural transformation on cycling layered Li(Mn1âˆ’yCoy)O2 cathode materials. Electrochimica Acta, 1999, 45, 285-294.	5.2	72
150	A Comprehensive Model for Non-Aqueous Lithium Air Batteries Involving Different Reaction Mechanisms. Journal of the Electrochemical Society, 2015, 162, A614-A621.	2.9	72
151	Structure of the poly(ethylene oxide)â€“sodium perchlorate complex PEO3â€“NaClO4from powder X-ray diffraction data. Journal of Materials Chemistry, 1992, 2, 379-381.	6.7	71
152	Two- and Three-Dimensional Mesoporous Iron Oxides with Microporous Walls. Angewandte Chemie - International Edition, 2004, 43, 5958-5961.	13.8	71
153	LiO₂: Cryosynthesis and Chemical/Electrochemical Reactivities. Journal of Physical Chemistry Letters, 2017, 8, 2334-2338.	4.6	70
154	Structure of an amorphous polymer electrolyte, poly(ethylene oxide)3:LiCF3SO3. Chemical Communications, 1997, , 157-158.	4.1	68
155	Charging Mechanism of Li₂MnO₃. Chemistry of Materials, 2020, 32, 3733-3740.	6.7	68
156	Vacancy diffusion in the intercalation electrode Li1âˆ’xNiO2. Solid State Ionics, 1992, 57, 353-358.	2.7	67
157	Raising the Conductivity of Crystalline Polymer Electrolytes by Aliovalent Doping. Journal of the American Chemical Society, 2005, 127, 18305-18308.	13.7	67
158	Ab initio structure determination of LiCF3SO3 from X-ray powder diffraction data using entropy maximization and likelihood ranking. Journal of Solid State Chemistry, 1992, 100, 191-196.	2.9	66
159	Activated Lithium-Metal-Oxides as Catalytic Electrodes for Liâ€“O2 Cells. Electrochemical and Solid-State Letters, 2011, 14, A64.	2.2	66
160	Unlocking the energy capabilities of micron-sized LiFePO4. Nature Communications, 2015, 6, 7898.	12.8	65
161	Observation of Interfacial Degradation of Li₆PS₅Cl against Lithium Metal and LiCoO₂ via <i>In Situ</i> Electrochemical Raman Microscopy. Batteries and Supercaps, 2020, 3, 647-652.	4.7	63
162	Factors influencing the conductivity of crystalline polymer electrolytes. Faraday Discussions, 2007, 134, 143-156.	3.2	62

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163	Depth-dependent oxygen redox activity in lithium-rich layered oxide cathodes. Journal of Materials Chemistry A, 2019, 7, 25355-25368.	10.3	62
164	A New Class of Pyrochlore Solid Solution Formed by Chemical Intercalation of Oxygen. Journal of the American Chemical Society, 1996, 118, 11129-11133.	13.7	57
165	Layered LixMn1 âˆ’ yNiyO2 intercalation electrodes. Journal of Materials Chemistry, 2000, 10, 2838-2841.	6.7	57
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