Peter Bruce

List of Publications by Citations

369 papers	66,359 citations	101 h-index	255 g-index
408 ext. papers	71,794 ext. citations	11.9 avg, IF	8.13 L-index

#	Paper	IF	Citations
369	Nanostructured materials for advanced energy conversion and storage devices. *Nature Materials*, **2005**, 4, 366-77	27	7496
368	Li-O2 and Li-S batteries with high energy storage. *Nature Materials*, **2011**, 11, 19-29	27	6999
367	Nanomaterials for rechargeable lithium batteries. *Angewandte Chemie - International Edition*, **2008**, 47, 2930-46	16.4	5042
366	Challenges facing lithium batteries and electrical double-layer capacitors. *Angewandte Chemie - International Edition*, **2012**, 51, 9994-10024	16.4	2149
365	A reversible and higher-rate Li-O2 battery. *Science*, **2012**, 337, 563-6	33.3	1559
364	Lithium insertion into manganese spinels. *Materials Research Bulletin*, **1983**, 18, 461-472	5.1	1265
363	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, 8694-8	16.4	1235
362	Electrochemical measurement of transference numbers in polymer electrolytes. *Polymer*, **1987**, 28, 2324-2328	3.9	1217
361	Synthesis of layered LiMnO2 as an electrode for rechargeable lithium batteries. *Nature*, **1996**, 381, 499-500	50.4	1151
360	Reactions in the rechargeable lithium-O2 battery with alkyl carbonate electrolytes. *Journal of the American Chemical Society*, **2011**, 133, 8040-7	16.4	1049
359	The carbon electrode in nonaqueous Li-O2 cells. *Journal of the American Chemical Society*, **2013**, 135, 494-500	16.4	1014
358	Rechargeable LI2O2 electrode for lithium batteries. *Journal of the American Chemical Society*, **2006**, 128, 1390-3	16.4	977
357	The lithium-oxygen battery with ether-based electrolytes. *Angewandte Chemie - International Edition*, **2011**, 50, 8609-13	16.4	922
356	Advances in understanding mechanisms underpinning lithium–air batteries. *Nature Energy*, **2016**, 1,	62.3	834
355	Alpha-MnO2 nanowires: a catalyst for the O2 electrode in rechargeable lithium batteries. *Angewandte Chemie - International Edition*, **2008**, 47, 4521-4	16.4	767
354	The role of LiO2 solubility in O2 reduction in aprotic solvents and its consequences for Li-O2 batteries. *Nature Chemistry*, **2014**, 6, 1091-9	17.6	764
353	Lithium-Ion Intercalation into TiO2-B Nanowires. *Advanced Materials*, **2005**, 17, 862-865	24	747

352	Ionic conductivity in crystalline polymer electrolytes. *Nature*, **2001**, 412, 520-3	50.4	713
351	Electrochemical extraction of lithium from LiMn2O4. *Materials Research Bulletin*, **1984**, 19, 179-187	5.1	704
350	Charging a Li-O□battery using a redox mediator. *Nature Chemistry*, **2013**, 5, 489-94	17.6	675
349	TiO(2)-B nanowires. *Angewandte Chemie - International Edition*, **2004**, 43, 2286-8	16.4	670
348	Charge-compensation in 3d-transition-metal-oxide intercalation cathodes through the generation of localized electron holes on oxygen. *Nature Chemistry*, **2016**, 8, 684-91	17.6	667
347	A stable cathode for the aprotic Li-O2 battery. *Nature Materials*, **2013**, 12, 1050-6	27	617
346	Ordered mesoporous metal oxides: synthesis and applications. *Chemical Society Reviews*, **2012**, 41, 4909-27	38.5	604
345	An O2 cathode for rechargeable lithium batteries: The effect of a catalyst. *Journal of Power Sources* , **2007**, 174, 1177-1182	8.9	519
344	Degradation diagnostics for lithium ion cells. *Journal of Power Sources*, **2017**, 341, 373-386	8.9	472
343	Oxygen reactions in a non-aqueous Li+ electrolyte. *Angewandte Chemie - International Edition*, **2011** , 50, 6351-5	16.4	472
342	Mesoporous Crystalline □MnO2□ Reversible Positive Electrode for Rechargeable Lithium Batteries. *Advanced Materials*, **2007**, 19, 657-660	24	460
341	Steady state current flow in solid binary electrolyte cells. *Journal of Electroanalytical Chemistry and Interfacial Electrochemistry*, **1987**, 225, 1-17		433
340	Mechanism of Electrochemical Activity in Li2MnO3. *Chemistry of Materials*, **2003**, 15, 1984-1992	9.6	415
339	Polymer electrolytes. *Journal of the Chemical Society, Faraday Transactions*, **1993**, 89, 3187		379
338	Mesoporous and nanowire Co3O4 as negative electrodes for rechargeable lithium batteries. *Physical Chemistry Chemical Physics*, **2007**, 9, 1837-42	3.6	363
337	Ordered mesoporous Fe2O3 with crystalline walls. *Journal of the American Chemical Society*, **2006**, 128, 5468-74	16.4	360
336	Increasing the conductivity of crystalline polymer electrolytes. *Nature*, **2005**, 433, 50-3	50.4	356
335	Crystal Structure of the Polymer Electrolyte Poly(ethylene oxide)3:LiCF3SO3. *Science*, **1993**, 262, 883-5	33.3	355

334	Structure of the polymer electrolyte poly(ethylene oxide)6:LiAsF6. *Nature*, **1999**, 398, 792-794	50.4	353
333	Promoting solution phase discharge in Li-O2 batteries containing weakly solvating electrolyte solutions. *Nature Materials*, **2016**, 15, 882-8	27	349
332	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	24	345
331	Critical stripping current leads to dendrite formation on plating in lithium anode solid electrolyte cells. *Nature Materials*, **2019**, 18, 1105-1111	27	325
330	Na0.67Mn1−xMgxO2 (0 ≤ x ≤ 0.2): a high capacity cathode for sodium-ion batteries. *Energy and Environmental Science*, **2014**, 7, 1387-1391	35.4	325
329	Li-O2 battery with a dimethylformamide electrolyte. *Journal of the American Chemical Society*, **2012**, 134, 7952-7	16.4	319
328	Review—Manganese-Based P2-Type Transition Metal Oxides as Sodium-Ion Battery Cathode Materials. *Journal of the Electrochemical Society*, **2015**, 162, A2589-A2604	3.9	297
327	Synthesis of ordered mesoporous Fe3O4 and gamma-Fe2O3 with crystalline walls using post-template reduction/oxidation. *Journal of the American Chemical Society*, **2006**, 128, 12905-9	16.4	293
326	Silicate cathodes for lithium batteries: alternatives to phosphates?. *Journal of Materials Chemistry*, **2011**, 21, 9811		287
325	Oxygen redox chemistry without excess alkali-metal ions in Na[MgMn]O. *Nature Chemistry*, **2018**, 10, 288-295	17.6	281
324	Lithium-Oxygen Batteries and Related Systems: Potential, Status, and Future. *Chemical Reviews*, **2020**, 120, 6626-6683	68.1	279
323	βNaMnO2: a high-performance cathode for sodium-ion batteries. *Journal of the American Chemical Society*, **2014**, 136, 17243-8	16.4	277
322	Nanotubes with the TiO2-B structure. *Chemical Communications*, **2005**, 2454-6	5.8	276
321	Nanoparticulate TiO2(B): an anode for lithium-ion batteries. *Angewandte Chemie - International Edition*, **2012**, 51, 2164-7	16.4	274
320	Crystal Structure Determination from Powder Diffraction Data by Monte Carlo Methods. *Journal of the American Chemical Society*, **1994**, 116, 3543-3547	16.4	261
319	AC Impedance Analysis of Polycrystalline Insertion Electrodes: Application to Li1−x CoO2. *Journal of the Electrochemical Society*, **1985**, 132, 1521-1528	3.9	258
318	Synthesis of ordered mesoporous NiO with crystalline walls and a bimodal pore size distribution. *Journal of the American Chemical Society*, **2008**, 130, 5262-6	16.4	256
317	Lithium-air and lithium-sulfur batteries. *MRS Bulletin*, **2011**, 36, 506-512	3.2	255

316	Influence of size on the rate of mesoporous electrodes for lithium batteries. *Journal of the American Chemical Society*, **2010**, 132, 996-1004	16.4	255
315	Structure and lithium transport pathways in Li2FeSiO4 cathodes for lithium batteries. *Journal of the American Chemical Society*, **2011**, 133, 13031-5	16.4	253
314	Synthesis of nanowire and mesoporous low-temperature LiCoO2 by a post-templating reaction. *Angewandte Chemie - International Edition*, **2005**, 44, 6550-3	16.4	253
313	Energy storage beyond the horizon: Rechargeable lithium batteries. *Solid State Ionics*, **2008**, 179, 752-760	3.3	248
312	The lithium intercalation process in the low-voltage lithium battery anode Li(1+x)V(1-x)O2. *Nature Materials*, **2011**, 10, 223-9	27	244
311	Ionic conductivity in the crystalline polymer electrolytes PEO6:LiXF6, X = P, As, Sb. *Journal of the American Chemical Society*, **2003**, 125, 4619-26	16.4	242
310	The A-C Conductivity of Polycrystalline LISICON, Li2 + 2x Zn1 x GeO4, and a Model for Intergranular Constriction Resistances. *Journal of the Electrochemical Society*, **1983**, 130, 662-669	3.9	223
309	Superstructure control of first-cycle voltage hysteresis in oxygen-redox cathodes. *Nature*, **2020**, 577, 502-508	50.4	222
308	TiO2-(B) Nanotubes as Anodes for Lithium Batteries: Origin and Mitigation of Irreversible Capacity. *Advanced Energy Materials*, **2012**, 2, 322-327	21.8	214
307	Macroporous Li(Ni1/3Co1/3Mn1/3)O2: A High-Power and High-Energy Cathode for Rechargeable Lithium Batteries. *Advanced Materials*, **2006**, 18, 2330-2334	24	206
306	Anion Redox Chemistry in the Cobalt Free 3d Transition Metal Oxide Intercalation Electrode Li[Li0.2Ni0.2Mn0.6]O2. *Journal of the American Chemical Society*, **2016**, 138, 11211-8	16.4	205
305	Lithium intercalation into mesoporous anatase with an ordered 3D pore structure. *Angewandte Chemie - International Edition*, **2010**, 49, 2570-4	16.4	204
304	TiO2B nanowires as negative electrodes for rechargeable lithium batteries. *Journal of Power Sources*, **2005**, 146, 501-506	8.9	204
303	Structurally stable Mg-doped P2-Na2/3Mn1yMgyO2 sodium-ion battery cathodes with high rate performance: insights from electrochemical, NMR and diffraction studies. *Energy and Environmental Science*, **2016**, 9, 3240-3251	35.4	200
302	Synthesis of ordered mesoporous Li-Mn-O spinel as a positive electrode for rechargeable lithium batteries. *Angewandte Chemie - International Edition*, **2008**, 47, 9711-6	16.4	193
301	Plating and stripping calcium in an organic electrolyte. *Nature Materials*, **2018**, 17, 16-20	27	189
300	Dependence of Li2FeSiO4 electrochemistry on structure. *Journal of the American Chemical Society*, **2011**, 133, 1263-5	16.4	185
299	TiO[sub 2](B) Nanotubes as Negative Electrodes for Rechargeable Lithium Batteries. *Electrochemical and Solid-State Letters*, **2006**, 9, A139		181

298	New intercalation compounds for lithium batteries: layered LiMnO2. *Journal of Materials Chemistry*, **1999**, 9, 193-198		180
297	A Stoichiometric Nano-LiMn2O4 Spinel Electrode Exhibiting High Power and Stable Cycling. *Chemistry of Materials*, **2008**, 20, 5557-5562	9.6	179
296	A rechargeable lithium–oxygen battery with dual mediators stabilizing the carbon cathode. *Nature Energy*, **2017**, 2,	62.3	178
295	Lithiumbatterien und elektrische Doppelschichtkondensatoren: aktuelle Herausforderungen. *Angewandte Chemie*, **2012**, 124, 10134-10166	3.6	176
294	Hybrid electrolytes with 3D bicontinuous ordered ceramic and polymer microchannels for all-solid-state batteries. *Energy and Environmental Science*, **2018**, 11, 185-201	35.4	176
293	High Voltage Mg-Doped Na0.67Ni0.3−xMgxMn0.7O2 (x = 0.05, 0.1) Na-Ion Cathodes with Enhanced Stability and Rate Capability. *Chemistry of Materials*, **2016**, 28, 5087-5094	9.6	171
292	Nano-LiNi(0.5)Mn(1.5)O(4) spinel: a high power electrode for Li-ion batteries. *Dalton Transactions*, **2008**, 5471-5	4.3	162
291	Degradation Mechanisms at the LiGePS/LiCoO Cathode Interface in an All-Solid-State Lithium-Ion Battery. *ACS Applied Materials & Interfaces*, **2018**, 10, 22226-22236	9.5	158
290	The origin of electrochemical activity in Li2MnO3. *Chemical Communications*, **2002**, 2790-1	5.8	148
289	Mesoporous Mn2O3 and Mn3O4 with Crystalline Walls. *Advanced Materials*, **2007**, 19, 4063-4066	24	147
288	Alkali metal crystalline polymer electrolytes. *Nature Materials*, **2009**, 8, 580-4	27	144
287	Structural Characterization of Layered LiMnO2 Electrodes by Electron Diffraction and Lattice Imaging. *Journal of the Electrochemical Society*, **1999**, 146, 2404-2412	3.9	141
286	Ordered Crystalline Mesoporous Oxides as Catalysts for CO Oxidation. *Catalysis Letters*, **2009**, 131, 146-154	2.8	137
285	Lithium mobility in the layered oxide Li1−xCoO2. *Solid State Ionics*, **1985**, 17, 13-19	3.3	135
284	The lithium intercalation compound Li2CoSiO4 and its behaviour as a positive electrode for lithium batteries. *Chemical Communications*, **2007**, 4890-2	5.8	132
283	Solid-state chemistry of lithium power sources. *Chemical Communications*, **1997**, 1817	5.8	130
282	Materials challenges in rechargeable lithium-air batteries. *MRS Bulletin*, **2014**, 39, 443-452	3.2	127
281	Insights into Changes in Voltage and Structure of Li2FeSiO4 Polymorphs for Lithium-Ion Batteries. *Chemistry of Materials*, **2012**, 24, 2155-2161	9.6	119

280	Polymer electrolyte structure and its implications. *Electrochimica Acta*, **2000**, 45, 1417-1423	6.7	119
279	Oxygen Reactions in a Non-Aqueous Li+ Electrolyte. *Angewandte Chemie*, **2011**, 123, 6475-6479	3.6	118
278	First-cycle voltage hysteresis in Li-rich 3d cathodes associated with molecular O2 trapped in the bulk. *Nature Energy*, **2020**, 5, 777-785	62.3	117
277	Neutron Diffraction Study of Mesoporous and Bulk Hematite, Fe2O3. *Chemistry of Materials*, **2008**, 20, 4891-4899	9.6	115
276	Lithium manganese oxyfluoride as a new cathode material exhibiting oxygen redox. *Energy and Environmental Science*, **2018**, 11, 926-932	35.4	110
275	Crystalline and Amorphous Phases in the Poly(ethylene oxide)LiCF3SO3 System. *Macromolecules*, **1999**, 32, 808-813	5.5	109
274	Structural characterization of delithiated LiVO2. *Materials Research Bulletin*, **1984**, 19, 1497-1506	5.1	107
273	Polymorphism and structural defects in Li(2)FeSiO(4). *Dalton Transactions*, **2010**, 39, 6310-6	4.3	106
272	Structure of LiN(CF3SO2)2, a novel salt for electrochemistry. *Journal of Materials Chemistry*, **1994**, 4, 1579		104
271	Overcharging manganese oxides: Extracting lithium beyond Mn4+. *Journal of Power Sources*, **2005**, 146, 275-280	8.9	103
270	Crystal structure of a new polymorph of Li2FeSiO4. *Inorganic Chemistry*, **2010**, 49, 7446-51	5.1	102
269	High voltage structural evolution and enhanced Na-ion diffusion in P2-Na2/3Ni1/3MgxMn2/3O2 (0 x 0.2) cathodes from diffraction, electrochemical and ab initio studies. *Energy and Environmental Science*, **2018**, 11, 1470-1479	35.4	100
268	Role of Electrolyte Anions in the NaO2 Battery: Implications for NaO2 Solvation and the Stability of the Sodium Solid Electrolyte Interphase in Glyme Ethers. *Chemistry of Materials*, **2017**, 29, 6066-6075	9.6	99
267	Structures of the Polymer Electrolyte Complexes PEO6:LiXF6 (X = P, Sb), Determined from Neutron Powder Diffraction Data. *Chemistry of Materials*, **2001**, 13, 1282-1285	9.6	99
266	Lithium Insertion into Anatase Nanotubes. *Chemistry of Materials*, **2012**, 24, 4468-4476	9.6	98
265	Combined Neutron Diffraction, NMR, and Electrochemical Investigation of the Layered-to-Spinel Transformation in LiMnO2. *Chemistry of Materials*, **2004**, 16, 3106-3118	9.6	97
264	Die Lithium-Sauerstoff-Batterie mit etherbasierten Elektrolyten. *Angewandte Chemie*, **2011**, 123, 8768-8772	3.6	95
263	Lithium Coordination Sites in LixTiO2(B): A Structural and Computational Study. *Chemistry of Materials*, **2010**, 22, 6426-6432	9.6	93

262	H[sub 2]O[sub 2] Decomposition Reaction as Selecting Tool for Catalysts in Li□[sub 2] Cells. *Electrochemical and Solid-State Letters*, **2010**, 13, A180		93
261	The pursuit of rechargeable non-aqueous lithium□xygen battery cathodes. *Current Opinion in Solid State and Materials Science*, **2012**, 16, 178-185	12	91
260	The synthesis and lithium intercalation electrochemistry of VO2(B) ultra-thin nanowires. *Journal of Power Sources*, **2008**, 178, 723-728	8.9	91
259	Lithium insertion into □MnO2 and the rutile-spinel transformation. *Materials Research Bulletin*, **1984**, 19, 99-106	5.1	91
258	What Triggers Oxygen Loss in Oxygen Redox Cathode Materials?. *Chemistry of Materials*, **2019**, 31, 3293-3300	9.6	90
257	Nonstoichiometric Layered LixMnyO2 with a High Capacity for Lithium Intercalation/Deintercalation. *Chemistry of Materials*, **2002**, 14, 710-719	9.6	90
256	Rate Dependent Performance Related to Crystal Structure Evolution of Na0.67Mn0.8Mg0.2O2 in a Sodium-Ion Battery. *Chemistry of Materials*, **2015**, 27, 6976-6986	9.6	88
255	Structure and electrochemistry of polymer electrolytes. *Electrochimica Acta*, **1995**, 40, 2077-2085	6.7	88
254	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	3.9	87
253	Nanoparticulate TiO2(B): An Anode for Lithium-Ion Batteries. *Angewandte Chemie*, **2012**, 124, 2206-2209	3.6	86
252	Ionic conductivity of LISICON solid solutions, Li2+2xZn1□GeO4. *Journal of Solid State Chemistry*, **1982**, 44, 354-365	3.3	86
251	Nanostructuring of □MnO2: The Important Role of Surface to Bulk Ion Migration. *Chemistry of Materials*, **2013**, 25, 536-541	9.6	85
250	Layered LixMn1-yCoyO2 Intercalation ElectrodesInfluence of Ion Exchange on Capacity and Structure upon Cycling. *Chemistry of Materials*, **2001**, 13, 2380-2386	9.6	84
249	High Capacity Na□2 Batteries: Key Parameters for Solution-Mediated Discharge. *Journal of Physical Chemistry C*, **2016**, 120, 20068-20076	3.8	83
248	Mechanisms of Lithium Intercalation and Conversion Processes in Organic□norganic Halide Perovskites. *ACS Energy Letters*, **2017**, 2, 1818-1824	20.1	83
247	The determination of transference numbers in solid polymer electrolytes using the Hittorf method. *Solid State Ionics*, **1992**, 53-56, 1087-1094	3.3	82
246	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	5.8	81
245	Stabilizing Lithium into Cross-Stacked Nanotube Sheets with an Ultra-High Specific Capacity for Lithium Oxygen Batteries. *Angewandte Chemie - International Edition*, **2019**, 58, 2437-2442	16.4	81

244	The Layered Intercalation Compounds Li(Mn1□yCoy)O2: Positive Electrode Materials for Lithium□Ion Batteries. *Journal of Solid State Chemistry*, **1999**, 145, 549-556	3.3	80
243	Nature of the □□phase in layered Na-ion battery cathodes. *Energy and Environmental Science*, **2019**, 12, 2223-2232	35.4	79
242	Factors Influencing the Rate of Fe[sub 2]O[sub 3] Conversion Reaction. *Electrochemical and Solid-State Letters*, **2007**, 10, A264		76
241	Effect of ion association on transport in polymer electrolytes. *Faraday Discussions of the Chemical Society*, **1989**, 88, 43		74
240	Visualizing plating-induced cracking in lithium-anode solid-electrolyte cells. *Nature Materials*, **2021**, 20, 1121-1129	27	74
239	A solid with a hierarchical tetramodal micro-meso-macro pore size distribution. *Nature Communications*, **2013**, 4, 2015	17.4	73
238	Overcapacity of Li[Ni[sub x]Li[sub 1/3□x/3]Mn[sub 2/3□/3]]O[sub 2] Electrodes. *Electrochemical and Solid-State Letters*, **2004**, 7, A294		73
237	Direct detection of discharge products in lithium-oxygen batteries by solid-state NMR spectroscopy. *Angewandte Chemie - International Edition*, **2012**, 51, 8560-3	16.4	72
236	Structural Polymorphism in Li2CoSiO4 Intercalation Electrodes: A Combined Diffraction and NMR Study. *Chemistry of Materials*, **2010**, 22, 1892-1900	9.6	72
235	Li NMR Chemical Shift Imaging To Detect Microstructural Growth of Lithium in All-Solid-State Batteries. *Chemistry of Materials*, **2019**, 31, 2762-2769	9.6	70
234	Kinetics of lithium peroxide oxidation by redox mediators and consequences for the lithium-oxygen cell. *Nature Communications*, **2018**, 9, 767	17.4	70
233	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	3.3	70
232	Chemical intercalation of magnesium into solid hosts. *Journal of Materials Chemistry*, **1991**, 1, 705		70
231	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	3.6	68
230	TiO2-B Nanowires. *Angewandte Chemie*, **2004**, 116, 2336-2338	3.6	68
229	A Parametric Open Circuit Voltage Model for Lithium Ion Batteries. *Journal of the Electrochemical Society*, **2015**, 162, A2271-A2280	3.9	67
228	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	3.8	67
227	Two- and three-dimensional mesoporous iron oxides with microporous walls. *Angewandte Chemie - International Edition*, **2004**, 43, 5958-61	16.4	67

226	A Comprehensive Model for Non-Aqueous Lithium Air Batteries Involving Different Reaction Mechanisms. *Journal of the Electrochemical Society*, **2015**, 162, A614-A621	3.9	66
225	Structure of the poly(ethylene oxide)sodium perchlorate complex PEO3NaClO4 from powder X-ray diffraction data. *Journal of Materials Chemistry*, **1992**, 2, 379-381		65
224	Direct Detection of the Superoxide Anion as a Stable Intermediate in the Electroreduction of Oxygen in a Non-Aqueous Electrolyte Containing Phenol as a Proton Source. *Angewandte Chemie - International Edition*, **2015**, 54, 8165-8	16.4	64
223	Structure of an amorphous polymer electrolyte, poly(ethyleneoxide)3:LiCF3SO3. *Chemical Communications*, **1997**, 157-158	5.8	64
222	Activated Lithium-Metal-Oxides as Catalytic Electrodes for LiO2 Cells. *Electrochemical and Solid-State Letters*, **2011**, 14, A64		63
221	Operando Monitoring of the Solution-Mediated Discharge and Charge Processes in a Na-O Battery Using Liquid-Electrochemical Transmission Electron Microscopy. *Nano Letters*, **2018**, 18, 1280-1289	11.5	61
220	Synthesis of tetrahedral LiFeO2 and its behavior as a cathode in rechargeable lithium batteries. *Journal of the American Chemical Society*, **2008**, 130, 3554-9	16.4	61
219	Structural transformation on cycling layered Li(Mn1yCoy)O2 cathode materials. *Electrochimica Acta*, **1999**, 45, 285-294	6.7	60
218	Raising the conductivity of crystalline polymer electrolytes by aliovalent doping. *Journal of the American Chemical Society*, **2005**, 127, 18305-8	16.4	56
217	LiO: Cryosynthesis and Chemical/Electrochemical Reactivities. *Journal of Physical Chemistry Letters*, **2017**, 8, 2334-2338	6.4	55
216	A New Class of Pyrochlore Solid Solution Formed by Chemical Intercalation of Oxygen. *Journal of the American Chemical Society*, **1996**, 118, 11129-11133	16.4	54
215	Polymorphism in Li2(Fe,Mn)SiO4: A combined diffraction and NMR study. *Journal of Materials Chemistry*, **2011**, 21, 17823		53
214	Factors influencing the conductivity of crystalline polymer electrolytes. *Faraday Discussions*, **2007**, 134, 143-56; discussion 215-33, 415-9	3.6	53
213	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	3.3	53
212	Li0.44MnO2: an intercalation electrode with a tunnel structure and excellent cyclability. *Journal of Materials Chemistry*, **1998**, 8, 255-259		52
211	Unlocking the energy capabilities of micron-sized LiFePO4. *Nature Communications*, **2015**, 6, 7898	17.4	51
210	Nanostructured materials for advanced energy conversion and storage devices **2010**, 148-159		51
209	Phase diagram of the LISICON, solid electrolyte system, Li4GeO4-Zn2GeO4. *Materials Research Bulletin*, **1980**, 15, 379-385	5.1	51

208	Lithium-ion diffusion mechanisms in the battery anode material Li(1+x)V(1-x)O *Physical Chemistry Chemical Physics*, **2014**, 16, 21114-8	3.6	50
207	Vacancy diffusion in the intercalation electrode Li1 NiO2. *Solid State Ionics*, **1992**, 57, 353-358	3.3	49
206	Crystal Structures of Poly(Ethylene Oxide)3:LiBF4 and (Diglyme)n:LiBF4 (n = 1,2). *Chemistry of Materials*, **2005**, 17, 767-772	9.6	48
205	Layered LixMn1 yNiyO2 intercalation electrodes. *Journal of Materials Chemistry*, **2000**, 10, 2838-2841		48
204	The role of O2 in O-redox cathodes for Li-ion batteries. *Nature Energy*, **2021**, 6, 781-789	62.3	48
203	An Oxygen-Rich Pyrochlore with Fluorite Composition. *Journal of Solid State Chemistry*, **1999**, 148, 56-62	3.3	47
202	Tetragonal-packed crystal structures. *Acta Crystallographica Section B: Structural Crystallography and Crystal Chemistry*, **1982**, 38, 1891-1896		47
201	Crystal Structures of the Polymer Electrolytes Poly(ethylene oxide)4:MSCN (M = NH4, K). *Journal of the American Chemical Society*, **1994**, 116, 7469-7470	16.4	45
200	The Interface between Li6.5La3Zr1.5Ta0.5O12 and Liquid Electrolyte. *Joule*, **2020**, 4, 101-108	27.8	45
199	Sodium/Na Alumina Interface: Effect of Pressure on Voids. *ACS Applied Materials & Interfaces*, **2020**, 12, 678-685	9.5	45
198	Sulfone-Based Electrolytes for Nonaqueous Li O2 Batteries. *Journal of Physical Chemistry C*, **2014**, 118, 18892-18898	3.8	44
197	Phenol-Catalyzed Discharge in the Aprotic Lithium-Oxygen Battery. *Angewandte Chemie - International Edition*, **2017**, 56, 6539-6543	16.4	43
196	Capacity Loss of Lithium Manganese Oxide Spinel in LiPF6 / Ethylene Carbonate-Dimethyl Carbonate Electrolytes. *Journal of the Electrochemical Society*, **1999**, 146, 481-485	3.9	43
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