Khalil Amine

List of Publications by Citations

421 papers	40,319 citations	107 h-index	189 g-index
456 ext. papers	47,721 ext. citations	16.4 avg, IF	7.82 L-index

#	Paper	IF	Citations
421	Challenges facing lithium batteries and electrical double-layer capacitors. *Angewandte Chemie - International Edition*, **2012**, 51, 9994-10024	16.4	2149
420	30 Years of Lithium-Ion Batteries. *Advanced Materials*, **2018**, 30, e1800561	24	1694
419	High-energy cathode material for long-life and safe lithium batteries. *Nature Materials*, **2009**, 8, 320-4	27	1155
418	Aprotic and aqueous Li-O_2 batteries. *Chemical Reviews*, **2014**, 114, 5611-40	68.1	841
417	Nanostructured high-energy cathode materials for advanced lithium batteries. *Nature Materials*, **2012**, 11, 942-7	27	781
416	Formation of the spinel phase in the layered composite cathode used in Li-ion batteries. *ACS Nano*, **2013**, 7, 760-7	16.7	656
415	Non-flammable electrolyte enables Li-metal batteries with aggressive cathode chemistries. *Nature Nanotechnology*, **2018**, 13, 715-722	28.7	606
414	The role of AlF3 coatings in improving electrochemical cycling of Li-enriched nickel-manganese oxide electrodes for Li-ion batteries. *Advanced Materials*, **2012**, 24, 1192-6	24	558
413	A lithium-oxygen battery based on lithium superoxide. *Nature*, **2016**, 529, 377-82	50.4	520
412	Role of surface coating on cathode materials for lithium-ion batteries. *Journal of Materials Chemistry*, **2010**, 20, 7606		477
411	The role of nanotechnology in the development of battery materials for electric vehicles. *Nature Nanotechnology*, **2016**, 11, 1031-1038	28.7	462
410	A new class of lithium and sodium rechargeable batteries based on selenium and selenium-sulfur as a positive electrode. *Journal of the American Chemical Society*, **2012**, 134, 4505-8	16.4	434
409	Commercialization of Lithium Battery Technologies for Electric Vehicles. *Advanced Energy Materials* , **2019**, 9, 1900161	21.8	407
408	Titanium-Based Anode Materials for Safe Lithium-Ion Batteries. *Advanced Functional Materials*, **2013**, 23, 959-969	15.6	400
407	Microscale spherical carbon-coated Li4Ti5O12 as ultra high power anode material for lithium batteries. *Energy and Environmental Science*, **2011**, 4, 1345	35.4	399
406	Understanding the Rate Capability of High-Energy-Density Li-Rich Layered Li1.2Ni0.15Co0.1Mn0.55O2 Cathode Materials. *Advanced Energy Materials*, **2014**, 4, 1300950	21.8	393
405	Fluorinated electrolytes for 5 V lithium-ion battery chemistry. *Energy and Environmental Science*, **2013**, 6, 1806	35.4	381

404	Anatase titania nanorods as an intercalation anode material for rechargeable sodium batteries. *Nano Letters*, **2014**, 14, 416-22	11.5	376
403	Dissolution, migration, and deposition of transition metal ions in Li-ion batteries exemplified by Mn-based cathodes – a critical review. *Energy and Environmental Science*, **2018**, 11, 243-257	35.4	364
402	Synthesis and characterization of $Li[(Ni_{0.8}Co_{0.1}Mn_{0.1})_{0.8}(Ni_{0.5}Mn_{0.5})_{0.2}]O_2$ with the microscale core-shell structure as the positive electrode material for lithium batteries. *Journal of the American Chemical Society*, **2005**, 127, 13411-8	16.4	363
401	Graphene-based three-dimensional hierarchical sandwich-type architecture for high-performance Li/S batteries. *Nano Letters*, **2013**, 13, 4642-9	11.5	358
400	A nanostructured cathode architecture for low charge overpotential in lithium-oxygen batteries. *Nature Communications*, **2013**, 4, 2383	17.4	355
399	Nanostructured anode material for high-power battery system in electric vehicles. *Advanced Materials*, **2010**, 22, 3052-7	24	338
398	High-Performance Anode Materials for Rechargeable Lithium-Ion Batteries. *Electrochemical Energy Reviews*, **2018**, 1, 35-53	29.3	334
397	Progress in Mechanistic Understanding and Characterization Techniques of Li-S Batteries. *Advanced Energy Materials*, **2015**, 5, 1500408	21.8	321
396	Electrolyte design strategies and research progress for room-temperature sodium-ion batteries. *Energy and Environmental Science*, **2017**, 10, 1075-1101	35.4	320
395	Mn(II) deposition on anodes and its effects on capacity fade in spinel lithium manganate-carbon systems. *Nature Communications*, **2013**, 4, 2437	17.4	315
394	Tailored Preparation Methods of TiO_2 Anatase, Rutile, Brookite: Mechanism of Formation and Electrochemical Properties. *Chemistry of Materials*, **2010**, 22, 1173-1179	9.6	279
393	High-Performance Carbon-$LiMnPO_4$ Nanocomposite Cathode for Lithium Batteries. *Advanced Functional Materials*, **2010**, 20, 3260-3265	15.6	277
392	Burning lithium in CS_2 for high-performing compact Li_2S–graphene nanocapsules for Li–S batteries. *Nature Energy*, **2017**, 2,	62.3	271
391	(De)lithiation mechanism of Li/SeS(x) (x = 0-7) batteries determined by in situ synchrotron X-ray diffraction and X-ray absorption spectroscopy. *Journal of the American Chemical Society*, **2013**, 135, 8047-56	16.4	268
390	Holey two-dimensional transition metal oxide nanosheets for efficient energy storage. *Nature Communications*, **2017**, 8, 15139	17.4	261
389	Bridging the academic and industrial metrics for next-generation practical batteries. *Nature Nanotechnology*, **2019**, 14, 200-207	28.7	255
388	State-of-the-art characterization techniques for advanced lithium-ion batteries. *Nature Energy*, **2017**, 2,	62.3	251
387	Disproportionation in $Li-O_2$ batteries based on a large surface area carbon cathode. *Journal of the American Chemical Society*, **2013**, 135, 15364-72	16.4	250

386	Advanced Na[Ni0.25Fe0.5Mn0.25]O2/C-Fe3O4 sodium-ion batteries using EMS electrolyte for energy storage. *Nano Letters*, **2014**, 14, 1620-6	11.5	241
385	In situ quantification of interphasial chemistry in Li-ion battery. *Nature Nanotechnology*, **2019**, 14, 50-56	28.7	235
384	Thermal Runaway of Lithium-Ion Batteries without Internal Short Circuit. *Joule*, **2018**, 2, 2047-2064	27.8	234
383	Understanding materials challenges for rechargeable ion batteries with in situ transmission electron microscopy. *Nature Communications*, **2017**, 8,	17.4	234
382	A Novel Cathode Material with a Concentration-Gradient for High-Energy and Safe Lithium-Ion Batteries. *Advanced Functional Materials*, **2010**, 20, 485-491	15.6	225
381	Non-Annealed Graphene Paper as a Binder-Free Anode for Lithium-Ion Batteries. *Journal of Physical Chemistry C*, **2010**, 114, 12800-12804	3.8	223
380	Safety characteristics of Li(Ni0.8Co0.15Al0.05)O2 and Li(Ni1/3Co1/3Mn1/3)O2. *Electrochemistry Communications*, **2006**, 8, 329-335	5.1	217
379	Sodium insertion in carboxylate based materials and their application in 3.6 V full sodium cells. *Energy and Environmental Science*, **2012**, 5, 9632	35.4	214
378	Evolution of lattice structure and chemical composition of the surface reconstruction layer in Li(1.2)Ni(0.2)Mn(0.6)O2 cathode material for lithium ion batteries. *Nano Letters*, **2015**, 15, 514-22	11.5	213
377	Kinetics Tuning of Li-Ion Diffusion in Layered Li(NixMnyCoz)O2. *Journal of the American Chemical Society*, **2015**, 137, 8364-7	16.4	209
376	Nanostructured Black Phosphorus/Ketjenblack-Multiwalled Carbon Nanotubes Composite as High Performance Anode Material for Sodium-Ion Batteries. *Nano Letters*, **2016**, 16, 3955-65	11.5	208
375	Ultrasound assisted design of sulfur/carbon cathodes with partially fluorinated ether electrolytes for highly efficient Li/S batteries. *Advanced Materials*, **2013**, 25, 1608-15	24	204
374	The effect of oxygen crossover on the anode of a Li-O(2) battery using an ether-based solvent: insights from experimental and computational studies. *ChemSusChem*, **2013**, 6, 51-5	8.3	202
373	Effectively suppressing dissolution of manganese from spinel lithium manganate via a nanoscale surface-doping approach. *Nature Communications*, **2014**, 5, 5693	17.4	202
372	Conflicting roles of nickel in controlling cathode performance in lithium ion batteries. *Nano Letters*, **2012**, 12, 5186-91	11.5	199
371	Improvement of long-term cycling performance of Li[Ni0.8Co0.15Al0.05]O2 by AlF3 coating. *Journal of Power Sources*, **2013**, 234, 201-207	8.9	198
370	Building ultraconformal protective layers on both secondary and primary particles of layered lithium transition metal oxide cathodes. *Nature Energy*, **2019**, 4, 484-494	62.3	190
369	High electrochemical performances of microsphere C-TiO$_2$ anode for sodium-ion battery. *ACS Applied Materials & Interfaces*, **2014**, 6, 11295-301	9.5	187

368	Rechargeable lithium batteries and beyond: Progress, challenges, and future directions. *MRS Bulletin*, **2014**, 39, 395-401	3.2	187
367	Surface modification of cathode materials from nano- to microscale for rechargeable lithium-ion batteries. *Journal of Materials Chemistry*, **2010**, 20, 7074		187
366	Elucidating anionic oxygen activity in lithium-rich layered oxides. *Nature Communications*, **2018**, 9, 947	17.4	181
365	Injection of oxygen vacancies in the bulk lattice of layered cathodes. *Nature Nanotechnology*, **2019**, 14, 602-608	28.7	180
364	Lithiumbatterien und elektrische Doppelschichtkondensatoren: aktuelle Herausforderungen. *Angewandte Chemie*, **2012**, 124, 10134-10166	3.6	176
363	Flame-retardant additives for lithium-ion batteries. *Journal of Power Sources*, **2003**, 119-121, 383-387	8.9	171
362	Synthesis of porous carbon supported palladium nanoparticle catalysts by atomic layer deposition: application for rechargeable lithium-O_2 battery. *Nano Letters*, **2013**, 13, 4182-9	11.5	170
361	Reduction Mechanisms of Ethylene, Propylene, and Vinylethylene Carbonates. *Journal of the Electrochemical Society*, **2004**, 151, A178	3.9	169
360	Challenges in Developing Electrodes, Electrolytes, and Diagnostics Tools to Understand and Advance Sodium-Ion Batteries. *Advanced Energy Materials*, **2018**, 8, 1702403	21.8	164
359	In situ fabrication of porous-carbon-supported □MnO_2 nanorods at room temperature: application for rechargeable Li□O_2 batteries. *Energy and Environmental Science*, **2013**, 6, 519	35.4	164
358	Evidence for lithium superoxide-like species in the discharge product of a Li-O_2 battery. *Physical Chemistry Chemical Physics*, **2013**, 15, 3764-71	3.6	164
357	Effect of the size-selective silver clusters on lithium peroxide morphology in lithium-oxygen batteries. *Nature Communications*, **2014**, 5, 4895	17.4	162
356	Nanoarchitecture Multi-Structural Cathode Materials for High Capacity Lithium Batteries. *Advanced Functional Materials*, **2013**, 23, 1070-1075	15.6	160
355	Increased Stability Toward Oxygen Reduction Products for Lithium-Air Batteries with Oligoether-Functionalized Silane Electrolytes. *Journal of Physical Chemistry C*, **2011**, 115, 25535-25542	3.8	159
354	Nanoscale Phase Separation, Cation Ordering, and Surface Chemistry in Pristine $Li_{1.2}Ni_{0.2}Mn_{0.6}O_2$ for Li-Ion Batteries. *Chemistry of Materials*, **2013**, 25, 2319-2326	9.6	157
353	A review of composite solid-state electrolytes for lithium batteries: fundamentals, key materials and advanced structures. *Chemical Society Reviews*, **2020**, 49, 8790-8839	58.5	153
352	A high-energy and long-cycling lithium-sulfur pouch cell via a macroporous catalytic cathode with double-end binding sites. *Nature Nanotechnology*, **2021**, 16, 166-173	28.7	153
351	Design strategies for nonaqueous multivalent-ion and monovalent-ion battery anodes. *Nature Reviews Materials*, **2020**, 5, 276-294	73.3	151

350	High Capacity O3-Type Na[Li0.05(Ni0.25Fe0.25Mn0.5)0.95]O2 Cathode for Sodium Ion Batteries. *Chemistry of Materials*, **2014**, 26, 6165-6171	9.6	148
349	Rational Design of Graphene-Supported Single Atom Catalysts for Hydrogen Evolution Reaction. *Advanced Energy Materials*, **2019**, 9, 1803689	21.8	147
348	Nanostructured TiO2 and Its Application in Lithium-Ion Storage. *Advanced Functional Materials*, **2011**, 21, 3231-3241	15.6	146
347	Oxygen Release Degradation in Li-Ion Battery Cathode Materials: Mechanisms and Mitigating Approaches. *Advanced Energy Materials*, **2019**, 9, 1900551	21.8	145
346	A metal-free, lithium-ion oxygen battery: a step forward to safety in lithium-air batteries. *Nano Letters*, **2012**, 12, 5775-9	11.5	141
345	In Situ Probing and Synthetic Control of Cationic Ordering in Ni-Rich Layered Oxide Cathodes. *Advanced Energy Materials*, **2017**, 7, 1601266	21.8	139
344	The influence of large cations on the electrochemical properties of tunnel-structured metal oxides. *Nature Communications*, **2016**, 7, 13374	17.4	138
343	Development of microstrain in aged lithium transition metal oxides. *Nano Letters*, **2014**, 14, 4873-80	11.5	138
342	A disordered rock salt anode for fast-charging lithium-ion batteries. *Nature*, **2020**, 585, 63-67	50.4	137
341	High Capacity of Hard Carbon Anode in Na-Ion Batteries Unlocked by POx Doping. *ACS Energy Letters*, **2016**, 1, 395-401	20.1	136
340	Two-Dimensional Holey CoO Nanosheets for High-Rate Alkali-Ion Batteries: From Rational Synthesis to in Situ Probing. *Nano Letters*, **2017**, 17, 3907-3913	11.5	134
339	Li-Se battery: absence of lithium polyselenides in carbonate based electrolyte. *Chemical Communications*, **2014**, 50, 5576-9	5.8	134
338	Solid electrolytes and interfaces in all-solid-state sodium batteries: Progress and perspective. *Nano Energy*, **2018**, 52, 279-291	17.1	132
337	The Recycling of Spent Lithium-Ion Batteries: a Review of Current Processes and Technologies. *Electrochemical Energy Reviews*, **2018**, 1, 461-482	29.3	131
336	Design of surface protective layer of LiF/FeF3 nanoparticles in Li-rich cathode for high-capacity Li-ion batteries. *Nano Energy*, **2015**, 15, 164-176	17.1	129
335	Tuning of Thermal Stability in Layered Li(NiMnCo)O. *Journal of the American Chemical Society*, **2016**, 138, 13326-13334	16.4	128
334	Dimeric [Mo2 S12](2-) Cluster: A Molecular Analogue of MoS2 Edges for Superior Hydrogen-Evolution Electrocatalysis. *Angewandte Chemie - International Edition*, **2015**, 54, 15181-5	16.4	128
333	Insights into the Effects of Zinc Doping on Structural Phase Transition of P2-Type Sodium Nickel Manganese Oxide Cathodes for High-Energy Sodium Ion Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 22227-37	9.5	128

332	Redox shuttles for safer lithium-ion batteries. *Electrochimica Acta*, **2009**, 54, 5605-5613	6.7	127
331	Nitrogen-coordinated single iron atom catalysts derived from metal organic frameworks for oxygen reduction reaction. *Nano Energy*, **2019**, 61, 60-68	17.1	126
330	Raman Evidence for Late Stage Disproportionation in a Li-O2 Battery. *Journal of Physical Chemistry Letters*, **2014**, 5, 2705-10	6.4	126
329	Multi-scale study of thermal stability of lithiated graphite. *Energy and Environmental Science*, **2011**, 4, 4023	35.4	126
328	Anion-redox nanolithia cathodes for Li-ion batteries. *Nature Energy*, **2016**, 1,	62.3	125
327	Insights into the Na+ Storage Mechanism of Phosphorus-Functionalized Hard Carbon as Ultrahigh Capacity Anodes. *Advanced Energy Materials*, **2018**, 8, 1702781	21.8	124
326	Freestanding three-dimensional core-shell nanoarrays for lithium-ion battery anodes. *Nature Communications*, **2016**, 7, 11774	17.4	124
325	Study on the Catalytic Activity of Noble Metal Nanoparticles on Reduced Graphene Oxide for Oxygen Evolution Reactions in Lithium-Air Batteries. *Nano Letters*, **2015**, 15, 4261-8	11.5	123
324	Developing high safety Li-metal anodes for future high-energy Li-metal batteries: strategies and perspectives. *Chemical Society Reviews*, **2020**, 49, 5407-5445	58.5	121
323	A rigid naphthalenediimide triangle for organic rechargeable lithium-ion batteries. *Advanced Materials*, **2015**, 27, 2907-12	24	120
322	Tuning the Solid Electrolyte Interphase for Selective Li- and Na-Ion Storage in Hard Carbon. *Advanced Materials*, **2017**, 29, 1606860	24	119
321	A novel concentration-gradient Li[Ni0.83Co0.07Mn0.10]O2 cathode material for high-energy lithium-ion batteries. *Journal of Materials Chemistry*, **2011**, 21, 10108		113
320	Cathode Material with Nanorod Structure�An Application for Advanced High-Energy and Safe Lithium Batteries. *Chemistry of Materials*, **2013**, 25, 2109-2115	9.6	112
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318	Insights into the structural effects of layered cathode materials for high voltage sodium-ion batteries. *Energy and Environmental Science*, **2017**, 10, 1677-1693	35.4	111
317	Temperature-Sensitive Structure Evolution of Lithium-Manganese-Rich Layered Oxides for Lithium-Ion Batteries. *Journal of the American Chemical Society*, **2018**, 140, 15279-15289	16.4	108
316	Insight into sulfur reactions in Li-S batteries. *ACS Applied Materials & Interfaces*, **2014**, 6, 21938-45	9.5	107
315	Reversible Redox Chemistry of Azo Compounds for Sodium-Ion Batteries. *Angewandte Chemie - International Edition*, **2018**, 57, 2879-2883	16.4	106

314	Atomic to Nanoscale Investigation of Functionalities of an Al2O3 Coating Layer on a Cathode for Enhanced Battery Performance. *Chemistry of Materials*, **2016**, 28, 857-863	9.6	105
313	3D-Printed Cathodes of LiMn1FexPO4 Nanocrystals Achieve Both Ultrahigh Rate and High Capacity for Advanced Lithium-Ion Battery. *Advanced Energy Materials*, **2016**, 6, 1600856	21.8	105
312	New class of nonaqueous electrolytes for long-life and safe lithium-ion batteries. *Nature Communications*, **2013**, 4, 1513	17.4	104
311	Solid-State Li-Ion Batteries Using Fast, Stable, Glassy Nanocomposite Electrolytes for Good Safety and Long Cycle-Life. *Nano Letters*, **2016**, 16, 1960-8	11.5	103
310	Synthesis of Spherical Nano- to Microscale CoreShell Particles Li[(Ni0.8Co0.1Mn0.1)1-x(Ni0.5Mn0.5)x]O2and Their Applications to Lithium Batteries. *Chemistry of Materials*, **2006**, 18, 5159-5163	9.6	103
309	Growth mechanism of Ni0.3Mn0.7CO3 precursor for high capacity Li-ion battery cathodes. *Journal of Materials Chemistry*, **2011**, 21, 9290		101
308	Effects of additives on thermal stability of Li ion cells. *Journal of Power Sources*, **2005**, 146, 116-120	8.9	101
307	Fundamental Understanding and Material Challenges in Rechargeable Nonaqueous LiO2 Batteries: Recent Progress and Perspective. *Advanced Energy Materials*, **2018**, 8, 1800348	21.8	101
306	Unique aqueous Li-ion/sulfur chemistry with high energy density and reversibility. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 6197-6202	11.5	100
305	Improved electrochemical properties of BiOF-coated 5V spinel Li[Ni0.5Mn1.5]O4 for rechargeable lithium batteries. *Journal of Power Sources*, **2010**, 195, 2023-2028	8.9	99
304	Revisiting the Corrosion of the Aluminum Current Collector in Lithium-Ion Batteries. *Journal of Physical Chemistry Letters*, **2017**, 8, 1072-1077	6.4	98
303	Silicon-Graphene Composite Anodes for High-Energy Lithium Batteries. *Energy Technology*, **2013**, 1, 77-84	3.5	98
302	In Operando XRD and TXM Study on the Metastable Structure Change of NaNi1/3Fe1/3Mn1/3O2 under Electrochemical Sodium-Ion Intercalation. *Advanced Energy Materials*, **2016**, 6, 1601306	21.8	95
301	Double-structured LiMn(0.85)Fe(0.15)PO4 coordinated with LiFePO4 for rechargeable lithium batteries. *Angewandte Chemie - International Edition*, **2012**, 51, 1853-6	16.4	94
300	Parasitic Reactions in Nanosized Silicon Anodes for Lithium-Ion Batteries. *Nano Letters*, **2017**, 17, 1512-1519	11.5	93
299	Solar-powered electrochemical energy storage: an alternative to solar fuels. *Journal of Materials Chemistry A*, **2016**, 4, 2766-2782	13	92
298	Composition-Tailored Synthesis of Gradient Transition Metal Precursor Particles for Lithium-Ion Battery Cathode Materials. *Chemistry of Materials*, **2011**, 23, 1954-1963	9.6	92
297	Open-Structured V2O5nH2O Nanoflakes as Highly Reversible Cathode Material for Monovalent and Multivalent Intercalation Batteries. *Advanced Energy Materials*, **2017**, 7, 1602720	21.8	91

296	Correlation between manganese dissolution and dynamic phase stability in spinel-based lithium-ion battery. *Nature Communications*, **2019**, 10, 4721	17.4	91
295	High-voltage performance of concentration-gradient Li[Ni0.67Co0.15Mn0.18]O2 cathode material for lithium-ion batteries. *Electrochimica Acta*, **2010**, 55, 8621-8627	6.7	91
294	Enabling the high capacity of lithium-rich anti-fluorite lithium iron oxide by simultaneous anionic and cationic redox. *Nature Energy*, **2017**, 2, 963-971	62.3	90
293	Contribution of the Structural Changes of LiNi[sub 0.8]Co[sub 0.15]Al[sub 0.05]O[sub 2] Cathodes on the Exothermic Reactions in Li-Ion Cells. *Journal of the Electrochemical Society*, **2006**, 153, A731	3.9	90
292	Anion Solvation in Carbonate-Based Electrolytes. *Journal of Physical Chemistry C*, **2015**, 119, 27255-27264	3.8	89
291	Lithium titanate hydrates with superfast and stable cycling in lithium ion batteries. *Nature Communications*, **2017**, 8, 627	17.4	88
290	Nanostructured cathode materials for rechargeable lithium batteries. *Journal of Power Sources*, **2015**, 283, 219-236	8.9	87
289	Atomic-Resolution Visualization of Distinctive Chemical Mixing Behavior of Ni, Co, and Mn with Li in Layered Lithium Transition-Metal Oxide Cathode Materials. *Chemistry of Materials*, **2015**, 27, 5393-5401	9.6	87
288	Exploring Highly Reversible 1.5-Electron Reactions (V/V/V) in NaVCr(PO) Cathode for Sodium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 43632-43639	9.5	87
287	Synthetic Control of Kinetic Reaction Pathway and Cationic Ordering in High-Ni Layered Oxide Cathodes. *Advanced Materials*, **2017**, 29, 1606715	24	86
286	Selenium and SeleniumSulfur Chemistry for Rechargeable Lithium Batteries: Interplay of Cathode Structures, Electrolytes, and Interfaces. *ACS Energy Letters*, **2017**, 2, 605-614	20.1	85
285	Stabilization of a High-Capacity and High-Power Nickel-Based Cathode for Li-Ion Batteries. *CheM*, **2018**, 4, 690-704	16.2	85
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282	Ordering Heterogeneity of [MnO6] Octahedra in Tunnel-Structured MnO2 and Its Influence on Ion Storage. *Joule*, **2019**, 3, 471-484	27.8	84
281	Structure dependent electrochemical performance of Li-rich layered oxides in lithium-ion batteries. *Nano Energy*, **2017**, 35, 370-378	17.1	83
280	Mechanism of capacity fade of MCMB/Li1.1[Ni1/3Mn1/3Co1/3]0.9O2cell at elevated temperature and additives to improve its cycle life. *Journal of Materials Chemistry*, **2011**, 21, 17754		83
279	Low-temperature study of lithium-ion cells using a LiySn micro-reference electrode. *Journal of Power Sources*, **2007**, 174, 373-379	8.9	82

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276	Computational Studies of Polysiloxanes: Oxidation Potentials and Decomposition Reactions. *Journal of Physical Chemistry C*, **2011**, 115, 12216-12223	3.8	80
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274	RuO2 nanoparticles supported on MnO2 nanorods as high efficient bifunctional electrocatalyst of lithium-oxygen battery. *Nano Energy*, **2016**, 28, 63-70	17.1	77
273	Revealing the Rate-Limiting Li-Ion Diffusion Pathway in Ultrathick Electrodes for Li-Ion Batteries. *Journal of Physical Chemistry Letters*, **2018**, 9, 5100-5104	6.4	76
272	Platinum-Coated Hollow Graphene Nanocages as Cathode Used in Lithium-Oxygen Batteries. *Advanced Functional Materials*, **2016**, 26, 7626-7633	15.6	75
271	Nanoporous Structured LiFePO[sub 4] with Spherical Microscale Particles Having High Volumetric Capacity for Lithium Batteries. *Electrochemical and Solid-State Letters*, **2009**, 12, A181		75
270	Solvating power series of electrolyte solvents for lithium batteries. *Energy and Environmental Science*, **2019**, 12, 1249-1254	35.4	74
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265	Dual functioned BiOF-coated Li[Li0.1Al0.05Mn1.85]O4 for lithium batteries. *Journal of Materials Chemistry*, **2009**, 19, 1995		69
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263	Surface Modification for Suppressing Interfacial Parasitic Reactions of a Nickel-Rich Lithium-Ion Cathode. *Chemistry of Materials*, **2019**, 31, 2723-2730	9.6	68
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