M Stanley Whittingham

List of Publications by Year
in descending order

212 papers	25,731 citations	13827 67 h-index	6454 157 g-index
214 all docs	214 docs citations	214 times ranked	19421 citing authors

#	Article	IF	Citations
1	Lithium Batteries and Cathode Materials. Chemical Reviews, 2004, 104, 4271-4302.	23.0	5,407
2	Pathways for practical high-energy long-cycling lithium metal batteries. Nature Energy, 2019, 4, 180-186.	19.8	2,101
3	Ultimate Limits to Intercalation Reactions for Lithium Batteries. Chemical Reviews, 2014, 114, 11414-11443.	23.0	920
4	Lithiumâ€"oxygen batteries: bridging mechanistic understanding and battery performance. Energy and Environmental Science, 2013, 6, 750.	15.6	825
5	Layered vanadium and molybdenum oxides: batteries and electrochromics. Journal of Materials Chemistry, 2009, 19, 2526.	6.7	795
6	The Role of Ternary Phases in Cathode Reactions. Journal of the Electrochemical Society, 1976, 123, 315-320.	1.3	665
7	History, Evolution, and Future Status of Energy Storage. Proceedings of the IEEE, 2012, 100, 1518-1534.	16.4	657
8	Materials Challenges Facing Electrical Energy Storage. MRS Bulletin, 2008, 33, 411-419.	1.7	608
9	Understanding and applying coulombic efficiency in lithium metal batteries. Nature Energy, 2020, 5, 561-568.	19.8	526
10	Hydrothermal synthesis of lithium iron phosphate cathodes. Electrochemistry Communications, 2001, 3, 505-508.	2.3	520
11	Conversion Reaction Mechanisms in Lithium Ion Batteries: Study of the Binary Metal Fluoride Electrodes. Journal of the American Chemical Society, 2011, 133, 18828-18836.	6.6	492
12	High-energy lithium metal pouch cells with limited anode swelling and long stable cycles. Nature Energy, 2019, 4, 551-559.	19.8	492
13	Narrowing the Gap between Theoretical and Practical Capacities in Liâ€Ion Layered Oxide Cathode Materials. Advanced Energy Materials, 2017, 7, 1602888.	10.2	455
14	Critical Parameters for Evaluating Coin Cells and Pouch Cells of Rechargeable Li-Metal Batteries. Joule, 2019, 3, 1094-1105.	11.7	358
15	Hydrothermal Synthesis of Vanadium Oxides. Chemistry of Materials, 1998, 10, 2629-2640.	3.2	352
16	Measurement of Sodium Ion Transport in Beta Alumina Using Reversible Solid Electrodes. Journal of Chemical Physics, 1971, 54, 414-416.	1.2	346
17	Reactivity, stability and electrochemical behavior of lithium iron phosphates. Electrochemistry Communications, 2002, 4, 239-244.	2.3	339
18	Structural chemistry of vanadium oxides with open frameworks. Acta Crystallographica Section B: Structural Science, 1999, 55, 627-663.	1.8	301

#	Article	IF	Citations
19	Balancing interfacial reactions to achieve long cycle life in high-energy lithium metal batteries. Nature Energy, 2021, 6, 723-732.	19.8	285
20	Some transition metal (oxy)phosphates and vanadium oxides for lithium batteries. Journal of Materials Chemistry, 2005, 15, 3362.	6.7	278
21	The hydrothermal synthesis and characterization of olivines and related compounds for electrochemical applications. Solid State Ionics, 2008, 178, 1676-1693.	1.3	274
22	The synthesis, characterization and electrochemical behavior of the layered LiNi0.4Mn0.4Co0.2O2 compound. Journal of Materials Chemistry, 2004, 14, 214.	6.7	234
23	Effect of Al₂O₃ Coating on Stabilizing LiNi_{0.4}Mn_{0.4}Co_{0.2}O₂ Cathodes. Chemistry of Materials, 2015, 27, 6146-6154.	3.2	185
24	Energy and environmental aspects in recycling lithium-ion batteries: Concept of Battery Identity Global Passport. Materials Today, 2020, 41, 304-315.	8.3	181
25	Introduction:â€‰ Batteries and Fuel Cells. Chemical Reviews, 2004, 104, 4243-4244.	23.0	175
26	Manganese Vanadium Oxide Nanotubes:Â Synthesis, Characterization, and Electrochemistry. Chemistry of Materials, 2001, 13, 4382-4386.	3.2	174
27	Hydrothermal Synthesis and Characterization of KxMnO2Â·yH2O. Chemistry of Materials, 1996, 8, 1275-1280.	3.2	172
28	New Iron(III) Phosphate Phases:Â Crystal Structure and Electrochemical and Magnetic Properties. Inorganic Chemistry, 2002, 41, 5778-5786.	1.9	172
29	What Limits the Capacity of Layered Oxide Cathodes in Lithium Batteries?. ACS Energy Letters, 2019, 4, 1902-1906.	8.8	172
30	nâ€Butyllithiumâ€”An Effective, General Cathode Screening Agent. Journal of the Electrochemical Society, 1977, 124, 1387-1388.	1.3	150
31	Hydrothermal synthesis of cathode materials. Journal of Power Sources, 2007, 174, 442-448.	4.0	143
32	Novel Tungsten, Molybdenum, and Vanadium Oxides Containing Surfactant Ions. Chemistry of Materials, 1996, 8, 2096-2101.	3.2	134
33	Layered Li<i>_x</i>Ni<i>_y</i>Mn<i>_y</i>Co₁₋₂<i>_y</i>O₂ Cathodes for Lithium Ion Batteries:â€‰ Understanding Local Structure via Magnetic Properties. Chemistry of Materials, 2007, 19, 4682-4693.	3.2	127
34	The hydrothermal synthesis of new oxide materials. Solid State Ionics, 1995, 75, 257-268.	1.3	126
35	Liâ€“Nbâ€“O Coating/Substitution Enhances the Electrochemical Performance of the LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂ (NMC 811) Cathode. ACS Applied Materials & Interfaces, 2019, 11, 34889-34894.	4.0	124
36	Iron and Manganese Pyrophosphates as Cathodes for Lithium-Ion Batteries. Chemistry of Materials, 2011, 23, 293-300.	3.2	123

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37	Challenges and Development of Tin-Based Anode with High Volumetric Capacity for Li-Ion Batteries. Electrochemical Energy Reviews, 2020, 3, 643-655.	13.1	123
38	Spin-Transfer Pathways in Paramagnetic Lithium Transition-Metal Phosphates from Combined Broadband Isotropic Solid-State MAS NMR Spectroscopy and DFT Calculations. Journal of the American Chemical Society, 2012, 134, 17178-17185.	6.6	122
39	Temperature-dependent properties of FePO4 cathode materials. Materials Research Bulletin, 2002, 37, 1249-1257.	2.7	121
40	Characterization of Amorphous and Crystalline Tinâ€“Cobalt Anodes. Electrochemical and Solid-State Letters, 2007, 10, A274.	2.2	121
41	Electrospun nano-vanadium pentoxide cathode. Electrochemistry Communications, 2009, 11, 522-525.	2.3	118
42	Nanotechnology for environmentally sustainable electromobility. Nature Nanotechnology, 2016, 11, 1039-1051.	15.6	117
43	Structural and electrochemical behavior of LiMn0.4Ni0.4Co0.2O2. Journal of Power Sources, 2007, 165, 517-534.	4.0	116
44	Rock-Salt Growth-Induced (003) Cracking in a Layered Positive Electrode for Li-Ion Batteries. ACS Energy Letters, 2017, 2, 2607-2615.	8.8	116
45	Hydrothermal synthesis of transition metal oxides under mild conditions. Current Opinion in Solid State and Materials Science, 1996, 1, 227-232.	5.6	115
46	Layered Mixed Transition Metal Oxide Cathodes with Reduced Cobalt Content for Lithium Ion Batteries. Chemistry of Materials, 2008, 20, 7454-7464.	3.2	111
47	Can Vanadium Be Substituted into LiFePO₄?. Chemistry of Materials, 2011, 23, 4733-4740.	3.2	110
48	Electrospun Manganese Oxide Nanofibers as Anodes for Lithium-Ion Batteries. Electrochemical and Solid-State Letters, 2007, 10, A48.	2.2	108
49	Oxygen Loss in Layered Oxide Cathodes for Li-Ion Batteries: Mechanisms, Effects, and Mitigation. Chemical Reviews, 2022, 122, 5641-5681.	23.0	108
50	Mechanism of Reduction of the Fluorographite Cathode. Journal of the Electrochemical Society, 1975, 122, 526-527.	1.3	107
51	What is the Role of Nb in Nickel-Rich Layered Oxide Cathodes for Lithium-Ion Batteries?. ACS Energy Letters, 0, , 1377-1382.	8.8	107
52	Quantifying the Capacity Contributions during Activation of Li₂MnO₃. ACS Energy Letters, 2020, 5, 634-641.	8.8	105
53	Inorganic nanomaterials for batteries. Dalton Transactions, 2008, , 5424.	1.6	102
54	Performance of LiFePO4 as lithium battery cathode and comparison with manganese and vanadium oxides. Journal of Power Sources, 2003, 119-121, 239-246.	4.0	100

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55	Thermal Stability and Reactivity of Cathode Materials for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 7013-7021.	4.0	93
56	Pushing the limit of 3d transition metal-based layered oxides that use both cation and anion redox for energy storage. Nature Reviews Materials, 2022, 7, 522-540.	23.3	92
57	What can we learn about battery materials from their magnetic properties?. Journal of Materials Chemistry, 2011, 21, 9865.	6.7	91
58	Can Multielectron Intercalation Reactions Be the Basis of Next Generation Batteries?. Accounts of Chemical Research, 2018, 51, 258-264.	7.6	91
59	Lithium Batteries: 50 Years of Advances to Address the Next 20 Years of Climate Issues. Nano Letters, 2020, 20, 8435-8437.	4.5	89
60	Îµ-VOPO[sub 4]: Electrochemical Synthesis and Enhanced Cathode Behavior. Journal of the Electrochemical Society, 2005, 152, A721.	1.3	86
61	Science and Applications of Mixed Conductors for Lithium Batteries. MRS Bulletin, 2000, 25, 39-46.	1.7	81
62	Cathodic Behavior of Alkali Manganese Oxides from Permanganate. Journal of the Electrochemical Society, 1997, 144, L64-L67.	1.3	77
63	Layered Oxide Cathodes for Li-Ion Batteries: Oxygen Loss and Vacancy Evolution. Chemistry of Materials, 2019, 31, 7790-7798.	3.2	76
64	Hydrothermal synthesis of sodium tungstates. Chemistry of Materials, 1990, 2, 219-221.	3.2	75
65	Synthesis of novel compounds with the pyrochlore and hexagonal tungsten bronze structures. Journal of Solid State Chemistry, 1992, 96, 31-47.	1.4	74
66	Extremely Durable Highâ€Rate Capability of a LiNi_{0.4}Mn_{0.4}Co_{0.2}O₂ Cathode Enabled with Singleâ€Walled Carbon Nanotubes. Advanced Energy Materials, 2011, 1, 58-62.	10.2	74
67	Comparative Study of the Capacity and Rate Capability of LiNiyMnyCo1â€“2yO2 (yâ€‰=â€‰0.5, 0.45, 0.4, 0.33). Journal of the Electrochemical Society, 2011, 158, A516.	1.3	74
68	An Organic Coprecipitation Route to Synthesize High Voltage LiNi_{0.5}Mn_{1.5}O₄. ACS Applied Materials & Interfaces, 2013, 5, 10227-10232.	4.0	69
69	Stability and Rate Capability of Al Substituted Lithium-Rich High-Manganese Content Oxide Materials for Li-Ion Batteries. Journal of the Electrochemical Society, 2011, 159, A116-A120.	1.3	65
70	Study of the Transition Metal Ordering in Layered Na_{<i>x</i>}Ni_{<i>x</i>/2}Mn_{1â€“<i>x</i>/2}O₂ (2/3 â‰) Tj ETQq0 0 0 rgBT /Overlock	0.9	64
71	Thermodynamics, Kinetics and Structural Evolution of Îµ-LiVOPO4 over Multiple Lithium Intercalation. Chemistry of Materials, 2016, 28, 1794-1805.	3.2	64
72	Vaper Phase Polymerized PEDOT/Cellulose Paper Composite for Flexible Solid-State Supercapacitor. ACS Applied Energy Materials, 2020, 3, 1559-1568.	2.5	64

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73	Why Substitution Enhances the Reactivity of LiFePO₄. Chemistry of Materials, 2013, 25, 85-89.	3.2	63
74	Evidence for Decavanadate Clusters in the Lamellar Surfactant Ion Phase. Chemistry of Materials, 1997, 9, 647-649.	3.2	60
75	Hierarchical nickel valence gradient stabilizes high-nickel content layered cathode materials. Nature Communications, 2021, 12, 2350.	5.8	59
76	The Structural and Electrochemical Impact of Li and Fe Site Substitution in LiFePO4. Chemistry of Materials, 2013, 25, 2691-2699.	3.2	58
77	Tuning the Activity of Oxygen in LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ Battery Electrodes. ACS Applied Materials & Interfaces, 2016, 8, 27762-27771.	4.0	58
78	A high-performance oxygen evolution catalyst in neutral-pH for sunlight-driven CO2 reduction. Nature Communications, 2019, 10, 4081.	5.8	57
79	Oxygen and transition metal involvement in the charge compensation mechanism of LiNi1/3Mn1/3Co1/3O2 cathodes. Journal of Materials Chemistry, 2012, 22, 19993.	6.7	56
80	Electrointercalation in transition-metal disulphides. Journal of the Chemical Society Chemical Communications, 1974, , 328.	2.0	55
81	Structure of Hydrated Tungsten Peroxides [WO2(O2)H2O]Â·nH2O. Chemistry of Materials, 1998, 10, 1882-1888.	3.2	55
82	Influence of Manganese Content on the Performance of LiNi_{0.9â^'<i>y</i>}Mn_{<i>y</i>}Co_{0.1}O₂ (0.45 â‰ <i>y</i> â‰)Tj ETQq0 0 0 rgBT /C	3.2	55
83	A New Vanadium Dioxide Cathode. Journal of the Electrochemical Society, 1996, 143, L193-L195.	1.3	54
84	Insertion electrodes as SMART materials: the first 25 years and future promises. Solid State Ionics, 2000, 134, 169-178.	1.3	54
85	Structure Stabilization by Mixed Anions in Oxyfluoride Cathodes for High-Energy Lithium Batteries. ACS Nano, 2015, 9, 10076-10084.	7.3	54
86	Manganese dioxides as cathodes for lithium rechargeable cells: the stability challenge. Solid State Ionics, 2000, 131, 109-115.	1.3	53
87	Synthesis, Crystal Structure, and Electrochemical and Magnetic Study of New Iron (III) Hydroxyl-Phosphates, Isostructural with Lipscombite. Chemistry of Materials, 2005, 17, 1139-1147.	3.2	53
88	Intercalation and lattice expansion in titanium disulfide. Journal of Chemical Physics, 1975, 62, 1588-1588.	1.2	52
89	Atomic Insight into the Layered/Spinel Phase Transformation in Charged LiNi_{0.80}Co_{0.15}Al_{0.05}O₂ Cathode Particles. Journal of Physical Chemistry C, 2017, 121, 1421-1430.	1.5	52
90	Enabling multi-electron reaction of Îµ-VOPO₄ to reach theoretical capacity for lithium-ion batteries. Chemical Communications, 2018, 54, 7802-7805.	2.2	51

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91	Introduction: Batteries. Chemical Reviews, 2014, 114, 11413-11413.	23.0	50
92	KVOPO₄: A New High Capacity Multielectron Naâ€Ion Battery Cathode. Advanced Energy Materials, 2018, 8, 1800221.	10.2	50
93	Identifying the chemical and structural irreversibility in LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ â€“ a model compound for classical layered intercalation. Journal of Materials Chemistry A, 2018, 6, 4189-4198.	5.2	48
94	Special Editorial Perspective: Beyond Li-Ion Battery Chemistry. Chemical Reviews, 2020, 120, 6328-6330.	23.0	47
95	Comparison of the polymorphs of VOPO₄ as multi-electron cathodes for rechargeable alkali-ion batteries. Journal of Materials Chemistry A, 2017, 5, 17421-17431.	5.2	46
96	Thermodynamics of Antisite Defects in Layered NMC Cathodes: Systematic Insights from High-Precision Powder Diffraction Analyses. Chemistry of Materials, 2020, 32, 1002-1010.	3.2	44
97	Free Energy of Formation of Sodium Tungsten Bronzes, Na x â€‰WOâ€‰3. Journal of the Electrochemical Society, 1975, 122, 713-714.	1.3	43
98	Synthesis of vanadium oxide nanofibers and tubes using polylactide fibers as template. Materials Research Bulletin, 2005, 40, 383-393.	2.7	42
99	Formation of an Anti-Coreâ€“Shell Structure in Layered Oxide Cathodes for Li-Ion Batteries. ACS Energy Letters, 2017, 2, 2598-2606.	8.8	42
100	Good Practices for Rechargeable Lithium Metal Batteries. Journal of the Electrochemical Society, 2019, 166, A4141-A4149.	1.3	42
101	Towards understanding the rate capability of layered transition metal oxides LiNiyMnyCo1âˆ'2yO2. Journal of Power Sources, 2014, 268, 106-112.	4.0	41
102	Copper pyrazole directed crystallization of decavanadates: synthesis and characterization of {Cu(pz)}₄[{Cu(pz)₃}₂V₁₀O₂₈] and (Hpz)₂[{Cu(pz)₄}₂V₁₀O₂₈]Â·2H₂O. CrystEngComm, 2009, 11, 625-631.	1.3	40
103	Electrochemical Behavior of the Amorphous Tinâ€“Cobalt Anode. Electrochemical and Solid-State Letters, 2010, 13, A184.	2.2	39
104	Hydrothermal Synthesis of a New Molybdate with a Layered Structure, (NMe4)Mo4-.delta.O12. Chemistry of Materials, 1994, 6, 357-359.	3.2	37
105	Electrochemical Behavior of Nanostructured É›-VOPO4over Two Redox Plateaus. Journal of the Electrochemical Society, 2013, 160, A1777-A1780.	1.3	36
106	How Bulk Sensitive is Hard X-ray Photoelectron Spectroscopy: Accounting for the Cathodeâ€“Electrolyte Interface when Addressing Oxygen Redox. Journal of Physical Chemistry Letters, 2020, 11, 2106-2112.	2.1	36
107	Hydrothermal synthesis of electrode materials pyrochlore tungsten trioxide film. Journal of Power Sources, 1995, 54, 461-464.	4.0	34
108	The Anode Challenge for Lithiumâ€Ion Batteries: A Mechanochemically Synthesized Snâ€“Feâ€“C Composite Anode Surpasses Graphitic Carbon. Advanced Science, 2016, 3, 1500229.	5.6	33

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109	TUNGSTEN OXIDES AND BRONZES: SYNTHESIS, DIFFUSION AND REACTIVITY. International Journal of Modern Physics B, 1993, 07, 4145-4164.	1.0	32
110	Layered Molybdenum (Oxy)Pyrophosphate as Cathode for Lithium-Ion Batteries. Chemistry of Materials, 2013, 25, 3513-3521.	3.2	32
111	Crystal Structure, Physical Properties, and Electrochemistry of Copper Substituted LiFePO₄ Single Crystals. Chemistry of Materials, 2012, 24, 166-173.	3.2	31
112	Lithium Closoboranes as Electrolytes in Solid Cathode Lithium Cells. Journal of the Electrochemical Society, 1980, 127, 1653-1654.	1.3	29
113	Layered compounds and intercalation chemistry: An example of chemistry and diffusion in solids. Journal of Chemical Education, 1980, 57, 569.	1.1	29
114	Synthesis and characterization of a pipe-structure manganese vanadium oxide by hydrothermal reaction. Journal of Materials Chemistry, 1999, 9, 3137-3140.	6.7	29
115	Mg Substitution Clarifies the Reaction Mechanism of Olivine LiFePO₄. Advanced Energy Materials, 2015, 5, 1401204.	10.2	29
116	Electrochemical Performance of Nanosized Disordered LiVOPO₄. ACS Omega, 2018, 3, 7310-7323.	1.6	29
117	Intrinsic Challenges to the Electrochemical Reversibility of the High Energy Density Copper(II) Fluoride Cathode Material. ACS Applied Energy Materials, 2019, 2, 5243-5253.	2.5	29
118	Structure Evolution and Thermal Stability of High-Energy- Density Li-Ion Battery Cathode Li₂VO₂F. Journal of the Electrochemical Society, 2017, 164, A1552-A1558.	1.3	27
119	Îµ- and Î²-LiVOPO₄: Phase Transformation and Electrochemistry. ACS Applied Materials & Interfaces, 2017, 9, 28537-28541.	4.0	27
120	Synthesis and electrochemistry of a vanadium-pillared manganese oxide. Electrochemistry Communications, 2000, 2, 445-447.	2.3	26
121	A high-performance solid-state synthesized LiVOPO4 for lithium-ion batteries. Electrochemistry Communications, 2019, 105, 106491.	2.3	26
122	Vanadyl Phosphates A<i>_x</i>VOPO₄ (A = Li, Na, K) as Multielectron Cathodes for Alkaliâ€ion Batteries. Advanced Energy Materials, 2020, 10, 2002638.	10.2	26
123	New Iron Sulfur Cathodes for Nonaqueous Lithium Batteries. Journal of the Electrochemical Society, 1979, 126, 887-891.	1.3	25
124	A Î²-VOPO4/Îµ-VOPO4 composite Li-ion battery cathode. Electrochemistry Communications, 2014, 46, 67-70.	2.3	25
125	Nanocrystal Conversion-Assisted Design of Snâ€"Fe Alloy with a Coreâ€"Shell Structure as High-Performance Anodes for Lithium-Ion Batteries. ACS Omega, 2019, 4, 4888-4895.	1.6	25
126	The hydrothermal synthesis of the new manganese and vanadium oxides, NiMnO3H, MAV3O7 and MA0.75V4O10Â·0.67H2O (MA=CH3NH3). Journal of Materials Chemistry, 1999, 9, 93-100.	6.7	23

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127	Synthesis and characterization of layered and scrolled amine-templated vanadium oxides. Journal of Materials Science, 2008, 43, 4742-4748.	1.7	23
128	Tin-Iron Based Nano-Materials as Anodes for Li-Ion Batteries. Journal of the Electrochemical Society, 2011, 158, A1498.	1.3	23
129	Understanding the stability of MnPO₄. Journal of Materials Chemistry A, 2014, 2, 12827.	5.2	23
130	Morphology, composition and electrochemistry of a nano-porous silicon versus bulk silicon anode for lithium-ion batteries. Journal of Materials Science, 2017, 52, 3670-3677.	1.7	21
131	Role of disorder in limiting the true multi-electron redox in Îµ-LiVOPO₄. Journal of Materials Chemistry A, 2018, 6, 20669-20677.	5.2	21
132	Uniform second Li ion intercalation in solid state <i>Ïµ</i>-LiVOPO4. Applied Physics Letters, 2016, 109, .	1.5	20
133	Li₃Mo₄P₅O₂₄: A Two-Electron Cathode for Lithium-Ion Batteries with Three-Dimensional Diffusion Pathways. Chemistry of Materials, 2016, 28, 2229-2235.	3.2	20
134	Rational synthesis and electrochemical performance of LiVOPO₄ polymorphs. Journal of Materials Chemistry A, 2019, 7, 8423-8432.	5.2	20
135	Whither Mn Oxidation in Mn-Rich Alkali-Excess Cathodes?. ACS Energy Letters, 2021, 6, 1055-1064.	8.8	20
136	Systematic Evaluation of Carbon Hosts for High-Energy Rechargeable Lithium-Metal Batteries. ACS Energy Letters, 0, , 1550-1559.	8.8	20
137	Comparison of one-, two-, and three-dimensional iron phosphates containing ethylenediamine. Journal of Solid State Chemistry, 2003, 175, 63-71.	1.4	19
138	Lithium Batteries and Cathode Materials. ChemInform, 2004, 35, no.	0.1	19
139	Fundamental Linkage Between Structure, Electrochemical Properties, and Chemical Compositions of LiNi_{1â€“<i>x</i>â€“<i>y</i>}Mn<i>_x</i>Co<i>_y</i>O₂ Cathode Materials. ACS Applied Materials & Interfaces, 2021, 13, 2622-2629.	4.0	19
140	Structure, defects and thermal stability of delithiated olivine phosphates. Journal of Materials Chemistry, 2012, 22, 20482.	6.7	18
141	Extending the limits of powder diffraction analysis: Diffraction parameter space, occupancy defects, and atomic form factors. Review of Scientific Instruments, 2018, 89, 093002.	0.6	18
142	Synthesis, crystal structures and magnetic properties of organically templated new layered vanadates: [C4H8NH2]V3O7, [(CH3)2NH2]V3O7, [C5H10NH2]V3O7 and [C2H5NH3]V3O7. Journal of Materials Chemistry, 2004, 14, 2922.	6.7	17
143	Hydrothermal synthesis of copper coordination polymers based on molybdates: Chemistry issues. Journal of Molecular Structure, 2006, 796, 179-186.	1.8	17
144	What Happens to LiMnPO₄ upon Chemical Delithiation?. Inorganic Chemistry, 2016, 55, 4335-4343.	1.9	17

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145	Can Greener Cyrene Replace NMP for Electrode Preparation of NMC 811 Cathodes?. Journal of the Electrochemical Society, 2021, 168, 040536.	1.3	16
146	Conditioning the Surface and Bulk of High-Nickel Cathodes with a Nb Coating: An <i>In Situ</i> X-ray Study. Journal of Physical Chemistry Letters, 2021, 12, 7908-7913.	2.1	16
147	Lithium titanium disulfide cathodes. Nature Energy, 2021, 6, 214-214.	19.8	14
148	Control of the structure and properties of vanadium and manganese oxides through tailored soft synthesis. Solid State Sciences, 2001, 3, 1231-1236.	0.8	13
149	The first example of a novel one-dimensional cyclic tetrameric metavanadate: [PPh4]2V4O11. CrystEngComm, 2002, 4, 601.	1.3	13
150	Evolution of lithium ordering with (de)-lithiation in Î²-LiVOPO₄: insights through solid-state NMR and first principles DFT calculations. Journal of Materials Chemistry A, 2020, 8, 5546-5557.	5.2	13
151	Hydrothermal Synthesis and Characterization of A Series of Novel Zinc Vanadium Oxides as Cathode Materials. Materials Research Society Symposia Proceedings, 1997, 496, 367.	0.1	12
152	Nonstoichiometry and Defects in Hydrothermally Synthesized Îµ-LiVOPO₄. ACS Applied Energy Materials, 2019, 2, 4792-4800.	2.5	12
153	A Mixed Rate Cathode for Lithium Batteries. Journal of the Electrochemical Society, 1981, 128, 485-486.	1.3	11
154	Reaction Mechanism of the Sn₂Fe Anode in Lithium-Ion Batteries. ACS Omega, 2019, 4, 22345-22355.	1.6	11
155	Structural Changes in a High-Energy Density VO₂F Cathode upon Heating and Li Cycling. ACS Applied Energy Materials, 2018, 1, 4514-4521.	2.5	10
156	Valence-to-core X-ray emission spectroscopy of vanadium oxide and lithiated vanadyl phosphate materials. Journal of Materials Chemistry A, 2020, 8, 16332-16344.	5.2	10
157	Solvothermal synthesis and characterization of a layered pyridinium vanadate, (C5H6N)V3O7. Journal of Materials Chemistry, 2003, 13, 1424.	6.7	9
158	Mixed Conductors: Synthesis, Properties, Applications. MRS Bulletin, 1989, 14, 31-38.	1.7	8
159	Two novel open-framework zinc phosphates: (CH3NH3)Zn4(PO4)3 and (CH3NH3)2Zn5(PO4)4Electronic supplementary information (ESI) available: tables for atomic coordinates and anisotropic parameters and full list of bond lengths and bond angles. See http://www.rsc.org/suppdata/jm/b3/b303910b/. Journal of Materials Chemistry, 2003, 13, 1936.	6.7	8
160	Beyond the Nobel recognition â€“ To a cleaner sustainable future. Journal of Power Sources, 2020, 473, 228574.	4.0	8
161	Al Substitution for Mn during Co-Precipitation Boosts the Electrochemical Performance of LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂. Journal of the Electrochemical Society, 2021, 168, 050532.	1.3	8
162	Niobium Triselenide in a Lithium Dioxolane Cell. Journal of the Electrochemical Society, 1981, 128, 706-707.	1.3	7

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163	Electrochemically synthesized nanoporous gold as a cathode material for Li-O2 batteries. Journal of Solid State Electrochemistry, 2017, 21, 463-468.	1.2	7
164	Structure, Composition, and Electrochemistry of Chromium-Substituted Îµ-LiVOPO4. ACS Applied Energy Materials, 2021, 4, 1421-1430.	2.5	7
165	Enhanced High-Rate Performance of Nanosized Single Crystal Îµ-VOPO₄ with Niobium Substitution for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2021, 168, 060519.	1.3	7
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