Christian Masquelier

List of Publications by Year
in descending order

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154 papers	17,509 citations	17440 63 h-index	13379 130 g-index
169 all docs	169 docs citations	169 times ranked	10905 citing authors

#	Article	IF	Citations
1	Fundamentals of inorganic solid-state electrolytes for batteries. Nature Materials, 2019, 18, 1278-1291.	27.5	1,341
2	Effect of Structure on the Fe3â€‰+â€‰â€‰/â€‰Fe2â€‰+â€‰ Redox Couple in Iron Phosphates. Journal of the Electrochemical Society, 1997, 144, 1609-1613.	2.9	1,161
3	Polyanionic (Phosphates, Silicates, Sulfates) Frameworks as Electrode Materials for Rechargeable Li (or Na) Batteries. Chemical Reviews, 2013, 113, 6552-6591.	47.7	968
4	Room-temperature single-phase LiÂinsertion/extraction in nanoscale LixFePO4. Nature Materials, 2008, 7, 741-747.	27.5	639
5	Toward Understanding of Electrical Limitations (Electronic, Ionic) in LiMPO[sub 4] (M=Fe, Mn) Electrode Materials. Journal of the Electrochemical Society, 2005, 152, A913.	2.9	576
6	Size Effects on Carbon-Free LiFePO[sub 4] Powders. Electrochemical and Solid-State Letters, 2006, 9, A352.	2.2	573
7	The existence of a temperature-driven solid solution in LixFePO4 for 0 â‰ x â‰ 1. Nature Materials, 2005, 4, 254-260.	27.5	478
8	Study of the LiFePO4/FePO4 Two-Phase System by High-Resolution Electron Energy Loss Spectroscopy. Chemistry of Materials, 2006, 18, 5520-5529.	6.7	475
9	Towards high energy density sodium ion batteries through electrolyte optimization. Energy and Environmental Science, 2013, 6, 2361.	30.8	410
10	One-Step Low-Temperature Route for the Preparation of Electrochemically Active LiMnPO4 Powders. Chemistry of Materials, 2004, 16, 93-99.	6.7	389
11	Mapping of Transition Metal Redox Energies in Phosphates with NASICON Structure by Lithium Intercalation. Journal of the Electrochemical Society, 1997, 144, 2581-2586.	2.9	338
12	Silicate cathodes for lithium batteries: alternatives to phosphates?. Journal of Materials Chemistry, 2011, 21, 9811.	6.7	310
13	Electronic Crystallization in a Lithium Battery Material: Columnar Ordering of Electrons and Holes in the SpinelLiMn2O4. Physical Review Letters, 1998, 81, 4660-4663.	7.8	309
14	Magnetic Structures of the Triphylite LiFePO4and of Its Delithiated Form FePO4. Chemistry of Materials, 2003, 15, 4082-4090.	6.7	309
15	New Cathode Materials for Rechargeable Lithium Batteries: The 3-D Framework Structures Li3Fe2(XO4)3(X=P, As). Journal of Solid State Chemistry, 1998, 135, 228-234.	2.9	290
16	An Electrochemical Cell for Operando Study of Lithium Batteries Using Synchrotron Radiation. Journal of the Electrochemical Society, 2010, 157, A606.	2.9	284
17	Chemical and Magnetic Characterization of Spinel Materials in the LiMn2O4â€"Li2Mn4O9â€"Li4Mn5O12System. Journal of Solid State Chemistry, 1996, 123, 255-266.	2.9	259
18	An all-solid state NASICON sodium battery operating at 200ÂÂ°C. Journal of Power Sources, 2014, 247, 975-980.	7.8	256

#	ARTICLE	IF	CITATIONS
19	Rhombohedral Form of Li3V2(PO4)3as a Cathode in Li-Ion Batteries. Chemistry of Materials, 2000, 12, 3240-3242.	6.7	251
20	In situ X-ray diffraction techniques as a powerful tool to study battery electrode materials. Electrochimica Acta, 2002, 47, 3137-3149.	5.2	235
21	Atomic-Scale Influence of Grain Boundaries on Li-Ion Conduction in Solid Electrolytes for All-Solid-State Batteries. Journal of the American Chemical Society, 2018, 140, 362-368.	13.7	226
22	Structural and Mechanistic Insights into Fast Lithium-Ion Conduction in Li₄SiO₄â€"Li₃PO₄ Solid Electrolytes. Journal of the American Chemical Society, 2015, 137, 9136-9145.	13.7	223
23	Comprehensive Investigation of the Na₃V₂(PO₄)₂F₃â€"NaV₂(PO₄)<sub>2</su System by Operando High Resolution Synchrotron X-ray Diffraction. Chemistry of Materials, 2015, 27, 3009-3020.	6.7	217
24	Dependence of Li₂FeSiO₄ Electrochemistry on Structure. Journal of the American Chemical Society, 2011, 133, 1263-1265.	13.7	204
25	A comparative structural and electrochemical study of monoclinic Li3Fe2(PO4)3 and Li3V2(PO4)3. Journal of Power Sources, 2003, 119-121, 278-284.	7.8	203
26	Na₃V₂(PO₄)₂F₃ Revisited: A High-Resolution Diffraction Study. Chemistry of Materials, 2014, 26, 4238-4247.	6.7	193
27	Lithium Insertion into Titanium Phosphates, Silicates, and Sulfates. Chemistry of Materials, 2002, 14, 5057-5068.	6.7	187
28	Challenges of today for Na-based batteries of the future: From materials to cell metrics. Journal of Power Sources, 2021, 482, 228872.	7.8	169
29	A Powder Neutron Diffraction Investigation of the Two Rhombohedral NASICON Analogues:Â Î³-Na3Fe2(PO4)3and Li3Fe2(PO4)3. Chemistry of Materials, 2000, 12, 525-532.	6.7	167
30	Improving the energy density of Na₃V₂(PO₄)₃-based positive electrodes through V/Al substitution. Journal of Materials Chemistry A, 2015, 3, 16198-16205.	10.3	150
31	Enhancing the Lithium Ion Conductivity in Lithium Superionic Conductor (LISICON) Solid Electrolytes through a Mixed Polyanion Effect. ACS Applied Materials & Interfaces, 2017, 9, 7050-7058.	8.0	147
32	Î±-Na₃M₂(PO₄)₃ (M = Ti, Fe): Absolute Cationic Ordering in NASICON-Type Phases. Journal of the American Chemical Society, 2011, 133, 11900-11903.	13.7	144
33	Electrochemical and electrical properties of Nb- and/or C-containing LiFePO4 composites. Solid State Ionics, 2006, 177, 333-341.	2.7	142
34	Synthesis and Crystallographic Study of Homeotypic LiVPO₄F and LiVPO₄O. Chemistry of Materials, 2012, 24, 1223-1234.	6.7	141
35	A review of structural properties and synthesis methods of solid electrolyte materials in the Li2S â^' P2S5 binary system. Journal of Power Sources, 2018, 407, 31-43.	7.8	140
36	Linking Local Environments and Hyperfine Shifts: A Combined Experimental and Theoretical³¹P and⁷Li Solid-State NMR Study of Paramagnetic Fe(III) Phosphates. Journal of the American Chemical Society, 2010, 132, 16825-16840.	13.7	133

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37	Strong Impact of the Oxygen Content in Na₃V₂(PO₄)₂F_{3â€“<i>y</i>}O_{<i>y</i>} (0 â‰ <i>y</i> â‰ 0.5) on Its Structural and Electrochemical Properties. Chemistry of Materials, 2016, 28, 7683-7692.	6.7	126
38	A NASICONâ€Type Positive Electrode for Na Batteries with High Energy Density: Na₄MnV(PO₄)₃. Small Methods, 2019, 3, 1800218.	8.6	121
39	Electrochemical Kinetic Study of LiFePO4 Using Cavity Microelectrode. Journal of the Electrochemical Society, 2011, 158, A1090.	2.9	114
40	Discovery of a Sodium-Ordered Form of Na₃V₂(PO₄)₃ below Ambient Temperature. Chemistry of Materials, 2015, 27, 5982-5987.	6.7	110
41	Crystal Structure of a New Polymorph of Li₂FeSiO₄. Inorganic Chemistry, 2010, 49, 7446-7451.	4.0	109
42	Crystal Structures, Local Atomic Environments, and Ion Diffusion Mechanisms of Scandium-Substituted Sodium Superionic Conductor (NASICON) Solid Electrolytes. Chemistry of Materials, 2018, 30, 2618-2630.	6.7	109
43	The effects of moderate thermal treatments under air on LiFePO4-based nano powders. Journal of Materials Chemistry, 2009, 19, 3979.	6.7	106
44	Thickness of Cubic Surface Phase on Barium Titanate Single-Crystalline Grains. Journal of the American Ceramic Society, 1994, 77, 1665-1668.	3.8	98
45	High Rate Performance for Carbonâ€Coated Na₃V₂(PO₄)₂F₃ in Naâ€Ion Batteries. Small Methods, 2019, 3, 1800215.	8.6	92
46	A chemical map of NaSICON electrode materials for sodium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 281-292.	10.3	91
47	Magnetic Properties of Metastable Lithium Iron Oxides Obtained by Solvothermal/Hydrothermal Reaction. Journal of Solid State Chemistry, 1998, 141, 554-561.	2.9	90
48	Structural and Electrochemical Studies of Rhombohedral Na2TiM(PO4)3and Li1.6Na0.4TiM(PO4)3(M =) Tj ETQq0 0 0 rgBT /Overlock 10	6.7	89
49	Lithium ions on the fast track. Nature Materials, 2011, 10, 649-650.	27.5	89
50	Synthesis of LiMnO2 with Î±â€‰â€â€‰NaMnO2â€Type Structure by a Mixedâ€Alkaline Hydrothermal Reaction. Journal of the Electrochemical Society, 1998, 145, L49-L52.	2.9	88
51	Heterogeneous behaviour of the lithium battery composite electrode LiFePO4. Journal of Power Sources, 2013, 229, 16-21.	7.8	87
52	Hydrated Iron Phosphates FePO[sub 4]â‹…nH[sub 2]O and Fe[sub 4](P[sub 2]O[sub 7])[sub 3]â‹…nH[sub 2]O as 3 V Positive Electrodes in Rechargeable Lithium Batteries. Journal of the Electrochemical Society, 2002, 149, A1037.	2.9	86
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55	In Situ X-Ray Diffraction during Lithium Extraction from Rhombohedral and Monoclinic Li[sub 3]V[sub 2](PO[sub 4])[sub 3]. Electrochemical and Solid-State Letters, 2003, 6, A80.	2.2	77
56	Preparation of LiCoO2 and LiCo1â^'xFexO2 using hydrothermal reactions. Journal of Materials Chemistry, 1999, 9, 199-204.	6.7	75
57	Effect of Cation Arrangement on the Magnetic Properties of Lithium Ferrites (LiFeO2) Prepared by Hydrothermal Reaction and Post-annealing Method. Journal of Solid State Chemistry, 1998, 140, 159-167.	2.9	73
58	On the Origin of the 3.3 and 4.5 V Steps Observed in LiMn[sub 2]O[sub 4]-Based Spinels. Journal of the Electrochemical Society, 2000, 147, 845.	2.9	73
59	Lithium Insertion or Extraction from/into Tavorite-Type LiVPO₄F: An In Situ X-ray Diffraction Study. Journal of the Electrochemical Society, 2012, 159, A1171-A1175.	2.9	73
60	Lithium Insertion/Extraction into/from LiMX2O7Compositions (M = Fe, V; X = P, As) Prepared via a Solution Method. Chemistry of Materials, 2002, 14, 2701-2710.	6.7	66
61	Synthesis and Thermal Behavior of Crystalline Hydrated Iron(III) Phosphates of Interest as Positive Electrodes in Li Batteries. Chemistry of Materials, 2003, 15, 5051-5058.	6.7	66
62	On the Origin of the Electrochemical Capacity of Li[sub 2]Fe[sub 0.8]Mn[sub 0.2]SiO[sub 4]. Journal of the Electrochemical Society, 2010, 157, A1309.	2.9	66
63	Li₂FeSiO₄ Polymorphs Probed by ⁶Li MAS NMR and ⁵⁷Fe MÃ¶ssbauer Spectroscopy. Chemistry of Materials, 2011, 23, 2735-2744.	6.7	65
64	Li-Rich Li_{1+<i>x</i>}Mn_{2â€"<i>x</i>}O₄ Spinel Electrode Materials: An <i>Operando</i> Neutron Diffraction Study during Li⁺ Extraction/Insertion. Journal of Physical Chemistry C, 2014, 118, 25947-25955.	3.1	63
65	V^{IV} Disproportionation Upon Sodium Extraction From Na₃V₂(PO₄)₂F₃ Observed by Operando X-ray Absorption Spectroscopy and Solid-State NMR. Journal of Physical Chemistry C, 2017, 121, 4103-4111.	3.1	61
66	Preparation, structure and electrochemistry of LiFeBO₃: a cathode material for Li-ion batteries. Journal of Materials Chemistry A, 2014, 2, 2060-2070.	10.3	58
67	Under Pressure: Mechanochemical Effects on Structure and Ion Conduction in the Sodium-Ion Solid Electrolyte Na₃PS₄. Journal of the American Chemical Society, 2020, 142, 18422-18436.	13.7	58
68	Phase Behavior in Rhombohedral NaSiCON Electrolytes and Electrodes. Chemistry of Materials, 2020, 32, 7908-7920.	6.7	58
69	X-ray Study of the Spinel LiMn2O4at Low Temperatures. Chemistry of Materials, 1999, 11, 3629-3635.	6.7	56
70	Low temperature preparation of optimized phosphates for Li-battery applications. Solid State Ionics, 2004, 173, 113-118.	2.7	55
71	Polymorphism in Li2(Fe,Mn)SiO4: A combined diffraction and NMR study. Journal of Materials Chemistry, 2011, 21, 17823.	6.7	55
72	A New Null Matrix Electrochemical Cell for Rietveld Refinements of In-Situ or Operando Neutron Powder Diffraction Data. Journal of the Electrochemical Society, 2013, 160, A2176-A2183.	2.9	53

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73	A Reversible Lithium Intercalation Process in an ReO[sub 3]-Type Structure PNb[sub 9]O[sub 25]. Journal of the Electrochemical Society, 2002, 149, A391.	2.9	52
74	Magnetic Structural Studies of the Two Polymorphs of Li3Fe2(PO4)3:Â Analysis of the Magnetic Ground State from Super-Super Exchange Interactions. Chemistry of Materials, 2001, 13, 4527-4536.	6.7	50
75	A New Superionic Plastic Polymorph of the Na⁺ Conductor Na₃PS₄. , 2019, 1, 641-646.		50
76	Development of potentiometric ion sensors based on insertion materials as sensitive element. Solid State Ionics, 2003, 159, 149-158.	2.7	47
77	Revealing Defects in Crystalline Lithium-Ion Battery Electrodes by Solid-State NMR: Applications to LiVPO₄F. Chemistry of Materials, 2015, 27, 5212-5221.	6.7	47
78	Mechanochemical synthesis and ion transport properties of Na3OX (X = Cl, Br, I and BH4) antiperovskite solid electrolytes. Journal of Power Sources, 2020, 471, 228489.	7.8	47
79	Aluminum substitution for vanadium in the Na₃V₂(PO₄)₂F₃ and Na₃V₂(PO₄)₂FO₂ type materials. Chemical Communications, 2019, 55, 11719-11722.	4.1	45
80	Stability in water and electrochemical properties of the Na3V2(PO4)2F3 â€“ Na3(VO)2(PO4)2F solid solution. Energy Storage Materials, 2019, 20, 324-334.	18.0	45
81	MicroRaman spectroscopy on LiMn2O4: warnings on laser-induced thermal decomposition. Solid State Ionics, 2004, 170, 135-138.	2.7	44
82	Solubility range and ionic conductivity of large trivalent ion doped Na1+xMxZr2âˆ’xP3O12 (M: In, Yb, Er,) Tj ETQq0 0 0 rgBT /Overlock 10	2.7	43
83	Singular Structural and Electrochemical Properties in Highly Defective LiFePO₄ Powders. Chemistry of Materials, 2015, 27, 4261-4273.	6.7	43
84	Coupled X-ray diffraction and electrochemical studies of the mixed Ti/V-containing NASICON: Na₂TiV(PO₄)₃. Journal of Materials Chemistry A, 2018, 6, 6654-6659.	10.3	40
85	High temperature electrochemical performance of nanosized LiFePO4. Journal of Power Sources, 2010, 195, 6897-6901.	7.8	39
86	Magnetic Structures of LiMBO₃ (M = Mn, Fe, Co) Lithiated Transition Metal Borates. Inorganic Chemistry, 2013, 52, 11966-11974.	4.0	38
87	Crystal Structure of Na7Fe4(AsO4)6 and Î±-Na3Al2(AsO4)3, Two Sodium Ion Conductors Structurally Related to II-Na3Fe2(AsO4)3. Journal of Solid State Chemistry, 1995, 118, 33-42.	2.9	37
88	Understanding Local Defects in Li-Ion Battery Electrodes through Combined DFT/NMR Studies: Application to LiVPO₄F. Journal of Physical Chemistry C, 2017, 121, 3219-3227.	3.1	37
89	Temperature Dependence of Structural and Transport Properties for Na₃V₂(PO₄)₂F₃ and Na₃V₂(PO₄)₂F_{2.5}O_{0.5}. Chemistry of Materials, 2018, 30, 358-365.	6.7	37
90	Crystal Structures and Local Environments of NASICON-Type Na₃FeV(PO₄)₃ and Na₄FeV(PO₄)₃ Positive Electrode Materials for Na-Ion Batteries. Chemistry of Materials, 2021, 33, 5355-5367.	6.7	37

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91	Characterization of Li1 âˆ' ÎMn2 âˆ' 2ÎO4 defect spinel materials by their phase transition, magnetic and electrochemical properties. Journal of Power Sources, 1997, 68, 623-628.	7.8	35
92	Existence of Superstructures Due to Large Amounts of Fe Vacancies in the LiFePO₄-Type Framework. Chemistry of Materials, 2011, 23, 32-38.	6.7	34
93	Structural and electrochemical studies of novel Na₇V₃Al(P₂O₇)₄(PO₄) and Na₇V₂Al₂(P₂O₇)₄(PO<sub>4</sub high-voltage cathode materials for Na-ion batteries. Journal of Materials Chemistry A, 2017, 5,	10.3	34
94	Density Functional Theory-Assisted ³¹P and ²³Na Magic-Angle Spinning Nuclear Magnetic Resonance Study of the Na₃V₂(PO₄)₂F₃â€"Na₃V₂(PO<sub>4</sub Solid Solution: Unraveling Its Local and Electronic Structures. Chemistry of Materials, 2019, 31, 9759-9768.	6.7	34
95	A new family of sodium ion conductors: the diphosphates and diarsenates Na7M3 (X2O7)4; (M=Al, Ga,) Tj ETQq1 1 0.784314 rgBT /Ove	2.7	33
96	Electrochemical and magnetic properties of lithium manganese oxide spinels prepared by oxidation at low temperature of hydrothermally obtained LiMnO2. Solid State Ionics, 1996, 89, 53-63.	2.7	33
97	Synthesis, Phase Stability, and Electrochemically Driven Transformations in the LiCuO2âˆ'Li2CuO2System. Chemistry of Materials, 2005, 17, 4406-4415.	6.7	32
98	Vanadyl-type defects in Tavorite-like NaVPO₄F: from the average long range structure to local environments. Journal of Materials Chemistry A, 2017, 5, 25044-25055.	10.3	32
99	Crystal Structure of Na₂V₂(PO₄)₃, an Intriguing Phase Spotted in the Na₃V₂(PO₄)₃â€"Na₁V₂(PO₄)<sub>3</su System. Chemistry of Materials, 2022, 34, 451-462.	6.7	31
100	An Asymmetric Sodium Extraction/Insertion Mechanism for the Fe/V-Mixed NASICON Na₄FeV(PO₄)₃. Chemistry of Materials, 2022, 34, 4142-4152.	6.7	30
101	Infrared spectroscopy investigation of the charge ordering transition in LiMn2O4. Solid State Communications, 1999, 111, 453-458.	1.9	29
102	TEM Studies: The Key for Understanding the Origin of the 3.3 V and 4.5 V Steps Observed in LiMn2O4-based Spinels. Journal of Solid State Chemistry, 2000, 155, 394-408.	2.9	29
103	Crystal structure of a new vanadium(IV) diphosphate: VP2O7, prepared by lithium extraction from LiVP2O7. Solid State Sciences, 2001, 3, 881-887.	0.7	29
104	Chemical and Electrochemical Insertion of Lithium into Two Allotropic Varieties of NbPO5. Chemistry of Materials, 2002, 14, 2334-2341.	6.7	28
105	Monitoring the Crystal Structure and the Electrochemical Properties of Na₃(VO)₂(PO₄)₂F through Fe³⁺ Substitution. ACS Applied Materials & Interfaces, 2019, 11, 38808-38818.	8.0	28
106	Lithium-Insertion Mechanism in Crystalline and Amorphous FePO[sub 4]â‹…nH[sub 2]O. Journal of the Electrochemical Society, 2009, 156, A595.	2.9	27
107	The charge order transition and elastic/anelastic properties of LiMn2O4. Journal of Physics Condensed Matter, 2003, 15, 457-465.	1.8	26
108	Towards Reversible High-Voltage Multi-Electron Reactions in Alkali-Ion Batteries Using Vanadium Phosphate Positive Electrode Materials. Molecules, 2021, 26, 1428.	3.8	25

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109	Phase stability and sodium-vacancy orderings in a NaSICON electrode. Journal of Materials Chemistry A, 2021, 10, 209-217.	10.3	24
110	Crystal structure of the sodium ion conductor Î±-Na7Fe3(P2O7)4: Evidence for a long-range ordering of the Na+ ions. Journal of Solid State Chemistry, 1991, 95, 156-167.	2.9	23
111	Oxidation under Air of Tavorite LiVPO₄F: Influence of Vanadyl-Type Defects on Its Electrochemical Properties. Journal of Physical Chemistry C, 2016, 120, 26187-26198.	3.1	23
112	Insights into the Rich Polymorphism of the Na⁺ Ion Conductor Na₃PS₄ from the Perspective of Variable-Temperature Diffraction and Spectroscopy. Chemistry of Materials, 2021, 33, 5652-5667.	6.7	23
113	Reversed Phase Composite Polymeric Electrolytes Based on Poly(oxyethylene).. Chemistry of Materials, 2011, 23, 1785-1797.	6.7	22
114	Hydrothermal synthesis, silver decoration and electrochemistry of LiMPO4 (M=Fe, Mn, and Co) single crystals. Solid State Ionics, 2012, 220, 47-52.	2.7	22
115	One-pot synthesis of LiFePO 4 â€"carbon mesoporous composites for Li-ion batteries. Microporous and Mesoporous Materials, 2014, 198, 175-184.	4.4	22
116	Influence of the preparation process on the cation transport properties of Li4 + xMxSi1 â^' xO4 (M = B,) Tj ETQq0 0 0 rgBT /Overlock 10	2.7	21
117	Energetics of LiFePO4 and Polymorphs of Its Delithiated Form, FePO4. Electrochemical and Solid-State Letters, 2006, 9, A46-A48.	2.2	21
118	LiVPO₄F_{1â€"<i>y</i>}O_{<i>y</i>} Tavorite-Type Compositions: Influence of the Concentration of Vanadyl-Type Defects on the Structure and Electrochemical Performance. Chemistry of Materials, 2018, 30, 5682-5693.	6.7	21
119	Synthesis of Li 2 FeSiO 4 /carbon nano-composites by impregnation method. Journal of Power Sources, 2015, 284, 574-581.	7.8	20
120	Crystal structures of new silver ion conductors Ag7Fe3(X2O7)4 (X = P, As). New Journal of Chemistry, 2009, 33, 998.	2.8	19
121	Nonstochiometry in LiFe_{0.5}Mn_{0.5}PO₄: Structural and Electrochemical Properties. Journal of the Electrochemical Society, 2013, 160, A1446-A1450.	2.9	19
122	Structural and electrochemical studies of a new Tavorite composition: LiVPO₄OH. Journal of Materials Chemistry A, 2016, 4, 11030-11045.	10.3	19
123	A High Voltage Cathode Material for Sodium Batteries: Na₃V(PO₄)₂. Inorganic Chemistry, 2018, 57, 8760-8768.	4.0	19
124	A Combined Operando Synchrotron X-ray Absorption Spectroscopy and First-Principles Density Functional Theory Study to Unravel the Vanadium Redox Paradox in the Na₃V₂(PO₄)₂F₃â€"Na₃V₂(PO<sub>4</sub Compositions. Journal of Physical Chemistry C, 2020, 124, 23511-23522.	3.1	19
125	Comparative Studies on the Phase Stability, Electronic Structure, and Topology of the Charge Density in the Li3XO4 (X = P, As, V) Lithium Orthosalt Polymorphs. Chemistry of Materials, 2009, 21, 1861-1874.	6.7	18
126	In Situ X-ray Diffraction Study of Electrochemical Insertion in Mg_{0.5}Ti₂(PO₄)₃: An Electrode Material for Lithium or Sodium Batteries. Journal of the Electrochemical Society, 2012, 159, A1716-A1721.	2.9	18

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127	Mineral-Inspired Crystal Growth and Physical Properties of Na₂Cu(SO₄)₂ and Review of Na₂<i>M</i>(SO₄)₂(H₂O)_{<i>x</i>} (<i>x</i> = 0â€“6) Compounds. Crystal Growth and Design, 2019, 19, 1233-1244.	3.0	17
128	Disproportionation of stoichiometric LiMn2O4 on annealing in oxygen. Journal of Solid State Chemistry, 2004, 177, 1-5.	2.9	16
129	Stabilization of an orthorhombic phase in LiMnO by means of high pressure. Solid State Ionics, 2005, 176, 635-639.	2.7	16
130	Structural details in Li3PS4: Variety in thiophosphate building blocks and correlation to ion transport. Energy Storage Materials, 2022, 44, 168-179.	18.0	16
131	Comparative study of the phase transition of Li1+xMn2âˆ’xO4 by anelastic spectroscopy and differential scanning calorimetry. Electrochemistry Communications, 2006, 8, 113-117.	4.7	15
132	Two-Dimensional Substitution Series Na₃P_{1â€“<i>x</i>}Sb_{<i>x</i>}S_{4â€“<i>y</i>}Se_{<i>y</i>}: Beyond Static Description of Structural Bottlenecks for Na⁺ Transport. Chemistry of Materials, 2022, 34, 2410-2421.	6.7	15
133	Structure of the sodium ion conductor Na7Fe3(As2O7)4. Acta Crystallographica Section C: Crystal Structure Communications, 1990, 46, 1584-1587.	0.4	14
134	Enumeration as a Tool for Structure Solution: A Materials Genomic Approach to Solving the Cation-Ordered Structure of Na₃V₂(PO₄)₂F₃. Chemistry of Materials, 2020, 32, 8981-8992.	6.7	14
135	(NH₄)_{0.75}Fe(H₂O)₂[BP₂O₈]Â·0.25H₂O, a Fe³⁺/Fe²⁺ Mixed Valence Cathode Material for Na Battery Exhibiting a Helical Structure. Journal of Physical Chemistry C, 2015, 119, 4540-4549.	3.1	13
136	Na₇V₃(P₂O₇)₄as a high voltage electrode material for Na-ion batteries: crystal structure and mechanism of Na⁺extraction/insertion by<i>operando</i>X-ray diffraction. Journal of Materials Chemistry A, 2020, 8, 21110-21121.	10.3	13
137	Magnetic structure of two lithium iron phosphates: A- and B-Li 3 Fe 2 (PO 4) 3. Applied Physics A: Materials Science and Processing, 2002, 74, s704-s706.	2.3	12
138	Ag₃V₂(PO₄)₂F₃, a new compound obtained by Ag⁺/Na⁺ ion exchange into the Na₃V₂(PO₄)₂F₃ framework. Journal of Materials Chemistry A, 2018, 6, 10340-10347.	10.3	12
139	Redox Paradox of Vanadium in Tavorite LiVPO4F1â€“yOy. Chemistry of Materials, 2019, 31, 7367-7376.	6.7	12
140	Chemistry and structure analysis in the Li4 + xBxSi1 âˆ’ xO4 solid solution. Journal of Power Sources, 1995, 54, 448-451.	7.8	11
141	Ionothermal Synthesis of Polyanionic Electrode Material Na₃V₂(PO₄)₂FO₂ through a Topotactic Reaction. Inorganic Chemistry, 2020, 59, 17282-17290.	4.0	11
142	Crystal structures and sodium/silver distributions within the ionic conductors Na₅Ag₂Fe₃(As₂O₇)₄and Na₂Ag₅Fe₃(P₂O₇)₄. New Journal of Chemistry, 2010, 34, 287-293.	2.8	9
143	HBO2 as an adhesive agent for the multi-step fabrication of all-solid-state sodium batteries. Journal of Power Sources, 2020, 450, 227597.	7.8	6
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