

# Laurence Croguennec

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3840882/publications.pdf>

Version: 2024-02-01

177  
papers

12,445  
citations

28242

55  
h-index

25770

108  
g-index

194  
all docs

194  
docs citations

194  
times ranked

10050  
citing authors

#	ARTICLE	IF	CITATIONS
1	Polyanionic (Phosphates, Silicates, Sulfates) Frameworks as Electrode Materials for Rechargeable Li (or Na) Batteries. <i>Chemical Reviews</i> , 2013, 113, 6552-6591.	23.0	968
2	Lithium deintercalation in LiFePO <sub>4</sub> nanoparticles via a domino-cascade model. <i>Nature Materials</i> , 2008, 7, 665-671.	13.3	811
3	Cathode Composites for Li-S Batteries via the Use of Oxygenated Porous Architectures. <i>Journal of the American Chemical Society</i> , 2011, 133, 16154-16160.	6.6	568
4	Recent Achievements on Inorganic Electrode Materials for Lithium-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2015, 137, 3140-3156.	6.6	461
5	Towards high energy density sodium ion batteries through electrolyte optimization. <i>Energy and Environmental Science</i> , 2013, 6, 2361.	15.6	410
6	Reversible Oxygen Participation to the Redox Processes Revealed for Li <sub>1.20</sub> Mn <sub>0.54</sub> Co <sub>0.13</sub> Ni <sub>0.13</sub> O <sub>2</sub> . <i>Journal of the Electrochemical Society</i> , 2013, 160, A786-A792.	1.3	313
7	An overview of the Li(Ni,M)O <sub>2</sub> systems: syntheses, structures and properties. <i>Electrochimica Acta</i> , 1999, 45, 243-253.	2.6	286
8	Different oxygen redox participation for bulk and surface: A possible global explanation for the cycling mechanism of Li <sub>1.20</sub> Mn <sub>0.54</sub> Co <sub>0.13</sub> Ni <sub>0.13</sub> O <sub>2</sub> . <i>Journal of Power Sources</i> , 2013, 236, 250-258.	4.0	280
9	Mechanisms Associated with the "Plateau" Observed at High Voltage for the Overlithiated Li <sub>1.12</sub> (Ni <sub>0.425</sub> Mn <sub>0.425</sub> Co <sub>0.15</sub> ) <sub>0.88</sub> O <sub>2</sub> System. <i>Chemistry of Materials</i> , 2008, 20, 4815-4825.		267
10	Atomic resolution of lithium ions in LiCoO <sub>2</sub> . <i>Nature Materials</i> , 2003, 2, 464-467.	13.3	234
11	Thermal Stability of Lithium Nickel Oxide Derivatives. Part I: Li <sub>x</sub> Ni <sub>1.02</sub> O <sub>2</sub> and Li <sub>x</sub> Ni <sub>0.89</sub> Al <sub>0.16</sub> O <sub>2</sub> (x = 0.50). <i>Tj ETQq1 1 0.784314 rgBT / Ov</i>	3.2	217
12	Comprehensive Investigation of the Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> "NaV <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> " System by Operando High Resolution Synchrotron X-ray Diffraction. <i>Chemistry of Materials</i> , 2015, 27, 3009-3020.	3.2	217
13	Synthesis and Characterization of New LiNi <sub>1-y</sub> Mg <sub>y</sub> O <sub>2</sub> Positive Electrode Materials for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2000, 147, 2061.	1.3	216
14	Operando X-ray Absorption Study of the Redox Processes Involved upon Cycling of the Li-Rich Layered Oxide Li <sub>1.20</sub> Mn <sub>0.54</sub> Co <sub>0.13</sub> Ni <sub>0.13</sub> O <sub>2</sub> in Li Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2014, 118, 5700-5709.	1.5	204
15	Reinvestigation of Li <sub>2</sub> MnO <sub>3</sub> Structure: Electron Diffraction and High Resolution TEM. <i>Chemistry of Materials</i> , 2009, 21, 4216-4222.	3.2	202
16	Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> Revisited: A High-Resolution Diffraction Study. <i>Chemistry of Materials</i> , 2014, 26, 4238-4247.	3.2	193
17	X-Ray Photoelectron Spectroscopy Investigations of Carbon-Coated Li <sub>x</sub> FePO <sub>4</sub> Materials. <i>Chemistry of Materials</i> , 2008, 20, 7164-7170.	3.2	187
18	Effects of aluminum on the structural and electrochemical properties of LiNiO <sub>2</sub> . <i>Journal of Power Sources</i> , 2003, 115, 305-314.	4.0	185

#	ARTICLE	IF	CITATIONS
19	On the structure of $\text{Li}_3\text{Ti}_2(\text{PO}_4)_3$ . Journal of Materials Chemistry, 2002, 12, 2971-2978.	6.7	176
20	Structure of $\text{Li}_2\text{MnO}_3$ with different degrees of defects. Solid State Ionics, 2010, 180, 1652-1659.	1.3	171
21	Challenges of today for Na-based batteries of the future: From materials to cell metrics. Journal of Power Sources, 2021, 482, 228872.	4.0	169
22	$\text{Li}_{1.20}\text{Mn}_{0.54}\text{Co}_{0.13}\text{Ni}_{0.13}\text{O}_2$ with Different Particle Sizes as Attractive Positive Electrode Materials for Lithium-Ion Batteries: Insights into Their Structure. Journal of Physical Chemistry C, 2012, 116, 13497-13506.	1.5	162
23	Rechargeable aqueous electrolyte batteries: from univalent to multivalent cation chemistry. Journal of Materials Chemistry A, 2019, 7, 20519-20539.	5.2	155
24	Structural and electrochemical properties of $\text{LiNi}_{0.70}\text{Co}_{0.15}\text{Al}_{0.15}\text{O}_2$ . Solid State Ionics, 2003, 160, 39-50.	1.3	145
25	Thermal Stability of Lithium Nickel Oxide Derivatives. Part II: $\text{Li}_x\text{Ni}_{0.70}\text{Co}_{0.15}\text{Al}_{0.15}\text{O}_2$ and $\text{Li}_x\text{Ni}_{0.90}\text{Mn}_{0.10}\text{O}_2$ ( $x=0.50$ and $0.30$ ). Comparison with $\text{Li}_x\text{Ni}_{1.02}\text{O}_2$ and $\text{Li}_x\text{Ni}_{0.89}\text{Al}_{0.16}\text{O}_2$ . Chemistry of Materials, 2003, 15, 4484-4493.	3.2	145
26	The $\text{Li}_x\text{Ni}_{1-y}\text{Mg}_y\text{O}_2$ ( $y=0.05, 0.10$ ) system: structural modifications observed upon cycling. Solid State Ionics, 2000, 132, 15-29.	1.3	142
27	Structural characterisation of the highly deintercalated $\text{Li}_x\text{Ni}_{1.02}\text{O}_2$ phases (with $x \approx 0.30$ ). Journal of Materials Chemistry, 2001, 11, 131-141.	6.7	141
28	Synthesis and Crystallographic Study of Homeotypic $\text{LiVPO}_4\text{F}$ and $\text{LiVPO}_4\text{O}$ . Chemistry of Materials, 2012, 24, 1223-1234.	3.2	141
29	$\text{NaMnFe}_2(\text{PO}_4)_3$ Alluaudite Phase: Synthesis, Structure, and Electrochemical Properties As Positive Electrode in Lithium and Sodium Batteries. Chemistry of Materials, 2010, 22, 5554-5562.	3.2	140
30	Lithium secondary batteries working at very high temperature: Capacity fade and understanding of aging mechanisms. Journal of Power Sources, 2013, 236, 265-275.	4.0	134
31	Lithium batteries: a new tool in solid state chemistry. Solid State Sciences, 1999, 1, 11-19.	0.8	128
32	Strong Impact of the Oxygen Content in $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{F}_3$ ( $0 \leq y \leq 0.5$ ) on Its Structural and Electrochemical Properties. Chemistry of Materials, 2016, 28, 7683-7692.	3.2	126
33	Insight into the Atomic Structure of Cycled Lithium-Rich Layered Oxide $\text{Li}_{1.20}\text{Mn}_{0.54}\text{Co}_{0.13}\text{Ni}_{0.13}\text{O}_2$ Using HAADF STEM and Electron Nanodiffraction. Journal of Physical Chemistry C, 2015, 119, 75-83.	1.5	117
34	Electrochemical Cyclability of Orthorhombic $\text{LiMnO}_2$ : Characterization of Cycled Materials. Journal of the Electrochemical Society, 1997, 144, 3323-3330.	1.3	105
35	$\text{NiO}$ Obtained by Electrochemical Lithium Deintercalation from Lithium Nickelate: Structural Modifications. Journal of the Electrochemical Society, 2000, 147, 1314.	1.3	105
36	High Rate Performance for Carbon-Coated $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{F}_3$ in Na-Ion Batteries. Small Methods, 2019, 3, 1800215.	4.6	92

#	ARTICLE	IF	CITATIONS
37	A chemical map of NaSICON electrode materials for sodium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 281-292.	5.2	91
38	On the metastable O2-type LiCoO2. Solid State Ionics, 2001, 144, 263-276.	1.3	85
39	LiFePO <sub>4</sub> Mesocrystals for Lithium-Ion Batteries. Small, 2011, 7, 1127-1135.	5.2	83
40	Influence of the synthesis route on the electrochemical properties of LiNi <sub>0.425</sub> Mn <sub>0.425</sub> Co <sub>0.15</sub> O <sub>2</sub> . Solid State Ionics, 2005, 176, 1539-1547.	1.3	81
41	Multiple phases in the $\mu$ -VPO <sub>4</sub> O <sup>2-</sup> LiVPO <sub>4</sub> O <sup>2-</sup> Li <sub>2</sub> VPO <sub>4</sub> O system: a combined solid state electrochemistry and diffraction structural study. Journal of Materials Chemistry A, 2014, 2, 10182-10192.	5.2	79
42	Local structure of LiNiO <sub>2</sub> studied by neutron diffraction. Physical Review B, 2005, 71, .	1.1	78
43	Layered Li <sub>1+x</sub> (Ni <sub>0.425</sub> Mn <sub>0.425</sub> Co <sub>0.15</sub> ) <sub>1-x</sub> O <sub>2</sub> Positive Electrode Materials for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2006, 153, A261.	1.3	75
44	Effect of Aluminum Substitution on the Structure, Electrochemical Performance and Thermal Stability of Li <sub>1+x</sub> (Ni <sub>0.40</sub> Mn <sub>0.40</sub> Co <sub>0.20</sub> Al <sub>z</sub> ) <sub>1-x</sub> O <sub>2</sub> . Journal of the Electrochemical Society, 2011, 158, A664.	1.3	74
45	Lithium Insertion or Extraction from/into Tavorite-Type LiVPO <sub>4</sub> F: An In Situ X-ray Diffraction Study. Journal of the Electrochemical Society, 2012, 159, A1171-A1175.	1.3	73
46	Structural and Electrochemical Characterization of the LiNi <sub>1-y</sub> Ti <sub>y</sub> O <sub>2</sub> Electrode Materials Obtained by Direct Solid-State Reactions. Chemistry of Materials, 2002, 14, 2149-2157.	3.2	72
47	The structure of tavorite LiFePO <sub>4</sub> (OH) from diffraction and GGA + U studies and its preliminary electrochemical characterization. Dalton Transactions, 2010, 39, 5108.	1.6	66
48	Structural and Electrochemical Study of a New Crystalline Hydrated Iron(III) Phosphate FePO <sub>4</sub> ·H <sub>2</sub> O Obtained from LiFePO <sub>4</sub> (OH) by Ion Exchange. Chemistry of Materials, 2010, 22, 1854-1861.	3.2	63
49	Li-Rich Li <sub>1+x</sub> Mn <sub>2-x</sub> O <sub>4</sub> Spinel Electrode Materials: An Operando Neutron Diffraction Study during Li <sup>+</sup> Extraction/Insertion. Journal of Physical Chemistry C, 2014, 118, 25947-25955.	1.5	63
50	Effects of Manganese Substitution for Nickel on the Structural and Electrochemical Properties of LiNiO <sub>2</sub> . Journal of the Electrochemical Society, 2003, 150, A1287.	1.3	62
51	[ <sup>7</sup> Li and <sup>1</sup> H] MAS NMR Observation of Interphase Layers on Lithium Nickel Oxide Based Positive Electrodes of Lithium-Ion Batteries. Electrochemical and Solid-State Letters, 2004, 7, A140.	2.2	61
52	V <sup>IV</sup> Disproportionation Upon Sodium Extraction From Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> Observed by Operando X-ray Absorption Spectroscopy and Solid-State NMR. Journal of Physical Chemistry C, 2017, 121, 4103-4111.	1.5	61
53	Cation ordering in the layered Li <sub>1+x</sub> (Ni <sub>0.425</sub> Mn <sub>0.425</sub> Co <sub>0.15</sub> ) <sub>1-x</sub> O <sub>2</sub> materials (x=0 and 0.12). Journal of Power Sources, 2007, 172, 893-900.	4.0	58
54	C-containing LiFePO <sub>4</sub> materials Part I: Mechano-chemical synthesis and structural characterization. Solid State Ionics, 2008, 179, 2020-2026.	1.3	58

#	ARTICLE	IF	CITATIONS
55	In Situ X-Ray Absorption Spectroscopy Study of $\text{Li}_{(1-z)}\text{Ni}_{(1+z)}\text{O}_2$ Cathode Material. <i>Journal of the Electrochemical Society</i> , 2000, 147, 2104.	1.3	56
56	Synthesis and Electrochemical Properties of Layered $\text{Li}_{0.9}\text{Ni}_{0.45}\text{Ti}_{0.55}\text{O}_2$ . <i>Chemistry of Materials</i> , 2003, 15, 4503-4507.	3.2	55
57	A Layered Iron(III) Phosphate Phase, $\text{Na}_3\text{Fe}_3(\text{PO}_4)_4$ : Synthesis, Structure, and Electrochemical Properties as Positive Electrode in Sodium Batteries. <i>Journal of Physical Chemistry C</i> , 2010, 114, 10034-10044.	1.5	55
58	Nature of the stacking faults in orthorhombic $\text{LiMnO}_2$ . <i>Journal of Materials Chemistry</i> , 1997, 7, 511-516.	6.7	54
59	A New Null Matrix Electrochemical Cell for Rietveld Refinements of In-Situ or Operando Neutron Powder Diffraction Data. <i>Journal of the Electrochemical Society</i> , 2013, 160, A2176-A2183.	1.3	53
60	Synthesis of $\text{Li}_{1.1}(\text{Ni}_{0.425}\text{Mn}_{0.425}\text{Co}_{0.15})_{0.9}\text{O}_{1.8}\text{F}_{0.2}$ Materials by Different Routes: Is There Fluorine Substitution for Oxygen?. <i>Journal of the Electrochemical Society</i> , 2009, 156, A349.	1.3	51
61	Electrochemical behavior of orthorhombic $\text{LiMnO}_2$ : influence of the grain size and cationic disorder. <i>Solid State Ionics</i> , 1996, 89, 127-137.	1.3	50
62	Layered $\text{Li}(\text{Ni}, \text{M})\text{O}_2$ Systems as the Cathode Material in Lithium-Ion Batteries. <i>MRS Bulletin</i> , 2002, 27, 608-612.	1.7	48
63	Raman and FTIR Spectroscopy Investigations of Carbon-Coated $\text{Li}_x\text{FePO}_4$ Materials. <i>Journal of the Electrochemical Society</i> , 2008, 155, A879.	1.3	48
64	Segregation Tendency in Layered Aluminum-Substituted Lithium Nickel Oxides. <i>Chemistry of Materials</i> , 2009, 21, 1051-1059.	3.2	47
65	Revealing Defects in Crystalline Lithium-Ion Battery Electrodes by Solid-State NMR: Applications to $\text{LiVPO}_4\text{F}$ . <i>Chemistry of Materials</i> , 2015, 27, 5212-5221.	3.2	47
66	Aluminum substitution for vanadium in the $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{F}_3$ and $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{FO}_2$ type materials. <i>Chemical Communications</i> , 2019, 55, 11719-11722.	2.2	45
67	Stability in water and electrochemical properties of the $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{F}_3$ $\leftrightarrow$ $\text{Na}_3(\text{VO})_2(\text{PO}_4)_2\text{F}$ solid solution. <i>Energy Storage Materials</i> , 2019, 20, 324-334.	9.5	45
68	Structural characterisation of new metastable $\text{NiO}_2$ phases. <i>Solid State Ionics</i> , 2000, 135, 259-266.	1.3	44
69	NMR evidence of LiF coating rather than fluorine substitution in $\text{Li}(\text{Ni}_{0.425}\text{Mn}_{0.425}\text{Co}_{0.15})\text{O}_2$ . <i>Journal of Solid State Chemistry</i> , 2008, 181, 3303-3307.	1.4	43
70	Preparation, physical and structural characterization of $\text{LiMnO}_2$ samples with variable cationic disorder. <i>Journal of Materials Chemistry</i> , 1995, 5, 1919.	6.7	42
71	Electrochemical performances in temperature for a C-containing $\text{LiFePO}_4$ composite synthesized at high temperature. <i>Journal of Power Sources</i> , 2008, 183, 411-417.	4.0	42
72	Structural Study of the $\text{Li}_{0.5}\text{Na}_{0.5}\text{MnFe}_2(\text{PO}_4)_3$ and $\text{Li}_{0.75}\text{Na}_{0.25}\text{MnFe}_2(\text{PO}_4)_3$ Alluaudite Phases and Their Electrochemical Properties As Positive Electrodes in Lithium Batteries. <i>Inorganic Chemistry</i> , 2010, 49, 10378-10389.	1.9	42

#	ARTICLE	IF	CITATIONS
73	Spinel materials for Li-ion batteries: new insights obtained by <i>operando</i> neutron and synchrotron X-ray diffraction. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2015, 71, 688-701.	0.5	41
74	New Spinel Cobalt Oxides, Potential Conductive Additives for the Positive Electrode of Ni <sup>+</sup> MH Batteries. <i>Chemistry of Materials</i> , 2006, 18, 5840-5851.	3.2	40
75	An aqueous electrolyte rechargeable Li-ion/polysulfide battery. <i>Journal of Materials Chemistry A</i> , 2014, 2, 9025-9029.	5.2	40
76	Understanding Local Defects in Li-Ion Battery Electrodes through Combined DFT/NMR Studies: Application to LiVPO <sub>4</sub> F. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3219-3227.	1.5	37
77	Temperature Dependence of Structural and Transport Properties for Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> and Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>2.5</sub> O <sub>0.5</sub> . <i>Chemistry of Materials</i> , 2018, 30, 358-365.	3.2	37
78	Crystal Structures and Local Environments of NASICON-Type Na <sub>3</sub> FeV(PO <sub>4</sub> ) <sub>3</sub> and Na <sub>4</sub> FeV(PO <sub>4</sub> ) <sub>3</sub> Positive Electrode Materials for Na-Ion Batteries. <i>Chemistry of Materials</i> , 2021, 33, 5355-5367.	3.2	37
79	On the mechanism of the P <sub>2</sub> Na <sub>0.70</sub> CoO <sub>2</sub> ↔ LiCoO <sub>2</sub> exchange reaction <sup>†</sup> Part I: proposition of a model to describe the P <sub>2</sub> O <sub>2</sub> transition. <i>Journal of Solid State Chemistry</i> , 2004, 177, 2790-2802.	1.4	36
80	Targeting the role of lithium sulphide formation for the rapid capacity fading in lithium-sulphur batteries. <i>Journal of Power Sources</i> , 2015, 282, 437-443.	4.0	35
81	Structural Study of the T <sub>2</sub> -Li <sub>x</sub> CoO <sub>2</sub> (0.52 <math>x</math> 0.72) Phase. <i>Inorganic Chemistry</i> , 2004, 43, 914-922.	1.9	34
82	Density Functional Theory-Assisted <sup>31</sup> P and <sup>23</sup> Na Magic-Angle Spinning Nuclear Magnetic Resonance Study of the Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> ↔ Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>2.5</sub> O <sub>0.5</sub> Solid Solution: Unraveling Its Local and Electronic Structures. <i>Chemistry of Materials</i> , 2019, 31, 9759-9768.	3.2	31
83	In-situ wrapping of tin oxide nanoparticles by bacterial cellulose derived carbon nanofibers and its application as freestanding interlayer in lithium sulfide based lithium-sulfur batteries. <i>Journal of Colloid and Interface Science</i> , 2018, 530, 137-145.	5.0	33
84	Vanadyl-type defects in Tavorite-like NaVPO <sub>4</sub> F: from the average long range structure to local environments. <i>Journal of Materials Chemistry A</i> , 2017, 5, 25044-25055.	5.2	32
85	Crystal Structure of Na <sub>2</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> , an Intriguing Phase Spotted in the Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> ↔ Na <sub>1</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> System. <i>Chemistry of Materials</i> , 2022, 34, 451-462.	3.2	31
86	Nuclear and Magnetic Structure of Layered LiFe <sub>1-x</sub> Co <sub>x</sub> O <sub>2</sub> (0 ≤ $x$ ≤ 1) Determined by High-Resolution Neutron Diffraction. <i>Journal of Solid State Chemistry</i> , 2002, 163, 406-411.	1.4	30
87	<sup>6</sup> /7Li NMR study of the Li <sub>1-z</sub> Ni <sub>1+z</sub> O <sub>2</sub> phases. <i>Magnetic Resonance in Chemistry</i> , 2005, 43, 849-857.	1.1	30
88	Hard carbons derived from waste tea bag powder as anodes for sodium ion battery. <i>Materials Technology</i> , 2019, 34, 515-524.	1.5	30
89	In-situ tracking of NaFePO <sub>4</sub> formation in aqueous electrolytes and its electrochemical performances in Na-ion/polysulfide batteries. <i>Journal of Power Sources</i> , 2019, 412, 55-62.	4.0	30
90	An Asymmetric Sodium Extraction/Insertion Mechanism for the Fe/V-Mixed NASICON Na <sub>4</sub> FeV(PO <sub>4</sub> ) <sub>3</sub> . <i>Chemistry of Materials</i> , 2022, 34, 4142-4152.	3.2	30

#	ARTICLE	IF	CITATIONS
91	Multinuclear NMR and DFT Calculations on the $\text{LiFePO}_4 \cdot \text{OH}$ and $\text{FePO}_4 \cdot \text{H}_2\text{O}$ Homeotypic Phases. <i>Journal of Physical Chemistry C</i> , 2011, 115, 16234-16241.	1.5	28
92	Thermal stability of $\text{Li}_2\text{MnO}_3$ : from localized defects to the spinel phase. <i>Dalton Transactions</i> , 2012, 41, 1574-1581.	1.6	28
93	Monitoring the Crystal Structure and the Electrochemical Properties of $\text{Na}_3(\text{VO})_2(\text{PO}_4)_2\text{F}$ through $\text{Fe}^{3+}$ Substitution. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 38808-38818.	4.0	28
94	Phosphate structure and lithium environments in lithium phosphorus oxynitride amorphous thin films. <i>Ionics</i> , 2016, 22, 471-481.	1.2	27
95	Lithium and Vacancy Ordering in $\text{T}^{\sim}\text{Li}_x\text{CoO}_2$ Derived from $\text{O}_2$ -Type $\text{LiCoO}_2$ . <i>Chemistry of Materials</i> , 2003, 15, 2977-2983.	3.2	25
96	Mechanochemical synthesis of $\text{SnS}$ anodes for sodium ion batteries. <i>International Journal of Energy Research</i> , 2020, 44, 10809-10820.	2.2	25
97	Towards Reversible High-Voltage Multi-Electron Reactions in Alkali-Ion Batteries Using Vanadium Phosphate Positive Electrode Materials. <i>Molecules</i> , 2021, 26, 1428.	1.7	25
98	On the mechanism of the $\text{P}_2\text{Na}_{0.70}\text{CoO}_2 \cdot \text{O}_2 \leftrightarrow \text{LiCoO}_2$ exchange reaction" Part II: an in situ X-ray diffraction study. <i>Journal of Solid State Chemistry</i> , 2004, 177, 2803-2809.	1.4	24
99	Phase stability and sodium-vacancy orderings in a NaSICON electrode. <i>Journal of Materials Chemistry A</i> , 2021, 10, 209-217.	5.2	24
100	Coupled Ion/Electron Hopping in $\text{Li}_x\text{NiO}_2$ : A $^7\text{Li}$ NMR Study. <i>Inorganic Chemistry</i> , 2006, 45, 1184-1191.	1.9	23
101	Oxidation under Air of Tavorite $\text{LiVPO}_4\text{F}$ : Influence of Vanadyl-Type Defects on Its Electrochemical Properties. <i>Journal of Physical Chemistry C</i> , 2016, 120, 26187-26198.	1.5	23
102	Use of ion-selective polymer membranes for an aqueous electrolyte rechargeable Li-ion "polysulphide battery. <i>Journal of Materials Chemistry A</i> , 2015, 3, 2869-2875.	5.2	21
103	$\text{LiVPO}_4\text{F}_{1-x}\text{O}_x$ Tavorite-Type Compositions: Influence of the Concentration of Vanadyl-Type Defects on the Structure and Electrochemical Performance. <i>Chemistry of Materials</i> , 2018, 30, 5682-5693.	3.2	21
104	Impact of Synthesis Conditions in Na-Rich Prussian Blue Analogues. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 42682-42692.	4.0	21
105	Morphology and Surface Reactivity Relationship in the $\text{Li}_{1-x}\text{Mn}_2\text{O}_4$ Spinel with $x = 0.05$ and $0.10$ : A Combined First-Principle and Experimental Study. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 44922-44930.	4.0	21
106	C-containing $\text{LiFePO}_4$ materials " Part II: Electrochemical characterization. <i>Solid State Ionics</i> , 2008, 179, 2383-2389.	1.3	20
107	Surface Reactivity of $\text{Li}_2\text{MnO}_3$ : First-Principles and Experimental Study. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 44222-44230.	4.0	20
108	The $\text{T}^{\sim}\text{Li}_2/3\text{Co}_2/3\text{Mn}_1/3\text{O}_2$ System. 1. Its Structural Characterization. <i>Chemistry of Materials</i> , 2004, 16, 1411-1417.	3.2	19



#	ARTICLE	IF	CITATIONS
109	Pyrolyzed bacterial cellulose-supported SnO <sub>2</sub> nanocomposites as high-capacity anode materials for sodium-ion batteries. <i>Cellulose</i> , 2016, 23, 2597-2607.	2.4	19
110	Structural and electrochemical studies of a new Tavorite composition: LiVPO <sub>4</sub> OH. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11030-11045.	5.2	19
111	A Combined Operando Synchrotron X-ray Absorption Spectroscopy and First-Principles Density Functional Theory Study to Unravel the Vanadium Redox Paradox in the Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> "Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> Compositions. <i>Journal of Physical Chemistry C</i> , 2020, 124, 23511-23522.	1.6	19
112	Controlling the Cathodic Potential of KVPO <sub>4</sub> F through Oxygen Substitution. <i>Chemistry of Materials</i> , 2022, 34, 4523-4535.	3.2	18
113	DFT Modeling of NMR Contact Shift Mechanism in the Ideal LiNi <sub>2</sub> O <sub>4</sub> Spinel and Application to Thermally Treated Layered Li <sub>0.5</sub> NiO <sub>2</sub> . <i>Chemistry of Materials</i> , 2007, 19, 4166-4173.	3.2	17
114	Utilization of The Indonesian "Spent Tea Leaves as Promising Porous Hard Carbon Precursors for Anode Materials in Sodium Ion Batteries. <i>Waste and Biomass Valorization</i> , 2020, 11, 3121-3131.	1.8	16
115	Iron(III) Phosphates Obtained by Thermal Treatment of the Tavorite-Type FePO <sub>4</sub> ·H <sub>2</sub> O Material: Structures and Electrochemical Properties in Lithium Batteries. <i>Inorganic Chemistry</i> , 2012, 51, 3146-3155.	1.9	15
116	Design, Synthesis, and Characterization of Polyphosphazene Bearing Stable Nitroxide Radicals as Cathode-Active Materials in Li-Ion Batteries. <i>Macromolecular Chemistry and Physics</i> , 2017, 218, 1700051.	1.1	15
117	A New Sodium-Based Aqueous Rechargeable Battery System: The Special Case of Na <sub>0.44</sub> MnO <sub>2</sub> /Dissolved Sodium Polysulfide. <i>Energy Technology</i> , 2017, 5, 2182-2188.	1.8	15
118	Electrochemical Redox Processes Involved in Carbon-Coated KVPO <sub>4</sub> F for High Voltage K-Ion Batteries Revealed by XPS Analysis. <i>Journal of the Electrochemical Society</i> , 2020, 167, 130527.	1.3	15
119	Li(Ni <sub>0.40</sub> Mn <sub>0.40</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> )O <sub>2</sub> : A promising positive electrode material for high-power and safe lithium-ion batteries. <i>Journal of Power Sources</i> , 2011, 196, 8625-8631.	4.0	14
120	Effect of Temperature on Structure and Electronic Properties of Nanometric Spinel-Type Cobalt Oxides. <i>Journal of Physical Chemistry C</i> , 2013, 117, 9065-9075.	1.5	14
121	Enumeration as a Tool for Structure Solution: A Materials Genomic Approach to Solving the Cation-Ordered Structure of Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> . <i>Chemistry of Materials</i> , 2020, 32, 8981-8992.	3.2	14
122	Surface reactivity of Li <sub>2</sub> MnO <sub>3</sub> : Structural and morphological impact. <i>Applied Surface Science</i> , 2021, 542, 148514.	3.1	14
123	Thermal Behavior of the Layered Oxide Li <sub>2/3</sub> Co <sub>2/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> Obtained by Ion Exchange from the P2-Type Na <sub>2/3</sub> Co <sub>2/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> Phase. <i>Journal of Physical Chemistry C</i> , 2013, 117, 3264-3271.	1.5	13
124	A novel polyphosphazene with nitroxide radical side groups as cathode-active material in Li-ion batteries. <i>Polymers for Advanced Technologies</i> , 2019, 30, 2977-2982.	1.6	13
125	Effect of the Particles Morphology on the Electrochemical Performance of Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> ·yO <sub>y</sub> . <i>Batteries and Supercaps</i> , 2022, 5, .	2.4	13
126	Impact of the F <sup>+</sup> for O <sup>2+</sup> Substitution in Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> ·yO <sub>y</sub> on Their Transport Properties and Electrochemical Performance. <i>ACS Applied Energy Materials</i> , 2022, 5, 1065-1075.	2.5	13



#	ARTICLE	IF	CITATIONS
127	Electron Diffraction Study of the Layered $\text{Li}_y(\text{Ni}_{0.425}\text{Mn}_{0.425}\text{Co}_{0.15})\text{O}_{2.88}$ Materials Reintercalated after Two Different States of Charge. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, A194.	2.2	12
128	$\text{Ag}_3\text{V}_2(\text{PO}_4)_2\text{F}_3$ , a new compound obtained by $\text{Ag}^+/\text{Na}^+$ ion exchange into the $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{F}_3$ framework. <i>Journal of Materials Chemistry A</i> , 2018, 6, 10340-10347.	5.2	12
129	Redox Paradox of Vanadium in Tavorite $\text{LiVPO}_4\text{F}_1\text{yO}_y$ . <i>Chemistry of Materials</i> , 2019, 31, 7367-7376.	3.2	12
130	Aqueous Multivalent Charge Storage Mechanism in Aromatic Diamine-Based Organic Electrodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 8508-8520.	4.0	12
131	Effect of Particle Size on $\text{LiNi}_{0.6}\text{Mn}_{0.2}\text{Co}_{0.2}\text{O}_2$ Layered Oxide Performance in Li-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2022, 5, 5617-5632.	2.5	12
132	Synthesis of Li and Mn-Rich Layered Oxides as Concentration-Gradients for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2018, 165, A425-A433.	1.3	11
133	Ionothermal Synthesis of Polyanionic Electrode Material $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{FO}_2$ through a Topotactic Reaction. <i>Inorganic Chemistry</i> , 2020, 59, 17282-17290.	1.9	11
134	A gallic acid based metal organic framework derived $\text{NiS/C}$ anode for sodium ion batteries. <i>Sustainable Energy and Fuels</i> , 2021, 5, 3363-3372.	2.5	10
135	A Unique Structure of Ni(III) in $\text{LiNi}_{0.3}\text{Co}_{0.7}\text{O}_2$ Without Jahn-Teller Distortion. <i>Electrochemical and Solid-State Letters</i> , 2005, 8, A544.	2.2	9
136	Halogen-Free Polyphosphazene-Based Flame Retardant Cathode Materials for $\text{LiS}$ Batteries. <i>Energy Technology</i> , 2021, 9, 2100563.	1.8	9
137	First 18650-format Na-ion cells aging investigation: A degradation mechanism study. <i>Journal of Power Sources</i> , 2022, 529, 231253.	4.0	9
138	Lithium electrochemical deintercalation from $\text{O}_2\text{-LiCoO}_2$ : structural study and first principles calculations. <i>Materials Research Society Symposia Proceedings</i> , 2002, 756, 1.	0.1	8
139	In situ XAS study of $\text{Li}_x\text{Ni}_{0.7}\text{Fe}_{0.15}\text{Co}_{0.15}\text{O}_2$ cathode material. <i>Journal of Synchrotron Radiation</i> , 2001, 8, 866-868.	1.0	7
140	Electronic density distortion of $\text{NiO}_2$ due to intercalation by Li. <i>Journal of Physics and Chemistry of Solids</i> , 2004, 65, 241-243.	1.9	7
141	The $\text{Li}_2/3\text{Co}_{2/3}\text{Mn}_{1/3}\text{O}_2$ System. 2. Its Electrochemical Behavior. <i>Chemistry of Materials</i> , 2004, 16, 1418-1426.	3.2	7
142	$\text{TiO}_2$ embedded hydrothermally synthesized carbon composite as interlayer for lithium-sulfur batteries. <i>Journal of Solid State Electrochemistry</i> , 2020, 24, 2469-2478.	1.2	7
143	Self-Healable and Recyclable Sulfur Rich Poly(vinyl chloride) by $\text{S-S}$ Dynamic Bonding. <i>Macromolecular Chemistry and Physics</i> , 2023, 224, .	1.1	7
144	Particle nanosizing and coating with an ionic liquid: two routes to improve the transport properties of $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{FO}_2$ . <i>Nanoscale</i> , 2022, 14, 8663-8676.	2.8	7

#	ARTICLE	IF	CITATIONS
145	High Resolution Electron Microscopy evidence of stacking faults in $\text{O-LiMnO}_2$ . <i>Molecular Crystals and Liquid Crystals</i> , 1998, 311, 101-108.	0.3	6
146	One-step precipitation of nanometric $\text{LiMO}_2$ powders (M=Co, Fe) in alcoholic media. <i>Solid State Ionics</i> , 2010, 181, 623-630.	1.3	6
147	NMR study of the $\text{LiMnPO}_4 \cdot \text{OH}$ and $\text{MPO}_4 \cdot \text{H}_2\text{O}$ (M=Mn, V) homeotypic phases and DFT calculations. <i>Solid State Nuclear Magnetic Resonance</i> , 2012, 42, 42-50.	1.5	6
148	The adsorption effect of freestanding $\text{SiO}_x$ -decorated stabilized polyacrylonitrile interlayers in lithium-sulfur batteries. <i>Dalton Transactions</i> , 2019, 48, 4353-4361.	1.6	6
149	Preparation of salacca peel-based porous carbons by $\text{K}_2\text{CO}_3$ activation method as cathode materials for LiS battery. <i>Carbon Letters</i> , 2020, 30, 207-213.	3.3	6
150	Reactivity at the Electrode-Electrolyte Interfaces in Li-Ion and Gel Electrolyte Lithium Batteries for $\text{LiNi}_{0.6}\text{Mn}_{0.2}\text{Co}_{0.2}\text{O}_2$ with Different Particle Sizes. <i>ACS Applied Materials &amp; Interfaces</i> , 0, , .	4.0	6
151	Lithium deintercalation in $\text{LiFePO}_4$ nanoparticles via a domino-cascade model. , 2010, , 180-186.		5
152	Crystal Structure and Lithium Diffusion Pathways of a Potential Positive Electrode Material for Lithium-Ion Batteries: $\text{Li}_2\text{V}(\text{H}_0.5\text{PO}_4)_2$ . <i>Inorganic Chemistry</i> , 2017, 56, 6776-6779.	1.9	5
153	Poly( <i>ortho</i> -phenylenediamine) overlaid fibrous carbon networks exhibiting a synergistic effect for enhanced performance in hybrid micro energy storage devices. <i>Journal of Materials Chemistry A</i> , 2021, 9, 10487-10496.	5.2	5
154	Structural and Spectroscopic Evidence for Hydrogen Bonding Induced $\text{NH}_4^+$ Cation Ordering in $\text{Li}^2\text{-(NH}_4)_2\text{FeF}_5$ at Low Temperature. <i>Journal of Solid State Chemistry</i> , 1997, 131, 189-197.	1.4	4
155	Local atomic and electronic structure in the $\text{LiVPO}_4(\text{F},\text{O})$ avorite-type materials from solid-state NMR combined with DFT calculations. <i>Magnetic Resonance in Chemistry</i> , 2020, 58, 1109-1117.	1.1	4
156	Elektrochemische Deintercalation von $\text{Ag}_2\text{PbO}_2$ . <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2001, 627, 2473.	0.6	3
157	Multimodal study of dis-sodiation mechanisms within individual $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{F}_3$ cathode crystals using 4D-STEM-ASTAR and STXM-XANES. <i>Microscopy and Microanalysis</i> , 2021, 27, 3446-3447.	0.2	3
158	Introduction to Rechargeable Lithium-Sulfur Batteries. , 2017, , 1-30.		2
159	Investigation of PZT-5H and PZT-8 type piezoelectric effect on cycling stability on Si-MWCNT containing anode materials. <i>Turkish Journal of Chemistry</i> , 2021, 45, 1551-1558.	0.5	2
160	Thermal Stability of Lithium Nickel Oxide Derivatives. Part 1. $\text{Li}_x\text{Ni}_{1.02}\text{O}_2$ and $\text{Li}_x\text{Ni}_{0.89}\text{Al}_{0.16}\text{O}_2$ ( $x = 0.50$ ) <small>Tj ETQq0,0 0 rgBT /Overlock 0,1</small>		2
161	Li-Rich Layered Oxides: Still a Challenge, but a Very Promising Positive Electrode Material for Li-Ion Batteries. <i>Series on Chemistry, Energy and the Environment</i> , 2018, , 57-104.	0.3	1
162	(Invited) In the Quest of New Materials for High Energy Density Lithium-Ion Batteries. <i>ECS Meeting Abstracts</i> , 2017, , .	0.0	1

#	ARTICLE	IF	CITATIONS
163	Prospects for Li-ion Batteries and Emerging Energy Electrochemical Systems. Series on Chemistry, Energy and the Environment, 2018, , .	0.3	1
164	Feasibility and Limitations of High-Voltage Lithium-Iron-Manganese Spinels. Journal of the Electrochemical Society, 2022, 169, 070518.	1.3	1
165	Thermal Stability of Lithium Nickel Oxide Derivatives. Part 2. $\text{Li}_x\text{Ni}_{0.70}\text{Co}_{0.15}\text{Al}_{0.15}\text{O}_2$ and $\text{Li}_x\text{Ni}_{0.90}\text{Mn}_{0.10}\text{O}_2$ ( $x = 0.50$ and $0.30$ ). Comparison with $\text{Li}_x\text{Ni}_{1.02}\text{O}_2$ and $\text{Li}_x\text{Ni}_{0.89}\text{Al}_{0.16}\text{O}_2$ . ChemInform, 2004, 35, no.	0.1	0
166	Multinuclear NMR Study of the $\text{LiFePO}_4\cdot\text{OH}$ and $\text{FePO}_4\cdot\text{H}_2\text{O}$ Homeotypic Phases. ECS Meeting Abstracts, 2011, , .	0.0	0
167	Lithium–Sulfur Battery Electrolytes. , 2017, , 149-194.		0
168	The Use of Lithium (Poly)sulfide Species in Li–S Batteries. , 2017, , 105-148.		0
169	The Stability and the Electrochemical Properties of $\text{Na}_3\text{V}_3+2\text{-Y V}_4+ \text{y} (\text{PO}_4)_2\text{F}_3\text{-Y O y} (0 \hat{\%} \text{ y} \hat{\%} 2)$ . ECS Meeting Abstracts, 2019, , .	0.0	0
170	23 Na and 31 P Solid-State NMR: A Key Tool to Study Local Environments in $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{F}_3\text{-Y O y} (0 \hat{\%} \text{ y} \hat{\%})$ Tj ETQq0 0 0 rgBT /Ov	0.0	0
171	The Challenge of New Compositions for Layered Oxides Rich in Lithium and in Manganese As Positive Electrode Materials for Lithium-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
172	(Invited) Anionic and Cationic Substitution to Control the Properties of Vanadium Fluorophosphates for Li and Na-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
173	(Invited) Sodium Vanadium Fluorophosphates for Na-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
174	(Invited) Towards Reversible High-Voltage Multi-Electron Reactions in Alkali-Ion Batteries Using Vanadium Phosphate Positive Electrode Materials. ECS Meeting Abstracts, 2021, MA2021-02, 215-215.	0.0	0
175	A Chemical Map of Nasicon Electrode Materials for Sodium-Ion Batteries. ECS Meeting Abstracts, 2021, MA2021-02, 214-214.	0.0	0
176	(Invited) Crystal Chemistry of $\text{Na}_x\text{MM}'(\text{PO}_4)_3$ Nasicon Electrodes ( $\text{M}, \text{M}' = \text{V}, \text{Fe}, \text{Mn}, \text{Ti}, \text{Cr}$ ). ECS Meeting Abstracts, 2021, MA2021-02, 211-211.	0.0	0
177	Unraveling the Morphological Dependency of the $\text{LiNi}_{0.6}\text{Mn}_{0.2}\text{Co}_{0.2}\text{O}_2$ Layered Oxide Reactivity in Li-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 8669-8685.	2.5	0