

# Neeraj Sharma

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

159  
papers

5,252  
citations

41  
h-index

65  
g-index

169  
ext. papers

6,003  
ext. citations

7.8  
avg, IF

6.03  
L-index

#	Paper	IF	Citations
159	Small angle neutron scattering and its application in battery systems. <i>Current Opinion in Electrochemistry</i> , <b>2022</b> , 100990	7.2	2
158	Strategies for the Analysis of Graphite Electrode Function. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2102693	11.8	3
157	Structure and Dynamics in Mg-Stabilized $\text{NaPO}_3$ . <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 17079-17089	16.4	2
156	$\text{P}_2\text{-Na}_{2/3}\text{Mn}_{0.8}\text{M}_{0.1}\text{M}'_{0.1}\text{O}_2$ (M = Zn, Fe and M' = Cu, Al, Ti): A Detailed Crystal Structure Evolution Investigation. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 3905-3914	9.6	3
155	Sodium-ion battery anodes from carbon depositions. <i>Electrochimica Acta</i> , <b>2021</b> , 379, 138109	6.7	1
154	$\text{Sc}_{1.5}\text{Al}_{0.5}\text{W}_3\text{O}_{12}$ Exhibits Zero Thermal Expansion between 4 and 1400 K. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 3823-3831	9.6	4
153	Repurposing Waste Tires as Tunable Frameworks for Use in Sodium-Ion and Lithium-Sulfur Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 6972-6990	8.3	1
152	Dopant and Current Rate Dependence on the Structural Evolution of $\text{P}_2\text{-Na}_{2/3}\text{Mn}_{0.8}\text{Zn}_{0.1}\text{M}_{0.1}\text{O}_2$ (M=Cu, Ti): An Operando Study. <i>Chemistry Methods</i> , <b>2021</b> , 1, 295-304		0
151	Oxygen Nucleation of MoS Nanosheet Thin Film Supercapacitor Electrodes for Enhanced Electrochemical Energy Storage. <i>ChemSusChem</i> , <b>2021</b> , 14, 2882-2891	8.3	0
150	Pyrolysed coffee grounds as a conductive host agent for sulfur composite electrodes in LiS batteries. <i>Carbon Trends</i> , <b>2021</b> , 4, 100053	0	2
149	Fluorinated (Nano)Carbons: C <sub>x</sub> Electrodes and C <sub>x</sub> -Based Batteries. <i>Energy Technology</i> , <b>2021</b> , 9, 2000605	9.5	9
148	Biphasic $\text{P}_2/\text{O}_3\text{-NaLiMnFeO}$ : a structural investigation. <i>Dalton Transactions</i> , <b>2021</b> , 50, 1357-1365	4.3	2
147	Biomass Derived High Areal and Specific Capacity Hard Carbon Anodes for Sodium-Ion Batteries. <i>Energy &amp; Fuels</i> , <b>2021</b> , 35, 1820-1830	4.1	5
146	Mechanistic implications of Li-S cell function through modification of organo-sulfur cathode architectures. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 14075-14092	3.6	3
145	The structural evolution of tetradymite-type $\text{Sb}_2\text{Te}_3$ in alkali ion batteries. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 871, 159378	5.7	0
144	The phase evolution of tetradymite-type bismuth selenide in alkali ion batteries. <i>Journal of Solid State Chemistry</i> , <b>2021</b> , 300, 122241	3.3	0
143	The $\text{Sc}_2\text{W}_x\text{Mo}_{3-x}\text{O}_{12}$ series as electrodes in alkali-ion batteries. <i>CrystEngComm</i> , <b>2021</b> , 23, 3880-3891	3.3	1

142	Nanostructured LiMnO with LiPO Integrated at the Atomic Scale for High-Energy Electrode Materials with Reversible Anionic Redox. <i>ACS Central Science</i> , <b>2020</b> , 6, 2326-2338	16.8	12
141	Novel structurally-stable Na-rich NaVO cathode material with high reversible capacity by utilization of anion redox activity. <i>Chemical Communications</i> , <b>2020</b> , 56, 8245-8248	5.8	5
140	Recycling lithium-ion batteries: adding value with multiple lives. <i>Green Chemistry</i> , <b>2020</b> , 22, 2244-2254	10	17
139	Controlling Spin Switching with Anionic Supramolecular Frameworks. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 3229-3234	9.6	13
138	Dual Polymer/Liquid Electrolyte with BaTiO <sub>3</sub> Electrode for Magnesium Batteries. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 5882-5892	6.1	10
137	Pulsed Laser Deposition-based Thin Film Microbatteries. <i>Chemistry - an Asian Journal</i> , <b>2020</b> , 15, 1829-1847	7.5	13
136	Iron-Doped Sodium-Vanadium Fluorophosphates: NaVOFe(PO) <sub>2</sub> F ( <i>Inorganic Chemistry</i> , <b>2020</b> , 59, 854-862)	7.1	8
135	High-Performance NaVO <sub>3</sub> with Mixed Cationic and Anionic Redox Reactions for Na-Ion Battery Applications. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 8836-8844	9.6	9
134	Elucidation of the high-voltage phase in the layered sodium ion battery cathode material P <sub>3</sub> Na <sub>0.5</sub> Ni <sub>0.25</sub> Mn <sub>0.75</sub> O <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 21151-21162	13	5
133	Probing the charged state of layered positive electrodes in sodium-ion batteries: reaction pathways, stability and opportunities. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 24833-24867	13	15
132	Alkali Metal-Modified P2 NaMnO: Crystal Structure and Application in Sodium-Ion Batteries. <i>Inorganic Chemistry</i> , <b>2020</b> , 59, 12143-12155	5.1	4
131	Exploration of the high temperature phase evolution of electrochemically modified Sc <sub>2</sub> (WO <sub>4</sub> ) <sub>3</sub> via potassium discharge. <i>Inorganic Chemistry Frontiers</i> , <b>2019</b> , 6, 2718-2726	6.8	2
130	High performance P2 sodium layered oxides: an in-depth study into the effect of rationally selected stoichiometry. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 21812-21826	13	7
129	Monitoring lead-acid battery function using operando neutron radiography. <i>Journal of Power Sources</i> , <b>2019</b> , 438, 226976	8.9	4
128	Investigation of K modified P2 Na <sub>0.7</sub> Mn <sub>0.8</sub> Mg <sub>0.2</sub> O <sub>2</sub> as a cathode material for sodium-ion batteries. <i>CrystEngComm</i> , <b>2019</b> , 21, 172-181	3.3	10
127	Na <sub>4</sub> Co <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> P <sub>2</sub> O <sub>7</sub> through Correlative Operando X-ray Diffraction and Electrochemical Impedance Spectroscopy. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 5152-5159	9.6	13
126	Activated Carbon from E-Waste Plastics as a Promising Anode for Sodium-Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 10310-10322	8.3	17
125	Electron microscopy and its role in advanced lithium-ion battery research. <i>Sustainable Energy and Fuels</i> , <b>2019</b> , 3, 1623-1646	5.8	12

124	Exploring the rate dependence of phase evolution in P2-type Na <sub>2/3</sub> Mn <sub>0.8</sub> Fe <sub>0.1</sub> Ti <sub>0.1</sub> O <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 12115-12125	13	9
123	Rb/Cs-Modified P2 NaMnMgO: Application in Sodium-Ion Batteries. <i>ACS Omega</i> , <b>2019</b> , 4, 5784-5794	3.9	4
122	In Situ Studies of Li/Cu-Doped Layered P2 Na <sub>x</sub> MnO <sub>2</sub> Electrodes for Sodium-Ion Batteries. <i>Small Methods</i> , <b>2019</b> , 3, 1800092	12.8	8
121	Elucidation of structures and lithium environments for an organo-sulfur cathode. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 18667-18679	3.6	5
120	Thermal Evolution and Phase Transitions in Electrochemically Activated Sc(MoO). <i>Inorganic Chemistry</i> , <b>2019</b> , 58, 9964-9973	5.1	4
119	Mechanistic insights into the phenomena of increasing capacity with cycle number: using pulsed-laser deposited MoO thin film electrodes. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 25779-25787	3.6	5
118	Structural Evolution and High-Voltage Structural Stability of Li(NixMnyCoz)O <sub>2</sub> Electrodes. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 376-386	9.6	41
117	Higher permittivity of Ni-doped lead zirconate titanate, Pb[(Zr <sub>0.52</sub> Ti <sub>0.48</sub> )(1-x)Nix]O <sub>3</sub> , ceramics. <i>Ceramics International</i> , <b>2019</b> , 45, 4398-4407	5.1	7
116	Antimony-carbon nanocomposites for potassium-ion batteries: Insight into the failure mechanism in electrodes and possible avenues to improve cyclic stability. <i>Journal of Power Sources</i> , <b>2019</b> , 413, 476-484	8.9	43
115	In-Situ Nanoindentation Measurement of Local Mechanical Behavior of a Li-Ion Battery Cathode in Liquid Electrolyte. <i>Experimental Mechanics</i> , <b>2019</b> , 59, 337-347	2.6	18
114	Investigating low-valent compositions in the NaVO(PO)F family: structural transitions and their consequences. <i>Dalton Transactions</i> , <b>2018</b> , 47, 2610-2618	4.3	4
113	Electrochemical performance and structure of Al <sub>2</sub> W <sub>3</sub> MoxO <sub>12</sub> . <i>CrystEngComm</i> , <b>2018</b> , 20, 1352-1360	3.3	12
112	Structural evolution and stability of Sc(WO) after discharge in a sodium-based electrochemical cell. <i>Dalton Transactions</i> , <b>2018</b> , 47, 1251-1260	4.3	10
111	Local Structure Adaptations and Oxide Ionic Conductivity in the Type III Stability Region of (1-x)Bi <sub>2</sub> O <sub>3</sub> -xNb <sub>2</sub> O <sub>5</sub> . <i>Chemistry of Materials</i> , <b>2018</b> , 30, 3387-3394	9.6	1
110	High voltage structural evolution and enhanced Na-ion diffusion in P2-Na <sub>2/3</sub> Ni <sub>1/3</sub> MgxMn <sub>2/3</sub> O <sub>2</sub> (0 ≤ x ≤ 0.2) cathodes from diffraction, electrochemical and ab initio studies. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 1470-1479	35.4	100
109	SmFeO <sub>3</sub> and Bi-doped SmFeO <sub>3</sub> perovskites as an alternative class of electrodes in lithium-ion batteries. <i>CrystEngComm</i> , <b>2018</b> , 20, 6165-6172	3.3	12
108	On the dynamics of transition metal migration and its impact on the performance of layered oxides for sodium-ion batteries: NaFeO <sub>2</sub> as a case study. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 15132-15146	13	46
107	Graphene and magnesiated graphene as electrodes for magnesium ion batteries. <i>Materials Letters</i> , <b>2018</b> , 232, 103-106	3.3	9

106	Electrochemical Modification of Negative Thermal Expansion Materials in the Ta NbVO Series. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 10633-10639	5.1	5
105	Towards a reliable Li-metal-free LiNO <sub>3</sub> -free Li-ion polysulphide full cell via parallel interface engineering. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2509-2520	35.4	21
104	The crystal structures and corresponding ion-irradiation response for the Tb(x)Yb(2-x)TiO <sub>5</sub> series. <i>Ceramics International</i> , <b>2018</b> , 44, 511-519	5.1	11
103	Electrochemically activated solid synthesis: an alternative solid-state synthetic method. <i>Dalton Transactions</i> , <b>2018</b> , 47, 14604-14611	4.3	4
102	Rate and Composition Dependence on the Structural-Electrochemical Relationships in P <sub>2</sub> Na <sub>2</sub> /3Fe <sub>1-x</sub> MnyO <sub>2</sub> Positive Electrodes for Sodium-Ion Batteries. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 7503-7510	9.6	17
101	Hybrid Solid Polymer Electrolytes with Two-Dimensional Inorganic Nanofillers. <i>Chemistry - A European Journal</i> , <b>2018</b> , 24, 18180-18203	4.8	19
100	Structural evidence for Mg-doped LiFePO <sub>4</sub> electrode polarisation in commercial Li-ion batteries. <i>Journal of Power Sources</i> , <b>2018</b> , 394, 1-8	8.9	21
99	Correlating cycling history with structural evolution in commercial 26650 batteries using in operando neutron powder diffraction. <i>Journal of Power Sources</i> , <b>2017</b> , 343, 446-457	8.9	17
98	An Initial Review of the Status of Electrode Materials for Potassium-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1602911	21.8	634
97	Higher oxidation level in graphene oxide. <i>Optik</i> , <b>2017</b> , 143, 115-124	2.5	66
96	Capacity Enhancement of the Quenched Li-Ni-Mn-Co Oxide High-voltage Li-ion Battery Positive Electrode. <i>Electrochimica Acta</i> , <b>2017</b> , 236, 10-17	6.7	10
95	In operando neutron diffraction study of the temperature and current rate-dependent phase evolution of LiFePO <sub>4</sub> in a commercial battery. <i>Journal of Power Sources</i> , <b>2017</b> , 342, 562-569	8.9	13
94	Mechanisms of Sodium Insertion/Extraction on the Surface of Defective Graphenes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 431-438	9.5	15
93	Maricite NaFePO <sub>4</sub> /C/graphene: a novel hybrid cathode for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 16616-16621	13	43
92	An Operando Mechanistic Evaluation of a Solar-Rechargeable Sodium-Ion Intercalation Battery. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700545	21.8	25
91	The Na <sub>x</sub> MoO <sub>2</sub> Phase Diagram (1/2-x). <i>Chemistry of Materials</i> , <b>2017</b> , 29, 7243-7254	9.6	19
90	Structure-Electrochemical Evolution of a Mn-Rich P <sub>2</sub> Na <sub>2</sub> /3Fe <sub>0.2</sub> Mn <sub>0.8</sub> O <sub>2</sub> Na-Ion Battery Cathode. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 7416-7423	9.6	43
89	Effect of Ni-nanoparticles decoration on graphene to enable high capacity sodium-ion battery negative electrodes. <i>Electrochimica Acta</i> , <b>2017</b> , 250, 212-218	6.7	8

88	Understanding the Behavior of LiCoO <sub>2</sub> Cathodes at Extended Potentials in Ionic Liquid-Alkyl Carbonate Hybrid Electrolytes. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 15630-15638	3.8	11
87	Crystallographic Evolution of P2 Na <sub>2</sub> /3Fe <sub>0.4</sub> Mn <sub>0.6</sub> O <sub>2</sub> Electrodes during Electrochemical Cycling. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 6342-6354	9.6	53
86	Lithium Germanate (Li <sub>2</sub> GeO <sub>5</sub> ): A High-Performance Anode Material for Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 16059-16063	16.4	26
85	Moisture exposed layered oxide electrodes as Na-ion battery cathodes. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 18963-18975	13	40
84	Size and Composition Effects in Sb-Carbon Nanocomposites for Sodium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 30152-30164	9.5	54
83	The Origin of Capacity Fade in the Li <sub>2</sub> MnO <sub>3</sub> /LiMO <sub>2</sub> (M = Li, Ni, Co, Mn) Microsphere Positive Electrode: An Operando Neutron Diffraction and Transmission X-ray Microscopy Study. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 8824-33	16.4	80
82	High-Performance P2-Phase Na <sub>2</sub> /3Mn <sub>0.8</sub> Fe <sub>0.1</sub> Ti <sub>0.1</sub> O <sub>2</sub> Cathode Material for Ambient-Temperature Sodium-Ion Batteries. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 106-116	9.6	166
81	Sodium insertion/extraction from single-walled and multi-walled carbon nanotubes: The differences and similarities. <i>Journal of Power Sources</i> , <b>2016</b> , 314, 102-108	8.9	22
80	Comparison of the structural evolution of the O3 and P2 phases of Na <sub>2</sub> /3Fe <sub>2</sub> /3Mn <sub>1</sub> /3O <sub>2</sub> during electrochemical cycling. <i>Electrochimica Acta</i> , <b>2016</b> , 203, 189-197	6.7	12
79	Structural evolution of NASICON-type Li <sub>1+x</sub> Al <sub>x</sub> Ge <sub>2-x</sub> (PO <sub>4</sub> ) <sub>3</sub> using in situ synchrotron X-ray powder diffraction. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 7718-7726	13	56
78	Anhydrous Calcium Oxalate Polymorphism: A Combined Computational and Synchrotron X-ray Diffraction Study. <i>Crystal Growth and Design</i> , <b>2016</b> , 16, 5954-5965	3.5	11
77	Characterization of an oxalate-phosphate-amine metal-organic framework (OPA-MOF) exhibiting properties suited for innovative applications in agriculture. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 9239-9252	4.3	16
76	In Situ Neutron Diffraction Monitoring of Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> Formation: Toward a Rational Synthesis of Garnet Solid Electrolytes. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 2903-2910	9.6	69
75	Using in situ synchrotron x-ray diffraction to study lithium- and sodium-ion batteries: A case study with an unconventional battery electrode (Gd <sub>2</sub> TiO <sub>5</sub> ). <i>Journal of Materials Research</i> , <b>2015</b> , 30, 381-389	2.5	12
74	Structural evolution of electrodes in the NCR and CGR cathode-containing commercial lithium-ion batteries cycled between 3.0 and 4.5 V: An operando neutron powder-diffraction study. <i>Journal of Materials Research</i> , <b>2015</b> , 30, 373-380	2.5	19
73	Interplay between Electrochemistry and Phase Evolution of the P2-type Na <sub>x</sub> (Fe <sub>1/2</sub> Mn <sub>1/2</sub> )O <sub>2</sub> Cathode for Use in Sodium-Ion Batteries. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 3150-3158	9.6	93
72	Rate Dependent Performance Related to Crystal Structure Evolution of Na <sub>0.67</sub> Mn <sub>0.8</sub> Mg <sub>0.2</sub> O <sub>2</sub> in a Sodium-Ion Battery. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 6976-6986	9.6	88
71	In Situ Neutron Powder Diffraction of Li <sub>6</sub> C <sub>60</sub> for Hydrogen Storage. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 19715-19721	3.8	22

70	Introducing a 0.2 V sodium-ion battery anode: The Na <sub>2</sub> Ti <sub>3</sub> O <sub>7</sub> to Na <sub>3</sub> Ti <sub>3</sub> O <sub>7</sub> pathway. <i>Electrochemistry Communications</i> , <b>2015</b> , 61, 10-13	5.1	46
69	Structural evolution of mixed valent (V <sup>3+</sup> /V <sup>4+</sup> ) and V <sup>4+</sup> sodium vanadium fluorophosphates as cathodes in sodium-ion batteries: comparisons, overcharging and mid-term cycling. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 23017-23027	13	29
68	A comprehensive picture of the current rate dependence of the structural evolution of P2-Na <sub>2</sub> /3Fe <sub>2</sub> /3Mn <sub>1</sub> /3O <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 21023-21038	13	36
67	Understanding Structure-Function Relationship in Hybrid Co <sub>3</sub> O <sub>4</sub> -Fe <sub>2</sub> O <sub>3</sub> /C Lithium-Ion Battery Electrodes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 20736-44	9.5	33
66	The Unique Structural Evolution of the O3-Phase Na <sub>2</sub> /3Fe <sub>2</sub> /3Mn <sub>1</sub> /3O <sub>2</sub> during High Rate Charge/Discharge: A Sodium-Centred Perspective. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 4994-5005	15.6	58
65	In Situ Powder Diffraction Studies of Electrode Materials in Rechargeable Batteries. <i>ChemSusChem</i> , <b>2015</b> , 8, 2826-53	8.3	51
64	Evaluation of undoped and M-doped TiO <sub>2</sub> , where M = Sn, Fe, Ni/Nb, Zr, V, and Mn, for lithium-ion battery applications prepared by the molten-salt method. <i>RSC Advances</i> , <b>2015</b> , 5, 29535-29544	3.7	80
63	The use of deuterated ethyl acetate in highly concentrated electrolyte as a low-cost solvent for in situ neutron diffraction measurements of Li-ion battery electrodes. <i>Electrochimica Acta</i> , <b>2015</b> , 174, 417-423	6.7	13
62	Ammonia-storage in lithium intercalated fullerenes. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 21099-21105	9	9
61	In-situ Neutron Diffraction Study of a High Voltage Li(Ni <sub>0.42</sub> Mn <sub>0.42</sub> Co <sub>0.16</sub> )O <sub>2</sub> /Graphite Pouch Cell. <i>Electrochimica Acta</i> , <b>2015</b> , 180, 234-240	6.7	33
60	Graphene and Selected Derivatives as Negative Electrodes in Sodium- and Lithium-Ion Batteries. <i>ChemElectroChem</i> , <b>2015</b> , 2, 600-610	4.3	36
59	Local structural changes in LiMn <sub>1.5</sub> Ni <sub>0.5</sub> O <sub>4</sub> spinel cathode material for lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2014</b> , 255, 439-449	8.9	37
58	Sodium Distribution and Reaction Mechanisms of a Na <sub>3</sub> V <sub>2</sub> O <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F Electrode during Use in a Sodium-Ion Battery. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 3391-3402	9.6	91
57	Lithium Migration in Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> Studied Using in Situ Neutron Powder Diffraction. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 2318-2326	9.6	84
56	Mass production of Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> with a conductive network via in situ spray pyrolysis as a long cycle life, high rate anode material for lithium ion batteries. <i>RSC Advances</i> , <b>2014</b> , 4, 38568-38574	3.7	7
55	Kinetics of the Thermally-Induced Structural Rearrangement of EMnO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 24257-24265	3.8	11
54	Evidence of Solid-Solution Reaction upon Lithium Insertion into Cryptomelane K <sub>0.25</sub> Mn <sub>2</sub> O <sub>4</sub> Material. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 3976-3983	3.8	33
53	Carbon coated Na <sub>7</sub> Fe <sub>7</sub> (PO <sub>4</sub> ) <sub>6</sub> F <sub>3</sub> : A novel intercalation cathode for sodium-ion batteries. <i>Journal of Power Sources</i> , <b>2014</b> , 271, 497-503	8.9	16

52	Structural evolution of high energy density V <sup>3+</sup> /V <sup>4+</sup> mixed valent Na <sub>3</sub> V <sub>2</sub> O <sub>2x</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3-2x</sub> (x = 0.8) sodium vanadium fluorophosphate using in situ synchrotron X-ray powder diffraction. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 7766-7779	13	51
51	In-situ neutron diffraction study of the simultaneous structural evolution of a LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> cathode and a Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> anode in a LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub>   Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> full cell. <i>Journal of Power Sources</i> , <b>2014</b> , 246, 464-472	8.9	60
50	Li <sub>2</sub> MnSiO <sub>4</sub> cathodes modified by phosphorous substitution and the structural consequences. <i>Solid State Ionics</i> , <b>2014</b> , 259, 29-39	3.3	15
49	In situ neutron powder diffraction using custom-made lithium-ion batteries. <i>Journal of Visualized Experiments</i> , <b>2014</b> , e52284	1.6	4
48	Sodium uptake in cell construction and subsequent in operando electrode behaviour of Prussian blue analogues, Fe[Fe(CN) <sub>6</sub> ](1-x)·yH <sub>2</sub> O and FeCo(CN) <sub>6</sub> . <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 24178-87	3.6	57
47	Mechanistic and structural investigation of Li <sub>x</sub> MnO <sub>2</sub> cathodes during cycling in Li-ion batteries. <i>Electrochimica Acta</i> , <b>2014</b> , 137, 736-743	6.7	4
46	Synthetic, Structural, and Electrochemical Study of Monoclinic Na <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> as a Sodium-Ion Battery Anode Material. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 7067-7072	9.6	71
45	Structure of the Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> anode during charge-discharge cycling. <i>Powder Diffraction</i> , <b>2014</b> , 29, S59-S63	1.8	10
44	Comparison of the so-called CGR and NCR cathodes in commercial lithium-ion batteries using in situ neutron powder diffraction. <i>Powder Diffraction</i> , <b>2014</b> , 29, S35-S39	1.8	30
43	Preparation and electrochemical properties of high-capacity LiFePO <sub>4</sub>   Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> /C composite for lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2014</b> , 246, 912-917	8.9	36
42	Discharge mechanism of the heat treated electrolytic manganese dioxide cathode in a primary Li/MnO <sub>2</sub> battery: An in-situ and ex-situ synchrotron X-ray diffraction study. <i>Journal of Power Sources</i> , <b>2014</b> , 258, 155-163	8.9	15
41	Crystal structures of orthorhombic, hexagonal, and cubic compounds of the Sm(x)Yb(2-x)TiO <sub>5</sub> series. <i>Journal of Solid State Chemistry</i> , <b>2014</b> , 213, 182-192	3.3	26
40	Current-dependent electrode lattice fluctuations and anode phase evolution in a lithium-ion battery investigated by in situ neutron diffraction. <i>Electrochimica Acta</i> , <b>2013</b> , 101, 79-85	6.7	48
39	High Performance Composite Lithium-Rich Nickel Manganese Oxide Cathodes for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , <b>2013</b> , 160, A1856-A1862	3.9	34
38	Overcharging a lithium-ion battery: Effect on the Li <sub>x</sub> C <sub>6</sub> negative electrode determined by in situ neutron diffraction. <i>Journal of Power Sources</i> , <b>2013</b> , 244, 695-701	8.9	65
37	A simple electrochemical cell for in-situ fundamental structural analysis using synchrotron X-ray powder diffraction. <i>Journal of Power Sources</i> , <b>2013</b> , 244, 109-114	8.9	41
36	Expanding the applications of the ilmenite mineral to the preparation of nanostructures: TiO <sub>2</sub> nanorods and their photocatalytic properties in the degradation of oxalic acid. <i>Chemistry - A European Journal</i> , <b>2013</b> , 19, 1091-6	4.8	22
35	Formation and conductivity studies of lithium argyrodite solid electrolytes using in-situ neutron diffraction. <i>Solid State Ionics</i> , <b>2013</b> , 230, 72-76	3.3	81



34	High capacity spherical $\text{Li}[\text{Li}_{0.24}\text{Mn}_{0.55}\text{Co}_{0.14}\text{Ni}_{0.07}]\text{O}_2$ cathode material for lithium ion batteries. <i>Solid State Ionics</i> , <b>2013</b> , 233, 12-19	3.3	19
33	A (3 + 3)-dimensional "hypercubic" oxide-ionic conductor: type II $\text{Bi}_2\text{O}_3\text{-Nb}_2\text{O}_5$ . <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 6477-84	16.4	28
32	Real-time investigation of the structural evolution of electrodes in a commercial lithium-ion battery containing a V-added $\text{LiFePO}_4$ cathode using in-situ neutron powder diffraction. <i>Journal of Power Sources</i> , <b>2013</b> , 244, 158-163	8.9	27
31	Electrochemical Na Extraction/Insertion of $\text{Na}_3\text{V}_2\text{O}_7 \cdot x(\text{PO}_4)_2\text{F}_3$ . <i>Chemistry of Materials</i> , <b>2013</b> , 25, 4917-4925	9.6	96
30	Non-equilibrium Structural Evolution of the Lithium-Rich $\text{Li}_{1+y}\text{Mn}_2\text{O}_4$ Cathode within a Battery. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 754-760	9.6	44
29	Synthesis, structure, and electrochemical performance of magnesium-substituted lithium manganese orthosilicate cathode materials for lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2012</b> , 197, 231-237	8.9	47
28	Crystal chemistry of the Pmnb polymorph of $\text{Li}_2\text{MnSiO}_4$ . <i>Journal of Solid State Chemistry</i> , <b>2012</b> , 188, 32-37	3.3	53
27	$\text{TiO}_2$ nanoparticles synthesized by the molten salt method as a dual functional material for dye-sensitized solar cells. <i>RSC Advances</i> , <b>2012</b> , 2, 5123	3.7	38
26	Enhanced electrochemical properties of $\text{LiFePO}_4$ by Mo-substitution and graphitic carbon-coating via a facile and fast microwave-assisted solid-state reaction. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 3634-9	3.6	32
25	Giant magnetoelastic effect at the opening of a spin-gap in $\text{Ba}_3\text{BiIr}_2\text{O}_9$ . <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 3265-70	16.4	32
24	Vanadium Substitution of $\text{LiFePO}_4$ Cathode Materials To Enhance the Capacity of $\text{LiFePO}_4$ -Based Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 24424-24429	3.8	52
23	Direct evidence of concurrent solid-solution and two-phase reactions and the nonequilibrium structural evolution of $\text{LiFePO}_4$ . <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 7867-73	16.4	123
22	Floating-zone growth of brownmillerite $\text{Sr}_2\text{Fe}_2\text{O}_5$ and the observation of a chain-ordered superstructure by single-crystal neutron diffraction. <i>Solid State Ionics</i> , <b>2012</b> , 225, 432-436	3.3	23
21	X-ray and neutron diffraction studies of flux and hydrothermally grown nonlinear optical material $\text{KBe}_2\text{BO}_3\text{F}_2$ . <i>CrystEngComm</i> , <b>2012</b> , 14, 6079	3.3	11
20	In situ neutron powder diffraction studies of lithium-ion batteries. <i>Journal of Solid State Electrochemistry</i> , <b>2012</b> , 16, 1849-1856	2.6	49
19	Variation in structure and $\text{Li}^+$ -ion migration in argyrodite-type $\text{Li}_6\text{PS}_5\text{X}$ (X = Cl, Br, I) solid electrolytes. <i>Journal of Solid State Electrochemistry</i> , <b>2012</b> , 16, 1807-1813	2.6	124
18	Lithium Extraction/Insertion from/into $\text{LiCoPO}_4$ in Aqueous Batteries. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 1899-1905	3.9	39
17	Time-Dependent in-Situ Neutron Diffraction Investigation of a $\text{Li}(\text{Co}_{0.16}\text{Mn}_{1.84})\text{O}_4$ Cathode. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 21473-21480	3.8	43

16	In-situ neutron diffraction study of the MoS <sub>2</sub> anode using a custom-built Li-ion battery. <i>Solid State Ionics</i> , <b>2011</b> , 199-200, 37-43	3.3	56
15	Br-Doped Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> and Composite TiO <sub>2</sub> Anodes for Li-ion Batteries: Synchrotron X-Ray and in situ Neutron Diffraction Studies. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 3990-3997	15.6	145
14	YCa <sub>3</sub> (VO) <sub>3</sub> (BO <sub>3</sub> ) <sub>4</sub> : A Kagomé Compound Based on Vanadium(III) with a Highly Frustrated Ground State. <i>Chemistry of Materials</i> , <b>2011</b> , 23, 1315-1322	9.6	24
13	Synthesis and Characterization of Li(Co <sub>0.5</sub> Ni <sub>0.5</sub> )PO <sub>4</sub> Cathode for Li-Ion Aqueous Battery Applications. <i>Electrochemical and Solid-State Letters</i> , <b>2011</b> , 14, A86		38
12	TiO <sub>2</sub> (B)@anatase hybrid nanowires with highly reversible electrochemical performance. <i>Electrochemistry Communications</i> , <b>2011</b> , 13, 46-49	5.1	42
11	Preparation of Li <sub>1.03</sub> Mn <sub>1.97</sub> O <sub>4</sub> and Li <sub>1.06</sub> Mn <sub>1.94</sub> O <sub>4</sub> by the Polymer Precursor Method and X-ray, Neutron Diffraction and Electrochemical Studies. <i>Journal of the Electrochemical Society</i> , <b>2011</b> , 158, A1231-9	3.9	24
10	Structure of BiRe <sub>2</sub> O <sub>6</sub> re-investigated using single-crystal neutron Laue diffraction. <i>Journal of Physics: Conference Series</i> , <b>2010</b> , 251, 012028	0.3	
9	Structural changes in a commercial lithium-ion battery during electrochemical cycling: An in situ neutron diffraction study. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 8258-8266	8.9	153
8	Re-investigation of the structure and crystal chemistry of the Bi <sub>2</sub> O <sub>3</sub> -W <sub>2</sub> O <sub>6</sub> type (Ib) solid solution using single-crystal neutron and synchrotron X-ray diffraction. <i>Acta Crystallographica Section B: Structural Science</i> , <b>2010</b> , 66, 165-72		8
7	Structure and crystal chemistry of fluorite-related Bi <sub>38</sub> Mo <sub>7</sub> O <sub>78</sub> from single crystal X-ray diffraction and ab initio calculations. <i>Journal of Solid State Chemistry</i> , <b>2009</b> , 182, 1312-1318	3.3	11
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5	Structures, Phase Transitions, Hydration, and Ionic Conductivity of Ba <sub>4</sub> Nb <sub>2</sub> O <sub>9</sub> . <i>Chemistry of Materials</i> , <b>2009</b> , 21, 3853-3864	9.6	31
4	Coexistence of ferroelectricity and magnetism in transition-metal-doped n = 3 Aurivillius phases. <i>Journal of Physics Condensed Matter</i> , <b>2008</b> , 20, 025215	1.8	11
3	Crystal Structures and Phase Transitions in A-Site Deficient Perovskites Ln <sub>1/3</sub> TaO <sub>3</sub> . <i>Chemistry of Materials</i> , <b>2008</b> , 20, 6666-6676	9.6	23
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1	Three-layer Aurivillius phases containing magnetic transition metal cations: Bi <sub>2-x</sub> Sr <sub>2+x</sub> (Nb,Ta) <sub>2+x</sub> M <sub>1-x</sub> O <sub>12</sub> , M=Ru <sup>4+</sup> , Ir <sup>4+</sup> , Mn <sup>4+</sup> , x=0.5. <i>Journal of Solid State Chemistry</i> , <b>2007</b> , 180, 370-376	3.3	19