Neeraj Sharma

List of Publications by Citations

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	An Initial Review of the Status of Electrode Materials for Potassium-Ion Batteries. *Advanced Energy Materials*, **2017**, 7, 1602911	21.8	634
158	High-Performance P2-Phase Na2/3Mn0.8Fe0.1Ti0.1O2 Cathode Material for Ambient-Temperature Sodium-Ion Batteries. *Chemistry of Materials*, **2016**, 28, 106-116	9.6	166
157	Structural changes in a commercial lithium-ion battery during electrochemical cycling: An in situ neutron diffraction study. *Journal of Power Sources*, **2010**, 195, 8258-8266	8.9	153
156	Br-Doped Li4Ti5O12 and Composite TiO2 Anodes for Li-ion Batteries: Synchrotron X-Ray and in situ Neutron Diffraction Studies. *Advanced Functional Materials*, **2011**, 21, 3990-3997	15.6	145
155	Variation in structure and Li+-ion migration in argyrodite-type Li6PS5X (X = Cl, Br, I) solid electrolytes. *Journal of Solid State Electrochemistry*, **2012**, 16, 1807-1813	2.6	124
154	Direct evidence of concurrent solid-solution and two-phase reactions and the nonequilibrium structural evolution of LiFePO4. *Journal of the American Chemical Society*, **2012**, 134, 7867-73	16.4	123
153	High voltage structural evolution and enhanced Na-ion diffusion in P2-Na2/3Ni1/3□MgxMn2/3O2 (0 □x □0.2) cathodes from diffraction, electrochemical and ab initio studies. *Energy and Environmental Science*, **2018**, 11, 1470-1479	35.4	100
152	Electrochemical Na Extraction/Insertion of Na3V2O2x(PO4)2F3□2x. *Chemistry of Materials*, **2013**, 25, 4917-4925	9.6	96
151	Interplay between Electrochemistry and Phase Evolution of the P2-type Nax(Fe1/2Mn1/2)O2 Cathode for Use in Sodium-Ion Batteries. *Chemistry of Materials*, **2015**, 27, 3150-3158	9.6	93
150	Sodium Distribution and Reaction Mechanisms of a Na3V2O2(PO4)2F Electrode during Use in a Sodium-Ion Battery. *Chemistry of Materials*, **2014**, 26, 3391-3402	9.6	91
149	Rate Dependent Performance Related to Crystal Structure Evolution of Na0.67Mn0.8Mg0.2O2 in a Sodium-Ion Battery. *Chemistry of Materials*, **2015**, 27, 6976-6986	9.6	88
148	Lithium Migration in Li4Ti5O12 Studied Using in Situ Neutron Powder Diffraction. *Chemistry of Materials*, **2014**, 26, 2318-2326	9.6	84
147	Formation and conductivity studies of lithium argyrodite solid electrolytes using in-situ neutron diffraction. *Solid State Ionics*, **2013**, 230, 72-76	3.3	81
146	The Origin of Capacity Fade in the Li2MnO3□LiMO2 (M = Li, Ni, Co, Mn) Microsphere Positive Electrode: An Operando Neutron Diffraction and Transmission X-ray Microscopy Study. *Journal of the American Chemical Society*, **2016**, 138, 8824-33	16.4	80
145	Evaluation of undoped and M-doped TiO2, where M = Sn, Fe, Ni/Nb, Zr, V, and Mn, for lithium-ion battery applications prepared by the molten-salt method. *RSC Advances*, **2015**, 5, 29535-29544	3.7	80
144	Synthetic, Structural, and Electrochemical Study of Monoclinic Na4Ti5O12 as a Sodium-Ion Battery Anode Material. *Chemistry of Materials*, **2014**, 26, 7067-7072	9.6	71
143	In Situ Neutron Diffraction Monitoring of Li7La3Zr2O12 Formation: Toward a Rational Synthesis of Garnet Solid Electrolytes.. *Chemistry of Materials*, **2015**, 27, 2903-2910	9.6	69

142	Higher oxidation level in graphene oxide. *Optik*, **2017**, 143, 115-124	2.5	66
141	Overcharging a lithium-ion battery: Effect on the LixC6 negative electrode determined by in situ neutron diffraction. *Journal of Power Sources*, **2013**, 244, 695-701	8.9	65
140	In-situ neutron diffraction study of the simultaneous structural evolution of a LiNi0.5Mn1.5O4 cathode and a Li4Ti5O12 anode in a LiNi0.5Mn1.5O4||Li4Ti5O12 full cell. *Journal of Power Sources*, **2014**, 246, 464-472	8.9	60
139	The Unique Structural Evolution of the O3-Phase Na2/3Fe2/3Mn1/3O2 during High Rate Charge/Discharge: A Sodium-Centred Perspective. *Advanced Functional Materials*, **2015**, 25, 4994-5005	15.6	58
138	Sodium uptake in cell construction and subsequent in operando electrode behaviour of Prussian blue analogues, Fe[Fe(CN)6](1-x)□yH2O and FeCo(CN)6. *Physical Chemistry Chemical Physics*, **2014**, 16, 24178-87	3.6	57
137	In-situ neutron diffraction study of the MoS2 anode using a custom-built Li-ion battery. *Solid State Ionics*, **2011**, 199-200, 37-43	3.3	56
136	Structural evolution of NASICON-type Li1+xAlxGe2□(PO4)3 using in situ synchrotron X-ray powder diffraction. *Journal of Materials Chemistry A*, **2016**, 4, 7718-7726	13	56
135	Size and Composition Effects in Sb-Carbon Nanocomposites for Sodium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 30152-30164	9.5	54
134	Crystallographic Evolution of P2 Na2/3Fe0.4Mn0.6O2 Electrodes during Electrochemical Cycling. *Chemistry of Materials*, **2016**, 28, 6342-6354	9.6	53
133	Crystal chemistry of the Pmnb polymorph of Li2MnSiO4. *Journal of Solid State Chemistry*, **2012**, 188, 32-37	3.3	53
132	Vanadium Substitution of LiFePO4 Cathode Materials To Enhance the Capacity of LiFePO4-Based Lithium-Ion Batteries. *Journal of Physical Chemistry C*, **2012**, 116, 24424-24429	3.8	52
131	Structural evolution of high energy density V3+/V4+ mixed valent Na3V2O2x(PO4)2F3□x (x = 0.8) sodium vanadium fluorophosphate using in situ synchrotron X-ray powder diffraction. *Journal of Materials Chemistry A*, **2014**, 2, 7766-7779	13	51
130	In Situ Powder Diffraction Studies of Electrode Materials in Rechargeable Batteries. *ChemSusChem*, **2015**, 8, 2826-53	8.3	51
129	In situ neutron powder diffraction studies of lithium-ion batteries. *Journal of Solid State Electrochemistry*, **2012**, 16, 1849-1856	2.6	49
128	Current-dependent electrode lattice fluctuations and anode phase evolution in a lithium-ion battery investigated by in situ neutron diffraction. *Electrochimica Acta*, **2013**, 101, 79-85	6.7	48
127	Synthesis, structure, and electrochemical performance of magnesium-substituted lithium manganese orthosilicate cathode materials for lithium-ion batteries. *Journal of Power Sources*, **2012**, 197, 231-237	8.9	47
126	Introducing a 0.2 V sodium-ion battery anode: The Na2Ti3O7 to Na3□Ti3O7 pathway. *Electrochemistry Communications*, **2015**, 61, 10-13	5.1	46
125	On the dynamics of transition metal migration and its impact on the performance of layered oxides for sodium-ion batteries: NaFeO2 as a case study. *Journal of Materials Chemistry A*, **2018**, 6, 15132-15146	13	46

124	Non-equilibrium Structural Evolution of the Lithium-Rich Li1+yMn2O4 Cathode within a Battery. *Chemistry of Materials*, **2013**, 25, 754-760	9.6	44
123	Maricite NaFePO4/C/graphene: a novel hybrid cathode for sodium-ion batteries. *Journal of Materials Chemistry A*, **2017**, 5, 16616-16621	13	43
122	Structure–Electrochemical Evolution of a Mn-Rich P2 Na2/3Fe0.2Mn0.8O2 Na-Ion Battery Cathode. *Chemistry of Materials*, **2017**, 29, 7416-7423	9.6	43
121	Time-Dependent in-Situ Neutron Diffraction Investigation of a Li(Co0.16Mn1.84)O4 Cathode. *Journal of Physical Chemistry C*, **2011**, 115, 21473-21480	3.8	43
120	Antimony-carbon nanocomposites for potassium-ion batteries: Insight into the failure mechanism in electrodes and possible avenues to improve cyclic stability. *Journal of Power Sources*, **2019**, 413, 476-484	8.9	43
119	TiO2(B)@anatase hybrid nanowires with highly reversible electrochemical performance. *Electrochemistry Communications*, **2011**, 13, 46-49	5.1	42
118	A simple electrochemical cell for in-situ fundamental structural analysis using synchrotron X-ray powder diffraction. *Journal of Power Sources*, **2013**, 244, 109-114	8.9	41
117	Structural Evolution and High-Voltage Structural Stability of Li(NixMnyCoz)O2 Electrodes. *Chemistry of Materials*, **2019**, 31, 376-386	9.6	41
116	Moisture exposed layered oxide electrodes as Na-ion battery cathodes. *Journal of Materials Chemistry A*, **2016**, 4, 18963-18975	13	40
115	Lithium Extraction–Insertion from/into LiCoPO4in Aqueous Batteries. *Industrial & Engineering Chemistry Research*, **2011**, 50, 1899-1905	3.9	39
114	TiO2 nanoparticles synthesized by the molten salt method as a dual functional material for dye-sensitized solar cells. *RSC Advances*, **2012**, 2, 5123	3.7	38
113	Synthesis and Characterization of Li(Co0.5Ni0.5)PO4 Cathode for Li-Ion Aqueous Battery Applications. *Electrochemical and Solid-State Letters*, **2011**, 14, A86		38
112	Local structural changes in LiMn1.5Ni0.5O4 spinel cathode material for lithium-ion batteries. *Journal of Power Sources*, **2014**, 255, 439-449	8.9	37
111	A comprehensive picture of the current rate dependence of the structural evolution of P2-Na2/3Fe2/3Mn1/3O2. *Journal of Materials Chemistry A*, **2015**, 3, 21023-21038	13	36
110	Graphene and Selected Derivatives as Negative Electrodes in Sodium- and Lithium-Ion Batteries. *ChemElectroChem*, **2015**, 2, 600-610	4.3	36
109	Preparation and electrochemical properties of high-capacity LiFePO4–i3V2(PO4)3/C composite for lithium-ion batteries. *Journal of Power Sources*, **2014**, 246, 912-917	8.9	36
108	High Performance Composite Lithium-Rich Nickel Manganese Oxide Cathodes for Lithium-Ion Batteries. *Journal of the Electrochemical Society*, **2013**, 160, A1856-A1862	3.9	34
107	Understanding Structure-Function Relationship in Hybrid Co3O4-Fe2O3/C Lithium-Ion Battery Electrodes. *ACS Applied Materials & Interfaces*, **2015**, 7, 20736-44	9.5	33

106	Evidence of Solid-Solution Reaction upon Lithium Insertion into Cryptomelane K0.25Mn2O4 Material. *Journal of Physical Chemistry C*, **2014**, 118, 3976-3983	3.8	33
105	In-situ Neutron Diffraction Study of a High Voltage Li(Ni0.42Mn0.42Co0.16)O2/Graphite Pouch Cell. *Electrochimica Acta*, **2015**, 180, 234-240	6.7	33
104	Enhanced electrochemical properties of LiFePO4 by Mo-substitution and graphitic carbon-coating via a facile and fast microwave-assisted solid-state reaction. *Physical Chemistry Chemical Physics*, **2012**, 14, 3634-9	3.6	32
103	Giant magnetoelastic effect at the opening of a spin-gap in Ba3BiIr2O9. *Journal of the American Chemical Society*, **2012**, 134, 3265-70	16.4	32
102	Structures, Phase Transitions, Hydration, and Ionic Conductivity of Ba4Nb2O9. *Chemistry of Materials*, **2009**, 21, 3853-3864	9.6	31
101	Comparison of the so-called CGR and NCR cathodes in commercial lithium-ion batteries using in situ neutron powder diffraction. *Powder Diffraction*, **2014**, 29, S35-S39	1.8	30
100	Structural evolution of mixed valent (V3+/V4+) and V4+ sodium vanadium fluorophosphates as cathodes in sodium-ion batteries: comparisons, overcharging and mid-term cycling. *Journal of Materials Chemistry A*, **2015**, 3, 23017-23027	13	29
99	A (3 + 3)-dimensional "hypercubic" oxide-ionic conductor: type II Bi2O3-Nb2O5. *Journal of the American Chemical Society*, **2013**, 135, 6477-84	16.4	28
98	Real-time investigation of the structural evolution of electrodes in a commercial lithium-ion battery containing a V-added LiFePO4 cathode using in-situ neutron powder diffraction. *Journal of Power Sources*, **2013**, 244, 158-163	8.9	27
97	Lithium Germanate (Li GeO): A High-Performance Anode Material for Lithium-Ion Batteries. *Angewandte Chemie - International Edition*, **2016**, 55, 16059-16063	16.4	26
96	Crystal structures of orthorhombic, hexagonal, and cubic compounds of the Sm(x)Yb(2□)TiO5 series. *Journal of Solid State Chemistry*, **2014**, 213, 182-192	3.3	26
95	An Operando Mechanistic Evaluation of a Solar-Rechargeable Sodium-Ion Intercalation Battery. *Advanced Energy Materials*, **2017**, 7, 1700545	21.8	25
94	YCa3(VO)3(BO3)4: A Kagom□ Compound Based on Vanadium(III) with a Highly Frustrated Ground State. *Chemistry of Materials*, **2011**, 23, 1315-1322	9.6	24
93	Preparation of Li1.03Mn1.97O4 and Li1.06Mn1.94O4 by the Polymer Precursor Method and X-ray, Neutron Diffraction and Electrochemical Studies. *Journal of the Electrochemical Society*, **2011**, 158, A1231	3.9	24
92	Floating-zone growth of brownmillerite Sr2Fe2O5 and the observation of a chain-ordered superstructure by single-crystal neutron diffraction. *Solid State Ionics*, **2012**, 225, 432-436	3.3	23
91	Crystal Structures and Phase Transitions in A-Site Deficient Perovskites Ln1/3TaO3. *Chemistry of Materials*, **2008**, 20, 6666-6676	9.6	23
90	In Situ Neutron Powder Diffraction of Li6C60 for Hydrogen Storage. *Journal of Physical Chemistry C*, **2015**, 119, 19715-19721	3.8	22
89	Expanding the applications of the ilmenite mineral to the preparation of nanostructures: TiO2 nanorods and their photocatalytic properties in the degradation of oxalic acid. *Chemistry - A European Journal*, **2013**, 19, 1091-6	4.8	22

88	Sodium insertion/extraction from single-walled and multi-walled carbon nanotubes: The differences and similarities. *Journal of Power Sources*, **2016**, 314, 102-108	8.9	22
87	Towards a reliable Li-metal-free LiNO3-free Li-ion polysulphide full cell via parallel interface engineering. *Energy and Environmental Science*, **2018**, 11, 2509-2520	35.4	21
86	Structural evidence for Mg-doped LiFePO4 electrode polarisation in commercial Li-ion batteries. *Journal of Power Sources*, **2018**, 394, 1-8	8.9	21
85	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. *Journal of Materials Research*, **2015**, 30, 373-380	2.5	19
84	High capacity spherical Li[Li0.24Mn0.55Co0.14Ni0.07]O2 cathode material for lithium ion batteries. *Solid State Ionics*, **2013**, 233, 12-19	3.3	19
83	The NaxMoO2Phase Diagram (1/2Chemistry of Materials, **2017**, 29, 7243-7254	9.6	19
82	Three-layer Aurivillius phases containing magnetic transition metal cations: Bi2Sr2+x(Nb,Ta)2+xM1O12, M=Ru4+, Ir4+, Mn4+, x0.5. *Journal of Solid State Chemistry*, **2007**, 180, 370-376	3.3	19
81	Hybrid Solid Polymer Electrolytes with Two-Dimensional Inorganic Nanofillers. *Chemistry - A European Journal*, **2018**, 24, 18180-18203	4.8	19
80	In-Situ Nanoindentation Measurement of Local Mechanical Behavior of a Li-Ion Battery Cathode in Liquid Electrolyte. *Experimental Mechanics*, **2019**, 59, 337-347	2.6	18
79	Correlating cycling history with structural evolution in commercial 26650 batteries using in operando neutron powder diffraction. *Journal of Power Sources*, **2017**, 343, 446-457	8.9	17
78	Activated Carbon from E-Waste Plastics as a Promising Anode for Sodium-Ion Batteries. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10310-10322	8.3	17
77	Recycling lithium-ion batteries: adding value with multiple lives. *Green Chemistry*, **2020**, 22, 2244-2254	10	17
76	Rate and Composition Dependence on the StructuralElectrochemical Relationships in P2Na2/3Fe1MnyO2 Positive Electrodes for Sodium-Ion Batteries. *Chemistry of Materials*, **2018**, 30, 7503-7510	9.6	17
75	Carbon coated Na7Fe7(PO4)6F3: A novel intercalation cathode for sodium-ion batteries. *Journal of Power Sources*, **2014**, 271, 497-503	8.9	16
74	Characterization of an oxalate-phosphate-amine metalorganic framework (OPA-MOF) exhibiting properties suited for innovative applications in agriculture. *Journal of Materials Science*, **2016**, 51, 9239-9252	4.3	16
73	Mechanisms of Sodium Insertion/Extraction on the Surface of Defective Graphenes. *ACS Applied Materials & Interfaces*, **2017**, 9, 431-438	9.5	15
72	Li2MnSiO4 cathodes modified by phosphorous substitution and the structural consequences. *Solid State Ionics*, **2014**, 259, 29-39	3.3	15
71	Discharge mechanism of the heat treated electrolytic manganese dioxide cathode in a primary Li/MnO2 battery: An in-situ and ex-situ synchrotron X-ray diffraction study. *Journal of Power Sources*, **2014**, 258, 155-163	8.9	15

70	Probing the charged state of layered positive electrodes in sodium-ion batteries: reaction pathways, stability and opportunities. *Journal of Materials Chemistry A*, **2020**, 8, 24833-24867	13	15
69	Structure of the naphthalene dimer from rare gas tagging. *Journal of Physical Chemistry A*, **2007**, 111, 4211-4	2.8	14
68	In operando neutron diffraction study of the temperature and current rate-dependent phase evolution of LiFePO4 in a commercial battery. *Journal of Power Sources*, **2017**, 342, 562-569	8.9	13
67	Na4Co3(PO4)2P2O7 through Correlative Operando X-ray Diffraction and Electrochemical Impedance Spectroscopy. *Chemistry of Materials*, **2019**, 31, 5152-5159	9.6	13
66	Controlling Spin Switching with Anionic Supramolecular Frameworks. *Chemistry of Materials*, **2020**, 32, 3229-3234	9.6	13
65	Pulsed Laser Deposition-based Thin Film Microbatteries. *Chemistry - an Asian Journal*, **2020**, 15, 1829-1847	4.5	13
64	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. *Electrochimica Acta*, **2015**, 174, 417-423	6.7	13
63	Electron microscopy and its role in advanced lithium-ion battery research. *Sustainable Energy and Fuels*, **2019**, 3, 1623-1646	5.8	12
62	Using in situ synchrotron x-ray diffraction to study lithium- and sodium-ion batteries: A case study with an unconventional battery electrode (Gd2TiO5). *Journal of Materials Research*, **2015**, 30, 381-389	2.5	12
61	Nanostructured LiMnO with LiPO Integrated at the Atomic Scale for High-Energy Electrode Materials with Reversible Anionic Redox. *ACS Central Science*, **2020**, 6, 2326-2338	16.8	12
60	Electrochemical performance and structure of Al2W3□MoxO12. *CrystEngComm*, **2018**, 20, 1352-1360	3.3	12
59	SmFeO3 and Bi-doped SmFeO3 perovskites as an alternative class of electrodes in lithium-ion batteries. *CrystEngComm*, **2018**, 20, 6165-6172	3.3	12
58	Comparison of the structural evolution of the O3 and P2 phases of Na2/3Fe2/3Mn1/3O2 during electrochemical cycling. *Electrochimica Acta*, **2016**, 203, 189-197	6.7	12
57	Kinetics of the Thermally-Induced Structural Rearrangement of □MnO2. *Journal of Physical Chemistry C*, **2014**, 118, 24257-24265	3.8	11
56	Understanding the Behavior of LiCoO2 Cathodes at Extended Potentials in Ionic Liquid□Alkyl Carbonate Hybrid Electrolytes. *Journal of Physical Chemistry C*, **2017**, 121, 15630-15638	3.8	11
55	X-ray and neutron diffraction studies of flux and hydrothermally grown nonlinear optical material KBe2BO3F2. *CrystEngComm*, **2012**, 14, 6079	3.3	11
54	Structure and crystal chemistry of fluorite-related Bi38Mo7O78 from single crystal X-ray diffraction and ab initio calculations. *Journal of Solid State Chemistry*, **2009**, 182, 1312-1318	3.3	11
53	Coexistence of ferroelectricity and magnetism in transition-metal-doped n = 3 Aurivillius phases. *Journal of Physics Condensed Matter*, **2008**, 20, 025215	1.8	11

52	The crystal structures and corresponding ion-irradiation response for the Tb(x)Yb(2-x)TiO5 series. *Ceramics International*, **2018**, 44, 511-519	5.1	11
51	Anhydrous Calcium Oxalate Polymorphism: A Combined Computational and Synchrotron X-ray Diffraction Study. *Crystal Growth and Design*, **2016**, 16, 5954-5965	3.5	11
50	Capacity Enhancement of the Quenched Li-Ni-Mn-Co Oxide High-voltage Li-ion Battery Positive Electrode. *Electrochimica Acta*, **2017**, 236, 10-17	6.7	10
49	Investigation of K modified P2 Na0.7Mn0.8Mg0.2O2 as a cathode material for sodium-ion batteries. *CrystEngComm*, **2019**, 21, 172-181	3.3	10
48	Dual Polymer/Liquid Electrolyte with BaTiO3 Electrode for Magnesium Batteries. *ACS Applied Energy Materials*, **2020**, 3, 5882-5892	6.1	10
47	Structural evolution and stability of Sc(WO) after discharge in a sodium-based electrochemical cell. *Dalton Transactions*, **2018**, 47, 1251-1260	4.3	10
46	Structure of the Li4Ti5O12 anode during charge-discharge cycling. *Powder Diffraction*, **2014**, 29, S59-S63	1.8	10
45	Exploring the rate dependence of phase evolution in P2-type Na2/3Mn0.8Fe0.1Ti0.1O2. *Journal of Materials Chemistry A*, **2019**, 7, 12115-12125	13	9
44	Graphene and magnesiated graphene as electrodes for magnesium ion batteries. *Materials Letters*, **2018**, 232, 103-106	3.3	9
43	Ammonia-storage in lithium intercalated fullerides. *Journal of Materials Chemistry A*, **2015**, 3, 21099-21105	13	9
42	High-Performance NaVO3 with Mixed Cationic and Anionic Redox Reactions for Na-Ion Battery Applications. *Chemistry of Materials*, **2020**, 32, 8836-8844	9.6	9
41	Fluorinated (Nano)Carbons: CFx Electrodes and CFx-Based Batteries. *Energy Technology*, **2021**, 9, 2000605	3.5	9
40	In Situ Studies of Li/Cu-Doped Layered P2 NaxMnO2 Electrodes for Sodium-Ion Batteries. *Small Methods*, **2019**, 3, 1800092	12.8	8
39	Effect of Ni-nanoparticles decoration on graphene to enable high capacity sodium-ion battery negative electrodes. *Electrochimica Acta*, **2017**, 250, 212-218	6.7	8
38	Re-investigation of the structure and crystal chemistry of the Bi2O3-W2O6 (type (Ib)O3 solid solution using single-crystal neutron and synchrotron X-ray diffraction. *Acta Crystallographica Section B: Structural Science*, **2010**, 66, 165-72		8
37	Iron-Doped Sodium-Vanadium Fluorophosphates: NaVOFe(PO)F (Inorganic Chemistry, **2020**, 59, 854-862	5.1	8
36	High performance P2 sodium layered oxides: an in-depth study into the effect of rationally selected stoichiometry. *Journal of Materials Chemistry A*, **2019**, 7, 21812-21826	13	7
35	Mass production of Li4Ti5O12 with a conductive network via in situ spray pyrolysis as a long cycle life, high rate anode material for lithium ion batteries. *RSC Advances*, **2014**, 4, 38568-38574	3.7	7

34	Higher permittivity of Ni-doped lead zirconate titanate, Pb[(Zr0.52Ti0.48)(1-x) Nix]O3, ceramics. *Ceramics International*, **2019**, 45, 4398-4407	5.1	7
33	Novel structurally-stable Na-rich NaVO cathode material with high reversible capacity by utilization of anion redox activity. *Chemical Communications*, **2020**, 56, 8245-8248	5.8	5
32	Electrochemical Modification of Negative Thermal Expansion Materials in the Ta NbVO Series. *Inorganic Chemistry*, **2018**, 57, 10633-10639	5.1	5
31	Elucidation of structures and lithium environments for an organo-sulfur cathode. *Physical Chemistry Chemical Physics*, **2019**, 21, 18667-18679	3.6	5
30	Structure, crystal chemistry and thermal evolution of the □Bi2O3-related phase Bi9ReO17. *Journal of Solid State Chemistry*, **2009**, 182, 2468-2474	3.3	5
29	Elucidation of the high-voltage phase in the layered sodium ion battery cathode material P3□Na0.5Ni0.25Mn0.75O2. *Journal of Materials Chemistry A*, **2020**, 8, 21151-21162	13	5
28	Mechanistic insights into the phenomena of increasing capacity with cycle number: using pulsed-laser deposited MoO thin film electrodes. *Physical Chemistry Chemical Physics*, **2019**, 21, 25779-25787	3.6	5
27	Biomass Derived High Areal and Specific Capacity Hard Carbon Anodes for Sodium-Ion Batteries. *Energy & Fuels*, **2021**, 35, 1820-1830	4.1	5
26	Monitoring lead-acid battery function using operando neutron radiography. *Journal of Power Sources*, **2019**, 438, 226976	8.9	4
25	Rb/Cs-Modified P2 NaMnMgO: Application in Sodium-Ion Batteries. *ACS Omega*, **2019**, 4, 5784-5794	3.9	4
24	Investigating low-valent compositions in the NaVO(PO)F family: structural transitions and their consequences. *Dalton Transactions*, **2018**, 47, 2610-2618	4.3	4
23	Thermal Evolution and Phase Transitions in Electrochemically Activated Sc(MoO). *Inorganic Chemistry*, **2019**, 58, 9964-9973	5.1	4
22	In situ neutron powder diffraction using custom-made lithium-ion batteries. *Journal of Visualized Experiments*, **2014**, e52284	1.6	4
21	Mechanistic and structural investigation of LixMnO2 cathodes during cycling in Li-ion batteries. *Electrochimica Acta*, **2014**, 137, 736-743	6.7	4
20	Alkali Metal-Modified P2 NaMnO: Crystal Structure and Application in Sodium-Ion Batteries. *Inorganic Chemistry*, **2020**, 59, 12143-12155	5.1	4
19	Sc1.5Al0.5W3O12 Exhibits Zero Thermal Expansion between 4 and 1400 K. *Chemistry of Materials*, **2021**, 33, 3823-3831	9.6	4
18	Electrochemically activated solid synthesis: an alternative solid-state synthetic method. *Dalton Transactions*, **2018**, 47, 14604-14611	4.3	4
17	Strategies for the Analysis of Graphite Electrode Function. *Advanced Energy Materials*, **2021**, 11, 2102693	21.8	3

16	P2-Na2/3Mn0.8M0.1M?0.1O2 (M = Zn, Fe and M? = Cu, Al, Ti): A Detailed Crystal Structure Evolution Investigation. *Chemistry of Materials*, **2021**, 33, 3905-3914	9.6	3
15	Mechanistic implications of Li-S cell function through modification of organo-sulfur cathode architectures. *Physical Chemistry Chemical Physics*, **2021**, 23, 14075-14092	3.6	3
14	Exploration of the high temperature phase evolution of electrochemically modified Sc2(WO4)3via potassium discharge. *Inorganic Chemistry Frontiers*, **2019**, 6, 2718-2726	6.8	2
13	Structure and Dynamics in Mg-Stabilized NaPO. *Journal of the American Chemical Society*, **2021**, 143, 17079-17089	16.4	2
12	Pyrolysed coffee grounds as a conductive host agent for sulfur composite electrodes in Li batteries. *Carbon Trends*, **2021**, 4, 100053	0	2
11	Biphasic P2/O3-NaLiMnFeO: a structural investigation. *Dalton Transactions*, **2021**, 50, 1357-1365	4.3	2
10	Small angle neutron scattering and its application in battery systems. *Current Opinion in Electrochemistry*, **2022**, 100990	7.2	2
9	Local Structure Adaptations and Oxide Ionic Conductivity in the Type III Stability Region of (1 x)Bi2O3xNb2O5. *Chemistry of Materials*, **2018**, 30, 3387-3394	9.6	1
8	Sodium-ion battery anodes from carbon depositions. *Electrochimica Acta*, **2021**, 379, 138109	6.7	1
7	Repurposing Waste Tires as Tunable Frameworks for Use in Sodium-Ion and LithiumSulfur Batteries. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 6972-6990	8.3	1
6	The Sc2WxMo3O12 series as electrodes in alkali-ion batteries. *CrystEngComm*, **2021**, 23, 3880-3891	3.3	1
5	Dopant and Current Rate Dependence on the Structural Evolution of P2-Na2/3Mn0.8Zn0.1M0.1O2 (M=Cu, Ti): An Operando Study. *Chemistry Methods*, **2021**, 1, 295-304		0
4	Oxygen Nucleation of MoS Nanosheet Thin Film Supercapacitor Electrodes for Enhanced Electrochemical Energy Storage. *ChemSusChem*, **2021**, 14, 2882-2891	8.3	0
3	The structural evolution of tetradymite-type Sb2Te3 in alkali ion batteries. *Journal of Alloys and Compounds*, **2021**, 871, 159378	5.7	0
2	The phase evolution of tetradymite-type bismuth selenide in alkali ion batteries. *Journal of Solid State Chemistry*, **2021**, 300, 122241	3.3	0
1	Structure of BiRe2O6re-investigated using single-crystal neutron Laue diffraction. *Journal of Physics: Conference Series*, **2010**, 251, 012028	0.3	