

# Won-Sub Yoon

## List of Publications by Citations

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234  
papers

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12,131  
ext. citations

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#	Paper	IF	Citations
234	Electrochemical and Structural Properties of $x\text{Li}_2\text{MDO}_3[(1-x)\text{LiMn}_0.5\text{Ni}_0.5\text{O}_2]$ Electrodes for Lithium Batteries (M = Ti, Mn, Zr; $0 \leq x \leq 0.3$ ). <i>Chemistry of Materials</i> , <b>2004</b> , 16, 1996-2006	9.6	438
233	Investigation of the charge compensation mechanism on the electrochemically Li-ion deintercalated $\text{Li}_{1-x}\text{Co}_{1/3}\text{Ni}_{1/3}\text{Mn}_{1/3}\text{O}_2$ electrode system by combination of soft and hard X-ray absorption spectroscopy. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 17479-87	16.4	356
232	Sodium intercalation chemistry in graphite. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 2963-2969	35.4	287
231	Electrochemical properties of manganese oxide coated onto carbon nanotubes for energy-storage applications. <i>Journal of Power Sources</i> , <b>2008</b> , 178, 483-489	8.9	258
230	Oxygen Contribution on Li-Ion Intercalation/Deintercalation in $\text{LiCoO}_2$ Investigated by O K-Edge and Co L-Edge X-ray Absorption Spectroscopy. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 2526-2532	3.4	249
229	Cation Ordering in Layered $\text{O}_3$ $\text{Li}[\text{Ni}_x\text{Li}_{1/3-2x/3}\text{Mn}_{2/3-x/3}]\text{O}_2$ ( $0 \leq x \leq 1/2$ ) Compounds. <i>Chemistry of Materials</i> , <b>2005</b> , 17, 2386-2394	9.6	245
228	In Situ X-ray Absorption Spectroscopic Study on $\text{LiNi}_{0.5}\text{Mn}_{0.5}\text{O}_2$ Cathode Material during Electrochemical Cycling. <i>Chemistry of Materials</i> , <b>2003</b> , 15, 3161-3169	9.6	204
227	Exploring Anomalous Charge Storage in Anode Materials for Next-Generation Li Rechargeable Batteries. <i>Chemical Reviews</i> , <b>2020</b> , 120, 6934-6976	68.1	196
226	A comparative study on structural changes of $\text{LiCo}_{1/3}\text{Ni}_{1/3}\text{Mn}_{1/3}\text{O}_2$ and $\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ during first charge using in situ XRD. <i>Electrochemistry Communications</i> , <b>2006</b> , 8, 1257-1262	5.1	187
225	Local Structure and Cation Ordering in $\text{O}_3$ Lithium Nickel Manganese Oxides with Stoichiometry $\text{Li}[\text{Ni}_{x/3}\text{Mn}_{(2-x)/3}\text{Li}_{(1-x)/3}]\text{O}_2$ . <i>Electrochemical and Solid-State Letters</i> , <b>2004</b> , 7, A167		180
224	Understanding the Electrochemical Mechanism of the New Iron-Based Mixed-Phosphate $\text{Na}_4\text{Fe}_3(\text{PO}_4)_2(\text{P}_2\text{O}_7)$ in a Na Rechargeable Battery. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 3614-3622	9.6	174
223	X-ray absorption spectroscopy studies of nickel oxide thin film electrodes for supercapacitors. <i>Electrochimica Acta</i> , <b>2002</b> , 47, 3201-3209	6.7	174
222	Advances in the Cathode Materials for Lithium Rechargeable Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 2578-2605	16.4	170
221	Electrodeposited manganese oxides on three-dimensional carbon nanotube substrate: Supercapacitive behaviour in aqueous and organic electrolytes. <i>Journal of Power Sources</i> , <b>2009</b> , 188, 323-331	8.9	158
220	Investigation of the Local Structure of the $\text{LiNi}_{0.5}\text{Mn}_{0.5}\text{O}_2$ Cathode Material during Electrochemical Cycling by X-Ray Absorption and NMR Spectroscopy. <i>Electrochemical and Solid-State Letters</i> , <b>2002</b> , 5, A263		158
219	High-performance flexible lead-free nanocomposite piezoelectric nanogenerator for biomechanical energy harvesting and storage. <i>Nano Energy</i> , <b>2015</b> , 15, 177-185	17.1	156
218	Pseudocapacitive properties of electrochemically prepared nickel oxides on 3-dimensional carbon nanotube film substrates. <i>Journal of Power Sources</i> , <b>2008</b> , 182, 642-652	8.9	155

217	Electrochemical performance and ex situ analysis of ZnMn <sub>2</sub> O <sub>4</sub> nanowires as anode materials for lithium rechargeable batteries. <i>Nano Research</i> , <b>2011</b> , 4, 505-510	10	154
216	Modeling and Applications of Electrochemical Impedance Spectroscopy (EIS) for Lithium-ion Batteries. <i>Journal of Electrochemical Science and Technology</i> , <b>2020</b> , 11, 1-13	3.2	148
215	Exceptional electrochemical performance of freestanding electrospun carbon nanofiber anodes containing ultrafine SnO <sub>x</sub> particles. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 9895	35.4	142
214	Cation Ordering in Li[Ni <sub>x</sub> Mn <sub>x</sub> Co(1-2x)]O <sub>2</sub> -Layered Cathode Materials: A Nuclear Magnetic Resonance (NMR), Pair Distribution Function, X-ray Absorption Spectroscopy, and Electrochemical Study. <i>Chemistry of Materials</i> , <b>2007</b> , 19, 6277-6289	9.6	124
213	Electrochemical Activity of Li in the Transition-Metal Sites of O <sub>3</sub> Li[Li <sub>(1-x)/3</sub> Mn <sub>(2x)/3</sub> Ni <sub>x</sub> ]O <sub>2</sub> . <i>Electrochemical and Solid-State Letters</i> , <b>2004</b> , 7, A290		122
212	A novel concept of hybrid capacitor based on manganese oxide materials. <i>Electrochemistry Communications</i> , <b>2007</b> , 9, 2807-2811	5.1	118
211	Self-assembled porous MoO <sub>2</sub> /graphene microspheres towards high performance anodes for lithium ion batteries. <i>Journal of Power Sources</i> , <b>2015</b> , 275, 351-361	8.9	116
210	New Insight into Ni-Rich Layered Structure for Next-Generation Li Rechargeable Batteries. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1701788	21.8	113
209	Influence of carbon towards improved lithium storage properties of Li <sub>2</sub> MnSiO <sub>4</sub> cathodes. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 2470		112
208	Carbon supported, Al doped-Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> as a high rate cathode material for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 6556		111
207	Understanding the Crystal Structure of Layered LiNi <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>2</sub> by Electron Diffraction and Powder Diffraction Simulation. <i>Electrochemical and Solid-State Letters</i> , <b>2004</b> , 7, A155		111
206	Evidence of reversible oxygen participation in anomalously high capacity Li- and Mn-rich cathodes for Li-ion batteries. <i>Nano Energy</i> , <b>2016</b> , 21, 172-184	17.1	109
205	New Insight into the Reaction Mechanism for Exceptional Capacity of Ordered Mesoporous SnO <sub>2</sub> Electrodes via Synchrotron-Based X-ray Analysis. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 6361-6370	9.6	105
204	Discovery of abnormal lithium-storage sites in molybdenum dioxide electrodes. <i>Nature Communications</i> , <b>2016</b> , 7, 11049	17.4	100
203	In situ X-ray diffraction studies of mixed LiMn <sub>2</sub> O <sub>4</sub>   LiNi <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> composite cathode in Li-ion cells during charge/discharge cycling. <i>Journal of Power Sources</i> , <b>2009</b> , 192, 652-659	8.9	99
202	Combined NMR and XAS Study on Local Environments and Electronic Structures of Electrochemically Li-Ion Deintercalated Li <sub>1-x</sub> Co <sub>1/3</sub> Ni <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> Electrode System. <i>Electrochemical and Solid-State Letters</i> , <b>2004</b> , 7, A53		99
201	Crystal structure changes of LiMn <sub>0.5</sub> Ni <sub>0.5</sub> O <sub>2</sub> cathode materials during charge and discharge studied by synchrotron based in situ XRD. <i>Electrochemistry Communications</i> , <b>2002</b> , 4, 649-654	5.1	95
200	Electrochemical and In Situ Synchrotron XRD Studies on Al <sub>2</sub> O <sub>3</sub> -Coated LiCoO <sub>2</sub> Cathode Material. <i>Journal of the Electrochemical Society</i> , <b>2004</b> , 151, A1344	3.9	92

199	Rational syntheses of core-shell Fe@(PtRu) nanoparticle electrocatalysts for the methanol oxidation reaction with complete suppression of CO-poisoning and highly enhanced activity. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 17154-17164	13	90
198	A New Strategy for High-Voltage Cathodes for K-Ion Batteries: Stoichiometric KVPO <sub>4</sub> F. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1801591	21.8	90
197	Soft X-Ray Absorption Spectroscopic Study of a LiNi <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>2</sub> Cathode during Charge. <i>Journal of the Electrochemical Society</i> , <b>2004</b> , 151, A246	3.9	85
196	Nanostructured MgFe <sub>2</sub> O <sub>4</sub> as anode materials for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 7038-7041	5.7	81
195	Structural and Electrochemical Properties of LiAl <sub>y</sub> Co <sub>1-y</sub> O <sub>2</sub> Cathode for Li Rechargeable Batteries. <i>Journal of the Electrochemical Society</i> , <b>2000</b> , 147, 2023	3.9	81
194	Investigating the first-cycle irreversibility of lithium metal oxide cathodes for Li batteries. <i>Journal of Materials Science</i> , <b>2008</b> , 43, 4701-4706	4.3	78
193	In situ analyses for ion storage materials. <i>Chemical Society Reviews</i> , <b>2016</b> , 45, 5717-5770	58.5	76
192	Electronic Structure and Chemistry of Iron-Based Metal Oxide Nanostructured Materials: A NEXAFS Investigation of BiFeO <sub>3</sub> , Bi <sub>2</sub> Fe <sub>4</sub> O <sub>9</sub> , Fe <sub>2</sub> O <sub>3</sub> , Fe <sub>3</sub> O <sub>4</sub> , and Fe/Fe <sub>3</sub> O <sub>4</sub> . <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 10359-10369	3.8	75
191	Characterization of LiNi <sub>0.85</sub> Co <sub>0.10</sub> Mn <sub>0.05</sub> O <sub>2</sub> (M = Al, Fe) as a cathode material for lithium secondary batteries. <i>Journal of Power Sources</i> , <b>2001</b> , 97-98, 308-312	8.9	73
190	Lithium-free transition metal monoxides for positive electrodes in lithium-ion batteries. <i>Nature Energy</i> , <b>2017</b> , 2,	62.3	72
189	The Reaction Mechanism and Capacity Degradation Model in Lithium Insertion Organic Cathodes, Li <sub>2</sub> C <sub>6</sub> O <sub>6</sub> , Using Combined Experimental and First Principle Studies. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 3086-92	6.4	71
188	Preparation of LiCoPO <sub>4</sub> and LiFePO <sub>4</sub> coated LiCoPO <sub>4</sub> materials with improved battery performance. <i>Journal of Alloys and Compounds</i> , <b>2010</b> , 497, 321-324	5.7	70
187	Investigation of the Lithiation and Delithiation Conversion Mechanisms of Bismuth Fluoride Nanocomposites. <i>Journal of the Electrochemical Society</i> , <b>2006</b> , 153, A799	3.9	70
186	Electronic structural changes of the electrochemically Li-ion deintercalated LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> cathode material investigated by X-ray absorption spectroscopy. <i>Journal of Power Sources</i> , <b>2007</b> , 174, 1015-1020	8.9	68
185	The Fe K-edge X-ray absorption characteristics of La <sub>1-x</sub> Sr <sub>x</sub> FeO <sub>3</sub> prepared by solid state reaction. <i>Materials Research Bulletin</i> , <b>2009</b> , 44, 1397-1404	5.1	67
184	Structural changes and thermal stability of charged LiNi <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> cathode material for Li-ion batteries studied by time-resolved XRD. <i>Journal of Power Sources</i> , <b>2009</b> , 189, 515-518	8.9	65
183	New electrolytes for lithium ion batteries using LiF salt and boron based anion receptors. <i>Journal of Power Sources</i> , <b>2008</b> , 184, 517-521	8.9	65
182	Synthesis of LiCoO <sub>2</sub> using acrylic acid and its electrochemical properties for Li secondary batteries. <i>Journal of Power Sources</i> , <b>1999</b> , 81-82, 517-523	8.9	65

181	<sup>6</sup> Li MAS NMR and in situ X-ray studies of lithium nickel manganese oxides. <i>Journal of Power Sources</i> , <b>2003</b> , 119-121, 649-653	8.9	60
180	Nanoscale size effect of titania (anatase) nanotubes with uniform wall thickness as high performance anode for lithium-ion secondary battery. <i>Journal of Power Sources</i> , <b>2012</b> , 204, 162-167	8.9	57
179	Thermal stability of charged LiNi <sub>0.5</sub> Co <sub>0.2</sub> Mn <sub>0.3</sub> O <sub>2</sub> cathode for Li-ion batteries investigated by synchrotron based in situ X-ray diffraction. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 562, 219-223	5.7	57
178	Studies of LiMn <sub>2</sub> O <sub>4</sub> Capacity Fading at Elevated Temperature Using In Situ Synchrotron X-Ray Diffraction. <i>Journal of the Electrochemical Society</i> , <b>2006</b> , 153, A774	3.9	57
177	Structural studies of the new carbon-coated silicon anode materials using synchrotron-based in situ XRD. <i>Electrochemistry Communications</i> , <b>2002</b> , 4, 893-897	5.1	57
176	First-cycle irreversibility of layered LiNiCoMn oxide cathode in Li-ion batteries. <i>Electrochimica Acta</i> , <b>2008</b> , 54, 684-689	6.7	55
175	Understanding Origin of Voltage Hysteresis in Conversion Reaction for Na Rechargeable Batteries: The Case of Cobalt Oxides. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 5042-5050	15.6	54
174	Structural study of the coating effect on the thermal stability of charged MgO-coated LiNi <sub>0.8</sub> Co <sub>0.2</sub> O <sub>2</sub> cathodes investigated by in situ XRD. <i>Journal of Power Sources</i> , <b>2012</b> , 217, 128-134	8.9	52
173	Time-resolved XRD study on the thermal decomposition of nickel-based layered cathode materials for Li-ion batteries. <i>Journal of Power Sources</i> , <b>2006</b> , 163, 219-222	8.9	52
172	Nano-sized lithium manganese oxide dispersed on carbon nanotubes for energy storage applications. <i>Electrochemistry Communications</i> , <b>2009</b> , 11, 1575-1578	5.1	50
171	Electrochemical characterization of layered LiCoO <sub>2</sub> films prepared by electrostatic spray deposition. <i>Journal of Power Sources</i> , <b>2001</b> , 97-98, 282-286	8.9	49
170	Probing the Additional Capacity and Reaction Mechanism of the RuO <sub>2</sub> Anode in Lithium Rechargeable Batteries. <i>ChemSusChem</i> , <b>2015</b> , 8, 2378-84	8.3	47
169	Mesoporous transition metal dichalcogenide ME <sub>2</sub> (M = Mo, W; E = S, Se) with 2-D layered crystallinity as anode materials for lithium ion batteries. <i>RSC Advances</i> , <b>2016</b> , 6, 14253-14260	3.7	46
168	In situ soft XAS study on nickel-based layered cathode material at elevated temperatures: a novel approach to study thermal stability. <i>Scientific Reports</i> , <b>2014</b> , 4, 6827	4.9	45
167	In situ X-ray absorption and diffraction studies of carbon coated LiFe <sub>1/4</sub> Mn <sub>1/4</sub> Co <sub>1/4</sub> Ni <sub>1/4</sub> P <sub>4</sub> O <sub>4</sub> cathode during first charge. <i>Electrochemistry Communications</i> , <b>2009</b> , 11, 913-916	5.1	45
166	Ultrathin supercapacitor electrodes with high volumetric capacitance and stability using direct covalent-bonding between pseudocapacitive nanoparticles and conducting materials. <i>Nano Energy</i> , <b>2015</b> , 12, 612-625	17.1	43
165	Thermal behavior and the decomposition mechanism of electrochemically delithiated Li <sub>1-x</sub> NiO <sub>2</sub> . <i>Journal of Power Sources</i> , <b>2001</b> , 97-98, 321-325	8.9	43
164	Oxygen Contribution on Li-Ion Intercalation-Deintercalation in LiAl <sub>y</sub> Co <sub>1-y</sub> O <sub>2</sub> Investigated by O K-Edge and Co L-Edge X-Ray Absorption Spectroscopy. <i>Journal of the Electrochemical Society</i> , <b>2002</b> , 149, A1305	3.9	43

163	Applications of Voltammetry in Lithium Ion Battery Research. <i>Journal of Electrochemical Science and Technology</i> , <b>2020</b> , 11, 14-25	3.2	43
162	In situ XRD studies of the structural changes of ZrO <sub>2</sub> -coated LiCoO <sub>2</sub> during cycling and their effects on capacity retention in lithium batteries. <i>Journal of Power Sources</i> , <b>2006</b> , 163, 185-190	8.9	41
161	Discovering a Dual-Buffer Effect for Lithium Storage: Durable Nanostructured Ordered Mesoporous Co <sub>3</sub> N Intermetallic Electrodes. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 2800-2808	15.6	40
160	Exceptional Lithium Storage in a Co(OH) Anode: Hydride Formation. <i>ACS Nano</i> , <b>2018</b> , 12, 2909-2921	16.7	39
159	A Novel Silver Molybdenum Oxyfluoride Perovskite as a Cathode Material for Lithium Batteries. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 2139-2148	9.6	39
158	Time-Resolved XRD Study on the Thermal Decomposition of Li <sub>1-x</sub> Ni <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> Cathode Materials for Li-Ion Batteries. <i>Electrochemical and Solid-State Letters</i> , <b>2005</b> , 8, A83		39
157	Enhanced high-temperature cycling of Li <sub>2</sub> O <sub>2</sub> B <sub>2</sub> O <sub>3</sub> -coated spinel-structured LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> cathode material for application to lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 601, 217-222	5.7	38
156	A study on the newly observed intermediate structures during the thermal decomposition of nickel-based layered cathode materials using time-resolved XRD. <i>Electrochemistry Communications</i> , <b>2006</b> , 8, 859-862	5.1	38
155	Synergistic effect of nano-Pt and Ni spine for HER in alkaline solution: hydrogen spillover from nano-Pt to Ni spine. <i>Scientific Reports</i> , <b>2018</b> , 8, 2986	4.9	37
154	The phase transition behaviors of Li <sub>1-x</sub> Mn <sub>0.5</sub> Fe <sub>0.5</sub> PO <sub>4</sub> during lithium extraction studied by in situ X-ray absorption and diffraction techniques. <i>Electrochemistry Communications</i> , <b>2009</b> , 11, 2023-2026	5.1	37
153	Study on structure and electrochemical properties of carbon-coated monoclinic Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> using synchrotron based in situ X-ray diffraction and absorption. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 569, 76-81	5.7	36
152	Lithium-excess olivine electrode for lithium rechargeable batteries. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 2902-2915	35.4	36
151	Characterization and Control of Irreversible Reaction in Li-Rich Cathode during the Initial Charge Process. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 10804-10818	9.5	35
150	Nd <sub>2</sub> K <sub>2</sub> IrO <sub>7</sub> and Sm <sub>2</sub> K <sub>2</sub> IrO <sub>7</sub> : iridium(VI) oxides prepared under ambient pressure. <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 215-8	16.4	34
149	Multiscale factors in designing alkali-ion (Li, Na, and K) transition metal inorganic compounds for next-generation rechargeable batteries. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 4406-4449	35.4	33
148	Structural complexity of layered-spinel composite electrodes for Li-ion batteries. <i>Journal of Materials Research</i> , <b>2010</b> , 25, 1601-1616	2.5	33
147	Changes in electronic structure of the electrochemically Li-ion deintercalated LiNiO <sub>2</sub> system investigated by soft X-ray absorption spectroscopy. <i>Journal of Power Sources</i> , <b>2006</b> , 163, 234-237	8.9	33
146	Porous V <sub>2</sub> O <sub>5</sub> /RGO/CNT hierarchical architecture as a cathode material: Emphasis on the contribution of surface lithium storage. <i>Scientific Reports</i> , <b>2016</b> , 6, 31275	4.9	32

145	Investigation of the Structural Changes in $\text{Li}[\text{NiyMnyCo}(1-y)]\text{O}_2$ ( $y = 0.05$ ) upon Electrochemical Lithium Deintercalation. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 1209-1219	9.6	32
144	Changes in electronic structure of the electrochemically Li-ion deintercalated $\text{LiMn}_2\text{O}_4$ system investigated by soft X-ray absorption spectroscopy. <i>Journal of Power Sources</i> , <b>2003</b> , 119-121, 706-709	8.9	32
143	Hierarchical micro-lamella-structured 3D porous copper current collector coated with tin for advanced lithium-ion batteries. <i>Applied Surface Science</i> , <b>2017</b> , 399, 132-138	6.7	31
142	Comparative study of $\text{Li}(\text{Li}_{1/3}\text{Ti}_{5/3})\text{O}_4$ and $\text{Li}(\text{Ni}_{1/2}\text{Li}_{2x/3}\text{Ti}_{x/3})\text{Ti}_3/2\text{O}_4$ ( $x=1/3$ ) anodes for Li rechargeable batteries. <i>Electrochimica Acta</i> , <b>2009</b> , 54, 5914-5918	6.7	31
141	Phase Dynamics on Conversion-Reaction-Based Tin-Doped Ferrite Anode for Next-Generation Lithium Batteries. <i>ACS Nano</i> , <b>2019</b> , 13, 5674-5685	16.7	30
140	In Operando Monitoring of the Pore Dynamics in Ordered Mesoporous Electrode Materials by Small Angle X-ray Scattering. <i>ACS Nano</i> , <b>2015</b> , 9, 5470-7	16.7	30
139	Entangled Germanium Nanowires and Graphite Nanofibers for the Anode of Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , <b>2013</b> , 160, A112-A116	3.9	29
138	In situ X-ray absorption spectroscopic investigation of the electrochemical conversion reactions of $\text{CuF}_2/\text{MoO}_3$ nanocomposite. <i>Journal of Solid State Chemistry</i> , <b>2010</b> , 183, 3029-3038	3.3	29
137	Structural Studies on the Effects of $\text{ZrO}_2$ Coating on $\text{LiCoO}_2$ during Cycling Using In Situ X-Ray Diffraction Technique. <i>Journal of the Electrochemical Society</i> , <b>2006</b> , 153, A2152	3.9	29
136	Electronic Structure of the Electrochemically Delithiated $\text{Li}_{1-x}\text{FePO}_4$ Electrodes Investigated by P K-edge X-Ray Absorption Spectroscopy. <i>Electrochemical and Solid-State Letters</i> , <b>2006</b> , 9, A415		28
135	Stabilizing effects of Al-doping on Ni-rich $\text{LiNi}_{0.80}\text{Co}_{0.15}\text{Mn}_{0.05}\text{O}_2$ cathode for Li rechargeable batteries. <i>Journal of Power Sources</i> , <b>2020</b> , 474, 228592	8.9	28
134	A facile and surfactant-free synthesis of porous hollow $\text{MnO}_2$ 3D nanoarchitectures for lithium ion batteries with superior performance. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 778, 37-46	5.7	28
133	Tracking the Influence of Thermal Expansion and Oxygen Vacancies on the Thermal Stability of Ni-Rich Layered Cathode Materials. <i>Advanced Science</i> , <b>2020</b> , 7, 1902413	13.6	27
132	Incorporation of PEDOT:PSS into $\text{SnO}_2$ /reduced graphene oxide nanocomposite anodes for lithium-ion batteries to achieve ultra-high capacity and cyclic stability. <i>RSC Advances</i> , <b>2015</b> , 5, 13964-13977	3.7	27
131	A Mechanistic Study on the Improvement of the Thermal Stability of Delithiated $\text{Li}_{1-x}\text{NiO}_2$ by Co Substitution for Ni. <i>Journal of the Electrochemical Society</i> , <b>2001</b> , 148, A1164	3.9	27
130	Triggered reversible phase transformation between layered and spinel structure in manganese-based layered compounds. <i>Nature Communications</i> , <b>2019</b> , 10, 3385	17.4	26
129	Deciphering the thermal behavior of lithium rich cathode material by in situ X-ray diffraction technique. <i>Journal of Power Sources</i> , <b>2015</b> , 285, 156-160	8.9	26
128	Novel concept of pseudocapacitor using stabilized lithium metal powder and non-lithiated metal oxide electrodes in organic electrolyte. <i>Electrochemistry Communications</i> , <b>2009</b> , 11, 1166-1169	5.1	26

127	Performance enhancement of membrane electrode assemblies with plasma etched polymer electrolyte membrane in PEM fuel cell. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 10452-10456	6.7	26
126	Comparative study of bulk and nano-structured mesoporous SnO <sub>2</sub> electrodes on the electrochemical performances for next generation Li rechargeable batteries. <i>Journal of Power Sources</i> , <b>2019</b> , 413, 241-249	8.9	26
125	A biocompatible implant electrode capable of operating in body fluids for energy storage devices. <i>Nano Energy</i> , <b>2017</b> , 34, 86-92	17.1	25
124	O <sub>3</sub> -type NaNi <sub>1/3</sub> Fe <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> layered cathode for Na-ion batteries: Structural evolution and redox mechanism upon Na (de) intercalation. <i>Journal of Power Sources</i> , <b>2019</b> , 439, 227064	8.9	25
123	Comparative studies on C-coated and uncoated LiFePO <sub>4</sub> cycling at various rates and temperatures using synchrotron based in situ X-ray diffraction. <i>Electrochimica Acta</i> , <b>2011</b> , 56, 1182-1189	6.7	25
122	Synthesis of LiAl <sub>y</sub> Co <sub>1-y</sub> O <sub>2</sub> using acrylic acid and its electrochemical properties for Li rechargeable batteries. <i>Journal of Power Sources</i> , <b>2001</b> , 97-98, 303-307	8.9	25
121	Hierarchical titania nanotubes with self-branched crystalline nanorods. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2010</b> , 2, 1581-7	9.5	24
120	Characterization of LiMn <sub>2</sub> O <sub>4</sub> -coated LiCoO <sub>2</sub> film electrode prepared by electrostatic spray deposition. <i>Journal of Power Sources</i> , <b>2006</b> , 163, 207-210	8.9	24
119	A Study on the Thermal Behavior of Electrochemically Delithiated Li[ <sub>sub 1-x</sub> ]NiO[ <sub>sub 2</sub> ]. <i>Journal of the Electrochemical Society</i> , <b>2001</b> , 148, A716	3.9	24
118	Surface enriched graphene hollow spheres towards building ultra-high power sodium-ion capacitor with long durability. <i>Energy Storage Materials</i> , <b>2020</b> , 25, 702-713	19.4	24
117	Fe <sub>3</sub> O <sub>4</sub> nanoparticles encapsulated in one-dimensional Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> nanomatrix: An extremely reversible anode for long life and high capacity Li-ion batteries. <i>Nano Energy</i> , <b>2016</b> , 19, 246-256	17.1	23
116	Lithium-ion transport through a tailored disordered phase on the LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> surface for high-power cathode materials. <i>ChemSusChem</i> , <b>2014</b> , 7, 2248-54	8.3	23
115	From grass to battery anode: agricultural biomass hemp-derived carbon for lithium storage.. <i>RSC Advances</i> , <b>2018</b> , 8, 32231-32240	3.7	23
114	Comparative studies between oxygen-deficient LiMn <sub>2</sub> O <sub>4</sub> and Al-doped LiMn <sub>2</sub> O <sub>4</sub> . <i>Journal of Power Sources</i> , <b>2005</b> , 146, 226-231	8.9	22
113	X-Ray Absorption Spectroscopic Study of LiAl[ <sub>sub y</sub> ]Co[ <sub>sub 1-y</sub> ]O[ <sub>sub 2</sub> ] Cathode for Li Rechargeable Batteries. <i>Journal of the Electrochemical Society</i> , <b>2002</b> , 149, A146	3.9	22
112	Performance and stability characteristics of MEAs with carbon-supported Pt and Pt <sub>1</sub> Ni <sub>1</sub> nanoparticles as cathode catalysts in PEM fuel cell. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 4394-4399	6.7	21
111	In situ X-ray diffraction studies on the mechanism of capacity retention improvement by coating at the surface of LiCoO <sub>2</sub> . <i>Journal of Power Sources</i> , <b>2007</b> , 174, 619-623	8.9	21
110	Stability characteristics of Pt <sub>1</sub> Ni <sub>1</sub> /C as cathode catalysts in membrane electrode assembly of polymer electrolyte membrane fuel cell. <i>Electrochimica Acta</i> , <b>2012</b> , 59, 264-269	6.7	20



109	The dependence of performance degradation of membrane electrode assembly on platinum loading in polymer electrolyte membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 2490-2497	6.7	20
108	Optimizing high voltage Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> cathode for achieving high rate sodium-ion batteries with long cycle life. <i>Chemical Engineering Journal</i> , <b>2021</b> , 403, 126291	14.7	20
107	Zr-doping effect on the capacity retention of LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> cycled between 5.0 and 1.0V: In situ synchrotron X-Ray diffraction study. <i>Journal of Power Sources</i> , <b>2017</b> , 368, 1-10	8.9	19
106	Effect of local structural changes on rate capability of LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> cathode material for lithium ion batteries. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 686, 593-600	5.7	18
105	Improved Electrode Performance of LiAl <sub>y</sub> Co <sub>1-y</sub> O <sub>2</sub> Prepared via Sol-Gel Process. <i>Electrochemical and Solid-State Letters</i> , <b>2001</b> , 4, A35		18
104	Solvent-polarity-induced hematite (Fe <sub>2</sub> O <sub>3</sub> ) nanostructures for lithium-ion battery and photoelectrochemical applications. <i>Electrochimica Acta</i> , <b>2017</b> , 245, 643-653	6.7	17
103	Crystal and local structure studies of LiFe <sub>0.48</sub> Mn <sub>0.48</sub> Mg <sub>0.04</sub> PO <sub>4</sub> cathode material for lithium rechargeable batteries. <i>Journal of Power Sources</i> , <b>2013</b> , 244, 581-585	8.9	17
102	Reversible phase transformation of titania (anatase) nanotubes upon electrochemical lithium-intercalation observed by ex situ transmission electron microscopy. <i>Journal of Power Sources</i> , <b>2014</b> , 249, 59-65	8.9	17
101	High rate capabilities induced by multi-phasic nanodomains in iron-substituted calcium cobaltite electrodes. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 1829		17
100	Enhancing the structural durability of Ni-rich layered materials by post-process: washing and heat-treatment. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 10206-10216	13	16
99	The kinetic effect on structural behavior of mixed LiMn <sub>2</sub> O <sub>4</sub> /Ni <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> cathode materials studied by in situ time-resolved X-ray diffraction technique. <i>Electrochemistry Communications</i> , <b>2012</b> , 15, 74-77	5.1	16
98	Formation of an SEI on a LiMn <sub>2</sub> O <sub>4</sub> cathode during room temperature charge/discharge cycling studied by soft X-ray absorption spectroscopy at the Fluorine K-edge. <i>Journal of Applied Electrochemistry</i> , <b>2011</b> , 41, 1295-1299	2.6	16
97	Enhanced electrochemical lithium storage activity of LiCrO <sub>2</sub> by size effect. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 2993		16
96	Electronic structural changes of the electrochemically delithiated LiFe <sub>0.5</sub> Co <sub>0.5</sub> PO <sub>4</sub> cathode material studied by X-ray absorption spectroscopy. <i>Journal of Power Sources</i> , <b>2008</b> , 183, 427-430	8.9	16
95	Catalytic effect of reduced graphene oxide on facilitating reversible conversion reaction in SnO <sub>2</sub> for next-generation Li rechargeable batteries. <i>Journal of Power Sources</i> , <b>2020</b> , 446, 227321	8.9	16
94	Understanding the structural phase transitions in lithium vanadium phosphate cathodes for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 10331-10336	13	15
93	Anionic Redox Chemistry as a Clue for Understanding the Structural Behavior in Layered Cathode Materials. <i>Small</i> , <b>2020</b> , 16, e1905875	11	15
92	Microwave-assisted hydrothermal synthesis of electrochemically active nano-sized Li <sub>2</sub> MnO <sub>3</sub> dispersed on carbon nanotube network for lithium ion batteries. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 591, 356-361	5.7	15

91	Amorphous germanium oxide nanobubbles for lithium-ion battery anode. <i>Materials Research Bulletin</i> , <b>2019</b> , 110, 24-31	5.1	15
90	Synthesis and characterization of Na <sub>0.3</sub> RhO <sub>2</sub> ·0.6H <sub>2</sub> O semiconductor with a weak ferromagnetic component. <i>Solid State Communications</i> , <b>2005</b> , 135, 51-56	1.6	14
89	Nanostructured Electrode Materials for Rechargeable Lithium-Ion Batteries. <i>Journal of Electrochemical Science and Technology</i> , <b>2020</b> , 11, 195-219	3.2	14
88	Highly Efficient Nanocarbon Coating Layer on the Nanostructured Copper Sulfide-Metal Organic Framework Derived Carbon for Advanced Sodium-Ion Battery Anode. <i>Materials</i> , <b>2019</b> , 12,	3.5	13
87	Enhancement of the interfacial reaction on mesoporous RuO <sub>2</sub> for next generation Li batteries. <i>Journal of Power Sources</i> , <b>2018</b> , 396, 749-753	8.9	13
86	Preparation of MEA with the Polybenzimidazole Membrane for High Temperature PEM Fuel Cell. <i>Electrochemical and Solid-State Letters</i> , <b>2011</b> , 14, B38		13
85	Electrochemically active silver molybdenum oxyfluoride perovskite: Synthesis and in situ electrochemical characterization. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 6831-6838	8.9	13
84	Anode Design Based on Microscale Porous Scaffolds for Advanced Lithium Ion Batteries. <i>Journal of Electronic Materials</i> , <b>2017</b> , 46, 3789-3795	1.9	12
83	Processing and characterization of titanium dioxide grown on titanium foam for potential use as Li-ion electrode. <i>Applied Surface Science</i> , <b>2017</b> , 411, 363-367	6.7	12
82	Nanostructural Uniformity of Ordered Mesoporous Materials: Governing Lithium Storage Behaviors. <i>Small</i> , <b>2018</b> , 14, e1702985	11	12
81	Hierarchically structured nanoporous copper for use as lithium-ion battery anode. <i>Scripta Materialia</i> , <b>2019</b> , 163, 9-13	5.6	12
80	Kathodenmaterialien für wiederaufladbare Lithiumbatterien. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 2598-2626	3.6	12
79	Conduction Mechanism of Charge Carriers in Electrodes and Design Factors for the Improvement of Charge Conduction in Li-ion Batteries. <i>Journal of Electrochemical Science and Technology</i> , <b>2021</b> , 12, 1-20	3.2	12
78	Structural and Electrochemical Kinetic Properties of 0.5LiMnO <sub>2</sub> ·0.5LiCoO <sub>2</sub> Cathode Materials with Different LiMnO Domain Sizes. <i>Scientific Reports</i> , <b>2019</b> , 9, 427	4.9	11
77	Cerotic acid assisted sol-gel synthesis and electrochemical performance of double doped spinels (Li <sub>x</sub> Cr <sub>x</sub> Mg <sub>y</sub> Mn <sub>2-x-y</sub> O <sub>4</sub> ) as cathode materials for lithium rechargeable batteries. <i>Powder Technology</i> , <b>2016</b> , 301, 197-210	5.2	11
76	Na <sub>2</sub> BeF <sub>2</sub> nanocomposite: New type of Na-ion battery cathode material. <i>Nano Research</i> , <b>2017</b> , 10, 4388-4397		11
75	Cu <sub>2</sub> Li <sub>2</sub> MnSiO <sub>4</sub> -polyaniline composite hybrids as high performance cathode for lithium batteries. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 630, 292-298	5.7	11
74	Unusual Lattice-Magnetism Connections in MnBi Nanorods. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 1100-1105	15.6	11

73	Crystal Structure Changes of LiNi <sub>0.5</sub> Co <sub>0.2</sub> Mn <sub>0.3</sub> O <sub>2</sub> Cathode Materials During the First Charge Investigated by in situ XRD. <i>Journal of Electrochemical Science and Technology</i> , <b>2012</b> , 3, 29-34	3.2	11
72	A Study on the Structural and Electrochemical Properties of Li <sub>0.99</sub> Ni <sub>0.46</sub> Mn <sub>1.56</sub> O <sub>4</sub> Cathode Material Using Synchrotron based in-situ X-ray Diffraction. <i>Journal of Electrochemical Science and Technology</i> , <b>2013</b> , 4, 34-40	3.2	11
71	Nanoengineered Organic Electrodes for Highly Durable and Ultrafast Cycling of Organic Sodium-Ion Batteries. <i>Small</i> , <b>2020</b> , 16, e2003688	11	11
70	Flexible quasi-solid-state lithium-ion capacitors employing amorphous SiO <sub>2</sub> nanospheres encapsulated in nitrogen-doped carbon shell as a high energy anode. <i>Journal of Power Sources</i> , <b>2021</b> , 484, 229143	8.9	11
69	High Capacity and Reversibility of Oxygen-Vacancy-Controlled MoO <sub>3</sub> on Cu in Li-Ion Batteries: Unveiling Storage Mechanism in Binder-Free MoO <sub>3</sub> Anodes. <i>Energy Technology</i> , <b>2020</b> , 8, 1901502	3.5	10
68	Suppression of Structural Fatigue by Doping in Spinel Electrode Probed by In Situ Bending Beam Method. <i>Journal of the Electrochemical Society</i> , <b>2004</b> , 151, A484	3.9	10
67	Indirect-To-Direct Band Gap Transition of One-Dimensional VSe: Theoretical Study with Dispersion Energy Correction. <i>ACS Omega</i> , <b>2019</b> , 4, 18392-18397	3.9	10
66	Reaction mechanism and additional lithium storage of mesoporous MnO <sub>2</sub> anode in Li batteries. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 53, 276-284	12	10
65	Electronic structural studies on the improved thermal stability of Li(Ni <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> )O <sub>2</sub> by ZrO <sub>2</sub> coating for lithium ion batteries. <i>Journal of Applied Electrochemistry</i> , <b>2017</b> , 47, 565-572	2.6	9
64	Low Iridium Content Confined inside a Co <sub>3</sub> O <sub>4</sub> Hollow Sphere for Superior Acidic Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 16640-16650	8.3	9
63	Mechanistic studies on reversible conversion reaction in Li <sub>2</sub> MnO <sub>3</sub> -carbon nanotube composite anode. <i>Journal of Power Sources</i> , <b>2019</b> , 423, 323-330	8.9	9
62	Cinnamon-Derived Hierarchically Porous Carbon as an Effective Lithium Polysulfide Reservoir in Lithium-Sulfur Batteries. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	9
61	Crystal Structure Changes of LiNi <sub>0.5</sub> Co <sub>0.2</sub> Mn <sub>0.3</sub> O <sub>2</sub> Cathode Materials During the First Charge Investigated by in situ XRD. <i>Journal of Electrochemical Science and Technology</i> , <b>2012</b> , 3, 29-34	3.2	9
60	Controlled Atomic Solubility in Mn-Rich Composite Material to Achieve Superior Electrochemical Performance for Li-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1902231	21.8	9
59	Zinc and aluminium: glutamic acid assisted dual-doped LiMn <sub>2</sub> O <sub>4</sub> spinels via sol-gel method as cathode material for use in lithium rechargeable batteries. <i>Journal of Sol-Gel Science and Technology</i> , <b>2015</b> , 73, 62-71	2.3	8
58	Further utilization of a Mn redox reaction via control of structural disorder in olivine systems. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 13743-13750	13	8
57	Synthesis and electrochemical properties of dual doped spinels LiNi <sub>x</sub> Al <sub>y</sub> Mn <sub>2-x-y</sub> O <sub>4</sub> via facile novel chelated sol-gel method as possible cathode material for lithium rechargeable batteries. <i>Journal of Energy Chemistry</i> , <b>2017</b> , 26, 101-114	12	8
56	Understanding the exceptional elevated temperature performance of high voltage LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> cathodes by LiFePO <sub>4</sub> modification. <i>Electrochimica Acta</i> , <b>2014</b> , 137, 404-410	6.7	8

55	Destabilization of the Surface Structure of Ni-Rich Layered Materials by Water-Washing Process. <i>Energy Storage Materials</i> , <b>2021</b> ,	19.4	8
54	Unveiling the Impact of Fe Incorporation on Intrinsic Performance of Reconstructed Water Oxidation Electrocatalyst. <i>ACS Energy Letters</i> , 4345-4354	20.1	8
53	Fully Exploited Oxygen Redox Reaction by the Inter-Diffused Cations in Co-Free Li-Rich Materials for High Performance Li-Ion Batteries. <i>Advanced Science</i> , <b>2020</b> , 7, 2001658	13.6	8
52	Polymorphic Effects on Electrochemical Performance of Conversion-Based MnO Anode Materials for Next-Generation Li Batteries. <i>Small</i> , <b>2021</b> , 17, e2006433	11	8
51	Pore-interconnected hollow (Sn,Ti)O <sub>2</sub> solid-solution nanoparticles for lithium-ion battery anode materials. <i>Composites Part B: Engineering</i> , <b>2019</b> , 166, 613-620	10	7
50	Synthesis and electrochemical characterization on dual-doped LiCoO <sub>2</sub> via green chemistry method for lithium rechargeable batteries. <i>Journal of Applied Electrochemistry</i> , <b>2014</b> , 44, 709-718	2.6	7
49	Ge-incorporation into 6-line ferrihydrite nanocrystals. <i>CrystEngComm</i> , <b>2010</b> , 12, 1997	3.3	7
48	Characteristics and performance of membrane electrode assemblies with operating conditions in polymer electrolyte membrane fuel cell. <i>Electrochimica Acta</i> , <b>2010</b> , 56, 717-721	6.7	7
47	Structural and Electrochemical Properties of Doped LiFe <sub>0.48</sub> Mn <sub>0.48</sub> Mg <sub>0.04</sub> PO <sub>4</sub> as Cathode Material for Lithium ion Batteries. <i>Journal of Electrochemical Science and Technology</i> , <b>2013</b> , 4, 102-107	3.2	7
46	The effects of nanostructures on lithium storage behavior in Mn <sub>2</sub> O <sub>3</sub> anodes for next-generation lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2021</b> , 493, 229682	8.9	7
45	Porous supraparticles of LiFePO <sub>4</sub> nanorods with carbon for high rate Li-ion batteries. <i>Materials Express</i> , <b>2018</b> , 8, 316-324	1.3	7
44	Effects of multi-dopants (Zn and Ho) in stabilizing spinel structure for cathode materials in lithium rechargeable batteries. Novel chelated sol-gel synthesis. <i>Particuology</i> , <b>2016</b> , 24, 87-95	2.8	6
43	A Simple Synthesis of Co <sub>3</sub> O <sub>4</sub> Nanoparticles Decorated on Multiwalled Carbon Nanotubes Hybrid Material for Rechargeable Li-Ion and Li-Air Batteries. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2017</b> , 17, 3390-3396	1.3	6
42	Non-aqueous quasi-solid electrolyte for use in supercapacitors. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2018</b> , 59, 192-195	6.3	6
41	Revisiting Solid Electrolyte Interphase on the Carbonaceous Electrodes Using Soft X-ray Absorption Spectroscopy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 29992-29999	9.5	6
40	Loose-fit graphitic encapsulation of silicon nanowire for one-dimensional Si anode design. <i>Journal of Materials Science and Technology</i> , <b>2017</b> , 33, 1120-1127	9.1	6
39	Magnetic spin glass properties of the bi-layer hydrate Na <sub>0.3</sub> NiO <sub>2</sub> ·1.3H <sub>2</sub> O. <i>Solid State Communications</i> , <b>2006</b> , 139, 60-63	1.6	6
38	Unveiling the Genesis and Effectiveness of Negative Fading in Nanostructured Iron Oxide Anode Materials for Lithium-Ion Batteries.. <i>ACS Nano</i> , <b>2022</b> ,	16.7	6

37	Inhomogeneous lithium-storage reaction triggering the inefficiency of all-solid-state batteries. <i>Journal of Energy Chemistry</i> , <b>2022</b> , 66, 226-236	12	6
36	Novel chelating agent assisted dual doped spinel via sol-gel method for lithium rechargeable batteries. <i>Journal of Electroanalytical Chemistry</i> , <b>2016</b> , 767, 141-152	4.1	5
35	Emerging Materials for Sodium-Ion Hybrid Capacitors: A Brief Review. <i>ACS Applied Energy Materials</i> ,	6.1	5
34	Biomass Waste, Coffee Grounds-derived Carbon for Lithium Storage. <i>Journal of Electrochemical Science and Technology</i> , <b>2018</b> , 9, 163-168	3.2	5
33	Improved Rate Capability of Li/Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> Cell for Advanced Lithium Secondary Battery. <i>Bulletin of the Korean Chemical Society</i> , <b>2011</b> , 32, 1491-1494	1.2	5
32	Ultrafast kinetics in a phase separating electrode material by forming an intermediate phase without reducing the particle size. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 4258-4268	35.4	5
31	Nd <sub>2</sub> K <sub>2</sub> IrO <sub>7</sub> und Sm <sub>2</sub> K <sub>2</sub> IrO <sub>7</sub> : Normaldrucksynthese komplexer Iridium(VI)-oxide. <i>Angewandte Chemie</i> , <b>2009</b> , 121, 221-224	3.6	4
30	Enhancement of polymer electrolyte membrane fuel cell performance by boiling a membrane electrode assembly in sulfuric acid solution. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 5952-5956	8.9	4
29	Structure and magnetism of the mono-layer hydrate Na <sub>0.3</sub> NiO <sub>2</sub> · 0.7H <sub>2</sub> O. <i>Solid State Communications</i> , <b>2007</b> , 142, 75-79	1.6	4
28	SnO <sub>2</sub> -Coated 3D Etched Cu Foam for Lithium-ion Battery Anode. <i>Journal of Electrochemical Science and Technology</i> , <b>2020</b> , 11, 92-98	3.2	4
27	Carbon-Coated Supraballs of Randomly Packed LiFePO <sub>4</sub> Nanoplates for High Rate and Stable Cycling of Li-Ion Batteries. <i>Particle and Particle Systems Characterization</i> , <b>2019</b> , 36, 1900149	3.1	3
26	Direct observation of pseudocapacitive sodium storage behavior in molybdenum dioxide anodes. <i>Journal of Power Sources</i> , <b>2018</b> , 397, 113-123	8.9	3
25	The effect of high-temperature storage on the reaction heterogeneity of Ni-rich layered cathode materials. <i>Energy Storage Materials</i> , <b>2022</b> , 46, 259-268	19.4	3
24	A Study on the Structural and Electrochemical Properties of Li <sub>0.99</sub> Ni <sub>0.46</sub> Mn <sub>1.56</sub> O <sub>4</sub> Cathode Material Using Synchrotron based in-situ X-ray Diffraction. <i>Journal of Electrochemical Science and Technology</i> , <b>2013</b> , 4, 34-40	3.2	3
23	Principles and Applications of Galvanostatic Intermittent Titration Technique for Lithium-ion Batteries. <i>Journal of Electrochemical Science and Technology</i> ,	3.2	3
22	Synthesis of ceria-carbon composite spheres and their application for next-generation lithium rechargeable batteries. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 837, 155467	5.7	3
21	Impact of Local Separation on the Structural and Electrochemical Behaviors in Li <sub>2</sub> MoO <sub>3</sub> ·LiCrO <sub>2</sub> Disordered Rock-Salt Cathode Material. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2002958	21.8	3
20	Nd <sub>2</sub> K <sub>2</sub> IrO <sub>7</sub> und Sm <sub>2</sub> K <sub>2</sub> IrO <sub>7</sub> : Iridium(VI) Oxides Prepared under Ambient Pressure. <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 1005-1005	16.4	2

19	The condition for the evolution of extra current peak in the cyclic voltammogram of $\text{Li}_x\text{Mn}_2\text{O}_4$ investigated by in situ bending beam method. <i>Electrochemistry Communications</i> , <b>2009</b> , 11, 212-215	5.1	2
18	Additional Lithium Storage on Dynamic Electrode Surface by Charge Redistribution in Inactive Ru Metal. <i>Small</i> , <b>2020</b> , 16, e1905868	11	2
17	Evidence for the Coexistence of Polysulfide and Conversion Reactions in the Lithium Storage Mechanism of $\text{MoS}_2$ Anode Material. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 1935-1945	9.6	2
16	Improving stability using a mixed ion/hybrid electrolyte strategy in a sodium ion capacitor. <i>Journal of Power Sources</i> , <b>2021</b> , 500, 229918	8.9	2
15	Dual lithium storage of Pt electrode: alloying and reversible surface layer. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 18377-18384	13	2
14	A multiscale investigation elucidating the structural complexities and electrochemical properties of layered-layered composite cathode materials synthesized at low temperatures. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 5439-5448	3.6	1
13	Understanding the effect of nonmetallic impurities in regenerated cathode materials for lithium-ion battery recycling by tracking down impurity elements. <i>Journal of Hazardous Materials</i> , <b>2021</b> , 425, 127907	12.8	1
12	Triggering anomalous capacity by nanoengineered ordered mesoporous structure for $\text{Co}_3\text{O}_4$ anode material in Li-ion rechargeable batteries. <i>Applied Surface Science</i> , <b>2021</b> , 151744	6.7	1
11	Superior Rate Capability and Cycling Stability in Partially Cation-Disordered Co-Free Li-Rich Layered Materials Enabled by an Initial Activation Process. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 5115-5126	9.6	1
10	Bonding dependent lithium storage behavior of molybdenum oxides for next-generation Li-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2022</b> , 10, 7718-7727	13	1
9	Challenges and Design Strategies for Conversion-Based Anode Materials for Lithium- and Sodium-Ion Batteries. <i>Journal of Electrochemical Science and Technology</i> , <b>2022</b> , 13, 32-53	3.2	1
8	Revealing the unconventional lithium storage mechanism of ordered mesoporous NiO for lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2022</b> , 526, 231135	8.9	1
7	Strategic Approach to Diversify Design Options for Li-Ion Batteries by Utilizing Low-Ni Layered Cathode Materials. <i>Advanced Energy Materials</i> , <b>2022</b> , 12, 2103052	21.8	1
6	Crystal Water-Assisted Additional Capacity for Nickel Hydroxide Anode Materials. <i>Advanced Functional Materials</i> , 2110828	15.6	1
5	Li-Ion Batteries: Carbon-Coated Supraballs of Randomly Packed $\text{LiFePO}_4$ Nanoplates for High Rate and Stable Cycling of Li-Ion Batteries (Part. Part. Syst. Charact. 7/2019). <i>Particle and Particle Systems Characterization</i> , <b>2019</b> , 36, 1970019	3.1	
4	$\text{Nd}_2\text{K}_2\text{IrO}_7$ und $\text{Sm}_2\text{K}_2\text{IrO}_7$ : Normaldrucksynthese komplexer Iridium(VI)-oxide. <i>Angewandte Chemie</i> , <b>2009</b> , 121, 1023-1023	3.6	
3	Batteries: Nanostructural Uniformity of Ordered Mesoporous Materials: Governing Lithium Storage Behaviors (Small 43/2018). <i>Small</i> , <b>2018</b> , 14, 1870197	11	
2	Strategic Approach to Diversify Design Options for Li-Ion Batteries by Utilizing Low-Ni Layered Cathode Materials (Adv. Energy Mater. 7/2022). <i>Advanced Energy Materials</i> , <b>2022</b> , 12, 2270028	21.8	

- 1 Crystal Water-Assisted Additional Capacity for Nickel Hydroxide Anode Materials (Adv. Funct. Mater. 17/2022). *Advanced Functional Materials*, **2022**, 32, 2270101 15.6