Won-Sub Yoon

List of Publications by Year in Descending Order

234 papers	10,585 citations	57 h-index	94 g-index
243 ext. papers	12,131 ext. citations	9.5 avg, IF	6.35 L-index

#	Paper	IF	Citations
234	Unveiling the Genesis and Effectiveness of Negative Fading in Nanostructured Iron Oxide Anode Materials for Lithium-Ion Batteries.. *ACS Nano*, **2022**,	16.7	6
233	The effect of high-temperature storage on the reaction heterogeneity of Ni-rich layered cathode materials. *Energy Storage Materials*, **2022**, 46, 259-268	19.4	3
232	Inhomogeneous lithium-storage reaction triggering the inefficiency of all-solid-state batteries. *Journal of Energy Chemistry*, **2022**, 66, 226-236	12	6
231	Bonding dependent lithium storage behavior of molybdenum oxides for next-generation Li-ion batteries. *Journal of Materials Chemistry A*, **2022**, 10, 7718-7727	13	1
230	Strategic Approach to Diversify Design Options for Li-Ion Batteries by Utilizing Low-Ni Layered Cathode Materials (Adv. Energy Mater. 7/2022). *Advanced Energy Materials*, **2022**, 12, 2270028	21.8	
229	Challenges and Design Strategies for Conversion-Based Anode Materials for Lithium- and Sodium-Ion Batteries. *Journal of Electrochemical Science and Technology*, **2022**, 13, 32-53	3.2	1
228	Revealing the unconventional lithium storage mechanism of ordered mesoporous NiO for lithium-ion batteries. *Journal of Power Sources*, **2022**, 526, 231135	8.9	1
227	Strategic Approach to Diversify Design Options for Li-Ion Batteries by Utilizing Low-Ni Layered Cathode Materials. *Advanced Energy Materials*, **2022**, 12, 2103052	21.8	1
226	Crystal Water-Assisted Additional Capacity for Nickel Hydroxide Anode Materials (Adv. Funct. Mater. 17/2022). *Advanced Functional Materials*, **2022**, 32, 2270101	15.6	
225	Destabilization of the Surface Structure of Ni-Rich Layered Materials by Water-Washing Process. *Energy Storage Materials*, **2021**,	19.4	8
224	Understanding the effect of nonmetallic impurities in regenerated cathode materials for lithium-ion battery recycling by tracking down impurity elements. *Journal of Hazardous Materials*, **2021**, 425, 127907	12.8	1
223	Triggering anomalous capacity by nanoengineered ordered mesoporous structure for Co3O4 anode material in Li-ion rechargeable batteries. *Applied Surface Science*, **2021**, 151744	6.7	1
222	Polymorphic Effects on Electrochemical Performance of Conversion-Based MnO Anode Materials for Next-Generation Li Batteries. *Small*, **2021**, 17, e2006433	11	8
221	Evidence for the Coexistence of Polysulfide and Conversion Reactions in the Lithium Storage Mechanism of MoS2 Anode Material. *Chemistry of Materials*, **2021**, 33, 1935-1945	9.6	2
220	The effects of nanostructures on lithium storage behavior in Mn2O3 anodes for next-generation lithium-ion batteries. *Journal of Power Sources*, **2021**, 493, 229682	8.9	7
219	Superior Rate Capability and Cycling Stability in Partially Cation-Disordered Co-Free Li-Rich Layered Materials Enabled by an Initial Activation Process. *Chemistry of Materials*, **2021**, 33, 5115-5126	9.6	1
218	Improving stability using a mixed ion/hybrid electrolyte strategy in a sodium ion capacitor. *Journal of Power Sources*, **2021**, 500, 229918	8.9	2

217	Reaction mechanism and additional lithium storage of mesoporous MnO2 anode in Li batteries. *Journal of Energy Chemistry*, **2021**, 53, 276-284	12	10
216	Optimizing high voltage Na3V2(PO4)2F3 cathode for achieving high rate sodium-ion batteries with long cycle life. *Chemical Engineering Journal*, **2021**, 403, 126291	14.7	20
215	Flexible quasi-solid-state lithium-ion capacitors employing amorphous SiO2 nanospheres encapsulated in nitrogen-doped carbon shell as a high energy anode. *Journal of Power Sources*, **2021**, 484, 229143	8.9	11
214	Impact of Local Separation on the Structural and Electrochemical Behaviors in Li2MoO3?LiCrO2 Disordered Rock-Salt Cathode Material. *Advanced Energy Materials*, **2021**, 11, 2002958	21.8	3
213	Conduction Mechanism of Charge Carriers in Electrodes and Design Factors for the Improvement of Charge Conduction in Li-ion Batteries. *Journal of Electrochemical Science and Technology*, **2021**, 12, 1-20	3.2	12
212	Dual lithium storage of Pt electrode: alloying and reversible surface layer. *Journal of Materials Chemistry A*, **2021**, 9, 18377-18384	13	2
211	Understanding the structural phase transitions in lithium vanadium phosphate cathodes for lithium-ion batteries. *Journal of Materials Chemistry A*, **2020**, 8, 10331-10336	13	15
210	Enhancing the structural durability of Ni-rich layered materials by post-process: washing and heat-treatment. *Journal of Materials Chemistry A*, **2020**, 8, 10206-10216	13	16
209	Cinnamon-Derived Hierarchically Porous Carbon as an Effective Lithium Polysulfide Reservoir in Lithium-Sulfur Batteries. *Nanomaterials*, **2020**, 10,	5.4	9
208	Multiscale factors in designing alkali-ion (Li, Na, and K) transition metal inorganic compounds for next-generation rechargeable batteries. *Energy and Environmental Science*, **2020**, 13, 4406-4449	35.4	33
207	Exploring Anomalous Charge Storage in Anode Materials for Next-Generation Li Rechargeable Batteries. *Chemical Reviews*, **2020**, 120, 6934-6976	68.1	196
206	A multiscale investigation elucidating the structural complexities and electrochemical properties of layered-layered composite cathode materials synthesized at low temperatures. *Physical Chemistry Chemical Physics*, **2020**, 22, 5439-5448	3.6	1
205	Anionic Redox Chemistry as a Clue for Understanding the Structural Behavior in Layered Cathode Materials. *Small*, **2020**, 16, e1905875	11	15
204	High Capacity and Reversibility of Oxygen-Vacancy-Controlled MoO3 on Cu in Li-Ion Batteries: Unveiling Storage Mechanism in Binder-Free MoO3 Anodes. *Energy Technology*, **2020**, 8, 1901502	3.5	10
203	Tracking the Influence of Thermal Expansion and Oxygen Vacancies on the Thermal Stability of Ni-Rich Layered Cathode Materials. *Advanced Science*, **2020**, 7, 1902413	13.6	27
202	SnO2-Coated 3D Etched Cu Foam for Lithium-ion Battery Anode. *Journal of Electrochemical Science and Technology*, **2020**, 11, 92-98	3.2	4
201	Modeling and Applications of Electrochemical Impedance Spectroscopy (EIS) for Lithium-ion Batteries. *Journal of Electrochemical Science and Technology*, **2020**, 11, 1-13	3.2	148
200	Applications of Voltammetry in Lithium Ion Battery Research. *Journal of Electrochemical Science and Technology*, **2020**, 11, 14-25	3.2	43

199	Nanostructured Electrode Materials for Rechargeable Lithium-Ion Batteries. *Journal of Electrochemical Science and Technology*, **2020**, 11, 195-219	3.2	14
198	Synthesis of ceria-carbon composite spheres and their application for next-generation lithium rechargeable batteries. *Journal of Alloys and Compounds*, **2020**, 837, 155467	5.7	3
197	Catalytic effect of reduced graphene oxide on facilitating reversible conversion reaction in SnO2 for next-generation Li rechargeable batteries. *Journal of Power Sources*, **2020**, 446, 227321	8.9	16
196	Controlled Atomic Solubility in Mn-Rich Composite Material to Achieve Superior Electrochemical Performance for Li-Ion Batteries. *Advanced Energy Materials*, **2020**, 10, 1902231	21.8	9
195	Additional Lithium Storage on Dynamic Electrode Surface by Charge Redistribution in Inactive Ru Metal. *Small*, **2020**, 16, e1905868	11	2
194	Stabilizing effects of Al-doping on Ni-rich LiNi0.80Co0.15Mn0.05O2 cathode for Li rechargeable batteries. *Journal of Power Sources*, **2020**, 474, 228592	8.9	28
193	Fully Exploited Oxygen Redox Reaction by the Inter-Diffused Cations in Co-Free Li-Rich Materials for High Performance Li-Ion Batteries. *Advanced Science*, **2020**, 7, 2001658	13.6	8
192	Nanoengineered Organic Electrodes for Highly Durable and Ultrafast Cycling of Organic Sodium-Ion Batteries. *Small*, **2020**, 16, e2003688	11	11
191	Ultrafast kinetics in a phase separating electrode material by forming an intermediate phase without reducing the particle size. *Energy and Environmental Science*, **2020**, 13, 4258-4268	35.4	5
190	Kathodenmaterialien f□wiederaufladbare Lithiumbatterien. *Angewandte Chemie*, **2020**, 132, 2598-2626	3.6	12
189	Advances in the Cathode Materials for Lithium Rechargeable Batteries. *Angewandte Chemie - International Edition*, **2020**, 59, 2578-2605	16.4	170
188	Surface enriched graphene hollow spheres towards building ultra-high power sodium-ion capacitor with long durability. *Energy Storage Materials*, **2020**, 25, 702-713	19.4	24
187	Triggered reversible phase transformation between layered and spinel structure in manganese-based layered compounds. *Nature Communications*, **2019**, 10, 3385	17.4	26
186	Low Iridium Content Confined inside a Co3O4 Hollow Sphere for Superior Acidic Water Oxidation. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 16640-16650	8.3	9
185	Structural and Electrochemical Kinetic Properties of 0.5LiMnO□.5LiCoO Cathode Materials with Different LiMnO Domain Sizes. *Scientific Reports*, **2019**, 9, 427	4.9	11
184	Carbon-Coated Supraballs of Randomly Packed LiFePO4 Nanoplates for High Rate and Stable Cycling of Li-Ion Batteries. *Particle and Particle Systems Characterization*, **2019**, 36, 1900149	3.1	3
183	Highly Efficient Nanocarbon Coating Layer on the Nanostructured Copper Sulfide-Metal Organic Framework Derived Carbon for Advanced Sodium-Ion Battery Anode. *Materials*, **2019**, 12,	3.5	13
182	Phase Dynamics on Conversion-Reaction-Based Tin-Doped Ferrite Anode for Next-Generation Lithium Batteries. *ACS Nano*, **2019**, 13, 5674-5685	16.7	30

181	Pore-interconnected hollow (Sn,Ti)O2 solid-solution nanoparticles for lithium-ion battery anode materials. *Composites Part B: Engineering*, **2019**, 166, 613-620	10	7
180	Mechanistic studies on reversible conversion reaction in Li2MnO3-carbon nanotube composite anode. *Journal of Power Sources*, **2019**, 423, 323-330	8.9	9
179	O3-type NaNi1/3Fe1/3Mn1/3O2 layered cathode for Na-ion batteries: Structural evolution and redox mechanism upon Na (de) intercalation. *Journal of Power Sources*, **2019**, 439, 227064	8.9	25
178	Li-Ion Batteries: Carbon-Coated Supraballs of Randomly Packed LiFePO4 Nanoplates for High Rate and Stable Cycling of Li-Ion Batteries (Part. Part. Syst. Charact. 7/2019). *Particle and Particle Systems Characterization*, **2019**, 36, 1970019	3.1	
177	Indirect-To-Direct Band Gap Transition of One-Dimensional VSe: Theoretical Study with Dispersion Energy Correction. *ACS Omega*, **2019**, 4, 18392-18397	3.9	10
176	Comparative study of bulk and nano-structured mesoporous SnO2 electrodes on the electrochemical performances for next generation Li rechargeable batteries. *Journal of Power Sources*, **2019**, 413, 241-249	8.9	26
175	A facile and surfactant-free synthesis of porous hollow □MnO2 3D nanoarchitectures for lithium ion batteries with superior performance. *Journal of Alloys and Compounds*, **2019**, 778, 37-46	5.7	28
174	Hierarchically structured nanoporous copper for use as lithium-ion battery anode. *Scripta Materialia* , **2019**, 163, 9-13	5.6	12
173	Amorphous germanium oxide nanobubbles for lithium-ion battery anode. *Materials Research Bulletin*, **2019**, 110, 24-31	5.1	15
172	Exceptional Lithium Storage in a Co(OH) Anode: Hydride Formation. *ACS Nano*, **2018**, 12, 2909-2921	16.7	39
171	Synergistic effect of nano-Pt and Ni spine for HER in alkaline solution: hydrogen spillover from nano-Pt to Ni spine. *Scientific Reports*, **2018**, 8, 2986	4.9	37
170	Nanostructural Uniformity of Ordered Mesoporous Materials: Governing Lithium Storage Behaviors. *Small*, **2018**, 14, e1702985	11	12
169	Characterization and Control of Irreversible Reaction in Li-Rich Cathode during the Initial Charge Process. *ACS Applied Materials & Interfaces*, **2018**, 10, 10804-10818	9.5	35
168	Non-aqueous quasi-solid electrolyte for use in supercapacitors. *Journal of Industrial and Engineering Chemistry*, **2018**, 59, 192-195	6.3	6
167	New Insight into Ni-Rich Layered Structure for Next-Generation Li Rechargeable Batteries. *Advanced Energy Materials*, **2018**, 8, 1701788	21.8	113
166	Further utilization of a Mn redox reaction via control of structural disorder in olivine systems. *Journal of Materials Chemistry A*, **2018**, 6, 13743-13750	13	8
165	Direct observation of pseudocapacitive sodium storage behavior in molybdenum dioxide anodes. *Journal of Power Sources*, **2018**, 397, 113-123	8.9	3
164	A New Strategy for High-Voltage Cathodes for K-Ion Batteries: Stoichiometric KVPO4F. *Advanced Energy Materials*, **2018**, 8, 1801591	21.8	90

163	Enhancement of the interfacial reaction on mesoporous RuO2 for next generation Li batteries. *Journal of Power Sources*, **2018**, 396, 749-753	8.9	13
162	Revisiting Solid Electrolyte Interphase on the Carbonaceous Electrodes Using Soft X-ray Absorption Spectroscopy. *ACS Applied Materials & Interfaces*, **2018**, 10, 29992-29999	9.5	6
161	Biomass Waste, Coffee Grounds-derived Carbon for Lithium Storage. *Journal of Electrochemical Science and Technology*, **2018**, 9, 163-168	3.2	5
160	Batteries: Nanostructural Uniformity of Ordered Mesoporous Materials: Governing Lithium Storage Behaviors (Small 43/2018). *Small*, **2018**, 14, 1870197	11	
159	From grass to battery anode: agricultural biomass hemp-derived carbon for lithium storage.. *RSC Advances*, **2018**, 8, 32231-32240	3.7	23
158	Porous supraparticles of LiFePO4 nanorods with carbon for high rate Li-ion batteries. *Materials Express*, **2018**, 8, 316-324	1.3	7
157	Lithium-free transition metal monoxides for positive electrodes in lithium-ion batteries. *Nature Energy*, **2017**, 2,	62.3	72
156	A biocompatible implant electrode capable of operating in body fluids for energy storage devices. *Nano Energy*, **2017**, 34, 86-92	17.1	25
155	A Simple Synthesis of Co3O4 Nanoparticles Decorated on Multiwalled Carbon Nanotubes Hybrid Material for Rechargeable Li-Ion and Li-Air Batteries. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 3390-3396	1.3	6
154	Anode Design Based on Microscale Porous Scaffolds for Advanced Lithium Ion Batteries. *Journal of Electronic Materials*, **2017**, 46, 3789-3795	1.9	12
153	Solvent-polarity-induced hematite (□Fe2O3) nanostructures for lithium-ion battery and photoelectrochemical applications. *Electrochimica Acta*, **2017**, 245, 643-653	6.7	17
152	Electronic structural studies on the improved thermal stability of Li(Ni0.8Co0.15Al0.05)O2 by ZrO2 coating for lithium ion batteries. *Journal of Applied Electrochemistry*, **2017**, 47, 565-572	2.6	9
151	Processing and characterization of titanium dioxide grown on titanium foam for potential use as Li-ion electrode. *Applied Surface Science*, **2017**, 411, 363-367	6.7	12
150	Hierarchical micro-lamella-structured 3D porous copper current collector coated with tin for advanced lithium-ion batteries. *Applied Surface Science*, **2017**, 399, 132-138	6.7	31
149	Zr-doping effect on the capacity retention of LiNi0.5Mn1.5O4□cycled between 5.0 and 1.0□V: In situ synchrotron X-Ray diffraction study. *Journal of Power Sources*, **2017**, 368, 1-10	8.9	19
148	Loose-fit graphitic encapsulation of silicon nanowire for one-dimensional Si anode design. *Journal of Materials Science and Technology*, **2017**, 33, 1120-1127	9.1	6
147	NaF□eF2 nanocomposite: New type of Na-ion battery cathode material. *Nano Research*, **2017**, 10, 4388-4397	10	11
146	Synthesis and electrochemical properties of dual doped spinels LiNixAlyMn2□□O4 via facile novel chelated sol□gel method as possible cathode material for lithium rechargeable batteries. *Journal of Energy Chemistry*, **2017**, 26, 101-114	12	8

145	Effects of multi-dopants (Zn and Ho) in stabilizing spinel structure for cathode materials in lithium rechargeable batteries□Novel chelated sol□gel synthesis. *Particuology*, **2016**, 24, 87-95	2.8	6
144	In situ analyses for ion storage materials. *Chemical Society Reviews*, **2016**, 45, 5717-5770	58.5	76
143	Discovery of abnormal lithium-storage sites in molybdenum dioxide electrodes. *Nature Communications*, **2016**, 7, 11049	17.4	100
142	Porous V2O5/RGO/CNT hierarchical architecture as a cathode material: Emphasis on the contribution of surface lithium storage. *Scientific Reports*, **2016**, 6, 31275	4.9	32
141	Effect of local structural changes on rate capability of LiNi0.5Mn1.5O4□cathode material for lithium ion batteries. *Journal of Alloys and Compounds*, **2016**, 686, 593-600	5.7	18
140	Cerotic acid assisted sol-gel synthesis and electrochemical performance of double doped spinels (LiCrxMgyMn2-x-yO4) as cathode materials for lithium rechargeable batteries. *Powder Technology*, **2016**, 301, 197-210	5.2	11
139	Evidence of reversible oxygen participation in anomalously high capacity Li- and Mn-rich cathodes for Li-ion batteries. *Nano Energy*, **2016**, 21, 172-184	17.1	109
138	Mesoporous transition metal dichalcogenide ME2 (M = Mo, W; E = S, Se) with 2-D layered crystallinity as anode materials for lithium ion batteries. *RSC Advances*, **2016**, 6, 14253-14260	3.7	46
137	Novel chelating agent assisted dual doped spinel via sol□gel method for lithium rechargeable batteries. *Journal of Electroanalytical Chemistry*, **2016**, 767, 141-152	4.1	5
136	Fe3O4 nanoparticles encapsulated in one-dimensional Li4Ti5O12 nanomatrix: An extremely reversible anode for long life and high capacity Li-ion batteries. *Nano Energy*, **2016**, 19, 246-256	17.1	23
135	Discovering a Dual-Buffer Effect for Lithium Storage: Durable Nanostructured Ordered Mesoporous Co□Sn Intermetallic Electrodes. *Advanced Functional Materials*, **2016**, 26, 2800-2808	15.6	40
134	Understanding Origin of Voltage Hysteresis in Conversion Reaction for Na Rechargeable Batteries: The Case of Cobalt Oxides. *Advanced Functional Materials*, **2016**, 26, 5042-5050	15.6	54
133	Lithium-excess olivine electrode for lithium rechargeable batteries. *Energy and Environmental Science*, **2016**, 9, 2902-2915	35.4	36
132	Sodium intercalation chemistry in graphite. *Energy and Environmental Science*, **2015**, 8, 2963-2969	35.4	287
131	Rational syntheses of core□shell Fe@(PtRu) nanoparticle electrocatalysts for the methanol oxidation reaction with complete suppression of CO-poisoning and highly enhanced activity. *Journal of Materials Chemistry A*, **2015**, 3, 17154-17164	13	90
130	Zinc and aluminium: glutamic acid assisted dual-doped LiMn2O4 spinels via sol□gel method as cathode material for use in lithium rechargeable batteries. *Journal of Sol-Gel Science and Technology*, **2015**, 73, 62-71	2.3	8
129	High-performance flexible lead-free nanocomposite piezoelectric nanogenerator for biomechanical energy harvesting and storage. *Nano Energy*, **2015**, 15, 177-185	17.1	156
128	Deciphering the thermal behavior of lithium rich cathode material by in situ X-ray diffraction technique. *Journal of Power Sources*, **2015**, 285, 156-160	8.9	26

127	Self-assembled porous MoO2/graphene microspheres towards high performance anodes for lithium ion batteries. *Journal of Power Sources*, **2015**, 275, 351-361	8.9	116
126	Probing the Additional Capacity and Reaction Mechanism of the RuO2 Anode in Lithium Rechargeable Batteries. *ChemSusChem*, **2015**, 8, 2378-84	8.3	47
125	Incorporation of PEDOT:PSS into SnO2/reduced graphene oxide nanocomposite anodes for lithium-ion batteries to achieve ultra-high capacity and cyclic stability. *RSC Advances*, **2015**, 5, 13964-13971	3.7	27
124	In Operando Monitoring of the Pore Dynamics in Ordered Mesoporous Electrode Materials by Small Angle X-ray Scattering. *ACS Nano*, **2015**, 9, 5470-7	16.7	30
123	Ultrathin supercapacitor electrodes with high volumetric capacitance and stability using direct covalent-bonding between pseudocapacitive nanoparticles and conducting materials. *Nano Energy*, **2015**, 12, 612-625	17.1	43
122	Cu□i2MnSiO4-polyaniline composite hybrids as high performance cathode for lithium batteries. *Journal of Alloys and Compounds*, **2015**, 630, 292-298	5.7	11
121	In situ soft XAS study on nickel-based layered cathode material at elevated temperatures: a novel approach to study thermal stability. *Scientific Reports*, **2014**, 4, 6827	4.9	45
120	Lithium-ion transport through a tailored disordered phase on the LiNi0.5 Mn1.5 O4 surface for high-power cathode materials. *ChemSusChem*, **2014**, 7, 2248-54	8.3	23
119	The Reaction Mechanism and Capacity Degradation Model in Lithium Insertion Organic Cathodes, Li2C6O6, Using Combined Experimental and First Principle Studies. *Journal of Physical Chemistry Letters*, **2014**, 5, 3086-92	6.4	71
118	Synthesis and electrochemical characterization on dual-doped LiCoO2 via green chemistry method for lithium rechargeable batteries. *Journal of Applied Electrochemistry*, **2014**, 44, 709-718	2.6	7
117	Microwave-assisted hydrothermal synthesis of electrochemically active nano-sized Li2MnO3 dispersed on carbon nanotube network for lithium ion batteries. *Journal of Alloys and Compounds*, **2014**, 591, 356-361	5.7	15
116	Understanding the exceptional elevated temperature performance of high voltage LiNi0.5Mn1.5O4 cathodes by LiFePO4 modification. *Electrochimica Acta*, **2014**, 137, 404-410	6.7	8
115	New Insight into the Reaction Mechanism for Exceptional Capacity of Ordered Mesoporous SnO2 Electrodes via Synchrotron-Based X-ray Analysis. *Chemistry of Materials*, **2014**, 26, 6361-6370	9.6	105
114	Reversible phase transformation of titania (anatase) nanotubes upon electrochemical lithium-intercalation observed by ex situ transmission electron microscopy. *Journal of Power Sources*, **2014**, 249, 59-65	8.9	17
113	Enhanced high-temperature cycling of Li2O□B2O3-coated spinel-structured LiNi0.5Mn1.5O4 cathode material for application to lithium-ion batteries. *Journal of Alloys and Compounds*, **2014**, 601, 217-222	5.7	38
112	Study on structure and electrochemical properties of carbon-coated monoclinic Li3V2(PO4)3 using synchrotron based in situ X-ray diffraction and absorption. *Journal of Alloys and Compounds*, **2013**, 569, 76-81	5.7	36
111	Understanding the Electrochemical Mechanism of the New Iron-Based Mixed-Phosphate Na4Fe3(PO4)2(P2O7) in a Na Rechargeable Battery. *Chemistry of Materials*, **2013**, 25, 3614-3622	9.6	174
110	Thermal stability of charged LiNi0.5Co0.2Mn0.3O2 cathode for Li-ion batteries investigated by synchrotron based in situ X-ray diffraction. *Journal of Alloys and Compounds*, **2013**, 562, 219-223	5.7	57

109	Entangled Germanium Nanowires and Graphite Nanofibers for the Anode of Lithium-Ion Batteries. *Journal of the Electrochemical Society*, **2013**, 160, A112-A116	3.9	29
108	Crystal and local structure studies of LiFe0.48Mn0.48Mg0.04PO4 cathode material for lithium rechargeable batteries. *Journal of Power Sources*, **2013**, 244, 581-585	8.9	17
107	A Study on the Structural and Electrochemical Properties of Li0.99Ni0.46Mn1.56O4 Cathode Material Using Synchrotron based in-situ X-ray Diffraction. *Journal of Electrochemical Science and Technology*, **2013**, 4, 34-40	3.2	3
106	A Study on the Structural and Electrochemical Properties of Li0.99Ni0.46Mn1.56O4Cathode Material Using Synchrotron based in-situ X-ray Diffraction. *Journal of Electrochemical Science and Technology*, **2013**, 4, 34-40	3.2	11
105	Structural and Electrochemical Properties of Doped LiFe0.48Mn0.48Mg0.04PO4as Cathode Material for Lithium ion Batteries. *Journal of Electrochemical Science and Technology*, **2013**, 4, 102-107	3.2	7
104	The kinetic effect on structural behavior of mixed LiMn2O4–LiNi1/3Co1/3Mn1/3O2 cathode materials studied by in situ time-resolved X-ray diffraction technique. *Electrochemistry Communications*, **2012**, 15, 74-77	5.1	16
103	Stability characteristics of Pt1Ni1/C as cathode catalysts in membrane electrode assembly of polymer electrolyte membrane fuel cell. *Electrochimica Acta*, **2012**, 59, 264-269	6.7	20
102	Nanoscale size effect of titania (anatase) nanotubes with uniform wall thickness as high performance anode for lithium-ion secondary battery. *Journal of Power Sources*, **2012**, 204, 162-167	8.9	57
101	Exceptional electrochemical performance of freestanding electrospun carbon nanofiber anodes containing ultrafine SnOx particles. *Energy and Environmental Science*, **2012**, 5, 9895	35.4	142
100	Structural study of the coating effect on the thermal stability of charged MgO-coated LiNi0.8Co0.2O2 cathodes investigated by in situ XRD. *Journal of Power Sources*, **2012**, 217, 128-134	8.9	52
99	Carbon supported, Al doped-Li3V2(PO4)3 as a high rate cathode material for lithium-ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 6556		111
98	The dependence of performance degradation of membrane electrode assembly on platinum loading in polymer electrolyte membrane fuel cell. *International Journal of Hydrogen Energy*, **2012**, 37, 2490-2497	6.7	20
97	Crystal Structure Changes of LiNi0.5Co0.2Mn0.3O2 Cathode Materials During the First Charge Investigated by in situ XRD. *Journal of Electrochemical Science and Technology*, **2012**, 3, 29-34	3.2	9
96	Crystal Structure Changes of LiNi0.5Co0.2Mn0.3O2Cathode Materials During the First Charge Investigated by in situ XRD. *Journal of Electrochemical Science and Technology*, **2012**, 3, 29-34	3.2	11
95	Nanostructured MgFe2O4 as anode materials for lithium-ion batteries. *Journal of Alloys and Compounds*, **2011**, 509, 7038-7041	5.7	81
94	Formation of an SEI on a LiMn2O4 cathode during room temperature charge–discharge cycling studied by soft X-ray absorption spectroscopy at the Fluorine K-edge. *Journal of Applied Electrochemistry*, **2011**, 41, 1295-1299	2.6	16
93	Electrochemical performance and ex situ analysis of ZnMn2O4 nanowires as anode materials for lithium rechargeable batteries. *Nano Research*, **2011**, 4, 505-510	10	154
92	Preparation of MEA with the Polybenzimidazole Membrane for High Temperature PEM Fuel Cell. *Electrochemical and Solid-State Letters*, **2011**, 14, B38		13

91	Influence of carbon towards improved lithium storage properties of Li2MnSiO4 cathodes. *Journal of Materials Chemistry*, **2011**, 21, 2470		112
90	Comparative studies on C-coated and uncoated LiFePO4 cycling at various rates and temperatures using synchrotron based in situ X-ray diffraction. *Electrochimica Acta*, **2011**, 56, 1182-1189	6.7	25
89	Performance and stability characteristics of MEAs with carbon-supported Pt and Pt1Ni1 nanoparticles as cathode catalysts in PEM fuel cell. *International Journal of Hydrogen Energy*, **2011**, 36, 4394-4399	6.7	21
88	Improved Rate Capability of Li/Li3V2(PO4)3Cell for Advanced Lithium Secondary Battery. *Bulletin of the Korean Chemical Society*, **2011**, 32, 1491-1494	1.2	5
87	Structural complexity of layered-spinel composite electrodes for Li-ion batteries. *Journal of Materials Research*, **2010**, 25, 1601-1616	2.5	33
86	Preparation of LiCoPO4 and LiFePO4 coated LiCoPO4 materials with improved battery performance. *Journal of Alloys and Compounds*, **2010**, 497, 321-324	5.7	70
85	Hierarchical titania nanotubes with self-branched crystalline nanorods. *ACS Applied Materials & Interfaces*, **2010**, 2, 1581-7	9.5	24
84	Ge-incorporation into 6-line ferrihydrite nanocrystals. *CrystEngComm*, **2010**, 12, 1997	3.3	7
83	Characteristics and performance of membrane electrode assemblies with operating conditions in polymer electrolyte membrane fuel cell. *Electrochimica Acta*, **2010**, 56, 717-721	6.7	7
82	Investigation of the Structural Changes in Li[NiyMnyCo(1−2y)]O2 (y = 0.05) upon Electrochemical Lithium Deintercalation. *Chemistry of Materials*, **2010**, 22, 1209-1219	9.6	32
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