Won-Sub Yoon

List of Publications by Year
in descending order

235 papers	13,964 citations	20759 60 h-index	25716 108 g-index
243 all docs	243 docs citations	243 times ranked	12925 citing authors

#	Article	IF	Citations
1	Modeling and Applications of Electrochemical Impedance Spectroscopy (EIS) for Lithium-ion Batteries. Journal of Electrochemical Science and Technology, 2020, 11, 1-13.	0.9	523
2	Electrochemical and Structural Properties of xLi2Mâ€˜O3Â·(1â^'x)LiMn0.5Ni0.5O2 Electrodes for Lithium Batteries (Mâ€˜ = Ti, Mn, Zr; 0 â‰ x â©½ 0.3). Chemistry of Materials, 2004, 16, 1996-2006.	3.2	481
3	Investigation of the Charge Compensation Mechanism on the Electrochemically Li-Ion Deintercalated Li1-xCo1/3Ni1/3Mn1/3O2Electrode System by Combination of Soft and Hard X-ray Absorption Spectroscopy. Journal of the American Chemical Society, 2005, 127, 17479-17487.	6.6	436
4	Exploring Anomalous Charge Storage in Anode Materials for Next-Generation Li Rechargeable Batteries. Chemical Reviews, 2020, 120, 6934-6976.	23.0	382
5	Sodium intercalation chemistry in graphite. Energy and Environmental Science, 2015, 8, 2963-2969.	15.6	369
6	Advances in the Cathode Materials for Lithium Rechargeable Batteries. Angewandte Chemie - International Edition, 2020, 59, 2578-2605.	7.2	357
7	Oxygen Contribution on Li-Ion Intercalationâ^'Deintercalation in LiCoO2Investigated by O K-Edge and Co L-Edge X-ray Absorption Spectroscopy. Journal of Physical Chemistry B, 2002, 106, 2526-2532.	1.2	293
8	Cation Ordering in Layered O3 Li[NixLi1/3-2x/3Mn2/3-x/3]O2 (0 â‰ x â‰ 1/2) Compounds. Chemistry of Materials, 2005, 17, 2386-2394.	3.2	283
9	Electrochemical properties of manganese oxide coated onto carbon nanotubes for energy-storage applications. Journal of Power Sources, 2008, 178, 483-489.	4.0	281
10	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.	3.2	237
11	A comparative study on structural changes of LiCo1/3Ni1/3Mn1/3O2 and LiNi0.8Co0.15Al0.05O2 during first charge using in situ XRD. Electrochemistry Communications, 2006, 8, 1257-1262.	2.3	234
12	In Situ X-ray Absorption Spectroscopic Study on LiNi0.5Mn0.5O2 Cathode Material during Electrochemical Cycling. Chemistry of Materials, 2003, 15, 3161-3169.	3.2	220
13	High-performance flexible lead-free nanocomposite piezoelectric nanogenerator for biomechanical energy harvesting and storage. Nano Energy, 2015, 15, 177-185.	8.2	200
14	Local Structure and Cation Ordering in O3 Lithium Nickel Manganese Oxides with Stoichiometry Li[Ni[sub x]Mn[sub (2â^'x)/3]Li[sub (1â^'2x)/3]]O[sub 2]. Electrochemical and Solid-State Letters, 2004, 7, A167.	2.2	195
15	X-ray absorption spectroscopy studies of nickel oxide thin film electrodes for supercapacitors. Electrochimica Acta, 2002, 47, 3201-3209.	2.6	186
16	Electrodeposited manganese oxides on three-dimensional carbon nanotube substrate: Supercapacitive behaviour in aqueous and organic electrolytes. Journal of Power Sources, 2009, 188, 323-331.	4.0	173
17	Electrochemical performance and ex situ analysis of ZnMn2O4 nanowires as anode materials for lithium rechargeable batteries. Nano Research, 2011, 4, 505-510.	5.8	170
18	Investigation of the Local Structure of the LiNi[sub 0.5]Mn[sub 0.5]O[sub 2] Cathode Material during Electrochemical Cycling by X-Ray Absorption and NMR Spectroscopy. Electrochemical and Solid-State Letters, 2002, 5, A263.	2.2	169

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19	New Insight into Niâ€Rich Layered Structure for Nextâ€Generation Li Rechargeable Batteries. Advanced Energy Materials, 2018, 8, 1701788.	10.2	169
20	Pseudocapacitive properties of electrochemically prepared nickel oxides on 3-dimensional carbon nanotube film substrates. Journal of Power Sources, 2008, 182, 642-652.	4.0	166
21	Applications of Voltammetry in Lithium Ion Battery Research. Journal of Electrochemical Science and Technology, 2020, 11, 14-25.	0.9	166
22	Exceptional electrochemical performance of freestanding electrospun carbon nanofiber anodes containing ultrafine SnOx particles. Energy and Environmental Science, 2012, 5, 9895.	15.6	165
23	Cation Ordering in Li[Ni_{<i>x</i>}Mn_{<i>x</i>}Co_(1â€"2<i>x</i>)]O₂-Layered Cathode Materials: A Nuclear Magnetic Resonance (NMR), Pair Distribution Function, X-ray Absorption Spectroscopy, and Electrochemical Study. Chemistry of Materials, 2007, 19, 6277-6289.	3.2	161
24	Rational syntheses of coreâ€"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.	5.2	135
25	Self-assembled porous MoO2/graphene microspheres towards high performance anodes for lithium ion batteries. Journal of Power Sources, 2015, 275, 351-361.	4.0	133
26	Electrochemical Activity of Li in the Transition-Metal Sites of O3 Li[Li[sub (1âˆ'2x)/3]Mn[sub (2âˆ'x)/3]Ni[sub x]]O[sub 2]. Electrochemical and Solid-State Letters, 2004, 7, A290.	2.2	132
27	A novel concept of hybrid capacitor based on manganese oxide materials. Electrochemistry Communications, 2007, 9, 2807-2811.	2.3	131
28	A New Strategy for Highâ€Voltage Cathodes for Kâ€Ion Batteries: Stoichiometric KVPO₄F. Advanced Energy Materials, 2018, 8, 1801591.	10.2	130
29	Evidence of reversible oxygen participation in anomalously high capacity Li- and Mn-rich cathodes for Li-ion batteries. Nano Energy, 2016, 21, 172-184.	8.2	127
30	Influence of carbon towards improved lithium storage properties of Li2MnSiO4 cathodes. Journal of Materials Chemistry, 2011, 21, 2470.	6.7	122
31	Understanding the Crystal Structure of Layered LiNi[sub 0.5]Mn[sub 0.5]O[sub 2] by Electron Diffraction and Powder Diffraction Simulation. Electrochemical and Solid-State Letters, 2004, 7, A155.	2.2	121
32	Carbon supported, Al doped-Li3V2(PO4)3 as a high rate cathode material for lithium-ion batteries. Journal of Materials Chemistry, 2012, 22, 6556.	6.7	114
33	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.	3.2	114
34	Discovery of abnormal lithium-storage sites in molybdenum dioxide electrodes. Nature Communications, 2016, 7, 11049.	5.8	112
35	Combined NMR and XAS Study on Local Environments and Electronic Structures of Electrochemically Li-Ion Deintercalated Li[sub 1âˆ'x]Co[sub 1/3]Ni[sub 1/3]Mn[sub 1/3]O[sub 2] Electrode System. Electrochemical and Solid-State Letters, 2004, 7, A53.	2.2	108
36	Electrochemical and In Situ Synchrotron XRD Studies on Al[sub 2]O[sub 3]-Coated LiCoO[sub 2] Cathode Material. Journal of the Electrochemical Society, 2004, 151, A1344.	1.3	108

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37	In situ X-ray diffraction studies of mixed LiMn2O4â€“LiNi1/3Co1/3Mn1/3O2 composite cathode in Li-ion cells during chargeâ€“discharge cycling. Journal of Power Sources, 2009, 192, 652-659.	4.0	105
38	Nanostructured MgFe2O4 as anode materials for lithium-ion batteries. Journal of Alloys and Compounds, 2011, 509, 7038-7041.	2.8	105
39	Stabilizing effects of Al-doping on Ni-rich LiNi0.80Co0.15Mn0.05O2 cathode for Li rechargeable batteries. Journal of Power Sources, 2020, 474, 228592.	4.0	105
40	Crystal structure changes of LiMn0.5Ni0.5O2 cathode materials during charge and discharge studied by synchrotron based in situ XRD. Electrochemistry Communications, 2002, 4, 649-654.	2.3	101
41	In situ analyses for ion storage materials. Chemical Society Reviews, 2016, 45, 5717-5770.	18.7	101
42	Soft X-Ray Absorption Spectroscopic Study of a LiNi[sub 0.5]Mn[sub 0.5]O[sub 2] Cathode during Charge. Journal of the Electrochemical Society, 2004, 151, A246.	1.3	95
43	Lithium-free transition metal monoxides for positive electrodes in lithium-ion batteries. Nature Energy, 2017, 2, .	19.8	94
44	Investigating the first-cycle irreversibility of lithium metal oxide cathodes for Li batteries. Journal of Materials Science, 2008, 43, 4701-4706.	1.7	92
45	Structural and Electrochemical Properties of LiAl[sub y]Co[sub 1â^'y]O[sub 2] Cathode for Li Rechargeable Batteries. Journal of the Electrochemical Society, 2000, 147, 2023.	1.3	86
46	Electronic Structure and Chemistry of Iron-Based Metal Oxide Nanostructured Materials: A NEXAFS Investigation of BiFeO₃, Bi₂Fe₄O₉, Î±-Fe₂O₃, Î³-Fe₂O₃, and Fe/Fe₃O₄. Journal of Physical Chemistry C, 2008, 112, 10359-10369.	1.5	84
47	Characterization of LiNi0.85Co0.10M0.05O2 (M = Al, Fe) as a cathode material for lithium secondary batteries. Journal of Power Sources, 2001, 97-98, 308-312.	4.0	82
48	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, 3086-3092.	2.1	81
49	Electronic structural changes of the electrochemically Li-ion deintercalated LiNi0.8Co0.15Al0.05O2 cathode material investigated by X-ray absorption spectroscopy. Journal of Power Sources, 2007, 174, 1015-1020.	4.0	77
50	The Fe K-edge X-ray absorption characteristics of La1â^'xSrxFeO3â^'Î´ prepared by solid state reaction. Materials Research Bulletin, 2009, 44, 1397-1404.	2.7	77
51	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.	15.6	77
52	Investigation of the Lithiation and Delithiation Conversion Mechanisms of Bismuth Fluoride Nanocomposites. Journal of the Electrochemical Society, 2006, 153, A799.	1.3	76
53	New electrolytes for lithium ion batteries using LiF salt and boron based anion receptors. Journal of Power Sources, 2008, 184, 517-521.	4.0	76
54	Structural changes and thermal stability of charged LiNi1/3Co1/3Mn1/3O2 cathode material for Li-ion batteries studied by time-resolved XRD. Journal of Power Sources, 2009, 189, 515-518.	4.0	74

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55	Synthesis of LiCoO2 using acrylic acid and its electrochemical properties for Li secondary batteries. Journal of Power Sources, 1999, 81-82, 517-523.	4.0	72
56	Preparation of LiCoPO4 and LiFePO4 coated LiCoPO4 materials with improved battery performance. Journal of Alloys and Compounds, 2010, 497, 321-324.	2.8	71
57	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.	4.0	68
58	Unveiling the Impact of Fe Incorporation on Intrinsic Performance of Reconstructed Water Oxidation Electrocatalyst. ACS Energy Letters, 2021, 6, 4345-4354.	8.8	67
59	6Li MAS NMR and in situ X-ray studies of lithium nickel manganese oxides. Journal of Power Sources, 2003, 119-121, 649-653.	4.0	66
60	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.	4.0	65
61	Exceptional Lithium Storage in a Co(OH)₂ Anode: Hydride Formation. ACS Nano, 2018, 12, 2909-2921.	7.3	64
62	Unveiling the Genesis and Effectiveness of Negative Fading in Nanostructured Iron Oxide Anode Materials for Lithium-Ion Batteries. ACS Nano, 2022, 16, 631-642.	7.3	64
63	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.	4.0	63
64	Structural studies of the new carbon-coated silicon anode materials using synchrotron-based in situ XRD. Electrochemistry Communications, 2002, 4, 893-897.	2.3	62
65	First-cycle irreversibility of layered Liâ€“Niâ€“Coâ€“Mn oxide cathode in Li-ion batteries. Electrochimica Acta, 2008, 54, 684-689.	2.6	62
66	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.	2.8	62
67	Understanding Origin of Voltage Hysteresis in Conversion Reaction for Na Rechargeable Batteries: The Case of Cobalt Oxides. Advanced Functional Materials, 2016, 26, 5042-5050.	7.8	61
68	Destabilization of the surface structure of Ni-rich layered materials by water-washing process. Energy Storage Materials, 2022, 44, 441-451.	9.5	61
69	Tracking the Influence of Thermal Expansion and Oxygen Vacancies on the Thermal Stability of Niâ€Rich Layered Cathode Materials. Advanced Science, 2020, 7, 1902413.	5.6	59
70	Studies of LiMn[sub 2]O[sub 4] Capacity Fading at Elevated Temperature Using In Situ Synchrotron X-Ray Diffraction. Journal of the Electrochemical Society, 2006, 153, A774.	1.3	58
71	Time-resolved XRD study on the thermal decomposition of nickel-based layered cathode materials for Li-ion batteries. Journal of Power Sources, 2006, 163, 219-222.	4.0	57
72	Nano-sized lithium manganese oxide dispersed on carbon nanotubes for energy storage applications. Electrochemistry Communications, 2009, 11, 1575-1578.	2.3	57

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73	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.	1.6	57
74	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.	1.6	56
75	Oxygen Contribution on Li-Ion Intercalation-Deintercalation in LiAl[sub y]Co[sub 1â^'y]O[sub 2] Investigated by O K-Edge and Co L-Edge X-Ray Absorption Spectroscopy. Journal of the Electrochemical Society, 2002, 149, A1305.	1.3	52
76	Probing the Additional Capacity and Reaction Mechanism of the RuO₂ Anode in Lithium Rechargeable Batteries. ChemSusChem, 2015, 8, 2378-2384.	3.6	52
77	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.	1.7	52
78	Optimizing high voltage Na3V2(PO4)2F3 cathode for achieving high rate sodium-ion batteries with long cycle life. Chemical Engineering Journal, 2021, 403, 126291.	6.6	51
79	Discovering a Dualâ€Buffer Effect for Lithium Storage: Durable Nanostructured Ordered Mesoporous Coâ€"Sn Intermetallic Electrodes. Advanced Functional Materials, 2016, 26, 2800-2808.	7.8	50
80	Electrochemical characterization of layered LiCoO2 films prepared by electrostatic spray deposition. Journal of Power Sources, 2001, 97-98, 282-286.	4.0	49
81	In situ X-ray absorption and diffraction studies of carbon coated LiFe1/4Mn1/4Co1/4Ni1/4PO4 cathode during first charge. Electrochemistry Communications, 2009, 11, 913-916.	2.3	49
82	Lithium-excess olivine electrode for lithium rechargeable batteries. Energy and Environmental Science, 2016, 9, 2902-2915.	15.6	49
83	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.	8.2	48
84	Time-Resolved XRD Study on the Thermal Decomposition of Li[sub 1â^'x]Ni[sub 0.8]Co[sub 0.15]Al[sub 0.05]O[sub 2] Cathode Materials for Li-Ion Batteries. Electrochemical and Solid-State Letters, 2005, 8, A83.	2.2	46
85	In situ XRD studies of the structural changes of ZrO2-coated LiCoO2 during cycling and their effects on capacity retention in lithium batteries. Journal of Power Sources, 2006, 163, 185-190.	4.0	45
86	The phase transition behaviors of Li1â^'xMn0.5Fe0.5PO4 during lithium extraction studied by in situ X-ray absorption and diffraction techniques. Electrochemistry Communications, 2009, 11, 2023-2026.	2.3	45
87	Enhanced high-temperature cycling of Li2Oâ€"2B2O3-coated spinel-structured LiNi0.5Mn1.5O4 cathode material for application to lithium-ion batteries. Journal of Alloys and Compounds, 2014, 601, 217-222.	2.8	45
88	Characterization and Control of Irreversible Reaction in Li-Rich Cathode during the Initial Charge Process. ACS Applied Materials & Interfaces, 2018, 10, 10804-10818.	4.0	45
89	Thermal behavior and the decomposition mechanism of electrochemically delithiated Li1â^'xNiO2. Journal of Power Sources, 2001, 97-98, 321-325.	4.0	44
90	A biocompatible implant electrode capable of operating in body fluids for energy storage devices. Nano Energy, 2017, 34, 86-92.	8.2	44

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91	Hierarchical micro-lamella-structured 3D porous copper current collector coated with tin for advanced lithium-ion batteries. Applied Surface Science, 2017, 399, 132-138.	3.1	44
92	A facile and surfactant-free synthesis of porous hollow Î»-MnO2 3D nanoarchitectures for lithium ion batteries with superior performance. Journal of Alloys and Compounds, 2019, 778, 37-46.	2.8	44
93	Principles and Applications of Galvanostatic Intermittent Titration Technique for Lithium-ion Batteries. Journal of Electrochemical Science and Technology, 2022, 13, 19-31.	0.9	44
94	A Novel Silver Molybdenum Oxyfluoride Perovskite as a Cathode Material for Lithium Batteries. Chemistry of Materials, 2009, 21, 2139-2148.	3.2	43
95	A study on the newly observed intermediate structures during the thermal decomposition of nickel-based layered cathode materials using time-resolved XRD. Electrochemistry Communications, 2006, 8, 859-862.	2.3	42
96	Triggered reversible phase transformation between layered and spinel structure in manganese-based layered compounds. Nature Communications, 2019, 10, 3385.	5.8	42
97	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.	2.8	41
98	Phase Dynamics on Conversion-Reaction-Based Tin-Doped Ferrite Anode for Next-Generation Lithium Batteries. ACS Nano, 2019, 13, 5674-5685.	7.3	40
99	Changes in electronic structure of the electrochemically Li-ion deintercalated LiNiO2 system investigated by soft X-ray absorption spectroscopy. Journal of Power Sources, 2006, 163, 234-237.	4.0	39
100	Nd₂K₂IrO₇ and Sm₂K₂IrO₇: Iridium(VI) Oxides Prepared under Ambient Pressure. Angewandte Chemie - International Edition, 2009, 48, 215-218.	7.2	39
101	Surface enriched graphene hollow spheres towards building ultra-high power sodium-ion capacitor with long durability. Energy Storage Materials, 2020, 25, 702-713.	9.5	39
102	<i>In Operando</i> Monitoring of the Pore Dynamics in Ordered Mesoporous Electrode Materials by Small Angle X-ray Scattering. ACS Nano, 2015, 9, 5470-5477.	7.3	38
103	Deciphering the thermal behavior of lithium rich cathode material by in situ X-ray diffraction technique. Journal of Power Sources, 2015, 285, 156-160.	4.0	38
104	Porous V2O5/RGO/CNT hierarchical architecture as a cathode material: Emphasis on the contribution of surface lithium storage. Scientific Reports, 2016, 6, 31275.	1.6	38
105	Investigation of the Structural Changes in Li[NiyMnyCo(1â^'2y)]O2 (y = 0.05) upon Electrochemical Lithium Deintercalation. Chemistry of Materials, 2010, 22, 1209-1219.	3.2	37
106	From grass to battery anode: agricultural biomass hemp-derived carbon for lithium storage. RSC Advances, 2018, 8, 32231-32240.	1.7	37
107	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.	4.0	37
108	Zr-doping effect on the capacity retention of LiNi0.5Mn1.5O4â€"Î´ cycled between 5.0 and 1.0ÂV: In situ synchrotron X-Ray diffraction study. Journal of Power Sources, 2017, 368, 1-10.	4.0	35

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109	Structural complexity of layered-spinel composite electrodes for Li-ion batteries. Journal of Materials Research, 2010, 25, 1601-1616.	1.2	34
110	Changes in electronic structure of the electrochemically Li-ion deintercalated LiMn2O4 system investigated by soft X-ray absorption spectroscopy. Journal of Power Sources, 2003, 119-121, 706-709.	4.0	33
111	Comparative study of Li(Li1/3Ti5/3)O4 and Li(Ni1/2â˘'Li2/3Ti/3)Ti3/2O4 (x= 1/3) anodes for Li rechargeable batteries. Electrochimica Acta, 2009, 54, 5914-5918.	2.6	32
112	In situ X-ray absorption spectroscopic investigation of the electrochemical conversion reactions of CuF2â€"MoO3 nanocomposite. Journal of Solid State Chemistry, 2010, 183, 3029-3038.	1.4	32
113	Performance enhancement of membrane electrode assemblies with plasma etched polymer electrolyte membrane in PEM fuel cell. International Journal of Hydrogen Energy, 2010, 35, 10452-10456.	3.8	32
114	Entangled Germanium Nanowires and Graphite Nanofibers for the Anode of Lithium-Ion Batteries. Journal of the Electrochemical Society, 2013, 160, A112-A116.	1.3	31
115	Electronic Structure of the Electrochemically Delithiated Li[sub 1â˘'x]FePO[sub 4] Electrodes Investigated by P K-edge X-Ray Absorption Spectroscopy. Electrochemical and Solid-State Letters, 2006, 9, A415.	2.2	30
116	Structural Studies on the Effects of ZrO[sub 2] Coating on LiCoO[sub 2] during Cycling Using In Situ X-Ray Diffraction Technique. Journal of the Electrochemical Society, 2006, 153, A2152.	1.3	30
117	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.	1.7	30
118	Low Iridium Content Confined inside a Co₃O₄ Hollow Sphere for Superior Acidic Water Oxidation. ACS Sustainable Chemistry and Engineering, 2019, 7, 16640-16650.	3.2	30
119	Understanding the structural phase transitions in lithium vanadium phosphate cathodes for lithium-ion batteries. Journal of Materials Chemistry A, 2020, 8, 10331-10336.	5.2	29
120	Comparative studies between oxygen-deficient LiMn2O4 and Al-doped LiMn2O4. Journal of Power Sources, 2005, 146, 226-231.	4.0	28
121	Novel concept of pseudocapacitor using stabilized lithium metal powder and non-lithiated metal oxide electrodes in organic electrolyte. Electrochemistry Communications, 2009, 11, 1166-1169.	2.3	28
122	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.	2.6	28
123	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.	8.2	28
124	Structural and Electrochemical Kinetic Properties of 0.5Li2MnO3â˘™0.5LiCoO2 Cathode Materials with Different Li2MnO3 Domain Sizes. Scientific Reports, 2019, 9, 427.	1.6	28
125	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.	5.2	28
126	Synthesis of LiAlyCo1â˘'yO2 using acrylic acid and its electrochemical properties for Li rechargeable batteries. Journal of Power Sources, 2001, 97-98, 303-307.	4.0	27

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127	A Mechanistic Study on the Improvement of the Thermal Stability of Delithiated Li[sub 1âˆ’x]NiO[sub 2] by Co Substitution for Ni. Journal of the Electrochemical Society, 2001, 148, A1164.	1.3	27
128	Indirect-To-Direct Band Gap Transition of One-Dimensional V₂Se₉: Theoretical Study with Dispersion Energy Correction. ACS Omega, 2019, 4, 18392-18397.	1.6	27
129	A Study on the Thermal Behavior of Electrochemically Delithiated Li[sub 1âˆ’x]NiO[sub 2]. Journal of the Electrochemical Society, 2001, 148, A716.	1.3	26
130	Characterization of LiMn2O4-coated LiCoO2 film electrode prepared by electrostatic spray deposition. Journal of Power Sources, 2006, 163, 207-210.	4.0	26
131	Hierarchical Titania Nanotubes with Self-Branched Crystalline Nanorods. ACS Applied Materials & Interfaces, 2010, 2, 1581-1587.	4.0	25
132	Crystal and local structure studies of LiFe0.48Mn0.48Mg0.04PO4 cathode material for lithium rechargeable batteries. Journal of Power Sources, 2013, 244, 581-585.	4.0	25
133	Lithiumâ€Ion Transport through a Tailored Disordered Phase on the LiNi_{0.5}Mn_{1.5}O₄ Surface for Highâ€Power Cathode Materials. ChemSusChem, 2014, 7, 2248-2254.	3.6	25
134	Nanostructured Electrode Materials for Rechargeable Lithium-Ion Batteries. Journal of Electrochemical Science and Technology, 2020, 11, 195-219.	0.9	25
135	X-Ray Absorption Spectroscopic Study of LiAl[sub y]Co[sub 1âˆ’y]O[sub 2] Cathode for Li Rechargeable Batteries. Journal of the Electrochemical Society, 2002, 149, A146.	1.3	24
136	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.	4.0	24
137	Enhanced electrochemical lithium storage activity of LiCrO2 by size effect. Journal of Materials Chemistry, 2009, 19, 2993.	6.7	23
138	Reaction mechanism and additional lithium storage of mesoporous MnO2 anode in Li batteries. Journal of Energy Chemistry, 2021, 53, 276-284.	7.1	23
139	The effects of nanostructures on lithium storage behavior in Mn2O3 anodes for next-generation lithium-ion batteries. Journal of Power Sources, 2021, 493, 229682.	4.0	23
140	Emerging Materials for Sodium-Ion Hybrid Capacitors: A Brief Review. ACS Applied Energy Materials, 2021, 4, 13376-13394.	2.5	23
141	Understanding the effect of nonmetallic impurities in regenerated cathode materials for lithium-ion battery recycling by tracking down impurity elements. Journal of Hazardous Materials, 2022, 425, 127907.	6.5	23
142	In situ X-ray diffraction studies on the mechanism of capacity retention improvement by coating at the surface of LiCoO2. Journal of Power Sources, 2007, 174, 619-623.	4.0	22
143	Electronic structural changes of the electrochemically delithiated LiFe0.5Co0.5PO4 cathode material studied by X-ray absorption spectroscopy. Journal of Power Sources, 2008, 183, 427-430.	4.0	22
144	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.	3.8	22

#	Article	IF	Citations
145	Effect of local structural changes on rate capability of LiNi 0.5 Mn 1.5 O 4â^'Î´ cathode material for lithium ion batteries. Journal of Alloys and Compounds, 2016, 686, 593-600.	2.8	22
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