

Xinhai Li

List of Publications by Citations

Source: <https://exaly.com/author-pdf/192129/xinhai-li-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

103
papers

4,427
citations

34
h-index

64
g-index

103
ext. papers

5,090
ext. citations

7.7
avg, IF

5.93
L-index

#	Paper	IF	Citations
103	Novel Carbon-Encapsulated Porous SnO ₂ Anode for Lithium-Ion Batteries with Much Improved Cyclic Stability. <i>Small</i> , 2016 , 12, 1945-55	11	207
102	Three-dimensional hierarchical Co ₃ O ₄ /CuO nanowire heterostructure arrays on nickel foam for high-performance lithium ion batteries. <i>Nano Energy</i> , 2014 , 6, 19-26	17.1	206
101	Smart construction of three-dimensional hierarchical tubular transition metal oxide core/shell heterostructures with high-capacity and long-cycle-life lithium storage. <i>Nano Energy</i> , 2015 , 12, 437-446	17.1	200
100	Enhanced electrochemical properties of lithium-reactive V ₂ O ₅ coated on the LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ cathode material for lithium ion batteries at 60 °C. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 1284-1288	13	187
99	Advances in nanostructures fabricated via spray pyrolysis and their applications in energy storage and conversion. <i>Chemical Society Reviews</i> , 2019 , 48, 3015-3072	58.5	182
98	Lightweight Reduced Graphene Oxide@MoS ₂ Interlayer as Polysulfide Barrier for High-Performance Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 3707-3713	9.5	182
97	A short process for the efficient utilization of transition-metal chlorides in lithium-ion batteries: A case of Ni _{0.8} Co _{0.1} Mn _{0.1} O _{1.1} and LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ . <i>Journal of Power Sources</i> , 2017 , 342, 495-503	8.9	174
96	Electrochemical analysis graphite/electrolyte interface in lithium-ion batteries: p-Toluenesulfonyl isocyanate as electrolyte additive. <i>Nano Energy</i> , 2017 , 34, 131-140	17.1	162
95	Facile general strategy toward hierarchical mesoporous transition metal oxides arrays on three-dimensional macroporous foam with superior lithium storage properties. <i>Nano Energy</i> , 2015 , 13, 77-91	17.1	154
94	Co ₃ O ₄ /Co nanoparticles enclosed graphitic carbon as anode material for high performance Li-ion batteries. <i>Chemical Engineering Journal</i> , 2017 , 321, 495-501	14.7	143
93	Synthesis and electrochemical study of Zr-doped Li[Li _{0.2} Mn _{0.54} Ni _{0.13} Co _{0.13}]O ₂ as cathode material for Li-ion battery. <i>Ceramics International</i> , 2016 , 42, 263-269	5.1	129
92	A novel NiCo ₂ O ₄ anode morphology for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 11970-11975	13	113
91	Li ₃ V(MoO ₄) ₃ as a novel electrode material with good lithium storage properties and improved initial coulombic efficiency. <i>Nano Energy</i> , 2018 , 44, 272-278	17.1	104
90	Metallurgy Inspired Formation of Homogeneous Al ₂ O ₃ Coating Layer To Improve the Electrochemical Properties of LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Cathode Material. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 10199-10205	8.3	96
89	Accurate construction of a hierarchical nickel-cobalt oxide multishell yolk-shell structure with large and ultrafast lithium storage capability. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 14996-15001	13	94
88	Synthesis, Characterization, and Thermal Stability of LiNi _{1/3} Mn _{1/3} Co _{1/3} Mg ₂ O ₂ , LiNi _{1/3} Mn _{1/3} Co _{1/3} Mg ₂ O ₂ , and LiNi _{1/3} Mn _{1/3} Co _{1/3} Mg ₂ O ₂ □ <i>Chemistry of Materials</i> , 2010 , 22, 1164-1172	9.6	91
87	Improving the electrochemical performance of lithium vanadium fluorophosphate cathode material: Focus on interfacial stability. <i>Journal of Power Sources</i> , 2016 , 329, 553-557	8.9	88

86	A new design concept for preparing nickel-foam-supported metal oxide microspheres with superior electrochemical properties. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 13469-13474	13	86
85	A low temperature fluorine substitution on the electrochemical performance of layered LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ -Fz cathode materials. <i>Electrochimica Acta</i> , 2013 , 92, 1-8	6.7	81
84	A MoS ₂ coating strategy to improve the comprehensive electrochemical performance of LiVPO ₄ F. <i>Journal of Power Sources</i> , 2016 , 315, 294-301	8.9	77
83	Natural sisal fibers derived hierarchical porous activated carbon as capacitive material in lithium ion capacitor. <i>Journal of Power Sources</i> , 2016 , 329, 339-346	8.9	73
82	Nanosized LiVPO ₄ F/graphene composite: A promising anode material for lithium ion batteries. <i>Journal of Power Sources</i> , 2014 , 251, 325-330	8.9	68
81	Graphitic carbon balanced between high plateau capacity and high rate capability for lithium ion capacitors. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 15302-15309	13	66
80	Introducing reduced graphene oxide to improve the electrochemical performance of silicon-based materials encapsulated by carbonized polydopamine layer for lithium ion batteries. <i>Materials Letters</i> , 2017 , 195, 164-167	3.3	62
79	Fluidized bed reaction towards crystalline embedded amorphous Si anode with much enhanced cycling stability. <i>Chemical Communications</i> , 2018 , 54, 3755-3758	5.8	60
78	Anchoring K ⁺ in Li ⁺ Sites of LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ Cathode Material to Suppress its Structural Degradation During High-Voltage Cycling. <i>Energy Technology</i> , 2018 , 6, 2358-2366	3.5	55
77	Hydrogen titanate and TiO ₂ nanowires as anode materials for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2011 , 21, 12675		53
76	Improving rate capability and decelerating voltage decay of Li-rich layered oxide cathodes by chromium doping. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 11109-11119	6.7	50
75	Robust synthesis of hierarchical mesoporous hybrid NiO/MnCo ₂ O ₄ microspheres and their application in Lithium-ion batteries. <i>Electrochimica Acta</i> , 2016 , 191, 392-400	6.7	46
74	Carbonization and graphitization of pitch applied for anode materials of high power lithium ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2013 , 17, 1401-1408	2.6	41
73	Suppressing the Voltage Decay and Enhancing the Electrochemical Performance of Li _{1.2} Mn _{0.54} Co _{0.13} Ni _{0.13} O ₂ by Multifunctional Nb ₂ O ₅ Coating. <i>Energy Technology</i> , 2018 , 6, 2139-2145	3.5	40
72	Facile construction of Co(OH) ₂ @Ni(OH) ₂ core-shell nanosheets on nickel foam as three dimensional free-standing electrode for supercapacitors. <i>Electrochimica Acta</i> , 2019 , 293, 40-46	6.7	40
71	Spinel-embedded and Li ₃ PO ₄ modified Li[Li _{0.2} Mn _{0.54} Ni _{0.13} Co _{0.13}]O ₂ cathode materials for High-Performance Li-Ion batteries. <i>Applied Surface Science</i> , 2018 , 456, 763-770	6.7	38
70	Effect of synthesis routes on the electrochemical performance of Li[Ni _{0.6} Co _{0.2} Mn _{0.2}]O ₂ for lithium ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2012 , 16, 3849-3854	2.6	34
69	Synthesis of nanoparticles-assembled Co ₃ O ₄ microspheres as anodes for Li-ion batteries by spray pyrolysis of CoCl ₂ solution. <i>Electrochimica Acta</i> , 2016 , 209, 456-463	6.7	33

68	Enhanced electrochemical performance of LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ cathode materials obtained by atomization co-precipitation method. <i>Ceramics International</i> , 2016 , 42, 644-649	5.1	31
67	One-step synthesis of Li-doped NiO as high-performance anode material for lithium ion batteries. <i>Ceramics International</i> , 2016 , 42, 14565-14572	5.1	31
66	Comparative investigations of LiVPO ₄ F/C and Li ₃ V ₂ (PO ₄) ₃ /C synthesized in similar soft chemical route. <i>Journal of Solid State Electrochemistry</i> , 2013 , 17, 1-8	2.6	31
65	Ethylene sulfate as film formation additive to improve the compatibility of graphite electrode for lithium-ion battery. <i>Ionics</i> , 2014 , 20, 795-801	2.7	31
64	Lithiophilic Ag/Li composite anodes via a spontaneous reaction for Li nucleation with a reduced barrier. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 20911-20918	13	30
63	A novel dried plum-like yolk-shell architecture of tin oxide nanodots embedded into a carbon matrix: ultra-fast assembly and superior lithium storage properties. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 5803-5810	13	29
62	The role of a MnO ₂ functional layer on the surface of Ni-rich cathode materials: Towards enhanced chemical stability on exposure to air. <i>Ceramics International</i> , 2018 , 44, 13341-13348	5.1	28
61	Cooperation of nitrogen-doping and catalysis to improve the Li-ion storage performance of lignin-based hard carbon. <i>Journal of Energy Chemistry</i> , 2018 , 27, 1390-1396	12	27
60	Electrochemical properties of LiNi _{0.6} Co _{0.2} Mn _{0.2} O ₂ as cathode material for Li-ion batteries prepared by ultrasonic spray pyrolysis. <i>Materials Letters</i> , 2015 , 159, 39-42	3.3	25
59	Effects of Nb doping on the performance of 0.5Li ₂ MnO ₃ ∩.5LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode material for lithium-ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2018 , 822, 57-65	4.1	25
58	Structural and electrochemical characterization of NH ₄ F-pretreated lithium-rich layered Li[Li _{0.2} Ni _{0.13} Co _{0.13} Mn _{0.54}]O ₂ cathodes for lithium-ion batteries. <i>Ceramics International</i> , 2018 , 44, 14370-14376	5.1	24
57	Distinct impact of cobalt salt type on the morphology, microstructure, and electrochemical properties of Co ₃ O ₄ synthesized by ultrasonic spray pyrolysis. <i>Journal of Alloys and Compounds</i> , 2017 , 696, 836-843	5.7	21
56	Atomic layer deposition-strengthened lithiophilicity of ultrathin TiO ₂ film decorated Cu foil for stable lithium metal anode. <i>Journal of Power Sources</i> , 2020 , 463, 228157	8.9	21
55	An Ostwald ripening route towards Ni-rich layered cathode material with cobalt-rich surface for lithium ion battery. <i>Science China Materials</i> , 2018 , 61, 719-727	7.1	21
54	Spray pyrolysis synthesis of nickel-rich layered cathodes LiNi _{1-x} Co _x Mn _x O ₂ (x = 0.075, 0.05, 0.025) for lithium-ion batteries. <i>Journal of Energy Chemistry</i> , 2018 , 27, 447-450	12	19
53	Performance of PVDF-HFP-based gel polymer electrolytes with different pore forming agents. <i>Iranian Polymer Journal (English Edition)</i> , 2012 , 21, 755-761	2.3	18
52	Potentiostatic deposition of nickel cobalt sulfide nanosheet arrays as binder-free electrode for high-performance pseudocapacitor. <i>Ceramics International</i> , 2018 , 44, 15778-15784	5.1	18
51	Capacity fading reason of LiNi _{0.5} Mn _{1.5} O ₄ with commercial electrolyte. <i>Ionics</i> , 2013 , 19, 379-383	2.7	17

50	Oxygen-induced lithiophilicity of tin-based framework toward highly stable lithium metal anode. <i>Chemical Engineering Journal</i> , 2020 , 394, 124848	14.7	16
49	In-situ tailored 3D Li ₂ O@Cu nanowires array enabling stable lithium metal anode with ultra-high coulombic efficiency. <i>Journal of Power Sources</i> , 2020 , 463, 228178	8.9	16
48	Fe _x O _y alloy nanoparticles encapsulated in three-dimensionally N-doped porous carbon/multiwalled carbon nanotubes composites as bifunctional electrocatalyst for zinc-air battery. <i>Journal of Power Sources</i> , 2019 , 438, 227019	8.9	16
47	Improved electrochemical performance of Si/C material based on the interface stability. <i>Journal of Alloys and Compounds</i> , 2017 , 725, 1304-1312	5.7	16
46	Systematic parameter acquisition method for electrochemical model of 4.35 V LiCoO ₂ batteries. <i>Solid State Ionics</i> , 2019 , 343, 115083	3.3	16
45	Smartly tailored Co(OH) ₂ -Ni(OH) ₂ heterostructure on nickel foam as binder-free electrode for high-energy hybrid capacitors. <i>Electrochimica Acta</i> , 2019 , 309, 140-147	6.7	15
44	The Electrochemical Performance and Reaction Mechanism of Coated Titanium Anodes for Manganese Electrowinning. <i>Journal of the Electrochemical Society</i> , 2019 , 166, E502-E511	3.9	15
43	Synthesis and characterization of Li ₄ Ti ₅ O ₁₂ /graphene composite as anode material with enhanced electrochemical performance. <i>Ionics</i> , 2013 , 19, 717-723	2.7	14
42	High-Value Utilization of Lignin To Prepare Functional Carbons toward Advanced Lithium-Ion Capacitors. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 11522-11531	8.3	14
41	Modification of Li[Li _{0.2} Mn _{0.54} Ni _{0.13} Co _{0.13}]O ₂ cathode with H ₂ MoO ₄ via a simple wet chemical coating process. <i>Applied Surface Science</i> , 2019 , 479, 1277-1286	6.7	14
40	Improving the electrochemical performance of Li-rich Li _{1.2} Ni _{0.13} Co _{0.13} Mn _{0.54} O ₂ cathode material by LiF coating. <i>Ionics</i> , 2018 , 24, 3717-3724	2.7	13
39	Bifunctional Li ₆ CoO ₄ serving as prelithiation reagent and pseudocapacitive electrode for lithium ion capacitors. <i>Journal of Energy Chemistry</i> , 2020 , 47, 38-45	12	13
38	Evolution of the morphology, structural and thermal stability of LiCoO ₂ during overcharge. <i>Journal of Energy Chemistry</i> , 2021 , 55, 524-532	12	13
37	Manipulating the Composition and Structure of Solid Electrolyte Interphase at Graphite Anode by Adjusting the Formation Condition. <i>Energy Technology</i> , 2019 , 7, 1900273	3.5	12
36	A novel hierarchical precursor of densely integrated hydroxide nanoflakes on oxide microspheres toward high-performance layered Ni-rich cathode for lithium ion batteries. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 1822-1828	7.8	12
35	Properties on novel PVDF-HFP-based composite polymer electrolyte with vinyltrimethoxysilane-modified ZSM-5. <i>Polymer Composites</i> , 2012 , 33, 629-635	3	12
34	New insight into the electrodeposition of NiCo layered double hydroxide and its capacitive evaluation. <i>Electrochimica Acta</i> , 2020 , 336, 135734	6.7	11
33	Effects of Al doping for Li[Li _{0.09} Mn _{0.65} *0.91Ni _{0.35} *0.91]O ₂ cathode material. <i>Ionics</i> , 2013 , 19, 1495-1501	2.7	11

32	Self-sacrificial-reaction guided formation of hierarchical electronic/ionic conductive shell enabling high-performance nano-silicon anode. <i>Chemical Engineering Journal</i> , 2021 , 415, 128998	14.7	11
31	Magnesium-doped Li[Li _{0.2} Mn _{0.54} Ni _{0.13} Co _{0.13}]O ₂ cathode with high rate capability and improved cyclic stability. <i>Ionics</i> , 2019 , 25, 1967-1977	2.7	10
30	Synthesis and electrochemical performance of LiNi _{0.6} Co _{0.2} Mn _{0.2} O ₂ /reduced graphene oxide cathode materials for lithium-ion batteries. <i>Ionics</i> , 2013 , 19, 1329-1334	2.7	10
29	A compact process to prepare LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ cathode material from nickel-copper sulfide ore. <i>Hydrometallurgy</i> , 2017 , 174, 1-9	4	10
28	Incorporating multifunctional LiAlSiO ₄ into polyethylene oxide for high-performance solid-state lithium batteries. <i>Journal of Energy Chemistry</i> , 2021 , 53, 116-123	12	10
27	Research Progress of Single-Crystal Nickel-Rich Cathode Materials for Lithium Ion Batteries.. <i>Small Methods</i> , 2021 , 5, e2100234	12.8	10
26	A smart architecture of nickel-cobalt sulfide nanotubes assembled nanoclusters for high-performance pseudocapacitor. <i>Journal of Alloys and Compounds</i> , 2018 , 765, 505-511	5.7	9
25	Modification by simultaneously $\text{LiWO}_3/\text{Li}_2\text{WO}_4$ composite coating and spinel-structure formation on Li[Li _{0.2} Mn _{0.54} Ni _{0.13} Co _{0.13}]O ₂ cathode via a simple wet process. <i>Journal of Alloys and Compounds</i> , 2019 , 790, 421-432	5.7	8
24	Compact structured silicon/carbon composites as high-performance anodes for lithium ion batteries. <i>Ionics</i> , 2018 , 24, 3405-3411	2.7	8
23	BODIPY-Based Conjugated Porous Polymer and Its Derived Porous Carbon for Lithium-Ion Storage. <i>ACS Omega</i> , 2018 , 3, 7727-7735	3.9	8
22	Preparation and physicochemical performances of poly[(vinylidene fluoride)-co-hexafluoropropylene]-based composite polymer electrolytes doped with modified carbon nanotubes. <i>Polymer International</i> , 2014 , 63, 307-314	3.3	8
21	Comprehensive reinvestigation on the initial coulombic efficiency and capacity fading mechanism of LiNi _{0.5} Mn _{1.5} O ₄ at low rate and elevated temperature. <i>Journal of Solid State Electrochemistry</i> , 2013 , 17, 1029-1038	2.6	8
20	Spiral Graphene Coupling Hierarchically Porous Carbon Advances Dual-Carbon Lithium Ion Capacitor. <i>Energy Storage Materials</i> , 2021 , 38, 528-534	19.4	8
19	Bulk and surface reconstructed Li-rich Mn-based cathode material for lithium ion batteries with eliminating irreversible capacity loss. <i>Journal of Electroanalytical Chemistry</i> , 2018 , 829, 7-15	4.1	8
18	Vital effect of sufficient vulcanization on the properties of Ni-Co-S/graphene composites for supercapacitor. <i>Chemical Engineering Science</i> , 2020 , 221, 115709	4.4	7
17	Superior lithium storage of Si/WSi ₂ composite prepared via one step co-reduction of multi-phase oxide. <i>Journal of Electroanalytical Chemistry</i> , 2018 , 826, 84-89	4.1	7
16	Controlled Synthesis of Ni _x Co _y S ₄ /rGO Composites for Constructing High-Performance Asymmetric Supercapacitor. <i>Frontiers in Materials</i> , 2019 , 6,	4	7
15	Investigation on the storage performance of LiMn ₂ O ₄ at elevated temperature with the mixture of electrolyte stabilizer. <i>Ionics</i> , 2012 , 18, 907-911	2.7	7

14	Performance and capacity fading reason of LiMn ₂ O ₄ /graphite batteries after storing at high temperature. <i>Rare Metals</i> , 2009 , 28, 322-327	5.5	7
13	The influences of SO ₄ ²⁻ from electrolytic manganese dioxide precursor on the electrochemical properties of Li-rich Mn-based material for Li-ion batteries. <i>Ionics</i> , 2019 , 25, 2585-2594	2.7	7
12	Three-dimensionally mesoporous dual (Co, Fe) metal oxide/CNTs composite as electrocatalysts for air cathodes in Li-O ₂ batteries. <i>Ceramics International</i> , 2018 , 44, 21942-21949	5.1	7
11	Study on performances of ZSM-5 doped P(VDF-HFP) based composite polymer electrolyte prepared by steam bath technique. <i>Iranian Polymer Journal (English Edition)</i> , 2012 , 21, 481-488	2.3	6
10	Improving the electrochemical performance of LiMn ₂ O ₄ /graphite batteries using LiF additive during fabrication. <i>Rare Metals</i> , 2011 , 30, 120-125	5.5	6
9	Clearing surficial charge-transport obstacles to boost the performance of lithium-rich layered oxides. <i>Chemical Engineering Journal</i> , 2020 , 399, 125142	14.7	5
8	Modification on improving the structural stabilities and cyclic properties of Li _{1.2} Mn _{0.54} Ni _{0.13} Co _{0.13} O ₂ cathode materials with CePO ₄ . <i>Ionics</i> , 2020 , 26, 2117-2127	2.7	5
7	Mono-Active Bimetallic Oxide Co ₂ AlO ₄ with Yolk-Shell Structure as a Superior Lithium-Storage Material. <i>ChemElectroChem</i> , 2019 , 6, 3298-3302	4.3	4
6	Storage performance with different charged state of manganese spinel battery. <i>Ionics</i> , 2012 , 18, 643-648.	2.7	4
5	A Renewable Sedimentary Slurry Battery: Preliminary Study in Zinc Electrodes. <i>IScience</i> , 2020 , 23, 101826.	6.1	4
4	Improving the Desulfurization Degree of High-Grade Nickel Matte via a Two-Step Oxidation Roasting Process. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018 , 49, 1834-1840	2.5	3
3	Mitigating the voltage fading and air sensitivity of O ₃ -type NaNi _{0.4} Mn _{0.4} Cu _{0.1} Ti _{0.1} O ₂ cathode material via La doping. <i>Chemical Engineering Journal</i> , 2021 , 133456	14.7	2
2	First principles calculation of Li _{2+2x} Zn _{1-x} SiO ₄ (x=0.125-0.5) as solid electrolyte for lithium-ion battery. <i>Solid State Ionics</i> , 2021 , 371, 115767	3.3	2
1	First-Principle Study of a ZnS/Graphene Heterostructure as a Promising Anode Material for Lithium-Ion Batteries. <i>Energy & Fuels</i> , 2022 , 36, 677-683	4.1	0