

Xinqun Cheng

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/1457218/xinqun-cheng-publications-by-year.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.

104
papers

4,123
citations

36
h-index

59
g-index

106
ext. papers

4,724
ext. citations

6.9
avg, IF

5.42
L-index

#	Paper	IF	Citations
104	Engineering Molecular Polymerization for Template-Free SiO _x /C Hollow Spheres as Ultrastable Anodes in Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2021 , 31, 2101145	15.6	18
103	Electrochemical behaviors in the anode of LiCoO ₂ /mesocarbon microbead battery and their impacts on the capacity degradation. <i>Ionics</i> , 2021 , 27, 2353-2365	2.7	1
102	Surface nitrided and carbon coated TiNb ₂ O ₇ anode material with excellent performance for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2020 , 835, 155241	5.7	10
101	Superior Electrochemical Performance of WNb ₂ O ₈ Nanorods Triggered by Ultra-Efficient Li ⁺ Diffusion. <i>ChemistrySelect</i> , 2020 , 5, 1209-1213	1.8	5
100	Unraveling the Relationship between Ti ⁴⁺ Doping and Li ⁺ Mobility Enhancement in Ti ⁴⁺ Doped Li ₃ V ₂ (PO ₄) ₃ . <i>ACS Applied Energy Materials</i> , 2020 , 3, 715-722	6.1	6
99	Facile carbon fiber-sewed high areal density electrode for lithium sulfur batteries. <i>Chemical Communications</i> , 2020 , 56, 10758-10761	5.8	6
98	Progressive concentration gradient nickel-rich oxide cathode material for high-energy and long-life lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 7728-7735	13	38
97	Amorphous carbon-encapsulated Si nanoparticles loading on MCMB with sandwich structure for lithium ion batteries. <i>Electrochimica Acta</i> , 2019 , 306, 590-598	6.7	31
96	Layer-by-Layer Engineered Silicon-Based Sandwich Nanomat as Flexible Anode for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 39970-39978	9.5	17
95	Understanding the Structural Evolution and Lattice Water Movement for Rhombohedral Nickel Hexacyanoferrate upon Sodium Migration. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 46705-46713	9.5	17
94	A Nanostructured Si/SiOC Composite Anode with Volume-Change-Buffering Microstructure for Lithium-Ion Batteries. <i>Chemistry - A European Journal</i> , 2019 , 25, 2604-2609	4.8	16
93	A multifunctional silicotungstic acid-modified Li-rich manganese-based cathode material with excellent electrochemical properties. <i>Journal of Solid State Electrochemistry</i> , 2019 , 23, 101-108	2.6	1
92	ZIF-8 with Ferrocene Encapsulated: A Promising Precursor to Single-Atom Fe Embedded Nitrogen-Doped Carbon as Highly Efficient Catalyst for Oxygen Electroreduction. <i>Small</i> , 2018 , 14, e1704282	11.2	148
91	Unravelling the Enhanced High-Temperature Performance of Lithium-Rich Oxide Cathode with Methyl Diphenylphosphinite as Electrolyte Additive. <i>ChemElectroChem</i> , 2018 , 5, 1569-1575	4.3	26
90	Polyaniline-encapsulated silicon on three-dimensional carbon nanotubes foam with enhanced electrochemical performance for lithium-ion batteries. <i>Journal of Power Sources</i> , 2018 , 381, 156-163	8.9	60
89	A two-dimensional nitrogen-rich carbon/silicon composite as high performance anode material for lithium ion batteries. <i>Chemical Engineering Journal</i> , 2018 , 341, 37-46	14.7	66
88	3D hierarchical Co/CoO/C nanocomposites with mesoporous microsheets grown on nickel foam as cathodes for Li-O ₂ batteries. <i>Journal of Alloys and Compounds</i> , 2018 , 749, 378-384	5.7	11

87	Polymeric multilayer-modified manganese dioxide with hollow porous structure as sulfur host for lithium sulfur batteries. <i>Electrochimica Acta</i> , 2018 , 259, 440-448	6.7	23
86	Enabling reliable lithium metal batteries by a bifunctional anionic electrolyte additive. <i>Energy Storage Materials</i> , 2018 , 11, 197-204	19.4	82
85	Pseudocapacitive Li ⁺ intercalation in porous Ti ₂ Nb ₁₀ O ₂₉ nanospheres enables ultra-fast lithium storage. <i>Energy Storage Materials</i> , 2018 , 11, 57-66	19.4	119
84	Unravelling the Interface Layer Formation and Gas Evolution/Suppression on a TiNbO Anode for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 27056-27062	9.5	35
83	Accelerated aging and degradation mechanism of LiFePO ₄ /graphite batteries cycled at high discharge rates.. <i>RSC Advances</i> , 2018 , 8, 25695-25703	3.7	21
82	Excellent room-temperature performance of lithium metal polymer battery with enhanced interfacial compatibility. <i>Electrochimica Acta</i> , 2018 , 283, 1261-1268	6.7	6
81	Influence of accidental overcharging on the performance and degradation mechanisms of LiCoO ₂ /mesocarbon microbead battery. <i>Journal of Solid State Electrochemistry</i> , 2018 , 22, 3743-3750	2.6	5
80	Free-Standing Sandwich-Type Graphene/Nanocellulose/Silicon Laminar Anode for Flexible Rechargeable Lithium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 29638-29646	9.5	48
79	State of health diagnosis model for lithium ion batteries based on real-time impedance and open circuit voltage parameters identification method. <i>Energy</i> , 2018 , 144, 647-656	7.9	44
78	Rapid Prediction of the Open-Circuit-Voltage of Lithium Ion Batteries Based on an Effective Voltage Relaxation Model. <i>Energies</i> , 2018 , 11, 3444	3.1	9
77	Toward Promising Turnkey Solution for Next-Generation Lithium Ion Batteries: Scale Preparation, Fading Analysis, and Enhanced Performance of Microsized Si/C Composites. <i>ACS Applied Energy Materials</i> , 2018 , 1, 6977-6985	6.1	6
76	Accelerated Aging Analysis on Cycle Life of LiFePO ₄ /Graphite Batteries Based on Different Rates. <i>ChemElectroChem</i> , 2018 , 5, 2301-2309	4.3	6
75	Sol-gel synthesis of preceramic polyphenylsilsesquioxane aerogels and their application toward monolithic porous SiOC ceramics. <i>Ceramics International</i> , 2018 , 44, 14947-14951	5.1	12
74	Superior performance of ordered macroporous TiNb ₂ O ₇ anodes for lithium ion batteries: Understanding from the structural and pseudocapacitive insights on achieving high rate capability. <i>Nano Energy</i> , 2017 , 34, 15-25	17.1	264
73	Improved electrochemical performance of micro-sized SiO ₂ -based composite anode by prelithiation of stabilized lithium metal powder. <i>Journal of Power Sources</i> , 2017 , 347, 170-177	8.9	91
72	A New Anion Receptor for Improving the Interface between Lithium- and Manganese-Rich Layered Oxide Cathode and the Electrolyte. <i>Chemistry of Materials</i> , 2017 , 29, 2141-2149	9.6	31
71	Improved Rate Performance of Lithium Sulfur Batteries by In-Situ Anchoring of Lithium Iodide in Carbon/Sulfur Cathode. <i>Electrochimica Acta</i> , 2017 , 238, 257-262	6.7	19
70	Facilitating the redox reaction of polysulfides by an electrocatalytic layer-modified separator for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 10936-10945	13	65

69	Improved high-voltage performance of LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode with Tris(2,2,2-trifluoroethyl) phosphite as electrolyte additive. <i>Electrochimica Acta</i> , 2017 , 243, 72-81	6.7	22
68	Pseudocapacitive Li ⁺ intercalation in ZnO/ZnO@C composites enables high-rate lithium-ion storage and stable cyclability. <i>Ceramics International</i> , 2017 , 43, 11998-12004	5.1	20
67	Electronically Conductive Sb-doped SnO ₂ Nanoparticles Coated LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ Cathode Material with Enhanced Electrochemical Properties for Li-ion Batteries. <i>Electrochimica Acta</i> , 2017 , 236, 273-279	6.7	50
66	Changes of Degradation Mechanisms of LiFePO ₄ /Graphite Batteries Cycled at Different Ambient Temperatures. <i>Electrochimica Acta</i> , 2017 , 237, 248-258	6.7	36
65	Hierarchical ordered macroporous/ultrathin mesoporous carbon architecture: A promising cathode scaffold with excellent rate performance for rechargeable Li-O ₂ batteries. <i>Carbon</i> , 2017 , 118, 139-147	10.4	37
64	Lithium Cobalt Oxides Functionalized by Conductive Al-doped ZnO Coating as Cathode for High-performance Lithium Ion Batteries. <i>Electrochimica Acta</i> , 2017 , 224, 96-104	6.7	24
63	Prediction Model and Principle of End-of-Life Threshold for Lithium Ion Batteries Based on Open Circuit Voltage Drifts. <i>Electrochimica Acta</i> , 2017 , 255, 83-91	6.7	7
62	Hydrothermal Self-Assembly Synthesis of Porous SnO ₂ /Graphene Nanocomposite as an Anode Material for Lithium Ion Batteries. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 1877-1883	1.3	2
61	Self-doping Ti _{1-x} Nb _{2+x} O ₇ anode material for lithium-ion battery and its electrochemical performance. <i>Journal of Alloys and Compounds</i> , 2017 , 728, 534-540	5.7	27
60	Mixed lithium ion and electron conducting LiAlPO _{3.93} F _{1.07} -coated LiCoO ₂ cathode with improved electrochemical performance. <i>Electrochemistry Communications</i> , 2017 , 83, 106-109	5.1	21
59	A Mild Surface Washing Method Using Protonated Polyaniline for Ni-rich LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Material of Lithium Ion Batteries. <i>Electrochimica Acta</i> , 2017 , 248, 534-540	6.7	67
58	1,3,6-Hexanetricarbonitrile as electrolyte additive for enhancing electrochemical performance of high voltage Li-rich layered oxide cathode. <i>Journal of Power Sources</i> , 2017 , 361, 227-236	8.9	47
57	Clew-like N-doped multiwalled carbon nanotube aggregates derived from metal-organic complexes for lithium-sulfur batteries. <i>Carbon</i> , 2017 , 122, 635-642	10.4	33
56	Interface Modifications by Tris(2,2,2-trifluoroethyl) Borate for Improving the High-Voltage Performance of LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ Cathode. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A1924-A1932	3.9	32
55	Micro-sized spherical silicon@carbon@graphene prepared by spray drying as anode material for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2017 , 723, 434-440	5.7	67
54	High-rate capability of three-dimensionally ordered macroporous T-Nb ₂ O ₅ through Li ⁺ intercalation pseudocapacitance. <i>Journal of Power Sources</i> , 2017 , 361, 80-86	8.9	106
53	Improved electrochemical performance of NaAlO ₂ -coated LiCoO ₂ for lithium-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2017 , 21, 1195-1201	2.6	18
52	Triphenyl phosphite as an electrolyte additive to improve the cyclic stability of lithium-rich layered oxide cathode for lithium-ion batteries. <i>Electrochimica Acta</i> , 2016 , 216, 44-50	6.7	27

51	Oxygen vacancies in SnO ₂ surface coating to enhance the activation of layered Li-Rich Li _{1.2} Mn _{0.54} Ni _{0.13} Co _{0.13} O ₂ cathode material for Li-ion batteries. <i>Journal of Power Sources</i> , 2016 , 331, 91-99	8.9	75
50	Degradation mechanism of over-charged LiCoO ₂ /mesocarbon microbeads battery during shallow depth of discharge cycling. <i>Journal of Power Sources</i> , 2016 , 329, 255-261	8.9	17
49	Recovery Strategy and Mechanism of Aged Lithium Ion Batteries after Shallow Depth of Discharge at Elevated Temperature. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 5234-42	9.5	14
48	Lithium Phosphorus Oxynitride Coated Concentration Gradient Li[Ni _{0.73} Co _{0.12} Mn _{0.15}]O ₂ Cathode Material with Enhanced Electrochemical Properties. <i>Electrochimica Acta</i> , 2016 , 192, 340-345	6.7	29
47	Facile synthesis of binder-free reduced graphene oxide/silicon anode for high-performance lithium ion batteries. <i>Journal of Power Sources</i> , 2016 , 312, 216-222	8.9	25
46	Role of fluorine surface modification in improving electrochemical cyclability of concentration gradient Li[Ni _{0.73} Co _{0.12} Mn _{0.15}]O ₂ cathode material for Li-ion batteries. <i>RSC Advances</i> , 2016 , 6, 26307-26316	3.7	24
45	Synthesis and electrochemical performance of hierarchical nanocomposite of carbon coated LiCoPO ₄ crosslinked by graphene. <i>Materials Chemistry and Physics</i> , 2016 , 171, 6-10	4.4	17
44	Influence of fluoroethylene carbonate as co-solvent on the high-voltage performance of LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode for lithium-ion batteries. <i>Electrochimica Acta</i> , 2016 , 191, 8-15	6.7	39
43	A Novel One-dimensional Reduced Graphene Oxide/Sulfur Nanoscroll Material and its Application in Lithium Sulfur Batteries. <i>Electrochimica Acta</i> , 2016 , 222, 1861-1869	6.7	29
42	Effect of short-time external short circuiting on the capacity fading mechanism during long-term cycling of LiCoO ₂ /mesocarbon microbeads battery. <i>Journal of Power Sources</i> , 2016 , 318, 154-162	8.9	20
41	Understanding undesirable anode lithium plating issues in lithium-ion batteries. <i>RSC Advances</i> , 2016 , 6, 88683-88700	3.7	204
40	Al ₂ O ₃ Coated Concentration-Gradient Li[Ni _{0.73} Co _{0.12} Mn _{0.15}]O ₂ Cathode Material by Freeze Drying for Long-Life Lithium Ion Batteries. <i>Electrochimica Acta</i> , 2015 , 174, 1185-1191	6.7	54
39	Facile synthesis of nanostructured TiNb ₂ O ₇ anode materials with superior performance for high-rate lithium ion batteries. <i>Chemical Communications</i> , 2015 , 51, 17293-6	5.8	96
38	Electrochemical performance degeneration mechanism of LiCoO ₂ with high state of charge during long-term charge/discharge cycling. <i>RSC Advances</i> , 2015 , 5, 81235-81242	3.7	29
37	Capacity fading mechanism during long-term cycling of over-discharged LiCoO ₂ /mesocarbon microbeads battery. <i>Journal of Power Sources</i> , 2015 , 293, 1006-1015	8.9	67
36	Lithium-rich Li _{1.2} Ni _{0.13} Co _{0.13} Mn _{0.54} O ₂ oxide coated by Li ₃ PO ₄ and carbon nanocomposite layers as high performance cathode materials for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 2634-2641	13	92
35	Improved electrochemical performance and capacity fading mechanism of nano-sized LiMn _{0.9} Fe _{0.1} PO ₄ cathode modified by polyacene coating. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 15693-15795	13	55
34	A novel nanoporous Fe-doped lithium manganese phosphate material with superior long-term cycling stability for lithium-ion batteries. <i>Nanoscale</i> , 2015 , 7, 11509-14	7.7	34

33	High-performance carbon-coated LiMnPO ₄ nanocomposites by facile two-step solid-state synthesis for lithium-ion battery. <i>Journal of Solid State Electrochemistry</i> , 2015 , 19, 281-288	2.6	18
32	Lithium deposition on graphite anode during long-term cycles and the effect on capacity loss. <i>RSC Advances</i> , 2014 , 4, 26335-26341	3.7	29
31	An Li-rich oxide cathode material with mosaic spinel grain and a surface coating for high performance Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 15640	13	65
30	Lithium compound deposition on mesocarbon microbead anode of lithium ion batteries after long-term cycling. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 12962-70	9.5	26
29	Enhancement of high voltage cycling performance and thermal stability of LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode by use of boron-based additives. <i>Solid State Ionics</i> , 2014 , 263, 146-151	3.3	40
28	Enhancement of low-temperature performance of LiFePO ₄ electrode by butyl sultone as electrolyte additive. <i>Solid State Ionics</i> , 2014 , 254, 27-31	3.3	31
27	Improved electrochemical performance of nano-crystalline Li ₂ FeSiO ₄ /C cathode material prepared by the optimization of sintering temperature. <i>Journal of Solid State Electrochemistry</i> , 2013 , 17, 1955-1959	3.6	13
26	A facile strategy to prepare nano-crystalline Li ₄ Ti ₅ O ₁₂ /C anode material via polyvinyl alcohol as carbon source for high-rate rechargeable Li-ion batteries. <i>Electrochimica Acta</i> , 2013 , 93, 173-178	6.7	47
25	High-performance LiFePO ₄ cathode material from FePO ₄ microspheres with carbon nanotube networks embedded for lithium ion batteries. <i>Journal of Power Sources</i> , 2013 , 223, 100-106	8.9	67
24	Facile preparation of Li ₄ Ti ₅ O ₁₂ /AB/MWCNTs composite with high-rate performance for lithium ion battery. <i>Electrochimica Acta</i> , 2013 , 94, 294-299	6.7	21
23	Fluoroethylene carbonate as electrolyte additive to improve low temperature performance of LiFePO ₄ electrode. <i>Electrochimica Acta</i> , 2013 , 87, 466-472	6.7	100
22	Hydrothermal-assisted sol-gel synthesis of Li ₄ Ti ₅ O ₁₂ /C nano-composite for high-energy lithium-ion batteries. <i>Solid State Ionics</i> , 2013 , 244, 52-56	3.3	37
21	Ascorbic acid-assisted solvothermal synthesis of LiMn _{0.9} Fe _{0.1} PO ₄ /C nanoplatelets with enhanced electrochemical performance for lithium ion batteries. <i>Journal of Power Sources</i> , 2013 , 243, 872-879	8.9	36
20	Changing of SEI Film and Electrochemical Properties about MCMB Electrodes during Long-Term Charge/Discharge Cycles. <i>Journal of the Electrochemical Society</i> , 2013 , 160, A2093-A2099	3.9	36
19	Improved properties of polymer electrolyte by ionic liquid PP1.3TFSI for secondary lithium ion battery. <i>Journal of Solid State Electrochemistry</i> , 2012 , 16, 383-389	2.6	20
18	Highly efficient and stable nonplatinum anode catalyst with Au@Pd core-shell nanostructures for methanol electrooxidation. <i>Journal of Catalysis</i> , 2012 , 295, 217-222	7.3	63
17	Effects of carbon on the structure and electrochemical performance of Li ₂ FeSiO ₄ cathode materials for lithium-ion batteries. <i>RSC Advances</i> , 2012 , 2, 6994	3.7	27
16	Effects of VC-LiBOB binary additives on SEI formation in ionic liquid/organic composite electrolyte. <i>RSC Advances</i> , 2012 , 2, 4097	3.7	12

15	The effects of functional ionic liquid on properties of solid polymer electrolyte. <i>Materials Chemistry and Physics</i> , 2011 , 128, 250-255	4.4	19
14	Enhancement of the electrochemical performance of silicon/carbon composite material for lithium ion batteries. <i>Ionics</i> , 2011 , 17, 87-90	2.7	22
13	Enhanced lithium storage performance of silicon anode via fabricating into sandwich electrode. <i>Electrochimica Acta</i> , 2011 , 56, 4403-4407	6.7	17
12	The effects of LiBOB additive for stable SEI formation of PP13TFSI-organic mixed electrolyte in lithium ion batteries. <i>Electrochimica Acta</i> , 2011 , 56, 4841-4848	6.7	44
11	Nanosized core/shell silicon@carbon anode material for lithium ion batteries with polyvinylidene fluoride as carbon source. <i>Journal of Materials Chemistry</i> , 2010 , 20, 3216		146
10	Simple annealing process for performance improvement of silicon anode based on polyvinylidene fluoride binder. <i>Journal of Power Sources</i> , 2010 , 195, 2069-2073	8.9	36
9	Improvement of cycle performance for silicon/carbon composite used as anode for lithium ion batteries. <i>Materials Chemistry and Physics</i> , 2009 , 115, 757-760	4.4	23
8	Effect of ZnO modification on the performance of LiNi _{0.5} Co _{0.25} Mn _{0.25} O ₂ cathode material. <i>Electrochimica Acta</i> , 2009 , 54, 5796-5803	6.7	53
7	Hierarchy carbon paper for the gas diffusion layer of proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2009 , 187, 505-508	8.9	22
6	Effect of Ag additive on the performance of LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode material for lithium ion battery. <i>Journal of Power Sources</i> , 2009 , 189, 2-8	8.9	35
5	Synthesis and characterization of carbon-coated LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode material prepared by polyvinyl alcohol pyrolysis route. <i>Journal of Alloys and Compounds</i> , 2009 , 473, 53-59	5.7	56
4	Electrochemical Properties of Natural Graphite Fluorinated by ClF ₃ and NF ₃ in Propylene Carbonate-Containing Solvent. <i>Journal of the Electrochemical Society</i> , 2008 , 155, A405	3.9	4
3	Electrochemical investigation of silicon/carbon composite as anode material for lithium ion batteries. <i>Journal of Materials Science</i> , 2008 , 43, 3149-3152	4.3	13
2	Electrochemical reaction of the SiMn/C composite for anode in lithium ion batteries. <i>Electrochimica Acta</i> , 2006 , 52, 1527-1531	6.7	12
1	The effect of boron doping on lithium intercalation performance of boron-doped carbon materials. <i>Materials Chemistry and Physics</i> , 2003 , 80, 94-101	4.4	30