

Shichao Zhang

List of Publications by Year in descending order

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99
papers

3,670
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136740

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times ranked

5533
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#	ARTICLE	IF	CITATIONS
1	Few-layered SnS ₂ on Few-layered Reduced Graphene Oxide as Na-ion Battery Anode with Ultralong Cycle Life and Superior Rate Capability. <i>Advanced Functional Materials</i> , 2015, 25, 481-489.	7.8	391
2	Nano-wire networks of sulfur-polypyrrole composite cathode materials for rechargeable lithium batteries. <i>Electrochemistry Communications</i> , 2008, 10, 1819-1822.	2.3	217
3	Hierarchical CuO@TiO ₂ Hollow Microspheres for Highly Efficient Photodriven Reduction of CO ₂ to CH ₄ . <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 2381-2388.	3.2	179
4	Nickel Nanowire Array Supported Silicon Anode for High-Performance Lithium-ion Batteries. <i>Advanced Materials</i> , 2010, 22, 5378-5382.	11.1	161
5	Nitrogen-doped reduced graphene oxide for high-performance flexible all-solid-state micro-supercapacitors. <i>Journal of Materials Chemistry A</i> , 2014, 2, 18125-18131.	5.2	158
6	Direct Growth of Flower-like MnO ₂ on Three-dimensional Graphene for High-performance Rechargeable Li-ion Batteries. <i>Advanced Energy Materials</i> , 2014, 4, 1301960.	10.2	154
7	N-doped hollow urchin-like anatase TiO ₂ @C composite as a novel anode for Li-ion batteries. <i>Journal of Power Sources</i> , 2018, 385, 10-17.	4.0	110
8	Peanut-like MnO@C core-shell composites as anode electrodes for high-performance lithium ion batteries. <i>Nanoscale</i> , 2014, 6, 3508.	2.8	103
9	Graphene-Based Materials for Flexible Lithium-Sulfur Batteries. <i>ACS Nano</i> , 2021, 15, 13901-13923.	7.3	94
10	Carbon nanofibers/nanosheets hybrid derived from cornstalks as a sustainable anode for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 6742-6746.	5.2	79
11	MnO Nanoparticles Interdispersed in 3D Porous Carbon Framework for High Performance Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 12713-12718.	4.0	76
12	Simple Synthesis of Mesoporous Carbon Nanofibers with Hierarchical Nanostructure for Ultrahigh Lithium Storage. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 2561-2567.	4.0	76
13	Tips-Bundled Pt/Co ₃ O ₄ Nanowires with Directed Peripheral Growth of Li ₂ O as Efficient Binder/Carbon-Free Catalytic Cathode for Lithium-Oxygen Battery. <i>ACS Catalysis</i> , 2015, 5, 241-245.	5.5	69
14	Coaxial SnO ₂ @TiO ₂ nanotube hybrids: from robust assembly strategies to potential application in Li+ storage. <i>Journal of Materials Chemistry</i> , 2012, 22, 11151.	6.7	66
15	ZnO nanoparticles encapsulated in a 3D hierarchical carbon framework as anode for lithium ion battery. <i>Electrochimica Acta</i> , 2016, 189, 245-251.	2.6	60
16	Controllable synthesis of high-performance LiMnPO ₄ nanocrystals by a facile one-spot solvothermal process. <i>Journal of Materials Chemistry A</i> , 2014, 2, 10581-10588.	5.2	58
17	Facile fabrication of reticular polypyrrole-silicon core-shell nanofibers for high performance lithium storage. <i>Journal of Materials Chemistry</i> , 2012, 22, 11636.	6.7	55
18	Graphene-like MnO ₂ decorated with ultrafine CeO ₂ as a highly efficient catalyst for long-life lithium-oxygen batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 6747-6755.	5.2	51

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19	Enhanced Electrochemical Performance of Sn@Co Nanoarchitected Electrode for Lithium Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2011, 115, 23603-23609.	1.5	49
20	Mushroom-like Au/NiCo ₂ O ₄ nanohybrids as high-performance binder-free catalytic cathodes for lithium-oxygen batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 5714-5721.	5.2	48
21	Formation of a stable carbon framework in a MnO yolk-shell sphere to achieve exceptional performance for a Li-ion battery anode. <i>Journal of Materials Chemistry A</i> , 2015, 3, 15591-15597.	5.2	48
22	Au-Decorated Cracked Carbon Tube Arrays as Binder-Free Catalytic Cathode Enabling Guided Li ₂ O ₂ Inner Growth for High-Performance Li-O ₂ Batteries. <i>Advanced Functional Materials</i> , 2016, 26, 7725-7732.	7.8	45
23	Hollow spherical carbonized polypyrrole/sulfur composite cathode materials for lithium/sulfur cells with long cycle life. <i>Journal of Power Sources</i> , 2014, 248, 337-342.	4.0	44
24	High nitrogen-containing cotton derived 3D porous carbon frameworks for high-performance supercapacitors. <i>Scientific Reports</i> , 2015, 5, 15388.	1.6	44
25	Understanding Moisture and Carbon Dioxide Involved Interfacial Reactions on Electrochemical Performance of Lithium-Air Batteries Catalyzed by Gold/Manganese-Dioxide. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 23876-23884.	4.0	42
26	One-pot synthesis of ultrafine ZnFe ₂ O ₄ nanocrystals anchored on graphene for high-performance Li and Li-ion batteries. <i>RSC Advances</i> , 2014, 4, 7703.	1.7	41
27	Morphology and size controlled synthesis of the hierarchical structured Li _{1.2} Mn _{0.54} Ni _{0.13} Co _{0.13} O ₂ cathode materials for lithium ion batteries. <i>Electrochimica Acta</i> , 2019, 297, 406-416.	2.6	38
28	Facile synthesis of hierarchical mesoporous Cu _x Co _{3-x} O ₄ nanosheets array on conductive substrates with high-rate performance for Li-ion batteries. <i>Electrochimica Acta</i> , 2014, 150, 75-82.	2.6	37
29	Fe ₃ O ₄ hard templating to assemble highly wrinkled graphene sheets into hierarchical porous film for compact capacitive energy storage. <i>RSC Advances</i> , 2019, 9, 20107-20112.	1.7	36
30	Facile solvothermal synthesis of ultrathin LiFe _x Mn _{1-x} PO ₄ nanoplates as advanced cathodes with long cycle life and superior rate capability. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19368-19375.	5.2	35
31	Facile Fabrication of Fe ₂ O ₃ Nanoparticles Anchored on Carbon Nanotubes as High-Performance Anode for Lithium-Ion Batteries. <i>ChemElectroChem</i> , 2018, 5, 2458-2463.	1.7	35
32	MOF-derived, N-doped porous carbon coated graphene sheets as high-performance anodes for lithium-ion batteries. <i>New Journal of Chemistry</i> , 2016, 40, 9679-9683.	1.4	33
33	Hierarchical Co ₃ O ₄ @multiwalled carbon nanotube nanocable films with superior cyclability and high lithium storage capacity. <i>Electrochimica Acta</i> , 2013, 108, 651-659.	2.6	32
34	Scalable preparation of silicon@graphite/carbon microspheres as high-performance lithium-ion battery anode materials. <i>RSC Advances</i> , 2016, 6, 69882-69888.	1.7	32
35	Polydopamine-coated hierarchical tower-shaped carbon for high-performance lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2019, 319, 359-365.	2.6	31
36	Application of Carbon Supported Pt-core@Au-shell Nanoparticles in Methanol Electrooxidation. <i>Journal of Physical Chemistry C</i> , 2014, 118, 29845-29853.	1.5	30

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37	<i>In situ</i> growth of ultrathin sulfur microcrystal on MXene-based 3D matrix for flexible lithium-sulfur batteries. <i>EcoMat</i> , 2022, 4, .	6.8	30
38	From graphite oxide to nitrogen and sulfur co-doped few-layered graphene by a green reduction route via Chinese medicinal herbs. <i>RSC Advances</i> , 2014, 4, 17902.	1.7	28
39	Controlled Growth of Li_2O_2 by Cocatalysis of Mobile Pd and Co_3O_4 Nanowire Arrays for High-Performance Li-O_2 Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 31653-31660.	4.0	26
40	Hierarchical porous ZnMn_2O_4 microspheres assembled by nanosheets for high performance anodes of lithium ion batteries. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 1730-1736.	3.0	26
41	Mesoporous Pd/ Co_3O_4 nanosheets nanoarrays as an efficient binder/carbon free cathode for rechargeable Li-O_2 batteries. <i>Applied Surface Science</i> , 2017, 420, 222-232.	3.1	24
42	Rational design of a 3D MoS_2 /dual-channel graphene framework hybrid as a free-standing electrode for enhanced lithium storage. <i>Journal of Materials Chemistry A</i> , 2018, 6, 13797-13805.	5.2	23
43	Synthesis, structure and electrochemical properties of lithium-rich cathode material $\text{Li}_{1.2}\text{Mn}_{0.6}\text{Ni}_{0.2}\text{O}_2$ microspheres. <i>RSC Advances</i> , 2015, 5, 81565-81572.	1.7	22
44	Ni_3S_2 nanosheet-anchored carbon submicron tube arrays as high-performance binder-free anodes for Na-ion batteries. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 131-138.	3.0	22
45	In Situ Synthesis of the Peapod-Like Cu-SnO_2 @Copper Foam as Anode with Excellent Cycle Stability and High Area Specific Capacity. <i>Advanced Functional Materials</i> , 2021, 31, 2101999.	7.8	22
46	Vertically Cobalt Nanoplate Arrays Based on One-Step Electrochemical Growth and Their Magnetic Properties. <i>Journal of Physical Chemistry C</i> , 2012, 116, 2801-2806.	1.5	21
47	Ru-decorated knitted Co_3O_4 nanowires as a robust carbon/binder-free catalytic cathode for lithium-oxygen batteries. <i>New Journal of Chemistry</i> , 2016, 40, 6812-6818.	1.4	20
48	Freestanding 3D nanoporous $\text{Cu@1D Cu}_2\text{O}$ nanowire heterostructures: from a facile one-step protocol to robust application in Li storage. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15089-15100.	5.2	19
49	Self-assembled hierarchical porous NiMn_2O_4 microspheres as high performance Li-ion battery anodes. <i>RSC Advances</i> , 2018, 8, 41749-41755.	1.7	18
50	Investigating the increased-capacity mechanism of porous carbon materials in lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14031-14042.	5.2	18
51	Synthesis of polyaniline-sulfur composites with different nanostructures via an interfacial emulsification method and a micelle template method and their properties. <i>RSC Advances</i> , 2020, 10, 11455-11462.	1.7	18
52	Hollow carbon-shell/carbon-nanorod arrays for high performance Li-ion batteries and supercapacitors. <i>RSC Advances</i> , 2015, 5, 7959-7963.	1.7	17
53	Glucose-assisted combustion synthesis of $\text{Li}_{1.2}\text{Ni}_{0.13}\text{Co}_{0.13}\text{Mn}_{0.54}\text{O}_2$ cathode materials with superior electrochemical performance for lithium-ion batteries. <i>RSC Advances</i> , 2016, 6, 79050-79057.	1.7	17
54	3D S@MoS_2 @reduced graphene oxide aerogels cathode for high-rate lithium-sulfur batteries. <i>Journal of Alloys and Compounds</i> , 2021, 852, 157011.	2.8	17

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55	Structure-design and theoretical-calculation for ultrasml Co ₃ O ₄ anchored into ionic liquid modified graphene as anode of flexible lithium-ion batteries. Nano Research, 0, , 1.	5.8	16
56	Application of nano Al ₂ O ₃ particles as precipitate nucleus for preparation of high rate nickel-rich cathode materials. Journal of Power Sources, 2019, 439, 227038.	4.0	15
57	Improved Electrocatalytic Activity of Three-Dimensional Open-Structured Co ₃ O ₄ @MnO ₂ Bifunctional Catalysts of Li-O ₂ Batteries by Inducing the Oriented Growth of Li ₂ O ₂ . ACS Sustainable Chemistry and Engineering, 2021, 9, 5334-5344.	3.2	15
58	Rechargeable Na ⁺ /SO ₂ Battery with Ethylenediamine Additive in Ether-Based Electrolyte. Advanced Functional Materials, 2020, 30, 2002120.	7.8	15
59	Controllable synthesis of hollow γ -Fe ₂ O ₃ nanostructures, their growth mechanism, and the morphology-reserved conversion to magnetic Fe ₃ O ₄ /C nanocomposites. RSC Advances, 2013, 3, 19097.	1.7	14
60	A facile one-pot dealloying strategy to synthesize monolithic asymmetry-patterned nanoporous copper ribbons with tunable microstructure and nanoporosity. RSC Advances, 2016, 6, 2662-2670.	1.7	14
61	A facile one-pot oxidation-assisted dealloying protocol to massively synthesize monolithic core-shell architected nanoporous copper@cuprous oxide nanonetworks for photodegradation of methyl orange. Scientific Reports, 2016, 6, 36084.	1.6	14
62	Synthesis and properties of mesoporous Zn-doped Li _{1.2} Mn _{0.54} Co _{0.13} Ni _{0.13} O ₂ as cathode materials by a MOFs-assisted solvothermal method. RSC Advances, 2017, 7, 35055-35059.	1.7	14
63	Structure-designed synthesis of 3D MoS ₂ anchored on ionic liquid modified rGO-CNTs inspired by a honeycomb for excellent lithium storage. Journal of Materials Chemistry A, 2020, 8, 4868-4876.	5.2	14
64	A Flexible Li ⁺ /Air Battery Workable under Harsh Conditions Based on an Integrated Structure: A Composite Lithium Anode Encased in a Gel Electrolyte. ACS Applied Materials & Interfaces, 2021, 13, 18627-18637.	4.0	14
65	Ordered LiMPO ₄ (M = Fe, Mn) nanorods synthesized from NH ₄ MPO ₄ ·H ₂ O microplates by stress involved ion exchange for Li-ion batteries. CrystEngComm, 2014, 16, 2239.	1.3	13
66	Copper nanowires based current collector for light-weight and flexible composite silicon anode with high stability and specific capacity. RSC Advances, 2015, 5, 87090-87097.	1.7	13
67	ZnO quantum dot-modified rGO with enhanced electrochemical performance for lithium-sulfur batteries. RSC Advances, 2020, 10, 32966-32975.	1.7	13
68	Reduced graphene oxide induced confined growth of PbTe crystals and enhanced electrochemical Li-storage properties. RSC Advances, 2013, 3, 23612.	1.7	12
69	Sea urchin-like Co ₃ O ₄ @Pd Nanoneedles with 3D open-structured matrix as efficient catalytic cathode for Li-O ₂ batteries. Solid State Ionics, 2019, 343, 115075.	1.3	12
70	Identical cut-off voltage <i>versus</i> equivalent capacity: an objective evaluation of the impact of dopants in layered oxide cathodes. Journal of Materials Chemistry A, 2021, 9, 11219-11227.	5.2	12
71	Nanoporous copper from dual-phase alloy families and its technology application in lithium ion batteries. Corrosion Reviews, 2015, 33, 203-231.	1.0	11
72	Fabrication of rutile TiO ₂ nanorod arrays on a copper substrate for high-performance lithium-ion batteries. RSC Advances, 2016, 6, 55671-55675.	1.7	11

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73	Improving cycling stability and suppressing voltage fade of layered lithium-rich cathode materials via SiO ₂ shell coating. <i>Ionics</i> , 2019, 25, 1979-1990.	1.2	11
74	Lychee-like TiO ₂ @TiN dual-function composite material for lithium-sulfur batteries. <i>RSC Advances</i> , 2020, 10, 2670-2676.	1.7	11
75	Facile One-Step Solution-Phase Route to Synthesize Hollow Nanoporous Cu _x O Microcages on 3D Copper Foam for Superior Li Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 4363-4370.	3.2	10
76	Monolithic three-dimensional hollow nanoporous Cu _x O encapsulated mesoporous Cu heterostructures with superior Li storage properties. <i>EcoMat</i> , 2022, 4, .	6.8	10
77	Investigation of Co ₃ O ₄ nanorods supported Pd anode catalyst for methanol oxidation in alkaline solution. <i>Journal of Energy Chemistry</i> , 2014, 23, 801-808.	7.1	9
78	Hollow nano silicon prepared by a controlled template direction and magnesiothermic reduction reaction as anode for lithium ion batteries. <i>New Journal of Chemistry</i> , 2014, 38, 4177.	1.4	9
79	Synthesis of Cu@Fe ₃ O ₄ nanowire arrays electrode for Li-ion batteries. <i>RSC Advances</i> , 2014, 4, 50752-50758.	1.7	9
80	Temperature-induced surface reconstruction and interface structure evolution on ligament of nanoporous copper. <i>Scientific Reports</i> , 2018, 8, 447.	1.6	9
81	Investigation of immiscible Sn-Zn coatings with two-layer microstructure as anode material for Li-ion battery. <i>Journal of Applied Electrochemistry</i> , 2012, 42, 477-482.	1.5	8
82	Preparation and characterization of nanoporous Cu ₆ Sn ₅ /Cu composite by chemical dealloying of Al-Cu-Sn ternary alloy. <i>Journal of Materials Science</i> , 2012, 47, 5911-5917.	1.7	8
83	Facile synthesis of nanostructured LiMnPO ₄ as a high-performance cathode material with long cycle life and superior rate capability. <i>RSC Advances</i> , 2015, 5, 99632-99639.	1.7	8
84	Facile shape control of nano-coaxial Co ₃ O ₄ /TiO ₂ arrays and the effect of the microstructure on lithium storage capability. <i>New Journal of Chemistry</i> , 2016, 40, 3536-3542.	1.4	8
85	Facile In-Situ Synthesis of Freestanding 3D Nanoporous Cu@Cu ₂ O Hierarchical Nanoplate Arrays as Binder-Free Integrated Anodes for High-Capacity, Long-Life Li-Ion Batteries. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 2536-2548.	1.1	8
86	Co ₃ O ₄ anchored on ionic liquid modified PAN as anode materials for flexible lithium-ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2022, 908, 116105.	1.9	8
87	Sustainable carbon-sheets and their MnO-C hybrid for Li-ion batteries. <i>RSC Advances</i> , 2016, 6, 79066-79071.	1.7	7
88	Cu@Sn nanostructures based on light-weight current collectors for superior reversible lithium ion storage. <i>RSC Advances</i> , 2016, 6, 20042-20050.	1.7	6
89	Self-standing Li _{1.2} Mn _{0.6} Ni _{0.2} O ₂ /graphene membrane as a binder-free cathode for Li-ion batteries. <i>RSC Advances</i> , 2018, 8, 39769-39776.	1.7	6
90	Influence of alloy composition on nanoporous structure by dealloying Mn-Cu ribbons. <i>Rare Metals</i> , 2011, 30, 370-374.	3.6	5

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91	Electrochemical growth of dispersing nickel oxide nanoparticles on carbon nanotubes. <i>Rare Metals</i> , 2011, 30, 661-665.	3.6	5
92	Resonant tunneling through an asymmetrical two-magnetic-barrier structure on single layer graphene. <i>Optical and Quantum Electronics</i> , 2017, 49, 1.	1.5	5
93	3D Si@Cu-Ni nano-pillars array composite as carbon/binder free anode for lithium ion battery. <i>Journal of Materials Research and Technology</i> , 2020, 9, 1549-1558.	2.6	5
94	In Situ Synthesis of the Peapod-Like Cu ₂ @Copper Foam as Anode with Excellent Cycle Stability and High Area Specific Capacity (<i>Adv. Funct. Mater.</i> 33/2021). <i>Advanced Functional Materials</i> , 2021, 31, 2170240.	7.8	5
95	Facile One-Step Preparation of 3D Nanoporous Cu/Cu ₆ Sn ₅ Microparticles as Anode Material for Lithium-Ion Batteries with Superior Lithium Storage Properties. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 5965-5973.	1.1	4
96	A Novel Sulfur-Based Terpolymer Cathode Material for Lithium-Sulfur Battery. <i>Energy Technology</i> , 2020, 8, 2000057.	1.8	3
97	Spin filtering magnetic modulation and spin-polarization switching in hybrid ferromagnet/semiconductor structures. <i>Science China: Physics, Mechanics and Astronomy</i> , 2014, 57, 1057-1062.	2.0	2
98	Designed Electrochemical and Wet-chemical Fabrication of Cu/Cu ₂ O@TiO ₂ Hybrid Nanowire Arrays for Li-ion Microbattery. <i>Chemistry Letters</i> , 2014, 43, 1625-1627.	0.7	2
99	Serial Disulfide Polymers as Cathode Materials in Lithium-Sulfur Battery: Materials Optimization and Electrochemical Characterization. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2538.	1.3	2