Shichao Zhang

List of Publications by Year
in descending order

99 papers	3,670 citations	136740 32 h-index	143772 57 g-index
99 all docs	99 docs citations	99 times ranked	5533 citing authors

#	Article	IF	Citations
1	<scp>Inâ€situ</scp> growth of ultrathin sulfur <scp>microcrystal</scp> on <scp>MXene</scp>â€based <scp>3D</scp> matrice for flexible lithiumâ€“sulfur batteries. EcoMat, 2022, 4, .	6.8	30
2	Co3O4 anchored on ionic liquid modified PAN as anode materials for flexible lithium-ion batteries. Journal of Electroanalytical Chemistry, 2022, 908, 116105.	1.9	8
3	Monolithic threeâ€dimensional hollow nanoporous <scp>Cu</scp>_x<scp>O</scp> encapsulated mesoporous Cu heterostructures with superior Li storage properties. EcoMat, 2022, 4, .	6.8	10
4	3D S@MoS2@reduced graphene oxide aerogels cathode for high-rate lithium-sulfur batteries. Journal of Alloys and Compounds, 2021, 852, 157011.	2.8	17
5	Identical cut-off voltage versus 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
6	Facile One-Step Solution-Phase Route to Synthesize Hollow Nanoporous Cu_xO Microcages on 3D Copper Foam for Superior Li Storage. ACS Sustainable Chemistry and Engineering, 2021, 9, 4363-4370.	3.2	10
7	Improved Electrocatalytic Activity of Three-Dimensional Open-Structured Co₃O₄@MnO₂ Bifunctional Catalysts of Li-O₂ Batteries by Inducing the Oriented Growth of Li₂O₂. ACS Sustainable Chemistry and Engineering, 2021, 9, 5334-5344.	3.2	15
8	A Flexible Liâ€“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
9	In Situ Synthesis of the Peapodâ€Like Cuâ€“SnO₂@Copper Foam as Anode with Excellent Cycle Stability and High Area Specific Capacity. Advanced Functional Materials, 2021, 31, 2101999.	7.8	22
10	In Situ Synthesis of the Peapodâ€Like Cuâ€“SnO₂@Copper Foam as Anode with Excellent Cycle Stability and High Area Specific Capacity (Adv. Funct. Mater. 33/2021). Advanced Functional Materials, 2021, 31, 2170240.	7.8	5
11	Graphene-Based Materials for Flexible Lithiumâ€“Sulfur Batteries. ACS Nano, 2021, 15, 13901-13923.	7.3	94
12	3D Si@Cu-Ni nano-pillars array composite as carbon/binder free anode for lithium ion battery. Journal of Materials Research and Technology, 2020, 9, 1549-1558.	2.6	5
13	ZnO quantum dot-modified rGO with enhanced electrochemical performance for lithiumâ€“sulfur batteries. RSC Advances, 2020, 10, 32966-32975.	1.7	13
14	Facile One-Step Preparation of 3D Nanoporous Cu/Cu6Sn5 Microparticles as Anode Material for Lithium-Ion Batteries with Superior Lithium Storage Properties. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5965-5973.	1.1	4
15	Serial Disulfide Polymers as Cathode Materials in Lithium-Sulfur Battery: Materials Optimization and Electrochemical Characterization. Applied Sciences (Switzerland), 2020, 10, 2538.	1.3	2
16	Facile In-Situ Synthesis of Freestanding 3D Nanoporous Cu@Cu2O Hierarchical Nanoplate Arrays as Binder-Free Integrated Anodes for High-Capacity, Long-Life Li-Ion Batteries. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 2536-2548.	1.1	8
17	Investigating the increased-capacity mechanism of porous carbon materials in lithium-ion batteries. Journal of Materials Chemistry A, 2020, 8, 14031-14042.	5.2	18
18	A Novel Sulfurâ€Based Terpolymer Cathode Material for Lithiumâ€“Sulfur Battery. Energy Technology, 2020, 8, 2000057.	1.8	3

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19	Structure-designed synthesis of 3D MoS₂anchored on ionic liquid modified rGOâ€“CNTs inspired by a honeycomb for excellent lithium storage. Journal of Materials Chemistry A, 2020, 8, 4868-4876.	5.2	14
20	Lychee-like TiO₂@TiN dual-function composite material for lithiumâ€“sulfur batteries. RSC Advances, 2020, 10, 2670-2676.	1.7	11
21	Synthesis of polyaniline-sulfur composites with different nanostructuresviaan interfacial emulsification method and a micelle template method and their properties. RSC Advances, 2020, 10, 11455-11462.	1.7	18
22	Rechargeable Naâ€“SO 2 Battery with Ethylenediamine Additive in Etherâ€Based Electrolyte. Advanced Functional Materials, 2020, 30, 2002120.	7.8	15
23	Improving cycling stability and suppressing voltage fade of layered lithium-rich cathode materials via SiO2 shell coating. Ionics, 2019, 25, 1979-1990.	1.2	11
24	Polydopamine-coated hierarchical tower-shaped carbon for high-performance lithium-sulfur batteries. Electrochimica Acta, 2019, 319, 359-365.	2.6	31
25	Sea urchin-like Co3O4@Pd Nanoneedles with 3D open-structured matrix as efficient catalytic cathode for Li-O2 batteries. Solid State Ionics, 2019, 343, 115075.	1.3	12
26	Application of nano Al2O3 particles as precipitate nucleus for preparation of high rate nickel-rich cathode materials. Journal of Power Sources, 2019, 439, 227038.	4.0	15
27	Fe₃O₄ hard templating to assemble highly wrinkled graphene sheets into hierarchical porous film for compact capacitive energy storage. RSC Advances, 2019, 9, 20107-20112.	1.7	36
28	Freestanding 3D nanoporous Cu@1D Cu₂O nanowire heterostructures: from a facile one-step protocol to robust application in Li storage. Journal of Materials Chemistry A, 2019, 7, 15089-15100.	5.2	19
29	Morphology and size controlled synthesis of the hierarchical structured Li1.2Mn0.54Ni0.13Co0.13O2 cathode materials for lithium ion batteries. Electrochimica Acta, 2019, 297, 406-416.	2.6	38
30	Temperature-induced surface reconstruction and interface structure evolution on ligament of nanoporous copper. Scientific Reports, 2018, 8, 447.	1.6	9
31	N-doped hollow urchin-like anatase TiO 2 @C composite as a novel anode for Li-ion batteries. Journal of Power Sources, 2018, 385, 10-17.	4.0	110
32	Self-assembled hierarchical porous NiMn2O4 microspheres as high performance Li-ion battery anodes. RSC Advances, 2018, 8, 41749-41755.	1.7	18
33	Rational design of a 3D MoS₂/dual-channel graphene framework hybrid as a free-standing electrode for enhanced lithium storage. Journal of Materials Chemistry A, 2018, 6, 13797-13805.	5.2	23
34	Facile Fabrication of Fe₂O₃ Nanoparticles Anchored on Carbon Nanotubes as Highâ€Performance Anode for Lithiumâ€Ion Batteries. ChemElectroChem, 2018, 5, 2458-2463.	1.7	35
35	Self-standing Li_{1.2}Mn_{0.6}Ni_{0.2}O₂/graphene membrane as a binder-free cathode for Li-ion batteries. RSC Advances, 2018, 8, 39769-39776.	1.7	6
36	Graphene-like Î´-MnO₂decorated with ultrafine CeO₂as a highly efficient catalyst for long-life lithiumâ€“oxygen batteries. Journal of Materials Chemistry A, 2017, 5, 6747-6755.	5.2	51

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37	Mesoporous Pd/Co 3 O 4 nanosheets nanoarrays as an efficient binder/carbon free cathode for rechargeable Li-O 2 batteries. Applied Surface Science, 2017, 420, 222-232.	3.1	24
38	Hierarchical porous ZnMn₂O₄microspheres assembled by nanosheets for high performance anodes of lithium ion batteries. Inorganic Chemistry Frontiers, 2017, 4, 1730-1736.	3.0	26
39	Resonant tunneling though an asymmetrical two-magnetic-barrier structure on single layer graphene. Optical and Quantum Electronics, 2017, 49, 1.	1.5	5
40	Synthesis and properties of mesoporous Zn-doped Li_{1.2}Mn_{0.54}Co_{0.13}Ni_{0.13}O₂ as cathode materials by a MOFs-assisted solvothermal method. RSC Advances, 2017, 7, 35055-35059.	1.7	14
41	Ni₃S₂ nanosheet-anchored carbon submicron tube arrays as high-performance binder-free anodes for Na-ion batteries. Inorganic Chemistry Frontiers, 2017, 4, 131-138.	3.0	22
42	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
43	Sustainable carbon-sheets and their MnOâ€“C hybrid for Li-ion batteries. RSC Advances, 2016, 6, 79066-79071.	1.7	7
44	MOF-derived, N-doped porous carbon coated graphene sheets as high-performance anodes for lithium-ion batteries. New Journal of Chemistry, 2016, 40, 9679-9683.	1.4	33
45	Glucose-assisted combustion synthesis of Li_{1.2}Ni_{0.13}Co_{0.13}Mn_{0.54}O₂ cathode materials with superior electrochemical performance for lithium-ion batteries. RSC Advances, 2016, 6, 79050-79057.	1.7	17
46	Auâ€Decorated Cracked Carbon Tube Arrays as Binderâ€Free Catalytic Cathode Enabling Guided Li₂O₂ Inner Growth for Highâ€Performance Liâ€O₂ Batteries. Advanced Functional Materials, 2016, 26, 7725-7732.	7.8	45
47	Ru-decorated knitted Co₃O₄nanowires as a robust carbon/binder-free catalytic cathode for lithiumâ€“oxygen batteries. New Journal of Chemistry, 2016, 40, 6812-6818.	1.4	20
48	Scalable preparation of silicon@graphite/carbon microspheres as high-performance lithium-ion battery anode materials. RSC Advances, 2016, 6, 69882-69888.	1.7	32
49	Controlled Growth of Li₂O₂ by Cocatalysis of Mobile Pd and Co₃O₄ Nanowire Arrays for High-Performance Liâ€“O₂ Batteries. ACS Applied Materials & Interfaces, 2016, 8, 31653-31660.	4.0	26
50	A facile one-pot oxidation-assisted dealloying protocol to massively synthesize monolithic core-shell architectured nanoporous copper@cuprous oxide nanonetworks for photodegradation of methyl orange. Scientific Reports, 2016, 6, 36084.	1.6	14
51	Fabrication of rutile TiO₂ nanorod arrays on a copper substrate for high-performance lithium-ion batteries. RSC Advances, 2016, 6, 55671-55675.	1.7	11
52	ZnO nanoparticles encapsulated in a 3D hierarchical carbon framework as anode for lithium ion battery. Electrochimica Acta, 2016, 189, 245-251.	2.6	60
53	Cu@Sn nanostructures based on light-weight current collectors for superior reversible lithium ion storage. RSC Advances, 2016, 6, 20042-20050.	1.7	6
54	Facile shape control of nano-coaxial Co₃O₄/TiO₂ arrays and the effect of the microstructure on lithium storage capability. New Journal of Chemistry, 2016, 40, 3536-3542.	1.4	8

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55	High nitrogen-containing cotton derived 3D porous carbon frameworks for high-performance supercapacitors. Scientific Reports, 2015, 5, 15388.	1.6	44
56	Mushroom-like Au/NiCo₂O₄nanohybrids as high-performance binder-free catalytic cathodes for lithiumâ€“oxygen batteries. Journal of Materials Chemistry A, 2015, 3, 5714-5721.	5.2	48
57	Carbon nanofibers/nanosheets hybrid derived from cornstalks as a sustainable anode for Li-ion batteries. Journal of Materials Chemistry A, 2015, 3, 6742-6746.	5.2	79
58	Formation of a stable carbon framework in a MnO yolkâ€“shell sphere to achieve exceptional performance for a Li-ion battery anode. Journal of Materials Chemistry A, 2015, 3, 15591-15597.	5.2	48
59	Hollow carbon-shell/carbon-nanorod arrays for high performance Li-ion batteries and supercapacitors. RSC Advances, 2015, 5, 7959-7963.	1.7	17
60	Facile solvothermal synthesis of ultrathin LiFe_xMn_{1â^'x}PO₄ nanoplates as advanced cathodes with long cycle life and superior rate capability. Journal of Materials Chemistry A, 2015, 3, 19368-19375.	5.2	35
61	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
62	Understanding Moisture and Carbon Dioxide Involved Interfacial Reactions on Electrochemical Performance of Lithiumâ€“Air Batteries Catalyzed by Gold/Manganese-Dioxide. ACS Applied Materials & Interfaces, 2015, 7, 23876-23884.	4.0	42
63	Synthesis, structure and electrochemical properties of lithium-rich cathode material Li1.2Mn0.6Ni0.2O2 microspheres. RSC Advances, 2015, 5, 81565-81572.	1.7	22
64	Nanoporous copper from dual-phase alloy families and its technology application in lithium ion batteries. Corrosion Reviews, 2015, 33, 203-231.	1.0	11
65	Hierarchical CuOâ€“TiO₂ Hollow Microspheres for Highly Efficient Photodriven Reduction of CO₂ to CH₄. ACS Sustainable Chemistry and Engineering, 2015, 3, 2381-2388.	3.2	179
66	Facile synthesis of nanostructured LiMnPO₄ as a high-performance cathode material with long cycle life and superior rate capability. RSC Advances, 2015, 5, 99632-99639.	1.7	8
67	Tips-Bundled Pt/Co₃O₄ Nanowires with Directed Peripheral Growth of Li₂O₂ as Efficient Binder/Carbon-Free Catalytic Cathode for Lithiumâ€“Oxygen Battery. ACS Catalysis, 2015, 5, 241-245.	5.5	69
68	Fewâ€Layered SnS₂ on Fewâ€Layered Reduced Graphene Oxide as Naâ€Ion Battery Anode with Ultralong Cycle Life and Superior Rate Capability. Advanced Functional Materials, 2015, 25, 481-489.	7.8	391
69	Application of Carbon Supported Pt_{core}â€“Au_{shell} Nanoparticles in Methanol Electrooxidation. Journal of Physical Chemistry C, 2014, 118, 29845-29853.	1.5	30
70	Investigation of Co3O4 nanorods supported Pd anode catalyst for methanol oxidation in alkaline solution. Journal of Energy Chemistry, 2014, 23, 801-808.	7.1	9
71	Direct Growth of Flowerâ€Like Îâ€MnO₂ on Threeâ€Dimensional Graphene for Highâ€Performance Rechargeable Liâ€O₂ Batteries. Advanced Energy Materials, 2014, 4, 1301960.	10.2	154
72	Facile synthesis of hierarchical mesoporous CuxCo3-xO4 nanosheets array on conductive substrates with high-rate performance for Li-ion batteries. Electrochimica Acta, 2014, 150, 75-82.	2.6	37

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73	One-pot synthesis of ultrafine ZnFe2O4 nanocrystals anchored on graphene for high-performance Li and Li-ion batteries. RSC Advances, 2014, 4, 7703.	1.7	41
74	Hollow nano silicon prepared by a controlled template direction and magnesiothermic reduction reaction as anode for lithium ion batteries. New Journal of Chemistry, 2014, 38, 4177.	1.4	9
75	Synthesis of Cu@Fe3O4 nanowire arrays electrode for Li-ion batteries. RSC Advances, 2014, 4, 50752-50758.	1.7	9
76	Peanut-like MnO@C coreâ€“shell composites as anode electrodes for high-performance lithium ion batteries. Nanoscale, 2014, 6, 3508.	2.8	103
77	From graphite oxide to nitrogen and sulfur co-doped few-layered graphene by a green reduction route via Chinese medicinal herbs. RSC Advances, 2014, 4, 17902.	1.7	28
78	Nitrogen-doped reduced graphene oxide for high-performance flexible all-solid-state micro-supercapacitors. Journal of Materials Chemistry A, 2014, 2, 18125-18131.	5.2	158
79	Controllable synthesis of high-performance LiMnPO₄ nanocrystals by a facile one-spot solvothermal process. Journal of Materials Chemistry A, 2014, 2, 10581-10588.	5.2	58
80	Ordered LiMPO4 (M = Fe, Mn) nanorods synthesized from NH4MPO4Â·H2O microplates by stress involved ion exchange for Li-ion batteries. CrystEngComm, 2014, 16, 2239.	1.3	13
81	MnO Nanoparticles Interdispersed in 3D Porous Carbon Framework for High Performance Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2014, 6, 12713-12718.	4.0	76
82	Spin filtering magnetic modulation and spin-polarization switching in hybrid ferromagnet/semiconductor structures. Science China: Physics, Mechanics and Astronomy, 2014, 57, 1057-1062.	2.0	2
83	Simple Synthesis of Mesoporous Carbon Nanofibers with Hierarchical Nanostructure for Ultrahigh Lithium Storage. ACS Applied Materials & Interfaces, 2014, 6, 2561-2567.	4.0	76
84	Hollow spherical carbonized polypyrrole/sulfur composite cathode materials for lithium/sulfur cells with long cycle life. Journal of Power Sources, 2014, 248, 337-342.	4.0	44
85	Designed Electrochemical and Wet-chemical Fabrication of Cu/Cu2O@TiO2 Hybrid Nanowire Arrays for Li-ion Microbattery. Chemistry Letters, 2014, 43, 1625-1627.	0.7	2
86	Hierarchical Co3O4@multiwalled carbon nanotube nanocable films with superior cyclability and high lithium storage capacity. Electrochimica Acta, 2013, 108, 651-659.	2.6	32
87	Controllable synthesis of hollow Î±-Fe2O3 nanostructures, their growth mechanism, and the morphology-reserved conversion to magnetic Fe3O4/C nanocomposites. RSC Advances, 2013, 3, 19097.	1.7	14
88	Reduced graphene oxide induced confined growth of PbTe crystals and enhanced electrochemical Li-storage properties. RSC Advances, 2013, 3, 23612.	1.7	12
89	Coaxial SnO2@TiO2 nanotube hybrids: from robust assembly strategies to potential application in Li+ storage. Journal of Materials Chemistry, 2012, 22, 11151.	6.7	66
90	Vertically Cobalt Nanoplate Arrays Based on One-Step Electrochemical Growth and Their Magnetic Properties. Journal of Physical Chemistry C, 2012, 116, 2801-2806.	1.5	21

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91	Facile fabrication of reticular polypyrroleâ€“silicon coreâ€“shell nanofibers for high performance lithium storage. Journal of Materials Chemistry, 2012, 22, 11636.	6.7	55
92	Investigation of immiscible Snâ€“Zn coatings with two-layer microstructure as anode material for Li-ion battery. Journal of Applied Electrochemistry, 2012, 42, 477-482.	1.5	8
93	Preparation and characterization of nanoporous Cu6Sn5/Cu composite by chemical dealloying of Alâ€“Cuâ€“Sn ternary alloy. Journal of Materials Science, 2012, 47, 5911-5917.	1.7	8
94	Enhanced Electrochemical Performance of Snâ€“Co Nanoarchitectured Electrode for Lithium Ion Batteries. Journal of Physical Chemistry C, 2011, 115, 23603-23609.	1.5	49
95	Influence of alloy composition on nanoporous structure by dealloying Mn-Cu ribbons. Rare Metals, 2011, 30, 370-374.	3.6	5
96	Electrochemical growth of dispersing nickel oxide nanoparticles on carbon nanotubes. Rare Metals, 2011, 30, 661-665.	3.6	5
97	Nickel Nanoconeâ€Array Supported Silicon Anode for Highâ€Performance Lithiumâ€Ion Batteries. Advanced Materials, 2010, 22, 5378-5382.	11.1	161
98	Nano-wire networks of sulfurâ€“polypyrrole composite cathode materials for rechargeable lithium batteries. Electrochemistry Communications, 2008, 10, 1819-1822.	2.3	217
99	Structure-design and theoretical-calculation for ultrasmall Co3O4 anchored into ionic liquid modified graphene as anode of flexible lithium-ion batteries. Nano Research, 0, , 1.	5.8	16