

Zhi-Cong Shi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8311276/publications.pdf>

Version: 2024-02-01

110
papers

5,711
citations

61857

43
h-index

85405

71
g-index

113
all docs

113
docs citations

113
times ranked

6650
citing authors

#	ARTICLE	IF	CITATIONS
1	Towards wearable electronic devices: A quasi-solid-state aqueous lithium-ion battery with outstanding stability, flexibility, safety and breathability. <i>Nano Energy</i> , 2018, 44, 164-173.	8.2	228
2	Self-Supported and Flexible Sulfur Cathode Enabled via Synergistic Confinement for High-Energy-Density Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2019, 31, e1902228.	11.1	216
3	One-pot synthesis of ZnFe ₂ O ₄ /C hollow spheres as superior anode materials for lithium ion batteries. <i>Chemical Communications</i> , 2011, 47, 6828.	2.2	214
4	Graphene-wrapped chromium-MOF(MIL-101)/sulfur composite for performance improvement of high-rate rechargeable Li-S batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 13509-13512.	5.2	171
5	Surface engineering of commercial Ni foams for stable Li metal anodes. <i>Energy Storage Materials</i> , 2019, 23, 547-555.	9.5	148
6	Porous Mn ₂ O ₃ microsphere as a superior anode material for lithium ion batteries. <i>RSC Advances</i> , 2012, 2, 4645.	1.7	142
7	A flexible rechargeable zinc-ion wire-shaped battery with shape memory function. <i>Journal of Materials Chemistry A</i> , 2018, 6, 8549-8557.	5.2	138
8	Controllable synthesis of spinel nano-ZnMn ₂ O ₄ via a single source precursor route and its high capacity retention as anode material for lithium ion batteries. <i>Journal of Materials Chemistry</i> , 2011, 21, 11987.	6.7	130
9	Improving the electrochemical performance of the LiNi _{0.5} Mn _{1.5} O ₄ spinel by polypyrrole coating as a cathode material for the lithium-ion battery. <i>Journal of Materials Chemistry A</i> , 2015, 3, 404-411.	5.2	130
10	Hollow Fe ₃ O ₄ /C spheres as superior lithium storage materials. <i>Journal of Power Sources</i> , 2012, 197, 305-309.	4.0	111
11	The effects of persulfate treatment on the electrochemical properties of Li[Li _{0.2} Mn _{0.5} Ni _{0.13} Co _{0.13}]O ₂ cathode material. <i>Journal of Power Sources</i> , 2013, 221, 108-113.	4.0	110
12	Dual-Phase Carbon with Co Single Atoms and Nanoparticles as a Bifunctional Oxygen Electrocatalyst for Rechargeable Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2103360.	7.8	107
13	Graphene-encapsulated sulfur (GES) composites with a core-shell structure as superior cathode materials for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 15142.	5.2	102
14	Mixed-conducting interlayer boosting the electrochemical performance of Ni-rich layered oxide cathode materials for lithium ion batteries. <i>Journal of Power Sources</i> , 2019, 421, 91-99.	4.0	101
15	Lithiophobic-lithiophilic composite architecture through co-deposition technology toward high-performance lithium metal batteries. <i>Nano Energy</i> , 2019, 63, 103854.	8.2	100
16	Rechargeable Zn-ion batteries with high power and energy densities: a two-electron reaction pathway in birnessite MnO ₂ cathode materials. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1975-1985.	5.2	99
17	Enhancing ORR/OER active sites through lattice distortion of Fe-enriched FeNi ₃ intermetallic nanoparticles doped N-doped carbon for high-performance rechargeable Zn-air battery. <i>Journal of Colloid and Interface Science</i> , 2021, 582, 977-990.	5.0	99
18	A three-dimensional LiFePO ₄ /carbon nanotubes/graphene composite as a cathode material for lithium-ion batteries with superior high-rate performance. <i>Journal of Alloys and Compounds</i> , 2015, 626, 280-286.	2.8	97

#	ARTICLE	IF	CITATIONS
37	Mn ₃ O ₄ Quantum Dots Supported on Nitrogen-Doped Partially Exfoliated Multiwall Carbon Nanotubes as Oxygen Reduction Electrocatalysts for High-Performance Zn-Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 23900-23909.	4.0	55
38	Constructing effective TiO ₂ nano-coating for high-voltage Ni-rich cathode materials for lithium ion batteries by precise kinetic control. <i>Journal of Power Sources</i> , 2020, 477, 228745.	4.0	55
39	MnO _x -Decorated Nickel-Iron Phosphides Nanosheets: Interface Modifications for Robust Overall Water Splitting at Ultra-High Current Densities. <i>Small</i> , 2022, 18, e2105803.	5.2	55
40	Heterojunction TiO ₂ @TiOF ₂ nanosheets as superior anode materials for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 5720-5729.	5.2	51
41	Facile synthesis of laminate-structured graphene sheet-Fe ₃ O ₄ nanocomposites with superior high reversible specific capacity and cyclic stability for lithium-ion batteries. <i>RSC Advances</i> , 2012, 2, 10680.	1.7	50
42	Co ₃ O ₄ Nanoparticles Anchored on Nitrogen-Doped Partially Exfoliated Multiwall Carbon Nanotubes as an Enhanced Oxygen Electrocatalyst for the Rechargeable and Flexible Solid-State Zn-Air Battery. <i>ACS Applied Energy Materials</i> , 2019, 2, 4428-4438.	2.5	47
43	Synthesis and characterization of mesoporous titanium pyrophosphate as lithium intercalation electrode materials. <i>Microporous and Mesoporous Materials</i> , 2006, 88, 232-237.	2.2	44
44	Walnut shell -Derived activated carbon: Synthesis and its application in the sulfur cathode for lithium-sulfur batteries. <i>Journal of Alloys and Compounds</i> , 2017, 718, 373-378.	2.8	44
45	Mesoporous FePO ₄ with Enhanced Electrochemical Performance as Cathode Materials of Rechargeable Lithium Batteries. <i>Electrochemical and Solid-State Letters</i> , 2005, 8, A396.	2.2	43
46	Discharge and corrosion behaviour of AP65 magnesium anode plates with different rolling reductions. <i>RSC Advances</i> , 2017, 7, 53226-53235.	1.7	43
47	Sub-micrometer-sized LiMn _{1.5} Ni _{0.5} O ₄ spheres as high rate cathode materials for long-life lithium ion batteries. <i>Electrochemistry Communications</i> , 2013, 27, 92-95.	2.3	41
48	Facile one-pot synthesis of low cost MnO ₂ nanosheet/Super P Li composites with high oxygen reduction reaction activity for Zn-air batteries. <i>Journal of Power Sources</i> , 2020, 448, 227385.	4.0	37
49	AZ31 magnesium alloy with ultrafine grains as the anode for Mg-air battery. <i>Electrochimica Acta</i> , 2021, 378, 138135.	2.6	37
50	Self-supported Zn ₃ P ₂ nanowires-assembly bundles grafted on Ti foil as an advanced integrated electrodes for lithium/sodium ion batteries with high performances. <i>Journal of Alloys and Compounds</i> , 2017, 724, 932-939.	2.8	36
51	Synergies of the crystallinity and conductive agents on the electrochemical properties of the hollow Fe ₃ O ₄ spheres. <i>Electrochimica Acta</i> , 2012, 76, 495-503.	2.6	35
52	Facile low-temperature synthesis of hematite quantum dots anchored on a three-dimensional ultra-porous graphene-like framework as advanced anode materials for asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11247-11255.	5.2	35
53	Layered GeP-black P(Ge ₂ P ₃): An advanced binary-phase anode for Li/Na-storage. <i>Ceramics International</i> , 2019, 45, 15711-15714.	2.3	32
54	Protonic membrane for fuel cell for co-generation of power and ethylene. <i>Journal of Power Sources</i> , 2008, 176, 122-127.	4.0	31

#	ARTICLE	IF	CITATIONS
55	Rechargeable Aqueous Mn-Metal Battery Enabled by Inorganic-Organic Interfaces. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	31
56	Improvement in capacity retention of cathode material for high power density lithium ion batteries: The route of surface coating. <i>Applied Energy</i> , 2017, 194, 540-548.	5.1	30
57	Ni(OH) ₂ nanoflakes supported on 3D hierarchically nanoporous gold/Ni foam as superior electrodes for supercapacitors. <i>Science China Materials</i> , 2018, 61, 353-362.	3.5	29
58	Enhanced Electrocatalytic Stability of Platinum Nanoparticles Supported on Sulfur-Doped Carbon using in-situ Solution Plasma. <i>Scientific Reports</i> , 2019, 9, 12704.	1.6	29
59	Flexible free-standing sulfurized polyacrylonitrile electrode for stable Li/Na storage. <i>Electrochimica Acta</i> , 2020, 333, 135493.	2.6	29
60	A P3-Type K _{1/2} Mn _{5/6} Mg _{1/12} Ni _{1/12} O ₂ Cathode Material for Potassium-Ion Batteries with High Structural Reversibility Secured by the Mg-Ni Pinning Effect. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 28369-28377.	4.0	29
61	Nano-sized cathode material LiMn _{0.5} Fe _{0.5} PO ₄ /C synthesized via improved sol-gel routine and its magnetic and electrochemical properties. <i>Electrochimica Acta</i> , 2017, 255, 205-211.	2.6	27
62	Poly-active centric Co ₃ O ₄ -CeO ₂ /Co-N-C composites as superior oxygen reduction catalysts for Zn-air batteries. <i>Science China Materials</i> , 2021, 64, 73-84.	3.5	27
63	Pseudocapacitive Transparent/Flexible Supercapacitor based on Graphene wrapped Ni(OH) ₂ Nanosheet Transparent Film Produced using Scalable Bio-inspired Methods. <i>Electrochimica Acta</i> , 2016, 219, 61-69.	2.6	26
64	3D hexapod-shaped Co-ZIFs-S derived co nanoparticles embedded into nitrogen and sulfur co-doped carbon decorated with ruthenium nanoparticles as efficient catalyst for rechargeable lithium oxygen battery. <i>Nano Energy</i> , 2022, 91, 106644.	8.2	24
65	γ-MnO ₂ nanowires supported on carbon black with oxygen-containing functional groups for enhanced electrocatalytic oxygen reduction reaction. <i>Journal of Alloys and Compounds</i> , 2020, 846, 156396.	2.8	23
66	SiO ₂ nanofiber composite gel polymer electrolyte by in-situ polymerization for stable Li metal batteries. <i>Chinese Chemical Letters</i> , 2023, 34, 107370.	4.8	23
67	Graphene-hollow-cubes with network-faces assembled a 3D micro-structured transparent and free-standing film for high performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 16803-16811.	5.2	22
68	NaCl multistage-recrystallization-induced formation of 3D micro-structured ribbon-like graphene based films for high performance flexible/transparent supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14595-14603.	5.2	21
69	O ₃ -Type NaCrO ₂ as a Superior Cathode Material for Sodium/Potassium-Ion Batteries Ensured by High Structural Reversibility. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 22635-22645.	4.0	20
70	Facile fabrication of graphene/nickel oxide composite with superior supercapacitance performance by using alcohols-reduced graphene as substrate. <i>Journal of Alloys and Compounds</i> , 2015, 644, 165-171.	2.8	19
71	CoFe nanoparticles dispersed in Co/Fe-N-C support with meso- and macroporous structures as the high-performance catalyst boosting the oxygen reduction reaction for Al/Mg-air batteries. <i>Journal of Power Sources</i> , 2022, 517, 230707.	4.0	19
72	Heterogeneous Bimetallic Organic Coordination Polymer-Derived Co/Fe@NC Bifunctional Catalysts for Rechargeable Li-O ₂ Batteries. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 5459-5467.	4.0	19

#	ARTICLE	IF	CITATIONS
73	Rational synthesis of MnO ₂ @CMK/S composite as cathode materials for lithium-sulfur batteries. <i>Materials Letters</i> , 2017, 195, 236-239.	1.3	18
74	Synthesis of Co Ni ₁ -S ₂ electrode material with a greatly enhanced electrochemical performance for supercapacitors by in-situ solid-state transformation. <i>Journal of Alloys and Compounds</i> , 2019, 803, 950-957.	2.8	18
75	Ternary Cu ₂ P ₇ /CuP ₂ /C composite: A high-performance multi-phase anode material for Li/Na-ion batteries endowed by heterointerfaces. <i>Journal of Alloys and Compounds</i> , 2019, 803, 804-811.	2.8	18
76	Constructing High Conductive Composite Coating with TiN and Polypyrrole to Improve the Performance of LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ at High Cutoff Voltage of 4.5 V. <i>ACS Applied Energy Materials</i> , 2021, 4, 10012-10024.	2.5	17
77	Effect of LiTFSI and LiFSI on Cycling Performance of Lithium Metal Batteries Using Thermoplastic Polyurethane/Halloysite Nanotubes Solid Electrolyte. <i>Acta Metallurgica Sinica (English Letters)</i> , 2021, 34, 359-372.	1.5	16
78	Superorganophilic MAF-6/PP Composite Separator Boosts Lithium Metal Anode Performance. <i>Energy Storage Materials</i> , 2021, 37, 387-395.	9.5	16
79	Knitting a sweater with UV-induced in situ polymerization of poly(pyrrole-co-citral nitrile) on Ni-rich layer oxide cathode materials for lithium ion batteries. <i>Journal of Power Sources</i> , 2022, 520, 230768.	4.0	16
80	Enhanced ionic conductivity of Li _{3.5} Si _{0.5} P _{0.5} O ₄ with addition of lithium borate. <i>Solid State Ionics</i> , 2015, 283, 109-114.	1.3	14
81	P3-Type K _{0.45} Co _{1/12} Mg _{1/12} Mn _{5/6} O ₂ as a superior cathode material for potassium-ion batteries with high structural reversibility ensured by Co-Mg Co-substitution. <i>Journal of Materials Chemistry A</i> , 2021, 9, 17261-17269.	5.2	14
82	Recent Progress and Challenges in Multivalent Metal-Ion Hybrid Capacitors. <i>Batteries and Supercaps</i> , 2021, 4, 1201-1220.	2.4	14
83	NiS ₂ nanosheet arrays on stainless steel foil as binder-free anode for high-power sodium-ion batteries. <i>Rare Metals</i> , 2022, 41, 1294-1303.	3.6	14
84	Simultaneous heterostructure engineering and Mn doping modulation of Ni ₂ P nanosheet arrays for enhanced electrocatalytic water splitting. <i>Science China Materials</i> , 2022, 65, 1814-1824.	3.5	14
85	Improving the formation and protective properties of La-conversion coatings on brass by use of La ₂ O ₃ nanoparticle incorporation with electrodeposition. <i>Corrosion Science</i> , 2011, 53, 3821-3831.	3.0	13
86	Tri-functional coating to enhance the capacity retention of LiNi _{0.5} Mn _{1.5} O ₄ for high power lithium ion battery. <i>Materials Letters</i> , 2018, 214, 68-71.	1.3	13
87	Nanocomposites LiMn _x Fe _{1-x} PO ₄ /C synthesized via freeze drying assisted sol-gel routine and their magnetic and electrochemical properties. <i>Journal of Alloys and Compounds</i> , 2019, 779, 339-346.	2.8	13
88	Building a stable artificial solid electrolyte interphase on lithium metal anodes toward long-life Li-O ₂ batteries. <i>Journal of Power Sources</i> , 2022, 540, 231603.	4.0	13
89	Improved rate and cycle performance of nano-sized 5LiFePO ₄ ·Li ₃ V ₂ (PO ₄) ₃ /C via high-energy ball milling assisted carbothermal reduction. <i>Journal of Alloys and Compounds</i> , 2017, 719, 281-287.	2.8	12
90	Nanocomposite LiFePO ₄ ·Li ₃ V ₂ (PO ₄) ₃ /C synthesized by freeze-drying assisted sol-gel method and its magnetic and electrochemical properties. <i>Science China Materials</i> , 2018, 61, 39-47.	3.5	10

#	ARTICLE	IF	CITATIONS
91	Gel formation and transformation of Moxidectin during the anti-solvent crystallization. <i>Journal of Crystal Growth</i> , 2017, 469, 8-12.	0.7	9
92	Lithium-Sulfur Batteries: Self-Supported and Flexible Sulfur Cathode Enabled via Synergistic Confinement for High-Energy-Density Lithium-Sulfur Batteries (<i>Adv. Mater.</i> 33/2019). <i>Advanced Materials</i> , 2019, 31, 1970236.	11.1	8
93	Cation-disorder zinc blende $Zn_{0.5}Ge_{0.5}P$ compound and $Zn_{0.5}Ge_{0.5}P@TiC$ composite as high-performance anodes for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9124-9133.	5.2	8
94	Dynamic behavior of binary component ion-exchange displacement chromatography of proteins visualized by confocal laser scanning microscopy. <i>Journal of Chromatography A</i> , 2012, 1257, 48-57.	1.8	7
95	AS61 Magnesium Alloy with Nano-Scale Mg_2Sn Phase as a Novel Anode for Primary Aqueous Magnesium Battery. <i>Journal of the Electrochemical Society</i> , 2021, 168, 100537.	1.3	7
96	Studies of the conversion coatings formed by combined use of lanthanum salt and benzotriazole on commercial brass. <i>Anti-Corrosion Methods and Materials</i> , 2012, 59, 32-38.	0.6	6
97	Cu ₂ P7-black P-MWCNTs (Cu ₅ /MWCNTs): An advanced hybrid anode for Li/Na-ion batteries. <i>Materials Letters</i> , 2019, 253, 263-267.	1.3	6
98	GO@Se@Ni Cathode Materials for Lithium-Selenium Battery. <i>Journal of the Electrochemical Society</i> , 2019, 166, A5259-A5264.	1.3	6
99	Improving Li Plating Behaviors Through Cu-Sn Alloy-Coated Current Collector for Dendrite-Free Lithium Metal Anodes. <i>Acta Metallurgica Sinica (English Letters)</i> , 2021, 34, 354-358.	1.5	6
100	Three-dimensional hierarchical Ca ₃ Co ₄ O ₉ hollow fiber network as high performance anode material for lithium-ion battery. <i>Science China Technological Sciences</i> , 2021, 64, 673-679.	2.0	5
101	Proton conductive YSZ-phosphate composite electrolyte for H ₂ S SOFC. <i>Ceramics International</i> , 2010, 36, 2163-2167.	2.3	4
102	Studies of the Conversion Coatings Formed by Combined Use of Lanthanum Salt and Benzotriazole on Commercial Brass. <i>Advanced Materials Research</i> , 0, 239-242, 214-218.	0.3	4
103	Synthesis of sub-micrometer lithium iron phosphate particles using supercritical hydrothermal method for lithium ion batteries. <i>Journal of Shanghai Jiaotong University (Science)</i> , 2012, 17, 517-522.	0.5	4
104	Three-dimensional graphene-wrapped porous carbon/sulfur composite for cathode of lithium-sulfur battery. <i>SN Applied Sciences</i> , 2020, 2, 1.	1.5	3
105	Mixed ionic/electronic conducting nanosheet arrays for stable lithium storage. <i>Nanotechnology</i> , 2021, 32, 475703.	1.3	3
106	Improving the protective properties of La-conversion coating on brass surface by the combined use of La ₂ O ₃ nanoparticles incorporation and electrodeposition. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2011, 62, 1133-1140.	0.8	2
107	Synthesis of spinel LiMn ₂ O ₄ microspheres with durable high rate capability. <i>Transactions of Nonferrous Metals Society of China</i> , 2012, 22, 2541-2547.	1.7	2
108	Spinel Oxide Cathode Material for High Power Lithium Ion Batteries for Electrical Vehicles. <i>Energy Procedia</i> , 2016, 88, 689-692.	1.8	1

#	ARTICLE	IF	CITATIONS
109	In situ growth of NiS ₂ nanosheet array on Ni foil as cathode to improve the performance of lithium/sodium-sulfur batteries. Science China Technological Sciences, 0, , 1.	2.0	0
110	Rechargeable Aqueous Mn-Metal Battery Enabled by Inorganic-Organic Interfaces. Angewandte Chemie, 2022, 134, .	1.6	0