Zhi-Cong Shi

List of Publications by Year
in descending order

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110 papers	5,711 citations	61984 43 h-index	85541 71 g-index
113 all docs	113 docs citations	113 times ranked	6650 citing authors

#	Article	IF	Citations
1	SiO2 nanofiber composite gel polymer electrolyte by in-situ polymerization for stable Li metal batteries. Chinese Chemical Letters, 2023, 34, 107370.	9.0	23
2	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. Nano Energy, 2022, 91, 106644.	16.0	24
3	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. Journal of Power Sources, 2022, 517, 230707.	7.8	19
4	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. Journal of Power Sources, 2022, 520, 230768.	7.8	16
5	NiS2 nanosheet arrays on stainless steel foil as binder-free anode for high-power sodium-ion batteries. Rare Metals, 2022, 41, 1294-1303.	7.1	14
6	Heterogeneous Bimetallic Organic Coordination Polymer-Derived Co/Fe@NC Bifunctional Catalysts for Rechargeable Liâ€“O₂ Batteries. ACS Applied Materials & Interfaces, 2022, 14, 5459-5467.	8.0	19
7	Simultaneous heterostructure engineering and Mn doping modulation of Ni2P nanosheet arrays for enhanced electrocatalytic water splitting. Science China Materials, 2022, 65, 1814-1824.	6.3	14
8	MnO_xâ€Decorated Nickelâ€Iron Phosphides Nanosheets: Interface Modifications for Robust Overall Water Splitting at Ultraâ€High Current Densities. Small, 2022, 18, e2105803.	10.0	55
9	Interface Engineering of NixSy@MnOxHy Nanorods to Efficiently Enhance Overall-Water-Splitting Activity and Stability. Nano-Micro Letters, 2022, 14, 120.	27.0	79
10	Rechargeable Aqueous Mnâ€Metal Battery Enabled by Inorganicâ€“Organic Interfaces. Angewandte Chemie - International Edition, 2022, 61, .	13.8	31
11	Rechargeable Aqueous Mnâ€Metal Battery Enabled by Inorganicâ€“Organic Interfaces. Angewandte Chemie, 2022, 134, .	2.0	0
12	Building a stable artificial solid electrolyte interphase on lithium metal anodes toward long-life Liâ€“O2 batteries. Journal of Power Sources, 2022, 540, 231603.	7.8	13
13	Improving Li Plating Behaviors Through Cuâ€“Sn Alloy-Coated Current Collector for Dendrite-Free Lithium Metal Anodes. Acta Metallurgica Sinica (English Letters), 2021, 34, 354-358.	2.9	6
14	Three-dimensional hierarchical Ca3Co4O9 hollow fiber network as high performance anode material for lithium-ion battery. Science China Technological Sciences, 2021, 64, 673-679.	4.0	5
15	Poly-active centric Co3O4-CeO2/Co-N-C composites as superior oxygen reduction catalysts for Zn-air batteries. Science China Materials, 2021, 64, 73-84.	6.3	27
16	Enhancing ORR/OER active sites through lattice distortion of Fe-enriched FeNi3 intermetallic nanoparticles doped N-doped carbon for high-performance rechargeable Zn-air battery. Journal of Colloid and Interface Science, 2021, 582, 977-990.	9.4	99
17	Cation-disorder zinc blende Zn_{0.5}Ge_{0.5}P compound and Zn_{0.5}Ge_{0.5}Pâ€“TiCâ€“C composite as high-performance anodes for Li-ion batteries. Journal of Materials Chemistry A, 2021, 9, 9124-9133.	10.3	8
18	P3-Type K_{0.45}Co_{1/12}Mg_{1/12}Mn_{5/6}O₂ as a superior cathode material for potassium-ion batteries with high structural reversibility ensured by Coâ€“Mg Co-substitution. Journal of Materials Chemistry A, 2021, 9, 17261-17269.	10.3	14

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19	Ultrasonic Plasma Engineering Toward Facile Synthesis of Single-Atom M-N4/N-Doped Carbon (Mâ€‰=â€‰Fe,) Tj ETQq1 1 0.784314 rg 13, 60.	27.0	63
20	Heterojunction TiO₂@TiOF₂ nanosheets as superior anode materials for sodium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 5720-5729.	10.3	51
21	Effect of LiTFSI and LiFSI on Cycling Performance of Lithium Metal Batteries Using Thermoplastic Polyurethane/Halloysite Nanotubes Solid Electrolyte. Acta Metallurgica Sinica (English Letters), 2021, 34, 359-372.	2.9	16
22	Recent Progress and Challenges in Multivalent Metalâ€Ion Hybrid Capacitors. Batteries and Supercaps, 2021, 4, 1201-1220.	4.7	14
23	O3-Type NaCrO₂ as a Superior Cathode Material for Sodium/Potassium-Ion Batteries Ensured by High Structural Reversibility. ACS Applied Materials & Interfaces, 2021, 13, 22635-22645.	8.0	20
24	The critical role of inorganic nanofillers in solid polymer composite electrolyte for Li⁺ transportation. , 2021, 3, 482-508.		68
25	Superorganophilic MAF-6/PP Composite Separator Boosts Lithium Metal Anode Performance. Energy Storage Materials, 2021, 37, 387-395.	18.0	16
26	AZ31 magnesium alloy with ultrafine grains as the anode for Mg-air battery. Electrochimica Acta, 2021, 378, 138135.	5.2	37
27	A P3-Type K_{1/2}Mn_{5/6}Mg_{1/12}Ni_{1/12}O₂ Cathode Material for Potassium-Ion Batteries with High Structural Reversibility Secured by the Mgâ€“Ni Pinning Effect. ACS Applied Materials & Interfaces, 2021, 13, 28369-28377.	8.0	29
28	Lithium Host:Advanced architecture components for lithium metal anode. Energy Storage Materials, 2021, 38, 276-298.	18.0	89
29	Dualâ€Phasic Carbon with Co Single Atoms and Nanoparticles as a Bifunctional Oxygen Electrocatalyst for Rechargeable Znâ€“Air Batteries. Advanced Functional Materials, 2021, 31, 2103360.	14.9	107
30	Constructing High Conductive Composite Coating with TiN and Polypyrrole to Improve the Performance of LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ at High Cutoff Voltage of 4.5 V. ACS Applied Energy Materials, 2021, 4, 10012-10024.	5.1	17
31	Mixed ionic/electronic conducting nanosheet arrays for stable lithium storage. Nanotechnology, 2021, 32, 475703.	2.6	3
32	AS61 Magnesium Alloy with Nano-Scale Mg₂Sn Phase as a Novel Anode for Primary Aqueous Magnesium Battery. Journal of the Electrochemical Society, 2021, 168, 100537.	2.9	7
33	Facile one-pot synthesis of low cost MnO2 nanosheet/Super P Li composites with high oxygen reduction reaction activity for Zn-air batteries. Journal of Power Sources, 2020, 448, 227385.	7.8	37
34	Rechargeable Zn-ion batteries with high power and energy densities: a two-electron reaction pathway in birnessite MnO₂ cathode materials. Journal of Materials Chemistry A, 2020, 8, 1975-1985.	10.3	99
35	Boosting the electrochemical performance of 3D composite lithium metal anodes through synergistic structure and interface engineering. Energy Storage Materials, 2020, 26, 56-64.	18.0	73
36	Flexible free-standing sulfurized polyacrylonitrile electrode for stable Li/Na storage. Electrochimica Acta, 2020, 333, 135493.	5.2	29

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37	Constructing effective TiO2 nano-coating for high-voltage Ni-rich cathode materials for lithium ion batteries by precise kinetic control. Journal of Power Sources, 2020, 477, 228745.	7.8	55
38	Î´-MnO2 nanowires supported on carbon black with oxygen-containing functional groups for enhanced electrocatalytic oxygen reduction reaction. Journal of Alloys and Compounds, 2020, 846, 156396.	5.5	23
39	Coupling of triporosity and strong Auâ€“Li interaction to enable dendrite-free lithium plating/stripping for long-life lithium metal anodes. Journal of Materials Chemistry A, 2020, 8, 18094-18105.	10.3	56
40	A flexible composite solid electrolyte with a highly stable interphase for dendrite-free and durable all-solid-state lithium metal batteries. Journal of Materials Chemistry A, 2020, 8, 18043-18054.	10.3	77
41	Three-dimensional graphene-wrapped porous carbon/sulfur composite for cathode of lithiumâ€“sulfur battery. SN Applied Sciences, 2020, 2, 1.	2.9	3
42	Lithiumâ€“Sulfur Batteries: Selfâ€Supported and Flexible Sulfur Cathode Enabled via Synergistic Confinement for Highâ€Energyâ€Density Lithiumâ€“Sulfur Batteries (Adv. Mater. 33/2019). Advanced Materials, 2019, 31, 1970236.	21.0	8
43	Layered GeP-black P(Ge2P3): An advanced binary-phase anode for Li/Na-storage. Ceramics International, 2019, 45, 15711-15714.	4.8	32
44	Wrought Mg-Al-Pb-RE alloy strips as the anodes for Mg-air batteries. Journal of Power Sources, 2019, 436, 226855.	7.8	70
45	Synthesis of Co Ni1-S2 electrode material with a greatly enhanced electrochemical performance for supercapacitors by in-situ solid-state transformation. Journal of Alloys and Compounds, 2019, 803, 950-957.	5.5	18
46	Cu2P7-black P-MWCNTs (CuP5/MWCNTs): An advanced hybrid anode for Li/Na-ion batteries. Materials Letters, 2019, 253, 263-267.	2.6	6
47	Enhanced Electrocatalytic Stability of Platinum Nanoparticles Supported on Sulfur-Doped Carbon using in-situ Solution Plasma. Scientific Reports, 2019, 9, 12704.	3.3	29
48	Superior Stability Secured by a Four-Phase Cathode Electrolyte Interface on a Ni-Rich Cathode for Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 36742-36750.	8.0	76
49	Li Alginate-Based Artificial SEI Layer for Stable Lithium Metal Anodes. ACS Applied Materials & Interfaces, 2019, 11, 37726-37731.	8.0	60
50	GO@Se@Ni Cathode Materials for Lithium-Selenium Battery. Journal of the Electrochemical Society, 2019, 166, A5259-A5264.	2.9	6
51	Selfâ€Supported and Flexible Sulfur Cathode Enabled via Synergistic Confinement for Highâ€Energyâ€Density Lithiumâ€“Sulfur Batteries. Advanced Materials, 2019, 31, e1902228.	21.0	216
52	Ternary Cu2P7/CuP2/C composite: A high-performance multi-phase anode material for Li/Na-ion batteries endowed by heterointerfaces. Journal of Alloys and Compounds, 2019, 803, 804-811.	5.5	18
53	Lithiophobic-lithiophilic composite architecture through co-deposition technology toward high-performance lithium metal batteries. Nano Energy, 2019, 63, 103854.	16.0	100
54	Co₃O₄ Nanoparticles Anchored on Nitrogen-Doped Partially Exfoliated Multiwall Carbon Nanotubes as an Enhanced Oxygen Electrocatalyst for the Rechargeable and Flexible Solid-State Znâ€“Air Battery. ACS Applied Energy Materials, 2019, 2, 4428-4438.	5.1	47

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55	Mixed-conducting interlayer boosting the electrochemical performance of Ni-rich layered oxide cathode materials for lithium ion batteries. Journal of Power Sources, 2019, 421, 91-99.	7.8	101
56	Surface engineering of commercial Ni foams for stable Li metal anodes. Energy Storage Materials, 2019, 23, 547-555.	18.0	148
57	Nanocomposites LiMnxFe1-xPO4/C synthesized via freeze drying assisted sol-gel routine and their magnetic and electrochemical properties. Journal of Alloys and Compounds, 2019, 779, 339-346.	5.5	13
58	A flexible rechargeable zinc-ion wire-shaped battery with shape memory function. Journal of Materials Chemistry A, 2018, 6, 8549-8557.	10.3	138
59	Ni(OH)2 nanoflakes supported on 3D hierarchically nanoporous gold/Ni foam as superior electrodes for supercapacitors. Science China Materials, 2018, 61, 353-362.	6.3	29
60	Nanocomposite LiFePO4Â·Li3V2(PO4)3/C synthesized by freeze-drying assisted sol-gel method and its magnetic and electrochemical properties. Science China Materials, 2018, 61, 39-47.	6.3	10
61	Tri-functional coating to enhance the capacity retention of LiNi 0.5 Mn 1.5 O 4 for high power lithium ion battery. Materials Letters, 2018, 214, 68-71.	2.6	13
62	Hierarchically Bicontinuous Porous Copper as Advanced 3D Skeleton for Stable Lithium Storage. ACS Applied Materials & Interfaces, 2018, 10, 13552-13561.	8.0	95
63	Towards wearable electronic devices: A quasi-solid-state aqueous lithium-ion battery with outstanding stability, flexibility, safety and breathability. Nano Energy, 2018, 44, 164-173.	16.0	228
64	Mn₃O₄ Quantum Dots Supported on Nitrogen-Doped Partially Exfoliated Multiwall Carbon Nanotubes as Oxygen Reduction Electrocatalysts for High-Performance Znâ€“Air Batteries. ACS Applied Materials & Interfaces, 2018, 10, 23900-23909.	8.0	55
65	Effect of crystallographic orientation on the discharge and corrosion behaviour of AP65 magnesium alloy anodes. Corrosion Science, 2018, 144, 107-126.	6.6	70
66	Rational synthesis of MnO2@CMK/S composite as cathode materials for lithiumâ€“sulfur batteries. Materials Letters, 2017, 195, 236-239.	2.6	18
67	NaCl multistage-recrystallization-induced formation of 3D micro-structured ribbon-like graphene based films for high performance flexible/transparent supercapacitors. Journal of Materials Chemistry A, 2017, 5, 14595-14603.	10.3	21
68	Gel formation and transformation of Moxidectin during the anti-solvent crystallization. Journal of Crystal Growth, 2017, 469, 8-12.	1.5	9
69	Improved rate and cycle performance of nano-sized 5LiFePO 4 Â·Li 3 V 2 (PO 4) 3 /C via high-energy ball milling assisted carbothermal reduction. Journal of Alloys and Compounds, 2017, 719, 281-287.	5.5	12
70	Walnut shell â€“ Derived activated carbon: Synthesis and its application in the sulfur cathode for lithiumâ€“sulfur batteries. Journal of Alloys and Compounds, 2017, 718, 373-378.	5.5	44
71	Nano-sized cathode material LiMn0.5Fe0.5PO4/C synthesized via improved sol-gel routine and its magnetic and electrochemical properties. Electrochimica Acta, 2017, 255, 205-211.	5.2	27
72	Graphene-hollow-cubes with network-faces assembled a 3D micro-structured transparent and free-standing film for high performance supercapacitors. Journal of Materials Chemistry A, 2017, 5, 16803-16811.	10.3	22

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73	Discharge and corrosion behaviour of AP65 magnesium anode plates with different rolling reductions. RSC Advances, 2017, 7, 53226-53235.	3.6	43
74	Self-supported Zn3P2 nanowires-assembly bundles grafted on Ti foil as an advanced integrated electrodes for lithium/sodium ion batteries with high performances. Journal of Alloys and Compounds, 2017, 724, 932-939.	5.5	36
75	Improvement in capacity retention of cathode material for high power density lithium ion batteries: The route of surface coating. Applied Energy, 2017, 194, 540-548.	10.1	30
76	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. Journal of Materials Chemistry A, 2016, 4, 11247-11255.	10.3	35
77	Pseudocapacitive Transparent/Flexible Supercapacitor based on Graphene wrapped Ni(OH) 2 Nanosheet Transparent Film Produced using Scalable Bio-inspired Methods. Electrochimica Acta, 2016, 219, 61-69.	5.2	26
78	Spinel Oxide Cathode Material for High Power Lithium Ion Batteries for Electrical Vehicles. Energy Procedia, 2016, 88, 689-692.	1.8	1
79	Nitrogen-Doped Carbon-Encapsulated SnO₂@Sn Nanoparticles Uniformly Grafted on Three-Dimensional Graphene-like Networks as Anode for High-Performance Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 197-207.	8.0	84
80	Enhanced ionic conductivity of Li3.5Si0.5P0.5O4 with addition of lithium borate. Solid State Ionics, 2015, 283, 109-114.	2.7	14
81	Facile fabrication of graphene/nickel oxide composite with superior supercapacitance performance by using alcohols-reduced graphene as substrate. Journal of Alloys and Compounds, 2015, 644, 165-171.	5.5	19
82	A three-dimensional LiFePO4/carbon nanotubes/graphene composite as a cathode material for lithium-ion batteries with superior high-rate performance. Journal of Alloys and Compounds, 2015, 626, 280-286.	5.5	97
83	Improving the electrochemical performance of the LiNi_{0.5}Mn_{1.5}O₄spinel by polypyrrole coating as a cathode material for the lithium-ion battery. Journal of Materials Chemistry A, 2015, 3, 404-411.	10.3	130
84	Graphene-wrapped chromium-MOF(MIL-101)/sulfur composite for performance improvement of high-rate rechargeable Liâ€“S batteries. Journal of Materials Chemistry A, 2014, 2, 13509-13512.	10.3	171
85	Novel Germanium/Polypyrrole Composite for High Power Lithium-ion Batteries. Scientific Reports, 2014, 4, 6095.	3.3	63
86	Graphene-encapsulated sulfur (GES) composites with a coreâ€“shell structure as superior cathode materials for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2013, 1, 15142.	10.3	102
87	Sub-micrometer-sized LiMn1.5Ni0.5O4 spheres as high rate cathode materials for long-life lithium ion batteries. Electrochemistry Communications, 2013, 27, 92-95.	4.7	41
88	Porous LiMn2O4 microspheres as durable high power cathode materials for lithium ion batteries. Journal of Materials Chemistry A, 2013, 1, 8170.	10.3	65
89	The effects of persulfate treatment on the electrochemical properties of Li[Li0.2Mn0.54Ni0.13Co0.13]O2 cathode material. Journal of Power Sources, 2013, 221, 108-113.	7.8	110
90	Studies of the conversion coatings formed by combined use of lanthanum salt and benzotriazole on commercial brass. Anti-Corrosion Methods and Materials, 2012, 59, 32-38.	1.5	6

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91	Dynamic behavior of binary component ion-exchange displacement chromatography of proteins visualized by confocal laser scanning microscopy. Journal of Chromatography A, 2012, 1257, 48-57.	3.7	7
92	Porous Mn2O3 microsphere as a superior anode material for lithium ion batteries. RSC Advances, 2012, 2, 4645.	3.6	142
93	Several highly efficient catalysts for Pt-free and FTO-free counter electrodes of dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 4009.	6.7	73
94	Synthesis of spinel LiMn2O4 microspheres with durable high rate capability. Transactions of Nonferrous Metals Society of China, 2012, 22, 2541-2547.	4.2	2
95	Facile synthesis of laminate-structured graphene sheetâ€“Fe3O4 nanocomposites with superior high reversible specific capacity and cyclic stability for lithium-ion batteries. RSC Advances, 2012, 2, 10680.	3.6	50
96	Synthesis of sub-micrometer lithium iron phosphate particles using supercritical hydrothermal method for lithium ion batteries. Journal of Shanghai Jiaotong University (Science), 2012, 17, 517-522.	0.9	4
97	Synergies of the crystallinity and conductive agents on the electrochemical properties of the hollow Fe3O4 spheres. Electrochimica Acta, 2012, 76, 495-503.	5.2	35
98	Hollow Fe3O4/C spheres as superior lithium storage materials. Journal of Power Sources, 2012, 197, 305-309.	7.8	111
99	One-pot synthesis of ZnFe2O4/C hollow spheres as superior anode materials for lithium ion batteries. Chemical Communications, 2011, 47, 6828.	4.1	214
100	Controllable synthesis of spinel nano-ZnMn2O4via a single source precursor route and its high capacity retention as anode material for lithium ion batteries. Journal of Materials Chemistry, 2011, 21, 11987.	6.7	130
101	Improving the formation and protective properties of La-conversion coatings on brass by use of La2O3 nanoparticle incorporation with electrodeposition. Corrosion Science, 2011, 53, 3821-3831.	6.6	13
102	Inhibition of brass corrosion in sodium chloride solutions by self-assembled silane films. Corrosion Science, 2011, 53, 4273-4281.	6.6	87
103	Improving the protective properties of Laâ€conversion coating on Î±â€brass surface by the combined use of La₂O₃ nanoparticles incorporation and electrodeposition. Materials and Corrosion - Werkstoffe Und Korrosion, 2011, 62, 1133-1140.	1.5	2
104	Proton conductive YSZ-phosphate composite electrolyte for H2S SOFC. Ceramics International, 2010, 36, 2163-2167.	4.8	4
105	Protonic membrane for fuel cell for co-generation of power and ethylene. Journal of Power Sources, 2008, 176, 122-127.	7.8	31
106	Synthesis, characterization and electrochemical performance of mesoporous FePO4 as cathode material for rechargeable lithium batteries. Electrochimica Acta, 2008, 53, 2665-2673.	5.2	81
107	Synthesis and characterization of mesoporous titanium pyrophosphate as lithium intercalation electrode materials. Microporous and Mesoporous Materials, 2006, 88, 232-237.	4.4	44
108	Mesoporous FePO[sub 4] with Enhanced Electrochemical Performance as Cathode Materials of Rechargeable Lithium Batteries. Electrochemical and Solid-State Letters, 2005, 8, A396.	2.2	43

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109	Studies of the Conversion Coatings Formed by Combined Use of Lanthanum Salt and Benzotriazole on Commercial Brass. Advanced Materials Research, 0, 239-242, 214-218.	0.3	4
110	In situ growth of NiS2 nanosheet array on Ni foil as cathode to improve the performance of lithium/sodium-sulfur batteries. Science China Technological Sciences, 0, , 1.	4.0	0