Henghui Zhou

List of Publications by Year
in descending order

92 papers	5,750 citations	70961 41 h-index	76769 74 g-index
92 all docs	92 docs citations	92 times ranked	7553 citing authors

#	Article	IF	Citations
1	Nanoporous Anatase TiO₂ Mesocrystals: Additive-Free Synthesis, Remarkable Crystalline-Phase Stability, and Improved Lithium Insertion Behavior. Journal of the American Chemical Society, 2011, 133, 933-940.	6.6	598
2	Self-supported Li4Ti5O12 nanosheet arrays for lithium ion batteries with excellent rate capability and ultralong cycle life. Energy and Environmental Science, 2014, 7, 1924.	15.6	252
3	High sulfur loading composite wrapped by 3D nitrogen-doped graphene as a cathode material for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2014, 2, 5018-5023.	5.2	249
4	Topotactic Transformation of Singleâ€Crystalline Precursor Discs into Discâ€Like Bi₂S₃ Nanorod Networks. Advanced Functional Materials, 2008, 18, 1194-1201.	7.8	203
5	Macroporous free-standing nano-sulfur/reduced graphene oxide paper as stable cathode for lithium-sulfur battery. Nano Energy, 2015, 11, 678-686.	8.2	190
6	Hydrothermal synthesis of TiO2(B) nanowires with ultrahigh surface area and their fast charging and discharging properties in Li-ion batteries. Chemical Communications, 2011, 47, 3439.	2.2	171
7	A modified ZrO2-coating process to improve electrochemical performance of Li(Ni1/3Co1/3Mn1/3)O2. Journal of Power Sources, 2009, 188, 538-545.	4.0	142
8	Improvement of the high-temperature, high-voltage cycling performance of LiNi0.5Co0.2Mn0.3O2 cathode with TiO2 coating. Journal of Alloys and Compounds, 2012, 543, 181-188.	2.8	140
9	Thiolâ€Branched Solid Polymer Electrolyte Featuring High Strength, Toughness, and Lithium Ionic Conductivity for Lithiumâ€Metal Batteries. Advanced Materials, 2020, 32, e2001259.	11.1	139
10	High-performance Liâ€“S battery cathode with catalyst-like carbon nanotube-MoP promoting polysulfide redox. Nano Research, 2017, 10, 3698-3705.	5.8	116
11	Improved electrochemical performance of layered LiNi0.4Co0.2Mn0.4O2 via Li2ZrO3 coating. Electrochimica Acta, 2008, 53, 3075-3083.	2.6	111
12	Advanced electrolyte design for stable lithium metal anode: From liquid to solid. Nano Energy, 2021, 80, 105516.	8.2	111
13	Tuning the electrochemical performances of anthraquinone organic cathode materials for Li-ion batteries through the sulfonic sodium functional group. RSC Advances, 2014, 4, 19878-19882.	1.7	110
14	Preparation of ETFE-based anion exchange membrane to reduce permeability of vanadium ions in vanadium redox battery. Journal of Membrane Science, 2007, 297, 174-180.	4.1	107
15	Dendriteâ€Free Lithium Deposition via a Superfilling Mechanism for Highâ€Performance Liâ€Metal Batteries. Advanced Materials, 2019, 31, e1903248.	11.1	106
16	Advanced electrochemical performance of Li4Ti5O12-based materials for lithium-ion battery: Synergistic effect of doping and compositing. Journal of Power Sources, 2014, 248, 1034-1041.	4.0	99
17	Structure and high rate performance of Ni2+ doped Li4Ti5O12 forÂlithium ion battery. Journal of Power Sources, 2013, 244, 272-279.	4.0	98
18	Li₄Ti₅O₁₂-based anode materials with low working potentials, high rate capabilities and high cyclability for high-power lithium-ion batteries: a synergistic effect of doping, incorporating a conductive phase and reducing the particle size. Journal of Materials Chemistry A, 2014, 2, 9982-9993.	5.2	97

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19	Effect of Trace Al Surface Doping on the Structure, Surface Chemistry and Low Temperature Performance of LiNi0.5Co0.2Mn0.3O2 Cathode. Electrochimica Acta, 2016, 212, 399-407.	2.6	97
20	Kinetics-controlled growth of aligned mesocrystalline SnO2 nanorod arrays for lithium-ion batteries with superior rate performance. Nano Research, 2013, 6, 243-252.	5.8	93
21	Ultrathin dendrimerâ€"graphene oxide composite film for stable cycling lithiumâ€"sulfur batteries. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3578-3583.	3.3	90
22	Stable Li metal anode with protected interface for high-performance Li metal batteries. Energy Storage Materials, 2018, 15, 249-256.	9.5	89
23	Branched CNT@SnO₂ nanorods@carbon hierarchical heterostructures for lithium ion batteries with high reversibility and rate capability. Journal of Materials Chemistry A, 2014, 2, 15582-15589.	5.2	83
24	Failure Mechanism and Interface Engineering for NASICON-Structured All-Solid-State Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2019, 11, 20895-20904.	4.0	83
25	Mgâ€"Ti co-doping behavior of porous LiFePO₄ microspheres for high-rate lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 17021-17028.	5.2	80
26	A modified Al2O3 coating process to enhance the electrochemical performance of Li(Ni1/3Co1/3Mn1/3)O2 and its comparison with traditional Al2O3 coating process. Journal of Power Sources, 2010, 195, 8267-8274.	4.0	79
27	SnO₂@PANI Coreâ€"Shell Nanorod Arrays on 3D Graphite Foam: A High-Performance Integrated Electrode for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 9620-9629.	4.0	78
28	Fabrication of high tap density LiFe_{0.6}Mn_{0.4}PO₄/C microspheres by a double carbon coatingâ€"spray drying method for high rate lithium ion batteries. Journal of Materials Chemistry A, 2013, 1, 2411-2417.	5.2	76
29	Monodispersed mesoporous Li4Ti5O12 submicrospheres as anode materials for lithium-ion batteries: morphology and electrochemical performances. Nanoscale, 2014, 6, 6651.	2.8	76
30	Understanding the trace Ti surface doping on promoting the low temperature performance of LiNi 1/3 Co 1/3 Mn 1/3 O 2 cathode. Journal of Power Sources, 2015, 281, 69-76.	4.0	76
31	Monodisperse Li1.2Mn0.6Ni0.2O2 microspheres with enhanced lithium storage capability. Journal of Materials Chemistry A, 2013, 1, 5301.	5.2	66
32	Pre-irradiation grafting of styrene and maleic anhydride onto PVDF membrane and subsequent sulfonation for application in vanadium redox batteries. Journal of Power Sources, 2008, 177, 617-623.	4.0	61
33	Enhanced electrochemical performances of 5ÂV spinel LiMn1.58Ni0.42O4 cathode materials by coating with LiAlO2. Journal of Power Sources, 2013, 239, 181-188.	4.0	57
34	High power performance of nano-LiFePO4/C cathode material synthesized via lauric acid-assisted solid-state reaction. Electrochimica Acta, 2011, 56, 2999-3005.	2.6	53
35	High-Performance All-Solid-State Polymer Electrolyte with Controllable Conductivity Pathway Formed by Self-Assembly of Reactive Discogen and Immobilized via a Facile Photopolymerization for a Lithium-Ion Battery. ACS Applied Materials & Interfaces, 2018, 10, 25273-25284.	4.0	53
36	Nanotube-based hierarchical titanate microspheres: an improved anode structure for Li-ion batteries. Chemical Communications, 2012, 48, 389-391.	2.2	51

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37	Carbon nanotube-loaded mesoporous LiFe0.6Mn0.4PO4/C microspheres as high performance cathodes for lithium-ion batteries. Journal of Power Sources, 2014, 267, 459-468.	4.0	50
38	Robust Î±-Fe₂O₃nanorod arrays with optimized interstices as high-performance 3D anodes for high-rate lithium ion batteries. Journal of Materials Chemistry A, 2015, 3, 13377-13383.	5.2	46
39	Ferroceneâ€Promoted Longâ€Cycle Lithiumâ€“Sulfur Batteries. Angewandte Chemie - International Edition, 2016, 55, 14818-14822.	7.2	46
40	Bulk and surface degradation in layered Ni-rich cathode for Li ions batteries: Defect proliferation via chain reaction mechanism. Energy Storage Materials, 2021, 35, 62-69.	9.5	46
41	Toward stable zinc aqueous rechargeable batteries by anode morphology modulation via polyaspartic acid additive. Energy Storage Materials, 2022, 45, 777-785.	9.5	44
42	Controllable preparation and properties of composite materials based on ceria nanoparticles and carbon nanotubes. Journal of Solid State Chemistry, 2008, 181, 2620-2625.	1.4	42
43	Positive Effect of Minor Manganese Doping on the Electrochemical Performance of LiFePO4/C under Extreme Conditions. Electrochimica Acta, 2015, 176, 642-648.	2.6	42
44	Grape-Like Fe3O4 Agglomerates Grown on Graphene Nanosheets for Ultrafast and Stable Lithium Storage. ACS Applied Materials & Interfaces, 2016, 8, 17245-17252.	4.0	42
45	Mesoporous Li₄Ti₅O_{12âˆ’x}/C submicrospheres with comprehensively improved electrochemical performances for high-power lithium-ion batteries. Physical Chemistry Chemical Physics, 2014, 16, 24874-24883.	1.3	40
46	Hierarchical MnO@C Hollow Nanospheres for Advanced Lithium-Ion Battery Anodes. ACS Applied Nano Materials, 2019, 2, 429-439.	2.4	40
47	Water-processable liquid metal nanoparticles by single-step polymer encapsulation. Nanoscale, 2020, 12, 13731-13741.	2.8	38
48	SnO2 quantum dots @ 3D sulfur-doped reduced graphene oxides as active and durable anode for lithium ion batteries. Electrochimica Acta, 2018, 291, 24-30.	2.6	37
49	Coaxial carbonâ€“siliconâ€“carbon nanotube arrays in porous anodic aluminum oxide templates as anodes for lithium ion batteries. Journal of Materials Chemistry, 2012, 22, 12193.	6.7	36
50	One-pot high temperature hydrothermal synthesis of Fe3O4@C/graphene nanocomposite as anode for high rate lithium ion battery. Electrochimica Acta, 2015, 180, 1041-1049.	2.6	36
51	Fe3O4C open hollow sphere assembled by nanocrystals and its application in lithium ion battery. Journal of Alloys and Compounds, 2012, 521, 39-44.	2.8	35
52	Improvement of the cycling performance of LiCoO2 with assistance of cross-linked PAN for lithium ion batteries. Journal of Alloys and Compounds, 2015, 639, 458-464.	2.8	34
53	Selection of Carbon Sources for Enhancing 3D Conductivity in the Secondary Structure of LiFePO4/C Cathode. Electrochimica Acta, 2016, 193, 206-215.	2.6	34
54	Enhanced electrochemical performance of LiFe0.6Mn0.4PO4/C cathode material prepared by ferrocene-assisted calcination process. Journal of Power Sources, 2015, 275, 823-830.	4.0	33

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55	Stable interstitial layer to alleviate fatigue fracture of high nickel cathode for lithium-ion batteries. Journal of Power Sources, 2018, 376, 200-206.	4.0	32
56	Surface-Based Li⁺ Complex Enables Uniform Lithium Deposition for Stable Lithium Metal Anodes. ACS Applied Energy Materials, 2019, 2, 4602-4608.	2.5	32
57	Structural and Electrochemical Characterization of (NH₄)₂HPO₄-Treated Lithium-Rich Layered Li_{1.2}Ni_{0.2}Mn_{0.6}O₂Cathodes for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2013, 160, A1661-A1667.	1.3	29
58	Understanding the accumulated cycle capacity fade caused by the secondary particle fracture of LiNi1-x-yCoxMnyO2 cathode for lithium ion batteries. Journal of Solid State Electrochemistry, 2017, 21, 673-682.	1.2	29
59	Catalytic separators with Coâ€“Nâ€“C nanoreactors for high-performance lithiumâ€“sulfur batteries. Inorganic Chemistry Frontiers, 2021, 8, 3066-3076.	3.0	29
60	An Entangled Cobaltâ€“Nitrogenâ€“Carbon Nanotube Array Electrode with Synergetic Confinement and Electrocatalysis of Polysulfides for Stable Liâ€“S Batteries. ACS Applied Energy Materials, 2019, 2, 2904-2912.	2.5	28
61	Radiation grafting of styrene and maleic anhydride onto PTFE membranes and sequent sulfonation for applications of vanadium redox battery. Radiation Physics and Chemistry, 2007, 76, 1703-1707.	1.4	27
62	Spinel Li_{4â€“2<i>x</i>}Co_{3<i>x</i>}Ti_{5â€“<i>x</i>}O₁₂ (0 â‰) Tj ETQq0 0 0 rgBT /O Performances. Journal of Physical Chemistry C, 2014, 118, 14246-14255.	1.5	27
63	Organophosphorus Hybrid Solid Electrolyte Interphase Layer Based on Li<i>_x</i>PO₄ Enables Uniform Lithium Deposition for Highâ€Performance Lithium Metal Batteries. Advanced Functional Materials, 2022, 32, 2107923.	7.8	27
64	In-situ synthesis of magnetite/expanded graphite composite material as high rate negative electrode for rechargeable lithium batteries. Journal of Power Sources, 2013, 223, 119-124.	4.0	26
65	Synergism of Rare Earth Trihydrides and Graphite in Lithium Storage: Evidence of Hydrogenâ€Enhanced Lithiation. Advanced Materials, 2018, 30, 1704353.	11.1	25
66	The Contradiction Between the Half-Cell and Full-Battery Evaluations on the Tungsten-Coating LiNi0.5Co0.2Mn0.3O2 Cathode. Electrochimica Acta, 2015, 180, 604-609.	2.6	24
67	An Interfacial Layer Based on Polymers of Intrinsic Microporosity to Suppress Dendrite Growth on Li Metal Anodes. Chemistry - A European Journal, 2019, 25, 12052-12057.	1.7	24
68	A pomegranate-structured sulfur cathode material with triple confinement of lithium polysulfides for high-performance lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 11788-11793.	5.2	23
69	A new approach for synthesizing bulk-type all-solid-state lithium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 9748-9760.	5.2	23
70	Designing Anion-Derived Solid Electrolyte Interphase in a Siloxane-Based Electrolyte for Lithium-Metal Batteries. ACS Applied Materials & Interfaces, 2022, 14, 27873-27881.	4.0	23
71	Microphase Separation and High Ionic Conductivity at High Temperatures of Lithium Salt-Doped Amphiphilic Alternating Copolymer Brush with Rigid Side Chains. Macromolecules, 2015, 48, 8557-8564.	2.2	18
72	Organic solvent-assisted free-standing Li₂MnO₃Â·LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂ on 3D graphene as a high energy density cathode. Chemical Communications, 2015, 51, 16381-16384.	2.2	17

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73	Graphene oxide-polypyrrole composite as sulfur hosts for high-performance lithium-sulfur batteries. Functional Materials Letters, 2018, 11, 1840007.	0.7	17
74	Ultrathin Aluminum Nanosheets Grown on Carbon Nanotubes for High Performance Lithium Ion Batteries. Advanced Functional Materials, 2022, 32, 2109112.	7.8	17
75	Highly energy density olivine cathode material synthesized by coprecipitation technique. Electrochimica Acta, 2013, 90, 597-603.	2.6	16
76	Binderâ€Free TiO₂â€Coated Polypropylene Separators for Advanced Lithiumâ€Ion Batteries. Energy Technology, 2020, 8, 2000228.	1.8	16
77	An asymmetric quasi-solid electrolyte for high-performance Li metal batteries. Chemical Communications, 2020, 56, 7195-7198.	2.2	14
78	Constructing a lithiophilic and mixed conductive interphase layer in electrolyte with dual-anion solvation sheath for stable lithium metal anode. Energy Storage Materials, 2022, 50, 792-801.	9.5	14
79	HIGH POWER PERFORMANCE OF MULTICOMPONENT OLIVINE CATHODE MATERIAL FOR LITHIUM-ION BATTERIES. Functional Materials Letters, 2011, 04, 299-303.	0.7	11
80	Superior performance of nanoscaled Fe₃O₄ as anode material promoted by mosaicking into porous carbon framework. Functional Materials Letters, 2014, 07, 1450005.	0.7	11
81	Ferroceneâ€Promoted Longâ€Cycle Lithiumâ€"Sulfur Batteries. Angewandte Chemie, 2016, 128, 15038-15042.	1.6	11
82	Solid-state electrolytes: Advances and perspectives. Functional Materials Letters, 2021, 14, 2130001.	0.7	11
83	Li3.33Cu1.005Ti4.665O12/CuO composite with P4332 space group for Li-ion batteries: synergistic effect of substituting and compositing. RSC Advances, 2014, 4, 31196-31200.	1.7	9
84	Application of a Modified Porphyrin in a Polymer Electrolyte with Superior Properties for All-Solid-State Lithium Batteries. ACS Applied Materials & Interfaces, 2021, 13, 48569-48581.	4.0	9
85	A high capacity nanocrystalline Sn anode for lithium ion batteries from hydrogenation induced phase segregation of bulk YSn₂. Journal of Materials Chemistry A, 2018, 6, 21266-21273.	5.2	8
86	Quality monitoring methods of initial and terminal manufacture of LiFePO4 based lithium ion batteries by capillary electrophoresis. Talanta, 2018, 179, 822-827.	2.9	7
87	A mixed ion-electron conducting network derived from a porous CoP film for stable lithium metal anodes. Materials Chemistry Frontiers, 2021, 5, 5486-5496.	3.2	7
88	3D Copper Foam@FeO_{<i>x</i>} Nanoarrays as a High Areal Capacity and Stable Electrode for Lithium-Ion Batteries. ACS Applied Energy Materials, 0, , .	2.5	6
89	PREPARATION AND ELECTROCHEMICAL PROPERTIES OF NANOSTRUCTURED Li0.8CoO2. International Journal of Nanoscience, 2006, 05, 285-290.	0.4	1
90	Recent Development in the Rate Performance of Li4Ti5O12. Applied Science and Convergence Technology, 2014, 23, 72-82.	0.3	1

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91	Effect of TiO_2-coating on structure and electrochemical performance of $LiCo_{0.2}Ni_{0.4}Mn_{0.4}O_2$. Frontiers of Chemistry in China: Selected Publications From Chinese Universities, 2008, 3, 64-69.	0.4	0
92	From dendritic mesoporous silica microspheres to waxberry-like hierarchical hollow carbon spheres: rational design of carbon host for lithium sulfur batteries. Nanotechnology, 2021, 32, 485405.	1.3	0