Minshen Zhu

List of Publications by Year
in descending order

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84 papers	11,944 citations	41258 49 h-index	62479 80 g-index
87 all docs	87 docs citations	87 times ranked	12922 citing authors

#	Article	IF	Citations
1	An extremely safe and wearable solid-state zinc ion battery based on a hierarchical structured polymer electrolyte. Energy and Environmental Science, 2018, 11, 941-951.	15.6	731
2	Photoluminescent Ti₃C₂ MXene Quantum Dots for Multicolor Cellular Imaging. Advanced Materials, 2017, 29, 1604847.	11.1	692
3	A self-healable and highly stretchable supercapacitor based on a dual crosslinked polyelectrolyte. Nature Communications, 2015, 6, 10310.	5.8	634
4	Nanostructured Polypyrrole as a flexible electrode material of supercapacitor. Nano Energy, 2016, 22, 422-438.	8.2	629
5	Highly Flexible, Freestanding Supercapacitor Electrode with Enhanced Performance Obtained by Hybridizing Polypyrrole Chains with MXene. Advanced Energy Materials, 2016, 6, 1600969.	10.2	580
6	Ultrathin MXeneâ€Micropatternâ€Based Fieldâ€Effect Transistor for Probing Neural Activity. Advanced Materials, 2016, 28, 3333-3339.	11.1	474
7	Texturing in situ: N,S-enriched hierarchically porous carbon as a highly active reversible oxygen electrocatalyst. Energy and Environmental Science, 2017, 10, 742-749.	15.6	451
8	Waterproof and Tailorable Elastic Rechargeable Yarn Zinc Ion Batteries by a Cross-Linked Polyacrylamide Electrolyte. ACS Nano, 2018, 12, 3140-3148.	7.3	439
9	Multifunctional Energy Storage and Conversion Devices. Advanced Materials, 2016, 28, 8344-8364.	11.1	420
10	From Industrially Weavable and Knittable Highly Conductive Yarns to Large Wearable Energy Storage Textiles. ACS Nano, 2015, 9, 4766-4775.	7.3	411
11	Recent Progress on Flexible and Wearable Supercapacitors. Small, 2017, 13, 1701827.	5.2	365
12	High-performance stretchable yarn supercapacitor based on PPy@CNTs@urethane elastic fiber core spun yarn. Nano Energy, 2016, 27, 230-237.	8.2	297
13	Magnetic-Assisted, Self-Healable, Yarn-Based Supercapacitor. ACS Nano, 2015, 9, 6242-6251.	7.3	291
14	Solidâ€State Rechargeable Zn//NiCo and Znâ€“Air Batteries with Ultralong Lifetime and High Capacity: The Role of a Sodium Polyacrylate Hydrogel Electrolyte. Advanced Energy Materials, 2018, 8, 1802288.	10.2	253
15	Super-high rate stretchable polypyrrole-based supercapacitors with excellent cycling stability. Nano Energy, 2015, 11, 518-525.	8.2	248
16	Porous Fe3O4/carbon composite electrode material prepared from metal-organic framework template and effect of temperature on its capacitance. Nano Energy, 2014, 8, 133-140.	8.2	232
17	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.	8.2	228
18	Mn₃O₄nanoparticles on layer-structured Ti₃C₂MXene towards the oxygen reduction reaction and zincâ€“air batteries. Journal of Materials Chemistry A, 2017, 5, 20818-20823.	5.2	226

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19	Antifreezing Hydrogel with High Zinc Reversibility for Flexible and Durable Aqueous Batteries by Cooperative Hydrated Cations. Advanced Functional Materials, 2020, 30, 1907218.	7.8	209
20	Proton-Insertion-Enhanced Pseudocapacitance Based on the Assembly Structure of Tungsten Oxide. ACS Applied Materials & Interfaces, 2014, 6, 18901-18910.	4.0	182
21	A Patternable and In Situ Formed Polymeric Zinc Blanket for a Reversible Zinc Anode in a Skinâ€Mountable Microbattery. Advanced Materials, 2021, 33, e2007497.	11.1	175
22	Highly anisotropic, multichannel wood carbon with optimized heteroatom doping for supercapacitor and oxygen reduction reaction. Carbon, 2018, 130, 532-543.	5.4	164
23	A Highly Durable, Transferable, and Substrateâ€Versatile Highâ€Performance Allâ€Polymer Microâ€Supercapacitor with Plugâ€andâ€Play Function. Advanced Materials, 2017, 29, 1605137.	11.1	160
24	Nanoscale Parallel Circuitry Based on Interpenetrating Conductive Assembly for Flexible and Highâ€Power Zinc Ion Battery. Advanced Functional Materials, 2019, 29, 1901336.	7.8	145
25	Polymers for supercapacitors: Boosting the development of the flexible and wearable energy storage. Materials Science and Engineering Reports, 2020, 139, 100520.	14.8	145
26	A flexible rechargeable zinc-ion wire-shaped battery with shape memory function. Journal of Materials Chemistry A, 2018, 6, 8549-8557.	5.2	138
27	A shape memory supercapacitor and its application in smart energy storage textiles. Journal of Materials Chemistry A, 2016, 4, 1290-1297.	5.2	134
28	Capacitance Enhancement in a Semiconductor Nanostructureâ€Based Supercapacitor by Solar Light and a Selfâ€Powered Supercapacitorâ€“Photodetector System. Advanced Functional Materials, 2016, 26, 4481-4490.	7.8	133
29	Building durable aqueous K-ion capacitors based on MXene family. , 2022, 1, e9120002.		131
30	An electrochromic supercapacitor and its hybrid derivatives: quantifiably determining their electrical energy storage by an optical measurement. Journal of Materials Chemistry A, 2015, 3, 21321-21327.	5.2	124
31	Advances in Flexible and Wearable Energyâ€Storage Textiles. Small Methods, 2018, 2, 1800124.	4.6	123
32	A high performance fiber-shaped PEDOT@MnO₂//C@Fe₃O₄asymmetric supercapacitor for wearable electronics. Journal of Materials Chemistry A, 2016, 4, 14877-14883.	5.2	118
33	Toward enhanced activity of a graphitic carbon nitride-based electrocatalyst in oxygen reduction and hydrogen evolution reactions via atomic sulfur doping. Journal of Materials Chemistry A, 2016, 4, 12205-12211.	5.2	112
34	Construction of a hierarchical 3D Co/N-carbon electrocatalyst for efficient oxygen reduction and overall water splitting. Journal of Materials Chemistry A, 2018, 6, 489-497.	5.2	111
35	3D spacer fabric based multifunctional triboelectric nanogenerator with great feasibility for mechanized large-scale production. Nano Energy, 2016, 27, 439-446.	8.2	107
36	Extremely Stable Polypyrrole Achieved via Molecular Ordering for Highly Flexible Supercapacitors. ACS Applied Materials & Interfaces, 2016, 8, 2435-2440.	4.0	99

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37	Light-permeable, photoluminescent microbatteries embedded in the color filter of a screen. Energy and Environmental Science, 2018, 11, 2414-2422.	15.6	97
38	Boron Element Nanowires Electrode for Supercapacitors. Advanced Energy Materials, 2018, 8, 1703117.	10.2	81
39	Recent progress of fiber-shaped asymmetric supercapacitors. Materials Today Energy, 2017, 5, 1-14.	2.5	80
40	Highly Integrated Supercapacitorâ€Sensor Systems via Material and Geometry Design. Small, 2016, 12, 3393-3399.	5.2	78
41	Dramatically improved energy conversion and storage efficiencies by simultaneously enhancing charge transfer and creating active sites in MnO x /TiO 2 nanotube composite electrodes. Nano Energy, 2016, 20, 254-263.	8.2	77
42	Dual-Redox-Sites Enable Two-Dimensional Conjugated Metalâ€“Organic Frameworks with Large Pseudocapacitance and Wide Potential Window. Journal of the American Chemical Society, 2021, 143, 10168-10176.	6.6	75
43	Fabrication of Boron Nitride Nanosheets by Exfoliation. Chemical Record, 2016, 16, 1204-1215.	2.9	74
44	Tiny robots and sensors need tiny batteries â€” hereâ€™s how to do it. Nature, 2021, 589, 195-197.	13.7	72
45	Hydrothermal synthesis of blue-fluorescent monolayer BN and BCNO quantum dots for bio-imaging probes. RSC Advances, 2016, 6, 79090-79094.	1.7	66
46	Enhanced Tolerance to Stretch-Induced Performance Degradation of Stretchable MnO₂-Based Supercapacitors. ACS Applied Materials & Interfaces, 2015, 7, 2569-2574.	4.0	65
47	Facile synthesis of Î±-Fe₂O₃nanodisk with superior photocatalytic performance and mechanism insight. Science and Technology of Advanced Materials, 2015, 16, 014801.	2.8	63
48	Self-Assembly of Integrated Tubular Microsupercapacitors with Improved Electrochemical Performance and Self-Protective Function. ACS Nano, 2019, 13, 8067-8075.	7.3	57
49	Highly enhanced reversibility of a Zn anode by in-situ texturing. Energy Storage Materials, 2022, 47, 98-104.	9.5	56
50	On-chip 3D interdigital micro-supercapacitors with ultrahigh areal energy density. Energy Storage Materials, 2020, 27, 17-24.	9.5	54
51	A modularization approach for linear-shaped functional supercapacitors. Journal of Materials Chemistry A, 2016, 4, 4580-4586.	5.2	50
52	Stamping Fabrication of Flexible Planar Microâ€Supercapacitors Using Porous Graphene Inks. Advanced Science, 2020, 7, 2001561.	5.6	49
53	Stretchable and Thermally Stable Dual Emission Composite Films of On-Purpose Aggregated Copper Nanoclusters in Carboxylated Polyurethane for Remote White Light-Emitting Devices. ACS Applied Materials & Interfaces, 2016, 8, 33993-33998.	4.0	47
54	On-Chip Integration of a Covalent Organic Framework-Based Catalyst into a Miniaturized Znâ€“Air Battery with High Energy Density. ACS Energy Letters, 2021, 6, 2491-2498.	8.8	46

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55	Robust reduced graphene oxide paper fabricated with a household non-stick frying pan: a large-area freestanding flexible substrate for supercapacitors. RSC Advances, 2015, 5, 33981-33989.	1.7	43
56	High SERS Sensitivity Enabled by Synergistically Enhanced Photoinduced Charge Transfer in Amorphous Nonstoichiometric Semiconducting Films. Advanced Materials Interfaces, 2019, 6, 1901133.	1.9	42
57	Flexible MXene films for batteries and beyond. , 2022, 4, 598-620.		42
58	Selfâ€Assembled Flexible and Integratable 3D Microtubular Asymmetric Supercapacitors. Advanced Science, 2019, 6, 1901051.	5.6	39
59	Onâ€Chip Batteries for Dustâ€Sized Computers. Advanced Energy Materials, 2022, 12, .	10.2	36
60	Battery-Everywhere Design Based on a Cathodeless Configuration with High Sustainability and Energy Density. ACS Energy Letters, 2021, 6, 1859-1868.	8.8	35
61	Pairing of Luminescent Switch with Electrochromism for Quasi-Solid-State Dual-Function Smart Windows. ACS Applied Materials & Interfaces, 2018, 10, 31697-31703.	4.0	32
62	A Subâ€Squareâ€Millimeter Microbattery with Milliampereâ€Hourâ€Level Footprint Capacity. Advanced Energy Materials, 2022, 12, .	10.2	30
63	Covalent Organic Frameworks for Efficient Energy Electrocatalysis: Rational Design and Progress. Advanced Energy and Sustainability Research, 2021, 2, 2000090.	2.8	29
64	A Wearable Supercapacitor Engaged with Gold Leaf Gilding Cloth Toward Enhanced Practicability. ACS Applied Materials & Interfaces, 2018, 10, 21297-21305.	4.0	28
65	Flexible Surface-Enhanced Raman Scattering Chip: A Universal Platform for Real-Time Interfacial Molecular Analysis with Femtomolar Sensitivity. ACS Applied Materials & Interfaces, 2020, 12, 54174-54180.	4.0	27
66	Imperceptible Supercapacitors with High Areaâ€Specific Capacitance. Small, 2021, 17, e2101704.	5.2	26
67	LaB6 nanowires for supercapacitors. Materials Today Energy, 2018, 10, 28-33.	2.5	25
68	Towards high-performance microscale batteries: Configurations and optimization of electrode materials by in-situ analytical platforms. Energy Storage Materials, 2020, 29, 17-41.	9.5	25
69	Interfacial Chemistry Triggers Ultrafast Radiative Recombination in Metal Halide Perovskites. Angewandte Chemie - International Edition, 2022, 61, .	7.2	22
70	A Building Brick Principle to Create Transparent Composite Films with Multicolor Emission and Selfâ€Healing Function. Small, 2018, 14, e1800315.	5.2	21
71	Artificial electrode interfaces enable stable operation of freestanding anodes for high-performance flexible lithium ion batteries. Journal of Materials Chemistry A, 2019, 7, 14097-14107.	5.2	21
72	Advanced architecture designs towards high-performance 3D microbatteries. Nano Materials Science, 2020, , .	3.9	18

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73	Unleashing energy storage ability of aqueous battery electrolytes. Materials Futures, 2022, 1, 022001.	3.1	17
74	Nano energy for miniaturized systems. Nano Materials Science, 2020, , .	3.9	15
75	Perovskite Origami for Programmable Microtube Lasing. Advanced Functional Materials, 2021, 31, 2109080.	7.8	14
76	Field-Effect Transistors: Ultrathin MXene-Micropattern-Based Field-Effect Transistor for Probing Neural Activity (Adv. Mater. 17/2016). Advanced Materials, 2016, 28, 3411-3411.	11.1	12
77	Graphene stirrer with designed movements: Targeting on environmental remediation and supercapacitor applications. Green Energy and Environment, 2018, 3, 86-96.	4.7	10
78	Decoding of Oxygen Network Distortion in a Layered High-Rate Anode by In Situ Investigation of a Single Microelectrode. ACS Nano, 2020, 14, 11753-11764.	7.3	10
79	Stressâ€Actuated Spiral Microelectrode for Highâ€Performance Lithiumâ€Ion Microbatteries. Small, 2020, 16, e2002410.	5.2	8
80	Steering Directional Light Emission and Mode Chirality through Postshaping of Cavity Geometry. Laser and Photonics Reviews, 2020, 14, 2000118.	4.4	7
81	A compact tube-in-tube microsized lithium-ion battery as an independent microelectric power supply unit. Cell Reports Physical Science, 2021, 2, 100429.	2.8	7
82	Limitations of Mean-Based Algorithms for Trace Reconstruction at Small Distance. , 2021, , .		3
83	Ultra-Dense Plasmonic Nanogap Arrays for Reorientable Molecular Fluorescence Enhancement and Spectrum Reshaping. Nanoscale, 0, , .	2.8	1
84	Dynamic Switching and Energy Storage Unified by Electrochemical Ion Intercalation. Advanced Materials Technologies, 2023, 8, .	3.0	1