

Miao Zhang

List of Publications by Year in descending order

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110
papers

9,697
citations

38660

50
h-index

35952

97
g-index

111
all docs

111
docs citations

111
times ranked

12421
citing authors

#	ARTICLE	IF	CITATIONS
1	Graphene-based smart materials. <i>Nature Reviews Materials</i> , 2017, 2, .	23.3	569
2	Polymer-Derived Heteroatom-Doped Porous Carbon Materials. <i>Chemical Reviews</i> , 2020, 120, 9363-9419.	23.0	492
3	Graphene-Based Materials for Lithium-Ion Hybrid Supercapacitors. <i>Advanced Materials</i> , 2015, 27, 5296-5308.	11.1	424
4	Reduced Graphene Oxide Membranes for Ultrafast Organic Solvent Nanofiltration. <i>Advanced Materials</i> , 2016, 28, 8669-8674.	11.1	349
5	A Flexible UV-Vis-NIR Photodetector based on a Perovskite/Conjugated Polymer Composite. <i>Advanced Materials</i> , 2016, 28, 5969-5974.	11.1	329
6	Graphene-Based Membranes for Molecular Separation. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2806-2815.	2.1	316
7	A high-performance three-dimensional Ni-Fe layered double hydroxide/graphene electrode for water oxidation. <i>Journal of Materials Chemistry A</i> , 2015, 3, 6921-6928.	5.2	291
8	Ultra-high Conductivity Polymer Hydrogels with Arbitrary Structures. <i>Advanced Materials</i> , 2017, 29, 1700974.	11.1	290
9	Highly Narrowband Photomultiplication Type Organic Photodetectors. <i>Nano Letters</i> , 2017, 17, 1995-2002.	4.5	278
10	Alginate hydrogel dressings for advanced wound management. <i>International Journal of Biological Macromolecules</i> , 2020, 162, 1414-1428.	3.6	257
11	Asymmetrical Ladder-Type Donor-Induced Polar Small Molecule Acceptor to Promote Fill Factors Approaching 77% for High-Performance Nonfullerene Polymer Solar Cells. <i>Advanced Materials</i> , 2018, 30, e1800052.	11.1	252
12	Water-enhanced oxidation of graphite to graphene oxide with controlled species of oxygenated groups. <i>Chemical Science</i> , 2016, 7, 1874-1881.	3.7	251
13	Hydrogen Evolution Reaction in Alkaline Media: Alpha- or Beta-Nickel Hydroxide on the Surface of Platinum?. <i>ACS Energy Letters</i> , 2018, 3, 237-244.	8.8	230
14	Ternary nonfullerene polymer solar cells with efficiency >13.7% by integrating the advantages of the materials and two binary cells. <i>Energy and Environmental Science</i> , 2018, 11, 2134-2141.	15.6	223
15	Efficient ternary non-fullerene polymer solar cells with PCE of 11.92% and FF of 76.5%. <i>Energy and Environmental Science</i> , 2018, 11, 841-849.	15.6	210
16	Efficient Ternary Polymer Solar Cells with Two Well-Compatible Donors and One Ultranarrow Bandgap Nonfullerene Acceptor. <i>Advanced Energy Materials</i> , 2018, 8, 1702854.	10.2	195
17	Ultratough, Ultrastrong, and Highly Conductive Graphene Films with Arbitrary Sizes. <i>Advanced Materials</i> , 2014, 26, 7588-7592.	11.1	182
18	Nematic liquid crystal materials as a morphology regulator for ternary small molecule solar cells with power conversion efficiency exceeding 10%. <i>Journal of Materials Chemistry A</i> , 2017, 5, 3589-3598.	5.2	173

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19	Over 13% Efficiency Ternary Nonfullerene Polymer Solar Cells with Tilted Up Absorption Edge by Incorporating a Medium Bandgap Acceptor. <i>Advanced Energy Materials</i> , 2018, 8, 1801968.	10.2	167
20	Ternary Nonfullerene Polymer Solar Cells with a Power Conversion Efficiency of 11.6% by Inheriting the Advantages of Binary Cells. <i>ACS Energy Letters</i> , 2018, 3, 555-561.	8.8	161
21	Multifunctional Pristine Chemically Modified Graphene Films as Strong as Stainless Steel. <i>Advanced Materials</i> , 2015, 27, 6708-6713.	11.1	157
22	Nitrogen and Sulfur Codoped Graphite Foam as a Self-Supported Metal-Free Electrocatalytic Electrode for Water Oxidation. <i>Advanced Energy Materials</i> , 2016, 6, 1501492.	10.2	153
23	High-Quality Graphene Ribbons Prepared from Graphene Oxide Hydrogels and Their Application for Strain Sensors. <i>ACS Nano</i> , 2015, 9, 12320-12326.	7.3	148
24	Highly Sensitive Low-Bandgap Perovskite Photodetectors with Response from Ultraviolet to the Near-Infrared Region. <i>Advanced Functional Materials</i> , 2017, 27, 1703953.	7.8	148
25	Energy level modulation of non-fullerene acceptors enables efficient organic solar cells with small energy loss. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2468-2475.	5.2	145
26	An ultrahigh-rate electrochemical capacitor based on solution-processed highly conductive PEDOT:PSS films for AC line-filtering. <i>Energy and Environmental Science</i> , 2016, 9, 2005-2010.	15.6	142
27	Alginate-chitosan oligosaccharide-ZnO composite hydrogel for accelerating wound healing. <i>Carbohydrate Polymers</i> , 2021, 266, 118100.	5.1	132
28	Achieving 14.11% efficiency of ternary polymer solar cells by simultaneously optimizing photon harvesting and exciton distribution. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7843-7851.	5.2	130
29	Janus-interface engineering boosting solar steam towards high-efficiency water collection. <i>Energy and Environmental Science</i> , 2021, 14, 5330-5338.	15.6	122
30	Robust graphene composite films for multifunctional electrochemical capacitors with an ultrawide range of areal mass loading toward high-rate frequency response and ultrahigh specific capacitance. <i>Energy and Environmental Science</i> , 2018, 11, 559-565.	15.6	119
31	Trap-Assisted Photomultiplication Polymer Photodetectors Obtaining an External Quantum Efficiency of 37-500%. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 5890-5897.	4.0	118
32	Solution-Processed PEDOT:PSS/Graphene Composites as the Electrocatalyst for Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 3587-3593.	4.0	115
33	NiFe Alloy Protected Silicon Photoanode for Efficient Water Splitting. <i>Advanced Energy Materials</i> , 2017, 7, 1601805.	10.2	109
34	Topological Design of Ultrastrong and Highly Conductive Graphene Films. <i>Advanced Materials</i> , 2017, 29, 1702831.	11.1	108
35	Organic Photodetectors with Gain and Broadband/Narrowband Response under Top/Bottom Illumination Conditions. <i>Advanced Optical Materials</i> , 2018, 6, 1800249.	3.6	108
36	Ultralight free-standing reduced graphene oxide membranes for oil-in-water emulsion separation. <i>Journal of Materials Chemistry A</i> , 2015, 3, 20113-20117.	5.2	101

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37	Simultaneously improved efficiency and average visible transmittance of semitransparent polymer solar cells with two ultra-narrow bandgap nonfullerene acceptors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21485-21492.	5.2	80
38	Nitrogen-Doped Holey Graphene Film-Based Ultrafast Electrochemical Capacitors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 20741-20747.	4.0	79
39	Synthesis of graphene oxide sheets with controlled sizes from sieved graphite flakes. <i>Carbon</i> , 2016, 110, 34-40.	5.4	77
40	Photomultiplication photodetectors with P3HT:fullerene-free material as the active layers exhibiting a broad response. <i>Nanoscale</i> , 2016, 8, 5578-5586.	2.8	77
41	Graphene oxide induced hydrothermal carbonization of egg proteins for high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 17040-17047.	5.2	74
42	Highly sensitive polymer photodetectors with a broad spectral response range from UV light to the near infrared region. <i>Journal of Materials Chemistry C</i> , 2015, 3, 7386-7393.	2.7	72
43	Designing an asymmetrical isomer to promote the LUMO energy level and molecular packing of a non-fullerene acceptor for polymer solar cells with 12.6% efficiency. <i>Chemical Science</i> , 2018, 9, 8142-8149.	3.7	67
44	A liquid crystal material as the third component for ternary polymer solar cells with an efficiency of 10.83% and enhanced stability. <i>Journal of Materials Chemistry A</i> , 2017, 5, 13145-13153.	5.2	65
45	A small graphene oxide sheet/polyvinylidene fluoride bilayer actuator with large and rapid responses to multiple stimuli. <i>Nanoscale</i> , 2017, 9, 17465-17470.	2.8	65
46	Arbitrary waveform AC line filtering applicable to hundreds of volts based on aqueous electrochemical capacitors. <i>Nature Communications</i> , 2019, 10, 2855.	5.8	65
47	Graphene-Based Organic Electrochemical Capacitors for AC Line Filtering. <i>Advanced Energy Materials</i> , 2017, 7, 1700591.	10.2	64
48	Efficient Ternary Organic Solar Cells with Two Compatible Non-Fullerene Materials as One Alloyed Acceptor. <i>Small</i> , 2018, 14, e1802983.	5.2	55
49	Tailoring the oxygenated groups of graphene hydrogels for high-performance supercapacitors with large areal mass loadings. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6587-6594.	5.2	54
50	Highly Ordered Graphene Solid: An Efficient Platform for Capacitive Sodium-Ion Storage with Ultrahigh Volumetric Capacity and Superior Rate Capability. <i>ACS Nano</i> , 2019, 13, 9161-9170.	7.3	53
51	Ultrasonic treatment increased functional properties and in vitro digestion of actomyosin complex during meat storage. <i>Food Chemistry</i> , 2021, 352, 129398.	4.2	52
52	A General Route to Robust Nacre-Like Graphene Oxide Films. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 15010-15016.	4.0	48
53	Poly(Ionic Liquid)-Derived Graphitic Nanoporous Carbon Membrane Enables Superior Supercapacitive Energy Storage. <i>ACS Nano</i> , 2019, 13, 10261-10271.	7.3	46
54	Suppressing the Self-Discharge of Supercapacitors by Modifying Separators with an Ionic Polyelectrolyte. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701547.	1.9	42

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55	Highly Conductive Stretchable Electrodes Prepared by In Situ Reduction of Wavy Graphene Oxide Films Coated on Elastic Tapes. <i>Advanced Electronic Materials</i> , 2016, 2, 1600022.	2.6	40
56	Graphene-based electrochemical capacitors with integrated high-performance. <i>Materials Today Energy</i> , 2017, 6, 181-188.	2.5	40
57	A Microfluidic Biosensor Based on Magnetic Nanoparticle Separation, Quantum Dots Labeling and MnO ₂ Nanoflower Amplification for Rapid and Sensitive Detection of Salmonella Typhimurium. <i>Micromachines</i> , 2020, 11, 281.	1.4	40
58	An ultrasensitive moisture driven actuator based on small flakes of graphene oxide. <i>Sensors and Actuators B: Chemical</i> , 2017, 242, 418-422.	4.0	36
59	Porous Carbon Membrane-Supported Atomically Dispersed Pyrrole-Type Fe ₃ N ₄ as Active Sites for Electrochemical Hydrazine Oxidation Reaction. <i>Small</i> , 2020, 16, e2002203.	5.2	34
60	Efficient ternary polymer solar cells with a parallel-linkage structure. <i>Journal of Materials Chemistry C</i> , 2015, 3, 11930-11936.	2.7	33
61	Simultaneously Enhanced Efficiency and Stability of Polymer Solar Cells by Employing Solvent Additive and Upside-down Drying Method. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 8863-8871.	4.0	32
62	Mildly reduced less defective graphene oxide/sulfur/carbon nanotube composite films for high-performance lithium-sulfur batteries. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 11104-11110.	1.3	30
63	Ternary non-fullerene polymer solar cells with an efficiency of 11.6% by simultaneously optimizing photon harvesting and phase separation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11751-11758.	5.2	30
64	A Large-Scale Graphene-Bimetal Film Electrode with an Ultrahigh Mass Catalytic Activity for Durable Water Splitting. <i>Advanced Energy Materials</i> , 2018, 8, 1800403.	10.2	29
65	A graphene oxide/oxygen deficient molybdenum oxide nanosheet bilayer as a hole transport layer for efficient polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2015, 3, 18380-18383.	5.2	28
66	Poly(ionic liquid)-Armored MXene Membrane: Interlayer Engineering for Facilitated Water Transport. <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202202515.	7.2	27
67	“Mix-Then-On-Demand-Complex” In Situ Cascade Anionization and Complexation of Graphene Oxide for High-Performance Nanofiltration Membranes. <i>ACS Nano</i> , 2021, 15, 4440-4449.	7.3	26
68	Inhibiting the growth of lithium dendrites at high current densities with oriented graphene foam. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15603-15609.	5.2	25
69	From wood to thin porous carbon membrane: Ancient materials for modern ultrafast electrochemical capacitors in alternating current line filtering. <i>Energy Storage Materials</i> , 2021, 35, 327-333.	9.5	25
70	Preparation of aloe polysaccharide/honey/PVA composite hydrogel: Antibacterial activity and promoting wound healing. <i>International Journal of Biological Macromolecules</i> , 2022, 211, 249-258.	3.6	25
71	Organic dispersions of graphene oxide with arbitrary concentrations and improved chemical stability. <i>Chemical Communications</i> , 2017, 53, 11005-11007.	2.2	20
72	Multitasking tartaric-acid-enabled, highly conductive, and stable MXene/conducting polymer composite for ultrafast supercapacitor. <i>Cell Reports Physical Science</i> , 2021, 2, 100449.	2.8	19

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73	Review on smart strategies for achieving highly efficient ternary polymer solar cells. <i>APL Materials</i> , 2020, 8, .	2.2	18
74	High-quality graphene films and nitrogen-doped organogels prepared from the organic dispersions of graphene oxide. <i>Carbon</i> , 2018, 129, 15-20.	5.4	18
75	Circulating T follicular helper cells are associated with rapid virological response in chronic hepatitis C patients undergoing peginterferon therapy. <i>International Immunopharmacology</i> , 2016, 34, 235-243.	1.7	17
76	Fused Ring Core Engineering for Small Molecule Acceptors Enable High Performance Nonfullerene Polymer Solar Cells. <i>Small Methods</i> , 2019, 3, 1900280.	4.6	17
77	A transport channel-regulated MXene membrane via organic phosphonic acids for efficient water permeation. <i>Chemical Communications</i> , 2021, 57, 6245-6248.	2.2	17
78	Application of Dispersive Liquid-Liquid Microextraction Based on Solidification of Floating Organic Droplet Multi-residue Method for the Simultaneous Determination of Polychlorinated Biphenyls, Organochlorine, and Pyrethroid Pesticides in Aqueous Sample. <i>Clean - Soil, Air, Water</i> , 2012, 40, 1326-1333.	0.7	15
79	Nanodancing with Moisture: Humidity-Sensitive Bilayer Actuator Derived from Cellulose Nanofibrils and Reduced Graphene Oxide. <i>Advanced Intelligent Systems</i> , 2022, 4, 2100084.	3.3	15
80	Mo, Fe bimetallic carbide composite as high stability electrocatalyst for oxygen reduction reaction. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 108052.	3.3	15
81	Efficient ternary organic photovoltaic cells with better trade-off photon harvesting and phase separation by doping DIB-SQ. <i>Journal of Materials Chemistry C</i> , 2016, 4, 7809-7816.	2.7	12
82	13.26% Efficiency Polymer Solar Cells by Optimizing Photogenerated Exciton Distribution and Phase Separation with the Third Component. <i>Solar Rrl</i> , 2019, 3, 1900269.	3.1	12
83	Ionic liquid magnetic bar microextraction and HPLC determination of carbamate pesticides in real water samples. <i>Mikrochimica Acta</i> , 2012, 179, 193-199.	2.5	11
84	Fluorene-fused ladder-type non-fullerene small molecule acceptors for high-performance polymer solar cells. <i>Materials Chemistry Frontiers</i> , 2019, 3, 709-715.	3.2	11
85	Immunogenicity of Hepatitis B Vaccine in Preterm or Low Birth Weight Infants: A Meta-Analysis. <i>American Journal of Preventive Medicine</i> , 2020, 59, 278-287.	1.6	11
86	Dramatically Boosted Efficiency of Small Molecule Solar Cells by Synergistically Optimizing Molecular Aggregation and Crystallinity. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 1982-1989.	3.2	10
87	Bridged Carbon Fabric Membrane with Boosted Performance in AC Line-Filtering Capacitors. <i>Advanced Science</i> , 2022, 9, e2105072.	5.6	10
88	Ultrasound-assisted headspace ionic-liquid microextraction of polycyclic aromatic hydrocarbons at elevated temperatures. <i>Mikrochimica Acta</i> , 2012, 177, 465-471.	2.5	9
89	Tfh cell-mediated humoral immune response and HBsAg level can predict HBeAg seroconversion in chronic hepatitis B patients receiving peginterferon- α therapy. <i>Molecular Immunology</i> , 2016, 73, 37-45.	1.0	9
90	Gas chromatographic determination of three chlorophenols in toilet paper by ultrasonic assisted extraction and synchronous derivative dispersive liquid-liquid microextraction. <i>Analytical Methods</i> , 2014, 6, 207-214.	1.3	8

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91	Solution-Processed Graphene Composite Films as Freestanding Platinum-Free Counter Electrodes for Bendable Dye Sensitized Solar Cells. <i>Chinese Journal of Chemistry</i> , 2016, 34, 59-66.	2.6	8
92	Effects of the seasonal flooding on riparian soil seed bank in the Three Gorges Reservoir Region: a case study in Shanmu River. <i>SpringerPlus</i> , 2016, 5, 492.	1.2	8
93	Adjusting acceptor redistribution for highly efficient solvent additive-free polymer solar cells. <i>Journal of Materials Chemistry C</i> , 2016, 4, 3202-3208.	2.7	8
94	Highly efficient polymer solar cells by step-by-step optimizing donor molecular packing and acceptor redistribution. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 709-716.	1.3	8
95	The soil seed bank of a rehabilitated draw-down zone and its similarity to standing vegetation in the Three Gorges Reservoir Area. <i>Ecological Research</i> , 2017, 32, 1011-1021.	0.7	7
96	Efficient Polymer Solar Cells with Open-Circuit Voltage of 1.01 V and Power Conversion Efficiency of 8.09%. <i>ACS Omega</i> , 2018, 3, 11562-11568.	1.6	6
97	A novel 9 <i>H</i> -indeno[1,2- <i>b</i>]pyrazine-2,3-dicarbonitrile end group for an efficient non-fullerene small molecule acceptor. <i>Journal of Materials Chemistry C</i> , 2019, 7, 10111-10118.	2.7	6
98	Seed rain and seed bank of a draw-down zone and their similarities to vegetation under the regulated water-level fluctuation in Xiangxi River. <i>Journal of Freshwater Ecology</i> , 2020, 35, 57-71.	0.5	6
99	Ultratough and ultrastrong graphene oxide hybrid films via a polycationitrile approach. <i>Nanoscale Horizons</i> , 2021, 6, 341-347.	4.1	6
100	Ultra-Sensitive, Rapid and On-Site Sensing Harmful Ingredients Used in Aquaculture with Magnetic Fluid SERS. <i>Biosensors</i> , 2022, 12, 169.	2.3	5
101	Preparation of Plasmonic Ag@PS Composite via Seed-Mediated In Situ Growth Method and Application in SERS. <i>Frontiers in Chemistry</i> , 2022, 10, 847203.	1.8	5
102	Liquid Metal Fiber Mat as a Highly Stable Solid-State Junction for Inkjet-Printed Flexible Reference Electrodes. <i>Analytical Chemistry</i> , 2022, 94, 6728-6735.	3.2	5
103	Poly(ionic liquid)-Armored MXene Membrane: Interlayer Engineering for Facilitated Water Transport. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
104	Analysis of two anti-tumor active ingredients in <i>Radix Actinidiae chinensis</i> by dispersive liquid-liquid microextraction coupled to high performance liquid chromatography-mass spectrometry. <i>Analytical Methods</i> , 2013, 5, 5227.	1.3	3
105	Determination of trace fungicides in environmental water samples using poly(HPMA-EDMA) monolith microextraction coupled to high performance liquid chromatography. <i>Analytical Methods</i> , 2014, 6, 4783-4789.	1.3	2
106	Hydrazine Oxidation Reaction: Porous Carbon Membrane-Supported Atomically Dispersed Pyrrole-Type Fe ₄ N ₄ as Active Sites for Electrochemical Hydrazine Oxidation Reaction (Small 31/2020). <i>Small</i> , 2020, 16, 2070171.	5.2	2
107	Overt and occult hepatitis B infection after neonatal vaccination: mother-to-infant transmission and HBV vaccine effectiveness. <i>International Journal of Infectious Diseases</i> , 2021, 104, 601-609.	1.5	2
108	Reduced Graphene Oxide-Poly (Ionic Liquid) Composite Films of High Mechanical Performance. <i>Frontiers in Materials</i> , 2021, 8, .	1.2	2

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109	Biomimetic Graphite Foils with High Foldability and Conductivity. <i>Small Methods</i> , 2019, 3, 1800282.	4.6	1
110	Multitasking Tartaric Acid-Enabled Highly Conductive, Stable Titanium Carbide MXene/PEDOT:PSS Composite for Ultrafast Supercapacitor. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0