

# He Zhu

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

3,132  
citations

186209

28  
h-index

168321

53  
g-index

61  
all docs

61  
docs citations

61  
times ranked

3619  
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxygen vacancy distributions and electron localization in a CeO <sub>2</sub> (100) nanocube. Inorganic Chemistry Frontiers, 2022, 9, 275-283.	3.0	8
2	Dramatic and Reversible Water-Induced Stiffening Driven by Phase Separation within Polymer Gels. Advanced Functional Materials, 2022, 32, 2109850.	7.8	20
3	Stabilizing Layered Structure in Aqueous Electrolyte via Dynamic Water Intercalation/Deintercalation. Advanced Materials, 2022, 34, e2108541.	11.1	22
4	Stretchable Hydrogels with Low Hysteresis and High Fracture Toughness for Flexible Electronics. Macromolecular Rapid Communications, 2022, 43, e2100716.	2.0	9
5	Unblocking Oxygen Charge Compensation for Stabilized High-Voltage Structure in P2-Type Sodium-Ion Cathode. Advanced Science, 2022, 9, e2200498.	5.6	32
6	Direct transformation of ZIF-8 into hollow porous carbons and hollow carbon composites. Nano Research, 2022, 15, 5769-5774.	5.8	10
7	Joule heating of ionic conductors using zero-phase frequency alternating current to suppress electrochemical reactions. Engineering, 2022, , .	3.2	4
8	Fluorinated Poly(ionic liquid) Copolymers as Transparent, Strong, and Versatile Adhesive Materials. ACS Applied Polymer Materials, 2022, 4, 3217-3224.	2.0	6
9	Acid-Clay Electrolyte for Wide-Temperature-Range and Long-Cycle Proton Batteries. Advanced Materials, 2022, 34, e2202063.	11.1	16
10	Bioinspired Semicrystalline Dynamic Ionogels with Adaptive Mechanics and Tactile Sensing. ACS Applied Materials & Interfaces, 2022, 14, 20132-20138.	4.0	5
11	Modulating precursor nanosheets for stabilized Ni-rich cathode material for Li-ion batteries. Rare Metals, 2022, 41, 2552-2559.	3.6	19
12	Transient Solid-State Laser Activation of Indium for High-Performance Reduction of CO <sub>2</sub> to Formate. Small, 2022, 18, e2201311.	5.2	22
13	Fabrication of metal-organic framework-based nanofibrous separator via one-pot electrospinning strategy. Nano Research, 2021, 14, 1465-1470.	5.8	32
14	Improving Dielectric Constant of Polymers through Liquid Electrolyte Inclusion. Advanced Functional Materials, 2021, 31, 2007863.	7.8	25
15	LiMnO <sub>2</sub> cathode stabilized by interfacial orbital ordering for sustainable lithium-ion batteries. Nature Sustainability, 2021, 4, 392-401.	11.5	156
16	A nanorod-like Ni-rich layered cathode with enhanced Li <sup>+</sup> diffusion pathways for high-performance lithium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 2830-2839.	5.2	58
17	Fabrication of Metal-Organic Framework/Polymer Composites via a One-Pot Solvent Crystal Template Strategy. ACS Applied Polymer Materials, 2021, 3, 2038-2044.	2.0	5
18	Modulating the Surface Ligand Orientation for Stabilized Anionic Redox in Li-Rich Oxide Cathodes. Advanced Energy Materials, 2021, 11, 2003479.	10.2	45

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19	Insight into the capacity decay mechanism of cycled $\text{LiNi}_{0.5}\text{Co}_{0.2}\text{Mn}_{0.3}\text{O}_2$ cathodes via in situ x-ray diffraction. <i>Nanotechnology</i> , 2021, 32, 295701.	1.3	17
20	Colorimetric Ionic Organohydrogels Mimicking Human Skin for Mechanical Stimuli Sensing and Injury Visualization. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 26490-26497.	4.0	23
21	Highly Transparent, Stretchable, and Conducting Ionomers Based on Poly(ionic liquid)s. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 31102-31110.	4.0	39
22	Solvothermal synthesis of covalent triazine framework and its application in photodegradation of organic dyes. <i>Materials Today Chemistry</i> , 2021, 20, 100475.	1.7	10
23	Metal Oxy-Hydroxides with a Hierarchical and Hollow Structure for Highly Efficient Solar-Thermal Water Evaporation. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 27726-27733.	4.0	9
24	Hierarchically Porous Monolith with High MOF Accessibility and Strengthened Mechanical Properties using Water-in-Oil High Internal Phase Emulsion Template. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100620.	1.9	12
25	All-Solid-State Self-Healing Ionic Conductors Enabled by Ion-Dipole Interactions within Fluorinated Poly(ionic Liquid) Copolymers. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 41140-41148.	4.0	42
26	Cation mixing in Wadsley-Roth phase anode of lithium-ion battery improves cycling stability and fast $\text{Li}^+$ storage. <i>Applied Physics Reviews</i> , 2021, 8, .	5.5	21
27	Flexible nanoporous antireflection coatings prepared from controllable latex aggregation and their efficient color deepening function. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 627, 127165.	2.3	2
28	Hierarchically porous carbon with heteroatom doping for the application of Zn-ion capacitors. <i>Carbon</i> , 2021, 185, 1-8.	5.4	35
29	Damage-resistant and healable polyacrylonitrile-derived stretchable materials with exceptional fracture toughness and fatigue threshold. <i>Journal of Materials Chemistry A</i> , 2021, 9, 23451-23458.	5.2	6
30	Structure and Charge Regulation Strategy Enabling Superior Cyclability for Ni-Rich Layered Cathode Materials. <i>Small</i> , 2021, 17, e2104282.	5.2	36
31	Ten Thousand-Cycle Ultrafast Energy Storage of Wadsley-Roth Phase $\text{Fe-Nb}$ Oxides with a Desolvation Promoting Interfacial Layer. <i>Nano Letters</i> , 2021, 21, 9675-9683.	4.5	17
32	Spontaneous Strain Buffer Enables Superior Cycling Stability in Single-Crystal Nickel-Rich NCM Cathode. <i>Nano Letters</i> , 2021, 21, 9997-10005.	4.5	58
33	In Situ Probing Multiple-Scale Structures of Energy Materials for $\text{Li-ion}$ Batteries. <i>Small Methods</i> , 2020, 4, 1900223.	4.6	39
34	Structuring Metal-Organic Framework Materials into Hierarchically Porous Composites through One-Pot Fabrication Strategy. <i>Chemistry - A European Journal</i> , 2020, 26, 3358-3363.	1.7	5
35	Boosting fast energy storage by synergistic engineering of carbon and deficiency. <i>Nature Communications</i> , 2020, 11, 132.	5.8	92
36	Reversible Water Transportation Diode: Temperature-Adaptive Smart Janus Textile for Moisture/Thermal Management. <i>Advanced Functional Materials</i> , 2020, 30, 1907851.	7.8	120

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37	Highly stretchable, recyclable, notch-insensitive, and conductive polyacrylonitrile-derived organogel. <i>Journal of Materials Chemistry A</i> , 2020, 8, 20346-20353.	5.2	36
38	Negative-Pressure-Induced Large Polarization in Nanosized $\text{PbTiO}_3$ . <i>Advanced Materials</i> , 2020, 32, e2002968.	11.1	20
39	Stretchable, Phase-Transformable Ionogels with Reversible Ionic Conductor-Insulator Transition. <i>Advanced Functional Materials</i> , 2020, 30, 2005079.	7.8	37
40	Tuning the Kinetics of Zinc-Ion Insertion/Extraction in $\text{V}_2\text{O}_5$ by In Situ Polyaniline Intercalation Enables Improved Aqueous Zinc-Ion Storage Performance. <i>Advanced Materials</i> , 2020, 32, e2001113.	11.1	357
41	Unveiling the solid-solution charge storage mechanism in 1T vanadium disulfide nanoarray cathodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9068-9076.	5.2	36
42	Ultralow-Strain Zn-Substituted Layered Oxide Cathode with Suppressed $\text{P}_2\text{O}_7$ Transition for Stable Sodium Ion Storage. <i>Advanced Functional Materials</i> , 2020, 30, 1910327.	7.8	110
43	Achieving Ultrahigh-Rate and High-Safety $\text{Li}^+$ Storage Based on Interconnected Tunnel Structure in Micro-Size Niobium Tungsten Oxides. <i>Advanced Materials</i> , 2020, 32, e1905295.	11.1	95
44	Synergy of Ion Doping and Spiral Array Architecture on $\text{Ti}_2\text{Nb}_{10}\text{O}_{29}$ : A New Way to Achieve High-Power Electrodes. <i>Advanced Functional Materials</i> , 2020, 30, 2002665.	7.8	37
45	Structuring the reduced graphene oxide/polyHIPE foam for piezoresistive sensing via emulsion-templated polymerization. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 134, 105898.	3.8	30
46	Recent progress on MOF-derived carbon materials for energy storage. , 2020, 2, 176-202.		198
47	Lithium-Ion Batteries: Radially Oriented Single-Crystal Primary Nanosheets Enable Ultrahigh Rate and Cycling Properties of $\text{LiNi}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1}\text{O}_2$ Cathode Material for Lithium-Ion Batteries ( <i>Adv. Energy Mater.</i> 15/2019). <i>Advanced Energy Materials</i> , 2019, 9, 1970051.	10.2	14
48	Radially Oriented Single-Crystal Primary Nanosheets Enable Ultrahigh Rate and Cycling Properties of $\text{LiNi}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1}\text{O}_2$ Cathode Material for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1803963.	10.2	240
49	Development of a Highly Sensitive, Broad-Range Hierarchically Structured Reduced Graphene Oxide/PolyHIPE Foam for Pressure Sensing. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 4318-4327.	4.0	83
50	Interconnected Porous Monolith Prepared via $\text{UiO-66}$ Stabilized Pickering High Internal Phase Emulsion Template. <i>Chemistry - A European Journal</i> , 2018, 24, 16426-16431.	1.7	28
51	Collectable and Recyclable Mussel-Inspired Poly(ionic liquid)-Based Sorbents for Ultrafast Water Treatment. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 2829-2835.	3.2	30
52	Engineering Elastic ZIF-8 Sponges for Oil-Water Separation. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700560.	1.9	49
53	Rapid collection and re-dispersion of MOF particles by a simple and versatile method using a thermo-responsive polymer. <i>RSC Advances</i> , 2016, 6, 63398-63402.	1.7	3
54	Assembly of a Metal-Organic Framework into 3D Hierarchical Porous Monoliths Using a Pickering High Internal Phase Emulsion Template. <i>Chemistry - A European Journal</i> , 2016, 22, 8751-8755.	1.7	80

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55	MOFsomes via Transient Pickering Emulsion Template. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600294.	1.9	7
56	Flexible and Porous Nanocellulose Aerogels with High Loadings of Metal-Organic Framework Particles for Separations Applications. <i>Advanced Materials</i> , 2016, 28, 7652-7657.	11.1	369
57	Alginate Hydrogel: A Shapeable and Versatile Platform for <i>in Situ</i> Preparation of Metal-Organic Framework-Polymer Composites. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 17395-17401.	4.0	127
58	A versatile and facile surface modification route based on polydopamine for the growth of MOF films on different substrates. <i>Canadian Journal of Chemical Engineering</i> , 2015, 93, 63-67.	0.9	18
59	Preparation of raspberry-like ZIF-8/PS composite spheres via dispersion polymerization. <i>Dalton Transactions</i> , 2015, 44, 16752-16757.	1.6	24
60	Reversibly Dispersible/Collectable Metal-Organic Frameworks Prepared by Grafting Thermally Responsive and Switchable Polymers. <i>Macromolecular Materials and Engineering</i> , 2015, 300, 191-197.	1.7	27