

He Zhu

List of Publications by Year in descending order

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186209
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3619
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Tuning the Kinetics of Zinc-Ion Insertion/Extraction in V_2O_5 by In Situ Polyaniline Intercalation Enables Improved Aqueous Zinc-Ion Storage Performance. <i>Advanced Materials</i> , 2020, 32, e2001113.	11.1	357
3	Radially Oriented Single-Crystal Primary Nanosheets Enable Ultrahigh Rate and Cycling Properties of $Li_{0.8}Co_{0.1}Mn_{0.1}O_2$ Cathode Material for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1803963.	10.2	240
4	Recent progress on MOF-derived carbon materials for energy storage. , 2020, 2, 176-202.		198
5	LiMnO ₂ cathode stabilized by interfacial orbital ordering for sustainable lithium-ion batteries. <i>Nature Sustainability</i> , 2021, 4, 392-401.	11.5	156
6	Alginate Hydrogel: A Shapeable and Versatile Platform for <i>in Situ</i> Preparation of Metal-Organic Framework-Polymer Composites. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 17395-17401.	4.0	127
7	Reversible Water Transportation Diode: Temperature-Adaptive Smart Janus Textile for Moisture/Thermal Management. <i>Advanced Functional Materials</i> , 2020, 30, 1907851.	7.8	120
8	Ultralow-Strain Zn-Substituted Layered Oxide Cathode with Suppressed P ₂ -O ₂ Transition for Stable Sodium Ion Storage. <i>Advanced Functional Materials</i> , 2020, 30, 1910327.	7.8	110
9	Achieving Ultrahigh-Rate and High-Safety Li^{+} Storage Based on Interconnected Tunnel Structure in Micro-Size Niobium Tungsten Oxides. <i>Advanced Materials</i> , 2020, 32, e1905295.	11.1	95
10	Boosting fast energy storage by synergistic engineering of carbon and deficiency. <i>Nature Communications</i> , 2020, 11, 132.	5.8	92
11	Development of a Highly Sensitive, Broad-Range Hierarchically Structured Reduced Graphene Oxide/PolyHIPE Foam for Pressure Sensing. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4318-4327.	4.0	83
12	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
13	A nanorod-like Ni-rich layered cathode with enhanced Li^{+} diffusion pathways for high-performance lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 2830-2839.	5.2	58
14	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
15	Engineering Elastic ZIF-8 Sponges for Oil-Water Separation. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700560.	1.9	49
16	Modulating the Surface Ligand Orientation for Stabilized Anionic Redox in Li-Rich Oxide Cathodes. <i>Advanced Energy Materials</i> , 2021, 11, 2003479.	10.2	45
17	All-Solid-State Self-Healing Ionic Conductors Enabled by Ion-Dipole Interactions within Fluorinated Poly(Ionic Liquid) Copolymers. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 41140-41148.	4.0	42
18	In Situ Probing Multiple-Scale Structures of Energy Materials for Li-Ion Batteries. <i>Small Methods</i> , 2020, 4, 1900223.	4.6	39

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19	Highly Transparent, Stretchable, and Conducting Ionoelastomers Based on Poly(ionic liquid)s. ACS Applied Materials & Interfaces, 2021, 13, 31102-31110.	4.0	39
20	Stretchable, Phase-Transformable Ionogels with Reversible Ionic Conductor-Insulator Transition. Advanced Functional Materials, 2020, 30, 2005079.	7.8	37
21	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. Advanced Functional Materials, 2020, 30, 2002665.	7.8	37
22	Highly stretchable, recyclable, notch-insensitive, and conductive polyacrylonitrile-derived organogel. Journal of Materials Chemistry A, 2020, 8, 20346-20353.	5.2	36
23	Unveiling the solid-solution charge storage mechanism in 1T vanadium disulfide nanoarray cathodes. Journal of Materials Chemistry A, 2020, 8, 9068-9076.	5.2	36
24	Structure and Charge Regulation Strategy Enabling Superior Cyclability for Ni-Rich Layered Cathode Materials. Small, 2021, 17, e2104282.	5.2	36
25	Hierarchically porous carbon with heteroatom doping for the application of Zn-ion capacitors. Carbon, 2021, 185, 1-8.	5.4	35
26	Fabrication of metal-organic framework-based nanofibrous separator via one-pot electrospinning strategy. Nano Research, 2021, 14, 1465-1470.	5.8	32
27	Unblocking Oxygen Charge Compensation for Stabilized High-Voltage Structure in P-Type Sodium-Ion Cathode. Advanced Science, 2022, 9, e2200498.	5.6	32
28	Collectable and Recyclable Mussel-Inspired Poly(ionic liquid)-Based Sorbents for Ultrafast Water Treatment. ACS Sustainable Chemistry and Engineering, 2017, 5, 2829-2835.	3.2	30
29	Structuring the reduced graphene oxide/polyHIPE foam for piezoresistive sensing via emulsion-templated polymerization. Composites Part A: Applied Science and Manufacturing, 2020, 134, 105898.	3.8	30
30	Interconnected Porous Monolith Prepared via UiO-66 Stabilized Pickering High Internal Phase Emulsion Template. Chemistry - A European Journal, 2018, 24, 16426-16431.	1.7	28
31	Reversibly Dispersible/Collectable Metal-Organic Frameworks Prepared by Grafting Thermally Responsive and Switchable Polymers. Macromolecular Materials and Engineering, 2015, 300, 191-197.	1.7	27
32	Improving Dielectric Constant of Polymers through Liquid Electrolyte Inclusion. Advanced Functional Materials, 2021, 31, 2007863.	7.8	25
33	Preparation of raspberry-like ZIF-8/PS composite spheres via dispersion polymerization. Dalton Transactions, 2015, 44, 16752-16757.	1.6	24
34	Colorimetric Ionic Organohydrogels Mimicking Human Skin for Mechanical Stimuli Sensing and Injury Visualization. ACS Applied Materials & Interfaces, 2021, 13, 26490-26497.	4.0	23
35	Stabilizing Layered Structure in Aqueous Electrolyte via Dynamic Water Intercalation/Deintercalation. Advanced Materials, 2022, 34, e2108541.	11.1	22
36	Transient Solid-State Laser Activation of Indium for High-Performance Reduction of CO_2 to Formate. Small, 2022, 18, e2201311.	5.2	22

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37	Cation mixing in Wadsley-Roth phase anode of lithium-ion battery improves cycling stability and fast Li ⁺ storage. <i>Applied Physics Reviews</i> , 2021, 8, .	5.5	21
38	Negative-Pressure-Induced Large Polarization in Nanosized PbTiO ₃ . <i>Advanced Materials</i> , 2020, 32, e2002968.	11.1	20
39	Dramatic and Reversible Water-Induced Stiffening Driven by Phase Separation within Polymer Gels. <i>Advanced Functional Materials</i> , 2022, 32, 2109850.	7.8	20
40	Modulating precursor nanosheets for stabilized Ni-rich cathode material for Li-ion batteries. <i>Rare Metals</i> , 2022, 41, 2552-2559.	3.6	19
41	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
42	Insight into the capacity decay mechanism of cycled LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ cathodes via in situ x-ray diffraction. <i>Nanotechnology</i> , 2021, 32, 295701.	1.3	17
43	Ten Thousand-Cycle Ultrafast Energy Storage of Wadsley-Roth Phase Fe-Nb Oxides with a Desolvation Promoting Interfacial Layer. <i>Nano Letters</i> , 2021, 21, 9675-9683.	4.5	17
44	Acid-Induced Clay Electrolyte for Wide-Temperature-Range and Long-Cycle Proton Batteries. <i>Advanced Materials</i> , 2022, 34, e2202063.	11.1	16
45	Lithium-Ion Batteries: Radially Oriented Single-Crystal Primary Nanosheets Enable Ultrahigh Rate and Cycling Properties of LiNi _{0.8} Co _{0.1} Mn _{0.1} 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
46	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
47	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
48	Direct transformation of ZIF-8 into hollow porous carbons and hollow carbon composites. <i>Nano Research</i> , 2022, 15, 5769-5774.	5.8	10
49	Metal Oxy-Hydroxides with a Hierarchical and Hollow Structure for Highly Efficient Solar-Thermal Water Evaporation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 27726-27733.	4.0	9
50	Stretchable Hydrogels with Low Hysteresis and High Fracture Toughness for Flexible Electronics. <i>Macromolecular Rapid Communications</i> , 2022, 43, e2100716.	2.0	9
51	Oxygen vacancy distributions and electron localization in a CeO ₂ (100) nanocube. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 275-283.	3.0	8
52	MOFsomes via Transient Pickering Emulsion Template. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600294.	1.9	7
53	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
54	Fluorinated Poly(ionic liquid) Copolymers as Transparent, Strong, and Versatile Adhesive Materials. <i>ACS Applied Polymer Materials</i> , 2022, 4, 3217-3224.	2.0	6

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55	Structuring Metal-Organic Framework Materials into Hierarchically Porous Composites through One-Pot Fabrication Strategy. Chemistry - A European Journal, 2020, 26, 3358-3363.	1.7	5
56	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
57	Bioinspired Semicrystalline Dynamic Ionogels with Adaptive Mechanics and Tactile Sensing. ACS Applied Materials & Interfaces, 2022, 14, 20132-20138.	4.0	5
58	Joule heating of ionic conductors using zero-phase frequency alternating current to suppress electrochemical reactions. Engineering, 2022, , .	3.2	4
59	Rapid collection and re-dispersion of MOF particles by a simple and versatile method using a thermo-responsive polymer. RSC Advances, 2016, 6, 63398-63402.	1.7	3
60	Flexible nanoporous antireflection coatings prepared from controllable latex aggregation and their efficient color deepening function. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 627, 127165.	2.3	2