

He Zhu

List of Publications by Year in descending order

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218677

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#	ARTICLE	IF	CITATIONS
1	Tuning the Kinetics of Zinc ²⁺ /O ⁵⁻ by In Situ Polyaniline Intercalation Enables Improved Aqueous Zinc ²⁺ Storage Performance. <i>Advanced Materials</i> , 2020, 32, e2001113.	21.0	357
2	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>Advanced Energy Materials</i> , 2019, 9, 1803963.	19.5	240
3	Recent progress on MOF-derived carbon materials for energy storage. , 2020, 2, 176-202.		198
4	LiMnO ₂ cathode stabilized by interfacial orbital ordering for sustainable lithium-ion batteries. <i>Nature Sustainability</i> , 2021, 4, 392-401.	23.7	156
5	Ultralow-Strain Zn-Substituted Layered Oxide Cathode with Suppressed P2 ⁺ →O ₂ Transition for Stable Sodium Ion Storage. <i>Advanced Functional Materials</i> , 2020, 30, 1910327.	14.9	110
6	Switching Between Giant Positive and Negative Thermal Expansions of a YFe(CN) ₆ -based Prussian Blue Analogue Induced by Guest Species. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 9023-9028.	13.8	101
7	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.	21.0	95
8	Boosting fast energy storage by synergistic engineering of carbon and deficiency. <i>Nature Communications</i> , 2020, 11, 132.	12.8	92
9	Zero Thermal Expansion in Magnetic and Metallic Tb(Co,Fe) ₂ Intermetallic Compounds. <i>Journal of the American Chemical Society</i> , 2018, 140, 602-605.	13.7	87
10	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.	10.3	58
11	Spontaneous Strain Buffer Enables Superior Cycling Stability in Single-Crystal Nickel-Rich NCM Cathode. <i>Nano Letters</i> , 2021, 21, 9997-10005.	9.1	58
12	Charge transfer drives anomalous phase transition in ceria. <i>Nature Communications</i> , 2018, 9, 5063.	12.8	48
13	Modulating the Surface Ligand Orientation for Stabilized Anionic Redox in Li-Rich Oxide Cathodes. <i>Advanced Energy Materials</i> , 2021, 11, 2003479.	19.5	45
14	Bridging Structural Inhomogeneity to Functionality: Pair Distribution Function Methods for Functional Materials Development. <i>Advanced Science</i> , 2021, 8, 2003534.	11.2	44
15	In Situ Probing Multiple-Scale Structures of Energy Materials for Li-Ion Batteries. <i>Small Methods</i> , 2020, 4, 1900223.	8.6	39
16	A New Insight into Cross-Sensitivity to Humidity of SnO ₂ Sensor. <i>Small</i> , 2018, 14, e1703974.	10.0	38
17	Twin Crystal Induced near Zero Thermal Expansion in SnO ₂ Nanowires. <i>Journal of the American Chemical Society</i> , 2018, 140, 7403-7406.	13.7	37
18	Synergy of Ion Doping and Spiral Array Architecture on Ti ₂ Nb ₁₀ O ₂₉ : A New Way to Achieve High-Power Electrodes. <i>Advanced Functional Materials</i> , 2020, 30, 2002665.	14.9	37

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19	Unveiling the solid-solution charge storage mechanism in 1T vanadium disulfide nanoarray cathodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9068-9076.	10.3	36
20	Structure and Charge Regulation Strategy Enabling Superior Cyclability for Ni-Rich Layered Cathode Materials. <i>Small</i> , 2021, 17, e2104282.	10.0	36
21	Local Chemical Ordering and Negative Thermal Expansion in PtNi Alloy Nanoparticles. <i>Nano Letters</i> , 2017, 17, 7892-7896.	9.1	34
22	3D negative thermal expansion in orthorhombic MIL-68(In). <i>Chemical Communications</i> , 2018, 54, 5712-5715.	4.1	34
23	Strong Second Harmonic Generation in a Tungsten Bronze Oxide by Enhancing Local Structural Distortion. <i>Journal of the American Chemical Society</i> , 2020, 142, 7480-7486.	13.7	33
24	Low-Frequency Phonon Driven Negative Thermal Expansion in Cubic GaFe(CN) ₆ Prussian Blue Analogues. <i>Inorganic Chemistry</i> , 2018, 57, 10918-10924.	4.0	32
25	Unlocking Oxygen Charge Compensation for Stabilized High-Voltage Structure in P2-type Sodium-ion Cathode. <i>Advanced Science</i> , 2022, 9, e2200498.	11.2	32
26	Insights into Ti doping for stabilizing the Na ₂ /3Fe ₁ /3Mn ₂ /3O ₂ cathode in sodium ion battery. <i>Journal of Energy Chemistry</i> , 2022, 73, 542-548.	12.9	32
27	Tunable Thermal Expansion from Negative, Zero, to Positive in Cubic Prussian Blue Analogues of GaFe(CN) ₆ . <i>Inorganic Chemistry</i> , 2018, 57, 14027-14030.	4.0	28
28	Local Structural Distortion Induced Uniaxial Negative Thermal Expansion in Nanosized Semimetal Bismuth. <i>Advanced Science</i> , 2016, 3, 1600108.	11.2	26
29	Hydration and Thermal Expansion in Anatase Nanoparticles. <i>Advanced Materials</i> , 2016, 28, 6894-6899.	21.0	23
30	Structure and Phase Transformation in the Giant Magnetostriction Laves-Phase SmFe ₂ . <i>Inorganic Chemistry</i> , 2018, 57, 689-694.	4.0	23
31	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, .	11.3	21
32	Negative-Pressure-Induced Large Polarization in Nanosized PbTiO ₃ . <i>Advanced Materials</i> , 2020, 32, e2002968.	21.0	20
33	Modulating precursor nanosheets for stabilized Ni-rich cathode material for Li-ion batteries. <i>Rare Metals</i> , 2022, 41, 2552-2559.	7.1	19
34	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.	2.6	17
35	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.	9.1	17
36	Constructing O ₂ /O ₃ homogeneous hybrid stabilizes Li-rich layered cathodes. <i>Energy Storage Materials</i> , 2022, 51, 756-763.	18.0	16

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37	Negative Thermal Expansion in Nanosolids. <i>Accounts of Chemical Research</i> , 2019, 52, 2694-2702.	15.6	14
38	Local Chemical Strain in PtFe Alloy Nanoparticles. <i>Inorganic Chemistry</i> , 2018, 57, 10494-10497.	4.0	10
39	Cation deficiency effect on negative thermal expansion of ferroelectric PbTiO_3 . <i>Inorganic Chemistry Frontiers</i> , 2015, 2, 1091-1094.	6.0	9
40	Phase transition and thermal expansion of $\text{Ho}_2\text{W}_3\text{O}_{12}$. <i>Inorganic Chemistry Communication</i> , 2016, 73, 111-114.	3.9	9
41	Oxygen vacancy distributions and electron localization in a $\text{CeO}_2(100)$ nanocube. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 275-283.	6.0	8
42	Spreading monoclinic boundary network between hexagonal primary grains for high performance Ni-rich cathode materials. <i>Nano Energy</i> , 2022, 100, 107502.	16.0	7
43	Switching Between Giant Positive and Negative Thermal Expansions of a $\text{YFe}(\text{CN})_6$ -based Prussian Blue Analogue Induced by Guest Species. <i>Angewandte Chemie</i> , 2017, 129, 9151-9156.	2.0	5