

# Fengshan Zheng

## List of Publications by Year in descending order

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34  
papers

2,344  
citations

471509

17  
h-index

414414

32  
g-index

38  
all docs

38  
docs citations

38  
times ranked

3027  
citing authors

#	ARTICLE	IF	CITATIONS
1	Broad temperature plateau for thermoelectric figure of merit $ZT^2$ in phase-separated $\text{PbTe}_{0.7}\text{Sb}_{0.3}$ . Nature Communications, 2014, 5, 4515.	12.8	461
2	Origin of the High Performance in GeTe-Based Thermoelectric Materials upon $\text{Bi}_{2-x}\text{Te}_{3-x}$ Doping. Journal of the American Chemical Society, 2014, 136, 11412-11419.	13.7	319
3	High Thermoelectric Performance Realized in a $\text{BiCuSeO}$ System by Improving Carrier Mobility through 3D Modulation Doping. Journal of the American Chemical Society, 2014, 136, 13902-13908.	13.7	317
4	Experimental observation of chiral magnetic bobbers in B20-type FeGe. Nature Nanotechnology, 2018, 13, 451-455.	31.5	243
5	Boosting the Thermoelectric Performance of (Na,K)-Codoped Polycrystalline SnSe by Synergistic Tailoring of the Band Structure and Atomic-Scale Defect Phonon Scattering. Journal of the American Chemical Society, 2017, 139, 9714-9720.	13.7	168
6	Direct Imaging of a Zero-Field Target Skyrmion and Its Polarity Switch in a Chiral Magnetic Nanodisk. Physical Review Letters, 2017, 119, 197205.	7.8	156
7	Control of morphology and formation of highly geometrically confined magnetic skyrmions. Nature Communications, 2017, 8, 15569.	12.8	103
8	Carrier lifetime enhancement in halide perovskite via remote epitaxy. Nature Communications, 2019, 10, 4145.	12.8	93
9	Advanced electron microscopy for thermoelectric materials. Nano Energy, 2015, 13, 626-650.	16.0	80
10	Understanding Nanostructuring Processes in Thermoelectrics and Their Effects on Lattice Thermal Conductivity. Advanced Materials, 2016, 28, 2737-2743.	21.0	54
11	Investigation into the extremely low thermal conductivity in Ba heavily doped $\text{BiCuSeO}$ . Nano Energy, 2016, 27, 167-174.	16.0	40
12	High thermoelectric properties realized in earth-abundant $\text{Bi}_2\text{S}_3$ bulk via carrier modulation and multi-nano-precipitates synergy. Nano Energy, 2020, 78, 105227.	16.0	40
13	Excellent $ZT$ achieved in $\text{Cu}_{1.8}\text{S}$ thermoelectric alloys through introducing rare-earth trichlorides. Journal of Materials Chemistry A, 2018, 6, 14440-14448.	10.3	39
14	Magnetic Skyrmion Formation at Lattice Defects and Grain Boundaries Studied by Quantitative Off-Axis Electron Holography. Nano Letters, 2017, 17, 1395-1401.	9.1	33
15	Dislocation Evolution and Migration at Grain Boundaries in Thermoelectric SnTe. ACS Applied Energy Materials, 2019, 2, 2392-2397.	5.1	27
16	Highly enhanced thermoelectric properties of $\text{Cu}_{1.8}\text{S}$ by introducing PbS. Journal of Alloys and Compounds, 2018, 764, 738-744.	5.5	25
17	Magnetic skyrmion braids. Nature Communications, 2021, 12, 5316.	12.8	22
18	Realizing high thermoelectric performance in n-type SnSe polycrystals via (Pb, Br) co-doping and multi-nanoprecipitates synergy. Journal of Alloys and Compounds, 2021, 864, 158401.	5.5	19

#	ARTICLE	IF	CITATIONS
19	Fabrication and characterization of a focused ion beam milled lanthanum hexaboride based cold field electron emitter source. Applied Physics Letters, 2018, 113, 093101.	3.3	17
20	Skyrmion-antiskyrmion pair creation and annihilation in a cubic chiral magnet. Nature Physics, 2022, 18, 863-868.	16.7	17
21	Manipulation of dipolar magnetism in low-dimensional iron oxide nanoparticle assemblies. Physical Chemistry Chemical Physics, 2019, 21, 6171-6177.	2.8	10
22	Measurement of charge density in nanoscale materials using off-axis electron holography. Journal of Electron Spectroscopy and Related Phenomena, 2020, 241, 146881.	1.7	9
23	Robust nature of the chiral spin helix in $Sr_2Cr_2O_7$ nanostructures studied by off-axis electron holography. Physical Review B, 2020, 102, .	3.2	8
24	Atomic-Scale Observation of Off-Centering Rattlers in Filled Skutterudites. Advanced Energy Materials, 2022, 12, .	19.5	8
25	Quantitative measurement of charge accumulation along a quasi-one-dimensional $W_5O_{14}$ nanowire during electron field emission. Nanoscale, 2020, 12, 10559-10564.	5.6	7
26	Structural origin of enhanced critical temperature in ultrafine multilayers of cuprate superconducting films. Physical Review B, 2014, 89, .	3.2	6
27	Three-dimensional electric field mapping of an electrically biased atom probe needle using off-axis electron holography. Microscopy and Microanalysis, 2019, 25, 326-327.	0.4	6
28	Interplay of anomalous strain relaxation and minimization of polarization changes at nitride semiconductor heterointerfaces. Physical Review B, 2020, 102, .	3.2	3
29	Live Measurement of Electrical Charge Density in Materials using Off-Axis Electron Holography. Microscopy and Microanalysis, 2019, 25, 44-45.	0.4	2
30	Diversity of states in a chiral magnet nanocylinder. APL Materials, 2022, 10, .	5.1	2
31	Prospect for measuring two-dimensional van der Waals magnets by electron magnetic chiral dichroism. Ultramicroscopy, 2022, 234, 113476.	1.9	1
32	Model-Based Iterative Reconstruction of Charge Density in Nanoscale Materials using Off-Axis Electron Holography. Microscopy and Microanalysis, 2019, 25, 48-49.	0.4	0
33	Three-dimensional Charge Density and Electric Field Mapping of an Electrically Biased Needle Using Off-axis Electron Holography. Microscopy and Microanalysis, 2020, 26, 1540-1542.	0.4	0
34	Magnetic Field Mapping using Off-Axis Electron Holography in the Transmission Electron Microscope. Journal of Visualized Experiments, 2020, , .	0.3	0