

# Qihao Zhang

## List of Publications by Year in descending order

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42  
papers

3,589  
citations

186265  
28  
h-index

276875  
41  
g-index

42  
all docs

42  
docs citations

42  
times ranked

2798  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-entropy-stabilized chalcogenides with high thermoelectric performance. <i>Science</i> , 2021, 371, 830-834.	12.6	546
2	High efficiency Bi <sub>2</sub> Te <sub>3</sub> -based materials and devices for thermoelectric power generation between 100 and 300 Å°C. <i>Energy and Environmental Science</i> , 2016, 9, 3120-3127.	30.8	358
3	Realizing a thermoelectric conversion efficiency of 12% in bismuth telluride/skutterudite segmented modules through full-parameter optimization and energy-loss minimized integration. <i>Energy and Environmental Science</i> , 2017, 10, 956-963.	30.8	274
4	Skutterudite with graphene-modified grain-boundary complexation enhances zT enabling high-efficiency thermoelectric device. <i>Energy and Environmental Science</i> , 2017, 10, 183-191.	30.8	252
5	Improved Thermoelectric Performance of Silver Nanoparticlesâ€Dispersed Bi <sub>2</sub> Te <sub>3</sub> Composites Deriving from Hierarchical Twoâ€Phased Heterostructure. <i>Advanced Functional Materials</i> , 2015, 25, 966-976.	14.9	243
6	High-efficiency half-Heusler thermoelectric modules enabled by self-propagating synthesis and topologic structure optimization. <i>Energy and Environmental Science</i> , 2019, 12, 3390-3399.	30.8	135
7	Realizing high-performance thermoelectric power generation through grain boundary engineering of skutterudite-based nanocomposites. <i>Nano Energy</i> , 2017, 41, 501-510.	16.0	130
8	High-Efficiency and Stable Thermoelectric Module Based on Liquid-Like Materials. <i>Joule</i> , 2019, 3, 1538-1548.	24.0	126
9	Towards tellurium-free thermoelectric modules for power generation from low-grade heat. <i>Nature Communications</i> , 2021, 12, 1121.	12.8	118
10	Highâ€Efficiency Thermoelectric Power Generation Enabled by Homogeneous Incorporation of MXene in (Bi,Sb) <sub>2</sub> Te <sub>3</sub> Matrix. <i>Advanced Energy Materials</i> , 2020, 10, 1902986.	19.5	109
11	Carbon nanotube yarn based thermoelectric textiles for harvesting thermal energy and powering electronics. <i>Journal of Materials Chemistry A</i> , 2020, 8, 2984-2994.	10.3	107
12	Electrode interface optimization advances conversion efficiency and stability of thermoelectric devices. <i>Nature Communications</i> , 2020, 11, 2723.	12.8	101
13	High efficiency GeTe-based materials and modules for thermoelectric power generation. <i>Energy and Environmental Science</i> , 2021, 14, 995-1003.	30.8	101
14	Superior performance and high service stability for GeTe-based thermoelectric compounds. <i>National Science Review</i> , 2019, 6, 944-954.	9.5	96
15	An argyrodite-type Ag <sub>9</sub> GaSe <sub>6</sub> liquid-like material with ultralow thermal conductivity and high thermoelectric performance. <i>Chemical Communications</i> , 2017, 53, 11658-11661.	4.1	84
16	Micro-thermoelectric devices. <i>Nature Electronics</i> , 2022, 5, 333-347.	26.0	84
17	Intrinsically High Thermoelectric Performance in AgInSe <sub>2</sub> nâ€Type Diamondâ€Like Compounds. <i>Advanced Science</i> , 2018, 5, 1700727.	11.2	66
18	A Device-to-Material Strategy Guiding the â€Double-Highâ€Thermoelectric Module. <i>Joule</i> , 2020, 4, 2475-2483.	24.0	64

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19	The effect of reduced graphene oxide on microstructure and thermoelectric properties of Nb-doped A-site-deficient SrTiO <sub>3</sub> ceramics. <i>Journal of Alloys and Compounds</i> , 2019, 786, 884-893.	5.5	55
20	Enhanced thermoelectric and mechanical properties of Na-doped polycrystalline SnSe thermoelectric materials via CNTs dispersion. <i>Journal of Alloys and Compounds</i> , 2018, 741, 756-764.	5.5	54
21	An efficient thermoelectric material: preparation of reduced graphene oxide/polyaniline hybrid composites by cryogenic grinding. <i>RSC Advances</i> , 2015, 5, 8988-8995.	3.6	50
22	Uniform dispersion of SiC in Yb-filled skutterudite nanocomposites with high thermoelectric and mechanical performance. <i>Scripta Materialia</i> , 2019, 162, 166-171.	5.2	46
23	Preparation of 1-D/3-D structured AgNWs/Bi <sub>2</sub> Te <sub>3</sub> nanocomposites with enhanced thermoelectric properties. <i>Acta Materialia</i> , 2014, 73, 37-47.	7.9	45
24	Enhanced thermoelectric performance of Se-doped PbTe bulk materials via nanostructuring and multi-scale hierarchical architecture. <i>Journal of Alloys and Compounds</i> , 2017, 725, 563-572.	5.5	40
25	One-pot fabrication and thermoelectric properties of Ag nanoparticles/polyaniline hybrid nanocomposites. <i>RSC Advances</i> , 2014, 4, 26810-26816.	3.6	39
26	Preparation of bulk AgNWs/PEDOT:PSS composites: a new model towards high-performance bulk organic thermoelectric materials. <i>RSC Advances</i> , 2015, 5, 45106-45112.	3.6	36
27	Enhanced thermoelectric properties of hydrothermally synthesized n-type Se&Lu-codoped Bi <sub>2</sub> Te <sub>3</sub> . <i>Journal of Advanced Ceramics</i> , 2020, 9, 424-431.	17.4	34
28	Experimental investigation of a novel heat pipe thermoelectric generator for waste heat recovery and electricity generation. <i>International Journal of Energy Research</i> , 2020, 44, 7450-7463.	4.5	33
29	Mg <sub>3</sub> (Bi,Sb) <sub>2</sub> -based thermoelectric modules for efficient and reliable waste-heat utilization up to 750 K. <i>Energy and Environmental Science</i> , 2022, 15, 3265-3274.	30.8	26
30	Microstructure and composition engineering Yb single-filled CoSb <sub>3</sub> for high thermoelectric and mechanical performances. <i>Journal of Materiomics</i> , 2019, 5, 702-710.	5.7	23
31	Transparent Power-generating Windows Based on Solar-thermal-Electric Conversion. <i>Advanced Energy Materials</i> , 2021, 11, 2101213.	19.5	21
32	Enhanced thermoelectric performance of hydrothermally synthesized polycrystalline Te-doped SnSe. <i>Chinese Chemical Letters</i> , 2021, 32, 811-815.	9.0	18
33	Preparation of AgNPs/Ca <sub>3</sub> Co <sub>4</sub> O <sub>9</sub> nanocomposites with enhanced thermoelectric performance. <i>Materials Today Communications</i> , 2016, 6, 44-49.	1.9	15
34	Constructing nanoporous carbon nanotubes/Bi <sub>2</sub> Te <sub>3</sub> composite for synchronous regulation of the electrical and thermal performances. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	14
35	Enhanced thermoelectric properties of binary CoSb <sub>3</sub> by embedding FeCl <sub>3</sub> -intercalated graphene nanosheets. <i>Journal of the European Ceramic Society</i> , 2021, 41, 6523-6530.	5.7	12
36	Thermoelectric transport and magnetoresistance of electrochemical deposited Bi <sub>2</sub> Te <sub>3</sub> films at micrometer thickness. <i>Ceramics International</i> , 2020, 46, 3339-3344.	4.8	9

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37	Incongruent pulsed laser deposition strategy for thin film growth of Ca <sub>3</sub> Co <sub>4</sub> O <sub>9</sub> thermoelectric compound. <i>Ceramics International</i> , 2019, 45, 13138-13143.	4.8	8
38	Enhanced thermoelectric properties in p-type Bi <sub>0.4</sub> Sb <sub>1.6</sub> Te <sub>3</sub> alloy by combining incorporation and doping using multi-scale CuAlO <sub>2</sub> particles. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017, 214, 1600451.	1.8	7
39	Protective Properties of Electrochemically Deposited Al-Based Coatings on Yb <sub>0.3</sub> Co <sub>4</sub> Sb <sub>12</sub> Skutterudite. <i>Journal of Electronic Materials</i> , 2019, 48, 5523-5531.	2.2	4
40	High-Performance n-Type Ge-Free Silicon Thermoelectric Material from Silicon Waste. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 47912-47920.	8.0	4
41	Segmented modules. , 2021, , 469-492.		1
42	Boosting thermoelectric performance of BayCo <sub>4</sub> Sb <sub>12</sub> by interlinking large aspect-ratio silver nanowires at the triple junction of grain boundaries. <i>Materials Today Energy</i> , 2022, , 101007.	4.7	1