Qihao Zhang

List of Publications by Year in descending order

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42 papers	3,589 citations	185998 28 h-index	276539 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. Science, 2021, 371, 830-834.	6.0	546
2	High efficiency Bi₂Te₃-based materials and devices for thermoelectric power generation between 100 and 300 Â°C. Energy and Environmental Science, 2016, 9, 3120-3127.	15.6	358
3	Realizing a thermoelectric conversion efficiency of 12% in bismuth telluride/skutterudite segmented modules through full-parameter optimization and energy-loss minimized integration. Energy and Environmental Science, 2017, 10, 956-963.	15.6	274
4	Skutterudite with graphene-modified grain-boundary complexion enhances zT enabling high-efficiency thermoelectric device. Energy and Environmental Science, 2017, 10, 183-191.	15.6	252
5	Improved Thermoelectric Performance of Silver Nanoparticlesâ€Dispersed Bi₂Te₃ Composites Deriving from Hierarchical Twoâ€Phased Heterostructure. Advanced Functional Materials, 2015, 25, 966-976.	7.8	243
6	High-efficiency half-Heusler thermoelectric modules enabled by self-propagating synthesis and topologic structure optimization. Energy and Environmental Science, 2019, 12, 3390-3399.	15.6	135
7	Realizing high-performance thermoelectric power generation through grain boundary engineering of skutterudite-based nanocomposites. Nano Energy, 2017, 41, 501-510.	8.2	130
8	High-Efficiency and Stable Thermoelectric Module Based on Liquid-Like Materials. Joule, 2019, 3, 1538-1548.	11.7	126
9	Towards tellurium-free thermoelectric modules for power generation from low-grade heat. Nature Communications, 2021, 12, 1121.	5.8	118
10	Highâ€Efficiency Thermoelectric Power Generation Enabled by Homogeneous Incorporation of MXene in (Bi,Sb)₂Te₃ Matrix. Advanced Energy Materials, 2020, 10, 1902986.	10.2	109
11	Carbon nanotube yarn based thermoelectric textiles for harvesting thermal energy and powering electronics. Journal of Materials Chemistry A, 2020, 8, 2984-2994.	5.2	107
12	Electrode interface optimization advances conversion efficiency and stability of thermoelectric devices. Nature Communications, 2020, 11, 2723.	5.8	101
13	High efficiency GeTe-based materials and modules for thermoelectric power generation. Energy and Environmental Science, 2021, 14, 995-1003.	15.6	101
14	Superior performance and high service stability for GeTe-based thermoelectric compounds. National Science Review, 2019, 6, 944-954.	4.6	96
15	An argyrodite-type Ag₉GaSe₆ liquid-like material with ultralow thermal conductivity and high thermoelectric performance. Chemical Communications, 2017, 53, 11658-11661.	2.2	84
16	Micro-thermoelectric devices. Nature Electronics, 2022, 5, 333-347.	13.1	84
17	Intrinsically High Thermoelectric Performance in AgInSe₂ nâ€Type Diamondâ€Like Compounds. Advanced Science, 2018, 5, 1700727.	5.6	66
18	A Device-to-Material Strategy Guiding the â€œDouble-Highâ€•Thermoelectric Module. Joule, 2020, 4, 2475-2483.	11.7	64

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19	The effect of reduced graphene oxide on microstructure and thermoelectric properties of Nb-doped A-site-deficient SrTiO3 ceramics. Journal of Alloys and Compounds, 2019, 786, 884-893.	2.8	55
20	Enhanced thermoelectric and mechanical properties of Na-doped polycrystalline SnSe thermoelectric materials via CNTs dispersion. Journal of Alloys and Compounds, 2018, 741, 756-764.	2.8	54
21	An efficient thermoelectric material: preparation of reduced graphene oxide/polyaniline hybrid composites by cryogenic grinding. RSC Advances, 2015, 5, 8988-8995.	1.7	50
22	Uniform dispersion of SiC in Yb-filled skutterudite nanocomposites with high thermoelectric and mechanical performance. Scripta Materialia, 2019, 162, 166-171.	2.6	46
23	Preparation of 1-D/3-D structured AgNWs/Bi2Te3 nanocomposites with enhanced thermoelectric properties. Acta Materialia, 2014, 73, 37-47.	3.8	45
24	Enhanced thermoelectric performance of Se-doped PbTe bulk materials via nanostructuring and multi-scale hierarchical architecture. Journal of Alloys and Compounds, 2017, 725, 563-572.	2.8	40
25	One-pot fabrication and thermoelectric properties of Ag nanoparticlesâ€“polyaniline hybrid nanocomposites. RSC Advances, 2014, 4, 26810-26816.	1.7	39
26	Preparation of bulk AgNWs/PEDOT:PSS composites: a new model towards high-performance bulk organic thermoelectric materials. RSC Advances, 2015, 5, 45106-45112.	1.7	36
27	Enhanced thermoelectric properties of hydrothermally synthesized n-type Se&Lu-codoped Bi2Te3. Journal of Advanced Ceramics, 2020, 9, 424-431.	8.9	34
28	Experimental investigation of a novel heat pipe thermoelectric generator for waste heat recovery and electricity generation. International Journal of Energy Research, 2020, 44, 7450-7463.	2.2	33
29	Mg₃(Bi,Sb)₂-based thermoelectric modules for efficient and reliable waste-heat utilization up to 750 K. Energy and Environmental Science, 2022, 15, 3265-3274.	15.6	26
30	Microstructure and composition engineering Yb single-filled CoSb3 for high thermoelectric and mechanical performances. Journal of Materiomics, 2019, 5, 702-710.	2.8	23
31	Transparent Powerâ€Generating Windows Based on Solarâ€Thermalâ€Electric Conversion. Advanced Energy Materials, 2021, 11, 2101213.	10.2	21
32	Enhanced thermoelectric performance of hydrothermally synthesized polycrystalline Te-doped SnSe. Chinese Chemical Letters, 2021, 32, 811-815.	4.8	18
33	Preparation of AgNPs/Ca3Co4O9 nanocomposites with enhanced thermoelectric performance. Materials Today Communications, 2016, 6, 44-49.	0.9	15
34	Constructing nanoporous carbon nanotubes/Bi2Te3 composite for synchronous regulation of the electrical and thermal performances. Journal of Applied Physics, 2017, 121, .	1.1	14
35	Enhanced thermoelectric properties of binary CoSb3 by embedding FeCl3-intercalated graphene nanosheets. Journal of the European Ceramic Society, 2021, 41, 6523-6530.	2.8	12
36	Thermoelectric transport and magnetoresistance of electrochemical deposited Bi2Te3 films at micrometer thickness. Ceramics International, 2020, 46, 3339-3344.	2.3	9

#	Article	IF	Citations
37	Incongruent pulsed laser deposition strategy for thin film growth of Ca3Co4O9 thermoelectric compound. Ceramics International, 2019, 45, 13138-13143.	2.3	8
38	Enhanced thermoelectric properties in pâ€type Bi_{0.4}Sb_{1.6}Te₃ alloy by combining incorporation and doping using multiâ€scale CuAlO₂ particles. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600451.	0.8	7
39	Protective Properties of Electrochemically Deposited Al-Based Coatings on Yb0.3Co4Sb12 Skutterudite. Journal of Electronic Materials, 2019, 48, 5523-5531.	1.0	4
40	High-Performance n-Type Ge-Free Silicon Thermoelectric Material from Silicon Waste. ACS Applied Materials & Interfaces, 2021, 13, 47912-47920.	4.0	4
41	Segmented modules. , 2021, , 469-492.		1
42	Boosting thermoelectric performance of BayCo4Sb12 by interlinking large aspect-ratio silver nanowires at the triple junction of grain boundaries. Materials Today Energy, 2022, , 101007.	2.5	1