Pai-Chun Wei

List of Publications by Year
in descending order

32 papers	1,116 citations	516561 16 h-index	395590 33 g-index
33 all docs	33 docs citations	33 times ranked	2009 citing authors

#	Article	IF	Citations
1	Hierarchical twinning and light impurity doping enable high-performance GeTe thermoelectrics. Acta Materialia, 2022, 222, 117406.	3.8	11
2	Compositional Fluctuations Locked by Athermal Transformation Yielding High Thermoelectric Performance in GeTe. Advanced Materials, 2021, 33, e2005612.	11.1	52
3	Thermoelectric Materials: Compositional Fluctuations Locked by Athermal Transformation Yielding High Thermoelectric Performance in GeTe (Adv. Mater. 1/2021). Advanced Materials, 2021, 33, 2170008.	11.1	6
4	Dual lattice incommensurabilities and enhanced lattice perfection by low-temperature thermal annealing in photoelectric <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mml:msub><mm Physical Review Materials, 2021, 5, .	0.9	2
5	Anisotropic elasticity drives negative thermal expansion in monocrystalline SnSe. Physical Review B, 2021, 103, .	1.1	11
6	Spectroscopic trace of the Lifshitz transition and multivalley activation in thermoelectric SnSe under high pressure. NPG Asia Materials, 2021, 13, .	3.8	8
7	Thermoelectric Characteristics of A Single-Crystalline Topological Insulator Bi2Se3 Nanowire. Nanomaterials, 2021, 11, 819.	1.9	15
8	Designed growth and patterning of perovskite nanowires for lasing and wide color gamut phosphors with long-term stability. Nano Energy, 2020, 73, 104801.	8.2	53
9	Thermodynamic Routes to Ultralow Thermal Conductivity and High Thermoelectric Performance. Advanced Materials, 2020, 32, e1906457.	11.1	71
10	Enhancing thermoelectric performance by Fermi level tuning and thermal conductivity degradation in (Ge1â^’xBix)Te crystals. Scientific Reports, 2019, 9, 8616.	1.6	39
11	Designing Environmentally Friendly High-<i>zT</i> Zn₄Sb₃ via Thermodynamic Routes. ACS Applied Energy Materials, 2019, 2, 7564-7571.	2.5	15
12	Thermoelectric Figure-of-Merit of Fully Dense Single-Crystalline SnSe. ACS Omega, 2019, 4, 5442-5450.	1.6	40
13	Hybrid Organicâ€“Inorganic Thermoelectric Materials and Devices. Angewandte Chemie - International Edition, 2019, 58, 15206-15226.	7.2	138
14	Hybride organischâ€•anorganische thermoelektrische Materialien und Baueinheiten. Angewandte Chemie, 2019, 131, 15348-15370.	1.6	9
15	Extremely space and time restricted thermal transport in the high temperature Cmcm phase of thermoelectric SnSe. Materials Today Physics, 2019, 11, 100171.	2.9	11
16	Interfacial reactions in thermoelectric modules. Materials Research Letters, 2018, 6, 244-248.	4.1	14
17	Extremely reduced dielectric confinement in two-dimensional hybrid perovskites with large polar organics. Communications Physics, 2018, 1, .	2.0	135
18	Layer-edge device of two-dimensional hybrid perovskites. Nature Communications, 2018, 9, 5196.	5.8	63

#	ARTICLE	IF	CITATIONS
19	Room Temperature Resonant Ultrasound Spectroscopy of Single Crystalline SnSe. ACS Applied Energy Materials, 2018, 1, 6123-6128.	2.5	21
20	Ultralow thermal conductivity in n-type Ge-doped AgBiSe2 thermoelectric materials. Acta Materialia, 2017, 141, 217-229.	3.8	48
21	The effects of Ge doping on the thermoelectric performance of p-type polycrystalline SnSe. RSC Advances, 2016, 6, 114825-114829.	1.7	22
22	The intrinsic thermal conductivity of SnSe. Nature, 2016, 539, E1-E2.	13.7	140
23	Thermoelectric Properties of Zintl Phase Compounds of Ca1âˆ’x Eu x Zn2Sb2 (0Ââ‰ÂxÂâ‰Â1). Journal of Electronic Materials, 2016, 45, 1942-1946.	1.0	27
24	The reduction of antiphase boundary defects by the surfactant antimony and its application to the IIIâ€“V multi-junction solar cells. Solar Energy Materials and Solar Cells, 2016, 144, 418-421.	3.0	3
25	Thermoelectric properties optimization of Fe2VGa by tuning electronic density of states via titanium doping. Journal of Applied Physics, 2015, 118, 165102.	1.1	13
26	Enhancement of thermoelectric figure of merit in <i>Î²</i> -Zn4Sb3 by indium doping control. Applied Physics Letters, 2015, 107, .	1.5	26
27	Structural, compositional, and photoluminescence characterization of thermal chemical vapor deposition-grown Zn3N2 microtips. Journal of Applied Physics, 2014, 116, 143507.	1.1	7
28	Surface diffusion controlled formation of high quality vertically aligned InN nanotubes. Journal of Applied Physics, 2014, 116, 124301.	1.1	7
29	Room-temperature negative photoconductivity in degenerate InN thin films with a supergap excitation. Physical Review B, 2010, 81, .	1.1	72
30	Origin of the anomalous temperature evolution of photoluminescence peak energy in degenerate InN nanocolumns. Optics Express, 2009, 17, 11690.	1.7	17
31	Thermal diffusivity study in supported epitaxial InN thin films by the traveling-wave technique. Journal of Applied Physics, 2008, 104, .	1.1	4
32	Epitaxial Growth of InN Films by Molecular-Beam Epitaxy Using Hydrazoic Acid (HN3) as an Efficient Nitrogen Sourceâ€. Journal of Physical Chemistry A, 2007, 111, 6755-6759.	1.1	15