Junphil Hwang

List of Publications by Year
in descending order

20 papers	919 citations	623188 14 h-index	794141 19 g-index
20 all docs	20 docs citations	20 times ranked	1151 citing authors

#	Article	IF	Citations
1	Band Degeneracy, Low Thermal Conductivity, and High Thermoelectric Figure of Merit in SnTeâ€“CaTe Alloys. Chemistry of Materials, 2016, 28, 376-384.	3.2	234
2	Right sizes of nano- and microstructures for high-performance and rigid bulk thermoelectrics. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10949-10954.	3.3	115
3	High Thermoelectric Performance of a Heterogeneous PbTe Nanocomposite. Chemistry of Materials, 2015, 27, 944-949.	3.2	102
4	Ultralow Lattice Thermal Conductivity and Enhanced Thermoelectric Performance in SnTe:Ga Materials. Chemistry of Materials, 2017, 29, 612-620.	3.2	89
5	Enhancement of the thermoelectric performance of bulk SnTe alloys via the synergistic effect of band structure modification and chemical bond softening. Journal of Materials Chemistry A, 2017, 5, 14165-14173.	5.2	65
6	Gigantic Phonon-Scattering Cross Section To Enhance Thermoelectric Performance in Bulk Crystals. ACS Nano, 2019, 13, 8347-8355.	7.3	54
7	High power output from body heat harvesting based on flexible thermoelectric system with low thermal contact resistance. Journal Physics D: Applied Physics, 2018, 51, 365501.	1.3	44
8	Large enhancement in the thermoelectric properties of Pb0.98Na0.02Te by optimizing the synthesis conditions. Journal of Materials Chemistry A, 2013, 1, 11269.	5.2	38
9	Mat-like flexible thermoelectric system based on rigid inorganic bulk materials. Journal Physics D: Applied Physics, 2017, 50, 494006.	1.3	30
10	Thermoelectricity in semiconductor nanowires. Physica Status Solidi - Rapid Research Letters, 2013, 7, 767-780.	1.2	27
11	High Thermoelectric Performance of ZnO by Coherent Phonon Scattering and Optimized Charge Transport. Advanced Functional Materials, 2021, 31, 2105008.	7.8	19
12	More than half reduction in price per watt of thermoelectric device without increasing the thermoelectric figure of merit of materials. Applied Energy, 2017, 205, 1459-1466.	5.1	18
13	Optimization of peak and average figures of merits for In & Se co-doped SnTe alloys. Inorganic Chemistry Frontiers, 2018, 5, 793-801.	3.0	17
14	New device architecture of a thermoelectric energy conversion for recovering low-quality heat. Applied Physics A: Materials Science and Processing, 2014, 114, 1201-1208.	1.1	15
15	Improved thermoelectric properties of n-type Bi2Te3 alloy deriving from two-phased heterostructure by the reduction of CuI with Sn. Journal of Materials Science: Materials in Electronics, 2019, 30, 1282-1291.	1.1	15
16	Enhancement of thermoelectric performance in a non-toxic CuInTe₂/SnTe coated grain nanocomposite. Journal of Materials Chemistry A, 2021, 9, 14851-14858.	5.2	12
17	Low Thermal Conductivity and High Thermoelectric Performance in In4Se3â^'x with Phase-Separated Indium Inclusions. Journal of Electronic Materials, 2017, 46, 1444-1450.	1.0	9
18	Size-Controlled Auâ€“Cu₂Se Coreâ€“Shell Nanoparticles and Their Thermoelectric Properties. ACS Applied Materials & Interfaces, 2020, 12, 36589-36599.	4.0	9

#	Article	IF	Citations
19	Synergetic enhancement of thermoelectric performances by localized carrier and phonon scattering in Cu₂Se with incorporated fullerene nanoparticles. Nanoscale Advances, 2021, 3, 3107-3113.	2.2	7
20	Study on Metalizing 2% Na-PbTe for Thermoelectric Device. Transactions of the Society of Information Storage Systems, 2014, 10, 32-38.	0.0	0