

# Hyungyu Jin

## List of Publications by Year in descending order

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Version: 2024-02-01

30  
papers

779  
citations

623734

14  
h-index

526287

27  
g-index

31  
all docs

31  
docs citations

31  
times ranked

1290  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of the magnon dispersion on the longitudinal spin Seebeck effect in yttrium iron garnets. <i>Physical Review B</i> , 2015, 92, .	3.2	111
2	Magnon-drag thermopower and Nernst coefficient in Fe, Co, and Ni. <i>Physical Review B</i> , 2016, 94, .	3.2	107
3	The use of poly-cation oxides to lower the temperature of two-step thermochemical water splitting. <i>Energy and Environmental Science</i> , 2018, 11, 2172-2178.	30.8	105
4	Deep learning-based phase prediction of high-entropy alloys: Optimization, generation, and explanation. <i>Materials and Design</i> , 2021, 197, 109260.	7.0	90
5	Phonon-induced diamagnetic force and its effect on the lattice thermal conductivity. <i>Nature Materials</i> , 2015, 14, 601-606.	27.5	45
6	Thermoelectric Properties and Low-Energy Carrier Filtering by Mo Microparticle Dispersion in an n-Type $(\text{Cu})_{0.003}\text{Bi}_{2}(\text{Te,Se})_{3}$ Bulk Matrix. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 38076-38084.	8.0	39
7	Electronic structure and thermoelectric properties of p-type Ag-doped $\text{Mg}_2\text{Sn}$ and $\text{Mg}_2\text{Sn}_{1-x}\text{Six}$ ( $x=0.05, 0.1$ ). <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	35
8	P-type doping of elemental bismuth with indium, gallium and tin: a novel doping mechanism in solids. <i>Energy and Environmental Science</i> , 2015, 8, 2027-2040.	30.8	32
9	Enhancement of thermoelectric properties by lattice softening and energy band gap control in Te-deficient $\text{InTe}_{1-x}$ . <i>AIP Advances</i> , 2018, 8, .	1.3	24
10	Possible Charge Density Wave and Enhancement of Thermoelectric Properties at Mild-Temperature Range in n-Type $\text{Cu}$ -Doped $\text{Bi}_2\text{Te}_{2.1}\text{Se}_{0.9}$ Compounds. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 925-933.	8.0	23
11	Spincaloritronic Measurements: A Round Robin Comparison of the Longitudinal Spin Seebeck Effect. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2019, 68, 1765-1773.	4.7	19
12	Designing efficient spin Seebeck-based thermoelectric devices via simultaneous optimization of bulk and interface properties. <i>Energy and Environmental Science</i> , 2021, 14, 3480-3491.	30.8	19
13	Enhancement in the figure of merit of p-type $\text{Bi}_{100-x}\text{Sb}_x$ alloys through multiple valence-band doping. <i>Applied Physics Letters</i> , 2012, 101, 053904.	3.3	18
14	Enhanced thermoelectric power factor in $\text{Yb}_{1-x}\text{Sc}_x\text{Al}_2$ alloys using chemical pressure tuning of the Yb valence. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	17
15	Enhancing the spin Seebeck effect by controlling interface condition in Pt/polycrystalline nickel ferrite slabs. <i>Journal of Applied Physics</i> , 2020, 127, 085105.	2.5	15
16	Spin-Seebeck like signal in ferromagnetic bulk metallic glass without platinum contacts. <i>Solid State Communications</i> , 2014, 198, 40-44.	1.9	12
17	$\text{YbCu}_2\text{Si}_2$ – $\text{LaCu}_2\text{Si}_2$ Solid Solutions with Enhanced Thermoelectric Power Factors. <i>Journal of Electronic Materials</i> , 2015, 44, 1663-1667.	2.2	9
18	Optimization of the figure of merit in $\text{Bi}_{100-x}\text{O}_3$ nanocomposites. <i>Physical Review Materials</i> , 2018, 2, .	2.4	9

#	ARTICLE	IF	CITATIONS
19	Transverse thermal energy conversion using spin and topological structures. <i>Journal of Applied Physics</i> , 2021, 130, 171101.	2.5	9
20	Fabrication and Cooling Performance Optimization of Stretchable Thermoelectric Cooling Device. <i>ACS Applied Electronic Materials</i> , 2021, 3, 5433-5442.	4.3	9
21	Lithium as an Interstitial Donor in Bismuth and Bismuth-Antimony Alloys. <i>Journal of Electronic Materials</i> , 2012, 41, 1648-1652.	2.2	7
22	BiSb and spin-related thermoelectric phenomena. <i>Proceedings of SPIE</i> , 2016, , .	0.8	5
23	Effective phonon scattering and enhancement of thermoelectric performance in Ga-excess Bi <sub>0.4</sub> Sb <sub>1.6</sub> Te <sub>3</sub> compounds. <i>Current Applied Physics</i> , 2020, 20, 1036-1040.	2.4	5
24	Thermoelectric and spin-caloritronic coolers: from basics to recent developments. <i>Proceedings of SPIE</i> , 2016, , .	0.8	4
25	A rotating fluidized bed reactor for rapid temperature ramping in two-step thermochemical water splitting. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 8126-8138.	7.1	4
26	High thermoelectric performance by chemical potential tuning and lattice anharmonicity in GeTe <sub>1-x</sub> Te <sub>x</sub> compounds. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 1205-1214.	6.0	4
27	Anisotropic defect-induced ferromagnetism and transport in Gd-doped GaN two-dimensional electron gasses. <i>Physical Review B</i> , 2015, 92, .	3.2	2
28	Spin Caloritronic Measurements: A Round Robin Comparison of the Longitudinal Spin Seebeck Effect. , 2018, , .		1
29	Synergistic Enhancement of Thermoelectric Performances by Cl-Doping and Pb-Excess in (Pb,Sn)Se Topological Crystal Insulator. <i>Materials</i> , 2021, 14, 1920.	2.9	0
30	Catalytic effect of laser-combined atmospheric pressure plasma in lowering the reduction temperature of hematite. <i>RSC Advances</i> , 2021, 11, 35489-35493.	3.6	0