

# Te-Huan Liu

## List of Publications by Year in Descending Order

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**Version:** 2024-04-27

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

30  
papers

1,271  
citations

20  
h-index

31  
g-index

31  
ext. papers

1,534  
ext. citations

7.8  
avg, IF

4.65  
L-index

#	Paper	IF	Citations
30	Effects of electron-phonon intervalley scattering and band non-parabolicity on electron transport properties of high-temperature phase SnSe: An ab initio study. <i>Materials Today Physics</i> , <b>2022</b> , 22, 100592 <sup>8</sup>	8	2
29	Confinement effect on thermopower of electrolytes. <i>Materials Today Physics</i> , <b>2022</b> , 23, 100627	8	2
28	Significant suppression of phonon transport in polar semiconductors owing to electron-phonon-induced dipole coupling: An effect of breaking centrosymmetry. <i>Materials Today Physics</i> , <b>2022</b> , 22, 100598	8	1
27	Multiscale Structural Modulation of Anisotropic Graphene Framework for Polymer Composites Achieving Highly Efficient Thermal Energy Management. <i>Advanced Science</i> , <b>2021</b> , 8, 2003734	13.6	38
26	First-Principles Study of All Thermoelectric Properties of Si - Ge Alloys Showing Large Phonon Drag from 150 to 1100K. <i>Physical Review Applied</i> , <b>2021</b> , 16,	4.3	2
25	Effect of electron-phonon interaction on lattice thermal conductivity of SiGe alloys. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 023903	3.4	21
24	Nano-microstructural control of phonon engineering for thermoelectric energy harvesting. <i>MRS Bulletin</i> , <b>2018</b> , 43, 181-186	3.2	80
23	Electron mean-free-path filtering in Dirac material for improved thermoelectric performance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 879-884	11.5	46
22	Seeded growth of boron arsenide single crystals with high thermal conductivity. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 031903	3.4	31
21	Large thermoelectric power factor from crystal symmetry-protected non-bonding orbital in half-Heuslers. <i>Nature Communications</i> , <b>2018</b> , 9, 1721	17.4	77
20	Simultaneously high electron and hole mobilities in cubic boron-V compounds: BP, BAs, and BSb. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	31
19	Phonon Hydrodynamic Heat Conduction and Knudsen Minimum in Graphite. <i>Nano Letters</i> , <b>2018</b> , 18, 638-649	6.9	54
18	Umklapp scattering is not necessarily resistive. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	9
17	Unusual high thermal conductivity in boron arsenide bulk crystals. <i>Science</i> , <b>2018</b> , 361, 582-585	33.3	185
16	First-principles mode-by-mode analysis for electron-phonon scattering channels and mean free path spectra in GaAs. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	94
15	Ab initio study of electron mean free paths and thermoelectric properties of lead telluride. <i>Materials Today Physics</i> , <b>2017</b> , 2, 69-77	8	42
14	Dirac-electron-mediated magnetic proximity effect in topological insulator/magnetic insulator heterostructures. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	25

13	Tailoring Superconductivity with Quantum Dislocations. <i>Nano Letters</i> , <b>2017</b> , 17, 4604-4610	11.5	7
12	Anisotropic thermal transport in phosphorene: effects of crystal orientation. <i>Nanoscale</i> , <b>2015</b> , 7, 10648-547	9.4	90
11	Thermal conductivity of boron nitride nanoribbons: Anisotropic effects and boundary scattering. <i>International Journal of Thermal Sciences</i> , <b>2015</b> , 94, 72-78	4.1	28
10	Anomalous thermal transport along the grain boundaries of bicrystalline graphene nanoribbons from atomistic simulations. <i>Carbon</i> , <b>2014</b> , 73, 432-442	10.4	25
9	Mechanical mutability of polycrystalline graphene from atomistic simulations. <i>Computational Materials Science</i> , <b>2014</b> , 91, 56-61	3.2	4
8	Anisotropic thermal conductivity of MoS <sub>2</sub> nanoribbons: Chirality and edge effects. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 201909	3.4	37
7	Thermal response of grain boundaries in graphene sheets under shear strain from atomistic simulations. <i>Computational Materials Science</i> , <b>2013</b> , 70, 163-170	3.2	17
6	An analytical model for calculating thermal properties of two-dimensional nanomaterials. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 171909	3.4	2
5	Decoupling of CVD graphene by controlled oxidation of recrystallized Cu. <i>RSC Advances</i> , <b>2012</b> , 2, 3008	3.7	69
4	Graphene defect polarity dynamics. <i>Carbon</i> , <b>2012</b> , 50, 2870-2876	10.4	20
3	Effects of dislocation densities and distributions on graphene grain boundary failure strengths from atomistic simulations. <i>Carbon</i> , <b>2012</b> , 50, 3465-3472	10.4	76
2	Low-temperature grown graphene films by using molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 221911	3.4	25
1	Structure, energy, and structural transformations of graphene grain boundaries from atomistic simulations. <i>Carbon</i> , <b>2011</b> , 49, 2306-2317	10.4	125