

Te-Huan Liu

List of Publications by Year in descending order

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31
papers

1,803
citations

331538

21
h-index

434063

31
g-index

31
all docs

31
docs citations

31
times ranked

2724
citing authors

#	ARTICLE	IF	CITATIONS
1	Unusual high thermal conductivity in boron arsenide bulk crystals. <i>Science</i> , 2018, 361, 582-585.	6.0	300
2	Structure, energy, and structural transformations of graphene grain boundaries from atomistic simulations. <i>Carbon</i> , 2011, 49, 2306-2317.	5.4	137
3	First-principles mode-by-mode analysis for electron-phonon scattering channels and mean free path spectra in GaAs. <i>Physical Review B</i> , 2017, 95, .	1.1	125
4	Nano-microstructural control of phonon engineering for thermoelectric energy harvesting. <i>MRS Bulletin</i> , 2018, 43, 181-186.	1.7	111
5	Large thermoelectric power factor from crystal symmetry-protected non-bonding orbital in half-Heuslers. <i>Nature Communications</i> , 2018, 9, 1721.	5.8	111
6	Multiscale Structural Modulation of Anisotropic Graphene Framework for Polymer Composites Achieving Highly Efficient Thermal Energy Management. <i>Advanced Science</i> , 2021, 8, 2003734.	5.6	108
7	Anisotropic thermal transport in phosphorene: effects of crystal orientation. <i>Nanoscale</i> , 2015, 7, 10648-10654.	2.8	100
8	Effects of dislocation densities and distributions on graphene grain boundary failure strengths from atomistic simulations. <i>Carbon</i> , 2012, 50, 3465-3472.	5.4	86
9	Phonon Hydrodynamic Heat Conduction and Knudsen Minimum in Graphite. <i>Nano Letters</i> , 2018, 18, 638-649.	4.5	83
10	Decoupling of CVD graphene by controlled oxidation of recrystallized Cu. <i>RSC Advances</i> , 2012, 2, 3008.	1.7	82
11	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> , 2018, 115, 879-884.	3.3	61
12	Ab initio study of electron mean free paths and thermoelectric properties of lead telluride. <i>Materials Today Physics</i> , 2017, 2, 69-77.	2.9	58
13	Simultaneously high electron and hole mobilities in cubic boron-V compounds: BP, BAs, and BSb. <i>Physical Review B</i> , 2018, 98, .	1.1	55
14	Enhanced Electromagnetic Shielding and Thermal Conductive Properties of Polyolefin Composites with a Ti ₃ C ₂ T _x MXene/Graphene Framework Connected by a Hydrogen-Bonded Interface. <i>ACS Nano</i> , 2022, 16, 9254-9266.	7.3	54
15	Seeded growth of boron arsenide single crystals with high thermal conductivity. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	43
16	Anisotropic thermal conductivity of MoS ₂ nanoribbons: Chirality and edge effects. <i>Applied Physics Letters</i> , 2014, 104, 201909.	1.5	41
17	Effect of electron-phonon interaction on lattice thermal conductivity of SiGe alloys. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	33
18	Thermal conductivity of boron nitride nanoribbons: Anisotropic effects and boundary scattering. <i>International Journal of Thermal Sciences</i> , 2015, 94, 72-78.	2.6	31

#	ARTICLE	IF	CITATIONS
19	Dirac-electron-mediated magnetic proximity effect in topological insulator/magnetic insulator heterostructures. <i>Physical Review B</i> , 2017, 96, .	1.1	29
20	Low-temperature grown graphene films by using molecular beam epitaxy. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	28
21	Anomalous thermal transport along the grain boundaries of bicrystalline graphene nanoribbons from atomistic simulations. <i>Carbon</i> , 2014, 73, 432-442.	5.4	26
22	Thermal response of grain boundaries in graphene sheets under shear strain from atomistic simulations. <i>Computational Materials Science</i> , 2013, 70, 163-170.	1.4	22
23	Graphene defect polarity dynamics. <i>Carbon</i> , 2012, 50, 2870-2876.	5.4	21
24	Umklapp scattering is not necessarily resistive. <i>Physical Review B</i> , 2018, 98, .	1.1	21
25	Tailoring Superconductivity with Quantum Dislocations. <i>Nano Letters</i> , 2017, 17, 4604-4610.	4.5	9
26	First-Principles Study of All Thermoelectric Properties of Si-Ge Alloys Showing Large Phonon Drag from 150 to 1100ÅK. <i>Physical Review Applied</i> , 2021, 16, .	1.5	8
27	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> , 2022, 22, 100598.	2.9	5
28	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> , 2022, 22, 100592.	2.9	5
29	Mechanical mutability of polycrystalline graphene from atomistic simulations. <i>Computational Materials Science</i> , 2014, 91, 56-61.	1.4	4
30	Confinement effect on thermopower of electrolytes. <i>Materials Today Physics</i> , 2022, 23, 100627.	2.9	4
31	An analytical model for calculating thermal properties of two-dimensional nanomaterials. <i>Applied Physics Letters</i> , 2013, 103, 171909.	1.5	2