Konstantinos Termentzidis

List of Publications by Year
in descending order

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72 papers	1,729 citations	236612 25 h-index	288905 40 g-index
73 all docs	73 docs citations	73 times ranked	1893 citing authors

#	Article	IF	Citations
1	Kapitza conductance of siliconâ€“amorphous polyethylene interfaces by molecular dynamics simulations. Physical Review B, 2009, 79, .	1.1	165
2	CO adsorption on metal surfaces: A hybrid functional study with plane-wave basis set. Physical Review B, 2007, 76, .	1.1	133
3	Non-equilibrium molecular dynamics study of thermal energy transport in Auâ€“SAMâ€“Au junctions. International Journal of Heat and Mass Transfer, 2010, 53, 1-11.	2.5	98
4	Thermal conductance at the interface between crystals using equilibrium and nonequilibrium molecular dynamics. Physical Review B, 2012, 86, .	1.1	82
5	Monte Carlo simulations of phonon transport in nanoporous silicon and germanium. Journal of Applied Physics, 2014, 115, .	1.1	79
6	Thermal boundary conductance across rough interfaces probed by molecular dynamics. Physical Review B, 2014, 89, .	1.1	76
7	Nonequilibrium molecular dynamics simulation of the in-plane thermal conductivity of superlattices with rough interfaces. Physical Review B, 2009, 79, .	1.1	69
8	Modulated SiC nanowires: Molecular dynamics study of their thermal properties. Physical Review B, 2013, 87, .	1.1	64
9	Molecular dynamics simulations for the prediction of thermal conductivity of bulk silicon and silicon nanowires: Influence of interatomic potentials and boundary conditions. Journal of Applied Physics, 2011, 110, 034309.	1.1	57
10	Cross-plane thermal conductivity of superlattices with rough interfaces using equilibrium and non-equilibrium molecular dynamics. International Journal of Heat and Mass Transfer, 2011, 54, 2014-2020.	2.5	54
11	Large thermal conductivity decrease in point defective Bi2Te3 bulk materials and superlattices. Journal of Applied Physics, 2013, 113, .	1.1	54
12	Thermal properties of amorphous/crystalline silicon superlattices. Journal of Physics Condensed Matter, 2014, 26, 355801.	0.7	44
13	Thermal conductivity and thermal boundary resistance of nanostructures. Nanoscale Research Letters, 2011, 6, 288.	3.1	40
14	Crystalline-amorphous silicon nano-composites: Nano-pores and nano-inclusions impact on the thermal conductivity. Journal of Applied Physics, 2016, 119, .	1.1	39
15	Amorphization and reduction of thermal conductivity in porous silicon by irradiation with swift heavy ions. Journal of Applied Physics, 2013, 114, .	1.1	38
16	Thermal conductivity of phononic membranes with aligned and staggered lattices of holes at room and low temperatures. Physical Review B, 2017, 95, .	1.1	37
17	Thermal conductivity of GaAs/AlAs superlattices and the puzzle of interfaces. Journal of Physics Condensed Matter, 2010, 22, 475001.	0.7	35
18	Atomistic amorphous/crystalline interface modelling for superlattices and core/shell nanowires. Journal of Physics Condensed Matter, 2014, 26, 055011.	0.7	30

#	Article	IF	Citations
19	Modeling the reduction of thermal conductivity in core/shell and diameter-modulated silicon nanowires. Physical Review B, 2015, 91, .	1.1	30
20	Monte Carlo simulations of phonon transport in Si nanowires with constrictions. International Journal of Heat and Mass Transfer, 2015, 86, 648-655.	2.5	30
21	Characterization of the thermal conductivity of insulating thin films by scanning thermal microscopy. Microelectronics Journal, 2013, 44, 1029-1034.	1.1	28
22	Efficient tuning of potential parameters for liquidâ€“solid interactions. Molecular Simulation, 2016, 42, 910-915.	0.9	28
23	Transferability of neural network potentials for varying stoichiometry: Phonons and thermal conductivity of Mn<i>x</i>Ge<i>y</i> compounds. Journal of Applied Physics, 2020, 127, .	1.1	27
24	Impact of screw and edge dislocations on the thermal conductivity of individual nanowires and bulk GaN: a molecular dynamics study. Physical Chemistry Chemical Physics, 2018, 20, 5159-5172.	1.3	26
25	Scaling behavior of the thermal conductivity of width-modulated nanowires and nanofilms for heat transfer control at the nanoscale. Nanotechnology, 2014, 25, 465402.	1.3	25
26	Thermal conductivity of meso-porous germanium. Applied Physics Letters, 2014, 105, 031912.	1.5	21
27	Size dependence of the surface tension of a free surface of an isotropic fluid. Physical Review E, 2017, 95, 062801.	0.8	18
28	Thermal transport across nanometre gaps: Phonon transmission vs. air conduction. International Journal of Heat and Mass Transfer, 2020, 158, 119963.	2.5	17
29	Heat transport in phononic-like membranes: Modeling and comparison with modulated nano-wires. International Journal of Heat and Mass Transfer, 2017, 114, 550-558.	2.5	15
30	Gibbs Adsorption Impact on a Nanodroplet Shape: Modification of Youngâ€“Laplace Equation. Journal of Physical Chemistry B, 2018, 122, 3176-3183.	1.2	15
31	Thermal transport in two- and three-dimensional nanowire networks. Physical Review B, 2018, 98, .	1.1	15
32	Thermal conductivity anisotropy in nanostructures and nanostructured materials. Journal Physics D: Applied Physics, 2018, 51, 094003.	1.3	14
33	Influence of amorphous layers on the thermal conductivity of phononic crystals. Physical Review B, 2018, 97, .	1.1	12
34	Thermal conductivity in disordered porous nanomembranes. Nanotechnology, 2019, 30, 265401.	1.3	12
35	Thermal transport enhancement of hybrid nanocomposites; impact of confined water inside nanoporous silicon. Applied Physics Letters, 2020, 117, .	1.5	12
36	AbÂInitio Calculations and Measurements of Thermoelectric Properties of V2O5 Films. Journal of Electronic Materials, 2013, 42, 1597-1603.	1.0	11

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37	Enhanced thermal conductivity in percolating nanocomposites: a molecular dynamics investigation. Nanoscale, 2018, 10, 21732-21741.	2.8	11
38	Thermal rectification in asymmetric two-phase nanowires. Physical Review B, 2021, 103, .	1.1	11
39	CO adsorption on a Au/Ni(111) surface alloyâ€"a DFT study. Journal of Physics Condensed Matter, 2007, 19, 246219.	0.7	10
40	Thermal properties study of silicon nanostructures by photoacoustic techniques. Journal of Applied Physics, 2020, 127, .	1.1	10
41	Atomistic evidence of hydrodynamic heat transfer in nanowires. International Journal of Heat and Mass Transfer, 2022, 194, 123003.	2.5	10
42	Thermal conductivity of <i>Bi</i>2<i>Te</i>3 tilted nanowires, a molecular dynamics study. Applied Physics Letters, 2015, 106, .	1.5	9
43	Radial dependence of thermal transport in silicon nanowires. JPhys Materials, 2019, 2, 015002.	1.8	9
44	A density-functional theory study of the adsorption of CO molecules on Au/Ni(111). Journal of Physics Condensed Matter, 2006, 18, 10825-10835.	0.7	8
45	The influence of structural characteristics on the electronic and thermal properties of GaN/AlN core/shell nanowires. Journal of Applied Physics, 2016, 119, .	1.1	8
46	Synthesis of bismuth telluride nanotubes and their simulated thermal properties. Superlattices and Microstructures, 2018, 122, 587-595.	1.4	8
47	Decorated Dislocations against Phonon Propagation for Thermal Management. ACS Applied Energy Materials, 2020, 3, 2682-2694.	2.5	8
48	Mechanism and crucial parameters on GaN nanocluster formation in a silica matrix. Journal of Applied Physics, 2017, 121, 054301.	1.1	7
49	Ballistic Heat Transport in Nanocomposite: The Role of the Shape and Interconnection of Nanoinclusions. Nanomaterials, 2021, 11, 1982.	1.9	7
50	Structure impact on the thermal and electronic properties of bismuth telluride by ab-initio and molecular dynamics calculations. Journal of Physics: Conference Series, 2012, 395, 012114.	0.3	6
51	Prediction of the thermal conductivity of SiC nanowires with kinetic theory of gases. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2492-2498.	0.8	6
52	Molecular Dynamics Simulations and Thermal Transport at the Nano-Scale. , 2012, , .		6
53	Thermal conductivity of deca-nanometric patterned Si membranes by multiscale simulations. International Journal of Heat and Mass Transfer, 2018, 126, 830-835.	2.5	6
54	Roughness and amorphization impact on thermal conductivity of nanofilms and nanowires: Making atomistic modeling more realistic. Journal of Applied Physics, 2019, 126, 164305.	1.1	5

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55	Thermal conductivity and Kapitza resistance of diameter modulated SiC nanowires, a molecular dynamics study. Journal of Physics: Conference Series, 2012, 395, 012107.	0.3	4
56	Thermal conductivity of regularly spaced amorphous/crystalline silicon superlattices. A molecular dynamics study. Materials Research Society Symposia Proceedings, 2013, 1543, 71-79.	0.1	4
57	Thermal conductivity temperature dependence of water confined in nanoporous silicon. Journal of Physics Condensed Matter, 2022, 34, 305701.	0.7	4
58	Interfacial thermal resistance between nanoconfined water and silicon: Impact of temperature and silicon phase. Surfaces and Interfaces, 2022, 33, 102188.	1.5	4
59	Thermoelectric transport in V2O5thin films. Journal of Physics: Conference Series, 2012, 395, 012016.	0.3	3
60	Effect of Amorphisation on the Thermal Properties of Nanostructured Membranes. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2017, 72, 189-192.	0.7	3
61	On the dependence of the thermal conductivity of width-modulated nanowires on the number of modulations. Journal of Physics: Conference Series, 2017, 785, 012011.	0.3	3
62	Vibrational density of states of free and embedded semiconducting GaN nanoparticles. Semiconductor Science and Technology, 2020, 35, 094001.	1.0	3
63	Modeling Thermal Transport in Nano-Porous Semiconductors. , 2017, , 253-284.		2
64	Effect of the amorphization around spherical nano-pores on the thermal conductivity of nano-porous Silicon. Journal of Physics: Conference Series, 2017, 785, 012009.	0.3	2
65	Kapitza thermal conductance at the interface between Lennard-Jones crystals using non-equilibrium molecular dynamics simulations. Journal of Physics: Conference Series, 2012, 395, 012115.	0.3	1
66	Microscopic Study of Solid/Fluid Interface with Molecular Dynamics. Springer Proceedings in Physics, 2019, , 73-89.	0.1	1
67	Structural Engineering of Vacancy Defected Bismuth Tellurides for Thermo-electric Applications. EPJ Web of Conferences, 2012, 33, 02012.	0.1	0
68	Thermal conductivity of Bi2Te3 nanowires and nanotubes. , 2015, , .		0
69	Nanoscale and Microscale Heat Transfer V (NMHT-V) EUROTHERM seminar No 108. Journal of Physics: Conference Series, 2017, 785, 011001.	0.3	0
70	Phonon Transport in Disordered 2D Phononic Crystals. , 2019, , .		0
71	Thermal Conductivity of Amorphous/Crystalline Silicon Nanowires and Superlattices. , 2014, , .		0
72	Tuning thermal transport in nanowires: molecular dynamics and Monte Carlo simulations. Frontiers of Nanoscience, 2020, 17, 61-76.	0.3	0