Konstantinos Termentzidis

List of Publications by Year in Descending Order

66 papers	1,395 citations	22 h-index	36 g-index
73 ext. papers	1,566 ext. citations	2.7 avg, IF	4.79 L-index

#	Paper	IF	Citations
66	Atomistic evidence of hydrodynamic heat transfer in nanowires. *International Journal of Heat and Mass Transfer*, **2022**, 194, 123003	4.9	1
65	Thermal rectification in asymmetric two-phase nanowires. *Physical Review B*, **2021**, 103,	3.3	4
64	Ballistic Heat Transport in Nanocomposite: The Role of the Shape and Interconnection of Nanoinclusions. *Nanomaterials*, **2021**, 11,	5.4	1
63	Thermal properties study of silicon nanostructures by photoacoustic techniques. *Journal of Applied Physics*, **2020**, 127, 225101	2.5	3
62	Thermal transport across nanometre gaps: Phonon transmission vs. air conduction. *International Journal of Heat and Mass Transfer*, **2020**, 158, 119963	4.9	3
61	Vibrational density of states of free and embedded semiconducting GaN nanoparticles. *Semiconductor Science and Technology*, **2020**, 35, 094001	1.8	1
60	Decorated Dislocations against Phonon Propagation for Thermal Management. *ACS Applied Energy Materials*, **2020**, 3, 2682-2694	6.1	5
59	Tuning thermal transport in nanowires: molecular dynamics and Monte Carlo simulations. *Frontiers of Nanoscience*, **2020**, 17, 61-76	0.7	
58	Transferability of neural network potentials for varying stoichiometry: Phonons and thermal conductivity of MnxGey compounds. *Journal of Applied Physics*, **2020**, 127, 244901	2.5	12
57	Thermal transport enhancement of hybrid nanocomposites; impact of confined water inside nanoporous silicon. *Applied Physics Letters*, **2020**, 117, 033701	3.4	2
56	Thermal conductivity in disordered porous nanomembranes. *Nanotechnology*, **2019**, 30, 265401	3.4	6
55	Roughness and amorphization impact on thermal conductivity of nanofilms and nanowires: Making atomistic modeling more realistic. *Journal of Applied Physics*, **2019**, 126, 164305	2.5	2
54	Microscopic Study of Solid/Fluid Interface with Molecular Dynamics. *Springer Proceedings in Physics*, **2019**, 73-89	0.2	1
53	Radial dependence of thermal transport in silicon nanowires. *JPhys Materials*, **2019**, 2, 015002	4.2	5
52	Gibbs Adsorption Impact on a Nanodroplet Shape: Modification of Young-Laplace Equation. *Journal of Physical Chemistry B*, **2018**, 122, 3176-3183	3.4	11
51	Thermal conductivity anisotropy in nanostructures and nanostructured materials. *Journal Physics D: Applied Physics*, **2018**, 51, 094003	3	11
50	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	3.6	16

49	Influence of amorphous layers on the thermal conductivity of phononic crystals. *Physical Review B*, **2018**, 97,	3.3	10
48	Synthesis of bismuth telluride nanotubes and their simulated thermal properties. *Superlattices and Microstructures*, **2018**, 122, 587-595	2.8	6
47	Thermal conductivity of deca-nanometric patterned Si membranes by multiscale simulations. *International Journal of Heat and Mass Transfer*, **2018**, 126, 830-835	4.9	4
46	Enhanced thermal conductivity in percolating nanocomposites: a molecular dynamics investigation. *Nanoscale*, **2018**, 10, 21732-21741	7.7	8
45	Thermal transport in two- and three-dimensional nanowire networks. *Physical Review B*, **2018**, 98,	3.3	9
44	Mechanism and crucial parameters on GaN nanocluster formation in a silica matrix. *Journal of Applied Physics*, **2017**, 121, 054301	2.5	7
43	Effect of Amorphisation on the Thermal Properties of Nanostructured Membranes. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **2017**, 72, 189-192	1.4	3
42	Modeling Thermal Transport in Nano-Porous Semiconductors **2017**, 253-284		0
41	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
40	Size dependence of the surface tension of a free surface of an isotropic fluid. *Physical Review E*, **2017**, 95, 062801	2.4	14
39	Heat transport in phononic-like membranes: Modeling and comparison with modulated nano-wires. *International Journal of Heat and Mass Transfer*, **2017**, 114, 550-558	4.9	15
38	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	2
37	Thermal conductivity of phononic membranes with aligned and staggered lattices of holes at room and low temperatures. *Physical Review B*, **2017**, 95,	3.3	30
36	Efficient tuning of potential parameters for liquid□olid interactions. *Molecular Simulation*, **2016**, 42, 910-915	2	20
35	The influence of structural characteristics on the electronic and thermal properties of GaN/AlN core/shell nanowires. *Journal of Applied Physics*, **2016**, 119, 074304	2.5	7
34	Crystalline-amorphous silicon nano-composites: Nano-pores and nano-inclusions impact on the thermal conductivity. *Journal of Applied Physics*, **2016**, 119, 175104	2.5	33
33	Modeling the reduction of thermal conductivity in core/shell and diameter-modulated silicon nanowires. *Physical Review B*, **2015**, 91,	3.3	27
32	Monte Carlo simulations of phonon transport in Si nanowires with constrictions. *International Journal of Heat and Mass Transfer*, **2015**, 86, 648-655	4.9	27

31	Thermal conductivity of Bi2Te3 tilted nanowires, a molecular dynamics study. *Applied Physics Letters*, **2015**, 106, 233108	3.4	9
30	Atomistic amorphous/crystalline interface modelling for superlattices and core/shell nanowires. *Journal of Physics Condensed Matter*, **2014**, 26, 055011	1.8	28
29	Scaling behavior of the thermal conductivity of width-modulated nanowires and nanofilms for heat transfer control at the nanoscale. *Nanotechnology*, **2014**, 25, 465402	3.4	24
28	Thermal properties of amorphous/crystalline silicon superlattices. *Journal of Physics Condensed Matter*, **2014**, 26, 355801	1.8	36
27	Thermal conductivity of meso-porous germanium. *Applied Physics Letters*, **2014**, 105, 031912	3.4	19
26	Monte Carlo simulations of phonon transport in nanoporous silicon and germanium. *Journal of Applied Physics*, **2014**, 115, 024304	2.5	67
25	Thermal boundary conductance across rough interfaces probed by molecular dynamics. *Physical Review B*, **2014**, 89,	3.3	57
24	Characterization of the thermal conductivity of insulating thin films by scanning thermal microscopy. *Microelectronics Journal*, **2013**, 44, 1029-1034	1.8	23
23	Modulated SiC nanowires: Molecular dynamics study of their thermal properties. *Physical Review B*, **2013**, 87,	3.3	55
22	Large thermal conductivity decrease in point defective Bi2Te3 bulk materials and superlattices. *Journal of Applied Physics*, **2013**, 113, 013506	2.5	48
21	Ab Initio Calculations and Measurements of Thermoelectric Properties of V2O5 Films. *Journal of Electronic Materials*, **2013**, 42, 1597-1603	1.9	11
20	Amorphization and reduction of thermal conductivity in porous silicon by irradiation with swift heavy ions. *Journal of Applied Physics*, **2013**, 114, 014903	2.5	30
19	Thermal conductivity of regularly spaced amorphous/crystalline silicon superlattices. A molecular dynamics study. *Materials Research Society Symposia Proceedings*, **2013**, 1543, 71-79		3
18	Thermal conductance at the interface between crystals using equilibrium and nonequilibrium molecular dynamics. *Physical Review B*, **2012**, 86,	3.3	64
17	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	1.6	6
16	Molecular Dynamics Simulations and Thermal Transport at the Nano-Scale **2012**,		5
15	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
14	Thermoelectric transport in V2O5thin films. *Journal of Physics: Conference Series*, **2012**, 395, 012016	0.3	2

13	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
12	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	4
11	Structural Engineering of Vacancy Defected Bismuth Tellurides for Thermo-electric Applications. *EPJ Web of Conferences*, **2012**, 33, 02012	0.3	
10	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	2.5	51
9	Thermal conductivity and thermal boundary resistance of nanostructures. *Nanoscale Research Letters*, **2011**, 6, 288	5	34
8	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	4.9	48
7	Thermal conductivity of GaAs/AlAs superlattices and the puzzle of interfaces. *Journal of Physics Condensed Matter*, **2010**, 22, 475001	1.8	29
6	Non-equilibrium molecular dynamics study of thermal energy transport in Au□SAM□Au junctions. *International Journal of Heat and Mass Transfer*, **2010**, 53, 1-11	4.9	82
5	Nonequilibrium molecular dynamics simulation of the in-plane thermal conductivity of superlattices with rough interfaces. *Physical Review B*, **2009**, 79,	3.3	62
4	Kapitza conductance of silicon□morphous polyethylene interfaces by molecular dynamics simulations. *Physical Review B*, **2009**, 79,	3.3	147
3	CO adsorption on a Au/Ni(111) surface alloy-a DFT study. *Journal of Physics Condensed Matter*, **2007**, 19, 246219	1.8	9
2	CO adsorption on metal surfaces: A hybrid functional study with plane-wave basis set. *Physical Review B*, **2007**, 76,	3.3	121
1	A density-functional theory study of the adsorption of CO molecules on Au/Ni(111). *Journal of Physics Condensed Matter*, **2006**, 18, 10825-10835	1.8	8