BoHung Kim

List of Publications by Year
in descending order

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35 papers	1,039 citations	430874 18 h-index	414414 32 g-index
35 all docs	35 docs citations	35 times ranked	791 citing authors

#	Article	IF	Citations
1	Molecular dynamics simulations of thermal resistance at the liquid-solid interface. Journal of Chemical Physics, 2008, 129, 174701.	3.0	146
2	Thermal interactions in nanoscale fluid flow: molecular dynamics simulations with solidâ€“liquid interfaces. Microfluidics and Nanofluidics, 2008, 5, 551-559.	2.2	92
3	Pressure dependence of Kapitza resistance at gold/water and silicon/water interfaces. Journal of Chemical Physics, 2013, 139, 244702.	3.0	73
4	Transport Phenomena of Water in Molecular Fluidic Channels. Scientific Reports, 2016, 6, 33881.	3.3	71
5	Near-surface viscosity effects on capillary rise of water in nanotubes. Physical Review E, 2015, 92, 053009.	2.1	62
6	Viscous heating in nanoscale shear driven liquid flows. Microfluidics and Nanofluidics, 2010, 9, 31-40.	2.2	58
7	Interface thermal resistance between liquid water and various metallic surfaces. International Journal of Precision Engineering and Manufacturing, 2015, 16, 1341-1346.	2.2	56
8	Molecular dynamics simulations of Kapitza length for argon-silicon and water-silicon interfaces. International Journal of Precision Engineering and Manufacturing, 2014, 15, 323-329.	2.2	45
9	Interfacial thermal resistance between the graphene-coated copper and liquid water. International Journal of Heat and Mass Transfer, 2016, 97, 422-431.	4.8	44
10	Signaling Pathways Involved in Striatal Synaptic Plasticity are Sensitive to Temporal Pattern and Exhibit Spatial Specificity. PLoS Computational Biology, 2013, 9, e1002953.	3.2	34
11	Wetting of chemically heterogeneous striped surfaces: Molecular dynamics simulations. AIP Advances, 2018, 8, .	1.3	33
12	Stress and surface tension analyses of water on graphene-coated copper surfaces. International Journal of Precision Engineering and Manufacturing, 2016, 17, 503-510.	2.2	29
13	Molecular dynamics study of thermodynamic properties of nanoclusters for additive manufacturing. International Journal of Precision Engineering and Manufacturing - Green Technology, 2017, 4, 301-306.	4.9	29
14	Smart Wall Model for Molecular Dynamics Simulations of Nanoscale Gas Flows. Communications in Computational Physics, 2010, 7, 977-993.	1.7	29
15	Nano-scale liquid film sheared between strong wetting surfaces: effects of interface region on the flow. Journal of Mechanical Science and Technology, 2015, 29, 1681-1688.	1.5	25
16	Manipulating thermal resistance at the solidâ€“fluid interface through monolayer deposition. RSC Advances, 2019, 9, 4948-4956.	3.6	24
17	Scale Effects in Nanoscale Heat Transfer for Fourierâ€™s Law in a Dissimilar Molecular Interface. ACS Omega, 2020, 5, 26527-26536.	3.5	24
18	Thermal resistance at a liquidâ€“solid interface dependent on the ratio of thermal oscillation frequencies. Chemical Physics Letters, 2012, 554, 77-81.	2.6	22

#	Article	IF	Citations
19	Atomic density effects on temperature characteristics and thermal transport at grain boundaries through a proper bin size selection. Journal of Chemical Physics, 2016, 144, 194707.	3.0	18
20	Deposition mechanism of graphene flakes directly from graphite particles in the kinetic spray process studied using molecular dynamics simulation. Computational Materials Science, 2019, 169, 109091.	3.0	16
21	Effects of dissimilar molecular interface and ion-concentration on wetting characteristics of nanodroplets. Microfluidics and Nanofluidics, 2021, 25, 1.	2.2	15
22	Scale Effect on Simple Liquid Transport through a Nanoporous Graphene Membrane. Langmuir, 2021, 37, 6498-6509.	3.5	14
23	Wetting of single crystalline and amorphous silicon surfaces: effective range of intermolecular forces for wetting. Molecular Simulation, 2020, 46, 224-234.	2.0	11
24	Physical origins of temperature continuity at an interface between a crystal and its melt. Journal of Chemical Physics, 2018, 148, 034703.	3.0	10
25	Viscous heating and temperature profiles of liquid water flows in copper nanochannel. Journal of Mechanical Science and Technology, 2019, 33, 3257-3263.	1.5	10
26	Molecular transportation phenomena of simple liquids through a nanoporous graphene membrane. Physical Review E, 2020, 102, 033110.	2.1	9
27	Unraveling the Molecular Interface and Boundary Problems in an Electrical Double Layer and Electroosmotic Flow. Langmuir, 2022, 38, 7244-7255.	3.5	9
28	Interface thermal resistance modeling of the silicon-argon interface. International Journal of Precision Engineering and Manufacturing, 2013, 14, 1023-1028.	2.2	8
29	First law of thermodynamics on the boundary for flow through a carbon nanotube. Physical Review E, 2021, 103, 053115.	2.1	8
30	Subatomic-Level Solid/Fluid Boundary of Lennard-Jones Atoms: A Molecular Dynamics Study of Metal-Inert Fluid Interface. Applied Sciences (Switzerland), 2019, 9, 2439.	2.5	5
31	Scale effects in the nanoscale heat transfer of molecular interfaces with different lattice orientations. AIP Advances, 2021, 11, .	1.3	4
32	A molecular dynamics study on cooling rate effect on atomic structure of solidified silver nanoparticles. European Physical Journal D, 2019, 73, 1.	1.3	3
33	Characterization of interface thermal resistance between graphene and Cu film by using a micropipette thermography technique. MRS Communications, 2018, 8, 1463-1469.	1.8	2
34	Surface texturing by turning process using circular driven rotary tool with multiple cutting edges. International Journal of Precision Engineering and Manufacturing, 2014, 15, 1137-1142.	2.2	1
35	Molecular Dynamics Simulations of Thermal Interactions in Nanoscale Liquid Channels. , 2008, , .		0