

Xinyu Wang

List of Publications by Year in descending order

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53
papers

1,499
citations

361045

20
h-index

315357

38
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all docs

53
docs citations

53
times ranked

1888
citing authors

#	ARTICLE	IF	CITATIONS
1	A Low-Operating-Power and Flexible Active-Matrix Organic-Transistor Temperature-Sensor Array. <i>Advanced Materials</i> , 2016, 28, 4832-4838.	11.1	265
2	Cell-Inspired All-Aqueous Microfluidics: From Intracellular Liquid-Liquid Phase Separation toward Advanced Biomaterials. <i>Advanced Science</i> , 2020, 7, 1903359.	5.6	111
3	High performance organic transistor active-matrix driver developed on paper substrate. <i>Scientific Reports</i> , 2014, 4, 6430.	1.6	110
4	Heat transfer and flow characteristics of microchannels with solid and porous ribs. <i>Applied Thermal Engineering</i> , 2020, 178, 115639.	3.0	62
5	Microfluidic-mediated nano-drug delivery systems: from fundamentals to fabrication for advanced therapeutic applications. <i>Nanoscale</i> , 2020, 12, 15512-15527.	2.8	58
6	Phonon thermal conduction in a graphene-C ₃ N heterobilayer using molecular dynamics simulations. <i>Nanotechnology</i> , 2019, 30, 075403.	1.3	55
7	Microfluidics in cardiovascular disease research: state of the art and future outlook. <i>Microsystems and Nanoengineering</i> , 2021, 7, 19.	3.4	47
8	Phonon Thermal Properties of Transition-Metal Dichalcogenides MoS ₂ and MoSe ₂ Heterostructure. <i>Journal of Physical Chemistry C</i> , 2017, 121, 10336-10344.	1.5	44
9	Direct Patterning of Self-Assembled Monolayers by Stamp Printing Method and Applications in High Performance Organic Field-Effect Transistors and Complementary Inverters. <i>Advanced Functional Materials</i> , 2015, 25, 6112-6121.	7.8	43
10	Machine Learning Enabled Prediction of Mechanical Properties of Tungsten Disulfide Monolayer. <i>ACS Omega</i> , 2019, 4, 10121-10128.	1.6	40
11	Coherent and incoherent phonon transport in a graphene and nitrogenated holey graphene superlattice. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 24240-24248.	1.3	38
12	Molecular dynamics study of thermal transport in a nitrogenated holey graphene bilayer. <i>Journal of Materials Chemistry C</i> , 2017, 5, 5119-5127.	2.7	36
13	Modifying the thermal conductivity of small molecule organic semiconductor thin films with metal nanoparticles. <i>Scientific Reports</i> , 2015, 5, 16095.	1.6	35
14	Phonon thermal transport in silicene-germanene superlattice: a molecular dynamics study. <i>Nanotechnology</i> , 2017, 28, 255403.	1.3	34
15	Self-Assembled chitosan/phospholipid nanoparticles: from fundamentals to preparation for advanced drug delivery. <i>Drug Delivery</i> , 2020, 27, 200-215.	2.5	34
16	Mechanical properties of molybdenum diselenide revealed by molecular dynamics simulation and support vector machine. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 9159-9167.	1.3	33
17	Molecular dynamics study of thermal transport in a dinaphtho[2,3-b:2',3'-f]thieno[3,2-b]thiophene (DNNT) organic semiconductor. <i>Nanoscale</i> , 2017, 9, 2262-2271.	2.8	31
18	Effect of biaxial strain on thermal transport in WS ₂ monolayer from first principles calculations. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2020, 124, 114312.	1.3	31

#	ARTICLE	IF	CITATIONS
19	Improvement of flow and heat transfer performance of manifold microchannel with porous fins. Applied Thermal Engineering, 2022, 206, 118129.	3.0	31
20	Improved thermoelectric properties of WS ₂ phononic crystals: insights from first-principles calculations. Nanoscale, 2021, 13, 7176-7192.	2.8	24
21	First-principles calculations of phonon behaviors in graphether: a comparative study with graphene. Physical Chemistry Chemical Physics, 2021, 23, 123-130.	1.3	22
22	Investigation of interfacial thermal transport across graphene and an organic semiconductor using molecular dynamics simulations. Physical Chemistry Chemical Physics, 2017, 19, 15933-15941.	1.3	21
23	Tunable thermal transport in a WS ₂ monolayer with isotopic doping and fractal structure. Nanoscale, 2019, 11, 19763-19771.	2.8	20
24	Understanding thermal transport in asymmetric layer hexagonal boron nitride heterostructure. Nanotechnology, 2017, 28, 035404.	1.3	19
25	Studies of gas-liquid two-phase flows in horizontal mini tubes using 3D reconstruction and numerical methods. International Journal of Multiphase Flow, 2020, 133, 103456.	1.6	19
26	Enhancement of Interfacial Thermal Transport between Metal and Organic Semiconductor Using Self-Assembled Monolayers with Different Terminal Groups. Journal of Physical Chemistry C, 2020, 124, 16748-16757.	1.5	18
27	Thermal transport in organic semiconductors. Journal of Applied Physics, 2021, 130, .	1.1	18
28	Mechanical responses of WSe ₂ monolayers: a molecular dynamics study. Materials Research Express, 2019, 6, 085071.	0.8	17
29	Thermal and flow characterization in nanochannels with tunable surface wettability: A comprehensive molecular dynamics study. Numerical Heat Transfer; Part A: Applications, 2020, 78, 231-251.	1.2	17
30	Investigation of flow and heat transfer performance of the manifold microchannel with different manifold arrangements. Case Studies in Thermal Engineering, 2022, 34, 102073.	2.8	17
31	Thermal Transport in Supported Graphene Nanomesh. ACS Applied Materials & Interfaces, 2018, 10, 9211-9215.	4.0	16
32	Molecular dynamics study of convective heat transfer mechanism in a nano heat exchanger. RSC Advances, 2020, 10, 23097-23107.	1.7	13
33	Thermal transport in C ₃ N nanotube: a comparative study with carbon nanotube. Nanotechnology, 2019, 30, 255401.	1.3	12
34	High-Throughput Computations of Cross-Plane Thermal Conductivity in Multilayer Stanene. International Journal of Heat and Mass Transfer, 2021, 171, 121073.	2.5	10
35	Atomistic simulations of phonon behaviors in isotopically doped graphene with Sierpinski carpet fractal structure. Materials Research Express, 2020, 7, 035020.	0.8	9
36	Extraordinary thermoelectric performance in 2D group III monolayer XP ₃ (X = Al, Ga, and) Tj ETQq0 0 Q rgBT /Overlock 10 T	1.3	9

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37	Nonequilibrium phonon transport induced by finite sizes: Effect of phonon-phonon coupling. <i>Physical Review B</i> , 2021, 104, .	1.1	9
38	Dewetting transition of water on nanostructured and wettability patterned surfaces: A molecular dynamics study. <i>Journal of Molecular Liquids</i> , 2021, 336, 116869.	2.3	8
39	Experimental and numerical studies of liquid-liquid two-phase flows in microchannel with sudden expansion/contraction cavities. <i>Chemical Engineering Journal</i> , 2022, 433, 133820.	6.6	8
40	Thermal Annealing Effect on the Thermal and Electrical Properties of Organic Semiconductor Thin Films. <i>MRS Advances</i> , 2016, 1, 1637-1643.	0.5	7
41	Discovery of high thermoelectric performance of WS ₂ -WSe ₂ nanoribbons with superlattice and Janus structures. <i>Journal of Alloys and Compounds</i> , 2022, 903, 163850.	2.8	7
42	Achieving high performance Ga ₂ O ₃ diodes by adjusting chemical composition of tin oxide Schottky electrode. <i>Semiconductor Science and Technology</i> , 2019, 34, 075001.	1.0	6
43	Predicting the effective thermal conductivity of unfrozen soils with various water contents based on artificial neural network. <i>Nanotechnology</i> , 2021, 33, .	1.3	6
44	Atomistic insights into dynamic growth of pentacene thin films on metal surfaces functionalized with self-assembled monolayers. <i>Applied Surface Science</i> , 2022, 579, 152203.	3.1	6
45	Intelligent identification of two-phase flow patterns in a long pipeline-riser system. <i>Flow Measurement and Instrumentation</i> , 2022, 84, 102124.	1.0	4
46	Tuning Interfacial Thermal Conductance Across Metal–Organic Semiconductor Interfaces by Mixing Self-Assembled Monolayers. <i>ACS Applied Electronic Materials</i> , 2022, 4, 718-728.	2.0	4
47	Molecular dynamic simulation of thermal transport in monolayer C ₃ B x N ₁ alloy. <i>Nanotechnology</i> , 2020, 31, 185404.	1.3	3
48	Thermal boundary resistance at graphene-pentacene interface explored by a data-intensive approach. <i>Nanotechnology</i> , 2021, 32, 215404.	1.3	3
49	Flow regime recognition in a long pipeline-riser system based on signals at the top of the riser. <i>Flow Measurement and Instrumentation</i> , 2021, 80, 101987.	1.0	3
50	Interfacial thermal transport of graphene/Ga ₂ O ₃ heterojunction: a molecular dynamics study with a self-consistent interatomic potential. <i>Physical Chemistry Chemical Physics</i> , 2022, , .	1.3	3
51	A numerical study on hydrodynamic and heat transfer characteristics of gas–liquid Taylor flow in horizontal mini tubes. <i>Numerical Heat Transfer; Part A: Applications</i> , 2021, 80, 487-504.	1.2	1
52	Numerical study of droplet impact on superhydrophobic vibrating surfaces with microstructures. <i>Case Studies in Thermal Engineering</i> , 2022, 30, 101732.	2.8	1
53	Strain engineering on the thermoelectric performance of monolayer AlP ₃ : A first-principles study. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2022, , 115365.	1.3	1