Dongyan Xu

List of Publications by Year
in descending order

65 papers	1,722 citations	279487 23 h-index	288905 40 g-index
66 all docs	66 docs citations	66 times ranked	2846 citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced heat transfer coefficient of flow boiling in microchannels through expansion areas. International Journal of Thermal Sciences, 2022, 177, 107573.	2.6	23
2	High-thermopower polarized electrolytes enabled by methylcellulose for low-grade heat harvesting. Science Advances, 2022, 8, eabl5318.	4.7	38
3	Nonmetallic power-law behavior of conductance in Ni-doped NbSe3 nanowires. Materials Today Physics, 2022, 27, 100770.	2.9	1
4	Chemically Switchable n-Type and p-Type Conduction in Bismuth Selenide Nanoribbons for Thermoelectric Energy Harvesting. ACS Nano, 2021, 15, 2791-2799.	7.3	14
5	Solid-State Thermal Memory of Temperature-Responsive Polymer Induced by Hydrogen Bonds. Nano Letters, 2021, 21, 3843-3848.	4.5	7
6	Effect of abnormal grain growth on thermoelectric properties of hot-pressed Bi0.5Sb1.5Te3 alloys. Journal of Alloys and Compounds, 2020, 817, 153284.	2.8	14
7	Effective Lorenz Number of the Point Contact between Silver Nanowires. Nano Letters, 2020, 20, 8576-8583.	4.5	2
8	Thermal Transport of Tin Dioxide Nanowires. IOP Conference Series: Earth and Environmental Science, 2020, 440, 022045.	0.2	1
9	Electrical and Thermal Transport through Silver Nanowires and Their Contacts: Effects of Elastic Stiffening. Nano Letters, 2020, 20, 7389-7396.	4.5	40
10	Enhanced power factor of n-type Bi₂Te_{2.8}Se_{0.2} alloys through an efficient one-step sintering strategy for low-grade heat harvesting. Journal of Materials Chemistry A, 2020, 8, 24524-24535.	5.2	7
11	Liquid Thermocells Enable Low-Grade Heat Harvesting. Matter, 2020, 3, 1400-1402.	5.0	19
12	Tuning thermal conductivity of bismuth selenide nanoribbons by reversible copper intercalation. International Journal of Heat and Mass Transfer, 2020, 159, 120077.	2.5	4
13	Ultralow thermal conductance of the van der Waals interface between organic nanoribbons. Materials Today Physics, 2019, 11, 100139.	2.9	25
14	Quantum transport characteristics of heavily doped bismuth selenide nanoribbons. Npj Quantum Materials, 2019, 4, .	1.8	40
15	Design of Cassie-wetting nucleation sites in pool boiling. International Journal of Heat and Mass Transfer, 2019, 132, 25-33.	2.5	16
16	Single-crystalline 2D erucamide with low friction and enhanced thermal conductivity. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 540, 29-35.	2.3	11
17	The suppression effect of easy-to-activate nucleation sites on the critical heat flux in pool boiling. International Journal of Thermal Sciences, 2018, 129, 231-237.	2.6	23
18	Measuring nanowire thermal conductivity at high temperatures. Measurement Science and Technology, 2018, 29, 025001.	1.4	9

#	Article	IF	Citations
19	Development and optimization of high power density micro-thermoelectric generators. Journal of Physics: Conference Series, 2018, 1052, 012009.	0.3	1
20	Thermal boundary resistance correlated with strain energy in individual Si film-wafer twist boundaries. Materials Today Physics, 2018, 6, 53-59.	2.9	27
21	FeVSb-based amorphous films with ultra-low thermal conductivity and high <i>ZT</i>: a potential material for thermoelectric generators. Journal of Materials Chemistry A, 2018, 6, 11435-11445.	5.2	5
22	(Invited) Development of Thermoelectric Materials and Thermal Interface Materials By Pulsed Electroplating. ECS Meeting Abstracts, 2018, , .	0.0	0
23	Electron contributions to the heat conduction across Au/graphene/Au interfaces. Carbon, 2017, 115, 665-671.	5.4	24
24	Reference channel-based microfluidic resistance sensing for single yeast cell volume growth measurement. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	4
25	Defect Facilitated Phonon Transport through Kinks in Boron Carbide Nanowires. Nano Letters, 2017, 17, 3550-3555.	4.5	23
26	Significantly enhanced thermal conductivity of indium arsenide nanowires via sulfur passivation. Scientific Reports, 2017, 7, 13252.	1.6	8
27	A setup for measuring the Seebeck coefficient and the electrical resistivity of bulk thermoelectric materials. Review of Scientific Instruments, 2017, 88, 095111.	0.6	21
28	Experimental Studies of Thermal Transport in Nanostructures. , 2017, , 319-357.		2
29	Structure-induced variation of thermal conductivity in epoxy resin fibers. Nanoscale, 2017, 9, 10585-10589.	2.8	13
30	Unusual thermal transport behavior in self-assembled fullerene nanorods. RSC Advances, 2016, 6, 67509-67513.	1.7	2
31	A High Power Density Micro-Thermoelectric Generator Fabricated by an Integrated Bottom-Up Approach. Journal of Microelectromechanical Systems, 2016, 25, 744-749.	1.7	46
32	Length-dependent thermal transport in one-dimensional self-assembly of planar Ï€-conjugated molecules. Nanoscale, 2016, 8, 11932-11939.	2.8	7
33	Impact of the film thickness and substrate on the thermopower measurement of thermoelectric films by the potential-Seebeck microprobe (PSM). Applied Thermal Engineering, 2016, 107, 552-559.	3.0	7
34	Effects of interfacial roughness on phonon transport in bilayer silicon thin films. Physical Review B, 2015, 92, .	1.1	14
35	Anisotropic Lattice Thermal Conductivity and Suppressed Acoustic Phonons in MOF-74 from First Principles. Journal of Physical Chemistry C, 2015, 119, 26000-26008.	1.5	39
36	Experimental evidence of very long intrinsic phonon mean free path along the <i>c</i>-axis of graphite. Applied Physics Letters, 2015, 106, .	1.5	58

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37	Thermoelectric characterization of individual bismuth selenide topological insulator nanoribbons. Nanoscale, 2015, 7, 6683-6690.	2.8	43
38	Fluid infiltration pressure for hydrophobic nanochannels. Physical Review E, 2015, 91, 033022.	0.8	31
39	H₂O Adsorption/Desorption in MOF-74: <i>Ab Initio</i> Molecular Dynamics and Experiments. Journal of Physical Chemistry C, 2015, 119, 13021-13031.	1.5	43
40	Enhancing the Thermoelectric Properties of the Electroplated Bi 2 Te 3 Films by Tuning the Pulse Off-to-on Ratio. Electrochimica Acta, 2015, 178, 217-224.	2.6	25
41	Thermal conductivity of zinc blende and wurtzite CdSe nanostructures. Nanoscale, 2015, 7, 16071-16078.	2.8	11
42	Tunable Rigidity of (Polymeric Core)â€"(Lipid Shell) Nanoparticles for Regulated Cellular Uptake. Advanced Materials, 2015, 27, 1402-1407.	11.1	383
43	Estimation of temperature coefficient of resistance for microfabricated platinum thermometers in thermal conductivity measurements of one-dimensional nanostructures. Measurement Science and Technology, 2014, 25, 025008.	1.4	2
44	Reduced thermal conductivity in Er-doped epitaxial InxGa1â^'xSb alloys. Applied Physics Letters, 2013, 103, .	1.5	11
45	Thermoelectric figure of merit of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mml:msub><mml:mrow> Physical Review B, 2010, 81, .	1.1	85
46	High efficiency semimetal/semiconductor nanocomposite thermoelectric materials. Journal of Applied Physics, 2010, 108, .	1.1	72
47	Experimental characterization of electrical current leakage in poly(dimethylsiloxane) microfluidic devices. Microfluidics and Nanofluidics, 2009, 6, 589-598.	1.0	14
48	Field-Effect Control of Electroosmotic Pumping Using Porous Siliconâ€"Silicon Nitride Membranes. Journal of Microelectromechanical Systems, 2009, 18, 1173-1183.	1.7	9
49	Water structures near charged (100) and (111) silicon surfaces. Applied Physics Letters, 2009, 94, .	1.5	18
50	Ionic current through a nanopore three nanometers in diameter. Physical Review E, 2009, 80, 021918.	0.8	13
51	Ionic Current Through a 3 NM in Diameter Nanopore. , 2009, , .		0
52	Microfluidic differential resistive pulse sensors. Electrophoresis, 2008, 29, 2754-2759.	1.3	59
53	On-chip counting the number and the percentage of CD4+ T lymphocytes. Lab on A Chip, 2008, 8, 309-315.	3.1	71
54	Electroosmotic Flow in Nanotubes with High Surface Charge Densities. Nano Letters, 2008, 8, 42-48.	4.5	67

#	Article	IF	Citations
55	Thermal Bubble Nucleation in Nanochannels: Simulations and Strategies for Nanobubble Nucleation and Sensing. Materials Research Society Symposia Proceedings, 2008, 1139, 1.	0.1	0
56	Experimental characterization of a metal-oxide-semiconductor field-effect transistor-based Coulter counter. Journal of Applied Physics, 2008, 103, 104701-10470110.	1.1	37
57	Wide-spectrum, ultrasensitive fluidic sensors with amplification from both fluidic circuits and metal oxide semiconductor field effect transistors. Applied Physics Letters, 2007, 91, .	1.5	28
58	Molecular dynamics simulations of ion distribution in nanochannels. Molecular Simulation, 2007, 33, 959-963.	0.9	12
59	SiO2-coated porous anodic alumina membranes for high flow rate electroosmotic pumping. Nanotechnology, 2007, 18, 275705.	1.3	47
60	What do we know about long laminar plasma jets?. Pure and Applied Chemistry, 2006, 78, 1253-1264.	0.9	16
61	Effects of surrounding gas on the long laminar argon plasma jet characteristics. International Communications in Heat and Mass Transfer, 2005, 32, 939-946.	2.9	7
62	Effects of natural convection on the characteristics of a long laminar argon plasma jet issuing horizontally into ambient air. International Journal of Heat and Mass Transfer, 2005, 48, 3253-3255.	2.5	13
63	Motion and heating of non-spherical particles in a plasma jet. Surface and Coatings Technology, 2003, 171, 149-156.	2.2	22
64	Three-dimensional modelling of the characteristics of long laminar plasma jets with lateral injection of carrier gas and particulate matter. Journal Physics D: Applied Physics, 2003, 36, 1583-1594.	1.3	27
65	Thermophoresis of a Near-Wall Particle at Great Knudsen Numbers. Aerosol Science and Technology, 2002, 36, 39-47.	1.5	9