Nuo Yang

List of Publications by Year in Descending Order

89 papers	4,366 citations	37 h-index	65 g-index
98 ext. papers	5,391 ext. citations	6.6 avg, IF	6.04 L-index

#	Paper	IF	Citations
89	Graded thermal conductivity in 2D and 3D homogeneous hotspot systems. *Materials Today Physics*, **2022**, 22, 100605	8	4
88	Efficient mechanical modulation of the phonon thermal conductivity of MoS nanowires.. *Nanoscale*, **2022**,	7.7	2
87	A study on the upper limit efficiency of solar still by optimizing the mass transfer. *Applied Thermal Engineering*, **2022**, 213, 118664	5.8	0
86	Reverse osmosis desalination systems powered by solar energy: Preheating techniques and brine disposal challenges □A detailed review. *Energy Conversion and Management*, **2021**, 114971	10.6	9
85	Maximization and minimization of interfacial thermal conductance by modulating the mass distribution of the interlayer. *Physical Review B*, **2021**, 103,	3.3	1
84	Electric-field-induced modulation of thermal conductivity in poly(vinylidene fluoride). *Nano Energy*, **2021**, 82, 105749	17.1	11
83	Electrospun Composite Gel Polymer Electrolytes with High Thermal Conductivity toward Wide Temperature Lithium Metal Batteries. *ACS Applied Energy Materials*, **2021**, 4, 8130-8141	6.1	1
82	Phonon weak couplings model and its applications: A revisit to two-temperature non-equilibrium transport. *Materials Today Physics*, **2021**, 16, 100305	8	11
81	How Does van der Waals Confinement Enhance Phonon Transport?*. *Chinese Physics Letters*, **2021**, 38, 014401	1.8	12
80	Performance assessment of solar PV-driven hybrid HDH-RO desalination system integrated with energy recovery units and solar collectors: Theoretical approach. *Energy Conversion and Management*, **2021**, 239, 114215	10.6	18
79	An integrated thermoelectric heating-cooling system for air sterilization□a simulation study. *Materials Today Physics*, **2021**, 19, 100430	8	2
78	Improved thermo-economic performance of solar desalination via copper chips, nanofluid, and nano-based phase change material. *Solar Energy*, **2021**, 224, 1313-1325	6.8	21
77	Potential and challenges of improving solar still by micro/nano-particles and porous materials - A review. *Journal of Cleaner Production*, **2021**, 311, 127432	10.3	23
76	Optimizing thermal transport in graphene nanoribbon based on phonon resonance hybridization. *Materials Today Physics*, **2021**, 20, 100445	8	11
75	A compact flat solar still with high performance. *International Journal of Heat and Mass Transfer*, **2021**, 179, 121657	4.9	10
74	Thermal conductivity of one-dimensional carbon-boron nitride van der Waals heterostructure: A molecular dynamics study. *International Journal of Heat and Mass Transfer*, **2021**, 180, 121773	4.9	8
73	Thermal conductivities and mechanical properties of epoxy resin as a function of the degree of cross-linking. *International Journal of Heat and Mass Transfer*, **2021**, 180, 121821	4.9	2

72	Temperature-dependent thermal transport of single molecular junctions from semiclassical Langevin molecular dynamics. *Physical Review B*, **2021**, 104,	3.3	3
71	New hydrogel materials for improving solar water evaporation, desalination and wastewater treatment: A review. *Desalination*, **2020**, 491, 114564	10.3	66
70	Thermoelectric applications of chalcogenides **2020**, 31-56		1
69	Mass difference and polarization lead to low thermal conductivity of graphene-like carbon nitride (C3N). *Carbon*, **2020**, 162, 202-208	10.4	21
68	Thermal transport of chalcogenides **2020**, 339-370		1
67	Reduction of interfacial thermal resistance of overlapped graphene by bonding carbon chains. *Chinese Physics B*, **2020**, 29, 126303	1.2	6
66	Influence of basin metals and novel wick-metal chips pad on the thermal performance of solar desalination process. *Journal of Cleaner Production*, **2020**, 248, 119224	10.3	36
65	High efficient solar evaporation by airing multifunctional textile. *International Journal of Heat and Mass Transfer*, **2020**, 147, 118866	4.9	39
64	Thermal boundary resistance measurement and analysis across SiC/SiO2 interface. *Applied Physics Letters*, **2019**, 115, 101603	3.4	18
63	Unexpectedly high cross-plane thermoelectric performance of layered carbon nitrides. *Journal of Materials Chemistry A*, **2019**, 7, 2114-2121	13	34
62	Quantifying phonon particle and wave transport in silicon nanophononic metamaterial with cross junction. *Materials Today Physics*, **2019**, 8, 56-61	8	35
61	Augmentation of a pyramid solar still performance using evacuated tubes and nanofluid: Experimental approach. *Applied Thermal Engineering*, **2019**, 160, 113997	5.8	68
60	Materials Discovery and Properties Prediction in Thermal Transport via Materials Informatics: A Mini Review. *Nano Letters*, **2019**, 19, 3387-3395	11.5	55
59	The roles of metal-organic frameworks in modulating water permeability of graphene oxide-based carbon membranes. *Carbon*, **2019**, 148, 277-289	10.4	28
58	Superior thermal conductivity of poly (ethylene oxide) for solid-state electrolytes: A molecular dynamics study. *International Journal of Heat and Mass Transfer*, **2019**, 137, 1241-1246	4.9	26
57	Efficiency enhancement on the solar steam generation by wick materials with wrapped graphene nanoparticles. *Applied Thermal Engineering*, **2019**, 161, 114195	5.8	17
56	Hybrid Thermal Transport Characteristics of Doped Organic Semiconductor Poly(3,4-ethylenedioxythiophene):Tosylate. *Journal of Physical Chemistry C*, **2019**, 123, 26735-26741	3.8	20
55	Thermal conductivity of molybdenum disulfide nanotube from molecular dynamics simulations. *International Journal of Heat and Mass Transfer*, **2019**, 145, 118719	4.9	18

54	Ultralow thermal conductance of the van der Waals interface between organic nanoribbons. *Materials Today Physics*, **2019**, 11, 100139	8	15
53	A cross-interface model for thermal transport across the interface between overlapped nanoribbons. *Physical Chemistry Chemical Physics*, **2019**, 21, 25072-25079	3.6	13
52	Thermally-Responsive Hydrogels Poly(N-Isopropylacrylamide) as the Thermal Switch. *Journal of Physical Chemistry C*, **2019**, 123, 31003-31010	3.8	14
51	Nanoconfinement-Induced Giant Electrocaloric Effect in Ferroelectric Polymer Nanowire Array Integrated with Aluminum Oxide Membrane to Exhibit Record Cooling Power Density. *Advanced Materials*, **2019**, 31, e1806642	24	39
50	Predictions of Thermo-Mechanical Properties of Cross-Linked Polyacrylamide Hydrogels Using Molecular Simulations. *Advanced Theory and Simulations*, **2019**, 2, 1800153	3.5	30
49	A Modified Theoretical Model to Accurately Account for Interfacial Roughness in Predicting the Interfacial Thermal Conductance. *Frontiers in Energy Research*, **2018**, 6,	3.8	19
48	Low-cost high-efficiency solar steam generator by combining thin film evaporation and heat localization: Both experimental and theoretical study. *Applied Thermal Engineering*, **2018**, 143, 1079-1084	5.8	60
47	Unexpected thermal conductivity enhancement in pillared graphene nanoribbon with isotopic resonance. *Physical Review B*, **2018**, 98,	3.3	50
46	Role of Molecular Polarity in Thermal Transport of Boron Nitride-Organic Molecule Composites. *ACS Omega*, **2018**, 3, 12530-12534	3.9	19
45	Energy and exergy analysis of solar stills with micro/nano particles: A comparative study. *Energy Conversion and Management*, **2018**, 177, 363-375	10.6	107
44	High Thermal Conductivity of Bulk Epoxy Resin by Bottom-Up Parallel-Linking and Strain: A Molecular Dynamics Study. *Journal of Physical Chemistry C*, **2018**, 122, 13140-13147	3.8	37
43	Thermal performance and exergy analysis of solar stills □A review. *Renewable and Sustainable Energy Reviews*, **2017**, 73, 521-544	16.2	101
42	A Review of Thermal Transport in Low-Dimensional Materials Under External Perturbation: Effect of Strain, Substrate, and Clustering. *Nanoscale and Microscale Thermophysical Engineering*, **2017**, 21, 201-236	3.7	27
41	Thermal transport in graphene with defect and doping: Phonon modes analysis. *Carbon*, **2017**, 116, 139-144	10.4	86
40	Enhancement of Interfacial Thermal Conductance of SiC by Overlapped Carbon Nanotubes and Intertube Atoms. *Journal of Heat Transfer*, **2017**, 139,	1.8	7
39	The effects of flake graphite nanoparticles, phase change material, and film cooling on the solar still performance. *Applied Energy*, **2017**, 191, 358-366	10.7	160
38	A Series Circuit of Thermal Rectifiers: An Effective Way to Enhance Rectification Ratio. *Small*, **2017**, 13, 1602726	11	35
37	The unexpected thermal conductivity from graphene disk, carbon nanocone to carbon nanotube. *International Journal of Heat and Mass Transfer*, **2017**, 108, 940-944	4.9	27

36	Ultra-fast vapor generation by a graphene nano-ratchet: a theoretical and simulation study. *Nanoscale*, **2017**, 9, 19066-19072	7.7	31
35	Thermal Transport in Soft PAAm Hydrogels. *Polymers*, **2017**, 9,	4.5	45
34	Generalized Two-Temperature Model for Coupled Phonons in Nanosized Graphene. *Nano Letters*, **2017**, 17, 5805-5810	11.5	46
33	Enhancement of Thermal Conductivity of Polyvinyl Alcohol Membrane Using Nano-fiber. *MRS Advances*, **2017**, 2, 3651-3656	0.7	1
32	Enhancing the solar still performance using nanofluids and glass cover cooling: Experimental study. *Applied Thermal Engineering*, **2017**, 113, 684-693	5.8	193
31	A hybrid desalination system using humidification-dehumidification and solar stills integrated with evacuated solar water heater. *Energy Conversion and Management*, **2016**, 124, 287-296	10.6	90
30	Nano-cross-junction effect on phonon transport in silicon nanowire cages. *Physical Review B*, **2016**, 94,	3.3	84
29	Manipulating the temperature dependence of the thermal conductivity of graphene phononic crystal. *Nanotechnology*, **2016**, 27, 265702	3.4	23
28	Adjustable thermal resistor by reversibly folding a graphene sheet. *Nanoscale*, **2016**, 8, 14943-9	7.7	38
27	Factors affecting solar stills productivity and improvement techniques: A detailed review. *Applied Thermal Engineering*, **2016**, 100, 267-284	5.8	136
26	Spontaneous Migration of Polyethylene Molecule Sheathed inside Single-Walled Carbon Nanotube for Nano-Heat Pipe. *Scientific Reports*, **2016**, 6, 26441	4.9	1
25	A continuous desalination system using humidification dehumidification and a solar still with an evacuated solar water heater. *Applied Thermal Engineering*, **2016**, 104, 734-742	5.8	71
24	Thermoelectric properties of nanoscale three dimensional Si phononic crystals. *International Journal of Heat and Mass Transfer*, **2016**, 99, 102-106	4.9	15
23	Performance enhancement of wick solar still using rejected water from humidification-dehumidification unit and film cooling. *Applied Thermal Engineering*, **2016**, 108, 1268-1278	5.8	51
22	Enhancing the Thermoelectric Figure of Merit by Low-Dimensional Electrical Transport in Phonon-Glass Crystals. *Nano Letters*, **2015**, 15, 5229-34	11.5	45
21	Significant reduction of graphene thermal conductivity by phononic crystal structure. *International Journal of Heat and Mass Transfer*, **2015**, 91, 428-432	4.9	66
20	A Revisit to High Thermoelectric Performance of Single-layer MoS2. *Scientific Reports*, **2015**, 5, 18342	4.9	108
19	Extremely High Thermal Conductivity of Aligned Carbon Nanotube-Polyethylene Composites. *Scientific Reports*, **2015**, 5, 16543	4.9	63

18	Nanoscale Graphene Disk: A Natural Functionally Graded Material-How is Fourier's Law Violated along Radius Direction of 2D Disk. *Scientific Reports*, **2015**, 5, 14878	4.9	19
17	Unusual isotope effect on thermal transport of single layer molybdenum disulphide. *Applied Physics Letters*, **2015**, 107, 191907	3.4	30
16	Thermal Interface Conductance Between Aluminum and Silicon by Molecular Dynamics Simulations. *Journal of Computational and Theoretical Nanoscience*, **2015**, 12, 168-174	0.3	54
15	The Vacancy Effect on Thermal Interface Resistance between Aluminum and Silicon by Molecular Dynamics. *Materials Research Society Symposia Proceedings*, **2015**, 1753, 7		
14	Extreme low thermal conductivity in nanoscale 3D Si phononic crystal with spherical pores. *Nano Letters*, **2014**, 14, 1734-8	11.5	128
13	Profiling nanowire thermal resistance with a spatial resolution of nanometers. *Nano Letters*, **2014**, 14, 806-12	11.5	47
12	Modulation of thermal conductivity in kinked silicon nanowires: phonon interchanging and pinching effects. *Nano Letters*, **2013**, 13, 1670-4	11.5	54
11	Reduction of thermal conductivity by nanoscale 3D phononic crystal. *Scientific Reports*, **2013**, 3, 1143	4.9	39
10	Thermal transport in nanostructures. *AIP Advances*, **2012**, 2, 041410	1.5	113
9	Understanding length dependences of effective thermal conductivity of nanowires. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2012**, 376, 3514-3517	2.3	24
8	How does folding modulate thermal conductivity of graphene?. *Applied Physics Letters*, **2012**, 100, 093107	3.4	72
7	Non-Fourier heat conductions in nanomaterials. *Journal of Applied Physics*, **2011**, 110, 064310	2.5	91
6	Violation of Fourier's law and anomalous heat diffusion in silicon nanowires. *Nano Today*, **2010**, 5, 85-90	17.9	191
5	Thermal rectification in asymmetric graphene ribbons. *Applied Physics Letters*, **2009**, 95, 033107	3.4	273
4	Ultralow thermal conductivity of isotope-doped silicon nanowires. *Nano Letters*, **2008**, 8, 276-80	11.5	197
3	Carbon nanocone: A promising thermal rectifier. *Applied Physics Letters*, **2008**, 93, 243111	3.4	218
2	Thermal rectification and negative differential thermal resistance in lattices with mass gradient. *Physical Review B*, **2007**, 76,	3.3	215
1	Modulating the thermal conductivity of crystalline nylon by tuning hydrogen bonds through structure poling. *Journal of Materials Chemistry A*,	13	4