Nuo Yang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7647180/publications.pdf

Version: 2024-02-01

95 papers	6,284 citations	50170 46 h-index	66788 78 g-index
98 all docs	98 docs citations	98 times ranked	4196 citing authors

#	Article	IF	Citations
1	Reverse osmosis desalination systems powered by solar energy: Preheating techniques and brine disposal challenges â€“ A detailed review. Energy Conversion and Management, 2022, 251, 114971.	4.4	75
2	Graded thermal conductivity in 2D and 3D homogeneous hotspot systems. Materials Today Physics, 2022, 22, 100605.	2.9	18
3	Efficient mechanical modulation of the phonon thermal conductivity of Mo₆S₆ nanowires. Nanoscale, 2022, 14, 3078-3086.	2.8	15
4	Unified theory of second sound in two-dimensional materials. Physical Review B, 2022, 105, .	1.1	7
5	A study on the upper limit efficiency of solar still by optimizing the mass transfer. Applied Thermal Engineering, 2022, 213, 118664.	3.0	11
6	Thermo-economic performance enhancement of a solar desalination unit using external condenser, nanofluid, and ultrasonic foggers. Sustainable Energy Technologies and Assessments, 2022, 52, 102348.	1.7	8
7	Research progress on thermal transprot of graphene-based composite thermal interface materials. Wuli Xuebao/Acta Physica Sinica, 2022, .	0.2	3
8	Phonon weak couplings model and its applications: A revisit to two-temperature non-equilibrium transport. Materials Today Physics, 2021, 16, 100305.	2.9	19
9	How Does van der Waals Confinement Enhance Phonon Transport?*. Chinese Physics Letters, 2021, 38, 014401.	1.3	24
10	Maximization and minimization of interfacial thermal conductance by modulating the mass distribution of the interlayer. Physical Review B, 2021, 103, .	1.1	29
11	Electric-field-induced modulation of thermal conductivity in poly(vinylidene fluoride). Nano Energy, 2021, 82, 105749.	8.2	45
12	Electrospun Composite Gel Polymer Electrolytes with High Thermal Conductivity toward Wide Temperature Lithium Metal Batteries. ACS Applied Energy Materials, 2021, 4, 8130-8141.	2.5	11
13	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.	4.4	69
14	An integrated thermoelectric heating-cooling system for air sterilizationâ€” a simulation study. Materials Today Physics, 2021, 19, 100430.	2.9	10
15	Improved thermo-economic performance of solar desalination via copper chips, nanofluid, and nano-based phase change material. Solar Energy, 2021, 224, 1313-1325.	2.9	69
16	Potential and challenges of improving solar still by micro/nano-particles and porous materials - A review. Journal of Cleaner Production, 2021, 311, 127432.	4.6	65
17	Optimizing thermal transport in graphene nanoribbon based on phonon resonance hybridization. Materials Today Physics, 2021, 20, 100445.	2.9	27
18	A compact flat solar still with high performance. International Journal of Heat and Mass Transfer, 2021, 179, 121657.	2.5	34

#	Article	IF	Citations
19	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.	2.5	19
20	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.	2.5	22
21	Modulating the thermal conductivity of crystalline nylon by tuning hydrogen bonds through structure poling. Journal of Materials Chemistry A, 2021, 9, 24472-24479.	5.2	18
22	Temperature-dependent thermal transport of single molecular junctions from semiclassical Langevin molecular dynamics. Physical Review B, 2021, 104, .	1.1	8
23	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.	4.6	70
24	High efficient solar evaporation by airing multifunctional textile. International Journal of Heat and Mass Transfer, 2020, 147, 118866.	2.5	58
25	New hydrogel materials for improving solar water evaporation, desalination and wastewater treatment: A review. Desalination, 2020, 491, 114564.	4.0	142
26	Thermoelectric applications of chalcogenides. , 2020, , 31-56.		6
27	Mass difference and polarization lead to low thermal conductivity of graphene-like carbon nitride (C3N). Carbon, 2020, 162, 202-208.	5.4	35
28	Thermal transport of chalcogenides. , 2020, , 339-370.		1
29	Reduction of interfacial thermal resistance of overlapped graphene by bonding carbon chains*. Chinese Physics B, 2020, 29, 126303.	0.7	11
30	Efficiency enhancement on the solar steam generation by wick materials with wrapped graphene nanoparticles. Applied Thermal Engineering, 2019, 161, 114195.	3.0	24
31	Hybrid Thermal Transport Characteristics of Doped Organic Semiconductor Poly(3,4-ethylenedioxythiophene):Tosylate. Journal of Physical Chemistry C, 2019, 123, 26735-26741.	1.5	35
32	Thermal conductivity of molybdenum disulfide nanotube from molecular dynamics simulations. International Journal of Heat and Mass Transfer, 2019, 145, 118719.	2.5	25
33	Ultralow thermal conductance of the van der Waals interface between organic nanoribbons. Materials Today Physics, 2019, 11, 100139.	2.9	25
34	Thermal boundary resistance measurement and analysis across SiC/SiO2 interface. Applied Physics Letters, 2019, 115, .	1.5	28
35	Unexpectedly high cross-plane thermoelectric performance of layered carbon nitrides. Journal of Materials Chemistry A, 2019, 7, 2114-2121.	5.2	44
36	Quantifying phonon particle and wave transport in silicon nanophononic metamaterial with cross junction. Materials Today Physics, 2019, 8, 56-61.	2.9	55

#	Article	IF	Citations
37	Augmentation of a pyramid solar still performance using evacuated tubes and nanofluid: Experimental approach. Applied Thermal Engineering, 2019, 160, 113997.	3.0	113
38	Materials Discovery and Properties Prediction in Thermal Transport via Materials Informatics: A Mini Review. Nano Letters, 2019, 19, 3387-3395.	4.5	94
39	The roles of metal-organic frameworks in modulating water permeability of graphene oxide-based carbon membranes. Carbon, 2019, 148, 277-289.	5.4	50
40	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.	2.5	43
41	A cross-interface model for thermal transport across the interface between overlapped nanoribbons. Physical Chemistry Chemical Physics, 2019, 21, 25072-25079.	1.3	20
42	Thermally-Responsive Hydrogels Poly(N-Isopropylacrylamide) as the Thermal Switch. Journal of Physical Chemistry C, 2019, 123, 31003-31010.	1.5	28
43	Nanoconfinementâ€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.	11.1	56
44	Predictions of Thermoâ€Mechanical Properties of Crossâ€Linked Polyacrylamide Hydrogels Using Molecular Simulations. Advanced Theory and Simulations, 2019, 2, 1800153.	1.3	52
45	Unexpected thermal conductivity enhancement in pillared graphene nanoribbon with isotopic resonance. Physical Review B, 2018, 98, .	1.1	75
46	Role of Molecular Polarity in Thermal Transport of Boron Nitrideâ€"Organic Molecule Composites. ACS Omega, 2018, 3, 12530-12534.	1.6	26
47	Energy and exergy analysis of solar stills with micro/nano particles: A comparative study. Energy Conversion and Management, 2018, 177, 363-375.	4.4	159
48	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.	1.5	62
49	A Modified Theoretical Model to Accurately Account for Interfacial Roughness in Predicting the Interfacial Thermal Conductance. Frontiers in Energy Research, 2018, 6, .	1.2	30
50	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.	3.0	82
51	ENHANCEMENT OF THERMAL CONDUCTIVITY OF ELECTROSPINNING PVA NANO-FIBER FILM BY DOPING SILVER NANOWIRES. , 2018, , .		1
52	Thermal performance and exergy analysis of solar stills â€" A review. Renewable and Sustainable Energy Reviews, 2017, 73, 521-544.	8.2	148
53	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.	1.4	38
54	Thermal transport in graphene with defect and doping: Phonon modes analysis. Carbon, 2017, 116, 139-144.	5.4	118

#	Article	IF	Citations
55	Enhancement of Interfacial Thermal Conductance of SiC by Overlapped Carbon Nanotubes and Intertube Atoms. Journal of Heat Transfer, 2017, 139, .	1.2	14
56	The effects of flake graphite nanoparticles, phase change material, and film cooling on the solar still performance. Applied Energy, 2017, 191, 358-366.	5.1	224
57	A Series Circuit of Thermal Rectifiers: An Effective Way to Enhance Rectification Ratio. Small, 2017, 13, 1602726.	5.2	51
58	The unexpected thermal conductivity from graphene disk, carbon nanocone to carbon nanotube. International Journal of Heat and Mass Transfer, 2017, 108, 940-944.	2.5	36
59	Ultra-fast vapor generation by a graphene nano-ratchet: a theoretical and simulation study. Nanoscale, 2017, 9, 19066-19072.	2.8	47
60	Generalized Two-Temperature Model for Coupled Phonons in Nanosized Graphene. Nano Letters, 2017, 17, 5805-5810.	4.5	64
61	Enhancement of Thermal Conductivity of Polyvinyl Alcohol Membrane Using Nano-fiber. MRS Advances, 2017, 2, 3651-3656.	0.5	1
62	Enhancing the solar still performance using nanofluids and glass cover cooling: Experimental study. Applied Thermal Engineering, 2017, 113, 684-693.	3.0	284
63	Thermal Transport in Soft PAAm Hydrogels. Polymers, 2017, 9, 688.	2.0	73
64	Spontaneous Migration of Polyethylene Molecule Sheathed inside Single-Walled Carbon Nanotube for Nano-Heat Pipe. Scientific Reports, 2016, 6, 26441.	1.6	1
65	A continuous desalination system using humidification â€“ dehumidification and a solar still with an evacuated solar water heater. Applied Thermal Engineering, 2016, 104, 734-742.	3.0	105
66	Thermoelectric properties of nanoscale three dimensional Si phononic crystals. International Journal of Heat and Mass Transfer, 2016, 99, 102-106.	2.5	18
67	Performance enhancement of wick solar still using rejected water from humidification-dehumidification unit and film cooling. Applied Thermal Engineering, 2016, 108, 1268-1278.	3.0	71
68	A hybrid desalination system using humidification-dehumidification and solar stills integrated with evacuated solar water heater. Energy Conversion and Management, 2016, 124, 287-296.	4.4	136
69	Nano-cross-junction effect on phonon transport in silicon nanowire cages. Physical Review B, 2016, 94, .	1.1	112
70	Manipulating the temperature dependence of the thermal conductivity of graphene phononic crystal. Nanotechnology, 2016, 27, 265702.	1.3	32
71	Adjustable thermal resistor by reversibly folding a graphene sheet. Nanoscale, 2016, 8, 14943-14949.	2.8	48
72	Factors affecting solar stills productivity and improvement techniques: A detailed review. Applied Thermal Engineering, 2016, 100, 267-284.	3.0	184

#	Article	IF	Citations
73	A Revisit to High Thermoelectric Performance of Single-layer MoS2. Scientific Reports, 2015, 5, 18342.	1.6	154
74	Extremely High Thermal Conductivity of Aligned Carbon Nanotube-Polyethylene Composites. Scientific Reports, 2015, 5, 16543.	1.6	73
75	Nanoscale Graphene Disk: A Natural Functionally Graded Materialâ€"How is Fourierâ€™s Law Violated along Radius Direction of 2D Disk. Scientific Reports, 2015, 5, 14878.	1.6	27
76	Unusual isotope effect on thermal transport of single layer molybdenum disulphide. Applied Physics Letters, 2015, 107, .	1.5	33
77	Thermal Interface Conductance Between Aluminum and Silicon by Molecular Dynamics Simulations. Journal of Computational and Theoretical Nanoscience, 2015, 12, 168-174.	0.4	78
78	The Vacancy Effect on Thermal Interface Resistance between Aluminum and Silicon by Molecular Dynamics. Materials Research Society Symposia Proceedings, 2015, 1753, 7.	0.1	1
79	Enhancing the Thermoelectric Figure of Merit by Low-Dimensional Electrical Transport in Phonon-Glass Crystals. Nano Letters, 2015, 15, 5229-5234.	4.5	55
80	Significant reduction of graphene thermal conductivity by phononic crystal structure. International Journal of Heat and Mass Transfer, 2015, 91, 428-432.	2.5	79
81	Extreme Low Thermal Conductivity in Nanoscale 3D Si Phononic Crystal with Spherical Pores. Nano Letters, 2014, 14, 1734-1738.	4.5	153
82	Profiling Nanowire Thermal Resistance with a Spatial Resolution of Nanometers. Nano Letters, 2014, 14, 806-812.	4.5	64
83	Modulation of Thermal Conductivity in Kinked Silicon Nanowires: Phonon Interchanging and Pinching Effects. Nano Letters, 2013, 13, 1670-1674.	4.5	61
84	Reduction of Thermal Conductivity by Nanoscale 3D Phononic Crystal. Scientific Reports, 2013, 3, 1143.	1.6	44
85	Thermal transport in nanostructures. AIP Advances, 2012, 2, .	0.6	138
86	Understanding length dependences of effective thermal conductivity of nanowires. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 3514-3517.	0.9	25
87	How does folding modulate thermal conductivity of graphene?. Applied Physics Letters, 2012, 100, 093107.	1.5	82
88	Non-Fourier heat conductions in nanomaterials. Journal of Applied Physics, 2011, 110, .	1.1	113
89	Violation of Fourier's law and anomalous heat diffusion in silicon nanowires. Nano Today, 2010, 5, 85-90.	6.2	222
90	Phononics: A New Science and Technology of Controlling Heat Flow and Processing Information by Phonons. , 2010, , .		2

#	Article	IF	Citations
91	Thermal rectification in asymmetric graphene ribbons. Applied Physics Letters, 2009, 95, .	1.5	308
92	Anomalous Heat Conduction, Diffusion and Heat Rectification in Nanoscale Structures. , 2009, , .		0
93	Ultralow Thermal Conductivity of Isotope-Doped Silicon Nanowires. Nano Letters, 2008, 8, 276-280.	4.5	221
94	Carbon nanocone: A promising thermal rectifier. Applied Physics Letters, 2008, 93, .	1.5	247
95	Thermal rectification and negative differential thermal resistance in lattices with mass gradient. Physical Review B, 2007, 76, .	1.1	242