Deyu Li

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1611726/publications.pdf

Version: 2024-02-01

141	12,635	50276	23533
papers	citations	46 h-index	111 g-index

141	141	141	14018
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Probing Light-Stimulated Activities in the Retina via Transparent Graphene Electrodes. ACS Applied Bio Materials, 2022, 5, 305-312.	4.6	2
2	Non-monotonic thickness dependent and anisotropic in-plane thermal transport in layered titanium trisulphide. Materials Today Nano, 2022, 17, 100165.	4.6	5
3	Elastic stiffening induces one-dimensional phonons in thin Ta2Se3 nanowires. Applied Physics Letters, 2022, 120, .	3.3	4
4	Nonmetallic power-law behavior of conductance in Ni-doped NbSe3 nanowires. Materials Today Physics, 2022, 27, 100770.	6.0	1
5	Observation of superdiffusive phonon transport in aligned atomic chains. Nature Nanotechnology, 2021, 16, 764-768.	31.5	43
6	Solid-State Thermal Memory of Temperature-Responsive Polymer Induced by Hydrogen Bonds. Nano Letters, 2021, 21, 3843-3848.	9.1	7
7	Non-monotonic boundary resistivity for electron transport in metal nanowires. Applied Physics Letters, 2021, 118, 153105.	3.3	2
8	Resonance in Atomic-Scale Sliding Friction. Nano Letters, 2021, 21, 4615-4621.	9.1	20
9	Contact Thermal Resistance between Silver Nanowires with Poly(vinylpyrrolidone) Interlayers. Nano Letters, 2021, 21, 4388-4393.	9.1	5
10	Enhanced thermoelectric performance of van der Waals Tellurium via vacancy engineering. Materials Today Physics, 2021, 18, 100379.	6.0	10
11	Bidirectional Modulation of Contact Thermal Resistance between Boron Nitride Nanotubes from a Polymer Interlayer. Nano Letters, 2021, 21, 7317-7324.	9.1	14
12	Remarkable suppression of lattice thermal conductivity by electron-phonon scattering in iridium dioxide nanowires. Materials Today Physics, 2021, 21, 100517.	6.0	4
13	Charging of flowable electrodes with bimodal distribution of carbon particles. Journal of Engineering Mathematics, 2021, 131, 1.	1.2	2
14	Reconfigurable Metasurface for Image Processing. Nano Letters, 2021, 21, 8715-8722.	9.1	51
15	From nanowires to super heat conductors. Journal of Applied Physics, 2021, 130, 220901.	2.5	4
16	Effective Lorenz Number of the Point Contact between Silver Nanowires. Nano Letters, 2020, 20, 8576-8583.	9.1	2
17	Decoupling phonon and carrier scattering at carbon nanotube/Bi2Te3 interfaces for improved thermoelectric performance. Carbon, 2020, 170, 191-198.	10.3	33
18	Electrical and Thermal Transport through Silver Nanowires and Their Contacts: Effects of Elastic Stiffening. Nano Letters, 2020, 20, 7389-7396.	9.1	40

#	Article	IF	Citations
19	Net negative contributions of free electrons to the thermal conductivity of NbSe₃ nanowires. Physical Chemistry Chemical Physics, 2020, 22, 21131-21138.	2.8	4
20	A Flexible and Infrared-Transparent Bi₂Te₃-Carbon Nanotube Thermoelectric Hybrid for both Active and Passive Cooling. ACS Applied Electronic Materials, 2020, 2, 3008-3016.	4.3	15
21	Pathways and challenges for efficient solar-thermal desalination. Science Advances, 2019, 5, eaax0763.	10.3	311
22	Kink as a new degree of freedom to tune the thermal conductivity of Si nanoribbons. Journal of Applied Physics, 2019, 126, .	2.5	11
23	Thermal transport in molecular beam epitaxy grown Si1â€‰â^'â€‰xGex alloy films with a full spectrum of composition (xâ€‰=â€‰0â€“1). Journal of Applied Physics, 2019, 125, 215109.	2.5	2
24	Thermoelectrics of Nanowires. Chemical Reviews, 2019, 119, 9260-9302.	47.7	110
25	The relationship between the Youngâ€™s modulus and dry etching rate of polydimethylsiloxane (PDMS). Biomedical Microdevices, 2019, 21, 26.	2.8	31
26	Kink effects on thermal transport in silicon nanowires. International Journal of Heat and Mass Transfer, 2019, 137, 573-578.	4.8	12
27	Thermal transport through fishbone silicon nanoribbons: unraveling the role of Sharvin resistance. Nanoscale, 2019, 11, 8196-8203.	5.6	17
28	Drastically Reduced Ion Mobility in a Nanopore Due to Enhanced Pairing and Collisions between Dehydrated Ions. Journal of the American Chemical Society, 2019, 141, 4264-4272.	13.7	46
29	Distinct Signatures of Electronâ€“Phonon Coupling Observed in the Lattice Thermal Conductivity of NbSe₃ Nanowires. Nano Letters, 2019, 19, 415-421.	9.1	37
30	Thermal Transport in Quasi-1D van der Waals Crystal Ta₂Pd₃Se₈ Nanowires: Size and Length Dependence. ACS Nano, 2018, 12, 2634-2642.	14.6	61
31	Cation Dynamics Governed Thermal Properties of Lead Halide Perovskite Nanowires. Nano Letters, 2018, 18, 2772-2779.	9.1	55
32	Measuring nanowire thermal conductivity at high temperatures. Measurement Science and Technology, 2018, 29, 025001.	2.6	9
33	Thermal transport in electrospun vinyl polymer nanofibers: effects of molecular weight and side groups. Soft Matter, 2018, 14, 9534-9541.	2.7	27
34	Impact of Graphene on the Efficacy of Neuron Culture Substrates. Advanced Healthcare Materials, 2018, 7, e1701290.	7.6	20
35	Ultrasensitive Graphene Optoelectronic Probes for Recording Electrical Activities of Individual Synapses. Nano Letters, 2018, 18, 5702-5708.	9.1	13
36	Retrograde Degenerative Signaling Mediated by the p75 Neurotrophin Receptor Requires p150Glued Deacetylation by Axonal HDAC1. Developmental Cell, 2018, 46, 376-387.e7.	7.0	23

#	Article	IF	Citations
37	Thermal Properties of Two Dimensional Layered Materials. Advanced Functional Materials, 2017, 27, 1604134.	14.9	130
38	Reference channel-based microfluidic resistance sensing for single yeast cell volume growth measurement. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	4
39	Vertically Aligned Graphene Sheets Membrane for Highly Efficient Solar Thermal Generation of Clean Water. ACS Nano, 2017, 11, 5087-5093.	14.6	871
40	Defect Facilitated Phonon Transport through Kinks in Boron Carbide Nanowires. Nano Letters, 2017, 17, 3550-3555.	9.1	23
41	A microfluidic diode for sorting and immobilization of Caenorhabditis elegans. Biomedical Microdevices, 2017, 19, 38.	2.8	8
42	Biomechanics of cell reorientation in a three-dimensional matrix under compression. Experimental Cell Research, 2017, 350, 253-266.	2.6	11
43	Ionic current modulation from DNA translocation through nanopores under high ionic strength and concentration gradients. Nanoscale, 2017, 9, 930-939.	5.6	32
44	Significantly enhanced thermal conductivity of indium arsenide nanowires via sulfur passivation. Scientific Reports, 2017, 7, 13252.	3.3	8
45	Ballistic Phonon Penetration Depth in Amorphous Silicon Dioxide. Nano Letters, 2017, 17, 7218-7225.	9.1	42
46	Cancer-associated fibroblasts promote directional cancer cell migration by aligning fibronectin. Journal of Cell Biology, 2017, 216, 3799-3816.	5.2	402
47	Experimental Studies of Thermal Transport in Nanostructures. , 2017, , 319-357.		2
48	Understanding thermal conductance across multi-wall carbon nanotube contacts: Role of nanotube curvature. Carbon, 2017, 114, 15-22.	10.3	18
49	Array Volume Fraction-Dependent Thermal Transport Properties of Vertically Aligned Carbon Nanotube Arrays. Journal of Heat Transfer, 2016, 138, .	2.1	13
50	Thermal conductivity of individual silicon nanoribbons. Nanoscale, 2016, 8, 17895-17901.	5.6	54
51	Unusual thermal transport behavior in self-assembled fullerene nanorods. RSC Advances, 2016, 6, 67509-67513.	3.6	2
52	Probing electrical signals in the retina via graphene-integrated microfluidic platforms. Nanoscale, 2016, 8, 19043-19049.	5.6	14
53	Effects of interfacial roughness on phonon transport in bilayer silicon thin films. Physical Review B, 2015, 92, .	3.2	14
54	Detection of short single-strand DNA homopolymers with ultrathin<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math>nanopores. Physical Review E, 2015, 92, 022719.	2.1	16

#	Article	IF	Citations
55	Stretching Fibroblasts Remodels Fibronectin and Alters Cancer Cell Migration. Scientific Reports, 2015, 5, 8334.	3.3	72
56	Thermal Conductivity of Individual Electrospun Polymer Nanofibers. , 2015, , .		0
57	Recreating blood-brain barrier physiology and structure on chip: A novel neurovascular microfluidic bioreactor. Biomicrofluidics, 2015, 9, 054124.	2.4	326
58	Retina-on-a-chip: a microfluidic platform for point access signaling studies. Biomedical Microdevices, 2015, 17, 114.	2.8	58
59	Experimental evidence of very long intrinsic phonon mean free path along the c-axis of graphite. Applied Physics Letters, 2015, 106, .	3.3	58
60	A microfluidic device for generation of chemical gradients. Microsystem Technologies, 2015, 21, 1797-1804.	2.0	7
61	Thermoelectric characterization of individual bismuth selenide topological insulator nanoribbons. Nanoscale, 2015, 7, 6683-6690.	5.6	43
62	Phonon Dynamics at Surfaces and Interfaces and Its Implications in Energy Transport in Nanostructured Materialsâ€"An opinion Paper. Nanoscale and Microscale Thermophysical Engineering, 2015, 19, 166-182.	2.6	46
63	Thermal conductivity of electrospun polyethylene nanofibers. Nanoscale, 2015, 7, 16899-16908.	5.6	103
64	Thermal conductivity of zinc blende and wurtzite CdSe nanostructures. Nanoscale, 2015, 7, 16071-16078.	5.6	11
65	TDP-43 is intercellularly transmitted across axon terminals. Journal of Cell Biology, 2015, 211, 897-911.	5.2	263
66	The Fabrication of Microfluidic Platforms with Pneumatically/Hydraulically Controlled PDMS Valves and Their Use in Neurobiological Research. Neuromethods, 2015, , 3-23.	0.3	0
67	Molecular Dynamics Simulation Method. , 2015, , 2290-2297.		0
68	Metabolic consequences of interleukin-6 challenge in developing neurons and astroglia. Journal of Neuroinflammation, 2014, 11, 183.	7.2	28
69	The Rho family GEF Asef2 regulates cell migration in three dimensional (3D) collagen matrices through myosin II. Cell Adhesion and Migration, 2014, 8, 460-467.	2.7	7
70	Molecular Dynamics Studies of Homogeneous and Heterogeneous Thermal Bubble Nucleation. Journal of Heat Transfer, 2014, 136, .	2.1	13
71	Phonon mean free path of graphite along thec-axis. Applied Physics Letters, 2014, 104, 081903.	3.3	67
72	A microfluidic cell co-culture platform with a liquid fluorocarbon separator. Biomedical Microdevices, 2014, 16, 311-323.	2.8	20

#	Article	IF	Citations
73	Observation of â€˜hiddenâ€™ planar defects in boron carbide nanowires and identification of their orientations. Nanoscale Research Letters, 2014, 9, 30.	5.7	16
74	Phonon Transport through Point Contacts between Graphitic Nanomaterials. Physical Review Letters, 2014, 112, .	7.8	60
75	Molecular Dynamics Simulation Method. , 2014, , 1-10.		1
76	Nanofluidic Systems for Single-Molecule Detection. , 2014, , 1-8.		0
77	Nanochannel Fabrication. , 2014, , 1-8.		0
78	Molecular dynamics study of DNA translocation through graphene nanopores. Physical Review E, 2013, 87, 062707.	2.1	38
79	Neurovascular unit on a chip: implications for translational applications. Stem Cell Research and Therapy, 2013, 4, S18.	5.5	56
80	Glia co-culture with neurons in microfluidic platforms promotes the formation and stabilization of synaptic contacts. Lab on A Chip, 2013, 13, 3008.	6.0	99
81	Report on the Seventh U.S.â€“Japan Joint Seminar on Nanoscale Transport Phenomenaâ€”Science and Engineering. Nanoscale and Microscale Thermophysical Engineering, 2013, 17, 25-49.	2.6	1
82	Biomolecule kinetics measurements in flow cell integrated porous silicon waveguides. Biomedical Optics Express, 2012, 3, 1993.	2.9	27
83	The Effects of Van Der Waals Bonding Strength on the In-Plane Lattice Thermal Conductivities of Multilayer Thin Films. , 2012, , .		0
84	Measurement of the Intrinsic Thermal Conductivity of Individual Silicon Nanoribbons. , 2012, , .		0
85	A Study of Small Molecule Absorption in Polydimethylsiloxane. , 2012, , .		3
86	Microfluidic Cell Co-Culture Platform With Liquid Fluorocarbon as the Cell Separator. , 2012, , .		0
87	Intertube Thermal Resistance in Double-Wall Carbon Nanotube. , 2012, , .		0
88	Boron carbide nanowires: low temperature synthesis and structural and thermal conductivity characterization. Journal of Materials Chemistry, 2012, 22, 9853.	6.7	33
89	Simultaneous On-Chip DC Dielectrophoretic Cell Separation and Quantitative Separation Performance Characterization. Analytical Chemistry, 2012, 84, 2017-2024.	6.5	42
90	Enhanced and switchable nanoscale thermal conduction due to van der Waals interfaces. Nature Nanotechnology, 2012, 7, 91-95.	31.5	120

#	Article	IF	Citations
91	A compact microfluidic gradient generator using passive pumping. Microfluidics and Nanofluidics, 2012, 12, 887-895.	2.2	36
92	Enhanced Thermopower of Graphene Films with Oxygen Plasma Treatment. ACS Nano, 2011, 5, 2749-2755.	14.6	181
93	A versatile valve-enabled microfluidic cell co-culture platform and demonstration of its applications to neurobiology and cancer biology. Biomedical Microdevices, 2011, 13, 539-548.	2.8	94
94	Measurement of the Intrinsic Thermal Conductivity of a Multiwalled Carbon Nanotube and Its Contact Thermal Resistance with the Substrate. Small, 2011, 7, 2334-2340.	10.0	75
95	Co-culture of neurons and glia in a novel microfluidic platform. Journal of Neuroscience Methods, 2011, 196, 38-44.	2.5	110
96	Angiocrine Factors Modulate Tumor Proliferation and Motility through EphA2 Repression of Slit2 Tumor Suppressor Function in Endothelium. Cancer Research, 2011, 71, 976-987.	0.9	52
97	A novel micro-fabricated thruster for drug release in remote controlled capsule. Sensors and Actuators A: Physical, 2010, 159, 227-232.	4.1	27
98	Contact thermal resistance between individual multiwall carbon nanotubes. Applied Physics Letters, 2010, 96, .	3.3	134
99	Measurement of the volume growth rate of single budding yeast with the MOSFET-based microfluidic Coulter counter. Lab on A Chip, 2010, 10, 2986.	6.0	30
100	Temperature dependence of frictional force in carbon nanotube oscillators. Nanotechnology, 2009, 20, 035704.	2.6	20
101	Experimental characterization of electrical current leakage in poly(dimethylsiloxane) microfluidic devices. Microfluidics and Nanofluidics, 2009, 6, 589-598.	2.2	14
102	Molecular dynamics simulation of thermal conductivity of nanocrystalline composite films. International Journal of Heat and Mass Transfer, 2009, 52, 2002-2008.	4.8	20
103	Field-Effect Control of Electroosmotic Pumping Using Porous Siliconâ€“Silicon Nitride Membranes. Journal of Microelectromechanical Systems, 2009, 18, 1173-1183.	2.5	9
104	Water structures near charged (100) and (111) silicon surfaces. Applied Physics Letters, 2009, 94, .	3.3	18
105	Ionic current through a nanopore three nanometers in diameter. Physical Review E, 2009, 80, 021918.	2.1	13
106	Ionic Current Through a 3 NM in Diameter Nanopore. , 2009, , .		0
107	Microfluidic differential resistive pulse sensors. Electrophoresis, 2008, 29, 2754-2759.	2.4	59
108	Nanochannel Fabrication. , 2008, , 1409-1414.		1

#	Article	IF	Citations
109	On-chip counting the number and the percentage of CD4+ T lymphocytes. Lab on A Chip, 2008, 8, 309-315.	6.0	71
110	Electroosmotic Flow in Nanotubes with High Surface Charge Densities. Nano Letters, 2008, 8, 42-48.	9.1	67
111	Thermal Bubble Nucleation in Nanochannels: Simulations and Strategies for Nanobubble Nucleation and Sensing. Materials Research Society Symposia Proceedings, 2008, 1139, 1.	0.1	0
112	Experimental characterization of a metal-oxide-semiconductor field-effect transistor-based Coulter counter. Journal of Applied Physics, 2008, 103, 104701-10470110.	2.5	37
113	Interface Effects on Lattice Thermal Conductivities of Superlattices. Journal of Computational and Theoretical Nanoscience, 2008, 5, 157-164.	0.4	3
114	Wide-spectrum, ultrasensitive fluidic sensors with amplification from both fluidic circuits and metal oxide semiconductor field effect transistors. Applied Physics Letters, 2007, 91, .	3.3	28
115	Dense Vertically Aligned Multiwalled Carbon Nanotube Arrays as Thermal Interface Materials. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 92-100.	1.3	292
116	Molecular dynamics simulations of ion distribution in nanochannels. Molecular Simulation, 2007, 33, 959-963.	2.0	12
117	SiO2-coated porous anodic alumina membranes for high flow rate electroosmotic pumping. Nanotechnology, 2007, 18, 275705.	2.6	47
118	Analysis of the size effect in electroplated fine copper wires and a realistic assessment to model copper resistivity. Journal of Applied Physics, 2007, 101, 063703.	2.5	79
119	Characterization of heat transfer along a silicon nanowire using thermoreflectance technique. IEEE Nanotechnology Magazine, 2006, 5, 67-74.	2.0	36
120	Effects of Ion-Water Potentials in Molecular Dynamics Simulation of Ion Distribution in Nanochannels. , 2006, , 161.		0
121	Molecular Dynamics Simulation of Ion Distribution in Nanochannels. , 2006, , 641.		0
122	Hydrodynamic lubrication in nanoscale bearings under high shear velocity. Journal of Chemical Physics, 2006, 125, 084702.	3.0	3
123	Isotope Effect on the Thermal Conductivity of Boron Nitride Nanotubes. Physical Review Letters, 2006, 97, 085901.	7.8	349
124	Monte Carlo Simulation of Silicon Nanowire Thermal Conductivity. Journal of Heat Transfer, 2005, 127, 1129-1137.	2.1	200
125	Minimum superlattice thermal conductivity from molecular dynamics. Physical Review B, 2005, 72, .	3.2	167
126	Thermal Transport in Nanostructured Solid-State Cooling Devices. Journal of Heat Transfer, 2005, 127, 108-114.	2.1	40

#	Article	IF	Citations
127	Thermal Conductance and Thermopower of an Individual Single-Wall Carbon Nanotube. Nano Letters, 2005, 5, 1842-1846.	9.1	795
128	Electrostatic Control of Ions and Molecules in Nanofluidic Transistors. Nano Letters, 2005, 5, 943-948.	9.1	595
129	DNA Translocation in Inorganic Nanotubes. Nano Letters, 2005, 5, 1633-1637.	9.1	297
130	Thermal expansion and impurity effects on lattice thermal conductivity of solid argon. Journal of Chemical Physics, 2004, 120, 3841-3846.	3.0	29
131	Molecular dynamics study of the lattice thermal conductivity of Kr/Ar superlattice nanowires. Physica B: Condensed Matter, 2004, 349, 270-280.	2.7	95
132	Thermal conductivity of Si/SiGe superlattice nanowires. Applied Physics Letters, 2003, 83, 3186-3188.	3.3	355
133	Thermal conductivity of individual silicon nanowires. Applied Physics Letters, 2003, 83, 2934-2936.	3.3	1,536
134	Fabrication of Silica Nanotube Arrays from Vertical Silicon Nanowire Templates. Journal of the American Chemical Society, 2003, 125, 5254-5255.	13.7	257
135	Predicting the Thermal Conductivity of Si and Ge Nanowires. Nano Letters, 2003, 3, 1713-1716.	9.1	268
136	Measuring Thermal and Thermoelectric Properties of One-Dimensional Nanostructures Using a Microfabricated Device. Journal of Heat Transfer, 2003, 125, 881-888.	2.1	698
137	Energy Dissipation Mechanisms in Carbon Nanotube Oscillators. Physical Review Letters, 2003, 91, 175504.	7.8	190
138	Molecular Dynamics Study of Solid Thin-Film Thermal Conductivity. Journal of Heat Transfer, 2000, 122, 536-543.	2.1	155
139	A novel concept for convective heat transfer enhancement. International Journal of Heat and Mass Transfer, 1998, 41, 2221-2225.	4.8	666
140	Relationship between the recovery factor and the viscous dissipation in a confined, impinging, circular jet of high-Prandtl number liquid. International Journal of Heat and Fluid Flow, 1997, 18, 585-590.	2.4	14
141	Thermal effect on the recirculation zone in sudden-expansion gas flows. International Journal of Heat and Mass Transfer, 1996, 39, 2619-2624.	4.8	26