Michael Thompson Pettes

List of Publications by Year
in descending order

66	6,644	117625 34	114465 63
papers	citations	h-index	g-index

71	71	71	9087
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Two-Dimensional Phonon Transport in Supported Graphene. Science, 2010, 328, 213-216.	12.6	1,692
2	Thermal Conductivity and Phonon Transport in Suspended Few-Layer Hexagonal Boron Nitride. Nano Letters, 2013, 13, 550-554.	9.1	585
3	Enhanced thermal conductivity of phase change materials with ultrathin-graphite foams for thermal energy storage. Energy and Environmental Science, 2014, 7, 1185-1192.	30.8	489
4	Ultrathin Graphite Foam: A Three-Dimensional Conductive Network for Battery Electrodes. Nano Letters, 2012, 12, 2446-2451.	9.1	382
5	High thermal conductivity of chain-oriented amorphous polythiophene. Nature Nanotechnology, 2014, 9, 384-390.	31.5	327
6	Thermal Transport in Three-Dimensional Foam Architectures of Few-Layer Graphene and Ultrathin Graphite. Nano Letters, 2012, 12, 2959-2964.	9.1	314
7	Influence of Polymeric Residue on the Thermal Conductivity of Suspended Bilayer Graphene. Nano Letters, 2011, 11, 1195-1200.	9.1	255
8	Significant Electronic Thermal Transport in the Conducting Polymer Poly(3,4â€ethylenedioxythiophene). Advanced Materials, 2015, 27, 2101-2106.	21.0	176
9	Thermal and Structural Characterizations of Individual Singleâ€, Doubleâ€, and Multiâ€Walled Carbon Nanotubes. Advanced Functional Materials, 2009, 19, 3918-3925.	14.9	169
10	Thermal transport in graphene. Solid State Communications, 2012, 152, 1321-1330.	1.9	165
11	Thermoelectric and structural characterizations of individual electrodeposited bismuth telluride nanowires. Journal of Applied Physics, 2009, 105, .	2.5	151
12	Basal-plane thermal conductivity of few-layer molybdenum disulfide. Applied Physics Letters, 2014, 104, 201902.	3.3	142
13	Determination of Transport Properties in Chromium Disilicide Nanowires via Combined Thermoelectric and Structural Characterizations. Nano Letters, 2007, 7, 1649-1654.	9.1	131
14	Effects of Surface Band Bending and Scattering on Thermoelectric Transport in Suspended Bismuth Telluride Nanoplates. Nano Letters, 2013, 13, 5316-5322.	9.1	129
15	Four-probe measurements of the in-plane thermoelectric properties of nanofilms. Review of Scientific Instruments, 2007, 78, 034901.	1.3	106
16	Thermal conductivity of indium arsenide nanowires with wurtzite and zinc blende phases. Physical Review B, 2011, 83, .	3.2	96
17	Magnetic field-induced helical mode and topological transitions in a topological insulator nanoribbon. Nature Nanotechnology, 2016, 11, 345-351.	31.5	93
18	Optical measurement of thermal transport in suspended carbon nanotubes. Applied Physics Letters, 2008, 92, .	3.3	91

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19	In-plane thermal conductivity of disordered layered WSe2 and (W)x(WSe2)y superlattice films. Applied Physics Letters, 2007, 91, .	3.3	77
20	Thermal conductivity suppression in bismuth nanowires. Journal of Applied Physics, 2009, 106, .	2.5	77
21	Optical Absorption and Thermal Transport of Individual Suspended Carbon Nanotube Bundles. Nano Letters, 2009, 9, 590-594.	9.1	72
22	Role of Oxygen Vacancy Defects in the Electrocatalytic Activity of Substoichiometric Molybdenum Oxide. Journal of Physical Chemistry C, 2018, 122, 18212-18222.	3.1	63
23	Direct observation of heat dissipation in individual suspended carbon nanotubes using a two-laser technique. Journal of Applied Physics, 2011, 110, .	2.5	52
24	Effect of growth base pressure on the thermoelectric properties of indium antimonide nanowires. Journal Physics D: Applied Physics, 2010, 43, 025406.	2.8	50
25	Nanoscale self-assembly of thermoelectric materials: a review of chemistry-based approaches. Nanotechnology, 2018, 29, 432001.	2.6	50
26	Gate Tunable Relativistic Mass and Berry's phase in Topological Insulator Nanoribbon Field Effect Devices. Scientific Reports, 2015, 5, 8452.	3.3	48
27	The effect of gas environment on electrical heating in suspended carbon nanotubes. Journal of Applied Physics, 2010, 108, .	2.5	41
28	Site-controlled telecom-wavelength single-photon emitters in atomically-thin MoTe2. Nature Communications, 2021, 12, 6753.	12.8	41
29	Reexamination of basal plane thermal conductivity of suspended graphene samples measured by electro-thermal micro-bridge methods. AIP Advances, 2015, 5, .	1.3	40
30	In-plane thermal and thermoelectric properties of misfit-layered [(PbSe)0.99]x(WSe2)x superlattice thin films. Applied Physics Letters, 2010, 96, .	3.3	38
31	Reexamination of thermal transport measurements of a low-thermal conductance nanowire with a suspended micro-device. Review of Scientific Instruments, 2013, 84, 084903.	1.3	37
32	A comprehensive study of thermoelectric and transport properties of Î²-silicon carbide nanowires. Journal of Applied Physics, 2013, 114, .	2.5	36
33	Giant Mechano-Optoelectronic Effect in an Atomically Thin Semiconductor. Nano Letters, 2018, 18, 2351-2357.	9.1	36
34	Polyelectrolyte-Assisted Oxygen Vacancies: A New Route to Defect Engineering in Molybdenum Oxide. Langmuir, 2018, 34, 6296-6306.	3.5	35
35	Thermoelectric properties of SnSe nanowires with different diameters. Scientific Reports, 2018, 8, 11966.	3.3	34
36	A Reexamination of Phonon Transport Through a Nanoscale Point Contact in Vacuum. Journal of Heat Transfer, 2014, 136, .	2.1	26

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37	Block Copolymer-Assisted Solvothermal Synthesis of Hollow Bi₂MoO₆ Spheres Substituted with Samarium. Langmuir, 2016, 32, 10967-10976.	3.5	24
38	Thermoelectric transport in surface- and antimony-doped bismuth telluride nanoplates. APL Materials, 2016, 4, 104810.	5.1	22
39	Isotope Effect in Bilayer WSe₂. Nano Letters, 2019, 19, 1527-1533.	9.1	22
40	Modified inverse micelle synthesis for mesoporous alumina with a high D4 siloxane adsorption capacity. Microporous and Mesoporous Materials, 2017, 239, 328-335.	4.4	18
41	Locally defined quantum emission from epitaxial few-layer tungsten diselenide. Applied Physics Letters, 2019, 114, .	3.3	18
42	Thermal conductivity of ZnTe nanowires. Journal of Applied Physics, 2013, 114, .	2.5	17
43	Iodine doping effects on the lattice thermal conductivity of oxidized polyacetylene nanofibers. Journal of Applied Physics, 2013, 114, 194302.	2.5	17
44	Scattering of phonons by high-concentration isotopic impurities in ultrathin graphite. Physical Review B, 2015, 91, .	3.2	16
45	Intrinsic helical twist and chirality in ultrathin tellurium nanowires. Nanoscale, 2021, 13, 9606-9614.	5.6	15
46	Sulfurization Engineering of Oneâ€Step Lowâ€Temperature MoS₂ and WS₂ Thin Films for Memristor Device Applications. Advanced Electronic Materials, 2022, 8, 2100515.	5.1	14
47	High Performance Bi-Metallic Manganese Cobalt Oxide/Carbon Nanotube Li-ion Battery Anodes. Electrochimica Acta, 2016, 213, 620-625.	5.2	13
48	Effect of cobalt alloying on the electrochemical performance of manganese oxide nanoparticles nucleated on multiwalled carbon nanotubes. Nanotechnology, 2017, 28, 155403.	2.6	10
49	Cobalt Doping as a Pathway To Stabilize the Solid-State Conversion Chemistry of Manganese Oxide Anodes in Li-Ion Batteries. Journal of Physical Chemistry C, 2018, 122, 7120-7127.	3.1	10
50	Thermoelectric properties and thermal tolerance of indium tin oxide nanowires. Nanotechnology, 2018, 29, 364001.	2.6	10
51	1D to 2D Transition in Tellurium Observed by 4D Electron Microscopy. Small, 2020, 16, e2005447.	10.0	10
52	Visualizing Grain Statistics in MOCVD WSe₂ through Four-Dimensional Scanning Transmission Electron Microscopy. Nano Letters, 2022, 22, 2578-2585.	9.1	9
53	Improved Capacity Retention of Metal Oxide Anodes in Liâ€Ion Batteries: Increasing Intraparticle Electronic Conductivity through Na Inclusion in Mn 3 O 4. ChemElectroChem, 2018, 5, 2059-2063.	3.4	8
54	Phonon Transport and Thermoelectricity in Defect-Engineered InAs Nanowires. Materials Research Society Symposia Proceedings, 2012, 1404, 36.	0.1	6

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55	Uncertainty analysis of axial temperature and Seebeck coefficient measurements. Review of Scientific Instruments, 2018, 89, 084903.	1.3	5
56	Multi-stimuli responsive tetra-PPO₆₀-PEO₂₀ ethylene diamine block copolymer enables pH, temperature, and solvent regulation of Au nanoparticle composite plasmonic response. Polymer Chemistry, 2019, 10, 6456-6472.	3.9	5
57	Thermoelectric properties of antimony selenide hexagonal nanotubes. Nanotechnology, 2021, 32, 095705.	2.6	5
58	Combined Thermoelectric and Structure Characterizations of Patterned Nanowires. , 2006, , .		4
59	Ultra-high resolution steady-state micro-thermometry using a bipolar direct current reversal technique. Review of Scientific Instruments, 2016, 87, 094901.	1.3	4
60	Local Lattice Deformation of Tellurene Grain Boundaries by Four-Dimensional Electron Microscopy. Journal of Physical Chemistry C, 2021, 125, 3396-3405.	3.1	4
61	Thermal transport in phase-stabilized lithium zirconate phosphates. Applied Physics Letters, 2020, 117, 011903.	3.3	3
62	Highly charged interface trap states in PbS1â˜'x govern electro-thermal transport. APL Materials, 2019, 7, 071105.	5.1	2
63	A High Temperature Instrument for Consecutive Measurements of Thermal Conductivity, Electrical Conductivity, and Seebeck Coefficient. Journal of Heat Transfer, 2019, 141, .	2.1	1
64	Carbon Nanotubes: (Thermal and Structural Characterizations of Individual Single-, Double-, and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 NA-NA.	14.9	0
65	Synergistic single process additive manufacturing of hydro-responsive Ag nanoparticle composites by digital visible light processing 3D printing. Materials Advances, 2020, 1, 2219-2224.	5.4	0
66	Manufacturing of Complex Siliconâ€“Carbon Structures: Exploring SixCy Materials. Materials, 2022, 15, 3475.	2.9	0