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	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
2	Visualizing Grain Statistics in MOCVD WSe₂ through Four-Dimensional Scanning Transmission Electron Microscopy. Nano Letters, 2022, 22, 2578-2585.	9.1	9
3	Manufacturing of Complex Siliconâ€“Carbon Structures: Exploring SixCy Materials. Materials, 2022, 15, 3475.	2.9	0
4	Intrinsic helical twist and chirality in ultrathin tellurium nanowires. Nanoscale, 2021, 13, 9606-9614.	5.6	15
5	Local Lattice Deformation of Tellurene Grain Boundaries by Four-Dimensional Electron Microscopy. Journal of Physical Chemistry C, 2021, 125, 3396-3405.	3.1	4
6	Thermoelectric properties of antimony selenide hexagonal nanotubes. Nanotechnology, 2021, 32, 095705.	2.6	5
7	Site-controlled telecom-wavelength single-photon emitters in atomically-thin MoTe2. Nature Communications, 2021, 12, 6753.	12.8	41
8	1D to 2D Transition in Tellurium Observed by 4D Electron Microscopy. Small, 2020, 16, e2005447.	10.0	10
9	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
10	Thermal transport in phase-stabilized lithium zirconate phosphates. Applied Physics Letters, 2020, 117, 011903.	3.3	3
11	Highly charged interface trap states in PbS1â^'x govern electro-thermal transport. APL Materials, 2019, 7, 071105.	5.1	2
12	Locally defined quantum emission from epitaxial few-layer tungsten diselenide. Applied Physics Letters, 2019, 114, .	3.3	18
13	A High Temperature Instrument for Consecutive Measurements of Thermal Conductivity, Electrical Conductivity, and Seebeck Coefficient. Journal of Heat Transfer, 2019, 141, .	2.1	1
14	Isotope Effect in Bilayer WSe₂. Nano Letters, 2019, 19, 1527-1533.	9.1	22
15	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
16	Polyelectrolyte-Assisted Oxygen Vacancies: A New Route to Defect Engineering in Molybdenum Oxide. Langmuir, 2018, 34, 6296-6306.	3.5	35
17	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
18	Giant Mechano-Optoelectronic Effect in an Atomically Thin Semiconductor. Nano Letters, 2018, 18, 2351-2357.	9.1	36

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19	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
20	Nanoscale self-assembly of thermoelectric materials: a review of chemistry-based approaches. Nanotechnology, 2018, 29, 432001.	2.6	50
21	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
22	Uncertainty analysis of axial temperature and Seebeck coefficient measurements. Review of Scientific Instruments, 2018, 89, 084903.	1.3	5
23	Thermoelectric properties of SnSe nanowires with different diameters. Scientific Reports, 2018, 8, 11966.	3.3	34
24	Thermoelectric properties and thermal tolerance of indium tin oxide nanowires. Nanotechnology, 2018, 29, 364001.	2.6	10
25	Effect of cobalt alloying on the electrochemical performance of manganese oxide nanoparticles nucleated on multiwalled carbon nanotubes. Nanotechnology, 2017, 28, 155403.	2.6	10
26	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
27	Ultra-high resolution steady-state micro-thermometry using a bipolar direct current reversal technique. Review of Scientific Instruments, 2016, 87, 094901.	1.3	4
28	Thermoelectric transport in surface- and antimony-doped bismuth telluride nanoplates. APL Materials, 2016, 4, 104810.	5.1	22
29	Block Copolymer-Assisted Solvothermal Synthesis of Hollow Bi₂MoO₆ Spheres Substituted with Samarium. Langmuir, 2016, 32, 10967-10976.	3.5	24
30	High Performance Bi-Metallic Manganese Cobalt Oxide/Carbon Nanotube Li-ion Battery Anodes. Electrochimica Acta, 2016, 213, 620-625.	5.2	13
31	Magnetic field-induced helical mode and topological transitions in a topological insulator nanoribbon. Nature Nanotechnology, 2016, 11, 345-351.	31.5	93
32	Scattering of phonons by high-concentration isotopic impurities in ultrathin graphite. Physical Review B, 2015, 91, .	3.2	16
33	Gate Tunable Relativistic Mass and Berry's phase in Topological Insulator Nanoribbon Field Effect Devices. Scientific Reports, 2015, 5, 8452.	3.3	48
34	Reexamination of basal plane thermal conductivity of suspended graphene samples measured by electro-thermal micro-bridge methods. AIP Advances, 2015, 5, .	1.3	40
35	Significant Electronic Thermal Transport in the Conducting Polymer Poly(3,4â€ethylenedioxythiophene). Advanced Materials, 2015, 27, 2101-2106.	21.0	176
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	Basal-plane thermal conductivity of few-layer molybdenum disulfide. Applied Physics Letters, 2014, 104, 201902.	3.3	142
38	High thermal conductivity of chain-oriented amorphous polythiophene. Nature Nanotechnology, 2014, 9, 384-390.	31.5	327
39	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
40	A comprehensive study of thermoelectric and transport properties of Î²-silicon carbide nanowires. Journal of Applied Physics, 2013, 114, .	2.5	36
41	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
42	Effects of Surface Band Bending and Scattering on Thermoelectric Transport in Suspended Bismuth Telluride Nanoplates. Nano Letters, 2013, 13, 5316-5322.	9.1	129
43	Thermal conductivity of ZnTe nanowires. Journal of Applied Physics, 2013, 114, .	2.5	17
44	Thermal Conductivity and Phonon Transport in Suspended Few-Layer Hexagonal Boron Nitride. Nano Letters, 2013, 13, 550-554.	9.1	585
45	Iodine doping effects on the lattice thermal conductivity of oxidized polyacetylene nanofibers. Journal of Applied Physics, 2013, 114, 194302.	2.5	17
46	Phonon Transport and Thermoelectricity in Defect-Engineered InAs Nanowires. Materials Research Society Symposia Proceedings, 2012, 1404, 36.	0.1	6
47	Thermal transport in graphene. Solid State Communications, 2012, 152, 1321-1330.	1.9	165
48	Thermal Transport in Three-Dimensional Foam Architectures of Few-Layer Graphene and Ultrathin Graphite. Nano Letters, 2012, 12, 2959-2964.	9.1	314
49	Ultrathin Graphite Foam: A Three-Dimensional Conductive Network for Battery Electrodes. Nano Letters, 2012, 12, 2446-2451.	9.1	382
50	Direct observation of heat dissipation in individual suspended carbon nanotubes using a two-laser technique. Journal of Applied Physics, 2011, 110, .	2.5	52
51	Thermal conductivity of indium arsenide nanowires with wurtzite and zinc blende phases. Physical Review B, 2011, 83, .	3.2	96
52	Influence of Polymeric Residue on the Thermal Conductivity of Suspended Bilayer Graphene. Nano Letters, 2011, 11, 1195-1200.	9.1	255
53	Effect of growth base pressure on the thermoelectric properties of indium antimonide nanowires. Journal Physics D: Applied Physics, 2010, 43, 025406.	2.8	50
54	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

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55	Two-Dimensional Phonon Transport in Supported Graphene. Science, 2010, 328, 213-216.	12.6	1,692
56	The effect of gas environment on electrical heating in suspended carbon nanotubes. Journal of Applied Physics, 2010, 108, .	2.5	41
57	Thermal and Structural Characterizations of Individual Singleâ€, Doubleâ€, and Multiâ€Walled Carbon Nanotubes. Advanced Functional Materials, 2009, 19, 3918-3925.	14.9	169
58	Carbon Nanotubes: (Thermal and Structural Characterizations of Individual Single-, Double-, and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6 NA-NA.	14.9	0
59	Optical Absorption and Thermal Transport of Individual Suspended Carbon Nanotube Bundles. Nano Letters, 2009, 9, 590-594.	9.1	72
60	Thermal conductivity suppression in bismuth nanowires. Journal of Applied Physics, 2009, 106, .	2.5	77
61	Thermoelectric and structural characterizations of individual electrodeposited bismuth telluride nanowires. Journal of Applied Physics, 2009, 105, .	2.5	151
62	Optical measurement of thermal transport in suspended carbon nanotubes. Applied Physics Letters, 2008, 92, .	3.3	91
63	In-plane thermal conductivity of disordered layered WSe2 and (W)x(WSe2)y superlattice films. Applied Physics Letters, 2007, 91, .	3.3	77
64	Determination of Transport Properties in Chromium Disilicide Nanowires via Combined Thermoelectric and Structural Characterizations. Nano Letters, 2007, 7, 1649-1654.	9.1	131
65	Four-probe measurements of the in-plane thermoelectric properties of nanofilms. Review of Scientific Instruments, 2007, 78, 034901.	1.3	106
66	Combined Thermoelectric and Structure Characterizations of Patterned Nanowires. , 2006, , .		4