Pramod Reddy

List of Publications by Year
in descending order

61 papers	6,245 citations	94381 37 h-index	123376 61 g-index
62 all docs	62 docs citations	62 times ranked	4789 citing authors

#	Article	IF	Citations
1	Thermoelectricity in Molecular Junctions. Science, 2007, 315, 1568-1571.	6.0	839
2	Role of electronâ€“phonon coupling in thermal conductance of metalâ€“nonmetal interfaces. Applied Physics Letters, 2004, 84, 4768-4770.	1.5	408
3	Radiative heat transfer in the extreme near field. Nature, 2015, 528, 387-391.	13.7	332
4	Probing the Chemistry of Molecular Heterojunctions Using Thermoelectricity. Nano Letters, 2008, 8, 715-719.	4.5	250
5	Enhancement of near-field radiative heat transfer using polar dielectric thin films. Nature Nanotechnology, 2015, 10, 253-258.	15.6	237
6	Nanogap near-field thermophotovoltaics. Nature Nanotechnology, 2018, 13, 806-811.	15.6	235
7	Heat dissipation in atomic-scale junctions. Nature, 2013, 498, 209-212.	13.7	219
8	Near-field radiative thermal transport: From theory to experiment. AIP Advances, 2015, 5, 053503.	0.6	210
9	Electrostatic control of thermoelectricity in molecular junctions. Nature Nanotechnology, 2014, 9, 881-885.	15.6	204
10	Radiative heat conductances between dielectric and metallic parallel plates with nanoscale gaps. Nature Nanotechnology, 2016, 11, 509-514.	15.6	201
11	Diffuse mismatch model of thermal boundary conductance using exact phonon dispersion. Applied Physics Letters, 2005, 87, 211908.	1.5	196
12	A Thermal Diode Based on Nanoscale Thermal Radiation. ACS Nano, 2018, 12, 5774-5779.	7.3	167
13	Quantized thermal transport in single-atom junctions. Science, 2017, 355, 1192-1195.	6.0	165
14	Ultra-High Vacuum Scanning Thermal Microscopy for Nanometer Resolution Quantitative Thermometry. ACS Nano, 2012, 6, 4248-4257.	7.3	159
15	Effect of Length and Contact Chemistry on the Electronic Structure and Thermoelectric Properties of Molecular Junctions. Journal of the American Chemical Society, 2011, 133, 8838-8841.	6.6	156
16	Perspective: Thermal and thermoelectric transport in molecular junctions. Journal of Chemical Physics, 2017, 146, .	1.2	144
17	Thermal conductance of single-molecule junctions. Nature, 2019, 572, 628-633.	13.7	127
18	Peltier cooling in molecular junctions. Nature Nanotechnology, 2018, 13, 122-127.	15.6	120

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19	Study of radiative heat transfer in Ã…ngstrÃ¶m- and nanometre-sized gaps. Nature Communications, 2017, 8, .	5.8	117
20	Interpretation of Stochastic Events in Single Molecule Conductance Measurements. Nano Letters, 2006, 6, 2362-2367.	4.5	115
21	Giant Enhancement in Radiative Heat Transfer in Sub-30 nm Gaps of Plane Parallel Surfaces. Nano Letters, 2018, 18, 3711-3715.	4.5	111
22	Nanoscale Thermometry Using Point Contact Thermocouples. Nano Letters, 2010, 10, 2613-2617.	4.5	102
23	Determining plasmonic hot-carrier energy distributions via single-molecule transport measurements. Science, 2020, 369, 423-426.	6.0	100
24	Measurement of thermopower and current-voltage characteristics of molecular junctions to identify orbital alignment. Applied Physics Letters, 2010, 96, .	1.5	99
25	Circadian clock neurons constantly monitor environmental temperature to set sleep timing. Nature, 2018, 555, 98-102.	13.7	96
26	Near-field photonic cooling through control of the chemical potential of photons. Nature, 2019, 566, 239-244.	13.7	96
27	Influence of Quantum Interference on the Thermoelectric Properties of Molecular Junctions. Nano Letters, 2018, 18, 5666-5672.	4.5	93
28	Hundred-fold enhancement in far-field radiative heat transfer over the blackbody limit. Nature, 2018, 561, 216-221.	13.7	81
29	Thermal and Thermoelectric Properties of Molecular Junctions. Advanced Functional Materials, 2020, 30, 1904534.	7.8	72
30	Evaluating Broader Impacts of Nanoscale Thermal Transport Research. Nanoscale and Microscale Thermophysical Engineering, 2015, 19, 127-165.	1.4	69
31	Near-field thermophotovoltaics for efficient heat to electricity conversion at high power density. Nature Communications, 2021, 12, 4364.	5.8	67
32	End-Group-Induced Charge Transfer in Molecular Junctions: Effect on Electronic-Structure and Thermopower. Journal of Physical Chemistry Letters, 2012, 3, 1962-1967.	2.1	57
33	Fermi level control of compensating point defects during metalorganic chemical vapor deposition growth of Si-doped AlGaN. Applied Physics Letters, 2014, 105, 222101.	1.5	47
34	Point defect reduction in MOCVD (Al)GaN by chemical potential control and a comprehensive model of C incorporation in GaN. Journal of Applied Physics, 2017, 122, .	1.1	47
35	Characterization of nanoscale temperature fields during electromigration of nanowires. Scientific Reports, 2014, 4, .	1.6	45
36	Length dependence of frontier orbital alignment in aromatic molecular junctions. Applied Physics Letters, 2012, 101, .	1.5	44

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37	Room temperature picowatt-resolution calorimetry. Applied Physics Letters, 2011, 99, 043106.	1.5	42
38	Nanoscale radiative thermal switching via multi-body effects. Nature Nanotechnology, 2020, 15, 99-104.	15.6	39
39	Defect-free Ni/GaN Schottky barrier behavior with high temperature stability. Applied Physics Letters, 2017, 110, .	1.5	38
40	Schottky contact formation on polar and non-polar AlN. Journal of Applied Physics, 2014, 116, .	1.1	32
41	Creation of stable molecular junctions with a custom-designed scanning tunneling microscope. Nanotechnology, 2011, 22, 485703.	1.3	25
42	Status of the growth and fabrication of AlGaN-based UV laser diodes for near and mid-UV wavelength. Journal of Materials Research, 2021, 36, 4638-4664.	1.2	25
43	High free carrier concentration in p-GaN grown on AlN substrates. Applied Physics Letters, 2017, 111, .	1.5	22
44	Sub-nanowatt resolution direct calorimetry for probing real-time metabolic activity of individual C. elegans worms. Nature Communications, 2020, 11, 2983.	5.8	22
45	Quantification of thermal and contact resistances of scanning thermal probes. Applied Physics Letters, 2014, 105, .	1.5	17
46	The effect of illumination power density on carbon defect configuration in silicon doped GaN. Journal of Applied Physics, 2016, 120, .	1.1	17
47	Temperature dependence of thermopower in molecular junctions. Applied Physics Letters, 2016, 109, .	1.5	17
48	On Ni/Au Alloyed Contacts to Mg-Doped GaN. Journal of Electronic Materials, 2018, 47, 305-311.	1.0	17
49	Scanning Probe Microscopy for Thermal Transport Measurements. Nanoscale and Microscale Thermophysical Engineering, 2015, 19, 279-302.	1.4	15
50	Parallelized, real-time, metabolic-rate measurements from individual Drosophila. Scientific Reports, 2018, 8, 14452.	1.6	15
51	Defect quasi Fermi level control-based CN reduction in GaN: Evidence for the role of minority carriers. Applied Physics Letters, 2017, 111, 152101.	1.5	14
52	Nanokelvin-resolution thermometry with a photonic microscale sensor at room temperature. Nature Photonics, 2022, 16, 422-427.	15.6	13
53	End-Group Influence on Frontier Molecular Orbital Reorganization and Thermoelectric Properties of Molecular Junctions. Journal of Physical Chemistry Letters, 2013, 4, 3825-3833.	2.1	12
54	A conduction model for contacts to Si-doped AlGaN grown on sapphire and single-crystalline AlN. Journal of Applied Physics, 2015, 117, .	1.1	9

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55	Quantitative Mapping of Unmodulated Temperature Fields with Nanometer Resolution. ACS Nano, 2022, 16, 939-950.	7.3	9
56	Plasma enhanced chemical vapor deposition of SiO2and SiNxon AlGaN: Band offsets and interface studies as a function of Al composition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, 061101.	0.9	6
57	Microwatt-Resolution Calorimeter for Studying the Reaction Thermodynamics of Nanomaterials at High Temperature and Pressure. ACS Sensors, 2021, 6, 387-398.	4.0	4
58	Quantifying the temperature of heated microdevices using scanning thermal probes. Applied Physics Letters, 2021, 118, .	1.5	3
59	Harmony with superatoms. Nature Materials, 2017, 16, 10-11.	13.3	2
60	Thermoelectricity at the Organic-Inorganic Interface. , 2010, , .		1
61	Report on the Eighth USâ€"Japan Joint Seminar on Nanoscale Transport Phenomenaâ€"Science and Engineering. Nanoscale and Microscale Thermophysical Engineering, 2015, 19, 95-97.	1.4	1