

# Pramod Reddy

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

60  
papers

4,746  
citations

35  
h-index

62  
g-index

62  
ext. papers

5,558  
ext. citations

15.1  
avg, IF

5.72  
L-index

#	Paper	IF	Citations
60	Status of the growth and fabrication of AlGaIn-based UV laser diodes for near and mid-UV wavelength. <i>Journal of Materials Research</i> , <b>2021</b> , 36, 4638-4664	2.5	10
59	Microwatt-Resolution Calorimeter for Studying the Reaction Thermodynamics of Nanomaterials at High Temperature and Pressure. <i>ACS Sensors</i> , <b>2021</b> , 6, 387-398	9.2	2
58	Quantifying the temperature of heated microdevices using scanning thermal probes. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 163102	3.4	2
57	Near-field thermophotovoltaics for efficient heat to electricity conversion at high power density. <i>Nature Communications</i> , <b>2021</b> , 12, 4364	17.4	15
56	Quantitative Mapping of Unmodulated Temperature Fields with Nanometer Resolution.. <i>ACS Nano</i> , <b>2021</b> ,	16.7	2
55	Determining plasmonic hot-carrier energy distributions via single-molecule transport measurements. <i>Science</i> , <b>2020</b> , 369, 423-426	33.3	46
54	Nanoscale radiative thermal switching via multi-body effects. <i>Nature Nanotechnology</i> , <b>2020</b> , 15, 99-104	28.7	21
53	Sub-nanowatt resolution direct calorimetry for probing real-time metabolic activity of individual <i>C. elegans</i> worms. <i>Nature Communications</i> , <b>2020</b> , 11, 2983	17.4	13
52	Thermal and Thermoelectric Properties of Molecular Junctions. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1904534	15.6	37
51	Thermal conductance of single-molecule junctions. <i>Nature</i> , <b>2019</b> , 572, 628-633	50.4	68
50	Near-field photonic cooling through control of the chemical potential of photons. <i>Nature</i> , <b>2019</b> , 566, 239-244	50.4	49
49	Circadian clock neurons constantly monitor environmental temperature to set sleep timing. <i>Nature</i> , <b>2018</b> , 555, 98-102	50.4	54
48	Peltier cooling in molecular junctions. <i>Nature Nanotechnology</i> , <b>2018</b> , 13, 122-127	28.7	81
47	Giant Enhancement in Radiative Heat Transfer in Sub-30 nm Gaps of Plane Parallel Surfaces. <i>Nano Letters</i> , <b>2018</b> , 18, 3711-3715	11.5	76
46	On Ni/Au Alloyed Contacts to Mg-Doped GaN. <i>Journal of Electronic Materials</i> , <b>2018</b> , 47, 305-311	1.9	9
45	Influence of Quantum Interference on the Thermoelectric Properties of Molecular Junctions. <i>Nano Letters</i> , <b>2018</b> , 18, 5666-5672	11.5	54
44	Nanogap near-field thermophotovoltaics. <i>Nature Nanotechnology</i> , <b>2018</b> , 13, 806-811	28.7	148

43	Plasma enhanced chemical vapor deposition of SiO <sub>2</sub> and SiN <sub>x</sub> on AlGa <sub>N</sub> : Band offsets and interface studies as a function of Al composition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2018</b> , 36, 061101	2.9	4
42	Parallelized, real-time, metabolic-rate measurements from individual Drosophila. <i>Scientific Reports</i> , <b>2018</b> , 8, 14452	4.9	7
41	Hundred-fold enhancement in far-field radiative heat transfer over the blackbody limit. <i>Nature</i> , <b>2018</b> , 561, 216-221	50.4	57
40	A Thermal Diode Based on Nanoscale Thermal Radiation. <i>ACS Nano</i> , <b>2018</b> , 12, 5774-5779	16.7	95
39	Defect-free Ni/GaN Schottky barrier behavior with high temperature stability. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 011603	3.4	32
38	Quantized thermal transport in single-atom junctions. <i>Science</i> , <b>2017</b> , 355, 1192-1195	33.3	124
37	Study of radiative heat transfer in Ågström- and nanometre-sized gaps. <i>Nature Communications</i> , <b>2017</b> , 8,	17.4	85
36	Perspective: Thermal and thermoelectric transport in molecular junctions. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 092201	3.9	104
35	High free carrier concentration in p-GaN grown on AlN substrates. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 032109	3.4	13
34	Defect quasi Fermi level control-based CN reduction in GaN: Evidence for the role of minority carriers. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 152101	3.4	12
33	Point defect reduction in MOCVD (Al)Ga <sub>N</sub> by chemical potential control and a comprehensive model of C incorporation in GaN. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 245702	2.5	34
32	Thermal transport: Harmony with superatoms. <i>Nature Materials</i> , <b>2016</b> , 16, 10-11	27	2
31	Radiative heat conductances between dielectric and metallic parallel plates with nanoscale gaps. <i>Nature Nanotechnology</i> , <b>2016</b> , 11, 509-514	28.7	147
30	The effect of illumination power density on carbon defect configuration in silicon doped GaN. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 235705	2.5	12
29	Temperature dependence of thermopower in molecular junctions. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 033102	3.4	14
28	Enhancement of near-field radiative heat transfer using polar dielectric thin films. <i>Nature Nanotechnology</i> , <b>2015</b> , 10, 253-8	28.7	186
27	Scanning Probe Microscopy for Thermal Transport Measurements. <i>Nanoscale and Microscale Thermophysical Engineering</i> , <b>2015</b> , 19, 279-302	3.7	12
26	Report on the Eighth USJapan Joint Seminar on Nanoscale Transport PhenomenaScience and Engineering. <i>Nanoscale and Microscale Thermophysical Engineering</i> , <b>2015</b> , 19, 95-97	3.7	0

25	A conduction model for contacts to Si-doped AlGa <sub>N</sub> grown on sapphire and single-crystalline AlN. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 245702	2.5	6
24	Near-field radiative thermal transport: From theory to experiment. <i>AIP Advances</i> , <b>2015</b> , 5, 053503	1.5	153
23	Evaluating Broader Impacts of Nanoscale Thermal Transport Research. <i>Nanoscale and Microscale Thermophysical Engineering</i> , <b>2015</b> , 19, 127-165	3.7	60
22	Radiative heat transfer in the extreme near field. <i>Nature</i> , <b>2015</b> , 528, 387-91	50.4	242
21	Electrostatic control of thermoelectricity in molecular junctions. <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 881-5	28.7	175
20	Characterization of nanoscale temperature fields during electromigration of nanowires. <i>Scientific Reports</i> , <b>2014</b> , 4,	4.9	39
19	Fermi level control of compensating point defects during metalorganic chemical vapor deposition growth of Si-doped AlGa <sub>N</sub> . <i>Applied Physics Letters</i> , <b>2014</b> , 105, 222101	3.4	40
18	Schottky contact formation on polar and non-polar AlN. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 194503	2.5	28
17	Quantification of thermal and contact resistances of scanning thermal probes. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 203107	3.4	16
16	End-Group Influence on Frontier Molecular Orbital Reorganization and Thermoelectric Properties of Molecular Junctions. <i>Journal of Physical Chemistry Letters</i> , <b>2013</b> , 4, 3825-3833	6.4	11
15	Heat dissipation in atomic-scale junctions. <i>Nature</i> , <b>2013</b> , 498, 209-12	50.4	188
14	Ultra-high vacuum scanning thermal microscopy for nanometer resolution quantitative thermometry. <i>ACS Nano</i> , <b>2012</b> , 6, 4248-57	16.7	132
13	End-Group-Induced Charge Transfer in Molecular Junctions: Effect on Electronic-Structure and Thermopower. <i>Journal of Physical Chemistry Letters</i> , <b>2012</b> , 3, 1962-1967	6.4	50
12	Length dependence of frontier orbital alignment in aromatic molecular junctions. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 243107	3.4	37
11	Effect of length and contact chemistry on the electronic structure and thermoelectric properties of molecular junctions. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 8838-41	16.4	131
10	Creation of stable molecular junctions with a custom-designed scanning tunneling microscope. <i>Nanotechnology</i> , <b>2011</b> , 22, 485703	3.4	21
9	Room temperature picowatt-resolution calorimetry. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 043106	3.4	38
8	Thermoelectricity at the Organic-Inorganic Interface <b>2010</b> ,		1

7	Nanoscale thermometry using point contact thermocouples. <i>Nano Letters</i> , <b>2010</b> , 10, 2613-7	11.5	91
6	Measurement of thermopower and current-voltage characteristics of molecular junctions to identify orbital alignment. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 013110	3.4	85
5	Probing the chemistry of molecular heterojunctions using thermoelectricity. <i>Nano Letters</i> , <b>2008</b> , 8, 715-9	11.5	230
4	Thermoelectricity in molecular junctions. <i>Science</i> , <b>2007</b> , 315, 1568-71	33.3	726
3	Interpretation of stochastic events in single molecule conductance measurements. <i>Nano Letters</i> , <b>2006</b> , 6, 2362-7	11.5	109
2	Diffuse mismatch model of thermal boundary conductance using exact phonon dispersion. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 211908	3.4	171
1	Role of electron-phonon coupling in thermal conductance of metal-nonmetal interfaces. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 4768-4770	3.4	338