Carlos Polanco

List of Publications by Year
in descending order

29	742	471371 17	610775 24
papers	citations	h-index	g-index

29	29	29	949
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Role of the third dimension in searching for Majorana fermions in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î±</mml:mi><mml:mtext>â^'</mml:mtext><mml:msub via phonons. Physical Review Research, 2022, 4, .		14
2	Nonequilibrium Greenâ€™s functions (NEGF) in vibrational energy transport: a topical review. Nanoscale and Microscale Thermophysical Engineering, 2021, 25, 1-24.	1.4	11
3	Progress in measuring, modeling, and manipulating thermal boundary conductance. Advances in Heat Transfer, 2021, 53, 327-404.	0.4	0
4	Success and breakdown of the T-matrix approximation for phonon-disorder scattering. Physical Review B, 2020, 102, .	1.1	8
5	GaN thermal transport limited by the interplay of dislocations and size effects. Physical Review B, 2020, 102, .	1.1	26
6	Thermal Transport by First-Principles Anharmonic Lattice Dynamics. , 2020, , 735-765.		3
7	Defect-limited thermal conductivity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></ Physical Review Materials, 2020, 4, .	0.9	18
8	Atomic-Scale Study of Intrinsic Defects Suppressing the Thermal Conductivity of Boron Arsenide. Microscopy and Microanalysis, 2019, 25, 942-943.	0.2	0
9	Maximization of thermal conductance at interfaces via exponentially mass-graded interlayers. Nanoscale, 2019, 11, 6254-6262.	2.8	29
10	Phonon thermal conductance across GaN-AlN interfaces from first principles. Physical Review B, 2019, 99, .	1.1	42
11	Dislocation-induced thermal transport anisotropy in single-crystal group-III nitride films. Nature Materials, 2019, 18, 136-140.	13.3	76
12	Interplay between total thickness and period thickness in the phonon thermal conductivity of superlattices from the nanoscale to the microscale: Coherent versus incoherent phonon transport. Physical Review B, 2018, 97, .	1.1	48
13	Ab initio phonon point defect scattering and thermal transport in graphene. Physical Review B, 2018, 97, .	1.1	58
14	Thermal Transport by First-Principles Anharmonic Lattice Dynamics. , 2018, , 1-31.		1
15	Symmetry-driven phonon chirality and transport in one-dimensional and bulk <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">a</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="normal">N</mml:mi></mml:mrow></mml:math> -derived materials. Physical Review B, 2018, 98, .	1.1	26
16	Antisite Pairs Suppress the Thermal Conductivity of BAs. Physical Review Letters, 2018, 121, 105901.	2.9	41
17	Thermal conductivity of InN with point defects from first principles. Physical Review B, 2018, 98, .	1.1	39
18	Optimizing the Interfacial Thermal Conductance at Goldâ€“Alkane Junctions From â€œFirst Principlesâ€• Journal of Heat Transfer, 2018, 140, .	1.2	8

#	Article	IF	Citations
19	Effects of bulk and interfacial anharmonicity on thermal conductance at solid/solid interfaces. Physical Review B, 2017, 95, .	1.1	19
20	Design rules for interfacial thermal conductance: Building better bridges. Physical Review B, 2017, 95, .	1.1	46
21	Lattice thermal transport in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">L</mml:mi><mml:msub><mml:mi mathvariant="normal">a</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">u</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi>X</mml:mi><mml:mn>4</mml:mn></mml:msub>	1.1	20
22	Role of crystal structure and junction morphology on interface thermal conductance. Physical Review B, 2015, 92, .	1.1	27
23	Enhancing phonon flow through one-dimensional interfaces by impedance matching. Journal of Applied Physics, 2014, 116, 083503.	1.1	12
24	Atomistic deconstruction of current flow in graphene based hetero-junctions. Journal of Computational Electronics, 2013, 12, 232-247.	1.3	16
25	Effect of interface adhesion and impurity mass on phonon transport at atomic junctions. Journal of Applied Physics, 2013, 113, .	1.1	36
26	Impedance Matching of Atomic Thermal Interfaces Using Primitive Block Decomposition. Nanoscale and Microscale Thermophysical Engineering, 2013, 17, 263-279.	1.4	18
27	Floating-electrode enhanced constriction dielectrophoresis for biomolecular trapping in physiological media of high conductivity. Biomicrofluidics, 2012, 6, 12806-1280614.	1.2	51
28	Interplay of Electrical Forces for Alignment of Sub-100 nm Electrospun Nanofibers on Insulator Gap Collectors. Langmuir, 2010, 26, 19022-19026.	1.6	48
29	Dislocation-Limited Thermal Conductivity in LiF: Revisiting Perturbative Models. Jom, 0, , 1.	0.9	1