

Xavier CartoixÃ

List of Publications by Year in descending order

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Version: 2024-02-01

26
papers

698
citations

623734

14
h-index

552781

26
g-index

26
all docs

26
docs citations

26
times ranked

1228
citing authors

#	ARTICLE	IF	CITATIONS
1	Multilevel 3-D Device Simulation Approach Applied to Deeply Scaled Nanowire Field Effect Transistors. IEEE Transactions on Electron Devices, 2022, 69, 5276-5282.	3.0	2
2	Hydrodynamic signatures in thermal transport in devices based on two-dimensional materials: An <i>ab initio</i> study. Physical Review B, 2022, 106, .	3.2	1
3	Scattering in Terms of Bohmian Conditional Wave Functions for Scenarios with Non-Commuting Energy and Momentum Operators. Entropy, 2021, 23, 408.	2.2	2
4	Tunable thermal conductivity of ternary alloy semiconductors from first-principles. Journal Physics D: Applied Physics, 2021, 54, 335302.	2.8	1
5	Atomistic Insights on the Full Operation Cycle of a HfO ₂ -Based Resistive Random Access Memory Cell from Molecular Dynamics. ACS Nano, 2021, 15, 12945-12954.	14.6	21
6	New insights in the lattice dynamics of monolayers, bilayers, and trilayers of WSe ₂ and unambiguous determination of few-layer-flakes™ thickness. 2D Materials, 2020, 7, 025004.	4.4	10
7	Experimental demonstration of the suppression of optical phonon splitting in 2D materials by Raman spectroscopy. 2D Materials, 2020, 7, 035017.	4.4	11
8	Revisiting the Role of Irradiance in the Determination of Sunscreens™ Sun Protection Factor. Journal of Physical Chemistry Letters, 2020, 11, 1209-1214.	4.6	5
9	Doping of III-V Arsenide and Phosphide Wurtzite Semiconductors. Journal of Physical Chemistry C, 2020, 124, 27203-27212.	3.1	4
10	Schottky barriers, emission regimes and contact resistances in 2H-1T MoS ₂ lateral metal-semiconductor junctions from first-principles. 2D Materials, 2020, 7, 045030.	4.4	9
11	Phonon transport across crystal-phase interfaces and twin boundaries in semiconducting nanowires. Nanoscale, 2019, 11, 16007-16016.	5.6	17
12	Phonon Engineering in Twinning Superlattice Nanowires. Nano Letters, 2019, 19, 4702-4711.	9.1	31
13	Indications of Phonon Hydrodynamics in Telescopic Silicon Nanowires. Physical Review Applied, 2019, 11, .	3.8	7
14	Thermal conductivity and phonon hydrodynamics in transition metal dichalcogenides from first-principles. 2D Materials, 2019, 6, 035002.	4.4	39
15	Thermal conductivity for III-V and II-VI semiconductor wurtzite and zinc-blende polytypes: The role of anharmonicity and phase space. Physical Review Materials, 2019, 3, .	2.4	14
16	Full-field thermal imaging of quasiballistic crosstalk reduction in nanoscale devices. Nature Communications, 2018, 9, 255.	12.8	59
17	Electrical contact resistance in graphite-graphene contacts from <i>ab initio</i> methods. Journal of Physics Condensed Matter, 2018, 30, 325302.	1.8	2
18	Thermal conductivity of hexagonal Si and hexagonal Si nanowires from first-principles. Applied Physics Letters, 2017, 111, .	3.3	21

#	ARTICLE	IF	CITATIONS
19	Optical Emission in Hexagonal SiGe Nanowires. Nano Letters, 2017, 17, 4753-4758.	9.1	51
20	Thermal transport in porous Si nanowires from approach-to-equilibrium molecular dynamics calculations. Applied Physics Letters, 2016, 109, .	3.3	24
21	Thermal boundary resistance in semiconductors by non-equilibrium thermodynamics. Advances in Physics: X, 2016, 1, 246-261.	4.1	9
22	Model for thermal conductivity in nanoporous silicon from atomistic simulations. Physical Review B, 2015, 91, .	3.2	46
23	Quantum-size effects in hafnium-oxide resistive switching. Applied Physics Letters, 2013, 102, 183505.	3.3	151
24	Transport properties of oxygen vacancy filaments in metal/crystalline or amorphous HfO ₂ /metal structures. Physical Review B, 2012, 86, .	3.2	70
25	Convergence study of neutral and charged defect formation energies in Si nanowires. Physical Review B, 2010, 81, .	3.2	29
26	Theory of Defects in One-Dimensional Systems: Application to Al-Catalyzed Si Nanowires. Nano Letters, 2009, 9, 975-979.	9.1	62