

Xavier CartoixÃ

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8093551/publications.pdf>

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	Quantum-size effects in hafnium-oxide resistive switching. Applied Physics Letters, 2013, 102, 183505.	3.3	151
2	Transport properties of oxygen vacancy filaments in metal/crystalline or amorphous HfO ₂ /metal structures. Physical Review B, 2012, 86, .	3.2	70
3	Theory of Defects in One-Dimensional Systems: Application to Al-Catalyzed Si Nanowires. Nano Letters, 2009, 9, 975-979.	9.1	62
4	Full-field thermal imaging of quasiballistic crosstalk reduction in nanoscale devices. Nature Communications, 2018, 9, 255.	12.8	59
5	Optical Emission in Hexagonal SiGe Nanowires. Nano Letters, 2017, 17, 4753-4758.	9.1	51
6	Model for thermal conductivity in nanoporous silicon from atomistic simulations. Physical Review B, 2015, 91, .	3.2	46
7	Thermal conductivity and phonon hydrodynamics in transition metal dichalcogenides from first-principles. 2D Materials, 2019, 6, 035002.	4.4	39
8	Phonon Engineering in Twinning Superlattice Nanowires. Nano Letters, 2019, 19, 4702-4711.	9.1	31
9	Convergence study of neutral and charged defect formation energies in Si nanowires. Physical Review B, 2010, 81, .	3.2	29
10	Thermal transport in porous Si nanowires from approach-to-equilibrium molecular dynamics calculations. Applied Physics Letters, 2016, 109, .	3.3	24
11	Thermal conductivity of hexagonal Si and hexagonal Si nanowires from first-principles. Applied Physics Letters, 2017, 111, .	3.3	21
12	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
13	Phonon transport across crystal-phase interfaces and twin boundaries in semiconducting nanowires. Nanoscale, 2019, 11, 16007-16016.	5.6	17
14	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
15	Experimental demonstration of the suppression of optical phonon splitting in 2D materials by Raman spectroscopy. 2D Materials, 2020, 7, 035017.	4.4	11
16	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
17	Thermal boundary resistance in semiconductors by non-equilibrium thermodynamics. Advances in Physics: X, 2016, 1, 246-261.	4.1	9
18	Schottky barriers, emission regimes and contact resistances in 2H-1Tâ€™ MoS ₂ lateral metal-semiconductor junctions from first-principles. 2D Materials, 2020, 7, 045030.	4.4	9

#	ARTICLE	IF	CITATIONS
19	Indications of Phonon Hydrodynamics in Telescopic Silicon Nanowires. <i>Physical Review Applied</i> , 2019, 11, .	3.8	7
20	Revisiting the Role of Irradiance in the Determination of Sunscreens'™ Sun Protection Factor. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1209-1214.	4.6	5
21	Doping of III-V Arsenide and Phosphide Wurtzite Semiconductors. <i>Journal of Physical Chemistry C</i> , 2020, 124, 27203-27212.	3.1	4
22	Electrical contact resistance in graphite-graphene contacts from ab initio methods. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 325302.	1.8	2
23	Scattering in Terms of Bohmian Conditional Wave Functions for Scenarios with Non-Commuting Energy and Momentum Operators. <i>Entropy</i> , 2021, 23, 408.	2.2	2
24	Multilevel 3-D Device Simulation Approach Applied to Deeply Scaled Nanowire Field Effect Transistors. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 5276-5282.	3.0	2
25	Tunable thermal conductivity of ternary alloy semiconductors from first-principles. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 335302.	2.8	1
26	Hydrodynamic signatures in thermal transport in devices based on two-dimensional materials: An ab initio study. <i>Physical Review B</i> , 2022, 106, .	3.2	1