

Miquel LÃ³pez-SuÃ¡rez

List of Publications by Year in descending order

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Version: 2024-02-01

40
papers

372
citations

840585

11
h-index

794469

19
g-index

40
all docs

40
docs citations

40
times ranked

581
citing authors

#	ARTICLE	IF	CITATIONS
1	Sub-kBT micro-electromechanical irreversible logic gate. Nature Communications, 2016, 7, 12068.	5.8	44
2	Observation of second sound in a rapidly varying temperature field in Ge. Science Advances, 2021, 7, .	4.7	40
3	Band gap engineering of MoS2 upon compression. Journal of Applied Physics, 2016, 119, .	1.1	39
4	Piezoelectric monolayers as nonlinear energy harvesters. Nanotechnology, 2014, 25, 175401.	1.3	30
5	Nanostructured graphene for energy harvesting. Physical Review B, 2011, 84, .	1.1	27
6	Noise energy harvesting in buckled BN nanoribbons from molecular dynamics. Nano Energy, 2015, 15, 329-334.	8.2	25
7	Electronic transport modulation on suspended few-layer MoS_2 under strain. Physical Review B, 2018, 97, .	1.1	19
8	Phonon transport across crystal-phase interfaces and twin boundaries in semiconducting nanowires. Nanoscale, 2019, 11, 16007-16016.	2.8	17
9	Probing Lattice Dynamics and Electronic Resonances in Hexagonal Ge and $\text{Si}_x\text{Ge}_{1-x}$ Alloys in Nanowires by Raman Spectroscopy. ACS Nano, 2020, 14, 6845-6856.	7.3	17
10	Inducing bistability with local electret technology in a microcantilever based non-linear vibration energy harvester. Applied Physics Letters, 2013, 102, .	1.5	13
11	Fabrication of highly regular suspended graphene nanoribbons through a one-step electron beam lithography process. Microelectronic Engineering, 2014, 129, 81-85.	1.1	13
12	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.	2.0	10
13	Heat production and error probability relation in Landauer reset at effective temperature. Scientific Reports, 2016, 6, 34039.	1.6	8
14	Cost of remembering a bit of information. Physical Review A, 2018, 97, .	1.0	8
15	Interface driven thermal rectification in a graphene bilayer graphene junction from nonequilibrium molecular dynamics. Journal of Applied Physics, 2018, 124, .	1.1	7
16	Fast MoS_2 thickness identification by transmission imaging. Applied Nanoscience (Switzerland), 2021, 11, 605-610.	1.6	7
17	Buckling suspended graphene nanoribbons to harvest energy from noisy vibrations. Microelectronic Engineering, 2013, 111, 122-125.	1.1	6
18	Quasiballistic phonon transport from first principles. Physical Review B, 2020, 102, .	1.1	6

#	ARTICLE	IF	CITATIONS
19	Interface-driven thermal rectification in nanoscale systems. <i>Physical Review Materials</i> , 2018, 2, .	0.9	6
20	Reset and switch protocols at Landauer limit in a graphene buckled ribbon. <i>Europhysics Letters</i> , 2015, 111, 10004.	0.7	5
21	Efficient Nonlinear Energy Harvesting with Wrinkled Piezoelectric Membranes. <i>Energy Harvesting and Systems</i> , 2016, 3, 133-137.	1.7	5
22	Micro-electromechanical memory bit based on magnetic repulsion. <i>Applied Physics Letters</i> , 2016, 109, 133505.	1.5	4
23	Heterogeneous Integration of Autonomous Systems in Package for Wireless Sensor Networks. <i>Procedia Engineering</i> , 2011, 25, 88-91.	1.2	3
24	Nonlinear dynamics in a graphene nanostructured device for energy harvesting. , 2013, , .		3
25	Fundamental Limits in Dissipative Processes during Computation. <i>Entropy</i> , 2019, 21, 822.	1.1	2
26	Low-temperature thermal rectification by tailoring isotope distributions. <i>Physical Review B</i> , 2019, 99, .	1.1	2
27	Modeling charge transport in gold nanogranular films. <i>Physical Review Materials</i> , 2021, 5, .	0.9	2
28	Operating micromechanical logic gates below $k_B T$: Physical vs logical reversibility. , 2015, , .		1
29	A microcantilever mechanical antenna. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	1
30	Tunable MoS ₂ strain sensor. <i>IEEE Instrumentation and Measurement Magazine</i> , 2020, 23, 30-33.	1.2	1
31	Nonlinear Dynamics of an Ambient Noise Driven Array of Coupled Graphene Nanostructured Devices for Energy Harvesting. <i>MATEC Web of Conferences</i> , 2014, 16, 01001.	0.1	1
32	Piezoelectric 2D materials for bistable NEMS energy harvesters. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1701, 1.	0.1	0
33	Vibration energy harvesting via parametrically-induced bistability. <i>Journal of Physics: Conference Series</i> , 2014, 557, 012122.	0.3	0
34	Nonlinear Dynamics of Ambient Noise-Driven Graphene Nanostructured Devices for Energy Harvesting. , 2016, , 197-212.		0
35	Computing Below the Expected Energy Limits. <i>Lecture Notes in Networks and Systems</i> , 2017, , 111-117.	0.5	0
36	Operating gravitational wave detectors far from equilibrium. <i>Classical and Quantum Gravity</i> , 2018, 35, 155018.	1.5	0

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37	Micro electro-mechanical logic device at fundamental energy limit. European Physical Journal B, 2018, 91, 1.	0.6	0
38	Thermodynamic reversible transformations in micro-electro-mechanical systems. European Physical Journal B, 2018, 91, 1.	0.6	0
39	The Cost of Remembering. Understanding Complex Systems, 2019, , 1-8.	0.3	0
40	Piezoresistive Memories Based on Two-Dimensional Nano-Scale Electromechanical Systems. Crystals, 2022, 12, 968.	1.0	0