

Miguel Muñoz Rojo

List of Publications by Year in descending order

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45
papers

1,703
citations

279487

23
h-index

276539

41
g-index

47
all docs

47
docs citations

47
times ranked

2772
citing authors

#	ARTICLE	IF	CITATIONS
1	Ferrofluidic thermal switch in a magnetocaloric device. IScience, 2022, 25, 103779.	1.9	9
2	Direct measurement of nanoscale filamentary hot spots in resistive memory devices. Science Advances, 2022, 8, eabk1514.	4.7	20
3	Solid-State Thermal Control Devices. Advanced Electronic Materials, 2021, 7, 2000625.	2.6	32
4	Indirectly Heated Switch as a Platform for Nanosecond Probing of Phase Transition Properties in Chalcogenides. IEEE Transactions on Electron Devices, 2021, 68, 1298-1303.	1.6	5
5	Graphene-based electromechanical thermal switches. 2D Materials, 2021, 8, 035055.	2.0	4
6	Thermal rectification in multilayer phase change material structures for energy storage applications. IScience, 2021, 24, 102843.	1.9	11
7	Fluidic and Mechanical Thermal Control Devices. Advanced Electronic Materials, 2021, 7, 2000623.	2.6	20
8	A Review on Principles and Applications of Scanning Thermal Microscopy (SThM). Advanced Functional Materials, 2020, 30, 1900892.	7.8	98
9	Toward a solid-state thermal diode for room-temperature magnetocaloric energy conversion. Journal of Applied Physics, 2020, 127, .	1.1	17
10	Monolithic mtesla-level magnetic induction by self-rolled-up membrane technology. Science Advances, 2020, 6, eaay4508.	4.7	35
11	Localized Heating and Switching in MoTe ₂ -Based Resistive Memory Devices. Nano Letters, 2020, 20, 1461-1467.	4.5	38
12	Localized Triggering of the Insulator-Metal Transition in VO ₂ Using a Single Carbon Nanotube. ACS Nano, 2019, 13, 11070-11077.	7.3	25
13	Ultrahigh thermal isolation across heterogeneously layered two-dimensional materials. Science Advances, 2019, 5, eaax1325.	4.7	149
14	Process-induced anomalous current transport in graphene/InAlN/GaN heterostructured diodes. , 2019, , .		1
15	Highly Efficient Antimicrobial Ceramics Based on Electrically Charged Interfaces. ACS Applied Materials & Interfaces, 2019, 11, 39254-39262.	4.0	6
16	Significant Phonon Drag Enables High Power Factor in the AlGaN/GaN Two-Dimensional Electron Gas. Nano Letters, 2019, 19, 3770-3776.	4.5	13
17	Thermal conductivity of crystalline AlN and the influence of atomic-scale defects. Journal of Applied Physics, 2019, 126, .	1.1	75
18	Thermal transport across graphene step junctions. 2D Materials, 2019, 6, 011005.	2.0	15

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19	Nanoscale Heterogeneities in Monolayer MoSe ₂ Revealed by Correlated Scanning Probe Microscopy and Tip-Enhanced Raman Spectroscopy. ACS Applied Nano Materials, 2018, 1, 572-579.	2.4	45
20	Tuning Electrical and Thermal Transport in AlGaIn/GaN Heterostructures via Buffer Layer Engineering. Advanced Functional Materials, 2018, 28, 1705823.	7.8	19
21	Probing Self-Heating in RRAM Devices by Sub-100 nm Spatially Resolved Thermometry. , 2018, , .		5
22	Localized Heating in Mo'ei-Based Resistive Memory Devices. , 2018, , .		0
23	Thermoelectrics: Tuning Electrical and Thermal Transport in AlGaIn/GaN Heterostructures via Buffer Layer Engineering (Adv. Funct. Mater. 22/2018). Advanced Functional Materials, 2018, 28, 1870152.	7.8	3
24	Low Power Nanoscale Switching of VO ₂ using Carbon Nanotube Heaters. , 2018, , .		0
25	Thermal conductivity of Bi ₂ Te ₃ nanowires: how size affects phonon scattering. Nanoscale, 2017, 9, 6741-6747.	2.8	41
26	Thermoelectric Skutterudite/oxide nanocomposites: Effective decoupling of electrical and thermal conductivity by functional interfaces. Nano Energy, 2017, 31, 393-402.	8.2	34
27	Energy Dissipation in Monolayer MoS ₂ Electronics. Nano Letters, 2017, 17, 3429-3433.	4.5	177
28	Spatially Resolved Thermometry of Resistive Memory Devices. Scientific Reports, 2017, 7, 15360.	1.6	41
29	Low Variability in Synthetic Monolayer MoS ₂ Devices. ACS Nano, 2017, 11, 8456-8463.	7.3	147
30	Dual-Layer Dielectric Stack for Thermally Isolated Low-Energy Phase-Change Memory. IEEE Transactions on Electron Devices, 2017, 64, 4496-4502.	1.6	29
31	Low thermal conductivity and improved thermoelectric performance of nanocrystalline silicon germanium films by sputtering. Nanotechnology, 2016, 27, 175401.	1.3	30
32	Ultra-low thermal conductivities in large-area Si-Ge nanomeshes for thermoelectric applications. Scientific Reports, 2016, 6, 32778.	1.6	84
33	Anisotropic Effects on the Thermoelectric Properties of Highly Oriented Electrodeposited Bi ₂ Te ₃ Films. Scientific Reports, 2016, 6, 19129.	1.6	76
34	Spatial potential ripples of azimuthal surface modes in topological insulator Bi ₂ Te ₃ nanowires. Scientific Reports, 2016, 6, 19014.	1.6	15
35	High electrical conductivity in out of plane direction of electrodeposited Bi ₂ Te ₃ films. AIP Advances, 2015, 5, .	0.6	12
36	Thermal conductivity measurements of high and low thermal conductivity films using a scanning hot probe method in the 3D mode and novel calibration strategies. Nanoscale, 2015, 7, 15404-15412.	2.8	50

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37	Enhancement of thermoelectric efficiency of doped PCDTBT polymer films. RSC Advances, 2015, 5, 66687-66694.	1.7	27
38	Modeling of transient thermoelectric transport in Harman method for films and nanowires. International Journal of Thermal Sciences, 2015, 89, 193-202.	2.6	9
39	Fabrication and Mechanical Characterization of Semi-Free-Standing (Conjugated) Polymer Thin Films. Langmuir, 2014, 30, 5217-5223.	1.6	10
40	Decrease in thermal conductivity in polymeric P3HT nanowires by size-reduction induced by crystal orientation: new approaches towards thermal transport engineering of organic materials. Nanoscale, 2014, 6, 7858-7865.	2.8	63
41	Improvement of Bismuth Telluride electrodeposited films by the addition of Sodium Lignosulfonate. Electrochimica Acta, 2014, 123, 117-126.	2.6	47
42	Review on measurement techniques of transport properties of nanowires. Nanoscale, 2013, 5, 11526.	2.8	91
43	Fabrication of Bi ₂ Te ₃ nanowire arrays and thermal conductivity measurement by 3D-scanning thermal microscopy. Journal of Applied Physics, 2013, 113, .	1.1	56
44	Effect of nanostructuration on the thermal conductivity of thermoelectric materials. , 2013, , .		2
45	Electrical contact resistances of thermoelectric thin films measured by Kelvin probe microscopy. Applied Physics Letters, 2013, 103, .	1.5	10