Giuseppe Romano

List of Publications by Year
in descending order

33	906	567281	477307
33	**906**	**15**	**29**
papers	citations	h-index	g-index
33	**33**	**33**	**1196**
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Universal effective medium theory to predict the thermal conductivity in nanostructured materials. International Journal of Heat and Mass Transfer, 2022, 183, 122040.	4.8	9
2	Multifidelity deep neural operators for efficient learning of partial differential equations with application to fast inverse design of nanoscale heat transport. Physical Review Research, 2022, 4, .	3.6	41
3	Mode- and space-resolved thermal transport of alloy nanostructures. International Journal of Heat and Mass Transfer, 2022, 195, 123191.	4.8	3
4	Mitigating the Effect of Nanoscale Porosity on Thermoelectric Power Factor of Si. ACS Applied Energy Materials, 2021, 4, 1915-1923.	5.1	10
5	Enhanced Thermoelectric Performance of Polycrystalline Si0.8Ge0.2 Alloys through the Addition of Nanoscale Porosity. Nanomaterials, 2021, 11, 2591.	4.1	7
6	â,PV: An end-to-end differentiable solar-cell simulator. Computer Physics Communications, 2021, 272, 108232.	7.5	5
7	Thermal transport in nanoporous holey silicon membranes investigated with optically induced transient thermal gratings. Journal of Applied Physics, 2020, 128, .	2.5	6
8	Parameter-free model to estimate thermal conductivity in nanostructured materials. Physical Review B, 2019, 100, .	3.2	11
9	Fast and interpretable classification of small X-ray diffraction datasets using data augmentation and deep neural networks. Npj Computational Materials, 2019, 5, .	8.7	177
10	Bayesim: A tool for adaptive grid model fitting with Bayesian inference. Computer Physics Communications, 2019, 239, 161-165.	7.5	8
11	Diffusive Phonons in Nongray Nanostructures. Journal of Heat Transfer, 2019, 141, .	2.1	5
12	Impact of thermally dead volume on phonon conduction along silicon nanoladders. Nanoscale, 2018, 10, 11117-11122.	5.6	20
13	Nanostructured Composites Based on Liquid-Crystalline Elastomers. Polymers, 2018, 10, 773.	4.5	22
14	Directional Phonon Suppression Function as a Tool for the Identification of Ultralow Thermal Conductivity Materials. Scientific Reports, 2017, 7, 44379.	3.3	7
15	Thermal anisotropy enhanced by phonon size effects in nanoporous materials. Applied Physics Letters, 2017, 110, .	3.3	11
16	Phonon bottleneck identification in disordered nanoporous materials. Physical Review B, 2017, 96, .	3.2	18
17	Phonon Conduction in Silicon Nanobeam Labyrinths. Scientific Reports, 2017, 7, 6233.	3.3	28
18	Single-molecule electronics: Cooling individual vibrational modes by the tunneling current. Journal of Chemical Physics, 2016, 144, 114310.	3.0	13

#	Article	IF	Citations
19	Temperature-dependent thermal conductivity in silicon nanostructured materials studied by the Boltzmann transport equation. Physical Review B, 2016, 93, .	3.2	44
20	Simulating Nanoscale Heat Transport. , 2016, , 3669-3679.		0
21	Heat Conduction in Nanostructured Materials Predicted by Phonon Bulk Mean Free Path Distribution. Journal of Heat Transfer, 2015, 137, .	2.1	36
22	Simulating Nanoscale Heat Transport. , 2015, , 1-12.		0
23	Toward phonon-boundary engineering in nanoporous materials. Applied Physics Letters, 2014, 105, .	3.3	42
24	Mesoscale modeling of phononic thermal conductivity of porous Si: interplay between porosity, morphology and surface roughness. Journal of Computational Electronics, 2012, 11, 8-13.	2.5	32
25	Piezoelectric potential in vertically aligned nanowires for high output nanogenerators. Nanotechnology, 2011, 22, 465401.	2.6	159
26	The Multiscale Paradigm in Electronic Device Simulation. IEEE Transactions on Electron Devices, 2011, 58, 1425-1432.	3.0	97
27	Simulation of Inelastic Scattering in Molecular Junctions: Application to Inelastic Electron Tunneling Spectroscopy and Dissipation Effects. Journal of Computational and Theoretical Nanoscience, 2010, 7, 2512-2526.	0.4	2
28	Heating and cooling mechanisms in single-molecule junctions. Physical Review B, 2010, 81, .	3.2	37
29	Handshaking multiscale thermal model of nanostructured devices. , 2010, , .		1
30	TiberCAD: towards multiscale simulation of optoelectronic devices. Optical and Quantum Electronics, 2008, 40, 1077-1083.	3.3	25
31	Joule heating in molecular tunnel junctions: application to C60. Journal of Computational Electronics, 2008, 7, 384-389.	2.5	6
32	Electronâ€"phonon scattering in molecular electronics: from inelastic electron tunnelling spectroscopy to heating effects. New Journal of Physics, 2008, 10, 065020.	2.9	24
33	Modeling of Dissipative Transport in Molecular Systems. , 2007, , .		0