Ilaria Zardo

List of Publications by Year
in descending order

51 papers	2,385 citations	236925 25 h-index	223800 46 g-index
51 all docs	51 docs citations	51 times ranked	2884 citing authors

#	Article	IF	Citations
1	Spatially mapping thermal transport in graphene by an opto-thermal method. Npj 2D Materials and Applications, 2022, 6, .	7.9	6
2	Unveiling Planar Defects in Hexagonal Group IV Materials. Nano Letters, 2021, 21, 3619-3625.	9.1	8
3	Low-Charge-Noise Nitrogen-Vacancy Centers in Diamond Created Using Laser Writing with a Solid-Immersion Lens. ACS Photonics, 2021, 8, 1726-1734.	6.6	28
4	Morphological and stoichiometric optimization of Cu2O thin films by deposition conditions and post-growth annealing. Thin Solid Films, 2021, 732, 138763.	1.8	12
5	Addressing Crystal Structure in Semiconductor Nanowires by Polarized Raman Spectroscopy. , 2021, , 307-348.		3
6	New insights in the lattice dynamics of monolayers, bilayers, and trilayers of WSe₂ and unambiguous determination of few-layer-flakesâ€™ thickness. 2D Materials, 2020, 7, 025004.	4.4	10
7	Measuring the Optical Absorption of Single Nanowires. Physical Review Applied, 2020, 14, .	3.8	19
8	Probing Lattice Dynamics and Electronic Resonances in Hexagonal Ge and Si_{<i>x</i>}Ge_{1â€“<i>x</i>} Alloys in Nanowires by Raman Spectroscopy. ACS Nano, 2020, 14, 6845-6856.	14.6	17
9	Experimental demonstration of the suppression of optical phonon splitting in 2D materials by Raman spectroscopy. 2D Materials, 2020, 7, 035017.	4.4	11
10	Ballistic Phonons in Ultrathin Nanowires. Nano Letters, 2020, 20, 2703-2709.	9.1	30
11	Quasi One-Dimensional Metalâ€“Semiconductor Heterostructures. Nano Letters, 2019, 19, 3892-3897.	9.1	7
12	Phonon Engineering in Twinning Superlattice Nanowires. Nano Letters, 2019, 19, 4702-4711.	9.1	31
13	Manipulating phonons at the nanoscale: Impurities and boundaries. Current Opinion in Green and Sustainable Chemistry, 2019, 17, 1-7.	5.9	9
14	Single-step Au-catalysed synthesis and microstructural characterization of coreâ€“shell Ge/Inâ€“Te nanowires by MOCVD. Materials Research Letters, 2018, 6, 29-35.	8.7	5
15	Thermal rectification. , 2018, , .		0
16	Special issue on thermoelectric properties of nanostructured materials. Journal Physics D: Applied Physics, 2018, 51, 430301.	2.8	1
17	Crystalline, Phononic, and Electronic Properties of Heterostructured Polytypic Ge Nanowires by Raman Spectroscopy. Nano Letters, 2018, 18, 7075-7084.	9.1	32
18	Nanowires for heat conversion. Journal Physics D: Applied Physics, 2018, 51, 353001.	2.8	24

#	ARTICLE	IF	CITATIONS
19	Effects of dielectric stoichiometry on the photoluminescence properties of encapsulated WSe2 monolayers. Nano Research, 2018, 11, 1399-1414.	10.4	12
20	A review on IIIâ€“V coreâ€“multishell nanowires: growth, properties, and applications. Journal Physics D: Applied Physics, 2017, 50, 143001.	2.8	63
21	Surfaceâ€directed molecular assembly of pentacene on aromatic organophosphonate selfâ€assembled monolayers explored by polarized Raman spectroscopy. Journal of Raman Spectroscopy, 2017, 48, 235-242.	2.5	5
22	Optical study of the band structure of wurtzite GaP nanowires. Journal of Applied Physics, 2016, 120, .	2.5	34
23	Assessing the thermoelectric properties of single InSb nanowires: the role of thermal contact resistance. Semiconductor Science and Technology, 2016, 31, 064001.	2.0	19
24	Complete thermoelectric benchmarking of individual InSb nanowires using combined micro-Raman and electric transport analysis. Nano Research, 2015, 8, 4048-4060.	10.4	32
25	Diameter dependence of the thermal conductivity of InAs nanowires. Nanotechnology, 2015, 26, 385401.	2.6	45
26	Hexagonal Silicon Realized. Nano Letters, 2015, 15, 5855-5860.	9.1	142
27	Direct band gap wurtzite GaP nanowires for LEDs and quantum devices. Proceedings of SPIE, 2014, , .	0.8	0
28	Valence Band Splitting in Wurtzite InGaAs Nanoneedles Studied by Photoluminescence Excitation Spectroscopy. ACS Nano, 2014, 8, 11440-11446.	14.6	10
29	Pressure dependence of Raman spectrum in InAs nanowires. Journal of Physics Condensed Matter, 2014, 26, 235301.	1.8	6
30	Wurtzite Gallium Phosphide has a direct-band gap. , 2013, , .		2
31	High Mobility One- and Two-Dimensional Electron Systems in Nanowire-Based Quantum Heterostructures. Nano Letters, 2013, 13, 6189-6196.	9.1	56
32	Spontaneous Alloy Composition Ordering in GaAs-AlGaAs Coreâ€“Shell Nanowires. Nano Letters, 2013, 13, 1522-1527.	9.1	116
33	Direct Band Gap Wurtzite Gallium Phosphide Nanowires. Nano Letters, 2013, 13, 1559-1563.	9.1	262
34	Role of microstructure on optical properties in high-uniformity In<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>âˆ’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>Ga<mml: xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>As nanowire arrays: Evidence of a wider wurtzite band gap. Physical Review B, 2013, 87, .	3.2	46
35	E₁(A) Electronic Band Gap in Wurtzite InAs Nanowires Studied by Resonant Raman Scattering. Nano Letters, 2013, 13, 3011-3016.	9.1	32
36	Crystal Phase Induced Bandgap Modifications in AlAs Nanowires Probed by Resonant Raman Spectroscopy. ACS Nano, 2013, 7, 1400-1407.	14.6	21

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37	High compositional homogeneity in In-rich InGaAs nanowire arrays on nanoimprinted SiO₂/Si (111). Applied Physics Letters, 2012, 101, 043116.	3.3	54
38	Pressure Tuning of the Optical Properties of GaAs Nanowires. ACS Nano, 2012, 6, 3284-3291.	14.6	43
39	Crystal Structure Transfer in Core/Shell Nanowires. Nano Letters, 2011, 11, 1690-1694.	9.1	93
40	Local modification of GaAs nanowires induced by laser heating. Nanotechnology, 2011, 22, 325701.	2.6	33
41	Effects of stacking variations on the lattice dynamics of InAs nanowires. Physical Review B, 2011, 84, .	3.2	39
42	Growth study of indium-catalyzed silicon nanowires by plasma enhanced chemical vapor deposition. Applied Physics A: Materials Science and Processing, 2010, 100, 287-296.	2.3	49
43	Thermal conductivity of GaAs nanowires studied by micro-Raman spectroscopy combined with laser heating. Applied Physics Letters, 2010, 97, .	3.3	96
44	Spatially resolved Raman spectroscopy on indium-catalyzed coreâ€“shell germanium nanowires: size effects. Nanotechnology, 2010, 21, 105703.	2.6	13
45	Defect Formation in Ga-Catalyzed Silicon Nanowires. Crystal Growth and Design, 2010, 10, 1534-1543.	3.0	46
46	Pressure induced phase separation in optimally doped bilayer manganites. Applied Physics Letters, 2009, 94, .	3.3	10
47	Gallium assisted plasma enhanced chemical vapor deposition of silicon nanowires. Nanotechnology, 2009, 20, 155602.	2.6	68
48	Single crystalline and coreâ€“shell indium-catalyzed germanium nanowiresâ€”a systematic thermal CVD growth study. Nanotechnology, 2009, 20, 245608.	2.6	25
49	Raman spectroscopy of wurtzite and zinc-blende GaAs nanowires: Polarization dependence, selection rules, and strain effects. Physical Review B, 2009, 80, .	3.2	222
50	Structural and optical properties of high quality zinc-blende/wurtzite GaAs nanowire heterostructures. Physical Review B, 2009, 80, .	3.2	434
51	Raman Spectroscopy on Semiconductor Nanowires. , 0, , .		4