Sonia Conesa-Boj

List of Publications by Year
in descending order

59 papers	3,080 citations	186265 28 h-index	175258 52 g-index
59 all docs	59 docs citations	59 times ranked	3516 citing authors

#	Article	IF	Citations
1	Structural and optical properties of high quality zinc-blende/wurtzite GaAs nanowire heterostructures. Physical Review B, 2009, 80, .	3.2	434
2	Self-assembled quantum dots in a nanowire system for quantum photonics. Nature Materials, 2013, 12, 439-444.	27.5	306
3	Raman spectroscopy of wurtzite and zinc-blende GaAs nanowires: Polarization dependence, selection rules, and strain effects. Physical Review B, 2009, 80, .	3.2	222
4	Direct correlation of crystal structure and optical properties in wurtzite/zinc-blende GaAs nanowire heterostructures. Physical Review B, 2011, 83, .	3.2	193
5	Ballistic superconductivity in semiconductor nanowires. Nature Communications, 2017, 8, 16025.	12.8	181
6	Hexagonal Silicon Realized. Nano Letters, 2015, 15, 5855-5860.	9.1	142
7	Plasma-enhanced low temperature growth of silicon nanowires and hierarchical structures by using tin and indium catalysts. Nanotechnology, 2009, 20, 225604.	2.6	110
8	Hard Superconducting Gap in InSb Nanowires. Nano Letters, 2017, 17, 2690-2696.	9.1	103
9	Long range epitaxial growth of prismatic heterostructures on the facets of catalyst-free GaAs nanowires. Journal of Materials Chemistry, 2009, 19, 840.	6.7	88
10	Gold-Free Ternary IIIâ€“V Antimonide Nanowire Arrays on Silicon: Twin-Free down to the First Bilayer. Nano Letters, 2014, 14, 326-332.	9.1	88
11	IIIâ€“V nanowire arrays: growth and light interaction. Nanotechnology, 2014, 25, 014015.	2.6	87
12	Modulation Doping of GaAs/AlGaAs Coreâ€“Shell Nanowires With Effective Defect Passivation and High Electron Mobility. Nano Letters, 2015, 15, 1336-1342.	9.1	78
13	Catalyst-free nanowires with axial In_xGa_{1â^’x}As/GaAs heterostructures. Nanotechnology, 2009, 20, 075603.	2.6	70
14	Gallium assisted plasma enhanced chemical vapor deposition of silicon nanowires. Nanotechnology, 2009, 20, 155602.	2.6	68
15	Analysis of the Atomic Layer Deposited Al2O3 field-effect passivation in black silicon. Solar Energy Materials and Solar Cells, 2015, 142, 29-33.	6.2	61
16	Single-Crystalline Hexagonal Siliconâ€“Germanium. Nano Letters, 2017, 17, 85-90.	9.1	59
17	Exciton localization mechanisms in wurtzite/zinc-blende GaAs nanowires. Physical Review B, 2013, 87, .	3.2	53
18	Boosting Hole Mobility in Coherently Strained [110]-Oriented Geâ€“Si Coreâ€“Shell Nanowires. Nano Letters, 2017, 17, 2259-2264.	9.1	51

#	Article	IF	Citations
19	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
20	Carrier confinement in GaN/Al<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>Ga<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>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>N		

#	Article	IF	Citations
37	Illuminating the Electronic Properties of WS₂ Polytypism with Electron Microscopy. Annalen Der Physik, 2021, 533, 2000499.	2.4	14
38	Quantum dots in the GaAs/AlxGa1â^'xAs core-shell nanowires: Statistical occurrence as a function of the shell thickness. Applied Physics Letters, 2015, 107, .	3.3	13
39	Charting the low-loss region in electron energy loss spectroscopy with machine learning. Ultramicroscopy, 2021, 222, 113202.	1.9	11
40	Metallic edge states in zig-zag vertically-oriented MoS2 nanowalls. Scientific Reports, 2019, 9, 15602.	3.3	10
41	Growth mechanisms and process window for InAs V-shaped nanoscale membranes on Si[001]. Nanotechnology, 2013, 24, 435603.	2.6	9
42	InSb Nanowires with Built-In Ga_xIn_{1â€“x}Sb Tunnel Barriers for Majorana Devices. Nano Letters, 2017, 17, 721-727.	9.1	9
43	Lock-in Ultrafast Electron Microscopy Simultaneously Visualizes Carrier Recombination and Interface-Mediated Trapping. Journal of Physical Chemistry Letters, 2020, 11, 8880-8886.	4.6	9
44	Robust Sample Preparation of Large-Area In- and Out-of-Plane Cross Sections of Layered Materials with Ultramicrotomy. ACS Applied Materials & Interfaces, 2020, 12, 15867-15874.	8.0	8
45	First-Principles Calculation of Optoelectronic Properties in 2D Materials: The Polytypic WS₂ Case. ACS Physical Chemistry Au, 2022, 2, 191-198.	4.0	7
46	Spatially Resolved Band Gap and Dielectric Function in Two-Dimensional Materials from Electron Energy Loss Spectroscopy. Journal of Physical Chemistry A, 2022, 126, 1255-1262.	2.5	6
47	Bottom-up engineering of InAs at the nanoscale: From V-shaped nanomembranes to nanowires. Journal of Crystal Growth, 2015, 420, 47-56.	1.5	5
48	Molybdenum nanopillar arrays: Fabrication and engineering. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 134, 114903.	2.7	5
49	Probing inhomogeneous composition in core/shell nanowires by Raman spectroscopy. Journal of Applied Physics, 2014, 116, 184303.	2.5	4
50	Morphology-induced spectral modification of self-assembled WS₂ pyramids. Nanoscale Advances, 2021, 3, 6427-6437.	4.6	3
51	Positionâ€Controlled Fabrication of Vertically Aligned Mo/MoS₂ Coreâ€“Shell Nanopillar Arrays. Advanced Functional Materials, 2022, 32, 2107880.	14.9	3
52	Hybrid IIIâ€“V/Silicon Nanowires. Semiconductors and Semimetals, 2015, 93, 231-248.	0.7	1
53	(S)TEM tomography of AlAs-GaAs coaxial Nanowires. , 2009, , .		0
54	GaN/AlN Axial Multi Quantum Well Nanowires for Optoelectronic Devices. , 2009, , .		0

#	Article	IF	Citations
55	Advanced Electron Microscopy Techniques on Semiconductor Nanowires: from Atomic Density of States Analysis to 3D Reconstruction Models. , 2010, , .		0
56	Single Material Band Gap Engineering in GaAs Nanowires. , 2011, , .		0
57	The power of nanowires to revolutionize solar energy. , 2014, , .		0
58	Terahertz spectroscopy of modulation doped core-shell GaAs/AlGaAs nanowires. , 2015, , .		0
59	New opportunities with nanowires. , 2016, , .		0