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	Positionâ€Controlled Fabrication of Vertically Aligned Mo/MoS₂ Coreâ€“Shell Nanopillar Arrays. Advanced Functional Materials, 2022, 32, 2107880.	14.9	3
2	First-Principles Calculation of Optoelectronic Properties in 2D Materials: The Polytypic WS₂ Case. ACS Physical Chemistry Au, 2022, 2, 191-198.	4.0	7
3	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
4	Morphology-induced spectral modification of self-assembled WS₂ pyramids. Nanoscale Advances, 2021, 3, 6427-6437.	4.6	3
5	Illuminating the Electronic Properties of WS₂ Polytypism with Electron Microscopy. Annalen Der Physik, 2021, 533, 2000499.	2.4	14
6	Charting the low-loss region in electron energy loss spectroscopy with machine learning. Ultramicroscopy, 2021, 222, 113202.	1.9	11
7	Molybdenum nanopillar arrays: Fabrication and engineering. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 134, 114903.	2.7	5
8	Vertically-oriented MoS₂ nanosheets for nonlinear optical devices. Nanoscale, 2020, 12, 10491-10497.	5.6	28
9	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
10	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
11	Metallic edge states in zig-zag vertically-oriented MoS2 nanowalls. Scientific Reports, 2019, 9, 15602.	3.3	10
12	Boosting Hole Mobility in Coherently Strained [110]-Oriented Geâ€“Si Coreâ€“Shell Nanowires. Nano Letters, 2017, 17, 2259-2264.	9.1	51
13	Towards higher electron mobility in modulation doped GaAs/AlGaAs core shell nanowires. Nanoscale, 2017, 9, 7839-7846.	5.6	15
14	Hard Superconducting Gap in InSb Nanowires. Nano Letters, 2017, 17, 2690-2696.	9.1	103
15	Single-Crystalline Hexagonal Siliconâ€“Germanium. Nano Letters, 2017, 17, 85-90.	9.1	59
16	Strain-Dependent Edge Structures in MoS₂ Layers. Nano Letters, 2017, 17, 7021-7026.	9.1	40
17	Photon bunching reveals single-electron cathodoluminescence excitation efficiency in InGaN quantum wells. Physical Review B, 2017, 96, .	3.2	33
18	Ballistic superconductivity in semiconductor nanowires. Nature Communications, 2017, 8, 16025.	12.8	181

#	Article	IF	Citations
19	InSb Nanowires with Built-In Ga_{<i>x</i>}In_{1â€“<i>x</i>}Sb Tunnel Barriers for Majorana Devices. Nano Letters, 2017, 17, 721-727.	9.1	9
20	Synthesis, Morphological, and Electro-optical Characterizations of Metal/Semiconductor Nanowire Heterostructures. Nano Letters, 2016, 16, 3507-3513.	9.1	14
21	New opportunities with nanowires. , 2016, , .		0
22	Hybrid IIIâ€“V/Silicon Nanowires. Semiconductors and Semimetals, 2015, 93, 231-248.	0.7	1
23	Terahertz spectroscopy of modulation doped core-shell GaAs/AlGaAs nanowires. , 2015, , .		0
24	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
25	Hexagonal Silicon Realized. Nano Letters, 2015, 15, 5855-5860.	9.1	142
26	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
27	High Yield of GaAs Nanowire Arrays on Si Mediated by the Pinning and Contact Angle of Ga. Nano Letters, 2015, 15, 2869-2874.	9.1	34
28	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
29	Cracking the Si Shell Growth in Hexagonal GaP-Si Coreâ€“Shell Nanowires. Nano Letters, 2015, 15, 2974-2979.	9.1	23
30	Quantum dots in the GaAs/Al<i>x</i>Ga1âˆ’<i>x</i>As core-shell nanowires: Statistical occurrence as a function of the shell thickness. Applied Physics Letters, 2015, 107, .	3.3	13
31	Low ensemble disorder in quantum well tube nanowires. Nanoscale, 2015, 7, 20531-20538.	5.6	15
32	The power of nanowires to revolutionize solar energy. , 2014, , .		0
33	Probing inhomogeneous composition in core/shell nanowires by Raman spectroscopy. Journal of Applied Physics, 2014, 116, 184303.	2.5	4
34	IIIâ€“V nanowire arrays: growth and light interaction. Nanotechnology, 2014, 25, 014015.	2.6	87
35	Plastic and Elastic Strain Fields in GaAs/Si Coreâ€“Shell Nanowires. Nano Letters, 2014, 14, 1859-1864.	9.1	32
36	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

#	Article	IF	Citations
37	Three-dimensional nanoscale study of Al segregation and quantum dot formation in GaAs/AlGaAs core-shell nanowires. Applied Physics Letters, 2014, 105, .	3.3	45
38	Hybrid axial and radial Siâ€“GaAs heterostructures in nanowires. Nanoscale, 2013, 5, 9633.	5.6	15
39	Three-Dimensional Magneto-Photoluminescence as a Probe of the Electronic Properties of Crystal-Phase Quantum Disks in GaAs Nanowires. Nano Letters, 2013, 13, 5303-5310.	9.1	28
40	Self-assembled quantum dots in a nanowire system for quantum photonics. Nature Materials, 2013, 12, 439-444.	27.5	306
41	Exciton localization mechanisms in wurtzite/zinc-blende GaAs nanowires. Physical Review B, 2013, 87, .	3.2	53
42	Raman spectroscopy of self-catalyzed GaAs_{1â^’<i>x</i>}Sb_{<i>x</i>}nanowires grown on silicon. Nanotechnology, 2013, 24, 405707.	2.6	37
43	Growth mechanisms and process window for InAs V-shaped nanoscale membranes on Si[001]. Nanotechnology, 2013, 24, 435603.	2.6	9
44	Vertical â€œIIIâ€“Vâ€•V-Shaped Nanomembranes Epitaxially Grown on a Patterned Si[001] Substrate and Their Enhanced Light Scattering. ACS Nano, 2012, 6, 10982-10991.	14.6	41
45	Direct correlation of crystal structure and optical properties in wurtzite/zinc-blende GaAs nanowire heterostructures. Physical Review B, 2011, 83, .	3.2	193
46	Single Material Band Gap Engineering in GaAs Nanowires. , 2011, , .		0
47	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
55	Raman spectroscopy of wurtzite and zinc-blende GaAs nanowires: Polarization dependence, selection rules, and strain effects. Physical Review B, 2009, 80, .	3.2	222
56	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
57	Plasma-enhanced low temperature growth of silicon nanowires and hierarchical structures by using tin and indium catalysts. Nanotechnology, 2009, 20, 225604.	2.6	110
58	Structural and optical properties of high quality zinc-blende/wurtzite GaAs nanowire heterostructures. Physical Review B, 2009, 80, .	3.2	434
59	GaN/AlN Axial Multi Quantum Well Nanowires for Optoelectronic Devices. , 2009, , .		0