Anna Fontcuberta i Morral

List of Publications by Year
in descending order

193 papers	10,392 citations	28190 55 h-index	37111 96 g-index
195 all docs	195 docs citations	195 times ranked	10097 citing authors

#	Article	IF	Citations
1	Large-Area Epitaxial Monolayer MoS₂. ACS Nano, 2015, 9, 4611-4620.	7.3	712
2	Single-nanowire solar cells beyond the Shockleyâ€“Queisser limit. Nature Photonics, 2013, 7, 306-310.	15.6	708
3	Structural and optical properties of high quality zinc-blende/wurtzite GaAs nanowire heterostructures. Physical Review B, 2009, 80, .	1.1	434
4	Light Generation and Harvesting in a van der Waals Heterostructure. ACS Nano, 2014, 8, 3042-3048.	7.3	389
5	Ga-assisted catalyst-free growth mechanism of GaAs nanowires by molecular beam epitaxy. Physical Review B, 2008, 77, .	1.1	386
6	Self-assembled quantum dots in a nanowire system for quantum photonics. Nature Materials, 2013, 12, 439-444.	13.3	306
7	Gallium arsenide p-i-n radial structures for photovoltaic applications. Applied Physics Letters, 2009, 94, .	1.5	270
8	Nucleation mechanism of gallium-assisted molecular beam epitaxy growth of gallium arsenide nanowires. Applied Physics Letters, 2008, 92, .	1.5	261
9	Raman spectroscopy of wurtzite and zinc-blende GaAs nanowires: Polarization dependence, selection rules, and strain effects. Physical Review B, 2009, 80, .	1.1	222
10	Impact of surfaces on the optical properties of GaAs nanowires. Applied Physics Letters, 2010, 97, .	1.5	213
11	Direct correlation of crystal structure and optical properties in wurtzite/zinc-blende GaAs nanowire heterostructures. Physical Review B, 2011, 83, .	1.1	193
12	Polarity Assignment in ZnTe, GaAs, ZnO, and GaN-AlN Nanowires from Direct Dumbbell Analysis. Nano Letters, 2012, 12, 2579-2586.	4.5	161
13	Vapor Phase Growth of Semiconductor Nanowires: Key Developments and Open Questions. Chemical Reviews, 2019, 119, 8958-8971.	23.0	158
14	Influence of Cu as a catalyst on the properties of silicon nanowires synthesized by the vapourâ€“solidâ€“solid mechanism. Nanotechnology, 2007, 18, 305606.	1.3	144
15	Prismatic Quantum Heterostructures Synthesized on Molecularâ€Beam Epitaxy GaAs Nanowires. Small, 2008, 4, 899-903.	5.2	142
16	Untangling the Electronic Band Structure of Wurtzite GaAs Nanowires by Resonant Raman Spectroscopy. ACS Nano, 2011, 5, 7585-7592.	7.3	126
17	Rational strain engineering in delafossite oxides for highly efficient hydrogen evolution catalysis in acidic media. Nature Catalysis, 2020, 3, 55-63.	16.1	124
18	Three-Dimensional Multiple-Order Twinning of Self-Catalyzed GaAs Nanowires on Si Substrates. Nano Letters, 2011, 11, 3827-3832.	4.5	123

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19	P-Doping Mechanisms in Catalyst-Free Gallium Arsenide Nanowires. Nano Letters, 2010, 10, 1734-1740.	4.5	110
20	Advances in the theory of IIIâ€"V nanowire growth dynamics. Journal Physics D: Applied Physics, 2013, 46, 313001.	1.3	110
21	InAs Quantum Dot Arrays Decorating the Facets of GaAs Nanowires. ACS Nano, 2010, 4, 5985-5993.	7.3	99
22	Functional carbon nanosheets prepared from hexayne amphiphile monolayers at room temperature. Nature Chemistry, 2014, 6, 468-476.	6.6	97
23	Quantum Dot Opto-Mechanics in a Fully Self-Assembled Nanowire. Nano Letters, 2014, 14, 4454-4460.	4.5	94
24	Template-Assisted Scalable Nanowire Networks. Nano Letters, 2018, 18, 2666-2671.	4.5	92
25	Semiconductor nanowires: to grow or not to grow?. Materials Today Nano, 2020, 9, 100058.	2.3	89
26	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
27	Gold-Free Ternary IIIâ€"V Antimonide Nanowire Arrays on Silicon: Twin-Free down to the First Bilayer. Nano Letters, 2014, 14, 326-332.	4.5	88
28	Plasmonic Photodetectors. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-13.	1.9	88
29	IIIâ€"V nanowire arrays: growth and light interaction. Nanotechnology, 2014, 25, 014015.	1.3	87
30	Influence of the (111) twinning on the formation of diamond cubic/diamond hexagonal heterostructures in Cu-catalyzed Si nanowires. Journal of Applied Physics, 2008, 104, .	1.1	86
31	Vectorial scanning force microscopy using a nanowire sensor. Nature Nanotechnology, 2017, 12, 150-155.	15.6	83
32	Plasmonic Waveguide-Integrated Nanowire Laser. Nano Letters, 2017, 17, 747-754.	4.5	80
33	Cantilever Magnetometry of Individual Ni Nanotubes. Nano Letters, 2012, 12, 6139-6144.	4.5	78
34	Modulation Doping of GaAs/AlGaAs Coreâ€"Shell Nanowires With Effective Defect Passivation and High Electron Mobility. Nano Letters, 2015, 15, 1336-1342.	4.5	78
35	Suppression of three dimensional twinning for a 100% yield of vertical GaAs nanowires on silicon. Nanoscale, 2012, 4, 1486.	2.8	73
36	Photonicâ€"Plasmonic Coupling of GaAs Single Nanowires to Optical Nanoantennas. Nano Letters, 2014, 14, 2271-2278.	4.5	73

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37	Magnetic states of an individual Ni nanotube probed by anisotropic magnetoresistance. Nanoscale, 2012, 4, 4989.	2.8	71
38	Catalyst-free nanowires with axial In_{<i>x</i>}Ga_{1âˆ’<i>x</i>}As<i>/</i>GaAs heterostructures. Nanotechnology, 2009, 20, 075603.	1.3	70
39	Field-effect passivation on silicon nanowire solar cells. Nano Research, 2015, 8, 673-681.	5.8	69
40	Observation of Incubation Times in the Nucleation of Silicon Nanowires Obtained by the Vapor-Liquid-Solid Method. Japanese Journal of Applied Physics, 2006, 45, L190-L193.	0.8	68
41	Gallium assisted plasma enhanced chemical vapor deposition of silicon nanowires. Nanotechnology, 2009, 20, 155602.	1.3	68
42	Position controlled self-catalyzed growth of GaAs nanowires by molecular beam epitaxy. Nanotechnology, 2010, 21, 435601.	1.3	67
43	InGaAs/InP double heterostructures on InP/Si templates fabricated by wafer bonding and hydrogen-induced exfoliation. Applied Physics Letters, 2003, 83, 5413-5415.	1.5	66
44	Size and environment dependence of surface phonon modes of gallium arsenide nanowires as measured by Raman spectroscopy. Nanotechnology, 2008, 19, 435704.	1.3	66
45	A review of MBE grown 0D, 1D and 2D quantum structures in a nanowire. Journal of Materials Chemistry C, 2013, 1, 4300.	2.7	66
46	Wetting of Ga on SiO_{<i>x</i>} and Its Impact on GaAs Nanowire Growth. Crystal Growth and Design, 2015, 15, 3105-3109.	1.4	65
47	Increased Photoconductivity Lifetime in GaAs Nanowires by Controlled n-Type and p-Type Doping. ACS Nano, 2016, 10, 4219-4227.	7.3	62
48	Bistability of Contact Angle and Its Role in Achieving Quantum-Thin Self-Assisted GaAs nanowires. Nano Letters, 2018, 18, 49-57.	4.5	62
49	Mobility and carrier density in p-type GaAs nanowires measured by transmission Raman spectroscopy. Nanoscale, 2012, 4, 1789.	2.8	60
50	Reversal Mechanism of an Individual Ni Nanotube Simultaneously Studied by Torque and SQUID Magnetometry. Physical Review Letters, 2013, 111, 067202.	2.9	59
51	Doping incorporation paths in catalyst-free Be-doped GaAs nanowires. Applied Physics Letters, 2013, 102, .	1.5	58
52	An Electrically-Driven GaAs Nanowire Surface Plasmon Source. Nano Letters, 2012, 12, 4943-4947.	4.5	57
53	Valence band structure of polytypic zinc-blende/wurtzite GaAs nanowires probed by polarization-dependent photoluminescence. Physical Review B, 2012, 85, .	1.1	57
54	Tailoring the diameter and density of self-catalyzed GaAs nanowires on silicon. Nanotechnology, 2015, 26, 105603.	1.3	57

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55	Determination of the band gap and the split-off band in wurtzite GaAs using Raman and photoluminescence excitation spectroscopy. Physical Review B, 2011, 83, .	1.1	56
56	From Twinning to Pure Zincblende Catalyst-Free InAs(Sb) Nanowires. Nano Letters, 2016, 16, 637-643.	4.5	56
57	Gold-Free GaAs Nanowire Synthesis and Optical Properties. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 819-828.	1.9	55
58	General theoretical considerations on nanowire solar cell designs. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 173-178.	0.8	52
59	Growth study of indium-catalyzed silicon nanowires by plasma enhanced chemical vapor deposition. Applied Physics A: Materials Science and Processing, 2010, 100, 287-296.	1.1	49
60	Fundamental aspects to localize self-catalyzed III-V nanowires on silicon. Nature Communications, 2019, 10, 869.	5.8	49
61	In(Ga)As quantum dot formation on group-III assisted catalyst-free InGaAs nanowires. Nanotechnology, 2011, 22, 195601.	1.3	48
62	Engineering the Size Distributions of Ordered GaAs Nanowires on Silicon. Nano Letters, 2017, 17, 4101-4108.	4.5	47
63	Defect Formation in Ga-Catalyzed Silicon Nanowires. Crystal Growth and Design, 2010, 10, 1534-1543.	1.4	46
64	Towards defect-free 1-D GaAs/AlGaAs heterostructures based on GaAs nanomembranes. Nanoscale, 2015, 7, 19453-19460.	2.8	46
65	Fundamental limits in the external quantum efficiency of single nanowire solar cells. Applied Physics Letters, 2011, 99, 263102.	1.5	45
66	Three-dimensional nanoscale study of Al segregation and quantum dot formation in GaAs/AlGaAs core-shell nanowires. Applied Physics Letters, 2014, 105, .	1.5	45
67	Ga-assisted growth of GaAs nanowires on silicon, comparison of surface SiOx of different nature. Journal of Crystal Growth, 2014, 404, 246-255.	0.7	44
68	Compensation mechanism in silicon-doped gallium arsenide nanowires. Applied Physics Letters, 2010, 97, .	1.5	43
69	Pressure Tuning of the Optical Properties of GaAs Nanowires. ACS Nano, 2012, 6, 3284-3291.	7.3	43
70	Growth mechanisms and optical properties of GaAs-based semiconductor microstructures by selective area epitaxy. Journal of Crystal Growth, 2008, 310, 1049-1056.	0.7	42
71	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.	7.3	41
72	Strain-Induced Band Gap Engineering in Selectively Grown GaNâ€"(Al,Ga)N Coreâ€"Shell Nanowire Heterostructures. Nano Letters, 2016, 16, 7098-7106.	4.5	41

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73	Hybrid Semiconductor Nanowireâ€"Metallic Yagi-Uda Antennas. Nano Letters, 2015, 15, 4889-4895.	4.5	39
74	Impact of the Ga Droplet Wetting, Morphology, and Pinholes on the Orientation of GaAs Nanowires. Crystal Growth and Design, 2016, 16, 5781-5786.	1.4	38
75	Raman spectroscopy of self-catalyzed GaAs_{1âˆ’<i>x</i>}Sb_{<i>x</i>}nanowires grown on silicon. Nanotechnology, 2013, 24, 405707.	1.3	37
76	Enhancement of Second Harmonic Signal in Nanofabricated Cones. Nano Letters, 2013, 13, 6048-6054.	4.5	35
77	Low-Temperature Preparation of Tailored Carbon Nanostructures in Water. Nano Letters, 2012, 12, 2573-2578.	4.5	34
78	High Yield of GaAs Nanowire Arrays on Si Mediated by the Pinning and Contact Angle of Ga. Nano Letters, 2015, 15, 2869-2874.	4.5	34
79	Conductive-probe atomic force microscopy as a characterization tool for nanowire-based solar cells. Nano Energy, 2017, 41, 566-572.	8.2	34
80	Plastic and Elastic Strain Fields in GaAs/Si Coreâ€"Shell Nanowires. Nano Letters, 2014, 14, 1859-1864.	4.5	32
81	Dynamic cantilever magnetometry of individual CoFeB nanotubes. Physical Review B, 2016, 93, .	1.1	32
82	Imaging Stray Magnetic Field of Individual Ferromagnetic Nanotubes. Nano Letters, 2018, 18, 964-970.	4.5	32
83	Doping challenges and pathways to industrial scalability of IIIâ€"V nanowire arrays. Applied Physics Reviews, 2021, 8, .	5.5	32
84	High Electron Mobility and Insights into Temperature-Dependent Scattering Mechanisms in InAsSb Nanowires. Nano Letters, 2018, 18, 3703-3710.	4.5	31
85	Optimizing the yield of A-polar GaAs nanowires to achieve defect-free zinc blende structure and enhanced optical functionality. Nanoscale, 2018, 10, 17080-17091.	2.8	31
86	The Role of Polarity in Nonplanar Semiconductor Nanostructures. Nano Letters, 2019, 19, 3396-3408.	4.5	31
87	Growth kinetics and morphological analysis of homoepitaxial GaAs fins by theory and experiment. Physical Review Materials, 2018, 2, .	0.9	31
88	Bandgap engineering in a nanowire: self-assembled 0, 1 and 2D quantum structures. Materials Today, 2013, 16, 213-219.	8.3	30
89	Free standing modulation doped coreâ€"shell GaAs/AlGaAs heteroâ€nanowires. Physica Status Solidi - Rapid Research Letters, 2011, 5, 353-355.	1.2	29
90	Anisotropic magnetoresistance of individual CoFeB and Ni nanotubes with values of up to 1.4% at room temperature. APL Materials, 2014, 2, .	2.2	29

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91	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.	4.5	28
92	Visual Understanding of Light Absorption and Waveguiding in Standing Nanowires with 3D Fluorescence Confocal Microscopy. ACS Photonics, 2017, 4, 2235-2241.	3.2	28
93	Efficient Multiterminal Spectrum Splitting via a Nanowire Array Solar Cell. ACS Photonics, 2015, 2, 1284-1288.	3.2	26
94	Nanowire-Aperture Probe: Local Enhanced Fluorescence Detection for the Investigation of Live Cells at the Nanoscale. ACS Photonics, 2016, 3, 1208-1216.	3.2	26
95	Synthesis parameter space of bismuth catalyzed germanium nanowires. Applied Physics Letters, 2009, 94, .	1.5	25
96	Single crystalline and coreâ€“shell indium-catalyzed germanium nanowiresâ€”a systematic thermal CVD growth study. Nanotechnology, 2009, 20, 245608.	1.3	25
97	Characterization and analysis of InAs/pâ€“Si heterojunction nanowire-based solar cell. Journal Physics D: Applied Physics, 2014, 47, 394017.	1.3	25
98	Nanoskiving Coreâ€“Shell Nanowires: A New Fabrication Method for Nano-optics. Nano Letters, 2014, 14, 524-531.	4.5	25
99	Imaging magnetic vortex configurations in ferromagnetic nanotubes. Physical Review B, 2017, 96, .	1.1	25
100	The use of molecular beam epitaxy for the synthesis of high purity IIIâ€“V nanowires. Journal of Physics Condensed Matter, 2008, 20, 454225.	0.7	24
101	Engineering light absorption in single-nanowire solar cells with metal nanoparticles. New Journal of Physics, 2011, 13, 123026.	1.2	24
102	Effect of the <i>pn</i> junction engineering on Si microwireâ€array solar cells. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 1588-1591.	0.8	24
103	Tuning growth direction of catalyst-free InAs(Sb) nanowires with indium droplets. Nanotechnology, 2017, 28, 054001.	1.3	24
104	IIIâ€“V Integration on Si(100): Vertical Nanospades. ACS Nano, 2019, 13, 5833-5840.	7.3	24
105	van der Waals Epitaxy of Earth-Abundant Zn₃P₂ on Graphene for Photovoltaics. Crystal Growth and Design, 2020, 20, 3816-3825.	1.4	24
106	Cracking the Si Shell Growth in Hexagonal GaP-Si Coreâ€“Shell Nanowires. Nano Letters, 2015, 15, 2974-2979.	4.5	23
107	Modulation of Fluorescence Signals from Biomolecules along Nanowires Due to Interaction of Light with Oriented Nanostructures. Nano Letters, 2015, 15, 176-181.	4.5	22
108	Observation of end-vortex nucleation in individual ferromagnetic nanotubes. Physical Review B, 2018, 97, .	1.1	22

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109	Quantitative Nanoscale Absorption Mapping: A Novel Technique To Probe Optical Absorption of Two-Dimensional Materials. Nano Letters, 2020, 20, 567-576.	4.5	22
110	Exciton footprint of self-assembled AlGaAs quantum dots in core-shell nanowires. Physical Review B, 2014, 90, .	1.1	21
111	Magnetization reversal of an individual exchange-biased permalloy nanotube. Physical Review B, 2015, 92, .	1.1	21
112	Measuring the Optical Absorption of Single Nanowires. Physical Review Applied, 2020, 14, .	1.5	19
113	Morphology and composition of oxidized InAs nanowires studied by combined Raman spectroscopy and transmission electron microscopy. Nanotechnology, 2016, 27, 305704.	1.3	18
114	Revealing Large-Scale Homogeneity and Trace Impurity Sensitivity of GaAs Nanoscale Membranes. Nano Letters, 2017, 17, 2979-2984.	4.5	18
115	Dopant-Induced Modifications of Ga<i>_x</i>In_(1â€“<i>x</i>)P Nanowire-Based pâ€“n Junctions Monolithically Integrated on Si(111). ACS Applied Materials & Interfaces, 2018, 10, 32588-32596.	4.0	18
116	Simultaneous Selective Area Growth of Wurtzite and Zincblende Self-Catalyzed GaAs Nanowires on Silicon. Nano Letters, 2021, 21, 3139-3145.	4.5	18
117	Polarization response of nanowires Ã la carte. Scientific Reports, 2015, 5, 7651.	1.6	17
118	Phonon confinement and plasmon-phonon interaction in nanowire-based quantum wells. Physical Review B, 2011, 83, .	1.1	16
119	Magnetization reversal in individual Py and CoFeB nanotubes locally probed via anisotropic magnetoresistance and anomalous Nernst effect. Applied Physics Letters, 2016, 108, .	1.5	16
120	Controlled synthesis of InAs wires, dot and twin-dot array configurations by cleaved edge overgrowth. Nanotechnology, 2008, 19, 045303.	1.3	15
121	Hybrid axial and radial Siâ€“GaAs heterostructures in nanowires. Nanoscale, 2013, 5, 9633.	2.8	15
122	Electrical transport in Câ€doped GaAs nanowires: surface effects. Physica Status Solidi - Rapid Research Letters, 2013, 7, 890-893.	1.2	15
123	Towards higher electron mobility in modulation doped GaAs/AlGaAs core shell nanowires. Nanoscale, 2017, 9, 7839-7846.	2.8	15
124	Highly sensitive piezotronic pressure sensors based on undoped GaAs nanowire ensembles. Journal Physics D: Applied Physics, 2019, 52, 294002.	1.3	15
125	Multiple morphologies and functionality of nanowires made from earth-abundant zinc phosphide. Nanoscale Horizons, 2020, 5, 274-282.	4.1	15
126	Synthesis, Morphological, and Electro-optical Characterizations of Metal/Semiconductor Nanowire Heterostructures. Nano Letters, 2016, 16, 3507-3513.	4.5	14

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127	Plasma-Enhanced Atomic Layer Deposition of Nickel Nanotubes with Low Resistivity and Coherent Magnetization Dynamics for 3D Spintronics. ACS Applied Materials & Interfaces, 2020, 12, 40443-40452.	4.0	14
128	Supercooling of nanoscale Ga drops with controlled impurity levels. Physical Review B, 2011, 84, .	1.1	13
129	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, .	1.5	13
130	Coherent Two-Mode Dynamics of a Nanowire Force Sensor. Physical Review Applied, 2018, 9, .	1.5	13
131	Thermodynamic re-assessment of the Znâ€“P binary system. Materialia, 2019, 6, 100301.	1.3	13
132	Remote Doping of Scalable Nanowire Branches. Nano Letters, 2020, 20, 3577-3584.	4.5	13
133	Towards defect-free thin films of the earth-abundant absorber zinc phosphide by nanopatterning. Nanoscale Advances, 2021, 3, 326-332.	2.2	13
134	Photophysics behind highly luminescent two-dimensional hybrid perovskite (CH3(CH2)2NH3)2(CH3NH3)2Pb3Br10 thin films. Journal of Materials Chemistry C, 2018, 6, 6216-6221.	2.7	12
135	GaAs nanoscale membranes: prospects for seamless integration of IIIâ€“Vs on silicon. Nanoscale, 2020, 12, 815-824.	2.8	12
136	Time-resolved open-circuit conductive atomic force microscopy for direct electromechanical characterisation. Nanotechnology, 2020, 31, 404003.	1.3	11
137	Segregation scheme of indium in AlGaInAs nanowire shells. Physical Review Materials, 2019, 3, .	0.9	11
138	Polymer Brush Guided Formation of Conformal, Plasmonic Nanoparticleâ€Based Electrodes for Microwire Solar Cells. Advanced Functional Materials, 2015, 25, 3958-3965.	7.8	10
139	Anisotropic-Strain-Induced Band Gap Engineering in Nanowire-Based Quantum Dots. Nano Letters, 2018, 18, 2393-2401.	4.5	10
140	3D Ordering at the Liquidâ€“Solid Polar Interface of Nanowires. Advanced Materials, 2020, 32, e2001030.	11.1	10
141	Raman spectroscopy and lattice dynamics calculations of tetragonally-structured single crystal zinc phosphide (Zn₃P₂) nanowires. Nanotechnology, 2021, 32, 085704.	1.3	10
142	Electrical contacts to single nanowires: a scalable method allowing multiple devices on a chip. Application to a single nanowire radial p-i-n junction. International Journal of Nanotechnology, 2013, 10, 419.	0.1	9
143	Questioning liquid droplet stability on nanowire tips: from theory to experiment. Nanotechnology, 2019, 30, 285604.	1.3	9
144	Ni₈₀Fe₂₀ nanotubes with optimized spintronic functionalities prepared by atomic layer deposition. Nanoscale, 2021, 13, 13451-13462.	2.8	9

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145	Tuning the <i>g</i>-factor of neutral and charged excitons confined to self-assembled (Al,Ga)As shell quantum dots. Applied Physics Letters, 2014, 105, .	1.5	8
146	Single-Crystalline Î³-Ga₂S₃ Nanotubes via Epitaxial Conversion of GaAs Nanowires. Nano Letters, 2019, 19, 8903-8910.	4.5	8
147	Nanosails Showcasing Zn₃As₂ as an Optoelectronicâ€Grade Earth Abundant Semiconductor. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900084.	1.2	8
148	The path towards 1 Âµm monocrystalline Zn₃P₂ films on InP: substrate preparation, growth conditions and luminescence properties. JPhys Energy, 2021, 3, 034011.	2.3	8
149	Coherent Hole Transport in Selective Area Grown Ge Nanowire Networks. Nano Letters, 2022, 22, 4269-4275.	4.5	8
150	Molecular beam epitaxy of InAs nanowires in SiO2nanotube templates: challenges and prospects for integration of IIIâ€"Vs on Si. Nanotechnology, 2016, 27, 455601.	1.3	7
151	How crystals get an edge. Nature, 2016, 531, 308-309.	13.7	7
152	Tuning the response of non-allowed Raman modes in GaAs nanowires. Journal Physics D: Applied Physics, 2016, 49, 095103.	1.3	7
153	Surface Defect Passivation of Silicon Micropillars. Advanced Materials Interfaces, 2018, 5, 1800865.	1.9	7
154	Heterotwin Zn₃P₂superlattice nanowires: the role of indium insertion in the superlattice formation mechanism and their optical properties. Nanoscale, 2020, 12, 22534-22540.	2.8	7
155	Rotated domains in selective area epitaxy grown Zn₃P₂: formation mechanism and functionality. Nanoscale, 2021, 13, 18441-18450.	2.8	7
156	Showcasing the optical properties of monocrystalline zinc phosphide thin films as an earth-abundant photovoltaic absorber. Materials Advances, 2022, 3, 1295-1303.	2.6	7
157	Increasing N content in GaNAsP nanowires suppresses the impact of polytypism on luminescence. Nanotechnology, 2019, 30, 405703.	1.3	6
158	Bottom-up engineering of InAs at the nanoscale: From V-shaped nanomembranes to nanowires. Journal of Crystal Growth, 2015, 420, 47-56.	0.7	5
159	Facet-driven formation of axial and radial In(Ga)As clusters in GaAs nanowires. Journal of Optics (United Kingdom), 2020, 22, 084002.	1.0	5
160	Porous Nitride Light-Emitting Diodes. ACS Photonics, 2022, 9, 1256-1263.	3.2	5
161	Light emission properties of mechanical exfoliation induced extended defects in hexagonal boron nitride flakes. 2D Materials, 2022, 9, 035018.	2.0	5
162	Probing inhomogeneous composition in core/shell nanowires by Raman spectroscopy. Journal of Applied Physics, 2014, 116, 184303.	1.1	4

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163	Tilting Catalyst-Free InAs Nanowires by 3D-Twinning and Unusual Growth Directions. Crystal Growth and Design, 2017, 17, 3596-3605.	1.4	4
164	Extraction of p-n junction properties and series resistance in GaAs nanowire-based solar cells using light concentration. Nanotechnology, 2019, 30, 094001.	1.3	4
165	The Advantage of Nanowire Configuration in Band Structure Determination. Advanced Functional Materials, 2021, 31, 2105426.	7.8	4
166	GaAs nanowires on Si nanopillars: towards large scale, phase-engineered arrays. Nanoscale Horizons, 2022, 7, 211-219.	4.1	4
167	Strain induced lifting of the charged exciton degeneracy in monolayer MoS₂ on a GaAs nanomembrane. 2D Materials, 2022, 9, 045006.	2.0	4
168	Hartree simulations of coupled quantum Hall edge states in corner-overgrown heterostructures. Physical Review B, 2013, 87, .	1.1	3
169	Quantum Dots in Nanowires. Semiconductors and Semimetals, 2016, , 159-184.	0.4	3
170	Does desorption affect the length distributions of nanowires?. Nanotechnology, 2019, 30, 475604.	1.3	3
171	Tuning adatom mobility and nanoscale segregation by twin formation and polytypism. Nanotechnology, 2019, 30, 054006.	1.3	3
172	Optical properties and carrier dynamics in Co-doped ZnO nanorods. Nanoscale Advances, 2021, 3, 214-222.	2.2	3
173	Fabrication of Single Crystalline InSbâ€onâ€insulator by Rapid Melt Growth. Physica Status Solidi (A) Applications and Materials Science, 0, , .	0.8	3
174	Nanoscale Growth Initiation as a Pathway to Improve the Earth-Abundant Absorber Zinc Phosphide. ACS Applied Energy Materials, 2022, 5, 5298-5306.	2.5	3
175	Raman tensor of zinc-phosphide (Zn₃P₂): from polarization measurements to simulation of Raman spectra. Physical Chemistry Chemical Physics, 2021, 24, 63-72.	1.3	3
176	Excitonic absorption and defect-related emission in three-dimensional MoS₂ pyramids. Nanoscale, 2022, 14, 1179-1186.	2.8	3
177	Boron quantification, concentration mapping and picosecond excitons dynamics in High-Pressure-High-Temperature diamond by cathodoluminescence. Carbon, 2022, 191, 48-54.	5.4	3
178	Spatial Modulation of Vibrational and Luminescence Properties of Monolayer MoSâ‚‚ Using a GaAs Nanowire Array. IEEE Journal of Quantum Electronics, 2022, 58, 1-8.	1.0	3
179	Unveiling Temperature-Dependent Scattering Mechanisms in Semiconductor Nanowires Using Optical-Pump Terahertz-Probe Spectroscopy. , 2019, , .		2
180	Image shift correction, noise analysis, and model fitting of (cathodo-)luminescence hyperspectral maps. Review of Scientific Instruments, 2022, 93, 053702.	0.6	2

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