

Hannah J Joyce

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

91 papers	4,617 citations	38 h-index	67 g-index
136 ext. papers	5,292 ext. citations	8.3 avg, IF	5.04 L-index

#	Paper	IF	Citations
91	Phase perfection in zinc Blende and Wurtzite III-V nanowires using basic growth parameters. <i>Nano Letters</i> , 2010 , 10, 908-15	11.5	398
90	Twin-free uniform epitaxial GaAs nanowires grown by a two-temperature process. <i>Nano Letters</i> , 2007 , 7, 921-6	11.5	240
89	Carrier lifetime and mobility enhancement in nearly defect-free core-shell nanowires measured using time-resolved terahertz spectroscopy. <i>Nano Letters</i> , 2009 , 9, 3349-53	11.5	216
88	III-V semiconductor nanowires for optoelectronic device applications. <i>Progress in Quantum Electronics</i> , 2011 , 35, 23-75	9.1	215
87	Electronic properties of GaAs, InAs and InP nanowires studied by terahertz spectroscopy. <i>Nanotechnology</i> , 2013 , 24, 214006	3.4	205
86	Influence of nanowire density on the shape and optical properties of ternary InGaAs nanowires. <i>Nano Letters</i> , 2006 , 6, 599-604	11.5	196
85	Polarization and temperature dependence of photoluminescence from zincblende and wurtzite InP nanowires. <i>Applied Physics Letters</i> , 2007 , 91, 263104	3.4	175
84	Ultrafast transient terahertz conductivity of monolayer MoS ₂ and WSe ₂ grown by chemical vapor deposition. <i>ACS Nano</i> , 2014 , 8, 11147-53	16.7	161
83	Temperature dependence of photoluminescence from single core-shell GaAs/AlGaAs nanowires. <i>Applied Physics Letters</i> , 2006 , 89, 173126	3.4	134
82	Ultralow surface recombination velocity in InP nanowires probed by terahertz spectroscopy. <i>Nano Letters</i> , 2012 , 12, 5325-30	11.5	127
81	Growth mechanism of truncated triangular III-V nanowires. <i>Small</i> , 2007 , 3, 389-93	11	118
80	Unexpected benefits of rapid growth rate for III-V nanowires. <i>Nano Letters</i> , 2009 , 9, 695-701	11.5	114
79	A review of the electrical properties of semiconductor nanowires: insights gained from terahertz conductivity spectroscopy. <i>Semiconductor Science and Technology</i> , 2016 , 31, 103003	1.8	103
78	Super deformability and Young's modulus of GaAs nanowires. <i>Advanced Materials</i> , 2011 , 23, 1356-60	24	99
77	Extreme sensitivity of graphene photoconductivity to environmental gases. <i>Nature Communications</i> , 2012 , 3, 1228	17.4	94
76	Nearly intrinsic exciton lifetimes in single twin-free GaAs/AlGaAs core-shell nanowire heterostructures. <i>Applied Physics Letters</i> , 2008 , 93, 053110	3.4	91
75	Removal of surface states and recovery of band-edge emission in InAs nanowires through surface passivation. <i>Nano Letters</i> , 2012 , 12, 3378-84	11.5	88

74	Nature of heterointerfaces in GaAs/InAs and InAs/GaAs axial nanowire heterostructures. <i>Applied Physics Letters</i> , 2008 , 93, 101911	3.4	86
73	Novel growth phenomena observed in axial InAs/GaAs nanowire heterostructures. <i>Small</i> , 2007 , 3, 1873-71	11	86
72	High Purity GaAs Nanowires Free of Planar Defects: Growth and Characterization. <i>Advanced Functional Materials</i> , 2008 , 18, 3794-3800	15.6	83
71	Single nanowire photoconductive terahertz detectors. <i>Nano Letters</i> , 2015 , 15, 206-10	11.5	78
70	Phase separation induced by Au catalysts in ternary InGaAs nanowires. <i>Nano Letters</i> , 2013 , 13, 643-50	11.5	75
69	Modulation doping of GaAs/AlGaAs core-shell nanowires with effective defect passivation and high electron mobility. <i>Nano Letters</i> , 2015 , 15, 1336-42	11.5	69
68	Electron mobilities approaching bulk limits in "surface-free" GaAs nanowires. <i>Nano Letters</i> , 2014 , 14, 5989-94	11.5	64
67	Strong carrier lifetime enhancement in GaAs nanowires coated with semiconducting polymer. <i>Nano Letters</i> , 2012 , 12, 6293-301	11.5	52
66	Determination of band offsets at GaN/single-layer MoS ₂ heterojunction. <i>Applied Physics Letters</i> , 2016 , 109, 032104	3.4	52
65	An Ultrafast Switchable Terahertz Polarization Modulator Based on III-V Semiconductor Nanowires. <i>Nano Letters</i> , 2017 , 17, 2603-2610	11.5	51
64	Increased Photoconductivity Lifetime in GaAs Nanowires by Controlled n-Type and p-Type Doping. <i>ACS Nano</i> , 2016 , 10, 4219-27	16.7	51
63	Noncontact measurement of charge carrier lifetime and mobility in GaN nanowires. <i>Nano Letters</i> , 2012 , 12, 4600-4	11.5	51
62	Long-Range Charge Extraction in Back-Contact Perovskite Architectures via Suppressed Recombination. <i>Joule</i> , 2019 , 3, 1301-1313	27.8	50
61	Evolution of epitaxial InAs nanowires on GaAs 111B. <i>Small</i> , 2009 , 5, 366-9	11	45
60	Self-healing of fractured GaAs nanowires. <i>Nano Letters</i> , 2011 , 11, 1546-9	11.5	44
59	Dynamics of strongly degenerate electron-hole plasmas and excitons in single InP nanowires. <i>Nano Letters</i> , 2007 , 7, 3383-7	11.5	44
58	Growth temperature and V/III ratio effects on the morphology and crystal structure of InP nanowires. <i>Journal Physics D: Applied Physics</i> , 2010 , 43, 445402	3	43
57	Growth of straight InAs-on-GaAs nanowire heterostructures. <i>Nano Letters</i> , 2011 , 11, 3899-905	11.5	40

56	Defect-Free GaAs/AlGaAs Core/Shell Nanowires on Si Substrates. <i>Crystal Growth and Design</i> , 2011 , 11, 3109-3114	3.5	40
55	Formation of hierarchical InAs nanoring/GaAs nanowire heterostructures. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 780-3	16.4	40
54	Understanding the true shape of Au-catalyzed GaAs nanowires. <i>Nano Letters</i> , 2014 , 14, 5865-72	11.5	39
53	Evolution of InAs branches in InAs/GaAs nanowire heterostructures. <i>Applied Physics Letters</i> , 2007 , 91, 133115	3.4	37
52	Polarity driven formation of InAs/GaAs hierarchical nanowire heterostructures. <i>Applied Physics Letters</i> , 2008 , 93, 201908	3.4	36
51	Resonant excitation and imaging of nonequilibrium exciton spins in single core-shell GaAs-AlGaAs nanowires. <i>Nano Letters</i> , 2007 , 7, 588-95	11.5	35
50	Engineering the Photoresponse of InAs Nanowires. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 43993-44000	3.5	34
49	Tailoring GaAs, InAs, and InGaAs Nanowires for Optoelectronic Device Applications. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2011 , 17, 766-778	3.8	32
48	Novel growth and properties of GaAs nanowires on Si substrates. <i>Nanotechnology</i> , 2010 , 21, 035604	3.4	31
47	Fast Room-Temperature Detection of Terahertz Quantum Cascade Lasers with Graphene-Loaded Bow-Tie Plasmonic Antenna Arrays. <i>ACS Photonics</i> , 2016 , 3, 1747-1753	6.3	29
46	Evolution of Wurtzite Structured GaAs Shells Around InAs Nanowire Cores. <i>Nanoscale Research Letters</i> , 2009 , 4, 846-849	5	28
45	Dependence of Dye Regeneration and Charge Collection on the Pore-Filling Fraction in Solid-State Dye-Sensitized Solar Cells. <i>Advanced Functional Materials</i> , 2014 , 24, 668-677	15.6	27
44	An ultrafast carbon nanotube terahertz polarisation modulator. <i>Journal of Applied Physics</i> , 2014 , 115, 203108	2.5	25
43	Taper-Free and Vertically Oriented Ge Nanowires on Ge/Si Substrates Grown by a Two-Temperature Process. <i>Crystal Growth and Design</i> , 2012 , 12, 135-141	3.5	24
42	Tin(IV) dopant removal through anti-solvent engineering enabling tin based perovskite solar cells with high charge carrier mobilities. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 8389-8397	7.1	22
41	Electron-beam patterning of polymer electrolyte films to make multiple nanoscale gates for nanowire transistors. <i>Nano Letters</i> , 2014 , 14, 94-100	11.5	22
40	Direct observation of charge-carrier heating at WZ-ZB InP nanowire heterojunctions. <i>Nano Letters</i> , 2013 , 13, 4280-7	11.5	22
39	Hybrid Nanowire Ion-to-Electron Transducers for Integrated Bioelectronic Circuitry. <i>Nano Letters</i> , 2017 , 17, 827-833	11.5	21

38	Vertically standing Ge nanowires on GaAs(110) substrates. <i>Nanotechnology</i> , 2008 , 19, 125602	3.4	20
37	Optimizing the Energy Offset between Dye and Hole-Transporting Material in Solid-State Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 19850-19858	3.8	18
36	The influence of surfaces on the transient terahertz conductivity and electron mobility of GaAs nanowires. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 224001	3	17
35	Integrated, Portable, Tunable, and Coherent Terahertz Sources and Sensitive Detectors Based on Layered Superconductors. <i>Proceedings of the IEEE</i> , 2020 , 108, 721-734	14.3	16
34	Ultrafast dynamics of exciton formation in semiconductor nanowires. <i>Small</i> , 2012 , 8, 1725-31	11	15
33	Crystallographically driven Au catalyst movement during growth of InAs/GaAs axial nanowire heterostructures. <i>Journal of Applied Physics</i> , 2009 , 105, 073503	2.5	14
32	Bifunctional Perovskite-BiVO ₄ Tandem Devices for Uninterrupted Solar and Electrocatalytic Water Splitting Cycles. <i>Advanced Functional Materials</i> , 2021 , 31, 2008182	15.6	14
31	CdS/CdSe lateral heterostructure nanobelts by a two-step physical vapor transport method. <i>Nanotechnology</i> , 2010 , 21, 145602	3.4	13
30	The influence of atmosphere on the performance of pure-phase WZ and ZB InAs nanowire transistors. <i>Nanotechnology</i> , 2017 , 28, 454001	3.4	12
29	Electronic comparison of InAs wurtzite and zincblende phases using nanowire transistors. <i>Physica Status Solidi - Rapid Research Letters</i> , 2013 , 7, 911-914	2.5	12
28	Taper-free and kinked germanium nanowires grown on silicon via purging and the two-temperature process. <i>Nanotechnology</i> , 2012 , 23, 115603	3.4	12
27	On-Chip Andreev Devices: Hard Superconducting Gap and Quantum Transport in Ballistic Nb-In Ga As-Quantum-Well-Nb Josephson Junctions. <i>Advanced Materials</i> , 2017 , 29, 1701836	24	11
26	Precursor flow rate manipulation for the controlled fabrication of twin-free GaAs nanowires on silicon substrates. <i>Nanotechnology</i> , 2012 , 23, 415702	3.4	10
25	Proximity induced superconductivity in indium gallium arsenide quantum wells. <i>Journal of Magnetism and Magnetic Materials</i> , 2018 , 459, 282-284	2.8	9
24	Vertically oriented epitaxial germanium nanowires on silicon substrates using thin germanium buffer layers. <i>Nanotechnology</i> , 2010 , 21, 295602	3.4	8
23	Nanowires for optoelectronic device applications. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009 , 6, 2678-2682		4
22	Improving holographic search algorithms using sorted pixel selection. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2019 , 36, 1456-1462	1.8	4
21	Light management in ultra-thin solar cells: a guided optimisation approach. <i>Optics Express</i> , 2020 , 28, 39093-39131	3.3	1

20	On-chip Hybrid Superconducting-Semiconducting Quantum Circuit. <i>IEEE Transactions on Applied Superconductivity</i> , 2018 , 28, 1-4	1.8	2
19	III-V compound semiconductor nanowires 2009 ,		2
18	III-V nanowires for optoelectronics 2006 ,		2
17	Growth, Structural and Optical Properties of GaAs, InGaAs and AlGaAs Nanowires and Nanowire Heterostructures. <i>Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS</i> , 2007 ,		2
16	High-Throughput Electrical Characterization of Nanomaterials from Room to Cryogenic Temperatures. <i>ACS Nano</i> , 2020 , 14, 15293-15305	16.7	2
15	Exploring the band structure of Wurtzite InAs nanowires using photocurrent spectroscopy. <i>Nano Research</i> , 2020 , 13, 1586-1591	10	2
14	Choice of Polymer Matrix for a Fast Switchable III/V Nanowire Terahertz Modulator. <i>MRS Advances</i> , 2017 , 2, 1475-1480	0.7	1
13	Single Nanowire Terahertz Detectors 2015 ,		1
12	Scalable Quantum Integrated Circuits on Superconducting Two-Dimensional Electron Gas Platform. <i>Journal of Visualized Experiments</i> , 2019 ,	1.6	1
11	Andreev reflections and magnetotransport in 2D Josephson junctions. <i>Journal of Physics: Conference Series</i> , 2019 , 1182, 012010	0.3	1
10	How InAs crystal phase affects the electrical performance of InAs nanowire FETs 2014 ,		1
9	III-V COMPOUND SEMICONDUCTOR NANOWIRES FOR OPTOELECTRONIC DEVICE APPLICATIONS. <i>International Journal of High Speed Electronics and Systems</i> , 2011 , 20, 131-141	0.5	1
8	Growth of III-V Nanowires and Nanowire Heterostructures by Metalorganic Chemical Vapor Deposition 2007 ,		1
7	Growth, Structural and Optical Properties of GaAs/AlGaAs Core/Shell Nanowires with and without Quantum Well Shells 2006 ,		1
6	Millimeter-Wave-to-Terahertz Superconducting Plasmonic Waveguides for Integrated Nanophotonics at Cryogenic Temperatures. <i>Materials</i> , 2021 , 14,	3.5	1
5	Terahertz Time-Domain Spectroscopy 2020 , 1, 1-4		0
4	Water-Assisted Growth: Bifunctional Perovskite-BiVO ₄ Tandem Devices for Uninterrupted Solar and Electrocatalytic Water Splitting Cycles (Adv. Funct. Mater. 15/2021). <i>Advanced Functional Materials</i> , 2021 , 31, 2170104	15.6	0
3	Properties of GaN nanowires with ScxGa _{1-x} N insertion. <i>Physica Status Solidi (B): Basic Research</i> , 2017 , 254, 1600740	1.3	

2 Failure and Formation of Axial Nanowire Heterostructures in Vapor-Liquid-Solid Growth. *Materials Research Society Symposia Proceedings*, **2007**, 1058, 1

1 Facet-Related Non-uniform Photoluminescence in Passivated GaAs Nanowires. *Frontiers in Chemistry*, **2020**, 8, 607481

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