Lars Samuelson

List of Publications by Year
in descending order

551 papers	32,244 citations	3515 90 h-index	6113 159 g-index
556 all docs	556 docs citations	556 times ranked	15631 citing authors

#	Article	IF	Citations
1	InP Nanowire Array Solar Cells Achieving 13.8% Efficiency by Exceeding the Ray Optics Limit. Science, 2013, 339, 1057-1060.	6.0	1,093
2	One-dimensional Steeplechase for Electrons Realized. Nano Letters, 2002, 2, 87-89.	4.5	656
3	Controlled polytypic and twin-plane superlattices in iiiâ€"v nanowires. Nature Nanotechnology, 2009, 4, 50-55.	15.6	646
4	Solid-phase diffusion mechanism for GaAs nanowire growth. Nature Materials, 2004, 3, 677-681.	13.3	633
5	Synthesis of branched 'nanotrees' by controlled seeding of multiple branching events. Nature Materials, 2004, 3, 380-384.	13.3	592
6	One-dimensional heterostructures in semiconductor nanowhiskers. Applied Physics Letters, 2002, 80, 1058-1060.	1.5	581
7	Epitaxial IIIâˆ'V Nanowires on Silicon. Nano Letters, 2004, 4, 1987-1990.	4.5	538
8	Structural and optical properties of high quality zinc-blende/wurtzite GaAs nanowire heterostructures. Physical Review B, 2009, 80, .	1.1	434
9	Controlled manipulation of nanoparticles with an atomic force microscope. Applied Physics Letters, 1995, 66, 3627-3629.	1.5	431
10	Nanowire resonant tunneling diodes. Applied Physics Letters, 2002, 81, 4458-4460.	1.5	429
11	Structural properties of â€ˆ111â€‰B -oriented IIIâ€"V nanowires. Nature Materials, 2006, 5, 574-580.	13.3	412
12	Single-electron transistors in heterostructure nanowires. Applied Physics Letters, 2003, 83, 2052-2054.	1.5	403
13	Nanowire Arrays Defined by Nanoimprint Lithography. Nano Letters, 2004, 4, 699-702.	4.5	383
14	Role of Surface Diffusion in Chemical Beam Epitaxy of InAs Nanowires. Nano Letters, 2004, 4, 1961-1964.	4.5	326
15	Vertical high-mobility wrap-gated InAs nanowire transistor. IEEE Electron Device Letters, 2006, 27, 323-325.	2.2	318
16	Preferential Interface Nucleation: An Expansion of the VLS Growth Mechanism for Nanowires. Advanced Materials, 2009, 21, 153-165.	11.1	309
17	Optical Properties of Rotationally Twinned InP Nanowire Heterostructures. Nano Letters, 2008, 8, 836-841.	4.5	303
18	Gold Nanoparticles: Production, Reshaping, and Thermal Charging. Journal of Nanoparticle Research, 1999, 1, 243-251.	0.8	284

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19	Failure of the Vaporâˆ’Liquidâˆ’Solid Mechanism in Au-Assisted MOVPE Growth of InAs Nanowires. Nano Letters, 2005, 5, 761-764.	4.5	282
20	A GaAs Nanowire Array Solar Cell With 15.3% Efficiency at 1 Sun. IEEE Journal of Photovoltaics, 2016, 6, 185-190.	1.5	280
21	Growth of one-dimensional nanostructures in MOVPE. Journal of Crystal Growth, 2004, 272, 211-220.	0.7	278
22	Optical Studies of Individual InAs Quantum Dots in GaAs: Few-Particle Effects. Science, 1998, 280, 262-264.	6.0	275
23	Few-Electron Quantum Dots in Nanowires. Nano Letters, 2004, 4, 1621-1625.	4.5	274
24	Direct Measurement of the Spin-Orbit Interaction in a Two-Electron InAs Nanowire Quantum Dot. Physical Review Letters, 2007, 98, 266801.	2.9	252
25	Size-, shape-, and position-controlled GaAs nano-whiskers. Applied Physics Letters, 2001, 79, 3335-3337.	1.5	249
26	Growth and Optical Properties of Strained GaAsâˆ’GaxIn1-xP Coreâˆ’Shell Nanowires. Nano Letters, 2005, 5, 1943-1947.	4.5	245
27	Self-forming nanoscale devices. Materials Today, 2003, 6, 22-31.	8.3	236
28	Crystal Phase Engineering in Single InAs Nanowires. Nano Letters, 2010, 10, 3494-3499.	4.5	234
29	Monolithic GaAs/InGaP nanowire light emitting diodes on silicon. Nanotechnology, 2008, 19, 305201.	1.3	228
30	Giant, Level-Dependent <i>g</i> Factors in InSb Nanowire Quantum Dots. Nano Letters, 2009, 9, 3151-3156.	4.5	224
31	Control of IIIâ€“V nanowire crystal structure by growth parameter tuning. Semiconductor Science and Technology, 2010, 25, 024009.	1.0	219
32	Study of the twoâ€dimensionalâ€“threeâ€dimensional growth mode transition in metalorganic vapor phase epitaxy of GaInP/InP quantumâ€sized structures. Applied Physics Letters, 1994, 65, 3093-3095.	1.5	217
33	Single quantum dots emit single photons at a time: Antibunching experiments. Applied Physics Letters, 2001, 78, 2476-2478.	1.5	213
34	Synthesis and Applications of IIIâ€“V Nanowires. Chemical Reviews, 2019, 119, 9170-9220.	23.0	208
35	Au-Free Epitaxial Growth of InAs Nanowires. Nano Letters, 2006, 6, 1817-1821.	4.5	207
36	Unidirectional electron flow in a nanometer-scale semiconductor channel: A self-switching device. Applied Physics Letters, 2003, 83, 1881-1883.	1.5	206

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37	Mass Transport Model for Semiconductor Nanowire Growth. Journal of Physical Chemistry B, 2005, 109, 13567-13571.	1.2	205
38	In-situ growth of quantum dot structures by the Stranski-Krastanow growth mode. Progress in Crystal Growth and Characterization of Materials, 1996, 33, 423-471.	1.8	204
39	Infrared Photodetectors in Heterostructure Nanowires. Nano Letters, 2006, 6, 229-232.	4.5	204
40	Deep level transient spectroscopy evaluation of nonexponential transients in semiconductor alloys. Journal of Applied Physics, 1983, 54, 5117-5122.	1.1	194
41	Electronic structure of strainedInP/Ga0.51In0.49Pquantum dots. Physical Review B, 1997, 56, 10404-10411.	1.1	194
42	Fabrication of individually seeded nanowire arrays by vapourâ€"liquidâ€"solid growth. Nanotechnology, 2003, 14, 1255-1258.	1.3	189
43	Gallium Phosphide Nanowires as a Substrate for Cultured Neurons. Nano Letters, 2007, 7, 2960-2965.	4.5	182
44	Strain mapping in free-standing heterostructured wurtzite InAs/InP nanowires. Nanotechnology, 2007, 18, 015504.	1.3	179
45	Growth Mechanism of Self-Catalyzed Group IIIâ^'V Nanowires. Nano Letters, 2010, 10, 4443-4449.	4.5	177
46	The Morphology of Axial and Branched Nanowire Heterostructures. Nano Letters, 2007, 7, 1817-1822.	4.5	175
47	Nitrogen pair luminescence in GaAs. Applied Physics Letters, 1990, 56, 1451-1453.	1.5	173
48	Defect-free InP nanowires grown in [001] direction on InP (001). Applied Physics Letters, 2004, 85, 2077-2079.	1.5	173
49	Semiconductor nanowires for 0D and 1D physics and applications. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 25, 313-318.	1.3	172
50	Vertical Enhancement-Mode InAs Nanowire Field-Effect Transistor With 50-nm Wrap Gate. IEEE Electron Device Letters, 2008, 29, 206-208.	2.2	168
51	Hole photoionization cross sections of EL2 in GaAs. Applied Physics Letters, 1988, 52, 1689-1691.	1.5	163
52	Energy structure and fluorescence ofEu2+in ZnS:Eu nanoparticles. Physical Review B, 2000, 61, 11021-11024.	1.1	161
53	Highâ€Quality InAs/InSb Nanowire Heterostructures Grown by Metalâ€"Organic Vaporâ€Phase Epitaxy. Small, 2008, 4, 878-882.	5.2	160
54	Vertical wrap-gated nanowire transistors. Nanotechnology, 2006, 17, S227-S230.	1.3	159

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55	Spatially resolved Hall effect measurement in a single semiconductor nanowire. Nature Nanotechnology, 2012, 7, 718-722.	15.6	158
56	Continuous gas-phase synthesis of nanowires with tunable properties. Nature, 2012, 492, 90-94.	13.7	156
57	Local probe techniques for luminescence studies of low-dimensional semiconductor structures. Journal of Applied Physics, 1998, 84, 1715-1775.	1.1	154
58	Sulfur passivation for ohmic contact formation to InAs nanowires. Nanotechnology, 2007, 18, 105307.	1.3	153
59	Tunable Double Quantum Dots in InAs Nanowires Defined by Local Gate Electrodes. Nano Letters, 2005, 5, 1487-1490.	4.5	149
60	Effects of Supersaturation on the Crystal Structure of Gold Seeded IIIâ˘V Nanowires. Crystal Growth and Design, 2009, 9, 766-773.	1.4	147
61	A New Understanding of Au-Assisted Growth of III-V Semiconductor Nanowires. Advanced Functional Materials, 2005, 15, 1603-1610.	7.8	139
62	Improved Subthreshold Slope in an InAs Nanowire Heterostructure Field-Effect Transistor. Nano Letters, 2006, 6, 1842-1846.	4.5	137
63	Size-selected gold nanoparticles by aerosol technology. Scripta Materialia, 1999, 12, 45-48.	0.5	136
64	In situ etching for total control over axial and radial nanowire growth. Nano Research, 2010, 3, 264-270.	5.8	135
65	Electron transport in InAs nanowires and heterostructure nanowire devices. Solid State Communications, 2004, 131, 573-579.	0.9	134
66	Tunable effectivegfactor in InAs nanowire quantum dots. Physical Review B, 2005, 72, .	1.1	134
67	Nanowire Single-Electron Memory. Nano Letters, 2005, 5, 635-638.	4.5	133
68	Nonlinear operation of GaInAs/InP-based three-terminal ballistic junctions. Applied Physics Letters, 2001, 79, 1384-1386.	1.5	132
69	Diameter Dependence of the Wurtziteâ˘Zinc Blende Transition in InAs Nanowires. Journal of Physical Chemistry C, 2010, 114, 3837-3842.	1.5	129
70	Spin relaxation in InAs nanowires studied by tunable weak antilocalization. Physical Review B, 2005, 71, .	1.1	125
71	Growth and characterization of GaAs and InAs nano-whiskers and InAs/GaAs heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 1126-1130.	1.3	123
72	Nanowires With Promise for Photovoltaics. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 1050-1061.	1.9	123

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73	Excited states of individual quantum dots studied by photoluminescence spectroscopy. Applied Physics Letters, 1996, 69, 749-751.	1.5	115
74	Axial InP Nanowire Tandem Junction Grown on a Silicon Substrate. Nano Letters, 2011, 11, 2028-2031.	4.5	114
75	Size- and shape-controlled GaAs nano-whiskers grown by MOVPE: a growth study. Journal of Crystal Growth, 2004, 260, 18-22.	0.7	112
76	Fifteen-Piconewton Force Detection from Neural Growth Cones Using Nanowire Arrays. Nano Letters, 2010, 10, 782-787.	4.5	109
77	Transmission electron microscopy investigation of the morphology of InP Stranskiâ€“Krastanow islands grown by metalorganic chemical vapor deposition. Applied Physics Letters, 1995, 67, 2981-2982.	1.5	107
78	Few Electron Double Quantum Dots in InAs/InP Nanowire Heterostructures. Nano Letters, 2007, 7, 243-246.	4.5	104
79	Bias-voltage-induced asymmetry in nanoelectronic Y-branches. Applied Physics Letters, 2001, 79, 3287-3289.	1.5	103
80	Sharp exciton emission from single InAs quantum dots in GaAs nanowires. Applied Physics Letters, 2003, 83, 2238-2240.	1.5	103
81	Optical transitions via the deep O donor in GaP. I. Phonon interaction in low-temperature spectra. Physical Review B, 1978, 18, 809-829.	1.1	102
82	Electron Trapping in InP Nanowire FETs with Stacking Faults. Nano Letters, 2012, 12, 151-155.	4.5	102
83	Microwave Detection at 110 GHz by Nanowires with Broken Symmetry. Nano Letters, 2005, 5, 1423-1427.	4.5	99
84	Assembling strained InAs islands on patterned GaAs substrates with chemical beam epitaxy. Applied Physics Letters, 1996, 68, 2228-2230.	1.5	98
85	Phase Segregation in AlInP Shells on GaAs Nanowires. Nano Letters, 2006, 6, 2743-2747.	4.5	98
86	Thermal conductivity of indium arsenide nanowires with wurtzite and zinc blende phases. Physical Review B, 2011, 83, .	1.1	96
87	Growth of self-assembled InAs and InAsxP1â˜’x dots on InP by metalorganic vapour phase epitaxy. Journal of Crystal Growth, 1998, 191, 347-356.	0.7	94
88	Development of a Vertical Wrap-Gated InAs FET. IEEE Transactions on Electron Devices, 2008, 55, 3030-3036.	1.6	94
89	Fibroblasts Cultured on Nanowires Exhibit Low Motility, Impaired Cell Division, and DNA Damage. Small, 2013, 9, 4006-4016.	5.2	94
90	Electrical and optical properties of deep levels in MOVPE grown GaAs. Journal of Crystal Growth, 1981, 55, 164-172.	0.7	93

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91	Fabrication of quantum devices by Ã…ngstrÃ¶m-level manipulation of nanoparticles with an atomic force microscope. Applied Physics Letters, 1998, 72, 548-550.	1.5	93
92	Precursor evaluation for<i>in situ</i>InP nanowire doping. Nanotechnology, 2008, 19, 445602.	1.3	92
93	Deep level transient spectroscopy of InP quantum dots. Applied Physics Letters, 1995, 67, 3016-3018.	1.5	91
94	Growth and characterization of defect free GaAs nanowires. Journal of Crystal Growth, 2006, 287, 504-508.	0.7	91
95	Colorful InAs Nanowire Arrays: From Strong to Weak Absorption with Geometrical Tuning. Nano Letters, 2012, 12, 1990-1995.	4.5	90
96	Epitaxial Growth of Indium Arsenide Nanowires on Silicon Using Nucleation Templates Formed by Self-Assembled Organic Coatings. Advanced Materials, 2007, 19, 1801-1806.	11.1	89
97	Tunnel Field-Effect Transistors Based on InP-GaAs Heterostructure Nanowires. ACS Nano, 2012, 6, 3109-3113.	7.3	89
98	Gold nanoparticle single-electron transistor with carbon nanotube leads. Applied Physics Letters, 2001, 79, 2106-2108.	1.5	87
99	Room-temperature and 50 GHz operation of a functional nanomaterial. Applied Physics Letters, 2001, 79, 1357-1359.	1.5	86
100	The electrical and structural properties of n-type InAs nanowires grown from metalâ€"organic precursors. Nanotechnology, 2010, 21, 205703.	1.3	86
101	Positioning of nanometer-sized particles on flat surfaces by direct deposition from the gas phase. Applied Physics Letters, 2001, 78, 3708-3710.	1.5	85
102	Position-Controlled Interconnected InAs Nanowire Networks. Nano Letters, 2006, 6, 2842-2847.	4.5	85
103	GaAs/GaSb nanowire heterostructures grown by MOVPE. Journal of Crystal Growth, 2008, 310, 4115-4121.	0.7	85
104	III-V Nanowiresâ€"Extending a Narrowing Road. Proceedings of the IEEE, 2010, 98, 2047-2060.	16.4	85
105	Probing Strain in Bent Semiconductor Nanowires with Raman Spectroscopy. Nano Letters, 2010, 10, 1280-1286.	4.5	85
106	Absorption of light in InP nanowire arrays. Nano Research, 2014, 7, 816-823.	5.8	85
107	Alignment of InP Stranskiâ€"Krastanow dots by growth on patterned GaAs/GaInP surfaces. Applied Physics Letters, 1996, 68, 1684-1686.	1.5	84
108	InAs nanowire metal-oxide-semiconductor capacitors. Applied Physics Letters, 2008, 92, .	1.5	84

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109	Surface diffusion effects on growth of nanowires by chemical beam epitaxy. Journal of Applied Physics, 2007, 101, 034313.	1.1	83
110	Changes in Contact Angle of Seed Particle Correlated with Increased Zincblende Formation in Doped InP Nanowires. Nano Letters, 2010, 10, 4807-4812.	4.5	83
111	Realizing Lateral Wrap-Gated Nanowire FETs: Controlling Gate Length with Chemistry Rather than Lithography. Nano Letters, 2012, 12, 1-6.	4.5	83
112	InAs1-xPxNanowires for Device Engineering. Nano Letters, 2006, 6, 403-407.	4.5	82
113	Axonal guidance on patterned free-standing nanowire surfaces. Nanotechnology, 2008, 19, 345101.	1.3	81
114	In situ growth of nano-structures by metal-organic vapour phase epitaxy. Journal of Crystal Growth, 1997, 170, 39-46.	0.7	80
115	Photoluminescence study of localization effects induced by the fluctuating random alloy potential in indirect band-gapGaAs1âˆ’xPx. Physical Review B, 1985, 32, 8220-8227.	1.1	79
116	Direct imaging of the atomic structure inside a nanowire by scanning tunnelling microscopy. Nature Materials, 2004, 3, 519-523.	13.3	79
117	High-Performance Single Nanowire Tunnel Diodes. Nano Letters, 2010, 10, 974-979.	4.5	77
118	Measurements of the band gap of wurtzite InAs1âˆ’xPx nanowires using photocurrent spectroscopy. Journal of Applied Physics, 2007, 101, 123701.	1.1	76
119	Thermal Conductance of InAs Nanowire Composites. Nano Letters, 2009, 9, 4484-4488.	4.5	76
120	Spin States of Holes in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Ge</mml:mi><mml:mo>/</mml:mo><mml:mi>Si</mml:mi></mml:math>Nanowire Quantum Dots. Physical Review Letters, 2008, 101, 186802.	2.9	75
121	Nanowire-Based Electrode for Acute In Vivo Neural Recordings in the Brain. PLoS ONE, 2013, 8, e56673.	1.1	73
122	Excitons bound to nitrogen pairs in GaAs. Physical Review B, 1990, 42, 7504-7512.	1.1	70
123	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
124	Observation of strain effects in semiconductor dots depending on cap layer thickness. Applied Physics Letters, 1995, 67, 1438-1440.	1.5	69
125	Reduction of the Schottky barrier height on silicon carbide using Au nano-particles. Solid-State Electronics, 2002, 46, 1433-1440.	0.8	69
126	Understanding InP Nanowire Array Solar Cell Performance by Nanoprobe-Enabled Single Nanowire Measurements. Nano Letters, 2018, 18, 3038-3046.	4.5	69

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127	Case study of an InAs quantum dot memory: Optical storing and deletion of charge. Applied Physics Letters, 2001, 79, 78-80.	1.5	68
128	Epitaxially grown GaP/GaAs1â^'xPx/GaP double heterostructure nanowires for optical applications. Nanotechnology, 2005, 16, 936-939.	1.3	68
129	Optimization of Au-assisted InAs nanowires grown by MOVPE. Journal of Crystal Growth, 2006, 297, 326-333.	0.7	67
130	Random telegraph noise in photoluminescence from individual self-assembled quantum dots. Physical Review B, 1999, 59, 10725-10729.	1.1	66
131	Probing the Wurtzite Conduction Band Structure Using State Filling in Highly Doped InP Nanowires. Nano Letters, 2011, 11, 2286-2290.	4.5	66
132	Direct Evidence for Random-Alloy Splitting of Cu Levels inGaAs1â^'xPx. Physical Review Letters, 1984, 53, 1501-1503.	2.9	65
133	Semiconductor nanowires for novel one-dimensional devices. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 560-567.	1.3	63
134	Optical investigations of individual InAs quantum dots:â€‚â€‚Level splittings of exciton complexes. Physical Review B, 1999, 60, 16640-16646.	1.1	62
135	AFM manipulation of carbon nanotubes: realization of ultra-fine nanoelectrodes. Nanotechnology, 2002, 13, 108-113.	1.3	62
136	Surface-enhanced Raman scattering of rhodamine 6G on nanowire arrays decorated with gold nanoparticles. Nanotechnology, 2008, 19, 275712.	1.3	62
137	Confinement in Thickness-Controlled GaAs Polytype Nanodots. Nano Letters, 2015, 15, 2652-2656.	4.5	62
138	Time-resolved studies of single semiconductor quantum dots. Physical Review B, 1999, 59, 5021-5025.	1.1	61
139	Band filling at low optical power density in semiconductor dots. Applied Physics Letters, 1995, 67, 1905-1907.	1.5	60
140	Operation of InGaAs/InP-Based Ballistic Rectifiers at Room Temperature and Frequencies up to 50 GHz. Japanese Journal of Applied Physics, 2001, 40, L909-L911.	0.8	60
141	Lineshape of the thermopower of quantum dots. New Journal of Physics, 2012, 14, 033041.	1.2	60
142	Observation of type-II recombination in single wurtzite/zinc-blende GaAs heterojunction nanowires. Physical Review B, 2014, 89, .	1.1	60
143	Direct Atomic Scale Imaging of IIIâ^'V Nanowire Surfaces. Nano Letters, 2008, 8, 3978-3982.	4.5	59
144	Electrical characterization of InP/GaInP quantum dots by space charge spectroscopy. Journal of Applied Physics, 1998, 84, 3747-3755.	1.1	58

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145	Shear Stress Measurements on InAs Nanowires by AFM Manipulation. Small, 2007, 3, 1398-1401.	5.2	58
146	Transients in the Formation of Nanowire Heterostructures. Nano Letters, 2008, 8, 3815-3818.	4.5	58
147	Improved size homogeneity of InP-on-GaInP Stranski-Krastanow islands by growth on a thin GaP interface layer. Journal of Crystal Growth, 1995, 156, 23-29.	0.7	57
148	Correlation of InGaP(001) surface structure during growth and bulk ordering. Physical Review B, 1999, 60, 8185-8190.	1.1	57
149	Strain and Shape of Epitaxial InAs/InP Nanowire Superlattice Measured by Grazing Incidence X-ray Techniques. Nano Letters, 2007, 7, 2596-2601.	4.5	57
150	A Comparative Study of Absorption in Vertically and Laterally Oriented InP Coreâ€"Shell Nanowire Photovoltaic Devices. Nano Letters, 2015, 15, 1809-1814.	4.5	57
151	Quantized conductance in a heterostructurally defined Ga0.25In0.75As/InP quantum wire. Applied Physics Letters, 1997, 71, 918-920.	1.5	56
152	Growth mechanisms for GaAs nanowires grown in CBE. Journal of Crystal Growth, 2004, 272, 167-174.	0.7	56
153	Electrical Properties of Self-Assembled Branched InAs Nanowire Junctions. Nano Letters, 2008, 8, 1100-1104.	4.5	56
154	A novel frequency-multiplication device based on three-terminal ballistic junction. IEEE Electron Device Letters, 2002, 23, 377-379.	2.2	54
155	Strong Schottky barrier reduction at Au-catalyst/GaAs-nanowire interfaces by electric dipole formation and Fermi-level unpinning. Nature Communications, 2014, 5, 3221.	5.8	54
156	Single electron pumping in InAs nanowire double quantum dots. Applied Physics Letters, 2007, 91, .	1.5	53
157	GaAs/AlGaAs Nanowire Heterostructures Studied by Scanning Tunneling Microscopy. Nano Letters, 2007, 7, 2859-2864.	4.5	53
158	In Situ Characterization of Nanowire Dimensions and Growth Dynamics by Optical Reflectance. Nano Letters, 2015, 15, 3597-3602.	4.5	53
159	Towards Nanowire Tandem Junction Solar Cells on Silicon. IEEE Journal of Photovoltaics, 2018, 8, 733-740.	1.5	53
160	A reflection high-energy electron diffraction and atomic force microscopy study of the chemical beam epitaxial growth of InAs and InP islands on (001) GaP. Applied Physics Letters, 1998, 72, 954-956.	1.5	52
161	Correlation-Induced Conductance Suppression at Level Degeneracy in a Quantum Dot. Physical Review Letters, 2010, 104, 186804.	2.9	52
162	Measuring Temperature Gradients over Nanometer Length Scales. Nano Letters, 2009, 9, 779-783.	4.5	51

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163	Alloying mechanisms in MOVPE GaAs1-xPx. Journal of Crystal Growth, 1983, 61, 425-426.	0.7	50
164	Ga0.25In0.75As/InP quantum wells with extremely high and anisotropic twoâ€dimensional electron gas mobilities. Applied Physics Letters, 1996, 68, 1111-1113.	1.5	50
165	Probing Confined Phonon Modes by Transport through a Nanowire Double Quantum Dot. Physical Review Letters, 2010, 104, 036801.	2.9	50
166	Antisite-related defects in plastically deformed GaAs. Physical Review B, 1986, 33, 5880-5883.	1.1	48
167	Contact mode atomic force microscopy imaging of nanometerâ€sized particles. Applied Physics Letters, 1995, 66, 3295-3297.	1.5	48
168	Particle-assisted Ga_{<i>x</i>}In_{1âˆ'<i>x</i>}P nanowire growth for designed bandgap structures. Nanotechnology, 2012, 23, 245601.	1.3	48
169	Structural Investigations of Coreâˆ'shell Nanowires Using Grazing Incidence X-ray Diffraction. Nano Letters, 2009, 9, 1877-1882.	4.5	47
170	A New Route toward Semiconductor Nanospintronics: Highly Mn-Doped GaAs Nanowires Realized by Ion-Implantation under Dynamic Annealing Conditions. Nano Letters, 2011, 11, 3935-3940.	4.5	47
171	Friction Measurements of InAs Nanowires on Silicon Nitride by AFM Manipulation. Small, 2009, 5, 203-207.	5.2	46
172	Stacking InAs islands and GaAs layers: Strongly modulated oneâ€dimensional electronic systems. Journal of Applied Physics, 1996, 80, 3360-3364.	1.1	45
173	Growth of GaP nanotree structures by sequential seeding of 1D nanowires. Journal of Crystal Growth, 2004, 272, 131-137.	0.7	45
174	Symmetry of Two-Terminal Nonlinear Electric Conduction. Physical Review Letters, 2004, 92, 046803.	2.9	45
175	Rectifying and Sorting of Regenerating Axons by Free-Standing Nanowire Patterns: A Highway for Nerve Fibers. Langmuir, 2009, 25, 4343-4346.	1.6	45
176	Nanowire Biocompatibility in the Brain - Looking for a Needle in a 3D Stack. Nano Letters, 2009, 9, 4184-4190.	4.5	45
177	Electron accumulation in single InP quantum dots observed by photoluminescence. Physical Review B, 2001, 64, .	1.1	44
178	Nanowire-based multiple quantum dot memory. Applied Physics Letters, 2006, 89, 163101.	1.5	44
179	Vertical InAs Nanowire Wrap Gate Transistors on Si Substrates. IEEE Transactions on Electron Devices, 2008, 55, 3037-3041.	1.6	44
180	A Radio Frequency Single-Electron Transistor Based on an InAs/InP Heterostructure Nanowire. Nano Letters, 2008, 8, 872-875.	4.5	44

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181	Formation of interface layers in GaxIn1âˆ'xAs/InP heterostructures: A reâ€evaluation using ultrathin quantum wells as a probe. Journal of Applied Physics, 1994, 75, 1501-1510.	1.1	43
182	Fluorescent Nanowire Heterostructures as a Versatile Tool for Biology Applications. Nano Letters, 2013, 13, 4728-4732.	4.5	43
183	X-ray Bragg Ptychography on a Single InGaN/GaN Coreâ€"Shell Nanowire. ACS Nano, 2017, 11, 6605-6611.	7.3	43
184	Optical transitions via the deep O donor in GaP. II. Temperature dependence of cross sections. Physical Review B, 1978, 18, 830-843.	1.1	42
185	Growth and characterization of strained layers of GaAsxP1âˆ'x. Journal of Crystal Growth, 1988, 93, 504-511.	0.7	41
186	Singleâ€monolayer quantum wells of GaInAs in InP grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 1990, 56, 1128-1130.	1.5	41
187	Three-photon cascade from single self-assembled InP quantum dots. Physical Review B, 2004, 69, .	1.1	41
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