

Jonathan Finley

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8634647/publications.pdf>

Version: 2024-02-01

278
papers

10,765
citations

28274

55
h-index

40979

93
g-index

282
all docs

282
docs citations

282
times ranked

8524
citing authors

#	ARTICLE	IF	CITATIONS
1	Optically programmable electron spin memory using semiconductor quantum dots. <i>Nature</i> , 2004, 432, 81-84.	27.8	858
2	Inverted Electron-Hole Alignment in InAs-GaAs Self-Assembled Quantum Dots. <i>Physical Review Letters</i> , 2000, 84, 733-736.	7.8	467
3	Direct Observation of Controlled Coupling in an Individual Quantum Dot Molecule. <i>Physical Review Letters</i> , 2005, 94, 057402.	7.8	339
4	Direct-bandgap emission from hexagonal Ge and SiGe alloys. <i>Nature</i> , 2020, 580, 205-209.	27.8	231
5	Lasing from individual GaAs-AlGaAs core-shell nanowires up to room temperature. <i>Nature Communications</i> , 2013, 4, 2931.	12.8	207
6	Observation of extremely slow hole spin relaxation in self-assembled quantum dots. <i>Physical Review B</i> , 2007, 76, .	3.2	194
7	Explanation of Photon Correlations in the Far-Off-Resonance Optical Emission from a Quantum-Dot "Cavity System. <i>Physical Review Letters</i> , 2009, 103, 207403.	7.8	182
8	Electrical detection of optically induced charge storage in self-assembled InAs quantum dots. <i>Applied Physics Letters</i> , 1998, 73, 2618-2620.	3.3	173
9	Charged and neutral exciton complexes in individual self-assembled In(Ga)As quantum dots. <i>Physical Review B</i> , 2001, 63, .	3.2	164
10	Observation of multicharged excitons and biexcitons in a single InGaAs quantum dot. <i>Physical Review B</i> , 2001, 63, .	3.2	142
11	Growth kinetics in position-controlled and catalyst-free InAs nanowire arrays on Si(111) grown by selective area molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	141
12	Emitters of N-photon bundles. <i>Nature Photonics</i> , 2014, 8, 550-555.	31.4	136
13	Site-selectively generated photon emitters in monolayer MoS ₂ via local helium ion irradiation. <i>Nature Communications</i> , 2019, 10, 2755.	12.8	132
14	Electrical control of spontaneous emission and strong coupling for a single quantum dot. <i>New Journal of Physics</i> , 2009, 11, 023034.	2.9	130
15	Manipulation of the spontaneous emission dynamics of quantum dots in two-dimensional photonic crystals. <i>Physical Review B</i> , 2005, 71, .	3.2	129
16	Investigation of the nonresonant dot-cavity coupling in two-dimensional photonic crystal nanocavities. <i>Physical Review B</i> , 2008, 77, .	3.2	126
17	Direct exciton emission from atomically thin transition metal dichalcogenide heterostructures near the lifetime limit. <i>Scientific Reports</i> , 2017, 7, 12383.	3.3	122
18	Direct Observation of a Noncatalytic Growth Regime for GaAs Nanowires. <i>Nano Letters</i> , 2011, 11, 3848-3854.	9.1	119

#	ARTICLE	IF	CITATIONS
19	Spontaneous Alloy Composition Ordering in GaAs-AlGaAs Core-Shell Nanowires. Nano Letters, 2013, 13, 1522-1527.	9.1	116
20	A Waveguide-Coupled On-Chip Single-Photon Source. Physical Review X, 2012, 2, .	8.9	115
21	Quantum dot single-photon sources with ultra-low multi-photon probability. Npj Quantum Information, 2018, 4, .	6.7	114
22	The Dielectric Impact of Layer Distances on Exciton and Trion Binding Energies in van der Waals Heterostructures. Nano Letters, 2018, 18, 2725-2732.	9.1	113
23	Phonon-assisted transitions from quantum dot excitons to cavity photons. Physical Review B, 2009, 80, .	3.2	112
24	Monolithically Integrated High- \hat{I}^2 Nanowire Lasers on Silicon. Nano Letters, 2016, 16, 152-156.	9.1	112
25	Fine structure of charged and neutral excitons in InAs-Al _{0.6} Ga _{0.4} As quantum dots. Physical Review B, 2002, 66, .	3.2	108
26	Quantum-confined Stark shifts of charged exciton complexes in quantum dots. Physical Review B, 2004, 70, .	3.2	108
27	Optically Probing Spin and Charge Interactions in a Tunable Artificial Molecule. Physical Review Letters, 2006, 97, 076403.	7.8	104
28	Dephasing of Exciton Polaritons in Photoexcited InGaAs Quantum Dots in GaAs Nanocavities. Physical Review Letters, 2009, 103, 087405.	7.8	104
29	Silicon photonic crystal nanostructures for refractive index sensing. Applied Physics Letters, 2008, 93, .	3.3	99
30	Three-stage decoherence dynamics of an electron spin qubit in an optically active quantum dot. Nature Physics, 2015, 11, 1005-1008.	16.7	96
31	On-chip time resolved detection of quantum dot emission using integrated superconducting single photon detectors. Scientific Reports, 2013, 3, 1901.	3.3	93
32	Enhanced phonon-assisted absorption in single InAs/GaAs quantum dots. Physical Review B, 2001, 63, .	3.2	90
33	Recent advances in exciton-based quantum information processing in quantum dot nanostructures. New Journal of Physics, 2005, 7, 184-184.	2.9	87
34	Electric-field-dependent carrier capture and escape in self-assembled InAs/GaAs quantum dots. Applied Physics Letters, 2000, 77, 4344-4346.	3.3	86
35	Mutual coupling of two semiconductor quantum dots via an optical nanocavity. Physical Review B, 2010, 82, .	3.2	82
36	Photocurrent spectroscopy of InAs/GaAs self-assembled quantum dots. Physical Review B, 2000, 62, 16784-16791.	3.2	80

#	ARTICLE	IF	CITATIONS
37	Stark Effect Spectroscopy of Mono- and Few-Layer MoS ₂ . Nano Letters, 2016, 16, 1554-1559.	9.1	80
38	On-Chip Generation, Routing, and Detection of Resonance Fluorescence. Nano Letters, 2015, 15, 5208-5213.	9.1	79
39	Electrical Control of Interdot Electron Tunneling in a Double InGaAs Quantum-Dot Nanostructure. Physical Review Letters, 2012, 108, 197402.	7.8	78
40	Dissipative preparation of the exciton and biexciton in self-assembled quantum dots on picosecond time scales. Physical Review B, 2014, 90, .	3.2	74
41	Enhanced Luminescence Properties of InAs-InAsP Core-Shell Nanowires. Nano Letters, 2013, 13, 6070-6077.	9.1	73
42	Electric-Field Switchable Second-Harmonic Generation in Bilayer MoS ₂ by Inversion Symmetry Breaking. Nano Letters, 2017, 17, 392-398.	9.1	71
43	Absence of vapor-liquid-solid growth during molecular beam epitaxy of self-induced InAs nanowires on Si. Applied Physics Letters, 2011, 98, 123114.	3.3	69
44	Experimental determination of intervalley transfer mechanisms in GaAs/AlAs heterostructures. Physical Review B, 1996, 54, R8329-R8332.	3.2	68
45	Bandgap Engineering of Graphene Nanoribbons by Control over Structural Distortion. Journal of the American Chemical Society, 2018, 140, 7803-7809.	13.7	68
46	Alloy Fluctuations Act as Quantum Dot-like Emitters in GaAs-AlGaAs Core-Shell Nanowires. ACS Nano, 2015, 9, 8335-8343.	14.6	65
47	Dynamic Acoustic Control of Individual Optically Active Quantum Dot-like Emission Centers in Heterostructure Nanowires. Nano Letters, 2014, 14, 2256-2264.	9.1	64
48	Resonance Fluorescence of GaAs Quantum Dots with Near-Unity Photon Indistinguishability. Nano Letters, 2019, 19, 2404-2410.	9.1	63
49	Raman spectrum of Janus transition metal dichalcogenide monolayers WSe and MoS ₂ . Physical Review B, 2021, 103, .	3.2	63
50	Manipulation of the homogeneous linewidth of an individual In(Ga)As quantum dot. Physical Review B, 2002, 66, .	3.2	61
51	Demonstration of Confined Electron Gas and Steep-Slope Behavior in Delta-Doped GaAs-AlGaAs Core-Shell Nanowire Transistors. Nano Letters, 2015, 15, 3295-3302.	9.1	60
52	Direct Measurements of Fermi Level Pinning at the Surface of Intrinsically n-Type InGaAs Nanowires. Nano Letters, 2016, 16, 5135-5142.	9.1	60
53	Continuum transitions and phonon coupling in single self-assembled Stranski-Krastanow quantum dots. Physical Review B, 2003, 68, .	3.2	59
54	Coaxial GaAs-AlGaAs core-multishell nanowire lasers with epitaxial gain control. Applied Physics Letters, 2016, 108, .	3.3	59

#	ARTICLE	IF	CITATIONS
55	Directional and Dynamic Modulation of the Optical Emission of an Individual GaAs Nanowire Using Surface Acoustic Waves. Nano Letters, 2011, 11, 1512-1517.	9.1	56
56	High Mobility One- and Two-Dimensional Electron Systems in Nanowire-Based Quantum Heterostructures. Nano Letters, 2013, 13, 6189-6196.	9.1	56
57	Robust valley polarization of helium ion modified atomically thin MoS ₂ . 2D Materials, 2018, 5, 011007.	4.4	55
58	High compositional homogeneity in In-rich InGaAs nanowire arrays on nanoimprinted SiO ₂ /Si (111). Applied Physics Letters, 2012, 101, 043116.	3.3	54
59	Discrete interactions between a few interlayer excitons trapped at a MoSe ₂ /WSe ₂ heterointerface. Npj 2D Materials and Applications, 2020, 4, .	7.9	54
60	Signatures of two-photon pulses from a quantum two-level system. Nature Physics, 2017, 13, 649-654.	16.7	53
61	Coupling Single Photons from Discrete Quantum Emitters in WSe ₂ to Lithographically Defined Plasmonic Slot Waveguides. Nano Letters, 2018, 18, 6812-6819.	9.1	53
62	A 2D Semiconductor Self-Assembled Monolayer Photoswitchable Diode. Advanced Materials, 2015, 27, 1426-1431.	21.0	52
63	Atomistic defects as single-photon emitters in atomically thin MoS ₂ . Applied Physics Letters, 2020, 117, .	3.3	51
64	Temporal monitoring of nonresonant feeding of semiconductor nanocavity modes by quantum dot multiexciton transitions. Physical Review B, 2010, 81, .	3.2	50
65	Tunable Quantum Confinement in Ultrathin, Optically Active Semiconductor Nanowires Via Reverse Reaction Growth. Advanced Materials, 2015, 27, 2195-2202.	21.0	50
66	Dynamic acousto-optic control of a strongly coupled photonic molecule. Nature Communications, 2015, 6, 8540.	12.8	50
67	Surface plasmon resonance spectroscopy of single bowtie nano-antennas using a differential reflectivity method. Scientific Reports, 2016, 6, 23203.	3.3	49
68	GaAs/AlGaAs core-shell nanowire lasers on silicon: invited review. Semiconductor Science and Technology, 2017, 32, 053001.	2.0	48
69	Engineering the Luminescence and Generation of Individual Defect Emitters in Atomically Thin MoS ₂ . ACS Photonics, 2021, 8, 669-677.	6.6	48
70	Crystal Phase Quantum Dots in the Ultrathin Core of GaAs/AlGaAs Core-Shell Nanowires. Nano Letters, 2015, 15, 7544-7551.	9.1	47
71	Role of microstructure on optical properties in high-uniformity InGaAs nanowire arrays: Evidence of a wider wurtzite band gap. Physical Review B, 2013, 87, .	3.2	46
72	Lattice-Matched InGaAs/InAlAs Core-Shell Nanowires with Improved Luminescence and Photoresponse Properties. Nano Letters, 2015, 15, 3533-3540.	9.1	46

#	ARTICLE	IF	CITATIONS
73	Tuning Lasing Emission toward Long Wavelengths in GaAs-(In,Al)GaAs Core-Shell Nanowires. Nano Letters, 2018, 18, 6292-6300.	9.1	43
74	Progress towards single spin optoelectronics using quantum dot nanostructures. Solid State Communications, 2005, 135, 591-601.	1.9	42
75	Climbing the Jaynes-Cummings ladder by photon counting. Journal of Nanophotonics, 2012, 6, 061803.	1.0	42
76	Signatures of a degenerate many-body state of interlayer excitons in a van der Waals heterostack. Physical Review Research, 2020, 2, .	3.6	42
77	Wavelength selective charge storage in self-assembled InGaAs/GaAs quantum dots. Applied Physics Letters, 2003, 83, 443-445.	3.3	41
78	Direct observation of acoustic phonon mediated relaxation between coupled exciton states in a single quantum dot molecule. Physical Review B, 2006, 74, .	3.2	41
79	Highly efficient single-photon emission from single quantum dots within a two-dimensional photonic band-gap. Physical Review B, 2008, 77, .	3.2	41
80	Acoustically regulated carrier injection into a single optically active quantum dot. Physical Review B, 2013, 88, .	3.2	41
81	Emergence of Photoswitchable States in a Graphene-Azobenzene-Au Platform. Nano Letters, 2014, 14, 6823-6827.	9.1	40
82	Charge and spin readout scheme for single self-assembled quantum dots. Physical Review B, 2008, 77, .	3.2	38
83	Manganese doping for enhanced magnetic brightening and circular polarization control of dark excitons in paramagnetic layered hybrid metal-halide perovskites. Nature Communications, 2021, 12, 3489.	12.8	38
84	Rate-limiting mechanisms in high-temperature growth of catalyst-free InAs nanowires with large thermal stability. Nanotechnology, 2012, 23, 235602.	2.6	37
85	Diameter dependent optical emission properties of InAs nanowires grown on Si. Applied Physics Letters, 2012, 101, 053103.	3.3	36
86	High-fidelity optical preparation and coherent Larmor precession of a single hole in an (In,Ga)As quantum dot molecule. Physical Review B, 2012, 85, .	3.2	36
87	Gate-Switchable Arrays of Quantum Light Emitters in Contacted Monolayer MoS ₂ van der Waals Heterodevices. Nano Letters, 2021, 21, 1040-1046.	9.1	36
88	Long-range ordered self-assembled InAs quantum dots epitaxially grown on (110) GaAs. Applied Physics Letters, 2004, 85, 4750-4752.	3.3	35
89	Ultrafast Photodetection in the Quantum Wells of Single AlGaAs/GaAs-Based Nanowires. Nano Letters, 2015, 15, 6869-6874.	9.1	35
90	Toward Plasmonic Tunnel Gaps for Nanoscale Photoemission Currents by On-Chip Laser Ablation. Nano Letters, 2019, 19, 1172-1178.	9.1	35

#	ARTICLE	IF	CITATIONS
91	Observation and explanation of strong electrically tunable exciton g factors in composition engineered In(Ga)As quantum dots. Physical Review B, 2011, 83, .	3.2	34
92	Effect of interwire separation on growth kinetics and properties of site-selective GaAs nanowires. Applied Physics Letters, 2014, 105, .	3.3	34
93	Direct Coupling of Coherent Emission from Site-Selectively Grown III-V Nanowire Lasers into Proximal Silicon Waveguides. ACS Photonics, 2017, 4, 2537-2543.	6.6	34
94	Crux of Using the Cascaded Emission of a Three-Level Quantum Ladder System to Generate Indistinguishable Photons. Physical Review Letters, 2020, 125, 233605.	7.8	34
95	Efficient spatial redistribution of quantum dot spontaneous emission from two-dimensional photonic crystals. Applied Physics Letters, 2007, 91, .	3.3	33
96	Surface acoustic wave regulated single photon emission from a coupled quantum dot "nanocavity" system. Applied Physics Letters, 2016, 109, .	3.3	33
97	Luminescence spectra of quantum dots in microcavities. III. Multiple quantum dots. Physical Review B, 2011, 84, .	3.2	32
98	Tuning the optical emission of MoS2 nanosheets using proximal photoswitchable azobenzene molecules. Applied Physics Letters, 2014, 105, .	3.3	32
99	Virtual Proofs of Reality and their Physical Implementation. , 2015, , .		32
100	Slow light enhanced gas sensing in photonic crystals. Optical Materials, 2018, 76, 106-110.	3.6	31
101	Probing the trapping and thermal activation dynamics of excitons at single twin defects in GaAs-AlGaAs core-shell nanowires. New Journal of Physics, 2013, 15, 113032.	2.9	30
102	Quantum Effects in Higher-Order Correlators of a Quantum-Dot Spin Qubit. Physical Review Letters, 2016, 117, 027402.	7.8	30
103	Observation of an electrically tunable exciton g factor in InGaAs/GaAs quantum dots. Applied Physics Letters, 2010, 96, 053113.	3.3	29
104	Pulsed Rabi oscillations in quantum two-level systems: beyond the area theorem. Quantum Science and Technology, 2018, 3, 014006.	5.8	29
105	Widely tunable alloy composition and crystal structure in catalyst-free InGaAs nanowire arrays grown by selective area molecular beam epitaxy. Applied Physics Letters, 2016, 108, .	3.3	27
106	Enhanced photoluminescence emission from two-dimensional silicon photonic crystal nanocavities. New Journal of Physics, 2010, 12, 053005.	2.9	26
107	Photocurrents in a Single InAs Nanowire/Silicon Heterojunction. ACS Nano, 2015, 9, 9849-9858.	14.6	26
108	The Native Material Limit of Electron and Hole Mobilities in Semiconductor Nanowires. ACS Nano, 2016, 10, 4942-4953.	14.6	26

#	ARTICLE	IF	CITATIONS
109	Ultrafast few-fermion optoelectronics in a single self-assembled quantum dot. Physical Review B, 2010, 82, .	3.2	25
110	All optical quantum control of a spin-quantum state and ultrafast transduction into an electric current. Scientific Reports, 2013, 3, 1906.	3.3	25
111	Optical properties and interparticle coupling of plasmonic bowtie nanoantennas on a semiconducting substrate. Physical Review B, 2014, 90, .	3.2	25
112	Coulomb Mediated Hybridization of Excitons in Coupled Quantum Dots. Physical Review Letters, 2016, 116, 077401.	7.8	25
113	3D Deep Learning Enables Accurate Layer Mapping of 2D Materials. ACS Nano, 2021, 15, 3139-3151.	14.6	25
114	Level-Crossing Transition in the Cluster Compounds Nb ₆ I ₁₁ and HNb ₆ I ₁₁ . Physical Review Letters, 1981, 46, 1472-1475.	7.8	24
115	Role of the X ₁ minimum in transport through AlAs single-barrier structures. Physical Review B, 1998, 58, 10619-10628.	3.2	24
116	Highly nonlinear excitonic Zeeman spin splitting in composition-engineered artificial atoms. Physical Review B, 2012, 85, .	3.2	24
117	Continuous wave lasing from individual GaAs-AlGaAs core-shell nanowires. Applied Physics Letters, 2016, 108, .	3.3	24
118	Impact of substrate induced band tail states on the electronic and optical properties of MoS ₂ . Applied Physics Letters, 2019, 115, .	3.3	24
119	Optomechanical wave mixing by a single quantum dot. Optica, 2021, 8, 291.	9.3	24
120	Spin-preserving ultrafast carrier capture and relaxation in InGaAs quantum dots. Applied Physics Letters, 2005, 87, 153113.	3.3	23
121	Direct observation of metastable hot trions in an individual quantum dot. Physical Review B, 2011, 84, .	3.2	23
122	Electrical control of the exciton-biexciton splitting in self-assembled InGaAs quantum dots. Nanotechnology, 2011, 22, 325202.	2.6	23
123	Independent dynamic acousto-mechanical and electrostatic control of individual quantum dots in a LiNbO ₃ -GaAs hybrid. Applied Physics Letters, 2015, 106, .	3.3	23
124	Controlling exciton many-body states by the electric-field effect in monolayer MoS ₂ . Physical Review Research, 2021, 3, .	3.3	23
125	Radio frequency occupancy state control of a single nanowire quantum dot. Journal Physics D: Applied Physics, 2014, 47, 394011.	2.8	22
126	Origin of Antibunching in Resonance Fluorescence. Physical Review Letters, 2020, 125, 170402.	7.8	22

#	ARTICLE	IF	CITATIONS
127	Electrically probing photonic bandgap phenomena in contacted defect nanocavities. Applied Physics Letters, 2007, 91, 201111.	3.3	21
128	Optically monitoring electron spin relaxation in a single quantum dot using a spin memory device. Physical Review B, 2010, 82, .	3.2	20
129	Stimulated Generation of Indistinguishable Single Photons from a Quantum Ladder System. Physical Review Letters, 2022, 128, 093603.	7.8	20
130	Electroluminescence spectroscopy in a high magnetic field of the ballistic-electron energy distribution in single-barrier heterostructures. Physical Review B, 1995, 51, 5562-5565.	3.2	19
131	Efficient and selective cavity-resonant excitation for single photon generation. New Journal of Physics, 2009, 11, 013031.	2.9	19
132	Selective optical charge generation, storage, and readout in a single self-assembled quantum dot. Applied Physics Letters, 2009, 94, .	3.3	19
133	Broadband Purcell enhanced emission dynamics of quantum dots in linear photonic crystal waveguides. Journal of Applied Physics, 2012, 112, .	2.5	19
134	Optimisation of NbN thin films on GaAs substrates for in-situ single photon detection in structured photonic devices. Journal of Applied Physics, 2013, 113, 143507.	2.5	19
135	Quantum Confinement Enhanced Thermoelectric Properties in Modulation Doped GaAs AlGaAs Core Shell Nanowires. Advanced Materials, 2020, 32, e1905458.	21.0	19
136	Modal gain and lasing states in InAs/GaAs self-organized quantum dot lasers. Journal of Applied Physics, 2000, 87, 615-617.	2.5	18
137	Temperature-induced carrier escape processes studied in absorption of individual In _x Ga _{1-x} As quantum dots. Physical Review B, 2004, 69, .	3.2	18
138	Quantum Transport and Sub-Band Structure of Modulation-Doped GaAs/AlAs Core Superlattice Nanowires. Nano Letters, 2017, 17, 4886-4893.	9.1	18
139	Low-threshold strain-compensated InGaAs/(In,Al)GaAs multi-quantum well nanowire lasers emitting near 1.3 μm at room temperature. Applied Physics Letters, 2021, 118, .	3.3	18
140	Unveiling the Zero-Phonon Line of the Boron Vacancy Center by Cavity-Enhanced Emission. Nano Letters, 2022, 22, 5137-5142.	9.1	18
141	Spin crossover transition in the cluster compounds Nb ₆ I ₁₁ and HNb ₆ I ₁₁ . Physical Review B, 1981, 24, 1323-1332.	3.2	17
142	Carrier dynamics in short wavelength self-assembled InAs/Al _{0.6} Ga _{0.4} As quantum dots with indirect barriers. Journal of Applied Physics, 2003, 93, 3524-3528.	2.5	17
143	Excited state quantum couplings and optical switching of an artificial molecule. Physical Review B, 2011, 84, .	3.2	17
144	Suppression of alloy fluctuations in GaAs-AlGaAs core-shell nanowires. Applied Physics Letters, 2016, 109, .	3.3	17

#	ARTICLE	IF	CITATIONS
145	Ultrathin catalyst-free InAs nanowires on silicon with distinct 1D sub-band transport properties. <i>Nanoscale</i> , 2020, 12, 21857-21868.	5.6	17
146	Resonant σ - π magnetotunneling in GaAs-AlAs-GaAs heterostructures. <i>Physical Review B</i> , 1996, 54, R5251-R5254.	3.2	16
147	Electronic properties of InAs/GaAs self-assembled quantum dots studied by photocurrent spectroscopy. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2001, 9, 106-113.	2.7	16
148	Nonlinear optical response of a single self-assembled InGaAs quantum dot: A femtojoule pump-probe experiment. <i>Applied Physics Letters</i> , 2006, 88, 203110.	3.3	16
149	Surface acoustic wave controlled charge dynamics in a thin InGaAs quantum well. <i>JETP Letters</i> , 2012, 95, 575-580.	1.4	16
150	Optical control of nonlinearly dressed states in an individual quantum dot. <i>Physical Review B</i> , 2016, 93, .	3.2	16
151	Optical characterization of silicon on insulator photonic crystal nanocavities infiltrated with colloidal PbS quantum dots. <i>Applied Physics Letters</i> , 2007, 91, 233111.	3.3	15
152	An atomically resolved study of InGaAs quantum dot layers grown with an indium flush step. <i>Nanotechnology</i> , 2010, 21, 215705.	2.6	15
153	Probing ultrafast carrier tunneling dynamics in individual quantum dots and molecules. <i>Annalen Der Physik</i> , 2013, 525, 49-58.	2.4	15
154	Ultracompact Photodetection in Atomically Thin MoSe ₂ . <i>ACS Photonics</i> , 2019, 6, 1902-1909.	6.6	15
155	Development of a multilayer thin-film solar control windshield. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1996, 14, 739-746.	2.1	14
156	A carrier relaxation bottleneck probed in single InGaAs quantum dots using integrated superconducting single photon detectors. <i>Applied Physics Letters</i> , 2014, 105, 081107.	3.3	14
157	Integrated superconducting detectors on semiconductors for quantum optics applications. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	2.2	14
158	Long-term mutual phase locking of picosecond pulse pairs generated by a semiconductor nanowire laser. <i>Nature Communications</i> , 2017, 8, 15521.	12.8	14
159	Carrier concentration dependent photoluminescence properties of Si-doped InAs nanowires. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	14
160	Breakdown of Corner States and Carrier Localization by Monolayer Fluctuations in Radial Nanowire Quantum Wells. <i>Nano Letters</i> , 2019, 19, 3336-3343.	9.1	14
161	Demonstration of n -type behavior in catalyst-free Si-doped GaAs nanowires grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	14
162	Shape control of quantum dots studied by cross-sectional scanning tunneling microscopy. <i>Journal of Applied Physics</i> , 2011, 109, 102413.	2.5	13

#	ARTICLE	IF	CITATIONS
163	Enhanced optical activity of atomically thin MoSe ₂ proximal to nanoscale plasmonic slot-waveguides. 2D Materials, 2017, 4, 021011.	4.4	13
164	Correlated Chemical and Electrically Active Dopant Analysis in Catalyst-Free Si-Doped InAs Nanowires. ACS Nano, 2018, 12, 1603-1610.	14.6	13
165	He-Ion Microscopy as a High-Resolution Probe for Complex Quantum Heterostructures in Core-Shell Nanowires. Nano Letters, 2018, 18, 3911-3919.	9.1	13
166	Line-Scan Hyperspectral Imaging Microscopy with Linear Unmixing for Automated Two-Dimensional Crystals Identification. ACS Photonics, 2020, 7, 1216-1225.	6.6	13
167	Optical properties of single charge tuneable InGaAs quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 127-130.	2.7	12
168	Correlation between emission intensity of self-assembled germanium islands and quality factor of silicon photonic crystal nanocavities. Physical Review B, 2011, 84, .	3.2	12
169	Nonresonant feeding of photonic crystal nanocavity modes by quantum dots. Journal of Applied Physics, 2011, 109, 102404.	2.5	12
170	Microscopic nature of crystal phase quantum dots in ultrathin GaAs nanowires by nanoscale luminescence characterization. New Journal of Physics, 2016, 18, 063009.	2.9	12
171	GaN Nanowire Arrays for Efficient Optical Read-Out and Optoelectronic Control of NV Centers in Diamond. Nano Letters, 2018, 18, 3651-3660.	9.1	12
172	Bright Electrically Controllable Quantum-Dot-Molecule Devices Fabricated by In Situ Electron-Beam Lithography. Advanced Quantum Technologies, 2021, 4, 2100002.	3.9	12
173	Resonance-fluorescence spectral dynamics of an acoustically modulated quantum dot. Physical Review Research, 2021, 3, .	3.6	12
174	Observation of ballistic transport in double-barrier resonant-tunneling structures by electroluminescence spectroscopy. Physical Review B, 1994, 50, 4885-4888.	3.2	11
175	A three-dimensional silicon photonic crystal nanocavity with enhanced emission from embedded germanium islands. New Journal of Physics, 2012, 14, 083035.	2.9	11
176	Controlled tunneling-induced dephasing of Rabi rotations for high-fidelity hole spin initialization. Physical Review B, 2015, 92, .	3.2	11
177	Emission redistribution from a quantum dot-bowtie nanoantenna. Journal of Nanophotonics, 2016, 10, 033509.	1.0	11
178	Optical absorption of composition-tunable InGaAs nanowire arrays. Nanotechnology, 2019, 30, 495703.	2.6	11
179	Tuning the Optical Properties of a MoSe ₂ Monolayer Using Nanoscale Plasmonic Antennas. Nano Letters, 2022, 22, 561-569.	9.1	11
180	Trions in MoS ₂ are quantum superpositions of intra- and intervalley spin states. Physical Review B, 2022, 105, .		

#	ARTICLE	IF	CITATIONS
181	Investigation of cavity modes and direct observation of Purcell enhancement in 2D photonic crystal defect microcavities. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2005, 26, 351-355.	2.7	10
182	Asymmetric optical nuclear spin pumping in a single uncharged quantum dot. <i>Physical Review B</i> , 2010, 82, .	3.2	10
183	Valence Band Splitting in Wurtzite InGaAs Nanoneedles Studied by Photoluminescence Excitation Spectroscopy. <i>ACS Nano</i> , 2014, 8, 11440-11446.	14.6	10
184	Imaging surface plasmon polaritons using proximal self-assembled InGaAs quantum dots. <i>Journal of Applied Physics</i> , 2014, 116, 033101.	2.5	10
185	A few-emitter solid-state multi-exciton laser. <i>Scientific Reports</i> , 2017, 7, 7420.	3.3	10
186	Carrier trapping and activation at short-period wurtzite/zinc-blende stacking sequences in polytypic InAs nanowires. <i>Physical Review B</i> , 2018, 97, .	3.2	10
187	Optimized waveguide coupling of an integrated III-V nanowire laser on silicon. <i>Journal of Applied Physics</i> , 2019, 125, .	2.5	10
188	Growth dynamics and compositional structure in periodic InAsSb nanowire arrays on Si (111) grown by selective area molecular beam epitaxy. <i>Nanotechnology</i> , 2021, 32, 135604.	2.6	10
189	High temperature behavior of reactively sputtered AlN films on float glass substrates. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1994, 12, 1528-1534.	2.1	8
190	Controlled positioning of self-assembled InAs quantum dots on (110) GaAs. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2005, 26, 72-76.	2.7	8
191	Coplanar stripline antenna design for optically detected magnetic resonance on semiconductor quantum dots. <i>Review of Scientific Instruments</i> , 2011, 82, 074707.	1.3	8
192	Metamorphic plasmonic nanoantennas for self-enhanced nonlinear light generation. <i>Optica</i> , 2016, 3, 1453.	9.3	8
193	Enhanced THz emission efficiency of composition-tunable InGaAs nanowire arrays. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	8
194	High-resolution spectroscopy of a quantum dot driven bichromatically by two strong coherent fields. <i>Physical Review Research</i> , 2021, 3, .	3.6	8
195	Theory of vertical and lateral Stark shifts of excitons in quantum dots. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003, 0, 1181-1184.	0.8	7
196	Cascaded exciton emission of an individual strain-induced quantum dot. <i>Applied Physics Letters</i> , 2009, 95, 083122.	3.3	7
197	Direct measurement of plasmon propagation lengths on lithographically defined metallic waveguides on GaAs. <i>Journal of Applied Physics</i> , 2011, 110, 123106.	2.5	7
198	Optical study of lithographically defined, subwavelength plasmonic wires and their coupling to embedded quantum emitters. <i>Nanotechnology</i> , 2014, 25, 075203.	2.6	7

#	ARTICLE	IF	CITATIONS
199	Charged Exciton Kinetics in Monolayer MoSe ₂ near Ferroelectric Domain Walls in Periodically Poled LiNbO ₃ . Nano Letters, 2021, 21, 959-966.	9.1	7
200	Voltage-controlled sharp-line electroluminescence in GaAs-AlAs double-barrier resonant-tunneling structures. Physical Review B, 1998, 58, R4242-R4245.	3.2	6
201	Physics and applications of self-assembled quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 2131-2159.	0.8	6
202	Redistribution dynamics of optically generated charges in In(Ga)As ⁺ GaAs self-assembled quantum dots. Applied Physics Letters, 2004, 85, 2592-2594.	3.3	6
203	Anomalous Stark shifts in single vertically coupled pairs of InGaAs quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 26, 302-307.	2.7	6
204	Highly directed emission from self-assembled quantum dots into guided modes in disordered photonic-crystal waveguides. Physical Review B, 2014, 90, .	3.2	6
205	In situ synthesis of VO ₂ for tunable mid-infrared photonic devices. RSC Advances, 2015, 5, 59506-59512.	3.6	6
206	Laser intensity effects in carrier-envelope phase-tagged time of flight-photoemission electron microscopy. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	6
207	Purcell enhanced coupling of nanowire quantum emitters to silicon photonic waveguides. Optics Express, 2021, 29, 43068.	3.4	6
208	Nonlocal Exciton-Photon Interactions in Hybrid High-Q Beam Nanocavities with Encapsulated Monolayers. Physical Review Letters, 2022, 128, .	7.8	6
209	Fabrication and investigation of photonic crystal microcavities for solid state quantum optics. , 2005, 5733, 114.		5
210	Universal signatures of lasing in the strong coupling regime. Proceedings of SPIE, 2012, , .	0.8	5
211	Epitaxial type-I and type-II InAs-AlAsSb core-shell nanowires on silicon. Applied Physics Letters, 2021, 119, .	3.3	5
212	Electroluminescence spectroscopy of intervalley scattering and hot-hole transport in a GaAs/AlxGa1-xAs tunneling structure. Physical Review B, 1996, 54, 4472-4475.	3.2	4
213	Determination of intervalley scattering times in GaAs from electroluminescence spectroscopy of single barrier tunneling devices. Applied Physics Letters, 1997, 70, 622-624.	3.3	4
214	Resonant tunneling in GaAs/AlAs/GaAs single barrier heterostructures at zero and elevated magnetic field. Superlattices and Microstructures, 1998, 23, 513-519.	3.1	4
215	Optically Induced Persistent Charge Storage Effects in Self Assembled InAs Quantum Dots. Japanese Journal of Applied Physics, 1999, 38, 531-534.	1.5	4
216	Excitation and Relaxation Mechanisms in Single In(Ga)As Quantum Dots. Physica Status Solidi (B): Basic Research, 2001, 224, 373-378.	1.5	4

#	ARTICLE	IF	CITATIONS
217	Time-resolved measurements and spatial photoluminescence distribution in InAs/AlGaAs quantum dots. Microelectronics Journal, 2003, 34, 747-749.	2.0	4
218	Tunable single quantum dot nanocavities for cavity QED experiments. Journal of Physics Condensed Matter, 2008, 20, 454209.	1.8	4
219	Design and realization of low density InAs quantum dots on AlGaInAs lattice matched to InP(001). Journal of Crystal Growth, 2010, 312, 2300-2304.	1.5	4
220	Strong Photoluminescence Enhancement from Colloidal Quantum Dot Near Silver Nano-Island Films. Journal of Fluorescence, 2011, 21, 539-543.	2.5	4
221	Nanoscale mapping of carrier recombination in GaAs/AlGaAs core-multishell nanowires by cathodoluminescence imaging in a scanning transmission electron microscope. Applied Physics Letters, 2019, 115, 243102.	3.3	4
222	Time-domain photocurrent spectroscopy based on a common-path birefringent interferometer. Review of Scientific Instruments, 2020, 91, 123101.	1.3	4
223	Electrical control of orbital and vibrational interlayer coupling in bi- and trilayer HMoS_2 . Physical Review Materials, 2022, 6, .	2.4	4
224	InAs/GaAs self-assembled quantum dot lasers: physical processes and device characteristics. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 489-493.	2.7	3
225	Wavelength selective data storage in InGaAs/GaAs quantum dots. Physica Status Solidi (B): Basic Research, 2003, 238, 345-348.	1.5	3
226	Non-linear effects on the power dependent photocurrent of self-assembled InAs/GaAs quantum dots. Microelectronics Journal, 2003, 34, 667-669.	2.0	3
227	Laterally self-ordered silicon-germanium islands with optimized confinement properties. Applied Physics Letters, 2013, 103, 063105.	3.3	3
228	Strong transmittance above the light line in mid-infrared two-dimensional photonic crystals. Journal of Applied Physics, 2015, 117, 223101.	2.5	3
229	Towards on-chip generation, routing and detection of non-classical light. , 2015, , .		3
230	Electronically Tunable Transparent Conductive Thin Films for Scalable Integration of 2D Materials with Passive 2D/3D Interfaces. Advanced Functional Materials, 2022, 32, .	14.9	3
231	Carrier dynamics in red-emitting self-organised InAs/AlGaAs quantum dots with indirect barriers. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 109-110.	2.7	2
232	Systematic reduction of the permanent exciton dipole for charged excitons in individual self-assembled InGaAs quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 199-203.	2.7	2
233	Nonequilibrium carrier dynamics in self-assembled InGaAs quantum dots. Physica Status Solidi (B): Basic Research, 2006, 243, 2217-2223.	1.5	2
234	All optical preparation, storage, and readout of a single spin in an individual quantum dot. Proceedings of SPIE, 2012, , .	0.8	2

#	ARTICLE	IF	CITATIONS
235	Coupling of guided surface plasmon polaritons to proximal self-assembled InGaAs Quantum Dots. Proceedings of SPIE, 2012, , .	0.8	2
236	Efficient Optomechanical Mode-Shape Mapping of Micromechanical Devices. Micromachines, 2021, 12, 880.	2.9	2
237	Self-assembly of InAs Quantum Dot Structures on Cleaved Facets. , 2008, , 25-41.		2
238	Automated, deep reactive ion etching free fiber coupling to nanophotonic devices. , 2022, , .		2
239	Optical Spectroscopy and Transport Studies of Tunnelling Processes and Hot Electron Relaxation in GaAs ϵ AlGaAs and GaAs ϵ AlAs Single Barrier Heterostructures. Physica Status Solidi (B): Basic Research, 1997, 204, 215-222.	1.5	1
240	Optically-induced charge storage in self-assembled InAs quantum dots. Thin Solid Films, 2000, 380, 192-194.	1.8	1
241	Wavelength Selective Charge Storage in self-assembled InGaAs-GaAs Quantum Dots. Materials Research Society Symposia Proceedings, 2002, 737, 223.	0.1	1
242	Effects of charge accumulation on the photocurrent and photoluminescence characteristics of self-assembled InAs/GaAs quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 37-39.	2.7	1
243	Dynamics of optically stored charges in InGaAs quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 886-891.	2.7	1
244	Quantum Dot Charge and Spin Memory Devices. , 2008, , 476-504.		1
245	Recent progress towards acoustically mediated carrier injection into individual nanostructures for single photon generation. Proceedings of SPIE, 2010, , .	0.8	1
246	Fabrication of high-Q silicon-based three-dimensional photonic crystal nanocavity and its lasing oscillation with InAs quantum-dot gain. , 2011, , .		1
247	Quantum dynamics of damped and driven anharmonic oscillators. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 1296-1302.	0.8	1
248	Quantum dot single photon sources with ultra-low multi-photon error rate. , 2018, , .		1
249	Shape Control of QDs Studied by Cross-sectional Scanning Tunneling Microscopy. Journal of the Korean Physical Society, 2011, 58, 1244-1250.	0.7	1
250	Magneto-optical studies of ballistic electron transport in single barrier heterostructures. Superlattices and Microstructures, 1994, 15, 373-376.	3.1	0
251	The role of higher energy bands in hot carrier transport investigated by electroluminescence spectroscopy. Superlattices and Microstructures, 1997, 22, 199-202.	3.1	0
252	Nonlinear optical microscopy of a single self-assembled InGaAs quantum dot. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 4009-4012.	0.8	0

#	ARTICLE	IF	CITATIONS
253	Preface: phys. stat. sol. (b) 243/14. Physica Status Solidi (B): Basic Research, 2006, 243, 3575-3575.	1.5	0
254	Guided Self Assembly of InAs Quantum Dots on a Cleaved Facet. Materials Research Society Symposia Proceedings, 2006, 959, 1.	0.1	0
255	Towards an Electro-Optical Driven Single Photon Device. , 2008, , .		0
256	Delivery of photons generated in silicon photonic crystal nano-cavity through lateral waveguide. , 2008, , .		0
257	Outcoupling of Light Generated in a Monolithic Silicon Photonic Crystal Nanocavity through a Lateral Waveguide. Japanese Journal of Applied Physics, 2009, 48, 062003.	1.5	0
258	Ultrafast few-fermion dynamics in single self-assembled InGaAs/GaAs quantum dots. , 2011, , .		0
259	Probing ultrafast charge and spin dynamics in a quantum dot molecule. , 2012, , .		0
260	Surface acoustic wave-driven carrier dynamics as a contact-less probe for mobilities of photogenerated carriers in undoped nanowires. , 2013, , .		0
261	Linear and non-linear response of lithographically defined plasmonic nanoantennas. , 2015, , .		0
262	Advances in semiconductor nanowire lasers. , 2016, , .		0
263	Quantum confinement phenomena in ultrathin GaAs nanowires. , 2016, , .		0
264	CW and ultrafast properties of GaAs-AlGaAs core-shell nanowire lasers on silicon (Conference) Tj ETQq0 0 0 rgBT /Overlock 1Q Tf 50 302		0
265	Nanometer-scale Resolved Cathodoluminescence Imaging: New Insights into GaAs/AlGaAs Core-shell Nanowire Lasers. Microscopy and Microanalysis, 2017, 23, 1470-1471.	0.4	0
266	Optical spectroscopy of self-assembled quantum dots. , 2002, , 85-109.		0
267	Nonlinear Optical Microscopy of a Single Self-assembled InGaAs Quantum Dot. , 2006, , .		0
268	Sub-threshold investigation of two coupled photonic crystal cavities. , 2009, , .		0
269	Ultrafast Few-Fermion Optoelectronics of a Single Quantum Dot. , 2010, , .		0
270	Picosecond Few-Fermion Dynamics of a Single Self-Assembled InGaAs Quantum Dot. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
271	Optically-probing spin qubit coherence without coherent control (Conference Presentation). , 2017, , .		0
272	Long-lived Quantum Emitters in hBN-WSe2 Van-Der-Waals Heterostructures. , 2018, , .		0
273	Two-photon bundles from a single two-level system. , 2018, , .		0
274	Silicon Waveguide Coupled III-V Nanowire Lasers with Epitaxial Gain Control. , 2018, , .		0
275	Tuning Lasing Emission towards Long Wavelengths in GaAs-(In,Al)GaAs Core-Multishell Nanowires. , 2019, , .		0
276	Waveguide Coupling of an Integrated Nanowire Laser on Silicon with Enhanced End-Facet Reflectivity. , 2019, , .		0
277	Picosecond Spin-Preserving Carrier Capture in InGaAs/GaAs Quantum Dots. , 2006, , 41-44.		0
278	Electronically Tunable Transparent Conductive Thin Films for Scalable Integration of 2D Materials with Passive 2D-3D Interfaces (Adv. Funct. Mater. 21/2022). Advanced Functional Materials, 2022, 32, .	14.9	0