Andr Strittmatter

List of Publications by Year in Descending Order

133 papers	2,699 citations	28 h-index	45 g-index
151 ext. papers	3,088 ext. citations	2.8 avg, IF	4.54 L-index

#	Paper	IF	Citations
133	Desorption induced formation of low-density GaN quantum dots: nanoscale correlation of structural and optical properties. *Journal Physics D: Applied Physics*, **2022**, 55, 145102	3	
132	Defect characterization of heavy-ion irradiated AlInN/GaN on Si high-electron-mobility transistors. *Journal Physics D: Applied Physics*, **2022**, 55, 115107	3	0
131	Low-resistivity vertical current transport across AlInN/GaN interfaces. *Japanese Journal of Applied Physics*, **2021**, 60, 010905	1.4	0
130	Understanding High-Energy 75-MeV Sulfur-Ion Irradiation-Induced Degradation in GaN-Based Heterostructures: The Role of the GaN Channel Layer. *IEEE Transactions on Electron Devices*, **2021**, 68, 24-28	2.9	2
129	Optical method for measuring proton projected range in GaAs. *Nuclear Instruments & Methods in Physics Research B*, **2021**, 500-501, 68-75	1.2	
128	Experimental re-evaluation of proton penetration ranges in GaAs and InGaP. *Journal Physics D: Applied Physics*, **2021**, 54, 115302	3	4
127	Tools for the performance optimization of single-photon quantum key distribution. *Npj Quantum Information*, **2020**, 6,	8.6	17
126	Interplay between emission wavelength and s-p splitting in MOCVD-grown InGaAs/GaAs quantum dots emitting above 1.3 μm. *Applied Physics Letters*, **2020**, 116, 023102	3.4	6
125	Individually resolved luminescence from closely stacked GaN/AlN quantum wells. *Photonics Research*, **2020**, 8, 610	6	5
124	Stressor-Induced Site Control of Quantum Dots for Single-Photon Sources. *Springer Series in Solid-state Sciences*, **2020**, 53-90	0.4	2
123	Nitride Microcavities and Single Quantum Dots for Classical and Non-classical Light Emitters. *Springer Series in Solid-state Sciences*, **2020**, 453-504	0.4	
122	Submonolayer Quantum Dots. *Springer Series in Solid-state Sciences*, **2020**, 13-51	0.4	2
121	Entanglement robustness to excitonic spin precession in a quantum dot. *Physical Review B*, **2020**, 102,	3.3	1
120	Thermal stability of emission from single InGaAs/GaAs quantum dots at the telecom O-band. *Scientific Reports*, **2020**, 10, 21816	4.9	4
119	Excitonic complexes in MOCVD-grown InGaAs/GaAs quantum dots emitting at telecom wavelengths. *Physical Review B*, **2019**, 100,	3.3	8
118	Broadband Semiconductor Light Sources Operating at 1060 nm Based on InAs:Sb/GaAs Submonolayer Quantum Dots. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-10	3.8	3
117	Static and Dynamic Characteristics of In(AsSb)/ GaAs Submonolayer Lasers. *IEEE Journal of Quantum Electronics*, **2019**, 55, 1-7	2	1

116	Quantum metrology of solid-state single-photon sources using photon-number-resolving detectors. *New Journal of Physics*, **2019**, 21, 035007	2.9	13
115	Outstanding Reliability of Heavy-Ion-Irradiated AlInN/GaN on Silicon HFETs. *IEEE Transactions on Nuclear Science*, **2019**, 66, 2417-2421	1.7	3
114	Generation of maximally entangled states and coherent control in quantum dot microlenses. *Applied Physics Letters*, **2018**, 112, 153107	3.4	17
113	A stand-alone fiber-coupled single-photon source. *Scientific Reports*, **2018**, 8, 1340	4.9	46
112	Enhancing the photon-extraction efficiency of site-controlled quantum dots by deterministically fabricated microlenses. *Optics Communications*, **2018**, 413, 162-166	2	11
111	Analysis of InAsSb/GaAs submonolayer stacks. *Journal of Crystal Growth*, **2018**, 494, 1-7	1.6	2
110	Enhanced photon-extraction efficiency from InGaAs/GaAs quantum dots in deterministic photonic structures at 1.3 μm fabricated by in-situ electron-beam lithography. *AIP Advances*, **2018**, 8, 085205	1.5	25
109	MOVPE-Growth of InGaSb/AlP/GaP(001) Quantum Dots for Nanoscale Memory Applications. *Physica Status Solidi (B): Basic Research*, **2018**, 255, 1800182	1.3	12
108	Two charge states of the CN acceptor in GaN: Evidence from photoluminescence. *Physical Review B*, **2018**, 98,	3.3	58
107	Single Quantum Dot with Microlens and 3D-Printed Micro-objective as Integrated Bright Single-Photon Source. *ACS Photonics*, **2017**, 4, 1327-1332	6.3	43
106	A bright triggered twin-photon source in the solid state. *Nature Communications*, **2017**, 8, 14870	17.4	48
105	Two-photon interference from remote deterministic quantum dot microlenses. *Applied Physics Letters*, **2017**, 110, 011104	3.4	23
104	Charge-driven feedback loop in the resonance fluorescence of a single quantum dot. *Physical Review B*, **2017**, 95,	3.3	3
103	All metalorganic chemical vapor phase epitaxy of p/n-GaN tunnel junction for blue light emitting diode applications. *Applied Physics Letters*, **2017**, 110, 102104	3.4	48
102	Resonance fluorescence of a site-controlled quantum dot realized by the buried-stressor growth technique. *Applied Physics Letters*, **2017**, 110, 111101	3.4	16
101	Properties of C-doped GaN. *Physica Status Solidi (B): Basic Research*, **2017**, 254, 1600708	1.3	23
100	Path-Controlled Time Reordering of Paired Photons in a Dressed Three-Level Cascade. *Physical Review Letters*, **2017**, 118, 233601	7.4	22
99	Leakage currents and Fermi-level shifts in GaN layers upon iron and carbon-doping. *Journal of Applied Physics*, **2017**, 122, 025704	2.5	19

98	Efficient single-photon source based on a deterministically fabricated single quantum dot - microstructure with backside gold mirror. *Applied Physics Letters*, **2017**, 111, 011106	3.4	16
97	Accessing the dark exciton spin in deterministic quantum-dot microlenses. *APL Photonics*, **2017**, 2, 121303	5.2	18
96	Triggered high-purity telecom-wavelength single-photon generation from p-shell-driven InGaAs/GaAs quantum dot. *Optics Express*, **2017**, 25, 31122-31129	3.3	18
95	Optimizing the InGaAs/GaAs Quantum Dots for 1.3 μm Emission. *Acta Physica Polonica A*, **2017**, 132, 386-390	0.6	5
94	Heterodimensional charge-carrier confinement in stacked submonolayer InAs in GaAs. *Physical Review B*, **2016**, 93,	3.3	29
93	Exploring Dephasing of a Solid-State Quantum Emitter via Time- and Temperature-Dependent Hong-Ou-Mandel Experiments. *Physical Review Letters*, **2016**, 116, 033601	7.4	115
92	Clustered quantum dots in single GaN islands formed at threading dislocations. *Japanese Journal of Applied Physics*, **2016**, 55, 05FF04	1.4	4
91	Metalorganic chemical vapor phase epitaxy of narrow-band distributed Bragg reflectors realized by GaN:Ge modulation doping. *Journal of Crystal Growth*, **2016**, 440, 6-12	1.6	10
90	Bright Single-Photon Sources Based on Anti-Reflection Coated Deterministic Quantum Dot Microlenses. *Technologies*, **2016**, 4, 1	2.4	19
89	Impact of Phonons on Dephasing of Individual Excitons in Deterministic Quantum Dot Microlenses. *ACS Photonics*, **2016**, 3, 2461-2466	6.3	30
88	Strong amplitude-phase coupling in submonolayer quantum dots. *Applied Physics Letters*, **2016**, 109, 201102	3.4	13
87	Generating single photons at gigahertz modulation-speed using electrically controlled quantum dot microlenses. *Applied Physics Letters*, **2016**, 108, 021104	3.4	26
86	Investigation of proton damage in III-V semiconductors by optical spectroscopy. *Journal of Applied Physics*, **2016**, 119, 235702	2.5	2
85	On reduction of current leakage in GaN by carbon-doping. *Applied Physics Letters*, **2016**, 109, 212102	3.4	18
84	Growth and structure of In0.5Ga0.5Sb quantum dots on GaP(001). *Applied Physics Letters*, **2016**, 109, 102102	3.4	8
83	Efficient Current Injection Into Single Quantum Dots Through Oxide-Confined p-n-Diodes. *IEEE Transactions on Electron Devices*, **2016**, 63, 2036-2042	2.9	14
82	Polarization engineering of c-plane InGaN quantum wells by pulsed-flow growth of AlInGaN barriers. *Physica Status Solidi (B): Basic Research*, **2016**, 253, 118-125	1.3	4
81	230 s room-temperature storage time and 1.14 eV hole localization energy in In0.5Ga0.5As quantum dots on a GaAs interlayer in GaP with an AlP barrier. *Applied Physics Letters*, **2015**, 106, 042102	3.4	16

80	Operating single quantum emitters with a compact Stirling cryocooler. *Review of Scientific Instruments*, **2015**, 86, 013113	1.7	19
79	Highly indistinguishable photons from deterministic quantum-dot microlenses utilizing three-dimensional in situ electron-beam lithography. *Nature Communications*, **2015**, 6, 7662	17.4	201
78	Strain field of a buried oxide aperture. *Physical Review B*, **2015**, 91,	3.3	10
77	Strong charge-carrier localization in InAs/GaAs submonolayer stacks prepared by Sb-assisted metalorganic vapor-phase epitaxy. *Physical Review B*, **2015**, 91,	3.3	10
76	Resolution and alignment accuracy of low-temperature in situ electron beam lithography for nanophotonic device fabrication. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2015**, 33, 021603	1.3	34
75	Advanced in-situ electron-beam lithography for deterministic nanophotonic device processing. *Review of Scientific Instruments*, **2015**, 86, 073903	1.7	16
74	Direct evidence of single quantum dot emission from GaN islands formed at threading dislocations using nanoscale cathodoluminescence: A source of single photons in the ultraviolet. *Applied Physics Letters*, **2015**, 106, 252101	3.4	24
73	Single-photon emission at a rate of 143 MHz from a deterministic quantum-dot microlens triggered by a mode-locked vertical-external-cavity surface-emitting laser. *Applied Physics Letters*, **2015**, 107, 041105	3.4	42
72	Fast gain and phase recovery of semiconductor optical amplifiers based on submonolayer quantum dots. *Applied Physics Letters*, **2015**, 107, 201102	3.4	15
71	Enhanced sheet carrier densities in polarization controlled AlInN/AlN/GaN/InGaN field-effect transistor on Si (111). *AIP Advances*, **2015**, 5, 077146	1.5	4
70	Desorption induced GaN quantum dots on (0001) AlN by MOVPE. *Physica Status Solidi - Rapid Research Letters*, **2015**, 9, 526-529	2.5	7
69	Growth of AlInN/GaN distributed Bragg reflectors with improved interface quality. *Journal of Crystal Growth*, **2015**, 414, 105-109	1.6	18
68	Indirect and direct optical transitions in In0.5Ga0.5As/GaP quantum dots. *Applied Physics Letters*, **2014**, 104, 123107	3.4	14
67	15 Gb/s index-coupled distributed-feedback lasers based on 1.3 □m InGaAs quantum dots. *Applied Physics Letters*, **2014**, 105, 011103	3.4	11
66	Carrier dynamics in InAs/GaAs submonolayer stacks coupled to Stranski-Krastanov quantum dots. *Physical Review B*, **2013**, 88,	3.3	19
65	In situ electron-beam lithography of deterministic single-quantum-dot mesa-structures using low-temperature cathodoluminescence spectroscopy. *Applied Physics Letters*, **2013**, 102, 251113	3.4	71
64	Spatial structure of In0.25Ga0.75As/GaAs/GaP quantum dots on the atomic scale. *Applied Physics Letters*, **2013**, 102, 123102	3.4	12
63	Site-selective growth of single quantum dots. *Physica Status Solidi (A) Applications and Materials Science*, **2012**, 209, 2378-2378	1.6	1

62	Site-controlled quantum dot growth on buried oxide stressor layers. *Physica Status Solidi (A) Applications and Materials Science*, **2012**, 209, 2411-2420	1.6	21
61	Lateral positioning of InGaAs quantum dots using a buried stressor. *Applied Physics Letters*, **2012**, 100, 093111	3.4	26
60	High-power low-divergence 1060 nm photonic crystal laser diodes based on quantum dots. *Electronics Letters*, **2012**, 48, 1419	1.1	9
59	Electro-optical resonance modulation of vertical-cavity surface-emitting lasers. *Optics Express*, **2012**, 20, 5099-107	3.3	18
58	Growth of In0.25Ga0.75As quantum dots on GaP utilizing a GaAs interlayer. *Applied Physics Letters*, **2012**, 101, 223110	3.4	14
57	Electrically driven single photon source based on a site-controlled quantum dot with self-aligned current injection. *Applied Physics Letters*, **2012**, 101, 211119	3.4	36
56	Atomic structure of closely stacked InAs submonolayer depositions in GaAs. *Journal of Applied Physics*, **2012**, 112, 083505	2.5	14
55	Atomic structure and optical properties of InAs submonolayer depositions in GaAs. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2011**, 29, 04D104	1.3	31
54	InAlGaN optical emitters: laser diodes with non-epitaxial cladding layers and ultraviolet light-emitting diodes **2011**,		4
53	Semi-polar nitride surfaces and heterostructures. *Physica Status Solidi (B): Basic Research*, **2011**, 248, 561-573	1.5	55
52	Coalescence during epitaxial lateral overgrowth of (Al,Ga)N(11.2) layers. *Journal of Crystal Growth*, **2011**, 314, 1-4	1.6	2
51	In-well pumping of InGaN/GaN vertical-external-cavity surface-emitting lasers. *Applied Physics Letters*, **2011**, 99, 201109	3.4	22
50	Atomic Structure of Buried InAs Sub-Monolayer Depositions in GaAs. *Applied Physics Express*, **2010**, 3, 105602	2.4	28
49	Large internal dipole moment in InGaN/GaN quantum dots. *Applied Physics Letters*, **2010**, 97, 063103	3.4	48
48	Nitride Laser Diodes With Nonepitaxial Cladding Layers. *IEEE Photonics Technology Letters*, **2010**, 22, 329-331	2.2	8
47	Structural characterization of thick (1122) GaN layers grown by HVPE on m-plane sapphire. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 1295-1298	1.6	5
46	Optical properties of InN grown on templates with controlled surface polarities. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 2351-2354	1.6	5
45	Optically-pumped lasing of semi-polar InGaN/GaN(1122) heterostructures. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 1814-1816		5

44	Monolithic electro-optically modulated vertical cavity surface emitting laser with 10 Gb/s open-eye operation. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 2552-2554		9
43	Quantum dot insertions in VCSELs from 840 to 1300 nm: growth, characterization, and device performance **2009**,		5
42	Control of Self-Organized In(Ga)As/GaAs Quantum Dot Growth. *Nanoscience and Technology*, **2008**, 41-65	0.6	
41	Ultra high-speed electro-optically modulated VCSELs: modeling and experimental results **2008**,		18
40	TEM Characterization of Self-Organized (In,Ga)N Quantum Dots. *Springer Proceedings in Physics*, **2008**, 255-258	0.2	
39	1040 nm vertical external cavity surface emitting laser based on InGaAs quantum dots grown in Stranski-Krastanow regime. *Electronics Letters*, **2008**, 44, 290	1.1	15
38	Temperature-stable operation of a quantum dot semiconductor disk laser. *Applied Physics Letters*, **2008**, 93, 051104	3.4	31
37	High-power semiconductor disk laser based on InAs□GaAs submonolayer quantum dots. *Applied Physics Letters*, **2008**, 92, 101123	3.4	51
36	Characterisation of an InAs quantum dot semiconductor disk laser **2008**,		1
35	Origin of the broad lifetime distribution of localized excitons in InGaN/GaN quantum dots. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 2766-2770	1.3	12
34	Quantum-dot semiconductor disk lasers. *Journal of Crystal Growth*, **2008**, 310, 5182-5186	1.6	34
33	Suppression of the wavelength blue shift during overgrowth of InGaAs-based quantum dots. *Journal of Crystal Growth*, **2008**, 310, 5066-5068	1.6	5
32	Polarized emission lines from single InGaN/GaN quantum dots: Role of the valence-band structure of wurtzite Group-III nitrides. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 2217-2219	3	6
31	Recombination characteristics of the proton and neutron irradiated semi-insulating GaN structures. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2007**, 583, 181-184	1.2	3
30	MOCVD of InGaAs/GaAs quantum dots for lasers emitting close to 1.3 □m. *Journal of Crystal Growth* , **2007**, 298, 591-594	1.6	15
29	Polarized emission lines from A- and B-type excitonic complexes in single InGaN/GaN quantum dots. *Journal of Applied Physics*, **2007**, 101, 113708	2.5	43
28	Phonon Interaction in InGaAs/GaAs Quantum Dots. *Materials Research Society Symposia Proceedings* , **2007**, 1053, 3		1
27	Control of fine-structure splitting and excitonic binding energies in selected individual InAs□GaAs quantum dots. *Applied Physics Letters*, **2006**, 89, 263109	3.4	56

26	Alternative precursor metal-organic chemical vapor deposition of InGaAs/GaAs quantum dot laser diodes with ultralow threshold at 1.25 μm. *Applied Physics Letters*, **2006**, 88, 262104	3.4	14
25	New method for the in situ determination of $Al_xGa_{1-x}N$ composition in MOVPE by real-time optical reflectance. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 1645-1649	1.6	2
24	Indium redistribution in an InGaN quantum well induced by electron-beam irradiation in a transmission electron microscope. *Applied Physics Letters*, **2005**, 86, 241911	3.4	41
23	Recombination dynamics of localized excitons in InGaN quantum dots. *Applied Physics Letters*, **2004**, 85, 1946-1948	3.4	51
22	Optical properties of InGaN quantum dots. *Superlattices and Microstructures*, **2004**, 36, 763-772	2.8	2
21	Influence of the reactor total pressure on optical properties of MOCVD grown InGaN layers. *Journal of Crystal Growth*, **2004**, 272, 415-419	1.6	10
20	Optimization of GaN MOVPE growth on patterned Si substrates using spectroscopic in situ reflectance. *Journal of Crystal Growth*, **2004**, 272, 76-80	1.6	4
19	Multi-excitonic complexes in single InGaN quantum dots. *Applied Physics Letters*, **2004**, 84, 4023-4025	3.4	79
18	Metalorganic chemical vapor phase epitaxy of gallium-nitride on silicon. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2003**, 1583-1606		101
17	Gallium-nitride-based devices on silicon. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2003**, 1940-1949		17
16	Spontaneous Superlattice Formation in AlGaN Layers Grown by MOCVD on Si(111)-Substrates. *Physica Status Solidi (B): Basic Research*, **2002**, 234, 722-725	1.3	9
15	Maskless epitaxial lateral overgrowth of GaN layers on structured Si(111) substrates. *Applied Physics Letters*, **2001**, 78, 727-729	3.4	94
14	Structural investigation of GaN layers grown on Si(111) substrates using a nitridated AlAs buffer layer. *Journal of Crystal Growth*, **2000**, 221, 293-296	1.6	13
13	Formation of GaAsN nanoinsertions in a GaN matrix by metal-organic chemical vapour deposition. *Semiconductor Science and Technology*, **2000**, 15, 766-769	1.8	16
12	Low-pressure metal organic chemical vapor deposition of GaN on silicon(111) substrates using an AlAs nucleation layer. *Applied Physics Letters*, **1999**, 74, 1242-1244	3.4	72
11	LP-MOCVD growth of GaN on silicon substrates: comparison between AlAs and ZnO nucleation layers. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1999**, 59, 29-32	3.1	17
10	65 GHz InGaAs/InAlGaAs/InP waveguide-integrated photodetectors for the 1.3–1.55 μm wavelength regime. *Applied Physics Letters*, **1999**, 74, 612-614	3.4	11
9	High Quality GaN Layers Grown by Metalorganic Chemical Vapor Deposition on Si(111) Substrates. *Physica Status Solidi A*, **1999**, 176, 611-614		40

8	Technology of InP-based 1.55-/spl mu/m ultrafast OEMMICs: 40-Gbit/s broad-band and 38/60-GHz narrow-band photoreceivers. *IEEE Journal of Quantum Electronics*, **1999**, 35, 1024-1031	2	18
7	Buried InAlGaAs-InP waveguides: etching, overgrowth, and characterization. *IEEE Photonics Technology Letters*, **1998**, 10, 114-116	2.2	6
6	Narrow-band photoreceiver OEIC on InP operating at 38 GHz. *IEEE Photonics Technology Letters*, **1998**, 10, 1298-1300	2.2	13
5	High-speed InGaAs/InAlGaAs/InP waveguide-integrated MSM photodetectors for 1.3 □1.55 [micro sign]m wavelength range. *Electronics Letters*, **1998**, 34, 587	1.1	6
4	Waveguide-integrated InP-InGaAs-InAlGaAs MSM photodetector with very-high vertical-coupling efficiency. *IEEE Photonics Technology Letters*, **1997**, 9, 496-498	2.2	8
3	Polarisation-insensitive high-speed InGaAs metal-semiconductor-metal photodetectors. *Electronics Letters*, **1997**, 33, 912	1.1	5
2	High speed, high efficiency resonant-cavity enhanced InGaAs MSM photodetectors. *Electronics Letters*, **1996**, 32, 1231	1.1	9
1	Distributed MSM photodetectors for the long-wavelength range		4