Tobias Heindel

List of Publications by Year in Descending Order

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

65 papers	1,905 citations	24 h-index	42 g-index
94 ext. papers	2,257 ext. citations	4 avg, IF	4.49 L-index

#	Paper	IF	Citations
65	A quantum key distribution testbed using a plug&play telecom-wavelength single-photon source. *Applied Physics Reviews*, **2022**, 9, 011412	17.3	2
64	Fiber-pigtailing quantum-dot cavity-enhanced light emitting diodes. *Applied Physics Letters*, **2021**, 119, 131104	3.4	2
63	Swing-Up of Quantum Emitter Population Using Detuned Pulses. *PRX Quantum*, **2021**, 2,	6.1	2
62	Deterministically fabricated solid-state quantum-light sources. *Journal of Physics Condensed Matter*, **2020**, 32, 153003	1.8	23
61	Tools for the performance optimization of single-photon quantum key distribution. *Npj Quantum Information*, **2020**, 6,	8.6	17
60	Deterministically fabricated quantum dot single-photon source emitting indistinguishable photons in the telecom O-band. *Applied Physics Letters*, **2020**, 116, 231104	3.4	17
59	Deterministically fabricated spectrally-tunable quantum dot based single-photon source. *Optical Materials Express*, **2020**, 10, 76	2.6	20
58	Stressor-Induced Site Control of Quantum Dots for Single-Photon Sources. *Springer Series in Solid-state Sciences*, **2020**, 53-90	0.4	2
57	Deterministic Quantum Devices for Optical Quantum Communication. *Springer Series in Solid-state Sciences*, **2020**, 285-359	0.4	1
56	Radiometric characterization of a triggered narrow-bandwidth single-photon source and its use for the calibration of silicon single-photon avalanche detectors. *Metrologia*, **2020**, 57, 055001	2.1	4
55	Cesium-Vapor-Based Delay of Single Photons Emitted by Deterministically Fabricated Quantum Dot Microlenses. *Advanced Quantum Technologies*, **2020**, 3, 1900071	4.3	2
54	Deterministic Integration of Quantum Dots into On-Chip Multi-Mode Interference Couplers Via in-Situ Electron Beam Lithography **2019**,		1
53	Optimized designs for telecom-wavelength quantum light sources based on hybrid circular Bragg gratings. *Optics Express*, **2019**, 27, 36824-36837	3.3	24
52	Quantum metrology of solid-state single-photon sources using photon-number-resolving detectors. *New Journal of Physics*, **2019**, 21, 035007	2.9	13
51	A stand-alone fiber-coupled single-photon source. *Scientific Reports*, **2018**, 8, 1340	4.9	46
50	Micropillars with a controlled number of site-controlled quantum dots. *Applied Physics Letters*, **2018** , 112, 071101	3.4	7
49	Enhancing the photon-extraction efficiency of site-controlled quantum dots by deterministically fabricated microlenses. *Optics Communications*, **2018**, 413, 162-166	2	11

48	Deterministic Integration of Quantum Dots into on-Chip Multimode Interference Beamsplitters Using in Situ Electron Beam Lithography. *Nano Letters*, **2018**, 18, 2336-2342	11.5	61
47	Controlling the gain contribution of background emitters in few-quantum-dot microlasers. *New Journal of Physics*, **2018**, 20, 023036	2.9	3
46	Photon-Number-Resolving Transition-Edge Sensors for the Metrology of Quantum Light Sources. *Journal of Low Temperature Physics*, **2018**, 193, 1243-1250	1.3	22
45	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
44	A bright triggered twin-photon source in the solid state. *Nature Communications*, **2017**, 8, 14870	17.4	48
43	Two-photon interference from remote deterministic quantum dot microlenses. *Applied Physics Letters*, **2017**, 110, 011104	3.4	23
42	Electrically Tunable Single-Photon Source Triggered by a Monolithically Integrated Quantum Dot Microlaser. *ACS Photonics*, **2017**, 4, 790-794	6.3	22
41	Strong light-matter coupling in the presence of lasing. *Physical Review A*, **2017**, 96,	2.6	15
40	Subminiature emitters based on a single (111) In(Ga)As quantum dot and hybrid microcavity. *Semiconductors*, **2017**, 51, 1399-1402	0.7	
39	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
38	Hybrid microcavity for superminiature single quantum dot based emitters. *Optoelectronics, Instrumentation and Data Processing*, **2017**, 53, 178-183	0.6	1
37	Accessing the dark exciton spin in deterministic quantum-dot microlenses. *APL Photonics*, **2017**, 2, 121303	5.2	18
36	On-chip optoelectronic feedback in a micropillar laser-detector assembly. *Optica*, **2017**, 4, 303	8.6	12
35	Single-Photon Sources Based on Deterministic Quantum-Dot Microlenses. *Nano-optics and Nanophotonics*, **2017**, 199-232	0	5
34	[illegible](111) In(Ga)As [illegible] [illegible]*Fizika I Tekhnika Poluprovodnikov*, **2017**, 51, 1451	0	
33	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
32	Bright Single-Photon Sources Based on Anti-Reflection Coated Deterministic Quantum Dot Microlenses. *Technologies*, **2016**, 4, 1	2.4	19
31	Generating single photons at gigahertz modulation-speed using electrically controlled quantum dot microlenses. *Applied Physics Letters*, **2016**, 108, 021104	3.4	26

30	On-chip light detection using monolithically integrated quantum dot micropillars. *Applied Physics Letters*, **2016**, 108, 081110	3.4	7
29	An electrically driven cavity-enhanced source of indistinguishable photons with 61% overall efficiency. *APL Photonics*, **2016**, 1, 011301	5.2	50
28	Correlations between axial and lateral emission of coupled quantum dot–micropillar cavities. *Physical Review B*, **2015**, 91,	3.3	11
27	Operating single quantum emitters with a compact Stirling cryocooler. *Review of Scientific Instruments*, **2015**, 86, 013113	1.7	19
26	A Pulsed Nonclassical Light Source Driven by an Integrated Electrically Triggered Quantum Dot Microlaser. *IEEE Journal of Selected Topics in Quantum Electronics*, **2015**, 21, 681-689	3.8	17
25	Highly indistinguishable photons from deterministic quantum-dot microlenses utilizing three-dimensional in situ electron-beam lithography. *Nature Communications*, **2015**, 6, 7662	17.4	201
24	All-optical depletion of dark excitons from a semiconductor quantum dot. *Applied Physics Letters*, **2015**, 106, 193101	3.4	17
23	Advanced in-situ electron-beam lithography for deterministic nanophotonic device processing. *Review of Scientific Instruments*, **2015**, 86, 073903	1.7	16
22	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
21	Free space quantum key distribution over 500 meters using electrically driven quantum dot single-photon sources: proof of principle experiment. *New Journal of Physics*, **2014**, 16, 043003	2.9	28
20	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
19	Quantum key distribution using quantum dot single-photon emitting diodes in the red and near infrared spectral range. *New Journal of Physics*, **2012**, 14, 083001	2.9	63
18	Microcavity enhanced single photon emission from an electrically driven site-controlled quantum dot. *Applied Physics Letters*, **2012**, 100, 091108	3.4	43
17	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
16	Cavity quantum electrodynamics studies with site-controlled InGaAs quantum dots integrated into high quality microcavities **2011**,		1
15	Electrically Driven Quantum Dot Micropillar Light Sources. *IEEE Journal of Selected Topics in Quantum Electronics*, **2011**, 17, 1670-1680	3.8	12
14	Site-controlled In(Ga)As/GaAs quantum dots for integration into optically and electrically operated devices. *Journal of Crystal Growth*, **2011**, 323, 194-197	1.6	11
13	Whispering gallery mode lasing in electrically driven quantum dot micropillars. *Applied Physics Letters*, **2010**, 97, 101108	3.4	27

12	Electrically driven quantum dot-micropillar single photon source with 34% overall efficiency. *Applied Physics Letters*, **2010**, 96, 011107	3.4	148
11	Nonlinear photoluminescence spectra from a quantum-dot□avity system: Interplay of pump-induced stimulated emission and anharmonic cavity QED. *Physical Review B*, **2010**, 81,	3.3	27
10	Status and future prospects of laser fusion and high power laser applications. *Journal of Physics: Conference Series*, **2010**, 244, 012005	0.3	2
9	Single photon emission from positioned GaAs/AlGaAs photonic nanowires. *Applied Physics Letters*, **2010**, 96, 211117	3.4	67
8	Quantum efficiency and oscillator strength of site-controlled InAs quantum dots. *Applied Physics Letters*, **2010**, 96, 151102	3.4	29
7	Highly efficient electrically triggered quantum dot micropillar single photon source. *Journal of Physics: Conference Series*, **2010**, 245, 012005	0.3	2
6	Single site-controlled In(Ga)As/GaAs quantum dots: growth, properties and device integration. *Nanotechnology*, **2009**, 20, 434012	3.4	65
5	The role of optical excitation power on the emission spectra of a strongly coupled quantum dot-micropillar system. *Optics Express*, **2009**, 17, 12821-8	3.3	23
4	Single photon emission from a site-controlled quantum dot-micropillar cavity system. *Applied Physics Letters*, **2009**, 94, 111111	3.4	78
3	Demonstration of strong coupling via electro-optical tuning in high-quality QD-micropillar systems. *Optics Express*, **2008**, 16, 15006-12	3.3	63
2	Low threshold electrically pumped quantum dot-micropillar lasers. *Applied Physics Letters*, **2008**, 93, 061104	3.4	76
1	Quantum Communication Using Semiconductor Quantum Dots. *Advanced Quantum Technologies*,2100116	4.3	9