Stephan Gotzinger

List of Publications by Year
in descending order

87 papers	5,422 citations	126907 33 h-index	102487 66 g-index
88 all docs	88 docs citations	88 times ranked	6980 citing authors

#	Article	IF	Citations
1	Single photon sources for quantum radiometry: a brief review about the current state-of-the-art. Applied Physics B: Lasers and Optics, 2022, 128, 1.	2.2	3
2	High-resolution vibronic spectroscopy of a single molecule embedded in a crystal. Journal of Chemical Physics, 2022, 156, 104301.	3.0	10
3	Grain Dependent Growth of Bright Quantum Emitters in Hexagonal Boron Nitride. Advanced Optical Materials, 2021, 9, .	7.3	13
4	Nanoscopic Charge Fluctuations in a Gallium Phosphide Waveguide Measured by Single Molecules. Physical Review Letters, 2021, 126, 133602.	7.8	10
5	On Quantum Efficiency Measurements and Plasmonic Antennas. ACS Photonics, 2021, 8, 1508-1521.	6.6	13
6	Single-Molecule Vacuum Rabi Splitting: Four-Wave Mixing and Optical Switching at the Single-Photon Level. Physical Review Letters, 2021, 127, 133603.	7.8	38
7	Nonlinear optics with one molecule and two photons. , 2021, , .		0
8	Truncated Metallo-Dielectric Omnidirectional Reflector: Collecting Single Photons in the Fundamental Gaussian Mode with 95% Efficiency. ACS Photonics, 2020, 7, 2474-2481.	6.6	9
9	Partial Cloaking of a Gold Particle by a Single Molecule. Physical Review Letters, 2020, 125, 103603.	7.8	12
10	Photonic Quantum Technologies. Advanced Quantum Technologies, 2020, 3, 2000007.	3.9	3
11	Thermal origin of light emission in nonresonant and resonant nanojunctions. Physical Review Research, 2020, 2, .	3.6	9
12	Collecting and Manipulating Single Photons with Near-Unity Efficiency. , 2020, , .		0
13	Coherent Coupling of Single Molecules to Microresonators. , 2019, , .		0
14	Coherent coupling of single molecules to on-chip ring resonators. New Journal of Physics, 2019, 21, 062002.	2.9	29
15	Coherent nonlinear optics of quantum emitters in nanophotonic waveguides. Nanophotonics, 2019, 8, 1641-1657.	6.0	40
16	Turning a molecule into a coherent two-level quantum system. Nature Physics, 2019, 15, 483-489.	16.7	118
17	Turning an Organic Molecule into a Coherent Two-Level Quantum System using a Tunable Fabry-Perot Microcavity. , 2019, , .		0
18	Controlled generation of intrinsic near-infrared color centers in 4H-SiC via proton irradiation and annealing. Applied Physics Letters, 2018, 113, .	3.3	37

#	Article	IF	Citations
19	Strong plasmonic enhancement of biexciton emission: controlled coupling of a single quantum dot to a gold nanocone antenna. Scientific Reports, 2017, 7, 42307.	3.3	53
20	Experimental demonstration of a predictable single photon source with variable photon flux. Metrologia, 2017, 54, 218-223.	1.2	17
21	A single molecule as a high-fidelity photon gun for producing intensity-squeezed light. Nature Photonics, 2017, 11, 58-62.	31.4	75
22	Coherent Coupling of a Single Molecule to a Scanning Fabry-Perot Microcavity. Physical Review X, 2017, 7, .	8.9	49
23	Chip-Based All-Optical Control of Single Molecules Coherently Coupled to a Nanoguide. Nano Letters, 2017, 17, 4941-4945.	9.1	44
24	Efficient on-chip interface for many-body quantum optics with single molecules. , 2017, , .		0
25	Small slot waveguide rings for on-chip quantum optical circuits. Optics Express, 2017, 25, 5397.	3.4	9
26	Experimental realization of an absolute single-photon source based on a single nitrogen vacancy center in a nanodiamond. Optica, 2017, 4, 71.	9.3	47
27	Coherent coupling of a single molecule to a scanning Fabry-PÃ©rot microcavity. , 2017, , .		0
28	Few-photon coherent nonlinear optics with a single molecule. Nature Photonics, 2016, 10, 450-453.	31.4	69
29	Spectroscopy and microscopy of single molecules in nanoscopic channels: spectral behavior vs. confinement depth. Physical Chemistry Chemical Physics, 2016, 18, 19588-19594.	2.8	18
30	When excitons and plasmons meet: Emerging function through synthesis and assembly. MRS Bulletin, 2015, 40, 768-776.	3.5	14
31	Enhancing the radiative emission rate of single molecules by a plasmonic nanoantenna weakly coupled with a dielectric substrate. Optics Express, 2015, 23, 32986.	3.4	4
32	Sensing Nanoparticles with a Cantilever-Based Scannable Optical Cavity of Low Finesse and Sub-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>Î»</mml:mi><mml:mn>3</mml:mn></mml:msup></mml:math>Volume. Physical Review Applied, 2015, 4, .	3.8	41
33	Spectroscopic detection of single Pr3+ ions on the 3H4â†'1D2 transition. New Journal of Physics, 2015, 17, 083018.	2.9	26
34	Fabrication and characterization of plasmonic nanocone antennas for strong spontaneous emission enhancement. Nanotechnology, 2015, 26, 404001.	2.6	23
35	An ultrasmall mode volume cantilever-based Fabry-PÃ©rot microcavity. , 2015, , .		0
36	Nonlinear Optics with Single Molecules. , 2015, , .		0

#	Article	IF	Citations
37	Experimental realization of an optical antenna designed for collecting 99% of photons from a quantum emitter. Optica, 2014, 1, 203.	9.3	54
38	Synthesis of a Covalent Monolayer Sheet by Photochemical Anthracene Dimerization at the Air/Water Interface and its Mechanical Characterization by AFM Indentation. Advanced Materials, 2014, 26, 2052-2058.	21.0	147
39	Coherent Interaction of Light and Single Molecules in a Dielectric Nanoguide. Physical Review Letters, 2014, 113, 213601.	7.8	72
40	Spectroscopic detection and state preparation of a single praseodymium ion in a crystal. Nature Communications, 2014, 5, 3627.	12.8	102
41	Singe-photon-single-molecule Quantum Optics. , 2013, , .		0
42	Spontaneous emission enhancement of a single molecule by a double-sphere nanoantenna across an interface. Optics Express, 2012, 20, 23331.	3.4	24
43	A two-dimensional polymer prepared by organic synthesis. Nature Chemistry, 2012, 4, 287-291.	13.6	376
44	Single-Photon Spectroscopy of a Single Molecule. Physical Review Letters, 2012, 108, 093601.	7.8	88
45	Einzelphotonen-Kommunikation zwischen einzelnen MolekÃ¼len. Physik in Unserer Zeit, 2012, 43, 166-167.	0.0	0
46	99% efficiency in collecting photons from a single emitter. Optics Letters, 2011, 36, 3545.	3.3	72
47	A planar dielectric antenna for directional single-photon emission and near-unity collection efficiency. Nature Photonics, 2011, 5, 166-169.	31.4	270
48	A planar dielectric antenna for directional single-photon emission and near-unity collection efficiency. , 2011, , .		4
49	Towards detection of single solid-state ions. , 2011, , .		0
50	A scanning microcavity for in situ control of single-molecule emission. Applied Physics Letters, 2010, 97, 021107.	3.3	49
51	Near-infrared single-photons from aligned molecules in ultrathin crystalline films at room temperature. Optics Express, 2010, 18, 6577.	3.4	59
52	Efficient coupling of single photons to single plasmons. Optics Express, 2010, 18, 13829.	3.4	16
53	Silicon photonic microcavities for optical switching. , 2009, , .		0
54	Molecules as sources for indistinguishable single photons. Journal of Modern Optics, 2009, 56, 161-166.	1.3	13

#	Article	IF	Citations
55	A single-molecule optical transistor. Nature, 2009, 460, 76-80.	27.8	308
56	Lifetime-limited zero-phonon spectra of single molecules in methyl methacrylate. Chemical Physics Letters, 2009, 472, 44-47.	2.6	9
57	Circular Grating Resonators as Small Mode-Volume Microcavities for Switching. Optics Express, 2009, 17, 5953.	3.4	16
58	Resolution and Enhancement in Nanoantenna-Based Fluorescence Microscopy. Nano Letters, 2009, 9, 4007-4011.	9.1	61
59	Spectral dynamics and spatial localization of single molecules in a polymer. Molecular Physics, 2009, 107, 1897-1909.	1.7	6
60	Imaging Plasmonic Nanoparticles with a Narrow-Band Single-Photon Source. , 2009, , .		0
61	Amplification of a Laser Beam by a Single Molecule. , 2009, , .		0
62	Circular grating resonators as candidates for ultra-small photonic devices. Proceedings of SPIE, 2008, , .	0.8	0
63	Cavity (Q)ED with microsphere resonators. Proceedings of SPIE, 2008, , .	0.8	0
64	Controlled Coupling of Counterpropagating Whispering-Gallery Modes by a Single Rayleigh Scatterer: A Classical Problem in a Quantum Optical Light. Physical Review Letters, 2007, 99, 173603.	7.8	254
65	Strong coupling of single quantum dots to micropillars. , 2007, , .		0
66	Realization of two Fourier-limited solid-state single-photon sources. Optics Express, 2007, 15, 15842.	3.4	31
67	Photon Antibunching from a Single Quantum-Dot-Microcavity System in the Strong Coupling Regime. Physical Review Letters, 2007, 98, 117402.	7.8	309
68	Influence of a Single Quantum Dot State on the Characteristics of a Microdisk Laser. Physical Review Letters, 2007, 98, 117401.	7.8	76
69	Quantum Degenerate Exciton-Polaritons in Thermal Equilibrium. Physical Review Letters, 2006, 97, 146402.	7.8	156
70	Scanning Near-Field Optical Studies of Photonic Devices. , 2006, , 215-237.		3
71	Controlled Photon Transfer between Two Individual Nanoemitters via Shared High-QModes of a Microsphere Resonator. Nano Letters, 2006, 6, 1151-1154.	9.1	72
72	A gallium nitride single-photon source operating at 200â€‰K. Nature Materials, 2006, 5, 887-892.	27.5	388

#	Article	IF	Citations
73	Influence of a controllable scatterer on the lasing properties of an ultralow threshold Raman microlaser. Applied Physics Letters, 2006, 89, 101105.	3.3	3
74	Investigation of excitons bound to fluorine donors in ZnSe. Semiconductor Science and Technology, 2006, 21, 1412-1415.	2.0	17
75	Ultrafine luminescent structures through nanoparticle self-assembly. Nanotechnology, 2006, 17, 3802-3805.	2.6	6
76	Influence of a controllable scatterer on lasing properties of an ultra-low threshold Raman-laser. , 2006, , .		0
77	Optimization of prism coupling to high-Q modes in a microsphere resonator using a near-field probe. Optics Communications, 2005, 250, 428-433.	2.1	37
78	Photon correlation studies of single GaN quantum dots. Applied Physics Letters, 2005, 87, 051916.	3.3	71
79	Confocal microscopy and spectroscopy of nanocrystals on a high-Qmicrosphere resonator. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, 154-158.	1.4	21
80	CdSe/CdS/ZnS and CdSe/ZnSe/ZnS Coreâ^'Shellâ^'Shell Nanocrystals. Journal of Physical Chemistry B, 2004, 108, 18826-18831.	2.6	688
81	Investigation of Energy Transfer between CdTe Nanocrystals on Polystyrene Beads and Dye Molecules for FRET-SNOM Applicationsâ€. Journal of Physical Chemistry B, 2004, 108, 14527-14534.	2.6	45
82	Nanoparticles and microspheres: tools to study the interaction of quantum emitters via shared optical modes. , 2004, 5333, 174.		1
83	Highly Emissive Colloidal CdSe/CdS Heterostructures of Mixed Dimensionality. Nano Letters, 2003, 3, 1677-1681.	9.1	579
84	Controlled coupling of a single emitter to a single mode of a microsphere: where do we stand?. , 2003, , .		1
85	Influence of a sharp fiber tip on high-Q modes of a microsphere resonator. Optics Letters, 2002, 27, 80.	3.3	28
86	Towards controlled coupling between a high-Q whispering-gallery mode and a single nanoparticle. Applied Physics B: Lasers and Optics, 2001, 73, 825-828.	2.2	27
87	Mapping and manipulating whispering gallery modes of a microsphere resonator with a near-field probe. Journal of Microscopy, 2001, 202, 117-121.	1.8	29