# Stephan Gotzinger

List of Publications by Year
in descending order



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|---|---|---|---|
| 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 | CdSe/CdS/ZnS and CdSe/ZnSe/ZnS Coreâ^'Shellâ^'Shell Nanocrystals. Journal of Physical Chemistry B, 2004, 108, 18826-18831. | 2.6 | 688 |
| 2 | Highly Emissive Colloidal CdSe/CdS Heterostructures of Mixed Dimensionality. Nano Letters, 2003, 3, 1677-1681. | 9.1 | 579 |
| 3 | A gallium nitride single-photon source operating at 200â€‰K. Nature Materials, 2006, 5, 887-892. | 27.5 | 388 |
| 4 | A two-dimensional polymer prepared by organic synthesis. Nature Chemistry, 2012, 4, 287-291. | 13.6 | 376 |
| 5 | Photon Antibunching from a Single Quantum-Dot-Microcavity System in the Strong Coupling Regime. Physical Review Letters, 2007, 98, 117402. | 7.8 | 309 |
| 6 | A single-molecule optical transistor. Nature, 2009, 460, 76-80. | 27.8 | 308 |
| 7 | A planar dielectric antenna for directional single-photon emission and near-unity collection efficiency. Nature Photonics, 2011, 5, 166-169. | 31.4 | 270 |
| 8 | 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 |
| 9 | Quantum Degenerate Exciton-Polaritons in Thermal Equilibrium. Physical Review Letters, 2006, 97, 146402. | 7.8 | 156 |
| 10 | 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 |
| 11 | Turning a molecule into a coherent two-level quantum system. Nature Physics, 2019, 15, 483-489. | 16.7 | 118 |
| 12 | Spectroscopic detection and state preparation of a single praseodymium ion in a crystal. Nature Communications, 2014, 5, 3627. | 12.8 | 102 |
| 13 | Single-Photon Spectroscopy of a Single Molecule. Physical Review Letters, 2012, 108, 093601. | 7.8 | 88 |
| 14 | Influence of a Single Quantum Dot State on the Characteristics of a Microdisk Laser. Physical Review Letters, 2007, 98, 117401. | 7.8 | 76 |
| 15 | A single molecule as a high-fidelity photon gun for producing intensity-squeezed light. Nature Photonics, 2017, 11, 58-62. | 31.4 | 75 |
| 16 | Controlled Photon Transfer between Two Individual Nanoemitters via Shared High-QModes of a Microsphere Resonator. Nano Letters, 2006, 6, 1151-1154. | 9.1 | 72 |
| 17 | 99% efficiency in collecting photons from a single emitter. Optics Letters, 2011, 36, 3545. | 3.3 | 72 |
| 18 | Coherent Interaction of Light and Single Molecules in a Dielectric Nanoguide. Physical Review Letters, 2014, 113, 213601. | 7.8 | 72 |

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|---|---|---|---|
| 19 | Photon correlation studies of single GaN quantum dots. Applied Physics Letters, 2005, 87, 051916. | 3.3 | 71 |
| 20 | Few-photon coherent nonlinear optics with a single molecule. Nature Photonics, 2016, 10, 450-453. | 31.4 | 69 |
| 21 | Resolution and Enhancement in Nanoantenna-Based Fluorescence Microscopy. Nano Letters, 2009, 9, 4007-4011. | 9.1 | 61 |
| 22 | Near-infrared single-photons from aligned molecules in ultrathin crystalline films at room temperature. Optics Express, 2010, 18, 6577. | 3.4 | 59 |
| 23 | Experimental realization of an optical antenna designed for collecting 99% of photons from a quantum emitter. Optica, 2014, 1, 203. | 9.3 | 54 |
| 24 | 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 |
| 25 | A scanning microcavity for in situ control of single-molecule emission. Applied Physics Letters, 2010, 97, 021107. | 3.3 | 49 |
| 26 | Coherent Coupling of a Single Molecule to a Scanning Fabry-Perot Microcavity. Physical Review X, 2017, 7, . | 8.9 | 49 |
| 27 | 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 |
| 28 | 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 |
| 29 | Chip-Based All-Optical Control of Single Molecules Coherently Coupled to a Nanoguide. Nano Letters, 2017, 17, 4941-4945. | 9.1 | 44 |
| 30 | 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 |
| 31 | Coherent nonlinear optics of quantum emitters in nanophotonic waveguides. Nanophotonics, 2019, 8, 1641-1657. | 6.0 | 40 |
| 32 | 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 |
| 33 | 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 |
| 34 | Controlled generation of intrinsic near-infrared color centers in 4H-SiC via proton irradiation and annealing. Applied Physics Letters, 2018, 113, . | 3.3 | 37 |
| 35 | Realization of two Fourier-limited solid-state single-photon sources. Optics Express, 2007, 15, 15842. | 3.4 | 31 |
| 36 | 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 |

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|---|---|---|---|
| 37 | Coherent coupling of single molecules to on-chip ring resonators. New Journal of Physics, 2019, 21, 062002. | 2.9 | 29 |
| 38 | Influence of a sharp fiber tip on high-Q modes of a microsphere resonator. Optics Letters, 2002, 27, 80. | 3.3 | 28 |
| 39 | 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 |
| 40 | Spectroscopic detection of single Pr3+ ions on the 3H4â^'1D2 transition. New Journal of Physics, 2015, 17, 083018. | 2.9 | 26 |
| 41 | Spontaneous emission enhancement of a single molecule by a double-sphere nanoantenna across an interface. Optics Express, 2012, 20, 23331. | 3.4 | 24 |
| 42 | Fabrication and characterization of plasmonic nanocone antennas for strong spontaneous emission enhancement. Nanotechnology, 2015, 26, 404001. | 2.6 | 23 |
| 43 | 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 |
| 44 | 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 |
| 45 | Investigation of excitons bound to fluorine donors in ZnSe. Semiconductor Science and Technology, 2006, 21, 1412-1415. | 2.0 | 17 |
| 46 | Experimental demonstration of a predictable single photon source with variable photon flux. Metrologia, 2017, 54, 218-223. | 1.2 | 17 |
| 47 | Circular Grating Resonators as Small Mode-Volume Microcavities for Switching. Optics Express, 2009, 17, 5953. | 3.4 | 16 |
| 48 | Efficient coupling of single photons to single plasmons. Optics Express, 2010, 18, 13829. | 3.4 | 16 |
| 49 | When excitons and plasmons meet: Emerging function through synthesis and assembly. MRS Bulletin, 2015, 40, 768-776. | 3.5 | 14 |
| 50 | Molecules as sources for indistinguishable single photons. Journal of Modern Optics, 2009, 56, 161-166. | 1.3 | 13 |
| 51 | Grain Dependent Growth of Bright Quantum Emitters in Hexagonal Boron Nitride. Advanced Optical Materials, 2021, 9, . | 7.3 | 13 |
| 52 | On Quantum Efficiency Measurements and Plasmonic Antennas. ACS Photonics, 2021, 8, 1508-1521. | 6.6 | 13 |
| 53 | Partial Cloaking of a Gold Particle by a Single Molecule. Physical Review Letters, 2020, 125, 103603. | 7.8 | 12 |
| 54 | Nanoscopic Charge Fluctuations in a Gallium Phosphide Waveguide Measured by Single Molecules. Physical Review Letters, 2021, 126, 133602. | 7.8 | 10 |

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|---|---|---|---|
| 55 | High-resolution vibronic spectroscopy of a single molecule embedded in a crystal. Journal of Chemical Physics, 2022, 156, 104301. | 3.0 | 10 |
| 56 | Lifetime-limited zero-phonon spectra of single molecules in methyl methacrylate. Chemical Physics Letters, 2009, 472, 44-47. | 2.6 | 9 |
| 57 | Small slot waveguide rings for on-chip quantum optical circuits. Optics Express, 2017, 25, 5397. | 3.4 | 9 |
| 58 | 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 |
| 59 | Thermal origin of light emission in nonresonant and resonant nanojunctions. Physical Review Research, 2020, 2, . | 3.6 | 9 |
| 60 | Ultrafine luminescent structures through nanoparticle self-assembly. Nanotechnology, 2006, 17, 3802-3805. | 2.6 | 6 |
| 61 | Spectral dynamics and spatial localization of single molecules in a polymer. Molecular Physics, 2009, 107, 1897-1909. | 1.7 | 6 |
| 62 | A planar dielectric antenna for directional single-photon emission and near-unity collection efficiency. , 2011, , . | | 4 |
| 63 | 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 |
| 64 | Scanning Near-Field Optical Studies of Photonic Devices. , 2006, , 215-237. | | 3 |
| 65 | Influence of a controllable scatterer on the lasing properties of an ultralow threshold Raman microlaser. Applied Physics Letters, 2006, 89, 101105. | 3.3 | 3 |
| 66 | Photonic Quantum Technologies. Advanced Quantum Technologies, 2020, 3, 2000007. | 3.9 | 3 |
| 67 | 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 |
| 68 | Controlled coupling of a single emitter to a single mode of a microsphere: where do we stand?. , 2003, , . | | 1 |
| 69 | Nanoparticles and microspheres: tools to study the interaction of quantum emitters via shared optical modes. , 2004, 5333, 174. | | 1 |
| 70 | Influence of a controllable scatterer on lasing properties of an ultra-low threshold Raman-laser. , 2006, , . | | 0 |
| 71 | Strong coupling of single quantum dots to micropillars. , 2007, , . | | 0 |
| 72 | Circular grating resonators as candidates for ultra-small photonic devices. Proceedings of SPIE, 2008, , . | 0.8 | 0 |

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|---|---|---|---|
| 73 | Cavity (Q)ED with microsphere resonators. Proceedings of SPIE, 2008, , . | 0.8 | 0 |
| 74 | Silicon photonic microcavities for optical switching. , 2009, , . | | 0 |
| 75 | Towards detection of single solid-state ions. , 2011, , . | | 0 |
| 76 | Einzelphotonen-Kommunikation zwischen einzelnen MolekÃ¼len. Physik in Unserer Zeit, 2012, 43, 166-167. | 0.0 | 0 |
| 77 | Singe-photon-single-molecule Quantum Optics. , 2013, , . | | 0 |
| 78 | An ultrasmall mode volume cantilever-based Fabry-PÃ©rot microcavity. , 2015, , . | | 0 |
| 79 | Nonlinear Optics with Single Molecules. , 2015, , . | | 0 |
| 80 | Efficient on-chip interface for many-body quantum optics with single molecules. , 2017, , . | | 0 |
| 81 | Coherent coupling of a single molecule to a scanning Fabry-PÃ©rot microcavity. , 2017, , . | | 0 |
| 82 | Coherent Coupling of Single Molecules to Microresonators. , 2019, , . | | 0 |
| 83 | Nonlinear optics with one molecule and two photons. , 2021, , . | | 0 |
| 84 | Imaging Plasmonic Nanoparticles with a Narrow-Band Single-Photon Source. , 2009, , . | | 0 |
| 85 | Amplification of a Laser Beam by a Single Molecule. , 2009, , . | | 0 |
| 86 | Turning an Organic Molecule into a Coherent Two-Level Quantum System using a Tunable Fabry-Perot Microcavity. , 2019, , . | | 0 |
| 87 | Collecting and Manipulating Single Photons with Near-Unity Efficiency. , 2020, , . | | 0 |