Johannes Borregaard

List of Publications by Year
in descending order

51 papers	5,120 citations	159585 30 h-index	182427 51 g-index
52 all docs	52 docs citations	52 times ranked	4752 citing authors

#	Article	IF	Citations
1	Interfacing single photons and single quantum dots with photonic nanostructures. Reviews of Modern Physics, 2015, 87, 347-400.	45.6	1,014
2	Chiral quantum optics. Nature, 2017, 541, 473-480.	27.8	1,007
3	An integrated diamond nanophotonics platform for quantum-optical networks. Science, 2016, 354, 847-850.	12.6	570
4	Deterministic photonâ€“emitter coupling in chiral photonic circuits. Nature Nanotechnology, 2015, 10, 775-778.	31.5	466
5	Distributed quantum sensing in a continuous-variable entangled network. Nature Physics, 2020, 16, 281-284.	16.7	166
6	Topological Quantum Optics in Two-Dimensional Atomic Arrays. Physical Review Letters, 2017, 119, 023603.	7.8	145
7	Quantum-dot based photonic quantum networks. Quantum Science and Technology, 2018, 3, 013001.	5.8	108
8	Qubit teleportation between non-neighbouring nodes in a quantum network. Nature, 2022, 605, 663-668.	27.8	99
9	Quantum Networks with Chiral-Lightâ€“Matter Interaction in Waveguides. Physical Review Letters, 2016, 117, 240501.	7.8	93
10	Efficient fiber-coupled single-photon source based on quantum dots in a photonic-crystal waveguide. Optica, 2017, 4, 178.	9.3	87
11	Indistinguishable and efficient single photons from a quantum dot in a planar nanobeam waveguide. Physical Review B, 2017, 96, .	3.2	85
12	Spinâ€“photon interface and spin-controlled photon switching in a nanobeam waveguide. Nature Nanotechnology, 2018, 13, 398-403.	31.5	85
13	Optical Interferometry with Quantum Networks. Physical Review Letters, 2019, 123, 070504.	7.8	74
14	Probing long-lived dark excitons in self-assembled quantum dots. Physical Review B, 2010, 81, .	3.2	67
15	One-Way Quantum Repeater Based on Near-Deterministic Photon-Emitter Interfaces. Physical Review X, 2020, 10, .	8.9	61
16	Near-Heisenberg-Limited Atomic Clocks in the Presence of Decoherence. Physical Review Letters, 2013, 111, 090801.	7.8	58
17	Photonic band structure of two-dimensional atomic lattices. Physical Review A, 2017, 96, .	2.5	57
18	Minimum error probability of quantum illumination. Physical Review A, 2018, 98, .	2.5	54

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19	Topological Quantum Optics Using Atomlike Emitter Arrays Coupled to Photonic Crystals. Physical Review Letters, 2020, 124, 083603.	7.8	53
20	Photonic controlled-phase gates through Rydberg blockade in optical cavities. Physical Review A, 2016, 93, .	2.5	51
21	Quantum Networks with Deterministic Spinâ€“Photon Interfaces. Advanced Quantum Technologies, 2019, 2, 1800091.	3.9	51
22	Quantum Optics with Near-Lifetime-Limited Quantum-Dot Transitions in a Nanophotonic Waveguide. Nano Letters, 2018, 18, 1801-1806.	9.1	49
23	On-chip deterministic operation of quantum dots in dual-mode waveguides for a plug-and-play single-photon source. Nature Communications, 2020, 11, 3782.	12.8	48
24	Efficient Atomic Clocks Operated with Several Atomic Ensembles. Physical Review Letters, 2013, 111, 090802.	7.8	43
25	A variational toolbox for quantum multi-parameter estimation. Npj Quantum Information, 2021, 7, .	6.7	42
26	Heralded Quantum Gates with Integrated Error Detection in Optical Cavities. Physical Review Letters, 2015, 114, 110502.	7.8	41
27	Nanomechanical single-photon routing. Optica, 2019, 6, 524.	9.3	41
28	Coherent nonlinear optics of quantum emitters in nanophotonic waveguides. Nanophotonics, 2019, 8, 1641-1657.	6.0	40
29	Quantum-assisted telescope arrays. Physical Review A, 2019, 100, .	2.5	35
30	Scalable photonic network architecture based on motional averaging in room temperature gas. Nature Communications, 2016, 7, 11356.	12.8	34
31	One- and two-axis squeezing of atomic ensembles in optical cavities. New Journal of Physics, 2017, 19, 093021.	2.9	31
32	Long-distance entanglement distribution using individual atoms in optical cavities. Physical Review A, 2015, 92, .	2.5	28
33	Near Transform-Limited Quantum Dot Linewidths in a Broadband Photonic Crystal Waveguide. ACS Photonics, 2020, 7, 2343-2349.	6.6	28
34	Numerical modeling of the coupling efficiency of single quantum emitters in photonic-crystal waveguides. Journal of the Optical Society of America B: Optical Physics, 2018, 35, 514.	2.1	27
35	Experimental Reconstruction of the Few-Photon Nonlinear Scattering Matrix from a Single Quantum Dot in a Nanophotonic Waveguide. Physical Review Letters, 2021, 126, 023603.	7.8	27
36	Coherent Spin-Photon Interface with Waveguide Induced Cycling Transitions. Physical Review Letters, 2021, 126, 013602.	7.8	27

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37	Coherent Optical Control of a Quantum-Dot Spin-Qubit in a Waveguide-Based Spin-Photon Interface. Physical Review Applied, 2019, 11, .	3.8	20
38	High-fidelity multiphoton-entangled cluster state with solid-state quantum emitters in photonic nanostructures. Physical Review A, 2022, 105, .	2.5	16
39	Controlled-phase Gate for Photons Based on Stationary Light. Physical Review Letters, 2018, 120, 010502.	7.8	15
40	Entangling a Hole Spin with a Time-Bin Photon: A Waveguide Approach for Quantum Dot Sources of Multiphoton Entanglement. Physical Review Letters, 2022, 128, .	7.8	14
41	Nanophotonic quantum network node with neutral atoms and an integrated telecom interface. New Journal of Physics, 2020, 22, 073033.	2.9	12
42	Fidelity of time-bin-entangled multiphoton states from a quantum emitter. Physical Review A, 2021, 104, .	2.5	8
43	Integrated Whispering-Gallery-Mode Resonator for Solid-State Coherent Quantum Photonics. Nano Letters, 2021, 21, 8707-8714.	9.1	7
44	On-Demand Source of Dual-Rail Photon Pairs Based on Chiral Interaction in a Nanophotonic Waveguide. PRX Quantum, 2022, 3, .	9.2	7
45	Scaling up solid-state quantum photonics. Science, 2018, 362, 646-646.	12.6	6
46	Suspended Spotâ€Size Converters for Scalable Singleâ€Photon Devices. Advanced Quantum Technologies, 2020, 3, 1900076.	3.9	6
47	Hybrid quantum repeater protocol with fast local processing. Physical Review A, 2012, 86, .	2.5	5
48	Efficient quantum computation in a network with probabilistic gates and logical encoding. Physical Review A, 2017, 95, .	2.5	5
49	Super sensitivity and super resolution with quantum teleportation. Npj Quantum Information, 2019, 5, .	6.7	3
50	Noise-robust exploration of many-body quantum states on near-term quantum devices. Npj Quantum Information, 2021, 7, .	6.7	3
51	Elementary test for nonclassicality based on measurements of position and momentum. Physical Review A, 2015, 92, .	2.5	1