Markus Hennrich

List of Publications by Year
in descending order

61 papers	6,020 citations	172457 29 h-index	161849 54 g-index
63 all docs	63 docs citations	63 times ranked	4780 citing authors

#	Article	IF	Citations
1	Exploring the Many-Body Dynamics Near a Conical Intersection with Trapped Rydberg Ions. Physical Review Letters, 2021, 126, 233404.	7.8	13
2	Observation of second- and higher-order electric quadrupole interactions with an atomic ion. Physical Review Research, 2021, 3, .	3.6	2
3	Micromotion minimization using Ramsey interferometry. New Journal of Physics, 2021, 23, 123028.	2.9	3
4	Trapped Rydberg ions: A new platform for quantum information processing. Advances in Atomic, Molecular and Optical Physics, 2020, 69, 233-306.	2.3	9
5	Long-Range Multibody Interactions and Three-Body Antiblockade in a Trapped Rydberg Ion Chain. Physical Review Letters, 2020, 125, 133602.	7.8	28
6	Tracking the Dynamics of an Ideal Quantum Measurement. Physical Review Letters, 2020, 124, 080401.	7.8	18
7	Submicrosecond entangling gate between trapped ions via Rydberg interaction. Nature, 2020, 580, 345-349.	27.8	50
8	Highly Polarizable Rydberg Ion in a Paul Trap. Physical Review Letters, 2019, 123, 153602.	7.8	8
9	Interacting Rydberg Ions. , 2019, , .		0
10	Single Strontium Rydberg Ion Confined in a Paul Trap. Physical Review X, 2017, 7, .	8.9	32
11	Coherent Control of a Single Trapped Rydberg Ion. Physical Review Letters, 2017, 119, 220501.	7.8	45
12	Coherent rydberg excitation of a single trapped ion. , 2017, , .		0
13	Can different quantum state vectors correspond to the same physical state? An experimental test. New Journal of Physics, 2016, 18, 013007.	2.9	54
14	Pure single photons from a trapped atom source. New Journal of Physics, 2016, 18, 093038.	2.9	46
15	Free Space Interference Experiments with Single Photons and Single Ions. Nano-optics and Nanophotonics, 2015, , 99-124.	0.2	2
16	Entanglement measures in ion-trap quantum simulators without full tomography. Physical Review A, 2014, 90, .	2.5	9
17	Quantum computations on a topologically encoded qubit. Science, 2014, 345, 302-305.	12.6	289
18	Demonstration of genuine multipartite entanglement with device-independent witnesses. Nature Physics, 2013, 9, 559-562.	16.7	60

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19	Undoing a Quantum Measurement. Physical Review Letters, 2013, 110, 070403.	7.8	16
20	Atom-Atom Entanglement by Single-Photon Detection. Physical Review Letters, 2013, 110, 083603.	7.8	64
21	Quantum simulation of dynamical maps with trapped ions. Nature Physics, 2013, 9, 361-367.	16.7	175
22	Experimental Characterization of Quantum Dynamics Through Many-Body Interactions. Physical Review Letters, 2013, 110, 060403.	7.8	7
23	A quantum information processor with trapped ions. New Journal of Physics, 2013, 15, 123012.	2.9	235
24	Interferometric thermometry of a single sub-Doppler-cooled atom. Physical Review A, 2012, 85, .	2.5	21
25	14-Qubit Entanglement: Creation and Coherence. Physical Review Letters, 2011, 106, 130506.	7.8	853
26	Experimental repetitive quantum error correction with trapped ions. , 2011, , .		0
27	Heralded single-photon absorption by a singleÂatom. Nature Physics, 2011, 7, 17-20.	16.7	89
28	An open-system quantum simulator with trapped ions. Nature, 2011, 470, 486-491.	27.8	823
29	Universal Digital Quantum Simulation with Trapped Ions. Science, 2011, 334, 57-61.	12.6	483
30	Single Atom as a Mirror of an Optical Cavity. Physical Review Letters, 2011, 107, 133002.	7.8	52
31	Experimental Repetitive Quantum Error Correction. Science, 2011, 332, 1059-1061.	12.6	260
32	Free space coupling to a single ion. , 2011, , .		0
33	QED with a spherical mirror. Physical Review A, 2010, 82, .	2.5	26
34	Two-color photoionization of calcium using SHG and LED light. Applied Physics B: Lasers and Optics, 2010, 100, 765-771.	2.2	11
35	Experimental multiparticle entanglement dynamics induced by decoherence. Nature Physics, 2010, 6, 943-946.	16.7	152
36	Resonant interaction of a single atom with single photons from a down-conversion source. Physical Review A, 2010, 81, .	2.5	16

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37	Electromagnetically Induced Transparency from a Single Atom in Free Space. Physical Review Letters, 2010, 105, 153604.	7.8	49
38	Interaction of a Single Trapped Ion with Heralded Single Photons. , 2010, , .		0
39	A diode laser stabilization scheme for⁴⁰Ca⁺single-ion spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 115401.	1.5	17
40	A single ion interacting with single spontaneous parametric down-conversion photons. , 2009, , .		0
41	Quantum interference from remotely trapped ions. New Journal of Physics, 2009, 11, 013032.	2.9	53
42	Bandwidth-Tunable Single-Photon Source in an Ion-Trap Quantum Network. Physical Review Letters, 2009, 103, 213601.	7.8	30
43	Realization of the Quantum Toffoli Gate with Trapped Ions. Physical Review Letters, 2009, 102, 040501.	7.8	270
44	Realization of Universal Ion-Trap Quantum Computation with Decoherence-Free Qubits. Physical Review Letters, 2009, 103, 200503.	7.8	77
45	Ca+quantum bits for quantum information processing. Physica Scripta, 2009, T137, 014008.	2.5	4
46	Single Photon Source for an Ion Trap Quantum Network. , 2009, , .		0
47	Quantum Information with Trapped Ions. , 2009, , .		0
48	Deterministic entanglement swapping with an ion-trap quantum computer. Nature Physics, 2008, 4, 839-842.	16.7	59
49	Photon-mediated interaction between two distant atoms. Physical Review A, 2008, 78, .	2.5	33
50	Time-resolved and state-selective detection of single freely falling atoms. Optics Communications, 2006, 264, 271-277.	2.1	12
51	Ultrafast Photochromic Reactions of Fulgide Photoswitches. Molecular Crystals and Liquid Crystals, 2005, 430, 15-21.	0.9	20
52	Transition from Antibunching to Bunching in Cavity QED. Physical Review Letters, 2005, 94, 053604.	7.8	75
53	Quantum Beat of Two Single Photons. Physical Review Letters, 2004, 93, 070503.	7.8	233
54	Photon statistics of a non-stationary periodically driven single-photon source. New Journal of Physics, 2004, 6, 86-86.	2.9	33

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55	Counter-intuitive vacuum-stimulated raman scattering. Journal of Modern Optics, 2003, 50, 935-942.	1.3	8
56	Kuhn, Hennrich, and Rempe Reply:. Physical Review Letters, 2003, 90, .	7.8	4
57	Counter-intuitive vacuum-stimulated Raman scattering. Journal of Modern Optics, 2003, 50, 935-942.	1.3	1
58	Deterministic Single-Photon Source for Distributed Quantum Networking. Physical Review Letters, 2002, 89, 067901.	7.8	705
59	Vacuum-Stimulated Raman Scattering Based on Adiabatic Passage in a High-Finesse Optical Cavity. Physical Review Letters, 2000, 85, 4872-4875.	7.8	228
60	Photoswitching Intramolecular Energy and Charge Transfer. Molecular Crystals and Liquid Crystals, 2000, 344, 145-150.	0.3	13
61	Controlled generation of single photons from a strongly coupled atom-cavity system. Applied Physics B: Lasers and Optics, 1999, 69, 373-377.	2.2	144