

# Rainer Kaltenbaek

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7177323/publications.pdf>

Version: 2024-02-01

47  
papers

2,923  
citations

318942

23  
h-index

355658

38  
g-index

49  
all docs

49  
docs citations

49  
times ranked

2777  
citing authors

#	ARTICLE	IF	CITATIONS
1	Large Quantum Superpositions and Interference of Massive Nanometer-Sized Objects. Physical Review Letters, 2011, 107, 020405.	2.9	373
2	An experimental test of non-local realism. Nature, 2007, 446, 871-875.	13.7	305
3	High-speed linear optics quantum computing using active feed-forward. Nature, 2007, 445, 65-69.	13.7	300
4	Cavity cooling of an optically levitated submicron particle. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14180-14185.	3.3	264
5	Quantum teleportation across the Danube. Nature, 2004, 430, 849-849.	13.7	261
6	Long-Distance Free-Space Distribution of Quantum Entanglement. Science, 2003, 301, 621-623.	6.0	177
7	Experimental Interference of Independent Photons. Physical Review Letters, 2006, 96, 240502.	2.9	171
8	Experimental violation of Svetlichny's inequality. New Journal of Physics, 2009, 11, 073051.	1.2	109
9	Quantum-inspired interferometry with chirped laser pulses. Nature Physics, 2008, 4, 864-868.	6.5	82
10	High-fidelity entanglement swapping with fully independent sources. Physical Review A, 2009, 79, .	1.0	77
11	Macroscopic Quantum Resonators (MAQRO): 2015 update. EPJ Quantum Technology, 2016, 3, .	2.9	77
12	Macroscopic quantum resonators (MAQRO). Experimental Astronomy, 2012, 34, 123-164.	1.6	74
13	Experimental Bound Entanglement in a Four-Photon State. Physical Review Letters, 2010, 105, 130501.	2.9	67
14	Optical one-way quantum computing with a simulated valence-bond solid. Nature Physics, 2010, 6, 850-854.	6.5	57
15	Quantum-optical coherence tomography with classical light. Optics Express, 2009, 17, 3818.	1.7	51
16	Derivation and experimental test of fidelity benchmarks for remote preparation of arbitrary qubit states. Physical Review A, 2010, 81, .	1.0	43
17	Classical Analogues of Two-Photon Quantum Interference. Physical Review Letters, 2009, 102, 243601.	2.9	40
18	Quantum physics in space. Physics Reports, 2022, 951, 1-70.	10.3	38

#	ARTICLE	IF	CITATIONS
19	Space QUEST mission proposal: experimentally testing decoherence due to gravity. <i>New Journal of Physics</i> , 2018, 20, 063016.	1.2	36
20	Dispersion-cancelled biological imaging with quantum-inspired interferometry. <i>Scientific Reports</i> , 2013, 3, 1582.	1.6	32
21	Cluster-State Quantum Computing Enhanced by High-Fidelity Generalized Measurements. <i>Physical Review Letters</i> , 2009, 103, 240504.	2.9	31
22	Entanglement-Enhanced Classical Communication Over a Noisy Classical Channel. <i>Physical Review Letters</i> , 2011, 106, 110505.	2.9	28
23	Testing the foundation of quantum physics in space via Interferometric and non-interferometric experiments with mesoscopic nanoparticles. <i>Communications Physics</i> , 2021, 4, .	2.0	28
24	Optimal linear optical implementation of a single-qubit damping channel. <i>New Journal of Physics</i> , 2012, 14, 033016.	1.2	26
25	Quantum technologies in space. <i>Experimental Astronomy</i> , 2021, 51, 1677-1694.	1.6	23
26	Proof-of-concept experiments for quantum physics in space. , 2004, 5161, 252.		18
27	Linear-optics realization of channels for single-photon multimode qudits. <i>Physical Review A</i> , 2011, 84, .	1.0	17
28	Thermal performance of a radiatively cooled system for quantum optomechanical experiments in space. <i>Applied Thermal Engineering</i> , 2016, 107, 689-699.	3.0	15
29	Talbot-Lau effect beyond the point-particle approximation. <i>Physical Review A</i> , 2019, 100, .	1.0	15
30	Minimum-error discrimination of entangled quantum states. <i>Physical Review A</i> , 2010, 82, .	1.0	14
31	Experimental bound entanglement?. <i>Nature Physics</i> , 2010, 6, 827-827.	6.5	13
32	How cold can you get in space? Quantum physics at cryogenic temperatures in space. <i>New Journal of Physics</i> , 2014, 16, 013058.	1.2	13
33	Quantum communications in space. , 2004, 5161, 240.		7
34	Chirped-pulse interferometry with finite frequency correlations. , 2009, , .		7
35	Testing quantum physics in space using optically trapped nanospheres. <i>Proceedings of SPIE</i> , 2013, , .	0.8	5
36	Single-shot Stern-Gerlach magnetic gradiometer with an expanding cloud of cold cesium atoms. <i>Physical Review A</i> , 2021, 103, .	1.0	5

#	ARTICLE	IF	CITATIONS
37	Optical implementation of a unitarily correctable code. Physical Review A, 2009, 80, .	1.0	4
38	Creating multiphoton-polarization bound entangled states. Physical Review A, 2011, 83, .	1.0	3
39	Macroscopic quantum resonators in space. , 2011, , .		3
40	Feasibility considerations for free-fall tests of gravitational decoherence. AVS Quantum Science, 2022, 4, 015604.	1.8	2
41	Measurement and active compensation of polarization drifts in a fiber quantum channel used for teleportation. , 2003, , .		1
42	Entanglement-enhanced classical communication over a noisy classical channel. , 2011, , .		1
43	Optomechanical Schrödinger cats “a case for space. , 2013, , 123-132.		1
44	Linear-Optics Realization of Channels for Single-Photon Multimode Qudits. , 2011, , .		1
45	Implementation of Quantum Algorithms using Optical Cluster State. , 2007, , .		0
46	Chirped-pulse interferometry for dispersion-cancelled OCT. , 2011, , .		0
47	Photon triplets and bound entanglement. , 2011, , .		0