Igor Pikovski

List of Publications by Year
in descending order

29 papers	2,326 citations	430874 18 h-index	501196 28 g-index
30 all docs	30 docs citations	30 times ranked	2138 citing authors

#	Article	IF	Citations
1	Probing Planck-scale physics with quantum optics. Nature Physics, 2012, 8, 393-397.	16.7	473
2	Gravitational wave detection with optical lattice atomic clocks. Physical Review D, 2016, 94, .	4.7	242
3	Pulsed quantum optomechanics. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16182-16187.	7.1	231
4	Prospects for fundamental physics with LISA. General Relativity and Gravitation, 2020, 52, 1.	2.0	198
5	Universal decoherence due to gravitational timeÂdilation. Nature Physics, 2015, 11, 668-672.	16.7	187
6	Quantum interferometric visibility as a witness of general relativistic proper time. Nature Communications, 2011, 2, 505.	12.8	159
7	Creating and verifying a quantum superposition in a micro-optomechanical system. New Journal of Physics, 2008, 10, 095020.	2.9	116
8	Quantum metasurfaces with atom arrays. Nature Physics, 2020, 16, 676-681.	16.7	98
9	The missing link in gravitational-wave astronomy: discoveries waiting in the decihertz range. Classical and Quantum Gravity, 2020, 37, 215011.	4.0	90
10	Bellâ€™s theorem for temporal order. Nature Communications, 2019, 10, 3772.	12.8	86
11	Macroscopic Quantum Resonators (MAQRO): 2015 update. EPJ Quantum Technology, 2016, 3, .	6.3	77
12	General relativistic effects in quantum interference of photons. Classical and Quantum Gravity, 2012, 29, 224010.	4.0	69
13	Towards optomechanical quantum state reconstruction of mechanical motion. Annalen Der Physik, 2015, 527, 15-26.	2.4	46
14	Time dilation in quantum systems and decoherence. New Journal of Physics, 2017, 19, 025011.	2.9	45
15	Amplified transduction of Planck-scale effects using quantum optics. Physical Review A, 2017, 96, .	2.5	38
16	Probing anharmonicity of a quantum oscillator in an optomechanical cavity. Physical Review A, 2016, 93, .	2.5	25
17	Detecting continuous gravitational waves with superfluid⁴He. New Journal of Physics, 2017, 19, 073023.	2.9	25
18	Gravitational mass of composite systems. Physical Review D, 2019, 99, .	4.7	21

#	Article	IF	Citations
19	General relativistic effects in quantum interference of â€œclocksâ€• Journal of Physics: Conference Series, 2016, 723, 012044.	0.4	20
20	Generating mechanical and optomechanical entanglement via pulsed interaction and measurement. New Journal of Physics, 2020, 22, 063001.	2.9	16
21	The missing link in gravitational-wave astronomy. Experimental Astronomy, 2021, 51, 1427-1440.	3.7	15
22	Quantum and classical phases in optomechanics. Physical Review A, 2016, 93, .	2.5	14
23	Do Gedanken experiments compel quantization of gravity?. Physical Review D, 2021, 104, .	4.7	14
24	Limits on inference of gravitational entanglement. Physical Review Research, 2022, 4, .	3.6	8
25	Optimal fidelity witnesses for gravitational entanglement. Physical Review A, 2022, 105, .	2.5	5
26	Reply to 'Questioning universal decoherence due to gravitational time dilation'. Nature Physics, 2016, 12, 2-3.	16.7	4
27	Quantum coherent oscillations in the early universe. Physical Review D, 2016, 93, .	4.7	2
28	Ein quantenoptischer Blick auf die Planck-Skala?. Physik in Unserer Zeit, 2012, 43, 163-164.	0.0	0
29	Many-body probes for quantum features of spacetime. AVS Quantum Science, 2022, 4, 021402.	4.9	0