Fabrizio Tamburini

List of Publications by Year
in descending order

74 papers	3,021 citations	318942 23 h-index	182931 54 g-index
76 all docs	76 docs citations	76 times ranked	2826 citing authors

#	Article	IF	Citations
1	Constraining the Generalized Uncertainty Principle with the light twisted by rotating black holes and M87*. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 826, 136894.	1.5	10
2	CPT Symmetry in Two-Fold de Sitter Universe. Symmetry, 2021, 13, 375.	1.1	1
3	Majorana bosonic quasiparticles from twisted photons in free space. Physical Review A, 2021, 103, .	1.0	9
4	Kerr-spacetime geometric optics for vortex beams. Physical Review A, 2021, 104, .	1.0	7
5	Twisted light, a new tool for general relativity and beyond â€" Revealing the properties of rotating black holes with the vorticity of light â€". International Journal of Modern Physics D, 2021, 30, .	0.9	5
6	Majorana quanta, string scattering, curved spacetimes and the Riemann Hypothesis. Physica Scripta, 2021, 96, 125276.	1.2	5
7	Measurement of the spin of the M87 black hole from its observed twisted light. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 492, L22-L27.	1.2	81
8	General Relativistic Wormhole Connections from Planck-Scales and the ER = EPR Conjecture. Entropy, 2020, 22, 3.	1.1	16
9	Testing the equivalence principle and discreteness of spacetime through the t3 gravitational phase with quantum information technology. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 810, 135792.	1.5	2
10	CPT symmetry in cosmology and the Archaic Universe. Physica Scripta, 2020, 95, 075004.	1.2	3
11	On the quantization of the extremal Reissner-NordstrÃ¶m black hole. Europhysics Letters, 2020, 132, 30001.	0.7	9
12	Relativistic Heisenberg principle for vortices of light from Planck to Hubble scales. Physical Review Research, 2020, 2, .	1.3	4
13	Radiation from charged particles due to explicit symmetry breaking in a gravitational field. International Journal of Geometric Methods in Modern Physics, 2018, 15, 1850122.	0.8	5
14	Dark Universe and distribution of matter as quantum imprinting. Physics of the Dark Universe, 2018, 22, 181-188.	1.8	6
15	Can the periodic spectral modulations observed in 236 Sloan Sky Survey stars be due to dark matter effects?. Physica Scripta, 2017, 92, 095001.	1.2	27
16	General relativistic electromagnetic and massive vector field effects with gamma-ray burst production. Physical Review D, 2017, 96, .	1.6	9
17	Twisted Soft Photon Hair Implants on Black Holes. Entropy, 2017, 19, 458.	1.1	9
18	General theorem on the divergence of vortex beams. Physical Review A, 2016, 94, .	1.0	19

#	Article	IF	Citations
19	Radio channel multiplexing with superpositions of opposite-sign OAM modes. AEU - International Journal of Electronics and Communications, 2016, 70, 990-997.	1.7	22
20	High-Order Vortex Beams Generation in the Radio-Frequency Domain. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 889-892.	2.4	11
21	Tripling the capacity of a point-to-point radio link by using electromagnetic vortices. Radio Science, 2015, 50, 501-508.	0.8	34
22	The physics of angular momentum radio. , 2015, , .		5
23	Angular momentum radio techniques. , 2015, , .		0
24	Space-Division Demultiplexing in Orbital-Angular-Momentum-Based MIMO Radio Systems. IEEE Transactions on Antennas and Propagation, 2015, 63, 4582-4587.	3.1	183
25	Manipulating intensity and phase distribution of composite Laguerre-Gaussian beams. Optics Express, 2014, 22, 17135.	1.7	20
26	Angular momentum radio. , 2014, , .		11
27	The Large Observatory for x-ray timing. Proceedings of SPIE, 2014, , .	0.8	10
28	Reply to Comment on â€˜Encoding many channels on the same frequency through radio vorticity: first experimental testâ€™. New Journal of Physics, 2012, 14, 118002.	1.2	51
29	Apparent Lorentz violation with superluminal Majorana-tachyonic neutrinos at OPERA?. Physica Scripta, 2012, 85, 035101.	1.2	5
30	Sub-Rayleigh optical vortex coronagraphy. Optics Express, 2012, 20, 2445.	1.7	29
31	Angular momentum properties of electromagnetic field transmitted through holey plasmonic vortex lenses. Optics Letters, 2012, 37, 3234.	1.7	27
32	Encoding many channels on the same frequency through radio vorticity: first experimental test. New Journal of Physics, 2012, 14, 033001.	1.2	724
33	LOFT: the Large Observatory For X-ray Timing. Proceedings of SPIE, 2012, , .	0.8	29
34	Experimental verification of photon angular momentum and vorticity with radio techniques. Applied Physics Letters, 2011, 99, .	1.5	254
35	Twisting of light around rotating black holes. Nature Physics, 2011, 7, 195-197.	6.5	267
36	Design, fabrication and characterization of phase masks for astronomical applications. Microelectronic Engineering, 2011, 88, 2675-2678.	1.1	6

#	Article	IF	Citations
37	Storming Majorana's Tower with OAM states of light in a plasma. Europhysics Letters, 2011, 96, 64005.	0.7	10
38	No quantum gravity signature from the farthest quasars. Astronomy and Astrophysics, 2011, 533, A71.	2.1	29
39	An all-spheric unobstructed optical terminal for free-space quantum communication. , 2011, , .		0
40	Wavelet andR/Sanalysis of the X-ray flickering of cataclysmic variables. Astronomy and Astrophysics, 2010, 519, A69.	2.1	13
41	z= 1 multifractality of Swift short GRBs?. Astronomy and Astrophysics, 2010, 517, A84.	2.1	1
42	Fabrication and testing of phase masks for optical vortex coronagraph to observe extrasolar planets. , 2010, , .		3
43	Photon orbital angular momentum and mass in a plasma vortex. Europhysics Letters, 2010, 90, 45001.	0.7	30
44	Fabrication and Testing of l = 2 Optical Vortex phase masks for Coronography. Optics Express, 2010, 18, 2339.	1.7	23
45	Floquet analysis of two-dimensional perturbed Keplerian flows in cataclysmic variables. Astronomy and Astrophysics, 2010, 519, A106.	2.1	0
46	Iqueye, a single photon-counting photometer applied to the ESO new technology telescope. Astronomy and Astrophysics, 2009, 508, 531-539.	2.1	42
47	Method to measure off-axis displacements based on the analysis of the intensity distribution of a vortex beam. Physical Review A, 2009, 79, .	1.0	46
48	AquEYE, a single photon counting photometer for astronomy. Journal of Modern Optics, 2009, 56, 261-272.	0.6	34
49	Lightâ€™s Orbital Angular Momentum and Optical Vortices for Astronomical Coronagraphy from Ground and Space Telescopes. Earth, Moon and Planets, 2009, 105, 283-288.	0.3	8
50	Fabrication of a three-dimensional optical vortices phase mask for astronomy by means of electron-beam lithography. Microelectronic Engineering, 2009, 86, 1103-1106.	1.1	18
51	Very fast photon counting photometers for astronomical applications: IquEYE for the ESO 3.5m New Technology Telescope. , 2009, , .		1
52	First Results of AQuEye, a Precursor â€˜Quantumâ€™ Instrument for the E-ELT. Thirty Years of Astronomical Discovery With UKIRT, 2009, , 249-253.	0.3	4
53	Analysis of the white-light flickering of the intermediate polar V709 Cassiopeiae with wavelets and Hurst analysis. Astronomy and Astrophysics, 2009, 502, 1-5.	2.1	7
54	Experimental verification of the feasibility of a quantum channel between space and Earth. New Journal of Physics, 2008, 10, 033038.	1.2	177

#	Article	IF	Citations
55	Photon wave function: A covariant formulation and equivalence with QED. Physical Review A, 2008, 78, .	1.0	32
56	Detecting gravitational waves using entangled photon states. Physical Review A, 2008, 78, .	1.0	5
57	Optical vortices with starlight. Astronomy and Astrophysics, 2008, 488, 1159-1165.	2.1	46
58	Space-to-Ground Single-Photon Link for the Realization of a Space Quantum Channel. , 2008, , .		0
59	From QuantEYE to AquEYEâ€"Instrumentation for Astrophysics on its Shortest Timescales. , 2008, , 171-185.		0
60	Very fast photon counting photometers for astronomical applications: from QuantEYE to AquEYE. , 2007, , .		6
61	Astronomical applications of quantum optics for extremely large telescopes. Journal of Modern Optics, 2007, 54, 191-197.	0.6	22
62	Monitoring the late decline of the old nova RW Ursae Minoris. Astronomy and Astrophysics, 2007, 464, 697-700.	2.1	5
63	QuantEYE: a quantum optics instrument for extremely large telescopes. , 2006, 6269, 635.		5
64	Overcoming the Rayleigh Criterion Limit with Optical Vortices. Physical Review Letters, 2006, 97, 163903.	2.9	296
65	QSpace Project: Quantum Cryptography in Space. , 2005, , 45-52.		0
66	Quantum-aided Classical Cryptography with a Moving Target. , 2005, , 53-59.		0
67	Astronomical quantum optics with Extremely Large Telescopes. Proceedings of the International Astronomical Union, 2005, 1, 502-505.	0.0	6
68	QuantEYE, the quantum optics instrument for OWL. Proceedings of the International Astronomical Union, 2005, 1, 506-507.	0.0	13
69	Space-to-ground quantum communication using an optical ground station: a feasibility study. , 2004, 5551, 113.		16
70	RW Ursae Minoris (1956): An Evolving Postnova System. Publications of the Astronomical Society of the Pacific, 2003, 115, 811-818.	1.0	7
71	Polarization statistics of extra-solar systems. Astronomy and Astrophysics, 2002, 394, 675-678.	2.1	10
72	Parametric Resonance in the Drift Motion of an Ionic Bubble in Near Critical Ar Gas. Physical Review Letters, 1999, 83, 4546-4549.	2.9	34

#	Article	IF	Citations
73	Metric preheating and limitations of linearized gravity. Nuclear Physics B, 1999, 561, 188-240.	0.9	121
74	Inflationary Reheating in Grand Unified Theories. Physical Review Letters, 1998, 81, 2630-2633.	2.9	24