Tomas Tyc

List of Publications by Year in descending order

88 papers	2,501 citations	304368 22 h-index	197535 49 g-index
89 all docs	89 docs citations	89 times ranked	1770 citing authors

#	Article	IF	Citations
1	Broadband Invisibility by Non-Euclidean Cloaking. Science, 2009, 323, 110-112.	6.0	463
2	Seeing through chaos in multimode fibres. Nature Photonics, 2015, 9, 529-535.	15.6	406
3	An omnidirectional retroreflector based on the transmutation of dielectric singularities. Nature Materials, 2009, 8, 639-642.	13.3	180
4	Continuous-variable quantum-state sharing via quantum disentanglement. Physical Review A, 2005, 71, .	1.0	102
5	How to share a continuous-variable quantum secret by optical interferometry. Physical Review A, 2002, 65, .	1.0	101
6	Spherical media and geodesic lenses in geometrical optics. Journal of Optics (United Kingdom), 2012, 14, 075705.	1.0	101
7	Robustness of Light-Transport Processes to Bending Deformations in Graded-Index Multimode Waveguides. Physical Review Letters, 2018, 120, 233901.	2.9	86
8	Transmutation of singularities in optical instruments. New Journal of Physics, 2008, 10, 115038.	1.2	76
9	Memory effect assisted imaging through multimode optical fibres. Nature Communications, 2021, 12, 3751.	5.8	58
10	Absolute instruments and perfect imaging in geometrical optics. New Journal of Physics, 2011, 13, 115004.	1.2	55
11	Controlling birefringence in dielectrics. Nature Photonics, 2011, 5, 357-359.	15.6	52
12	Continuous variable (2, 3) threshold quantum secret sharing schemes. New Journal of Physics, 2003, 5, 4-4.	1.2	46
13	Invisibility cloaking without superluminal propagation. New Journal of Physics, 2011, 13, 083007.	1.2	46
14	Perfect lenses in focus. Nature, 2011, 480, 42-43.	13.7	46
15	Evidence for subwavelength imaging with positive refraction. New Journal of Physics, 2011, 13, 033016.	1.2	43
16	Conformal cloak for waves. Physical Review A, 2011, 83, .	1.0	42
17	Gaussian Quantum Marginal Problem. Communications in Mathematical Physics, 2008, 280, 263-280.	1.0	32
18	Dr TIM: Ray-tracer TIM, with additional specialist scientific capabilities. Computer Physics Communications, 2014, 185, 1027-1037.	3.0	27

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19	Playing the tricks of numbers of light sources. New Journal of Physics, 2013, 15, 093034.	1.2	26
20	Efficient sharing of a continuous-variable quantum secret. Journal of Physics A, 2003, 36, 7625-7637.	1.6	24
21	Double-layer geodesic and gradient-index lenses. Nature Communications, 2022, 13, 2354.	5.8	24
22	Gouy phase for full-aperture spherical and cylindrical waves. Optics Letters, 2012, 37, 924.	1.7	23
23	Wide-Angle Ceramic Retroreflective Luneburg Lens Based on Quasi-Conformal Transformation Optics for Mm-Wave Indoor Localization. IEEE Access, 2022, 10, 41097-41111.	2.6	23
24	Highly non-Gaussian states created via cross-Kerr nonlinearity. New Journal of Physics, 2008, 10, 023041.	1.2	22
25	Light rays and waves on geodesic lenses. Photonics Research, 2019, 7, 1266.	3.4	21
26	Perfect conformal invisible device with feasible refractive indexes. Physical Review B, 2016, 93, .	1.1	20
27	Controlling refractive index of transformation-optics devices via optical path rescaling. Scientific Reports, 2019, 9, 18412.	1.6	20
28	Non-Euclidean Cloaking for Light Waves. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 418-426.	1.9	19
29	Superantenna made of transformation media. New Journal of Physics, 2008, 10, 115026.	1.2	18
30	Invisible lenses with positive isotropic refractive index. Physical Review A, 2014, 90, .	1.0	16
31	Generalized laws of refraction that can lead to wave-optically forbidden light-ray fields. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 1407.	0.8	15
32	Omnidirectional transformation-optics cloak made from lenses and glenses. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, 1032.	0.8	15
33	Resolution of Maxwell's fisheye with an optimal active drain. New Journal of Physics, 2014, 16, 063001.	1.2	14
34	Ray-optical transformation optics with ideal thin lenses makes omnidirectional lenses. Optics Express, 2018, 26, 17872.	1.7	14
35	H-plane horn antenna with enhanced directivity using conformal transformation optics. Scientific Reports, 2021, 11, 14322.	1.6	14
36	Conformal optical devices based on geodesic lenses. Optics Express, 2019, 27, 28722.	1.7	14

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37	The Lissajous lens: a three-dimensional absolute optical instrument without spherical symmetry. Optics Express, 2015, 23, 5716.	1.7	13
38	Direct stigmatic imaging with curved surfaces. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2015, 32, 478.	0.8	12
39	Ray optics of generalized lenses. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, 962.	0.8	12
40	Absolute optical instruments, classical superintegrability, and separability of the Hamilton-Jacobi equation. Physical Review A, 2017, 96, .	1.0	12
41	Inequalities for quantum marginal problems with continuous variables. Journal of Mathematical Physics, 2014, 55, .	0.5	11
42	A simple model explaining super-resolution in absolute optical instruments. New Journal of Physics, 2015, 17, 053007.	1.2	9
43	Influence of modal loss on quantum state generation via cross-Kerr nonlinearity. Physical Review A, 2009, 79, .	1.0	8
44	Magnifying absolute instruments for optically homogeneous regions. Physical Review A, 2011, 84, .	1.0	8
45	Absolute optical instruments without spherical symmetry. Physical Review A, 2015, 92, .	1.0	8
46	Directivity enhancement of a cylindrical wire antenna by a graded index dielectric shell designed using strictly conformal transformation optics. Scientific Reports, 2021, 11, 13035.	1.6	8
47	Ideal-lens cloaks and new cloaking strategies. Optics Express, 2019, 27, 37327.	1.7	8
48	A solution to the complement of the generalized Luneburg lens problem. Communications Physics, 2021, 4, .	2.0	8
49	Electronic-field correlation functions. Physical Review A, 1998, 58, 4967-4971.	1.0	7
50	Quantum marginal problems. European Physical Journal D, 2015, 69, 1.	0.6	7
51	Talbot effect for gratings with diagonal symmetry. Journal of Optics (United Kingdom), 2018, 20, 025604.	1.0	7
52	Frequency spectra of absolute optical instruments. New Journal of Physics, 2012, 14, 085023.	1.2	6
53	Spectra of absolute instruments from the WKB approximation. New Journal of Physics, 2013, 15, 065005.	1.2	6
54	Multi-focal spherical media and geodesic lenses in geometrical optics. Journal of Optics (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	1.0	6

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55	Scattering of waves by the invisible lens. Journal of Optics (United Kingdom), 2017, 19, 015601.	1.0	6
56	Optical triangulations of curved spaces. Optica, 2020, 7, 142.	4.8	6
57	METATOYs and optical vortices. Journal of Optics (United Kingdom), 2011, 13, 115704.	1.0	5
58	Photonic crystals composed of Eaton lenses and invisible lenses. Physical Review A, 2017, 95, .	1.0	5
59	Combinations of generalized lenses that satisfy the edge-imaging condition of transformation optics. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2020, 37, 305.	0.8	5
60	No Approximate Complex Fermion Coherent States. Foundations of Physics, 2007, 37, 1519-1539.	0.6	3
61	No Approximate Complex Fermion Coherent States. Foundations of Physics, 2007, 37, 1027-1048.	0.6	2
62	Waveguide tapering using Conformal transformation optics for ideal transmission. , 2019, , .		2
63	Correlation functions and spin. Physical Review E, 2000, 62, 4221-4224.	0.8	1
64	Super-antenna. Proceedings of SPIE, 2008, , .	0.8	1
65	Visual defects when extending two-dimensional invisible lenses with circular symmetry into the third-dimension. Journal of Optics (United Kingdom), 2016, 18, 044013.	1.0	1
66	Experimental demonstration of ray-rotation sheets. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2018, 35, 1160.	0.8	1
67	Design of an Impedance-Matched Horn Antenna with Enhanced Directivity Using Conformal Transformation Optics. , 2020, , .		1
68	Quantum State Sharing with Continuous Variables. , 2007, , 285-303.		1
69	Towards focusing broad band light through a multimode fiber endoscope. , 2019, , .		1
70	Inequalities for electron-field correlation functions. Physical Review A, 2000, 62, .	1.0	0
71	Perfect imaging with positive refraction. , 2010, , .		0
72	Frequency spectra of absolute optical instruments. , 2012, , .		0

#	Article	IF	Citations
73	About tests of collapse models and Bell inequalities at accelerator facilities. , 2012, , .		0
74	What do forbidden light-ray fields look like. Proceedings of SPIE, 2014, , .	0.8	0
75	Multimode fibres: a pathway towards deep-tissue fluorescence microscopy. Proceedings of SPIE, 2015, , .	0.8	0
76	Untangled modes in multimode fibres for flexible microendoscopy. , 2015, , .		0
77	Progress towards omnidirectional transformation optics with lenses. Proceedings of SPIE, 2016, , .	0.8	0
78	Untangled modes in multimode waveguides. , 2016, , .		0
79	Optical simulation of quantum mechanics on the MÃ¶bius strip, Kleinâ€™s bottle and other manifolds, and Talbot effect. New Journal of Physics, 2021, 23, 033003.	1.2	0
80	Transformation optics with lenses. , 2016, , .		0
81	Description of pairs of skew lenses as a single lens. , 2017, , .		0
82	Ideal-lens cloak and omnidirectional lens. , 2017, , .		0
83	Ideal-lens stars. , 2017, , .		0
84	Imaging with pairs of skew lenses. , 2017, , .		0
85	Optical simulation of curved 2D and 3D spaces. , 2018, , .		0
86	Perfect invisibility with ideal lenses. , 2019, , .		0
87	Lens Stars and Platonic Lenses: Connecting Transformation Optics and Kepler Problem. , 2021, , .		0
88	Lens stars and Platonic lenses. Optics Express, 2021, 29, 42055.	1.7	0