Tomas Tyc

List of Publications by Year in Descending Order

69 papers	1,811 citations	20 h-index	42 g-index
89 ext. papers	2,214 ext. citations	5.7 avg, IF	5.21 L-index

#	Paper	IF	Citations
69	Wide-Angle Ceramic Retroreflective Luneburg Lens based on Quasi-Conformal Transformation Optics for mm-Wave Indoor Localization. *IEEE Access*, **2022**, 1-1	3.5	2
68	Double-layer geodesic and gradient-index lenses.. *Nature Communications*, **2022**, 13, 2354	17.4	0
67	Lens stars and Platonic lenses. *Optics Express*, **2021**, 29, 42055	3.3	
66	Optical simulation of quantum mechanics on the Möbius strip, Klein bottle and other manifolds, and Talbot effect. *New Journal of Physics*, **2021**, 23, 033003	2.9	
65	Directivity enhancement of a cylindrical wire antenna by a graded index dielectric shell designed using strictly conformal transformation optics. *Scientific Reports*, **2021**, 11, 13035	4.9	2
64	Memory effect assisted imaging through multimode optical fibres. *Nature Communications*, **2021**, 12, 3751	17.4	16
63	H-plane horn antenna with enhanced directivity using conformal transformation optics. *Scientific Reports*, **2021**, 11, 14322	4.9	2
62	A solution to the complement of the generalized Luneburg lens problem. *Communications Physics*, **2021**, 4,	5.4	3
61	Optical triangulations of curved spaces. *Optica*, **2020**, 7, 142	8.6	1
60	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, 305-315	1.8	2
59	Conformal optical devices based on geodesic lenses. *Optics Express*, **2019**, 27, 28722-28733	3.3	9
58	Light rays and waves on geodesic lenses. *Photonics Research*, **2019**, 7, 1266	6	12
57	Ideal-lens cloaks and new cloaking strategies. *Optics Express*, **2019**, 27, 37327-37336	3.3	1
56	Waveguide tapering using Conformal transformation optics for ideal transmission **2019**,		2
55	Controlling refractive index of transformation-optics devices via optical path rescaling. *Scientific Reports*, **2019**, 9, 18412	4.9	8
54	Talbot effect for gratings with diagonal symmetry. *Journal of Optics (United Kingdom)*, **2018**, 20, 025604	1.7	6
53	Experimental demonstration of ray-rotation sheets. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2018**, 35, 1160-1164	1.8	1

52	Ray-optical transformation optics with ideal thin lenses makes omnidirectional lenses. *Optics Express*, **2018**, 26, 17872-17888	3.3	6
51	Robustness of Light-Transport Processes to Bending Deformations in Graded-Index Multimode Waveguides. *Physical Review Letters*, **2018**, 120, 233901	7.4	49
50	Photonic crystals composed of Eaton lenses and invisible lenses. *Physical Review A*, **2017**, 95,	2.6	4
49	Scattering of waves by the invisible lens. *Journal of Optics (United Kingdom)*, **2017**, 19, 015601	1.7	5
48	Absolute optical instruments, classical superintegrability, and separability of the Hamilton-Jacobi equation. *Physical Review A*, **2017**, 96,	2.6	10
47	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, 1032-40	1.8	8
46	Perfect conformal invisible device with feasible refractive indexes. *Physical Review B*, **2016**, 93,	3.3	17
45	Visual defects when extending two-dimensional invisible lenses with circular symmetry into the third-dimension. *Journal of Optics (United Kingdom)*, **2016**, 18, 044013	1.7	0
44	Ray optics of generalized lenses. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2016**, 33, 962-9	1.8	7
43	Seeing through chaos in multimode fibres. *Nature Photonics*, **2015**, 9, 529-535	33.9	237
42	A simple model explaining super-resolution in absolute optical instruments. *New Journal of Physics*, **2015**, 17, 053007	2.9	7
41	The Lissajous lens: a three-dimensional absolute optical instrument without spherical symmetry. *Optics Express*, **2015**, 23, 5716-22	3.3	10
40	Quantum marginal problems. *European Physical Journal D*, **2015**, 69, 1	1.3	4
39	Absolute optical instruments without spherical symmetry. *Physical Review A*, **2015**, 92,	2.6	7
38	Direct stigmatic imaging with curved surfaces. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2015**, 32, 478-81	1.8	9
37	Dr TIM: Ray-tracer TIM, with additional specialist scientific capabilities. *Computer Physics Communications*, **2014**, 185, 1027-1037	4.2	10
36	Invisible lenses with positive isotropic refractive index. *Physical Review A*, **2014**, 90,	2.6	14
35	Resolution of Maxwell's fisheye with an optimal active drain. *New Journal of Physics*, **2014**, 16, 063001	2.9	11

34	Inequalities for quantum marginal problems with continuous variables. *Journal of Mathematical Physics*, **2014**, 55, 062201	1.2	8
33	Invisibility, Perfect Imaging and More Where Optics Meets Magic **2014**, 17-22		
32	Playing the tricks of numbers of light sources. *New Journal of Physics*, **2013**, 15, 093034	2.9	21
31	Spectra of absolute instruments from the WKB approximation. *New Journal of Physics*, **2013**, 15, 065005	2.9	6
30	Multi-focal spherical media and geodesic lenses in geometrical optics. *Journal of Optics (United Kingdom)*, **2013**, 15, 125716	1.7	6
29	Spherical media and geodesic lenses in geometrical optics. *Journal of Optics (United Kingdom)*, **2012**, 14, 075705	1.7	75
28	Frequency spectra of absolute optical instruments. *New Journal of Physics*, **2012**, 14, 085023	2.9	4
27	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, 1407-11	1.8	10
26	Gouy phase for full-aperture spherical and cylindrical waves. *Optics Letters*, **2012**, 37, 924-6	3	20
25	Controlling birefringence in dielectrics. *Nature Photonics*, **2011**, 5, 357-359	33.9	40
24	Forum Optics: Perfect lenses in focus. *Nature*, **2011**, 480, 42-3	50.4	36
23	Invisibility cloaking without superluminal propagation. *New Journal of Physics*, **2011**, 13, 083007	2.9	41
22	Magnifying absolute instruments for optically homogeneous regions. *Physical Review A*, **2011**, 84,	2.6	7
21	Conformal cloak for waves. *Physical Review A*, **2011**, 83,	2.6	35
20	Evidence for subwavelength imaging with positive refraction. *New Journal of Physics*, **2011**, 13, 033016	2.9	32
19	METATOYs and optical vortices. *Journal of Optics (United Kingdom)*, **2011**, 13, 115704	1.7	4
18	Absolute instruments and perfect imaging in geometrical optics. *New Journal of Physics*, **2011**, 13, 115004	2.9	41
17	Non-Euclidean Cloaking for Light Waves. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 418-426	3.8	18

List of Publications

16	Influence of modal loss on quantum state generation via cross-Kerr nonlinearity. *Physical Review A*, **2009**, 79,	2.6	6
15	An omnidirectional retroreflector based on the transmutation of dielectric singularities. *Nature Materials*, **2009**, 8, 639-42	27	161
14	Broadband invisibility by non-Euclidean cloaking. *Science*, **2009**, 323, 110-2	33.3	369
13	Transmutation of singularities in optical instruments. *New Journal of Physics*, **2008**, 10, 115038	2.9	67
12	Highly non-Gaussian states created via cross-Kerr nonlinearity. *New Journal of Physics*, **2008**, 10, 023041	2.9	20
11	Superantenna made of transformation media. *New Journal of Physics*, **2008**, 10, 115026	2.9	17
10	Gaussian Quantum Marginal Problem. *Communications in Mathematical Physics*, **2008**, 280, 263-280	2	26
9	No Approximate Complex Fermion Coherent States. *Foundations of Physics*, **2007**, 37, 1519-1539	1.2	3
8	No Approximate Complex Fermion Coherent States. *Foundations of Physics*, **2007**, 37, 1027-1048	1.2	2
7	Quantum State Sharing with Continuous Variables **2007**, 285-303		0
6	Continuous-variable quantum-state sharing via quantum disentanglement. *Physical Review A*, **2005**, 71,	2.6	97
5	Continuous variable (2, 3) threshold quantum secret sharing schemes. *New Journal of Physics*, **2003**, 5, 4-4	2.9	38
4	Efficient sharing of a continuous-variable quantum secret. *Journal of Physics A*, **2003**, 36, 7625-7637		21
3	How to share a continuous-variable quantum secret by optical interferometry. *Physical Review A*, **2002**, 65,	2.6	90
2	Correlation functions and spin. *Physical Review E*, **2000**, 62, 4221-4	2.4	1
1	Electronic-field correlation functions. *Physical Review A*, **1998**, 58, 4967-4971	2.6	6