

Robert W Boyd

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

280
papers

13,323
citations

59
h-index

109
g-index

342
ext. papers

16,842
ext. citations

7.1
avg, IF

6.85
L-index

#	Paper	IF	Citations
280	Superluminal and slow light propagation in a room-temperature solid. <i>Science</i> , 2003 , 301, 200-2	33.3	589
279	Generating optical orbital angular momentum at visible wavelengths using a plasmonic metasurface. <i>Light: Science and Applications</i> , 2014 , 3, e167-e167	16.7	531
278	Large optical nonlinearity of indium tin oxide in its epsilon-near-zero region. <i>Science</i> , 2016 , 352, 795-7	33.3	487
277	Quantum correlations in optical angle-orbital angular momentum variables. <i>Science</i> , 2010 , 329, 662-5	33.3	367
276	Coupled-resonator-induced transparency. <i>Physical Review A</i> , 2004 , 69,	2.6	362
275	High-dimensional quantum cryptography with twisted light. <i>New Journal of Physics</i> , 2015 , 17, 033033	2.9	335
274	Realization of the Einstein-Podolsky-Rosen paradox using momentum- and position-entangled photons from spontaneous parametric down conversion. <i>Physical Review Letters</i> , 2004 , 92, 210403	7.4	321
273	Efficient separation of the orbital angular momentum eigenstates of light. <i>Nature Communications</i> , 2013 , 4, 2781	17.4	265
272	Stored light in an optical fiber via stimulated Brillouin scattering. <i>Science</i> , 2007 , 318, 1748-50	33.3	233
271	Imaging with a small number of photons. <i>Nature Communications</i> , 2015 , 6, 5913	17.4	224
270	Controlling the velocity of light pulses. <i>Science</i> , 2009 , 326, 1074-7	33.3	219
269	Optical Properties of Nanostructured Optical Materials. <i>Chemistry of Materials</i> , 1996 , 8, 1807-1819	9.6	212
268	Slow and fast light. <i>Progress in Optics</i> , 2002 , 43, 497-530	3.4	207
267	Influence of atmospheric turbulence on optical communications using orbital angular momentum for encoding. <i>Optics Express</i> , 2012 , 20, 13195-200	3.3	206
266	High-dimensional intracity quantum cryptography with structured photons. <i>Optica</i> , 2017 , 4, 1006	8.6	203
265	Optics. Observation of optical polarization Möbius strips. <i>Science</i> , 2015 , 347, 964-6	33.3	202
264	Influence of atmospheric turbulence on the propagation of quantum states of light carrying orbital angular momentum. <i>Optics Letters</i> , 2009 , 34, 142-4	3	201

263	The physics of ghost imaging. <i>Quantum Information Processing</i> , 2012 , 11, 949-993	1.6	200
262	Creating high-harmonic beams with controlled orbital angular momentum. <i>Physical Review Letters</i> , 2014 , 113, 153901	7.4	175
261	Observation of backward pulse propagation through a medium with a negative group velocity. <i>Science</i> , 2006 , 312, 895-7	33.3	174
260	Enhanced nonlinear optical response of composite materials. <i>Physical Review Letters</i> , 1995 , 74, 1871-1874	7.4	161
259	Nonlinear optical effects in epsilon-near-zero media. <i>Nature Reviews Materials</i> , 2019 , 4, 535-551	73.3	159
258	Dispersion of silicon nonlinearities in the near infrared region. <i>Applied Physics Letters</i> , 2007 , 91, 021111	3.4	158
257	Large optical nonlinearity of nanoantennas coupled to an epsilon-near-zero material. <i>Nature Photonics</i> , 2018 , 12, 79-83	33.9	157
256	Divergence of an orbital-angular-momentum-carrying beam upon propagation. <i>New Journal of Physics</i> , 2015 , 17, 023011	2.9	154
255	Atmospheric turbulence effects on the performance of a free space optical link employing orbital angular momentum multiplexing. <i>Optics Letters</i> , 2013 , 38, 4062-5	3	154
254	Exact solution to simultaneous intensity and phase encryption with a single phase-only hologram. <i>Optics Letters</i> , 2013 , 38, 3546-9	3	152
253	Enhanced nonlinear optical response of one-dimensional metal-dielectric photonic crystals. <i>Physical Review Letters</i> , 2004 , 93, 123902	7.4	150
252	Direct measurement of a 27-dimensional orbital-angular-momentum state vector. <i>Nature Communications</i> , 2014 , 5, 3115	17.4	145
251	The third-order nonlinear optical susceptibility of gold. <i>Optics Communications</i> , 2014 , 326, 74-79	2	144
250	SLOW AND STOPPED LIGHT 'Slow' and 'fast' light in resonator-coupled waveguides. <i>Journal of Modern Optics</i> , 2002 , 49, 2629-2636	1.1	144
249	Rapid generation of light beams carrying orbital angular momentum. <i>Optics Express</i> , 2013 , 21, 30196-203	3.3	140
248	Influence of atmospheric turbulence on states of light carrying orbital angular momentum. <i>Optics Letters</i> , 2012 , 37, 3735-7	3	139
247	Full characterization of polarization states of light via direct measurement. <i>Nature Photonics</i> , 2013 , 7, 316-321	33.9	135
246	Adaptive-optics-based simultaneous pre- and post-turbulence compensation of multiple orbital-angular-momentum beams in a bidirectional free-space optical link. <i>Optica</i> , 2014 , 1, 376	8.6	123

245	Breaking Lorentz reciprocity to overcome the time-bandwidth limit in physics and engineering. <i>Science</i> , 2017 , 356, 1260-1264	33.3	120
244	Maximum time delay achievable on propagation through a slow-light medium. <i>Physical Review A</i> , 2005 , 71,	2.6	119
243	Amplification of Angular Rotations Using Weak Measurements. <i>Physical Review Letters</i> , 2014 , 112,	7.4	116
242	Quantum walks and wavepacket dynamics on a lattice with twisted photons. <i>Science Advances</i> , 2015 , 1, e1500087	14.3	109
241	Highly efficient electron vortex beams generated by nanofabricated phase holograms. <i>Applied Physics Letters</i> , 2014 , 104, 043109	3.4	97
240	Material slow light and structural slow light: similarities and differences for nonlinear optics [Invited]. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2011 , 28, A38	1.7	97
239	Adaptive optics compensation of multiple orbital angular momentum beams propagating through emulated atmospheric turbulence. <i>Optics Letters</i> , 2014 , 39, 2845-8	3	95
238	Structured quantum waves. <i>Nature Physics</i> , 2015 , 11, 629-634	16.2	91
237	Slow and fast light: fundamentals and applications. <i>Journal of Modern Optics</i> , 2009 , 56, 1908-1915	1.1	90
236	Free-space propagation of high-dimensional structured optical fields in an urban environment. <i>Science Advances</i> , 2017 , 3, e1700552	14.3	86
235	Tomography of the quantum state of photons entangled in high dimensions. <i>Physical Review A</i> , 2011 , 84,	2.6	84
234	Ultraslow waves on the nanoscale. <i>Science</i> , 2017 , 358,	33.3	81
233	Controlling the orbital angular momentum of high harmonic vortices. <i>Nature Communications</i> , 2017 , 8, 14970	17.4	77
232	Nonlinear optical properties of nanocomposite materials. <i>Journal of Optics</i> , 1996 , 5, 505-512		72
231	Reconstructing the topology of optical polarization knots. <i>Nature Physics</i> , 2018 , 14, 1079-1082	16.2	71
230	Radial quantum number of Laguerre-Gauss modes. <i>Physical Review A</i> , 2014 , 89,	2.6	71
229	Exploring the quantum nature of the radial degree of freedom of a photon via Hong-Ou-Mandel interference. <i>Physical Review A</i> , 2014 , 89,	2.6	70
228	Sorting Photons by Radial Quantum Number. <i>Physical Review Letters</i> , 2017 , 119, 263602	7.4	67

227	PHYSICS. Classical entanglement?. <i>Science</i> , 2015 , 350, 1172-3	33.3	65
226	Simulating thick atmospheric turbulence in the lab with application to orbital angular momentum communication. <i>New Journal of Physics</i> , 2014 , 16, 033020	2.9	64
225	Ultra-high-Q resonances in plasmonic metasurfaces. <i>Nature Communications</i> , 2021 , 12, 974	17.4	63
224	Holographic generation of highly twisted electron beams. <i>Physical Review Letters</i> , 2015 , 114, 034801	7.4	62
223	Entangled-photon compressive ghost imaging. <i>Physical Review A</i> , 2011 , 84,	2.6	62
222	Compressive direct measurement of the quantum wave function. <i>Physical Review Letters</i> , 2014 , 113, 090402	7.4	60
221	Quantum ghost imaging through turbulence. <i>Physical Review A</i> , 2011 , 83,	2.6	59
220	Order-of-magnitude estimates of the nonlinear optical susceptibility. <i>Journal of Modern Optics</i> , 1999 , 46, 367-378	1.1	58
219	Generation of Nondiffracting Electron Bessel Beams. <i>Physical Review X</i> , 2014 , 4,	9.1	56
218	Strong, spectrally-tunable chirality in diffractive metasurfaces. <i>Scientific Reports</i> , 2015 , 5, 13034	4.9	56
217	Polarization Shaping for Control of Nonlinear Propagation. <i>Physical Review Letters</i> , 2016 , 117, 233903	7.4	56
216	Quantum cryptography with twisted photons through an outdoor underwater channel. <i>Optics Express</i> , 2018 , 26, 22563-22573	3.3	55
215	High-dimensional quantum cloning and applications to quantum hacking. <i>Science Advances</i> , 2017 , 3, e1601915	11.5	52
214	Measuring the orbital angular momentum spectrum of an electron beam. <i>Nature Communications</i> , 2017 , 8, 15536	17.4	51
213	Compressive object tracking using entangled photons. <i>Applied Physics Letters</i> , 2013 , 102, 231104	3.4	51
212	Experimental demonstration of 20 Gbit/s data encoding and 2 ns channel hopping using orbital angular momentum modes. <i>Optics Letters</i> , 2015 , 40, 5810-3	3	50
211	Secure information capacity of photons entangled in many dimensions. <i>Physical Review A</i> , 2012 , 85,	2.6	50
210	Q-plates as higher order polarization controllers for orbital angular momentum modes of fiber. <i>Optics Letters</i> , 2015 , 40, 1729-32	3	49

209	State transfer based on classical nonseparability. <i>Physical Review A</i> , 2015 , 92,	2.6	48
208	Supersensitive measurement of angular displacements using entangled photons. <i>Physical Review A</i> , 2011 , 83,	2.6	48
207	Weak Value Amplification Can Outperform Conventional Measurement in the Presence of Detector Saturation. <i>Physical Review Letters</i> , 2017 , 118, 070802	7.4	46
206	Chiral optical response of planar and symmetric nanotrimers enabled by heteromaterial selection. <i>Nature Communications</i> , 2016 , 7, 13117	17.4	46
205	STIMULATED BRILLOUIN SCATTERING IN THE PRESENCE OF EXTERNAL FEEDBACK. <i>Journal of Nonlinear Optical Physics and Materials</i> , 1992 , 01, 581-594	0.8	45
204	Beyond the perturbative description of the nonlinear optical response of low-index materials. <i>Optics Letters</i> , 2017 , 42, 3225-3228	3	43
203	Broadband frequency translation through time refraction in an epsilon-near-zero material. <i>Nature Communications</i> , 2020 , 11, 2180	17.4	42
202	Fourier relationship between the angle and angular momentum of entangled photons. <i>Physical Review A</i> , 2008 , 78,	2.6	42
201	Slow- and fast-light: fundamental limitations. <i>Journal of Modern Optics</i> , 2007 , 54, 2403-2411	1.1	42
200	Optical response of dipole antennas on an epsilon-near-zero substrate. <i>Physical Review A</i> , 2016 , 93,	2.6	41
199	Fiber-Based Slow-Light Technologies. <i>Journal of Lightwave Technology</i> , 2008 , 26, 3752-3762	4	40
198	Quantum spatial superresolution by optical centroid measurements. <i>Physical Review Letters</i> , 2011 , 107, 083603	7.4	37
197	Experimental generation of an optical field with arbitrary spatial coherence properties. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2014 , 31, A51	1.7	36
196	Thermal ghost imaging with averaged speckle patterns. <i>Physical Review A</i> , 2012 , 86,	2.6	36
195	Experimental investigation of high-dimensional quantum key distribution protocols with twisted photons. <i>Quantum - the Open Journal for Quantum Science</i> , 2017 , 2, 111		36
194	Observation of nanoscale magnetic fields using twisted electron beams. <i>Nature Communications</i> , 2017 , 8, 689	17.4	34
193	Theoretical analysis of quantum ghost imaging through turbulence. <i>Physical Review A</i> , 2011 , 84,	2.6	34
192	Exotic looped trajectories of photons in three-slit interference. <i>Nature Communications</i> , 2016 , 7, 13987	17.4	34

191	Spatial two-photon coherence of the entangled field produced by down-conversion using a partially spatially coherent pump beam. <i>Physical Review A</i> , 2010 , 81,	2.6	33
190	Effects of atmospheric turbulence on the entanglement of spatial two-qubit states. <i>Physical Review A</i> , 2010 , 81,	2.6	33
189	Equivalence of interaction hamiltonians in the electric dipole approximation. <i>Journal of Modern Optics</i> , 2004 , 51, 1137-1147	1.1	33
188	Single-shot measurement of the orbital-angular-momentum spectrum of light. <i>Nature Communications</i> , 2017 , 8, 1054	17.4	32
187	Custom-tailored spatial mode sorting by controlled random scattering. <i>Physical Review B</i> , 2017 , 95,	3.3	32
186	Ultra-strong polarization dependence of surface lattice resonances with out-of-plane plasmon oscillations. <i>Optics Express</i> , 2016 , 24, 28279-28289	3.3	32
185	Engineering the Frequency Spectrum of Bright Squeezed Vacuum via Group Velocity Dispersion in an SU(1,1) Interferometer. <i>Physical Review Letters</i> , 2016 , 117, 183601	7.4	31
184	Quantum-limited estimation of the axial separation of two incoherent point sources. <i>Optica</i> , 2019 , 6, 534	8.6	31
183	Digital spiral object identification using random light. <i>Light: Science and Applications</i> , 2017 , 6, e17013	16.7	30
182	Real-time imaging of spin-to-orbital angular momentum hybrid remote state preparation. <i>Physical Review A</i> , 2015 , 92,	2.6	30
181	Angular two-photon interference and angular two-qubit states. <i>Physical Review Letters</i> , 2010 , 104, 010501	3.0	30
180	Multiresonant High- Plasmonic Metasurfaces. <i>Nano Letters</i> , 2019 , 19, 6429-6434	11.5	29
179	Arbitrary optical wavefront shaping via spin-to-orbit coupling. <i>Journal of Optics (United Kingdom)</i> , 2016 , 18, 124002	1.7	29
178	Generation and application of besell beams in electron microscopy. <i>Ultramicroscopy</i> , 2016 , 166, 48-60	3.1	28
177	Automated classification of multiphoton microscopy images of ovarian tissue using deep learning. <i>Journal of Biomedical Optics</i> , 2018 , 23, 1-7	3.5	28
176	Light-Drag Enhancement by a Highly Dispersive Rubidium Vapor. <i>Physical Review Letters</i> , 2016 , 116, 013601	3.0	27
175	Using surface lattice resonances to engineer nonlinear optical processes in metal nanoparticle arrays. <i>Physical Review A</i> , 2018 , 97,	2.6	27
174	Twisted electrons. <i>Contemporary Physics</i> , 2018 , 59, 126-144	3.3	26

173	Quantum lithography: status of the field. <i>Quantum Information Processing</i> , 2012 , 11, 891-901	1.6	26
172	Dye-doped cholesteric-liquid-crystal room-temperature single-photon source. <i>Journal of Modern Optics</i> , 2004 , 51, 1535-1547	1.1	26
171	Anomalies in optical harmonic generation using high-intensity laser radiation. <i>Physical Review A</i> , 1990 , 41, 3822-3825	2.6	26
170	Prediction of an extremely large nonlinear refractive index for crystals at terahertz frequencies. <i>Physical Review A</i> , 2015 , 92,	2.6	25
169	Hanbury Brown and Twiss interferometry with twisted light. <i>Science Advances</i> , 2016 , 2, e1501143	14.3	25
168	Self-phase-modulation of surface plasmon polaritons. <i>Physical Review A</i> , 2014 , 89,	2.6	25
167	Optical activity in diffraction from a planar array of achiral nanoparticles. <i>Physical Review A</i> , 2009 , 79,	2.6	25
166	Temporal coherence and indistinguishability in two-photon interference effects. <i>Physical Review A</i> , 2008 , 77,	2.6	25
165	Physics. Quantum weirdness in the lab. <i>Science</i> , 2007 , 317, 1874-5	33.3	24
164	Implementation of sub-Rayleigh-resolution lithography using an N-photon absorber. <i>Journal of Modern Optics</i> , 2006 , 53, 2271-2277	1.1	24
163	Characterization of an underwater channel for quantum communications in the Ottawa River. <i>Optics Express</i> , 2019 , 27, 26346-26354	3.3	24
162	Compensation-free high-dimensional free-space optical communication using turbulence-resilient vector beams. <i>Nature Communications</i> , 2021 , 12, 1666	17.4	24
161	Spatial sampling of terahertz fields with sub-wavelength accuracy via probe-beam encoding. <i>Light: Science and Applications</i> , 2019 , 8, 55	16.7	23
160	Enhanced electro-optic response of layered composite materials. <i>Applied Physics Letters</i> , 1999 , 74, 2417-2419	3.4	23
159	Metformin Abrogates Age-Associated Ovarian Fibrosis. <i>Clinical Cancer Research</i> , 2020 , 26, 632-642	12.9	23
158	Twisting neutrons may reveal their internal structure. <i>Nature Physics</i> , 2018 , 14, 1-2	16.2	22
157	Ultrabroadband 3D invisibility with fast-light cloaks. <i>Nature Communications</i> , 2019 , 10, 4859	17.4	22
156	Generation of Caustics and Rogue Waves from Nonlinear Instability. <i>Physical Review Letters</i> , 2017 , 119, 203901	7.4	22

155	Using all transverse degrees of freedom in quantum communications based on a generic mode sorter. <i>Optics Express</i> , 2019 , 27, 10383-10394	3.3	22
154	Influence of atmospheric turbulence on the propagation of quantum states of light using plane-wave encoding. <i>Optics Express</i> , 2011 , 19, 18310-7	3.3	21
153	Organic photonic bandgap microcavities doped with semiconductor nanocrystals for room-temperature on-demand single-photon sources. <i>Journal of Modern Optics</i> , 2009 , 56, 167-174	1.1	21
152	Room temperature source of single photons of definite polarization. <i>Journal of Modern Optics</i> , 2007 , 54, 417-429	1.1	21
151	Realization of a scalable Laguerre-Gaussian mode sorter based on a robust radial mode sorter. <i>Optics Express</i> , 2018 , 26, 33057-33065	3.3	21
150	Nondestructive Measurement of Orbital Angular Momentum for an Electron Beam. <i>Physical Review Letters</i> , 2016 , 117, 154801	7.4	21
149	Robust organic lasers comprising glassy-cholesteric pentafluorene doped with a red-emitting oligofluorene. <i>Applied Physics Letters</i> , 2009 , 94, 041111	3.4	20
148	Hermite-Gaussian mode sorter. <i>Optics Letters</i> , 2018 , 43, 5263-5266	3	20
147	Perspectives on advances in high-capacity, free-space communications using multiplexing of orbital-angular-momentum beams. <i>APL Photonics</i> , 2021 , 6, 030901	5.2	20
146	Hardy's paradox tested in the spin-orbit Hilbert space of single photons. <i>Physical Review A</i> , 2014 , 89,	2.6	19
145	Quantum imaging and information. <i>Reports on Progress in Physics</i> , 2019 , 82, 124401	14.4	18
144	Recent progress in quantum and nonlinear optical lithography. <i>Journal of Modern Optics</i> , 2006 , 53, 713-718	1.8	18
143	Nanofabrication of optical structures and devices for photonics and biophotonics. <i>Journal of Modern Optics</i> , 2003 , 50, 2543-2550	1.1	18
142	Wigner Distribution of Twisted Photons. <i>Physical Review Letters</i> , 2016 , 116, 130402	7.4	17
141	Response to "The physics of ghost imaging" on local interference or local intensity fluctuation correlation? <i>Quantum Information Processing</i> , 2012 , 11, 1003-1011	1.6	17
140	Efficient nonlinear metasurfaces by using multiresonant high-Q plasmonic arrays. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2019 , 36, E30	1.7	17
139	Fundamental Radiative Processes in Near-Zero-Index Media of Various Dimensionalities. <i>ACS Photonics</i> , 2020 , 7, 1965-1970	6.3	17
138	Realization of the Einstein-Podolsky-Rosen Paradox Using Radial Position and Radial Momentum Variables. <i>Physical Review Letters</i> , 2019 , 123, 060403	7.4	16

137	Partial angular coherence and the angular Schmidt spectrum of entangled two-photon fields. <i>Physical Review A</i> , 2011 , 84,	2.6	16
136	Influence of pump coherence on the generation of position-momentum entanglement in optical parametric down-conversion. <i>Optics Express</i> , 2019 , 27, 20745-20753	3.3	16
135	Tighter spots of light with superposed orbital-angular-momentum beams. <i>Physical Review A</i> , 2016 , 94,	2.6	15
134	Free-space communication through turbulence: a comparison of plane-wave and orbital-angular-momentum encodings. <i>Journal of Modern Optics</i> , 2014 , 61, 43-48	1.1	15
133	Phase sensitivity of gain-unbalanced nonlinear interferometers. <i>Physical Review A</i> , 2017 , 96,	2.6	15
132	Spatially multiplexed orbital-angular-momentum-encoded single photon and classical channels in a free-space optical communication link. <i>Optics Letters</i> , 2017 , 42, 4881-4884	3	15
131	Measurement of the orbital-angular-momentum spectrum of fields with partial angular coherence using double-angular-slit interference. <i>Physical Review A</i> , 2012 , 86,	2.6	15
130	Discriminating orthogonal single-photon images. <i>Physical Review A</i> , 2009 , 79,	2.6	15
129	Single-End Adaptive Optics Compensation for Emulated Turbulence in a Bi-Directional 10-Mbit/s per Channel Free-Space Quantum Communication Link Using Orbital-Angular-Momentum Encoding. <i>Research</i> , 2019 , 2019, 8326701	7.8	15
128	Bright squeezed vacuum in a nonlinear interferometer: Frequency and temporal Schmidt-mode description. <i>Physical Review A</i> , 2018 , 97,	2.6	15
127	Properties of bright squeezed vacuum at increasing brightness. <i>Physical Review Research</i> , 2020 , 2,	3.9	14
126	Influence of pump coherence on the quantum properties of spontaneous parametric down-conversion. <i>Physica Scripta</i> , 2018 , 93, 084001	2.6	13
125	Fabrication and photoluminescence properties of porous CdSe. <i>Applied Physics Letters</i> , 2005 , 86, 063115	3.4	13
124	An optic to replace space and its application towards ultra-thin imaging systems. <i>Nature Communications</i> , 2021 , 12, 3512	17.4	13
123	Experimental demonstration of Klyshko's advanced-wave picture using a coincidence-count based, camera-enabled imaging system. <i>Journal of Modern Optics</i> , 2014 , 61, 547-551	1.1	12
122	Quantifying the impact of proximity error correction on plasmonic metasurfaces [Invited]. <i>Optical Materials Express</i> , 2015 , 5, 2798	2.6	12
121	Enhanced Nonlinear Optical Responses of Layered Epsilon-near-Zero Metamaterials at Visible Frequencies. <i>ACS Photonics</i> , 2021 , 8, 125-129	6.3	12
120	Fair sampling perspective on an apparent violation of duality. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 12337-41	11.5	11

119	Conditional preparation of states containing a definite number of photons. <i>Physical Review A</i> , 2008 , 77,	2.6	11
118	Single-Shot Direct Tomography of the Complete Transverse Amplitude, Phase, and Polarization Structure of a Light Field. <i>Physical Review Applied</i> , 2019 , 12,	4.3	10
117	Generation of a spin-polarized electron beam by multipole magnetic fields. <i>Ultramicroscopy</i> , 2014 , 138, 22-7	3.1	10
116	Performance of real-time adaptive optics compensation in a turbulent channel with high-dimensional spatial-mode encoding. <i>Optics Express</i> , 2020 , 28, 15376-15391	3.3	10
115	Dynamics of gravity-induced gradients in soap film thicknesses. <i>Applied Physics Letters</i> , 2006 , 88, 234104	3.4	9
114	Enhancement of third-harmonic generation in a polymer-dispersed liquid-crystal grating. <i>Applied Physics Letters</i> , 2005 , 87, 051102	3.4	9
113	Enhanced third-order nonlinear optical response of photonic bandgap materials. <i>Journal of Modern Optics</i> , 1999 , 46, 1061-1069	1.1	9
112	Turbulence-resilient pilot-assisted self-coherent free-space optical communications using automatic optoelectronic mixing of many modes. <i>Nature Photonics</i> , 2021 , 15, 743-750	33.9	9
111	Vectorizing the spatial structure of high-harmonic radiation from gas. <i>Nature Communications</i> , 2019 , 10, 2020	17.4	8
110	A primary radiation standard based on quantum nonlinear optics. <i>Nature Physics</i> , 2019 , 15, 529-532	16.2	8
109	Design of negative-refractive-index materials on the basis of rods with a gradient of the dielectric constant. <i>Applied Physics Letters</i> , 2007 , 91, 081103	3.4	8
108	Porosity-induced blueshift of photoluminescence in CdSe. <i>Journal of Applied Physics</i> , 2006 , 100, 053517	2.5	8
107	Minimalist Mie coefficient model. <i>Optics Express</i> , 2020 , 28, 16511-16525	3.3	8
106	Ultrafast Topological Engineering in Metamaterials. <i>Physical Review Letters</i> , 2020 , 125, 037403	7.4	8
105	Dynamic spatiotemporal beams that combine two independent and controllable orbital-angular-momenta using multiple optical-frequency-comb lines. <i>Nature Communications</i> , 2020 , 11, 4099	17.4	8
104	Quantum probabilities from quantum entanglement: experimentally unpacking the Born rule. <i>New Journal of Physics</i> , 2016 , 18, 053013	2.9	8
103	High-dimensional quantum key distribution based on mutually partially unbiased bases. <i>Physical Review A</i> , 2020 , 101,	2.6	7
102	Weak-value amplification of the fast-light effect in rubidium vapor. <i>Physical Review A</i> , 2016 , 93,	2.6	7

101	Nonlinear Optical Interactions in Optical Fibers. <i>Journal of Nonlinear Optical Physics and Materials</i> , 1998 , 07, 105-112	0.8	7
100	Utilizing adaptive optics to mitigate intra-modal-group power coupling of graded-index few-mode fiber in a 200-Gbit/s mode-division-multiplexed link. <i>Optics Letters</i> , 2020 , 45, 3577-3580	3	7
99	High-fidelity spatial mode transmission through a 1-km-long multimode fiber via vectorial time reversal. <i>Nature Communications</i> , 2021 , 12, 1866	17.4	7
98	Performance analysis of d-dimensional quantum cryptography under state-dependent diffraction. <i>Physical Review A</i> , 2019 , 100,	2.6	6
97	Quantum Nonlocal Aberration Cancellation. <i>Physical Review Letters</i> , 2019 , 123, 143603	7.4	6
96	Phase retrieval of an electron vortex beam using diffraction holography. <i>Applied Physics Letters</i> , 2017 , 111, 223101	3.4	6
95	Theoretical model for superluminal and slow light in erbium-doped optical fibers: enhancement of the frequency response by pump modulation. <i>Applied Physics B: Lasers and Optics</i> , 2012 , 107, 717-732	1.9	6
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