

Robert W Boyd

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/2985978/robert-w-boyd-publications-by-year.pdf>

Version: 2024-04-29

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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	Designing high-performance propagation-compressing spaceplates using thin-film multilayer stacks.. <i>Optics Express</i> , 2022 , 30, 2197-2205	3.3	1
279	Demonstration of Turbulence Resiliency in a Mode-, Polarization-, and Wavelength-Multiplexed Free-Space Optical Link Using Pilot-Assisted Optoelectronic Beam Mixing. <i>Journal of Lightwave Technology</i> , 2022 , 40, 588-596	4	2
278	Cross-polarized surface lattice resonances in a rectangular lattice plasmonic metasurface.. <i>Optics Letters</i> , 2022 , 47, 2105-2108	3	1
277	Experimental demonstration of superresolution of partially coherent light sources using parity sorting: erratum. <i>Optics Express</i> , 2021 , 29, 35579	3.3	
276	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
275	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
274	Kelvin's chirality of optical beams. <i>Physical Review A</i> , 2021 , 103,	2.6	4
273	Multiprobe Time Reversal for High-Fidelity Vortex-Mode-Division Multiplexing Over a Turbulent Free-Space Link. <i>Physical Review Applied</i> , 2021 , 15,	4.3	5
272	Compensation-free high-dimensional free-space optical communication using turbulence-resilient vector beams. <i>Nature Communications</i> , 2021 , 12, 1666	17.4	24
271	Reply to 'Physical limitations on broadband invisibility based on fast-light media'. <i>Nature Communications</i> , 2021 , 12, 2800	17.4	2
270	Giant Third-Order Nonlinear Response of Liquids at Terahertz Frequencies. <i>Physical Review Applied</i> , 2021 , 15,	4.3	5
269	Terahertz Nonlinear Spectroscopy of Water Vapor. <i>ACS Photonics</i> , 2021 , 8, 1683-1688	6.3	3
268	Dependence of the coupling properties between a plasmonic antenna array and a sub-wavelength epsilon-near-zero film on structural and material parameters. <i>Applied Physics Letters</i> , 2021 , 118, 241102	3.4	3
267	An optic to replace space and its application towards ultra-thin imaging systems. <i>Nature Communications</i> , 2021 , 12, 3512	17.4	13
266	Tunable Doppler shift using a time-varying epsilon-near-zero thin film near 1550 nm. <i>Optics Letters</i> , 2021 , 46, 3444-3447	3	0
265	Experimental demonstration of superresolution of partially coherent light sources using parity sorting. <i>Optics Express</i> , 2021 , 29, 22034-22043	3.3	6
264	Adiabatic Frequency Conversion Using a Time-Varying Epsilon-Near-Zero Metasurface. <i>Nano Letters</i> , 2021 , 21, 5907-5913	11.5	5

263	Direct Tomography of High-Dimensional Density Matrices for General Quantum States of Photons. <i>Physical Review Letters</i> , 2021 , 127, 040402	7.4	2
262	Enhanced Nonlinear Optical Responses of Layered Epsilon-near-Zero Metamaterials at Visible Frequencies. <i>ACS Photonics</i> , 2021 , 8, 125-129	6.3	12
261	Superscattering, Superabsorption, and Nonreciprocity in Nonlinear Antennas. <i>ACS Photonics</i> , 2021 , 8, 585-591	6.3	4
260	Photon Acceleration Using a Time-Varying Epsilon-near-Zero Metasurface. <i>ACS Photonics</i> , 2021 , 8, 716-720	6.3	4
259	Ultra-high-Q resonances in plasmonic metasurfaces. <i>Nature Communications</i> , 2021 , 12, 974	17.4	63
258	Confocal super-resolution microscopy based on a spatial mode sorter. <i>Optics Express</i> , 2021 , 29, 11784-11792	3.9	4
257	Compressive ultrafast pulse measurement via time-domain single-pixel imaging. <i>Optica</i> , 2021 , 8, 1176	8.6	2
256	Colossal enhancement of the magnetic dipole moment by exploiting lattice coupling in metasurfaces. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2021 , 38, C217	1.7	2
255	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
254	High-dimensional quantum key distribution based on mutually partially unbiased bases. <i>Physical Review A</i> , 2020 , 101,	2.6	7
253	Broadband frequency translation through time refraction in an epsilon-near-zero material. <i>Nature Communications</i> , 2020 , 11, 2180	17.4	42
252	Properties of bright squeezed vacuum at increasing brightness. <i>Physical Review Research</i> , 2020 , 2,	3.9	14
251	Kerker effect, superscattering, and scattering dark states in atomic antennas. <i>Physical Review Research</i> , 2020 , 2,	3.9	2
250	Plasmonic Nanoantenna-Enhanced Adiabatic Wavelength Conversion using a Time-varying Epsilon-near-zero-based Metasurface 2020 ,		2
249	Theory of four-wave mixing of cylindrical vector beams in optical fibers. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2020 , 37, 1670	1.7	3
248	Vectorial Phase Conjugation for High-Fidelity Mode Transmission Through Multimode Fiber 2020 ,		1
247	Ultra-High-Q Resonance in a Plasmonic Metasurface 2020 ,		1
246	Propagation of broadband THz pulses: effects of dispersion, diffraction and time-varying nonlinear refraction. <i>Optics Express</i> , 2020 , 28, 3237-3248	3.3	4

245	Minimalist Mie coefficient model. <i>Optics Express</i> , 2020 , 28, 16511-16525	3.3	8
244	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
243	Ultrafast modulation of the spectral filtering properties of a THz metasurface. <i>Optics Express</i> , 2020 , 28, 20296-20304	3.3	5
242	Fast generation and detection of spatial modes of light using an acousto-optic modulator. <i>Optics Express</i> , 2020 , 28, 29112-29121	3.3	6
241	Simultaneous turbulence mitigation and channel demultiplexing for two 100 Gbit/s orbital-angular-momentum multiplexed beams by adaptive wavefront shaping and diffusing. <i>Optics Letters</i> , 2020 , 45, 702-705	3	4
240	Fundamental quantum limits in ellipsometry. <i>Optics Letters</i> , 2020 , 45, 4607-4610	3	5
239	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
238	Dynamic coherent perfect absorption in nonlinear metasurfaces. <i>Optics Letters</i> , 2020 , 45, 6414-6417	3	5
237	Experimental mitigation of the effects of the limited size aperture or misalignment by singular-value-decomposition-based beam orthogonalization in a free-space optical link using Laguerre-Gaussian modes. <i>Optics Letters</i> , 2020 , 45, 6310-6313	3	6
236	Dynamically controlling local field enhancement at an epsilon-near-zero/dielectric interface via nonlinearities of an epsilon-near-zero medium. <i>Nanophotonics</i> , 2020 , 9, 4831-4837	6.3	4
235	Engineering Local Fields in Nonlinear Plasmonic Metasurfaces -INVITED. <i>EPJ Web of Conferences</i> , 2020 , 238, 11002	0.3	
234	Nonlinear Optics: feature issue introduction. <i>Optical Materials Express</i> , 2020 , 10, 774	2.6	
233	Nonlinear Optics: feature issue introduction. <i>Optics Express</i> , 2020 , 28, 5883-5885	3.3	
232	Towards polarization-based excitation tailoring for extended Raman spectroscopy. <i>Optics Express</i> , 2020 , 28, 10239-10252	3.3	3
231	Ultrafast Topological Engineering in Metamaterials. <i>Physical Review Letters</i> , 2020 , 125, 037403	7.4	8
230	Fundamental Radiative Processes in Near-Zero-Index Media of Various Dimensionalities. <i>ACS Photonics</i> , 2020 , 7, 1965-1970	6.3	17
229	Arbitrarily high time bandwidth performance in a nonreciprocal optical resonator with broken time invariance. <i>Scientific Reports</i> , 2020 , 10, 15752	4.9	5
228	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

227	Metformin Abrogates Age-Associated Ovarian Fibrosis. <i>Clinical Cancer Research</i> , 2020 , 26, 632-642	12.9	23
226	Quantum imaging and information. <i>Reports on Progress in Physics</i> , 2019 , 82, 124401	14.4	18
225	Multiresonant High- Plasmonic Metasurfaces. <i>Nano Letters</i> , 2019 , 19, 6429-6434	11.5	29
224	Performance analysis of d-dimensional quantum cryptography under state-dependent diffraction. <i>Physical Review A</i> , 2019 , 100,	2.6	6
223	Quantum Nonlocal Aberration Cancellation. <i>Physical Review Letters</i> , 2019 , 123, 143603	7.4	6
222	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
221	Nonlinear optical effects in epsilon-near-zero media. <i>Nature Reviews Materials</i> , 2019 , 4, 535-551	73.3	159
220	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
219	Vectorizing the spatial structure of high-harmonic radiation from gas. <i>Nature Communications</i> , 2019 , 10, 2020	17.4	8
218	A primary radiation standard based on quantum nonlinear optics. <i>Nature Physics</i> , 2019 , 15, 529-532	16.2	8
217	Measurement of the Photon-Plasmon Coupling Phase Shift. <i>Physical Review Letters</i> , 2019 , 122, 133601	7.4	5
216	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
215	Weak superradiance in arrays of plasmonic nanoantennas. <i>Physical Review A</i> , 2019 , 100,	2.6	2
214	Ultrabroadband 3D invisibility with fast-light cloaks. <i>Nature Communications</i> , 2019 , 10, 4859	17.4	22
213	Efficient Nonlinear Metasurfaces using Multiresonant High-Q Plasmonic Arrays 2019 ,		1
212	Generating a Twisted Spatiotemporal Wave Packet Using Coherent Superposition of Structured Beams with Different Frequencies 2019 ,		1
211	High-Q resonance train in a plasmonic metasurface 2019 ,		1
210	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

209	Suppression of self-focusing for few-cycle pulses. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2019 , 36, G68	1.7	2
208	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
207	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
206	Characterization of an underwater channel for quantum communications in the Ottawa River. <i>Optics Express</i> , 2019 , 27, 26346-26354	3.3	24
205	Quantum-limited estimation of the axial separation of two incoherent point sources. <i>Optica</i> , 2019 , 6, 534	8.6	31
204	Nonlinear optics with full three-dimensional illumination. <i>Optica</i> , 2019 , 6, 878	8.6	4
203	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
202	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, 1-10	7.8	0
201	Switchable detector array scheme to reduce the effect of single-photon detector's deadtime in a multi-bit/photon quantum link. <i>Optics Communications</i> , 2019 , 441, 132-132	2	
200	Light, the universe and everything – 2 Herculean tasks for quantum cowboys and black diamond skiers. <i>Journal of Modern Optics</i> , 2018 , 65, 1261-1308	1.1	5
199	Large optical nonlinearity of nanoantennas coupled to an epsilon-near-zero material. <i>Nature Photonics</i> , 2018 , 12, 79-83	33.9	157
198	Twisted electrons. <i>Contemporary Physics</i> , 2018 , 59, 126-144	3.3	26
197	Reconstructing the topology of optical polarization knots. <i>Nature Physics</i> , 2018 , 14, 1079-1082	16.2	71
196	Twisting neutrons may reveal their internal structure. <i>Nature Physics</i> , 2018 , 14, 1-2	16.2	22
195	Influence of pump coherence on the quantum properties of spontaneous parametric down-conversion. <i>Physica Scripta</i> , 2018 , 93, 084001	2.6	13
194	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
193	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
192	Hermite-Gaussian mode sorter. <i>Optics Letters</i> , 2018 , 43, 5263-5266	3	20

191	Experimental Estimate of the Nonlinear Refractive Index of Crystalline ZnSe in the Terahertz Spectral Range. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2018 , 82, 1547-1549	0.4	5
190	Quantum cryptography with twisted photons through an outdoor underwater channel. <i>Optics Express</i> , 2018 , 26, 22563-22573	3.3	55
189	Using surface lattice resonances to engineer nonlinear optical processes in metal nanoparticle arrays. <i>Physical Review A</i> , 2018 , 97,	2.6	27
188	Bright squeezed vacuum in a nonlinear interferometer: Frequency and temporal Schmidt-mode description. <i>Physical Review A</i> , 2018 , 97,	2.6	15
187	High-dimensional quantum cloning and applications to quantum hacking. <i>Science Advances</i> , 2017 , 3, e1601915	11.5	52
186	Weak Value Amplification Can Outperform Conventional Measurement in the Presence of Detector Saturation. <i>Physical Review Letters</i> , 2017 , 118, 070802	7.4	46
185	Controlling the orbital angular momentum of high harmonic vortices. <i>Nature Communications</i> , 2017 , 8, 14970	17.4	77
184	Breaking Lorentz reciprocity to overcome the time-bandwidth limit in physics and engineering. <i>Science</i> , 2017 , 356, 1260-1264	33.3	120
183	Measuring the orbital angular momentum spectrum of an electron beam. <i>Nature Communications</i> , 2017 , 8, 15536	17.4	51
182	Distributed angular double-slit interference with pseudo-thermal light. <i>Applied Physics Letters</i> , 2017 , 110, 071107	3.4	4
181	Free-space propagation of high-dimensional structured optical fields in an urban environment. <i>Science Advances</i> , 2017 , 3, e1700552	14.3	86
180	Observation of nanoscale magnetic fields using twisted electron beams. <i>Nature Communications</i> , 2017 , 8, 689	17.4	34
179	Ultraslow waves on the nanoscale. <i>Science</i> , 2017 , 358,	33.3	81
178	Single-shot measurement of the orbital-angular-momentum spectrum of light. <i>Nature Communications</i> , 2017 , 8, 1054	17.4	32
177	Beyond the perturbative description of the nonlinear optical response of low-index materials. <i>Optics Letters</i> , 2017 , 42, 3225-3228	3	43
176	Digital spiral object identification using random light. <i>Light: Science and Applications</i> , 2017 , 6, e17013	16.7	30
175	Custom-tailored spatial mode sorting by controlled random scattering. <i>Physical Review B</i> , 2017 , 95,	3.3	32
174	Phase sensitivity of gain-unbalanced nonlinear interferometers. <i>Physical Review A</i> , 2017 , 96,	2.6	15

173	Generation of Caustics and Rogue Waves from Nonlinear Instability. <i>Physical Review Letters</i> , 2017 , 119, 203901	7.4	22
172	Plasmonic nanoantennas with liquid crystals for nanocrystal fluorescence enhancement and polarization selectivity of classical and quantum light sources. <i>Molecular Crystals and Liquid Crystals</i> , 2017 , 657, 173-183	0.5	4
171	Sorting Photons by Radial Quantum Number. <i>Physical Review Letters</i> , 2017 , 119, 263602	7.4	67
170	Phase retrieval of an electron vortex beam using diffraction holography. <i>Applied Physics Letters</i> , 2017 , 111, 223101	3.4	6
169	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
168	High-dimensional intracity quantum cryptography with structured photons. <i>Optica</i> , 2017 , 4, 1006	8.6	203
167	Generation with phase-and-amplitude electron holograms of Laguerre-Gauss beams with orbital angular momentum up to 200. 2016 , 709-710		1
166	Tighter spots of light with superposed orbital-angular-momentum beams. <i>Physical Review A</i> , 2016 , 94,	2.6	15
165	Arbitrary optical wavefront shaping via spin-to-orbit coupling. <i>Journal of Optics (United Kingdom)</i> , 2016 , 18, 124002	1.7	29
164	Weak-value amplification of the fast-light effect in rubidium vapor. <i>Physical Review A</i> , 2016 , 93,	2.6	7
163	Optical response of dipole antennas on an epsilon-near-zero substrate. <i>Physical Review A</i> , 2016 , 93,	2.6	41
162	Wigner Distribution of Twisted Photons. <i>Physical Review Letters</i> , 2016 , 116, 130402	7.4	17
161	Light-Drag Enhancement by a Highly Dispersive Rubidium Vapor. <i>Physical Review Letters</i> , 2016 , 116, 013601	7.4	27
160	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
159	Hanbury Brown and Twiss interferometry with twisted light. <i>Science Advances</i> , 2016 , 2, e1501143	14.3	25
158	Diffraction holography for the phase retrieval of vortex beams 2016 , 713-714		
157	The duality principle in the presence of postselection. <i>Scientific Reports</i> , 2016 , 6, 19944	4.9	2
156	Generation and application of bessel beams in electron microscopy. <i>Ultramicroscopy</i> , 2016 , 166, 48-60	3.1	28

155	Super-critical phasematching for photon pair generation in structured light modes. <i>Optics Express</i> , 2016 , 24, 24495-24508	3.3	3
154	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
153	Quantum probabilities from quantum entanglement: experimentally unpacking the Born rule. <i>New Journal of Physics</i> , 2016 , 18, 053013	2.9	8
152	Polarization Shaping for Control of Nonlinear Propagation. <i>Physical Review Letters</i> , 2016 , 117, 233903	7.4	56
151	Exotic looped trajectories of photons in three-slit interference. <i>Nature Communications</i> , 2016 , 7, 13987	17.4	34
150	Chiral optical response of planar and symmetric nanotrimers enabled by heteromaterial selection. <i>Nature Communications</i> , 2016 , 7, 13117	17.4	46
149	Large optical nonlinearity of indium tin oxide in its epsilon-near-zero region. <i>Science</i> , 2016 , 352, 795-7	33.3	487
148	Nondestructive Measurement of Orbital Angular Momentum for an Electron Beam. <i>Physical Review Letters</i> , 2016 , 117, 154801	7.4	21
147	Imaging with a small number of photons. <i>Nature Communications</i> , 2015 , 6, 5913	17.4	224
146	Slow and Fast Light 2015 , 363-385		1
145	High-dimensional quantum cryptography with twisted light. <i>New Journal of Physics</i> , 2015 , 17, 033033	2.9	335
144	Structured quantum waves. <i>Nature Physics</i> , 2015 , 11, 629-634	16.2	91
143	Divergence of an orbital-angular-momentum-carrying beam upon propagation. <i>New Journal of Physics</i> , 2015 , 17, 023011	2.9	154
142	Quantum walks and wavepacket dynamics on a lattice with twisted photons. <i>Science Advances</i> , 2015 , 1, e1500087	14.3	109
141	Nuclear physics: Neutrons with a twist. <i>Nature</i> , 2015 , 525, 462-4	50.4	4
140	Prediction of an extremely large nonlinear refractive index for crystals at terahertz frequencies. <i>Physical Review A</i> , 2015 , 92,	2.6	25
139	Real-time imaging of spin-to-orbital angular momentum hybrid remote state preparation. <i>Physical Review A</i> , 2015 , 92,	2.6	30
138	Recovering full coherence in a qubit by measuring half of its environment. <i>Physical Review A</i> , 2015 , 92,	2.6	3

137	State transfer based on classical nonseparability. <i>Physical Review A</i> , 2015 , 92,	2.6	48
136	Observation of quantum recoherence of photons by spatial propagation. <i>Scientific Reports</i> , 2015 , 5, 15330	4.9	5
135	Holographic Generation of Highly Twisted Electron Beams. <i>Microscopy and Microanalysis</i> , 2015 , 21, 675-676	6.6	6
134	Strong, spectrally-tunable chirality in diffractive metasurfaces. <i>Scientific Reports</i> , 2015 , 5, 13034	4.9	56
133	Electron holograms encoding amplitude and phase for the generation of arbitrary wavefunctions. <i>Microscopy and Microanalysis</i> , 2015 , 21, 503-504	0.5	5
132	Holograms for the Generation of Vortex States with L=500h Fabricated by Electron Beam Lithography. <i>Microscopy and Microanalysis</i> , 2015 , 21, 667-668	0.5	3
131	Q-plates as higher order polarization controllers for orbital angular momentum modes of fiber. <i>Optics Letters</i> , 2015 , 40, 1729-32	3	49
130	PHYSICS. Classical entanglement?. <i>Science</i> , 2015 , 350, 1172-3	33.3	65
129	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
128	Quantifying the impact of proximity error correction on plasmonic metasurfaces [Invited]. <i>Optical Materials Express</i> , 2015 , 5, 2798	2.6	12
127	Optics. Observation of optical polarization Möbius strips. <i>Science</i> , 2015 , 347, 964-6	33.3	202
126	Holographic generation of highly twisted electron beams. <i>Physical Review Letters</i> , 2015 , 114, 034801	7.4	62
125	Highly efficient electron vortex beams generated by nanofabricated phase holograms. <i>Applied Physics Letters</i> , 2014 , 104, 043109	3.4	97
124	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
123	The third-order nonlinear optical susceptibility of gold. <i>Optics Communications</i> , 2014 , 326, 74-79	2	144
122	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
121	Direct measurement of a 27-dimensional orbital-angular-momentum state vector. <i>Nature Communications</i> , 2014 , 5, 3115	17.4	145
120	Generation of a spin-polarized electron beam by multipole magnetic fields. <i>Ultramicroscopy</i> , 2014 , 138, 22-7	3.1	10

119	Self-phase-modulation of surface plasmon polaritons. <i>Physical Review A</i> , 2014 , 89,	2.6	25
118	Simulating Quantum-Mechanical Barrier Tunneling Phenomena with a Nematic-Liquid-Crystal-Filled Double-Prism Structure. <i>Molecular Crystals and Liquid Crystals</i> , 2014 , 595, 136-143	0.5	3
117	Generation of Nondiffracting Electron Bessel Beams. <i>Physical Review X</i> , 2014 , 4,	9.1	56
116	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
115	Compressive direct measurement of the quantum wave function. <i>Physical Review Letters</i> , 2014 , 113, 090402	7.4	60
114	Creating high-harmonic beams with controlled orbital angular momentum. <i>Physical Review Letters</i> , 2014 , 113, 153901	7.4	175
113	Single-photon experiments with liquid crystals for quantum science and quantum engineering applications. <i>Liquid Crystals Reviews</i> , 2014 , 2, 111-129	2.8	5
112	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
111	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
110	Adaptive optics compensation of multiple orbital angular momentum beams propagating through emulated atmospheric turbulence. <i>Optics Letters</i> , 2014 , 39, 2845-8	3	95
109	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
108	Amplification of Angular Rotations Using Weak Measurements. <i>Physical Review Letters</i> , 2014 , 112,	7.4	116
107	Experiments and Potentialities for the use of Bessel Beam in Superresolution STEM. <i>Microscopy and Microanalysis</i> , 2014 , 20, 384-385	0.5	
106	Innovative Phase Plates for Beam Shaping. <i>Microscopy and Microanalysis</i> , 2014 , 20, 228-229	0.5	4
105	Reply to Comment on Evidence of slow-light effects from rotary drag of structured beams. <i>New Journal of Physics</i> , 2014 , 16, 038002	2.9	2
104	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
103	Radial quantum number of Laguerre-Gauss modes. <i>Physical Review A</i> , 2014 , 89,	2.6	71
102	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

101	Hardy's paradox tested in the spin-orbit Hilbert space of single photons. <i>Physical Review A</i> , 2014 , 89,	2.6	19
100	Efficient separation of the orbital angular momentum eigenstates of light. <i>Nature Communications</i> , 2013 , 4, 2781	17.4	265
99	Rapid generation of light beams carrying orbital angular momentum. <i>Optics Express</i> , 2013 , 21, 30196-203.	3.3	140
98	Full characterization of polarization states of light via direct measurement. <i>Nature Photonics</i> , 2013 , 7, 316-321	33.9	135
97	Compressive object tracking using entangled photons. <i>Applied Physics Letters</i> , 2013 , 102, 231104	3.4	51
96	Exact solution to simultaneous intensity and phase encryption with a single phase-only hologram. <i>Optics Letters</i> , 2013 , 38, 3546-9	3	152
95	Eigenmode super-resolution imaging in arbitrary optical systems. <i>Journal of Modern Optics</i> , 2013 , 60, 1931-1936	1.1	1
94	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
93	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
92	Thermal ghost imaging with averaged speckle patterns. <i>Physical Review A</i> , 2012 , 86,	2.6	36
91	Quantum lithography: status of the field. <i>Quantum Information Processing</i> , 2012 , 11, 891-901	1.6	26
90	Secure information capacity of photons entangled in many dimensions. <i>Physical Review A</i> , 2012 , 85,	2.6	50
89	Single and biphoton imaging and high dimensional quantum communication. <i>Quantum Information Processing</i> , 2012 , 11, 925-948	1.6	0
88	The physics of ghost imaging. <i>Quantum Information Processing</i> , 2012 , 11, 949-993	1.6	200
87	Response to "The physics of ghost imaging" Nonlocal interference or local intensity fluctuation correlation? <i>Quantum Information Processing</i> , 2012 , 11, 1003-1011	1.6	17
86	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
85	Influence of atmospheric turbulence on states of light carrying orbital angular momentum. <i>Optics Letters</i> , 2012 , 37, 3735-7	3	139
84	Influence of atmospheric turbulence on optical communications using orbital angular momentum for encoding. <i>Optics Express</i> , 2012 , 20, 13195-200	3.3	206

83	Tunneling delays in frustrated total internal reflection. <i>Physical Review A</i> , 2012 , 85,	2.6	6
82	Theoretical analysis of quantum ghost imaging through turbulence. <i>Physical Review A</i> , 2011 , 84,	2.6	34
81	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
80	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
79	Slow-light enhanced spectrometers on chip 2011 ,		2
78	Entangled-photon compressive ghost imaging. <i>Physical Review A</i> , 2011 , 84,	2.6	62
77	Partial angular coherence and the angular Schmidt spectrum of entangled two-photon fields. <i>Physical Review A</i> , 2011 , 84,	2.6	16
76	Loss of spatial coherence and limiting of focal plane intensity by small-scale laser-beam filamentation. <i>Physical Review A</i> , 2011 , 84,	2.6	5
75	Tomography of the quantum state of photons entangled in high dimensions. <i>Physical Review A</i> , 2011 , 84,	2.6	84
74	Supersensitive measurement of angular displacements using entangled photons. <i>Physical Review A</i> , 2011 , 83,	2.6	48
73	Quantum ghost imaging through turbulence. <i>Physical Review A</i> , 2011 , 83,	2.6	59
72	Quantum spatial superresolution by optical centroid measurements. <i>Physical Review Letters</i> , 2011 , 107, 083603	7.4	37
71	Heralded single-photon partial coherence. <i>Physical Review A</i> , 2010 , 82,	2.6	2
70	Angular two-photon interference and angular two-qubit states. <i>Physical Review Letters</i> , 2010 , 104, 0105014		30
69	Major Accomplishments in 2009 on Slow Light. <i>IEEE Photonics Journal</i> , 2010 , 2, 229-231	1.8	
68	Lasers: the first fifty years. <i>Applied Optics</i> , 2010 , 49, LF1	0.2	
67	Quantum correlations in optical angle-orbital angular momentum variables. <i>Science</i> , 2010 , 329, 662-5	33.3	367
66	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

65	Effects of atmospheric turbulence on the entanglement of spatial two-qubit states. <i>Physical Review A</i> , 2010 , 81,	2.6	33
64	Optical activity in diffraction from a planar array of achiral nanoparticles. <i>Physical Review A</i> , 2009 , 79,	2.6	25
63	Discriminating orthogonal single-photon images. <i>Physical Review A</i> , 2009 , 79,	2.6	15
62	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
61	Controlling the velocity of light pulses. <i>Science</i> , 2009 , 326, 1074-7	33.3	219
60	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
59	Slow and fast light: fundamentals and applications. <i>Journal of Modern Optics</i> , 2009 , 56, 1908-1915	1.1	90
58	Robust organic lasers comprising glassy-cholesteric pentafluorene doped with a red-emitting oligofluorene. <i>Applied Physics Letters</i> , 2009 , 94, 041111	3.4	20
57	Physics. Let quantum mechanics improve your images. <i>Science</i> , 2008 , 321, 501-2	33.3	
56	Fiber-Based Slow-Light Technologies. <i>Journal of Lightwave Technology</i> , 2008 , 26, 3752-3762	4	40
55	Fourier relationship between the angle and angular momentum of entangled photons. <i>Physical Review A</i> , 2008 , 78,	2.6	42
54	Surface plasmon resonance in Ag nanoparticles deposited inside porous GaP templates 2008 ,		1
53	Temporal coherence and indistinguishability in two-photon interference effects. <i>Physical Review A</i> , 2008 , 77,	2.6	25
52	Conditional preparation of states containing a definite number of photons. <i>Physical Review A</i> , 2008 , 77,	2.6	11
51	Room temperature source of single photons of definite polarization. <i>Journal of Modern Optics</i> , 2007 , 54, 417-429	1.1	21
50	Er- and Eu-doped GaP-oxide porous composites for optoelectronic applications. <i>Physica Status Solidi - Rapid Research Letters</i> , 2007 , 1, R13-R15	2.5	4
49	Slow- and fast-light: fundamental limitations. <i>Journal of Modern Optics</i> , 2007 , 54, 2403-2411	1.1	42
48	Enhancing the Spectral Sensitivity and Resolution of Interferometers Using Slow-Light Media 2007 ,		1

47	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
46	Dispersion of silicon nonlinearities in the near infrared region. <i>Applied Physics Letters</i> , 2007 , 91, 021111	3.4	158
45	Physics. Quantum weirdness in the lab. <i>Science</i> , 2007 , 317, 1874-5	33.3	24
44	Stored light in an optical fiber via stimulated Brillouin scattering. <i>Science</i> , 2007 , 318, 1748-50	33.3	233
43	Anisotropic nonlinear response of silicon in the near-infrared region 2007 ,		1
42	Dynamics of gravity-induced gradients in soap film thicknesses. <i>Applied Physics Letters</i> , 2006 , 88, 234104	3.4	9
41	Far-Field Patterns from Dye-Doped Planar-Aligned Nematic Liquid Crystals Under Nanosecond Laser Irradiation. <i>Molecular Crystals and Liquid Crystals</i> , 2006 , 453, 393-401	0.5	4
40	Single-Photon Source for Quantum Information Based on Single Dye Molecule Fluorescence in Liquid Crystal Host. <i>Molecular Crystals and Liquid Crystals</i> , 2006 , 454, 1/[403]-14/[416]	0.5	3
39	Implementation of sub-Rayleigh-resolution lithography using an N -photon absorber. <i>Journal of Modern Optics</i> , 2006 , 53, 2271-2277	1.1	24
38	Recent progress in quantum and nonlinear optical lithography. <i>Journal of Modern Optics</i> , 2006 , 53, 713-718	1.8	18
37	Observation of backward pulse propagation through a medium with a negative group velocity. <i>Science</i> , 2006 , 312, 895-7	33.3	174
36	Porosity-induced blueshift of photoluminescence in CdSe. <i>Journal of Applied Physics</i> , 2006 , 100, 053517	2.5	8
35	Maximum time delay achievable on propagation through a slow-light medium. <i>Physical Review A</i> , 2005 , 71,	2.6	119
34	Fabrication and photoluminescence properties of porous CdSe. <i>Applied Physics Letters</i> , 2005 , 86, 063115	3.4	13
33	Enhancement of third-harmonic generation in a polymer-dispersed liquid-crystal grating. <i>Applied Physics Letters</i> , 2005 , 87, 051102	3.4	9
32	MEASUREMENT OF THE INTENSITY-DEPENDENT REFRACTIVE INDEX USING COMPLETE SPATIO-TEMPORAL PULSE CHARACTERIZATION. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2005 , 14, 9-20	0.8	3
31	Dye-doped cholesteric-liquid-crystal room-temperature single-photon source. <i>Journal of Modern Optics</i> , 2004 , 51, 1535-1547	1.1	26
30	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

29	Coupled-resonator-induced transparency. <i>Physical Review A</i> , 2004 , 69,	2.6	362
28	Equivalence of interaction hamiltonians in the electric dipole approximation. <i>Journal of Modern Optics</i> , 2004 , 51, 1137-1147	1.1	33
27	Enhanced nonlinear optical response of one-dimensional metal-dielectric photonic crystals. <i>Physical Review Letters</i> , 2004 , 93, 123902	7.4	150
26	Nanofabrication of optical structures and devices for photonics and biophotonics. <i>Journal of Modern Optics</i> , 2003 , 50, 2543-2550	1.1	18
25	Superluminal and slow light propagation in a room-temperature solid. <i>Science</i> , 2003 , 301, 200-2	33.3	589
24	Influence of damping on the vanishing of the linear electro-optic effect in chiral isotropic media. <i>Physical Review A</i> , 2003 , 67,	2.6	5
23	CUMULATIVE BIREFRINGENCE EFFECTS OF NANOSECOND LASER PULSES IN DYE-DOPED PLANAR NEMATIC LIQUID CRYSTAL LAYERS. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2002 , 11, 341-350 ^{0.8}		4
22	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
21	Slow and Fast Light. <i>Progress in Optics</i> , 2002 , 43, 497-530	3.4	207
20	Enhanced third-order nonlinear optical response of photonic bandgap materials. <i>Journal of Modern Optics</i> , 1999 , 46, 1061-1069	1.1	9
19	Enhanced electro-optic response of layered composite materials. <i>Applied Physics Letters</i> , 1999 , 74, 2417-2419	3.4	23
18	Order-of-magnitude estimates of the nonlinear optical susceptibility. <i>Journal of Modern Optics</i> , 1999 , 46, 367-378	1.1	58
17	Measurement of the power distribution during stimulated brillouin scattering with focused gaussian beams. <i>Journal of Modern Optics</i> , 1998 , 45, 735-745	1.1	4
16	Nonlinear Optical Interactions in Optical Fibers. <i>Journal of Nonlinear Optical Physics and Materials</i> , 1998 , 07, 105-112	0.8	7
15	Third-Order Nonlinear Optical Properties of Selected Composites. <i>ACS Symposium Series</i> , 1997 , 108-124 ^{0.4}		2
14	Nonlinear optical properties of nanocomposite materials. <i>Journal of Optics</i> , 1996 , 5, 505-512		72
13	Optical Properties of Nanostructured Optical Materials. <i>Chemistry of Materials</i> , 1996 , 8, 1807-1819	9.6	212
12	Enhanced nonlinear optical response of composite materials. <i>Physical Review Letters</i> , 1995 , 74, 1871-1874	4	161

11	Enhancement of the Uniformity and Rotation of Large Aperture, Permanent Magnet, Tunable Faraday Rotators. <i>Journal of Modern Optics</i> , 1995 , 42, 1137-1143	1.1	2
10	HIGH-ORDER DIFFRACTION IN PHOTOREFRACTIVE SBN:Ce DUE TO NON-SINUSOIDAL GRATINGS FORMED BY BEAMS OF COMPARABLE INTENSITY. <i>Journal of Nonlinear Optical Physics and Materials</i> , 1993 , 02, 221-227	0.8	
9	Improvement of the photorefractive efficiency of BaTiO ₃ by Irradiation. <i>Applied Physics Letters</i> , 1992 , 61, 2015-2017	3.4	4
8	STIMULATED SCATTERING OF PICOSECOND OPTICAL PULSES IN THE PRESENCE OF SELF-FOCUSING. <i>Journal of Nonlinear Optical Physics and Materials</i> , 1992 , 01, 765-773	0.8	5
7	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
6	Anomalies in optical harmonic generation using high-intensity laser radiation. <i>Physical Review A</i> , 1990 , 41, 3822-3825	2.6	26
5	Dependence of the Efficiency of the Nonlinear-Optical Response of Materials on their Linear Permittivity and Permeability. <i>Laser and Photonics Reviews</i> , 2100032	8.3	0
4	Experimental investigation of high-dimensional quantum key distribution protocols with twisted photons. <i>Quantum - the Open Journal for Quantum Science</i> , 2, 111		36
3	Dye-doped cholesteric-liquid-crystal room-temperature single-photon source		1
2	Enhanced third-order nonlinear optical response of photonic bandgap materials		2
1	A Comprehensive Multipolar Theory for Periodic Metasurfaces. <i>Advanced Optical Materials</i> , 2102059	8.1	4