Andrew G White

List of Publications by Year
in descending order

149 papers	19,027 citations	28190 55 h-index	20307 116 g-index
150 all docs	150 docs citations	150 times ranked	10703 citing authors

#	Article	IF	Citations
1	Measurement of qubits. Physical Review A, 2001, 64, .	1.0	1,609
2	Generation of optical phase singularities by computer-generated holograms. Optics Letters, 1992, 17, 221.	1.7	1,247
3	Ultrabright source of polarization-entangled photons. Physical Review A, 1999, 60, R773-R776.	1.0	931
4	Roadmap on structured light. Journal of Optics (United Kingdom), 2017, 19, 013001.	1.0	888
5	Near-optimal single-photon sources in the solid state. Nature Photonics, 2016, 10, 340-345.	15.6	858
6	Demonstration of an all-optical quantum controlled-NOT gate. Nature, 2003, 426, 264-267.	13.7	792
7	Experimental Quantum Computing without Entanglement. Physical Review Letters, 2008, 101, 200501.	2.9	773
8	High-performance semiconductor quantum-dot single-photon sources. Nature Nanotechnology, 2017, 12, 1026-1039.	15.6	741
9	Simplifying quantum logic using higher-dimensional Hilbert spaces. Nature Physics, 2009, 5, 134-140.	6.5	570
10	Towards quantum chemistry on a quantum computer. Nature Chemistry, 2010, 2, 106-111.	6.6	568
11	Photonic Boson Sampling in a Tunable Circuit. Science, 2013, 339, 794-798.	6.0	522
12	Observation of topologically protected bound states in photonic quantum walks. Nature Communications, 2012, 3, 882.	5.8	488
13	Experimental Verification of Decoherence-Free Subspaces. Science, 2000, 290, 498-501.	6.0	458
14	Nonmaximally Entangled States: Production, Characterization, and Utilization. Physical Review Letters, 1999, 83, 3103-3107.	2.9	433
15	Quantum Process Tomography of a Controlled-NOT Gate. Physical Review Letters, 2004, 93, 080502.	2.9	378
16	Discrete Single-Photon Quantum Walks with Tunable Decoherence. Physical Review Letters, 2010, 104, 153602.	2.9	346
17	Entangled State Quantum Cryptography: Eavesdropping on the Ekert Protocol. Physical Review Letters, 2000, 84, 4733-4736.	2.9	335
18	Measuring Entangled Qutrits and Their Use for Quantum Bit Commitment. Physical Review Letters, 2004, 93, 053601.	2.9	307

#	Article	IF	Citations
19	Measurement of Quantum Weak Values of Photon Polarization. Physical Review Letters, 2005, 94, 220405.	2.9	290
20	Linear optical controlled-NOT gate in the coincidence basis. Physical Review A, 2002, 65, .	1.0	258
21	Qudit quantum-state tomography. Physical Review A, 2002, 66, .	1.0	254
22	Ancilla-Assisted Quantum Process Tomography. Physical Review Letters, 2003, 90, 193601.	2.9	252
23	Maximizing the entanglement of two mixed qubits. Physical Review A, 2001, 64, .	1.0	236
24	Violation of the Leggettâ€“Garg inequality with weak measurements of photons. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1256-1261.	3.3	231
25	Demonstration of a Simple Entangling Optical Gate and Its Use in Bell-State Analysis. Physical Review Letters, 2005, 95, 210504.	2.9	222
26	Experimental Demonstration of a Compiled Version of Shorâ€™s Algorithm with Quantum Entanglement. Physical Review Letters, 2007, 99, 250505.	2.9	221
27	Time-Reversal and Super-Resolving Phase Measurements. Physical Review Letters, 2007, 98, 223601.	2.9	220
28	Conclusive quantum steering with superconducting transition-edge sensors. Nature Communications, 2012, 3, 625.	5.8	200
29	Efficient Measurement of Quantum Dynamics via Compressive Sensing. Physical Review Letters, 2011, 106, 100401.	2.9	185
30	High-Efficiency Quantum Interrogation Measurements via the Quantum Zeno Effect. Physical Review Letters, 1999, 83, 4725-4728.	2.9	178
31	Simple scheme for efficient linear optics quantum gates. Physical Review A, 2001, 65, .	1.0	165
32	Boson Sampling with Single-Photon Fock States from a Bright Solid-State Source. Physical Review Letters, 2017, 118, 130503.	2.9	155
33	Grover's search algorithm: An optical approach. Journal of Modern Optics, 2000, 47, 257-266.	0.6	148
34	Indefinite Causal Order in a Quantum Switch. Physical Review Letters, 2018, 121, 090503.	2.9	144
35	â€œInteraction-freeâ€•imaging. Physical Review A, 1998, 58, 605-613.	1.0	137
36	Challenging local realism with human choices. Nature, 2018, 557, 212-216.	13.7	136

#	Article	IF	Citations
37	Manipulating Biphotonic Qutrits. Physical Review Letters, 2008, 100, 060504.	2.9	132
38	Two-photon quantum walks in an elliptical direct-write waveguide array. New Journal of Physics, 2011, 13, 075003.	1.2	124
39	Experimental Feedback Control of Quantum Systems Using Weak Measurements. Physical Review Letters, 2010, 104, 080503.	2.9	120
40	Measuring a Photonic Qubit without Destroying It. Physical Review Letters, 2004, 92, 190402.	2.9	114
41	Single-photon device requirements for operating linear optics quantum computing outside the post-selection basis. Journal of Modern Optics, 2011, 58, 276-287.	0.6	114
42	Measurements on the reality of the wavefunction. Nature Physics, 2015, 11, 249-254.	6.5	113
43	Measuring two-qubit gates. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 172.	0.9	111
44	Engineered optical nonlinearity for quantum light sources. Optics Express, 2011, 19, 55.	1.7	107
45	Scalable performance in solid-state single-photon sources. Optica, 2016, 3, 433.	4.8	106
46	Exploring Hilbert space: Accurate characterization of quantum information. Physical Review A, 2001, 65, .	1.0	97
47	Experimental Joint Quantum Measurements with Minimum Uncertainty. Physical Review Letters, 2014, 112, 020401.	2.9	95
48	Interferometric Measurements of Phase Singularities in the Output of a Visible Laser. Journal of Modern Optics, 1991, 38, 2531-2541.	0.6	87
49	Enhancing coherent transport in a photonic network using controllable decoherence. Nature Communications, 2016, 7, 11282.	5.8	82
50	Direct characterization of linear-optical networks. Optics Express, 2013, 21, 13450.	1.7	80
51	Creation of maximally entangled photon-number states using optical fiber multiports. Physical Review A, 2003, 68, .	1.0	74
52	Observation of Power-Law Scaling for Phase Transitions in Linear Trapped Ion Crystals. Physical Review Letters, 2000, 85, 2466-2469.	2.9	67
53	A solid-state single-photon filter. Nature Nanotechnology, 2017, 12, 663-667.	15.6	66
54	Reducing multi-photon rates in pulsed down-conversion by temporal multiplexing. Optics Express, 2011, 19, 22698.	1.7	65

#	Article	IF	Citations
55	Experimental Distribution of Entanglement with Separable Carriers. Physical Review Letters, 2013, 111, 230504.	2.9	62
56	Characterizing Quantum Dynamics with Initial System-Environment Correlations. Physical Review Letters, 2015, 114, 090402.	2.9	58
57	The Los Alamos Trapped Ion Quantum Computer Experiment. Fortschritte Der Physik, 1998, 46, 329-361.	1.5	55
58	Increasing communication capacity via superposition of order. Physical Review Research, 2020, 2, .	1.3	52
59	Active demultiplexing of single photons from a solidâ€state source. Laser and Photonics Reviews, 2017, 11, 1600297.	4.4	51
60	Sub-megahertz linewidth single photon source. APL Photonics, 2016, 1, .	3.0	49
61	Photon Sorting, Efficient Bell Measurements, and a Deterministic Controlled-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Z</mml:mi></mml:math>Gate Using a Passive Two-Level Nonlinearity. Physical Review Letters, 2015, 114, 173603.	2.9	48
62	Entangling Quantum-Logic Gate Operated with an Ultrabright Semiconductor Single-Photon Source. Physical Review Letters, 2013, 110, 250501.	2.9	44
63	Experimental test of nonlocal causality. Science Advances, 2016, 2, e1600162.	4.7	41
64	Certification and Quantification of Multilevel Quantum Coherence. Physical Review X, 2018, 8, .	2.8	41
65	Study of optical properties of electropolymerized melanin films by photopyroelectric spectroscopy. European Biophysics Journal, 2006, 35, 190-195.	1.2	36
66	Hardyâ€™s Paradox and Violation of a State-Independent Bell Inequality in Time. Physical Review Letters, 2011, 106, 200402.	2.9	36
67	Experimental simulation of closed timelike curves. Nature Communications, 2014, 5, 4145.	5.8	35
68	The Bell inequality: a measure of entanglement?. Journal of Modern Optics, 2001, 48, 1239-1246.	0.6	34
69	Cascaded second-order nonlinearity in an optical cavity. Europhysics Letters, 1996, 35, 425-430.	0.7	33
70	Robust and Efficient High-Dimensional Quantum State Tomography. Physical Review Letters, 2021, 126, 100402.	2.9	33
71	The Secret World of Shrimps: Polarisation Vision at Its Best. PLoS ONE, 2008, 3, e2190.	1.1	33
72	Classical and quantum signatures of competingÏ‡(2)nonlinearities. Physical Review A, 1997, 55, 4511-4515.	1.0	31

#	Article	IF	Citations
73	High-efficiency cross-phase modulation in a gas-filled waveguide. Physical Review A, 2013, 88, .	1.0	31
74	Squeezed light from second-harmonic generation: experiment versus theory. Optics Letters, 1995, 20, 1316.	1.7	30
75	Generation of mechanical interference fringes by multi-photon counting. New Journal of Physics, 2018, 20, 053042.	1.2	28
76	Charting the Australian quantum landscape. Quantum Science and Technology, 2019, 4, 020505.	2.6	24
77	High-fidelityZ-measurement error encoding of optical qubits. Physical Review A, 2005, 71, .	1.0	21
78	Entanglement Generation by Fock-State Filtration. Physical Review Letters, 2007, 98, 203602.	2.9	21
79	Classical and quantum properties of the subharmonic-pumped parametric oscillator. Optics Communications, 1997, 138, 158-171.	1.0	20
80	Laser frequency locking by direct measurement of detuning. Optics Letters, 2004, 29, 2704.	1.7	20
81	Determination of thermal and optical parameters of melanins by photopyroelectric spectroscopy. Applied Physics Letters, 2005, 87, 061920.	1.5	20
82	Engineering integrated photonics for heralded quantum gates. Scientific Reports, 2016, 6, 25126.	1.6	20
83	Gyromagnetic ratios of low-lying rotational states in156, 158, 160Gd. Zeitschrift FÃ¼r Physik A, 1991, 338, 135-138.	0.9	19
84	Observation of Entanglement-Dependent Two-Particle Holonomic Phase. Physical Review Letters, 2014, 112, 143603.	2.9	19
85	Optimal Imaging of Remote Bodies Using Quantum Detectors. Physical Review Letters, 2019, 123, 143604.	2.9	19
86	On the Measurement of Qubits. , 2005, , 509-538.		19
87	Demonstrating Superior Discrimination of Locally Prepared States Using Nonlocal Measurements. Physical Review Letters, 2005, 94, 220406.	2.9	18
88	Parametric downconversion and optical quantum gates: two's company, four's a crowd. Journal of Modern Optics, 2009, 56, 209-214.	0.6	18
89	Multi-time quantum correlations with no spatial analog. Npj Quantum Information, 2018, 4, .	2.8	17
90	Entanglement-free certification of entangling gates. Physical Review A, 2014, 89, .	1.0	16

#	Article	IF	Citations
91	Active versus passive squeezing by second-harmonic generation. Journal of the Optical Society of America B: Optical Physics, 1996, 13, 1337.	0.9	15
92	Quantum Hypercube States. Physical Review Letters, 2019, 123, 020402.	2.9	15
93	Frequency locking by analysis of orthogonal modes. Optics Communications, 2003, 221, 163-171.	1.0	14
94	Measuring Entanglement in a Photonic Embedding Quantum Simulator. Physical Review Letters, 2016, 116, 070503.	2.9	14
95	Unifying framework for spatial and temporal quantum correlations. Physical Review A, 2018, 98, .	1.0	14
96	Kerr noise reduction and squeezing. Journal of Optics B: Quantum and Semiclassical Optics, 2000, 2, 553-561.	1.4	13
97	Complementarity in variable strength quantum non-demolition measurements. New Journal of Physics, 2009, 11, 093012.	1.2	13
98	Grover's search algorithm: An optical approach. , 0, .		13
99	Experimental test of modular noise propagation theory for quantum optics. Physical Review A, 1996, 54, 3400-3404.	1.0	12
100	The bell inequality: A measure of entanglementa?. Journal of Modern Optics, 2001, 48, 1239-1246.	0.6	11
101	Entanglement creation using quantum interrogation. Physical Review A, 2002, 66, .	1.0	9
102	Publisherâ€™s Note: Measurement of Quantum Weak Values of Photon Polarization [Phys. Rev. Lett. 94, 220405 (2005)]. Physical Review Letters, 2005, 94, .	2.9	8
103	Demonstration of an Exposed-Core Fiber Platform for Two-Photon Rubidium Spectroscopy. Physical Review Applied, 2015, 4, .	1.5	8
104	Hectometer Revivals of Quantum Interference. Physical Review Letters, 2018, 121, 093603.	2.9	8
105	Hiding Ignorance Using High Dimensions. Physical Review Letters, 2020, 124, 250401.	2.9	8
106	Quantum theory of the far-off-resonance continuous-wave Raman laser: Heisenberg-Langevin approach. Physical Review A, 2003, 68, .	1.0	7
107	Information Causality in the Quantum and Post-Quantum Regime. Scientific Reports, 2015, 4, 6955.	1.6	7
108	PrydeetÂal.Reply:. Physical Review Letters, 2005, 95, .	2.9	6

#	Article	IF	Citations
109	Source of triggered entangled photon pairs?. Nature, 2007, 445, E4-E5.	13.7	6
110	Discrete Single-Photon Quantum Walks With Tunable Decoherence. , 2010, , .		6
111	Input states for quantum gates. Physical Review A, 2003, 67, .	1.0	5
112	Experimental information complementarity of two-qubit states. New Journal of Physics, 2011, 13, 053038.	1.2	5
113	Retrieving squeezing from classically noisy light in second-harmonic generation. Journal of the Optical Society of America B: Optical Physics, 1995, 12, 833.	0.9	4
114	Transforming chaos to periodic oscillations. Physical Review E, 2001, 64, 056220.	0.8	4
115	Matchgate quantum computing and non-local process analysis. New Journal of Physics, 2010, 12, 083027.	1.2	4
116	Generation of continuous-wave bright-squeezed light. Proceedings of SPIE, 1995, 2378, 91.	0.8	3
117	Progress in the search for the optimum light source: squeezing experiments with a frequency doubler. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1995, 7, 715-726.	1.0	2
118	<title>Experiments and theory of laser noise: consequences for squeezing and injection locking</title>. , 1996, 2799, 157.		1
119	Publisherâ€™s Note: Time-Reversal and Super-Resolving Phase Measurements [Phys. Rev. Lett.98, 223601 (2007)]. Physical Review Letters, 2007, 99, .	2.9	1
120	Observation of topologically protected bound states in photonic quantum walks. , 2011, , .		1
121	Sub-megahertz linewidth single photon source suitable for quantum memories. , 2017, , .		1
122	Quantum Computing Using Optics. , 2012, , 2437-2452.		1
123	Comment on â€˜Noiseless amplification in cavity-based optical systems with an internal two-photon process. II. Self-frequency-doubling laser and second-harmonic generation, self-down-converting laserâ€™. Journal of Modern Optics, 1997, 44, 651-652.	0.6	0
124	â€œInteraction-freeâ€•measurements of quantum objects?. , 1999, , .		0
125	Experimental linear optics controlled-NOT gates. , 2003, , .		0
126	The Los Alamos Trapped Ion Quantum Computer Experiment. , 2004, , 23-55.		0

#	Article	IF	Citations
127	Efficient quantum logic circuits: or, How I Learned to Stop Worrying and Love Hilbert Space. , 2007, , IFB3.		0
128	Linear optics implementation of symmetric matchgates. , 2009, , .		0
129	Simulating Quantum Systems in Biology, Chemistry, and Physics. , 2011, , .		0
130	Experimental bosonsampling in a photonic circuit. , 2013, , .		0
131	Fabrication and classical characterisation of an integrated optic controlled phase gate. , 2013, , .		0
132	Quantum Computing Using Optics. , 2013, , 1-24.		0
133	BosonSampling with realistic single-photon sources. , 2013, , .		0
134	Toward a quantum network based on semiconductor quantum dots. , 2014, , .		0
135	Doctor Who Meets Professor Heisenberg. Asia-Pacific Physics Newsletter, 2014, 03, 22-22.	0.0	0
136	Generation of mechanical interference fringes by multi-photon quantum measurement. , 2017, , .		0
137	Hypercube States for Sub-Planck Sensing. , 2019, , .		0
138	Towards Storage of Sub-Megahertz Single Photons in Gradient Echo Memory. , 2019, , .		0
139	Optical Quantum Information: Computing, Communication, and Metrology. , 2005, , .		0
140	Efficient quantum-logic circuits: or, How I Learned to Stop Worrying and Love Hilbert Space. , 2007, , .		0
141	Quantum Chemistry on a Quantum Computer: First Steps and Prospects. , 2009, , .		0
142	Quantum Information and Nonlinear Optics: Together at Last?. , 2010, , .		0
143	Optical Tomography of a Highly Squeezed, Continuous-Wave Vacuum-State. , 1996, , 475-476.		0
144	Trapped Ion Quantum Computer Research at Los Alamos. Lecture Notes in Computer Science, 1999, , 426-437.	1.0	0

#	Article	IF	Citations
145	Sub-Megahertz Linewidth Single Photon Source Suitable for Quantum Memories. , 2017, , .		0
146	Spatial modes for testing indefinite causal order. , 2018, , .		0
147	Communicating via ignorance & imaging via counting. , 2019, , .		0
148	Communicating via ignorance & imaging via counting. , 2019, , .		0
149	Optimal Imaging of Remote Bodies Using Quantum Detectors. , 2020, , .		0