Yaron Silberberg

List of Publications by Year in descending order

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147	16,933	28274	15732
papers	citations	55 h-index	125 g-index

148	148	148	9109
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Discretizing light behaviour in linear and nonlinear waveguide lattices. Nature, 2003, 424, 817-823.	27.8	1,500
2	Discrete solitons in optics. Physics Reports, 2008, 463, 1-126.	25.6	990
3	Anderson Localization and Nonlinearity in One-Dimensional Disordered Photonic Lattices. Physical Review Letters, 2008, 100, 013906.	7.8	774
4	Compressive ghost imaging. Applied Physics Letters, 2009, 95, .	3.3	757
5	Collapse of optical pulses. Optics Letters, 1990, 15, 1282.	3.3	752
6	Quantum Walks of Correlated Photons. Science, 2010, 329, 1500-1503.	12.6	749
7	Coherent quantum control of two-photon transitions by a femtosecond laser pulse. Nature, 1998, 396, 239-242.	27.8	696
8	Single-pulse coherently controlled nonlinear Raman spectroscopy and microscopy. Nature, 2002, 418, 512-514.	27.8	686
9	Ghost imaging with a single detector. Physical Review A, 2009, 79, .	2.5	591
10	Anderson localization of light. Nature Photonics, 2013, 7, 197-204.	31.4	589
11	High-NOON States by Mixing Quantum and Classical Light. Science, 2010, 328, 879-881.	12.6	474
12	Looking around corners and through thin turbid layers in real time with scattered incoherent light. Nature Photonics, 2012, 6, 549-553.	31.4	462
13	Scanningless depth-resolved microscopy. Optics Express, 2005, 13, 1468.	3.4	440
14	Focusing and compression of ultrashort pulses through scattering media. Nature Photonics, 2011, 5, 372-377.	31.4	429
15	Realization of Quantum Walks with Negligible Decoherence in Waveguide Lattices. Physical Review Letters, 2008, 100, 170506.	7.8	423
16	Coherent quantum control of multiphoton transitions by shaped ultrashort optical pulses. Physical Review A, 1999, 60, 1287-1292.	2.5	319
17	Laser scanning third-harmonic-generation microscopy in biology. Optics Express, 1999, 5, 169.	3.4	304
18	Observation of Topological Phase Transitions in Photonic Quasicrystals. Physical Review Letters, 2013, 110, 076403.	7.8	266

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19	Quantum and Classical Correlations in Waveguide Lattices. Physical Review Letters, 2009, 102, 253904.	7.8	261
20	Transform-Limited Pulses Are Not Optimal for Resonant Multiphoton Transitions. Physical Review Letters, 2001, 86, 47-50.	7.8	254
21	Quantum Coherent Control for Nonlinear Spectroscopy and Microscopy. Annual Review of Physical Chemistry, 2009, 60, 277-292.	10.8	228
22	Femtosecond Phase-and-Polarization Control for Background-Free Coherent Anti-Stokes Raman Spectroscopy. Physical Review Letters, 2003, 90, 213902.	7.8	217
23	Two Photon Absorption and Coherent Control with Broadband Down-Converted Light. Physical Review Letters, 2004, 93, 023005.	7.8	201
24	Nonlinear Interactions with an Ultrahigh Flux of Broadband Entangled Photons. Physical Review Letters, 2005, 94, 043602.	7.8	186
25	Supersensitive Polarization Microscopy Using NOON States of Light. Physical Review Letters, 2014, 112, 103604.	7.8	157
26	Super-resolution enhancement by quantum image scanning microscopy. Nature Photonics, 2019, 13, 116-122.	31.4	157
27	Quantum Correlations in Two-Particle Anderson Localization. Physical Review Letters, 2010, 105, 163905.	7.8	153
28	Topological pumping over a photonic Fibonacci quasicrystal. Physical Review B, 2015, 91, .	3.2	151
29	Improved depth resolution in video-rate line-scanning multiphoton microscopy using temporal focusing. Optics Letters, 2005, 30, 1686.	3.3	150
30	Narrow-Band Coherent Anti-Stokes Raman Signals from Broad-Band Pulses. Physical Review Letters, 2002, 88, 063004.	7.8	144
31	Noninvasive nonlinear focusing and imaging through strongly scattering turbid layers. Optica, 2014, 1, 170.	9.3	143
32	Geometrical representation of sum frequency generation and adiabatic frequency conversion. Physical Review A, 2008, 78, .	2.5	139
33	Single-Pulse Phase-Contrast Nonlinear Raman Spectroscopy. Physical Review Letters, 2002, 89, 273001.	7.8	129
34	Quantum control of coherent anti-Stokes Raman processes. Physical Review A, 2002, 65, .	2.5	123
35	Nonlinear coupling of waveguide modes. Applied Physics Letters, 1987, 50, 801-803.	3.3	121
36	Single-pulse coherent anti-Stokes Raman spectroscopy in the fingerprint spectral region. Journal of Chemical Physics, 2003, 118, 9208-9215.	3.0	119

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37	Real-time wavefront shaping through scattering media by all-optical feedback. Nature Photonics, 2013, 7, 919-924.	31.4	108
38	Optical discrete solitons in waveguide arrays 2 Dynamic properties. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 2637.	2.1	102
39	Robust adiabatic sum frequency conversion. Optics Express, 2009, 17, 12731.	3.4	99
40	Coherent Transient Enhancement of Optically Induced Resonant Transitions. Physical Review Letters, 2002, 88, 123004.	7.8	96
41	Depth-resolved structural imaging by third-harmonic generation microscopy. Journal of Structural Biology, 2004, 147, 3-11.	2.8	96
42	Full control of the spectral polarization of ultrashort pulses. Optics Letters, 2006, 31, 631.	3.3	91
43	Quantum walk of two interacting bosons. Physical Review A, 2012, 86, .	2.5	84
44	Polarization control of multiply scattered light through random media by wavefront shaping. Optics Letters, 2012, 37, 4663.	3.3	80
45	Spatiotemporal coherent control using shaped, temporally focused pulses. Optics Express, 2005, 13, 9903.	3.4	78
46	Simple Route to Strong-Field Coherent Control. Physical Review Letters, 2005, 94, 083002.	7.8	70
47	Quantum Control of the Angular Momentum Distribution in Multiphoton Absorption Processes. Physical Review Letters, 2004, 92, 103003.	7.8	69
48	Phase and amplitude pulse shaping with two-dimensional phase-only spatial light modulators. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 2940.	2.1	62
49	Light Modes of Free Space. Progress in Optics, 2016, , 237-281.	0.6	62
50	Quantum correlation enhanced super-resolution localization microscopy enabled by a fibre bundle camera. Nature Communications, 2017, 8, 14786.	12.8	62
51	Quantum lithography by coherent control of classical light pulses. Optics Express, 2004, 12, 6600.	3.4	60
52	Observation of discrete gap solitons in binary waveguide arrays. Optics Letters, 2004, 29, 2890.	3.3	59
53	Bloch Oscillations of Path-Entangled Photons. Physical Review Letters, 2010, 105, 263604.	7.8	58
54	DiscreteX-Wave Formation in Nonlinear Waveguide Arrays. Physical Review Letters, 2007, 98, 023901.	7.8	57

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55	Spectral control of broadband light through random media by wavefront shaping. Optics Letters, 2012, 37, 3429.	3.3	56
56	Numerical simulations of light bullets using the full-vector time-dependent nonlinear Maxwell equations. Journal of the Optical Society of America B: Optical Physics, 1997, 14, 3253.	2.1	49
57	Depth-resolved multiphoton polarization microscopy by third-harmonic generation. Optics Letters, 2003, 28, 2315.	3.3	49
58	Tracing the photodissociation probability of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:msup><mml:mrow /><mml:mrow><mml:mo>+</mml:mo></mml:mrow></mml:msup></mml:mrow></mml:math>in intense fields using chirped laser pulses. Physical Review A, 2010, 81, .	2.5	47
59	Single-beam coherent Raman spectroscopy and microscopy via spectral notch shaping. Optics Express, 2010, 18, 22693.	3.4	44
60	Single-beam spectrally controlled two-dimensional Raman spectroscopy. Nature Photonics, 2015, 9, 339-343.	31.4	44
61	Efficient polarization gating of high-order harmonic generation by polarization-shaped ultrashort pulses. Physical Review A, 2005, 72, .	2.5	43
62	Focusing light by wavefront shaping through disorder and nonlinearity. Optica, 2017, 4, 1073.	9.3	37
63	Mathematics of vectorial Gaussian beams. Advances in Optics and Photonics, 2019, 11, 828.	25.5	36
64	Physics at the attosecond frontier. Nature, 2001, 414, 494-495.	27.8	35
65	Harmonic generation with temporally focused ultrashort pulses. Journal of the Optical Society of America B: Optical Physics, 2005, 22, 2660.	2.1	34
66	Universal Correlations in a Nonlinear Periodic 1D System. Physical Review Letters, 2009, 102, 233904.	7.8	34
67	Quantum control of photodissociation by manipulation of bond softening. Physical Review A, 2012, 86, .	2.5	32
68	Quantum control with a twist. Nature, 2004, 430, 624-625.	27.8	31
69	Single-pulse stimulated Raman scattering spectroscopy. Optics Letters, 2011, 36, 1248.	3.3	30
70	Spectral polarization and spectral phase control of time-energy entangled photons. Physical Review A, 2007, 75, .	2.5	29
71	Two photon frequency conversion. Optics Express, 2012, 20, 3613.	3.4	29
72	All-optical processing in coherent nonlinear spectroscopy. Physical Review A, 2004, 70, .	2.5	28

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73	Single-pulse CARS based multimodal nonlinear optical microscope for bioimaging. Optics Express, 2015, 23, 13082.	3.4	27
74	Standoff detection via single-beam spectral notch filtered pulses. Applied Physics Letters, 2012, 100, 051111.	3.3	25
75	Light focusing through scattering media via linear fluorescence variance maximization, and its application for fluorescence imaging. Optics Express, 2019, 27, 21778.	3.4	25
76	Generation of a dark nonlinear focus by spatio-temporal coherent control. Optics Communications, 2006, 264, 482-487.	2.1	24
77	Ensemble-Averaged Quantum Correlations between Path-Entangled Photons Undergoing Anderson Localization. Physical Review Letters, 2015, 115, 133602.	7.8	24
78	Terahertz coherent anti-Stokes Raman scattering microscopy. Optica, 2019, 6, 52.	9.3	24
79	Entangled coherent states created by mixing squeezed vacuum and coherent light. Optica, 2019, 6, 753.	9.3	24
80	Strong-field spatiotemporal ultrafast coherent control in three-level atoms. Physical Review A, 2010, 81, .	2.5	22
81	Broadband sum-frequency generation as an efficient two-photon detector for optical tomography. Optics Express, 2007, 15, 8760.	3.4	21
82	Two-Photon Path-Entangled States in Multimode Waveguides. Physical Review Letters, 2012, 108, 153602.	7.8	19
83	Wavefront shaping for glare reduction. Optica, 2016, 3, 1104.	9.3	18
84	Multiple breakup of high-order spatial solitons. Optics Letters, 2008, 33, 2830.	3.3	17
85	Pythagorean coupling: Complete population transfer in a four-state system. Physical Review A, 2011, 84, .	2.5	17
86	Third-harmonic generation with cylindrical Gaussian beams. Journal of the Optical Society of America B: Optical Physics, 2004, 21, 1964.	2.1	16
87	Berezinskii-Kosterlitz-Thouless crossover in a photonic lattice. Physical Review A, 2011, 83, .	2.5	16
88	Spatiotemporal focusing through a thin scattering layer. Optics Express, 2012, 20, 5189.	3.4	16
89	Light with Tunable Non-Markovian Phase Imprint. Physical Review Letters, 2015, 115, 073901.	7.8	16
90	Impulsive Raman spectroscopy via precision measurement of frequency shift with low energy excitation. Optics Letters, 2018, 43, 470.	3.3	16

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91	Echo in a single vibrationally excited molecule. Nature Physics, 2020, 16, 328-333.	16.7	15
92	Tunable upconverted optical parametric oscillator with intracavity adiabatic sum-frequency generation. Optics Letters, 2010, 35, 1590.	3.3	14
93	Sparsity-based super-resolution and phase-retrieval in waveguide arrays. Optics Express, 2013, 21, 24015.	3.4	14
94	Hybrid single-source online Fourier transform coherent anti-Stokes Raman scattering/optical coherence tomography. Optics Letters, 2014, 39, 5709.	3.3	14
95	Vibrational spectroscopy via stimulated Raman induced Kerr lensing. APL Photonics, 2018, 3, .	5.7	12
96	Design of a high-power continuous source of broadband down-converted light. Physical Review A, 2006, 74, .	2.5	11
97	Quantum enhanced phase retrieval. Optica, 2016, 3, 193.	9.3	11
98	Spatio-temporal X-wave. Optics Express, 2009, 17, 18659.	3.4	10
99	Spooky spectroscopy. Nature Photonics, 2016, 10, 77-79.	31.4	10
100	Equilibrium temperatures of discrete nonlinear systems. Physical Review B, 2018, 98, .	3.2	10
101	Weakly diverging to tightly focused Gaussian beams: a single set of analytic expressions. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, 1999.	1.5	10
102	Polarization dependent properties of waveguide arrays: band-structure anomaly and high-band localizations. Optics Express, 2005, 13, 1762.	3.4	8
103	Photon correlations in multimode waveguides. Physical Review A, 2011, 84, .	2.5	8
104	Temporal Focusing Microscopy. Cold Spring Harbor Protocols, 2015, 2015, pdb.top085928.	0.3	8
105	Sub-Rayleigh Lithography Using High Flux Loss-Resistant Entangled States of Light. Physical Review Letters, 2012, 109, 103602.	7.8	7
106	Frequency-encoded multiplexed CARS microscopy by rapid pulse shaping. Journal of Modern Optics, 2014, 61, 872-876.	1.3	7
107	Second and third harmonic waves excited by focused Gaussian beams. Optics Express, 2015, 23, 27795.	3.4	7
108	Excitation of strongly confined scalar and vector self-trapped beams in one-dimensional arrays of Kerr-nonlinear channel waveguides. Journal of the Optical Society of America B: Optical Physics, 2005, 22, 1432.	2.1	6

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109	Compressive Fourier Transform Spectroscopy. , 2010, , .		6
110	Single beam low frequency 2D Raman spectroscopy. Optics Express, 2020, 28, 3803.	3.4	6
111	Broadband photon pair generation at 3Ï‰/2. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	5
112	Revealing true coupling strengths in two-dimensional spectroscopy with sparsity-based signal recovery. Light: Science and Applications, 2017, 6, e17115-e17115.	16.6	5
113	Coherently-enhanced lock-in-free chirped-CARS microscopy by notch filtering. Optics Express, 2017, 25, 28201.	3.4	5
114	Mode conversion via wavefront shaping. Optics Express, 2018, 26, 22208.	3.4	5
115	Observation of rogue events in non-Markovian light. Optica, 2020, 7, 864.	9.3	5
116	Effects of linear modes on the evolution of discrete solitons. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 62.	2.1	4
117	Combs for molecules. Nature, 2013, 502, 307-308.	27.8	4
118	Free-space nonperpendicular electricâ€“magnetic fields. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2015, 32, 647.	1.5	3
119	Universal correlations after thermalization in periodic nonlinear systems. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 035401.	1.5	3
120	SELF-INDUCED WAVEGUIDES: SPATIAL OPTICAL SOLITONS. , 1992, , 143-157.		3
121	Weakly diverging to tightly focused Gaussian beams: a single set of analytic expressions: continuationâ€”symmetric beams. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2017, 34, 331.	1.5	3
122	Simplified approach to low-frequency coherent anti-Stokes Raman spectroscopy using a sharp spectral edge filter. Optics Letters, 2019, 44, 3637.	3.3	3
123	Beam steering via peak power decay in nonlinear waveguide arrays. New Journal of Physics, 2013, 15, 093038.	2.9	2
124	Demonstration of complementarity between path information and interference with thermal light. Physical Review A, 2019, 99, .	2.5	2
125	NUMERICAL SIMULATIONS OF LIGHT BULLETS, USING THE FULL VECTOR, TIME DEPENDENT, NONLINEAR MAXWELL EQUATIONS. , 1995, , .		2
126	Effect of second-order coupling on photon-pair statistics in waveguide structures. Physical Review A, 2017, 96, .	2.5	1

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127	Anderson Localization of Light. Series in Optics and Optoelectronics, 2012, , 171-196.	0.0	1
128	Response to â€˜â€˜Comment on â€˜Nonlinear coupling of waveguide modesâ€™â€‰â€™ [Appl. Phys. Lett.51, 1645 (1987)]. Applied Physics Letters, 1987, 51, 1645-1645.	3.3	0
129	Nonlinear tuning of the superprism effect near photonic band edges. , 2006, , .		0
130	Excitation of discrete X-waves in nonlinear waveguide arrays. , 2006, , .		0
131	Discrete nonlinear X-waves in waveguide arrays. , 2006, , .		0
132	Anderson localization and nonlinearity in one dimensional disordered waveguide arrays. , 2007, , JMB6.		0
133	Temporally focused pulses and coherent control for nonlinear microscopy. , 2007, , .		0
134	Quantum Inspired Imaging with Compressive Sensing. , 2010, , .		0
135	Controlled Spatiotemporal Focusing Through Turbid Media. , 2011, , .		0
136	Experimental Observation of Topological States and Adiabatic Pumping in 1D Photonic Quasicrystals. , 2011, , .		0
137	Single-Pulse Two-dimensional Raman Spectroscopy. , 2015, , .		0
138	Observation of discrete gap solitons in binary waveguide arrays. , 2004, , .		0
139	Ground-state selection and modal cooling in a nonlinear waveguide. , 2005, , .		0
140	Enhanced nonlinear beam steering near band-edges of waveguide arrays. , 2005, , .		0
141	All-optical tuning of the superprism effect near band edges of nonlinear waveguide arrays. , 2006, , .		0
142	Observation of discrete nonlinear X-waves. , 2006, , .		0
143	Nonlinear Temporal Focusing Microscopy. , 2006, , .		0
144	Anderson localization, wave diffusion and the effect of nonlinearity in randomized photonic lattices. , 2007, , .		0

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145	Kerr Spatio-Temporal Focusing in a Planar Glass Waveguide. , 1999, , .		0
146	Range of Imaging and Focusing through Scattering Media. , 2016, , .		0
147	Quantum image scanning microscopy: concept and considerations towards applicability. , 2019, , .		0