Morten Bache

List of Publications by Year
in descending order

112 papers	4,355 citations	172457 29 h-index	110387 64 g-index
114 all docs	114 docs citations	114 times ranked	2350 citing authors

#	Article	IF	Citations
1	Ghost Imaging with Thermal Light: Comparing Entanglement and ClassicalCorrelation. Physical Review Letters, 2004, 93, 093602.	7.8	742
2	High-Resolution Ghost Image and Ghost Diffraction Experiments with Thermal Light. Physical Review Letters, 2005, 94, 183602.	7.8	631
3	Correlated imaging, quantum and classical. Physical Review A, 2004, 70, .	2.5	344
4	Coherent imaging with pseudo-thermal incoherent light. Journal of Modern Optics, 2006, 53, 739-760.	1.3	213
5	Detection of Sub-Shot-Noise Spatial Correlation in High-Gain Parametric Down Conversion. Physical Review Letters, 2004, 93, 243601.	7.8	175
6	Simultaneous near-field and far-field spatial quantum correlations in the high-gain regime of parametric down-conversion. Physical Review A, 2004, 69, .	2.5	164
7	Improved thermal and strain performance of annealed polymer optical fiber Bragg gratings. Optics Communications, 2011, 284, 176-182.	2.1	140
8	Low-loss single-mode hollow-core fiber with anisotropic anti-resonant elements. Optics Express, 2016, 24, 8429.	3.4	94
9	Stationary space-periodic structures with equal diffusion coefficients. Physical Review E, 1999, 60, 297-301.	2.1	93
10	Cavity soliton laser based on VCSEL with saturable absorber. Applied Physics B: Lasers and Optics, 2005, 81, 913-920.	2.2	92
11	Nonlocal explanation of stationary and nonstationary regimes in cascaded soliton pulse compression. Optics Letters, 2007, 32, 2490.	3.3	92
12	Low-loss hollow-core silica fibers with adjacent nested anti-resonant tubes. Optics Express, 2015, 23, 17394.	3.4	89
13	Coherent imaging of a pure phase object with classical incoherent light. Physical Review A, 2006, 73, .	2.5	86
14	Limits to compression with cascaded quadratic soliton compressors. Optics Express, 2008, 16, 3273.	3.4	82
15	Deep-UV to Mid-IR Supercontinuum Generation driven by Mid-IR Ultrashort Pulses in a Gas-filled Hollow-core Fiber. Scientific Reports, 2019, 9, 4446.	3.3	78
16	Octave-spanning supercontinuum generation in a silicon-rich nitride waveguide. Optics Letters, 2016, 41, 2719.	3.3	69
17	Ultrafast and Octave-Spanning Optical Nonlinearities from Strongly Phase-Mismatched Quadratic Interactions. Physical Review Letters, 2012, 109, 043902.	7.8	65
18	Modulational instability and solitons in nonlocal media with competing nonlinearities. Physical Review A, 2011, 84, .	2.5	56

#	Article	IF	Citations
19	Scaling laws for soliton pulse compression by cascaded quadratic nonlinearities. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 2752.	2.1	49
20	Ultra-low-noise supercontinuum generation with a flat near-zero normal dispersion fiber. Optics Letters, 2019, 44, 2216.	3.3	47
21	Optical Cherenkov radiation in ultrafast cascaded second-harmonic generation. Physical Review A, 2010, 82, .	2.5	45
22	Soliton-plasma nonlinear dynamics in mid-IR gas-filled hollow-core fibers. Optics Letters, 2017, 42, 2232.	3.3	45
23	The anisotropic Kerr nonlinear refractive index of the beta-barium borate (Î²-BaB_2O_4) nonlinear crystal. Optical Materials Express, 2013, 3, 357.	3.0	39
24	Generating mid-IR octave-spanning supercontinua and few-cycle pulses with solitons in phase-mismatched quadratic nonlinear crystals. Optical Materials Express, 2013, 3, 1647.	3.0	38
25	Low-Loss Hollow-Core Anti-Resonant Fibers With Semi-Circular Nested Tubes. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 156-161.	2.9	37
26	Ghost imaging using homodyne detection. Physical Review A, 2004, 70, .	2.5	32
27	Ghost imaging schemes: fast and broadband. Optics Express, 2004, 12, 6067.	3.4	32
28	Quadratic solitons for negative effective second-harmonic diffraction as nonlocal solitons with periodic nonlocal response function. Physical Review A, 2012, 86, .	2.5	29
29	Anomalous interaction of nonlocal solitons in media with competing nonlinearities. Physical Review A, 2012, 86, .	2.5	29
30	Coherent supercontinuum bandwidth limitations under femtosecond pumping at 2 Âµm in all-solid soft glass photonic crystal fibers. Optics Express, 2016, 24, 29406.	3.4	29
31	Type-I cascaded quadratic soliton compression in lithium niobate: Compressing femtosecond pulses from high-power fiber lasers. Physical Review A, 2010, 81, .	2.5	28
32	Invited Article: Multiple-octave spanning high-energy mid-IR supercontinuum generation in bulk quadratic nonlinear crystals. APL Photonics, 2016, 1, .	5.7	27
33	Nonlinear Dynamics of Ultrashort Long-Range Surface Plasmon Polariton Pulses in Gold Strip Waveguides. ACS Photonics, 2016, 3, 2324-2329.	6.6	27
34	Tuning quadratic nonlinear photonic crystal fibers for zero group-velocity mismatch. Optics Letters, 2006, 31, 1612.	3.3	25
35	Energetic mid-IR femtosecond pulse generation by self-defocusing soliton-induced dispersive waves in a bulk quadratic nonlinear crystal. Optics Express, 2015, 23, 6924.	3.4	25
36	Higher-order Kerr effect and harmonic cascading in gases. Optics Letters, 2012, 37, 4612.	3.3	24

#	Article	IF	Citations
37	Understanding Soliton Spectral Tunneling as a Spectral Coupling Effect. IEEE Photonics Technology Letters, 2013, 25, 1928-1931.	2.5	24
38	Observation of self-pulsing in singly resonant optical second-harmonic generation with competing nonlinearities. Physical Review A, 2002, 65, .	2.5	22
39	Dispersive waves induced by self-defocusing temporal solitons in a beta-barium-borate crystal. Optics Letters, 2015, 40, 4257.	3.3	22
40	Third-order susceptibility of gold for ultrathin layers. Optics Letters, 2016, 41, 317.	3.3	22
41	Modification of pattern formation in doubly resonant second-harmonic generation by competing parametric oscillation. Optics Letters, 2000, 25, 654.	3.3	21
42	Poor-manâ€™s model of hollow-core anti-resonant fibers. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 69.	2.1	21
43	Spiral Intensity Patterns in the Internally Pumped Optical Parametric Oscillator. Physical Review Letters, 2000, 85, 4506-4509.	7.8	20
44	Nonclassical statistics of intracavity coupledÏ‡(2)waveguides: The quantum optical dimer. Physical Review A, 2003, 67, .	2.5	20
45	Multi-stage generation of extreme ultraviolet dispersive waves by tapering gas-filled hollow-core anti-resonant fibers. Optics Express, 2018, 26, 24357.	3.4	20
46	Soliton-induced nonlocal resonances observed through high-intensity tunable spectrally compressed second-harmonic peaks. Physical Review A, 2014, 90, .	2.5	18
47	Quantum spatial correlations in high-gain parametric down-conversion measured by means of a CCD camera. Journal of Modern Optics, 2006, 53, 575-595.	1.3	17
48	Nonlinear wave equation in frequency domain: accurate modeling of ultrafast interaction in anisotropic nonlinear media. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 494.	2.1	17
49	Supercontinuum generation in quadratic nonlinear waveguides without quasi-phase matching. Optics Letters, 2015, 40, 629.	3.3	17
50	Quantum properties of transverse pattern formation in second-harmonic generation. Physical Review A, 2002, 66, .	2.5	16
51	Tailoring the dispersion properties of photonic crystal fibers. Optical and Quantum Electronics, 2007, 39, 995-1008.	3.3	16
52	Analysis of elliptically polarized states in vertical-cavity-surface-emitting lasers. Physical Review A, 2004, 69, .	2.5	15
53	Designing microstructured polymer optical fibers for cascaded quadratic soliton compression of femtosecond pulses. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 460.	2.1	13
54	Parametrically Tunable Soliton-Induced Resonant Radiation by Three-Wave Mixing. Physical Review Letters, 2017, 118, 143901.	7.8	13

#	Article	IF	Citations
55	Mid-IR femtosecond frequency conversion by soliton-probe collision in phase-mismatched quadratic nonlinear crystals. Optics Letters, 2015, 40, 3798.	3.3	12
56	Few-cycle solitons and supercontinuum generation with cascaded quadratic nonlinearities in unpoled lithium niobate ridge waveguides. Optics Letters, 2014, 39, 1105.	3.3	11
57	Directional supercontinuum generation: the role of the soliton. Journal of the Optical Society of America B: Optical Physics, 2019, 36, A131.	2.1	11
58	Soliton compression to few-cycle pulses with a high quality factor by engineering cascaded quadratic nonlinearities. Optics Express, 2012, 20, 27071.	3.4	10
59	Nonlinear optical model for strip plasmonic waveguides. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 1341.	2.1	9
60	Highly coherent mid-IR supercontinuum by self-defocusing solitons in lithium niobate waveguides with all-normal dispersion. Optics Express, 2014, 22, 12211.	3.4	6
61	Ghost Imaging. , 2007, , 79-111.		6
62	Correlated imaging with macroscopic fields. Fortschritte Der Physik, 2004, 52, 1080-1089.	4.4	5
63	Ultrafast nonlinear dynamics of thin gold films due to an intrinsic delayed nonlinearity. Journal of Optics (United Kingdom), 2017, 19, 094004.	2.2	5
64	Antiresonant hollow core fiber with seven nested capillaries. , 2016, , .		4
65	Octave-spanning frequency comb generation in all-normal-dispersion silicon-rich silicon nitride waveguide. , 2020, , .		4
66	Temporal switching induced by cascaded third order nonlinearity. Optics Letters, 2012, 37, 5109.	3.3	3
67	Soliton compression to ultra-short pulses using cascaded quadratic nonlinearities in silica photonic crystal fibers. , 2007, , .		3
68	Tuning quadratic nonlinear photonic crystal fibers for zero group-velocity mismatch. , 2006, , .		2
69	Correlated imaging: classical noise vs. quantum entanglement. , 2004, 5468, 262.		1
70	Second-Harmonic Generation with Zero Group-Velocity Mismatch in Nonlinear Photonic Crystal Fibers. , 2006, , .		1
71	Group-Velocity Matched Nonlinear Photonic Crystal Fibers. , 2006, , .		1
72	Coherent imaging of a pure phase object with classical incoherent light. , 2007, , .		1

#	Article	IF	Citations
73	Designing Quadratic Nonlinear Photonic Crystal Fibers for Soliton Compression to Few-cycle Pulses. , 2007, , .		1
74	Compression limits in cascaded quadratic soliton compressors. , 2008, , .		1
75	Anisotropic Anti-resonant Elements gives Broadband Single-mode Low-loss Hollow-core Fibers. , 2016, , .		1
76	Soliton Compression to Few-cycle Pulses Using Quadratic Nonlinear Photonic Crystal Fibers: A Design Study. , 2007, , .		0
77	Soliton Compression to Few-cycle Pulses by Cascaded Quadratic Nonlinearities. , 2007, , .		0
78	Dispersive waves in fs cascaded second-harmonic generation. , 2009, , .		0
79	High-energy Few-cycle Pulses Directly Generated from Strongly Phase-mismatched Lithium Niobate Crystal. , 2012, , .		0
80	Spectral Compression of Intense Femtosecond Pulses by Self Phase Modulation in Silica Glass. , 2012, , .		0
81	Critical Boundary of Cascaded Quadratic Soliton Compression in PPLN. , 2012, , .		0
82	Completely background free broadband coherent anti-Stokes Raman scattering spectroscopy. , 2013, , .		0
83	Directional selective nonlinear transmission of femtosecond pulses in glass-metal nanocomposites. , 2013, , .		0
84	Cross-correlation frequency-resolved optical gating by molecular vibration for ultrashort pulse. , 2013, , .		0
85	Near- and Mid-IR few-cycle self-defocusing soliton compression in PPLN waveguide. , 2013, , .		0
86	The Kerr nonlinearity of the beta-barium borate crystal. , 2013, , .		0
87	Few-cycle nonlinear mid-IR pulse generated with cascaded quadratic nonlinearities. , 2013, , .		0
88	Higher-order Kerr effect and harmonic cascading in gases. , 2013, , .		0
89	Pressure tunable cascaded third order nonlinearity and temporal pulse switching. , 2013, , .		0
90	Soliton delay driven by cascading and Raman responses. , 2013, , .		0

#	Article	IF	Citations
91	Broadband Cherenkov radiation by using group-velocity-matching in index-guiding photonic crystal fiber. , 2013, , .		0
92	Efficient Femtosecond Mid-infrared Pulse Generation by Dispersive Wave Radiation in Bulk Lithium Niobate Crystal. , 2014, , .		0
93	Octave-Spanning Mid-IR Supercontinuum Generation with Ultrafast Cascaded Nonlinearities. , 2014, , .		0
94	Nonlinear propagation of surface plasmon-polaritons in gold stripe waveguides. , 2016, , .		0
95	Low loss mid-IR transmission bands using silica hollow-core anisotropic anti-resonant fibers. , 2016, , .		0
96	Nonlinear effects in propagation of long-range surface plasmon polaritons in gold strip waveguides. , 2016, , .		0
97	Influence of dispersion of nonlinearity on coherent supercontinuum generation bandwidth in photonic crystal fibers pumped at 2 Î¼m. , 2017, , .		0
98	Toward single-mode UV to near-IR guidance using hollow-core anti-resonant silica fiber. , 2017, , .		0
99	Curvature and position of nested tubes in hollow-core anti-resonant fibers. , 2017, , .		0
100	Soliton-plasma nonlinear dynamics in mid-IR gas-filled hollow-core fibers: publisherâ€™s note. Optics Letters, 2017, 42, 2943.	3.3	0
101	Experimental verification of the intrinsic ultrafast delayed nonlinearity of gold. , 2017, , .		0
102	Multiple soliton compression stages in mid-IR gas-filled hollow-core fibers. , 2017, , .		0
103	Generation of multiple VUV dispersive waves using a tapered gas-filled hollow-core anti-resonant fiber. , 2017, , .		0
104	Directional supercontinuum generation. , 2018, , .		0
105	Power Dependent Noise Performance of fs Supercontinuum Generation in Normal Dispersion Fibers with a Long Zero-Dispersion Wavelength. , 2019, , .		0
106	Optical Cherenkov radiation by cascaded nonlinear interaction: an efficient source of few-cycle near- to mid-IR pulses. , 2011, , .		0
107	Improving Soliton Compression Quality with Cascaded Nonlinearities by Engineered Multi-section Quasi-phase-matching Design. , 2012, , .		0
108	Low-energy Self-defocusing Soliton Compression at Optical Communication Wavelengths in Unpoled Lithium Niobate Ridge Waveguide. , 2014, , .		0

#	Article	IF	Citations
109	High-energy pulse compressor using self-defocusing spectral broadening in anomalously dispersive media. , 2014, , .		0
110	Experiments on Cascaded Quadratic Soliton Compression in Unpoled LN Waveguide. , 2014, , .		0
111	Octave-spanning Supercontinuum Generation in a Silicon-rich Nitride Waveguide. , 2016, , .		0
112	Extending the UV Supercontinuum by Tapering Gas-Filled Hollow-Core Anti-Resonant Fibers. , 2018, , .		0