

Publication list for Morten Bache

Summary

- ISI indexed peer-reviewed publications: **100 (+8 to appear) with 2,400+ total citations**
 - Publication summary
 - 61 peer-reviewed journal papers (19 as first author)
 - 5 errata
 - 34 (+8 to appear) publications in conference proceedings (10 as first author)
 - Breakdown of ISI citations
 - 2,387 ISI citations (2,108 without self-citations)¹
 - 74 “hidden”² ISI citations
 - 6 papers with 100+ citations, 12 papers with 50+ citations, 41 papers with 10+ citations
 - h-index: 20
 - m-index: 1.1
 - Researcher ID: [C-5469-2008](#)
 - 2 ISI Highly Cited Papers in 2014
- [Google Scholar profile](#): **3,400+ citations**
 - h-index: 23
 - i-10 index: 45
- [ResearchGate](#)
- [Orcid](#)
- Non ISI publications
 - Patents: 1
 - Publications in conference proceedings (not ISI indexed): 30
 - Articles (not peer reviewed): 4
 - Book chapters: 2
 - Theses: 2
 - Oral contributions at international conferences: 67 (9 invited)
 - Poster contributions at international conferences: 32
 - Invited lectures: 9
 - Other publications: 3

ISI indexed peer-reviewed journal papers (61)

- [1] P. Andresén, [M. Bache](#), E. Mosekilde, G. Dewel and P. Borckmans
Stationary space-periodic structures with equal diffusion coefficients
Physical Review E **60**, 297-301 (1999)
[online](#)
- [2] P. Lodahl, [M. Bache](#) and M. Saffman
Modification of pattern formation in doubly resonant second harmonic generation by competing parametric oscillation
Optics Letters **25**, 654-656 (2000)
[online](#)
- [3] P. Lodahl, [M. Bache](#) and M. Saffman
Spiral intensity patterns in the internally pumped optical parametric oscillator
Physical Review Letters **85**, 4506-4509 (2000)
[online](#)
- [4] P. Lodahl, [M. Bache](#) and M. Saffman
Spatiotemporal instabilities in the internally pumped optical parametric oscillator
Physical Review A **63**, 023815 (2001)
[online](#)

¹ Search parameters: Author=(bache m not bache michael not bache marianne) OR Author=(bache m and prati f) AND Address=(italy or denmark not hvidovre not nanotech*)

² These consist of either citations of the e-prints or citations with broken links so the citation does not appear officially. Both types of citations were found using the ISI “Cited Reference Search”.

- [5] M. Bache, P. Lodahl, A. V. Mamaev, M. Marcus and M. Saffman
Observation of self-pulsing in singly resonant optical second-harmonic generation with competing nonlinearities
Physical Review A **65**, 033811 (2002)
[online](#)
- [6] M. Bache, P. Scotto, R. Zambrini, M. San Miguel and M. Saffman
Quantum properties of transverse pattern formation in second-harmonic generation
Physical Review A **66**, 013809 (2002)
[online](#), [arXiv:quant-ph/0202167](#)
- [7] M. Bache, Yu. B. Gaididei and P. L. Christiansen
Nonclassical statistics of intracavity coupled waveguides: the quantum optical dimer
Physical Review A **67**, 043802 (2003)
[online](#), [arXiv:quant-ph/0205029](#)
- [8] E. Brambilla, A. Gatti, M. Bache and L.A. Lugiato
Simultaneous near-field and far-field spatial quantum correlations in the high gain regime of parametric down-conversion
Physical Review A **69**, 023802 (2004)
[online](#), [arXiv:quant-ph/0306116](#)
- [9] F. Prati, P. Caccia, M. Bache and F. Castelli
Analysis of elliptically polarized states in vertical-cavity-surface-emitting lasers
Physical Review A **69**, 033810 (2004)
[online](#)
- [10] A. Gatti, E. Brambilla, M. Bache and L.A. Lugiato
Correlated imaging, quantum and classical
Physical Review A **70**, 013802 (2004)
[online](#), [arXiv:quant-ph/0405056](#)
- [11] A. Gatti, E. Brambilla, M. Bache and L.A. Lugiato
Ghost imaging with thermal light: comparing entanglement and classical correlation
Physical Review Letters **93**, 093602 (2004)
[online](#), [arXiv:quant-ph/0307187](#)
ISI Highly Cited Paper in 2014
- [12] M. Bache, E. Brambilla, A. Gatti and L.A. Lugiato
Ghost imaging using homodyne detection
Physical Review A **70**, 023823 (2004)
[online](#), [arXiv:quant-ph/0402160](#)
- [13] E. Brambilla, A. Gatti, M. Bache and L.A. Lugiato
Correlated imaging with macroscopic fields
Fortschritte der Physik **52**, 1080-1089 (2004)
[online](#)
Special Issue for F. DeMartini
- [14] M. Bache, E. Brambilla, A. Gatti and L.A. Lugiato
Ghost imaging schemes: fast and broadband
Optics Express **12**, 6067-6081 (2004)
[online](#), [arXiv:quant-ph/0409215](#)
- [15] O. Jedrkiewicz, Y.-K. Yang, E. Brambilla, M. Bache, A. Gatti, L.A. Lugiato, and P. Di Trapani
Single-shot detection of spatial quantum correlation in high-gain parametric down-conversion
Physical Review Letters **93**, 243601 (2004)
[online](#), [arXiv:quant-ph/0407211](#)
Selected for [News and Views](#) in Nature
- [16] A. Gatti, E. Brambilla, M. Bache and L.A. Lugiato
Entangled imaging in the large photon number regime
Laser Physics **15**, 176-186 (2005)
[online](#)
Special Issue in honour of Herbert Walther's 70th birthday
- [17] F. Ferri, D. Magatti, A. Gatti, M. Bache, E. Brambilla, and L.A. Lugiato
High-resolution ghost imaging and ghost diffraction experiments with thermal light
Physical Review Letters **94**, 183602 (2005)

- [online](#), [arXiv:quant-ph/0408021](#)
ISI Highly Cited Paper in 2014
- [18] [M. Bache](#), F. Prati, G. Tissoni, R. Kheradmand, I. Protsenko, L.A. Lugiato, and M. Brambilla
Cavity soliton laser based on VCSEL with saturable absorber
Applied Physics B: Lasers and Optics **81**, 913-920 (2005)
[online](#)
- [19] O. Jedrkiewicz, E. Brambilla, [M. Bache](#), A. Gatti, L. A. Lugiato, and P. Di Trapani
Quantum spatial correlations in high-gain parametric down-conversion measured by means of a CCD camera
Journal of Modern Optics **53**, 575-595 (2006)
[online](#), [arXiv:quant-ph/0502047](#)
- [20] A. Gatti, [M. Bache](#), D. Magatti, E. Brambilla, F. Ferri, and L.A. Lugiato
Coherent imaging with pseudo-thermal incoherent light
Journal of Modern Optics **53**, 739-760 (2006)
[online](#), [arXiv:quant-ph/0504082](#)
- [21] [M. Bache](#), D. Magatti, A. Gatti, E. Brambilla, F. Ferri, and L.A. Lugiato
Coherent imaging of a pure phase object with classical incoherent light
Physical Review A **73**, 053802 (2006)
[online](#), [arXiv:quant-ph/0604043](#)
- [22] [M. Bache](#), H. Nielsen, J. Lægsgaard, and O. Bang
Tuning quadratic nonlinear photonic crystal fibers for zero group-velocity mismatch
Optics Letters **31**, 1612-1614 (2006)
[online](#), [arXiv:physics/0511244](#)
- [23] [M. Bache](#), O. Bang, J. Moses and F.W. Wise
Nonlocal explanation of stationary and nonstationary regimes in cascaded soliton pulse compression
Optics Letters **32**, 2490-2492 (2007)
[online](#), [arXiv:0706.1933](#), [\[pdf\]](#)
- [24] [M. Bache](#), J. Moses, and F.W. Wise
Scaling laws for soliton pulse compression by cascaded quadratic nonlinearities
Journal of the Optical Society of America B **24**, 2752-2762 (2007)
[online](#), [arXiv:0706.1507](#)
Virtual Journal of Ultrafast Science, **6** issue 11 (2007)
- [25] J. Lægsgaard, P. J. Roberts and [M. Bache](#)
Tailoring the Dispersion Properties of Photonic Crystal Fibers
Optical and Quantum Electronics **39**, 995-1008 (2007)
[online](#)
- [26] [M. Bache](#), O. Bang, W. Krolikowski, J. Moses and F. W. Wise
Limits to compression with cascaded quadratic soliton compressors
Optics Express **16**, 3273-3287 (2008)
[online](#), [arXiv:0801.0707](#)
Virtual Journal of Ultrafast Science, **7** issue 4 (2008)
- [27] [M. Bache](#)
Designing microstructured polymer optical fibers for cascaded quadratic soliton compression of femtosecond pulses
Journal of the Optical Society of America B **26**, 460-470 (2009)
[online](#), [arXiv:0811.0143](#)
Virtual Journal of Nanoscale Science & Technology, **19** issue 13 (2009)
- [28] [M. Bache](#) and F. W. Wise
Type I cascaded quadratic soliton compression in lithium niobate: Compressing femtosecond pulses from high-power fiber lasers
Physical Review A **81**, 053815 (2010)
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- [29] [M. Bache](#), O. Bang, B.B. Zhou, J. Moses and F.W. Wise
Optical Cherenkov radiation in ultra-fast cascaded second-harmonic generation
Physical Review A **82**, 063806 (2010)
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- [30] W. Yuan, A. Stefani, [M. Bache](#), O. Bang, T. Jacobsen, B. Rose, N. Herholdt-Rasmussen, F. Kryger Nielsen, S. Andresen, O. Brøsted Sørensen, K. Styhr Hansen

Improved Thermal and Strain Performance of Annealed Polymer Optical Fiber Bragg Gratings
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- [31] [M. Bache](#), O. Bang, B.B. Zhou, J. Moses, and F. Wise
Optical Cherenkov radiation by cascaded nonlinear interaction: an efficient source of energetic few-cycle near-to mid-IR pulses
Optics Express **19**, 22557-22562 (2011). Special issue for Nonlinear Optics 2011.
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- [32] B.K. Esbensen, A. Wlotzka, [M. Bache](#), W. Krolikowski and O. Bang
Modulational instability and solitons in nonlocal media with competing nonlinearities
Physical Review A **84**, 053054 (2011)
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- [33] B. B. Zhou, A. Chong, F. W. Wise and [M. Bache](#)
Ultrafast and octave-spanning optical nonlinearities from strongly phase-mismatched cascaded interaction
Physical Review Letters **109**, 043902 (2012)
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- [34] B.K. Esbensen, [M. Bache](#), W. Krolikowski and O. Bang
Quadratic solitons for negative effective second-harmonic diffraction as nonlocal solitons with periodic nonlocal response function
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- [35] B.K. Esbensen, [M. Bache](#), O. Bang and W. Krolikowski
Anomalous interaction of nonlocal solitons in media with competing nonlinearities
Physical Review A **86**, 033838 (2012)
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- [36] [M. Bache](#), F. Eilenberger and S. Minardi
Higher-order Kerr effect and harmonic cascading in gases
Optics Letters **37**, 4612-4614 (2012)
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- [37] X.L. Zeng, H.R. Guo, B.B. Zhou and [M. Bache](#)
Soliton compression to few-cycle pulses with a high quality factor by engineering cascaded quadratic nonlinearities
Optics Express **20**, 27071-27082 (2012)
[doi](#), [arXiv:1210.5928](#), [\[pdf\]](#)
- [38] F. Eilenberger, [M. Bache](#), S. Minardi and T. Pertsch
Temporal switching induced by cascaded third order nonlinearity
Optics Letters **37**, 5109-5111 (2012)
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- [39] H.R. Guo, X.L. Zeng, B.B. Zhou and [M. Bache](#)
Nonlinear wave equation in frequency domain: accurate modeling of ultrafast interaction in anisotropic nonlinear media
Journal of the Optical Society of America B **30**, 494-505 (2013)
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- [40] [M. Bache](#), H.R. Guo, B.B. Zhou and X.L. Zeng
The anisotropic Kerr nonlinear refractive index of the beta-barium borate (β -BaB₂O₄) nonlinear crystal
Optical Materials Express **3**, 357-382 (2013)
[online](#), [doi](#), [arXiv:1209.3158](#), [\[pdf\]](#)
- [41] [M. Bache](#), H.R. Guo and B.B. Zhou
Generating mid-IR octave-spanning supercontinua and few-cycle pulses with solitons in phase-mismatched quadratic nonlinear crystals
Optical Materials Express **3**, 1647-1657 (2013), Mid-IR Photonic Materials special issue
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- [42] H.R. Guo, S.F. Wang, X.L. Zeng, and [M. Bache](#)
Understanding soliton spectral tunneling as a spectral coupling effect
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- [43] H.R. Guo, B.B. Zhou, X.L. Zeng and M. Bache
Few-cycle solitons and supercontinuum generation with cascaded quadratic nonlinearities in unpoled lithium niobate ridge waveguides
Optics Letters **39**, pp. 1105-1108 (2014)
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- [44] H.R. Guo, B.B. Zhou, X.L. Zeng and M. Bache
Highly coherent mid-IR supercontinuum by self-defocusing solitons in lithium niobate waveguides with all-normal dispersion
Opt. Express **22**, 12211-12225 (2014)
[doi](#), [\[pdf\]](#)
- [45] B.B. Zhou, H.R. Guo and M. Bache
Soliton-induced nonlocal resonances observed through high-intensity tunable spectrally compressed second-harmonic peaks
Physical Review A **90**, 013823 (2014)
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- [46] H.R. Guo, B.B. Zhou, M. Steinert, F. Setzpfandt, T. Pertsch, H. P. Chung, Y. H. Chen and M. Bache
Efficient supercontinuum generation in quadratic nonlinear waveguides without quasi-phase matching
Optics Letters **40**, 629-632 (2015)
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- [47] B.B. Zhou, H.R. Guo and M. Bache
Energetic mid-IR femtosecond pulse generation by self-defocusing soliton-induced dispersive waves in a bulk quadratic nonlinear crystal
Optics Express **23**, 6924-6936 (2015)
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- [48] Md. S. Habib, O. Bang, and M. Bache
Low-loss hollow-core silica fibers with adjacent nested anti-resonant tubes
Optics Express **23**, 17394-17406 (2015)
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- [49] X. Liu, B.B. Zhou, H.R. Guo and M. Bache
Mid-IR femtosecond frequency conversion by soliton-probe collision in phase-mismatched quadratic nonlinear crystals
Optics Letters **40**, 3798-3801 (2015)
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- [50] B. B. Zhou and M. Bache
Dispersive waves induced by self-defocusing temporal solitons in a beta-barium-borate crystal
Optics Letters **40**, 4257-4260 (2015)
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- [51] O. Lysenko, M. Bache and A. Lavrinenko
Third-order susceptibility of gold for ultrathin layers
Optics Letters **41**, 317-320 (2016)
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- [52] Md. S. Habib, O. Bang, and M. Bache
Low-loss hollow-core anti-resonant fibers with semi-circular nested tubes
IEEE Journal of Selected Topics in Quantum Electronics **22**, 4402106 (2016)
[online](#), [doi](#), [\[pdf\]](#)
- [53] Md. S. Habib, O. Bang, and M. Bache
Low-loss single-mode hollow-core fiber with anisotropic anti-resonant elements
Optics Express **24**, 8429-8436 (2016)
[online](#), [doi](#), [\[pdf\]](#)
- [54] O. Lysenko, M. Bache and A. Lavrinenko
Nonlinear optical model for strip plasmonic waveguides
Journal of the Optical Society of America B **33**, 1341-1348 (2016)
[online](#), [doi](#), [\[pdf\]](#)
Among top downloads of JOSAB in December 2016 in Fiber Optics and Waveguides and in January in Optoelectronics
- [55] X. Liu, M. Pu, B. B. Zhou, C. J. Krückel, A. Fülöp, V. Torres-Company and M. Bache
Octave-spanning supercontinuum generation in a silicon-rich nitride waveguide

- Optics Letters **41**, 2719-2722 (2016)
[online](#), [doi](#), [\[pdf\]](#), [arXiv:1606.00568](#)
- [56] B. B. Zhou and M. Bache
Multiple-octave spanning high-energy mid-IR supercontinuum generation in bulk quadratic nonlinear crystals
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[online](#), [doi](#), [\[pdf\]](#), [arXiv:1603.05804](#)
- [57] O. Lysenko, M. Bache, N. Olivier, A.V. Zayats, and A. Lavrinenko
Nonlinear Dynamics of Ultrashort Long-Range Surface Plasmon Polariton Pulses in Gold Strip Waveguides
 ACS Photonics **3**, 2324-2329, (2016)
[online](#), [doi](#), [\[pdf\]](#)
- [58] M. Klimczak, B. Siwicki, B. B. Zhou, M. Bache, D. Pysz, O. Bang, and R. Buczyński
Coherent supercontinuum bandwidth limitations under femtosecond pumping at 2 μm in all-solid soft glass photonic crystal fibers
 Opt. Express **24**, 29406-29416 (2016)
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- [59] B. B. Zhou, X. Liu, H. R. Guo, X. L. Zeng, X. F. Chen, H. P. Chung, Y. H. Chen, and M. Bache
Parametrically Tunable Soliton-Induced Resonant Radiation by Three-Wave Mixing
 Physical Review Letters **118**, 143901 (2017)
[online](#), [doi](#), [\[pdf\]](#), [arXiv:1606.00572](#)
- [60] Md. S. Habib, C. Markos, O. Bang, and M. Bache
Soliton-plasma nonlinear dynamics in mid-IR gas-filled hollow-core fibers
 Optics Letters **42**, 2232-2235 (2017)
[online](#), [doi](#), [\[pdf\]](#), [arXiv:1702.00267](#)
- [61] M. Bache and A. Lavrinenko
Ultrafast nonlinear dynamics of thin gold films
 Journal of Optics **19**, 094004 (2017); [Special issue on low-intensity nonlinear optics](#)
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ISI indexed peer-reviewed journal papers: errata (5)

- [1] F. Prati, P. Caccia, M. Bache and F. Castelli
Analysis of elliptically polarized states in vertical-cavity-surface-emitting lasers: erratum
 Physical Review A **70** 039904(E) (2004)
[doi](#)
- [2] M. Bache, J. Moses, and F.W. Wise
Scaling laws for soliton pulse compression by cascaded quadratic nonlinearities: erratum
 Journal of the Optical Society of America B **27**, 2505 (2010)
[online](#), [doi](#)
- [3] M. Bache
Designing microstructured polymer optical fibers for cascaded quadratic soliton compression of femtosecond pulses: erratum
 Journal of the Optical Society of America B **27**, 2506 (2010)
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- [4] X. Liu, M. Pu, B. Zhou, C. J. Krückel, A. Fülöp, V. Torres-Company and M. Bache
Octave-spanning supercontinuum generation in a silicon-rich nitride waveguide: erratum
 Optics Letters, in press (2017)
- [5] Md. S. Habib, C. Markos, O. Bang, and M. Bache
Soliton-plasma nonlinear dynamics in mid-IR gas-filled hollow-core fibers: erratum
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ISI indexed peer-reviewed conference papers (34+8)

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Correlated imaging: classical noise vs. quantum entanglement
 in *Fluctuations and Noise in Photonics and Quantum Optics II*, eds. P. Heszler, D. Abbott, J. R. Gea-Banacloche, and P. R. Hemmer

- Proceedings of SPIE **5468**, pp. 262-268 (2004)
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- [2] [M. Bache](#), J. Lægsgaard, O. Bang and A. Bjarklev
Second-harmonic generation with zero group-velocity mismatch in nonlinear photonic crystal fibers
in *Proceedings for 2006 8th International Conference on Transparent Optical Networks*, IEEE Catalog Number 06EX1326, M. Marciniak ed., Vol. 2, pp. 49-54, Nottingham, United Kingdom (2006)
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- [3] [M. Bache](#), J. Lægsgaard, O. Bang, J. Moses and F.W. Wise
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in *Photonic Crystal Fibers*, K. Kalli ed.
Proceedings of SPIE **6588**, 65880P (2007)
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- [4] [M. Bache](#), O. Bang, J. Moses, F.W. Wise and W. Krolikowski
Accurate nonlocal theory for cascaded quadratic soliton compression
in *Photonics: Design, Technology, and Packaging III*, W. Krolikowski et al. eds.
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- [5] [M. Bache](#), J. Moses, J. Lægsgaard, O. Bang and F.W. Wise
Soliton Compression to Few-cycle Pulses Using Quadratic Nonlinear Photonic Crystal Fibers: A Design Study
In *CLEO/QELS Technical Digest 2007*, paper CThQ4 (2007)
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- [6] [M. Bache](#), O. Bang, W. Krolikowski, J. Moses and F. W. Wise
Compression limits in cascaded quadratic soliton compressors
IEEE Proceedings for the Joint Opto-Electronics and Communications Conference and Australian Conference on Optical Fibre Technology (2008).
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- [7] [M. Bache](#), B.B. Zhou, A. Chong and F. W. Wise
Generating energetic few-cycle pulses at 800 nm using soliton compression with type 0 cascaded quadratic interaction in lithium niobate
in *Conference on Lasers and Electro-Optics*, OSA Technical Digest (CD) (Optical Society of America, 2010), paper CWA5.
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- [8] H.R. Guo, X.L. Zeng, B.B. Zhou and [M. Bache](#)
Critical Boundary of Cascaded Quadratic Soliton Compression in PPLN
paper JW4A.45, Conference in Lasers and Electro-Optics, San Jose, USA (2012)
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- [9] K. Iwaszczuk, B.B. Zhou, [M. Bache](#) and P. U. Jepsen
Spectral Compression of Intense Femtosecond Pulses by Self Phase Modulation in Silica Glass
paper JW4A.61, Conference in Lasers and Electro-Optics, San Jose, USA (2012)
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- [10] X.L. Zeng, H.R. Guo, B.B. Zhou and [M. Bache](#)
Improving Soliton Compression Quality with Cascaded Nonlinearities by Engineered Multi-section Quasi-phase-matching Design
paper JW4A.60, Conference in Lasers and Electro-Optics, San Jose, USA (2012)
[online](#), [pdf](#)
- [11] B.B. Zhou, A. Chong, F.W. Wise, J. Moses, and [M. Bache](#)
High-energy Few-cycle Pulses Directly Generated from Strongly Phase-mismatched Lithium Niobate Crystal
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- [12] X. Zeng, S. Wang, H. Guo and [M. Bache](#)
Broadband Cherenkov Radiation by Using Group velocity-matching in Index-guiding Photonic Crystal Fiber
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Completely background free broadband coherent anti-Stokes Raman scattering spectroscopy

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- [15] H. Guo, X. Zeng, B. Zhou and M. Bache
Near- and Mid-IR Few-cycle Self-defocusing Soliton Compression in PPLN Waveguide
in *2013 Conference on Lasers and Electro-Optics - International Quantum Electronics Conference*, (Optical Society of America, 2013), paper CD_11_3
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- [16] F. Eilenberger, M. Bache, S. Minardi, and T. Pertsch
Pressure tunable cascaded third order nonlinearity and temporal pulse switching
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- [18] S. Mohan, G. Seifert, H. Graener and M. Bache
Directional Selective Optical limiting of femtosecond pulses in simple transparent two-layer systems
in *2013 Conference on Lasers and Electro-Optics - International Quantum Electronics Conference*, (Optical Society of America, 2013), paper CD_P_39
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Ultrafast and octave-spanning optical nonlinearities from strongly phase-mismatched cascaded interaction
in *2013 Conference on Lasers and Electro-Optics - International Quantum Electronics Conference*, (Optical Society of America, 2013), paper CFIE_P_11
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- [20] M. Bache, X. Liu and B. Zhou
Few-cycle nonlinear mid-IR pulse generated with cascaded quadratic nonlinearities
in *2013 Conference on Lasers and Electro-Optics - International Quantum Electronics Conference*, (Optical Society of America, 2013), paper CFIE_P_13
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Cross-correlation frequency-resolved optical gating by molecular vibration for ultrashort pulse
in *2013 Conference on Lasers and Electro-Optics - International Quantum Electronics Conference*, (Optical Society of America, 2013), paper CFIE_P_35
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- [22] M. Bache, F. Eilenberger and S. Minardi
Higher-order Kerr effect and harmonic cascading in gases
in *2013 Conference on Lasers and Electro-Optics - International Quantum Electronics Conference*, (Optical Society of America, 2013), paper CFIE_P_41
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- [23] M. Bache and B.B. Zhou
High-energy pulse compressor using self-defocusing spectral broadening in anomalously dispersive media,
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- [24] B.B. Zhou, H.R. Guo and M. Bache
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- [62] M. Bache
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- [63] Md. Selim Habib, Christos Markos, Ole Bang, and Morten Bache
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Other contributions: workshops, meetings (12)

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Polarization instabilities in VCSELS
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Ghost imaging using homodyne detection
QUANTIM meeting, Varenna, Italy (2003)
- [7] A. Gatti, E. Brambilla, M. Bache and L. Lugiato
Ghost imaging, quantum and classical aspects
meeting in “Theoretical study of novel devices based on quantum entanglement”, Pavia, Italy (2004)
- [8] E. Brambilla, M. Bache, A. Gatti and L. Lugiato
Improving Correlated Imaging performances
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- [9] A. Gatti, E. Brambilla, M. Bache and L. Lugiato
Ghost imaging, quantum and classical aspects
QUANTIM meeting, Glasgow, Scotland (2004)
- [10] O. Jedrkiewicz and P. Di Trapani, A. Gatti, E. Brambilla, M. Bache and L. Lugiato
Detection of sub-shot noise spatial correlation in high-gain parametric down-conversion
QUANTIM meeting, Glasgow, Scotland (2004)
- [11] M. Bache, A. Gatti, E. Brambilla and L. Lugiato
Improving the performances of ghost imaging
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- [12] M. Bache, F. Prati, G. Tissoni, I. Protsenko and L.A. Lugiato
Cavity solitons in VCSELS with saturable absorber: the Cavity Soliton laser
VISTA meeting, Florence, Italy (2004)

Invited lectures (10)

- [1] M. Bache
Modification of pattern formation due to competing parametric processes
Technical University of Denmark, Lyngby, Denmark (1999).
- [2] M. Bache
Spatio-temporal structures from competing quadratic nonlinearities in nonlinear optics
Universitat de les Illes Balears, Palma de Mallorca, Spain (2000).
- [3] M. Bache
Nonlinearities and photonic crystal fibers: Efficient frequency conversion
University of Strathclyde, Glasgow, Scotland (2006).
- [4] M. Bache
Energetic few-cycle compressed femtosecond pulses with cascaded quadratic nonlinearities
Friederich Schiller University, Jena, Germany (2010).
- [5] M. Bache
Ultrafast nonlinear optics with cascaded nonlinearities
Shanghai University, Shanghai, China (2014)
- [6] M. Bache
Ultrafast nonlinear optics with cascaded nonlinearities
Insubria University, Como, Italy (2014)
- [7] M. Bache
Supercontinuum generation in quadratic nonlinear crystals
2015 Symposium on Nonlinear Effects, Tampere, Finland (2015)

- [8] M. Bache
The physics of supercontinuum generation, from basic science to practical applications
Max Planck Master Class, DESY, Hamburg (2015)
- [9] M. Bache
Ultrafast nonlinear optics in quadratic nonlinear crystals: pulse compression, temporal solitons and supercontinuum generation with energetic laser pulses
Lund University (2015)
- [10] M. Bache
Ultrashort and broadband mid-IR pulses: challenges and solutions
University of Tokyo (2016)

Other publications (3)

- [1] M. Bache, *How is the universe put together?*, Scenario Magazine [vol. 2](#), 31 (2010)
- [2] M. H. Frosz and M. Bache, *Phase-matching with a twist: Second-harmonic generation in birefringent periodically poled fibers*, OSA Spotlight on Optics, October 2010
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- [3] M. Bache, *Multimode ultrafast nonlinear optics in optical waveguides: numerical modeling and experiments in kagomé photonic-crystal fiber*, OSA Spotlight on Optics, February 2014
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Conferences and workshops attended (28)

- [1] CLEO-Europe/IQEC, Munich, Germany (2017)
- [2] 41st International Conference on Infrared, Millimeter, and Terahertz waves, Copenhagen, Denmark (2016)
- [3] CLEO-Europe/IQEC, Munich, Germany (2015)
- [4] Research in Optical Sciences topical meeting, High-Intensity Lasers (HILAS), Berlin, Germany (2014)
- [5] CLEO-Europe/IQEC, Munich, Germany (2013)
- [6] Ultrafast Phenomena, Lausanne, Switzerland (2012)
- [7] Conference in Lasers and Electro-Optics (CLEO), San Diego, USA (2012)
- [8] Research in Optical Sciences topical meeting, High-Intensity Lasers (HILAS), Berlin, Germany (2012)
- [9] Nonlinear Optics: Materials, Fundamentals and Applications, Kaua'i, USA (2011)
- [10] CLEO-Europe/IQEC, Munich, Germany (2011).
- [11] 2nd International Workshop on Laser-Matter Interaction 2010, Porquerolles, France (2010).
- [12] CLEO-Europe/IQEC, Munich, Germany (2009).
- [13] European Optical Society Annual Meeting 2008, Paris, France (2008)
- [14] First Mediterranean Photonics Conference, Ischia, Italy (2008).
- [15] Nonlinear Photonics (OSA Topical Meeting), Quebec, Canada (2007).
- [16] CLEO-Europe/IQEC, Munich, Germany (2007).
- [17] SPIE Europe International Congress on Optics and Optoelectronics, Prague, Czech Republic (2007).
- [18] 32nd European Conference on Optical Communication (ECOC 2006), Cannes, France (2006)
- [19] 8th International Conference on Transparent Optical Networks 2006 (ICTON 06), Nottingham, United Kingdom (2006).
- [20] CLEO/EQEC, Long Beach (CA), USA (2006).
- [21] CLEO-Europe/EQEC, Munich, Germany (2005).
- [22] 1st International Workshop "Imaging at the Limits", Cargese, France (2004).
- [23] CLEO-Europe/EQEC, Munich, Germany (2003).
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- [26] Quantum Electronics and Laser Science Conference, San Francisco (CA), USA (2000).
- [27] COCOS, Münster, Germany (1999).
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- [29] Nonlinear Science Festival I, Copenhagen, Denmark (1998).