

List of publications

[See www.mortensen-lab.org for an updated publication list]

132 peer-review journal papers, 3 preprints, and a total of 65 other scientific contributions, including 5 patent applications.

Publications in international peer-review journals (indexed in ISI Web of Science):

- [1] **N.A. Mortensen**, K. Flensberg, and A.-P. Jauho, “Angle dependence of Andreev scattering at semiconductor-superconductor interfaces”, [*Phys. Rev. B* **59**, 10176 \(1999\).](#)
- [2] **N.A. Mortensen**, A.-P. Jauho, K. Flensberg, and H. Schomerus, “Conductance enhancement in quantum point contact-semiconductor-superconductor devices”, [*Phys. Rev. B* **60**, 13762 \(1999\).](#)
- [3] **N.A. Mortensen**, K. Johnsen, A.-P. Jauho, and K. Flensberg, “Contact resistance of quantum tubes”, [*Superlattice Microst.* **26**, 351 \(1999\).](#)
- [4] **N.A. Mortensen**, A.-P. Jauho, and K. Flensberg, “Dephasing in semiconductor-superconductor structures by coupling to a voltage probe”, [*Superlattice Microstr.* **28**, 67 \(2000\).](#)
- [5] J. Erland, V. Mizeikis, W. Langbein, J.R. Jensen, **N.A. Mortensen**, and J.M. Hvam, “Seeding of Polariton Stimulation in a Homogeneously Broadened Microcavity”, [*Phys. Stat. Sol. \(b\)* **221**, 115 \(2000\).](#)
- [6] **N.A. Mortensen** and G. Bastian, “Side-gate modulation of critical current in mesoscopic Josephson junction”, [*Superlattice Microstr.* **28**, 231 \(2000\).](#)
- [7] **N.A. Mortensen**, H.M. Rønnow, H. Bruus, and P. Hedegård, “The magnetic neutron scattering resonance of high-Tc superconductors in external magnetic fields: an SO(5) study”, [*Phys. Rev. B* **62**, 8703 \(2000\).](#)
- [8] **N.A. Mortensen**, K. Flensberg, and A.-P. Jauho, “Coulomb Drag in Coherent Mesoscopic Systems”, [*Phys. Rev. Lett.* **86**, 1841 \(2001\).](#)
- [9] M. Titov, **N.A. Mortensen**, H. Schomerus, and C.W.J. Beenakker, “Andreev levels in a single-channel conductor”, [*Phys. Rev. B* **64**, 134206 \(2001\).](#)
- [10] K. Flensberg, T.S. Jensen, and **N.A. Mortensen**, “Diffusion equation and spin drag in spin-polarized transport”, [*Phys. Rev. B* **64**, 245308 \(2001\).](#)
- [11] **N.A. Mortensen**, K. Flensberg, and A.-P. Jauho, “Mesoscopic fluctuations of Coulomb drag between quasi-ballistic one-dimensional wires”, [*Phys. Rev. B* **65**, 85317 \(2002\).](#)
- [12] **N.A. Mortensen**, “Effective area of photonic crystal fibers”, [*Opt. Express* **10**, 341 \(2002\).](#)
- [13] **N.A. Mortensen** and J.R. Folkenberg, “Near-field to far-field transition of photonic crystal fibers: symmetries and interference phenomena”, [*Opt. Express* **10**, 475 \(2002\).](#)
- [14] **N.A. Mortensen**, J.R. Folkenberg, P.M.W. Skovgaard, and J. Broeng, “Numerical Aperture of Single-Mode Photonic Crystal Fibers”, [*IEEE Photonic Technol. Lett.* **14**, 1094 \(2002\).](#)
- [15] **N.A. Mortensen** and J.C. Egues, “Universal spin-polarization fluctuations in 1D wires with magnetic impurities”, [*Phys. Rev. B* **66**, 153306 \(2002\).](#)
- [16] **N.A. Mortensen**, K. Flensberg, and A.-P. Jauho, “Coulomb drag in the mesoscopic regime”, [*Phys. Scripta* **T101**, 177 \(2002\).](#)
- [17] **N.A. Mortensen**, M.D. Nielsen, J.R. Folkenberg, A. Petersson, and H.R. Simonsen, “Improved large-mode area endlessly single-mode photonic crystal fibers”, [*Opt. Lett.* **28**, 393 \(2003\).](#)
- [18] **N.A. Mortensen** and J.R. Folkenberg, “Low-loss criterion and effective area considerations for photonic crystal fibers”, [*J. Opt. A: Pure Appl. Opt.* **5**, 163 \(2003\).](#)

- [19] J. Riishede, **N.A. Mortensen**, and J. Lægsgaard, “A poor man's approach to modelling of microstructured optical fibers”, *J. Opt. A: Pure Appl. Opt.* **5**, 534 (2003).
- [20] **N.A. Mortensen**, M. Stach, J. Broeng, A. Petersson, H.R. Simonsen, and R. Michalzik, “Multi-mode photonic crystal fibers for VCSEL based data transmission”, *Opt. Express* **11**, 1953 (2003).
- [21] M.D. Nielsen, **N.A. Mortensen**, and J.R. Folkenberg, “Reduced micro-deformation attenuation in large-mode area photonic crystal fibers for visible applications”, *Opt. Lett.* **28**, 1645 (2003).
- [22] **N.A. Mortensen**, J.R. Folkenberg, M.D. Nielsen, and K.P. Hansen, “Modal cut-off and the V-parameter in photonic crystal fibers”, *Opt. Lett.* **28**, 1879 (2003).
- [23] J.R. Folkenberg, **N.A. Mortensen**, K.P. Hansen, T.P. Hansen, H.R. Simonsen, and C. Jacobsen, “Experimental investigation of cut-off phenomena in non-linear photonic crystal fibers”, *Opt. Lett.* **28**, 1882 (2003).
- [24] J. Lægsgaard, **N.A. Mortensen**, and A. Bjarklev, “Mode area and field energy distribution in honeycomb photonic bandgap fibres”, *J. Opt. Soc. Am. B.* **20**, 2037 (2003).
- [25] J. Lægsgaard, **N.A. Mortensen**, J. Riishede, and A. Bjarklev, “Material effects in airguiding photonic band-gap fibers”, *J. Opt. Soc. Am. B.* **20**, 2046 (2003).
- [26] M.D. Nielsen and **N.A. Mortensen**, “Photonic crystal fiber design based on the V-parameter”, *Opt. Express* **11**, 2762 (2003).
- [27] M.D. Nielsen, **N.A. Mortensen**, J.R. Folkenberg, and A. Bjarklev, “Mode Field Radius of Photonic Crystal Fibers Expressed by the V-parameter”, *Opt. Lett.* **28**, 2309 (2003).
- [28] M.D. Nielsen, J.R. Folkenberg, and **N.A. Mortensen**, “Single-mode photonic crystal fiber with an effective area of $600 \mu\text{m}^2$ and low bending loss”, *Electron. Lett.* **39**, 1802 (2003).
- [29] **N.A. Mortensen**, M.D. Nielsen, J.R. Folkenberg, K.P. Hansen, and J. Lægsgaard, “Small-core photonic crystal fibers with weakly disordered air-hole claddings”, *J. Opt. A: Pure Appl. Opt.* **6**, 221 (2004).
- [30] **N.A. Mortensen** and M.D. Nielsen, “Modeling of realistic cladding structures for air-core photonic band-gap fibers”, *Opt. Lett.* **29**, 349 (2004).
- [31] K. Saitoh, **N.A. Mortensen**, and M. Koshiba, “Air-core photonic band-gap fibers: the impact of surface modes”, *Opt. Express* **12**, 394 (2004).
- [32] M.D. Nielsen, J.R. Folkenberg, **N.A. Mortensen**, and A. Bjarklev, “Bandwidth comparison of photonic crystal fibers and conventional single-mode fibers”, *Opt. Express* **12**, 430 (2004).
- [33] **N.A. Mortensen**, M.D. Nielsen, J.R. Folkenberg, C. Jakobsen, and H.R. Simonsen, “Photonic crystal fiber with a hybrid honeycomb cladding”, *Opt. Express* **12**, 468 (2004).
- [34] J.R. Folkenberg, M.D. Nielsen, **N.A. Mortensen**, C. Jakobsen, and H.R. Simonsen, “Polarization maintaining large mode area photonic crystal fiber”, *Opt. Express* **12**, 956 (2004).
- [35] M.D. Nielsen, C. Jakobsen, N.A. Mortensen, J.R. Folkenberg, and H.R. Simonsen, “Low loss photonic crystal fibers for transmission systems and their dispersion properties”, *Opt. Express* **12**, 1372 (2004).
- [36] M.D. Nielsen, **N.A. Mortensen**, M. Albertsen, J.R. Folkenberg, A. Bjarklev, and D. Bonacinni, “Predicting macrobending loss for large-mode area photonic crystal fibers”, *Opt. Express* **12**, 1775 (2004).
- [37] G. Vienne, Y. Xu, C. Jakobsen, H.J. Deyerl, J.B.D. Jensen, T. Sørensen, T.P. Hansen, Y. Huang, M. Terrel, R.K. Lee, **N.A. Mortensen**, J. Broeng, H. Simonsen, A. Bjarklev, and A. Yariv, “Ultra-large bandwidth hollow-core guiding in all-silica Bragg fibres with nano-supports”, *Opt. Express* **12**, 3500 (2004).
- [38] M. Gersborg-Hansen, S. Balslev, **N.A. Mortensen**, and A. Kristensen, “A Coupled Cavity Micro Fluidic Dye Ring Laser”, *Microelectronic Engineering* **78-79**, 185 (2005).

- [39] **N.A. Mortensen**, L.H. Olesen, L. Belmon, and H. Bruus, “*Electro-hydrodynamics of binary electrolytes driven by modulated surface potentials*”, [Phys. Rev. E **71**, 056306 \(2005\)](#).
- [40] **N.A. Mortensen**, F. Okkels, and H. Bruus, “*Reexamination of Hagen-Poiseuille flow: shape-dependence of the hydraulic resistance in microchannels*”, [Phys. Rev. E **71**, 057301 \(2005\)](#).
- [41] Dabirian, M. Akbari, and **N.A. Mortensen**, “*Radiated fields of photonic crystal fibers*”, [Opt. Express **13**, 3999 \(2005\)](#).
- [42] **N.A. Mortensen**, “*Semi-analytical approach to short-wavelength dispersion and modal properties of photonic crystal fibers*”, [Opt. Lett. **30**, 1455 \(2005\)](#).
- [43] Dabirian, M. Akbari, and **N.A. Mortensen**, “*Propagation of Light in Photonic Crystal Fiber Devices*”, [J. Opt. A: Pure Appl. Opt. **7**, 663 \(2005\)](#).
- [44] Flindt, **N.A. Mortensen**, and A.-P. Jauho, “*Quantum computing via defect states in two-dimensional anti-dot lattices*”, [Nano Lett. **5**, 2515 \(2005\)](#).
- [45] K. Saitoh, Y. Tsuchida, M. Koshiha, and **N.A. Mortensen**, “*Endlessly single-mode holey fibers: the influence of core design*”, [Opt. Express **13**, 10833 \(2005\)](#).
- [46] M. Gersborg-Hansen, S. Balslev, and **N.A. Mortensen**, “*Finite-element simulation of cavity modes in a micro-fluidic dye ring laser*”, [J. Opt. A: Pure Appl. Opt. **8**, 17 \(2006\)](#).
- [47] **N.A. Mortensen**, F. Okkels, and H. Bruus, “*Universality in edge-source diffusion dynamics*”, [Phys. Rev. E **73**, 012101 \(2006\)](#).
- [48] **N.A. Mortensen**, L.H. Olesen, and H. Bruus, “*Transport coefficients for electrolytes in arbitrarily shaped nano and micro-fluidic channels*”, [New J. Phys. **8**, 37 \(2006\)](#).
- [49] L. Ejlsing, K. Smistrup, C.M. Pedersen, **N.A. Mortensen**, and H. Bruus, “*Frequency response in surface-potential driven electro-hydrodynamics*”, [Phys. Rev. E **73**, 037302 \(2006\)](#).
- [50] L. Rindorf and **N.A. Mortensen**, “*Non-perturbative approach to high-index-contrast variations in electromagnetic systems*”, [Opt. Commun. **261**, 181 \(2006\)](#).
- [51] J. Corbett, A. Dabirian, T. Butterley, **N.A. Mortensen**, and J.R. Allington-Smith, “*The coupling performance of photonic crystal fibres in fibre stellar interferometry*”, [Mon. Not. R. Astron. Soc. **368**, 203 \(2006\)](#).
- [52] H. Azzouz, L. Alkhafadiji, S. Balslev, J. Johansson, **N.A. Mortensen**, S. Nilsson, and A. Kristensen, “*Levitated droplet dye laser*”, [Opt. Express **14**, 4374 \(2006\)](#).
- [53] **N.A. Mortensen** and H. Bruus, “*Universal dynamics in the onset of a Hagen-Poiseuille flow*”, [Phys. Rev. E **74**, 017301 \(2006\)](#).
- [54] L. Rindorf and **N.A. Mortensen**, “*Calculation of optical-waveguide grating characteristics using Green's functions and the Dyson's equation*”, [Phys. Rev. E **74**, 036616 \(2006\)](#).
- [55] K. Saitoh, M. Koshiha, and **N.A. Mortensen**, “*Nonlinear photonic crystal fibres: pushing the zero-dispersion toward the visible*”, [New J. Phys. **8**, 207 \(2006\)](#).
- [56] **N.A. Mortensen**, “*Photonic crystal fibres: mapping Maxwell's equations onto a Schrödinger equation eigenvalue problem*”, [J. Eur. Opt. Soc., Rapid Publ. **1**, 06009 \(2006\)](#).
- [57] **N.A. Mortensen**, S. Xiao, and D. Felbacq, “*Mesoscopic magnetism in dielectric photonic crystal meta materials: topology and inhomogeneous broadening*”, [J. Eur. Opt. Soc., Rapid Publ. **1**, 06019 \(2006\)](#).
- [58] S. Xiao and **N.A. Mortensen**, “*Highly dispersive photonic band-gap-edge optofluidic biosensors*”, [J. Eur. Opt. Soc., Rapid Publ. **1**, 06026 \(2006\)](#).
- [59] **N.A. Mortensen**, S. Ejlsing, and S. Xiao, “*Liquid-infiltrated photonic crystals: Ohmic dissipation and broadening of modes*”, [J. Eur. Opt. Soc., Rapid Publ. **1**, 06032 \(2006\)](#).

- [60] S. Xiao, **N.A. Mortensen**, and M. Qiu, "Enhanced transmission through arrays of subwavelength holes in gold films coated by a finite dielectric layer", [*J. Eur. Opt. Soc., Rapid Publ.* **2**, 07009 \(2007\)](#).
- [61] M. Gersborg-Hansen, S. Balslev, **N.A. Mortensen**, and A. Kristensen, "Bleaching and diffusion dynamics in optofluidic dye lasers", [*Appl. Phys. Lett.* **90**, 143501 \(2007\)](#).
- [62] **N.A. Mortensen** and S. Xiao, "Slow-light enhancement of Beer-Lambert-Bouguer absorption", [*Appl. Phys. Lett.* **90**, 141108 \(2007\)](#).
- [63] **N.A. Mortensen**, L.H. Olesen, F. Okkels, and H. Bruus, "Mass and charge transport in micro and nano-fluidic channels", [*Nanoscale Microscale Thermophys. Eng.* **11**, 57 \(2007\)](#).
- [64] **N.A. Mortensen**, "Air-clad fibers: pump absorption assisted by chaotic wave dynamics?", [*Opt. Express* **15**, 8988 \(2007\)](#).
- [65] S. Xiao and **N.A. Mortensen**, "Proposal of highly sensitive optofluidic biosensors based on dispersive photonic crystal waveguides", [*J. Opt. A: Pure Appl. Opt.* **9**, S463 \(2007\)](#).
- [66] M.H. Sørensen, **N.A. Mortensen**, and M. Brandbyge, "Screening model for nanowire surface-charge sensors in liquid", [*Appl. Phys. Lett.* **91**, 102105 \(2007\)](#).
- [67] J. Pedersen, C. Flindt, **N.A. Mortensen**, and A.-P. Jauho, "Failure of standard approximations of the exchange coupling in nanostructures", [*Phys. Rev. B* **76**, 125323 \(2007\)](#).
- [68] J. Pedersen and **N.A. Mortensen**, "Enhanced circular dichroism via slow-light in dispersive structured media", [*Appl. Phys. Lett.* **91**, 213501 \(2007\)](#).
- [69] **N.A. Mortensen**, "Comment on 'Pinched Flow Fractionation: Continuous Size Separation of Particles Utilizing a Laminar Flow Profile in a Pinched Microchannel'", [*Anal. Chem.* **79**, 9240 \(2007\)](#).
- [70] M.E.V. Pedersen, L.S. Rishøj, H. Steffensen, S. Xiao, and **N.A. Mortensen**, "Slow-light enhanced optical detection in liquid-infiltrated photonic crystals", [*Opt. Quant. Electron.* **39**, 903 \(2007\)](#).
- [71] **N.A. Mortensen**, S. Xiao, and J. Pedersen, "Liquid-infiltrated photonic crystals - enhanced light-matter interactions for lab-on-a-chip applications", [*Microfluid. Nanofluid.* **4**, 117 \(2008\)](#).
- [72] J. Pedersen, C. Flindt, **N.A. Mortensen**, and A.-P. Jauho, "Spin qubits in an antidot lattice", [*Phys. Rev. B* **77**, 045325 \(2008\)](#).
- [73] J. Pedersen, S. Xiao, and **N.A. Mortensen**, "Slow-light enhanced absorption for bio-chemical sensing applications: potential of low-contrast lossy materials", [*J. Eur. Opt. Soc., Rapid Publ.* **3**, 08007 \(2008\)](#).
- [74] **N.A. Mortensen** and A. Kristensen, "Electro-viscous effects in capillary filling of nanochannels", [*App. Phys. Lett.* **92**, 063110 \(2008\)](#).
- [75] J. Pedersen, C. Flindt, **N.A. Mortensen**, and A.-P. Jauho, "Designed defects in 2D antidot lattices for quantum information processing", [*Physica E* **40**, 1075 \(2008\)](#).
- [76] T.G. Pedersen, C. Flindt, J. Pedersen, **N.A. Mortensen**, A.-P. Jauho, and K. Pedersen, "Graphene Antidot Lattices - Designed Defects and Spin Qubits", [*Phys. Rev. Lett.* **100**, 136804 \(2008\)](#); *ibid.* **100**, 189905 (2008).
- [77] **N.A. Mortensen**, "Comment on 'Design of a broadband highly dispersive pure silica photonic crystal fiber' by Subbaraman et al.", [*Appl. Optics* **47**, 3328 \(2008\)](#).
- [78] T.G. Pedersen, C. Flindt, J. Pedersen, A.-P. Jauho, **N.A. Mortensen**, and K. Pedersen "Optical properties of graphene antidot lattices", [*Phys. Rev. B* **77**, 245431 \(2008\)](#).
- [79] S. Xiao and **N.A. Mortensen**, and A.-P. Jauho, "Nanostructure design for surface-enhanced Raman spectroscopy – prospects and limits", [*J. Eur. Opt. Soc., Rapid Publ.* **3**, 08022 \(2008\)](#).

- [80] P.S. Nunes, **N.A. Mortensen**, J. P. Kutter, and K.B. Mogensen, "Photonic crystal sensor integrated in microfluidic system", [Opt. Lett. **33**, 1623 \(2008\)](#).
- [81] S. Xiao and **N.A. Mortensen**, "Resonant-tunnelling-assisted crossing for subwavelength plasmonic slot waveguides", [Opt. Express **16**, 14997 \(2008\)](#).
- [82] K.H. Jensen, M.N. Alam, B. Scherer, A. Lambrecht, and **N.A. Mortensen**, "Slow-light enhanced light-matter interactions with applications to gas sensing", [Opt. Commun. **281**, 5335 \(2008\)](#).
- [83] J. Pedersen, S. Xiao, and **N.A. Mortensen**, "Limits on slow-light in photonic crystals", [Phys. Rev. B **78**, 153101 \(2008\)](#).
- [84] M.B. Christiansen, A. Kristensen, S. Xiao, and **N.A. Mortensen**, "Photonic integration in k -space: Enhancing the performance of photonic crystal dye lasers", [Appl. Phys. Lett. **93**, 231101 \(2008\)](#).
- [85] **N.A. Mortensen**, O. Sigmund, and O. Breinbjerg, "Prospects for low-contrast all-dielectric cloaking", [J. Eur. Opt. Soc., Rapid Publ. **4**, 09008 \(2009\)](#).
- [86] M.B. Christiansen, J.M. Lopacinska, M.H. Jakobsen, **N.A. Mortensen**, M. Dufva, and A. Kristensen, "Polymer photonic crystal dye lasers as optofluidic cell sensors", [Opt. Express **17**, 2722 \(2009\)](#).
- [87] C. Karnutsch, C.L.C. Smith, A. Graham, R. McPhedran, B.J. Eggleton, L. O'Faolain, T.F. Kraus, S. Xiao, and **N.A. Mortensen**, "Temperature stabilization of optofluidic photonic crystal cavities", [Appl. Phys. Lett. **94**, 231114 \(2009\)](#); *ibid.* **96**, 079901 (2010).
- [88] M. Yan and **N.A. Mortensen**, "Hollow-core infrared fibre incorporating metal-wire metamaterial", [Opt. Express **17**, 14851 \(2009\)](#).
- [89] J.A. Fürst, J.G. Pedersen, C. Flindt, **N.A. Mortensen**, M. Brandbyge, T.G. Pedersen, and A.-P. Jauho, "Electronic properties of graphene antidote lattices", [New J. Phys. **11**, 095020 \(2009\)](#).
- [90] J.G. Pedersen and **N.A. Mortensen**, "A spectral route to determining chirality", [Appl. Phys. Lett. **95**, 151104 \(2009\)](#).
- [91] P. Skafte-Pedersen, P.S. Nunes, S. Xiao, and **N.A. Mortensen**, "Material limitations on the Detection Limit in Refractometry", [Sensors **9**, 8382 \(2009\)](#).
- [92] C. Jeppesen, **N.A. Mortensen**, and A. Kristensen, "Capacitance tuning of nanoscale split-ring resonators", [Appl. Phys. Lett. **15**, 193108 \(2009\)](#).
- [93] C. Jeppesen, R.B. Nielsen, A. Boltasseva, S. Xiao, **N.A. Mortensen**, and A. Kristensen, "Thin film Ag superlens toward lab-on-a-chip integration", [Opt. Express **17**, 22543 \(2009\)](#).
- [94] S. Raza, J. Grgic, J.G. Pedersen, S. Xiao, and **N.A. Mortensen**, "Coupled-resonator optical waveguides: Q -factor influence on slow-light propagation and the maximal group delay", [J. Europ. Opt. Soc. Rap. Public. **5**, 10009 \(2010\)](#).
- [95] **N.A. Mortensen**, M. Yan, O. Sigmund, and O. Breinbjerg, "On the unambiguous determination of effective optical properties of periodic metamaterials: a one-dimensional case study", [J. Europ. Opt. Soc. Rap. Public. **5**, 10010 \(2010\)](#).
- [96] J. Zhang, Y. Luo, and **N.A. Mortensen**, "Transmission of electromagnetic waves through sub-wavelength channels", [Opt. Express **18**, 3864 \(2010\)](#).
- [97] S. Xiao, L. Peng, and **N.A. Mortensen**, "Enhanced transmission of transverse electric waves through periodic arrays of structured subwavelength apertures", [Opt. Express **18**, 6040 \(2010\)](#).
- [98] P.S. Nunes, **N.A. Mortensen**, J.P. Kutter, and K.B. Mogensen, "Refractive index sensor based on a 1D photonic crystal in a microfluidic channel", [Sensors **10**, 2348 \(2010\)](#).
- [99] J. Zhang, Y. Luo, and **N.A. Mortensen**, "Minimizing the scattering of a non-magnetic cloak", [Appl. Phys. Lett. **96**, 113511 \(2010\)](#).

- [100] J. Grgic, J.G. Pedersen, S. Xiao, and **N.A. Mortensen**, “Group-index limitations in slow-light photonic crystals”, [Photonics Nanostruct. 8, 56 \(2010\)](#).
- [101] J.G. Pedersen, C. Flindt, A.-P. Jauho, and **N.A. Mortensen**, “Influence of confining potentials on the exchange coupling in double quantum dots”, [Phys. Rev. B 81, 193406 \(2010\)](#).
- [102] L. Peng, L. Ran, and **N.A. Mortensen**, “Achieving Anisotropy in Metamaterials made of Dielectric Cylindrical Rods”, [Appl. Phys. Lett. 96, 241108 \(2010\)](#).
- [103] J. Grgic, J. Mørk, A.-P. Jauho, and **N.A. Mortensen**, “Slow-light enhanced absorption in a hollow-core fiber”, [Opt. Express 18, 14270 \(2010\)](#).
- [104] L. Peng, O. Breinbjerg, and **N.A. Mortensen**, “Wireless energy transfer through non-resonant magnetic coupling”, [J. Electromagn. Waves Appl. 24, 1587 \(2010\)](#).
- [105] N. Aage, **N.A. Mortensen**, and O. Sigmund, “Topology optimization of metallic devices for microwave applications”, [Int. J. Num. Meth. Eng. 83, 228 \(2010\)](#).
- [106] J. Zhang, S. Xiao, C. Jeppesen, A. Kristensen, and **N.A. Mortensen**, “Electromagnetically induced transparency in metamaterials at near-infrared frequency”, [Opt. Express 18, 17187 \(2010\)](#).
- [107] S. Xiao, J. Zhang, L. Peng, C. Jeppesen, R. Malureanu, A. Kristensen, and **N.A. Mortensen**, “Nearly-zero transmission through periodically modulated ultrathin metal films”, [Appl. Phys. Lett. 98, 071116 \(2010\)](#).
- [108] J.R. Ott, **N.A. Mortensen**, and P. Lodahl, “Quantum interference and entanglement induced by multiple scattering”, [Phys. Rev. Lett. 105, 090501 \(2010\)](#).
- [109] J. Zhang, Y. Luo, and **N.A. Mortensen**, “Hiding levitating objects above a ground plane”, [Appl. Phys. Lett. 97, 133501 \(2010\)](#).
- [110] C. Jeppesen, S. Xiao, **N.A. Mortensen**, and A. Kristensen, “Metamaterial localized resonance sensors: prospects and limitations”, [Opt. Express 18, 25075 \(2010\)](#).
- [111] C. Jeppesen, **N.A. Mortensen**, and A. Kristensen, “The effect of Ti and ITO adhesion layers on gold splitting resonators”, [Appl. Phys. Lett. 97, 263103 \(2010\)](#).
- [112] C. Jeppesen, S. Xiao, **N.A. Mortensen**, and A. Kristensen, “Extended verification of scaling behavior in split-ring resonators”, [Opt. Commun. 284, 799 \(2011\)](#).
- [113] S. Xiao and **N.A. Mortensen**, “Surface-plasmon-polariton induced suppressed transmission through ultrathin metal disk arrays”, [Opt. Lett. 36, 37 \(2011\)](#).
- [114] L. Peng, J. Wang, L. Ran, O. Breinbjerg, and **N.A. Mortensen**, “Performance analysis and experimental verification of mid-range wireless energy transfer through non-resonant magnetic coupling”, [J. Electromagn. Waves Appl. 25, 845 \(2011\)](#).
- [115] L. Peng, L. Ran, and **N.A. Mortensen**, “The scattering of a cylindrical invisibility cloak: reduced parameters and optimization”, [J. Phys. D: Appl. Phys. 44, 135101 \(2011\)](#).
- [116] J. Zhang, L. Liu, Y. Luo, S. Zhang, and **N.A. Mortensen**, “Homogeneous optical cloak constructed with uniform layered structures”, [Opt. Express 19, 8625 \(2011\)](#).
- [117] Z.F. Öztürk, S. Xiao, M. Yan, M. Wubs, A.-P. Jauho, and **N.A. Mortensen**, “Field enhancement at metallic interfaces due to quantum confinement” [J. Nanophot. 5, 051602 \(2011\)](#).
- [118] L. Peng and **N.A. Mortensen**, “Equal-potential interpretation of electrically induced resonances in metamaterials”, [New J. Phys. 13, 053012 \(2011\)](#).
- [119] Y. Jin, S. Xiao, **N.A. Mortensen**, and S.L. He, “Arbitrarily thin metamaterial structure for perfect absorption and giant magnification”, [Opt. Express 19, 11114 \(2011\)](#).

- [120] J. Zhang, S. Xiao, M. Wubs, and **N.A. Mortensen**, “Adiabatic mode transformation for surface plasmon polaritons with short tapers”, *ACS Nano* **5**, 4359 (2011).
- [121] E. Amoorghorban, M. Wubs, **N.A. Mortensen**, and F. Kheirandish, “Casimir forces in multilayer magnetodielectrics with both gain and loss”, *Phys. Rev. A* **83**, 013806 (2011).
- [122] O. Nicoletti, M. Wubs, **N.A. Mortensen**, W. Sigle, P.A. van Aken, and P.A. Midgley, “Surface plasmon modes of a single silver nanorod: an electron energy loss study”, *Opt. Express* **19**, 15371 (2011).
- [123] J. Grgic, E. Campaioli, S. Raza, P. Bassi, and **N.A. Mortensen**, “Coupled-resonator optical waveguides: Q-factor and disorder influence”, *Opt. Quant. Electron.* **42**, 511 (2011).
- [124] S. Raza, G. Toscano, A.-P. Jauho, M. Wubs, and **N.A. Mortensen**, “Unusual resonances in nanoplasmonic structures due to nonlocal response”, *Phys. Rev. B* **84**, 121412(R) (2011).
- [125] J. Zhang and **N.A. Mortensen**, “Ultrathin Cylindrical Cloak”, *Prog. Electromagn. Res.* **121**, 381 (2011).
- [126] G. Gilardi, S. Xiao, R. Beccherelli, A. d’Alessandro, and **N.A. Mortensen**, “Geometrical and fluidic tuning of periodically modulated thin metal films”, *Phot. Nanostr.* **10**, 177 (2012).
- [127] G. Toscano, S. Raza, A.-P. Jauho, **N.A. Mortensen**, and M. Wubs, “Modified field enhancement in plasmonic nanowire dimers due to nonlocal response” *Opt. Express* **20**, 4146 (2012).
- [128] M. Wubs and **N.A. Mortensen**, “Mode expansions in the quantum electrodynamics of photonic media with disorder”, *Phot. Nanostr., in press* (2012).
- [129] S. Xiao, E. Stassen, and **N.A. Mortensen**, “Ultrathin silicon solar cells with enhanced photocurrents assisted by plasmonic nanostructures” *J. Nanophot.* **6**, in press (2012).
- [130] J. Clausen, A.B. Christiansen, J. Garnæs, **N.A. Mortensen**, and A. Kristensen, “Color effects from scattering on random surfaces structures in dielectrics”, *Opt. Express* **20**, in press (2012).
- [131] S. Arslanagic, T.V. Hansen, **N.A. Mortensen**, A.H. Gregersen, O. Sigmund, R.W. Ziolkowski, and O. Breinbjerg, “A review of the scattering parameter extraction method with clarification of ambiguity issues in relation to metamaterial homogenization”, *IEEE Antennas Propag. Mag.*, to appear (2012).
- [132] J. Andkjær, **N.A. Mortensen**, and O. Sigmund, “Effect of polarization and background material for low-contrast, all-dielectric optical cloaks”, *Appl. Phys. Lett.*, to appear (2012).
- [133] M.B. Dühring, **N.A. Mortensen**, and O. Sigmund, “Plasmonic versus dielectric enhancement in thin-film solar cells” (submitted, 2011).
- [134] J. Grgic, J.R. Ott, F. Wang, O. Sigmund, A.-P. Jauho, J. Mørk, and **N.A. Mortensen**, “Fundamental limitations to gain enhancement in periodic media and waveguides” (submitted, 2011).
- [135] X. Zhu, S. Xiao, L. Shi, X. Liu, J. Zi, O. Hansen, and **N.A. Mortensen**, “A stretch-tunable plasmonic structure with a polarization-dependent response” (submitted, 2012).

Publications in international proceedings series:

- [1] **N.A. Mortensen**, A. Kühle, and K.A. Mørch, “Interfacial tension in water at solid surfaces” in *Proceedings of Third International Symposium on Cavitation* ed. J.M. Michel and H. Kato, Vol. **1**, pp. 87-91 (Grenoble, France, 1998). [[arXiv:physics/9901014](https://arxiv.org/abs/physics/9901014)]
- [2] V. Mizeikis, J. Erland, J.R. Jensen, **N.A. Mortensen**, and J.M. Hvam, “Stimulation of polariton emission in a homogeneously broadened semiconductor microcavity”, *Springer Proceedings in Physics* **87**, 687 (2001).
- [3] **N.A. Mortensen**, K. Flensberg, and A.-P. Jauho, “Coulomb drag in phase-coherent mesoscopic structures”, *Springer Proceedings in Physics* **87**, 1347 (2001). [[arXiv:cond-mat/0108204](https://arxiv.org/abs/cond-mat/0108204)]

- [4] R. Michalzik, H.R. Roscher, M. Stach, D. Wiedenmann, M. Miller, J. Broeng, A. Petersson, **N.A. Mortensen**, H.R. Simonsen, and E. Kube, "Recent Progress in Short-Wavelength VCSEL-Based Optical Interconnections", [Proc. SPIE 5248, 117 \(2003\)](#).
- [5] J. Lægsgaard, K.P. Hansen, M.D. Nielsen, T.P. Hansen, J. Riishede, K. Hougaard, T. Sørensen, T.T. Larsen, **N.A. Mortensen**, J. Broeng, J.B. Jensen, and A. Bjarklev, "Photonic Crystal Fibers", [Proceedings of SBMO/IEEE MTT-S IMOC 2003 1, 259 \(2003\)](#).
- [6] J. Broeng, G. Vienne, A. Petersson, P.M.W. Skovgaard, J.R. Folkenberg, M.D. Nielsen, C. Jakobsen, H. Simonsen, and **N.A. Mortensen**, "Air-clad photonic crystal fibers for high-power single-mode lasers", [Proc. SPIE 5335, 192 \(2004\)](#).
- [7] H. Azzouz, L. Alkhafadiji, J. Johansson, **N.A. Mortensen**, S. Nilsson, and A. Kristensen, "Levitated droplet dye laser - a new approach for single molecule detection?", [Proc. SPIE 6092, 73 \(2006\)](#).
- [8] M. Gersborg-Hansen, S. Balslev, **N.A. Mortensen**, and A. Kristensen, "Diffusion dynamics in microfluidic dye lasers", [Proc. SPIE 6465, 646506 \(2007\)](#).
- [9] J. Pedersen, C. Flindt, **N.A. Mortensen**, and A.-P. Jauho, "Quantum information processing using designed defects in 2D anti-dot lattices", [AIP Conf. Proc. 893, 821 \(2007\)](#).
- [10] M. Gersborg-Hansen, **N.A. Mortensen**, and A. Kristensen, "Diffusive and convective dye replenishment in optofluidic light sources", [Proc. SPIE 6645, 664551 \(2007\)](#).
- [11] S. Xiao, J. Pedersen, and **N.A. Mortensen**, "Liquid-infiltrated photonic crystals for lab-on-a-chip applications", [Proc. SPIE 6645, 664558 \(2007\)](#).
- [12] S. Xiao and **N.A. Mortensen**, "Low-loss intersection of subwavelength Plasmon slot waveguides", [Proc. SPIE 7135, 71352J \(2008\)](#).
- [13] M. Yan, **N.A. Mortensen**, and M. Qiu, "Engineering modes in optical fibers with metamaterial", [Front. Optoelectron. China 2, 153 \(2009\)](#).
- [14] J.G. Pedersen and **N.A. Mortensen**, "Spectral signatures of chirality", [Proc. SPIE 7392, 739208 \(2009\)](#).
- [15] C. Jeppesen, R.B. Nielsen, S. Xiao, **N.A. Mortensen**, A.E. Boltasseva, and A. Kristensen, "An experimental investigation of Fang's Ag Superlens suitable for integration", [Proc. SPIE 7395, 73951I \(2009\)](#).
- [16] M.B. Christiansen, J.M. Lopacinska, M.H. Jakobsen, **N.A. Mortensen**, M. Dufva, and A. Kristensen, "Polymer photonic crystal dye lasers as label free evanescent sensors", [Proc. SPIE 7402, 74020L \(2009\)](#).
- [17] C. Karnutsch, S. Tomljenovic-Hanic, C. Monat, C. Grillet, P. Domachuk, R. McPhedran, B.J. Eggleton, L. O'Faolain, T.F. Krauss, S. Xiao, and **N.A. Mortensen**, "Waveguide-based optofluidics", [Proc. SPIE 7606, 760615 \(2010\)](#).
- [18] C. Jeppesen, S. Xiao, **N.A. Mortensen**, and A. Kristensen, "Capacitance tuning of nanoscale split-ring resonators", [Proc. SPIE 7711, 77111K \(2010\)](#).
- [19] M.B. Christiansen, C. Smith, T. Buss, S. Xiao, **N.A. Mortensen**, and A. Kristensen, "Nanoimprinted polymer photonic crystal dye lasers", [Proc. SPIE 7716, 77160Q \(2010\)](#).
- [20] G. Toscano, M. Wubs, S. Xiao, M. Yan, Z.F. Öztürk, A.-P. Jauho, and **N.A. Mortensen**, "Plasmonic nanostructures: local versus nonlocal response", [Proc. SPIE 7757, 77571T \(2010\)](#).
- [21] S. Xiao, L. Peng, and **N.A. Mortensen**, "Antenna-assisted enhanced transmission through subwavelength nanoholes", [Proc. SPIE 7754, 775418 \(2010\)](#).
- [22] J. Zhang, Y. Luo, and **N.A. Mortensen**, "Rigorous analysis of non-magnetic cloaks", [Proc. SPIE 7754, 775428 \(2010\)](#).
- [23] S. Xiao and **N.A. Mortensen**, "Quenched transmission of light through ultrathin metal film", [Proc. SPIE 8104, 81040B \(2011\)](#).

- [24] J.R. Ott, M. Wubs, **N.A. Mortensen**, and P. Lodahl, “Scattering induced quantum interference of multiple quantum optical states”, [AIP Conf. Proc. 1398, 82 \(2011\)](#).
- [25] M. Wubs, S. Raza, G. Toscano, J.M. Pedersen, A.-P. Jauho, and **N.A. Mortensen**, “Are there novel resonances in nanoplasmonic structures due to nonlocal response?”, [Proc. SPIE 8260, in press \(2012\)](#).

Extended abstracts in international conference proceedings (incomplete list):

- [1] **N.A. Mortensen**, A.-P. Jauho, and K. Flensberg, “Andreev scattering and conductance enhancement in mesoscopic semiconductor-superconductor junctions” in *Extended abstracts of Electron Transport in Mesoscopic Systems* ed. P. Delsing, T. Henning, E. Hürfeld, and T. Nord, pp. 120-121 (Göteborg, Sweden, 1999). [[arXiv:cond-mat/9911372](#)]
- [2] M.D. Nielsen, **N.A. Mortensen**, J.R. Folkenberg, K.P. Hansen, and A. Bjarklev, “Optical Properties of Photonic Crystal Fibers Expressed by the V-parameter” in *Proceedings of 29th European Conference on Optical Communication* (Rimini, Italy, 2003).
- [3] M. Stach, J. Broeng, A. Petersson, **N.A. Mortensen**, H.R. Simonsen, and R. Michalzik, “10 Gbit/s 850 nm VCSEL Based Data Transmission over 100 m-long Multimode Photonic Crystal Fibers” in *Proceedings of 29th European Conference on Optical Communication* (Rimini, Italy, 2003).
- [4] J. Riishede, **N.A. Mortensen**, and J. Lægsgaard, “Scalar Modelling of Photonic Crystal Fibres in MATLAB” in *Proceedings of Nordic MATLAB Conference* (Copenhagen, Denmark, 2003).
- [5] M.D. Nielsen, **N.A. Mortensen**, J.R. Folkenberg, A. Petersson, and A. Bjarklev, “Improved All-Silica Endlessly Single-mode Photonic Crystal Fiber”, in [Proceedings of OFC 2003 \(Atlanta, Georgia, 2003\)](#) [OSA Trends in Optics and Photonics **86**, 701 (2003).]
- [6] K. Saitoh, **N.A. Mortensen**, and M. Koshiba, “Modeling of Realistic Air-Core Photonic Band-Gap Fibers” in [Proceedings of IPR 2004 \(San Francisco, CA, 2004\)](#).
- [7] G. Vienne, Y. Xu, C. Jakobsen, H.J. Deyerl, T.P. Hansen, B.H. Larsen, J.B. Jensen, T. Sørensen, M. Terrel, Y. Huang, R. Lee, **N.A. Mortensen**, J. Broeng, H. Simonsen, A. Bjarklev, and A. Yariv, “First demonstration of air-silica Bragg fiber”, in [Proceedings of OFC 2004 \(Los Angeles, CA, 2004\)](#) [OSA Trends in Optics and Photonics **95**, PDP25 (2004).]
- [8] J. Limpert, A. Liem, T. Schreiber, S. Nolte, H. Zelmer, A. Tünnermann, J. Broeng, A. Petersson, C. Jakobsen, H. Simonsen, and **N.A. Mortensen**, “Extended large-mode-area single-mode microstructured fiber laser”, in [Proceedings of CLEO 2004 \(San Francisco, CA, 2004\)](#) [OSA Trends in Optics and Photonics **96**, CMS6 (2004)]
- [9] M. Gersborg-Hansen, S. Balslev, **N.A. Mortensen**, and A. Kristensen, “A Coupled Cavity Micro Fluidic Dye Ring Laser” in *Proceedings of Micro- and Nano-Engineering (MNE) 2004 Conference* (Rotterdam, The Netherlands, 2004).
- [10] G. Vienne, M. Yan, **N.A. Mortensen**, H.-J. Deyerl, T. Sørensen, and J. Broeng, “Air-silica Bragg Fiber: Experiments and Simulations” in *Proceedings of The 10th OptoElectronics and Communications Conference* (Seoul, 2005).
- [11] A. Kristensen, S. Balslev, M. Gersborg-Hansen, B. Bilenberg, T. Rasmussen, M. Hansen, D. Nilsson, and **N. A. Mortensen**, “Microfluidic Dye Lasers” in [Proceedings of 2006 IEEE/LEOS Summer Topical Meetings \(Quebec City, Canada, 2006\)](#).
- [12] **N.A. Mortensen**, L.H. Olesen, and H. Bruus, “Mass and charge transport in micro and nano-fluidic channels”, invited paper in *Proceedings of 2nd Int. Conf. Transport Phenomena in Micro and Nanodevices* (Barga, Italy, 2006).
- [13] H. Bruus, **N.A. Mortensen**, F. Okkels, and L.H. Olesen, “Universality in microfluidic phenomena inside microchannels with arbitrarily shaped cross-sections” in *Proceedings of Euromech Fluid Mechanics Conference EFMC-6* (Stockholm, Sweden, 2006).

- [14] M. Gersborg-Hansen, S. Balslev, **N.A. Mortensen**, and A. Kristensen, “*Micro-Fluidic Dye Ring Laser – Experimental Tuning of the Wavelength and Numerical Simulation of the Cavity Modes*” in [Proceedings of CLEO 2006 \(Long Beach, California, 2006\)](#).
- [15] J. Pedersen, S. Xiao, and **N.A. Mortensen**, “*Effect of loss on slow-light enhanced absorption in liquid-infiltrated photonic crystals*”, in [Proceedings of CLEO 2008 \(San Jose, CA, 2008\)](#).
- [16] P.S. Nunes, **N.A. Mortensen**, J.P. Kutter, and K.B. Mogensen, “*1-D photonic crystal sensor integrated in a microfluidic system*”, in [Proceedings of CLEO 2009 \(Baltimore, ML, 2009\)](#).
- [17] M.B. Christiansen, S. Xiao, **N.A. Mortensen**, and A. Kristensen, “*Enhancement of polymer dye lasers by multifunctional photonic crystal lattice*”, in [Proceedings of CLEO 2009 \(Baltimore, ML, 2009\)](#).
- [18] M.B. Christiansen, J.M. Lopacinska, M.H. Jakobsen, **N.A. Mortensen**, G. Blagoi, M. Dufva, and A. Kristensen, “*Polymer photonic crystal dye lasers as optofluidic cell sensors*”, in [Proceedings of CLEO 2009 \(Baltimore, ML, 2009\)](#).
- [19] C. Karnutsch, C.L. Smith, A. Graham, S. Tomljenovic-Hanic, R. McPhedran, B.J. Eggleton, L. O’Faolain, T.F. Krauss, S. Xiao, and **N.A. Mortensen**, “*Thermo-optic stabilization of optofluidic photonic crystal resonators*”, in [Proceedings of CLEO 2009 \(Baltimore, ML, 2009\)](#).
- [20] C. Jeppesen, A. Kristensen, S. Xiao, and **N.A. Mortensen**, “*Geometrical and fluidic tuning of nanoscale splitting resonators*”, in [Proceedings of CLEO 2010 \(San Jose, CA, 2010\)](#).
- [21] M. Yan and **N.A. Mortensen**, “*Metamaterial reflector for hollow-core infrared fiber design*”, in [Proceedings of OELS 2010 \(San Jose, CA, 2010\)](#).
- [22] J.R. Ott, **N.A. Mortensen**, and P. Lodahl, “*Quantum interference of multiple beams induced by multiple scattering*”, in [Proceedings of OELS 2011 \(Baltimore, ML, 2011\)](#).
- [23] J.R. Ott, **N.A. Mortensen**, and P. Lodahl, “*Multiple scattering of quantum optical states*” in [Proceedings of CLEO Europe 2011 \(Munich, Germany, 2011\)](#).

Academic dissertations:

- [1] M.V. Bollinger, K.R. Bukh, **N.A. Mortensen**, and M.P. Sager, “*Low temperature studies of hybrid superconductor-semimetal components*”, Bachelor’s Thesis (Polyteknisk midtvejsprojekt), Technical University of Denmark (1996) [grade 11/13 equivalent to A (ECTS)].
- [2] **N.A. Mortensen**, “*Theoretical models of transport in macroscopic and mesoscopic NS structures*”, Master’s Thesis, Technical University of Denmark (1998) [grade 13/13 equivalent to A (ECTS)].
- [3] **N.A. Mortensen**, “*Mesoscopic Coulomb Drag*”, PhD Thesis, Technical University of Denmark (2001). ISBN:87-89935-13-6 [[arXiv:cond-mat/0111397](https://arxiv.org/abs/cond-mat/0111397)]
- [4] **N.A. Mortensen**, “*Microstructured Optical Fibres - Theory and Simulations*”, Dr. Techn. Thesis, Technical University of Denmark (2006). ISBN:87-89935-67-5

Book chapters:

- [1] K. Mølhave, A. Kristensen and **N.A. Mortensen**, “*Liquid-droplet dye lasers and resonators*” in “*Innovative Photonic Structures for Bio/Chemical Detection*”, Springer series on “Integrated Microanalytical Systems (Springer, 2009), Chapter 17, pp. 471-486. [ed. Prof. X. Fan, (Univ. Missouri)] DOI: [10.1007/978-0-387-98063-8_17](https://doi.org/10.1007/978-0-387-98063-8_17)
- [2] A. Kristensen and **N.A. Mortensen**, “*Optofluidic dye lasers*” in “*Optofluidics: Fundamentals, Devices, and Applications*”, Biophotonics Series (McGraw-Hill, 2009), Chapter 11, pp. 241-258. [eds. Prof. S. Fainman (UC San Diego), Prof. L. Lee (UC Berkeley), Prof. D. Psaltis (Caltech/EPFL), Prof. C. Yang (Caltech)]
- [3] A. Kristensen and **N.A. Mortensen**, “*Optofluidic light sources*” in “*Handbook of Optofluidics*” (CRC Press, 2010). [eds. Prof. A.R. Hawkins (Brigham Young Univ., Utah) and Prof. H. Schmidt (UC Santa Cruz)]

Other publications:

- [1] **N.A. Mortensen**, "Unavoidable fluctuations" in *MIC annual report 2000* ed. F. Grey, p. 33 (2001).
- [2] **N.A. Mortensen**, "Fotoniske krystal-fibre" (popularizing, in Danish), *Gamma* **139**, 9 (2003).
- [3] T. Sørensen, Y. Xu, G. Vienne, C. Jakobsen, H.J. Deyerl, J.B. Jensen, T.P. Hansen, Y. Huang, M. Terrel, R.K. Lee, **N.A. Mortensen**, J. Broeng, H. Simonsen, A. Bjarklev, and A. Yariv, "Air-guiding air-silica Bragg fibers with nano-structured cladding", [Optics & Photonics News](#) **15** (12), 28 (2004).
- [4] C. Flindt, J. Pedersen, **N.A. Mortensen**, and A.-P. Jauho, "Antidot lattices for quantum information processing", in *MIC annual report 2005-2006*, p. 26 (2007). [ed. M. Dinnetz]
- [5] A. Lavrinenko and **N.A. Mortensen**, "Metafuture for metamaterials" in "Beyond Optical Horizons – Today and tomorrow with photonics" (popularizing), Chapter 13, pp. 230-234 (2009). [eds. A. Bjarklev, C.B. Hansen, and C. Smit]

International patent applications:

- [1] S.E. Barkou, J. Broeng, A. Bjarklev, **N.A. Mortensen**, and J.R. Jensen, "Dual core photonic crystal fibers (PCF) with special dispersion properties", US7174078B2.
- [2] **N.A. Mortensen**, J. Broeng, A. Petersson, J.R. Folkenberg, and G. Vienne, "Photonic Crystal Fibre", WO 04/019092.
- [3] J.R. Folkenberg, M.D. Nielsen, and **N.A. Mortensen**, "Photonic crystal fibres comprising stress elements", US7289709B2.
- [4] K.B. Mogensen, **N.A. Mortensen**, and J.P. Kutter, "A device and a system for analysis of a fluid sample", EP1942341-A1.
- [5] M. Yan and **N.A. Mortensen**, "Hollow-core optical fiber incorporating a metamaterial cladding" WO 10/127676.