

A1.2 (K. Busch)

- [A1.2:1] ‡ A. Hache, L. Tkeshelashvili, M. Diem, and K. Busch, *Testing random numbers with periodic structures*, *Europhys. Lett.* **73**, 225 (2006)
- [A1.2:2] J. Niegemann, L. Tkeshelashvili, S. Pereira, and K. Busch, *Nonlinear wave interaction in photonic band gap materials*, *Photonics Nanostruct.* **4**, 75 (2006)
- [A1.2:3] ‡ K. Busch, G. Schneider, L. Tkeshelashvili, and H. Uecker, *Justification of the Nonlinear Schrödinger Equation in Spatially Periodic Media*, *Z. Angew. Math. Phys.* **57**, 905 (2006)
- [A1.2:4] ‡ A. Hache, M. Malik, M. Diem, L. Tkeshelashvili, and K. Busch, *Measuring randomness with periodic media*, *Photonics Nanostruct.* **5**, 29 (2007)
- [A1.2:5] J. Niegemann, L. Tkeshelashvili, and K. Busch, *Higher-order time-domain simulations of Maxwell's equations using Krylov-subspace methods*, *J. Comput. Theor. Nanosci.* **4**, 627 (2007)
- [A1.2:6] K. Busch, J. Niegemann, M. Pototschnig, and L. Tkeshelashvili, *A Krylov subspace based Solver for the linear and nonlinear Maxwell Equations*, *phys. stat. sol. (b)* **244**, 3479 (2007)
- [A1.2:7] M. König, J. Niegemann, M. Pototschnig, L. Tkeshelashvili, and K. Busch, *Efficient modelling of nonlinear wave propagation and radiation dynamics in nano-photonic systems*, *Proc. SPIE* **6775**, 67750D (2007)
- [A1.2:8] S. Essig, J. Niegemann, L. Tkeshelashvili, and K. Busch, *Solitary Wave Formation in One-dimensional Photonic Crystals*, *phys. stat. sol. (a)* **204**, 3591 (2007)
- [A1.2:9] ‡ J. Hagmann, L. Tkeshelashvili, K. Busch, and G. Schneider, *Far-off-resonant Wave Interaction in One-dimensional Photonic Crystals with Quadratic Nonlinearity*, *Phys. Rev. A* **77**, 023809 (2008)
- [A1.2:10] J. Niegemann, L. Tkeshelashvili, and K. Busch, *Chaotic Scattering of Solitons on Point Defects in Fiber Bragg Gratings*, *Opt. Express* **16**, 10170 (2008)
- [A1.2:11] * M. Husnik, M.W. Klein, N. Feth, M. König, J. Niegemann, K. Busch, S. Linden, and M. Wegener, *Absolute Extinction Cross Section of Individual Magnetic Split-Ring Resonators*, *Nature Photonics* **2**, 614 (2008)
- [A1.2:12] J. Niegemann, M. König, K. Stannigel, and K. Busch, *Higher-Order Time-Domain Methods for the Analysis of Nano-Photonic Systems*, *Photonics Nanostruct.* **7**, 2 (2009)
- [A1.2:13] K. Stannigel, M. König, J. Niegemann, and K. Busch, *Analysis of metallic nanostructures via a Discontinuous Galerkin Time-Domain approach*, *Proc. SPIE* **7353**, 73530C (2009)
- [A1.2:14] M. Pototschnig, J. Niegemann, L. Tkeshelashvili, and K. Busch, *Time-Domain Simulations of the Nonlinear Maxwell Equations Using Operator-Exponential Methods*, *IEEE Trans. Ant. Propagat.* **57**, 475 (2009)
- [A1.2:15] * F.B.P. Niesler, N. Feth, S. Linden, J. Niegemann, J. Gieseler, K. Busch, and M. Wegener, *Second-harmonic generation from split-ring resonators on a GaAs substrate*, *Opt. Lett.* **34**, 1997 (2009)
- [A1.2:16] * P. Longo, P. Schmitteckert, and K. Busch, *Dynamics of photon transport through quantum impurities in dispersion-engineered one-dimensional systems*, *J. Opt. A* **11**, 114009 (2009)
- [A1.2:17] * P. Longo, P. Schmitteckert, and K. Busch, *Few-photon transport in low-dimensional systems: Interaction-induced radiation trapping*, *Phys. Rev. Lett.* **104**, 023602 (2010)

- [A1.2:18] * N. Feth, M. König, M. Husnik, K. Stannigel, J. Niegemann, K. Busch, M. Wegener, and S. Linden, *Electromagnetic interaction of split-ring resonators: The role of separation and relative orientation*, Opt. Express **18**, 6545 (2010)
- [A1.2:19] M. König, K. Busch, and J. Niegemann, *The Discontinuous Galerkin Time-Domain Method for Maxwell's Equations with Anisotropic Materials*, Photonics Nanostruct. **8**, 303 (2010)
- [A1.2:20] J. Niegemann, M. König, and K. Busch, *Simulations of nano-antennas with the Discontinuous Galerkin Time-Domain method*, Proc. SPIE **7713**, 77130Z (2010)
- [A1.2:21] M. König, C. Prohm, K. Busch, and J. Niegemann, *Stretched-coordinate PMLs for Maxwell's equations in the discontinuous Galerkin time-domain method*, Opt. Express **19**, 4618 (2011)
- [A1.2:22] * P. Longo, P. Schmitteckert, and K. Busch, *Few-photon transport in low-dimensional systems*, Phys. Rev. A **83**, 063828 (2011)
- [A1.2:23] ‡ C. Matyssek, J. Niegemann, W. Hergert, and K. Busch, *Computing electron energy loss spectra with the Discontinuous Galerkin Time-Domain method*, Photonics Nanostruct. **9**, 367 (2011)
- [A1.2:24] K. Busch, M. König, and J. Niegemann, *Discontinuous Galerkin methods in nanophotonics*, Laser Photonics Rev. **5**, 773 (2011)
- [A1.2:25] * ‡ F. von Cube, S. Irsen, J. Niegemann, C. Matyssek, W. Hergert, K. Busch, and S. Linden, *Spatio-spectral characterization of photonic meta-atoms with electron energy-loss spectroscopy*, Opt. Mater. Expr. **1**, 1009 (2011)
- [A1.2:26] * ‡ N. Meinzer, M. König, M. Ruther, S. Linden, G. Khitrova, H.M. Gibbs, K. Busch, and M. Wegener, *Distance-dependence of the coupling between split-ring-resonators and single-quantum-well gain*, Appl. Phys. Lett. **99**, 111104 (2011)