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CONTACT INFORMATION	DTU Fotonik Technical University of Denmark Building 343 DK - 2800 Kgs. Lyngby Denmark	Phone: +45 4525 3837 E-mail: jeped@fotonik.dtu.dk
PERSONAL	Born July 6th 1979 in Herlev, Denmark. Currently living in Copenhagen, Denmark with my wife Sidsel and our two children Amalie and Gustav.	
EDUCATION	<b>Technical University of Denmark (DTU)</b> Ph.D., Physics	<b>Mar 2007 – Now</b>
	<ul style="list-style-type: none"> <li>• Department: DTU Fotonik, Department of Photonics Engineering</li> <li>• Topic: <i>Electrons and photons in periodic structures</i></li> <li>• Supervisor: Dr. N. A. Mortensen</li> <li>• To be completed in June 2010 (extended due to paternity leave)</li> </ul>	
	<b>Technical University of Denmark (DTU)</b> Master of Science, Applied Physics	<b>Sep 2000 – Sep 2006</b>
	<ul style="list-style-type: none"> <li>• Emphasis on theoretical physics. Advanced courses in quantum mechanics, solid state physics and many-body physics.</li> <li>• Thesis: <i>Modelling nanoscale devices for coherent spin-manipulation</i></li> <li>• Department: DTU Nanotech, Department of Micro and Nanotechnology</li> <li>• Supervisors: Professor A.-P. Jauho and Ph.D. student C. Flindt</li> <li>• Grade: 13/13</li> </ul>	
EMPLOYMENT	<b>Technical University of Denmark (DTU)</b> Ph.D. student at DTU Fotonik, Department of Photonics Engineering. Extended due to paternity leave for two children. <i>Main research topics: Slow-light effects in photonic crystals, graphene antidot lattices, quantum computing via defect states in antidot lattices.</i>	<b>Mar 2007 – Now</b>
	<b>Danish Emergency Management Agency (DEMA)</b> Compulsory military service.	<b>May 1999 – Oct 1999</b>
RESEARCH	<b>Current and previous research interests</b> Photonic crystals and metamaterials. Slow-light phenomena in structured materials. Mesoscopic physics in general, but in particular research related to quantum computing and the physical realizations of qubits for quantum computing. Graphene and graphene antidot lattices. Piezoresistivity in <i>p</i> -type strained silicon.	
SCHOLARSHIPS	<b>DTU Ph.D. Scholarship</b>	<b>Mar 2007 – Feb 2010</b>

CONFERENCES  
ATTENDED

**Danish Physical Society Annual Meeting 2006**, Nyborg, Denmark, May 2006

**EP2DS 17 + 13 MSS**, Genova, Italy, July 15–20, 2007

**CLEO/QELS 2008**, San Jose, US, May 4–9, 2008

**Nanometa 2009**, Seefeld, Austria, January 5–8, 2009

**PECS VIII** - The 8th International Photonic & Electromagnetic Crystal Structures Meeting, Sydney, Australia, April 5–9, 2009

**OWTNM 2009**, Jena, Germany, April 17–18, 2009

PRESENTATIONS

**Oral presentations**

- *Limits of slow light in photonic crystals*, Contributed talk, PECS VIII - The 8th International Photonic & Electromagnetic Crystal Structures Meeting, Sydney, Australia, April 5–9, 2009.
- *Spectral signatures of chirality*, Contributed talk, SPIE Optics and Photonics, San Diego, US, 2009.

**Poster presentations**

- *Quantum information processing using designed defects in 2D antidot lattices*, Danish Physical Society Annual Meeting 2006, Nyborg, Denmark, May 2006.
- *Designed defects in 2D antidot lattices for quantum information processing*, EP2DS 17 + 13 MSS, Genova, Italy, July 15–20, 2007.
- *Effect of Loss on Slow-Light Enhanced Absorption in Liquid-Infiltrated Photonic Crystals*, CLEO/QELS 2008, San Jose, US, May 4–9, 2008.
- *Limits of slow-light in photonic crystals*, Nanometa 2009, Seefeld, Austria, January 5–8, 2009.

PUBLICATIONS

Author of 17 publications in international peer-reviewed journals. First author of 10 of these.  
Author of 5 published peer-reviewed conference proceedings. First author of 4 of these.  
Citation metrics from ISI Web of Science as of May 11th 2010: 108 citations, h-index 5.

MISCELLANEOUS

Referee for Physical Review B (since 2009), and Optics Express (since 2008).

UPDATED

May 11, 2010