Publications:

All-Si photodetector for telecommunication wavelength based on subwavelength grating structure and critical coupling
Publication: Research - peer-review › Journal article – Annual report year: 2017

Compact dielectric cavities based on frozen bound states in the continuum
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Control of exceptional points in photonic crystal slabs
Publication: Research - peer-review › Journal article – Annual report year: 2017

Dynamical dispersion engineering in coupled vertical cavities employing a high-contrast grating
Publication: Research - peer-review › Journal article – Annual report year: 2017

Efficient quality-factor estimation of a vertical cavity employing a high-contrast grating
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Hybrid Si-on-chip Lasers with Nano Structures
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Quality factor enhancement in photonic crystal slabs by manipulation of the ring of exceptional points
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

Quasi bound states in the continuum with few unit cells of photonic crystal slab
Publication: Research - peer-review › Journal article – Annual report year: 2017

Reciprocal-Space Engineering of Quasi-Bound States in the Continuum in Photonic Crystal Slabs for High-Q Microcavities
Publication: Research › Article in proceedings – Annual report year: 2018

Vertical cavity laser
Publication: Research › Patent – Annual report year: 2016

Hybrid grating reflectors: Origin of ultrabroad stopband
Publication: Research - peer-review › Journal article – Annual report year: 2016

Hybrid III-V on Si grating as a broadband reflector and a high-Q resonator
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Hybrid III-V/SOI resonant cavity enhanced photodetector
Publication: Research - peer-review › Journal article – Annual report year: 2016

Hybrid III-V/SOI Resonant Cavity Photodetector
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Numerical Investigation of Vertical Cavity Lasers With High-Contrast Gratings Using the Fourier Modal Method
Publication: Research - peer-review › Journal article – Annual report year: 2016
Theoretical Investigation of Subwavelength Gratings and Vertical Cavity Lasers Employing Grating Structures  
Publication: Research › Ph.D. thesis – Annual report year: 2016

Toward 100 GHz direct modulation rate of antenna coupled nanoLED  
Publication: Research › peer-review › Article in proceedings – Annual report year: 2017

Ultrabroadband Hybrid III-V/SOI Grating Reflector for On-chip Lasers  
Publication: Research › peer-review › Article in proceedings – Annual report year: 2016

Vcsel structure  
Publication: Research › Patent – Annual report year: 2015

A New Compact Broadband Reflector: The Hybrid Grating  
Publication: Research › peer-review › Article in proceedings – Annual report year: 2016

Effect of In-plane Mirror Dispersion on Vertical Cavities Based on High-Contrast Grating Mirrors  
Publication: Research › peer-review › Article in proceedings – Annual report year: 2015

Hybrid III-V-on-Si Laser with Ultra-low Energy Consumption  
Publication: Research › peer-review › Poster – Annual report year: 2015

Hybrid vertical-cavity laser with lateral emission into a silicon waveguide  
Publication: Research › peer-review › Journal article – Annual report year: 2015

Ultracompact resonator with high quality-factor based on a hybrid grating structure  
Publication: Research › peer-review › Journal article – Annual report year: 2015

Vertical-Cavity In-plane Heterostructures: Physics and Applications  
Publication: Research › peer-review › Journal article – Annual report year: 2015

Comparison of Different Numerical Methods for Quality Factor Calculation of Nano and Micro Photonic Cavities  
Publication: Research › peer-review › Article in proceedings – Annual report year: 2014

Hybrid grating reflector with high reflectivity and broad bandwidth  
Publication: Research › peer-review › Journal article – Annual report year: 2014

Effect of External Optical Feedback for Nano-laser Structures  
Publication: Research › peer-review › Article in proceedings – Annual report year: 2013

Projects:

Hybrid III-V-on-Si laser with ultralow energy consumption  
Project: PhD

Activities:

Danish Opening Ceremony of the International Year of Light  
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

8th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics  
Activity: Attending an event › Participating in or organising a conference