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-eactor 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

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

*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