Research outputs:

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

**Compact dielectric cavities based on frozen bound states in the continuum**
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

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

**Dynamical dispersion engineering in coupled vertical cavities employing a high-contrast grating**
Taghizadeh, A. & Chung, I-S. 2017 In : Scientific Reports. 7, 7 p., 2123
Research output: Research - peer-review › Journal article – Annual report year: 2017

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

**Hybrid Si-on-chip Lasers with Nano Structures**
Research output: 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**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**Quasi bound states in the continuum with few unit cells of photonic crystal slab**
Research output: 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**
Chung, I-S. & Taghizadeh, A. 2017 Proceedings of the 2017 International Conference on Transparent Optical Networks. IEEE, 3 p. 8024753
Research output: Research › Article in proceedings – Annual report year: 2018

**Vertical cavity laser**
Research output: Research › Patent – Annual report year: 2016
Hybrid vertical-cavity laser with lateral emission into a silicon waveguide
Research output: Research - peer-review › Journal article – Annual report year: 2015

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

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

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

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

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

Projects:

Hybrid III-V-on-Si laser with ultralow energy consumption
Forskningsrådssfinansiering 01/02/2013 → 04/05/2016
Project: PhD

Activities:

Danish Opening Ceremony of the International Year of Light
Taghizadeh, A. (Participant)
22 Jan 2015 → 23 Jan 2015
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

8th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics
Taghizadeh, A. (Organizer)
Activity: Attending an event › Participating in or organising a conference