Research outputs:

**Limitations of two-level emitters as nonlinearity in two-photon controlled-PHASE gates**
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

**Few-photon Non-linearity in Nanophotonic Devices for Quantum Information Technology**

**Scattering of two photons on a quantum emitter in a one-dimensional waveguide: exact dynamics and induced correlations**
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

**Strong nonlinearity-induced correlations for counterpropagating photons scattering on a two-level emitter**
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

**Measuring the effective phonon density of states of a quantum dot in cavity quantum electrodynamics**
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

**Proposed Quenching of Phonon-Induced Processes in Photoexcited Quantum Dots due to Electron-Hole Asymmetries**
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

**Non-Markovian phonon dephasing of a quantum dot in a photonic-crystal nanocavity**
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2012 › Research › peer-review

**Reducing dephasing in coupled quantum dot-cavity systems by engineering the carrier wavefunctions**
Research output: Contribution to journal › Conference article – Annual report year: 2012 › Research › peer-review

**Suppressing electron-phonon interactions in semiconductor quantum dot systems by engineering the electronic wavefunctions**
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2012 › Research › peer-review

Projects:

**Nanophotonic devices for quantum information technology**
Nysteen, A., Mørk, J., Kristensen, P. T., McCutcheon, D., Nielsen, P. K., Wubs, M., Fiore, A. & Busch, K.