Christian Rosenberg Petersen - DTU Orbit (06/05/2019)

Christian Rosenberg Petersen
Postdoc
Department of Photonics Engineering
Fiber Sensors & Supercontinuum

Postal address:
Ørsteds Plads
343, 024
2800
Kgs. Lyngby
Denmark
Email: chru@fotonik.dtu.dk
Phone: 45255906
Fax: 45936581
Web address: http://www.fotonik.dtu.dk
Web: http://www.fotonik.dtu.dk

Research outputs:

Deep-UV to Mid-IR Supercontinuum Generation driven by Mid-IR Ultrashort Pulses in a Gas-filled Hollow-core Fiber
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Real-time high-resolution mid-infrared optical coherence tomography
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

GLS and GLSSe ultrafast laser inscribed waveguides for mid-IR supercontinuum generation
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Supercontinuum laser for spectroscopic photoacoustic imaging of lipids in the extended near-infrared region
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2019 › Research › peer-review

Direct nanoimprinting of moth-eye structures in chalcogenide glass for broadband antireflection in the mid-infrared
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Ge22As20Se68 glass ultrafast laser inscribed waveguides for mid-IR integrated optics
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

High-pulse energy supercontinuum laser for high-resolution spectroscopic photoacoustic imaging of lipids in the 1650-1850 nm region
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

High Pulse Energy Supercontinuum Laser for Photoacoustic Detection and Identification of Lipids in the 1650-1850 nm Wavelength Region
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Mid-infrared fiber-coupled supercontinuum spectroscopic imaging using a tapered chalcogenide photonic crystal fiber
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Mid-infrared multispectral tissue imaging using a chalcogenide fiber supercontinuum source
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review
Mid-IR Supercontinuum Generation in Ultrafast Laser Inscribed Waveguides
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Multimaterial photonic crystal fibers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Towards a table-top synchrotron based on supercontinuum generation
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Efficient Mid-Infrared Supercontinuum Generation in Tapered Large Mode Area Chalcogenide Photonic Crystal Fibers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2017 › Research › peer-review

Increased mid-infrared supercontinuum bandwidth and average power by tapering large-mode-area chalcogenide photonic crystal fibers
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

2-10 μm Mid-infrared Supercontinuum Light Sources

Generation and Applications of High Average Power Mid-IR Supercontinuum in Chalcogenide Fibers
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2016 › Research › peer-review

Generation and applications of high average power Mid-IR supercontinuum in chalcogenide fibres
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2017 › Research › peer-review

Mid-IR supercontinuum generation beyond 7 μm using a silica-fluoride-chalcogenide fiber cascade
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

Refractive index and dispersion control of ultrafast laser inscribed waveguides in gallium lanthanum sulphide for near and mid-infrared applications
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Spectral-temporal composition matters when cascading supercontinua into the mid-infrared
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Towards the mid-infrared optical biopsy
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

Mid infrared supercontinuum generation from chalcogenide glass waveguides and fibers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Mid-infrared supercontinuum generation in the fingerprint region
Research output: Contribution to conference › Poster – Annual report year: 2015 › Research › peer-review
**Mid-infrared supercontinuum generation spanning more than 11 μm in a chalcogenide step-index fiber**
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

**Multi-milliwatt mid-infrared supercontinuum generation in a suspended core chalcogenide fiber**
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

**Two-octave mid-infrared supercontinuum generation in As-Se suspended core fibers**
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

**Broadband Mid-infrared Supercontinuum Generation in Suspended Core Chalcogenide Fibers**
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2014 › Research › peer-review

**High Average Power Mid-infrared Supercontinuum Generation in a Suspended Core Chalcogenide Fiber**
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

**Mid-infrared supercontinuum covering the 1.4–13.3 μm molecular fingerprint region using ultra-high NA chalcogenide step-index fibre**
Research output: Contribution to journal › Letter – Annual report year: 2014 › Research › peer-review

**Mid-infrared supercontinuum generation in a suspended core chalcogenide fiber**
Research output: Contribution to conference › Poster – Annual report year: 2014 › Research › peer-review

**Mid-infrared supercontinuum generation in concatenated fluoride and chalcogenide glass fibers covering more than three octaves**
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

**Supercontinuum based mid-IR imaging spectroscopy for cancer detection**
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2014 › Research › peer-review

**Supercontinuum generation from ultraviolet to mid-infrared**
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2014 › Research › peer-review

**Supercontinuum light sources for food analysis**
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2014 › Research › peer-review

**Thulium pumped mid-infrared 0.9–9μm supercontinuum generation in concatenated fluoride and chalcogenide glass fibers**
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

**Projects:**

**2-10μm mid-infrared supercontinuum light sources**
Project: PhD
Light and Food
Project: Research

Activities:

Generation and Applications of High Average Power Mid-IR Supercontinuum in Chalcogenide Fibres
Activity: Talks and presentations › Conference presentations