Research outputs:

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

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

Monitoring of ammonia in an aqueous environment using a supercontinuum-based photoacoustic sensing system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2019

Multispectral photoacoustic sensing for accurate glucose monitoring using a supercontinuum laser
Research output: Research - peer-review › Journal article – Annual report year: 2019

Polymer Optical Fiber Tip Mass Production Etch Mechanism to Achieve CPC Shape for Improved Biosensor Performance
Research output: Research - peer-review › Journal article – Annual report year: 2019

Scaling power, bandwidth, and efficiency of mid-infrared supercontinuum source based on a GeO2-doped silica fiber
Research output: Research - peer-review › Journal article – Annual report year: 2019

Towards Accurate and Label-free Monitoring of Bio-analytes using Supercontinuum based Multispectral Photoacoustic Spectroscopy in the Extended Near-infrared Wavelength regime
Research output: Research - peer-review › Article in proceedings – Annual report year: 2019

Multi-stage generation of extreme ultraviolet dispersive waves by tapering gas-filled hollow-core anti-resonant fibers
Research output: Research - peer-review › Journal article – Annual report year: 2018

Role of the Raman gain in the noise dynamics of all-normal dispersion silica fiber supercontinuum generation
Research output: Research - peer-review › Journal article – Annual report year: 2018

Dynamic mechanical characterization with respect to temperature, humidity, frequency and strain in mPOFs made of different materials
Research output: Research - peer-review › Journal article – Annual report year: 2018

Fast Inscription of Long Period Gratings in Microstructured Polymer Optical Fibers
Research output: Research - peer-review › Journal article – Annual report year: 2018
Fast and stable gratings inscription in POFs made of different materials with pulsed 248 nm KrF laser
Research output: Research - peer-review › Journal article – Annual report year: 2018

All-depth dispersion cancellation in spectral domain optical coherence tomography using numerical intensity correlations
Research output: Research - peer-review › Journal article – Annual report year: 2018

All-Polymer Fiber Bragg Grating based pH Sensor.
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Bragg Grating inscription With Low Pulse Energy in Doped Microstructured Polymer Optical Fibers
Research output: Research - peer-review › Journal article – Annual report year: 2018

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

Effects of Solvent Etching on PMMA Microstructured Optical Fiber Bragg Grating
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Ge22As20Se58 glass ultrafast laser inscribed waveguides for mid-IR integrated optics
Research output: Research - peer-review › Journal article – Annual report year: 2018

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

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

Hot water-assisted fabrication of chirped polymer optical fiber Bragg gratings
Research output: Research - peer-review › Journal article – Annual report year: 2018

Influence of the Cladding Structure in PMMA mPOFs Mechanical Properties for Strain Sensors Applications
Research output: Research - peer-review › Journal article – Annual report year: 2018

Largely tunable dispersion chirped polymer FBG
Research output: Research - peer-review › Journal article – Annual report year: 2018

LPG inscription in mPOF for optical sensing
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Mechanical characterization of drawn Zeonex, Topas, polycarbonate and PMMA microstructured polymer optical fibres
Research output: Research - peer-review › Journal article – Annual report year: 2018

Microstructured PMMA POF chirped Bragg gratings for strain sensing
Research output: Research - peer-review › Journal article – Annual report year: 2018

Mid-infrared fiber-coupled supercontinuum spectroscopic imaging using a tapered chalcogenide photonic crystal fiber
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018
Mid-infrared multispectral tissue imaging using a chalcogenide fiber supercontinuum source
Research output: Research - peer-review › Journal article – Annual report year: 2018

Mid-IR Supercontinuum Generation in Ultrafast Laser Inscribed Waveguides
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Moiré phase-shifted fiber Bragg gratings in polymer optical fibers
Research output: Research - peer-review › Journal article – Annual report year: 2018

Optical fiber
Research output: Research › Patent – Annual report year: 2018

Polarization noise places severe constraints on coherence of all-normal dispersion femtosecond supercontinuum generation
Research output: Research - peer-review › Journal article – Annual report year: 2018

Polymer optical fiber Bragg grating inscription with a single Nd:YAG laser pulse
Research output: Research - peer-review › Journal article – Annual report year: 2018

Prospective on using fibre mid-infrared supercontinuum laser sources for in vivo spectral discrimination of disease
Research output: Research - peer-review › Journal article – Annual report year: 2018

Recovering distance information in spectral domain interferometry
Research output: Research - peer-review › Journal article – Annual report year: 2018

Resolution dependence on phase extraction by the Hilbert transform in phase calibrated and dispersion compensated ultrahigh resolution spectrometer-based OCT
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Supercontinuum applications in high resolution non invasive optical imaging
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

The Application of Hansen Solubility Parameters for Local Etching of TOPAS Polymer Optical Fibers.
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Thermal profile detection through high-sensitivity fiber optic chirped Bragg grating on microstructured PMMA fiber
Research output: Research - peer-review › Journal article – Annual report year: 2018

Thermal stability of fiber Bragg gratings inscribed in microstructured polymer optical fibers with a single UV laser pulse
Research output: Research - peer-review › Paper – Annual report year: 2019

The value of ultrahigh resolution OCT in dermatology - delineating the dermo-epidermal junction, capillaries in the dermal papillae and vellus hairs
Research output: Research - peer-review › Journal article – Annual report year: 2018

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

Two optical coherence tomography systems detect topical gold nanoshells in hair follicles, sweat ducts and measure epidermis
Research output: Research - peer-review › Journal article – Annual report year: 2018
Ultra-low noise supercontinuum source for ultra-high resolution optical coherence tomography at 1300 nm
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Optical measuring system with an interrogator and a polymer-based single-mode fibre optic sensor system
Research output: Research › Patent – Annual report year: 2017

A comparative study of noise in supercontinuum light sources for ultra-high resolution optical coherence tomography
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Annealing and etching effects on strain and stress sensitivity of polymer optical fibre Bragg grating sensors
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Bandpass transmission filters based on phase shifted fiber Bragg gratings in microstructured polymer optical fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

BDK-doped core microstructured PMMA optical fiber for effective Bragg grating photo-inscription
Research output: Research - peer-review › Letter – Annual report year: 2017

Compact multichannel high-resolution micro-electro-mechanical systems-based interrogator for Fiber Bragg grating sensing
Research output: Research - peer-review › Journal article – Annual report year: 2017

Compact multichannel MEMS based spectrometer for FBG sensing
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Curvature and position of nested tubes in hollow-core anti-resonant fibers
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Dispersion free full range spectral intensity optical coherence tomography
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Effects of pre-strain on the intrinsic pressure sensitivity of polymer optical fiber Bragg-gratings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

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

Fast bragg grating inscription in PMMA polymer optical fibres: Impact of thermal pre-treatment of preforms
Research output: Research - peer-review › Journal article – Annual report year: 2017

Femtosecond laser micromachining of compound parabolic concentrator fiber tipped glucose sensors
Research output: Research - peer-review › Journal article – Annual report year: 2017

Gabor fusion master slave optical coherence tomography
Research output: Research - peer-review › Journal article – Annual report year: 2017

Generation of multiple VUV dispersive waves using a tapered gas-filled hollow-core anti-resonant fiber
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

High power, ultra-broadband supercontinuum source based on highly GeO2 doped silica fiber
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017
High-quality phase-shifted Bragg grating sensor inscribed with only one laser pulse in a polymer optical fiber
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Hybrid photonic-crystal fiber
Research output: Research - peer-review › Journal article – Annual report year: 2017

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

Influence of dispersion of nonlinearity on coherent supercontinuum generation bandwidth in photonic crystal fibers pumped at 2 μm
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Long-term strain response of polymer optical fiber FBG sensors
Research output: Research - peer-review › Journal article – Annual report year: 2017

Low Loss Polycarbonate Polymer Optical Fiber for High Temperature FBG Humidity Sensing
Research output: Research - peer-review › Journal article – Annual report year: 2017

Master/slave: A better tool for Gabor filtering optical coherence tomography imaging instruments
Research output: Research - peer-review › Journal article – Annual report year: 2017

Multiple soliton compression stages in mid-IR gas-filled hollow-core fibers
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Noise study of all-normal dispersion supercontinuum sources for potential application in optical coherence tomography
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Non-destructive testing of layer-to-layer fusion of a 3D print using ultrahigh resolution optical coherence tomography
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Phase estimation for global defocus correction in optical coherence tomography
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Phase-shifted Bragg grating inscription in PMMA microstructured POF using 248 nm UV radiation
Research output: Research - peer-review › Journal article – Annual report year: 2017

Polarization extinction ratio and polarization dependent intensity noise in long-pulse supercontinuum generation (Conference Presentation)
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Polymer optical fiber Bragg grating inscription with a single UV laser pulse
Research output: Research - peer-review › Journal article – Annual report year: 2017

Q-switch-pumped supercontinuum for ultra-high resolution optical coherence tomography
Research output: Research - peer-review › Journal article – Annual report year: 2017

Simultaneous measurement of temperature and humidity with microstructured polymer optical fiber Bragg gratings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017
Soliton-plasma nonlinear dynamics in mid-IR gas-filled hollow-core fibers
Research output: Research - peer-review › Journal article – Annual report year: 2017

Solution-Mediated Annealing of Polymer Optical Fiber Bragg Gratings at Room Temperature
Research output: Research - peer-review › Journal article – Annual report year: 2017

Thermal and chemical treatment of polymer optical fiber Bragg grating sensors for enhanced mechanical sensitivity
Research output: Research - peer-review › Journal article – Annual report year: 2017

Toward single-mode UV to near-IR guidance using hollow-core antiresonant silica fiber
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2018

Zeonex microstructured polymer optical fiber: fabrication friendly fibers for high temperature and humidity insensitive Bragg grating sensing
Research output: Research - peer-review › Journal article – Annual report year: 2017

Zeonex-PMMA microstructured polymer optical FBGs for simultaneous humidity and temperature sensing
Research output: Research - peer-review › Journal article – Annual report year: 2017

3D-printed PMMA Preform for Hollow-core POF Drawing
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

3-D printed sensing patches with embedded polymer optical fibre Bragg gratings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Anisotropic anti-resonant elements gives broadband single-mode low-loss hollow-core fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Annealing effects on strain and stress sensitivity of polymer optical fibre based sensors
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Antiresonant hollow core fiber with seven nested capillaries
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Aviation Fuel Gauging Sensor Utilizing Multiple Diaphragm Sensors Incorporating Polymer Optical Fiber Bragg Gratings
Research output: Research - peer-review › Journal article – Annual report year: 2016

Bragg grating photo-inscription in doped microstructured polymer optical fiber by 400 nm femtosecond laser pulses.
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Coherent supercontinuum bandwidth limitations under femtosecond pumping at 2 μm in all-solid soft glass photonic crystal fibers
Research output: Research - peer-review › Journal article – Annual report year: 2016

Compact multichannel demultiplexer for WDM-POF networks based on spatially overlapped FBGs
Research output: Research - peer-review › Journal article – Annual report year: 2016
Creation of a microstructured polymer optical fiber with UV Bragg grating inscription for the detection of extensions at temperatures up to 125°C
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Embedding silica and polymer fibre Bragg gratings (FBG) in plastic 3D-printed sensing patches
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Fabrication and characterization of polycarbonate microstructured polymer optical fibers for high-temperature-resistant fiber Bragg grating strain sensors
Research output: Research - peer-review › Journal article – Annual report year: 2016

Fuel level sensor based on polymer optical fiber Bragg gratings for aircraft applications
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

High energy supercontinuum sources using tapered photonic crystal fibers for multispectral photoacoustic microscopy
Research output: Research - peer-review › Journal article – Annual report year: 2016

High-power picosecond pulse delivery through hollow core photonic band gap fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Hollow-core fibers for high power pulse delivery
Research output: Research - peer-review › Journal article – Annual report year: 2016

Intrinsic pressure response of a single mode cyclo olefin polymer fiber bragg grating
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Investigation of the in-solution relaxation of polymer optical fibre Bragg gratings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Low-Loss Hollow-Core Anti-Resonant Fibers With Semi-Circular Nested Tubes
Research output: Research - peer-review › Journal article – Annual report year: 2016

Low loss mid-IR transmission bands using silica hollow-core anisotropic anti-resonant fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Low-loss single-mode hollow-core fiber with anisotropic anti-resonant elements
Research output: Research - peer-review › Journal article – Annual report year: 2016

Mid-infrared Spectroscopy/Bioimaging: Moving toward MIR optical biopsy
Research output: Research - peer-review › Journal article – Annual report year: 2016

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

Modulation-instability biosensing using an As2S3 chalcogenide tapered fiber
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

M-type fiber for exploiting higher-order-modes dispersion for application in mid-IR supercontinuum generation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Multimode supercontinuum generation in chalcogenide glass fibres
Research output: Research - peer-review › Journal article – Annual report year: 2016
Performance of low-cost few-mode fiber Bragg grating sensor systems: polarization sensitivity and linearity of temperature and strain response
Research output: Research - peer-review › Journal article – Annual report year: 2016

Polymer Optical Fiber Compound Parabolic Concentrator fiber tip based glucose sensor: In-Vitro Testing
Research output: Research - peer-review › Journal article – Annual report year: 2016

Polymer Optical Fibre Bragg Grating Humidity Sensor at 100ºC
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Record power, ultra-broadband supercontinuum source based on highly GeO2 doped silica fiber
Research output: Research - peer-review › Journal article – Annual report year: 2016

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

Sensitivity enhancement using annealed polymer optical fibre based sensors for pressure sensing applications
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Single mode step-index polymer optical fiber for humidity insensitive high temperature fiber Bragg grating sensors
Research output: Research - peer-review › Journal article – Annual report year: 2016

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

Study of doping non-PMMA polymer fibre canes with UV photosensitive compounds
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Temperature insensitive hysteresis free highly sensitive polymer optical fiber Bragg grating humidity sensor
Research output: Research - peer-review › Journal article – Annual report year: 2016

Towards supercontinuum-driven hyperspectral microscopy in the mid-infrared
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Towards the mid-infrared optical biopsy
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Zeonex Microstructured Polymer Optical Fibre Bragg Grating Sensor
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

An efficient and fast detection algorithm for multimode FBG sensing
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Angle dependent Fiber Bragg grating inscription in microstructured polymer optical fibers
Research output: Research - peer-review › Journal article – Annual report year: 2015

Antiresonant guiding in a poly(methyl-methacrylate) hollow-core optical fiber
Research output: Research - peer-review › Journal article – Annual report year: 2015
Coherent multi-octave spanning supercontinuum in tapered sulphide fibres.
Research output: Research - peer-review › Paper – Annual report year: 2015

Compound parabolic concentrator optical fiber tip for FRET-based fluorescent sensors
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Dielectric tube waveguides with absorptive cladding for broadband, low-dispersion and low loss THz guiding
Research output: Research - peer-review › Journal article – Annual report year: 2015

Dynamic gate algorithm for multimode fiber Bragg grating sensor systems
Research output: Research - peer-review › Journal article – Annual report year: 2015

Fabry-Perot micro-structured polymer optical fibre sensors for opto-acoustic endoscopy
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Fast Fiber Bragg Grating Inscription in the Undoped Microstructured Polymer Optical Fibers
Research output: Research › Conference abstract for conference – Annual report year: 2015

Fiber-based portable optical frequency standard for telecommunication
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Fiber-optic liquid level monitoring system using microstructured polymer fiber Bragg grating array sensors: performance analysis
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

High performance liquid-level sensor based on mPOFBG for aircraft applications
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

High-power picosecond pulse delivery through hollow core photonic band gap fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Humidity insensitive step-index polymer optical fibre Bragg grating sensors
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Improved Low-loss Hollow Core Anti-Resonant Silica Mid-IR Fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Long term strain behavior of PMMA based polymer optical fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Low Loss Double-clad Hollow Core Anti-Resonant Fibers in the Mid-IR
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Low-loss hollow-core silica fibers with adjacent nested anti-resonant tubes
Research output: Research - peer-review › Journal article – Annual report year: 2015

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

Mid-infrared supercontinuum generation in the fingerprint region
Research output: Research - peer-review › Poster – Annual report year: 2015
Mid-infrared supercontinuum generation spanning more than 11 μm in a chalcogenide step-index fiber
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

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

Nonlinear Label-Free Biosensing With High Sensitivity Using As$_2$S$_3$ Chalcogenide Tapered Fiber
Research output: Research - peer-review › Journal article – Annual report year: 2015

Optical frequency stabilization using gas-filled hollow-core photonic crystal fibers
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Optical frequency standard using acetylene-filled hollow-core photonic crystal fibers
Research output: Research - peer-review › Journal article – Annual report year: 2015

Pmma fiber viscoelasticity in extremely low frequency regime
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Polarization effects in polymer FBGs: study and use for transverse force sensing
Research output: Research - peer-review › Journal article – Annual report year: 2015

Polymer optical fiber compound parabolic concentrator tip for enhanced coupling efficiency for fluorescence based glucose sensors
Research output: Research - peer-review › Journal article – Annual report year: 2015

Polymer Optical Fibre Sensors for Endoscopic Opto-Acoustic Imaging
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Production and Characterization of Polycarbonate Microstructured Polymer Optical Fiber Bragg Grating Sensor
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Robust and accurate detection algorithm for multimode polymer optical FBG sensor system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Simple Room Temperature Method for Polymer Optical Fibre Cleaving
Research output: Research - peer-review › Journal article – Annual report year: 2015

Tapering of Polymer Optical Fibers for Compound Parabolic Concentrator Fiber Tip Fabrication
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

The effect of humidity on annealing of polymer optical fibre bragg gratings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Thermally tunable bandgaps in a hybrid As$_2$S$_3$/silica photonic crystal fiber
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Time-dependent variation of fiber Bragg grating reflectivity in PMMA-based polymer optical fibers
Research output: Research - peer-review › Journal article – Annual report year: 2015
Two-octave mid-infrared supercontinuum generation in As-Se suspended core fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Bragg grating writing in PMMA microstructured polymer optical fibers in less than 7 minutes
Research output: Research - peer-review › Journal article – Annual report year: 2014

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

Cladding defects in hollow core fibers for surface mode suppression and improved birefringence
Research output: Research - peer-review › Journal article – Annual report year: 2014

Design and Optimization of Air-Doped 3-dB Terahertz Fiber Directional Couplers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Design and optimization of mechanically down-doped terahertz fiber directional couplers
Research output: Research - peer-review › Journal article – Annual report year: 2015

High Average Power Mid-infrared Supercontinuum Generation in a Suspended Core Chalcogenide Fiber
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Hollow core fiber-based optical frequency standard
Research output: Research - peer-review › Poster – Annual report year: 2014

Hybrid polymer photonic crystal fiber with integrated chalcogenide glass nanofilms
Research output: Research - peer-review › Journal article – Annual report year: 2014

Increase of the photosensitivity of undoped poly(methylmethacrylate) under UV radiation at 325 nm
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Interferometric microstructured polymer optical fiber ultrasound sensor for optoacoustic endoscopic imaging in biomedical applications
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Investigations on birefringence effects in polymer optical fiber Bragg gratings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

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

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

Mid-infrared supercontinuum generation in chalcogenide step-index fibers pumped at 2.9 and 4.5 μm
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Mid-infrared supercontinuum generation in concatenated fluoride and chalcogenide glass fibers covering more than three octaves
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014
Mid-infrared supercontinuum generation to 12.5μm in large NA chalcogenide step-index fibres pumped at 4.5μm
Research output: Research - peer-review › Journal article – Annual report year: 2014

Photo-acoustic imaging of coronary arteries with polymer optical fibers
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Photosensitivity mechanism of undoped poly(methyl methacrylate) under UV radiation at 325 nm and its spatial resolution limit
Research output: Research - peer-review › Journal article – Annual report year: 2014

PMMA mPOF Bragg gratings written in less than 10 min
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

POF based glucose sensor incorporating grating wavelength filters
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Refractive index dispersion of chalcogenide glasses for ultra-high numerical-aperture fiber for mid-infrared supercontinuum generation
Research output: Research - peer-review › Journal article – Annual report year: 2014

Single-mode pumped high air-fill fraction photonic crystal fiber taper for high-power deep-blue supercontinuum sources
Research output: Research - peer-review › Journal article – Annual report year: 2014

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

Supercontinuum generation from ultraviolet to mid-infrared
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Supercontinuum light sources for food analysis
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

The all-fiber cladding-pumped Yb-doped gain-switched laser
Research output: Research - peer-review › Journal article – Annual report year: 2014

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

THz Tube Waveguides With Low Loss, Low Dispersion, and High Bandwidth
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

THz waveguides, devices and hybrid polymer-chalcogenide photonic crystal fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

THz Waveguides, Devices and Hybrid Polymer-chalcogenidePhotonic Crystal Fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

UV-Induced prevention of biofilm formation inside medical tubes and catheters
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Coherent and Incoherent Rogue Waves in Seeded Supercontinuum Generation
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013
Connectorization of fibre Bragg grating sensors recorded in microstructured polymer optical fibre
Research output: Research - peer-review › Conference article – Annual report year: 2013

Fabrication and characterization of porous-core honeycomb bandgap THz fibers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Gain-switched all-fiber lasers and quasi-continuous wave supercontinuum generation
Research output: Research › Ph.D. thesis – Annual report year: 2014

Gain-switched all-fiber laser with narrow bandwidth
Research output: Research - peer-review › Journal article – Annual report year: 2013

Gain-switched, Yb-doped, all-fiber laser with narrow bandwidth
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013

Highly photosensitive polymethyl methacrylate microstructured polymer optical fiber with doped core
Research output: Research - peer-review › Journal article – Annual report year: 2013

High-Tg TOPAS mPOF strain sensing at 110 degrees
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

High-Tg TOPAS microstructured polymer optical fiber for fiber Bragg grating strain sensing at 110 degrees
Research output: Research - peer-review › Journal article – Annual report year: 2013

Hole-Size Increasing PCFs for Blue-Extended Supercontinuum Generation
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013

Influence of Phase Coherence on Seeded Supercontinuum Generation
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013

Intensity noise in normal-pumped picosecond supercontinuum generation, where higher-order Raman lines cross into anomalous dispersion regime
Research output: Research - peer-review › Journal article – Annual report year: 2013

Intensity Noise of Normal-Pumped Picosecond Supercontinuum Generation
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013

Mid-infrared supercontinuum generation in tapered ZBLAN fiber with a standard Erbium mode-locked fiber laser
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013

Mid-infrared supercontinuum generation to 4.5 µm in uniform and tapered ZBLAN step-index fibers by direct pumping at 1064 or 1550 nm
Research output: Research - peer-review › Journal article – Annual report year: 2013

New horizons for Supercontinuum light sources: from UV to mid-IR
Research output: Research - peer-review › Conference article – Annual report year: 2013

Numerical demonstration of 3-12µm supercontinuum generation in large-core step-index chalcogenide fibers pumped at 4.5µm
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013
Numerical demonstration of 3-12μm supercontinuum generation in large-core step-index chalcogenide fibers pumped at 4.5μm
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Optimized ZBLAN fiber for efficient and broadband mid-infrared supercontinuum generation through direct pumping at 1550nm
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Selective Serial Multi-Antibody Biosensing with TOPAS Microstructured Polymer Optical Fibers
Research output: Research - peer-review › Journal article – Annual report year: 2013

Zero-dispersion wavelength independent quasi-CW pumped supercontinuum generation
Research output: Research - peer-review › Journal article – Annual report year: 2013

All fiber based supercontinuum light source utilized for IR microscopy
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Anomalous interaction of nonlocal solitons in media with competing nonlinearities
Research output: Research - peer-review › Journal article – Annual report year: 2012

Asymmetric Draw-Tower Tapers for Supercontinuum Generation and Verification of the Novel Concept of Group-Acceleration Matching
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Cleaving of TOPAS and PMMA microstructured polymer optical fibers: Core-shift and statistical quality optimization
Research output: Research - peer-review › Journal article – Annual report year: 2012

Deep-blue supercontinuum sources with optimum taper profiles – verification of GAM
Research output: Research - peer-review › Journal article – Annual report year: 2012

Describing supercontinuum noise and rogue wave statistics using higher-order moments
Research output: Research - peer-review › Journal article – Annual report year: 2012

Direct Writing of Fiber Bragg Grating in Microstructured Polymer Optical Fiber
Research output: Research - peer-review › Journal article – Annual report year: 2012

Dynamic Characterization of Polymer Optical Fibers
Research output: Research - peer-review › Journal article – Annual report year: 2012

Fabrication and characterization of porous-core honeycomb bandgap THz fibers
Research output: Research - peer-review › Journal article – Annual report year: 2012

Fiber design and realization of point-by-point written fiber Bragg gratings in polymer optical fibers
Research output: Research - peer-review › Conference article – Annual report year: 2012

Fiber Drawn 2D Polymeric Photonic Crystal THz Filters
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Higher-Order Moment Characterisation of Rogue Wave Statistics In Supercontinuum Generation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012
High power supercontinuum generation in tapered photonic crystal fibers
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2012

High Sensitivity Polymer Optical Fiber-Bragg-Grating-Based Accelerometer
Research output: Research - peer-review › Journal article – Annual report year: 2012

Influence of pump power and modulation instability gain spectrum on seeded supercontinuum and rogue wave generation
Research output: Research - peer-review › Journal article – Annual report year: 2012

Influence of two-photon absorption on soliton self-frequency shift
Research output: Research - peer-review › Journal article – Annual report year: 2012

IR microscopy utilizing intense supercontinuum light source
Research output: Research - peer-review › Journal article – Annual report year: 2012

Modulational instability and solitons in nonlocal media with competing nonlinearities
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Nonlinear fiber-optic strain sensor based on four-wave mixing in microstructured optical fiber
Research output: Research - peer-review › Journal article – Annual report year: 2012

Nonlinear matching of Solitons - Continued redshift between silica and soft-glass fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Optical fiber sensors fabricated by the focused ion beam technique
Research output: Research - peer-review › Conference article – Annual report year: 2012

Optimization of Tapered Photonic Crystal Fibers for Blue-Enhanced Supercontinuum Generation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Optimum PCF tapers for blue-enhanced supercontinuum sources
Research output: Research - peer-review › Journal article – Annual report year: 2012

Photonic crystal fibers for supercontinuum generation pumped by a gain-switched CW fiber laser
Research output: Research - peer-review › Conference article – Annual report year: 2012

Power dependence of supercontinuum noise in uniform and tapered PCFs
Research output: Research - peer-review › Journal article – Annual report year: 2012

Power dependence of supercontinuum noise in uniform and tapered PCFs: erratum
Research output: Research - peer-review › Comment/debate – Annual report year: 2012

Quadratic solitons for negative effective second-harmonic diffraction as nonlocal solitons with periodic nonlocal response function
Research output: Research - peer-review › Journal article – Annual report year: 2012

Seeded Supercontinuum Generation - Modulation Instability Gain, Coherent and Incoherent Rogue Waves
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012
Supercontinuum - broad as a lamp, bright as a laser, now in the mid-infrared
Research output: Research - peer-review › Conference article – Annual report year: 2012

Supercontinuum Generation in Uniform and Tapered Photonic Crystal Fibers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Supercontinuum generation in ZBLAN fibers—detailed comparison between measurement and simulation
Research output: Research - peer-review › Journal article – Annual report year: 2012

Tapered photonic crystal fibers for blue-enhanced supercontinuum generation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Temperature compensated, humidity insensitive, high-$T_g$ TOPAS FBGs for accelerometers and microphones
Research output: Research - peer-review › Conference article – Annual report year: 2013

Temperature Compensated Strain Sensor Based on Cascaded Sagnac Interferometers and All-Solid Birefringent Hybrid Photonic Crystal Fibers
Research output: Research - peer-review › Journal article – Annual report year: 2012

The role of phase coherence in seeded supercontinuum generation
Research output: Research - peer-review › Journal article – Annual report year: 2012

THz Photonic Band-Gap Prisms Fabricated by Fiber Drawing
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Tunable Polymer Fiber Bragg Grating (FBG) Inscription: Fabrication of Dual-FBG Temperature Compensated Polymer Optical Fiber Strain Sensors
Research output: Research - peer-review › Journal article – Annual report year: 2012

Polymer fiber waveguides for terahertz radiation
Research output: Research › Ph.D. thesis – Annual report year: 2011

870nm Bragg grating in single mode TOPAS microstructured polymer optical fibre
Research output: Research - peer-review › Conference article – Annual report year: 2011

All-solid birefringent hybrid photonic crystal fiber based interferometric sensor for measurement of strain and temperature
Research output: Research - peer-review › Conference article – Annual report year: 2012

Dark solitons in nonlinear media with arbitrary degree of non locality
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Direct probing of evanescent field for characterization of porous terahertz fibers
Research output: Research - peer-review › Journal article – Annual report year: 2011

Gain-switched CW fiber laser for improved supercontinuum generation in a PCF
Research output: Research - peer-review › Journal article – Annual report year: 2011

Group-Acceleration Matching in Tapered Optical Fibers for Maximising the Power in the Blue-Edge of a Supercontinuum
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Higher order moment description of supercontinuum noise and rogue wave statistics
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011
Highly sensitive and simple method for refractive index sensing of liquids in microstructured optical fibers using four-wave mixing
Research output: Research - peer-review › Journal article – Annual report year: 2011

Humidity insensitive TOPAS polymer fiber Bragg grating sensor
Research output: Research - peer-review › Journal article – Annual report year: 2011

Humidity sensitivity of TOPAS optical fibre Bragg grating
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Improved thermal and strain performance of annealed polymer optical fiber Bragg gratings
Research output: Research - peer-review › Journal article – Annual report year: 2011

Influence of Two Photon Absorption on Soliton Self-Frequency Shift
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Label-free biosensing with high sensitivity in dual-core microstructured polymer optical fibers
Research output: Research - peer-review › Journal article – Annual report year: 2011

Midinfrared optical rogue waves in soft glass photonic crystal fiber
Research output: Research - peer-review › Journal article – Annual report year: 2011

Mode profiling of THz fibers with dynamic aperture near-field imaging
Research output: Research - peer-review › Journal article – Annual report year: 2011

Modulational Instability and solitons in nonlocal media with competing nonlinearities
Research output: Research - peer-review › Journal article – Annual report year: 2011

Narrow Bandwidth 850-nm Fiber Bragg Gratings in Few-Mode Polymer Optical Fibers
Research output: Research - peer-review › Journal article – Annual report year: 2011

Nonlinear soliton matching between optical fibers
Research output: Research - peer-review › Journal article – Annual report year: 2011

Note: Optical fiber milled by focused ion beam and its application for Fabry-Pérot refractive index sensor
Research output: Research - peer-review › Journal article – Annual report year: 2011

Optical Cherenkov radiation by cascaded nonlinear interaction: an efficient source of few-cycle energetic near- to mid-IR pulses
Research output: Research - peer-review › Journal article – Annual report year: 2011

Optical Cherenkov radiation by cascaded nonlinear interaction: an efficient source of few-cycle near- to mid-IR pulses
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Optical fibre Bragg grating recorded in TOPAS cyclic olefin copolymer
Research output: Research - peer-review › Journal article – Annual report year: 2011

Optimum fiber tapers for increasing the power in the blue-edge of a supercontinuum - group-acceleration matching
Research output: Research - peer-review › Journal article – Annual report year: 2011
Polymer PCF Bragg grating sensors based on poly(methyl methacrylate) and TOPAS cyclic olefin copolymer
Research output: Research - peer-review › Conference article – Annual report year: 2011

Porous-core honeycomb bandgap THz fiber
Research output: Research - peer-review › Journal article – Annual report year: 2011

Reduced Amplitude Noise in Supercontinuum Generated in Tapered PCFs
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Selective filling of photonic crystal fibers using focused ion beam milled microchannels
Research output: Research - peer-review › Journal article – Annual report year: 2011

Sensing characteristics of birefringent microstructured polymer optical fiber
Research output: Research - peer-review › Conference article – Annual report year: 2011

Stimulated Raman scattering in soft glass fluoride fibers
Research output: Research - peer-review › Journal article – Annual report year: 2011

Supercontinuum generation in a photonic crystal fiber pumped by a gain-switched high-power fiber laser
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Supercontinuum noise in tapered photonic crystal fibers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Viscoelastic limit of polymer optical fibers: characterization of the dynamic response
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

ZBLAN supercontinuum generation - detailed comparison between measurement and simulation.
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Analytical theory for the dark-soliton interaction in nonlocal nonlinear materials with an arbitrary degree of nonlocality
Research output: Research - peer-review › Journal article – Annual report year: 2010

Analytical theory of dark nonlocal solitons
Research output: Research - peer-review › Journal article – Annual report year: 2010

Broadband polymer microstructured THz fiber coupler with downdoped cores
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Broadband terahertz fiber directional coupler
Research output: Research - peer-review › Journal article – Annual report year: 2010

Collisions and turbulence in optical rogue wave formation
Research output: Research - peer-review › Journal article – Annual report year: 2010

Design of microstructured waveguide devices for applications in optical sensing: [invited]
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Few-cycle femtosecond optical pulses in the visible and near-infrared: [invited]
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010
Fiber-optical accelerometers based on polymer optical fiber Bragg gratings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Fiber-optical microphones and accelerometers based on polymer optical fiber Bragg gratings: [invited]
Research output: Research - peer-review › Conference article – Annual report year: 2010

Grating writing and growth at 325nm in non-hydrogenated silica fiber
Research output: Research - peer-review › Poster – Annual report year: 2010

Increasing the blue-shift of a picosecond pumped supercontinuum
Research output: Research - peer-review › Book chapter – Annual report year: 2010

Microstructured optical fiber refractive index sensor
Research output: Research - peer-review › Journal article – Annual report year: 2010

Modelling of PCF Nonlinearities
Research output: Research - peer-review › Book chapter – Annual report year: 2010

Nonlinear diffraction from a virtual beam
Research output: Research - peer-review › Journal article – Annual report year: 2010

Optical Cherenkov radiation in ultrafast cascaded second-harmonic generation
Research output: Research - peer-review › Journal article – Annual report year: 2010

Photonic crystal fibers for label-free biosensing: [invited]
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Polymer microstructured fibers for guiding of THz radiation: [invited]
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Polymer optical fiber bragg grating sensors: measuring acceleration
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Refractive index sensing in an all-solid twin-core photonic bandgap fiber
Research output: Research - peer-review › Journal article – Annual report year: 2010

Tensile strain and temperature characterization of FBGs in preannealed Polymer Optical Fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Theory of dispersive wave frequency shift via trapping by a soliton in an axially nonuniform optical fiber
Research output: Research - peer-review › Journal article – Annual report year: 2010

Thulium pumped high power supercontinuum in loss-determined optimum lengths of tellurite photonic crystal fiber
Research output: Research - peer-review › Journal article – Annual report year: 2010

Bendable, low-loss Topas fibers for the terahertz frequency range
Research output: Research - peer-review › Journal article – Annual report year: 2009

Broadband THz waveguiding and high-precision broadband time-resolved spectroscopy: [invited]
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009
Dispersion-engineered and highly-nonlinear microstructured polymer optical fibres
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Dispersion-tailored, low-loss photonic crystal fibers for the THz range
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Dispersive waves in fs cascaded second-harmonic generation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Enhanced soliton self-frequency shift in a longitudinally varying taper
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2009

Infiltration liquid crystal in microstructured polymer optical fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Low-loss and bendable THz fiber with tailored dispersion
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Multi-order nonlinear diffraction in frequency doubling processes
Research output: Research - peer-review › Journal article – Annual report year: 2009

Multi-order nonlinear diffraction in second harmonic generation
Research output: Research - peer-review › Poster – Annual report year: 2009

Noise reduction of high-power supercontinuum sources by back seeding
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Observation of two-dimensional nonlocal gap solitons
Research output: Research - peer-review › Journal article – Annual report year: 2009

Optical rogue waves and soliton turbulence in nonlinear fibre optics
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Optimization of the soliton self-frequency shift in a tapered photonic crystal fiber
Research output: Research - peer-review › Journal article – Annual report year: 2009

Periodic refractive index modifications inscribed in polymer optical fibre by focussed IR femtosecond pulses
Research output: Research - peer-review › Paper – Annual report year: 2009

Thermal tunability of photonic bandgaps in liquid crystal infiltrated microstructured polymer optical fibers
Research output: Research - peer-review › Journal article – Annual report year: 2009

Ultrasensitive refractive index sensor based on twin-core photonic bandgap fibers
Research output: Research - peer-review › Paper – Annual report year: 2009

Ultrasensitive twin-core photonic bandgap fiber refractive index sensor
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Backseeded high-order parametric gain in supercontinuum generation
Research output: Research - peer-review › Journal article – Annual report year: 2008
Backseeding of higher order gain processes in picosecond supercontinuum generation
Research output: Research - peer-review › Journal article – Annual report year: 2008

Back seeding of picosecond supercontinuum generation in photonic crystal fibres
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Broadband light generation at ~1300 nm through spectrally recoiled solitons and dispersive waves
Research output: Research - peer-review › Journal article – Annual report year: 2008

Compression limits in cascaded quadratic soliton compression
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Controllable nonlocal behaviour by cascaded second-harmonic generation of fs pulses
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Degenerate four wave mixing in solid core photonic bandgap fibers
Research output: Research - peer-review › Journal article – Annual report year: 2008

Geometry and transport in a model of two coupled quadratic nonlinear waveguides
Research output: Research - peer-review › Journal article – Annual report year: 2008

Highly sensitive refractometer with a photonic-crystal-fiber long-period grating
Research output: Research - peer-review › Journal article – Annual report year: 2008

Increasing the blue-shift of a supercontinuum by modifying the fiber glass composition
Research output: Research - peer-review › Journal article – Annual report year: 2008

Label-free and selective nonlinear fiber-optical biosensing
Research output: Research - peer-review › Journal article – Annual report year: 2008

Limits to compression with cascaded quadratic soliton compressors
Research output: Research - peer-review › Journal article – Annual report year: 2008

Nonlocal gap soliton in liquid infiltrated photonic crystal fibres
Research output: Research - peer-review › Poster – Annual report year: 2008

Picosecond supercontinuum generation with back seeding of different spectral parts
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Picosecond supercontinuum generation with back seeding of different spectral parts components
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Sensitivity of photonic crystal fiber grating sensors: biosensing, refractive index, strain, and temperature sensing
Research output: Research - peer-review › Journal article – Annual report year: 2008

Spatiotemporal control of light by Bloch-mode dispersion in multi-core fibers
Research output: Research - peer-review › Journal article – Annual report year: 2008

Spatiotemporal light localization in infiltrated waveguide arrays
Research output: Research - peer-review › Poster – Annual report year: 2008
Spatiotemporal light localization in infiltrated waveguide arrays
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Accurate nonlocal theory for cascaded quadratic soliton compression
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Bragg gratings in Topas
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Cascaded quadratic soliton compression at 800 nm
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Designing quadratic nonlinear photonic crystal fibers for soliton compression to few-cycle pulses
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Enhanced stability of nonlocal solitons in saturable focusing media
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Finite-difference modeling of Bragg fibers with ultrathin cladding layers via adaptive coordinate transformation
Research output: Research - peer-review › Poster – Annual report year: 2007

General covariance in computational electrodynamics
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2007

Infiltrated microstructured fibers as tunable and nonlinear optical devices
Research output: Research - peer-review › Poster – Annual report year: 2007

Kraftig som en laser, hvidere end solen: Superkontinuumsgenerering - den ultimative hvidlyskilde
Research output: Research - peer-review › Book chapter – Annual report year: 2007

Localized biosensing with Topas microstructured polymer optical fiber
Research output: Research - peer-review › Journal article – Annual report year: 2007

Localized biosensing with Topas microstructured Polymer Optical Fiber
Research output: Research - peer-review › Journal article – Annual report year: 2007

Localized biosensing with Topas microstructured polymer optical fiber: Erratum
Research output: Research - peer-review › Journal article – Annual report year: 2007

Methods of supercontinuum generation for effective down-conversion in photonic crystal fibers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Modulational Instability in the nonlocal chi(2)-model
Research output: Research - peer-review › Journal article – Annual report year: 2007

Multi-antibody biosensing with Topas microstructured polymer optical fiber
Research output: Research - peer-review › Poster – Annual report year: 2007

Nonlocal explanation of stationary and nonstationary regimes in cascaded pulse compression
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007
Nonlocal explanation of stationary and nonstationary regimes in cascaded soliton pulse compression
Research output: Research - peer-review › Journal article – Annual report year: 2007

Photonic crystal fiber gratings: prospects for label-free biosensors
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Recent developments of Bragg gratings in PMMA and TOPAS polymer optical fibers
Research output: Research - peer-review › Poster – Annual report year: 2007

Rigorous modeling of cladding modes in photonic crystal fibers
Research output: Research - peer-review › Poster – Annual report year: 2007

Soliton compression to few-cycle pulses by cascaded quadratic nonlinearities
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Soliton compression to few-cycle pulses using quadratic nonlinear photonic crystal fibers: A design study
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Soliton compression to ultra-short pulses using cascaded quadratic nonlinearities in silica photonic crystal fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Spiralling solitons and multipole localized modes in nonlocal nonlinear media
Research output: Research - peer-review › Journal article – Annual report year: 2007

Supercontinuum generation in photonic crystal fibers using quasi-CW pumping
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Temporal nonlinear beam dynamics in infiltrated photonic crystal fibers
Research output: Research - peer-review › Poster – Annual report year: 2007

The role of the second zero-dispersion wavelength in generation of supercontinua and bright-bright soliton-pairs across the zero-dispersion wavelength: erratum
Research output: Research - peer-review › Journal article – Annual report year: 2007

Tunable all-optical devices based on liquid-filled photonic crystal fibers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Tunable Beam Diffraction in Infiltrated Microstructured Fibers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Tunable diffraction and self-defocusing in liquid-filled photonic crystal fibers
Research output: Research - peer-review › Journal article – Annual report year: 2007

Tunable nonlinear beam defocusing in infiltrated photonic crystal fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

A microstructured Polymer Optical Fiber Biosensor
Research output: Research - peer-review › Article in proceedings – Annual report year: 2006

Biosensing using microstructured polymer optical fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2006
Chromatic dispersion of liquid crystal infiltrated capillary tubes and photonic crystal fibers
Research output: Research - peer-review › Journal article – Annual report year: 2006

Group-velocity matched nonlinear photonic crystal fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2006

Localized biosensing with Topas microstructured polymer optical fiber
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2006

Microstructured Optical Fibers, fundamental properties and biosensor applications
Research output: Research - peer-review › Article in proceedings – Annual report year: 2006

Microstructured polymer optical fiber biosensors for detection of DNA and antibodies
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2006

Modulational instability in generalized nonlinear optical media
Research output: Research - peer-review › Book chapter – Annual report year: 2006

MPOF Biosensors
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2006

Nanoengineering of photonic crystal fibers for supercontinuum spectral shaping
Research output: Research - peer-review › Journal article – Annual report year: 2006

Nonlocal description of X waves in quadratic nonlinear materials
Research output: Research - peer-review › Journal article – Annual report year: 2006

Observation of attraction between dark solitons
Research output: Research - peer-review › Journal article – Annual report year: 2006

Photonic crystal fiber long-period gratings for biochemical sensing
Research output: Research - peer-review › Journal article – Annual report year: 2006

Second-harmonic generation with zero group-velocity mismatch in nonlinear photonic crystal fibers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2006

Second-harmonic Generation with Zero Group-Velocity Mismatch in Nonlinear Photonic Crystal Fibers
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2006

Soliton collision and Raman gain regimes in continuous-wave pumped supercontinuum generation
Research output: Research - peer-review › Journal article – Annual report year: 2006

Stability of two-dimensional spatial solitons in nonlocal nonlinear media
Research output: Research - peer-review › Journal article – Annual report year: 2006

Stability of two-dimensional spatial solitons in nonlocal nonlinear media
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2006

Stable rotating dipole solitons in nonlocal media
Research output: Research - peer-review › Article in proceedings – Annual report year: 2006
Stable rotating dipole solitons in nonlocal optical media
Research output: Research - peer-review › Journal article – Annual report year: 2006

Supercontinuum generation in fibers infiltrated with liquid crystals
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2006

The influence of input pump polarization on supercontinuum generation in photonic crystal fibers
Research output: Research - peer-review › Paper – Annual report year: 2006

Towards biochips using microstructured optical fiber sensors
Research output: Research - peer-review › Journal article – Annual report year: 2006

Tuning quadratic nonlinear photonic crystal fibers for zero group-velocity mismatch
Research output: Research - peer-review › Journal article – Annual report year: 2006

Biomolecule detection with integrated photonic crystal fiber sensor
Research output: Research - peer-review › Article in proceedings – Annual report year: 2005

Dark soliton formation and interaction in nonlocal nonlinear thermal media
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2005

Escape angles for out-of-phase nematicons
Research output: Research - peer-review › Poster – Annual report year: 2005

High-resolution, real-time imaging using a fiber-based optical coherence tomography system
Research output: Research - peer-review › Poster – Annual report year: 2005

Modulation instability in nonlocal chi2-model
Research output: Research - peer-review › Poster – Annual report year: 2005

Nano-engineering of photonic crystal fibers for supercontinuum generation
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2005

Nonlinear wave dynamics in nonlocal media
Research output: Research › Conference abstract for conference – Annual report year: 2005

Observation of attraction forces between dark solitons
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2005

Observation of attraction of dark solitons
Research output: Research - peer-review › Article in proceedings – Annual report year: 2005

Ring vortex solitons in nonlocal nonlinear media
Research output: Research - peer-review › Journal article – Annual report year: 2005

Ring vortex solitons in nonlocal nonlinear media
Research output: Research › Conference abstract in proceedings – Annual report year: 2005
Ring vortex solitons in nonlocal nonlinear media
Research output: Research › Conference abstract for conference – Annual report year: 2005

Ring vortex solitons in nonlocal nonlinear media
Research output: Research › Peer-review › Poster – Annual report year: 2005

Selective detection of antibodies in microstructured polymer optical fibers
Research output: Research › Peer-review › Journal article – Annual report year: 2005

Soliton interactions in nematic liquid crystals (NLC)
Research output: Research › Peer-review › Journal article – Annual report year: 2005

Supercontinuum generation in a photonic crystal fiber tapered to normal dispersion for all wavelengths
Research output: Research › Peer-review › Poster – Annual report year: 2005

Supercontinuum generation in a photonic crystal fiber with two zero-dispersion wavelengths tapered to normal dispersion at all wavelength
Research output: Research › Peer-review › Journal article – Annual report year: 2005

Supercontinuum generation in photonic crystal fibers: The role of the second zero dispersion wavelength
Research output: Research › Conference abstract in proceedings – Annual report year: 2005

Supercontinuum generation in untapered and tapered photonic crystal fibers with two zero dispersion wavelengths
Research output: Research › Peer-review › Conference article – Annual report year: 2005

Supercontinuum generation in untapered and tapered photonic crystal fibers with two zero dispersion wavelengths
Research output: Research › Peer-review › Conference abstract for conference – Annual report year: 2005

Theory of nonlocal soliton interaction in nematic liquid crystals
Research output: Research › Peer-review › Journal article – Annual report year: 2005

The role of tapering and second zero dispersion wavelength for supercontinuum generation in Photonic Crystal Fibers
Research output: Research › Poster – Annual report year: 2005

The role of the second zero-dispersion wavelength in generation of supercontinua and bright-bright soliton-pairs across the zero-dispersion wavelength
Research output: Research › Peer-review › Journal article – Annual report year: 2005

Attraction of nonlocal dark optical solitons
Research output: Research › Peer-review › Journal article – Annual report year: 2004

A nonlocal description of two-color parametric solitons
Research output: Research › Peer-review › Poster – Annual report year: 2004

Bubble generation in a twisted and bent DNA-like model
Research output: Research › Peer-review › Journal article – Annual report year: 2004

Cob-web microstructured fibers optimized for supercontinuum generation with picosecond pulses
Research output: Research › Peer-review › Paper – Annual report year: 2004
Complete modulational-instability gain spectrum of nonlinear quasi-phase-matching gratings
Research output: Research - peer-review › Journal article – Annual report year: 2004

Dispersion engineered cob-web photonic crystal fibers for efficient supercontinuum generation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

Dispersion engineered nano-structured cob-web photonic crystal fibres for efficient supercontinuum generation
Research output: Research - peer-review › Poster – Annual report year: 2004

Energy funneling in a bent chain of Morse oscillators with long-range coupling
Research output: Research - peer-review › Journal article – Annual report year: 2004

Modulation instability in a nonlocal \(x(2)\) - model
Research output: Research - peer-review › Poster – Annual report year: 2004

Modulation instability, solitons and beam propagation in spatially nonlocal nonlinear media
Research output: Research - peer-review › Journal article – Annual report year: 2004

Nonlinear wave propagation in nonlocal media
Research output: Research - peer-review › Paper – Annual report year: 2004

Nonlocal incoherent solitons
Research output: Research - peer-review › Paper – Annual report year: 2004

Nonlocal incoherent solitons
Research output: Research - peer-review › Journal article – Annual report year: 2004

Nonlocal incoherent solitons in materials with a logarithmic nonlinearity
Research output: Research › Paper – Annual report year: 2004

Nonlocal solitons
Research output: Research › Paper – Annual report year: 2004

Optical beams and spatial solitons in nonlocal nonlinear media
Research output: Research - peer-review › Paper – Annual report year: 2004

Phase- and group velocity matching in triangular photonic crystal fibres
Research output: Research › Journal article – Annual report year: 2004

Photonic crystal fiber based antibody detection
Research output: Research - peer-review › Paper – Annual report year: 2004

Photonic crystal fiber based antibody detection
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

Photonic crystal fiber design for broadband directional coupling
Research output: Research - peer-review › Journal article – Annual report year: 2004

Photonic crystal structures in sensing technology
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004
Second-harmonic generation in microstructured fibres: simultaneous phase-and group-velocity matching
Research output: Research - peer-review → Poster – Annual report year: 2004

Simultaneous phase- and group-velocity matching in photonic crystal fibres
Research output: Research - peer-review → Paper – Annual report year: 2004

Designing the dispersion for optimum supercontinuum bandwidth using picosecond pulses
Research output: Research - peer-review → Article in proceedings – Annual report year: 2003

Improving efficiency of supercontinuum generation in photonic crystal fibers
Research output: Research - peer-review → Journal article – Annual report year: 2003

Improving efficiency of supercontinuum generation in photonic crystal fibres by direct degenerate four-wave mixing
Research output: Research - peer-review → Journal article – Annual report year: 2003

Large amplitude spatial fluctuations in the boundary region of the Bose-Einstein condensate in the Gross-Pitaevskii regime
Research output: Research - peer-review → Journal article – Annual report year: 2003

Nonlinear waves in nonlocal media
Research output: Research - peer-review → Poster – Annual report year: 2003

Nonlocal solitons
Research output: Research - peer-review → Poster – Annual report year: 2003

Optical Beams in Nonlocal Nonlinear Media
Research output: Research - peer-review → Conference article – Annual report year: 2003

Quadratic solitons as nonlocal solitons
Research output: Research - peer-review → Paper – Annual report year: 2003

Quadratic solitons as nonlocal solitons
Research output: Research - peer-review → Journal article – Annual report year: 2003

Quadratic solitons described as nonlocal solitons
Research output: Research - peer-review → Poster – Annual report year: 2003

Collapse arrest and soliton stabilization in nonlocal nonlinear media
Research output: Research - peer-review → Journal article – Annual report year: 2002

Complete description of all modulational instability gain bands generated by nonlinear QPM gratings
Research output: Research → Article in proceedings – Annual report year: 2002

Engineering of spatial solitons in two-period QPM structures
Research output: Research - peer-review → Journal article – Annual report year: 2002

Escape angles in bulk chi(2) soliton interactions
Research output: Research - peer-review → Journal article – Annual report year: 2002

Generic features of modulational instability in nonlocal Kerr media
Research output: Research - peer-review → Journal article – Annual report year: 2002
Improving efficiency of supercontinuum generation in photonic crystal fibers by direct degenerate four-wave-mixing
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Modulational-instability gain bands in quasi-phase-matched materials
Research output: Research › Article in proceedings – Annual report year: 2002

Plane waves in periodic, quadratically nonlinear slab waveguides: stability and exact Fourier structure
Research output: Research - peer-review › Journal article – Annual report year: 2002

Soliton engineering with two-period QPM gratings
Research output: Research › Article in proceedings – Annual report year: 2002

Soliton interaction in weakly nonlocal nonlinear media
Research output: Research › Article in proceedings – Annual report year: 2002

Accurate switching intensities and length scales in quasi-phase-matched materials
Research output: Research - peer-review › Journal article – Annual report year: 2001

Accurate switching intensities and length scales in quasi-phase-matched materials
Research output: Research › Article in proceedings – Annual report year: 2001

Asymmetric induced cubic nonlinearities in homogeneous and quasi-phase-matched quadratic materials: signature and importance
Research output: Research - peer-review › Journal article – Annual report year: 2001

Determination of escape angles in quadratic bulk experiments with two identical solitons
Research output: Research - peer-review › Article in proceedings – Annual report year: 2001

Modulational Instability in nonlocal Kerr media
Research output: Research › Article in proceedings – Annual report year: 2001

Modulational Instability in nonlocal nonlinear Kerr media
Research output: Research - peer-review › Journal article – Annual report year: 2001

Modulational instability in periodic quadratic nonlinear materials
Research output: Research - peer-review › Journal article – Annual report year: 2001

Modulationally stable propagation in periodic quadratically nonlinear slab waveguides
Research output: Research › Article in proceedings – Annual report year: 2001

Nonlinearity and disorder: Classification and stability of nonlinear impurity modes
Research output: Research - peer-review › Journal article – Annual report year: 2001

Nonlinearity and disorder: Theory and applications
Research output: Research - peer-review › Book – Annual report year: 2001

Parametric localized modes in quadratic nonlinear photonic structures
Research output: Research - peer-review › Journal article – Annual report year: 2001

Rigorous proof of soliton stability and absence of collapse in Kerr media and Bose-Einstein condensates with a general nonlocal nonlinearity
Research output: Research › Article in proceedings – Annual report year: 2001
Solitons in nonlocal nonlinear media: Exact solutions
Research output: Research - peer-review › Journal article – Annual report year: 2001

Solitons in quadratic nonlinear photonic crystals
Research output: Research - peer-review › Journal article – Annual report year: 2001

Collapse suppression and soliton stabilization through nonlocality in bulk Kerr media
Research output: Research - peer-review › Article in proceedings – Annual report year: 2000

Effective nonlinearities and multi-wavelength second-harmonic generation in modulated quasi-phase-matching gratings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2000

Effective nonlinearities in modulated QPM gratings
Research output: Research - peer-review › Journal article – Annual report year: 2000

Effects of linear gratings in quasi-phase-matched quadratic| materials with induced Kerr effects
Research output: Research › Journal article – Annual report year: 2000

Engineering of effective quadratic and cubic nonlinearities in two-period QPM gratings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2000

Fusion arrest and collapse phenomena due to Kerr-nonlinearity in quadratic media
Research output: Research - peer-review › Article in proceedings – Annual report year: 2000

Influence of Four-Wave Mixing and Walk-Off on the Self-Focusing of Coupled Waves
Research output: Research - peer-review › Journal article – Annual report year: 2000

Modulational stability and dark solitons in periodic quadratic nonlinear media
Research output: Research - peer-review › Article in proceedings – Annual report year: 2000

Multi-component optical solitary waves
Research output: Research - peer-review › Journal article – Annual report year: 2000

Multi-wavelength and multi-colour temporal and spatial optical solitons
Research output: Research - peer-review › Article in proceedings – Annual report year: 2000

Optical spatial solitons in nonlocal nonlinear medium
Research output: Research - peer-review › Article in proceedings – Annual report year: 2000

Robustness of quadratic solitons with periodic gain
Research output: Research - peer-review › Journal article – Annual report year: 2000

Soliton collisions in quadratic bulk media with a| nonvanishing Kerr non-linearity
Research output: Research › Journal article – Annual report year: 2000

Soliton interaction in quadratic and cubic bulk media
Research output: Research - peer-review › Article in proceedings – Annual report year: 2000

Spatial solitons in nonlinear photonic crystals
Research output: Research - peer-review › Article in proceedings – Annual report year: 2000
Unified model for partially coherent solitons in logarithmically nonlinear media
Research output: Research - peer-review › Journal article – Annual report year: 2000

Collapse of Incoherent Light Beams in Inertial Bulk Kerr Media
Research output: Research - peer-review › Journal article – Annual report year: 1999

Engineering competing nonlinearities
Research output: Research - peer-review › Journal article – Annual report year: 1999

Fusion, collapse, and stationary bound states of incoherently coupled waves in bulk cubic media
Research output: Research - peer-review › Journal article – Annual report year: 1999

Quasiperiodic Envelope Solitons
Research output: Research - peer-review › Journal article – Annual report year: 1999

Two-Color Nonlinear Localized Modes in Photonic Crystals
Research output: Research - peer-review › Journal article – Annual report year: 1999

Two-color nonlinear localized photonic modes
Research output: Research - peer-review › Journal article – Annual report year: 1999

Stationary solutions and self-trapping in discrete quadratic nonlinear systems
Research output: Research - peer-review › Journal article – Annual report year: 1998

Spatial Solitons and Induced Kerr Effects in Quasi-Phase-Matched Quadratic Media
Research output: Research - peer-review › Journal article – Annual report year: 1997

Temperature effects in a nonlinear model of monolayer Scheibe aggregates
Research output: Research - peer-review › Journal article – Annual report year: 1994

Projects:

High-Speed Time-stretch Optical coherence tomography
Project: PhD

Polymer Optical Fiber Bragg Gratings for high sensitivity distributed biochemical sensors
Project: PhD

Gas-filled Hollow-Core Photonic Crystal Fibers for sensing applications and ultrafast non-linear optics
Project: PhD

Multi-tone supercontinuum sources for food control applications with IR spectroscopy
Project: PhD

Supercontinuum generation with rugged femtosecond fibre lasers
Project: PhD

High-power visible-near-IR Supercontinuum sources for spectroscopic photoacoustic microscopy
Project: PhD
Rekonfigurérbare optiske bølgelederstrukturer genereret ved solitonvekselvirkning
Project: PhD

Modellering og udvikling af fotoniske krystal bølgeledere
Project: PhD

Low noise femtosecond supercontinuum sources
Project: PhD

Low-noise supercontinuum lasers for Optical Coherence Tomography systems
Project: PhD

Design and fabrication of UV waveguiding polymer tube
Project: PhD

Ultrafast mid-IR nonlinear optics in gas-filled hollow-core photonic crystal fibers
Project: PhD

Speciality and Microstructured Polymer Optical FBG Sensors
Project: PhD

POF based Glucose Sensor Incorporating Grating Wavelength Filters
Project: PhD

Optical Fiber based Biosensors
Project: PhD

Polymer fiber-optical microphones
Project: PhD

Photonic crystal rod amplifiers: Understanding a new class of active optical waveguides
Project: PhD

Coherent energy transport, thermal effects, and radiative decay in ordered molecular monolayers by nonlinear dynamical models
Project: PhD

Spatial solitons, vortices, and patterns in non-linear optical media
Project: PhD

Nonlinear Photonic Crystals
Project: PhD

Nonlinear dynamics of optical polymers
Project: PhD

Fibre Laser based broadband THz imaging systems
Project: PhD
Biomedical Applications of Photonic Crystal Fibres
Project: PhD

Liquid Crystal Filled Microstructured Polymer Optical Fibres
Project: PhD

Advanced devices for ultra-high capacity optical communication systems
Project: PhD

Infrared Supercontinuum Generation in Soft Glass Fibers
Project: PhD

THz-BREW: Terahertz Broadband Relaxation dynamics of Electrons in Water
Project: PhD

Long-pulse Super-continuum Light Sources
Project: PhD

Hollow-core fibers for high power laser applications
Project: PhD

Laser frequency standards based on gas-filled hollow-core fibres
Project: PhD

2-10um mid-infrared supercontinuum light sources
Project: PhD

Topas microstructured polymer optical fibers for biosensing and terahertz waveguides
Project: PhD

Modelling of Mid-ir supercontinuum Generation in Chalcogendie Fibers
Project: PhD

Femtosecond few-cycle mid-infrared laser pulses
Project: PhD

Modal instabilities in large mode area fiber amplifiers and lasers
Project: PhD

Photonic crystal THz fibres and functional fibres devices
Project: PhD

Photonic Cristal Fiber based Sensors for Label-Free Detection of Biomolecules
Project: PhD

Fiber Bragg grating (FBG) strain sensors in all-solid microstructured polymer optical fibers
Project: PhD

Continuous Wave Supercontinuum Light Sources based on Tapered Photonic Crystal Fibres
Project: PhD
Deep-blue Supercontinuum Light Sources based on Tapered Photonic Crystal Fibres  
Project: PhD

Nonlinear properties of soft glass waveguides  
Project: PhD

Technology for POFBG fabrication and interrogation  
Project: PhD

Light and Food  
Project: Research

Mid- to NEaR infrared spectroscopy for improVed medical diAgnostics (MINERVA)  
Project: Research

Few-cycle femtosecond optical pulses in the visible and near-infrared  
Project: Research

Optical transducer systems: Optical microphones, accelerometers and pressure transducers based on FBG (Fiber Bragg Grating) technology and optical detectors  
Project: Research

Infrared high-power lasers and broadband light sources based on novel soft glass fiber technology  
Project: Research

Intelligent Tapers and Seeding for taming the optical Rogue wave and develop stable deep-blue Supercontinuum light sources  
Project: Research

Polymer-fibre based biosensor based on nonlinear optical effects  
Project: Research

Træktårn til mikrostrukturerede optiske polymerfibre  
Project: Research

Jorck og Hustrus Fond Pris  
Project: Research

All-Optical Signal Processing in Quadratic Nonlinear Materials  
Project: Research

Activities:

Polarization noise study in all-normal dispersion fiber supercontinuum generation  
Activity: Talks and presentations › Conference presentations

Ultra-low noise supercontinuum source for ultra-high resolution optical coherence tomography at 1300 nm  
Activity: Talks and presentations › Conference presentations

Optical Coherence Tomography, General aspects and use in Laryngology  
Activity: Talks and presentations › Conference presentations
Phase estimation for global defocus correction in optical coherence tomography
Activity: Talks and presentations › Conference presentations

Versatile hand-held master-slave optical coherence tomography instrument for non-destructive testing
Activity: Talks and presentations › Conference presentations

Resolution dependence on phase extraction by the Hilbert transform in phase calibrated and dispersion compensated ultrahigh resolution spectrometer based OCT
Activity: Talks and presentations › Conference presentations

Noise study of all-normal dispersion supercontinuum sources for potential application in optical coherence tomography
Activity: Talks and presentations › Conference presentations

Master/slave: a better tool for Gabor filtering optical coherence tomography imaging instruments
Activity: Talks and presentations › Conference presentations

Non-destructive testing of layer-to-layer fusion of a 3D print using ultrahigh resolution optical coherence tomography
Activity: Talks and presentations › Conference presentations

Hvorledes kan man udvikle en optiksensor i Danmark
Activity: Other

Optik i Arbejdstøj
Activity: Talks and presentations › Conference presentations

2nd Workshop on Specialty Optical Fibers and Their Applications
Activity: Talks and presentations › Conference presentations

2nd Workshop on Specialty Optical Fibers and Their Applications
Activity: Talks and presentations › Conference presentations

OSA Optics & Photonics Congress: Nonlinear Photonics
Activity: Attending an event › Participating in or organising a conference

COST Action 299, Optical Fibers for New Challenges Facing the Information Society
Activity: Talks and presentations › Conference presentations

Optical Fibers for New Challenges Facing the Information Society
Activity: Talks and presentations › Conference presentations

Biosensing with microstructured polymer optical fibers
Activity: Talks and presentations › Conference presentations

Enhanced soliton self-frequency shift by intelligent tapering
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.