Research outputs:

The aesthetic nature of the birthing room environment may alter the need for obstetrical interventions – an observational retrospective cohort study
Research output: Research - peer-review › Journal article – Annual report year: 2019

UV light assisted antibiotics for eradication of in vitro biofilms
Research output: Research - peer-review › Journal article – Annual report year: 2018

Dynamics of a green high-power tunable broad-area GaN diode laser with external-cavity feedback
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Diode laser systems based on nonlinear frequency conversion
Research output: Research - peer-review › Book chapter – Annual report year: 2018

Dynamics of a green high-power tunable external-cavity broad-area GaN diode laser
Research output: Research - peer-review › Journal article – Annual report year: 2018

Efficiency enhancement of InGaN amber MQWs using nanopillar structures
Research output: Research - peer-review › Journal article – Annual report year: 2018

Introduction to semiconductor light sources and their biomedical applications
Research output: Research - peer-review › Book chapter – Annual report year: 2018

LED Technology for Dental Applications
Research output: Research › Conference abstract for conference – Annual report year: 2018

Room-Light 1:1-Light Simulation Using a Mock-Up of Patient Bedrooms in the Projected New Psychiatric Hospital Bispebjerg
Research output: Research - peer-review › Journal article – Annual report year: 2018

Saturation in ceramic phosphors illuminated by a blue laser diode
Research output: Research - peer-review › Paper – Annual report year: 2018

Semiconductor Lasers and Diode-based Light Sources for Biophotonics
Research output: Research - peer-review › Book – Annual report year: 2018
Tunable High-Power External-Cavity GaN Diode Laser Systems in the Visible Spectral Range
Research output: Research - peer-review › Book chapter – Annual report year: 2018

Two-color interpolation of the absorption response for quantitative acousto-optic imaging
Research output: Research - peer-review › Journal article – Annual report year: 2018

Vitamin D enhanced pork from pigs exposed to artificial UVB light in indoor facilities
Research output: Research - peer-review › Journal article – Annual report year: 2018

3.5 W of diffraction-limited green light at 515 nm from SHG of a single-frequency tapered diode laser
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Depressed Patients Hospitalized in Southeast-Facing Rooms Are Discharged Earlier than Patients in Northwest-Facing Rooms
Research output: Research - peer-review › Journal article – Annual report year: 2017

Effective optimization of surface passivation on porous silicon carbide using atomic layer deposited Al2O3
Research output: Research - peer-review › Journal article – Annual report year: 2017

Effect of dopants on the morphology of porous SiC
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Efficient generation of 3.5W laser light at 515nm by frequency doubling a single-frequency high power DBR tapered diode laser
Research output: Research - peer-review › Journal article – Annual report year: 2017

High power diode lasers converted to the visible
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

How to treat Alzheimer's with new LED light technology
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Inactivation of Pseudomonas aeruginosa biofilm after ultraviolet light-emitting diode treatment: a comparative study between ultraviolet C and ultraviolet B
Research output: Research - peer-review › Journal article – Annual report year: 2017

Investigation of saturation effects in ceramic phosphors for laser lighting
Research output: Research - peer-review › Journal article – Annual report year: 2017

Light interventions: a novel approach for sustaining sleep quality and quantity of elite swimmers under conditions of shifted circadian rhythm
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Light interventions: a novel approach for sustaining sleep quality and quantity of elite swimmers under conditions of shifted circadian rhythm
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

New dental applications with LEDs
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Phosphor converted laser diode light source for endoscopic diagnostics
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017
Phosphor converted laser diode light source for endoscopic diagnostics
Research output: Research › Poster – Annual report year: 2018

UVB irradiation has a greater efficacy than photodynamic therapy on Enterococcus faecalis
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

White light emission from fluorescent SiC with porous surface
Research output: Research - peer-review › Journal article – Annual report year: 2017

Lamp for sunshine simulation
Research output: Research › Patent – Annual report year: 2016

340 nm pulsed UV LED system for europium-based time-resolved fluorescence detection of immunoassays
Research output: Research - peer-review › Journal article – Annual report year: 2016

Combining surface plasmonic and light extraction enhancement on InGaN quantum-well light-emitters
Research output: Research - peer-review › Journal article – Annual report year: 2016

Comparison of UVB and UVC irradiation disinfection efficacies on Pseudomonas Aeruginosa biofilm
Research output: Research - peer-review › Poster – Annual report year: 2016

Comparison of UVB and UVC irradiation disinfection efficacies on Pseudomonas Aeruginosa biofilm
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Does correlated color temperature affect the ability of humans to identify veins?
Research output: Research - peer-review › Journal article – Annual report year: 2016

Fabrication and surface passivation of porous 6H-SiC by atomic layer deposited films
Research output: Research - peer-review › Journal article – Annual report year: 2016

Glass Quality and Health in Public Housing
Research output: Research › Poster – Annual report year: 2016

Green high-power tunable external-cavity GaN diode laser at 515 nm
Research output: Research - peer-review › Journal article – Annual report year: 2016

High-flux focusable color-tunable and efficient white-light-emitting diode light engine for stage lighting
Research output: Research - peer-review › Journal article – Annual report year: 2016

Hybrid surface structures for efficiency enhancement of fluorescent SiC for white LED application
Research output: Research - peer-review › Paper – Annual report year: 2016

Investigation of the effect of UV-LED exposure conditions on the production of vitamin D in pig skin
Research output: Research - peer-review › Journal article – Annual report year: 2016

Laser diode based lighting for biomedical applications
Research output: Research - peer-review › Poster – Annual report year: 2016

Photoluminescence Enhancement in Nanotextured Fluorescent SiC Passivated by Atomic Layer Deposited Al2O3 Films
Research output: Research - peer-review › Journal article – Annual report year: 2016
Photoluminescence enhancement in porous SiC passivated by atomic layer deposited Al2O3 films
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Saturation effects of phosphor converted laser diodes
Research output: Research - peer-review › Poster – Annual report year: 2016

Surface passivation of nano-textured fluorescent SiC by atomic layer deposited TiO2
Research output: Research - peer-review › Journal article – Annual report year: 2016

Tunable high-power narrow-linewidth green external-cavity GaN diode laser
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Tuning range and output power optimization of an external-cavity GaN diode laser at 455 nm
Research output: Research - peer-review › Journal article – Annual report year: 2016

Laser Apparatus with Cascade of Nonlinear Frequency Mixers
Research output: Research › Patent – Annual report year: 2015

5.5 W of Diffraction-Limited Green Light Generated by SFG of Tapered Diode Lasers in a Cascade of Nonlinear Crystals
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Concept for power scaling second harmonic generation using a cascade of nonlinear crystals
Research output: Research - peer-review › Journal article – Annual report year: 2015

Development of LED Light Sources for Improved Visualization of Veins: a statistical approach
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Dielectric coating and surface plasmon enhancement of multi-color quantum-well structures
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Fabrication and Improvement of nanopillar InGaN/GaN light-emitting diodes using nanosphere lithography
Research output: Research - peer-review › Journal article – Annual report year: 2015

Highly efficient single-pass sum frequency generation by cascaded nonlinear crystals
Research output: Research - peer-review › Journal article – Annual report year: 2015

High-power non linear frequency converted laser diodes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

LED-lys til ældre: Lys, trivsel og alder - Hvordan hænger det sammen?
Research output: Communication › Report – Annual report year: 2015

Photoluminescence enhancement in nano-textured fluorescent SiC passivated by atomic layer deposited Al2O3 films
Research output: Research - peer-review › Paper – Annual report year: 2015

Scalable nanostructuring on polymer by a SiC stamp: optical and wetting effects
Research output: Research › Sound/Visual production (digital) – Annual report year: 2015

Scalable nanostructuring on polymer by a SiC stamp: optical and wetting effects
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015
Wavelength-conversion efficiency enhancement in nano-textured fluorescent 6H-SiC passivated by atomic layer deposited titanium oxide
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Compact green-diode-based lasers for biophotonic bioimaging
Research output: Research - peer-review › Journal article – Annual report year: 2014

A high power directly diode pumped Ti:sapphire laser with synchronized Yb-fiber amplifier for nonlinear optical microscopy and optical coherence tomography
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

A new approach to sum frequency generation of single-frequency blue light in a coupled ring cavity
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Development of New LED Light Sources for Improved Visualization of Bio-samples
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Dynamic behaviors of a broad-area diode laser with lateral-mode-selected external feedback
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Dynamics of a broad-area diode laser with lateral-mode-selected long-cavity feedback
Research output: Research - peer-review › Journal article – Annual report year: 2014

Future Solid State Lighting Based on Light Emitting Laser Diodes
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Future Solid State Lighting using LEDs and Diode Lasers
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Generation of 3.5 W of diffraction-limited green light from SHG of a single tapered diode laser in a cascade of nonlinear crystals
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Power Scaling of Nonlinear Frequency Converted Tapered Diode Lasers for Biophotonics
Research output: Research - peer-review › Journal article – Annual report year: 2014

Slutrapport for Hybrid belysning på skolebænken
Research output: Research - peer-review › Report – Annual report year: 2014

Surface plasmon coupling dynamics in InGaN/GaN quantum-well structures and radiative efficiency improvement
Research output: Research - peer-review › Journal article – Annual report year: 2014

Degradation Processes in High-Power Diode Lasers under External Optical Feedback
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Dynamic miniature lighting system with low correlated colour temperature and high colour rendering index for museum lighting of fragile artefacts
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Efficient concept generating 3.9 W of diffraction-limited green light with spectrally combined tapered diode lasers
Research output: Research - peer-review › Conference article – Annual report year: 2013
Generation of single-frequency tunable green light in a coupled ring tapered diode laser cavity
Research output: Research - peer-review › Journal article – Annual report year: 2013

Green, compact diode laser-based systems for biophotonics application
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Green, compact diode laser-based systems for biophotonics application
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

How does external feedback cause AlGaAs-based diode lasers to degrade?
Research output: Research - peer-review › Journal article – Annual report year: 2013

Intelligent styring af dynamisk LED belysning
Research output: Research › Report – Annual report year: 2013

Method of stabilizing a laser apparatus with wavelength converter
Research output: Research › Patent – Annual report year: 2013

Origin of low quantum efficiency of photoluminescence of InP/ZnS nanocrystals
Research output: Research - peer-review › Journal article – Annual report year: 2013

Resonant Plasmonic Enhancement of InGaN/GaN LED using Periodically Structured Ag Nanodisks
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Simulation Tool for Designing off-Grid PV Applications for the Urban Environments
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Simultaneous dual wavelength eye-tracked ultrahigh resolution retinal and choroidal optical coherence tomography
Research output: Research - peer-review › Journal article – Annual report year: 2013

Single-frequency blue light generation by single-pass sum-frequency generation in a coupled ring cavity tapered laser
Research output: Research - peer-review › Journal article – Annual report year: 2013

Spectral properties of a broad-area diode laser with off-axis external-cavity feedback
Research output: Research - peer-review › Journal article – Annual report year: 2013

The impact of external optical feedback on the degradation behavior of high-power diode lasers
Research output: Research - peer-review › Conference article – Annual report year: 2013

CO₂ neutratl armatur – CopenHybride
Research output: Research - peer-review › Sound/Visual production (digital) – Annual report year: 2012

Dansk LED - Museumsbelysning
Research output: Research - peer-review › Poster – Annual report year: 2012

Dual-wavelength high-power diode laser system based on an external-cavity tapered amplifier with tunable frequency difference
Research output: Research - peer-review › Journal article – Annual report year: 2012
Efficient concept for generation of diffraction-limited green light by sum-frequency generation of spectrally combined tapered diode lasers
Research output: Research - peer-review › Journal article – Annual report year: 2012

Efficient generation of 3.9 W of diffraction-limited green light with spectrally combined tapered diode lasers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Energy efficient Solid State Lighting
Research output: Research - peer-review › Report chapter – Annual report year: 2012

External-cavity high-power dual-wavelength tapered amplifier with tunable THz frequency difference
Research output: Research - peer-review › Conference article – Annual report year: 2012

Frequency-doubled diode laser for direct pumping of Ti:sapphire lasers
Research output: Research - peer-review › Conference article – Annual report year: 2012

High Power Diode Lasers with External Feedback: Overview and Prospects
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Laser system with wavelength converter
Research output: Research › Patent – Annual report year: 2012

Light distribution system comprising spectral conversion means
Research output: Research › Patent – Annual report year: 2012

Red Tunable High-Power Narrow-Spectrum External-Cavity Diode Laser Based on Tapered Amplifier
Research output: Research - peer-review › Book chapter – Annual report year: 2012

Spectral beam combining of diode lasers with high efficiency
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Spectral Design Flexibility of LED Brings Better life
Research output: Research - peer-review › Conference article – Annual report year: 2012

Improvement of the spatial and spectral coherence in high power diode lasers
Research output: Research › Ph.D. thesis – Annual report year: 2011

16 W output power by high-efficient spectral beam combining of DBR-tapered diode lasers
Research output: Research - peer-review › Journal article – Annual report year: 2011

Antireflective sub-wavelength structures for improvement of the extraction efficiency and color rendering index of monolithic white light-emitting diode
Research output: Research - peer-review › Journal article – Annual report year: 2011

Diffusely radiating led light system
Research output: Research › Patent – Annual report year: 2011

Direct pumping of ultrashort Ti:sapphire lasers by a frequency doubled diode laser
Research output: Research - peer-review › Conference article – Annual report year: 2012

Edge emitters with external cavities: Chapter 15.1
Research output: Research - peer-review › Book chapter – Annual report year: 2011
Experimental investigation of relative timing jitter in passively synchronized Q-switched lasers
Research output: Research - peer-review | Journal article – Annual report year: 2011

Frequency-doubled DBR-tapered diode laser for direct pumping of Ti:sapphire lasers generating sub-20 fs pulses
Research output: Research - peer-review | Journal article – Annual report year: 2011

High-power dual-wavelength external-Cavity diode laser based on tapered amplifier with tunable terahertz frequency difference
Research output: Research - peer-review | Journal article – Annual report year: 2011

Narrow line width operation of a 980 nm gain guided tapered diode laser bar
Research output: Research - peer-review | Journal article – Annual report year: 2011

Passive synchronized Q-switching between a quasi-three-level and a four-level laser
Research output: Research - peer-review | Conference article – Annual report year: 2011

Spectral narrowing of a 980 nm tapered diode laser bar
Research output: Research - peer-review | Conference article – Annual report year: 2011

Tunable high-power narrow-spectrum external-cavity diode laser at 675 nm as a pump source for UV generation
Research output: Research - peer-review | Journal article – Annual report year: 2011

Widely Tunable High-Power Tapered Diode Laser at 1060 nm
Research output: Research - peer-review | Journal article – Annual report year: 2011

1.38 W tunable high-power narrow-linewidth external-cavity tapered amplifier at 670 nm
Research output: Research - peer-review | Article in proceedings – Annual report year: 2010

All passive synchronized Q-switching of a quasi-three-level and a four-level Nd:YAG laser
Research output: Research - peer-review | Journal article – Annual report year: 2010

Autofluorescence of pigmented skin lesions using a pulsed UV laser with synchronized detection: clinical results
Research output: Research - peer-review | Conference article – Annual report year: 2010

Efficient quasi-three-level Nd:YAG laser at 946 nm pumped by a tunable external cavity tapered diode laser
Research output: Research - peer-review | Journal article – Annual report year: 2010

High-power green light generation by second harmonic generation of single-frequency tapered diode lasers
Research output: Research - peer-review | Article in proceedings – Annual report year: 2010

’No blue’ LED solution for photolithography room illumination
Research output: Research - peer-review | Book chapter – Annual report year: 2010

’No Blue’ White LED
Research output: Research - peer-review | Book chapter – Annual report year: 2010

Photonics activities at DTU Fotonik
Research output: Research - peer-review | Journal article – Annual report year: 2010
Tunable high-power narrow-spectrum external-cavity diode laser based on tapered amplifier at 668 nm
Research output: Research - peer-review › Journal article – Annual report year: 2010

Two-wave mixing in broad-area semiconductor amplifier
Research output: Research - peer-review › Book chapter – Annual report year: 2010

1.5 W green light generation by single-pass second harmonic generation of a single-frequency tapered diode laser
Research output: Research - peer-review › Journal article – Annual report year: 2009

A general theory of two-wave mixing in nonlinear media
Research output: Research - peer-review › Journal article – Annual report year: 2009

A new approach to asymmetric feedback in a segmented broad area diode laser
Research output: Research - peer-review › Journal article – Annual report year: 2009

A new LED light source for display cases
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Catastrophic optical mirror damage in diode lasers monitored during single-pulse operation
Research output: Research - peer-review › Journal article – Annual report year: 2009

Design and Simulation of Next-Generation High-Power, High-Brightness Laser Diodes
Research output: Research - peer-review › Conference article – Annual report year: 2009

External cavity tapered diode pumped laser to generate pulsed UV light for autofluorescence diagnostics
Research output: Research › Poster – Annual report year: 2009

Light emitting diodes as an alternative ambient illumination source in photolithography environment
Research output: Research - peer-review › Journal article – Annual report year: 2009

New light with diodes: light for a brighter future
Research output: Communication › Book chapter – Annual report year: 2009

Photonics engineering in a new light
Research output: Research › Book chapter – Annual report year: 2009

Tapered diode laser pumped 946 nm Nd:YAG laser
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Threshold for strong thermal dephasing in periodically poled KTP in external cavity frequency doubling
Research output: Research - peer-review › Journal article – Annual report year: 2009

Tunable high-power narrow-linewidth semiconductor laser based on an external-cavity tapered amplifier at 670 nm
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

A new pulsed 404 nm laser source for biomedical applications
Research output: Research › Article in proceedings – Annual report year: 2008

High power 404 nm source based on second harmonic generation in PPKTP of a tapered external feedback diode laser
Research output: Research - peer-review › Journal article – Annual report year: 2008
Nonlinear gain amplification due to two-wave mixing in a broad-area semiconductor amplifier with moving gratings
Research output: Research - peer-review › Journal article – Annual report year: 2008

Nonlinear gain amplification due to two-wave mixing in a broad-area semiconductor amplifier with moving gratings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Pulsed UV Laser for Fluorescence Diagnostics based on Non-Linear Frequency Conversion
Research output: Research › Poster – Annual report year: 2008

Pulsed UV-light source for auto-fluorescence diagnostics
Research output: Research › Poster – Annual report year: 2008

Pulsed UV-light source for auto-fluorescence diagnostics
Research output: Research › Article in proceedings – Annual report year: 2008

Theoretical investigation of two-wave mixing in a broad-area semiconductor amplifier with moving gratings
Research output: Research › Conference abstract for conference – Annual report year: 2008

808 nm tapered diode lasers optimized for high output power and nearly diffraction-limited beam quality in pulse mode operation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

External cavity second harmonic generation of an external cavity tapered laser (poster)
Research output: Research › Poster – Annual report year: 2007

Generation of more than 300 mW diffraction-limited light at 405 nm by second-harmonic generation of a tapered diode laser with external cavity feedback
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

New LED light sources and lamps for general illumination
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Novel low-loss 3-element ring resonator for second-harmonic generation of 808nm into 404nm using periodically poled KTP
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Structure, stability, and spectra of lateral modes of a broad-area semiconductor laser
Research output: Research - peer-review › Journal article – Annual report year: 2007

Two-wave mixing in a broad-area semiconductor amplifier
Research output: Research › Article in proceedings – Annual report year: 2007

Udvikling af LED lyskilder og lamper. Slutrapport for PSO 337-068
Research output: Research › Report – Annual report year: 2007

BRIGHTER EU-projekt
Research output: Research › Conference abstract for conference – Annual report year: 2006

External cavity setups for improving the beam quality of broad-stripe diode lasers
Research output: Research › Conference abstract for conference – Annual report year: 2006
Near-diffraction-limited segmented broad area diode laser based on off-axis spectral beam combining
Research output: Research - peer-review › Journal article – Annual report year: 2006

Two-wave mixing in a broad-area semiconductor amplifier
Research output: Research - peer-review › Journal article – Annual report year: 2006

An external-cavity laser diode at 635 nm for laser display applications
Research output: Research - peer-review › Journal article – Annual report year: 2005

Efficiency improvements
Research output: Research › Book chapter – Annual report year: 2005

Einsteins teorier bag udviklingen af laseren
Research output: Communication › Journal article – Annual report year: 2005

External cavity setup for beam quality improvement of a broad-stripe segmented diode laser
Research output: Research › Conference abstract for conference – Annual report year: 2005

Guiding of laser modes based on self-pumped four-wave mixing in a semiconductor amplifier
Research output: Research - peer-review › Journal article – Annual report year: 2005

LED-forskning og udvikling i Danmark
Research output: Research › Conference abstract for conference – Annual report year: 2005

New diode laser architectures and their applications in medicine
Research output: Research › Conference abstract for conference – Annual report year: 2005

Nye LED-lyskilder
Research output: Research › Conference abstract for conference – Annual report year: 2005

Optics and Plasma Research Department annual progress report for 2004
Research output: Research › Report – Annual report year: 2005

Second-harmonic generation of 405-nm light using periodically poled KTiOPO4 pumped by external-cavity laser diode with double grating feedback
Research output: Research - peer-review › Journal article – Annual report year: 2005

Self-injection locking of an extraordinarily wide broad-area diode laser with a 1000-mu m-wide emitter
Research output: Research - peer-review › Journal article – Annual report year: 2005

Tunable high-power narrow-linewidth semiconductor laser based on an external-cavity tapered amplifier
Research output: Research - peer-review › Journal article – Annual report year: 2005

Udvikling af fremtidens LED-lyskilder
Research output: Research › Conference abstract for conference – Annual report year: 2005

Excitation and amplification of lateral array modes in a broad area laser diode using asymmetric feedback
Research output: Research › Conference abstract for conference – Annual report year: 2004

Improvement of spatial and temporal coherence of a broad area laser diode using an external-cavity design with double grating feedback
Research output: Research - peer-review › Journal article – Annual report year: 2004
Improvement of the beam quality of a 1000 μm wind broad-area diode laser with self-injection phase locking in an external cavity
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

Improvement of the beam quality of a broad-area diode laser using double feedback from two external mirrors
Research output: Research - peer-review › Journal article – Annual report year: 2004

Lateral mode selection in a broad area laser diode by self-injection locking with a mirror stripe
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

Nonlinear optical effects in high power diode lasers (invited lecture)
Research output: Research › Conference abstract for conference – Annual report year: 2004

Optics and Fluid Dynamics Department annual progress report for 2003
Research output: Research › Report – Annual report year: 2004

Spatial and spectral control of high-power diode lasers using phase conjugate mirrors
Research output: Research - peer-review › Book chapter – Annual report year: 2004

High brightness laser source based on polarization coupling of two diode lasers with asymmetric feedback
Research output: Research - peer-review › Journal article – Annual report year: 2002

Improvement of brightness and output power of high-power laser diodes in the visible spectral region
Research output: Research - peer-review › Journal article – Annual report year: 2003

Improvement of the beam quality of a diode laser with two active broad-area segments
Research output: Research - peer-review › Journal article – Annual report year: 2003

Improving the focusing properties of a near-infrared high-power broad-stripe diode laser (poster)
Research output: Research › Poster – Annual report year: 2003

Improving the spatial and temporal coherence of high-power diode lasers using four-wave mixing in the gain material
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

Optics and Fluid Dynamics Department annual progress report for 2002
Research output: Research › Report – Annual report year: 2003

Diodelasere
Research output: Research › Conference abstract for conference – Annual report year: 2002

High-power diode lasers
Research output: Research › Conference abstract for conference – Annual report year: 2002

Improvement of the beam quality of a diode laser with two active segments
Research output: Research › Article in proceedings – Annual report year: 2002

Laserteknologier til Versamatrix’ matrixproblem
Research output: Research › Conference abstract for conference – Annual report year: 2002
Nonlinear guided modes in a high-power semiconductor laser
Research output: Research › Conference abstract for conference – Annual report year: 2002

Optics and Fluid Dynamics Department annual progress report for 2001
Research output: Research › Report – Annual report year: 2002

Phase locking of laser diode with microlens (poster)
Research output: Research › Conference abstract in proceedings – Annual report year: 2002

Polarization coupling of two broad area laser diodes with external feedback (poster)
Research output: Research › Conference abstract in proceedings – Annual report year: 2002

Power coupling of two broad area laser diodes with external feedback
Research output: Research › Article in proceedings – Annual report year: 2002

A novel diode laser system for photodynamic therapy
Research output: Communication › Journal article – Annual report year: 2001

Center for Biomedical Optics and New Laser Systems
Research output: Communication › Journal article – Annual report year: 2001

Development of diode laser systems for photodynamic therapy (poster)
Research output: Research › Poster – Annual report year: 2001

Fotorefraktive materialer - et skoleeksempel inden for den ikke-lineære optik
Research output: Research - peer-review › Journal article – Annual report year: 2001

Novel diode laser system for photodynamic therapy
Research output: Research › Article in proceedings – Annual report year: 2001

New diode laser architectures using phase conjugators
Research output: Research › Conference abstract for conference – Annual report year: 2000

Nonlinear cross talk between gratings recorded in BaTiO$_3$ by mutually incoherent beam pairs
Research output: Research - peer-review › Journal article – Annual report year: 2000

Phase conjugate high power laser diode arrays (Invited talk)
Research output: Research › Conference abstract for conference – Annual report year: 2000

Stability of the single-mode output of a laser diode array with phase conjugate feedback
Research output: Research - peer-review › Journal article – Annual report year: 2000

A high power laser diode array with external phase conjugate feedback
Research output: Research › Conference abstract for conference – Annual report year: 1999

Experimental observation of nonlinear grating cross talk in multibeam photorefractive recording
Research output: Research › Article in proceedings – Annual report year: 1999

High-power lasers for photodynamic therapy
Research output: Research › Conference abstract for conference – Annual report year: 1999
Nonlinear grating interactions in multibeam photorefractive recording: Theoretical investigation
Research output: Research - peer-review › Journal article – Annual report year: 1999

Optics in Denmark 1999: DOPS white book
Research output: Research - peer-review › Book – Annual report year: 1999

Phase locking and frequency doubling of laser diode arrays
Research output: Research › Conference abstract for conference – Annual report year: 1999

Phase locking of laser diode arrays using a photorefractive Rh:BaTiO₃ crystal (Invited paper)
Research output: Research › Article in proceedings – Annual report year: 1999

Photorefractive holographic storage: Fundamental limits and new materials
Research output: Research › Conference abstract for conference – Annual report year: 1999

Physical origin of laser frequency scanning induced by photorefractive phase-conjugate feedback
Research output: Research - peer-review › Journal article – Annual report year: 1999

Progress in high brightness laser diode arrays
Research output: Research › Conference abstract for conference – Annual report year: 1999

Reduction of photoexcited carriers modulation due to a long distance photoelectron pass in photorefractive Bi₁₂SiO₂₀
Research output: Research › Article in proceedings – Annual report year: 1999

Single mode laser diode array with external feedback
Research output: Research › Conference abstract in proceedings – Annual report year: 1999

Kinetics of higher order combinational gratings in photorefractive media: Diffusion regime
Research output: Research - peer-review › Journal article – Annual report year: 1998

New laser systems using phase conjugate feedback
Research output: Research › Conference abstract for conference – Annual report year: 1998

Nonlinear cross talk between mutually incoherently recorded gratings in BaTiO₃
Research output: Research › Conference abstract in proceedings – Annual report year: 1998

Nonlinear self-defocusing in doped silica sono-gels (vol 81, pg 7728, 1997)
Research output: Research - peer-review › Journal article – Annual report year: 1998

Optical storage in photorefractive materials
Research output: Research › Conference abstract for conference – Annual report year: 1998

Optics for medical diagnostics
Research output: Research › Conference abstract in proceedings – Annual report year: 1998

Single-mode high-power semiconductor lasers using phase conjugation
Research output: Communication › Journal article – Annual report year: 1998

Single-mode operation of a laser-diode array with frequency-selective phase-conjugate feedback
Research output: Research - peer-review › Journal article – Annual report year: 1998
Single mode operation of laser diode arrays using frequency selective phase conjugate feedback
Research output: Research › Conference abstract in proceedings – Annual report year: 1998

Single-mode operation of laser diode arrays using photorefractive phase conjugators (Invited paper)
Research output: Research › Conference abstract in proceedings – Annual report year: 1998

Suppressing self-induced frequency scanning of a phase conjugate diode laser array with using counterbalance dispersion
Research output: Research › Journal article – Annual report year: 1998

Tunable single-mode operation of a high-power laser-diode array by use of an external cavity with a grating and a photorefractive phase-conjugate mirror
Research output: Research - peer-review › Journal article – Annual report year: 1998

Dynamic grating formation in LiNbO₃:Fe crystals under influence of an externally applied magnetic field
Research output: Research › Article in proceedings – Annual report year: 1997

En ny optikuddannelse i Danmark?
Research output: Communication › Journal article – Annual report year: 1997

Krystaller som harddiske
Research output: Communication › Journal article – Annual report year: 1997

Laseren og nye perspektiver for vekselvirkning mellem lys og stof
Research output: Research › Conference abstract for conference – Annual report year: 1997

Lasers with phase conjugate feedback
Research output: Research › Conference abstract for conference – Annual report year: 1997

Local diffuse reflectance from three-layered skin tissue structures
Research output: Research › Article in proceedings – Annual report year: 1997

New strong higher order spatial harmonic gratings induced by multiwave interaction in photorefractive Bi₁₂₋ₓSiO₂₀ₓ
Research output: Research › Article in proceedings – Annual report year: 1997

Nonlinear optics - a new field for organic and inorganic materials
Research output: Research › Conference abstract for conference – Annual report year: 1997

Nonlinear self-defocusing in doped silica sono-gels
Research output: Research - peer-review › Journal article – Annual report year: 1997

Optisk datalagring i ulineære materialer
Research output: Research › Journal article – Annual report year: 1997

Phase conjugate lasers
Research output: Research › Conference abstract for conference – Annual report year: 1997

Ph.d. - uddannelsen er en national opgave
Research output: Communication › Journal article – Annual report year: 1997

Spectral dependence of cross-talk between photorefractive gratings in Bi₁₂₋ₓSiO₂₀ₓ in diffusion regime
Research output: Research › Journal article – Annual report year: 1997
The influence of dispersion on the self-induced scanning of a broad area diode laser with phase conjugate feedback
Research output: Research › Article in proceedings – Annual report year: 1997

Theory of nonlinear multiple-grating interaction in diffusion-dominated photorefractive media: errata
Research output: Research - peer-review › Journal article – Annual report year: 1997

Annual meeting of the Danish Optical Society. Book of abstracts
Research output: Research › Book – Annual report year: 1996

Biomedicinske anvendelser af optik
Research output: Research › Report – Annual report year: 1996

Biosensors based on an integrated twin-laser
Research output: Research › Conference abstract for conference – Annual report year: 1996

Dynamic grating formation in LiNbO₃ under the influence of an externally applied magnetic field
Research output: Research › Conference abstract for conference – Annual report year: 1996

Fremtidens datalagring sker ved hjælp af hologrammer
Research output: Communication › Journal article – Annual report year: 1996

Grating couplers in optical waveguides
Research output: Research › Conference abstract for conference – Annual report year: 1996

Har biomedicinsk optik en fremtid i Danmark
Research output: Research › Conference abstract for conference – Annual report year: 1996

Hvidbogen 'Optik i Danmark'.
Research output: Communication › Journal article – Annual report year: 1996

Laseren og nye perspektiver for vekselvirkning mellem lys og stof
Research output: Research › Conference abstract for conference – Annual report year: 1996

Lysudbredelse i humant væv
Research output: Communication › Journal article – Annual report year: 1996

Magnetophotorefractive effect in LiNbO₃:Fe crystals: theory and experiments
Research output: Research - peer-review › Journal article – Annual report year: 1996

Magnetophotorefractive effect in photovoltaic LiNbO₃:Fe
Research output: Research › Conference abstract for conference – Annual report year: 1996

Nonlinear crosstalk in photorefractive storage
Research output: Research › Conference abstract for conference – Annual report year: 1996

Nonlinear self-refraction of Gaussian laser beams in silica sono-gels
Research output: Research › Conference abstract for conference – Annual report year: 1996

Nonlinear self-refraction of Gaussian laser beams in silica sono-gels doped with copper tetrasulfonated phthalocyanine
Research output: Research › Article in proceedings – Annual report year: 1996
Strong coupling between coherent gratings due to nonlinear spatial frequency mixing in Bi$_{12}$SiO$_{20}$
Research output: Research - peer-review › Journal article – Annual report year: 1996

Theory of nonlinear multiple-grating interaction in diffusion-dominated photorefractive media
Research output: Research - peer-review › Journal article – Annual report year: 1996

Twin-laser biosensor
Research output: Research › Conference abstract for conference – Annual report year: 1996

Valg af optiske komponenter
Research output: Research › Conference abstract for conference – Annual report year: 1996

Basale mekanismer for lysudbredelse i væv
Research output: Research › Conference abstract for conference – Annual report year: 1995

Enhanced nonlinear interaction between gratings in drift-dominated photorefractive Bi$_{12}$SiO$_{20}$
Research output: Research › Article in proceedings – Annual report year: 1995

Fundamental properties of nonlinear combinations of gratings in Bi$_{12}$SiO$_{20}$ and their applications
Research output: Research › Journal article – Annual report year: 1996

Fundamental properties of photorefractive storage
Research output: Research › Conference abstract for conference – Annual report year: 1995

Influence of an externally applied magnetic field on vectorial interaction in LiNbO$_3$:Fe crystals
Research output: Research › Journal article – Annual report year: 1995

Magnetic field effect on holographic grating formation in Fe:LiNbO$_3$
Research output: Research › Conference abstract in proceedings – Annual report year: 1995

Magnetic field enhancement of photovoltaic grating formation in iron-doped lithium niobate crystals
Research output: Research › Conference abstract in proceedings – Annual report year: 1995

Nonlinear combinations of gratings in Bi$_{12}$SiO$_{20}$: theory and experiments
Research output: Research - peer-review › Journal article – Annual report year: 1995

Nonlinear combinations of gratings in drift-dominated recording in Bi$_{12}$SiO$_{20}$
Research output: Research - peer-review › Journal article – Annual report year: 1995

Nonlinear grating interaction in photorefractive Bi12SiO20
Research output: Research - peer-review › Journal article – Annual report year: 1995

Nonlinear optical properties of photorefractive materials
Research output: Research - peer-review › Book chapter – Annual report year: 1995

Nonlinear optics at Risø National Laboratory
Research output: Research › Conference abstract for conference – Annual report year: 1995

Optical phase conjugation and optical signal processing in photorefractive materials
Research output: Research › Article in proceedings – Annual report year: 1995
Photorefractive devices
Research output: Research › Journal article – Annual report year: 1995

Properties of photorefractive materials: Linear- and nonlinear aspects
Research output: Research › Conference abstract for conference – Annual report year: 1995

Temperature properties of laser-induced interference filters in lithium niobate
Research output: Research › Journal article – Annual report year: 1995

The influence of nonlinear interaction between gratings on light amplification in photorefractive BaTiO₃
Research output: Research › Article in proceedings – Annual report year: 1995

Amplitude and phase measurements in photorefractive time average interferometry
Research output: Research › Conference abstract for conference – Annual report year: 1994

Crosstalk in dynamic optical interconnects in photorefractive crystals
Research output: Research › Journal article – Annual report year: 1994

Crosstalk in photorefractive optical interconnects due to nonlinear mixing of gratings
Research output: Communication › Journal article – Annual report year: 1994

Four-wave mixing in solid
Research output: Research › Conference abstract for conference – Annual report year: 1994

Multiple grating interactions in photorefractive optical interconnects
Research output: Research › Article in proceedings – Annual report year: 1994

Nonlinear combinations of gratings in BSO
Research output: Research › Conference abstract for conference – Annual report year: 1994

Nonlinear grating Interaction in photorefractive materials
Research output: Research › Conference abstract for conference – Annual report year: 1994

Nonlinear interactions between gratings in photorefractive crystals
Research output: Research › Conference abstract for conference – Annual report year: 1994

Optical processing with photorefractive crystals
Research output: Research › Conference abstract for conference – Annual report year: 1994

Photorefractive time-average interferometry and holographic optical elements for industrial sensors
Research output: Research › Conference abstract for conference – Annual report year: 1994

Polarization properties of a photorefractive Bi₁₂SiO₂₀ crystal and their application in an optical correlator
Research output: Research › peer-review › Journal article – Annual report year: 1994

Properties of laser induced gratings in lithium niobate crystals
Research output: Research › Conference abstract for conference – Annual report year: 1994

Quantitative measurement of the vibrational amplitude and phase in photorefractive time-average interferometry: A comparison with electronic speckle pattern interferometry
Ulineær optik
Research output: Research - peer-review › Book – Annual report year: 1994

Higher spatial harmonics in nonlinear photorefractive interference filters
Research output: Research › Article in proceedings – Annual report year: 1993

Photorefractive interference filters: Theory and application
Research output: Research › Article in proceedings – Annual report year: 1992

Simple Theory for Degenerate Four-Wave Mixing in Photorefractive Media
Research output: Research › Article in proceedings – Annual report year: 1988

Projects:

New light sources based on the nonlinearities of silicon carbide
Project: PhD

PhD Project in Photonics Tecnologies for Treatment & Diagnostics o f Alzheimer’s and Dementia
Project: PhD

D-Light, Energibesparende diodelaser belysning
Project: Research

PigLED - Optimal lighting system for pigs
Project: Research

Tunbare lasere i det synlige og ultraviolette område
Project: PhD

Ulineær Dynamik i Halvlederlasere
Project: PhD

Diode laser based lighting
Project: PhD

UV light source for next generation immunoassay analyzer
Project: PhD

Innovative White Light-emitting Diodes Light Source
Project: PhD

Active Photonic Crystal Fibres for High Power Applications
Project: PhD

Syntetisering af nye typer interferensfiltre i fotorefraktive medier.
Project: PhD

Novel concepts for improving swept sources for Optical Coherence Tomography
Project: PhD
Hybrid light emitting diode enhanced with emissive nanocrystals  
Project: PhD

Fabrication and Characterization of Semiconductor Optical Devices  
Project: PhD

Window Pane Coating for photon harvesting  
Project: PhD

Pulsed Blue and Ultraviolet Laser System for Fluorescence Diagnostics based on Nonlinear Frequency Conversion  
Project: PhD

Forster energy transfer in hybrid light emitting diode  
Project: PhD

Polymer Based Nano Optics for Lab-On-A-Chip Micro System  
Project: PhD

Halvlederkomponenter til optisk kommunikation  
Project: PhD

Composite Fibre and Solid-State Visible Light Source  
Project: PhD

Development of high-power diode laser sources for medical and industrial applications  
Project: PhD

Super bright light-emitting diode  
Project: PhD

Thin-film deposition an characterization of new solar cell materials  
Project: PhD

Non-contact assessment of food quality using optical imaging methods  
Project: PhD

New light Sources for Biomedical Applications  
Project: PhD

Advanced optical design for multicolored LED systems for lighting applications  
Project: PhD

High-power green-yellow diode lasers for medical applications  
Project: PhD

Daylight as a Driver for Healthier Energy Optimization  
Project: Research

Energibesparende diodelaser belysning  
Project: Research
Center for LED metrology
Project: Research

Energibespørende LED farveblandings belysningssystem med høj lyskvalitet
Project: Research

WWW.BRIGHTER.EU : Brighter - 1705125
Project: Research

WWW.BRIGHT.EU
Project: Research

A high-brightness diode laser bar system for industrial test
Project: Research

Etablering af LED-belysning i Rosenborg Skatkammer
Project: Research

A new monolithic semiconductor laser based on nonlinear gain and refractive index : 1705114-1 STVF
Project: Research

Intelligent styring af dynamisk LED belysning
Project: Research

Danish LED Network
Project: Research

Combined daylight and intelligent LED lighting : Getting the daylight into the buildings
Project: Research

Hybrid lighting goes to school
Project: Research

Kompakt og effektivt grønt diodelasersystem til medicinske anvendelser
Project: Research

Nyt kompakt lasersystem til fremtidens højkvalitets displays
Project: Research

Activities:

High power diode lasers converted to the visible
Activity: Talks and presentations › Conference presentations

UVB irradiation has a greater efficacy than photodynamic therapy on Enterococcus Faecalis
Activity: Talks and presentations › Conference presentations

Energy efficient and high quality LED illumination in display cases: New lighting – New LEDs
Activity: Talks and presentations › Conference presentations
LED - fremtidens belysning
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

LED - fremtidens belysning
Activity: Attending an event › Participating in or organising a conference

Press clippings:

Test af batteridrevne lys: De er dårlige, og det dårligste gik i stykker under testen
Press/Media: Press / Media

Midt i en lysbrydningstid
Press/Media: Press / Media