Research outputs:

**Unusual photoanisotropic alignment in amorphous azobenzene polymers: Photoanisotropy**  
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

**The still unknown azobenzene - Wavelength dependent photoanisotropy in amorphous azobenzene polymers.**  
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

**Can colour be measured?**  
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2011 › Research › peer-review

**Materials through light, light through materials: interaction of light and matter**  
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2009 › Communication

**Polarization holography**  
Research output: Book/Report › Book – Annual report year: 2009 › Research › peer-review

**Acridizinium-Substituted Dendrimers As a New Potential Rewritable Optical Data Storage Material for Blu-ray**  
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

**Azobenzene Polyesters for Polarization Holographic Storage. Part I: Materials and Characterization**  
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2008 › Research › peer-review

**Holographic recording in thiophene-based polyester**  
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

**Azobenzene polyesters for polarization holographic storage. Part 1. Materials and characterization**  
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2007 › Research › peer-review
Nanotechnological initiatives in Denmark
Research output: Contribution to conference » Conference abstract for conference – Annual report year: 2005 » Research

Optical fabrication of nano-structured biopolymer surfaces
Research output: Contribution to journal » Journal article – Annual report year: 2005 » Research » peer-review

Organic materials and modern optics
Research output: Contribution to conference » Conference abstract for conference – Annual report year: 2005 » Research

Optical fabrication of nano-structured biopolymer surfaces
Research output: Contribution to journal » Journal article – Annual report year: 2005 » Research » peer-review

Organic materials for UV holographic and digital storage (invited talk)
Research output: Contribution to conference » Conference abstract for conference – Annual report year: 2005 » Research

Photodimerization in pyrimidine-substituted dipeptides
Research output: Contribution to journal » Journal article – Annual report year: 2005 » Research » peer-review

Photodimerization in substituted di- and oligopeptides by UV-light for optical data storage
Research output: Chapter in Book/Report/Conference proceeding » Article in proceedings – Annual report year: 2005 » Research » peer-review

Photodimerization in substituted di- and oligopeptides by UV-light for optical data storage
Research output: Contribution to journal » Conference abstract in journal – Annual report year: 2005 » Research » peer-review

Photoinduced phenomena in azobenzene polymers
Research output: Contribution to conference » Conference abstract for conference – Annual report year: 2005 » Research

Photoinduced phenomena in azobenzene polymers (invited talk)
Research output: Contribution to conference » Conference abstract for conference – Annual report year: 2005 » Research

Photoinduced phenomena in azobenzene polymers (invited talk)
Research output: Contribution to conference » Conference abstract for conference – Annual report year: 2005 » Research

Photoresponsive azobenzene polymers (invited talk)
Research output: Contribution to conference » Conference abstract for conference – Annual report year: 2005 » Research

Structural dynamics of the competing forces of light and matter
Research output: Contribution to conference » Conference abstract for conference – Annual report year: 2005 » Research

Photodimerization in dipeptides for high capacity optical digital storage
Research output: Contribution to journal » Journal article – Annual report year: 2004 » Research » peer-review

Photodimerization in dipeptides for high capacity optical digital storage
Research output: Contribution to journal » Journal article – Annual report year: 2004 » Research » peer-review

Description of photoinduced anisotropy in azobenzene side-chain polyesters
Research output: Contribution to journal » Journal article – Annual report year: 2003 » Research » peer-review
Ab initio calculation of the electronic spectrum of azobenzene dyes and its impact on the design of optical data storage materials
Research output: Contribution to journal › Journal article – Annual report year: 2000 › Research › peer-review

An improved method for separating the kinetics of anisotropic and topographic gratings in side-chain azobenzene polyesters
Research output: Contribution to journal › Journal article – Annual report year: 2000 › Research › peer-review

Biphotoic holographic gratings in azobenzene polyesters: Surface relief phenomena and polarization effects
Research output: Contribution to journal › Journal article – Annual report year: 2000 › Research › peer-review

Five-membered rings as diazo components in optical data storage devices: An ab initio investigation of the lowest singlet excitation energies
Research output: Contribution to journal › Journal article – Annual report year: 2000 › Research › peer-review

Holographic Memory Card System Using Polarization Holography
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2000 › Research › peer-review

Photoinduced Deformation of Azobenzene Polyester Films
Research output: Contribution to journal › Journal article – Annual report year: 2000 › Research › peer-review

Self-Induced Light Polarization Rotation in Azobenzene-Containing Polymers
Research output: Contribution to journal › Journal article – Annual report year: 2000 › Research › peer-review

Accelerated optical holographic recording using bis-DNO
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

A nonlinear optical element for incoherent image processing based on photoanisotropy
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1999 › Research

Azobenzene polymers for optical information storage
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1999 › Research
Azobenzene side-chain LC polyesters for optical information storage
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1999 › Research

Azobenzene side-chain liquid crystalline polyesters - A prodigious potential for optical information storage
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1999 › Research

Combined Main- and Side-Chain Azobenzene Polyesters: A potential for Photoinduced Nonlinear Waveguides
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1999 › Research

Holographic Gratings in Azobenzene Side-Chain Polymethacrylates
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Holographic memories
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1999 › Research

Holographic Memories
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1999 › Research

Light-induced circular birefringence in cyanoazobenzene side-chain liquid-crystalline polyester films
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Light induced surface relief in azobenzene materials
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1999 › Research

Optical holographic data storage using peptides
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1999 › Research

Optically induced surface relief phenomena in azobenzene polymers
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Physical processes in azobenzene polymers on irradiation with polarized light
Peptides for Holographic Data Storage
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1997 › Research

Photoinduced Circular Anisotropy in Side-Chain Azobenzene Polyesters
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review

Polarimetric investigation of materials with both linear and circular anisotropy
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review

Time-Resolved FTIR-Polarization Spectroscopy of the Laser-Induced Anisotropy in Side-Chain Liquid Crystalline Polyesters
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1997 › Research

Atomic force and optical near-field microscopic investigations of polarization holographic gratings in a liquid crystalline azobenzene side-chain polyester
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research › peer-review

10,000 optical write, read, and erase cycles in an azobenzene sidechain liquid-crystalline polyester
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research › peer-review

Laser Induced Segmental Orientation of Side-Chain Liquid Crystalline Polyesters Investigated by FTIR
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1996 › Research

Near-Field Microscopy on Liquid Crystalline Side-Chain Polyesters
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1996 › Research

New Polymer Materials for Erasable Holographic Storage
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research

Novel Azobenzene Polyesters and Peptides for Erasable Holographic Storage
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1996 › Research

Optisk informationslagring
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1996 › Research
Optisk informationslagring
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1996 › Research

Peptide oligomers for holographic data storage
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research › peer-review

Peptide oligomers for optical holographic storage of information
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1996 › Research

Photoinduced anisotropic measurements in liquid-crystalline azobenzene side-chain polyesters
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research

Photoinduced anisotropy measurements in liquid-crystalline azobenzene side-chain polyesters
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research

Polarization holographic gratings in side-chain azobenzene polyesters with linear and circular photoanisotropy
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research › peer-review

Selective deuterium labeling as a tool for the investigation of laser induced segmental orientation in cyanoazobenzene side-chain polyesters
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1996 › Research

Selective Deuterium Labelling as a Tool for the Investigation of Laser-Induced Segmental Orientation in Cyanoazobenzene Side-Chain Polyesters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1996 › Research

Side-Chain Liquid Crystalline Azobenzene Polyesters with Unique Reversible Optical Storage Properties
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research

Side-chain liquid crystalline polyesters for optical information storage
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research › peer-review

The Research Group on New Materials for Optical Information Storage at Risø National Laboratory
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1996 › Research

A compact holographic storage system based on novel polyesters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1995 › Research
Bacteriorhodopsin - a model material for studies in spatial nonlinear optics
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1995 › Research

Caratterizzazione de polipropilenadipati liquido-cristallini contenenti gruppi laterali azobenzenici
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1995 › Research

Fourier-transform infrared spectroscopy of side-chain liquid crystalline polyesters under external fields
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1995 › Research

Holographic storage in side-chain azobenzene polyesters
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1995 › Research

New azobenze polymers for optical information storage
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1995 › Research

New side-chain liquid crystalline polyesters for optical storage
Research output: Contribution to journal › Journal article – Annual report year: 1995 › Research

Novel side-chain liquid crystalline polyester architecture for reversible optical storage
Research output: Contribution to journal › Journal article – Annual report year: 1995 › Research › peer-review

On the explanation of the biphotonic processes in polyesters containing azobenzene moieties in the side chain
Research output: Contribution to journal › Journal article – Annual report year: 1995 › Research

Optical near-field studies of liquid crystalline side-chain azobenzene polyesters
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1995 › Research

Photoanisotropic Incoherent to coherent converter using a bacteriorhodopsin thin film
Research output: Contribution to journal › Journal article – Annual report year: 1995 › Research › peer-review

Spatial frequency response and transient anisotropy in bacteriorhodopsin thin films
Research output: Contribution to journal › Journal article – Annual report year: 1995 › Research
The diagnostic value of exercise echocardiography in ischemic heart disease in relation to quantitative coronary arteriography
Research output: Contribution to journal › Journal article – Annual report year: 1995 › Research › peer-review

The influence of substitutents on the orientational behaviour of novel azobenzene side-chain polyesters
Research output: Contribution to journal › Journal article – Annual report year: 1995 › Research › peer-review

The use of bacteriorhodopsin in optical processing: A review
Research output: Contribution to journal › Journal article – Annual report year: 1995 › Research

Array illuminator based on transverse self-phase modulation in bacteriorhodopsin thin film
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1994 › Research

Assessment of coronary artery stenosis pressure gradient by quantitative coronary arteriography in patients with coronary artery disease
Research output: Contribution to journal › Journal article – Annual report year: 1994 › Research

Bacteriorhodopsin: A holographic material assessment. POPAM ESPRIT project 6863
Research output: Book/Report › Book – Annual report year: 1994 › Research › peer-review

Characterisation of the orientational behaviour of liquid-crystalline side-chain polymers for reversible optical data storage by Fourier-Transform-IR-Spectroscopy
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1994 › Research

Characterization of the segmental mobility of liquid-crystalline side-chain polyesters by Fourier-Transform infrared spectroscopy
Research output: Contribution to journal › Journal article – Annual report year: 1994 › Research › peer-review

Dynamic contrast reversal due to self-phase modulation in bacteriorhodopsin thin film
Research output: Contribution to journal › Journal article – Annual report year: 1994 › Research

Erasable optical storage in azobenzene side-chain polyesters
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1994 › Research
Influence of the length of flexible spacers on the optical storage properties of side-chain liquid crystalline polyesters
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1994 › Research

New side-chain liquid crystalline polyesters for optical storage
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1994 › Research

Optical storage in side-chain liquid crystalline polyesters
Research output: Contribution to journal › Journal article – Annual report year: 1995 › Research

Spatial frequency response and transient anisotropy of bacteriorhodopsin thin films
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1994 › Research

The influence of substituents on the orientational behaviour of novel azobenzene side-chain polyesters
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1994 › Research

The sensitometric properties of chemically modified bacteriorhodopsin films
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1994 › Research

60.000 A4-sider på én kvadratcentimeter
Research output: Contribution to journal › Journal article – Annual report year: 1993 › Communication

Arbejdet med materialer for optisk lagring
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1993 › Research

Dark spatial solitons in bacteriorhodopsin thin films
Research output: Contribution to journal › Journal article – Annual report year: 1993 › Research

Holographically recorded transient gratings in retinylidene films
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1993 › Research

Influence of new architecture for side-chain liquid crystalline polyesters on holographic behaviour
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1993 › Research
Materials for optical storage
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1993 › Research

Molecular addressing? Reversible optical storage in side-chain liquid crystalline polyesters
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1993 › Research

New materials for optical storage
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1993 › Research

New materials for optical storage and processing. Paper N2
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1993 › Research

New side-chain liquid crystalline polyester architecture for erasable optical information storage
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1993 › Research

Novel biphotonic holographic storage in a side-chain liquid crystalline polyester
Research output: Contribution to journal › Journal article – Annual report year: 1993 › Research

Nye materialer husker med laserys
Research output: Contribution to journal › Journal article – Annual report year: 1993 › Communication

Nye materialer husker med laserys
Research output: Contribution to journal › Journal article – Annual report year: 1993 › Communication

Nye polymermaterialer til optisk hukommelse
Research output: Contribution to journal › Journal article – Annual report year: 1993 › Communication

Optical storage
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1993 › Research

Optical storage
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1993 › Research

Optical storage in side-chain liquid crystalline polyester
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1993 › Research

Optisk informationslagring
Side-chain liquid-crystalline polyesters for optical information storage
Research output: Contribution to journal › Journal article – Annual report year: 1992 › Research › peer-review

Generation of sub-Poissonian photon number distribution
Research output: Contribution to journal › Journal article – Annual report year: 1990 › Research › peer-review

Projects:

Fotodimerisering i peptider til optisk lagring
Risø (Løn)
01/09/2003 → 30/04/2007
Project: PhD

Spectroscopic Studies of Cytochrome P450 Enzymes by Application of Optical Spectroscopic Techniques Combined with QM/MM Calculations
Johannessen, C., Bohr, H., Abdali, S., Rottwitt, K., Blanch, E. W. & Ramanujam, P. S.
DTU stipendium
01/02/2004 → 01/08/2007
Project: PhD

Light engine V8 - a green revolution for colored light
Dam-Hansen, C., Ramanujam, P. S., Hanson, S. G., Pedersen, H. C., Jensen, O. B., Plesner, P., Brockmann, T., Poulsen, C., Flensburg, H., Thorseth, A. & Chakrabarti, M.
Innovationsfonden
01/09/2011 → 30/06/2014
Project: Research