

# Special Issue

## Polarization Optics in Biomedical Applications

### Message from the Guest Editors

All manuscripts will be internationally peer reviewed. We solicit papers covering various topics of interest that include, but are not limited to, the following:

#### PROPERTIES OF TISSUES

- Tissue birefringence, diattenuation and depolarization, Poincare sphere
- Polarimetric phantoms of biological tissues
- Interaction of polarized light with cells/tissue measurements and modeling

#### NOVEL POLARIMETRIC TECHNIQUES AND METHODS

- Mueller–Stokes polarimetry
- Polarized light microscopy
- Polarized light endoscopy
- Polarization-based fluorescence imaging
- Circular dichroism
- Shaped light with Orbital Angular Momentum
- Higher-order Poincare sphere, generalized Mueller matrix formalism
- Interaction of spin and orbital angular momentum of light

#### TOPOLOGICAL STATES AND SCATTERING

- Topological states and scattering
- Elastography BIOMEDICAL APPLICATIONS OF POLARIZED LIGHT
- Reproductive medicine
- Ophthalmology
- Neurosurgery
- Gastroenterology
- Cardiology
- Dermatology
- Cancer screening

### Guest Editors

Prof. Dr. Tatiana Novikova

1. LPICM, CNRS, Ecole Polytechnique, IP Paris, Palaiseau, France  
2. Department of Biomedical Engineering, Florida International University, Miami, FL, USA

Prof. Dr. Igor Meglinski

School of Engineering and Applied Science, Aston University, Birmingham B4 7ET, UK

### Deadline for manuscript submissions

closed (20 January 2024)



## Photonics

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[photonics@mdpi.com](mailto:photonics@mdpi.com)

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## About the Journal

### Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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### Editor-in-Chief

Prof. Dr. Nelson Tansu

School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

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#### Journal Rank:

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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).