

## Special Issue

# Advancements in Optical Materials and Photonic Device Technologies

### Message from the Guest Editors

In recent decades, the photonics industry has experienced rapid growth in many sectors. The application scenarios range from a biomedicine, telecommunications, routine microscopy, and process monitoring at industrial facilities to telescopes, the observation of gravitational waves, and sensing with quantum light. This progress is generating intense demand for the development and advancement of optical materials, which are the cornerstone of light handling and manipulation. The development of new photonic devices and detectors, extending operating ranges, reducing losses, increasing sensitivity, and the ability to generate light with desired properties are just a few examples related to materials development. This Special Issue is dedicated to the latest advances in optical materials facilitating the progress of photonic technologies and, thus, aims to disseminate the most recent result in this field. Topics will cover a broad range of materials: semiconductors, glasses, linear and nonlinear materials, crystals, active and passive systems, fibers and waveguides, metamaterials, quantum dots, mirrors, and coatings.

### Guest Editors

Dr. Ivan Zorin

Research Center for Non-Destructive Testing GmbH, Linz 4040, Austria

Dr. Bettina Heise

1. Research Center for Non-Destructive Testing (RECENDT)-GmbH, Linz, Austria

2. Institute for Mathematical Methods in Medicine and Data Based Modelling, Johannes Kepler University (JKU), Linz, Austria

### Deadline for manuscript submissions

closed (20 June 2025)



## Materials

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

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### Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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### Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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