



Advancements in Optical Materials and Photonic Device Technologies

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:

20 December 2024

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 telescoping, 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.





an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)