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# Sol-Gel Materials for Optics and Photonics: Design, Processing, Characterization, and Implementation

Guest Editors:

**Dr. Magdalena Zięba**
Department of Optoelectronics, Silesian University of Technology, B. Krzywoustego 2, 44-100 Gliwice, Poland

**Dr. Andrzej Kaźmierczak**
Institute of Microelectronics and Optoelectronics, Warsaw University of Technology, Koszykowa 75, 00-662, Warszawa, Poland

**Prof. Dr. Paweł Karasiński**
Department of Optoelectronics, Silesian University of Technology, B. Krzywoustego 2, 44-100 Gliwice, Poland

Deadline for manuscript submissions:
**closed (20 November 2025)**

## Message from the Guest Editors

Dear Colleagues,

Sol-gel technology is advantageous when developing materials from liquid rather than gaseous phases (such as in various CVD technologies). This process allows for the precise administration of the necessary compounds, while drastically reducing equipment costs (this is possible when replacing the gas flow control used in CVD via the weighting of sol components). Consequently, Sol-gel-derived techniques can be applied for the successful and low-cost procurement of numerous optical and photonic components, including antireflective coatings, multilayer structures, or waveguide films to name a few.

In this Special Issue, we invite you to submit your innovative research on the design, processing, characterisation, and application of sol-gel materials. The scope of this Special Issue covers the development of material systems, leading to improved optical properties, processes easing, and cost reductions for optic and photonic components and systems. Papers covering the design and characterisation of sol-gel-derived optical and photonic devices and systems are also welcome. We welcome both original research papers and in-depth reviews.

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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

## 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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## Contact Us

*Materials* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/materials
materials@mdpi.com
𝕏@Materials_Mdpi