

## Special Issue

# Structural and Luminescence Properties of Glass

### Message from the Guest Editor

Comparatively to silicate glasses, the phosphate glasses network can include luminescent (rare-earth, transition) ions in higher concentrations, with increased energy of emitted radiation. Boron oxide-based glasses exhibit a large glass formation range and high properties like enhanced transparency, together with thermal, chemical, and radiation stability. Zinc-tellurite glass has received widespread attention lately due to its promising potential as a rare-earth elements host for lasers or optical fibers. New interesting vitreous systems for luminescence purposes such as bismuthate and germanate systems are being studied nowadays. Between the recent glass structure models, the molecular dynamic simulation seems the most appropriate. Luminescence studies include absorption and emission spectra; photoluminescence excitation; temperature-dependent and time-dependent photoluminescence; luminescence decay spectra; and, if more than one luminescent ion is involved, the energy transfer process. The main applications of luminescent glasses are energy harvesting, lasers, and optoelectronics.

### Guest Editor

Prof. Dr. Bogdan Alexandru Sava

Faculty of Chemical Engineering and Biotechnologies, University Politehnica Bucharest—UPB, 313 Splaiul Independenței, 060042 Bucharest, Romania

### Deadline for manuscript submissions

closed (20 March 2024)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/144280](https://mdpi.com/si/144280)

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

[mdpi.com/journal/  
materials](https://mdpi.com/journal/materials)





# Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/journal/  
materials](https://mdpi.com/journal/materials)



## About the Journal

### 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.

---

### 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

---

### 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 and Metallurgical Engineering) /  
CiteScore - Q1 (Condensed Matter Physics)