



an Open Access Journal by MDPI

Glass Materials: Functional Applications in the Field of Biology

Guest Editors:

Dr. Sílvia Rodrigues Gavinho

i3N and Department of Physics, University of Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal

Dr. Manuel Pedro Fernandes Graça

i3N and Department of Physics, University of Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal

Deadline for manuscript submissions: **20 August 2025**



Message from the Guest Editors

This Special Issue invites original research, reviews, and case studies that explore the design, development, characterization, and implementation of glass-based materials in biological environments. Key topics include bioactive glasses for tissue engineering, especially in bone, skin and nerve regeneration, as well as glass-ceramics for implantable devices in dental. orthopedic. and cardiovascular applications. We also encourage submissions on the synthesis and characterization of glasses for applications such as biosensors and drug delivery systems.

This Special Issue also acts as a platform to share cuttingedge research and recent advancements in the field of bioactive glasses, including the development of new glass compositions, the use of additive manufacturing for creating glass scaffolds, and the functionalization of glass with therapeutic ions to enhance biological performance.

We invite you to submit your manuscript to the Special Issue Glass Materials: Functional Applications in the Field of Biology. Contributions in the form of full research articles and comprehensive reviews covering all aspects of glass materials for biomedical applications are highly encouraged.







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
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 iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

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