



materials



an Open Access Journal by MDPI

Advanced Sol-Gel Biomaterials: Design, Properties and Applications

Guest Editors:

Dr. N. M. Araújo-Gomes

Faculty of Science and
Technology, University of
Twente, Enschede, The
Netherlands

Dr. M. Clara Gonçalves

Departamento de Engenharia
Química, Instituto Superior
Técnico, Universidade de Lisboa,
1349-017 Lisboa, Portugal

Dr. Andreia Cerqueira

Department of Industrial Systems
Engineering and Design, Jaume I
University, Castellon de la Plana,
Spain

Deadline for manuscript
submissions:

closed (20 July 2023)

Message from the Guest Editors

Sol-gel based materials are emerging as a promising technology for various fields, mostly due to its design simplicity and chemical versatility. Mostly used for coatings, sol-gel networks can be altered to possess distinct and controllable physical and chemical characteristics regarding *e.g.* topography, surface chemistry, hydrophilicity, porosity, thermal/electrical conductivity, optical performance and chemical/mechanical degradability. One of the key aspects of these materials is the usage of low temperature on the wet-chemical process for the sol-gel synthesis. Due to this, greater stability, homogeneity and purity of the produced ceramics and (Bio)glasses is achieved, compared to conventional routes that require the use of high-temperature processes.

This versatile nature at low-temperatures allows the incorporation of, for example, organic compounds, that endow the sol-gel network with bioactive characteristics, well appreciated on the biomedical field, and already with positive outcomes.

Therefore, we would like to invite you to submit your full papers, communications, and reviews to this special issue.



mdpi.com/si/143621

Special Issue



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)