

## Special Issue

# Advanced Sol-Gel Biomaterials: Design, Properties and Applications

### 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.

### Guest Editors

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Dr. M. Clara Gonçalves

Dr. Andreia Cerqueira

### Deadline for manuscript submissions

closed (20 July 2023)



## Materials

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### 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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