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Advanced Sol-Gel Biomaterials: Design, Properties and Applications

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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.





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Message from the Editor-in-Chief

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