



an Open Access Journal by MDPI

Recent Developments in Biomaterials at the Nanoscale: Synthesis, Characterization and Applications

Guest Editors:

Dr. Stylianos Vasileios Kontomaris

 Faculty of Engineering and Architecture, Metropolitan College, 15125 Athens, Greece
BioNanoTec LTD, 2043 Nicosia, Cyprus

Dr. Andreas Stylianou

School of Sciences, European University Cyprus, Nicosia, Cyprus

Deadline for manuscript submissions: **20 August 2024**

mdpi.com/si/183230

Message from the Guest Editors

Biomaterials (natural or synthetic) at the nanoscale refer to materials that are designed and engineered to interact with biological systems at the nanometer scale. The nanoscale dimension of these materials enables them to interact with biological molecules, cells, and tissues in unique ways, often leading to enhanced performance and capabilities compared to bulk materials. These materials are specifically tailored to have properties and functionalities that make them suitable for various applications in medicine, biology, biophysics, chemistry and materials science. Significant applications are associated with the synthesis and characterization of biomaterials for biomedical purposes, drug delivery and tissue engineering.

This Special Issue welcomes contributions in the form of full articles, short communications, or review articles on new results related to the following:

- Characterization and imaging of biological systems and biomaterials at the nanoscale using advanced techniques such as atomic force microscopy, transmission electron microscopy, and scanning probe microscopy;
- Disease diagnosis and innovative therapies;
- Drug delivery;
- Tissue engineering.







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

International Journal of Molecular Sciences Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/ijms ijms@mdpi.com X@IJMS_MDPI