Special Issue

Biomimetic Materials in Tissue Engineering

Message from the Guest Editors

The fabrication of effective tissue-like scaffolds for tissue engineering purposes is an intriguing challenge in material science. Biomimetic materials are expected to reproduce extracellular matrix (ECM) characteristics, assuring highly complex engineered 3D structures that instead of replacing a mere function can trigger the regeneration of a functional tissue. It follows that the development of bioactive tissue substitutes inspired by anatomy is an ambitious goal.

The Special Issue focuses on some of the main features related to the development of bioinspired and biomimetic materials, including: materials bioactivation strategies, new processing technologies for tissue biomimicry, the identification and description of strategies to promote cell/material interactions, the development of materials supporting delivery strategies (bioactive cues, cells), and preclinical comparative studies evaluating materials' effectiveness in tissue regeneration based on biomolecular recognition.

Guest Editors

Dr. Elena Stocco

Consorzio per la Ricerca Sanitaria (CORIS), Padua, Italy

Dr. Andrea Porzionato

Section of Human Anatomy, Department of Neuroscience, University of Padova, 35122 Padova, Italy

Dr. Silvia Barbon

Section of Human Anatomy, Department of Neuroscience, University of Padova, 35121 Padova, Italy

Deadline for manuscript submissions

closed (30 April 2023)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/113677

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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.

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

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 and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

