Special Issue

Biomaterials for Hard Tissue Regeneration

Message from the Guest Editor

Biomaterials are of great clinical relevance because of their ability to stimulate the regeneration of hard tissues. Multiple cell-material interactions are involved in this process. New methods for manufacturing and modification of materials as well as the establishment of smart materials and biocompatible drug delivery substitutes can lead to adaptation of the already applicable materials as well to new biomaterials. The cellular suitability of new and modified biomaterials needs to be evaluated in preclinical in vitro and in vivo studies as well as clinical trials prior to clinical usage. This Special Issue aims to provide new insight into the cellular compatibility of new or modified biomaterials that are designed for implantation into defects and fractures of hard tissues. Particularly, the molecular interactions of biomaterials and cells or their extracellular components will be in focus. Therefore, we welcome original research and review manuscripts that report molecular mechanisms of cells at the interface of biomaterials established for hard tissue regeneration.

Guest Editor

Prof. Dr. Katrin Susanne Lips

Experimental Trauma Surgery, Justus-Liebig-University Giessen, Aulweg 128, 35392 Giessen, Germany

Deadline for manuscript submissions

closed (15 August 2021)



Molecules

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



mdpi.com/si/34859

Molecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
molecules@mdpi.com

mdpi.com/journal/molecules





Molecules

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Reaxys, CaPlus / SciFinder, MarinLit, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

