Special Issue

The Role of Nanoparticles in Tumor Treatment

Message from the Guest Editor

The field of oncology, nanotechnology, and biomedicine has witnessed rapid progress, leading to innovative developments in nanoparticles for safer and more effective cancer therapy. Nanoparticles predominantly fall into two categories: nanoparticles for gene therapy applications or for the delivery of small-molecule drugs for cancer treatment. They include liposome-, micelleand protein-based nanoparticles and have biologically attractive properties such as biocompatibility and biodegradability. Nanomedicine could represent a step forward for the application of immunotherapies in clinical practices. By harnessing the potential of nanoparticles, this Special Issue aims to usher in a new era of precise and personalized cancer therapy, providing patients with individualized treatment options. This Special Issue's goal is the design, development, and characterization of biological nanoparticles and their therapeutic application in cancer. This Special Issue will cover the latest advances made in the last few years. We look forward to receiving your contributions.

Guest Editor

Dr. Carla Vitorino

Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Coimbra, Pólo das Ciências da Saúde, Azinhaga de Santa Comba, 3000-548 Coimbra, Portugal

Deadline for manuscript submissions

31 December 2025



Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/211227

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

mdpi.com/journal/biomolecules





Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8 CiteScore 9.2 Indexed in PubMed



About the Journal

Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in Biomolecules so far. We would be delighted to welcome you as one of our authors.

Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

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

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)

