Special Issue

Applications of Nanoparticles in Tumor Therapy

Message from the Guest Editors

Over the last two decades, a large number of nanoparticle delivery systems has been developed and approved for clinical use in cancer diagnosis and therapy. In contrast with the commonly used small molecule drugs that present a wide range of biodistribution, low specificity, and high toxicity, nanoparticles (NPs) can improve the pharmacological response. The importance of these macromolecules is based on their nanoscale attribute (1–100 nm), being accumulated in the tumor tissue through a passive mechanism known as enhanced permeability and retention (EPR) effect because of the increased vascular permeability in the tumor region. They include different classes, based on their structure, sizes or inorganic or organic natures depicting some of them, and biologically attractive properties such as biocompatibility and biodegradability. Furthermore, the incorporation of active targeting using molecules (ligands, antibodies, peptides, and RNA aptamers) that can be recognized specifically by receptors on the surface of the cell membrane has increased nanoparticle uptake by tumor cells.

Guest Editors

Dr. Maria Virtudes Céspedes
IIB-Sant Pau, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain

Dr. Carla Vitorino
Centro De Neurociências e Biologia Celular, Universidade de Coimbra, Coimbra, Portugal

Deadline for manuscript submissions

closed (31 December 2021)

Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/62196

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

mdpi.com/journal/biomolecules

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)

MDPI