Special Issue

Structure Optimization of Nanovectors and Self-Assembled Nanoparticles for Smart Drug Delivery

Message from the Guest Editor

Smart delivery of drugs largely relies on nanovectors and self-assembled nanoparticles. As a shared trait, they are multicomponent objects with complex internal structure, held by noncovalent interactions. The library of usable compounds is vast, and so is the atlas of self-assembled shapes and structures, so that drugs of a very different nature can be suitably endowed with a hosting matrix with the aim of enhancing their therapeutic efficacy while reducing adverse effects. This ultimate goal can be attained by optimizing all steps of drug delivery, from pharmaceutic preparation to final release, along loading, storage, administration, protection, targeting and dropping. In this long and rugged travel, the responsiveness of self-assembled nanostructures to external conditions can be exploited to formulate evolving carriers, along common or new administration routes, each time displaying the appropriate and empowering tactics to support a challenging strategy game. This Special Issue aims at the most promising advances in the optimization of nanostructured vectors and self-assembled nanoparticles for potential pharmaceutical applications.

Guest Editor

Dr. Elena Del Favero

Department of Medical Biotechnology and Translational Medicine, University of Milan, LITA Viale Fratelli Cervi 93, 20090 Segrate, Italy

Deadline for manuscript submissions

closed (20 January 2023)

MDPI

About the Journal

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)