

Special Issue

Potentialities and Challenges of Bio-Inspired Delivery Systems

Message from the Guest Editors

Recent advances in drug delivery and nanomedicine allowed for the generation of carriers with intrinsic biologic properties to increase their bio-compatibility, immune tolerance and targeting of sick tissues. Biomimetic delivery platforms can be generated from basically any kind of cellular phenotype recapitulating the surface properties and the biological identity of the cell source. Erythrocyte ghosts, leukosomes, and platelet-derived particles represent only a few examples of these technologies. This class of carriers pairs with new discoveries in the generation of exosomes and cellular vesicles that can be loaded with different kinds of payloads and were recently tested in clinics. This Special Issue aims at collecting original works and reviews dedicated to complex biological carriers, including the work necessary to synthesize, purify and characterize them as well as their application and potential side effects (i.e., immunological response) in the medical field.

Guest Editors

Prof. Dr. Andrey Zamyatnin

1. Institute of Molecular Medicine, Sechenov First Moscow State Medical University, 119991 Moscow, Russia
2. Scientific Center for Translation Medicine, Sirius University of Science and Technology, 354340 Sochi, Russia
3. Belozersky Institute of Physico-Chemical Biology, Lomonosov Moscow State University, 119992 Moscow, Russia
4. Faculty of Health and Medical Sciences, University of Surrey, Guildford GU2 7X, UK

Dr. Alessandro Parodi

Scientific Center for Translation Medicine, Sirius University of Science and Technology, 354340 Sochi, Russia

Deadline for manuscript submissions

closed (20 October 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/148698

*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](https://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



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



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)