Special Issue

Toxicology Assessment of Nanoparticles and Emerging Pollutants on Cell Models and Living Organisms

Message from the Guest Editors

The wide use of nanoparticles in several fields due to their unique physicochemical properties has raised the problem of their toxicity. Despite their numerous advantages, many nano-scale inorganic materials are considered toxic due to the high surface-to-volume ratio that increases their interaction with biological systems. On the other side, in recent decades, emerging pollutants (new flame retardants, new phthalates, alternative bisphenols) have been used as additive chemicals in a several consumer products. These harmful substances are linked to several human health ailments, e.g., disturbances in hormone levels. fecundability, neurodevelopment disorders, and adverse birth outcomes. This Special Issue aims to understand the toxic effects of different kinds of nanoparticles and emerging pollutants on cells and living organisms investigating the underlying mechanisms, disturbances in the biochemical pathways, and toxicogenomic changes. In addition, new techniques able to functionalize the surface of nanoparticles to reduce their adverse effects in vitro and in vivo are investigated.

Guest Editors

Dr. Valeria De Matteis

Dr. Mariafrancesca Cascione

Prof. Dr. Quaiser Saquib

Deadline for manuscript submissions

closed (31 December 2022)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/95737

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





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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)

