

Special Issue

Preparations and Applications of Aerogels and/or Cryogels: From a Molecular Perspective

Message from the Guest Editors

This Special Issue aims to publish papers dealing with highly porous materials (aerogels and/or cryogels) from synthesis methods to targeting applications for sustainable development, including environmental and biomedical applications.

Highly porous materials usually come from molecular precursors of an organic, inorganic, or hybrid nature in which polymeric networks can be controlled at the molecular level. The observed progress in the synthesis of aerogels means that more and more attention is being paid to the optimization of molecular structures in order to obtain tailored properties for interesting applications. Hence, the key challenge is to link and understand the relationships between molecular structure, properties, and functions.

This Special Issue will present the materials suitable for both aerogels and/or cryogels, from fabrication methods to targeting applications, the biomedical molecular perspectives of aerogels, and the strengths and limitations of using this type of material. All article research submissions should involve research at the molecular level as well as verified experiments.

Guest Editors

Dr. Angelika Kmita

Academic Centre for Materials and Nanotechnology, AGH University of Science and Technology, Al. A. Mickiewicza 30, 30-059 Krakow, Poland

Dr. Dorota Lachowicz

Academic Centre for Materials and Nanotechnology, AGH University of Science and Technology, 30-059 Krakow, Poland

Deadline for manuscript submissions

20 April 2026



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/210991

*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)