

Special Issue

Magnetic Materials: Their Synthesis, Properties and Various Applications

Message from the Guest Editor

Magnetic materials have been widely applied in various areas. Many materials, especially in form of magnetic nanoparticles (MNPs) have potential for use in a number of biomedical applications as drug localization and magnetic hyperthermia to gene transfection and targeted therapeutics, or as a component of tissue engineering scaffolds or coatings of biomaterials/devices. Many paramagnetic rare-earth metal ions such as e.g., Gd³⁺ possess a large magnetic moment due to their isotropic electronic ground state. Because of excellent magnetic resonance imaging effect observed for these ions they are used as a common MRI contrast agent. Ferromagnetic particles with large magnetic response range are suitable for the fabrication of flexible magnetic field sensors used in human health monitoring, electronic skin, and human motion detection. Our Special Issue interest is being paid to the molecular synthesis methods and mechanism, molecular structure characterization of new multifunctional molecular magnetic materials.

Guest Editor

Dr. Elżbieta Tomaszewicz

Department of Inorganic Chemistry, West Pomeranian University of Technology in Szczecin, Szczecin, Poland

Deadline for manuscript submissions

closed (20 January 2025)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/187038

*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)* 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, and molecular biophysics. *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. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)