Special Issue

Magnetic Nanoparticles and Nanocomposites for Bioanalytical and Biomedical Purposes

Message from the Guest Editors

The past decade has demonstrated an increasing interest in the development of new magnetic systems for bioanalytical and biomedical purposes. Due to their magnetic properties, such systems are very well controllable, resulting in the development of accurate approaches for testing many human biomarkers in clinical diagnostics and for the controlled treatment of some diseases and the analysis of its efficacy in medicine. This Special Issue covers a wide spectrum of usage of magnetic nanoparticles and nanocomposites in bioanalytical and biomedical applications. Research papers, reviews, and short communications focused on the synthesis, characterization, and bioapplication of such materials are welcome. Special attention will be paid to state-of-the-art research related to the point-ofcare usage of the developed methods by the end-point users.

Topics of interest include:

- magnetic nanoparticles
- magnetic composites
- synthesis
- characterization
- bioanalytical use
- biomedical application

Guest Editors

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Deadline for manuscript submissions

closed (30 September 2025)



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About the Journal

Message from the Editor-in-Chief

Magnetochemistry constitutes a multidisciplinary field where chemists and physicists not only study magnetic properties but also design and synthesize chemical compounds with desired magnetic properties.

Magnetochemistry is inviting contributions in any field related with this area, such as theoretical models, crystal engineering, molecular magnetism, SMM, SIM, SCM, SCO, magnetic nanostructures, magnetic MOFs, magnetic recording, qubits, magneto-caloric materials, etc. Our goal is to share your contribution in a timely fashion and in a manner that will be valued by the scientific community.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

