

Special Issue

Functional Magnetic Materials: Synthesis, Processing, Structure and Application

Message from the Guest Editors

Functional magnetic materials find diverse applications in fields such as bioimaging, neuroimaging, drug delivery, magnetic storage, spintronics, and all-spin logic devices. However, as the proportion of renewable energy in total energy production increases, there is a growing need for devices that operate at high frequencies, for which existing materials may not meet the requirements. The elemental composition and processing of magnetic materials play a crucial role in the determination of their crystallographic orientation and emerging microstructure. Therefore, it is imperative to explore the various processing techniques that could be applied; these include nanostructure preparation, topological state manipulation, and additive manufacturing, and the correlation of the resulting magnetic components, films, and nanostructures with their overall structure. Due to the increasing demand for such materials, we welcome submissions from the research community that focus on the chemistry of magnetic materials chemistry, processing techniques, and the characterization of their properties. The submission of manuscripts that address the key properties of interest is encouraged.

Guest Editors

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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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