

Special Issue

Magneto-Optical Ceramics

Message from the Guest Editor

This Special Issue of *Magnetochemistry* aims to publish a collection of research contributions illustrating the recent achievements in all aspects of the fabrication and investigation of highly transparent magneto-optical transparent ceramics used in high power Faraday isolators.

The development of ceramic technology has led to significant progress in the fabrication and improvement of the characteristics of magneto-optical polycrystalline materials through a base component of Faraday isolators (FIs) and Faraday rotators (FRs), which are widely used in advanced optical communication systems and high-power lasers for polarization control, optical isolation, and depolarization compensation. In this regard, many works have appeared that describe the preparation and properties of various classes of paramagnetic optical materials (such as garnets, sesquioxides, pyrochlores, etc.) owning superior properties compared to commercially available TGG single crystals.

Guest Editor

Dr. Dmitry Permin

Devyatykh Institute of Chemistry of High-Purity Substances of the Russian Academy of Sciences, 49 Tropinina Str., 603950 Nizhny Novgorod, Russia

Deadline for manuscript submissions

closed (28 February 2021)



Magnetochemistry

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



mdpi.com/si/46460

Magnetochemistry
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
magnetochemistry@mdpi.com

[mdpi.com/journal/
magnetochemistry](https://mdpi.com/journal/magnetochemistry)





Magnetochemistry

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



[mdpi.com/journal/
magnetochemistry](https://mdpi.com/journal/magnetochemistry)



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

Prof. Dr. Carlos J. Gómez García

Department of Inorganic Chemistry, Faculty of Chemistry, University of Valencia, C/Dr. Moliner 50, 46100 Burjassot, Spain

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Chemistry, Inorganic and Nuclear) / CiteScore - Q2 (Electronic, Optical and Magnetic Materials)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.9 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the second half of 2025).