Special Issue

Phase Change Material and Magnetic Research

Message from the Guest Editor

Magnetic phase transitions cover a broad range of research in magnetism and magnetic materials, such as alloys and compounds. Based on the magnetic-field-induced transition, an abundance of physical effects are obtained in the vicinity of magnetic phase transitions, such as magnetocaloric, magnetostriction and magnetoresistance, which have the most potential for practical applications. The solid-state refrigeration technology based on the caloric effects, including magneto-, elasto- and baro-caloric effects, is honored as the most probable alternative to today's gas compression refrigeration technology. In addition, based on the spin reorientation and premartensitic transitions, the exchange bias effect, magnetic topological properties and skyrmions are produced in the materials undergoing magnetic phase transitions. In the world, magnetic phase transition and magnetic transition materials are active and pioneering fields. As for the types of magnetic transition materials, one-dimensional, two-dimensional, and three-dimensional materials, e.g., powder, ribbons, films, alloys and so on, can be fabricated, which would produce unprecedented magnetic properties.

Guest Editor

Prof. Dr. Shengcan Ma

Jiangxi Province Key Laboratory of Magnetic Metallic Materials and Devices/Ganzhou Key Laboratory for Rare Earth Magnetic Functional Materials and Physics, Faculty of Materials Metallurgy and Chemistry, Jiangxi University of Science and Technology, No. 1958 Hakka Avenue, Ganzhou 341000, China

Deadline for manuscript submissions

closed (15 December 2023)

Magnetochemistry

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.6

mdpi.com/si/121453

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

mdpi.com/journal/magnetochemistry

Magnetochemistry

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.6

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 Burjasot, Spain

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / 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).