

Special Issue

Magnetocaloric Effect: Theory, Materials and Applications

Message from the Guest Editor

The magnetocaloric effect (MCE) is due to the temperature change provoked by the application of a magnetic field. In this special chapter, the articles should improve:

- theoretical scientific knowledge (thermodynamics, magnetism)
- simulation studies (ab initio, Montecarlo)
- materials with high functional properties
- applications studies and development/simulation of specific devices (actuators, sensors, energy). As an example, magnetic refrigeration technology has brought an eco-friendly alternative to the conventional gas compression (CGC) technique.

This special issue is open to new ideas and approaches, as well to review articles. Dr. Joan-Josep Suñol Martínez

Guest Editor

Prof. Dr. Joan-Josep Suñol

Composite Campus- Materials and Thermodynamics labs, University of Girona, 17003 Girona, Spain

Deadline for manuscript submissions

closed (30 March 2022)



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

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About the Journal

Message from the Editor-in-Chief

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

Magnetochimistry 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

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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).