

Special Issue

Study on the Growth and Performance of Materials under Magnetic Field

Message from the Guest Editors

Magnetic fields have long been considered significant means to investigate the magnetic properties of materials. With the development of growth and assembly methods, magnetic field, similar to conventional reaction conditions such as temperature, pressure, and surfactant, has been developed as a new parameter for growing and assembling special structures (mainly through magneto-hydrothermal synthesis, magnetic-field-assisted laser deposition, etc.). Moreover, some advanced experiments have recently revealed fascinating magnetically induced enhancements in photoelectrocatalysis, batteries and so on, which received a great deal of attention due to their efficiency, tunability, and feasibility. Magneto-electrochemistry provides a new, effective, and general strategy to improve the activity of electrode materials and mass transfer, which will be a significant future development direction. This Special Issue of *Magnetochemistry* aims to provide a valuable forum for scientists to share their most recent novel findings on the growth and assembly of materials, and on electrode material performance under magnetic fields, as well as their related mechanisms.

Guest Editors

Dr. Lin Hu

High Magnetic Field Laboratory of Chinese Academy of Sciences, Hefei Institute of Physical Science, Hefei 230031, China

Prof. Dr. Qianwang Chen

Hefei National Laboratory for Physical Sciences at Microscale, Department of Materials Science & Engineering, University of Science and Technology of China, Hefei 230026, China

Deadline for manuscript submissions

closed (20 February 2023)



Magnetochemistry

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



mdpi.com/si/105808

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).