Special Issue

Magnetodynamics of Space Plasmas

Message from the Guest Editors

Space plasma physics is an interdisciplinary subject. In addition to motion and energy transfer processes, variations of material are essential to the evolution of magnetized plasmas in space, e.g., the generation and loss processes of space plasmas in the magnetic field, the creation of the auroral plasmas and its emissions, and charge exchange processes in the storm ring current region. This Special Issue aims to provide a valuable forum in which scientists from different fields can share their original articles, review articles and case reports on the evolutions of magnetized plasmas in space and enhance the interdisciplinarity of the subject. Topics to be covered include, but are not limited to the following: Plasmasphere and geocorona: Origin and dynamical evolution of the plasmasphere and geocorona; emission from the plasmasphere and geocorona and their imaging observations;
Magnetospheric activities: Magnetic storms; Substorms; Magnetic reconnection; Magnetospheric current system;
Radiation belts: energization and loss mechanisms of the geomagnetic trapped particles; wave-particle interactions;
Aurora dynamics: magnetosphere-ionosphere coupling;

Guest Editors

Prof. Dr. Chao Shen
Faculty of Science, Harbin Institute of Technology (Shenzhen), Shenzhen 518055, China

Prof. Dr. Desheng Han
School of Ocean and Earth Science, Tongji University, Shanghai 200070, China

Deadline for manuscript submissions

closed (31 March 2023)

Magnetochemistry

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.6

mdpi.com/si/117587

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).