

Special Issue

Stimuli-Responsive Magnetic Molecular Materials

Message from the Guest Editors

Dear colleagues, This Special Issue aims to provide a valuable forum where scientists in different fields will be able to share their most recent novel findings on the control and manipulation of physically and practically important properties of molecule-based materials.

Topics to be covered include but are not limited to:

- Molecule-based magnets: magnetoelectric effect, electric field control of spin states and magnetic exchange coupling in molecule-based magnetic materials, mixed valence systems, etc., in spin communication;
- Temperature- and pressure-induced spin-crossover (SCO) phenomenon, valent tautomerism, light-induced excited spin state trapping (LIESST);
- Light-responsive magnetic molecules: single-molecule magnets, single-chain magnets, and chiral magnets, optical switching at molecular level and photoinduced charge transfer;
- Photoswitching, photomagnetic effect, photomagnetic chromophores, photoinduced charge transfer, light-induced changes in spin state and structure;
- Applications of stimuli-responsive magnetic molecular materials in molecular electronics, spintronics, and quantum computing;
- Stimuli-responsive magnetic particles in biomedical applications.

Guest Editors

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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

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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).