Special Issue

Magnetocaloric Effect: Theory and Experiment in Concert

Message from the Guest Editors

Magnetocaloric effect (MCE) is heating or cooling of magnetic material when the applied magnetic field changes. At the heart of the MCEs lays coupling between the magnetic moments and external the magnetic field, and in some cases, the MCE involves structural transitions concomitant with magnetic transitions. In this special issue, the articles should improve:

- Theoretical prediction of the magnetocaloric effect (thermodynamics, magnetism)
- Magnetocaloric Materials.
- Applications studies and development (actuators, sensors, magnetic refrigeration). Magnetic refrigeration based on the caloric effect of solid-state materials is supposed to be one of the most promising approaches.

The purpose of this special issue is to highlight the latest developments in the shaping of Magnetocaloric Materials. Researchers are therefore invited to present all their original scientific and technical articles of a theoretical and experimental nature on a wide range of materials and processes.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

New phenomena and technological applications of magnetism are fascinating topics. The *Magnetism* journal aims to establish an international forum where both basic and applied developments in this field can be shared, on a budget-level peer-review publishing platform with other experts and non-specialists. The journal is inviting contributions from authors who wish to share their original work in any field related within this area, including fundamental mechanisms, theoretical models, novel magnetic materials and devices, magnetic nanostructures, magnetic recording, biomagnetism, etc. The journal will facilitate the author's process of submission and the peerreview steps for a high-quality and timely publication in order to reach the widest audience.

Editor-in-Chief

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