Special Issue

Advances in Magnetic Hysteresis—In Memory of Prof. Dr. Sergey Borisovich Leble

Message from the Guest Editors

This Special Issue aims to provide a valuable forum for scientists to share their new findings related to both fundamental and applied research on magnetic hysteresis, which is a key property of all ferromagnetic materials. In this issue, special attention will be paid to two scientific problems. The first is predicting the behavior of a magnetic system during magnetization reversal, taking into account the known parameters of the system. Here, the most important topics are the fundamental theory of ferromagnetism and the modeling of hysteresis processes. The second is the determination of intrinsic properties of materials based on the observed magnetic hysteresis. On this basis, the topics to be covered can include but are not limited to: 1. Theory and modeling of magnetic hysteresis 2.

Magnetic hysteresis versus material composition and properties Keywords

magnetic anisotropy

 M magnetic hysteresis

 M domain
 walls

 M micromagnetics

 M multiferroics

 M thin films

 ab
 initio theory of ferromagnetism

 exchange
 interaction

 M hysteresis curve computation

 Brown
 equations

 FORC

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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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