Special Issue

Magnetocaloric Effect: Theory, Materials and Applications

Message from the Guest Editor

The magnetocaloric effect (MCE) is due to the temperature change provoked by the application of a magnetic field. In this special chapter, the articles should improve:

- theoretical scientific knowledge (thermodynamics, magnetism)
- simulation studies (ab initio, Montecarlo)
- materials with high functional properties, and/or
- applications studies and development/simulation of specific devices (actuators, sensors, energy). As an example, magnetic refrigeration technology has brought an eco-friendly alternative to the conventional gas compression (CGC) technique.

This special issue is open to new ideas and approaches, as well to review articles.

Guest Editor

Prof. Dr. Joan-Josep Suñol

Composite Campus- Materials and Thermodynamics labs, University of Girona, 17003 Girona, Spain

Deadline for manuscript submissions

closed (31 May 2021)



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Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41616837734 applsci@mdpi.com

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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multidimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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