

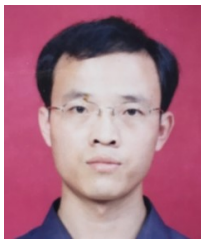
Call for papers on special issue “Caloric effects and related materials”

Guest Editor

Xuexi Zhang¹, 

¹ School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China

* Correspondence: xxzhang@hit.edu.cn; Scopus ID: [15125248900](https://orcid.org/15125248900)



Aim & Scope: In the past decades, solid-state cooling based on the various caloric effects has become an emerging technology which may provide the solution to replace the traditional vapor compression technique due to its high efficiency, inexpensive and eco-friendship. The caloric related materials undergoing phase transitions may exhibit the large adiabatic temperature change or isothermally entropy change under the influence of magnetic fields, uniaxial stresses, hydrostatic pressure or electric field, which corresponds to magnetocaloric effect (MCE), elastocaloric effect (eCE), barocaloric effect (BCE) or electrocaloric effect (ECE). In recent years, researchers have paid more and more attention to various novel caloric related materials, such as ferromagnetic shape memory alloys (FMSMAs) and rare-earth containing compounds, with the aim to achieve the properties for near-future applications. In order to reveal the great development in this emerging field of caloric effects and related materials, the collection aims to gather high quality papers in the topic of material design, processing-microstructure-property characterization and application.

I kindly invite you to submit a manuscript(s) for this Special Issue. Full papers, communications, and reviews are all welcome.

Keywords: Solid-state refrigeration; Magnetocaloric effects (MCE); Elastocaloric effects (eCE); Barocaloric effects (BCE); Electrocaloric effect (ECE); Shape memory alloys (SMAs); Magnetic refrigeration (MR); Superelasticity.

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Subtopics

- 1 Magnetocaloric effects (MCE)
- 2 Elastocaloric effects (eCE)
- 3 Barocaloric effects (BCE)
- 4 Electrocaloric effect (ECE)
- 5 Application of MCE, eCE, BCE and ECE

Deadline for manuscript submissions: 1st August 2020

To submit your manuscript click [here](#). To read author guidelines click [here](#).