Special Issue

Applications of Crystalline Materials in Elastocaloric Devices

Message from the Guest Editors

Solid-state devices based on crystalline materials with elastocaloric effects represent an emerging field focused on exploiting the elastocaloric effect for cooling and air conditioning applications. The elastocaloric effect is a physical phenomenon detected in crystalline materials, such shape memory alloys, whereby a temperature change occurs as a consequence of loading/unloading cycles through a mechanical field under adiabatic conditions. The purpose of this Special Issue is to present papers demonstrating advancements in research on crystalline elastocaloric materials and their contributions to the establishment of elastocaloric technology. Topics of interest include, but are not limited to, advancements in the development of crystalline materials and devices for air conditioning; the preparation, testing, and characterization of crystalline materials; and the application of crystalline materials in actuators and driving components.

Guest Editors

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Deadline for manuscript submissions

31 December 2026

Crystals

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 5.0

mdpi.com/si/263117

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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

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