



## Application of Shape Memory Alloys

Guest Editor:

**Dr. Luigi Manfredi**

Centre of Medical Engineering and Technology (CMET), Division of Imaging Science and Technology, School of Medicine, University of Dundee, Dundee, UK

Deadline for manuscript submissions:

**closed (20 October 2021)**

### Message from the Guest Editor

Dear Colleagues,

Shape memory alloys (SMA) are smart materials that can change shape by an external stimulus, whether mechanical, magnetic, thermal or electrical. They are well known for being biocompatible, used to design miniaturised actuators with high force to weight ratio, as well as for sensors applications. However, as actuators, low energy efficiency, hysteresis, complex control, structural fatigue, and over-heat are major concerns. Wide is the range of applications, varying from medical devices, consumer electronics, automotive, avionics, and many others. This Special Issue aims to present original contributions as well as review articles on SMA applications. This includes but is not limited to the design of novel actuators, sensors, robotic systems, and medical devices.

Dr. Luigi Manfredi

*Guest Editor*





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Alessandra Toncelli

Department of Physics, University  
of Pisa, 56126 Pisa, PI, Italy

## 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.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Inspec](#), [CAPlus / SciFinder](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (*Crystallography*) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

---

*Crystals* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/crystals](http://mdpi.com/journal/crystals)  
[crystals@mdpi.com](mailto:crystals@mdpi.com)  
[X@Crystals\\_MDPI](#)