## **Special Issue**

# Advanced Metal Forming Technologies – Advanced Experiment and Integrated Computational Design

## Message from the Guest Editors

The present Special Issue on "Advanced Metal Forming" Technologies - advanced experiment and integrated computational design" may shed light on bulk metallic genome "Crystal" corresponding to inter/intra-granular plastic deformation mechanisms such as slip, twinning, grain boundary sliding, grain size, recovery, recrystallization, texture, and yield asymmetry via experimentally metallurgical strategies (alloying and thermomechanical processing) and multi-scale modelings including thermodynamic/kinetic calculation, first principle calculation, molecular dynamic simulations, multi-phase field model, crystal plasticity model, continuum plasticity model, and finite element model. Thus, we invite researchers to contribute to this Special Issue focusing on the alloying-processingmicrostructure-property relationship of lightweight metals via the advanced experimental characterization, novel metal forming technologies and Integrated Computational Materials Engineering (ICME) modelings.

## **Guest Editors**

Dr. Renhai Shi

Prof. Dr. Rongpei Shi

Prof. Dr. Dejiang Li

Prof. Dr. Haitao Jiang

Prof. Dr. Xiaoqin Zeng

Prof. Dr. Mingyi Zheng

et al.

### Deadline for manuscript submissions

closed (31 December 2022)



an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.0



mdpi.com/si/104428

Crystals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
crystals@mdpi.com

mdpi.com/journal/ crystals





an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.0



## **About the Journal**

## 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

Prof. Dr. Alessandra Toncelli
Department of Physics, University of Pisa, 56126 Pisa, Pl, Italy

#### **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, Ei Compendex, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Crystallography) / CiteScore - Q2 (Condensed Matter Physics)

