





an Open Access Journal by MDPI

# Strain Reversal in Metals and Alloys: Origins and Consequences

Guest Editors:

### **Dr. Ebad Bagherpour**

Brunel Centre for Advanced Solidification Technology, Brunel University London, Uxbridge, Middlesex UB8 3PH, UK

### Assoc. Prof. Dr. Mohsen Reihanian

Shahid Chamran University of Ahvaz, Iran

#### Prof. Dr. Ramin Ebrahimi

Shiraz University, Iran

Deadline for manuscript submissions:

closed (31 March 2021)

## **Message from the Guest Editors**

This Special Issue is dedicated to covering all aspects of strain reversal, from its origins to its consequences in the deformation behavior and properties of metals and alloys. The potential topics include, but are not limited to:

- Impacts of strain reversal on mechanical properties and microstructure (from nano to micron size), dislocation arrangement, grain size, and texture.
- Factors affecting strain reversal, including the process parameters (e.g., the amount of forward and reverse strain) and the parameters relevant to the material, including the initial grain size, stacking fault, strain path, elasticity (in fatigue), and grain refinement.
- Processes involving strain reversal, from fatigue to severe plastic deformation methods including equal channel angular extrusion, simple shear extrusion, twist extrusion, high-pressure torsion, cyclic expansion extrusion, and accumulative roll bonding.

Both experimental and computational works (modelling and simulation) on metals and their alloys relevant to any aspects of strain reversal are welcome.







IMPACT FACTOR 2.7

CITESCORE 3.6

an Open Access Journal by MDPI

### **Editor-in-Chief**

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