

## Special Issue

# Microstructure and Mechanical Behaviour of Shape Memory Alloys

### Message from the Guest Editor

Undoubtedly, shape memory alloys are of scientific and practical interest for a variety of innovative engineering applications. In recent years, various multicomponent alloys and their synthesis technologies have been designed for different special practical applications. This Special Issue focuses on the study of thermoelastic deformation-induced martensitic transformations in various metallic alloys and compounds with shape memory effects (based on Ti, Fe, Ni, Cu, TiNi, Ni<sub>2</sub>MnGa etc.), their microstructures (including electron microscopic studies up to the atomic resolution), and the behavior of physical and mechanical properties. We plan to pay special attention to the effects of different chemical alloying, temperatures, pressures, external deformations, and magnetic fields on structure and thermoelastic martensitic transformations and their relationship with different properties of shape memory alloys. It is also proposed that the results of theoretical analyses and numerical modeling of martensitic transformations should be discussed. Prof. Dr. Vladimir Pushin

### Guest Editor

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### Deadline for manuscript submissions

closed (30 June 2023)



## Metals

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## About the Journal

### Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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