Special Issue

Microstructure and Deformation of Advanced Alloys

Message from the Guest Editors

The microstructure evolution and deformation mechanisms in alloys were researched during over eight decades. While the initial work was mostly experimental, studies of defects (including dislocations) and their motion during deformations resulted in mathematical models describing deformation mechanisms. Collected in this Topic are contributions related to characterization of defects, microstructure evolution, deformation modelling, design of advanced alloys, and alloy processing during manufacturing (including additive manufacturing and thermomechanical treatment). The goal of this Special Issue of Crystals is to elucidate the relationships among behaviour of defects, microstructure evolution, deformations, and thermomechanical properties of advanced alloys.Submissions to this Special Issue are welcome in the following areas:

- metals and alloys
- defects
- texture
- microstructure
- deformation
- aging
- properties
- hot-working
- cold-working

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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

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