Special Issue

Crystals Dislocation 2022

Message from the Guest Editors

The fact that crystals such as metals can be work-hardened has been known and utilized by human kind for thousands of years. However, people didn't know the reason and mechanism of work-hardening until the discovery of dislocation in 1930s. As a type of line defects, dislocation is strongly related with crystals' mechanical properties such as strength, toughness, fatigue, fracture, hydrogen embrittlement, stress corrosion cracking, creep, etc. The movement, multiplication, self-organization of dislocations and the interaction of dislocations with other defects such as solutes, second phase particles and grain boundaries are critical to understand the mechanisms of the above-mentioned phenomena. This collection aims to summarize the frontier research on characterization of dislocation evolution in crystals and try to bridge the gap between dislocation structures and various mechanical performances.

Guest Editors

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Deadline for manuscript submissions

closed (26 July 2023)

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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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