Special Issue

Superconductors: Materials, Microstructures and Applications

Message from the Guest Editors

Superconductors have attracted intensive research interest among the scientific community. On one hand, the zero-resistance nature of the superconductors below the critical temperature shows great potential in realizing dissipationless electronics. On the other hand, the mechanism of the unconventional superconductivity remains a mystery. Moreover, exotic phases and phenomena occur in the phase diagram of the unconventional superconductors, and these phases and phenomena are even less understood compared to the superconductivity itself. This special issue aims to cover the recent research development in superconducting materials and microstructures, as well as their application, in this regard, we propose the following topics:

- Theoretical prediction and experimental discovery of new superconducting materials.
- Search for high Tc superconductors.
- Unveiling the mechanism for unconventional superconductivity.
- Understanding the exotic phases and their properties in the phase diagram of unconventional superconductors.
- Superconductor microstructures.
- Superconductor-based low-consumption electronics.

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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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