Special Issue

Superconductors and Magnetic Materials (2nd Edition)

Message from the Guest Editors

This Special Issue focuses on the development and treatment of superconducting and magnetic materials for several applications from the macroscopic to the nano scale. Methods for optimizing the magnetization of superconducting bulks with combined pulsed field magnetization will be considered. Techniques for the improvement of the critical current density or magnetic flux pinning of existing superconducting compounds such as niobium–tin and niobium–titanium, magnesium diboride, cuprates, nickelates, carbon, and iron-based alloys will also be included in this Special Issue.

Concerning the development of magnetic materials, research on new high-remnant-flux permanent magnet crystals and the improvement of existing ones such as alnico, neodymium–iron–boron, and samarium–cobalt-based alloys will be considered. In addition, research on the development of techniques for increasing the relative magnetic permeability of existing high-magnetic-permeability alloys such as soft and hard ferrites, silicon–iron, and cobalt–iron-based alloys based, for example, on temperature annealing and the doping of new elements will be included in this Special Issue.

Guest Editors

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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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