# Special Issue

# Superconductivity and Magnetism: Recent Advances, New Trends, and Applications

## Message from the Guest Editors

This Special Issue aims to provide a comprehensive overview of the latest developments in the intertwined fields of superconductivity and magnetism, two of the most fascinating phenomena in condensed matter physics. Superconductivity has been a subject of intense research since its discovery in 1911 due to its fascinating properties such as the current transport without dissipations. On the other hand, magnetism has been known to humanity for thousands of years but continues to surprise researchers with its richness and complexity. In recent years, the interplay between superconductivity and magnetism has emerged as a fertile ground for discovering new physics and developing novel applications. This Special Issue aims to capture the state of the art in this exciting field.

**keywords:** superconductivity; magnetism; high-temperature superconductors; magnetic materials; superconducting devices; spintronics; magnetic applications; superconducting magnets, coils, and wires; magnetic nanoparticles; interplay between superconductivity and magnetism

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

## Editor-in-Chief

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