Special Issue

New Magnetic Films for Novel Applications

Message from the Guest Editors

Magnetic thin films, the cornerstone of the spintronics field, serve as the medium for information processing, transfer, operation, and storage. In recent years, spintronics research has seen remarkable progress. This includes advancements from giant magnetoresistance (GMR) to tunneling magnetoresistance (TMR) for detection, and from spin-transfer torque to spin–orbit torque for magnetization switching. The exploration of new materials, such as heavy metals, topological insulators, two-dimensional materials, antiferromagnets, and altermagnets, has significantly broadened the field.

To keep pace with these developments, this Special Issue aims to collect papers on a wide range of topics related to magnetic thin films, including novel magnetic materials, altermagnetism, spin–orbit torque, orbital torque, magnetization switching, surface-acoustic-wave spin devices, magnetization dynamics, skyrmions, the orbital Hall effect, chirality-induced spin selectivity, and their associated applications. We welcome original research articles, encompassing both experimental and theoretical works, as well as comprehensive reviews.

Guest Editors

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Deadline for manuscript submissions

closed (20 May 2025)

Crystals

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Impact Factor 2.4
CiteScore 5.0

mdpi.com/si/221222

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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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