Special Issue

Unlocking Quantum Phenomena: Insights into Materials and Applications

Message from the Guest Editors

This Special Issue will focus on the intricate relationships governing the electronic, magnetic, and structural properties of novel quantum materials. By leveraging state-of-the-art fabrication and characterization techniques, such as the epitaxial growth of thin films, we aim to uncover novel quantum phenomena and mechanisms behind correlated electronic behavior. The insights gained will directly inform the design of next-generation devices for energy-efficient technologies and bio-inspired computing, bridging fundamental research with practical applications. The integration of correlated systems into functional devices will not only push the boundaries of fundamental physics but also enable transformative technologies. This research aligns with the journal's scope by bridging quantum phenomena with practical implementations in materials for energy and electronics. For instance, investigating materials with tunable quantum states and robust spin-based functionalities will significantly advance spintronics, enabling faster, more efficient data storage and processing systems.

Guest Editors

Dr. Guoxing Miao

Institute for Quantum Computing, Department of Electrical and Computer Engineering, Waterloo Institute for Nanotechnology, University of Waterloo, Waterloo, ON N2L 3G1, Canada

Dr. Erbin Qiu

Department of Physics and Center for Advanced Nanoscience, University of California–San Diego, La Jolla, CA 92093, USA

Deadline for manuscript submissions

31 October 2025



Condensed Matter

an Open Access Journal by MDPI

Impact Factor 1.5 CiteScore 2.7



mdpi.com/si/232074

Condensed Matter Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 condensedmatter@mdpi.com

mdpi.com/journal/condensedmatter





Condensed Matter

an Open Access Journal by MDPI

Impact Factor 1.5 CiteScore 2.7



About the Journal

Message from the Editor-in-Chief

Welcome to *Condensed Matter* (ISSN 2410-3896)! It gives me great pleasure to invite you to publish in the journal. We are looking to build a collection of high quality research articles, supported by a community from across the field of condensed matter physics. In this task, I will be assisted by a highly qualified editorial board. We accept papers on basic research as well as applications, and experimental or theoretical work. Currently the journal is indexed by ESCI (Web of Science) and hope you can consider *Condensed Matter* as an exceptional home for your manuscript.

Editor-in-Chief

Prof. Dr. Antonio Bianconi

Rome International Center for Materials Science Superstripes (RICMASS), Via dei Sabelli 119A, 00185 Roma, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 20.1 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

