# **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**

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# Deadline for manuscript submissions

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# **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.

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