



## Selected Papers from the International Conference on Quantum Materials and Technologies (ICQMT2022)

Guest Editors:

**Prof. Dr. Ali Gencer**

**Prof. Dr. Annette Bussmann-Holder**

**Dr. J. Javier Campo Ruiz**

**Prof. Dr. Valerii Vinokur**

Deadline for manuscript  
submissions:  
**closed (31 December 2022)**

### Message from the Guest Editors

Dear Colleagues,

In recent decades, there have been significant developments in the field of quantum materials and technologies, led by dedicated world-wide scientific and technological efforts. Advancements in quantum materials and technologies have already found their applications in industry and research; the USA, Germany, the UK, China and Japan being at the forefront of these efforts. We proudly open this Special Issue of the proceedings for the International Conference on Quantum Materials and Technologies (ICQMT-2022) where leading scientists and technologists will be sharing knowledge under seven main subgroups of this wide subject area. The goal of this Special Issue is to collect state-of-the-art results (from experiments, theories and simulations) centered on quantum phenomena, and to provide a perspective on how the achievements of quantum materials and technologies can be practically applied for fundamental developments, new technological applications and achievements in quantum devices.

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*Guest Editors*





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## Editor-in-Chief

### Prof. Dr. Antonio Bianconi

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

## 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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*Condensed Matter* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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