





an Open Access Journal by MDPI

# **Emergent Properties in Strongly Correlated Materials**

Guest Editors:

#### Dr. Pinku Roy

Los Alamos National Laboratory, Los Alamos, NM 87545, USA

### Dr. Di Zhang

Los Alamos National Laboratory, Los Alamos, NM 87545, USA

### Dr. Igor Yurkevich

School of Engineering & Applied Science, Aston University, Birmingham B4 7ET, UK

Deadline for manuscript submissions:

17 September 2024

## **Message from the Guest Editors**

Materials where charge, spin, orbital and lattice degrees of freedom are simultaneously active may display spatially inhomogeneous electronic ground states. These correlated materials often exhibit remarkable properties, e.g., colossal magnetoresistance, high-temperature superconductivity, heavy fermion behavior, charge density wave orders, and non-Fermi liquid behavior. Understanding these collective states from micro to macro scale is fascinating and can be useful for various technological applications.

This Special Issue aims to compile the observed physical properties and phenomena, elucidate the structure–property correlations in these strongly correlated material systems, and address possible device concepts. Researchers investigating the electronic, magnetic, optical and thermal properties of such systems and their future applications are encouraged to submit articles in full paper, communication and review formats.









CITESCORE 3.6

an Open Access Journal by MDPI

### **Editor-in-Chief**

### **Prof. Dr. Alessandra Toncelli** Department of Physics, University of Pisa, 56126 Pisa, Pl, Italy

## **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.

### **Author Benefits**

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

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Crystallography*) / CiteScore - Q2 (*Condensed Matter Physics*)

#### **Contact Us**