Special Issue

Theoretical Condensed Matter Physics

Message from the Guest Editor

Condensed Matter Physics focusing on topics such as semiconductors, magnetism, superconductivity, complex fluids, and thin films is an essentially important research area solving a broad range of physical problems, both fundamental and applied. Theoretical physics, in particular, computational physics utilizes current development of massive computing power to solve problems across various fields, ranging from physics and chemistry to biology, material sciences and engineering. They are playing an essential role in modern scientific research and explorations. The present special issue is devised as a collection of articles reporting both basic and applied research on theoretical condensed matter physics. The topics may include computational study of materials such as material structures, characterization, applications, and properties including electronic, magnetic, transport, mechanical, thermal, using numerical methods for instance first-principles calculations, density-functional theory, molecular dynamics, Monte Carlo, tight-binding etc.

Guest Editor

Dr. Xihong Peng

Science and Mathematics Faculty, College of Integrative Sciences and Arts, Arizona State University, Polytechnic Campus, Mesa, AZ 85212, USA

Deadline for manuscript submissions

closed (31 January 2021)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/38616

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)