

Special Issue

Strain-Engineered Nanocomposites towards Multifunctionalities

Message from the Guest Editors

Strain engineering has become an important research theme in the field of materials science because the elastic strain states induced by lattice mismatch or local defects within crystalline materials would remarkably alter the physical properties of materials, such as the transition temperatures of ferroelectricity, ferromagnetism, and superconductivity, etc., which opens up enormous opportunities in device applications. Other than the strain tuning in single-phase oxides, where the biaxial strain between the film and substrate plays the dominant role in altering carrier mobility and physical properties of the epitaxial films, the strain states within functional nanocomposites are much more complex where both in-plane and out-of-plane strains significantly impact the physical properties as well as functionalities of the nanocomposites. Therefore, this Special Issue aims to share the latest research results in strain engineering of nanocomposite thin films which exhibit tunable properties and functionalities. We warmly welcome researchers to contribute to this Special issue in the form of research articles, letters, reviews, and communications, as well as all suitable forms.

Guest Editors

Dr. Di Zhang

Dr. Jijie Huang

Dr. Shikhar Misra

Dr. Xuejing Wang

Deadline for manuscript submissions

closed (15 November 2022)



Crystals

an Open Access Journal
by MDPI

Impact Factor 2.4
CiteScore 5.0



mdpi.com/si/107596

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

[mdpi.com/journal/
crystals](https://mdpi.com/journal/crystals)





Crystals

an Open Access Journal
by MDPI

Impact Factor 2.4
CiteScore 5.0



[mdpi.com/journal/
crystals](https://mdpi.com/journal/crystals)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University of Pisa, 56126 Pisa, PI, 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), Inspec, Ei Compendex, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Crystallography) / CiteScore - Q2 (Condensed Matter Physics)