# **Special Issue**

# Beyond the Horizon: Exploring the Advances in Graphene Material Advancements

# Message from the Guest Editors

This Special Issue, "Beyond the Horizon: Exploring the Frontier of Graphene Material Advancements", presents an in-depth exploration of the latest developments in graphene research. Authored by experts in the field, this Special Issue delves into groundbreaking graphene synthesis methods, advanced characterizations, and diverse applications. The journey begins with innovative techniques for precise control over graphene's properties, followed by cutting-edge characterizations that unravel its complexities. Applications spanning electronics, photonics, energy storage, and flexible technologies showcase graphene's transformative impact. This Special Issue also explores interdisciplinary intersections, revealing graphene's influence in biotechnology, medicine, and environmental science. It invites researchers and engineers to embrace graphene's limitless potential and offers a roadmap to navigate its boundless potential. This Special Issue is your portal to a world wherein graphene's versatility and ingenuity have no bounds, inspiring innovation and discovery in this remarkable material.

#### **Guest Editors**

Prof. Dr. Cristian Vacacela Gomez

INFN-Laboratori Nazionali di Frascati, Via E. Fermi 54, I-00044 Frascati, Italy

Prof. Dr. Stefano Bellucci

INFN-Laboratori Nazionali di Frascati, 00044 Frascati, Italy

Dr. Talia Tene

Department of Chemistry, Universidad Técnica Particular de Loja, Loja, Ecuador

# Deadline for manuscript submissions

closed (30 September 2024)



an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.0



mdpi.com/si/185349

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

mdpi.com/journal/ crystals





an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.0



# **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, Pl, 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, CAPlus / SciFinder, and other databases.

#### Journal Rank:

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

