

Special Issue

Synthesis, Properties and Applications of 2D Materials

Message from the Guest Editors

Two-dimensional nanomaterials, including metals, oxides, transition metal dichalcogenides, and their heterostructures, have received attention due to their versatile physiochemical properties such as superconductivity, magnetization, and charge density wave, which are suitable for different applications. Further modification of these materials via defect engineering, nanoparticles deposition, Li intercalation, electron beam and light irradiation, alloying, dimension tuning, etc., lead to interesting properties suitable for various tunable device applications. Due to their superior mechanical flexibility, controllable electrical properties, planar fabrication properties, high surface-to-volume ratio, etc., 2D materials and their heterostructures have emerged as suitable materials for sensing and optoelectronics applications. We invite researchers to contribute to this Special Issue on the synthesis, properties, and applications of 2D materials. We aim to cover the properties, structure, and fundamental understanding of the 2D materials.

Guest Editors

Dr. Amit Pawbake

Dr. Dattatray J. Late

Dr. Ranjit Kashid

Dr. Carino Ferrante

Deadline for manuscript submissions

closed (30 June 2021)



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

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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

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