



2D Materials: From Structures to Functions

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Deadline for manuscript submissions:

closed (30 September 2020)

Message from the Guest Editors

Dear Colleagues,

The aim of this Special Issue is to provide an up-to-date international platform that can enable scientists from various disciplines to publish the latest advancements and up-to-date reviews on the following topics:

- Novel approaches for preparation of stable and large-scale 2D crystals;
- New efforts put forward to expand the portfolio of 2D materials to search for optimal properties;
- Lateral and vertical 2D material heterostructures;
- Characterization techniques of 2D materials;
- Novel applications of 2D materials in pharmacy, biology, medicine, and green chemistry;
- Light-matter interactions in 2D materials, through excitons and polarons;
- Chemical functionalization of 2D materials;
- Ion beam modifications of 2D materials, plasma induced changes to 2D systems, defect engineering;
- Integration of 2D materials with conventional semiconductors for electronics and optoelectronics;
- Theory and modelling of 2D materials and related devices.

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Guest Editors





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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.

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