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2D Crystalline Monolayer Nanosheets

Guest Editors:

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Deadline for manuscript submissions:
closed (20 September 2021)

Message from the Guest Editors

Dear Colleagues,

2D crystalline nanomaterials at an atomic level are promising candidates for a wide range of applications in the fields of gas sensors, electrocatalysts, energy storage, electronic devices, and so on. 2D crystalline nanomaterials, such as graphene, phosphorene, MXenes, transition metal dichalcogenides and layered metal oxides, have many unique properties such as a very high electron mobility, thermal conductivity and strength. The synthesis of high-quality and atomically thin materials in large areas is a subject of intensive and ongoing investigation. The thicknesses, defects, ionic bonding and multi-components present in 2D crystals influence its properties. Therefore, before the processing of a new 2D crystalline nanomaterial, there is a critical need to develop theoretical models to predict its stability and potential novel properties. Following these theoretical predictions, basic research in the processing methods of large area 2D crystalline nanomaterials and composites of various different materials may be extended.

We invite researchers to contribute to the Special Issue, which is intended to help to better follow the newest research progress.

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Editor-in-Chief

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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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