

Special Issue

Two-Dimensional Materials: Synthesis, Property and Applications

Message from the Guest Editors

Since the discovery of graphene materials, two-dimensional materials have become candidate materials with great application potential due to their unique structural characteristics and physical and chemical properties. Especially in recent years, we have seen some major breakthroughs in the two-dimensional materials in various fields, not only in regard to developing new synthesis methods and exploring new properties, but also in regard to new applications and driving commercialization. Two-dimensional (2D) materials consist of a single layer or a few layers of atoms or molecules held together by strong covalent or ionic bonds within the layers and by weaker Van der Waals forces between the layers. They have unique characteristics and functions due to their unique 2D structure. At present, 2D photoelectric materials mainly include graphene (GN), topological insulators (TIs), transition-metal chalcogenide compounds (TMDCs), black phosphorus (BP), and so on. With the aim of solving some problems of two-dimensional materials, we hope to collect research articles on the topic of two-dimensional materials in the fields of synthesis, performance and application.

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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

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