Special Issue

Nonlinear Optical Properties and Applications of 2D Materials

Message from the Guest Editors

2D materials are some of the most exciting and frontier research subjects in materials science due to their great potential in technological applications that cover the fields of optoelectronics, nanophotonics, devices based on graphene oxide, nanocrystal materials, nanosheets, heterojunctions, monoatomic layers, solar cells, and thin films, to mention a few. A wide diversity of techniques and procedures to synthesize 2D materials, some very cheap and easy to perform, constitute one of the advantages over other types of materials. 2D materials such as graphene structures, with their high electrical conductivity, low density, and high flexibility, can be used in nanoelectronics, biosensing, and high-frequency devices. On the other hand, 2D photonic materials can confine, trap, and modulate the propagation of a light beam, which are effects that can used in biosensing, signal amplification, and information processing. Hetero-junctions based on thin films can be very useful in the development of high-transmittance diodes or the fabrication of new-generation solar cells.

We invite you to join the project to compile a set of stimulating and high-quality articles.

Guest Editors

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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

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