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Topological Photonic Crystals

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Message from the Guest Editors

Topological photonic crystals are currently in the scientific limelight not only because they possess tremendous technological potential but also because they have opened several avenues of basic science research. This is a result of their incredible capacity to simulate electronic phenomena, such as the quantum Hall effect, the quantum valley Hall effect, the quantum spin Hall effect, and topological insulators, among others. From a technological perspective, topological photonic crystals are excellent candidates for potential applications in topological lasers, topological waveguides, filters, and resonators.

This Special Issue will focus on some of the most recent advances in the field of "Topological Photonic Crystals". The Special Issue's topics will likely include but are not limited to: recent advances in the design of new topological photonic structures; the simulation of electronic phenomena; studies of intrinsic and extrinsic disorder effects; and technological applications such as waveguides, lasers, filters, and resonators.



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Special Issue



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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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