

Special Issue

Research Progress of Photoluminescent Materials

Message from the Guest Editor

This Special Issue aims to provide a comprehensive review of the latest advancements in the field of photoluminescent materials, focusing on their synthesis, characterization, and application. Photoluminescent materials play a crucial role in a wide range of technologies, including optoelectronics, biomedical imaging, sensor systems, and sustainable energy solutions. This Special Issue highlights pioneering research on new materials such as organic semiconductors, quantum dots, perovskites, and two-dimensional materials, with an emphasis on enhancing photoluminescent properties like high quantum efficiency, tuneable emission spectra, and improved stability. The scope of this Special Issue covers both the fundamental principles of photoluminescence and the practical challenges of integrating these materials into devices, such as light-emitting diodes (LEDs), displays, lasers, and biosensors. By consolidating the most recent research, this Special Issue seeks to provide valuable insights into the future direction of photoluminescent materials, underscoring their potential to drive the development of next-generation technologies across various fields.

Guest Editor

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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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