

Special Issue

Optical Molecular Systems: From Design to Applications

Message from the Guest Editor

Optical materials play a pivotal role in a wide range of scientific, technological, and industrial applications. This Special Issue delves into the intricate domain of molecular systems based on optical materials, tracing the path from molecular design to transformative applications. Special emphasis is placed on luminescent materials, including quantum dots, rare-earth luminescent materials, and photoluminescent organic materials, as well as chromic materials (such as photochromic, thermochromic, and electrochromic materials). Contributors will explore molecular architectures and processes, such as spectral conversion, energy transfer, dynamic responses, etc., with the aim of achieving desired optical properties. The collection highlights the diverse applications that arise from these optical molecular systems, spanning across energy harvesting, human-centric lighting, healthcare diagnostics, imaging and therapeutics, and monitoring and sensing, among other potential sectors.

Guest Editor

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