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Design, Synthesis, and Applications of Optoelectronic Functional Materials

Guest Editor:

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Message from the Guest Editor

The rapid development of novel optoelectronic materials has enabled many technological advances in applications, including photovoltaic, light-emitting diodes, photodetectors, lasing, and other photonics. Recently, exciting progress has been made in the field ranging from the understanding of fundamental materials properties, the synthesis of novel materials morphologies and dimensionalities, and the optimization of the devices. With these, researchers have been able to better design and synthesize functional materials for higher efficiency, sustainability, and low cost.

Despite these successes, many challenges are still to be addressed. This Special Issue aims to explore the design and synthesis of optoelectronic materials and their applications in devices, with, but not limited to, the following topics:

Photovoltaic, light-emitting diodes, photodetectors, lasers; Materials modeling and data-driven materials design; Optoelectronic materials synthesis; Organic-inorganic hybrid materials; Low-dimensional materials and superlattices.









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Message from the Editor-in-Chief

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