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Design, Synthesis, and Applications of Optoelectronic Functional Materials

Guest Editor:

Dr. Ruoxi Yang

Lawrence Berkeley National Laboratory, Materials Science Division, Berkeley, CA 94720, USA

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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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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

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Materials Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials_Mdpi