Special Issue

Wide Bandgap Semiconductor Photonic Devices

Message from the Guest Editors

The pursuit of wide bandgap semiconductor photonic devices has led to a series of fundamental breakthroughs, especially the Nobel prize winning blue light-emitting diodes (LEDs) based on group III-Nitride materials. For shorter wavelengths, wide bandgap semiconductor ultraviolet (UV) photonic devices have been explored for both photon emission and detection. For the past decades, developments have been carried out for wide bandgap semiconductor photonic devices on novel materials, device physics, active region design, and device fabrication/packaging. This Special Issue focuses on the most recent advances in the field of wide bandgap semiconductor photonic devices such as LEDs, lasers or photodetectors. Topics will include, but are not limited to development of advanced device physics; research of novel wide bandgap materials including 2D materials; exploration of nanostructured active regions such as nanowires or quantum dots; as well as study of non-classical device concepts. New methods of fabricating semiconductor photonic devices to achieve higher output power and quantum efficiency are also welcome.

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You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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