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Recent Advances in Infrared Photodetectors

Guest Editor:

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Message from the Guest Editor

III-V InGaAs photodetectors have been serving as the key element for ground and space light sensing applications in the short-wavelength infrared (SWIR) band.

This Special Issue aims to address issues that involve the materials as well as the device design, the processing technology, the characterization, and the applications of InGaAs photodetectors featuring novel structures, higher performances and new functionalities. This includes:

- Short-wavelength infrared (SWIR) InGaAs photodetectors;
- Lattice-mismatch material design and epitaxial growth;
- Extended wavelength InGaAs photodetectors;
- Misfit dislocation mitigation technologies ;
- InGaAs focal plane arrays (FPAs);
- Large array format and fine pixel pitch FPAs;
- SWIR read-out integrated circuit (ROIC) designs;
- Application exploration of InGaAs photodetectors;
- Polarization-integrated InGaAs photodetectors;
- SWIR spectral imaging;
- NIR-I and NIR-II biology and medical diagnostics;
- SWIR image processing.





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Message from the Editor-in-Chief

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