

Recent Advances in Infrared Photodetection and Imaging

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Message from the Guest Editor

Dear Colleagues,

As an important branch of photoelectric information technology, infrared photodetectors can realize imaging through successfully converting the incident infrared light into measurable electrical signals. Usually, the quality of infrared imaging is directly determined by the performance of the infrared photodetector. In recent years, with the wide application and increasing demand, the new generation of infrared photoelectricity technology with the characteristics of high sensitivity and being multi-band, lightweight and intelligent is constantly developing. Specially, with the discovery and reporting of novel materials and structures, infrared photodetectors show more research points in device structure, response mechanism and imaging system. Notably, infrared photodetectors are developing in the direction of high-performance, multi-spectrum, low-cost, large array and lightweight photodetectors, and have been widely used in military and civilian fields such as aerospace, precision guidance, medical epidemic prevention and intelligent driving, etc. This Special Issue aims to publish selected contributions on recent advances in infrared photodetection and imaging.

