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Generation, Detection and Processing of Terahertz Signals pp 123-137

THz Image Processing and Its Applications

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Abstract

This chapter labels the recent advances of terahertz (THz or 10¹² Hz) technology-based image processing and its applications. In short, the sandwiched regime between infrared and microwaves, bridging the gap amid optics and electronics is renowned as the THz. THz image processing deals with the interaction of matters in the sub-millimetre wavelength band (*ca*. 300 GHz to 3 THz) of a distinct electromagnetic spectrum indistinguishable from the other spectroscopic techniques. The THz regime also known as the "THz gap" for a long time as neither microwave nor optical devices could entirely subjugator this mysterious realm with its countless