

Accession number:20122315096710

Title:Terahertz imaging with quantum-well photodetectors

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Source title:IEEE Photonics Technology Letters

Abbreviated source title:IEEE Photonics Technol Lett

Volume:24

Issue:13

Issue date:2012

Publication year:2012

Pages:1109-1111

Article number:6189368

Language:English

ISSN:10411135

CODEN:IPTLEL

Document type:Journal article (JA)

Publisher:Institute of Electrical and Electronics Engineers Inc., 445 Hoes Lane / P.O. Box 1331, Piscataway, NJ 08855-1331, United States

Abstract:We present an imaging system based on a terahertz (THz) quantum-well photodetector (QWP). The THz QWP possessing high sensitivity at THz frequency band (0.3-10 THz) is utilized as a detector for imaging. We obtained images of a concealed sample in envelope by detecting the transmitted THz radiation from a black-body source as background radiation. This letter shows the potential of THz QWPs for imaging. © 2012 IEEE.

Number of references:12

Main heading:Semiconductor quantum wells

Controlled terms:Detectors - Frequency bands - Imaging techniques - Photodetectors

Uncontrolled terms:Background radiation - High sensitivity - Tera Hertz - Terahertz imaging - THz radiation

Classification code:714.2 Semiconductor Devices and Integrated Circuits - 716.4 Television Systems and Equipment - 741 Light, Optics and Optical Devices - 741.3 Optical Devices and Systems - 746 Imaging Techniques - 914 Safety Engineering

DOI:10.1109/LPT.2012.2196033

Database:Compendex

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