

512.

Author

Sizov FF. Reva VP. Golenkov AG. Zabudsky VV.

Title

Uncooled Detectors Challenges for THz/sub-THz Arrays Imaging,

Source

JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES, vol.32, no.10, OCT 2011, 1192-1206.

Abstract

Some problems and challenges for applications of uncooled or slightly cooled detectors (not deeper than to 77 K) for sub-THz and THz (terahertz) arrays are briefly discussed. The possibilities to involve detectors based on plasmon resonance FETs (field effect transistors) and those based on warm electron effect narrow-gap semiconductor bolometers are speculated, as they seem to be promising for using in large format broadband arrays of low-cost systems, though they are still in the stage of research and optimization.