57
Accession number:12734372
Title:Detection in Terahertz Range
Authors:Voitsekhovskii, A.V. (1); Nesmelov, S.N. (1); Kulchitskii, N.A. (2); Melnikov, A.A. (2); Maltsev, P.P. (3)
Author affiliation:(1) Tomsk State Univ., Tomsk, Russia; (2) Moscow State Inst. of Radio Eng. Electron. & Autom., Moscow, Russia; (3) Inst. of UHF Semicond. Electron., Moscow, Russia
Source title:Journal of Nano and Microsystem Technique
Abbreviated source title:J. Nano Microsyst. Tech. (Russia)
Issue:2
Publication date:2012
Pages:28-35
Language:Russian
ISSN:1813-8586
Document type:Journal article (JA)
Publisher:Editorial Board of the Journal Nano and Microsystem Technique
Country of publication:Russia
Material Identity Number:GD44-2012-005
Abstract:In this paper issues associated with the development of terahertz radiation detector technology are discussed. The basic physical phenomena and recent progress in different types of terahertz detection (direct detection and heterodyne detection) were considered. The advantages and disadvantages of direct detection detectors and heterodyne detection detectors are discussed.
Number of references:20
Inspec controlled terms:heterodyne detection - particle detectors - terahertz wave detectors
Uncontrolled terms:terahertz range detection - terahertz radiation detector technology - direct detection detector - heterodyne detection detector
Inspec classification codes:B7420 Particle and radiation detection and measurement - B1350 Microwave circuits and devices - B7220 Signal processing and conditioning equipment and techniques
Treatment:Practical (PRA)
Discipline:Electrical/Electronic engineering (B)
Database:Inspec
IPC Code:G01T; H01J47/00