694

Accession Number

12345546

Author

Bratman VL. Litvak AG. Suvorov EV.

Author Unabbreviated

Bratman Vladimir L.; Litvak Aleksandr G.; Suvorov Evgenii V.

Author/Editor Affiliation

Bratman VL. Litvak AG. Suvorov EV. : Institute of Applied Physics, Nizhny Novgorod, Russia

Title

Mastering the Terahertz Domain: Sources and Applications

Source

Physics-Uspekhi, vol.54, no.8, 2011, 837-44. Publisher: Uspekhi Fizicheskikh Nauk, Russia.

Abstract

The term 'terahertz range' is used in reference to the frequency range from 0.1 to 10 THz (wavelengths from 3 to 0.03 mm), which covers the short-wavelength part of the millimeter range well mastered by vacuum electronics, as well as the entire range of submillimeter waves and a part of the far-infrared region. Mastering the terahertz range includes creating sources and means of registration, as well as developing diverse applications. Our report is a brief review of the achievements in the generation of terahertz radiation by the methods of classical vacuum electronics and optoelec tronics,1 in addition to several applications of terahertz radiation. (42 References).