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Accession Number

12332485

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Title

High-speed nanoscale metal-semiconductor-metal photodetectors with terahertz bandwidth

Source

Optical and Quantum Electronics, vol.42, no.11-13, Oct. 2011, 771-6. Publisher: Springer Netherlands, Netherlands.

Abstract

A model for the maximum bandwidth achievable in metal-semiconductor-metal photodetectors is developed and simulated to determine the dimensions required for terahertz bandwidth. The bandwidth is found to exceed 1 THz for devices with line pitch less than 200 nm. (3 References).