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标题: THz/sub-THz direct detection detector on the basis of electron/hole heating in MCT layers
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摘要: Direct detection thin-film bipolar narrow-gap Hg1-xCdxTe semiconductor is considered as a waveguide THz/sub-THz bolometer. The response of such thin layer detectors was calculated and measured in the nu = 0.037-1.54 THz frequency range at T similar to 70-300 K. Noise equivalent power of such detectors can reach NEP300 (K) similar to 4 x 10(-10) W Hz(-1/2) and NEP100 (K) similar to 10(-11) in the low-frequency part of the sub-THz spectral range.
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