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Title: Fabrication of Schottky diodes for terahertz imaging

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Abstract: In this paper we present design, fabrication and characterization of Schottky terahertz diodes. The diode is based on a Ti/n-GaAs junction with very low junction capacitance. T-gate technology, based on trilayer of electronic resists and electron-beam lithography, and air-bridge technique have been used to obtain Schottky diodes with cutoff frequency in the THz range. The device fabrication process is fully planar and suitable for integration in monolithic arrays for active spectroscopic imaging.