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Title: Accurate photoconductive antenna characterization using a thin film polarizer

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Abstract:The horizontal and vertical polarizations of the terahertz radiation emitted from a small-gap dipole photo-conductive antenna are characterised using a single detector and a homemade thin-film wire grid polarizer. The two polarizations are seen to be temporally distinct. In addition, the dependence of the position of the excitation spot on the dipole with the polarity of the horizontal polarization is studied where a reversal in the horizontal polarization is observed between the two edges of the antenna anode.

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Inspec controlled terms:dipole antennas - electromagnetic wave polarisation - photoconducting devices - thin film devices

Uncontrolled terms:antenna anode - homemade thin-film wire grid polarizer - single detector - terahertz radiation - horizontal polarizations - vertical polarizations - small-gap dipole photoconductive antenna characterization

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