

397. Title:Simultaneous measurement of orthogonal components of polarization in a free-space propagating terahertz signal using electro-optic detection

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Abstract:We report a polarization-sensitive terahertz time-domain spectroscopy system, which allows the simultaneous measurement of orthogonal components of the polarization of a free-space propagating terahertz beam using a dual electro-optic detection scheme. We demonstrate the operation of our system by measuring the birefringence of lithium niobate, simultaneously obtaining terahertz spectra from two orthogonal crystallographic directions.