

Design and Fabrication of a Scanning Near-Field Microscopy Probe with Integrated Zinc Oxide Photoconductive Antennas for Local Terahertz Spectroscopy

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In this paper, we report the design and fabrication of a scanning near-field optical microscopy (SNOM) probe with integrated zinc oxide photoconductive antennas for local terahertz (THz) spectroscopy. Photoconductive antennas are used as a THz pulse emitter and detector. A pyramidal tip with an aperture formed at the end of a silicon cantilever is used as an SNOM head.

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