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标题: Time-resolved imaging of near-fields in THz antennas and direct quantitative measurement of field enhancements
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摘要: We investigate the interaction between terahertz waves and resonant antennas with sub-cycle temporal and lambda/100 spatial resolution. Depositing antennas on a LiNbO3 waveguide enables non-invasive electro-optic imaging, quantitative field characterization, and direct measurement of field enhancement (up to 40-fold). The spectral response is determined over a bandwidth spanning from DC across multiple resonances, and distinct behavior is observed in the near-and far-field. The scaling of enhancement and resonant frequency with gap size and antenna length agrees well with simulations. (C) 2012 Optical Society of America
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