

Generation of radially polarized THz pulses via velocity mismatched optical rectification

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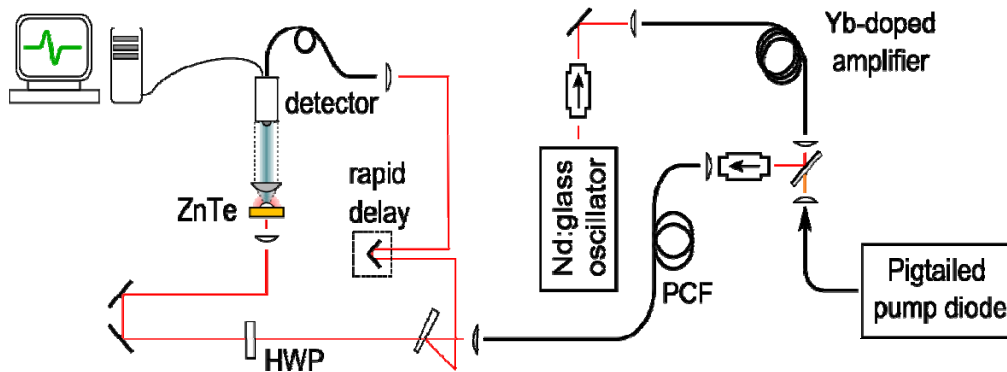
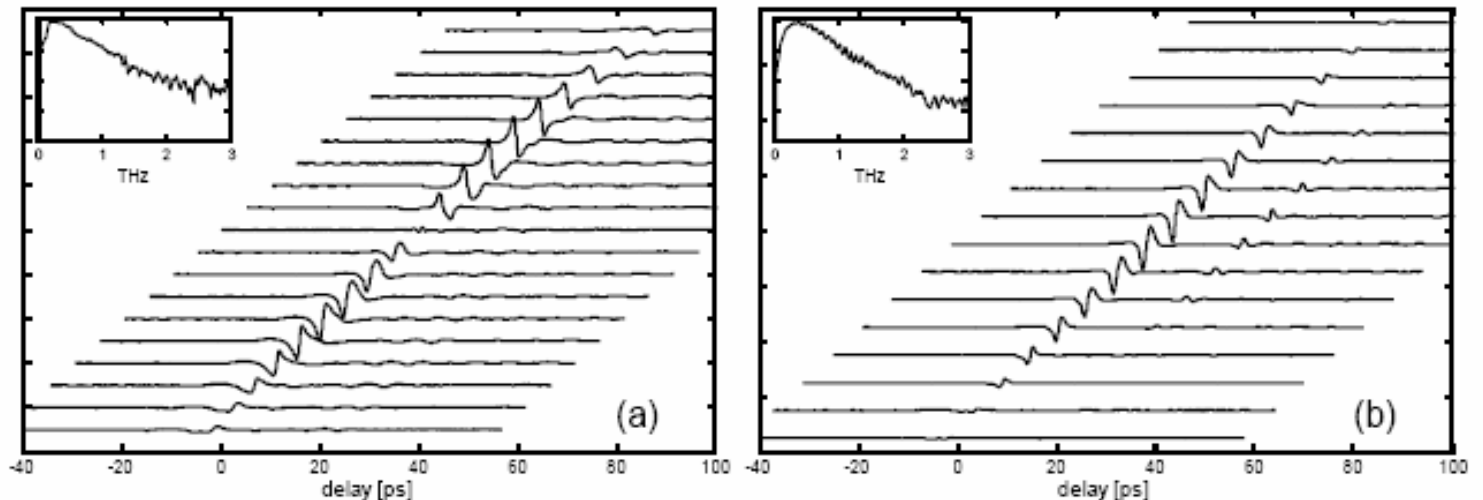


Fig. 1 Experimental setup. PCF: hollow core photonic crystal fiber, HWP: half wave plate. The Yb fiber amplifier amplifies the fs pulse train from the oscillator using parabolic pulse amplification technique. The amplified 1 μ m pulses are compressed down to <200 fs and then focused onto a ZnTe crystal for THz Generation via optical rectification.

Fig. 2 THz single cycle waveforms obtained by translating the THz receiver to scan the THz beam profiles. (a) radially polarized THz beam from <001> cut ZnTe; (b) linearly polarized THz beam from <110> cut ZnTe. Insets represent the typical spectra for each case.



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