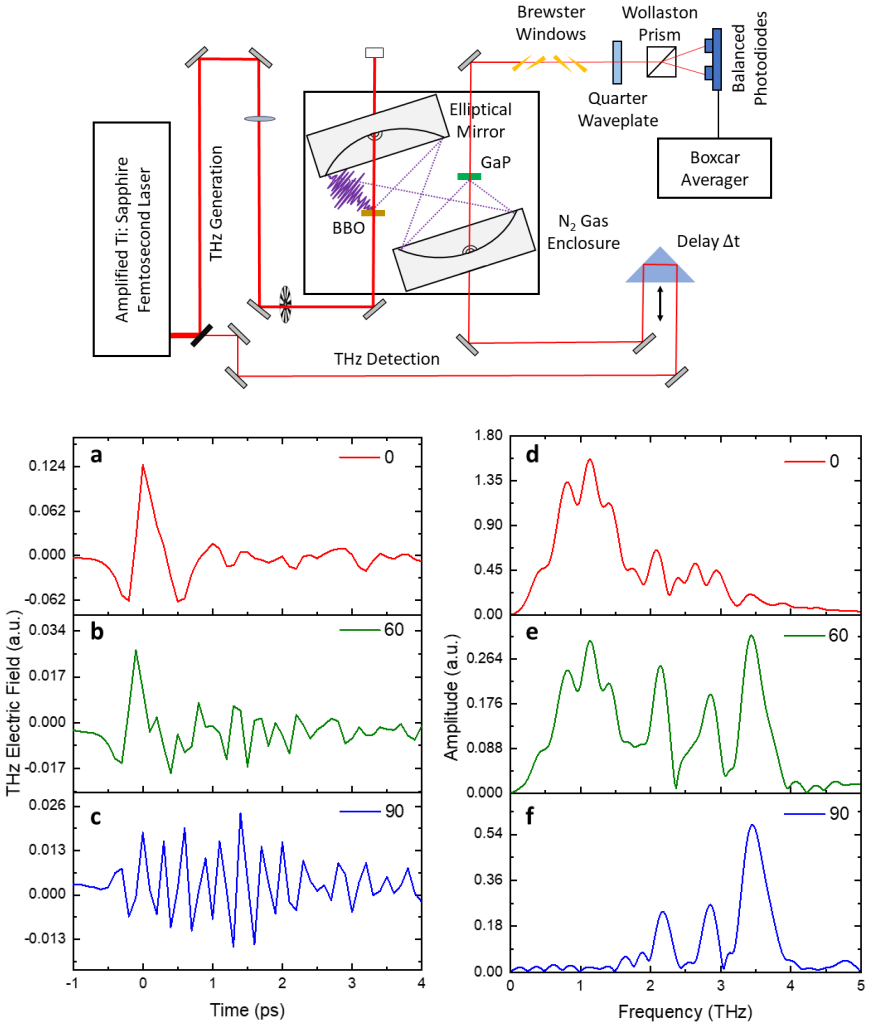
Single-cycle and multi-cycle terahertz pulse generation in beta barium borate (β-BBO)

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In this work, we present the generation of both single-cycle broadband and multi-cycle narrowband terahertz (THz) radiations from a Y-cut beta barium borate (β-BBO) crystal excited by 100 fs laser pulses at a central wavelength of 800 nm. Additionally, we demonstrate that by adjusting the azimuth angle of the crystal, it becomes feasible to generate a THz field that exhibits both single-cycle and multi-cycle components simultaneously. Finally, we discuss the mechanism responsible for the generation of both broadband and narrowband THz emissions in β-BBO [1-3].



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