

pellet and a single crystal samples at cryogenic temperature. We note that the easy-to-prepare polycrystalline PETN layer produced linewidths that were at least as narrow as observed for a single crystal measurement at similar cryogenic temperature. Finally, for the case of an HMX layer at 13 K, we described a highly resolved THz spectrum which we have tentatively assigned to the γ -polymorph. We suggest that narrow-line waveguide THz-TDS measurements, such as described here, can be used to test computational models for predicting THz spectra [27], and help to advance fundamental understandings of THz vibrational fingerprint spectra.

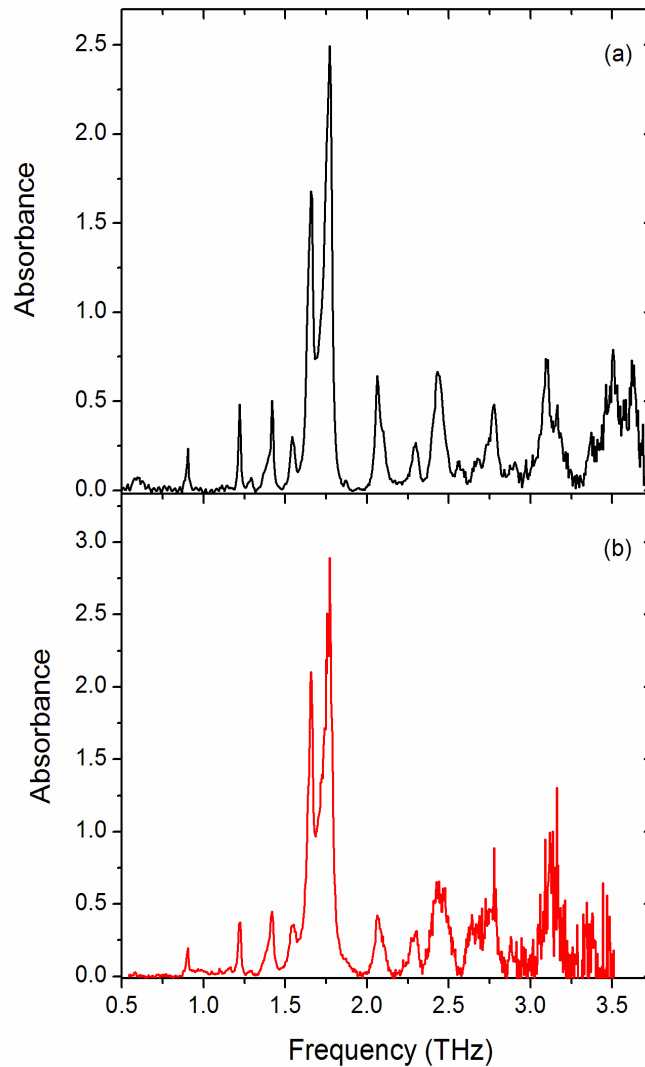


Fig. 11. Absorbance spectra for two different samples of HMX at cryogenic temperature. (a) HMX on Al at 13 K. (b) HMX on Cu at 12 K.

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