

Supplementary Information for

Broadband Terahertz Recognizing Conformational Characteristics of a Significant Neurotransmitter γ -Aminobutyric Acid

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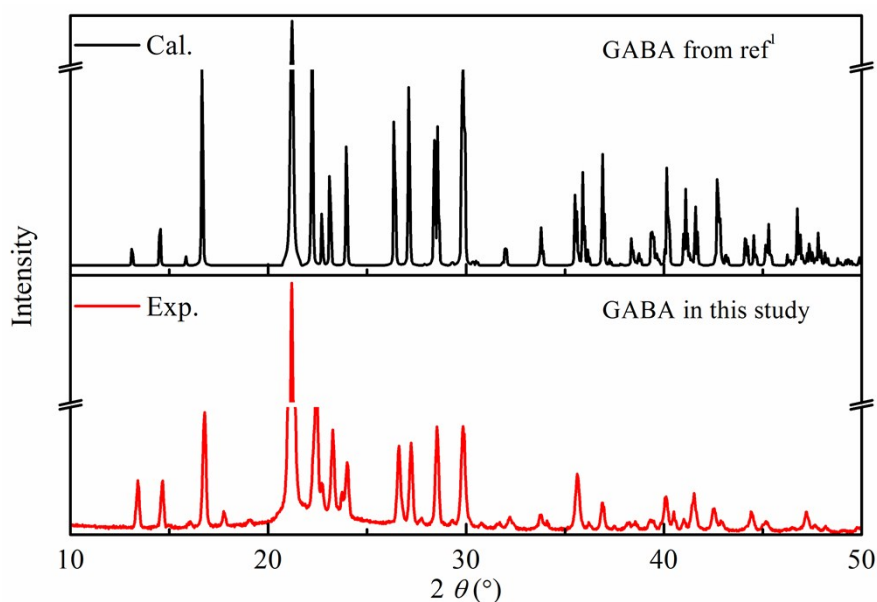


Figure S1. The calculated PXRD pattern of GABA and the corresponding experimental result.

As shown in Figure S1, PXRD was carried out to check the crystal structure of GABA. And the result manifests that the experimental PXRD pattern agrees very well with the calculated PXRD pattern of GABA.

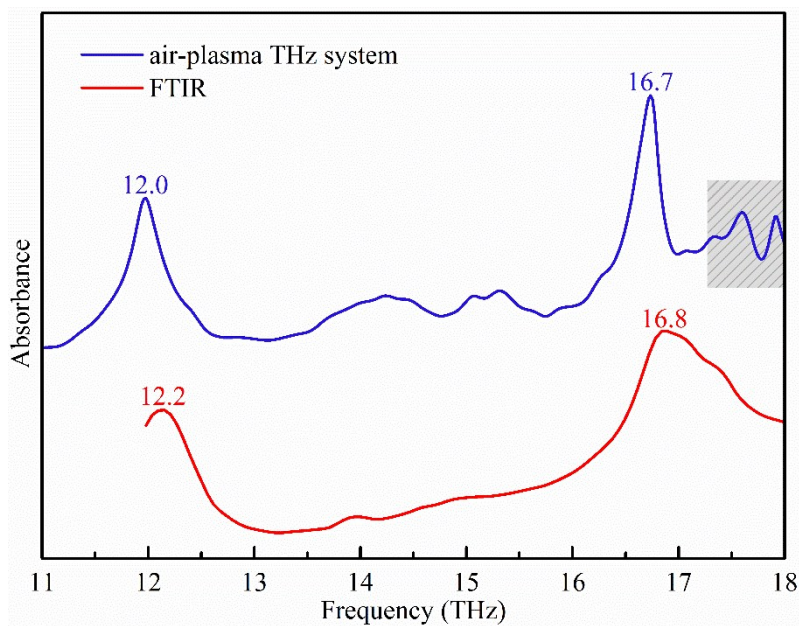


Figure S2. The comparison of the GABA spectra obtained by the broadband air-plasma THz system and FTIR.

Figure S2 shows the THz spectrum of GABA from 11 to 18 THz obtained by the broadband air-plasma THz system (COC as substrate) and the FTIR spectrum of GABA from 12 to 18 THz (KBr as substrate). We can see that the spectra from the broadband air-plasma THz system and FTIR in the 12-17 THz region covered by both systems are basically consistent.

Supplementary Reference

1 H. P. Weber, B. M. Craven and R. K. McMullan, The Neutron Structure of and Thermal Motion in Gamma-Aminobutyric Acid (Gaba) at 122-K, *Acta Crystallographica Section B-Structural Science*, 1983, **39**, 360-366.