

Broadband Terahertz Signatures and Vibrations of Dopamine

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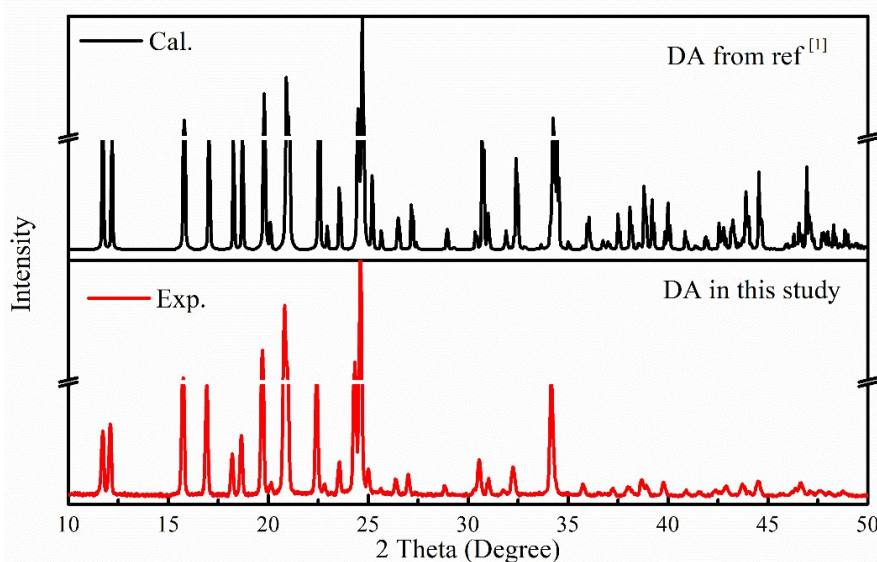


Fig. S1 The experimental and simulated PXRD patterns of DA.

As shown in Fig. S1, PXRD was carried out to check the crystal structure of DA sample. And the result manifests that the experimental PXRD pattern of DA agrees well

with the calculated pattern from the ref^[1].

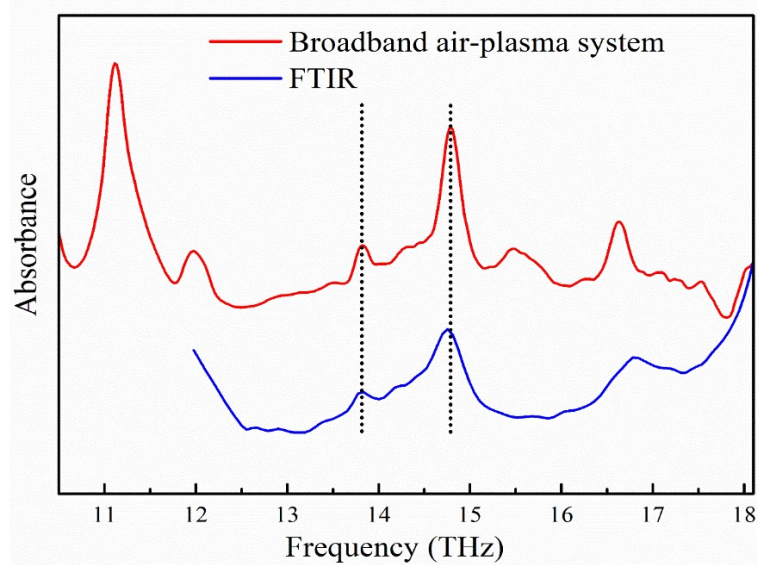


Fig. S2 The comparison of the DA spectra obtained by the broadband air-plasma THz system (red) and FTIR (blue).

Fig. S2 shows the THz spectrum of DA from 10.5 to 18 THz obtained by the broadband air-plasma THz system (COC as substrate) and the FTIR spectrum of DA from 12 to 18 THz (KBr as substrate), the result shows that the COC substrate has obvious absorption in the range of 13 to 16 THz. ^[2]

Supporting reference

1. L. Cruickshank, A. R. Kennedy, N. Shankland, *J. Mol. Struct.*, 2013, **1051**, 132-136.
2. Z. J. Zhu, C. Cheng, C. Chang, G. H. Ren, J. B. Zhang, Y. Pen, J. G. Han, H. W. Zhao, *Analyst*, 2019, **144**, 2504-2510.