

## Supplementary information

### Video Legend

Video 1. Temporal change of THz power spectra during volatilization of CH<sub>3</sub>CN droplets and diffusion of CH<sub>3</sub>CN in the gas cell A filled with smoke. (a) 1 s, (b) 5 s, (c) 10 s, (d) 15 s, (e) 20 s, (f) 30 s, (g) 40 s, and (h) 50 s after volatilization of the CH<sub>3</sub>CN droplets.

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