

Supporting Information

Ultrafast Continuum IR Generation and Its Application in IR Spectroscopy

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Supplementary Note S1. The intensity stability of continuum IR pulse

We estimated the intensity stability from the spectrum of continuum IR pulse. The intensity stability was defined as the percent ratio of the noise and the intensity average,

$$\text{Intensity Stability} = \frac{\sigma_N}{\bar{I}} \times 100 \% \quad (\text{S1})$$

where \bar{I} is the averaged intensity and σ_N is the noise defined as,

$$\sigma_N = \sqrt{N-1} \sqrt{\frac{(I - \bar{I})^2}{n-1}} \quad (\text{S2})$$

where I is the raw intensity, n is the number of intensity data, and N is the number of laser pulse.

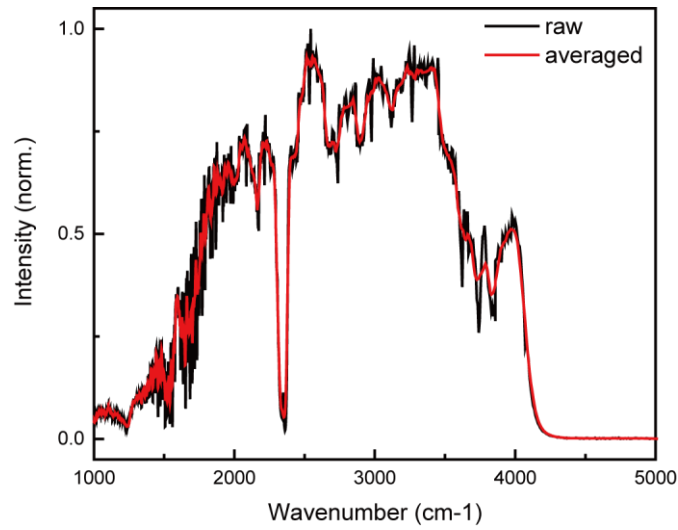


Figure S1. The raw and averaged intensities of continuum IR spectrum.



Figure S2. The captured photo of continuum IR generation setup based on plasma generation.