

## Supplementary Information

### Determination of Propellant Products by Time Resolved and Spatial Distributed LIPS Combined with High-Speed Schlieren Image

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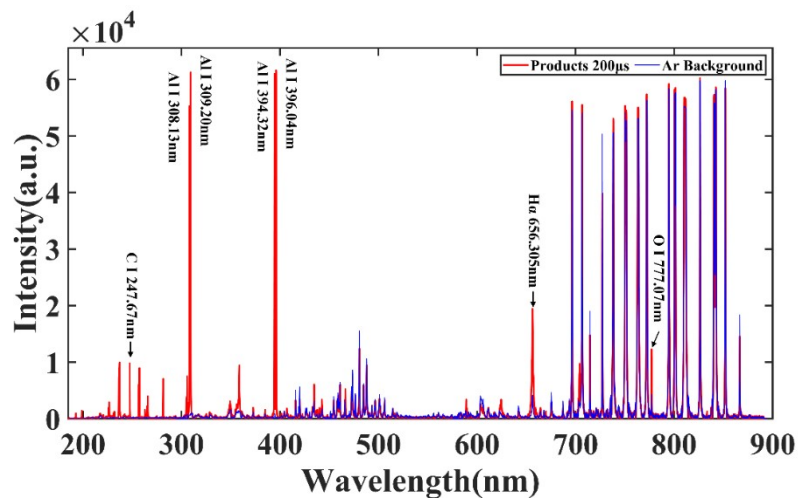


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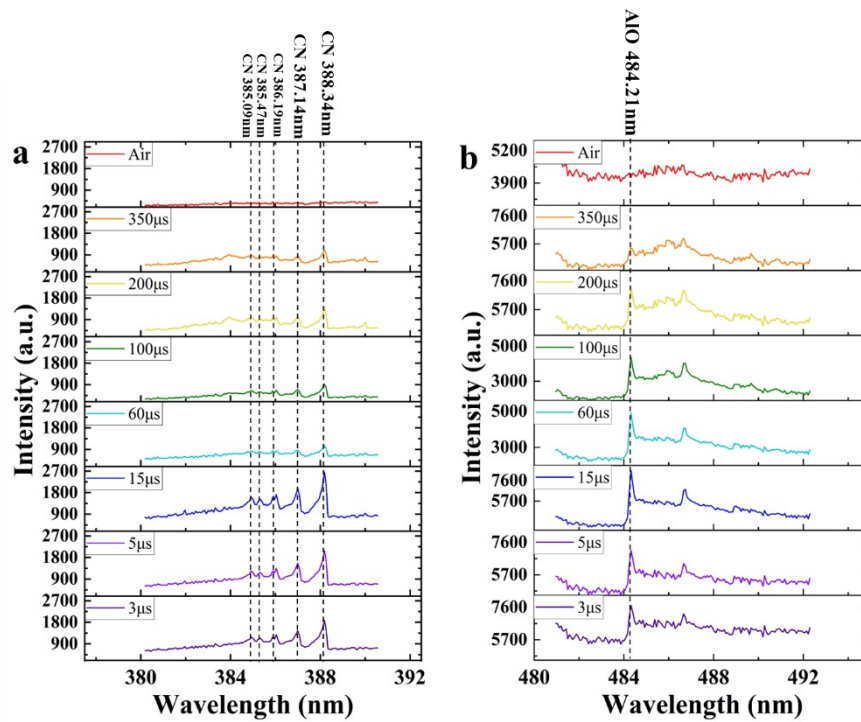


Figure S2. The comparison diagram of the background spectrum of air atmosphere and (a) CN bands and (b) AlO bands in spectra of products in air with the delay time at 3  $\mu\text{s}$ , 5  $\mu\text{s}$ , 15  $\mu\text{s}$ , 60  $\mu\text{s}$ , 100  $\mu\text{s}$ , 200  $\mu\text{s}$  and 350  $\mu\text{s}$  as the distance is 5 mm.

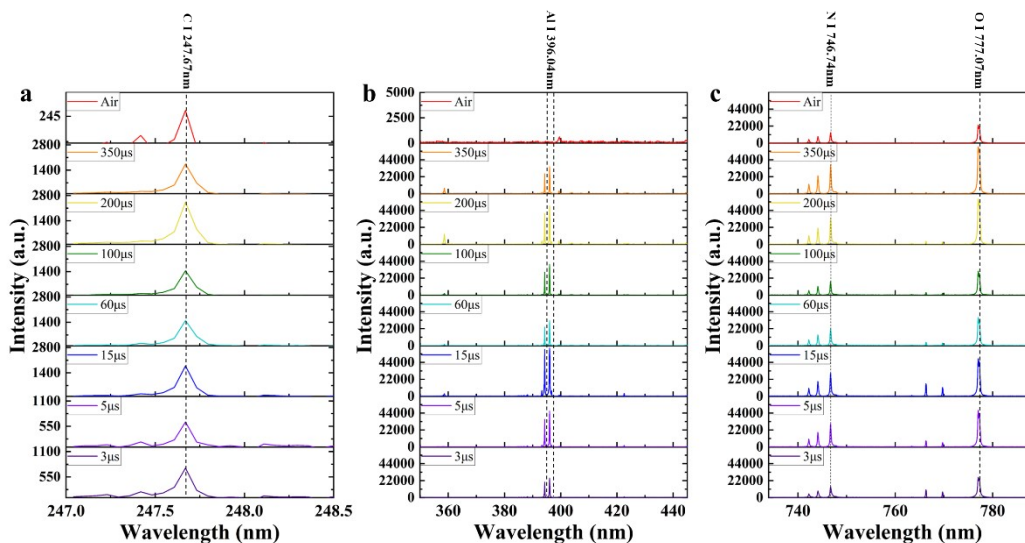


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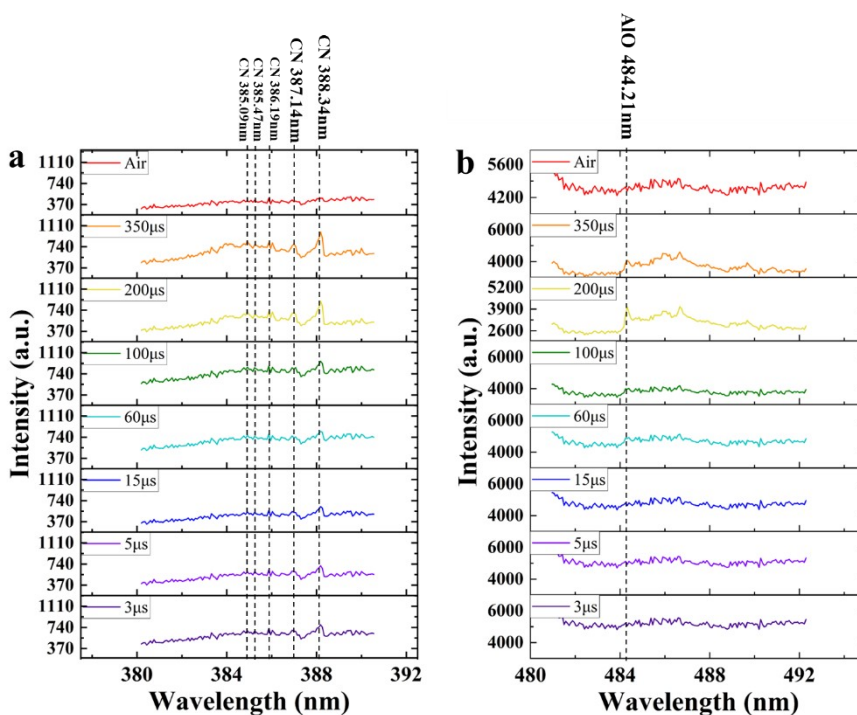


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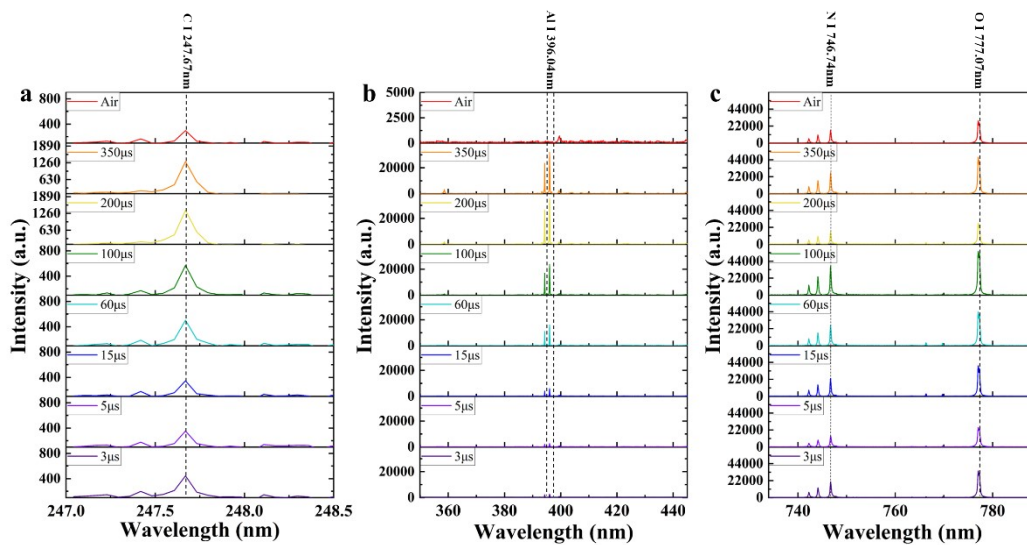


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