

## Supporting Information

### **Miniaturized photo-ionization Fourier deconvolution ion mobility spectrometer for the detection of volatile organic compounds**

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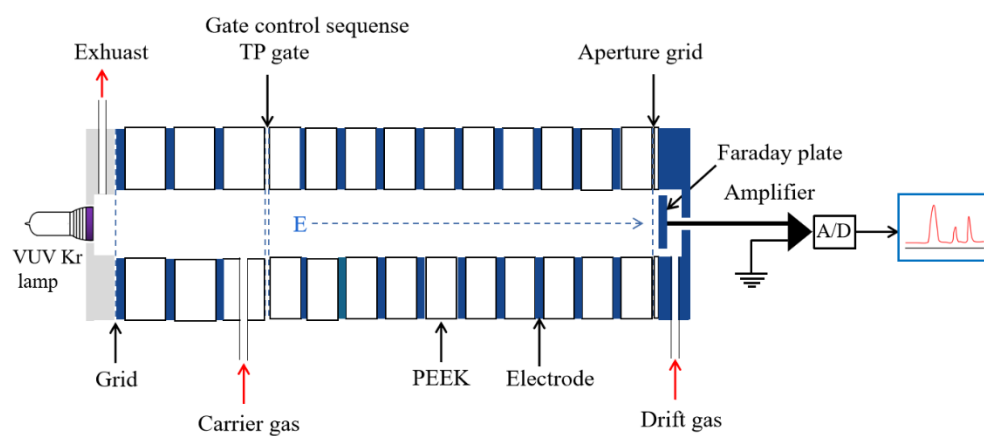


Figure S1 Schematic diagram of miniaturized Fourier deconvolution ion mobility spectrometer with a photo-ionization source

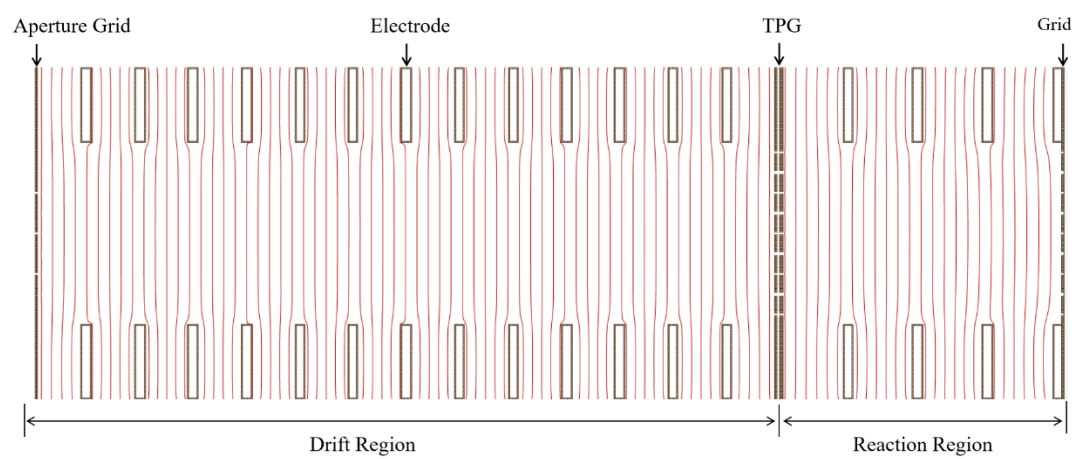


Figure S2 Electric field inside the miniaturized Fourier deconvolution ion mobility spectrometer.

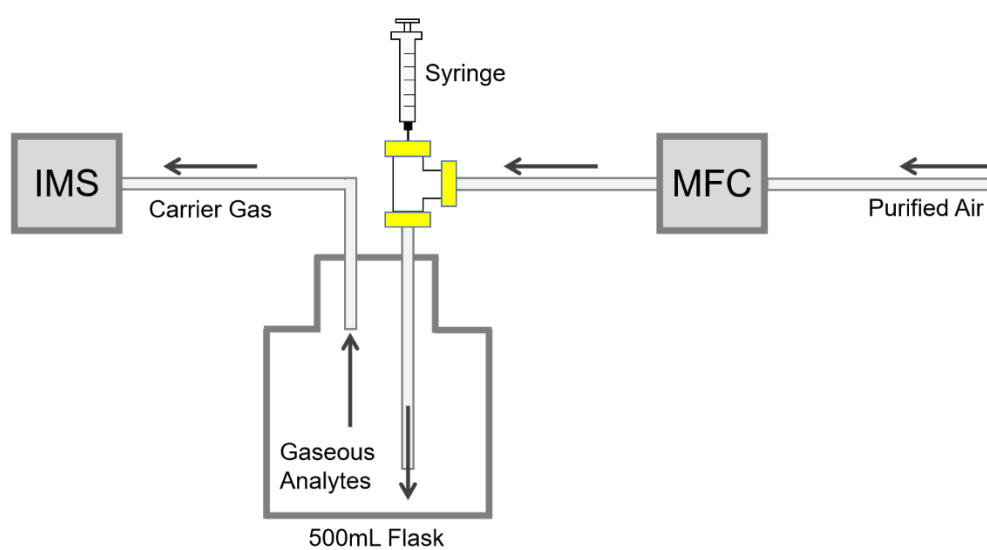


Figure S3 Schematic diagram of the exponential dilution system.

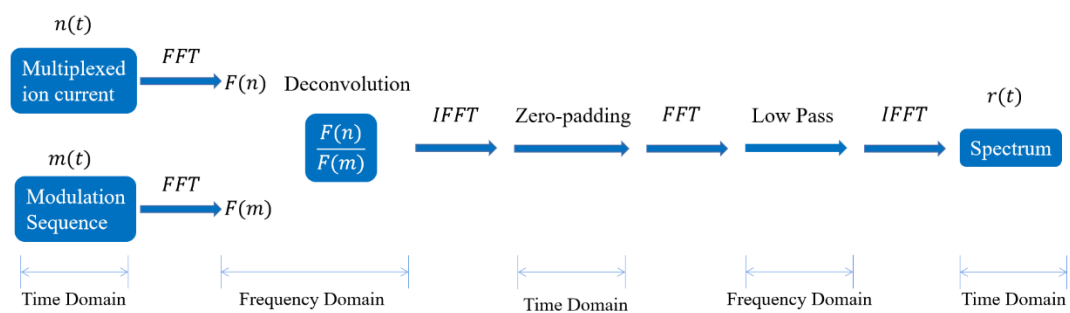


Figure S4. Systematic diagram of the data processing workflow of Fourier deconvolution ion mobility

spectrometry