

SUPPLEMENTARY MATERIAL

An Aerodynamic Assisted Miniature Mass Spectrometer For Enhanced Volatile Sample Analysis

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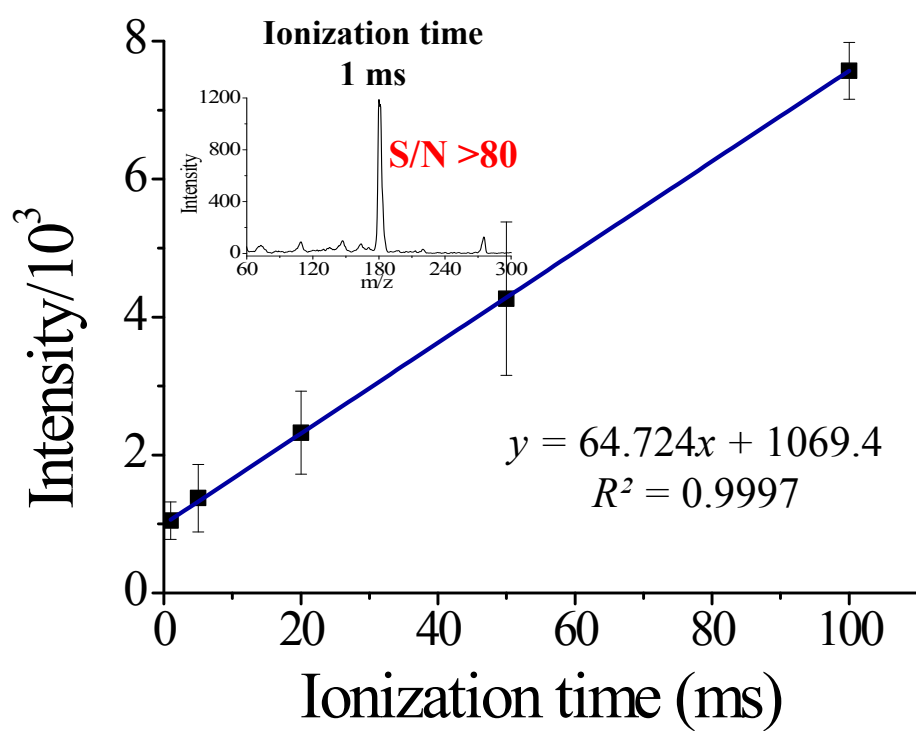


Figure S1. Ion intensities recorded as a function of ionization time.

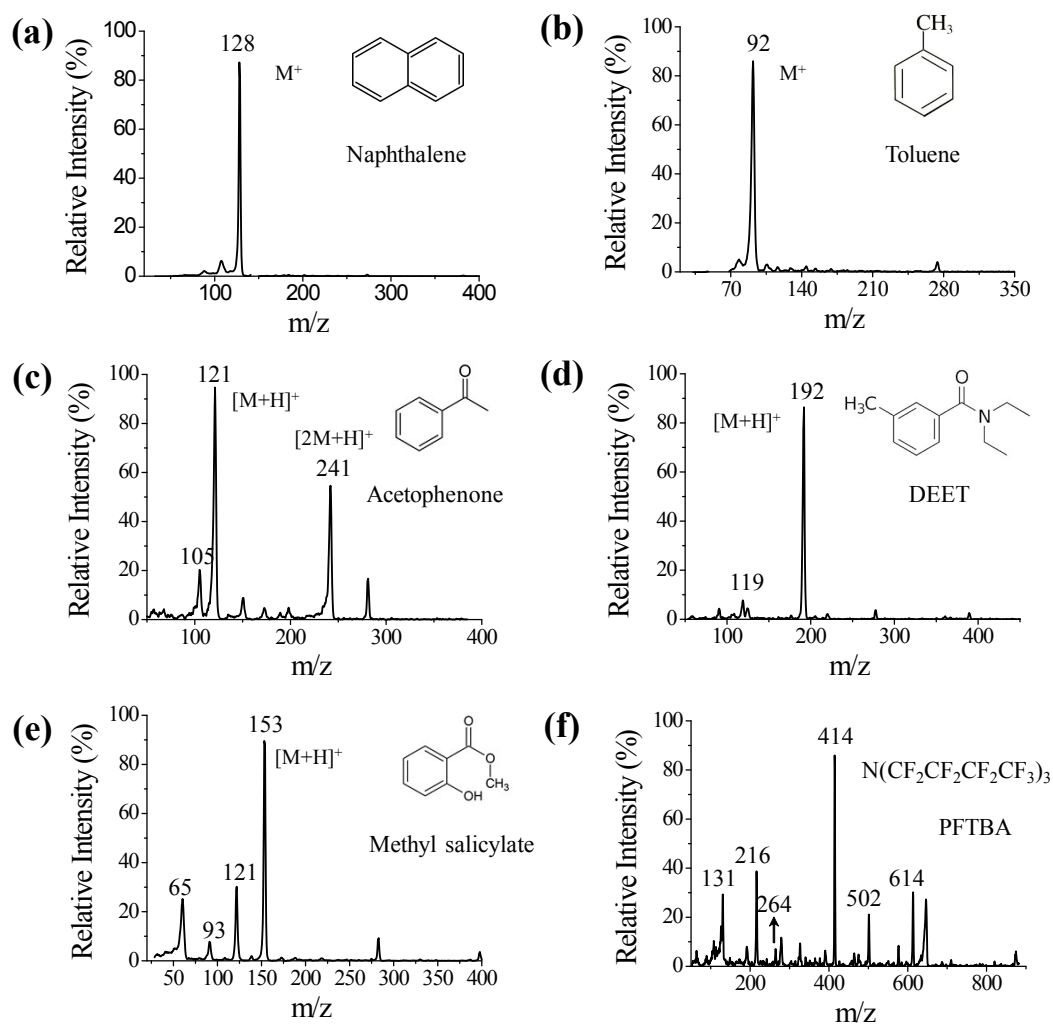


Figure S2. Mass spectra recorded using the continuous API mini-MS with in-vacuum plasma ionization source. (a) Naphthalene (m/z 128), (b) toluene (m/z 92), (c) acetophenone (m/z 121), (d) DEET (m/z 192), (e) methyl salicylate (m/z 153) and (f) PFTBA in positive ion mode.

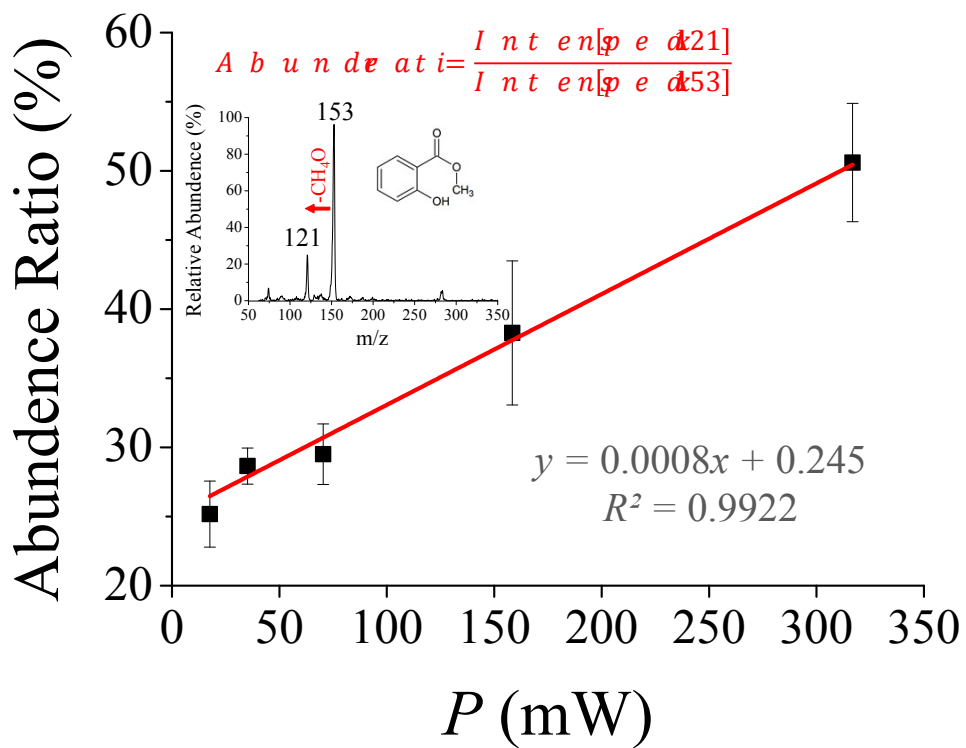


Figure S3. The fragment ion abundance ratio of Methyl salicylate with respect to the discharge power consumption (P).

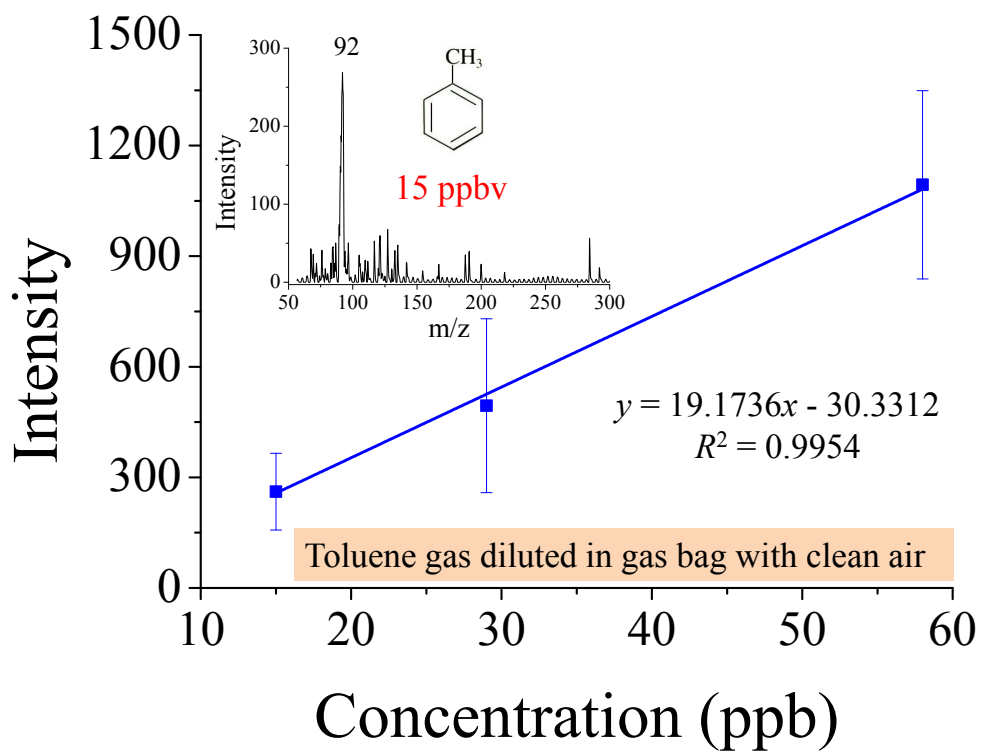


Figure S4. The linear of quantitation curve for toluene (m/z 92) prepared in gas bags with clean air. A LOD of 15 ppbv was achieved.

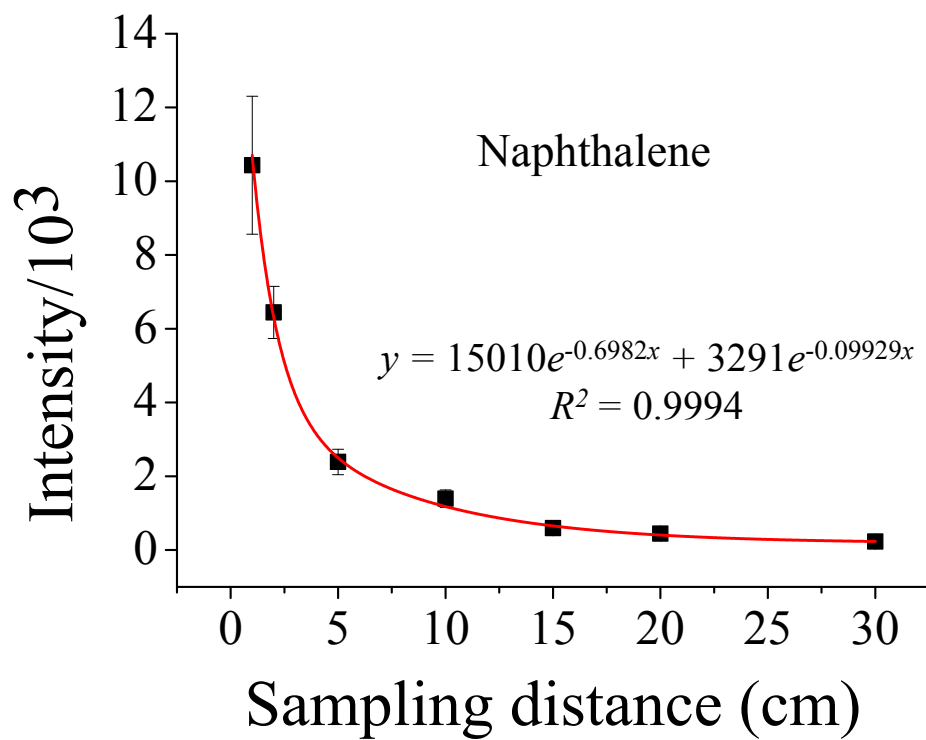


Figure S5. Ion signal intensity of naphthalene versus sampling distance (along $\alpha = 0$).