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Supporting Information

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Molecular Ionization from Carbon Nanotube Paper**

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Supporting information

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Supporting information 1:

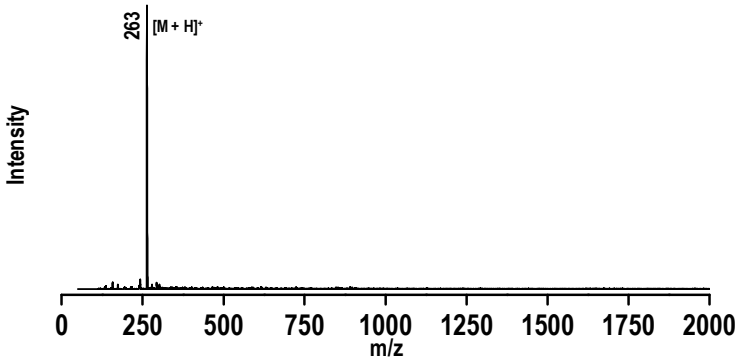

Figure S1. Full range mass spectrum of triphenylphosphine at 3 V.

Supporting information 2:

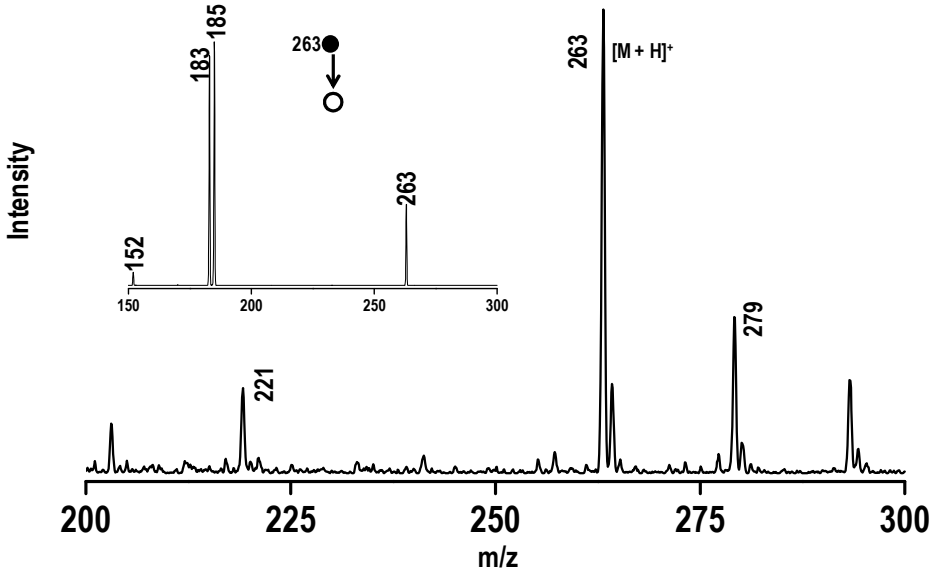

Figure S2. ESI mass spectrum (MeOH:H_2O, 1:1) of triphenylphosphine at 3 kV. The spectrum shows an enhanced oxidation peak at m/z 279 and its C_6H_6 fragment at m/z 221, in comparison to the CNT-coated paper (Figure 1C). MS/MS spectrum is shown in the inset.

Supporting information 3:

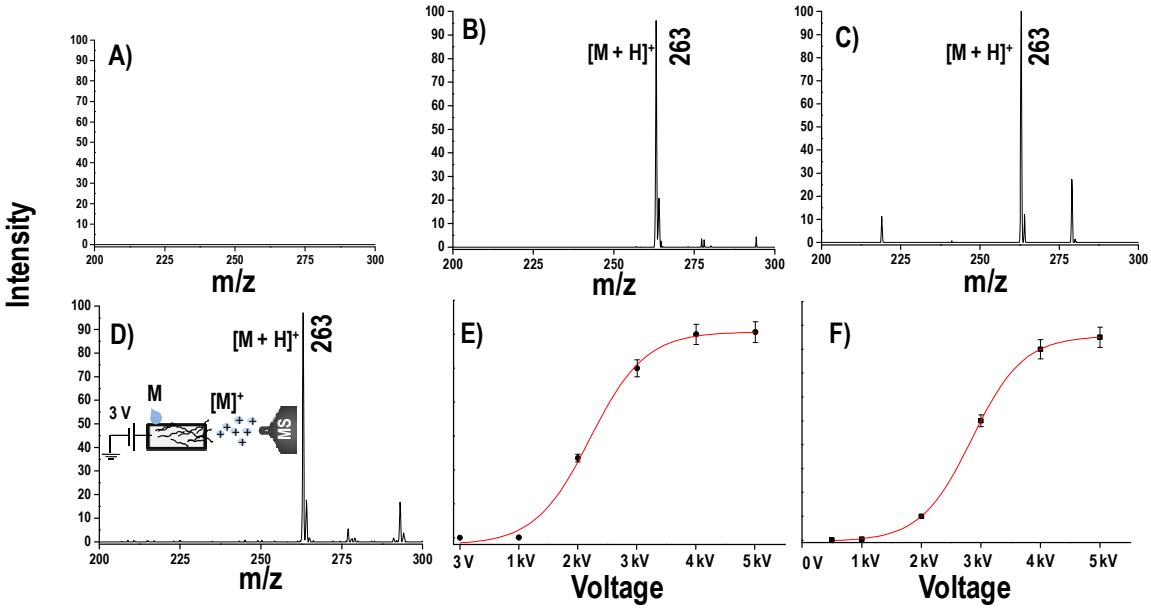

Figure S3. A) Mass spectrum of TPP below 500 V using normal paper as seen on the spectrometer (no signal is seen), B) spectrum of TPP at 3 V using CNT-coated paper (same as that in Figure 1C, given for comparison), C) spectrum at 500 V from a normal paper, D) spectrum using rectangular CNT-coated paper and the inset shows the schematic of the paper (with mass spectrometer facing it), E) variation of intensity of the m/z 263 peak with voltage for CNT-coated paper and F) the same for normal paper.

Supporting information 4:

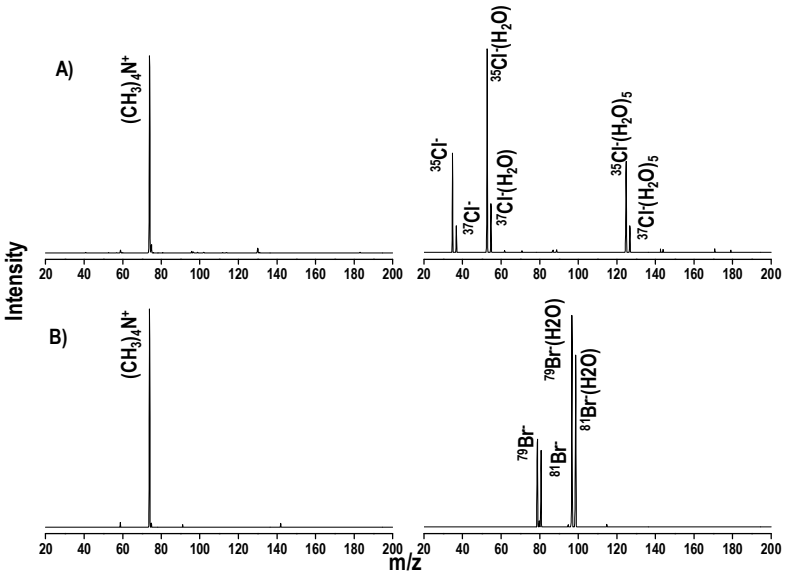

Figure S4. Analysis of preformed ions (positive and negative ion modes) at 3 V; A) tetramethylammonium chloride and B) tetramethylammonium bromide.

Supporting information 5:

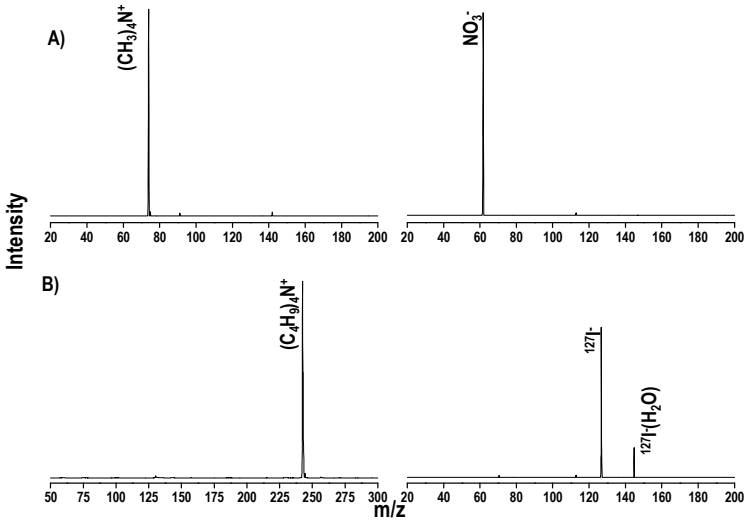

Figure S5. Analysis of preformed ions (positive and negative ion modes) at 3 V; A) tetramethylammonium nitrate and B) tetrabutylammonium iodide.

Supporting information 6:

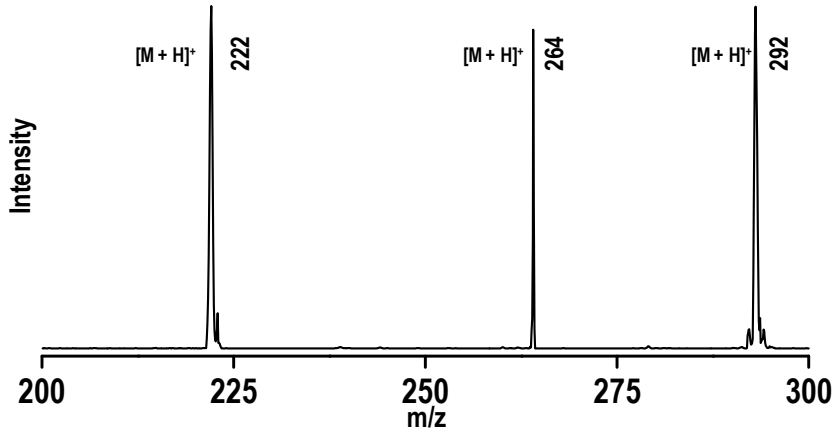

Figure S6. Analysis of a pesticide mixture at 3 V from the surface of an orange. Isotopic distribution of the peaks is not clearly visible due to low intensity.

Supporting information 7:

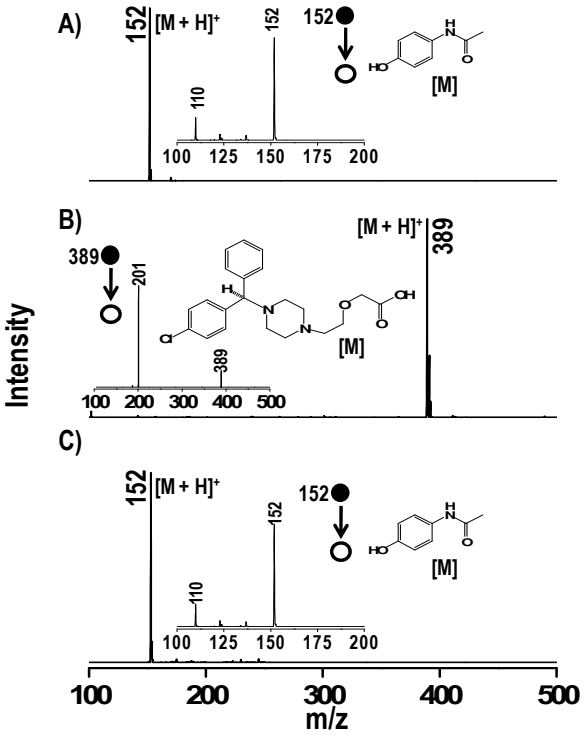

Figure S7. Analysis of tablets from CNT-coated paper at 3 V with their mass spectral and MS^2 data. A) Crocine (paracetamol), B) xyzal (levocetirizine dihydrochloride) and C) combiflam (paracetamol).

Supporting information 8:

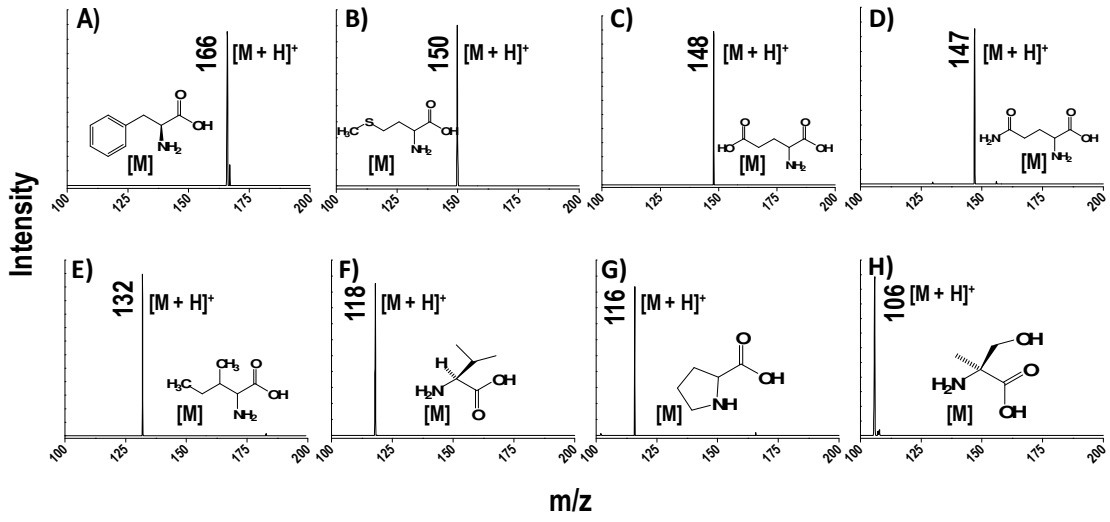

Figure S8. Detection of various amino acids (90 ng) loaded on CNT-coated paper and spectra recorded at 3 V: A) phenylalanine, B) methionine, C) glutamic acid, D) glutamine, E) isoleucine, F) valine, G) proline and H) serine.