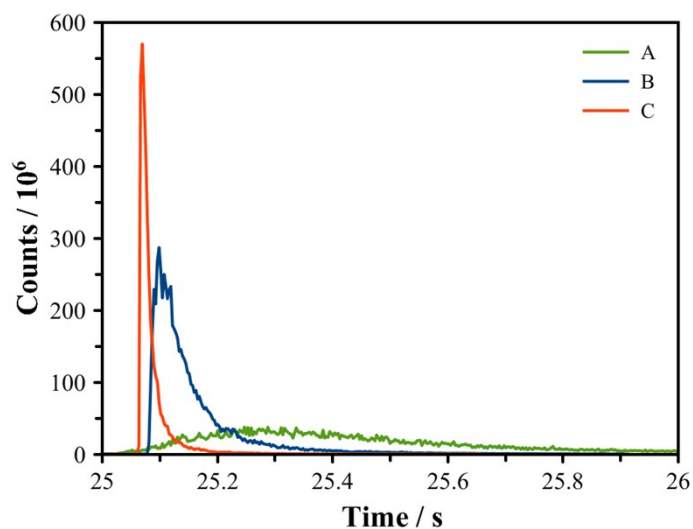
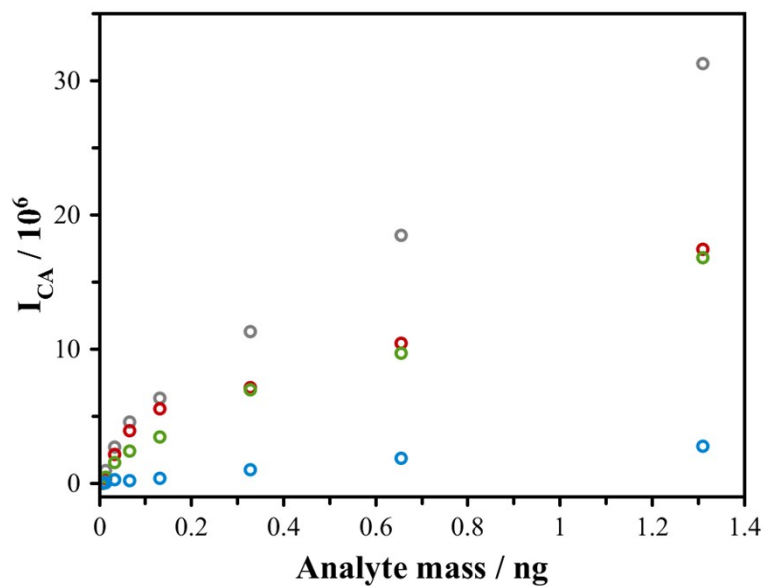


### Supplemental Information



**Figure S1:** The signal from a single droplet exhibits a time-dependence that varies with deposition location. Position C, at the tip of the paper, shows the highest intensity in the peak, while position A, far from the tip, has the longest duration. Position B, around 1mm from the tip and used throughout this study, shows the highest integrated peak area.



**Figure S2:** The integrated peak area of citric acid sampled from droplets as a function of analyte mass sampled using methanol as the PS solvent. The analyte mass was varied by deposition of between 1 and 200 droplets of a 0.01 g/L citric acid solution in burst method, as discussed in the manuscript text. Each color represents data collected during different experiments. The inter-experiment variability is discussed in the text, but unlike the data shown in Figure 5, these data do not exhibit linearity of signal with analyte mass.