## Electronic Supplementary Material (ESI) for Analytical Methods. This journal is © The Royal Society of Chemistry 2017

## SUPPORTING INFORMATION



**Figure S1**. Schematic of wipe-sampling experiment with actual instrument on right. This approach builds on work from reference 14 in the manuscript and has been adopted by a Department of Homeland Security Center of Excellence initiative to standardize wipe-sampling efficiency measurements for security applications across US and international governmental entities, academia, and industry (<u>http://www.northeastern.edu/alert/transitioning-technology/tessa/</u>).



Figure S2. Pipetted deposits (5  $\mu$ L volume) on PTFE obtained by diluting printing solution to 1 ng/ $\mu$ L and 50 ng/ $\mu$ L.



**Figure S3.** Dry-transfer deposits on synthetic leather (top left) countertop (top right) ABS plastic (bottom left) and ballistic nylon (bottom right) showing partial retention of array characteristics. Arrows or circles are given as visual aids in locating the deposits. Scale bar in all images =  $500 \ \mu m$ .



**Figure S4**. Images of ABS plastic and ABS (2) plastic (source: M. Tam, Canada Border Services Agency) with 3D images and measured profile heights (Smartzoom 5 digital microscope, Carl Zeiss Microscopy GmbH, Jena, Germany).





**Figure S5**. Inkjet printed deposits of PETN from ACN at 1000  $\mu$ g/mL on PTFE (top) and at 1500  $\mu$ g/mL dry-transferred to ABS plastic (bottom).