Electronic Supporting Information

Screen-Printed Back-to-Back Electroanalytical Sensors: Heavy Metal Ion Sensing

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**ESI Figure 1:** Image of two bSPEs in the side-by-side configuration comprising of two working, reference and counter electrodes. Distance between the centre of the two working electrodes: 7.5 mm.
ESI Figure 2: Square wave voltammograms (A) for the back-to-back (dotted line) and side-by-side (dashed line) configuration. Solution composition: 100 µg L\(^{-1}\) lead (II) ions; 0.02 M HCl. Additionally shown (B) is a plot of peak height vs. increasing concentrations of lead (II) ions. \((N=3)\) Deposition potential and time of -1.2 V and 30 seconds respectively.
ESI Figure 3
Calibration plots of lead (II) (A), cadmium (II) (B) and zinc (II) (C) using b²SPEs. Data presented is an average and error bars from three experiments. Deposition potential and time of -1.5 V and 120 seconds respectively. A new electrode was used for each addition.