

A Wearable, Textile-based Polyacrylate Imprinted Electrochemical Sensor for Cortisol Detection in Sweat

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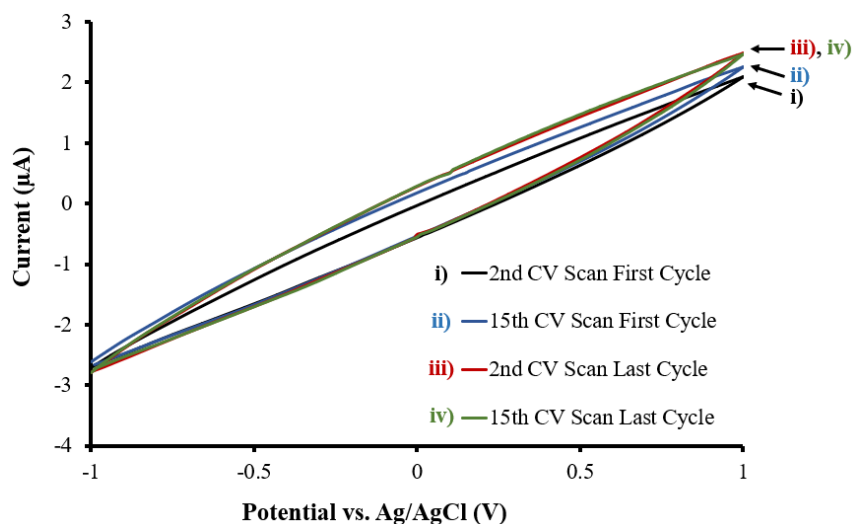


Figure S1. Overlaid CVs taken during the i) 2nd scan; and ii) 15th scan of the first electrochemical cleaning cycle; and iii) 2nd; and iv) 15th scan of the last electrochemical cleaning cycle using the MIP@PANI@CNT/CNC@textile cortisol sensor patch.

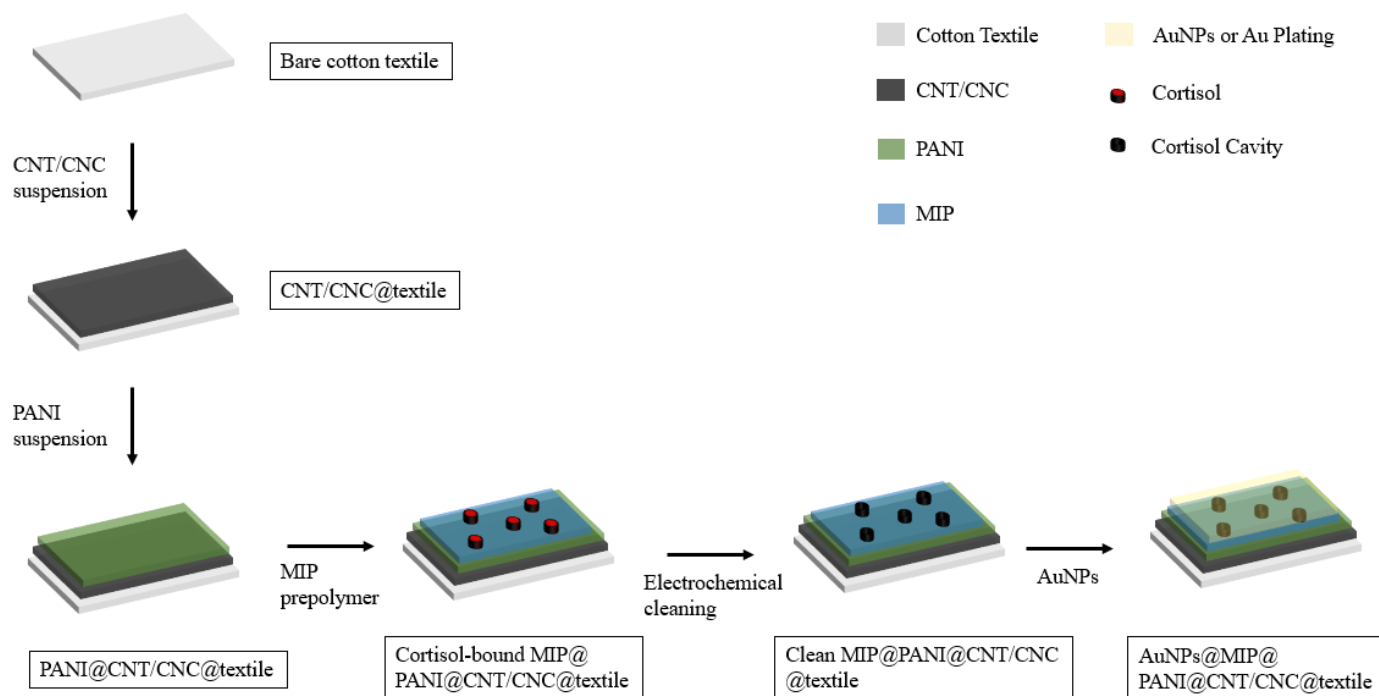


Figure S2. Schematic for the LbL assembly of the AuNPs@MIP@PANI@CNT/CNC@textile cortisol sensor patch.

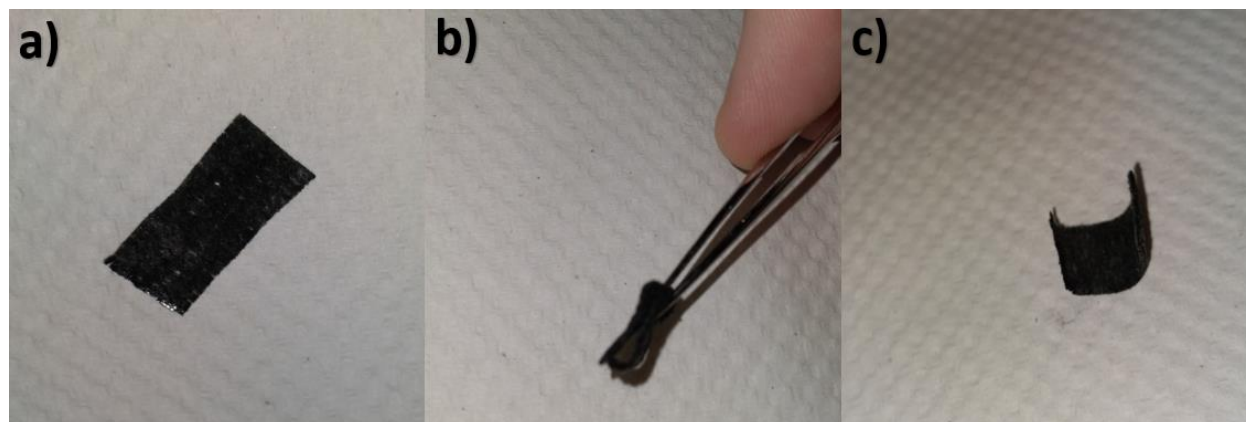
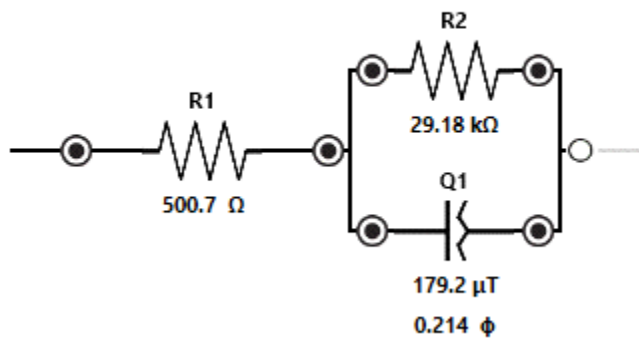


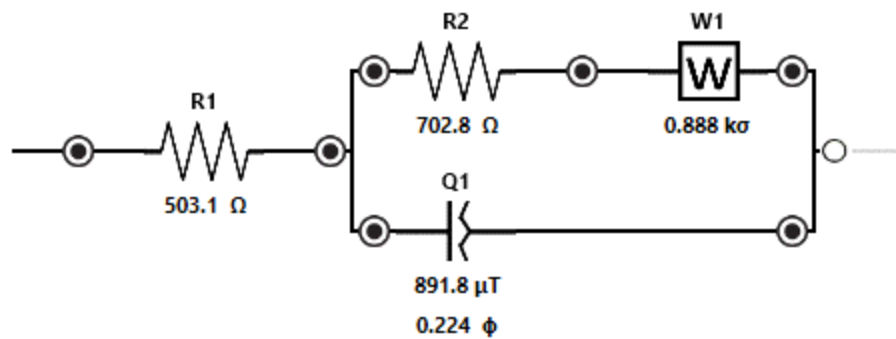
Figure S3. Camera image of the AuNPs@MIP@PANI@CNT/CNC@textile taken **a)** before; **b)** during; and **c)** after crumpling with tweezers.

Figure S4. EIS circuit fitting for different variations of cortisol sensor patches.

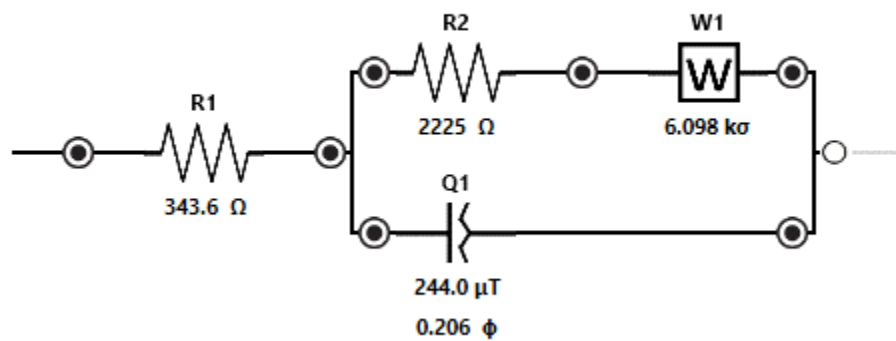
a) CNT/CNC@textile



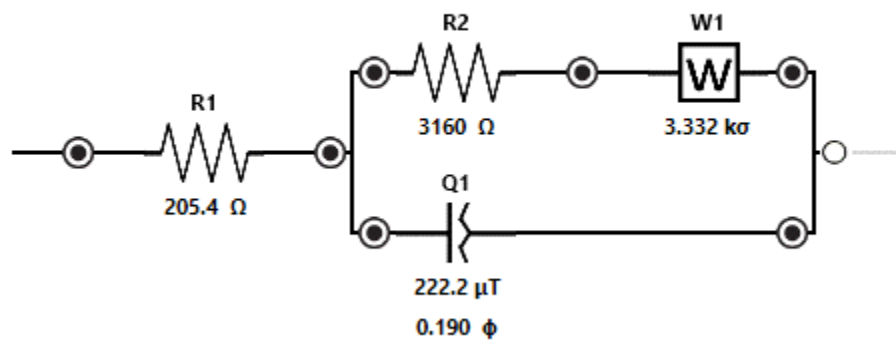
b) PANI@CNT/CNC@textile



c) MIP@PANI@CNT/CNC@textile



d) NIP@PANI@CNT/CNC@textile



e) AuNPs@MIP@PANI@CNT/CNC@textile

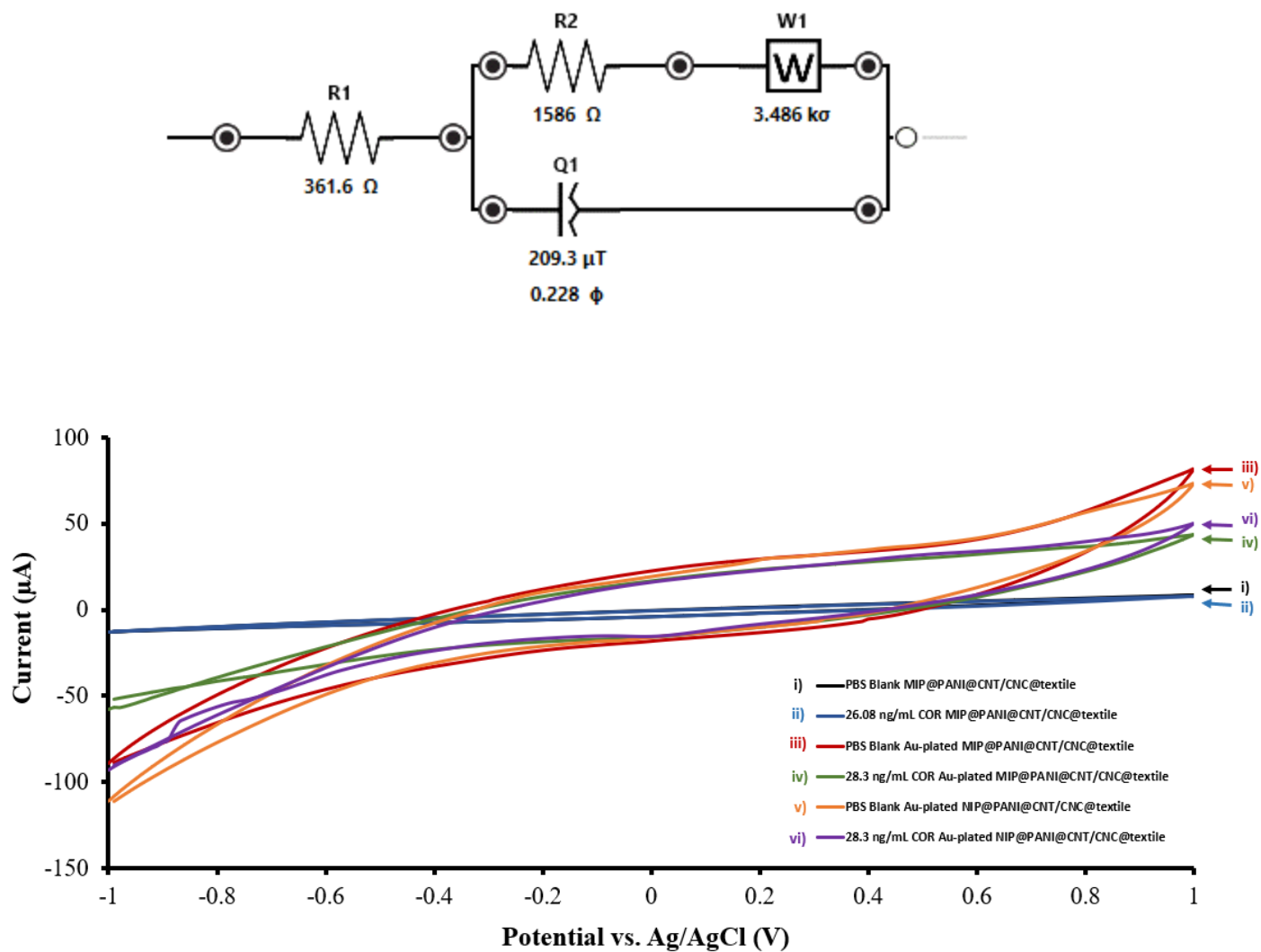


Figure S5. Overlaid CVs for different cortisol sensor patch variations obtained from analysis of 0.1 M PBS blank and 26.08 or 28.3 ng/mL cortisol (COR): i), ii) MIP@PANI@CNT/CNC@textile; iii), iv) Au-plated MIP@PANI@CNT/CNC@textile; and v), vi) Au-plated NIP@PANI@CNT/CNC@textile.

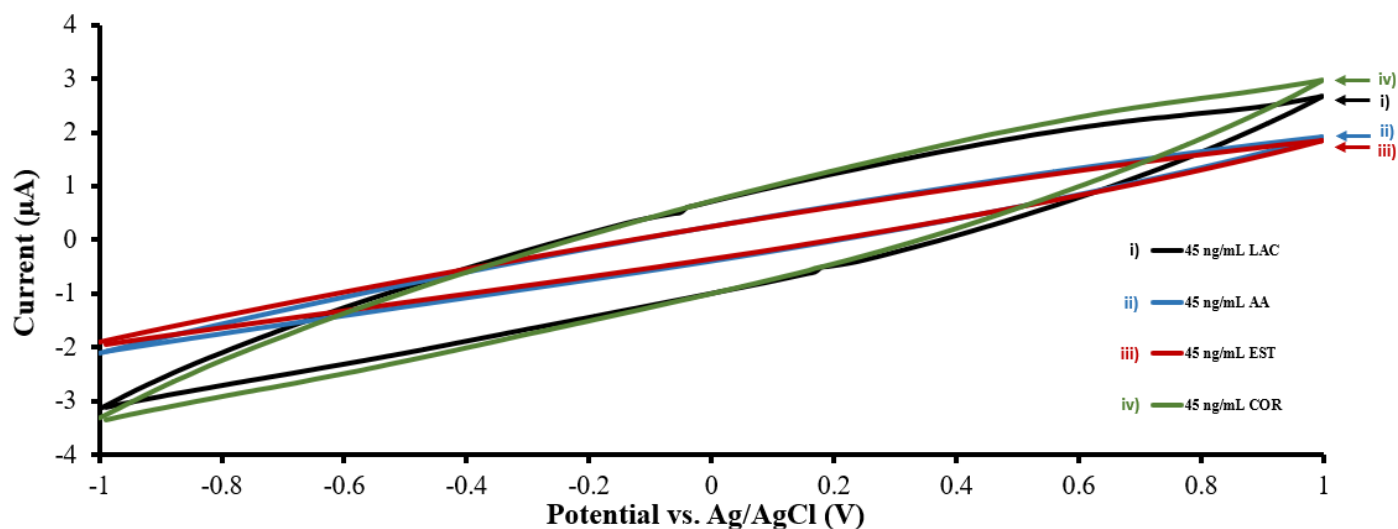


Figure S6. Overlaid CVs range obtained from analysis of i) 45 ng/mL lactate (LAC); ii) 45 ng/mL ascorbic acid (AA); iii) 45 ng/mL estriol (EST); and iv) 45 ng/mL cortisol (COR) in 0.1 M phosphate buffer using an MIP@PANI@CNT/CNC@textile cortisol sensor patch.

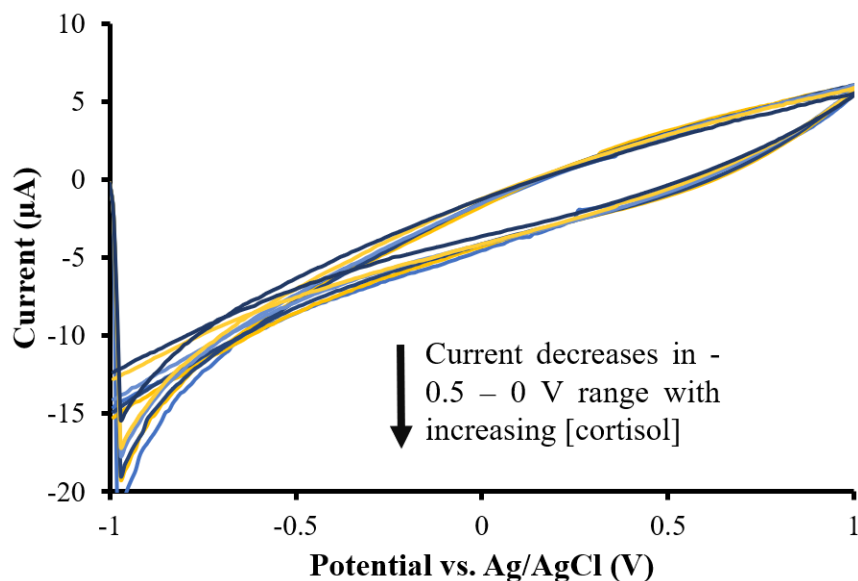


Figure S7. Overlaid voltammograms from the standard addition calibration for sweat sample analysis using the AuNPs@MIP@PANI@CNT/CNC@textile cortisol sensor patch.