Electronic Supplementary Material (ESI) for Sensors & Diagnostics.
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Supplementary information

Cork based substrate coupled with artificial antibodies for point-of-care detection of pro-inflammatory cytokine biomarker

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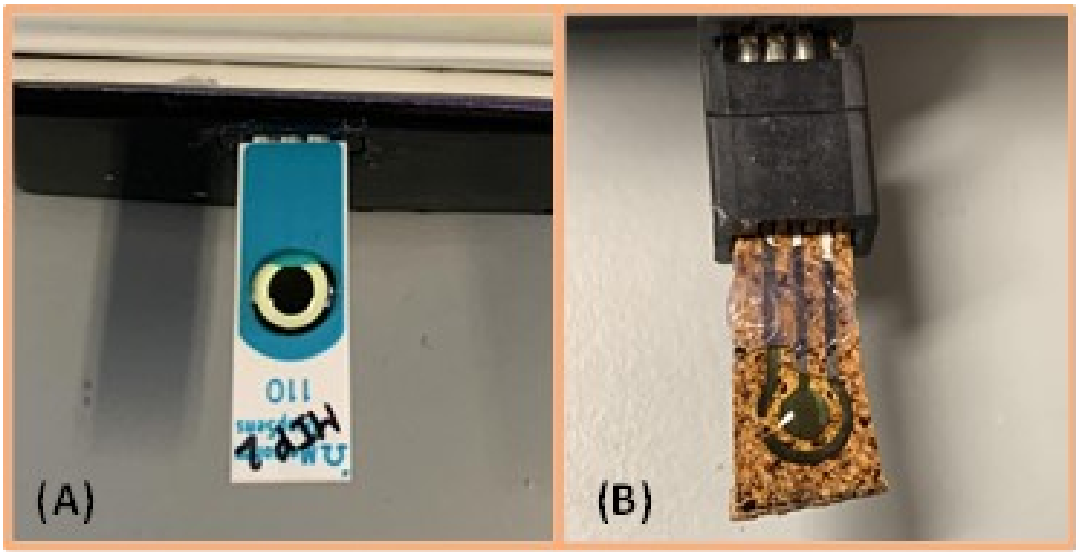
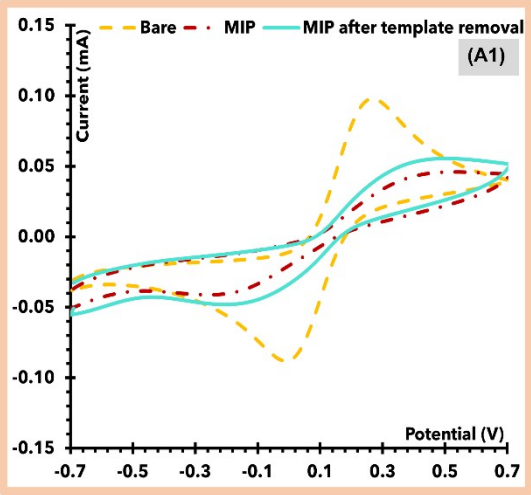
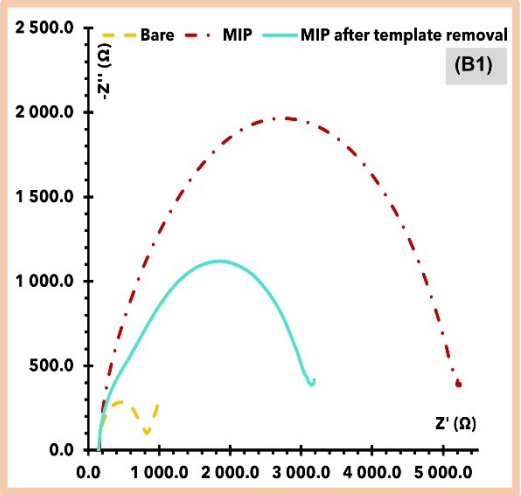
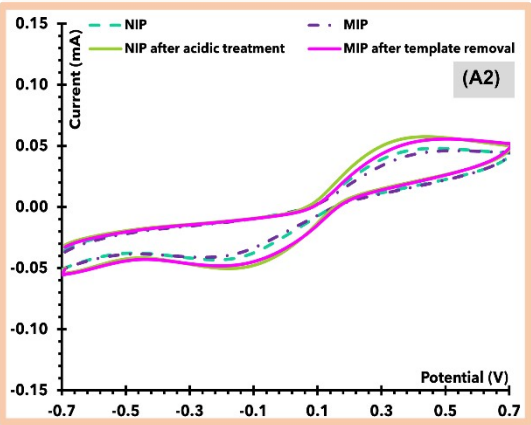


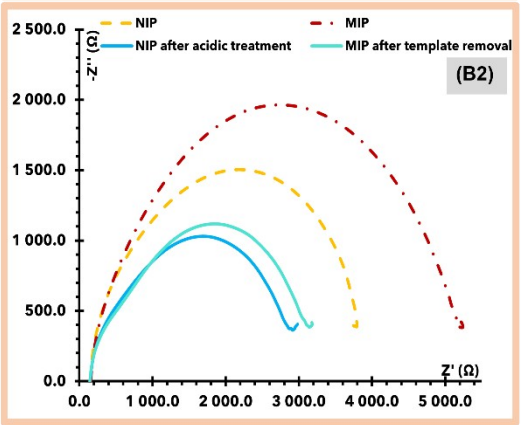
Figure S1 - Commercial electrode (C-110) (A) and homemade cork electrode (cork-SPE) (B).

C-SPE

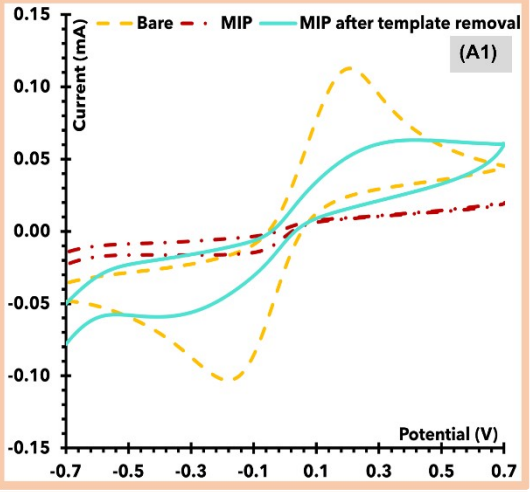


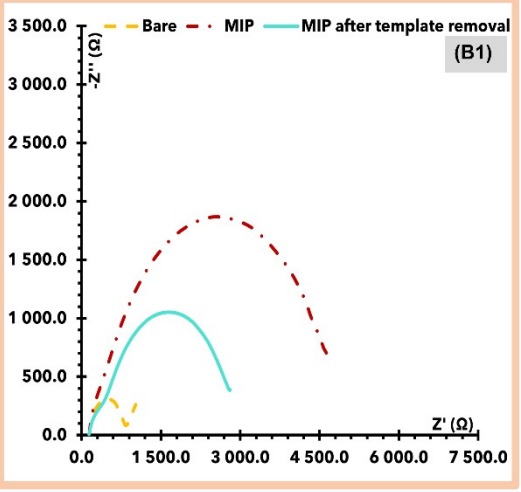


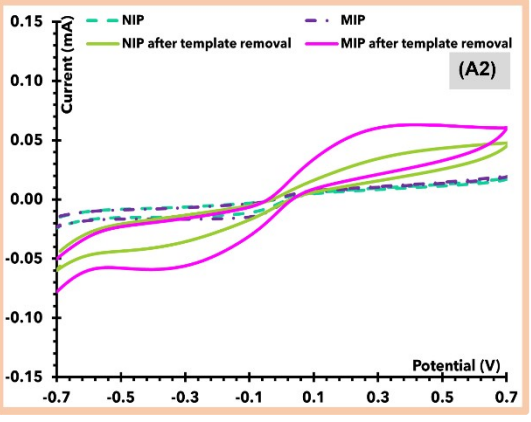




cork-SPE







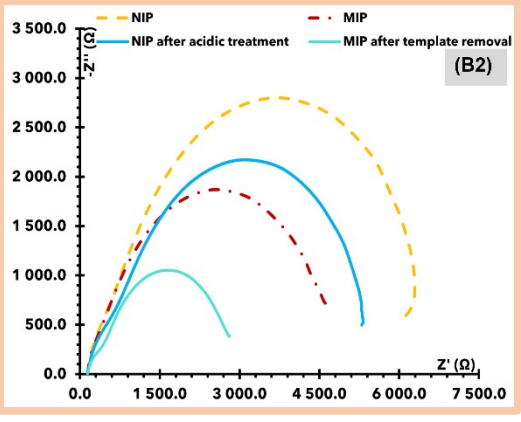


Figure S2 – Electrochemical follow up of the synthesis of the MIP and NIP materials. (A1 and B1 - CV and EIS readings after electropolymerization of MIP, A2 and B2 readings after electropolymerization and template removal of MIP and NIP, in C-SPE); (A1 and B1 - CV and EIS readings after electropolymerization of MIP, A2 and B2 readings after electropolymerization and template removal of MIP and NIP, in cork-SPE).

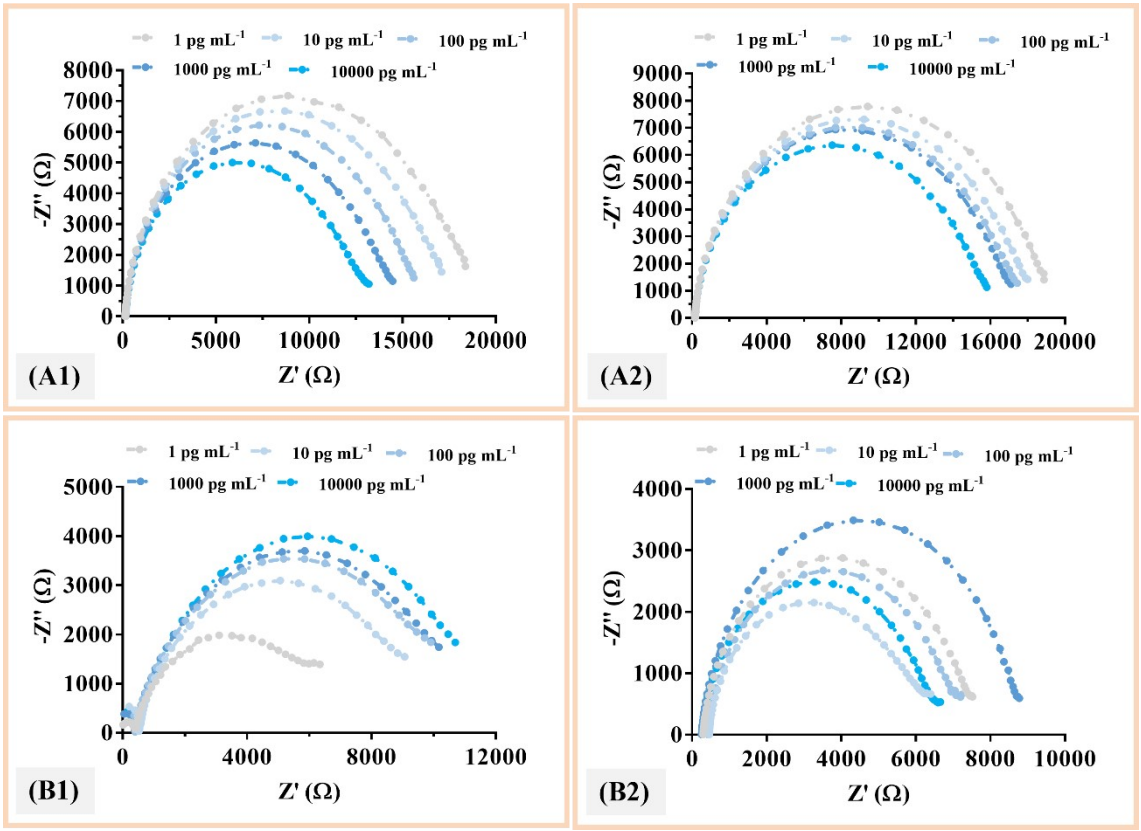


Figure S3 – EIS spectra with different concentration of IL-6 in spiked serum samples diluted 1000-fold in MIP and NIP sensors on commercial electrodes C-SPE (A1 and B1) and cork-SPE (A2 and B2). Measurements were performed 5 mM $K_3[Fe(CN)_6]$ and $K_4[Fe(CN)_6]$ prepared in 0.1 M KCl.

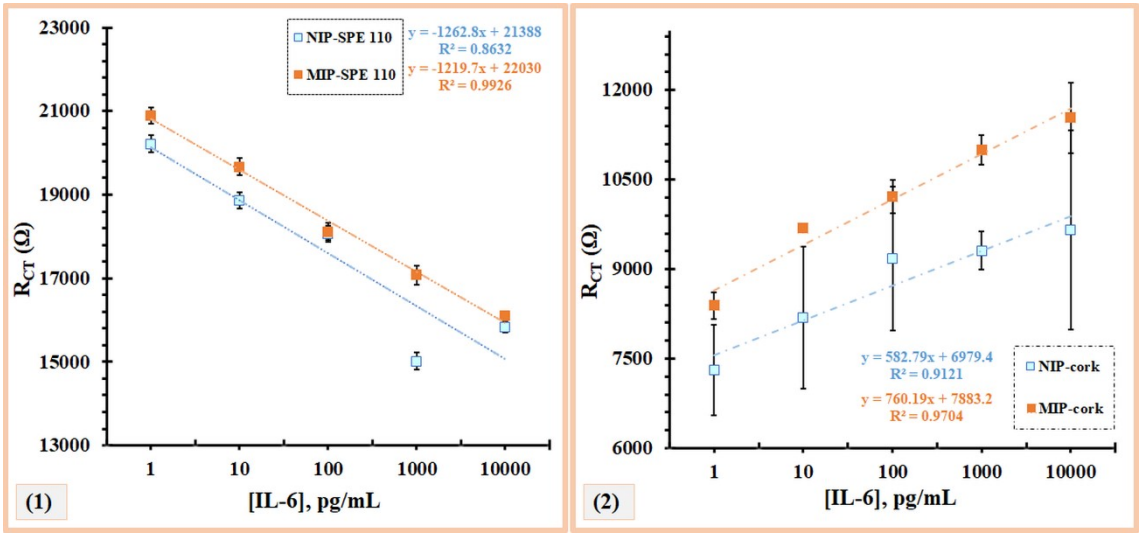


Figure S4 – Calibration curve of commercial electrodes (1) (C-SPE) and homemade cork electrodes (cork-SPE) with different concentration of IL-6 in spiked serum samples diluted 1000—fold.