

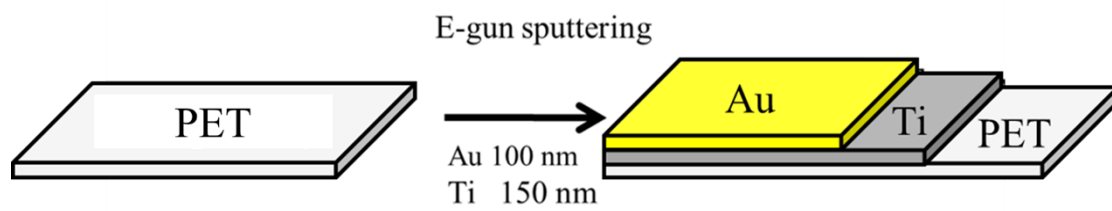
**Electronic Supplementary Information**  
**Fabrication of Gold/Polypyrrole Core/Shell Nanowires on**  
**Flexible Substrate for Molecular Imprinted**  
**Electrochemical Sensor**

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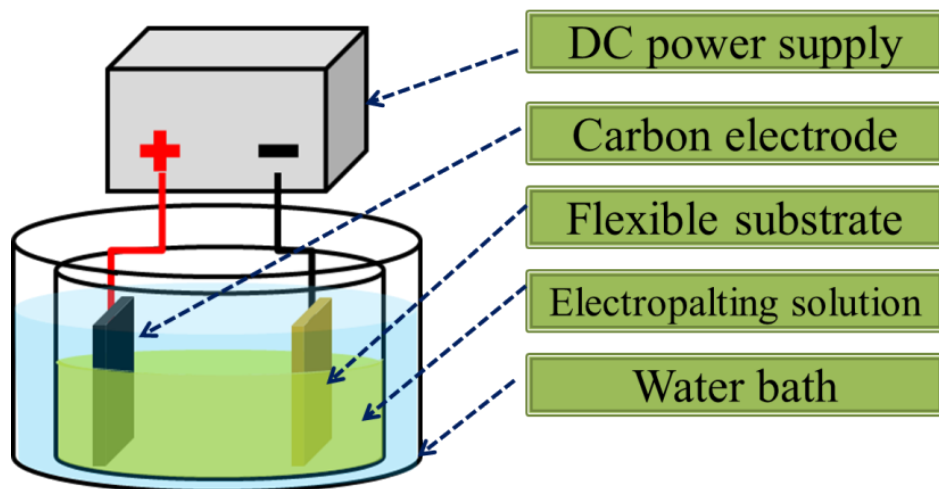
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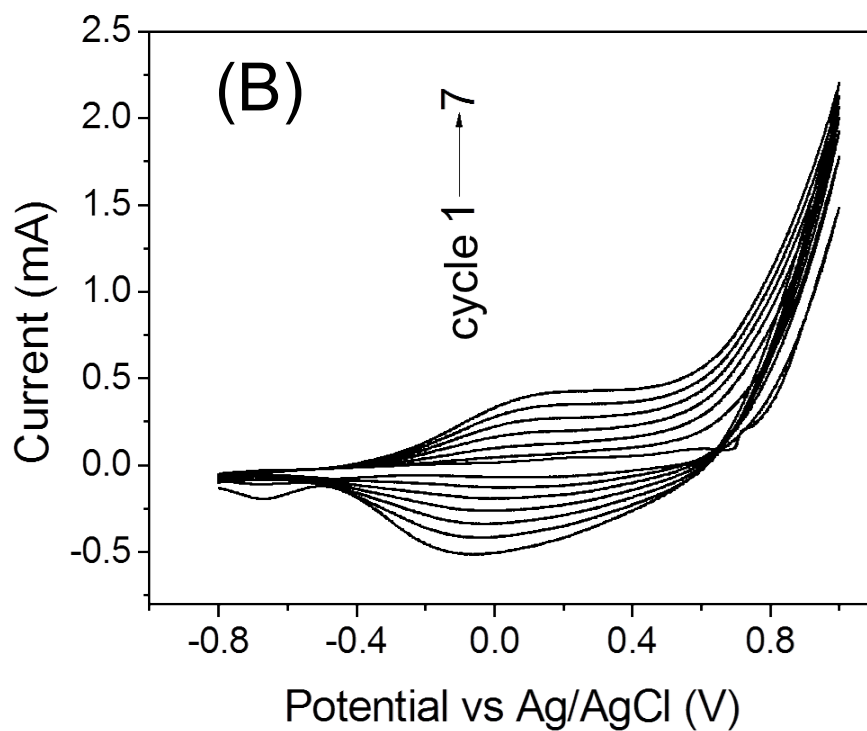
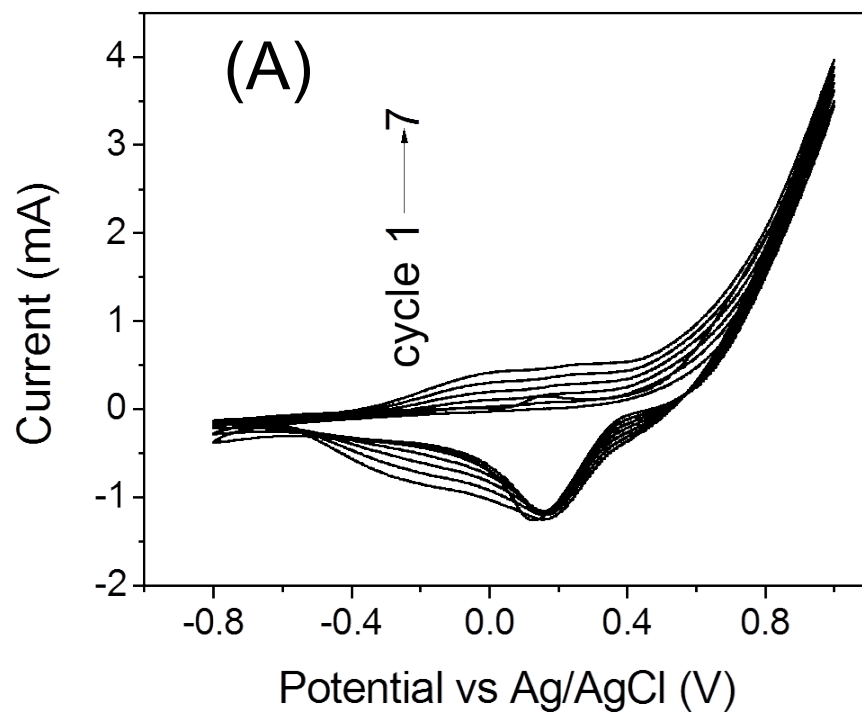
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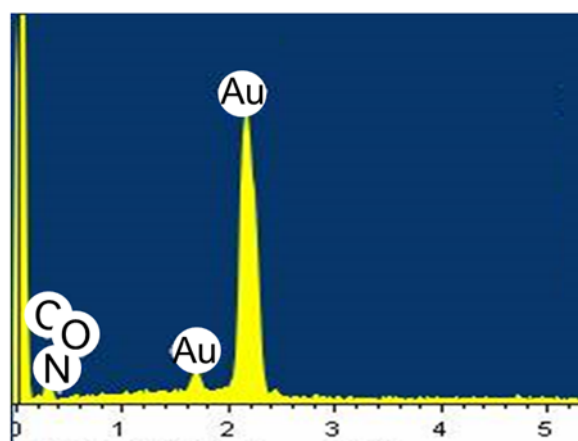
**Figure S1.** Fabrication of Au and Ti layers on a flexible PET substrate.



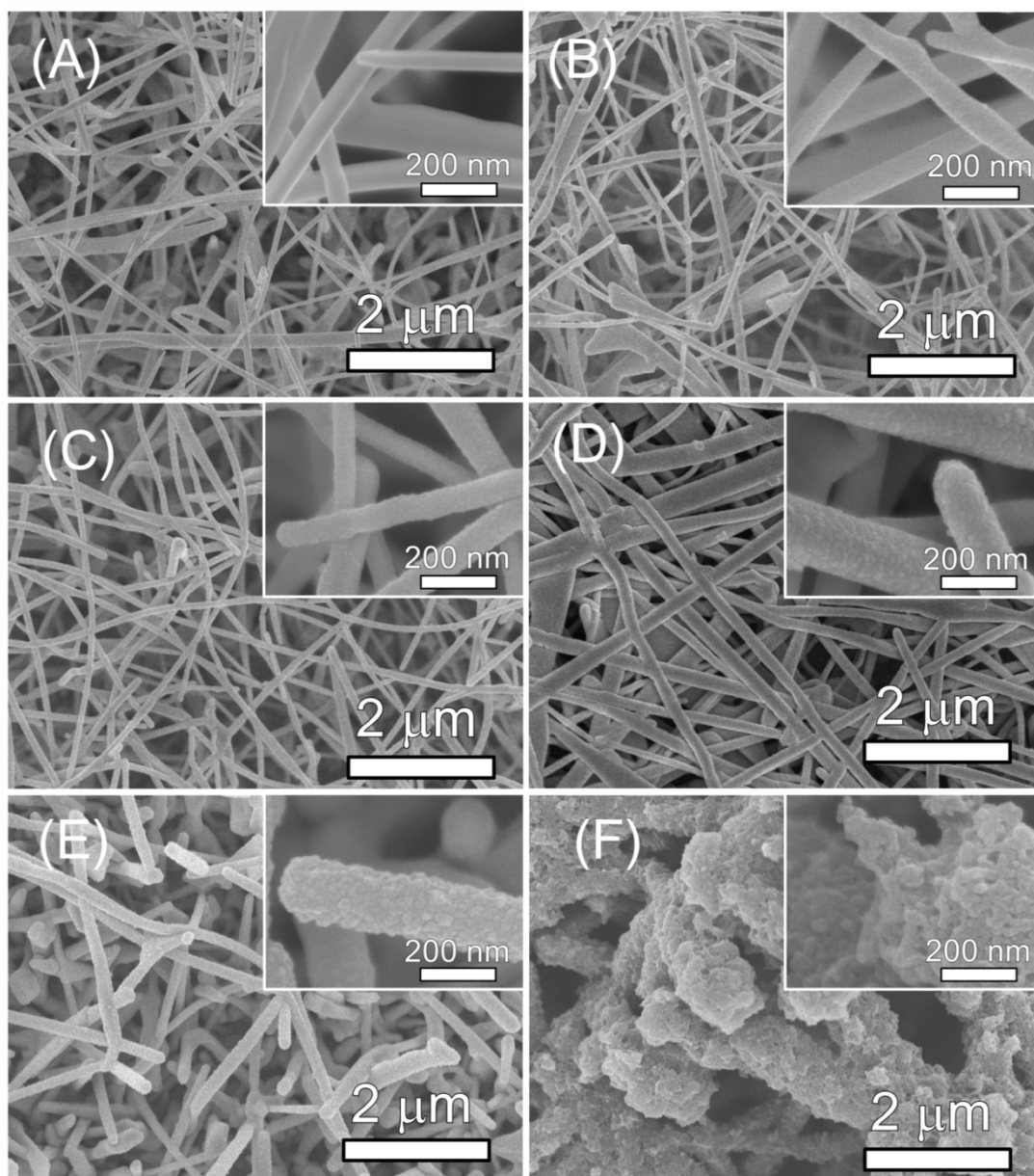
**Figure S2.** Two-electrode electrochemical deposition system for Au nanowire growth.



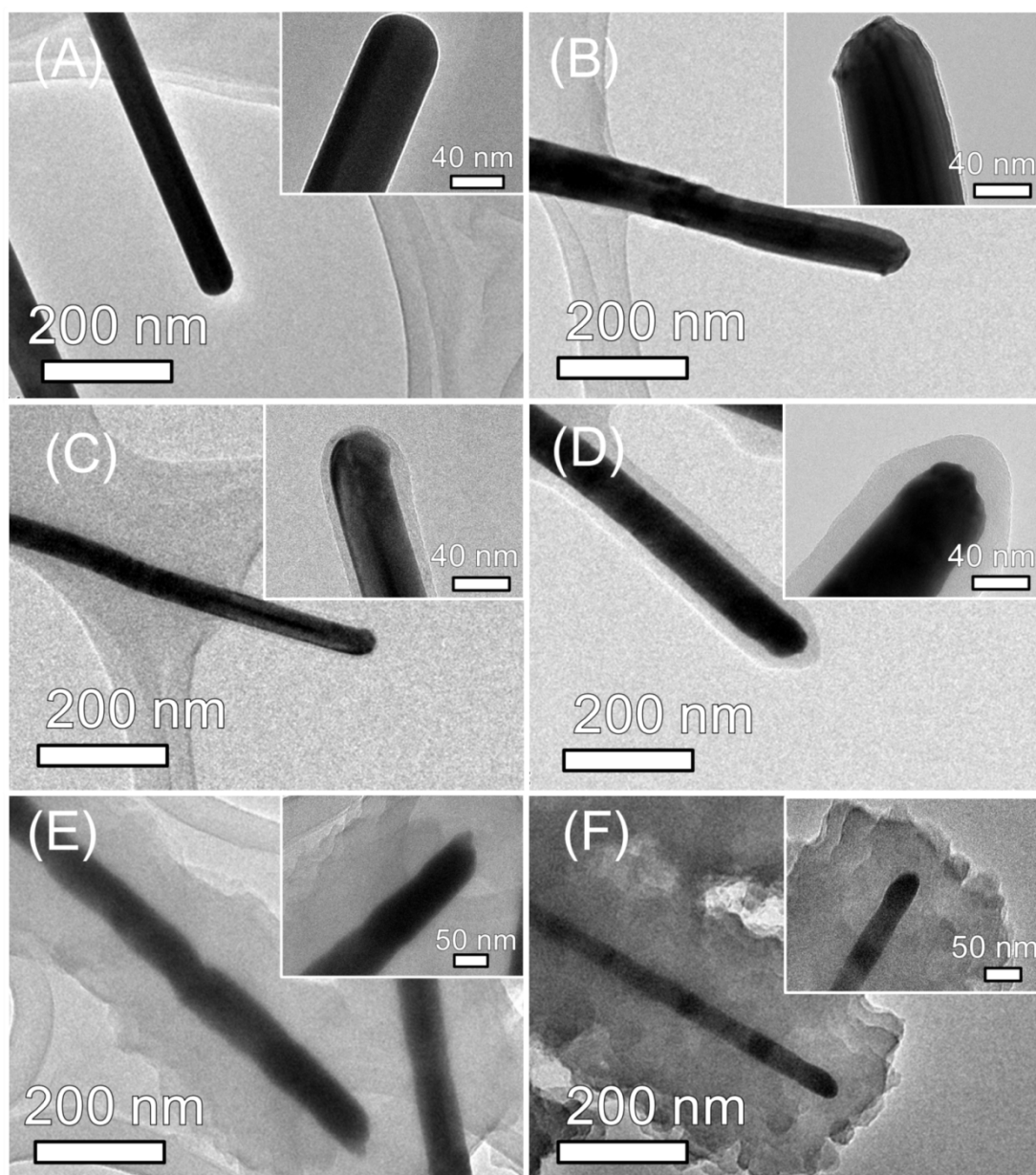
**Figure S3.** CV scans (7 cycles,  $500 \text{ mV s}^{-1}$ ) in pyrrole<sub>(aq)</sub> (0.05 M), NaClO<sub>4(aq)</sub> (0.1 M), for the fabrications of (A) APPW500 in DA<sub>(aq)</sub> (0.02 M) and (B) APPW500N without DA<sub>(aq)</sub>.



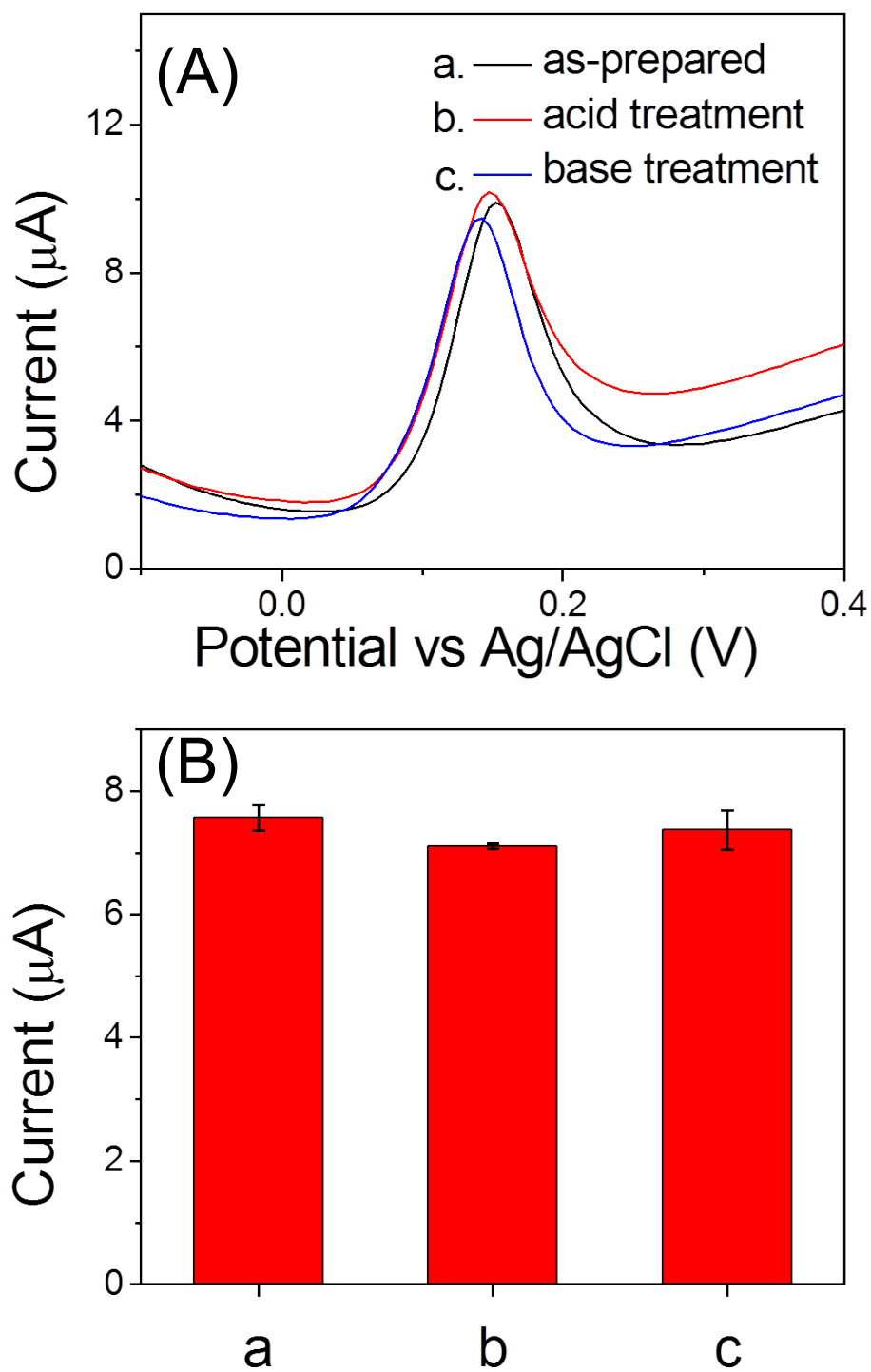
**Figure S4.** EDS spectrum of Au NWs on PET.



**Figure S5.** Low and high magnification (inset) SEM images of (A) Au NWs, (B) APPW900, (C) APPW700, (D) APPW500, (E) APPW300, and (F) APPW100.

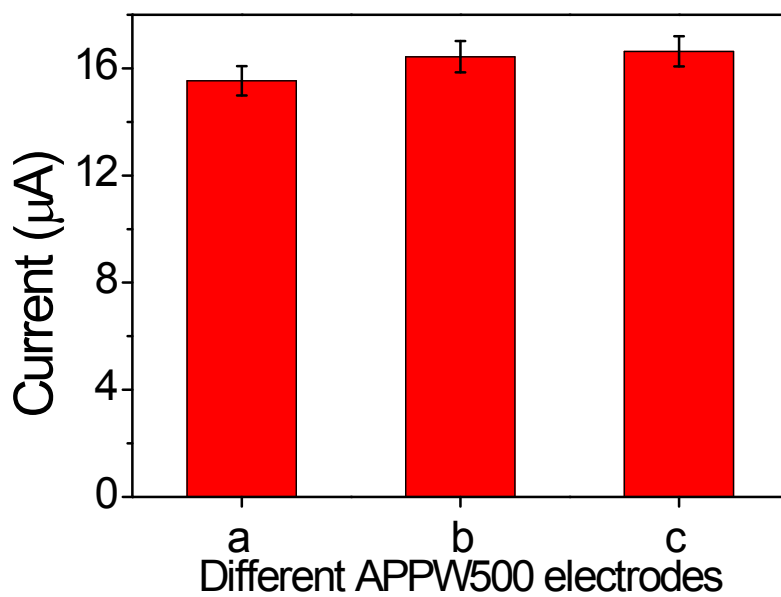


**Figure S6.** Low and high magnification (inset) TEM images of (A) Au NWs, (B) APPW900, (C) APPW700, (D) APPW500, (E) APPW300, and (F) APPW100.



**Figure S7.** (A) Plots of DPV responses for DA (10<sup>-5</sup> M) detection by an APPW500 electrode after sequential acid and base treatments. (a) As-prepared, (b) after acid treatment (in H<sub>2</sub>SO<sub>4(aq)</sub> (1M) for 10 min), and (c) after base treatment (in NaOH<sub>(aq)</sub> (1M) for 10 min). (B) Signal intensities of the DPV signals in (A).





**Figure S8.** Signal intensities of the DPV signals of DA ( $10^{-4}$ M) detected by APPW electrodes (fabricated in pyrrole<sub>(aq)</sub> (0.05 M), NaClO<sub>4(aq)</sub> (0.1 M), DA<sub>(aq)</sub> (0.02 M), 7 CV scans, scan rate  $500 \text{ mV s}^{-1}$ ) 2 and 6 days after the fabrication. The data are the electrodes (a) 2 days, (b) 2 days, and (c) 6 days after the fabrication.