Electronic Supplementary Information

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

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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 mV s⁻¹) in pyrrole_{aq} (0.05 M), NaClO₄_{aq} (0.1 M), for the fabrications of (A) APPW500 in DA_{aq} (0.02 M) and (B) APPW500N without DA_{aq}.
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 ($10^{-5}$ M) detection by an APPW500 electrode after sequential acid and base treatments. (a) As-prepared, (b) after acid treatment (in $\text{H}_2\text{SO}_4(\text{aq})$ (1M) for 10 min), and (c) after base treatment (in $\text{NaOH}(\text{aq})$ (1M) for 10 min). (B) Signal intensities of the DPV signals in (A).
Figure S8. Signal intensities of the DPV signals of DA (10⁻⁴M) detected by APPW electrodes (fabricated in pyrrole\(_{(aq)}\) (0.05 M), NaClO\(_{(aq)}\) (0.1 M), DA\(_{(aq)}\) (0.02 M), 7 CV scans, scan rate 500 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.