biosensors

MDPI

Supporting Materials

Molecularly Imprinted Polymer-Amyloid Fibril-Based Electrochemical Biosensor for Ultrasensitive Detection of Tryptophan

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Material characterization:

Preparation of PANI-no AF and PANI-AF

PANI was obtained by oxidizing 100 mM aniline with an aqueous solution of 10 mM iron (III)chloride in 10 mM HCl at room temperature. After 5 min of stirring, the solution was kept at room temperature overnight. PANI was recovered by filtration and washed several times with DI water. PANI-AF was produced in the same way as PANI-no AF but in the presence of 2 mM AF.

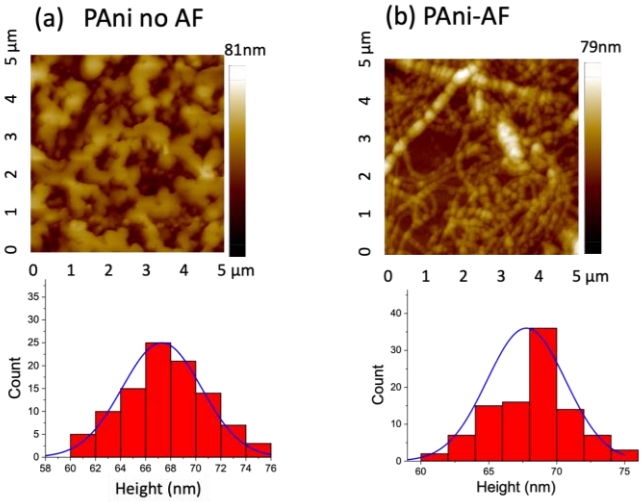

Figure S1. AFM for investigating the effect of AF on aniline polymerization. (**a**) Aniline polymerization without AF (PANI no AF) provides a cluster-like structure. (**b**) Aniline polymerization in the presence of AF (PANI-AF) clearly shows PAni -covered surface of AF.

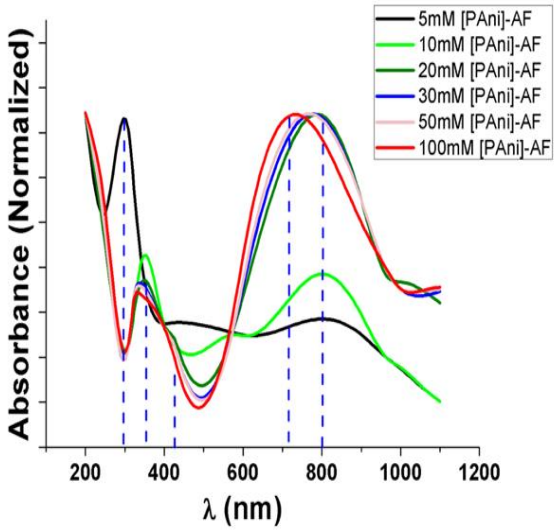

Figure S2. Determining the concentrations of aniline for polymerization around AF.

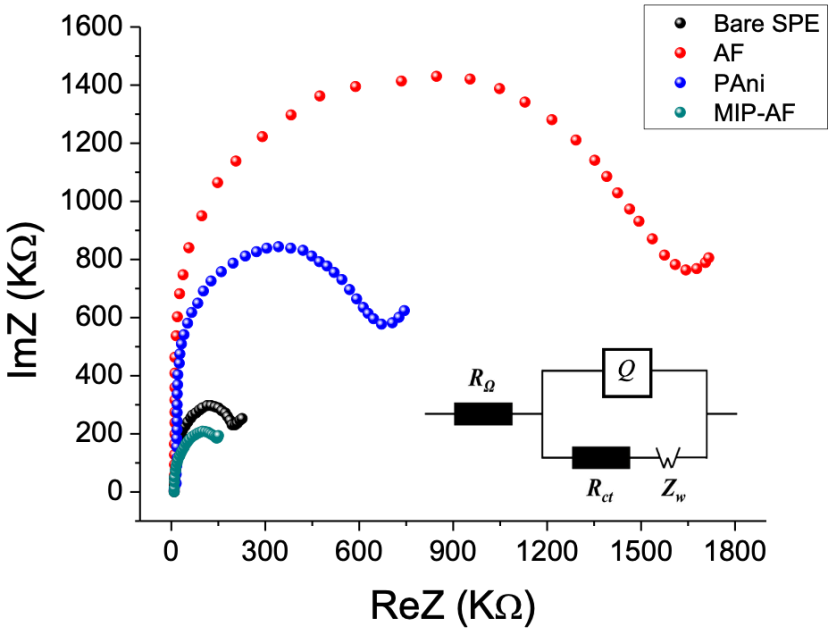

Figure S3. EIS Nyquist plot for characterizing MIP-AF development.