

**Supplementary**

**A Novel Electrochemical Aptasensor based on a New Platform of Samarium Molybdate Flower-like Nanoaprticles@Poly(pyrrole) for Non-invasive Determination of Saliva Cortisol**

**Zahra Rezapoor-Fashtali,<sup>1</sup> Mohammad Reza Ganjali <sup>1,2,\*</sup> and Farnoush Faribod<sup>1</sup>**

<sup>1</sup> Center of Excellence in Electrochemistry, School of Chemistry, College of Science, University of Tehran, Tehran, Iran

<sup>2</sup> National Institute of Genetic Engineering and Biotechnology (NIGEB), Tehran, Iran

\* Correspondence: ganjali@ut.ac.ir; Tel.: +98-2188356145

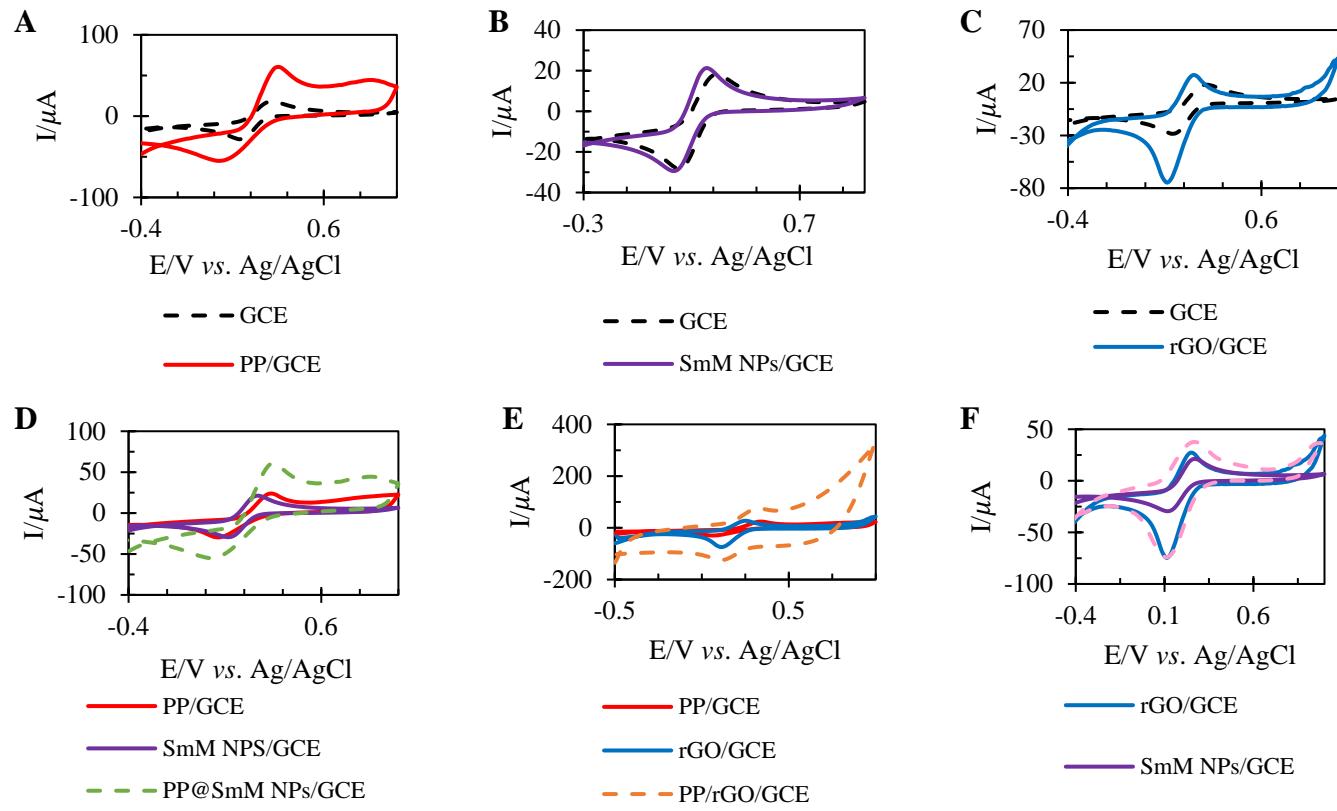


Figure S1. Comparison of electrode surface with the help of cyclic voltammetry *vs.* Ag/AgCl/KCl (3 mol/L) at potential scanning rate 0.1 V/s in ferricyanide 0.01 mol/L, PBS 0.01 mol/L, pH 7.4: A) the PP/GCE and the bare electrode; B) the SmM NPs/GCE and the bare electrode; C) the rGO/GCE and the bare electrode; D) the PP/GCE, SmM NPs /GCE with the SmM NPs@PP/GCE; E) the PP/GCE, rGO/GCE with the rGO/PP/GCE; F) the SmM NPs/GCE, rGO/GCE with the rGO/SmM NPs/ GCE

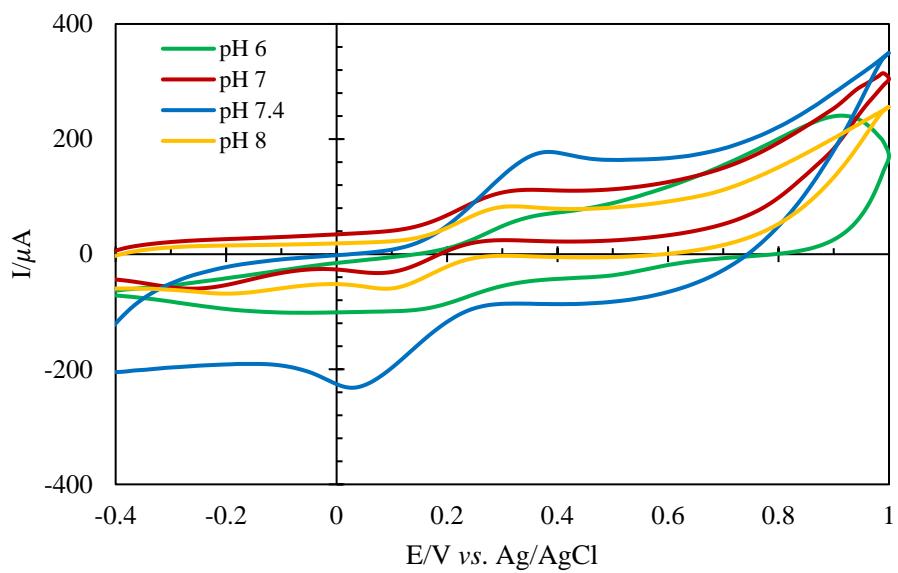


Figure S2. pH studies for the aptamer/rGO/SmM NPs@PP/GCE with the help of cyclic voltammetry *vs.*  $\text{Ag}/\text{AgCl}/\text{KCl}$  (3 mol/L) at potential scan rate 0.1 V/s in ferricyanide 0.01 mol/L, PBS 0.01 mol/L

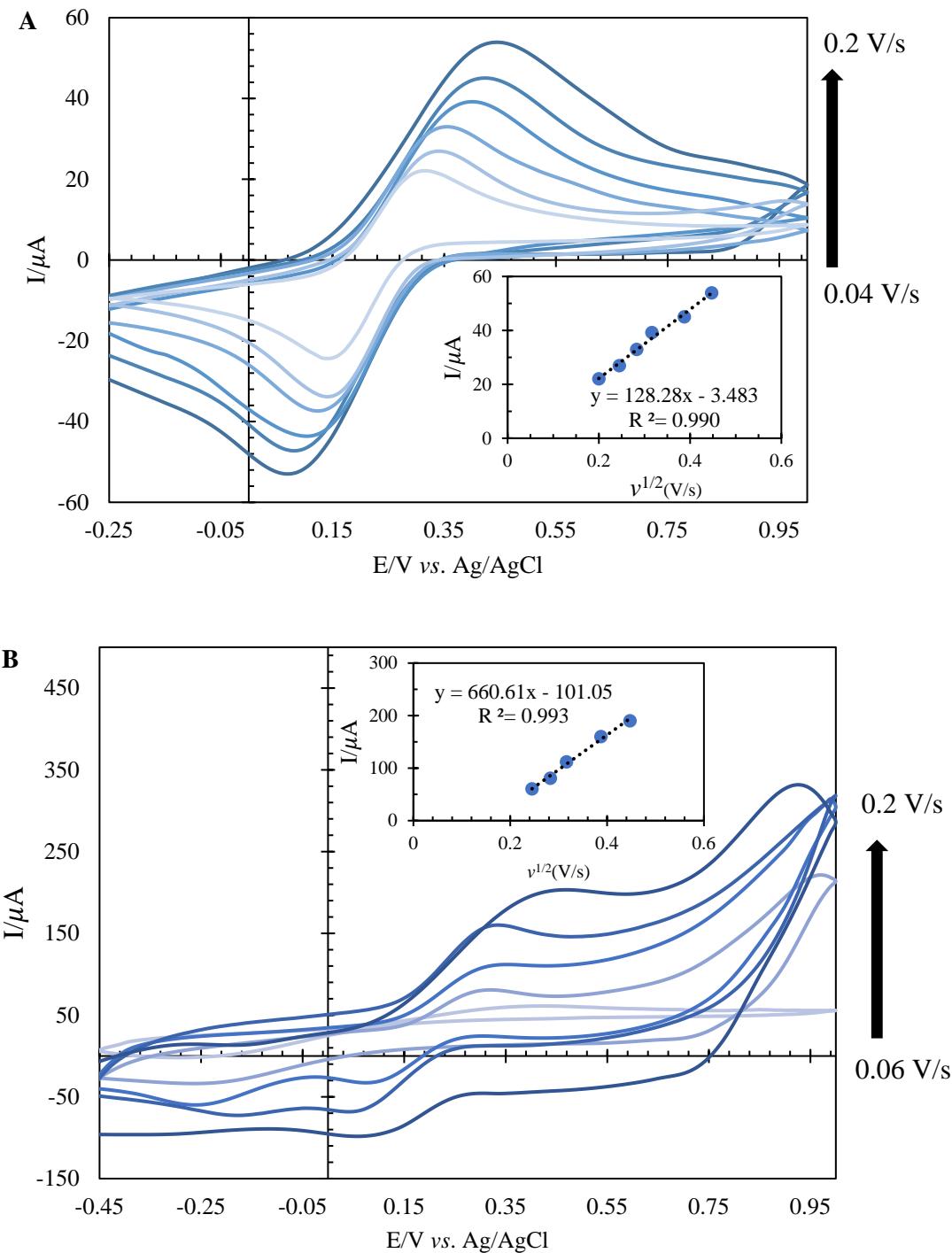


Figure S3. Investigation of the potential scanning rate on anodic currents of ferricyanide 0.01 mol/L, PBS 0.01 mol/L, pH 7.4 with the help of cyclic voltammetry vs. Ag/AgCl/KCl (3 mol/L) and the Randles-Sevcik equation to calculate the effective cross-section of (A) the bare GCE electrode; (B) the aptamer/rGO/SmM NPs@PP/GCE