

Supporting information

Fig S1. (a) ECL intensity-potential curve of gold electrode in 67 mmol L⁻¹ PBS (pH 4.0) containing 1 mmol L⁻¹ Ru(bpy)₃²⁺ under continuous CV. (b) ECL intensity-potential curve of Ru(bpy)₃²⁺ in 67 mmol L⁻¹ PBS (pH 4) containing TPrA under continuous CV.

Fig S2. SEM images of different sizes and shapes of AuNPs on the electrode with different deposition time (10s, 30s, 60s).

Fig S3. Cyclic voltammograms of different sizes and shapes AuNPs film modified Pt electrode in 1 mmol L⁻¹ K₃Fe(CN)₆ with different deposition time (s ~ d-0s, 10s, 30s, 50s, 60s). Scan rate: 100 mV s⁻¹.

Fig S4. (a) ECL intensity-pH curve for reaction of Ru(bpy)₃²⁺ with AuNPs film in the acid PBS. (b) ECL intensity-pH curve for reaction of TPrA for the resulting electrode covered a Nafion film after reaction of Ru(bpy)₃²⁺ with AuNPs in the alkaline PBS.

Fig S1.

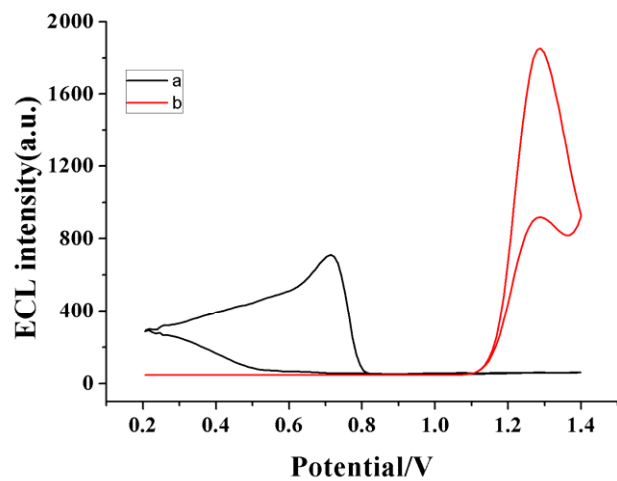


Fig S2.

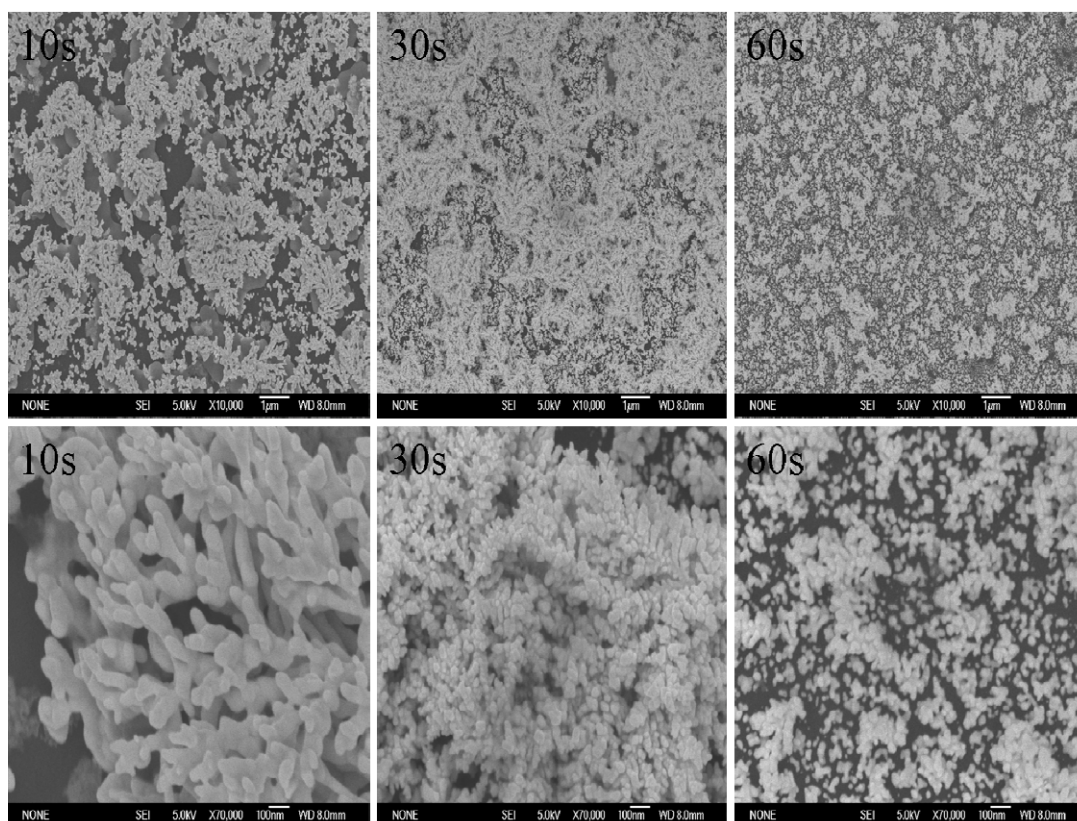


Fig S3.

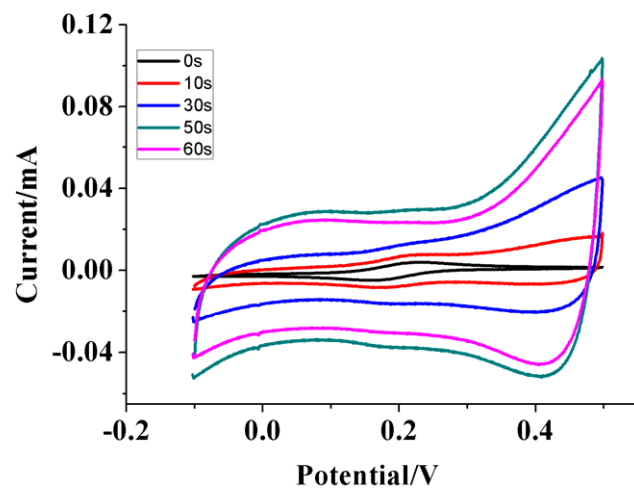


Fig S4.

