

Supporting Information

Electrochemical detection of microRNA-21 based on Au nanoparticles functionalized g-C₃N₄ nanosheet as sensing platform and hybridization chain reaction amplification strategy

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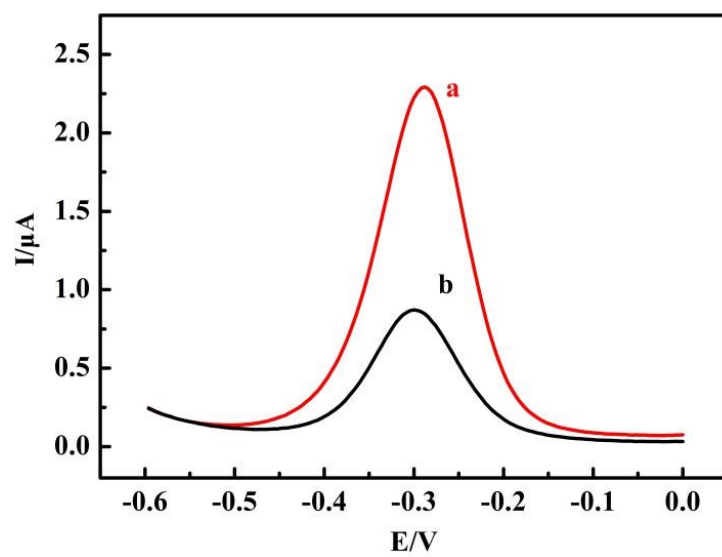


Fig.S1: DPV curves of the biosensor with Au NPs- g- C_3N_4 NS (a) and Au NPs (b) as base material

Condition: $C_{\text{microRNA}}=1.0 \text{ pM}$, other conditions were the same

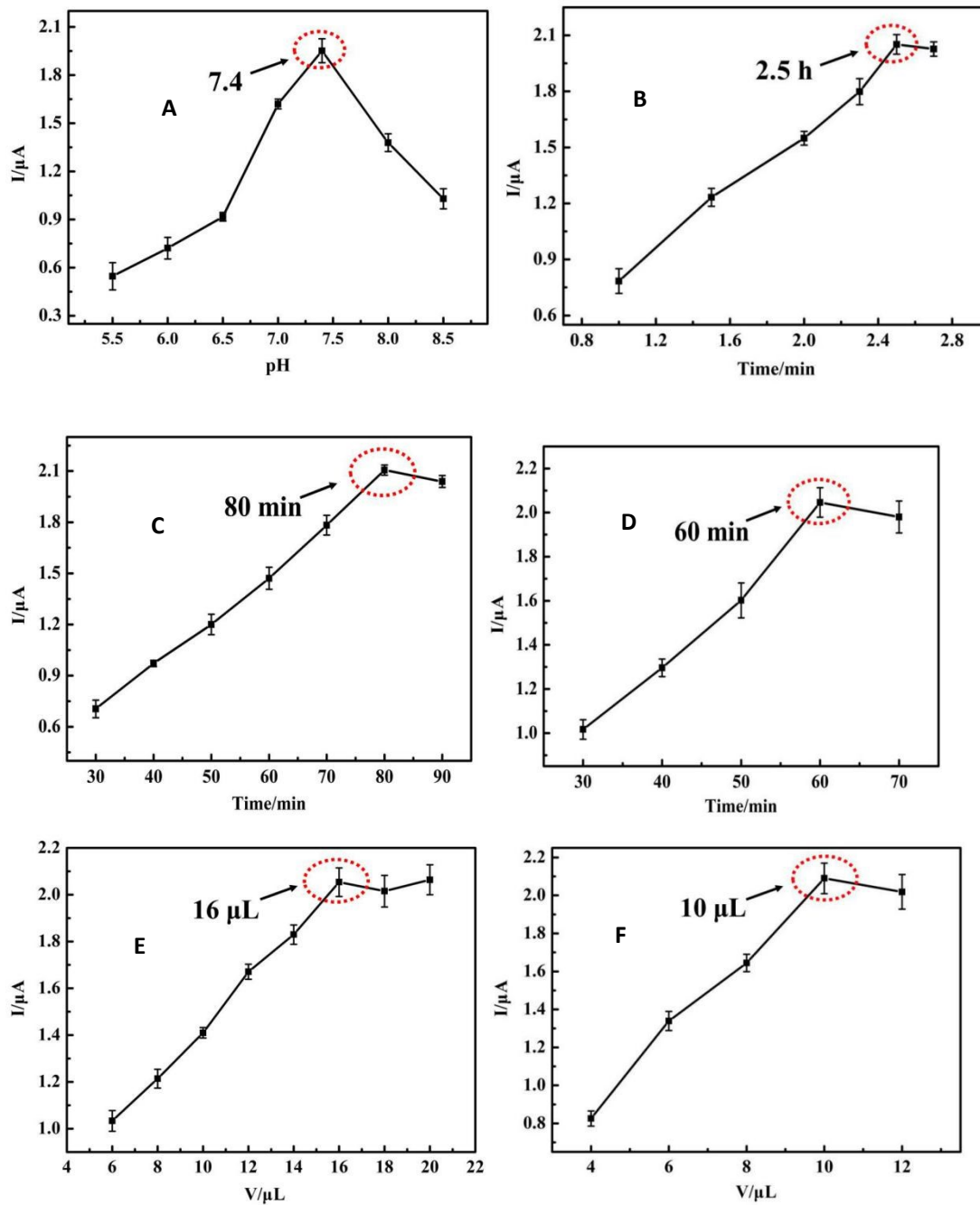


Fig. S2. Optimization of experimental conditions: (A) pH values ; (B) Incubation time of P₁-P₂; (C) Hybridization time between HP and micro RNA (E) Hybridization time between micro RNA and signal probes (F)

Amount of Au-g-C₃N₄ NS; (D) Amount of HP : Conditions: C_{microRNA}=1.0 pM

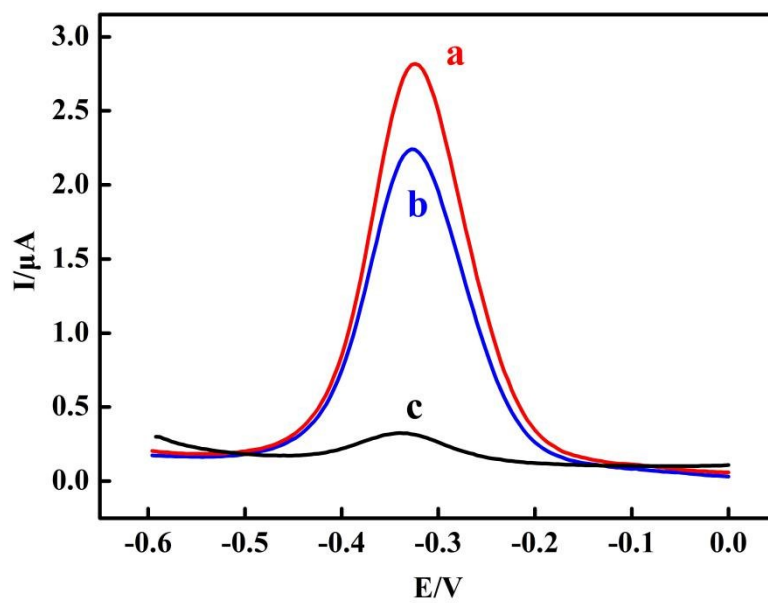


Fig. S3. DPV curves of biosensor in serum sample only (curve c) or containing 1.0 pM (b) and 10.0 pM (a) micro RNA-21, respectively.