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Supporting Information

Dual sensitive and rapid detection of glycated human serum albumin using the versatile lead/graphene nanocomposite probe in fluorescent-electrochemical aptasensor

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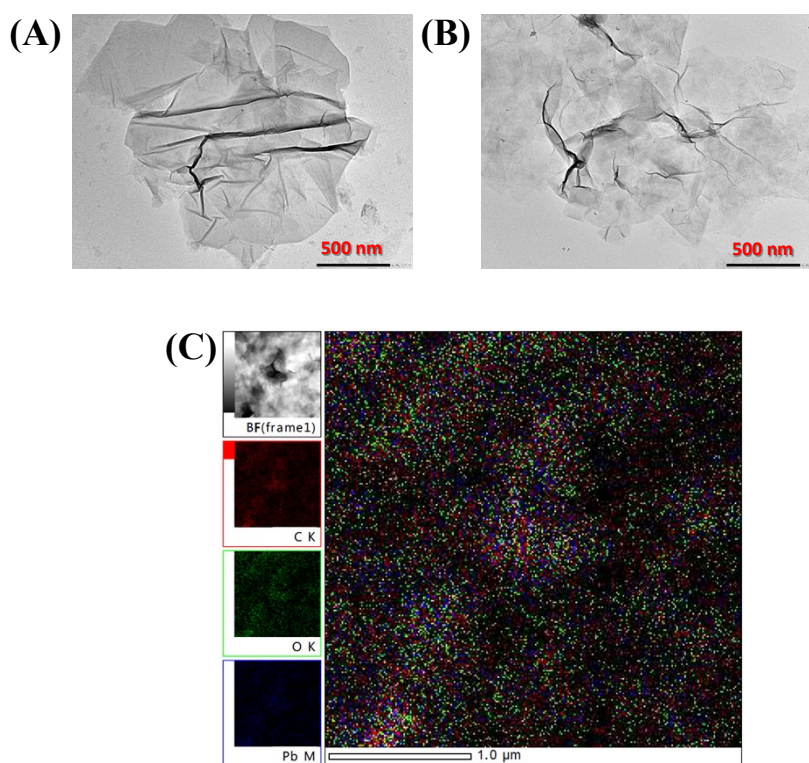


Figure S1. TEM images of (A) GO, (B) GO-Pb complex and (C) EDX of GO-Pb complex.

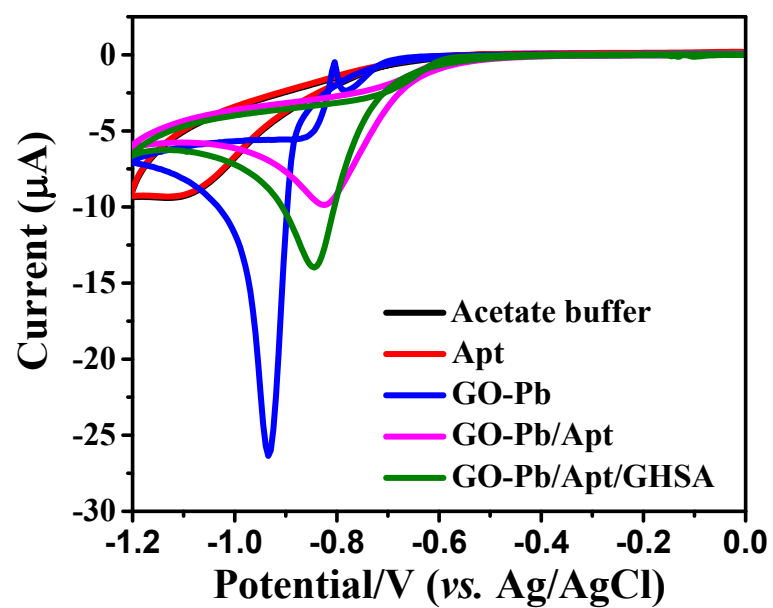
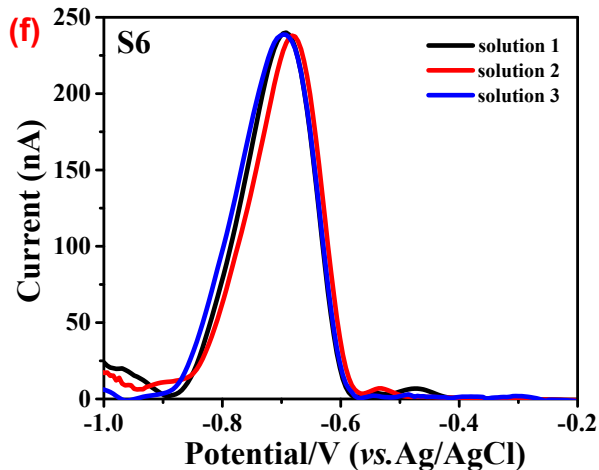
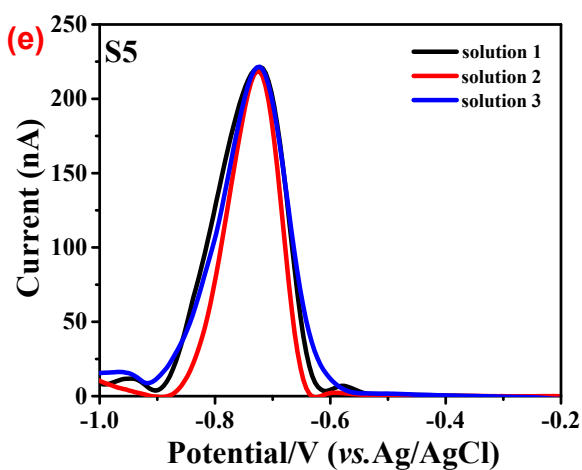
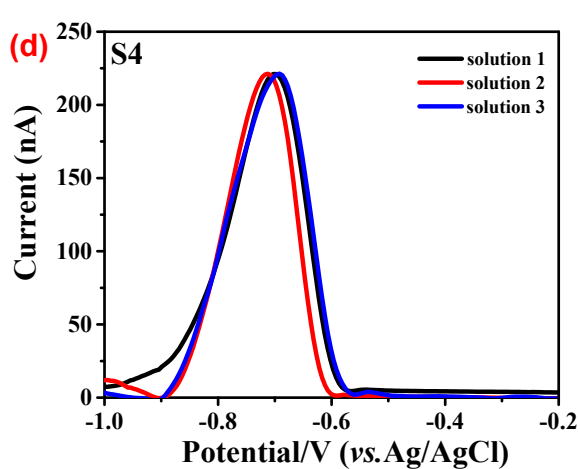
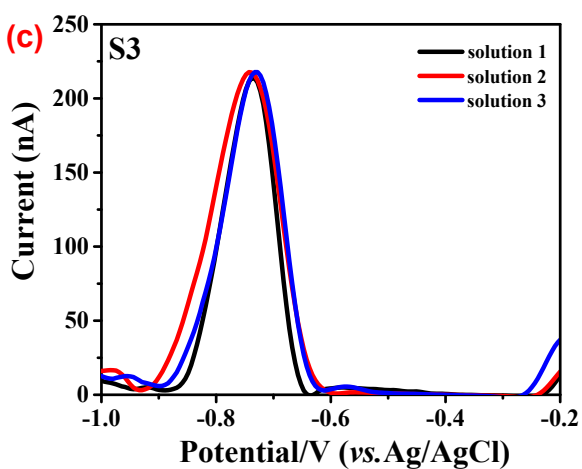
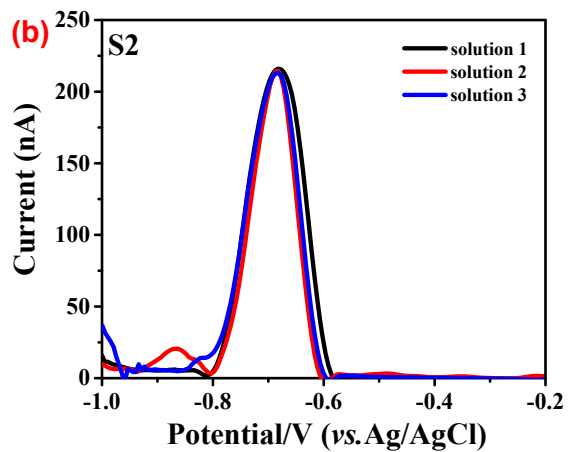
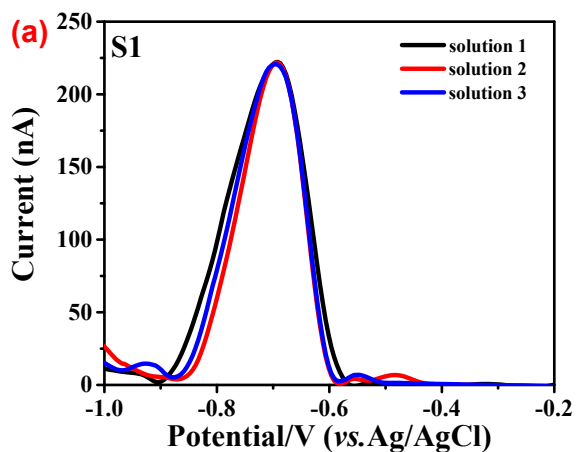


Figure S2. Cyclic voltammogram of aptasensor solution performed in 0.2 M Acetated buffer solution
pH 5.6.



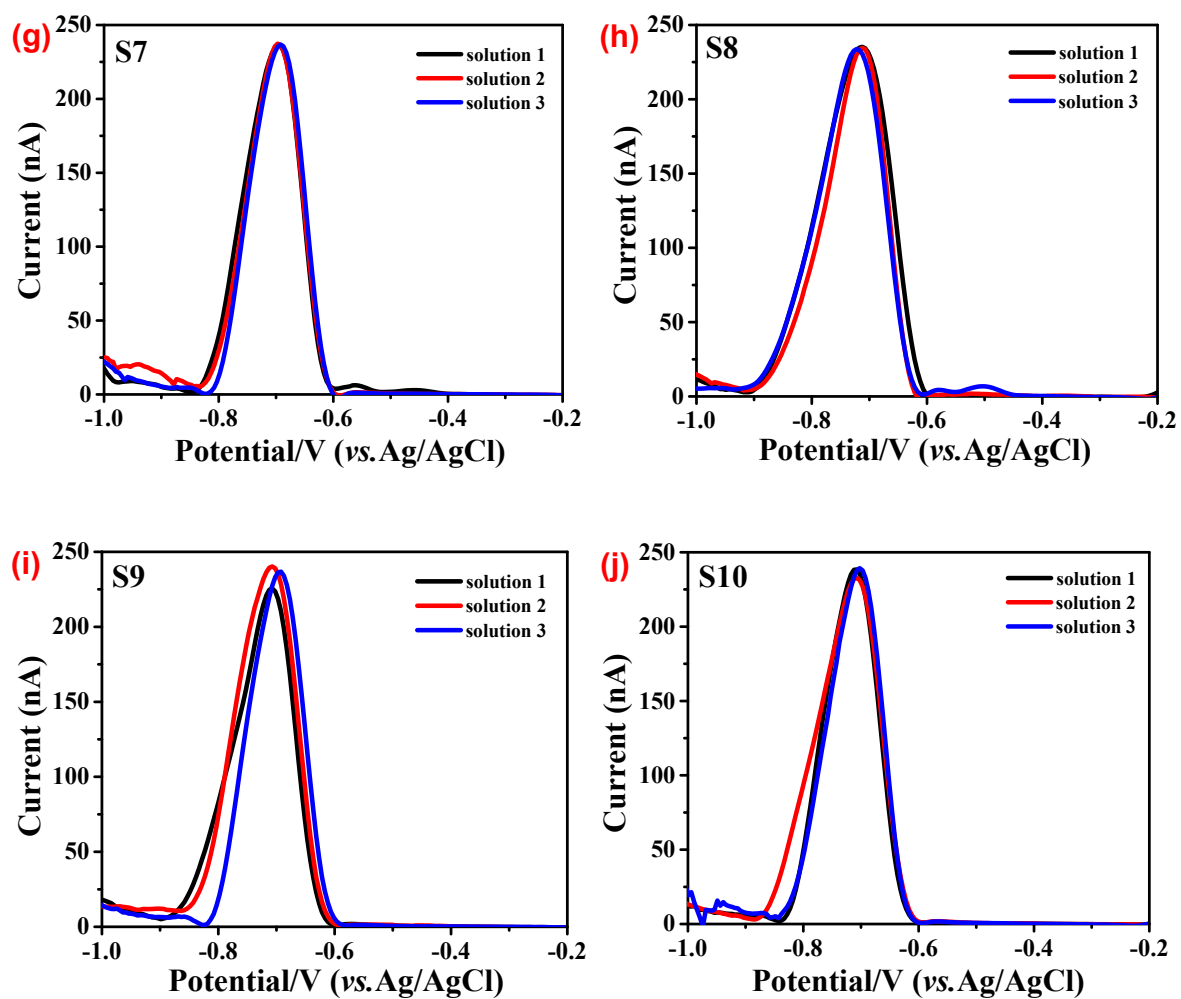


Figure S3. SWV measurement on the mean ($n = 3$) of the developed aptasensing platform in clinical serum samples; (a)-(e) non-DM individuals samples are label as S1-S5, (f)-(j) DM patients samples are label as S6-S10.

Table S1. GHSA in clinical serum samples analyzed by the proposed aptasensor fabrication.

Normal			Diabetes mellitus		
Sample No.	GHSA ($\mu\text{g mL}^{-1}$)		Sample No.	GHSA ($\mu\text{g mL}^{-1}$)	
	Fluorescent	Electrochemical		Fluorescent	Electrochemical
S1	8.71 ± 2.76	8.72 ± 0.46	S6	69.19 ± 2.76	68.48 ± 5.26
S2	2.86 ± 1.59	2.52 ± 0.14	S7	60.74 ± 3.32	60.22 ± 4.44
S3	4.16 ± 0.92	4.64 ± 0.49	S8	36.67 ± 2.43	35.07 ± 1.07
S4	7.41 ± 2.43	7.94 ± 0.48	S9	39.28 ± 3.68	40.10 ± 0.25
S5	6.11 ± 1.84	6.08 ± 0.59	S10	48.38 ± 0.92	48.91 ± 4.93