

Supporting Information

Synergy of specific electrons effect and surface plasmonic resonance enhanced visible-light photoelectrochemical sensing for sensitive analysis of CaMV 35S promoter

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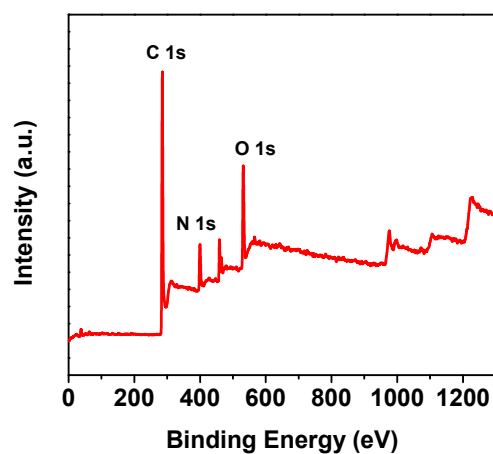


Fig. S1. XPS survey of N-GNRs.

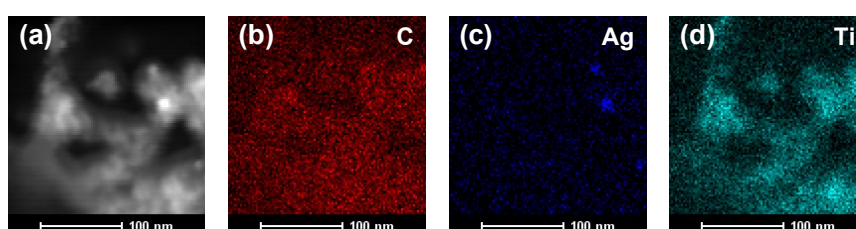


Fig. R2. STEM-HAADF image (a) and EDS elemental mapping for C map (b), Ag map (c), and Ti map of Ag/TiO₂/N-GNRs ternary composites.

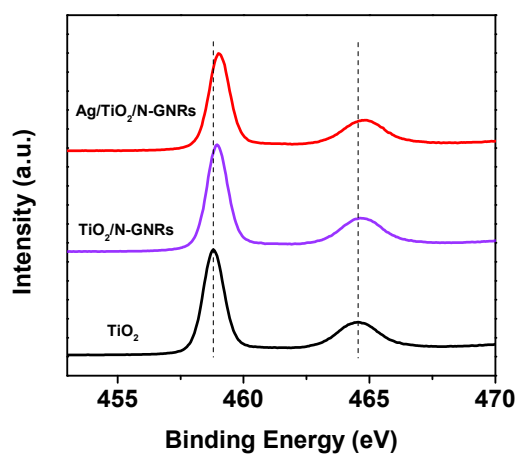


Fig. S3. XPS spectra of TiO₂, TiO₂/N-GNR, and Ag/TiO₂/N-GNR, respectively.

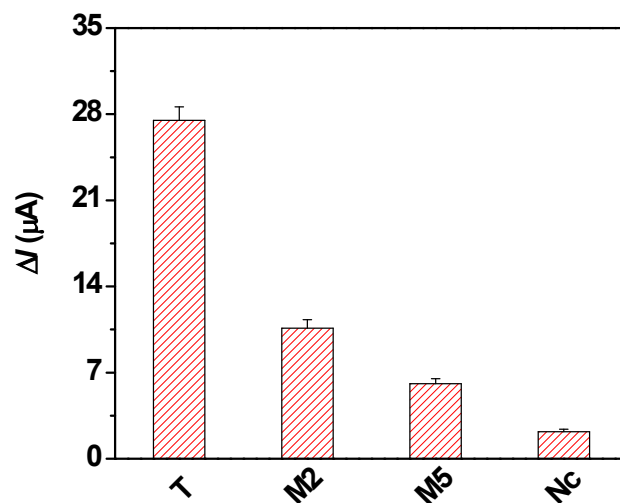


Fig. S4. Photocurrent changes of the prepared PEC sensor toward different oligonucleotides at the concentration of 10 nM target DNA (T), 2-Base-mismatch (M2), 5-base-mismatch (M5), Non-complementary (Nc).

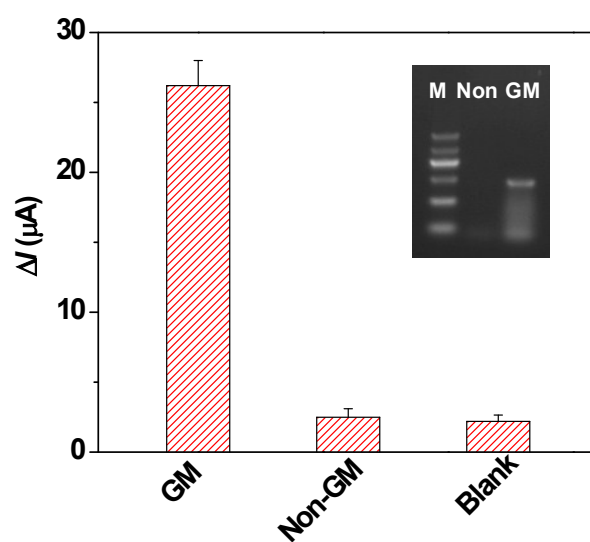


Fig. S5. Photocurrent changes and the results of agarose gel electrophoresis (Inset) toward P35s in transgenic soybean powder extract.

Table S1 Photoelectrochemical Detection of P35s in transgenic soybean powder extract by the**Proposed sensor**

sample	P35s concentration (nM)			recovery	RSD
	found before addition	added	found after addition		
1	50	50	98	96%	5.32%
2	100	100	204	104%	3.39%
3	150	150	299	99.3%	4.33%