

1 **Enhanced photoelectrochemical biosensing performance for Au**
2 **nanoparticle-polyaniline-TiO₂ heterojunction composites**

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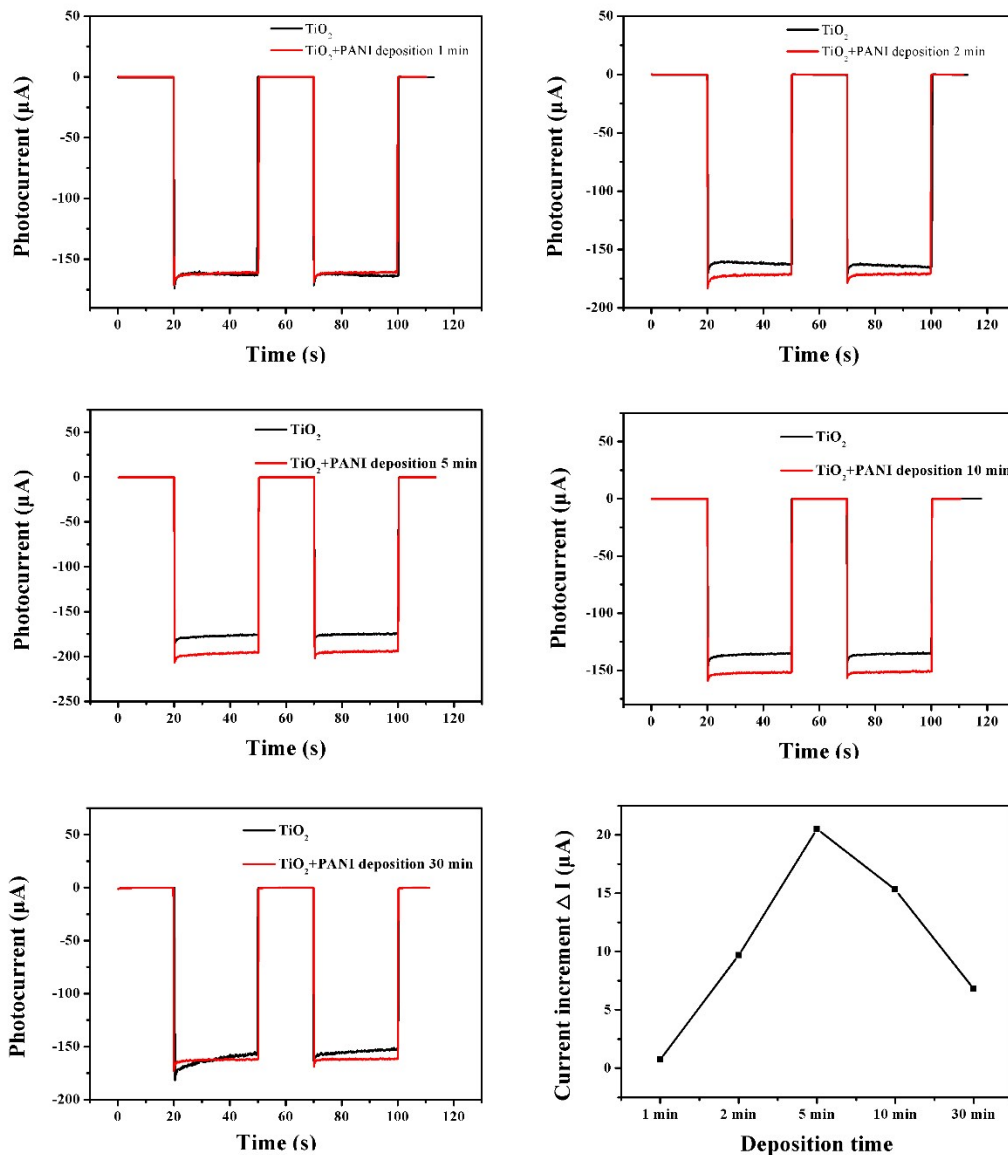
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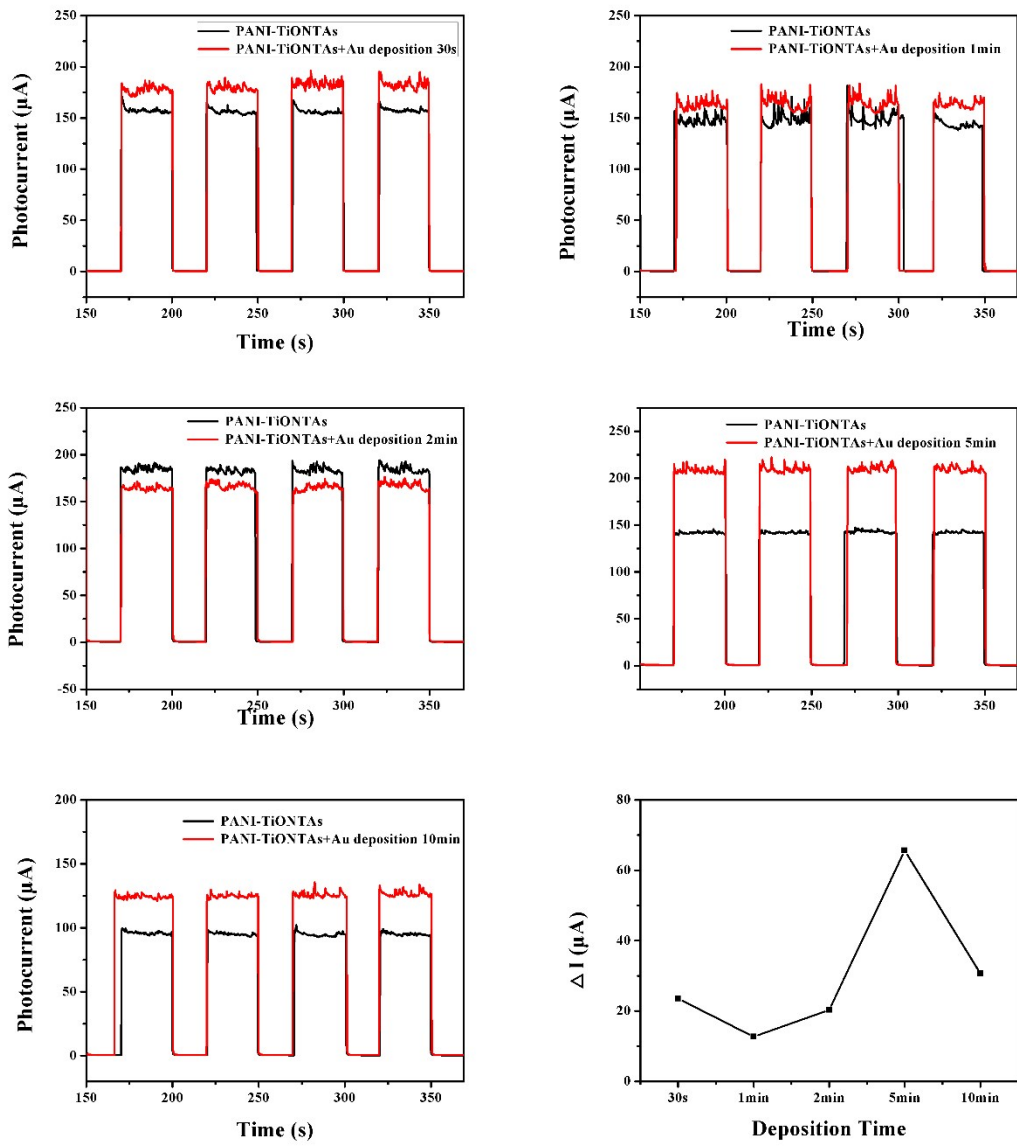
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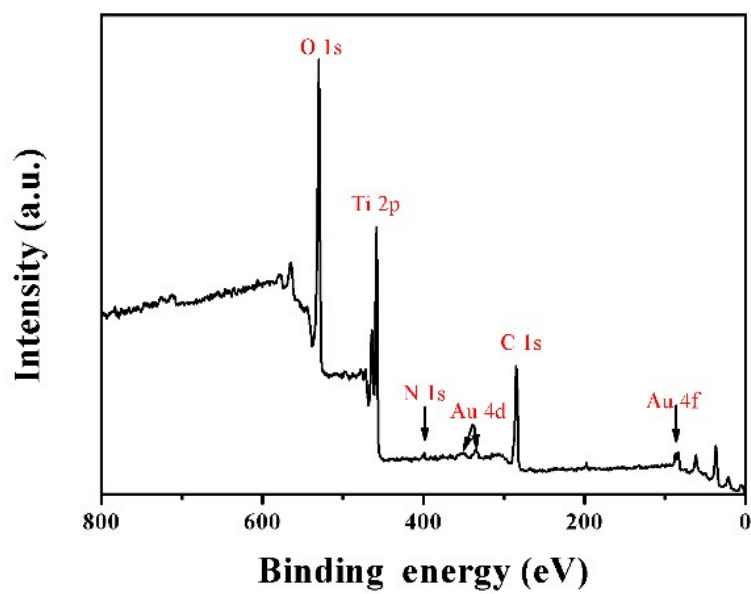
31 Fig. S1. Optimization of deposition time. The photocurrent was measured before and after
 32 polyaniline deposition, and 5 min was selected as the optimum deposition time.



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34 Fig. S2. Optimization of illumination time. The photocurrents before and after the
 35 deposition of Au NPs were measured, and 5 min was selected as the optimum
 36 illumination time.

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39 Fig. S3. Full XPS spectrum of Au-PANI-TiONTAs with Ti 2p, O 1s, C 1s, N 1s, Au 4d,
40 and Au 4f peaks.

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44 Table S1. Recovery study for determining glucose in human serum.

C_{added} (mM)	C_{found} (mM)	Recovery (%)
3.93	3.78	96.18
11.19	10.99	98.21
11.87	11.92	100.42

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