Electronic Supplementary Material (ESI) for Analytical Methods.

Supplementary Information

Electrochemical sandwich-type immunosensor for detection of PSA based on trimetallic AgAuPt nanocomposite synthesized using galvanic replacement reaction

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Figures captions:

Fig. S1 Effect of incubation time of Ab_1 at the surface of GCE/AgAuPt

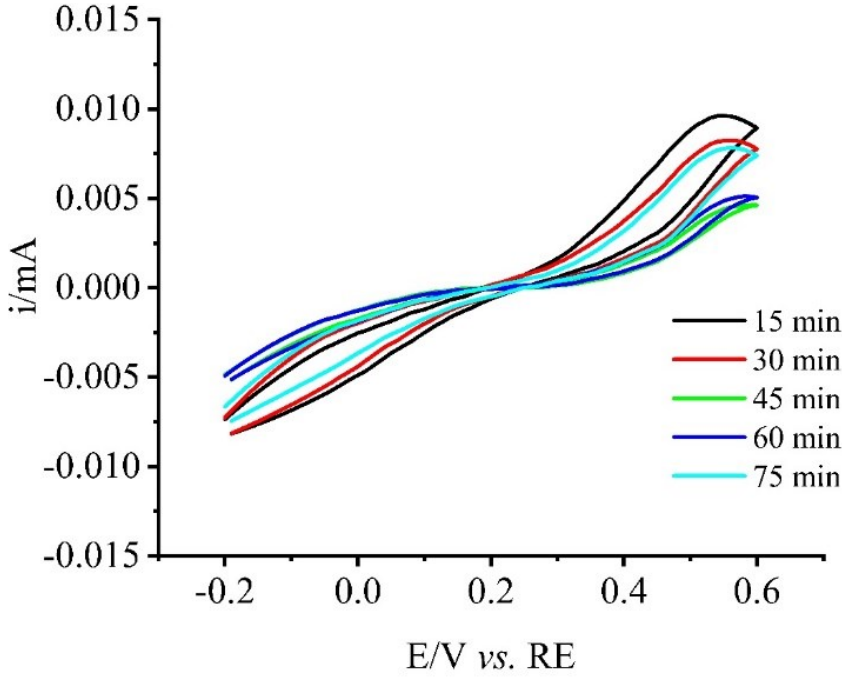
Fig. S2 Effect of incubation time of BSA at the surface of GCE/AgAuPt/Ab_1

Fig. S3 Effect of incubation time of PSA at the surface of GCE/AgAuPt/Ab_1/BSA

Fig. S4 Effect of incubation time of Ab_2-AgPt at the surface of GCE/AgAuPt/Ab_1/BSA/PSA

Fig. S5 Effect of H_2O_2 concentration in the DPV response of the proposed GCE/AgAuPt/Ab_1/BSA/PSA/Ab_2-AgPt immunoassay in the PBS buffer (pH=7.4) containing 5.0 mM $Fe(CN)_6^{3-}$ as the redox probe

Fig. S6 Stability of the as-prepared immunoassay studied in the 7, 14 and 21 days after fabrication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i/mA
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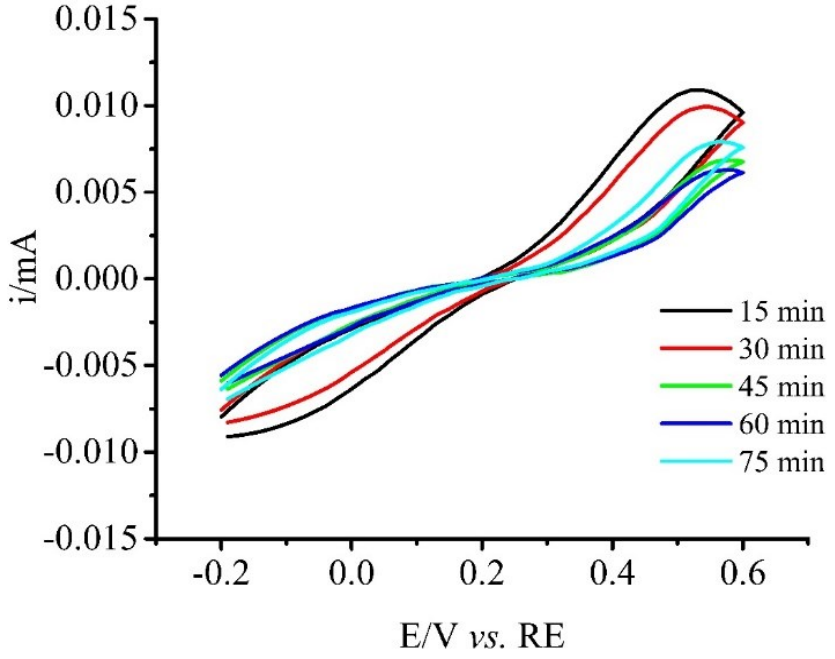
0.2
0.4
0.6
E/V vs. RE
15 min
30 min
45 min
60 min
75 min

Fig. S1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i/mA
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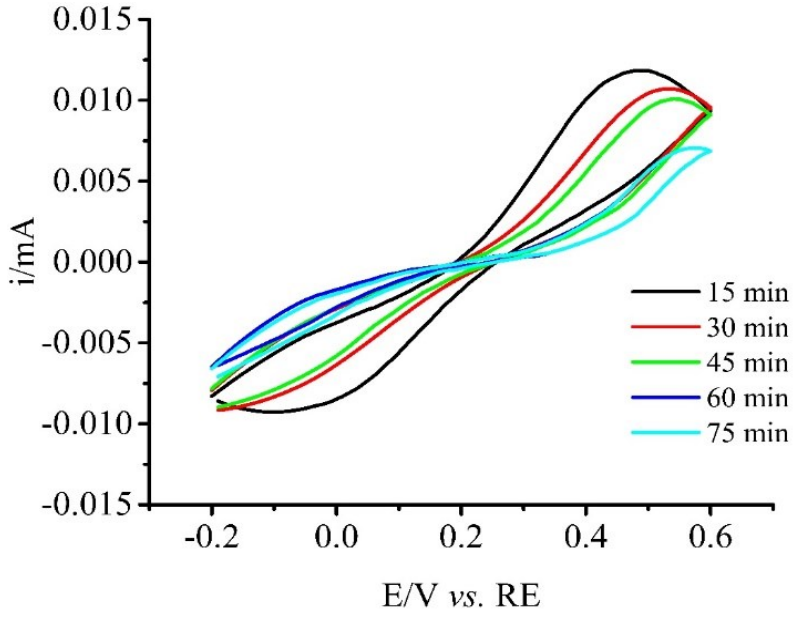
0.2
0.4
0.6
E/V vs. RE
15 min
30 min
45 min
60 min
75 min

Fig. S2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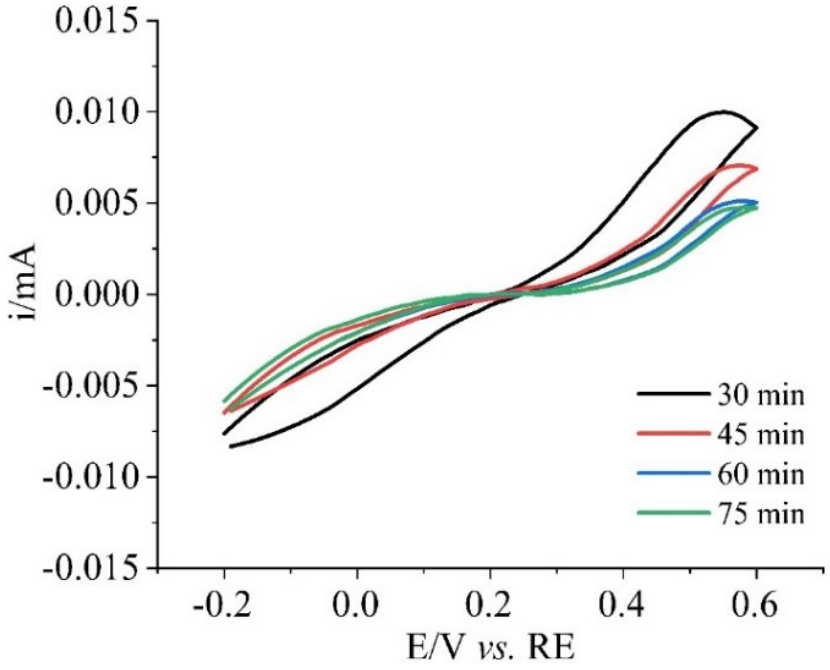
i/mA
-0.2
0.0
0.2
0.4
0.6
E/V vs. RE
15 min
30 min
45 min
60 min
75 min

Fig. S3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0.010
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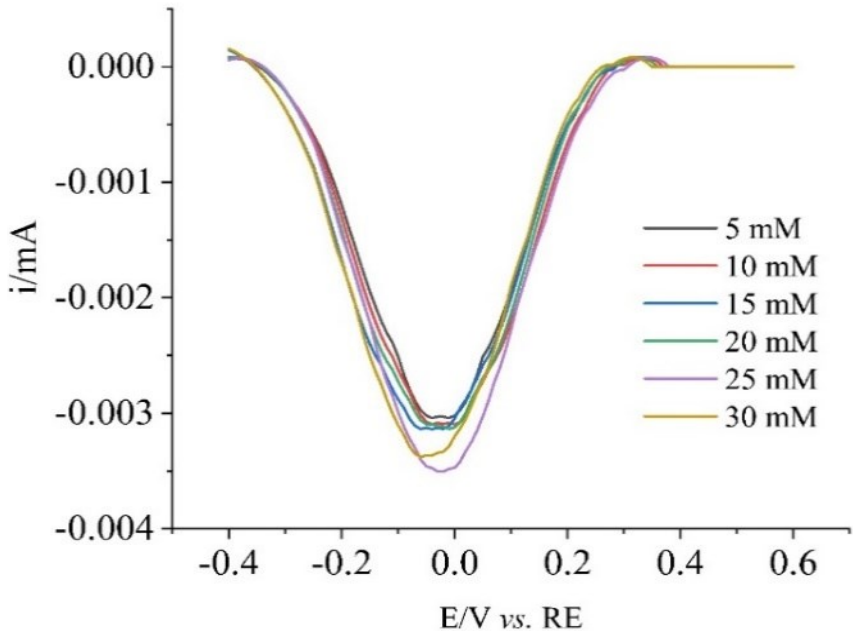
-0.015
i/mA
-0.2
0.0
0.2
0.4
0.6
E/V vs. RE
30 min
45 min
60 min
75 min

Fig. S4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-0.003
-0.004
i/mA
-0.4
-0.2
0.0
0.2
0.4
0.6
E/V vs. RE
5 mM
10 mM
15 mM
20 mM
25 mM
30 mM

Fig. S5

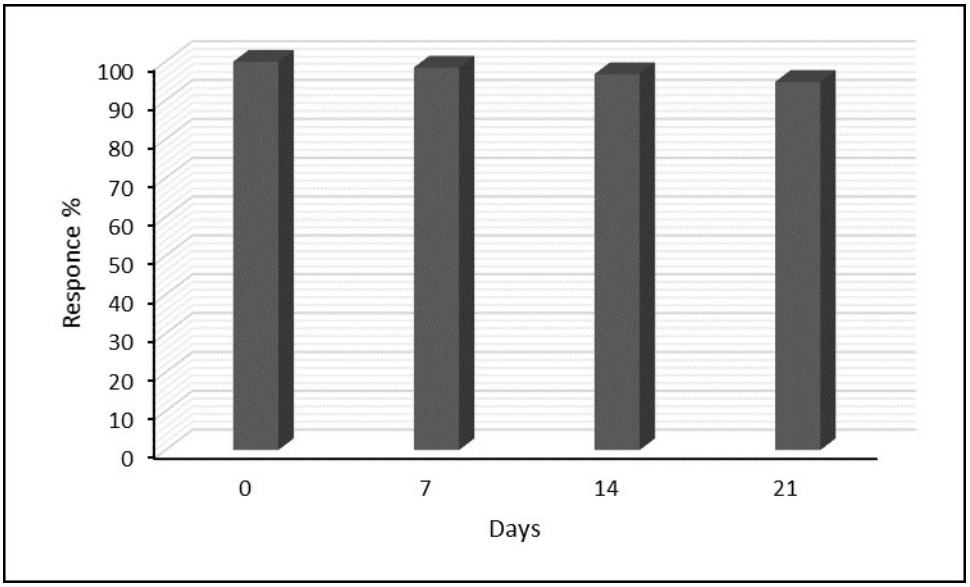

Fig. S6