

Supplementary Information

Electrodeposition of gold nanoparticles at pectin scaffold and its electrocatalytic application to the selective determination of dopamine

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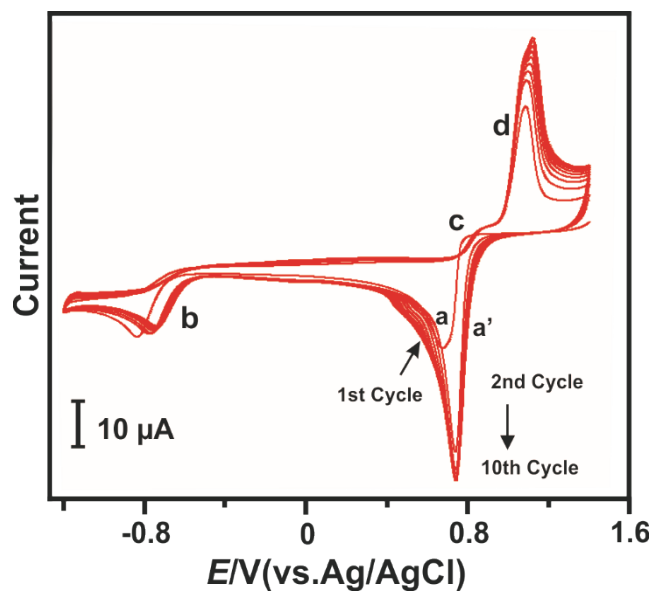


Fig. S1 The electrochemical deposition of Au nanoparticles (without pectin) at the GCE in 0.1 M KNO_3 containing 0.1 mM of HAuCl_4 for 10 cycles (control). Scan rate = 25 mV s^{-1} .

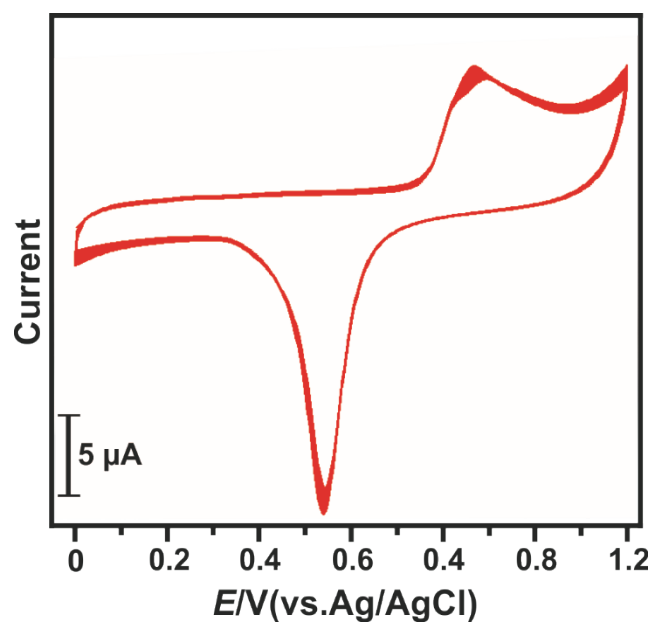


Fig. S2 Consecutive CVs obtained at GCE/pectin-Au NPs for 200 cycles in PBS (pH 7) at the scan rate 50 mVs^{-1} .

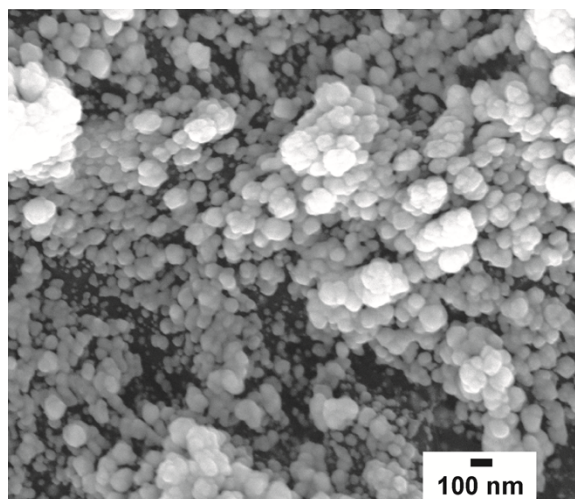


Fig. S3 The SEM image of Au NPs/GCE

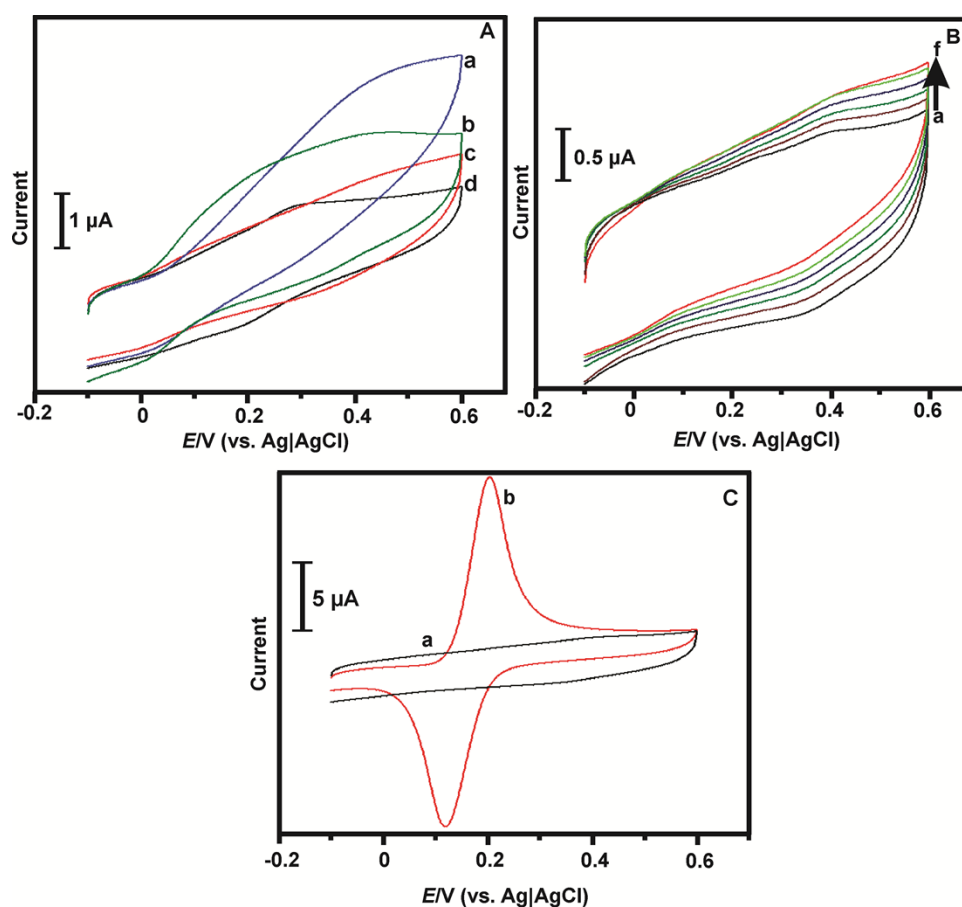


Fig S4: (A) CVs obtained at GCE/pectin-Au NPs in the absence (a) and presence of nafion 0.5% (b), 1% (c) 1.5% (d) in PBS (pH 7) at the scan rate 25 mVs^{-1} . (B) CVs obtained at pectin-Au NPs/Nf film modified GCE in the absence (a) and presence of 1 to 4 mM ascorbic acid (curves b

to e) in PBS (pH 7) at the scan rate 25 mVs⁻¹. (C) CVs obtained at the pectin-Au NPs/Nf film modified GCE in the presence of 2 mM AA (a) and 0.5 mM DA (b).

Table S1 The signal ratio to the blank signal for the each addition of AA at GCE/pectin-Au NPs/Nf

[Ascorbic acid]/mM	Signal ratio to blank signal/%
0	-
1	1.9
2	2.3
3	3.3
4	4.1