

A dopamine electrochemical sensor based on gold nanoparticles/over-oxidized polypyrrole nanotube composite arrays

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Fig. 1S. SWV curves of the Au NPs/OPPy NT arrays electrode to the addition of various concentrations of DA in the tap water (TW).

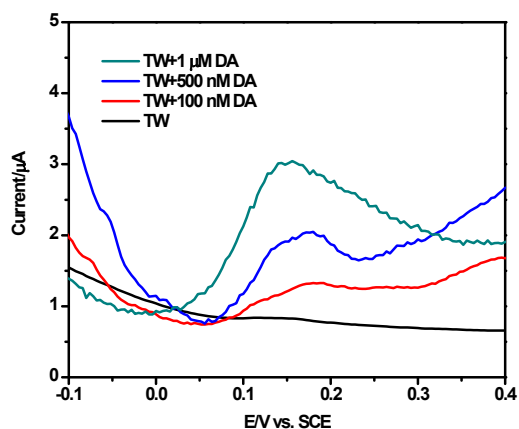


Table 1S. Comparison of different electrochemical sensors for the determination of DA.

Modified electrodes	Detection range(μ M)	Ref
cyclodextrin/poly(N-acetylaniline)/CNT	4–200	1
DNA-OPPy	0.3–10	2
5-hydroxytryptophan/GCE	0.5–35	3
Pyrolytic graphite electrode	1–20	4
Acetylcholine/GCE	0.7–5.0	5
Au NPs/OPPy NT arrays	0.025–25	This work

References:

1. A. Abbaspour, A. Noori, *Biosens. Bioelectron.* 2011, 26, 4674.
2. X. Jiang, X. Lin, *Anal. Chim. Acta*, 2005, 537, 145.
3. Y. Li, X. Huang, Y. Chen, L. Wang, X. Lin, *Microchim. Acta*, 2009, 164, 107.
4. R.P. da Silva, A.W.O. Lima, S.H.P. Serrano, *Anal. Chim. Acta* 2008, 612, 89.
5. G. Jin, X. Lin, J. Gong, *J. Electroanal. Chem.* 2004, 569, 135.