

## Supporting information

Johari-Ahar M., et al., *BiolImpacts*, 2018, 8(4), 263-270

doi: [10.15171/bi.2018.29](https://doi.org/10.15171/bi.2018.29)

<http://bi.tbzmed.ac.ir/>

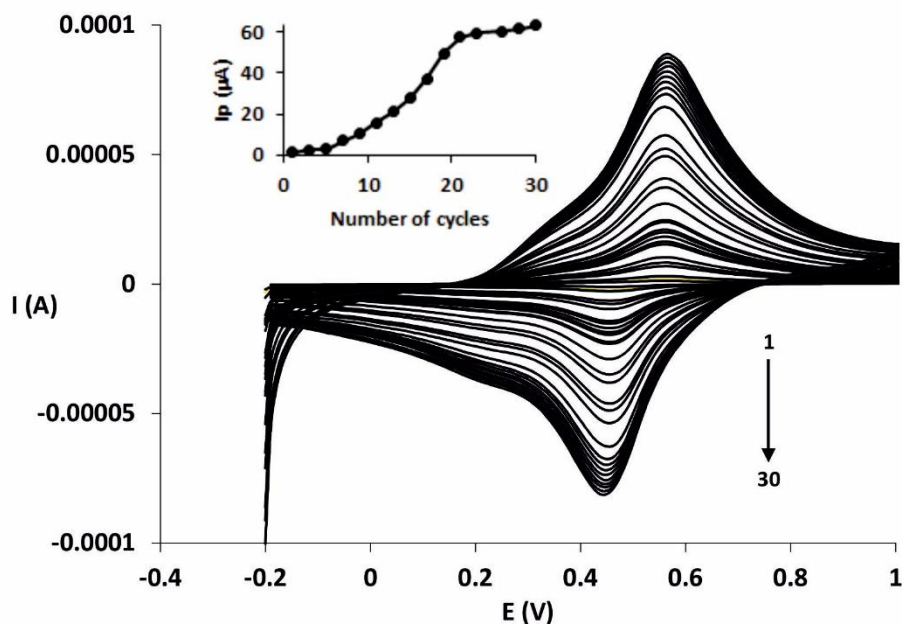
### Nafion-coated cadmium pentacyanonitrosylferrate-modified glassy carbon electrode for detection of dopamine in biological samples

Mohammad Johari-Ahar<sup>1,2</sup>, Jaleh Barar<sup>1,2\*</sup>, Pari Karami<sup>1,2</sup>, Davoud Asgari<sup>1,2</sup>, Soodabeh Davaran<sup>1,2</sup>, Mohammad-Reza Rashidi<sup>1,2\*</sup>

<sup>1</sup>Research Center for Pharmaceutical Nanotechnology, Biomedicine Institute, Tabriz University of Medical Sciences, Tabriz, Iran

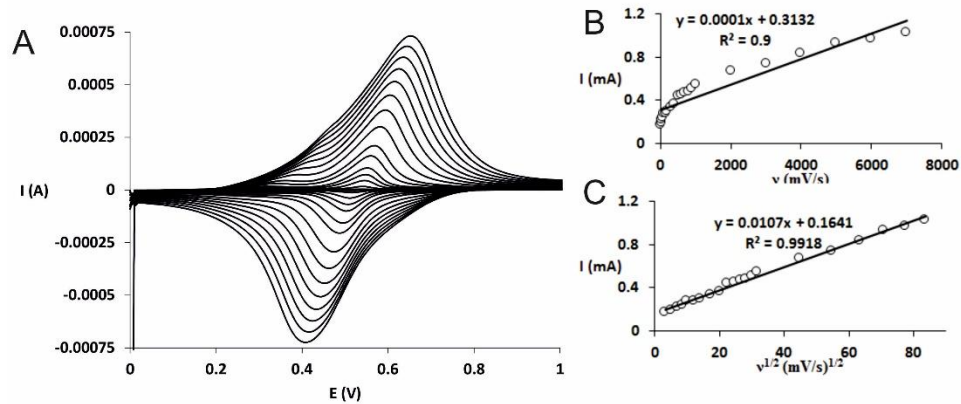
<sup>2</sup>Faculty of Chemistry, University of Tabriz, Tabriz, Iran

<sup>3</sup>Faculty of Pharmacy, Tabriz University of Medical Sciences, Tabriz, Iran

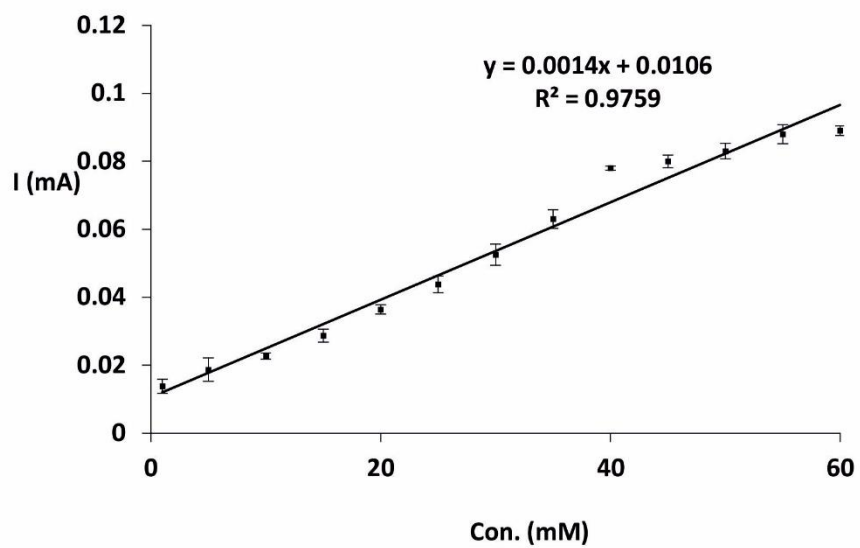


**Fig. S1.** Successive cyclic voltammetric scans (1–30 from inner to outer curve) recorded during electrodeposition of CdPCNF on the GC electrode surface at pH 3. Potential scan rate: 0.1 V/s.

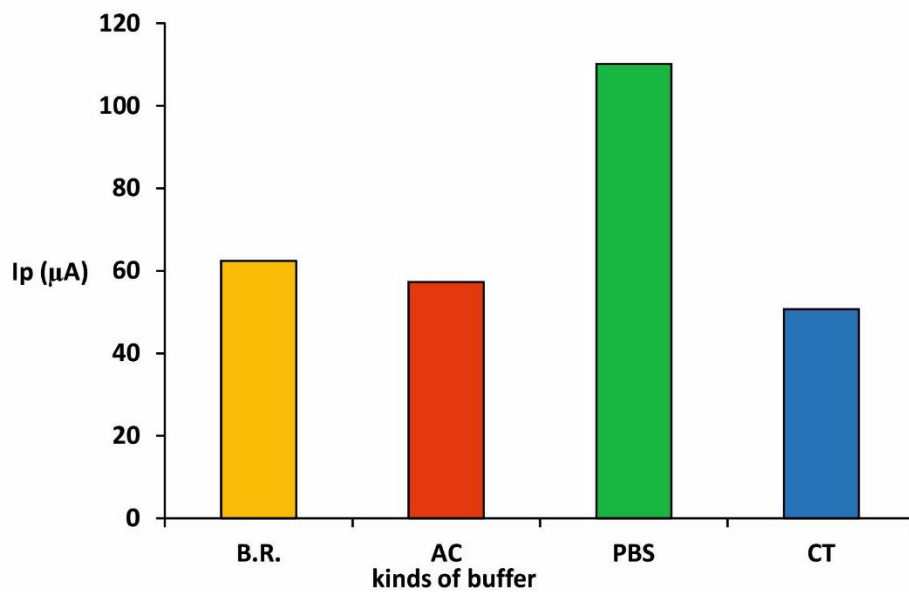
Inset: Anodic peak current reached a plateau after 21 potential cycles of CV.



**Fig. S2.** (A) Cyclic voltammograms of 5.0 mM DA for Nafion|CdPCNF|GC electrode at different potential scan rates ranging from 10 to 7000 mV/s; (B) and (C) represent the variation of peak currents versus scan rate ( $v$ ) and (square root of scan rates )  $v^{1/2}$ , respectively.



**Fig. S3.** The calibration plot of DA determination using CV method



**Fig. S4.** Responses of Nafion|CdPCNF|GC electrode for the determination of DA are different in the various supporting electrolytes (buffers). Maximum response was recorded in PBS at pH 7.4.