

## Supplementary material

# Inkjet-Printed Carbon Nanotube Electrodes Modified with Dimercaptosuccinic Acid-Capped Fe<sub>3</sub>O<sub>4</sub> Nanoparticles on Reduced Graphene Oxide Nanosheets for Single-Drop Determination of Trifluoperazine

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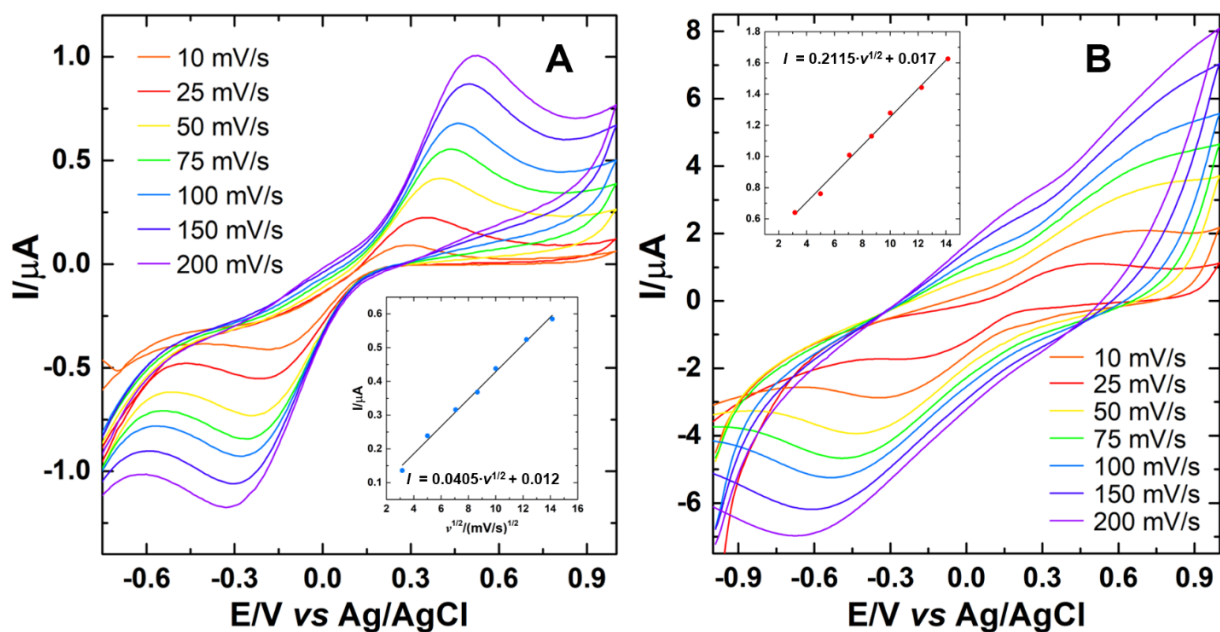
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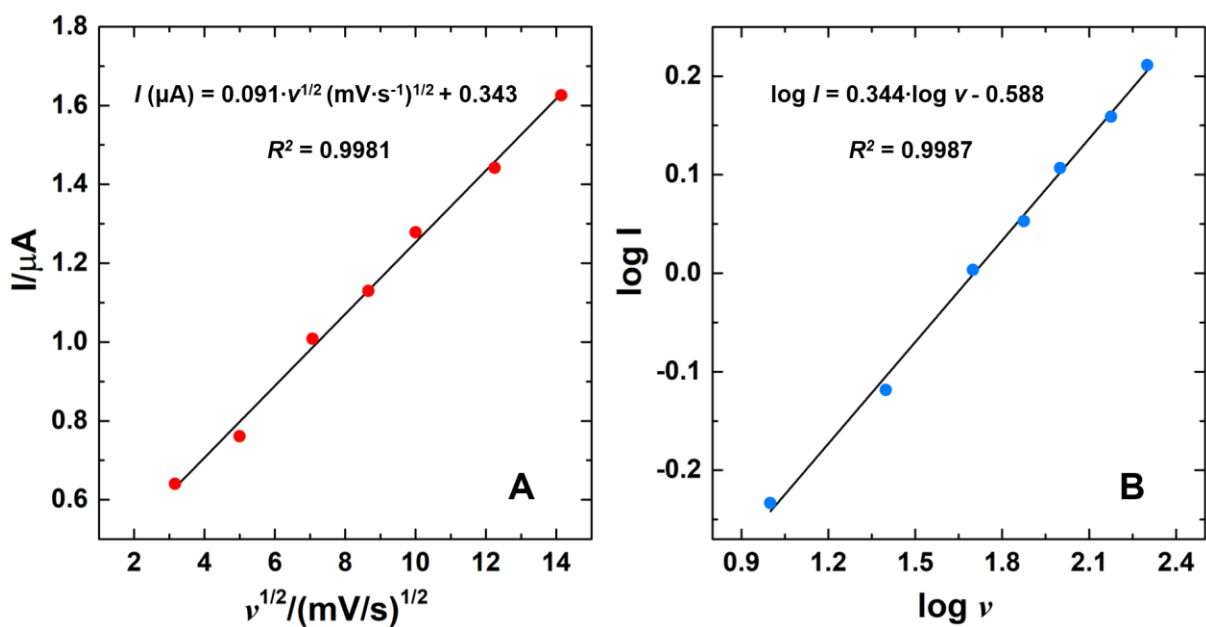
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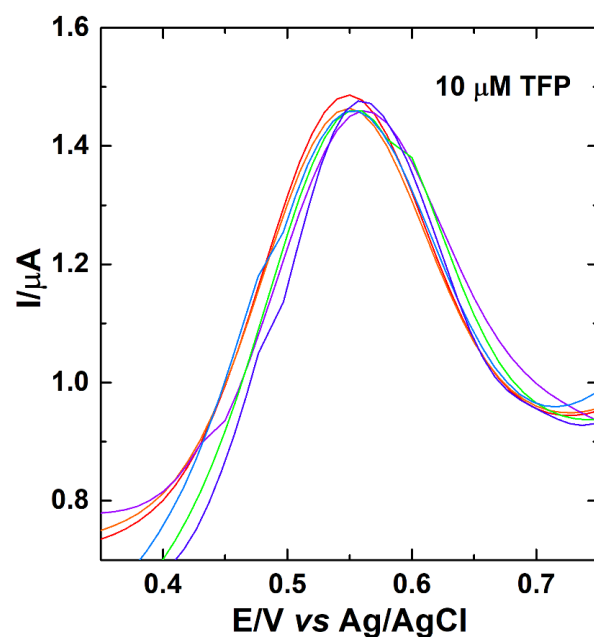
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**Figure S1.** Cyclic voltammograms of  $K_3[Fe(CN)_6]$  (1 mM) at (A) bare CNT electrode; (B) DMSA/ $Fe_3O_4$ /RGO-modified CNT electrode at various scan rates. The supporting electrolyte was 0.1 M KCl.



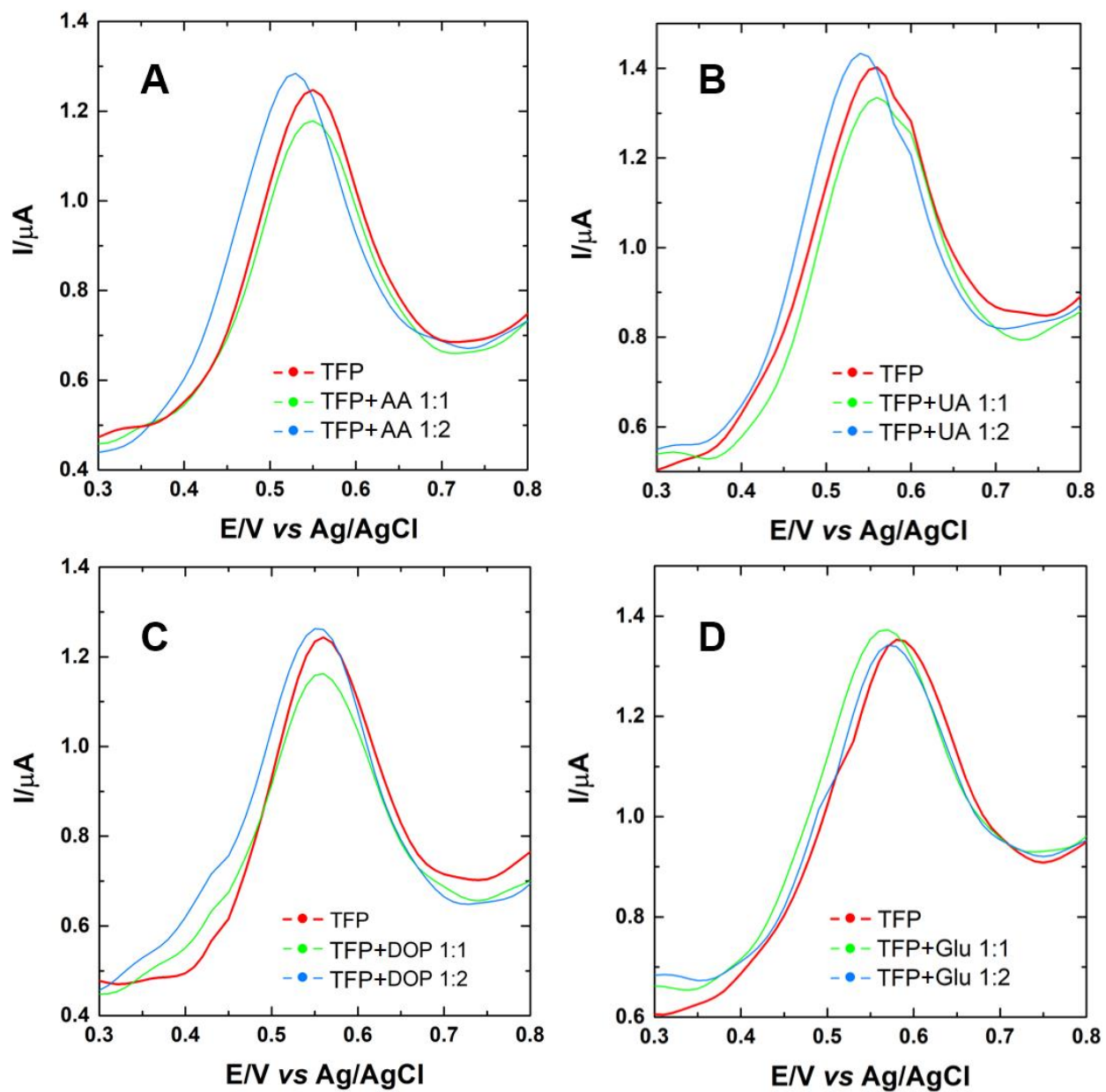
**Figure S2.** Dependence of the: (A) peak currents vs. square root of the scan rate, (B) logarithm of peak currents vs. logarithm of scan rate.



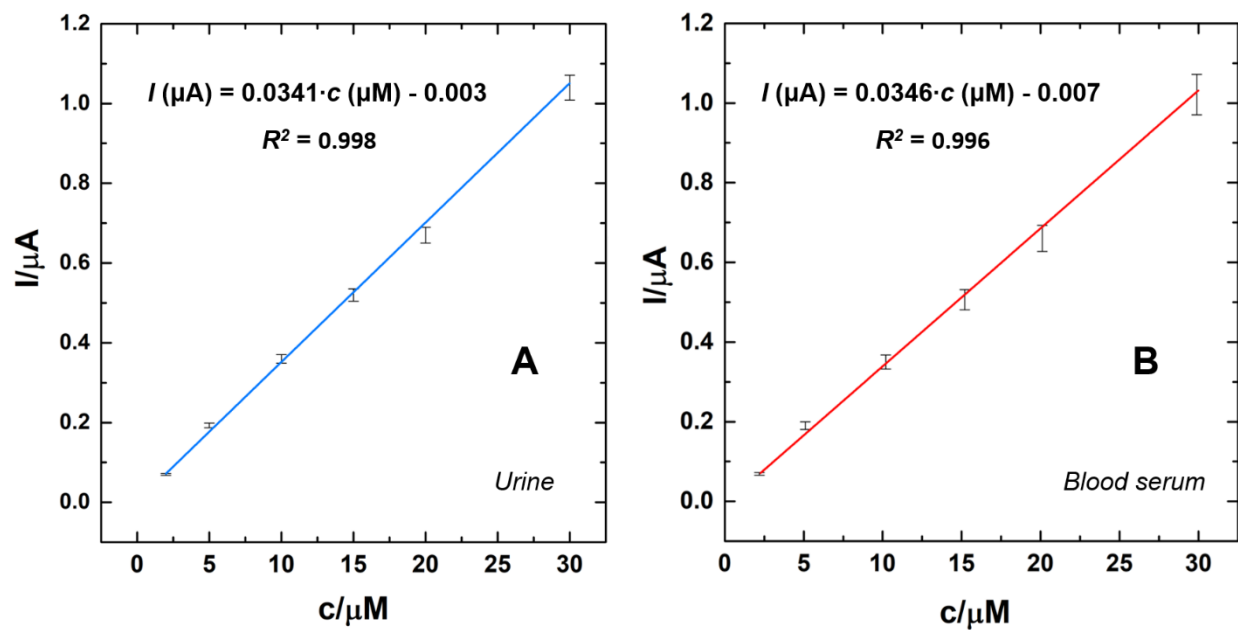
**Figure S3.** The electrochemical response of TFP ( $10 \mu\text{M}$ ) in six consecutive measurements under the same SWV conditions.

**Table S1.** Numerical results of 6 consecutive measurements of  $10 \mu\text{M}$  of TFP.

#	Peak height ( $\mu\text{A}$ )	
1	0.756159	<b>Mean:</b> $0.7625 \mu\text{A}$
2	0.757545	
3	0.747945	<b>SD:</b> 0.01849
4	0.791336	
5	0.778345	<b>RSD:</b> 2.42%
6	0.743783	



**Figure S4.** Electrochemical response of TFP (10  $\mu\text{M}$ ) at DMSA/Fe<sub>3</sub>O<sub>4</sub>/RGO/CNT electrode in the presence of interfering compounds: (A) ascorbic acid, (B) uric acid, (C) dopamine and (D) glucose (1:1 and 1:2) under optimized experimental conditions.



**Figure S5.** Calibration plots used for real sample analysis for: (A) urine and (B) blood serum.