

**A NANODIAMOND BASED ELECTROCHEMICAL SENSOR FOR THE  
DETERMINATION OF PARACETAMOL IN PHARMACEUTICAL SAMPLES**

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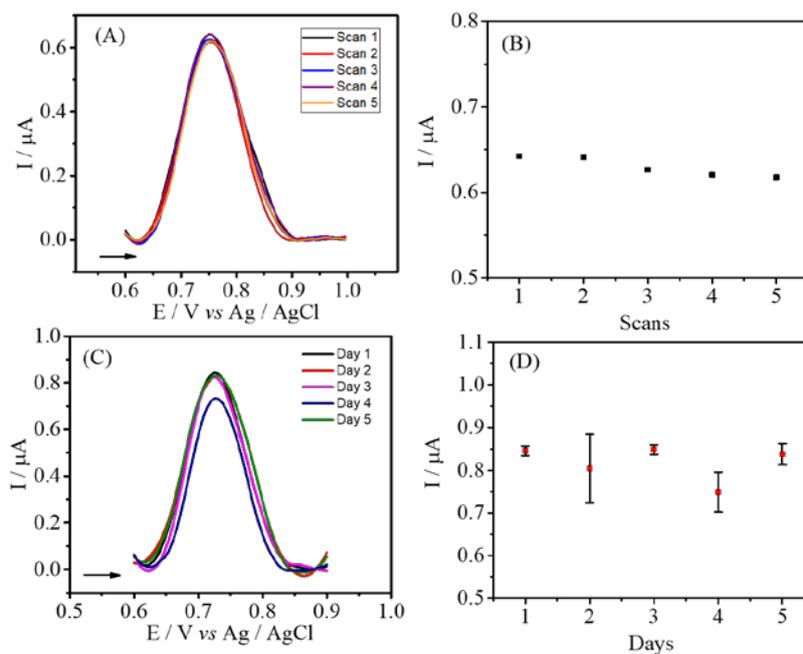
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**Figure S1.** Repeatability and reproducibility of ND/GCE. (A) SWV records were obtained for five measurements in a row using 5.2 μmol L<sup>-1</sup> of PAR in 0.1 mol L<sup>-1</sup> H<sub>2</sub>SO<sub>4</sub> solution; (B) Current *vs* Scans in the same system; (C) SWV records were obtained for five different modifications using 5.2 μmol L<sup>-1</sup> of PAR in 0.1 mol L<sup>-1</sup> H<sub>2</sub>SO<sub>4</sub> solution; (D); Current *vs* days in the different systems;

**Table S1.** Calculated values of electroactive area and heterogeneous electron transfer rate constant ( $k_0$ ) for GCE and ND/GCE

Electrode	Electroactive area (cm <sup>2</sup> )	K <sup>0</sup> constant (cm s <sup>-1</sup> )
GCE	0.038 ± 0.005	9.3 × 10 <sup>-4</sup>
ND/GCE	0.100 ± 0.007	4.2 × 10 <sup>-3</sup>

Table S2. Percentage of Interference from Potential Concomitant Species

Concomitant species	% of Interference
CYS	-2.92
NaCl	-10.47
KCl	-5.83
AA	5.06
DA	-6.97
GLU	1.28

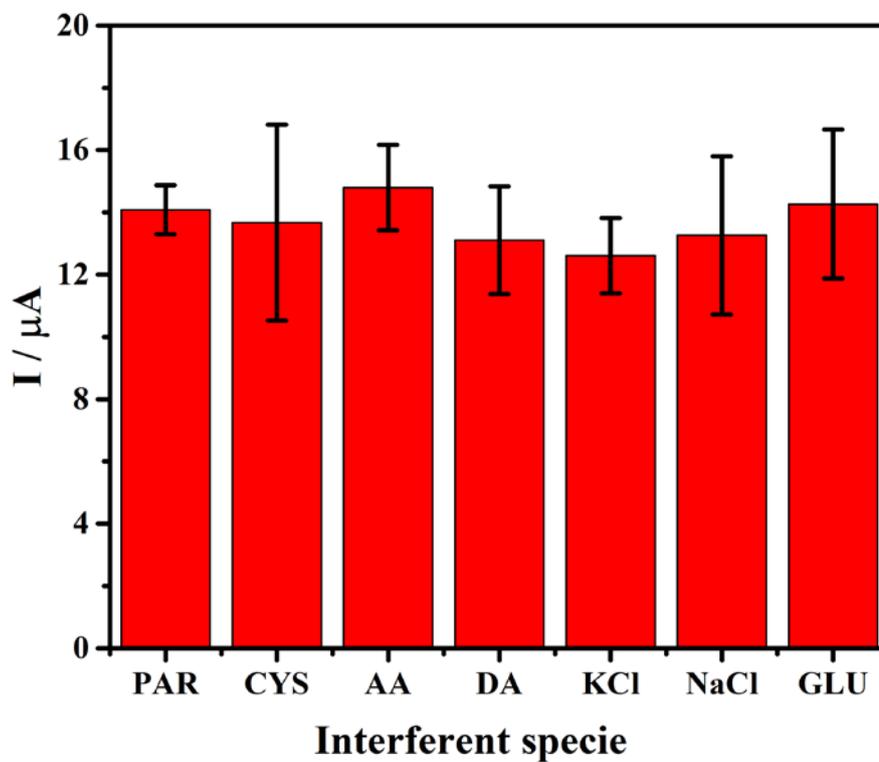


Figure S2. Results obtained (%) for interference study using different species for PAR determination. Supporting electrolyte: 0.1 mol L<sup>-1</sup> H<sub>2</sub>SO<sub>4</sub>

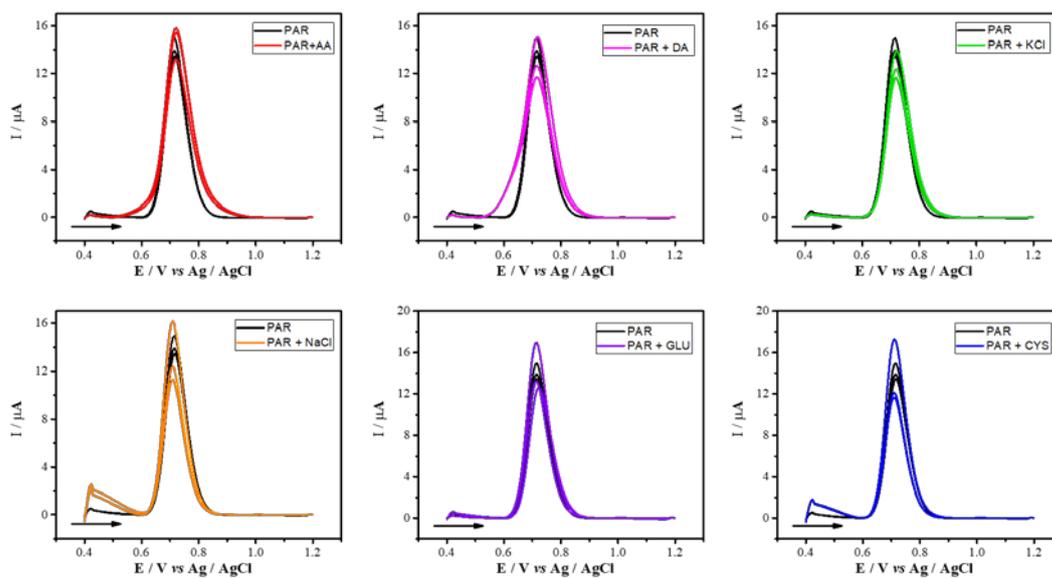


Figure S3. SWV records were obtained for different concomitant species using equal concentrations of the interferents: Cysteine (CYS), Sodium Chloride (NaCl), Potassium Chloride (KCl), Ascorbic Acid (AA), Dopamine (DA) and Glucose (GLU) and PAR in  $0.1 \text{ mol L}^{-1} \text{ H}_2\text{SO}_4$  solution. Analysis condition:  $f = 80 \text{ Hz}$ ,  $a = 40 \text{ mV}$  and  $\Delta E_s = 6 \text{ mV}$