

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

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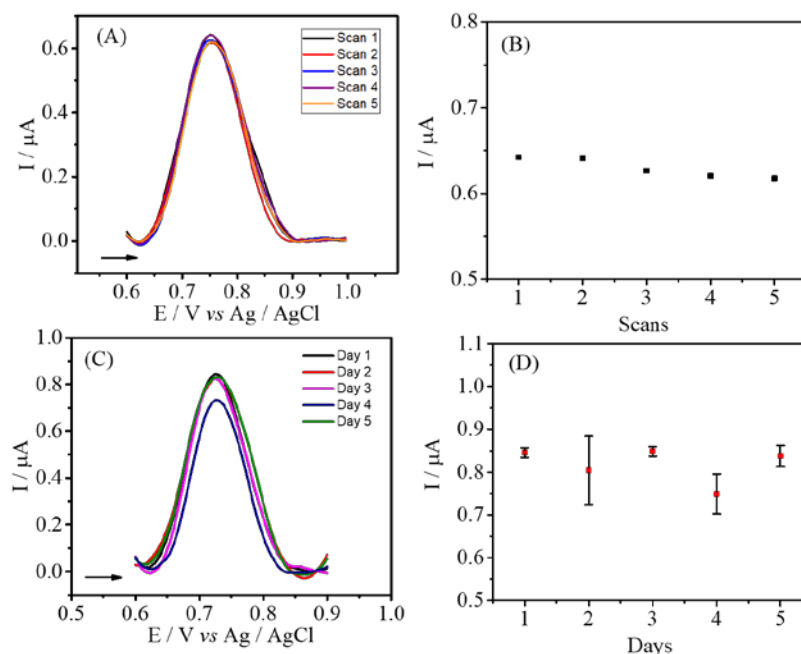


Figure S1. Repeatability and reproducibility of ND/GCE. (A) SWV records were obtained for five measurements in a row using $5.2 \mu\text{mol L}^{-1}$ of PAR in 0.1 mol L^{-1} H_2SO_4 solution; (B) Current *vs* Scans in the same system; (C) SWV records were obtained for five different modifications using $5.2 \mu\text{mol L}^{-1}$ of PAR in 0.1 mol L^{-1} H_2SO_4 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^2)	K^0 constant (cm s^{-1})
GCE	0.038 ± 0.005	9.3×10^{-4}
ND/GCE	0.100 ± 0.007	4.2×10^{-3}

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

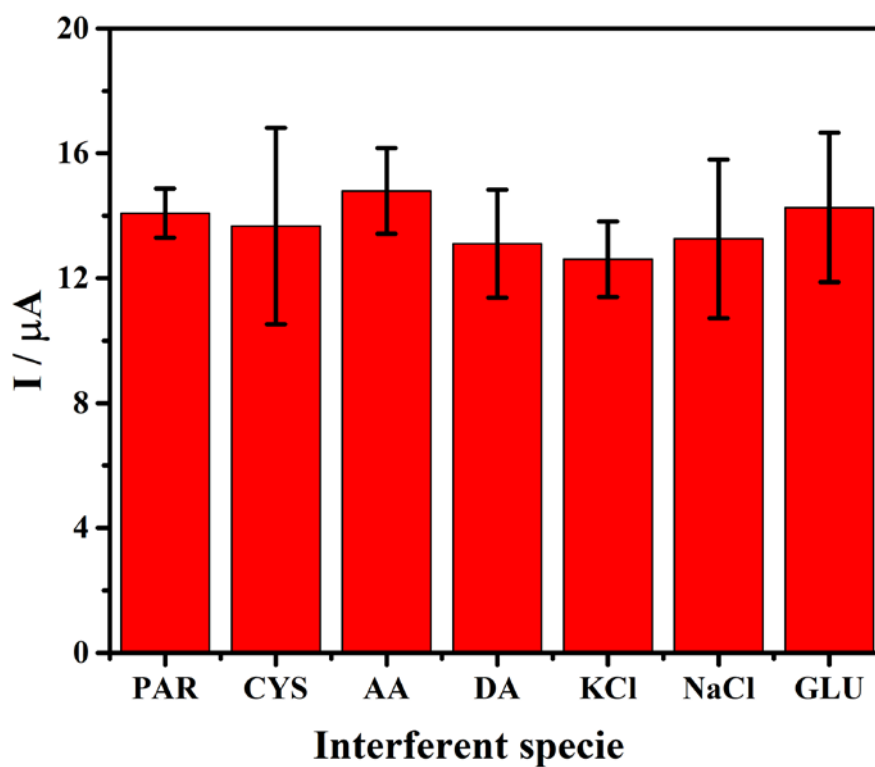


Figure S2. Results obtained (%) for interference study using different species for PAR determination. Supporting electrolyte: 0.1 mol L⁻¹ H₂SO₄

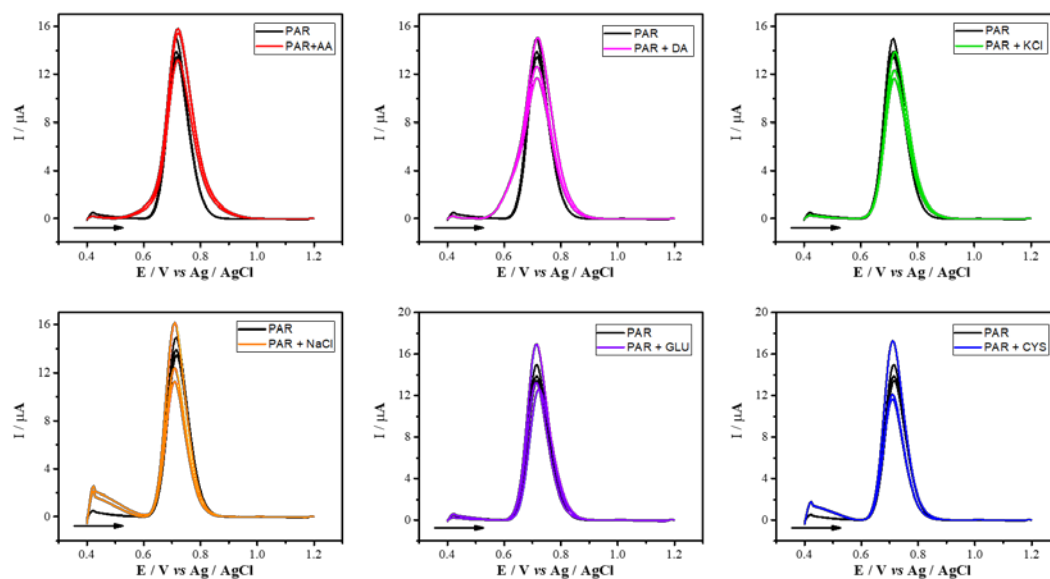


Figure S3. SWV records were obtained for different concomitant species using equal concentrations of the interferents: Cysteine (CYS), Sodium Chloride (NaCl), Potassium Chloride (KCl), Ascorbic Acid (AA), Dopamine (DA) and Glucose (GLU) and PAR in $0.1 \text{ mol L}^{-1} \text{ H}_2\text{SO}_4$ solution.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