

Supplementary Information

Additive Manufacturing towards the Fabrication of Greener Electrochemical Sensors for Antioxidants

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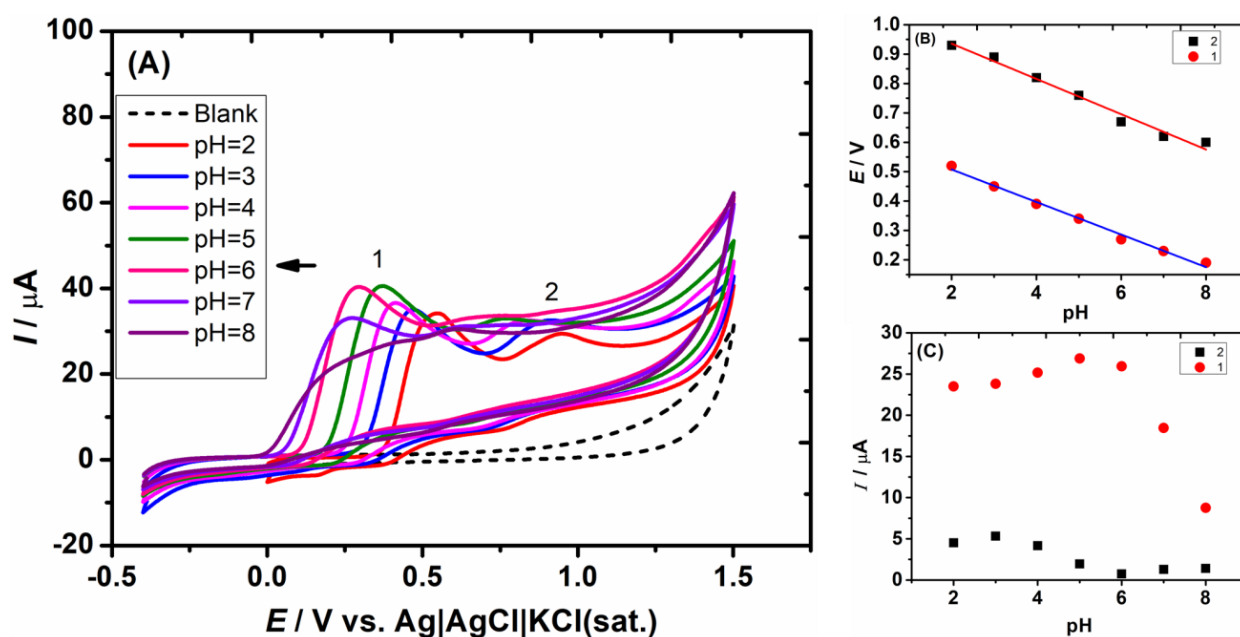


Figure S1. (A) Cyclic voltammetric recordings for 1 mmol L⁻¹ PY in 0.12 mol L⁻¹ BR buffer (pH range from 2.0 to 8.0). (B) pH influence at peak potential (E_p) and (C) pH influence at peak current (I_p).

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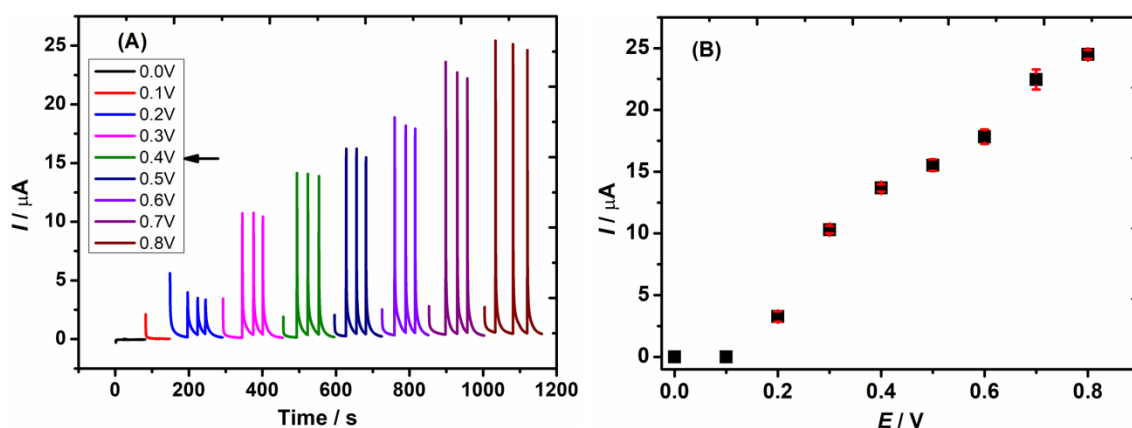


Figure S2. (A) BIA-AD recordings obtained from 3 successive injections of $100 \mu\text{mol L}^{-1}$ PY. (B) Hydrodynamic voltammogram obtained by plotting the peak current values (average of 3 injections) as function of the corresponding applied potential. Electrolyte: BR buffer (0.12 mol L^{-1} , pH 6.0). Conditions: injected volume: $100 \mu\text{L}$ and dispensing rate: $200 \mu\text{L s}^{-1}$.

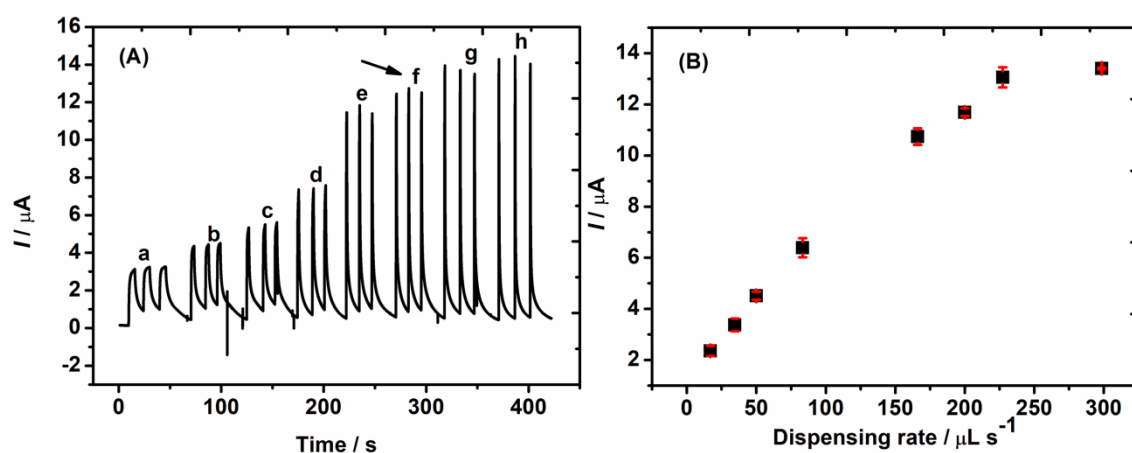


Figure S3. BIA-AD recordings obtained from 3 successive injections of $100 \mu\text{mol L}^{-1}$ PY as function of dispensing rate (a) 16.9, (b) 34.5, (c) 50, (d) 83.3, (e) 166, (f) 200, (g) 227.3 and (h) $300 \mu\text{L s}^{-1}$. (B) Influence of the dispensing rate on peak current (I_p) of the PY. Conditions: injected volume: $100 \mu\text{L}$ and working potential: 0.4 V.

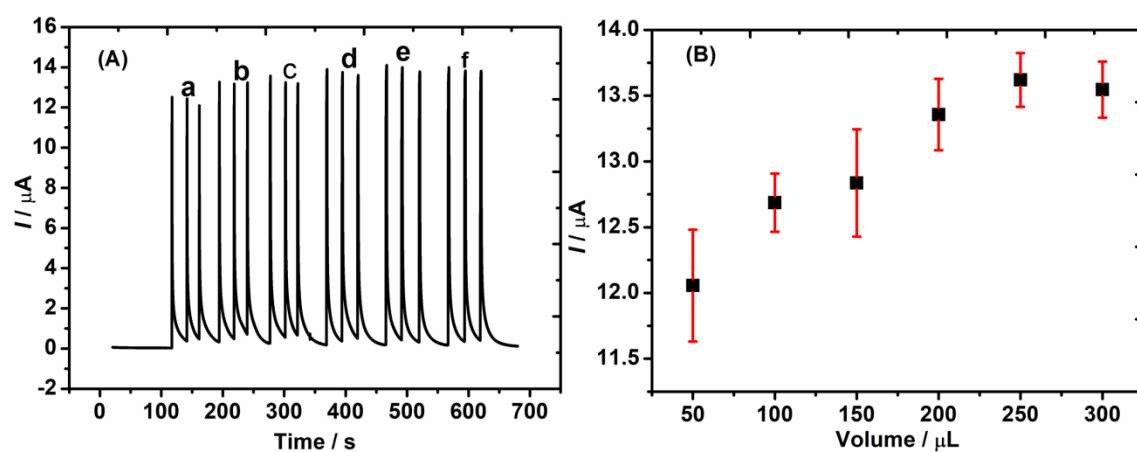


Figure S4. BIA-AD recordings obtained from 3 successive injections of $100 \mu\text{mol L}^{-1}$ PY as function of injected volume (a) 50, (b) 100, (c) 150, (d) 200, (e) 250 and 300 μL . (B) Influence of the injected volume on the peak current (I_p) of the PY. Conditions: dispensing rate: $200 \mu\text{L s}^{-1}$ and working potential: 0.4 V.