Commercial screen-printed electrodes based on carbon nanomaterials for a fast and cost-effective voltammetric determination of paracetamol, ibuprofen and caffeine in water samples

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Supporting Information

This supplementary section provides further description of the optimization of condition media and the potential range related to the simultaneous determination of paracetamol (PA), ibuprofen (IB) and caffeine (CF) by DPV using the conventional SPCE as a carbon based SPE model.

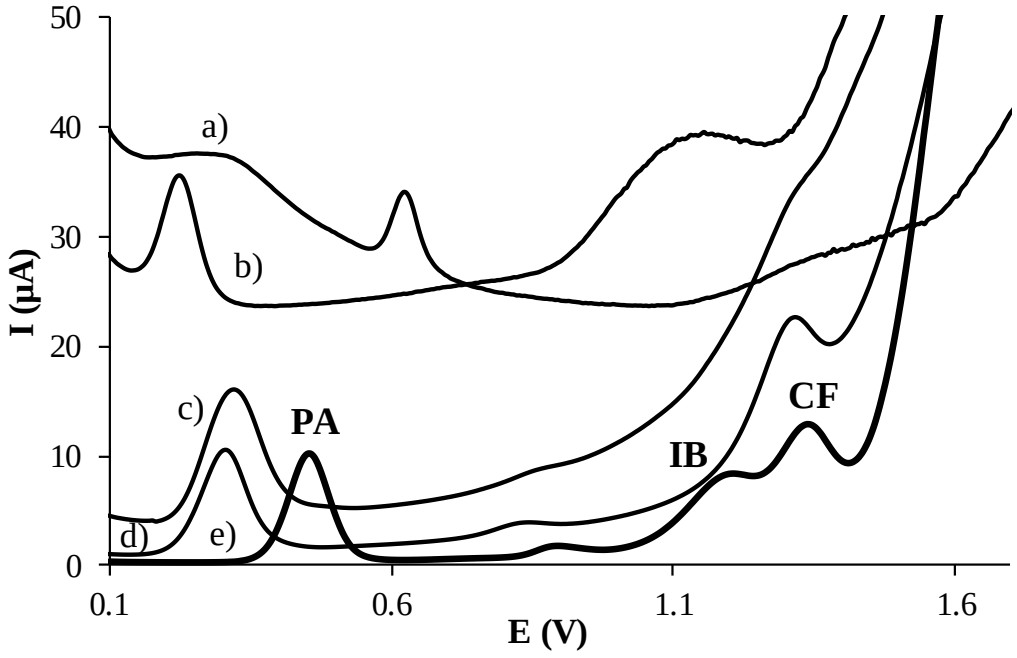

Fig. S1. DPV measurements of 20 mg L^{-1} PA, IB and CF solutions performed in the presence of different buffers: a) 0.05 mol L^{-1} sulphuric acid (pH 1); b) 0.1 mol L^{-1} ammonia buffer (pH 8.6); c) 0.1 mol L^{-1} maleate buffer (pH 6.8); d) 0.1 mol L^{-1} phosphate buffer (pH 7.4); and e) 0.1 mol L^{-1} acetate buffer (pH 4.5).

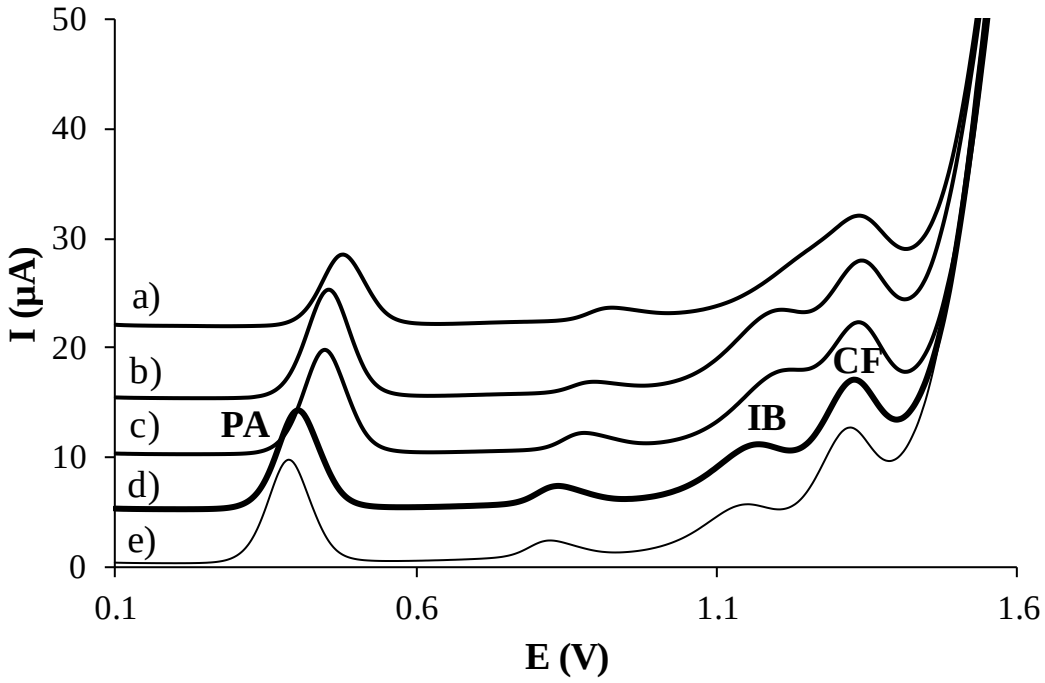

Fig. S2. DPV measurements of 20 mg L^{-1} PA, IB and CF solutions performed in 0.1 mol L^{-1} acetate buffer at different pHs: a) pH 4.0; b) pH 4.5; c) pH 5.0; d) pH 5.5; and e) pH 6.0.