

A sensitive enzyme-free lactic acid sensor based on NiO nanoparticle for practical applications

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Supporting information

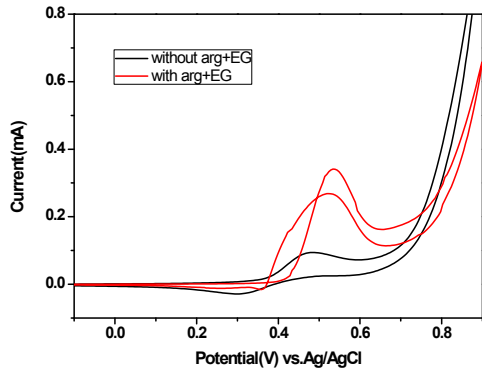


Figure .S1. CV runs (black signal) response when NiO nanostructures synthesized without the addition of arginine and ethylene glycol and red signal shows the response with the addition of arginine and ethylene glycol in 0.1 M NaOH and 0.1 mM lactic acid

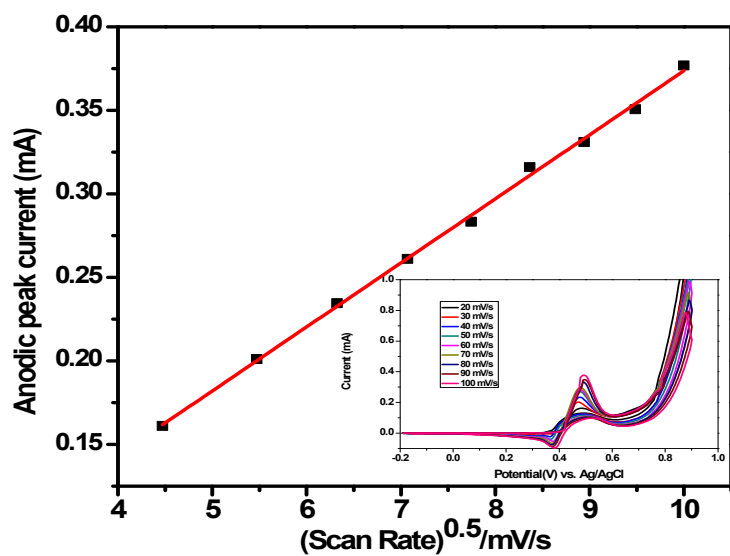


Figure. S2. A plot of anodic peak current of various CV runs against the square root of the different scan rates. Inset: CV response of the NiO Nps/GCE electrode in 0.1 mM of lactic acid at different scan rates.

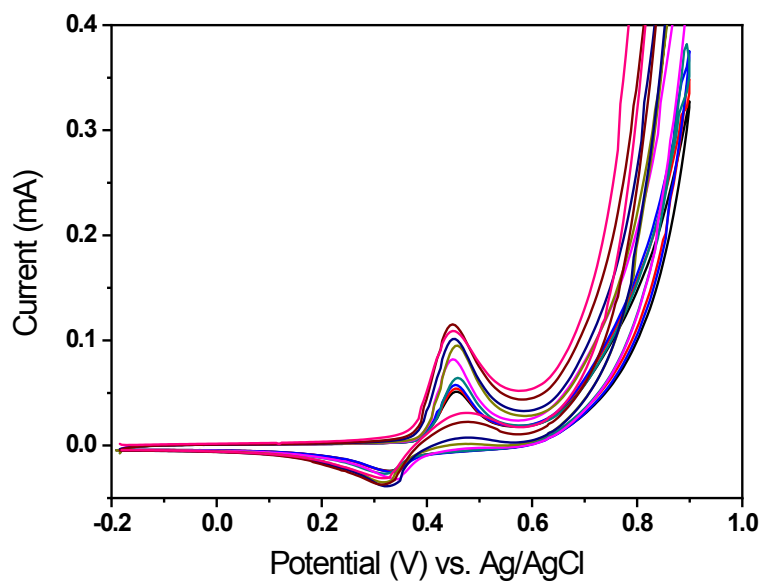
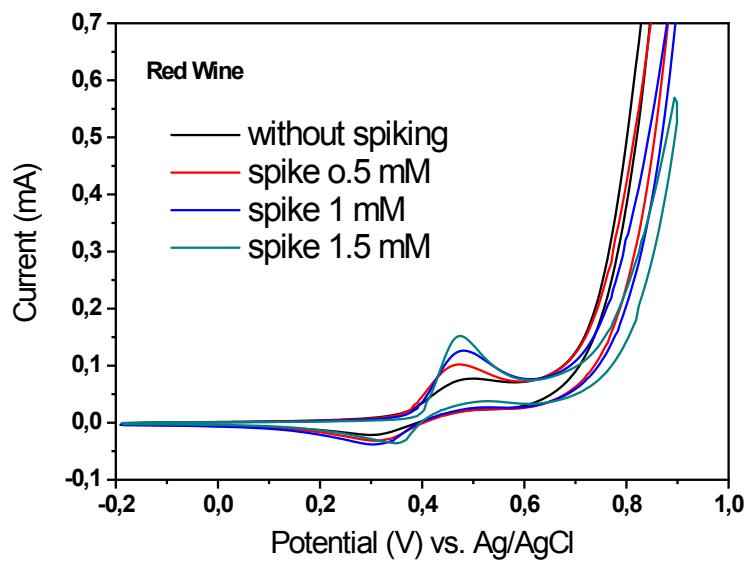
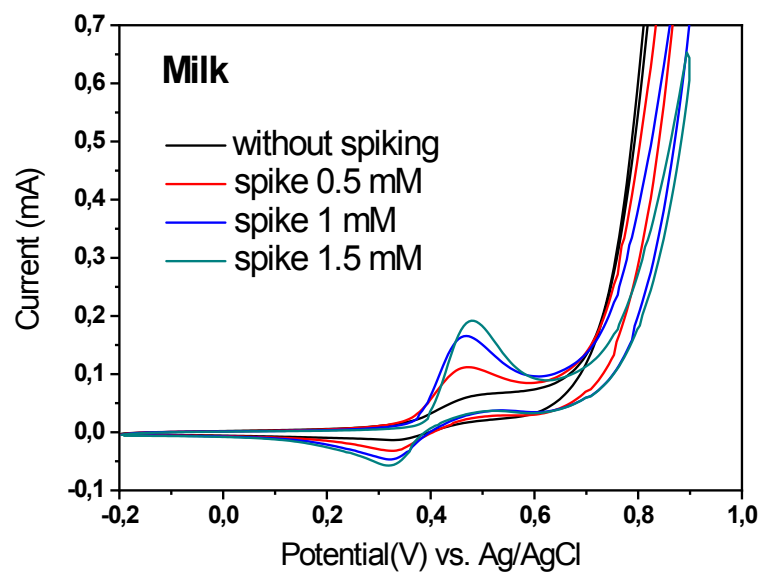


Figure. S3. Cyclic voltammetry runs at different concentrations of Lactic acid: 0.005, 0.01, 0.05, 0.1, 1, 2, 3, 4, 5 mM in 0.1M NaOH



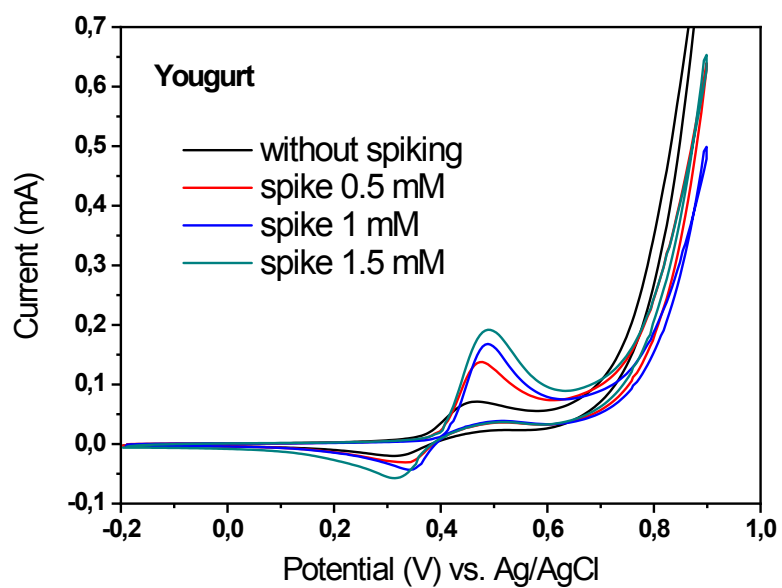


Figure. S4 CV runs in real samples (milk, red wine and yogurt) without and with Lactic acid spiking. In all the samples, the black line shows the response of the real sample without spiking, the red line shows the response after 0.5 mM of spiking, the blue line with 1 mM and the green line with 1.5 mM of spiking.

