Title (10)	:	**Reduced Graphene Oxide Enhances the Performance of ZnOFe2O3 for Glucose Electrochemical Oxidation**
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Abstract	:	The need for accurate analytical glucose measurement techniques that are low-cost, highly sensitive, and user-friendly is crucial for glucose monitoring in healthcare and optimizing industrial processes. A simple and low-cost glucose monitoring was designed by synthesizing Zinc Oxide (ZnO) with Iron Oxide (Fe2O3) through a hydrothermal method by loading the composite onto reduced Graphene Oxide. The ZnO nanoparticles had a flower-like shape, while Fe2O3 had a sphere-like shape. These nanoparticles were evenly distributed on the wrinkled sheet surface of rGO with an average size of particles of ± 14.88 nm as observed via Transmission Electron Microscopy (TEM) and Field Emission Scanning Electron Microscopy (FESEM). The X-ray Diffraction (XRD) analysis exhibits overlapping peaks of diffraction of Fe2O3 and rGO at 24°, resulting from the reduction of GO. Cyclic Voltammetric analysis (CV) was used to determine the prepared composite's electrochemical propertie s, which was then further manufactured as a sensing probe. CV analysis revealed that the modified electrode's current response was higher than the bare electrode (ZnO and Fe2O3) with and without glucose. The modified glucose sensor shows a sensitivity of 504.23 µA mM-1 cm-2 and a limit detection of glucose of 6.28 mM. Keywords: Electrochemical; reduced graphene oxide; metal oxide; glucose oxidation; ZnOFe2O3.