

Abstract

An impedimetric sensor was fabricated for the determination of lamivudine (LAM) and tenofovir disoproxil fumarate (TDF) using a modified glassy carbon electrode. The glassy carbon electrode was modified with nickel-cobalt sulfide decorated graphene quantum dots (Ni-CoS-GQDs). Characterization of the fabricated sensor was achieved by using UV-Vis, electrochemical impedance spectroscopy (EIS), cyclic voltammetry (CV) and differential pulse voltammetry (DPV). The LODs were 56.18 $\mu\text{g/ml}$, LAM and 56.13 $\mu\text{g/ml}$, TDF. The average recovery range was 98.85%.