

Supplementary Information:

A Chitosan Modified Nickel Oxide Platform for Biosensing Applications

Pratima R. Solanki^{a*}, Manoj Kumar Patel^b, Md. Azahar Ali^c, B. D. Malhotra^{d*}

^aSpecial Centre for Nanosciences, Jawaharlal Nehru University, New Delhi-110067, India

^bSchool of Biotechnology, Jawaharlal Nehru University, New Delhi-110067, India

^cDepartment of Electrical and Computer Engineering, Iowa State University, Ames, IA 50011, United States

^dDepartment of Biotechnology, Delhi Technical University, Shahbad Daulatpur, Main Bawana Road, Delhi-110042, India.

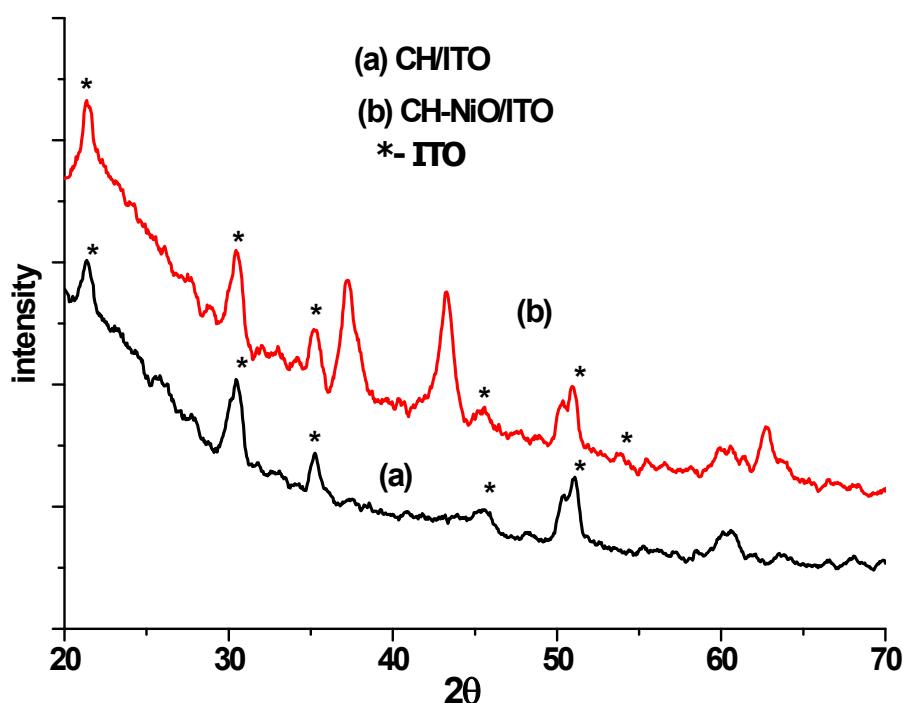


Figure S1: X-ray diffraction pattern of (a) CH/ITO and CH-NiO/ITO electrode

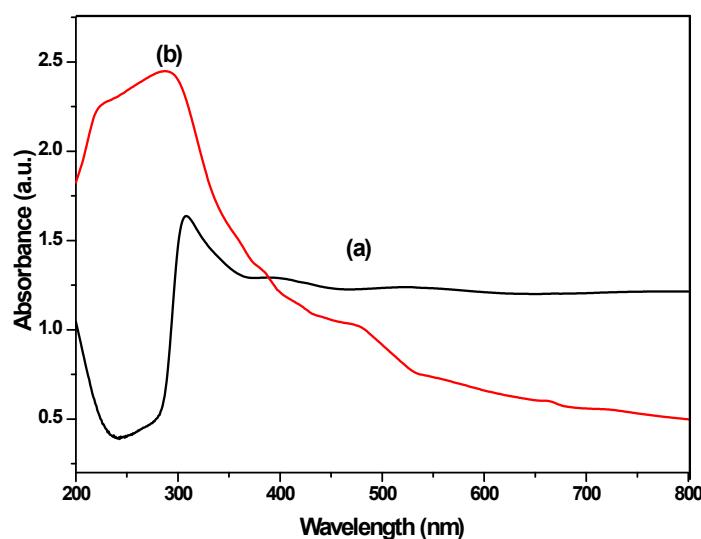


Figure S2: UV-visible absorption spectra of (a) CH-NiO/ITO film, (b) Ab-Vc/CH-NiO/ITO immunoelectrode.

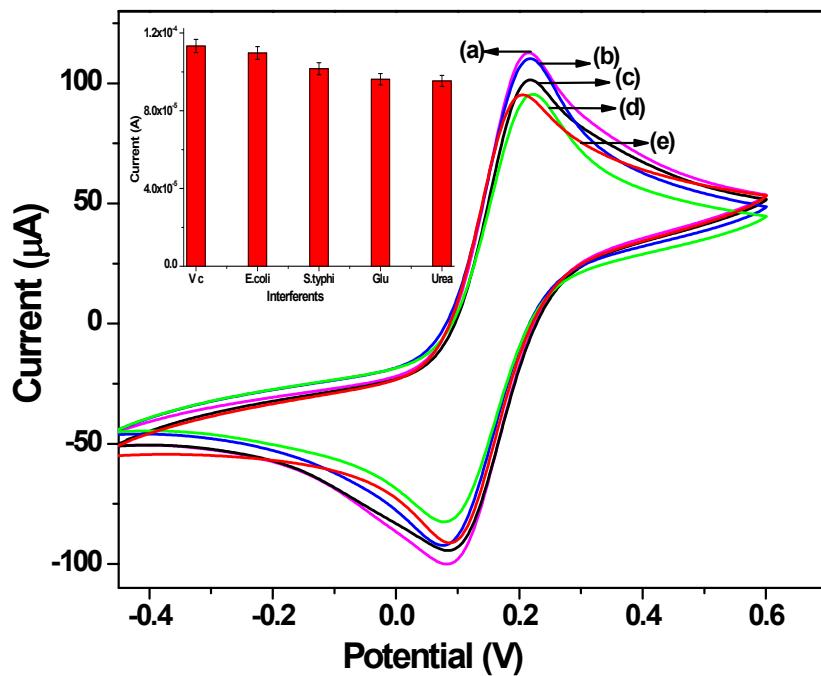


Figure S3. Interference studies of (a) Ab-Vc/Vc/BSA/Ab-Vc/CH-NiO/ITO immunoelectrode (100 ng mL^{-1}) in presence of (b) *Escherichia coli* (100 ng mL^{-1}), (c) *Salmonella typhi* (100 ng mL^{-1}), (d) glucose (Glu), (e) uric acid (UA); inset shows the histogram plot with all interferents.

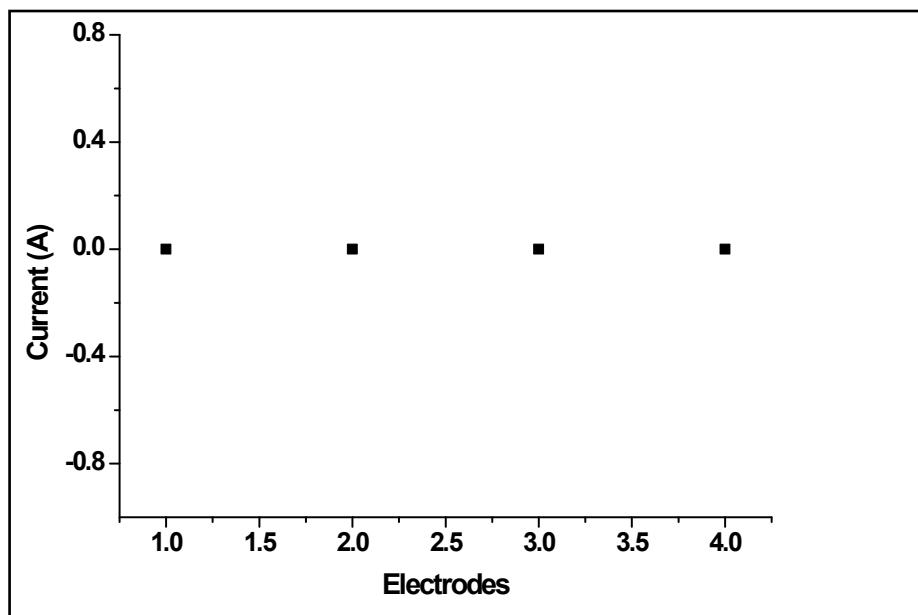


Figure S4. Reproducibility test for Ab-*Vc*/*Vc*/BSA/Ab-*Vc*/CH-NiO/ITO immunoelectrode at 100 ng mL⁻¹ of *Vc*.

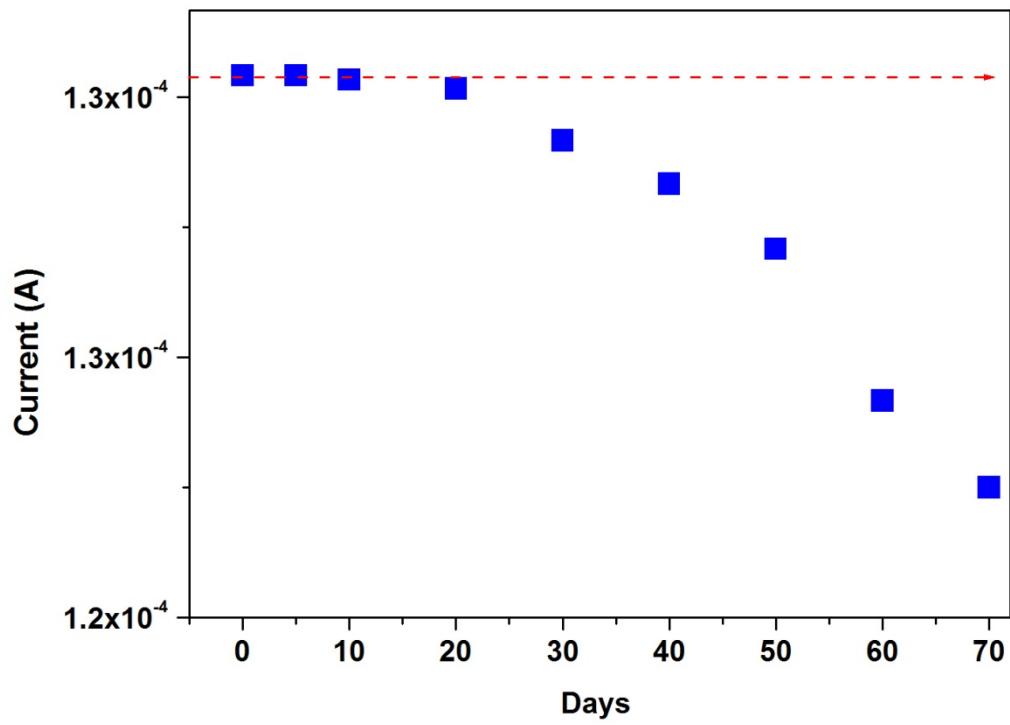


Figure S5. The stability curve of Ab-*Vc*/*Vc*/BSA/Ab-*Vc*/CH-NiO/ITO immunoelectrode (100 ng mL⁻¹) for 0-70 days.