

Label free electrochemical detection of stress hormone-cortisol by chemiresistor sulphur doped graphitic carbon nitride on carbon fiber paper electrode

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Supplementary File

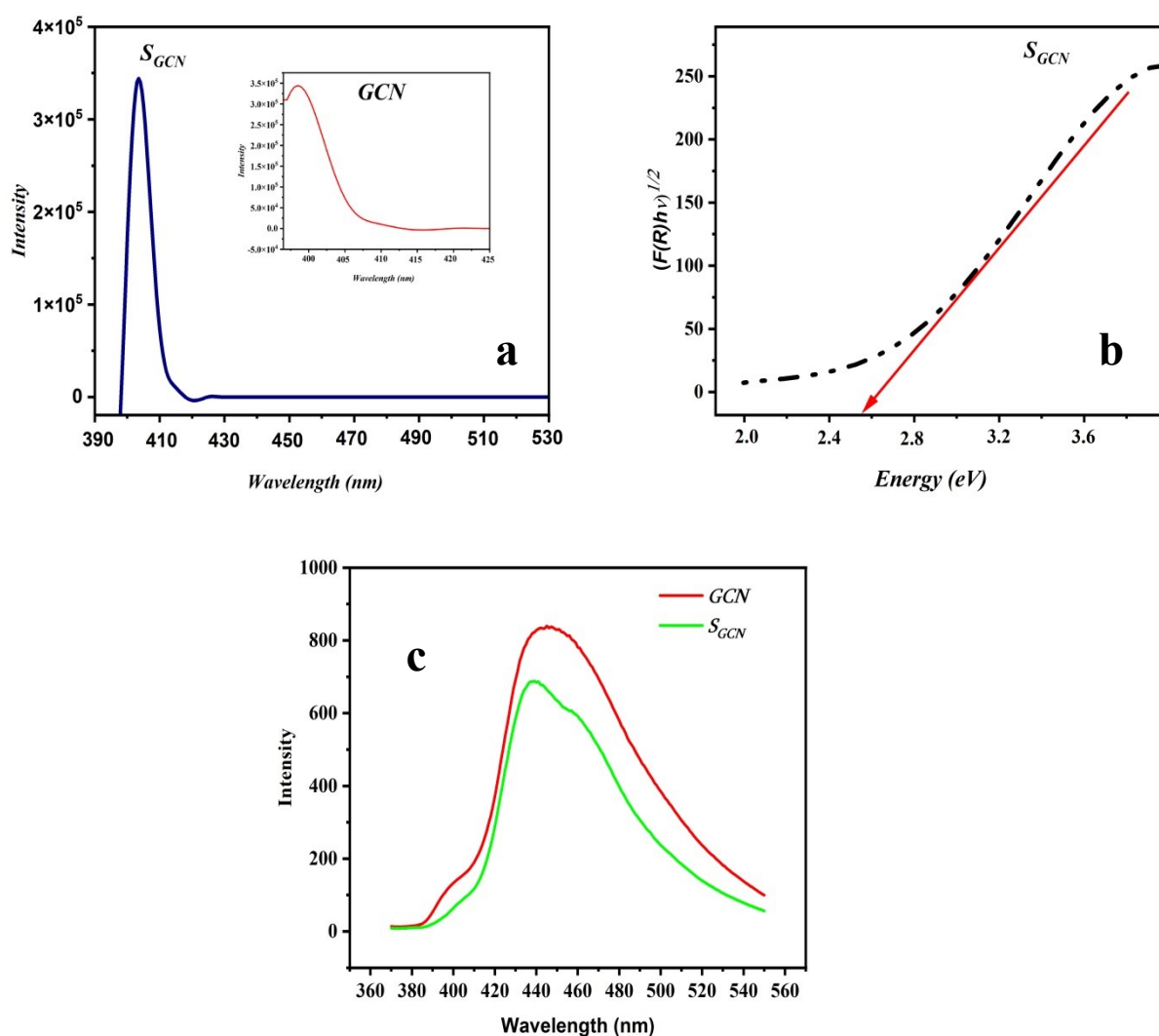
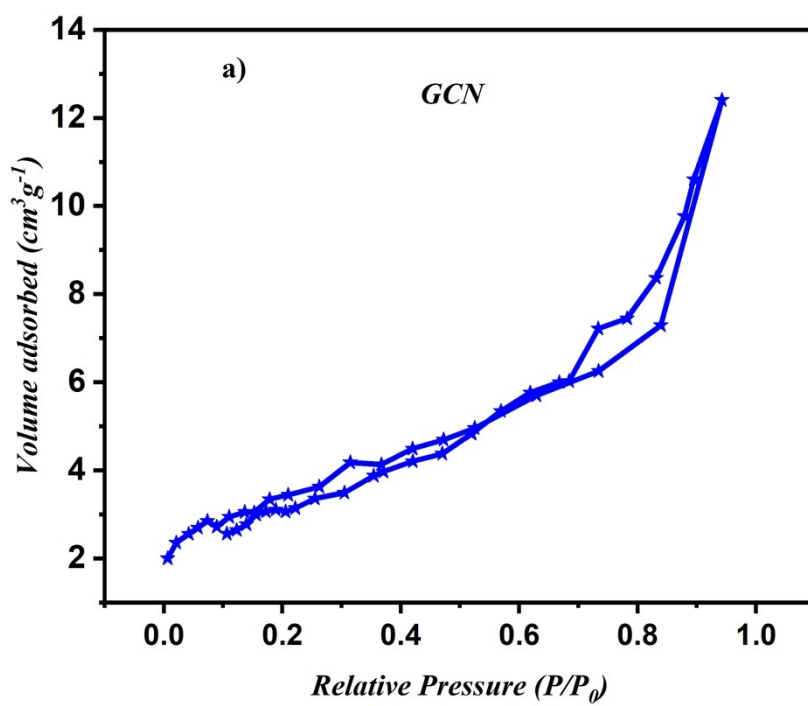


Fig.S1 a) UV-vis diffuse absorbance spectra and related Tauc plot spectra b) and c) photoluminescence (PL) spectra of bulk S_{GCN} and GCN.



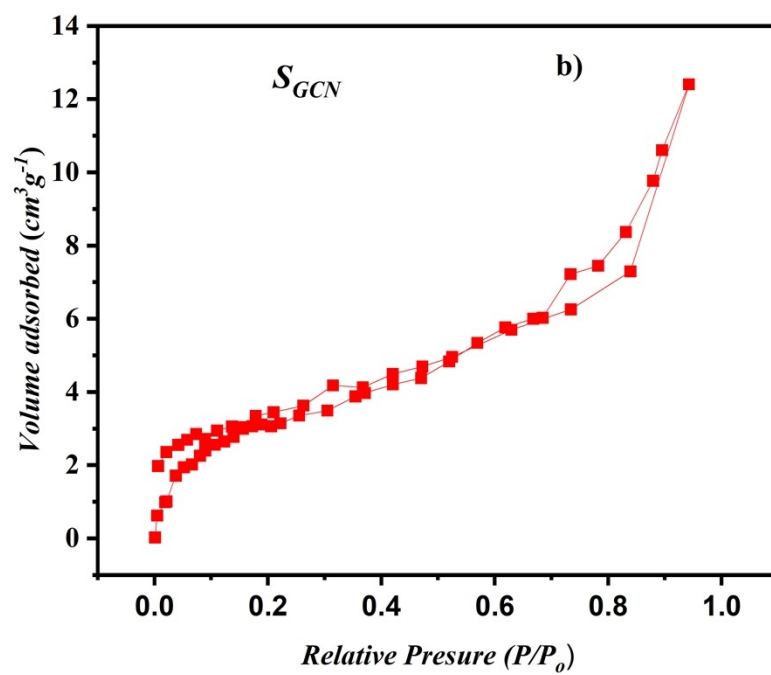


Fig.S2 Nitrogen sorption assays of a) GCN and b) S_{GCN}

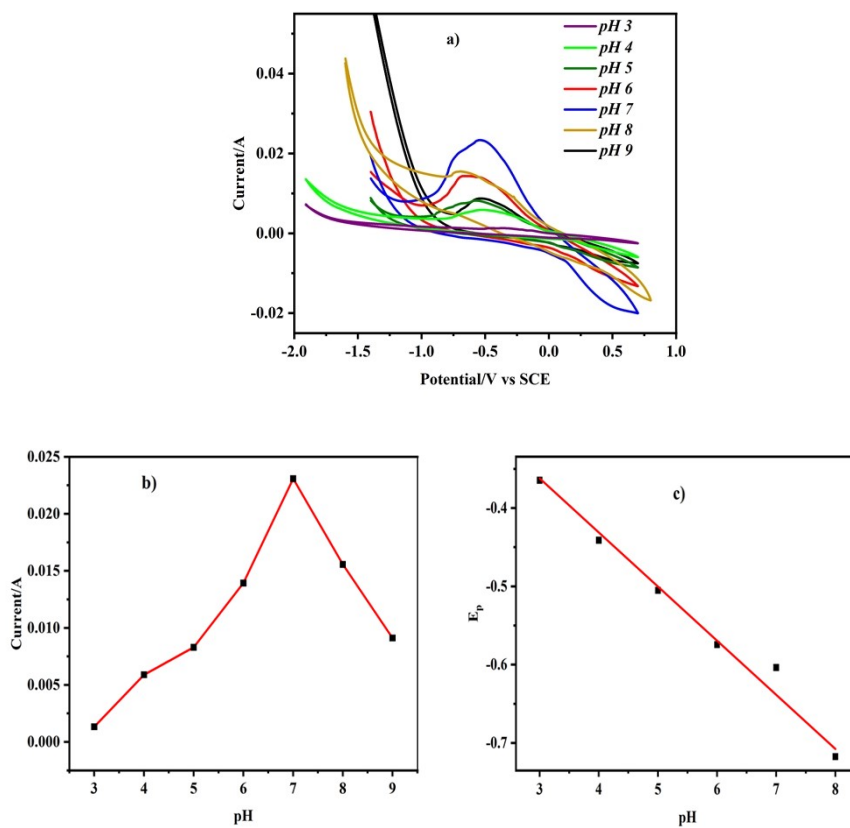


Fig S3. a) CVs for 0.1mM cortisol in 0.010 M PBS with pH varying from 3–9 recorded with S_{GCN}/CFP electrode. b) Cortisol oxidation pH vs Current and c) pH vs Potential

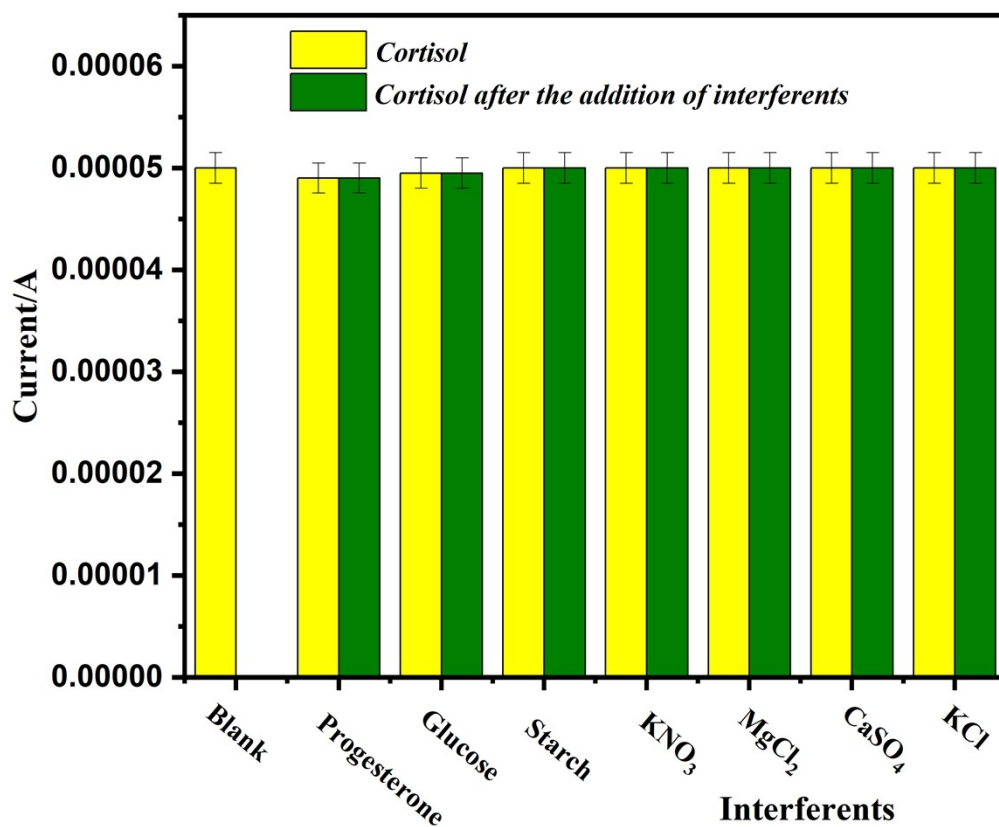


Fig.S4 The electrochemical current response of cortisol (30 μM) at S_{GCN}/CFP electrode in the presence of potential interferent progesterone (150 μM) and other interferents of concentration of 300 μM.

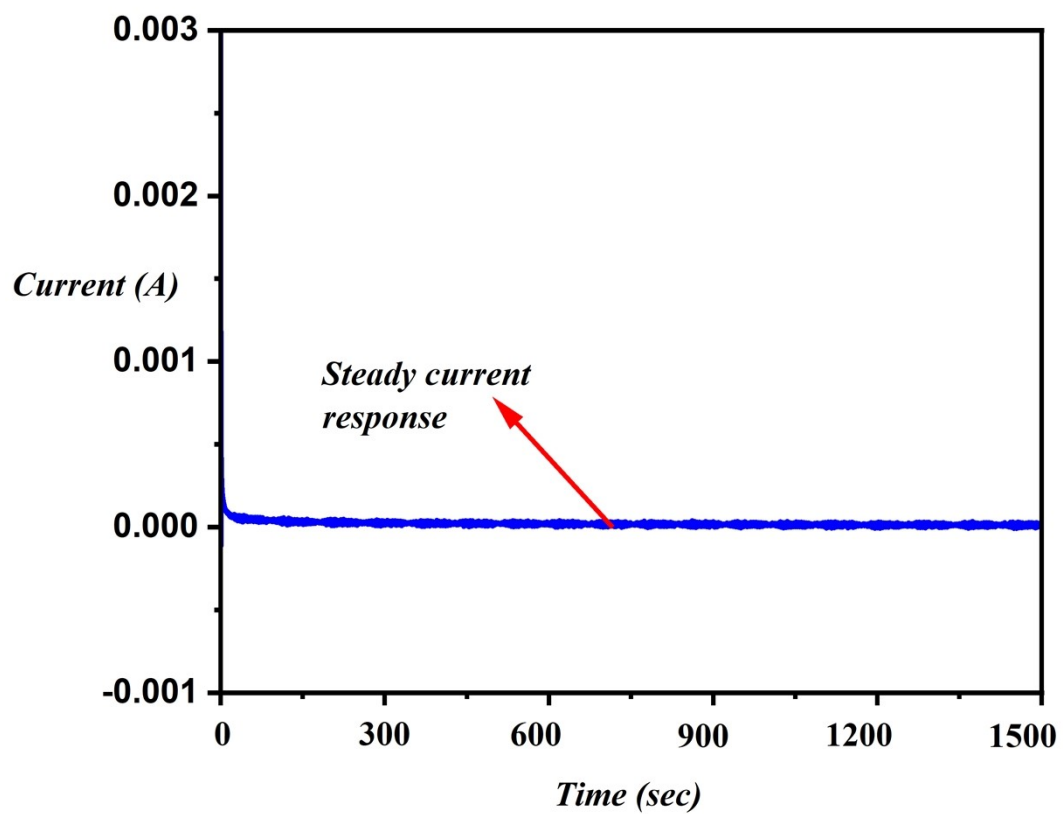


Fig.S5 Chronoamperometric current response on applying a constant potential of 600mV for 30 min into an electrolyte solution cortisol analyte at S_{GCN}/CFP electrode.