

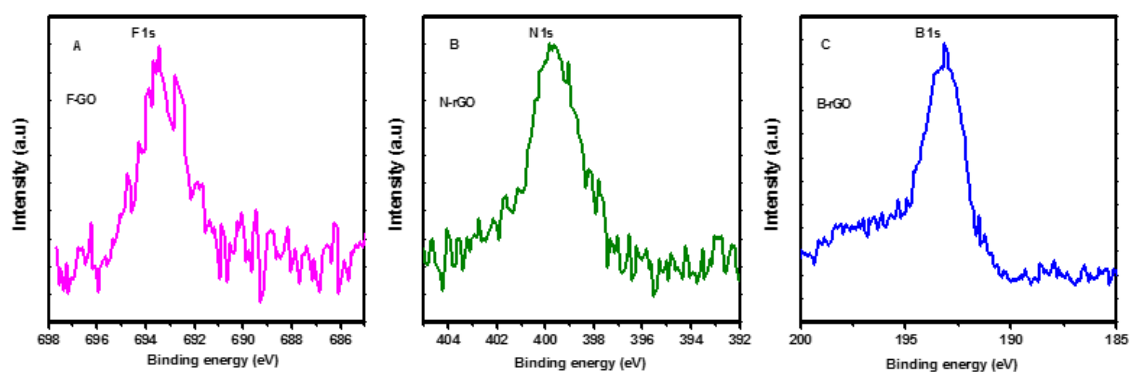
## Supplementary Materials

# Graphene-Oxide-Based Electrochemical Sensors for the Sensitive Detection of Pharmaceutical Drug Naproxen

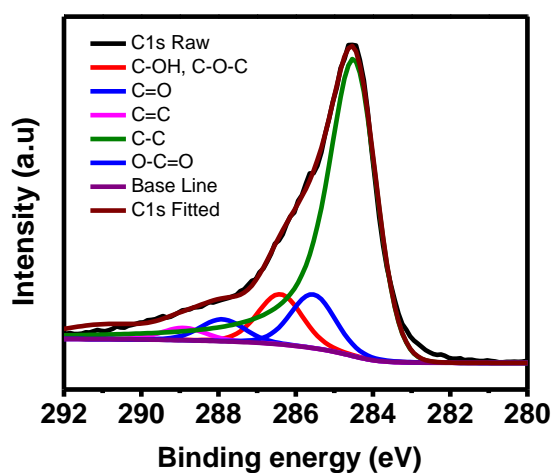
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**Figure S1.** High-resolution XPS spectra of: (A) F1s peak of fluorinated graphene oxide at 692.675; (B) N1s peak of nitrogen doped reduced graphene oxide at 400.137 eV; and (C) B1s peak of boron doped reduced graphene oxide at 197.455 eV.



**Figure S2.** High-resolution C1s spectrum with the deconvoluted peaks for N-rGO.

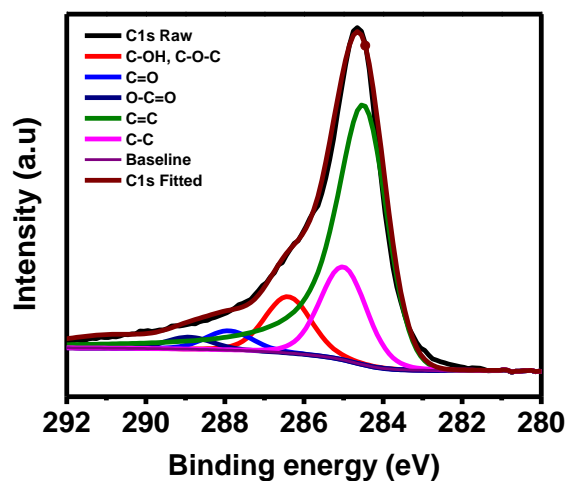


Figure S3. High-resolution C1s spectrum with the deconvoluted peaks for B-rGO.

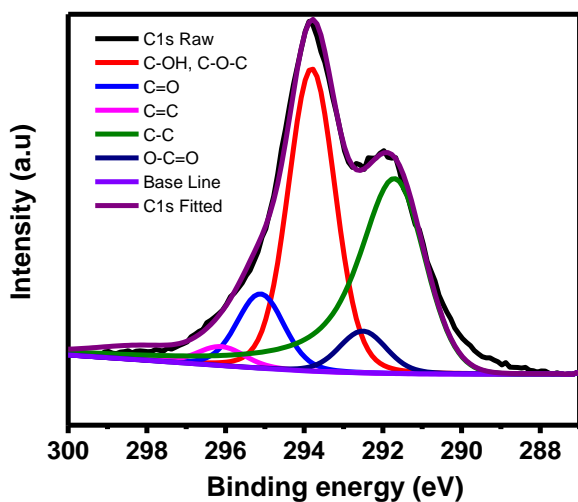
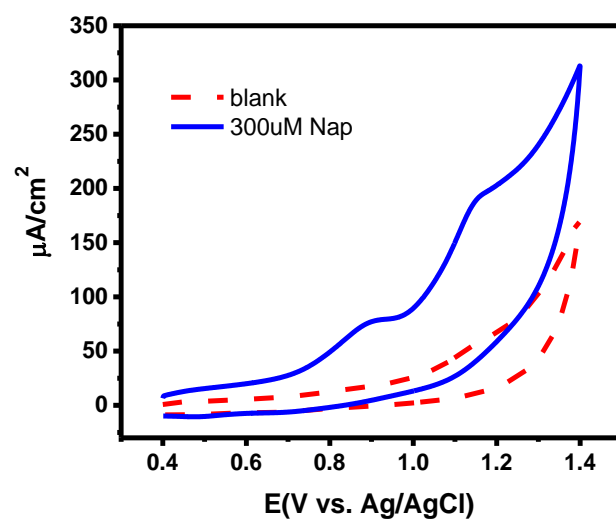
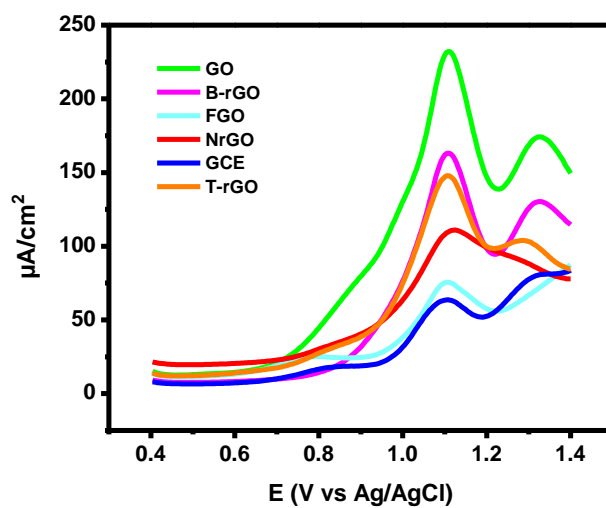


Figure S4. High-resolution C1s spectrum with the deconvoluted peaks for F-GO.



**Figure S5.** CV curves of GO/GCE recorded at a scan rate of 50 mV/s in 0.1M PBS (pH 7.2) buffer in the absence of (dashed line) and in the presence of 300 μM Naproxen (solid line).



**Figure S6.** DPV curves of the various electrodes recorded in 0.1M PBS (pH 7.2) containing 300 μM.