

Supplementary

Facile Fabrication of Bio-Nanohybrid Electrode with Guanine/Cytosine-Modified Electrochemically Reduced Graphene Oxide Electrode and Its Application in Doxorubicin Analysis

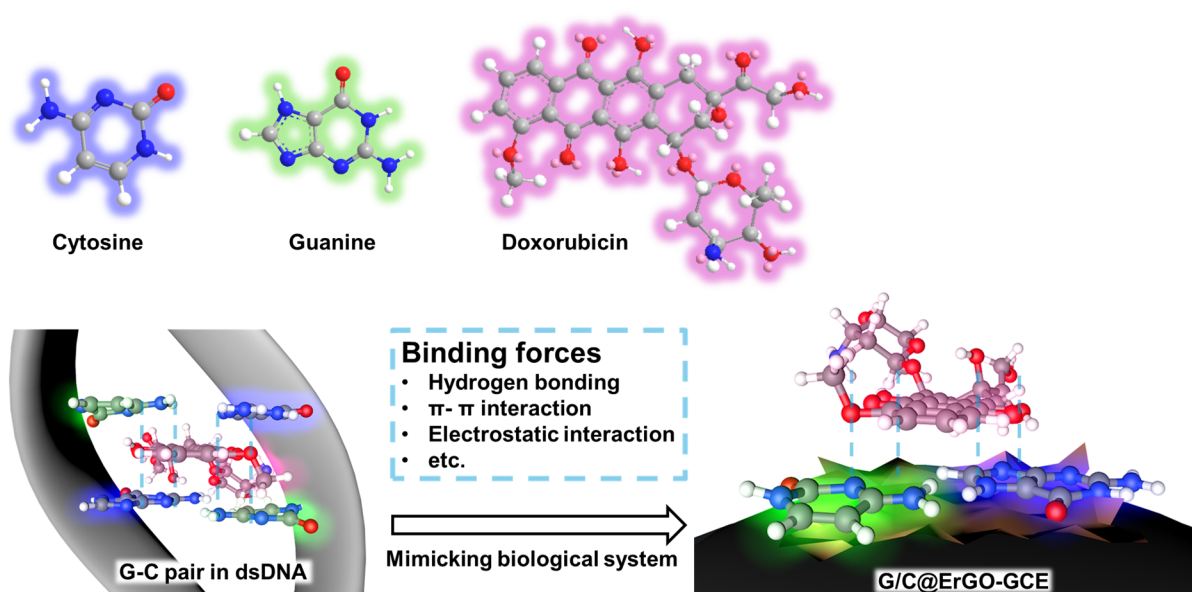
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Scheme S1. Explanation for binding events between guanine/cytosine and doxorubicin.

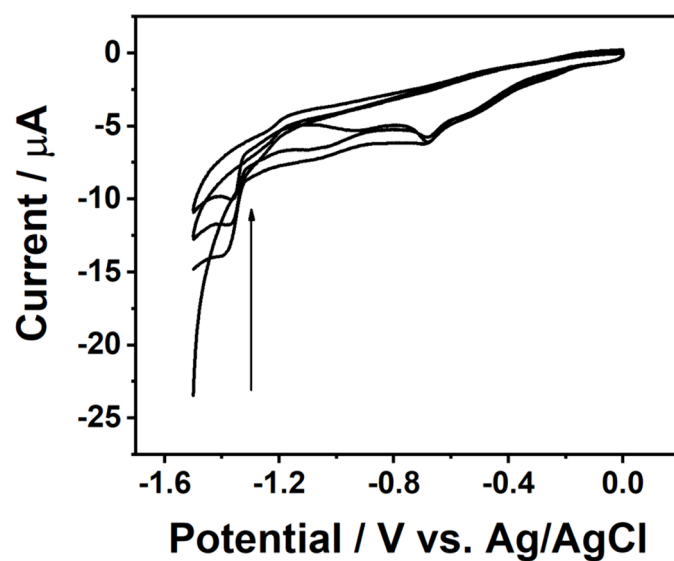


Figure S1. Electrochemical reduction of graphene oxide with cyclic voltammetry.

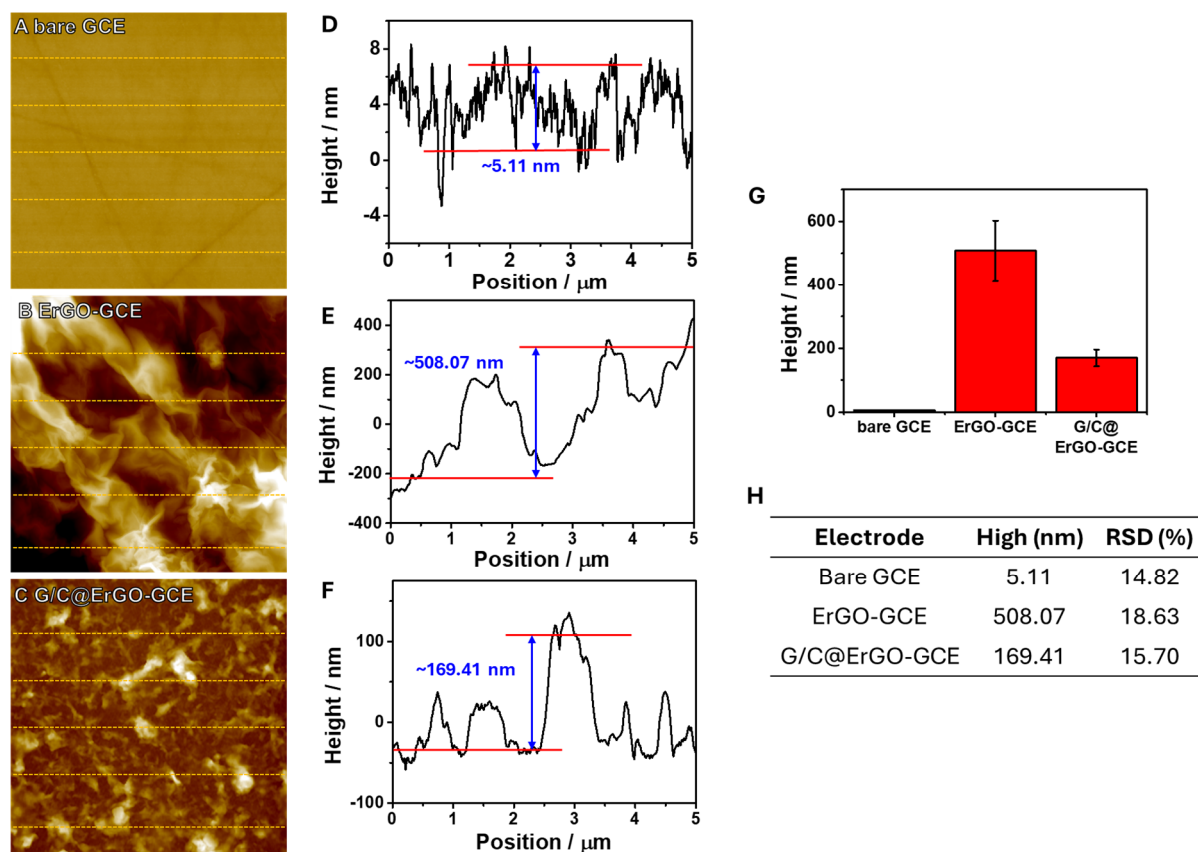


Figure S2. AFM images of (A) bare GCE, (B) ErGO-GCE, and (C) G/C@ErGO-GCE. Height profiles for determining height differences on (D) bare GCE, (E) ErGO-GCE, and (F) G/C@ErGO-GCE. (G) Plot of the height differences obtained from (D–F). (H) Comparison of the average height differences and RSD value for each electrode.

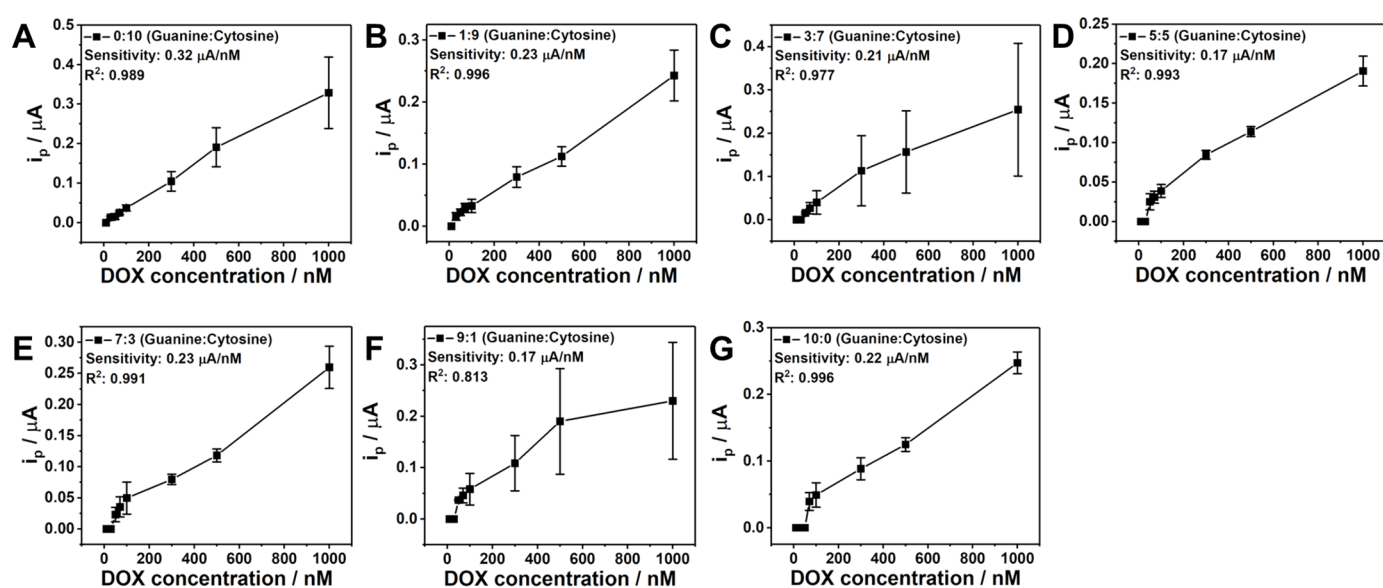


Figure S3. Optimization of guanine and cytosine ratio. Each plot represents the oxidation peak current of DOX at different concentrations from 10 nM to 1 μM with different guanine and cytosine ratio of (A) 0:10, (B) 1:9, (C) 3:7, (D) 5:5, (E) 7:3, (F) 9:1, and (G) 10:0 (guanine:cytosine), respectively.

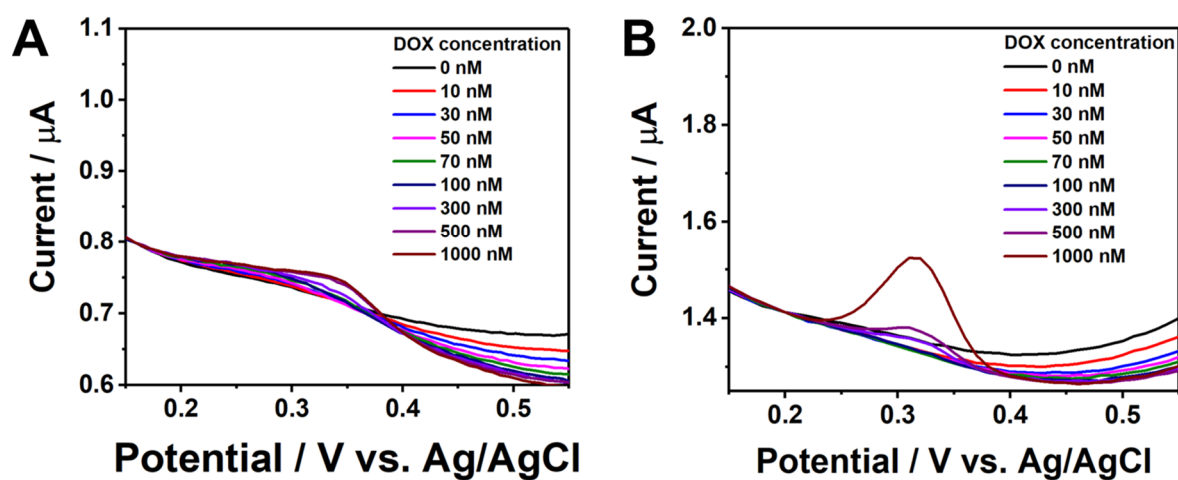


Figure S4. DPV curves for the DOX detection with (A) bare GCE and (B) ErGO-GCE.