

## Supporting Information

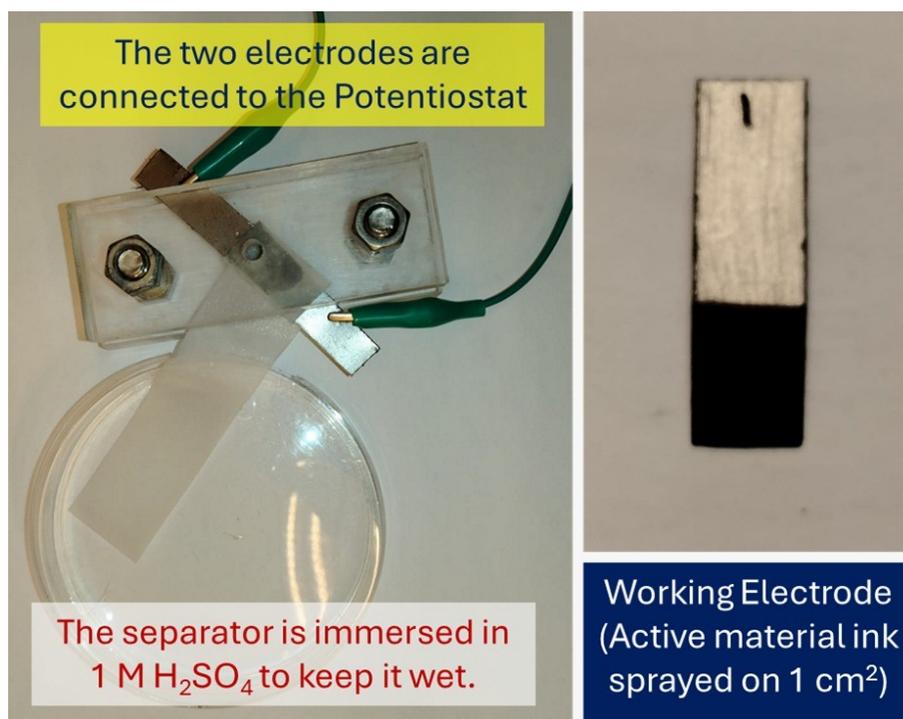
### **Graphene Oxide Nanoribbons Grafted with Thionine as Versatile Materials for Energy Storage and Hydrogen Evolution Electrocatalysis**

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**Figure S1:** Photographs of the assembled device used for the two-electrode measurements and the working electrode included in that device.

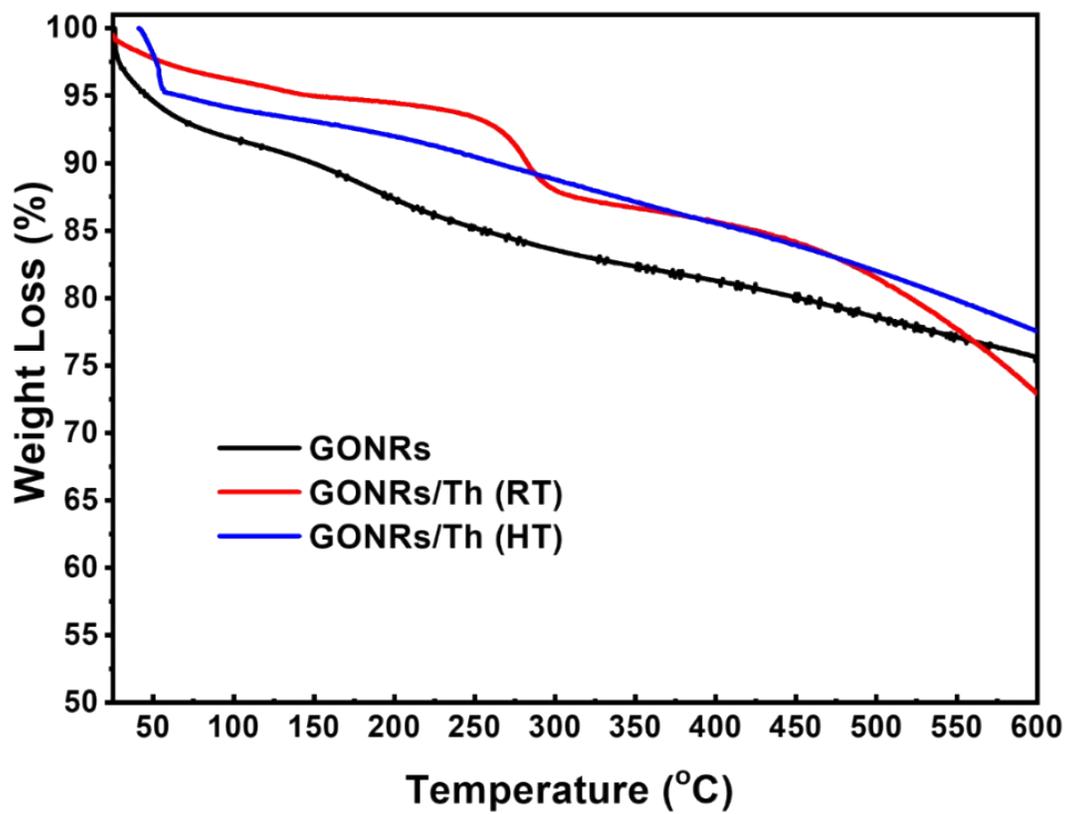
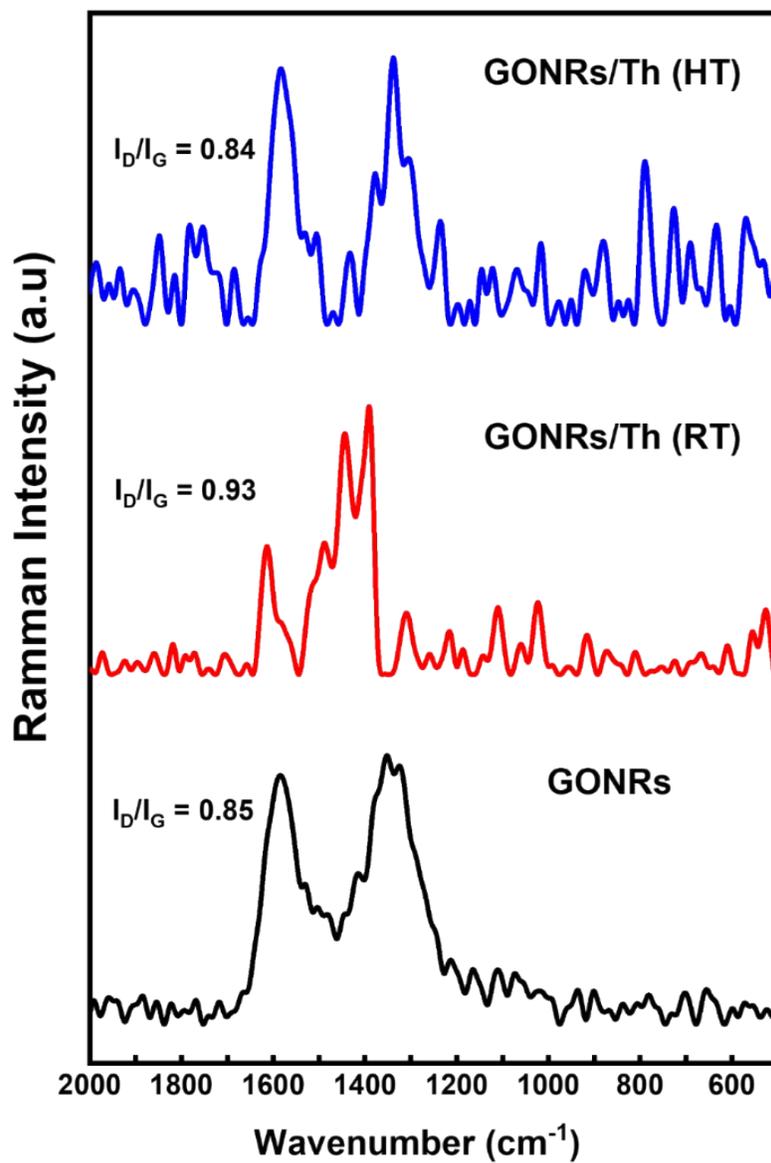
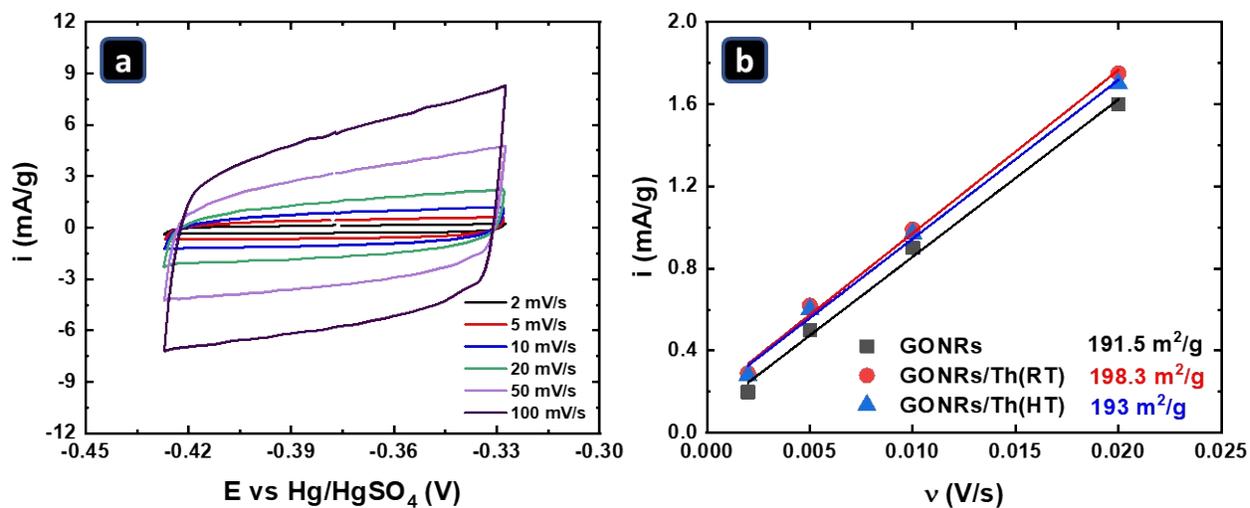


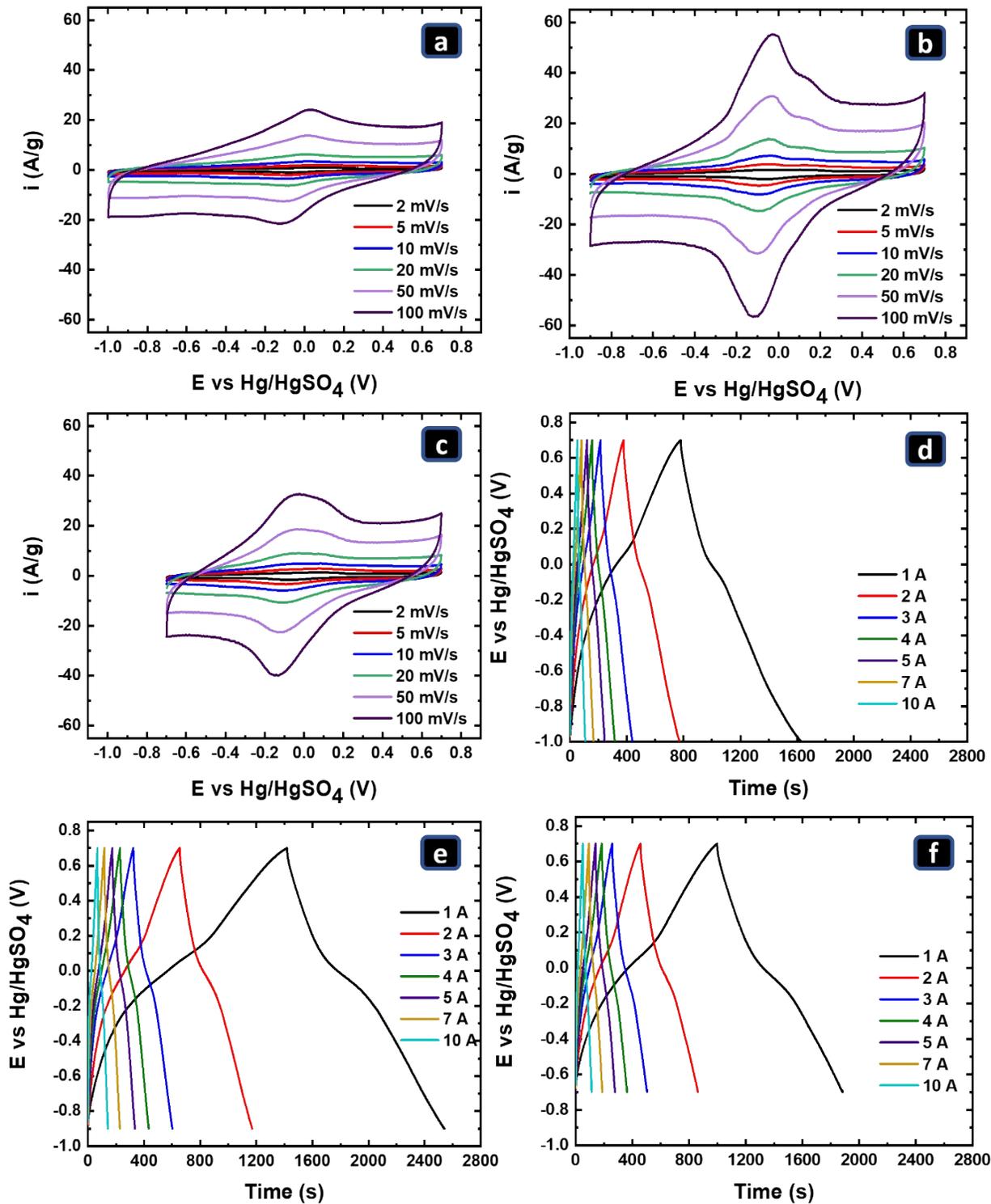
Figure S2: TGA of GONRs, GONRs/Th (RT), and GONRs/Th (HT).



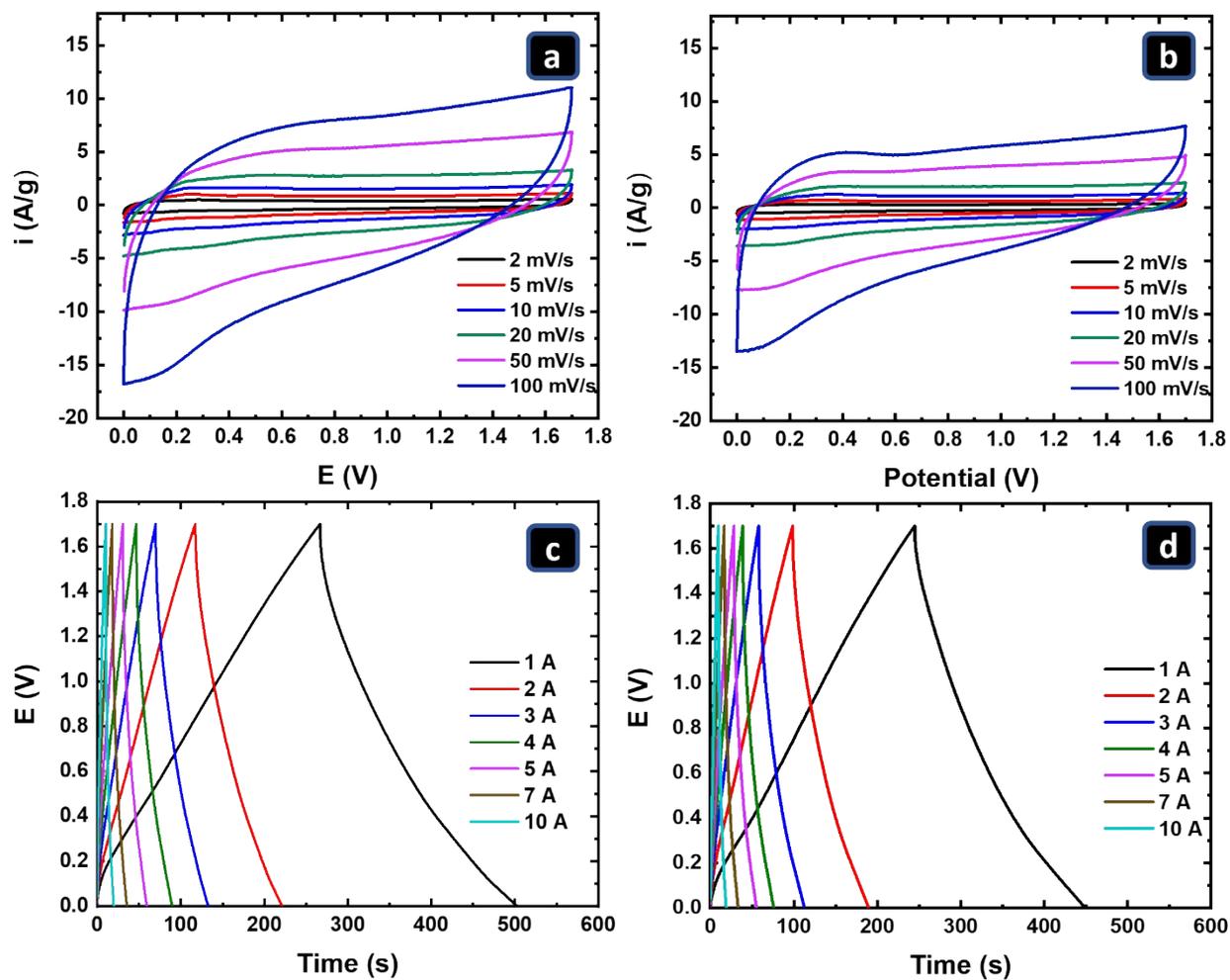
**Figure S3:** Ramman spectroscopy of GONRs, GONRs/Th (RT), and GONRs/Th (HT).



**Figure S4:** (a) CVs of GONRs/Th(RT) at scan rates of 2-100 mV in 1 M  $\text{H}_2\text{SO}_4$ , employing a potential window of  $\text{OCP} \pm 50$  mV, as an example for the data used to generate Figure 4Sb. (b) The correlation between the specific current and scan rate (2-20 mV/s only) for calculating the electrochemical specific surface area.



**Figure S5:** The CV curves scan rates of 2–100 mV/s and GCD at different current densities of 1–10 A/g for (a, d) GONRs, (b, e) GONRS/Th (RT), and (c, f) GONRS/Th (HT), respectively, all in 1 M H<sub>2</sub>SO<sub>4</sub> at RT.



**Figure S6:** CVs at scan rates of 2–100 mV/s and the GCD responses at current densities of 1–10 A/g for assembled (a, c) GONRs/Th (RT)//GONRs/Th (RT) and (b, d) GONRs/Th (HT)//GONRs/Th (HT) symmetric two-electrode devices, respectively.