Supporting Information

Functionalization of graphene with nitrogen using ethylenediaminetetraacetic acid and their electrochemical energy storage properties

T. K. Shruthi, N. Ilayaraja, D. Jeyakumar and M. Sathish*

Functional Materials Division, CSIR-Central Electrochemical Research Institute,
Karaikudi -630 006, India.

E-mail: marappan.sathish@gmail.com; msathish@cecri.res.in

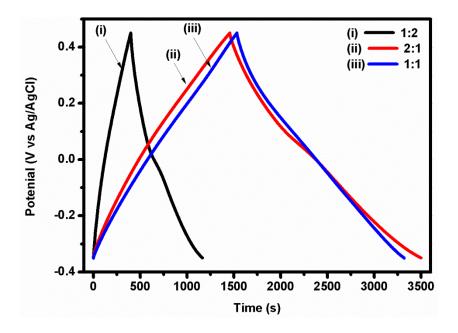


Fig S1. Galvanostatic charge-discharge profile of GED with different weight ratio of RGO and GED at 0.1 A/g current density in 0.5 M H₂SO₄ solution (with 10 wt % of acetylene black loading).

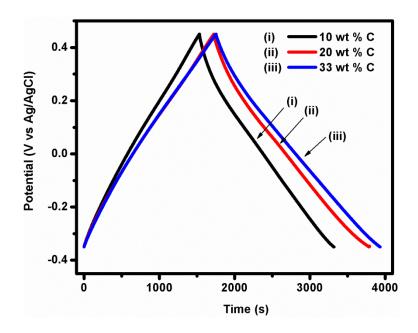


Fig S2. Galvanostatic charge-discharge profile of GED (1:1) containing different loading of acetylene black in 0.5 M H₂SO₄ solution at 0.1 A/g current density.

Preparation of GED with different weight ratios of RGO and EDTA:-

GED with different weight ratio of RGO and EDTA was prepared by varying the GO and EDTA amount appropriately, and adopting the procedure given in the experimental part. In genereal, GED with 1:1 weight ratio was used for the characterization. The GED with other ratios (1:2 and 2:1) used in the manuscript has been mentioned in respective places. To study the specific capacitance of GED with different weight ratios of RGO and EDTA (1:2, 1:1, 2:1), the electrodes were prepared with 10 wt% acetylene black loading.