Electronic Supplementary Information

Sucrose templated interconnected meso/macroporous 2D symmetric graphitic carbon network as support for α-Fe_2O_3 towards an improved supercapacitive behavior

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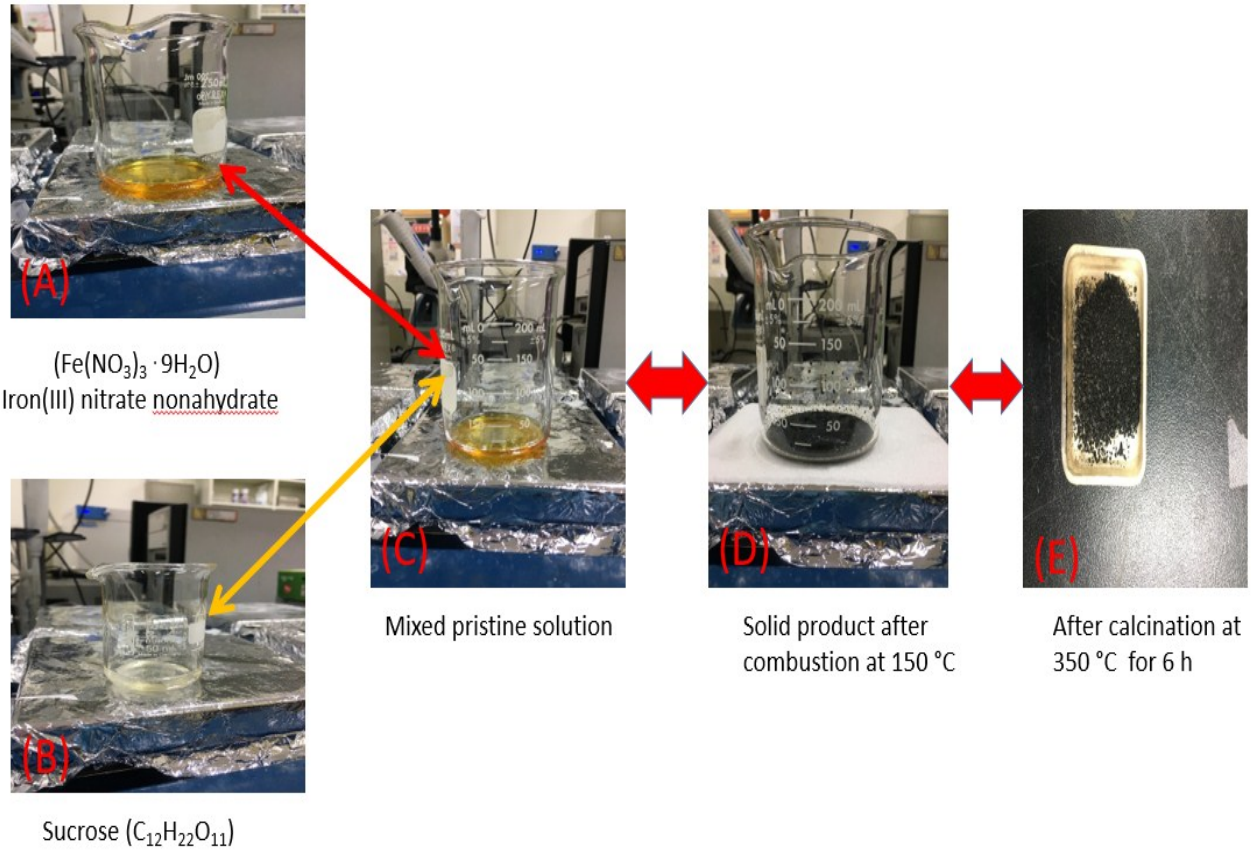

Figure S1: Synthesis procedure for 2D C@ α-Fe_2O_3 and α-Fe_2O_3.

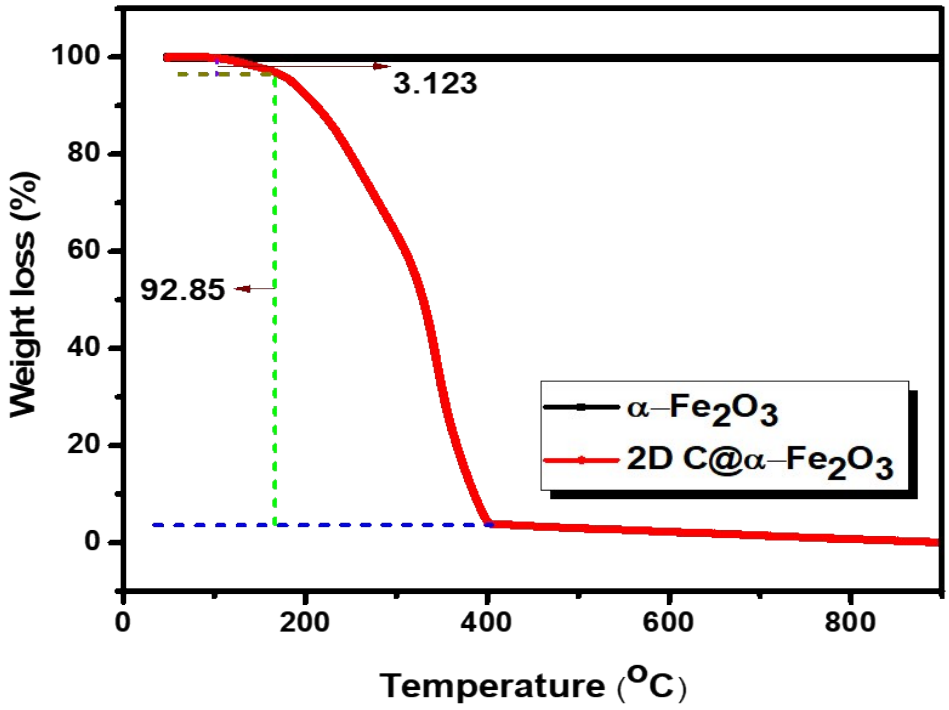

Figure S2: TGA Curves for 2D C@ α-Fe_2O_3 and α-Fe_2O_3 at a constant heating rate of 10 ^{o}C min^{-1}

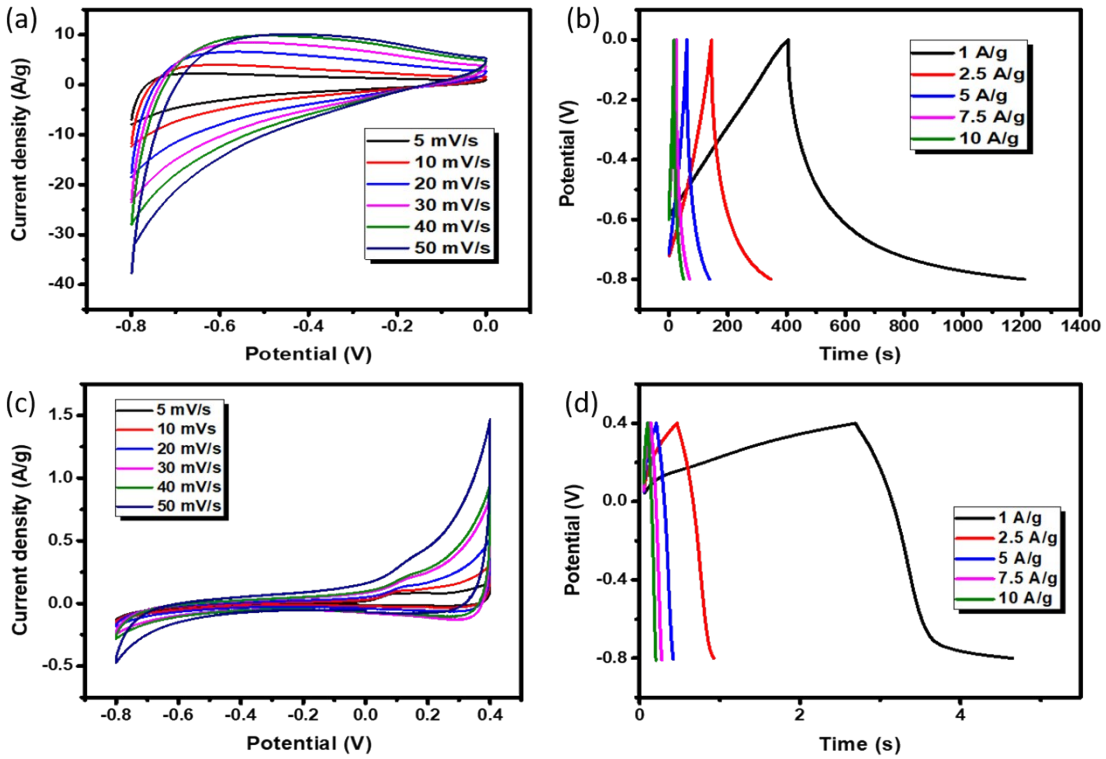

Figure S3: (a) CV for 2D C@ α-Fe_2O_3 with potential window from -0.8~0; (b) GCD for 2D C@ α-Fe_2O_3 with potential window from -0.8~0; (c) CV for Nickel foam; (d) CV for Nickel foam.

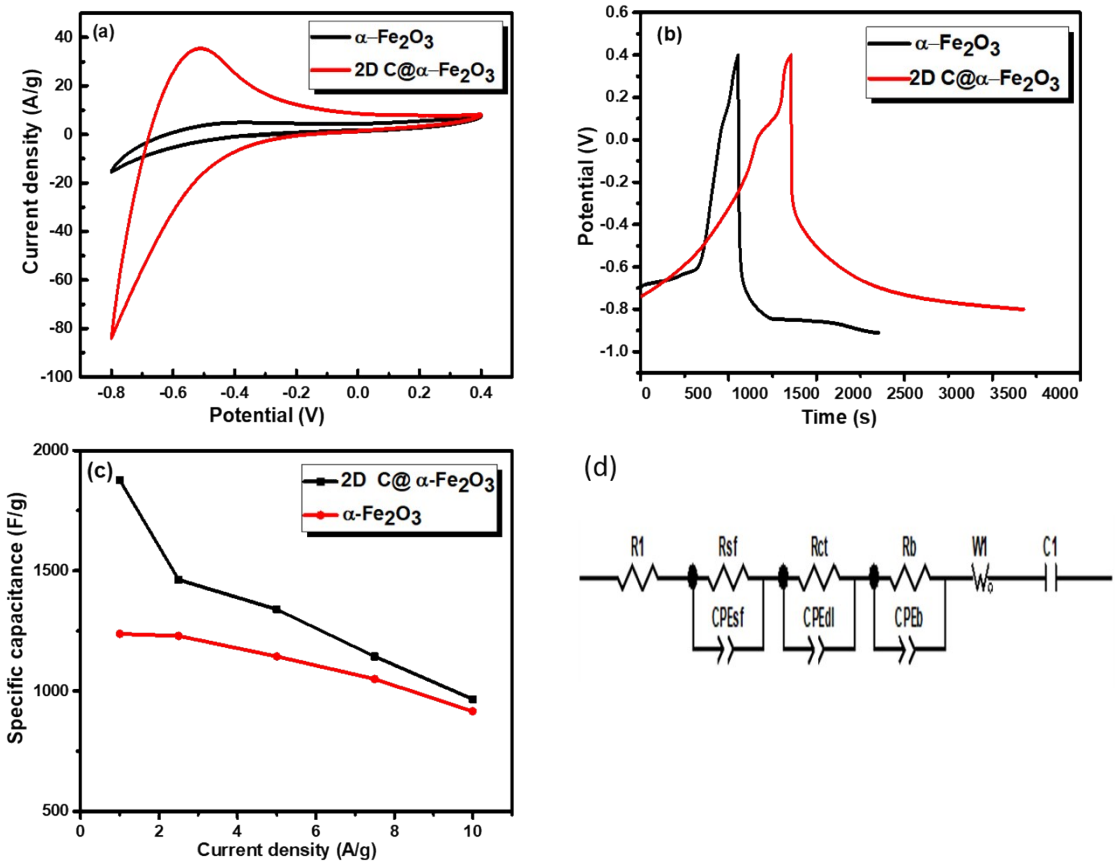

Figure S4: (a) (c) Comparison of CV curves for α-Fe_2O_3 and 2D C@ α-Fe_2O_3 at 50 mV/s scan rate; (b) Comparison of GCD curves for 2D C@ α-Fe_2O_3 and α-Fe_2O_3 at 1 A/g; (c) Plot of specific capacitance as a function of current density; (d) equivalent circuit for hematite.

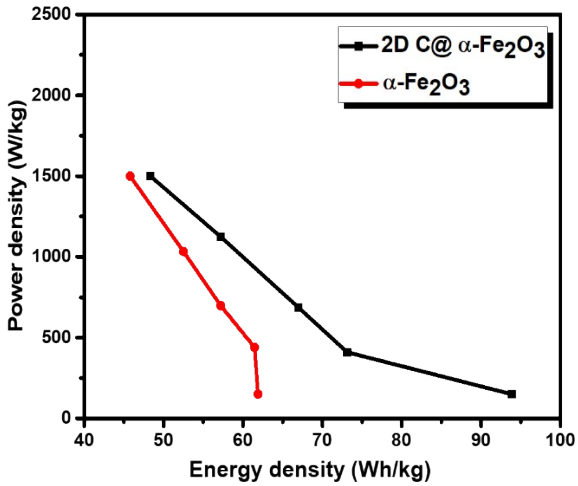

Figure S5: Comparative study for Ragone plot of 2D C@ α-Fe_2O_3 and α-Fe_2O_3.