Supplementary Information

Electrochemical Evaluation of Anodic Galvanized-Iron Nanoparticles as Electrode Materials for Supercapacitors

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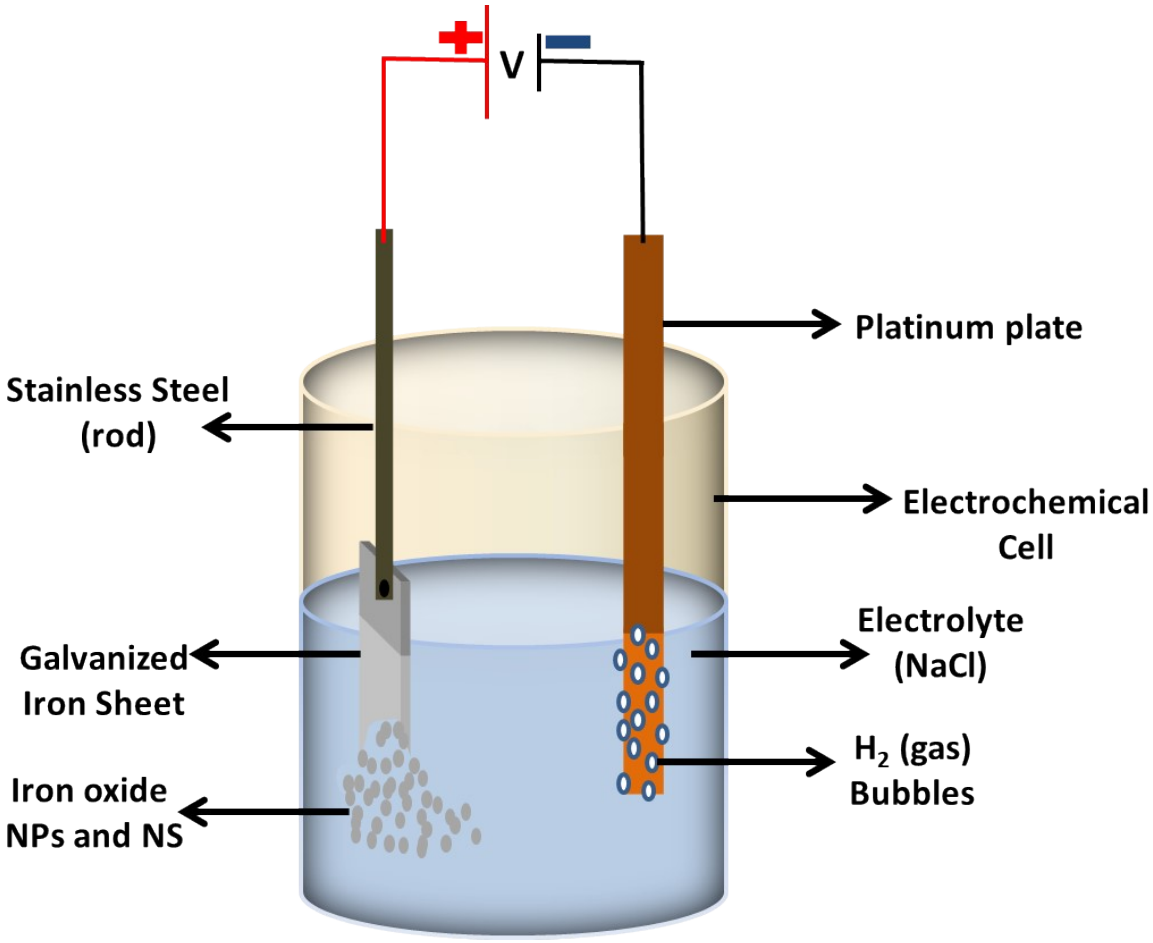

Figure S1: Schematic diagram showing the experimental set-up for the production of the Fe_2O_3 nanoparticles in 1M NaCl electrolyte at room temperature.

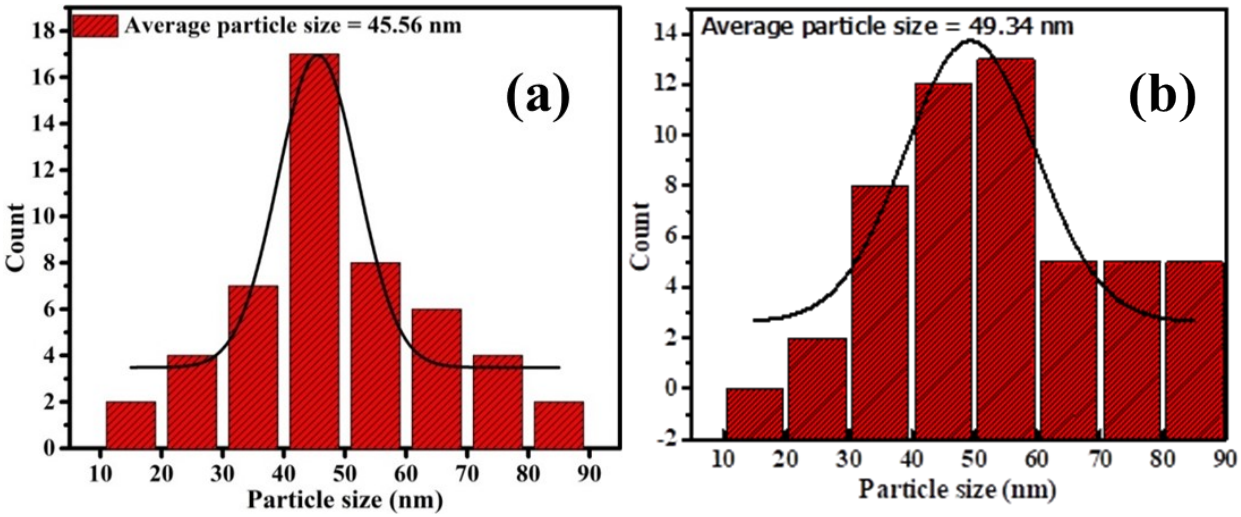

Figure S2: Histogram of the (a) pure iron-oxide NPs, and (b) GI-oxide NPs.

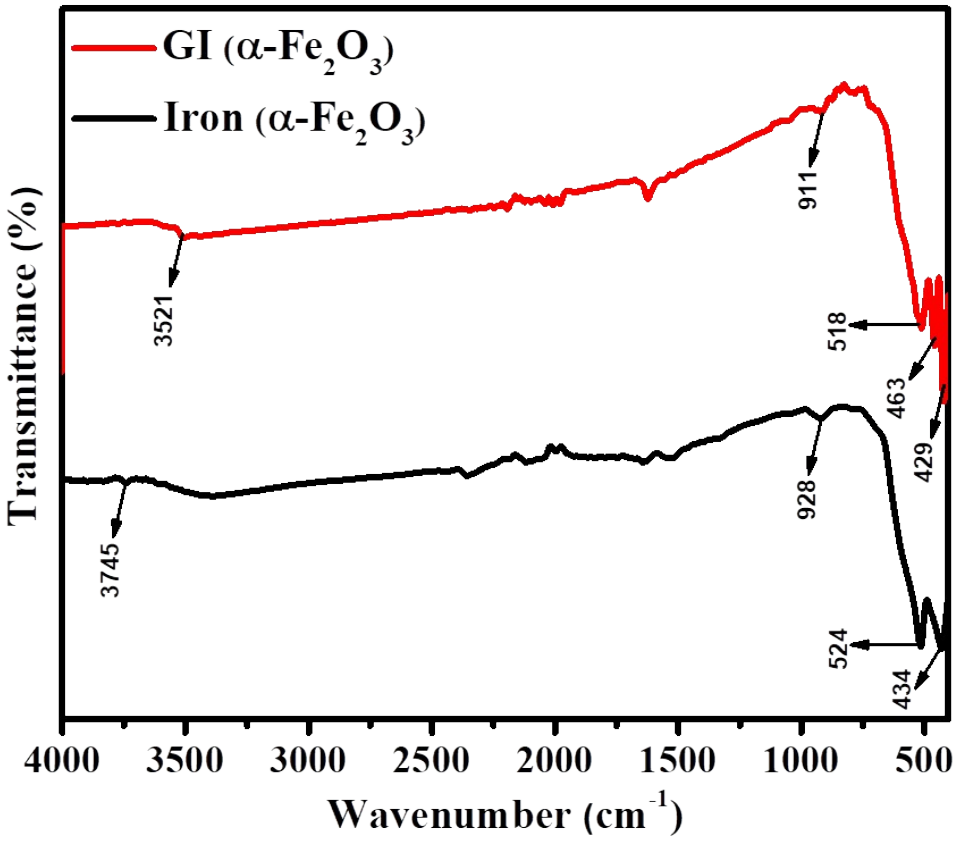

Figure S3: FTIR spectra of GI-oxide and the pure iron-oxide NPs.

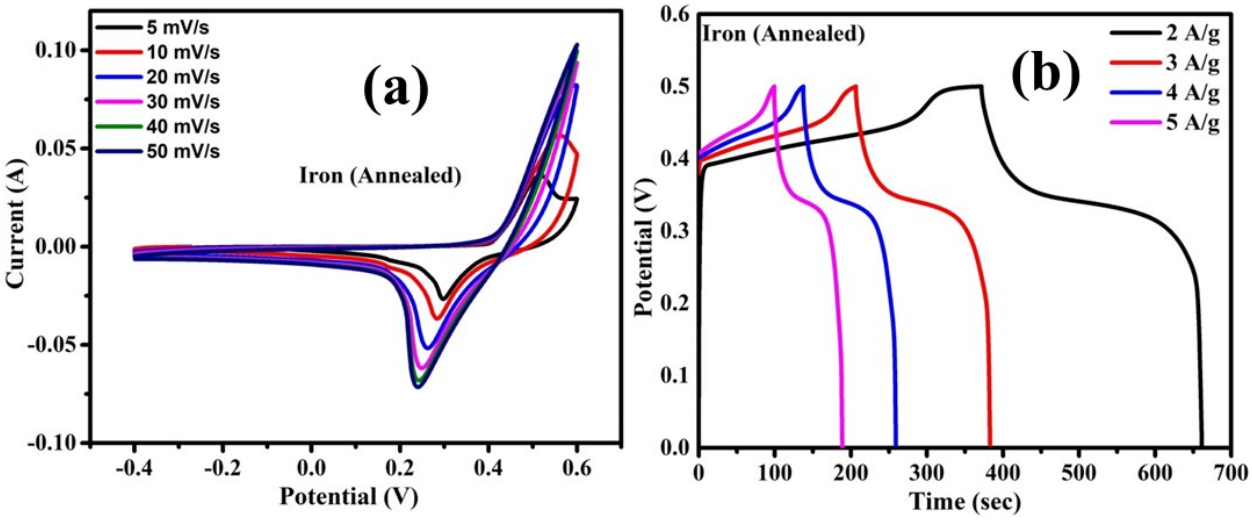

Figure S4: CV (a) and GCD (b) response of the pure iron-oxide NPs electrode.

Table S1: Comparison between GI-oxide electrode and iron-oxide electrode.

Current density (A/g^{-})	2		3		4		5	
Materials	G-iron (Annealed)	Iron (Annealed)	G-iron (Annealed)	Iron (Annealed)	G-iron (Annealed)	Iron (Annealed)	G-iron (Annealed)	Iron (Annealed)
Specific capacitance (Fg^{-1})	694	586	639	531	584	484	555	450
Energy density (Wh/kg)	24.09	20.34	22.18	18.43	20.27	16.80	19.27	15.62
Power density (Wkg^{-1})	252.83	252.49	374.87	374.84	499.80	499.83	624.97	624.8