Supplementary Data

Glycerol-Assisted Tuning the Phase and Morphology of Iron Oxide Nanostructures for Supercapacitor Electrode Materials

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Figure S1. FTIR spectrum of Fe-glycerate.

Figure S2. XRD pattern of samples obtained by using 20 mL of glycerol (a) and 50 mL of glycerol (b).

Figure S3. SEM and TEM images of $\alpha$-Fe$_2$O$_3$-5 (a, b), $\alpha$-Fe$_2$O$_3$-15 (c, d), product obtained by using 20 mL of glycerol (e, f).
Figure S4. SEM and TEM images of Fe$_3$O$_4$-25 (a, b), Fe$_3$O$_4$-35 (c, d), Fe$_3$O$_4$-40 (e, f), and Fe$_3$O$_4$-45 (g, h).

Figure S5. SEM and TEM images of product obtained by using 50 mL of glycerol (a, b), Fe-glycerate-60 (c, d).
Figure S6. XPS characterization of Fe-glycerate-55. (a) survey, (b) Fe2p, (c) O1s, and (d) C1s.
Figure S7. GCD curves of $\alpha$-Fe$_2$O$_3$-10 (a), Fe$_3$O$_4$-30 (b), and Fe-glycerate-55 (c) at various current densities.

Figure S8. Nyquist plots of $\alpha$-Fe$_2$O$_3$-10, Fe$_3$O$_4$-30, Fe-glycerate-55.