

Supporting information

Ethylenediamine-assisted crystallization of Fe₂O₃ microspindles with controllable size and their pseudocapacitance performance

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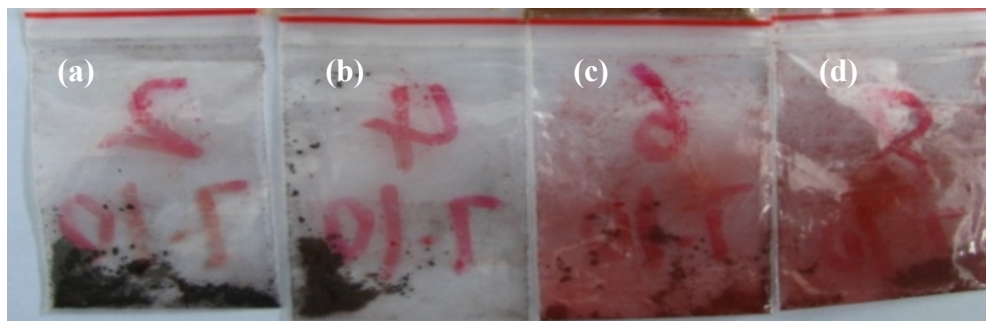


Fig. S1 Different optical color of the as-obtained Fe_2O_3 samples by hydrothermal treatment at (a) 80 °C; (b) 100 °C; (c) 120 °C and (d) 140 °C.

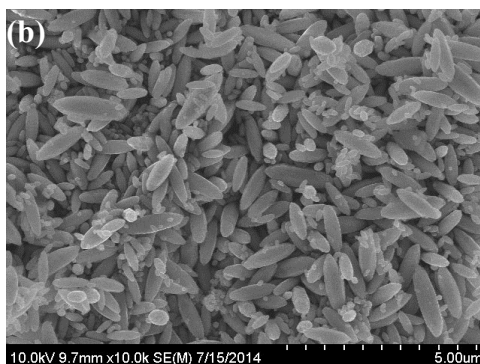
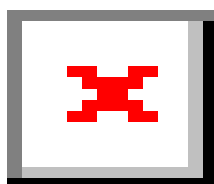


Fig. S2 SEM images of the as-prepared Fe_2O_3 products by hydrothermal method using water and EN solution in the volume ratio of 5:5 at different reaction temperatures, 120 °C for (a), and 140 °C for (b).

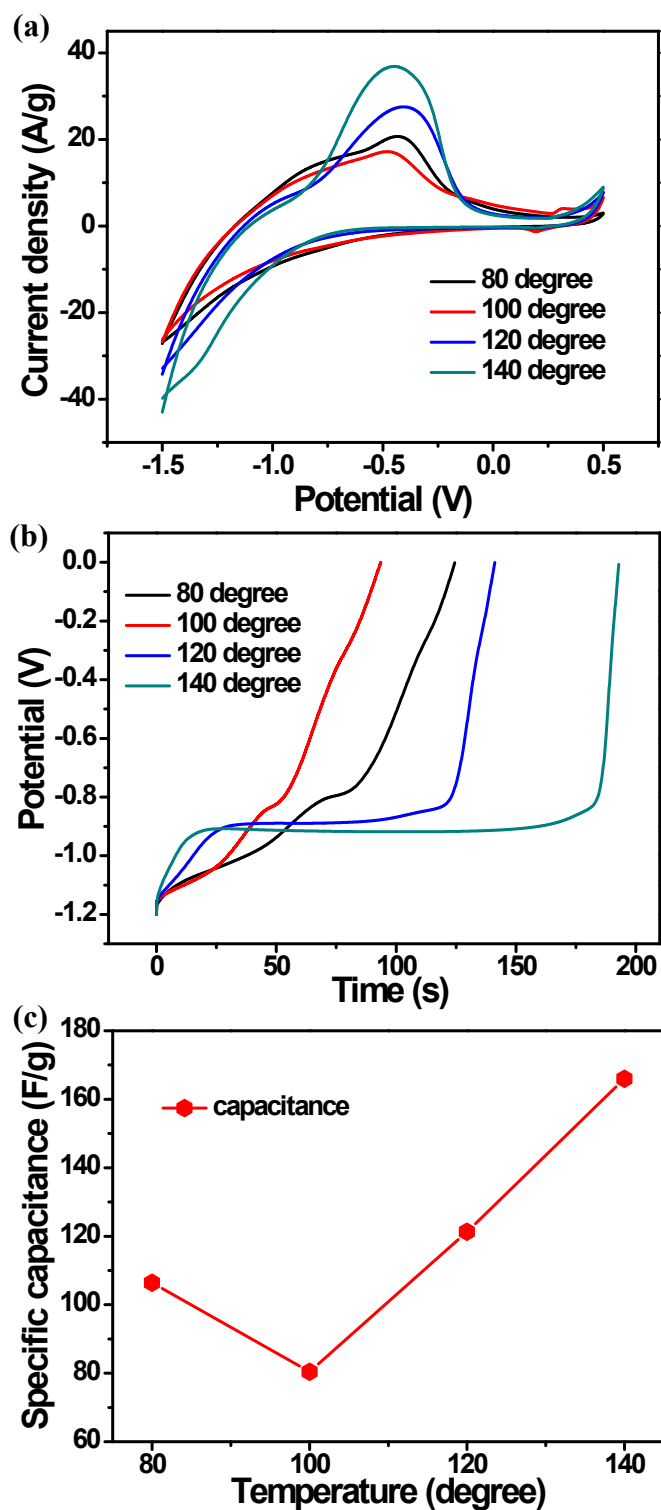


Fig. S3 (a) CV curves of the as-prepared iron components at the scan rate of 100 mV/s within the potential range from -1.5 to 0.45 V. (b) Constant current discharge of the iron components at the current density of 1 A/g and within the potential range from -1.2 to 0 V. (c) The measured specific capacitance of the iron oxides prepared under different reaction temperatures.

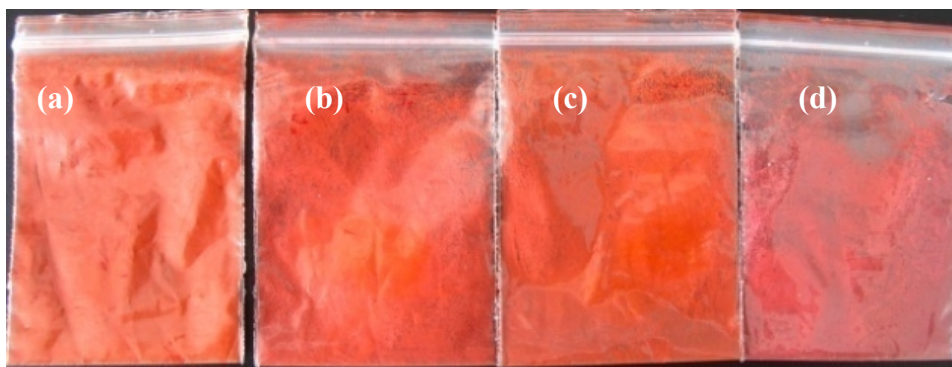


Fig. S4 Different optical color of the as-obtained Fe₂O₃ samples by hydrothermal treatment at 140 °C with different volume ratios of water to EN: (a) 9:1; (b) 8:2; (c) 7:3 and (d) 6:4.

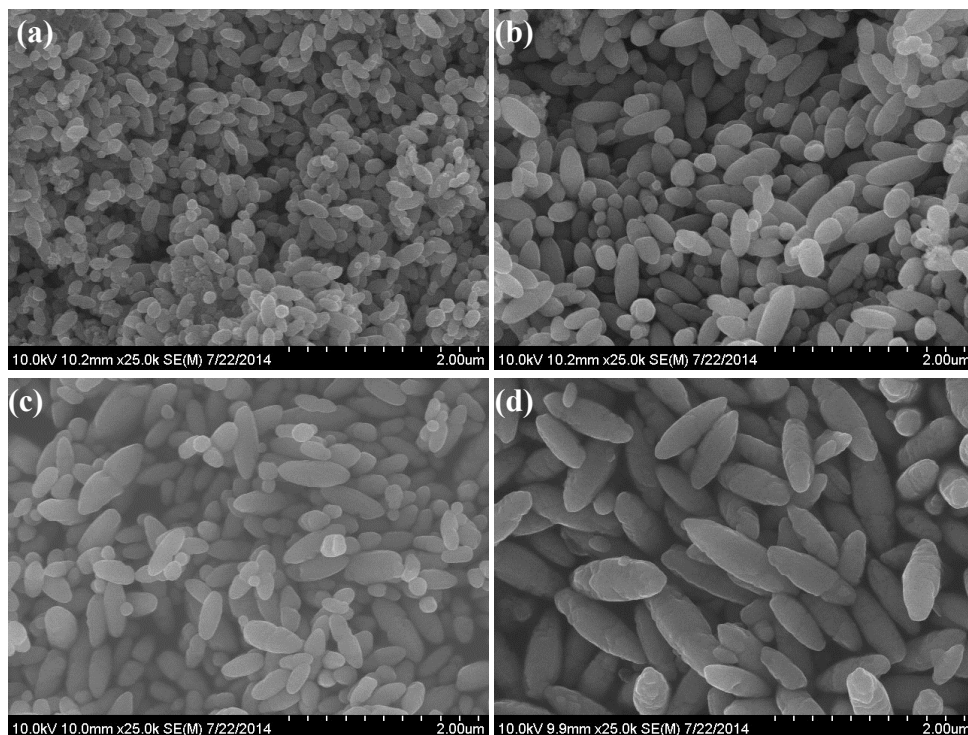


Fig. S5 SEM images of the as-prepared Fe₂O₃ products by using different volume ratios of water and EN solution, which is 9:1 for (a), 8:2 for (b), 7:3 for (c), and 6:4 for (d).

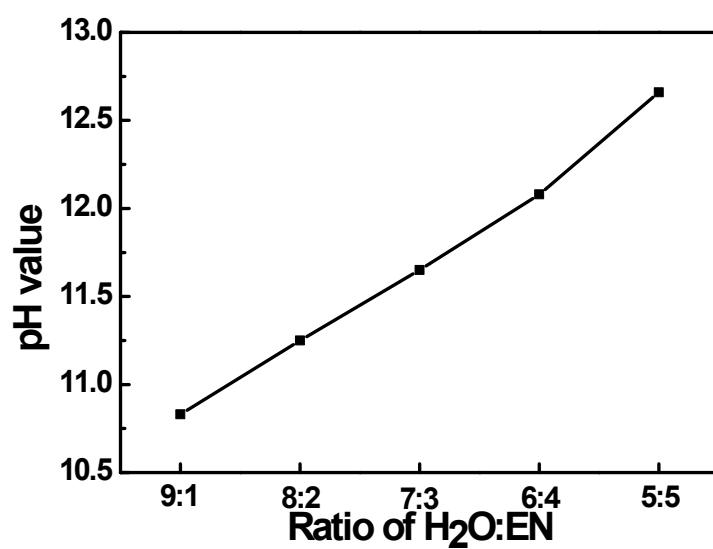


Fig. S6 pH value of the reaction solution with different volume ratios of water to EN.