

Supporting Information

Fabrication of Highly Conductive Porous $\text{Fe}_3\text{O}_4@\text{RGO}/\text{PEDOT:PSS}$ Composite Films via Acid Post-Treatment and Their Applications as Electrochemical Supercapacitor and Thermoelectric Material

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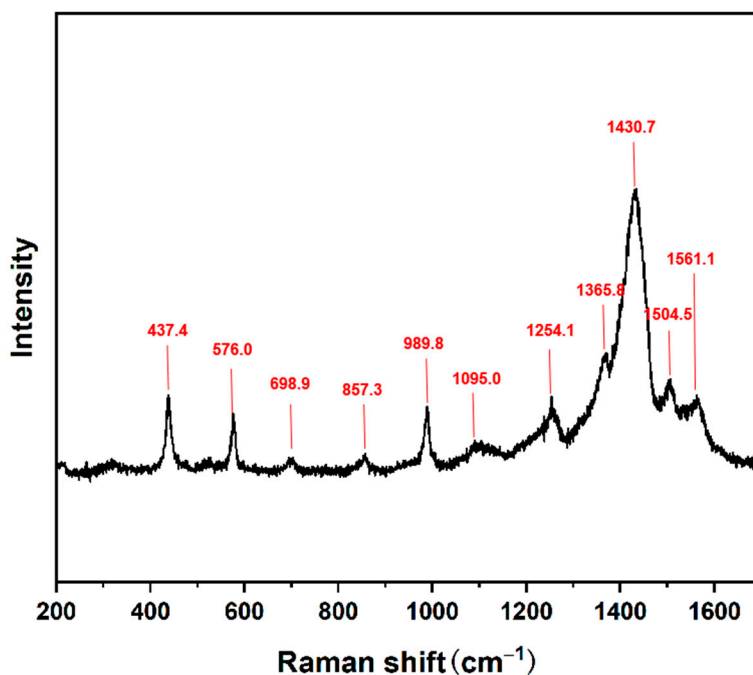


Figure S1. Raman spectra of the PEDOT:PSS film after acid treatment via HClO_4 .

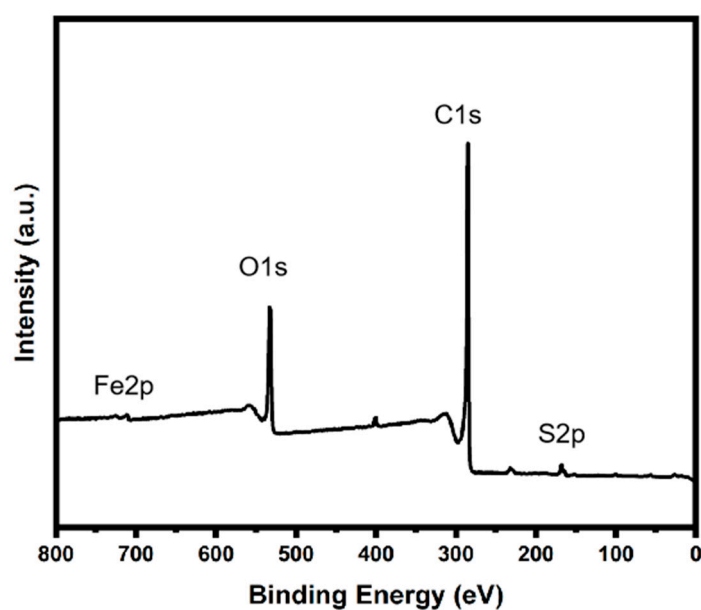


Figure S2. XPS survey spectrum of the porous $\text{Fe}_3\text{O}_4\text{@RGO/PEDOT:PSS}$.

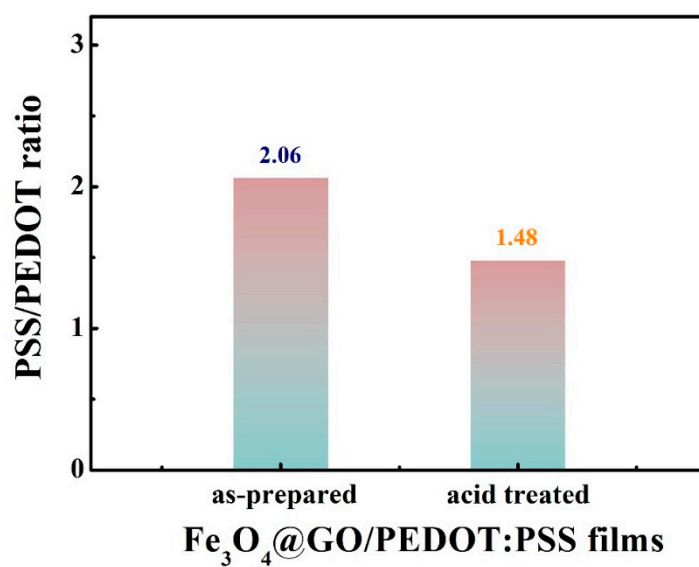


Figure S3. PSS/PEDOT ratio calculated for $\text{Fe}_3\text{O}_4\text{@GO/PEDOT:PSS}$ samples before and $\text{Fe}_3\text{O}_4\text{@RGO/PEDOT:PSS}$ after acid treatment.

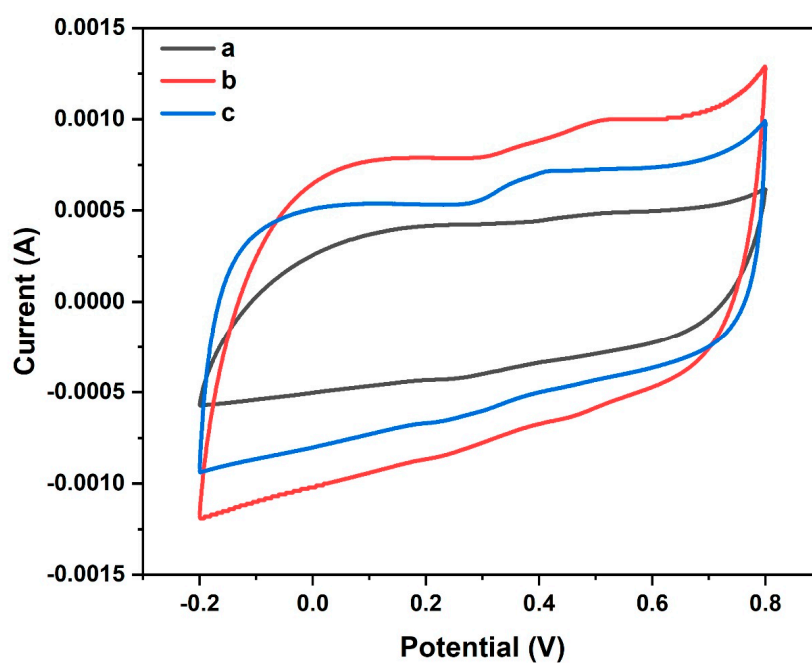


Figure S4. CV curves of $\text{Fe}_3\text{O}_4@\text{RGO}/\text{PEDOT:PSS}$ with different PEDOT:PSS content at a scan rate of 50 mV s^{-1} : a, the content of PEDOT:PSS is 16.7 wt%; b, the content of PEDOT:PSS is 28.6 wt%; c, the content of PEDOT:PSS is 50.0 wt%.

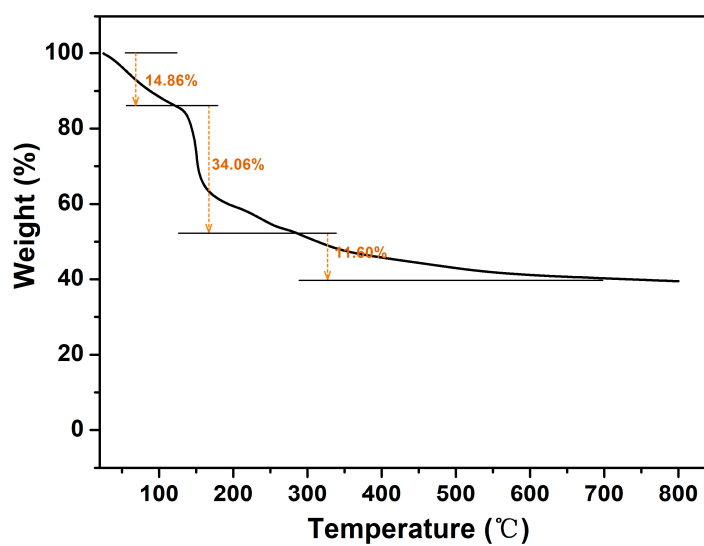


Figure S5. TG curves for $\text{Fe}_3\text{O}_4@\text{RGO}/\text{PEDOT:PSS}$ flexible film.

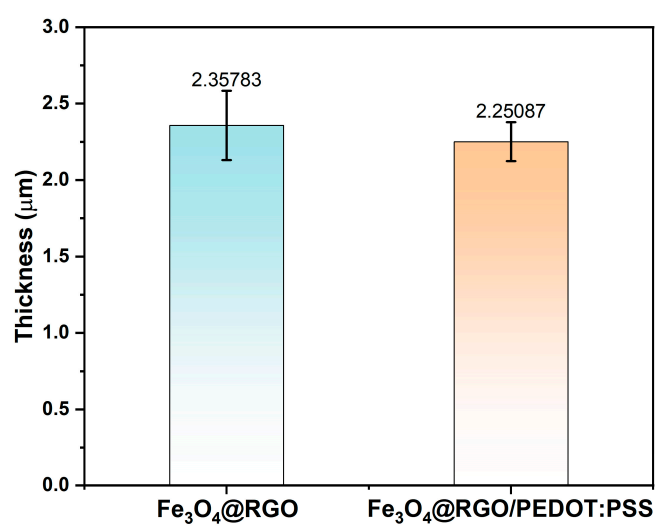


Figure S6. The thickness of Fe₃O₄@RGO and Fe₃O₄@RGO/PEDOT:PSS films.