

Supplementary Materials: Facile Synthesis of $\text{MnPO}_4 \cdot \text{H}_2\text{O}$ Nanowire/Graphene Oxide Composite Material and Its Application as Electrode Material for High Performance Supercapacitors

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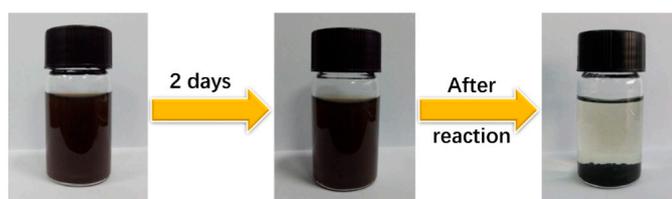


Figure S1. Optical images of GO (graphene oxide) dispersions before and after reaction.

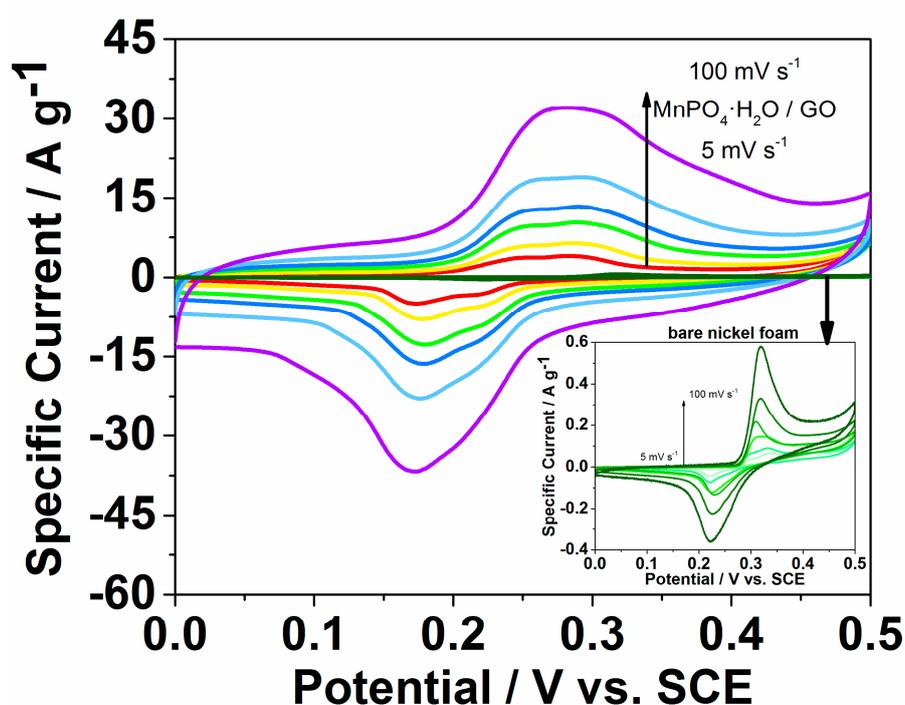


Figure S2. (a) CV (Cyclic voltammetry) tests of as-prepared $\text{MnPO}_4 \cdot \text{H}_2\text{O}$ nanowire/graphene oxide material and bare nickel foam at different scan rates; inset: enlarged view of CV curves of bare nickel foam; (b) calculated specific capacitances of bare nickel foam electrode at scan rates of 5–100 mV s⁻¹.

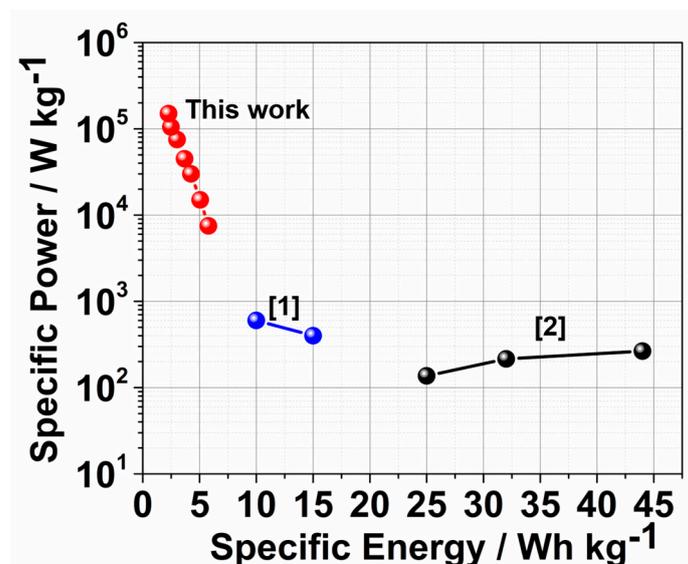


Figure S3. Ragone plot of MnPO₄·H₂O nanowire/graphene oxide material and other similar phosphates.

Figure S3 shows the Ragone plot of MnPO₄·H₂O nanowire/graphene oxide material with ultrahigh specific power, which is close to conventional solid state. However, it is average in specific energy compared with some reported similar phosphates [1,2].

References

1. Minakshi, M.; Meyrick, D.; Appadoo, D. Maricite (NaMn_{1/3}Ni_{1/3}Co_{1/3}PO₄)/activated carbon: hybrid capacitor. *Energy Fuels* **2013**, *27*, 3516–3522.
2. Minakshi, M.; Mitchell, D.; Jones, R.; Alenazey, F.; Watcharatharapong, T.; Chakraborty, S.; Ahuja, R. Synthesis, structural and electrochemical properties of sodium nickel phosphate for energy storage devices. *Nanoscale* **2016**, *8*, 11291–11305.