

Supporting Information

Scalable Thermal Synthesis of Highly Crumpled, Highly Exfoliated and N-doped Graphene/Mn-Oxide Nanoparticle Hybrid for High-Performance Supercapacitors

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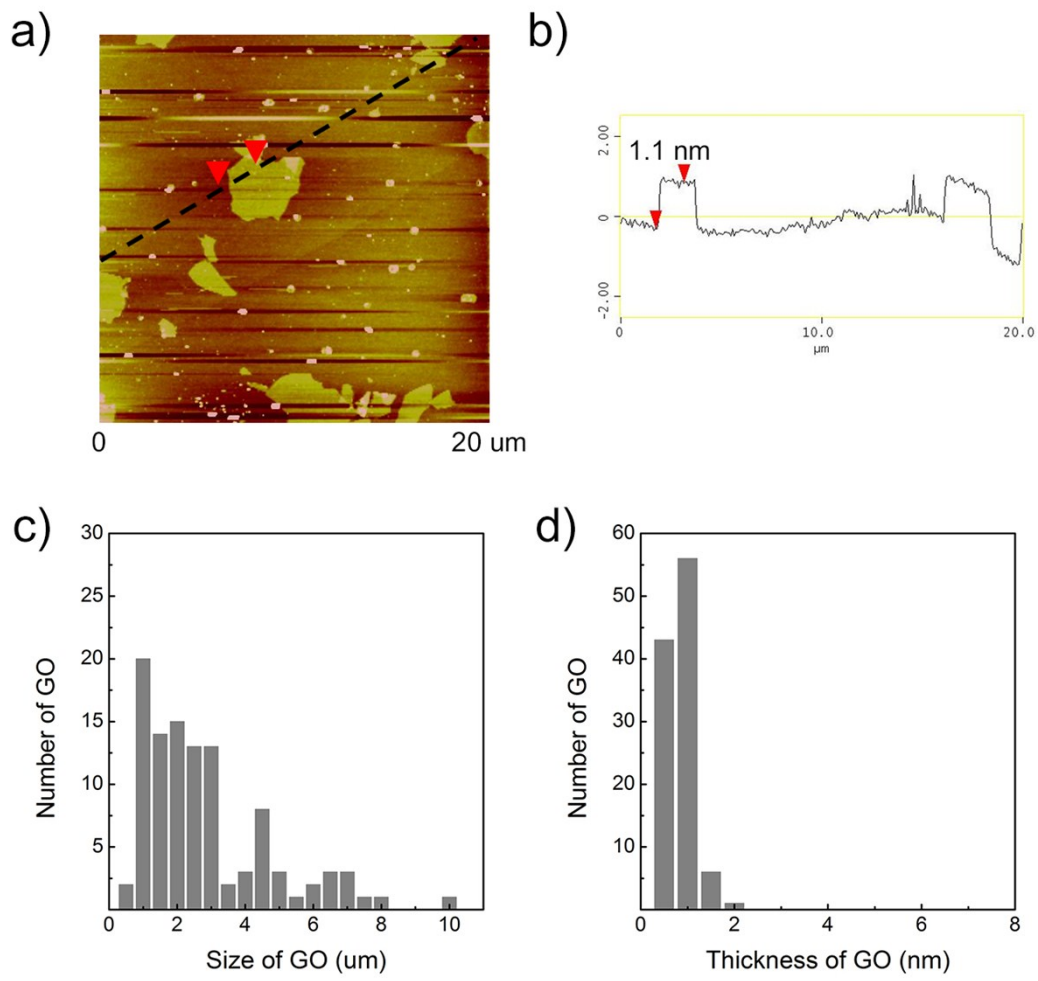


Figure S1. (a) AFM image, (b) cross section, (c) size distribution and (d) thickness distribution of GO.

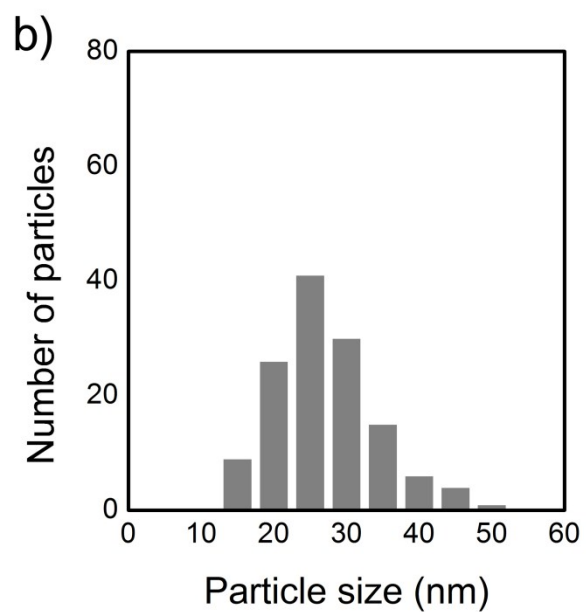
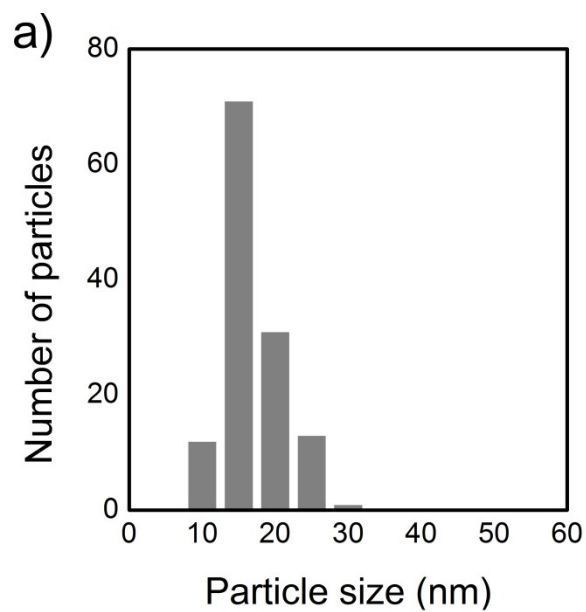


Figure S2. Size distribution of Mn-oxide nanoparticles in $\text{Mn}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$ mixtures a) annealed at 500 °C and b) annealed at 500 °C followed by a rapid quenching.

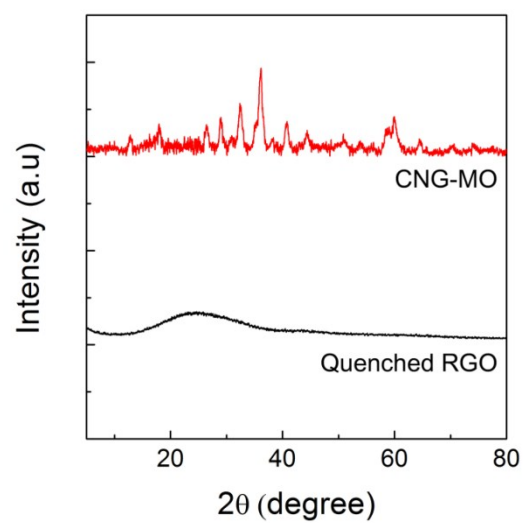


Figure S3. XRD patterns of GO-Gly-Mn(NO₃)₂·4H₂O mixtures annealed at 500 °C followed by a rapid quenching, and quenched RGO.

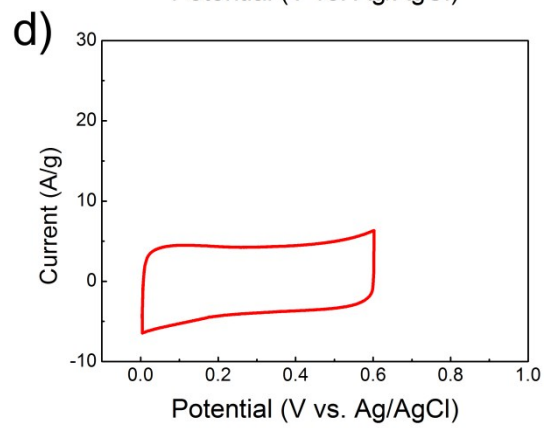
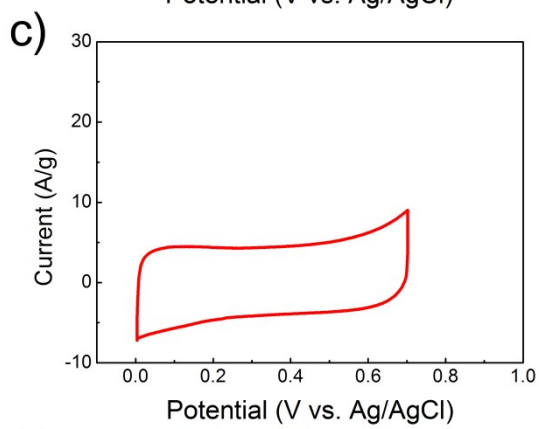
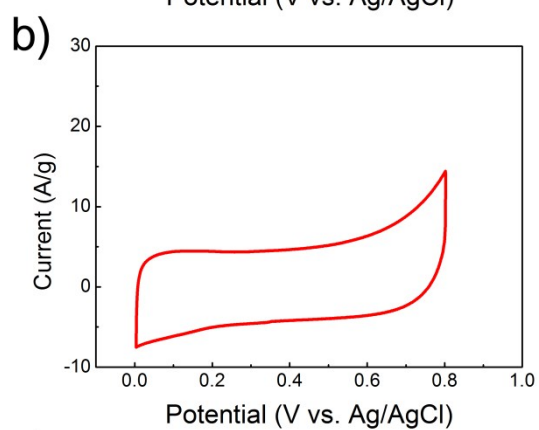
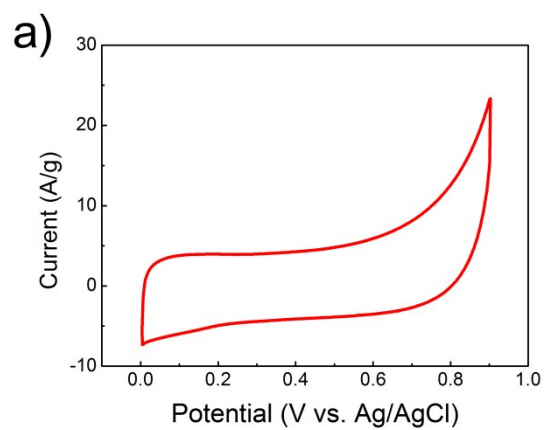


Figure S4. CV curves of the CNG-MO sample measured with different upper cut-off voltages at a scan rate of 5 mV/sec. a) 0.9, b) 0.8, c) 0.7, and d) 0.6 V vs. Ag/AgCl.

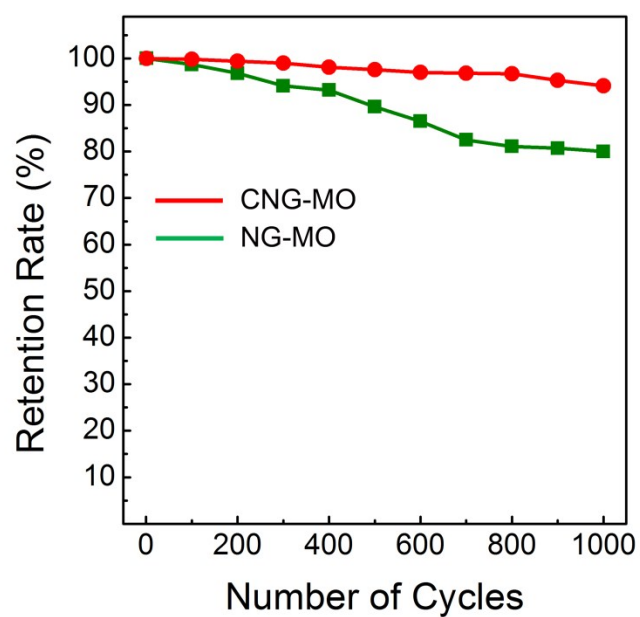


Figure S5. Cycle stabilities of the CNG-MO and NG-MO at a scan rate of 5 mV/sec.