Article

A Highly Flexible Supercapacitor Based on MnO_2/RGO Nanosheets and Bacterial Cellulose-Filled Gel Electrolyte

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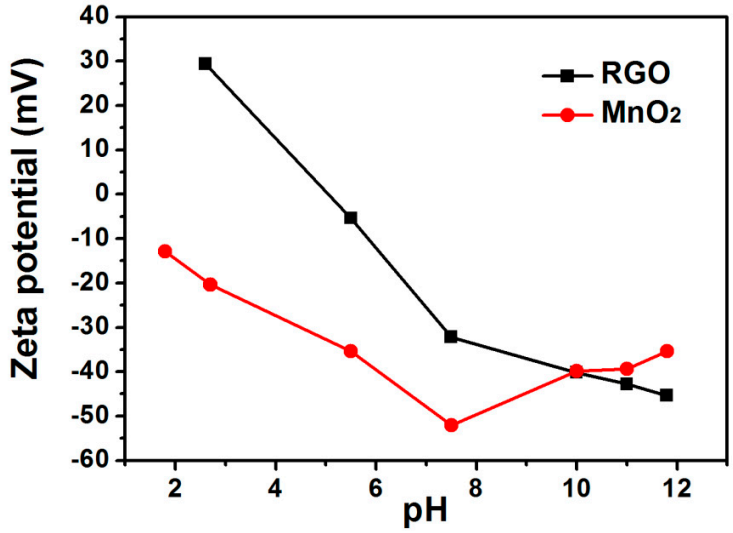

Figure S1. Zeta potential of RGO and MnO_2 as a function of pH, in aqueous dispersion, adjusted by HCl and $NH_3 \cdot H_2O$

Table S1. Zeta potentials (Z) of RGO and MnO_2 at various pH, respectively.

pH	1.8	2.6	2.7	5.5	7.5	10	11	11.8
Z of RGO (mV)	–	29.4	–	-5.4	-32.2	-40.2	-42.8	-45.4
Z of MnO_2 (mV)	-12.9	–	-20.4	-35.4	-52.1	-39.8	-39.4	-35.4

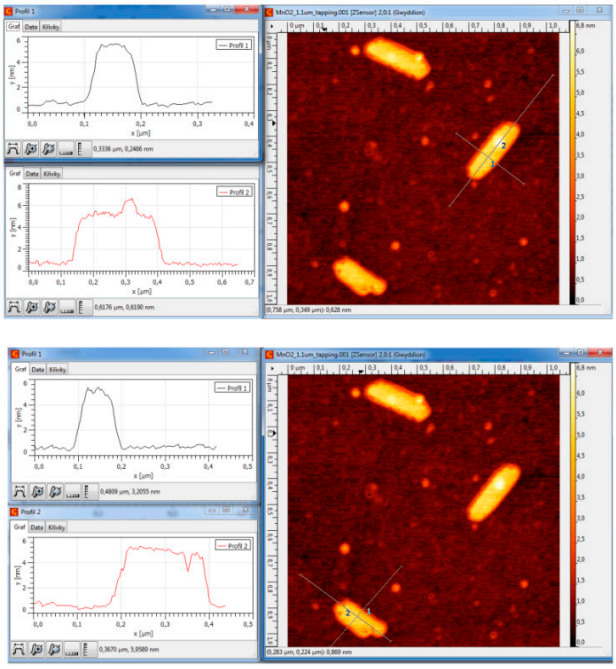

Figure S2. AFM images of MnO_2 show a uniform thickness of ~ 4.5 nm.

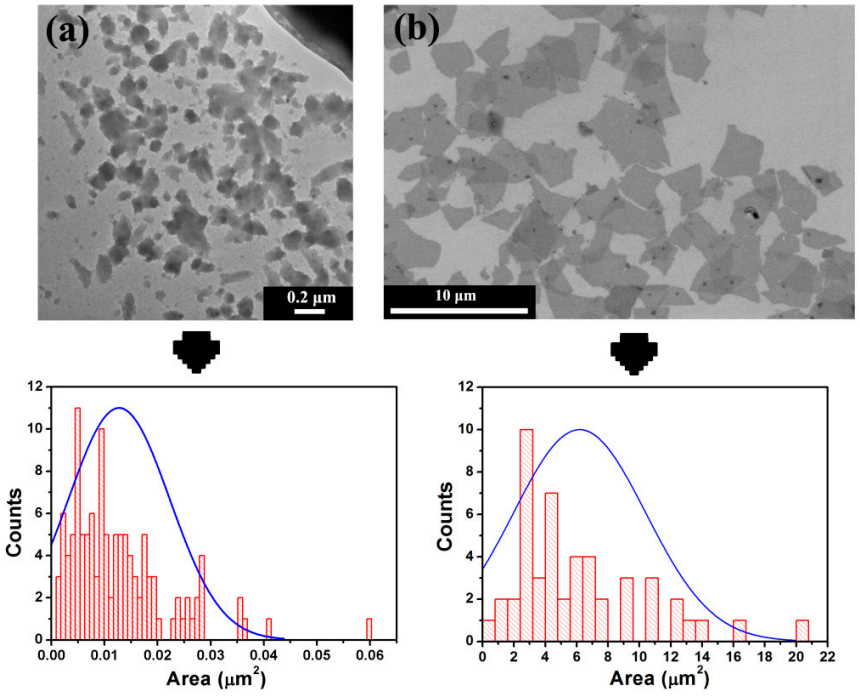

Figure S3. (a) TEM image of MnO_2 presents a lateral size of 100 ~ 300 nm; **(b)** SEM image of RGO on silicon wafer shows a lateral size of 2 ~ 5 µm and their corresponding area distribution.

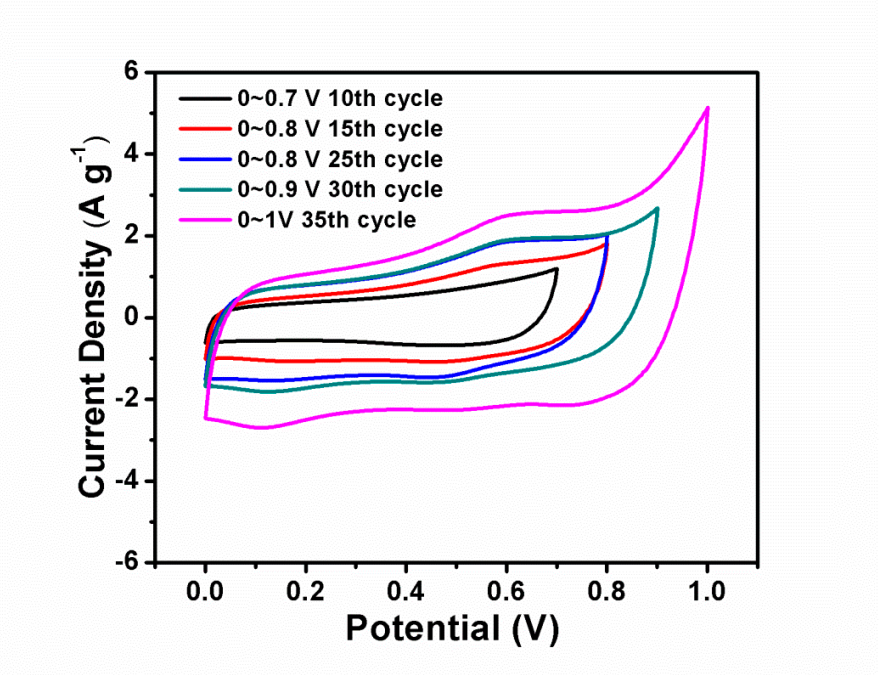

Figure S4. CV curves of MnO_2/RGO at a scan rate of 10 mV s^{-1} with various cycles collected in a three-electrode system with an Ag/AgCl reference in 1 M Na_2SO_4. The redox peaks appear when the potential window extended and increases after cycling.