# An oxygen-independent and membrane-less glucose biobattery/supercapacitor hybrid device

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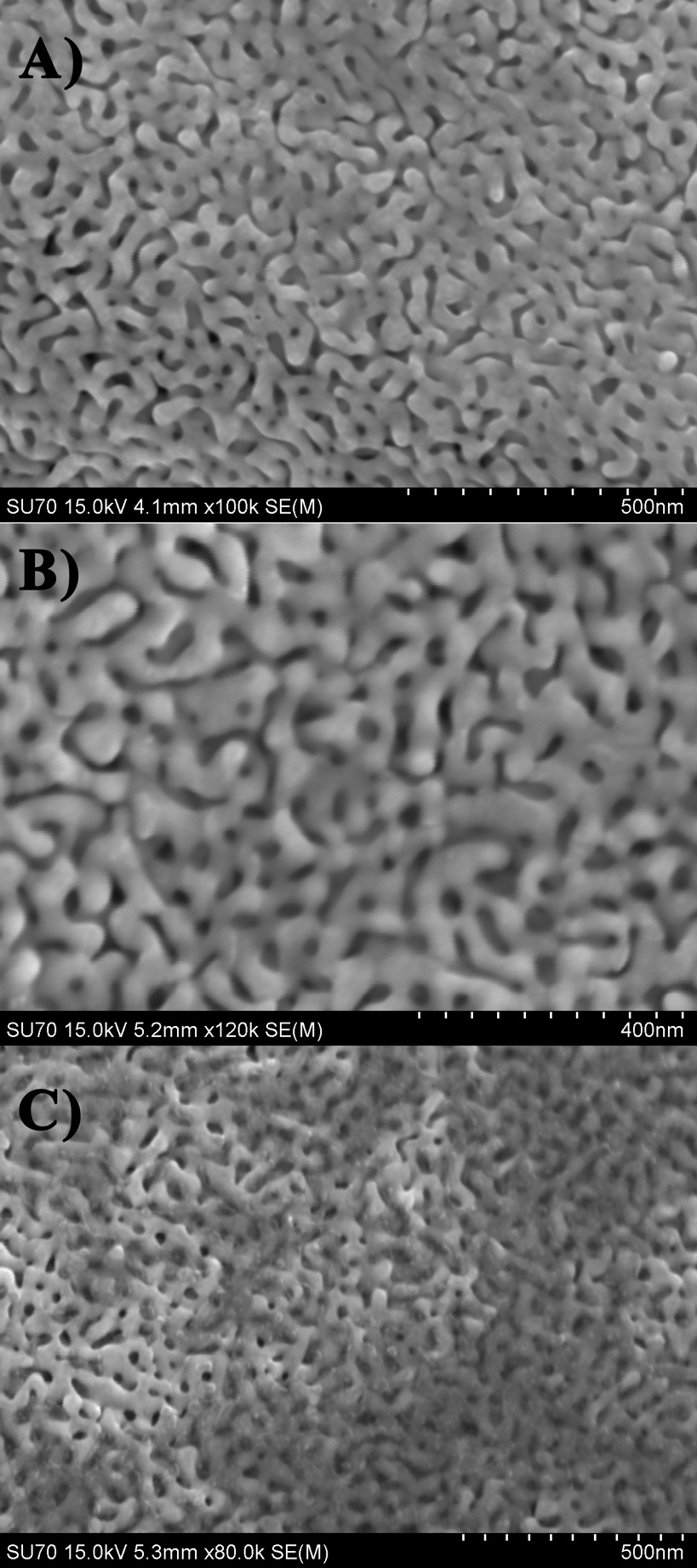
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**Supplementary figures**

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**Figure S1.** The relationship between deposition time and specific capacitance of the corresponding NPG/MnO2 at a potential of 0.45 V vs. SCE.



**Figure S2.** SEM images of the bare NPG (A) and NPG/MnO2 obtained by electrodeposition for 30 s (B), and NPG/MnO2 for 300 s (C).

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**Figure S3.** Raman spectrum of the electrodeposited MnO2 film on the Au film (deposition time: 180 s).

**Figure S4.** TEM images of the bare NPG.



**Figure S5.** Stability of NPG/MnO2 and Au/MnO2 (deposition time: 180 s) in 0.1 M PBS, pH 7.0 in a potential range from 0 to 0.5 V vs. SCE at a scan rate of 100 mV s-1.

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**Figure S6**. Potential profile of NPG/PEDOT (negative electrode of the capacitor)//NPG/MnO2 (positive electrode of the capacitor) over 50 cycles. Experimental procedure: reset at open-circuit for 30 min, followed by discharging at 0.1 mA cm-2 and cutoff at 0 V.