



## **Supplementary Materials: Direct Patterning and Spontaneous Self-Assembly of Graphene Oxide via Electrohydrodynamic Jet Printing for Energy Storage and Sensing**

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Figure S1. The effect of voltage on the thickness of the jet fiber. The scale bar is 100  $\mu m.$ 



**Figure S2.** (a) EHD jet printed linear pattern. The scale bar is 500  $\mu$ m. (b) The magnification image in (a) shows the coffee ring effect. The color of the pattern is gradually changed by different of the GO thickness. The scale bar is 100  $\mu$ m.



**Figure S3.** Structure of coin cell type supercapacitor. (**a**) schematic illustration of a coin cell type supercapacitor. (**b**) A photo of the anode. (**c**) Wave washer. (**d**) Graphene printed on the electrode. (**e**) Polymer electrolyte (PVA/H<sub>3</sub>PO<sub>4</sub>). (**f**) Cathode.



**Figure S4.** Properties of a two-electrode coin cell type supercapacitor. (**a**) Galvanostatic charge/discharge testing results at a current density from 0.25 to 1 A/g. (**b**) Cyclic voltammetry (CV) diagram with varying scan rate from 20 to 100 mV/s.



Figure S5. The saturation curve of the high aspect ratio sensor.