Fabric Solar Cells by Directly Weaving Carbon Nanotube Yarns with CdSe Nanowire-Based Electrodes

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Supporting Information:

1. Figure S1. Morphology characterization, mechanical and electrical properties of CNT yarns.

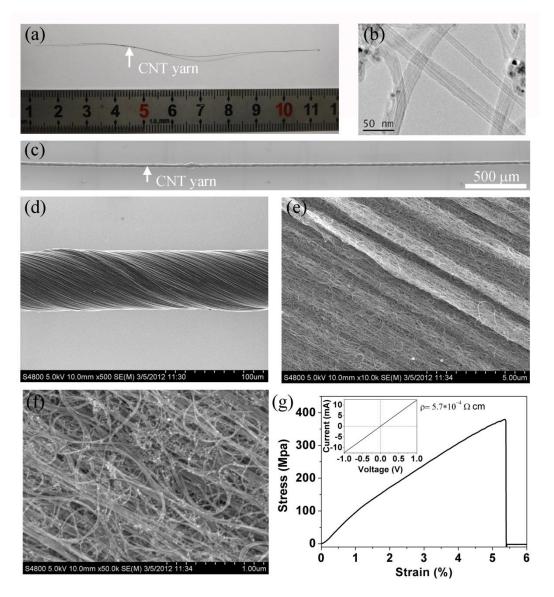


Figure S1. Morphology characterization, mechanical and electrical properties of CNT yarns. (a) Photo of a freestanding 10 cm-long CNT yarn made by spinning a CNT film. (b) Transmission electron microscopy (TEM) image of the CNT film used for spinning the yarn, consisting of mainly single-walled nanotube bundles. (c) Scanning electron microscopy (SEM) image of the CNT yarn showing a straight and uniform segment. (d,e,f) SEM images of the CNT yarns with increasing magnifications, showing tightly twisted CNT bundles. (g) Stress-strain curve of a CNT yarn with 30 µm diameter showing a tensile strength of >300 MPa. Inset, current-voltage curve of the CNT yarn showing an electrical resistivity (ρ) of 5.7×10⁻⁴ Ω·cm.