

Investigation of Carbon Nanotube Webs as Novel Material for Counter Electrodes in a New Organic Electrolyte Based Dye Sensitized Solar Cell

Dalal Noureldine,^a Tharallah Shoker,^a Mustafa Musameh^b and Tarek H. Ghaddar^{a*}

Supporting Information

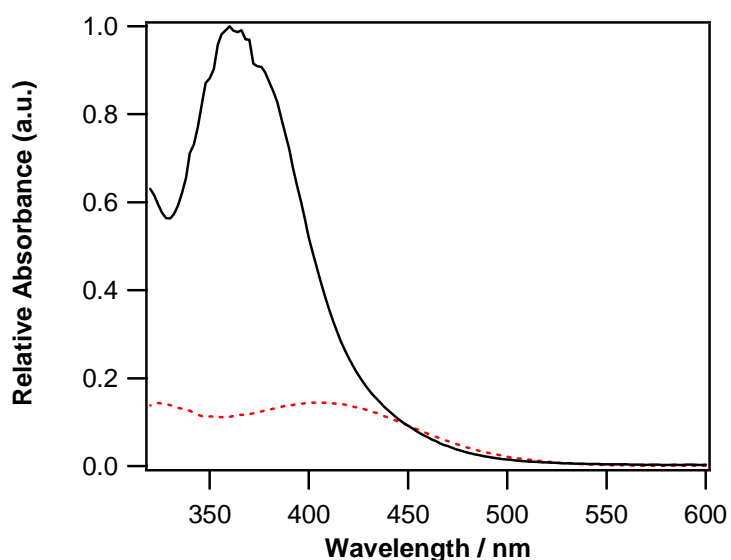


Figure S1: Relative absorption spectra of 1.0 M 1-methyl-3-propyl imidazolium iodide and .15 M I₂ in acetonitrile (solid-black), and 1.0 M T and 0.15 M DT in acetonitrile (dotted-red).

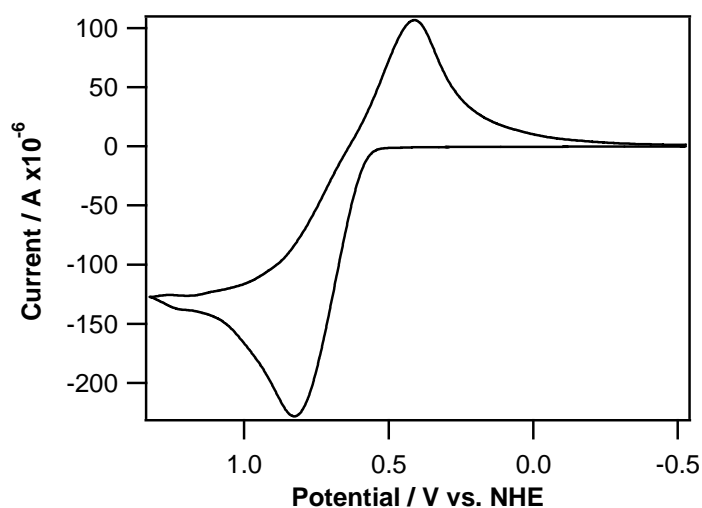


Figure S2: Cyclic voltammogram of T/DT electrolyte in acetonitrile with 0.1 M TBAPF₆.



Figure S2: Photograph of a drawn film of MWCNT webs from an MWCT forest grown on a ceramic substrate.



Figure S3: Photograph of a counter electrode prepared with 20 layers of MWCNT webs on an FTO substrate.

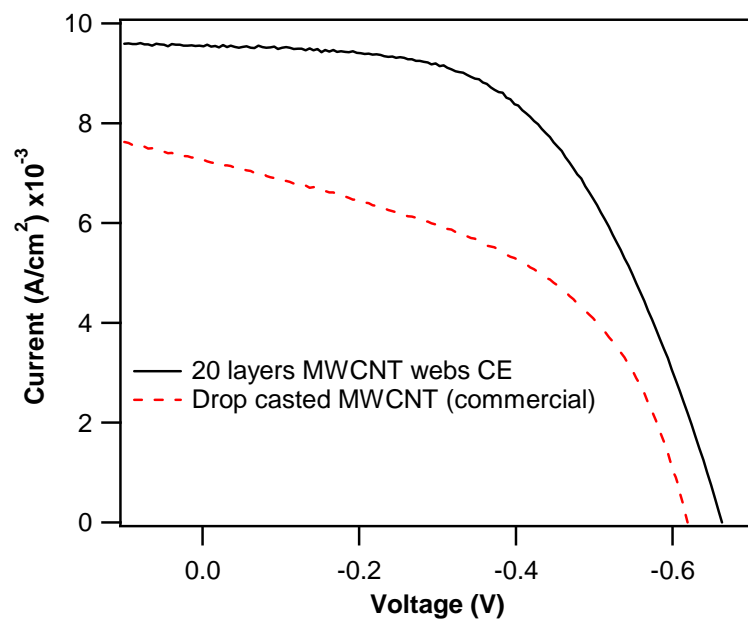


Figure S4: Photocurrent-voltage (J - V) curves of device E with 20 layers of MWCNT webs as the counter electrode (solid-black), and a device made with commercial MWCNT. Measured under $100 \text{ mW}\cdot\text{cm}^{-2}$ simulated AM1.5 spectrum with an active area = 0.126 cm^2 and a spacer thickness $l = 60 \mu\text{m}$.