

Supporting Information

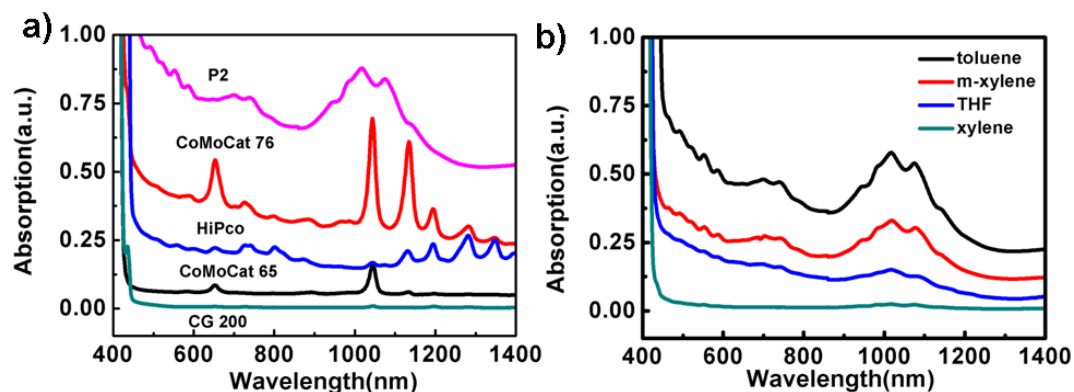


Figure S1. a) Adsorption spectra of different commercial SWCNTs dispersed in toluene with aid of PFO, b) Adsorption spectra of arc discharge SWCNTs dispersed by PFO in toluene, m-xylene, THF and xylene after centrifugation.

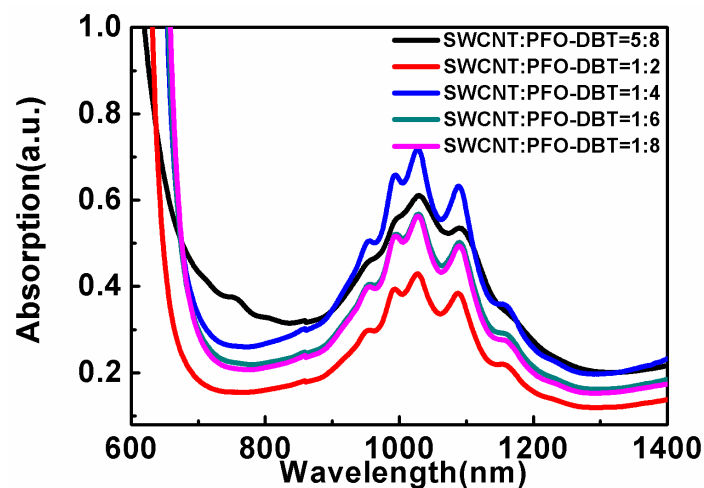


Figure S2. Adsorption spectra of arc discharge SWCNTs with different weight ratios of SWCNTs to PFO-DBT in THF after centrifugation.

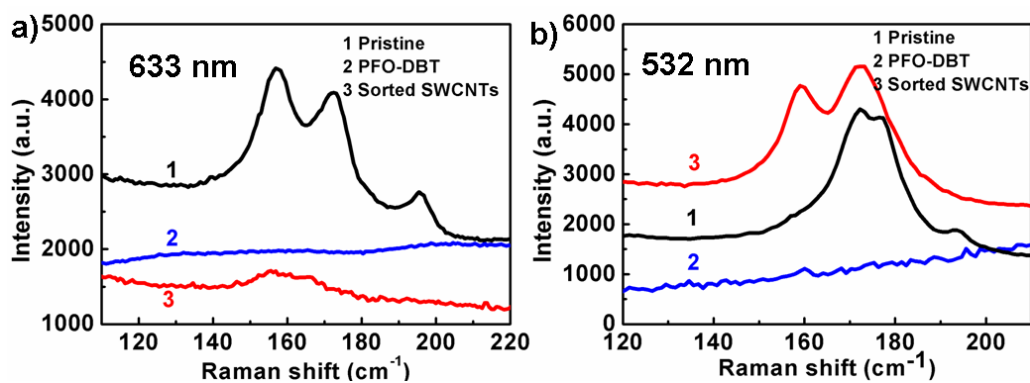


Figure S3. Radial breathing mode (RBM) region of Raman spectra of arc discharge SWCNTs before and after being sorted by PFO-DBT using a) 633 and b) 532 nm laser.

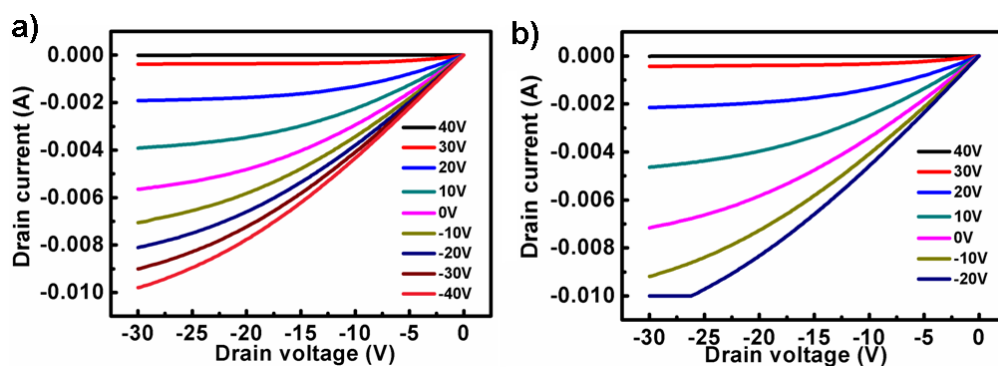


Figure S4 Typical output characteristic of SWCNT TFTs by a) drop-casting and b) printing method.

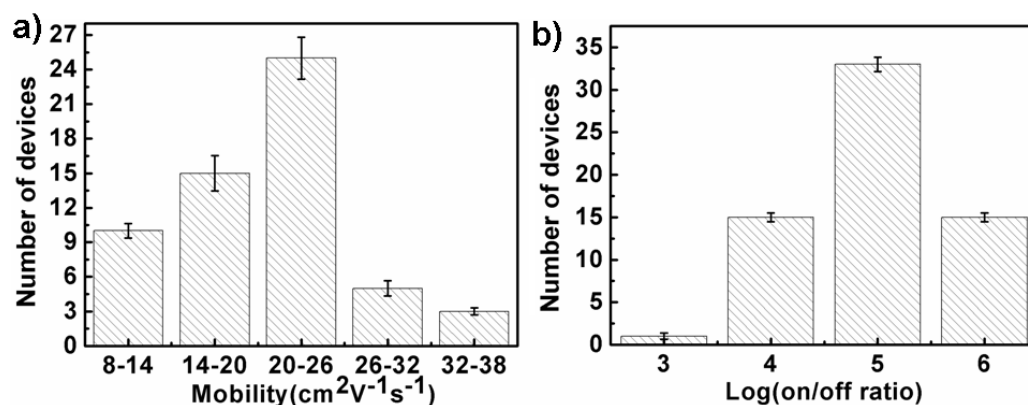


Figure S5 Histogram of a) the mobility and b) on-off ratios of TFT devices based on sorted sc-SWCNTs.