

### Supporting Information

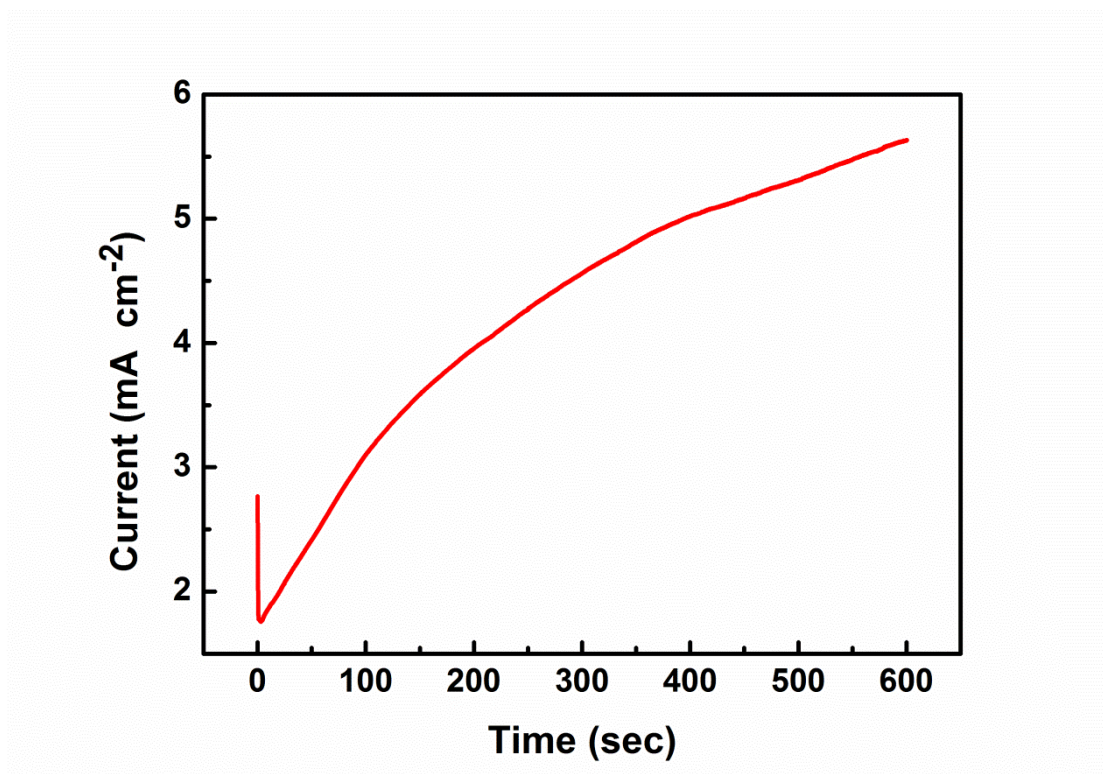


Figure S1. Chronoamperometric curves for synthesis of PPy films. Applied potential and reaction time of 0.85 V and 600 s, respectively.

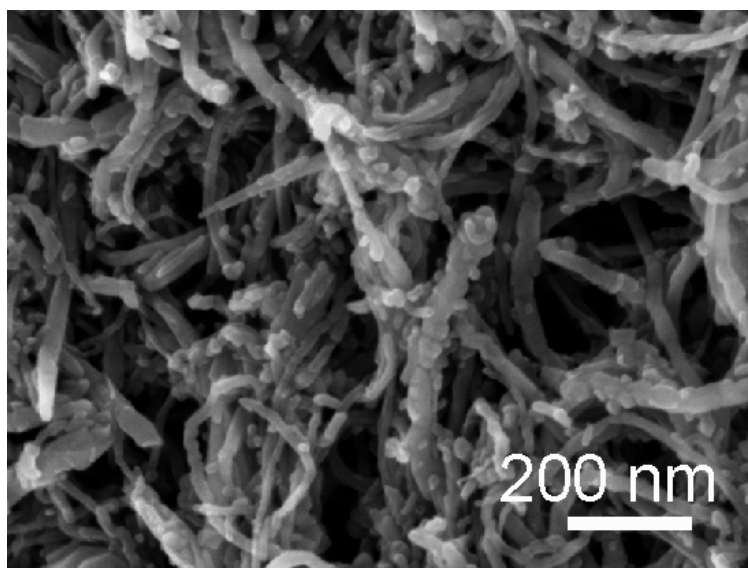


Figure S2. Typical SEM images of CNT coating on cotton fabric surface via ultrasonic condition for 6.0 h, and 0.85 V, 200 s synthesis conditions.

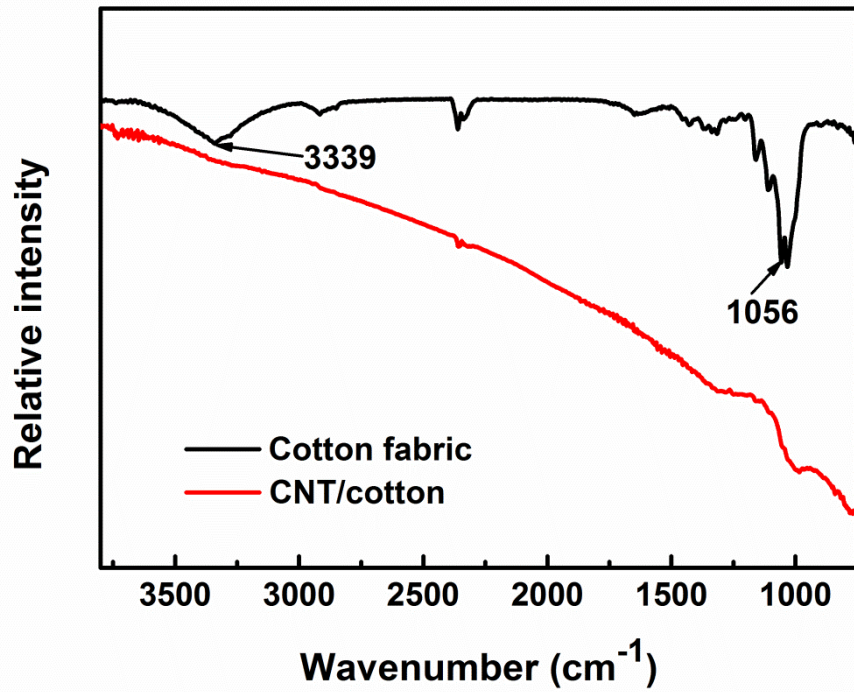


Figure S3. FTIR spectra of CNT/cotton fabrics and PPy/CNT/cotton fabrics.

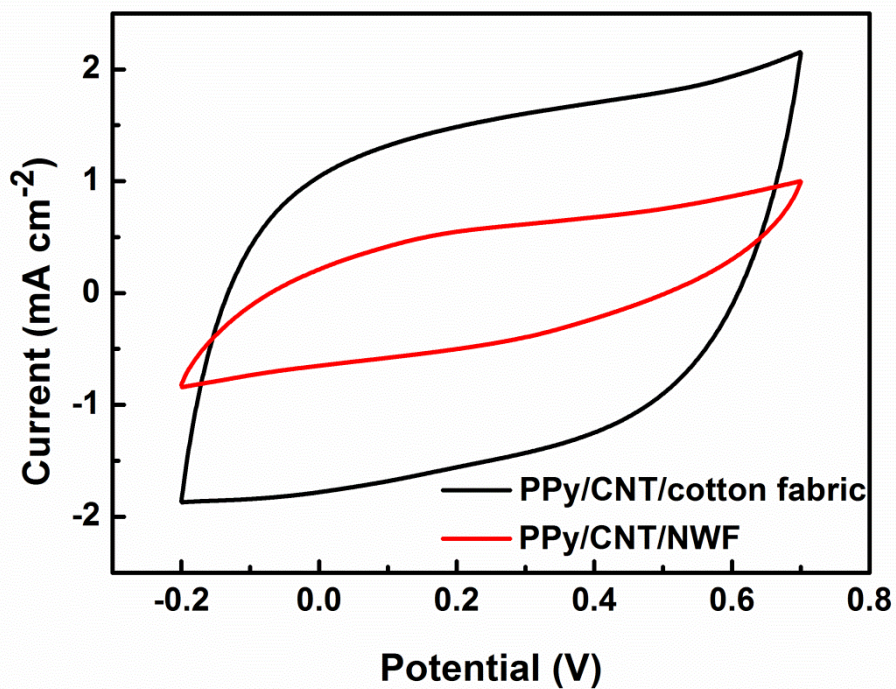


Figure S4. CV curves of PPy/CNT/cotton fabrics and PPy/CNT/NWF at a scan rate of 25 mV s<sup>-1</sup>; 0.85 V, 600 s and 0.85 V, 200 s, synthesis conditions, respectively.

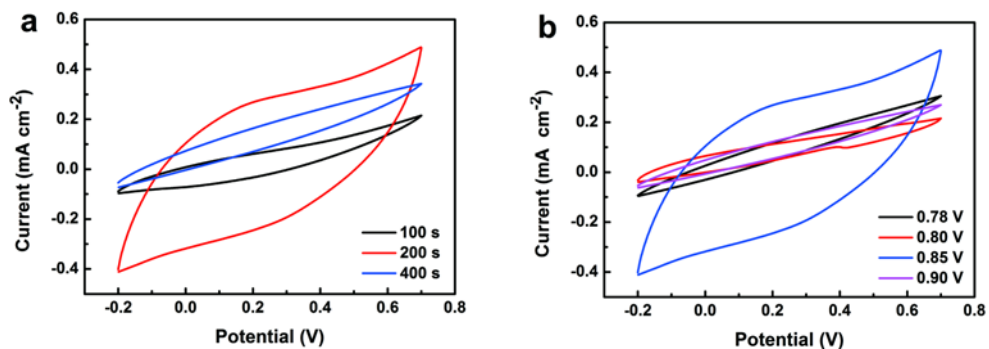


Figure S5. Electrochemical behavior of PPy for different growth conditions. (a) CV curves of PPy/CNT/NWF supercapacitors with PPy electrodeposition time from 100 to 400 s and constant potential 0.85 V. (b) CV curves of supercapacitors with PPy electrodeposition potential from 0.78 to 0.90 V and constant time 200 s. All CV curves were at a scan rate of  $100 \text{ mV s}^{-1}$ .