

[텍스트 입력]

## Supporting Information Available

# Acid-treated SWCNT/polyurethane nanoweb as a stretchable and transparent conductor

<sup>5</sup> Tae Ann Kim, Sang-Soo Lee, Heesuk Kim and Min Park\*

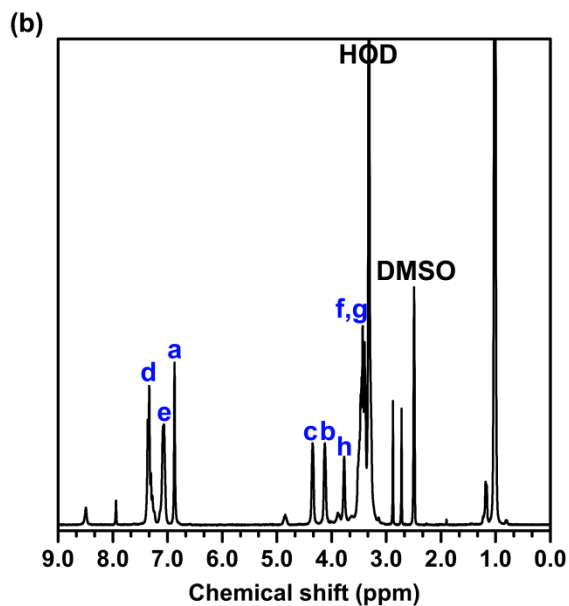
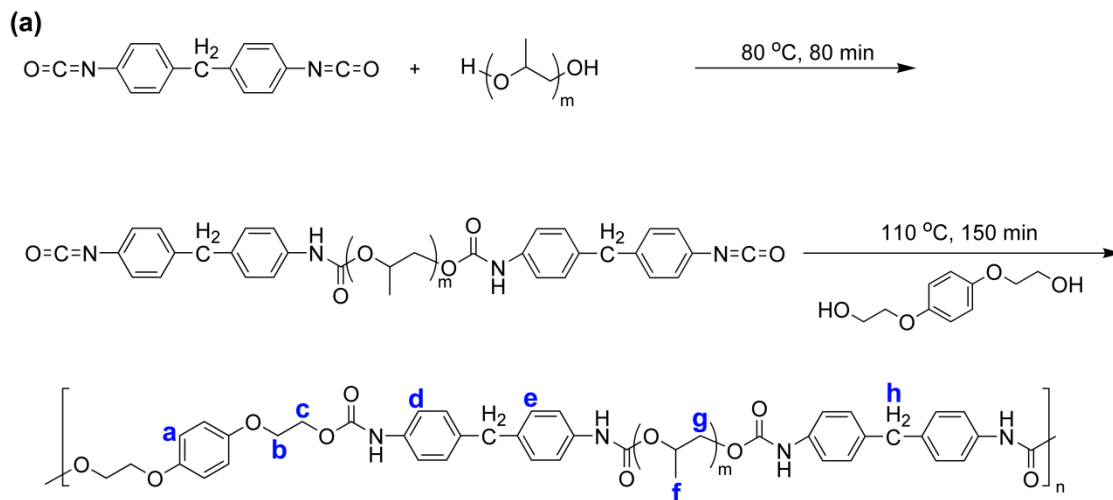
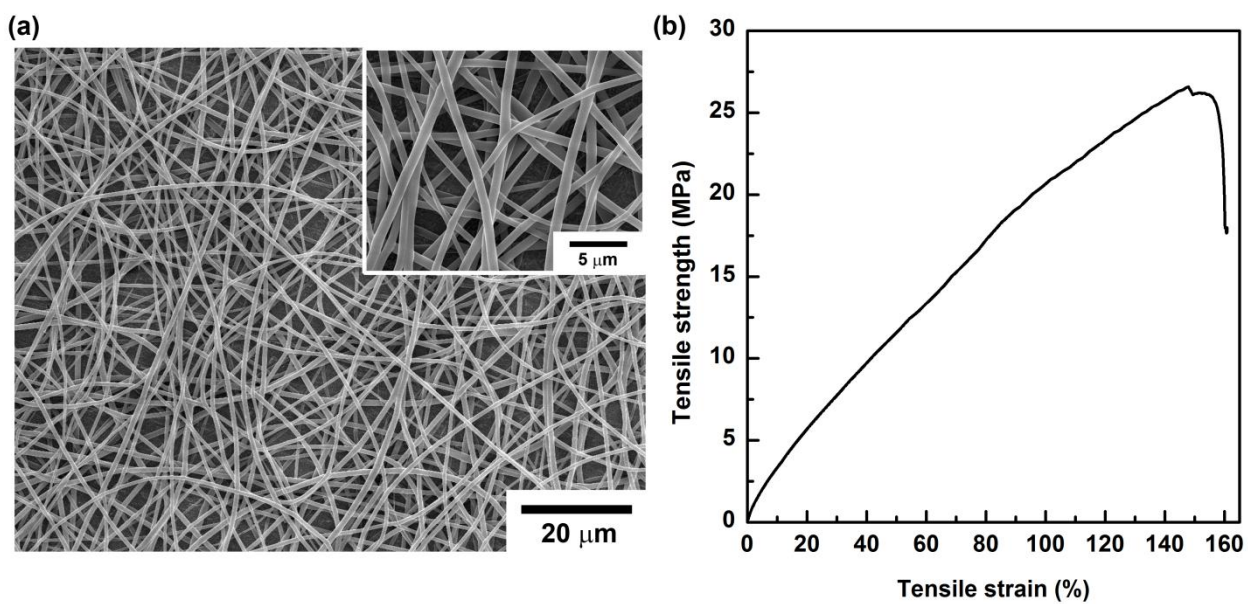


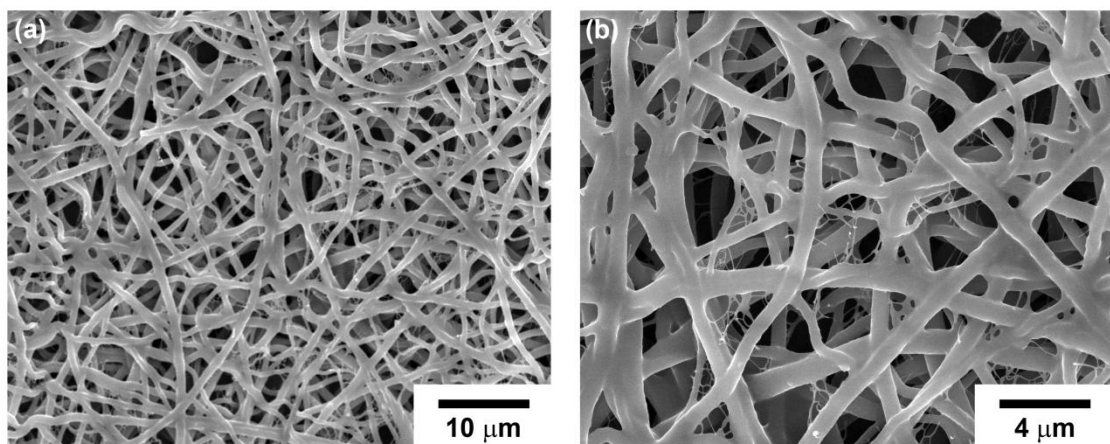
Fig.S1 (a) Synthetic scheme of polyurethane and (b) its <sup>1</sup>H NMR spectrum.

10

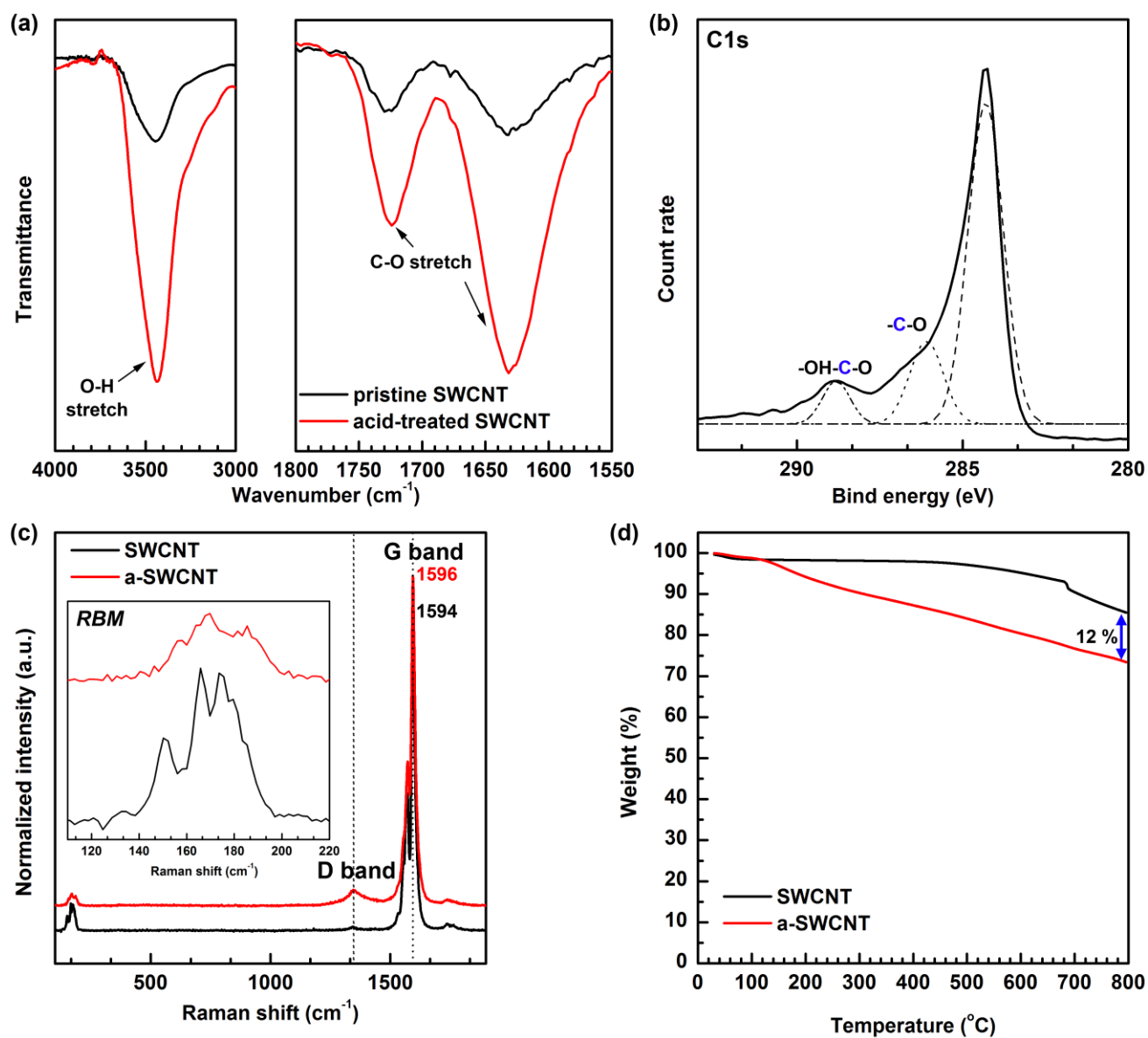
[텍스트 입력]



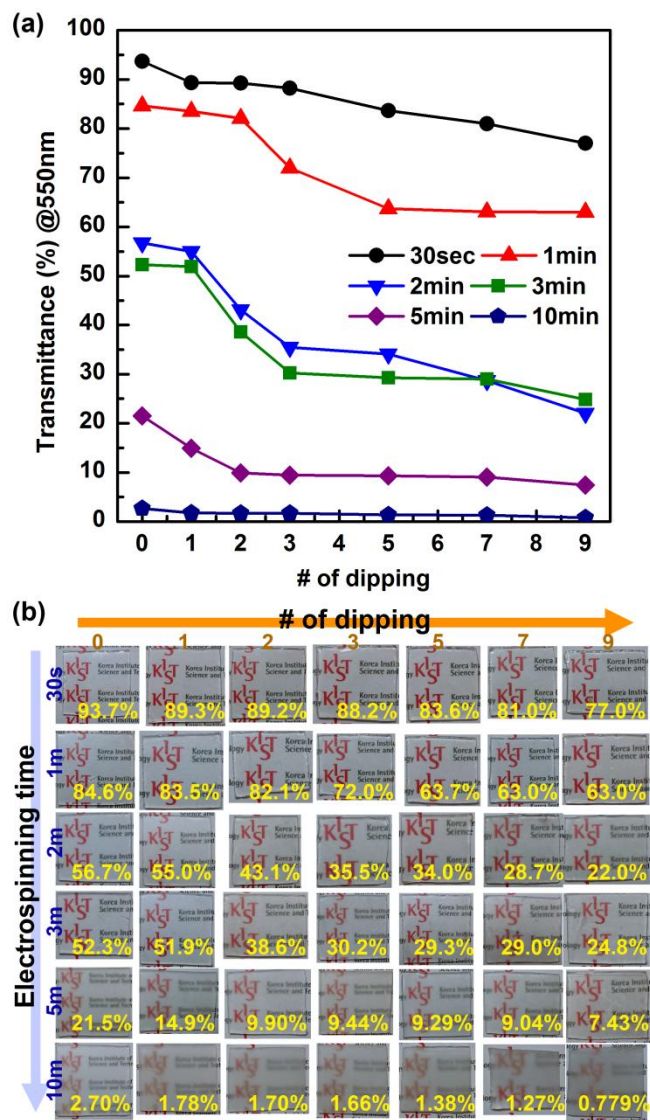
**Fig. S2** (a) SEM images of electrospun PU nanoweb, (inset) magnified image, and (b) its stress-strain behavior.



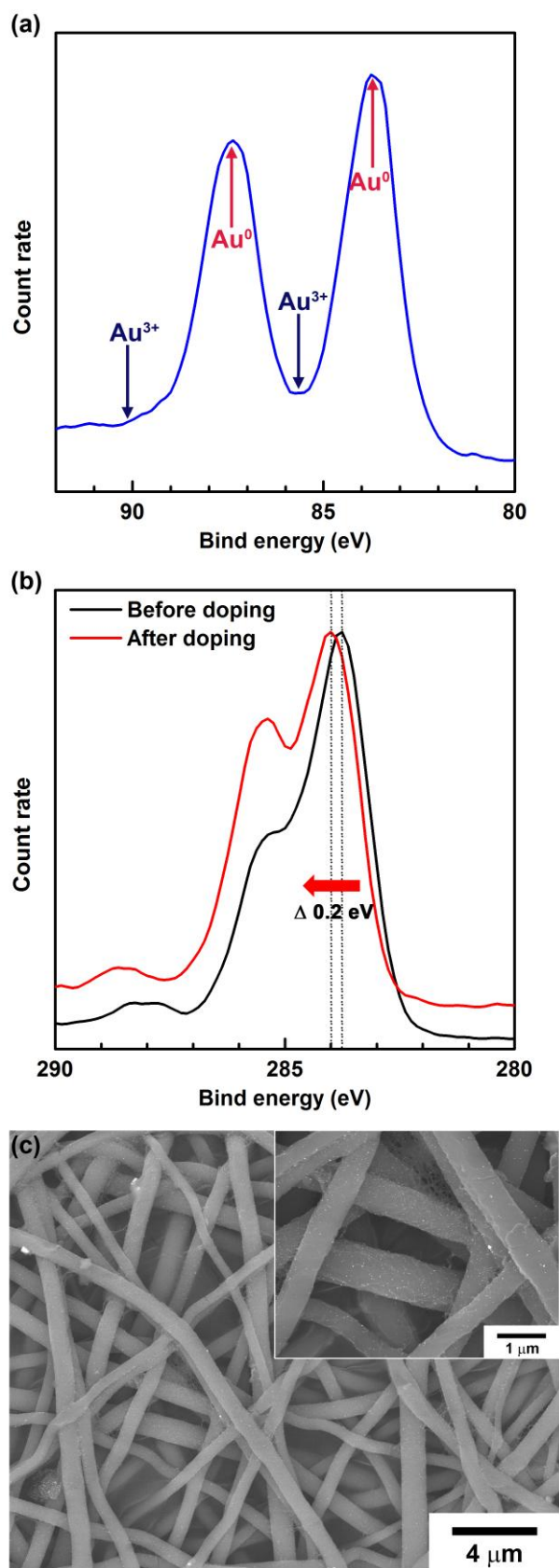
**Fig. S3** (a) SEM image of the SWCNT/PU nanoweb. (b) Enlarged view of (a).



**Figure S4.** (a) FT-IR spectra of pristine SWCNT (black) and acid-treated SWCNT (red), (b) C1s core-level spectrum of acid-treated SWCNTs, (c) Raman spectra and (d) TGA traces of SWCNT (black) and acid-treated SWCNT (red).

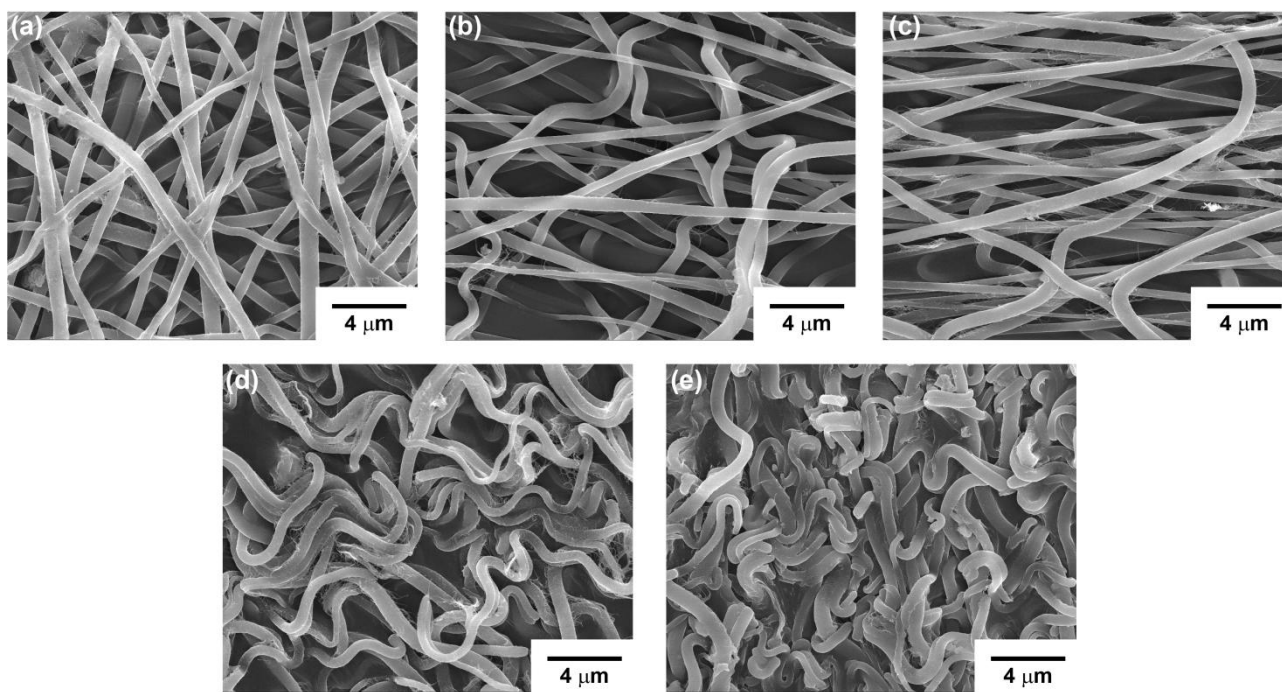


**Fig. S5** (a) Transmittance of the a-SWNT/PU nanoweb as a function of the number of dipping cycles and (b) associated photographs.



**Fig. S6** The XPS Au4f (a), C1s peak (b) of doped a-SWCNT/PU conductors and (c) their COMPO images.

[텍스트 입력]



**Fig. S7** SEM images of the a-SWCNT/PU nanoweb: (a) no strain, (b) 50% strain, (c) 100% strain, (d) 50% released, (e) fully released.