## **Supporting Information**

## Sandwich-Structured Silver Nanowire Transparent Conductive Films with 3H Hardness and Robust Flexibility for Potential Applications in Curved Touch Screens

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**Figure S1.** UV-Vis curves to characterize the transmittance and haze of TCFs fabricated by the (**a**) bare AgNW layer and (**b**) BHC/AgNW/THC layer, respectively. The sheet resistance statistic distribution of the (**c**) bare AgNW TCF and (**d**) BHC/AgNW/THC TCF, respectively. The optical transmittance, haze and sheet resistance of the bare AgNW TCF were 91.6%, 1.4% at 550 nm and 56  $\pm$  3.2  $\Omega$ /sq; while after hardening process, the values for BHC/AgNW/THC TCF were 90.6%, 1% at 550 nm and 72  $\pm$  4.0  $\Omega$ /sq, respectively.



**Figure S2.** Relative changes in the resistance after the 3M taping test, once for the bare AgNW TCF and 50 times for the BHC/AgNW/THC TCF.



**Figure S3.** (a) The picture of PET/BHC substrates with 10  $\mu$ m, 15  $\mu$ m and 20  $\mu$ m coating thickness. (b) Normal and (c) enlarged interface SEM image manifesting the intact AgNW film structure.



**Figure S4.** (a) Relative resistance changes of the bare AgNW TCF and the BHC/AgNW/THC TCF as a function of bending radius. (b) Relative resistance changes of the films under bending tests with 5000 bending cycles under bending radius of 1 cm. The relative change in resistance is expressed as  $(R-R_0)/R_0$ , where R is the resistance after bending tests and  $R_0$  is the resistance before bending.