## **Electronic Supplementary Information**

## Humidity assisted annealing technique for transparent conductive silver nanowires networks

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Figure S1. The difference between initial and final total transmittance  $\Delta T$  vs. initial total transmittance for NW-90 networks after humidity assisted annealing at different temperatures (60-85 °C) and RH (50-85 %). Electrodes with higher density of wires showed higher changes in T<sub>total</sub> values after annealing.



Figure S2. Transmittance spectra of NW-35 electrode annealed at 85 °C/70 % RH. Both optical transmittance value at 550 nm and position of maximum changed during annealing.



Figure S3. SEM images of Ag35-NW on glass after 180 min humidity assisted annealing at 60 °C/70 % RH (A), 85 °C/70 % RH (B), 60 °C/ 85% RH (C) and 85 °C/85 % RH (D). White arrows in (B) mark soldering points.



Figure S4. Sheet resistance vs. annealing time at a constant temperature of 60 °C and different RH values: (A) NW-90 electrode; (B) NW-35 electrode.



Figure S5. Transmittance (A) and reflectance (B) spectra of NW-90 electrode on PEN foil before (black) and after annealing in the climate cabinet at 85 °C/70 % RH (red). Additionally, direct (dotted blue) and total (solid blue) transmittance and reflectance spectra of pure PEN foil are shown. (C) SEM picture of the corresponding AgNW-90 electrode on PEN foil after humidity assisted annealing.