

Supplementary data for

Facile Post Treatment of Ag Nanowire/Polymer Composites for Flexible Transparent Electrodes and Thin Film Heaters

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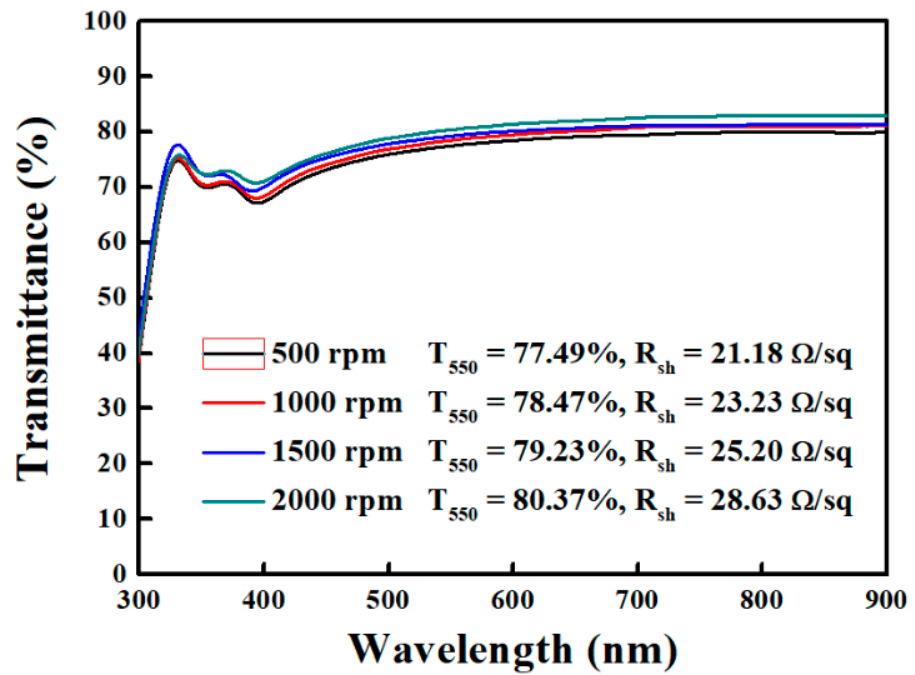


Figure S1. Transmittance of thick Ag NWs network at various spin rate.

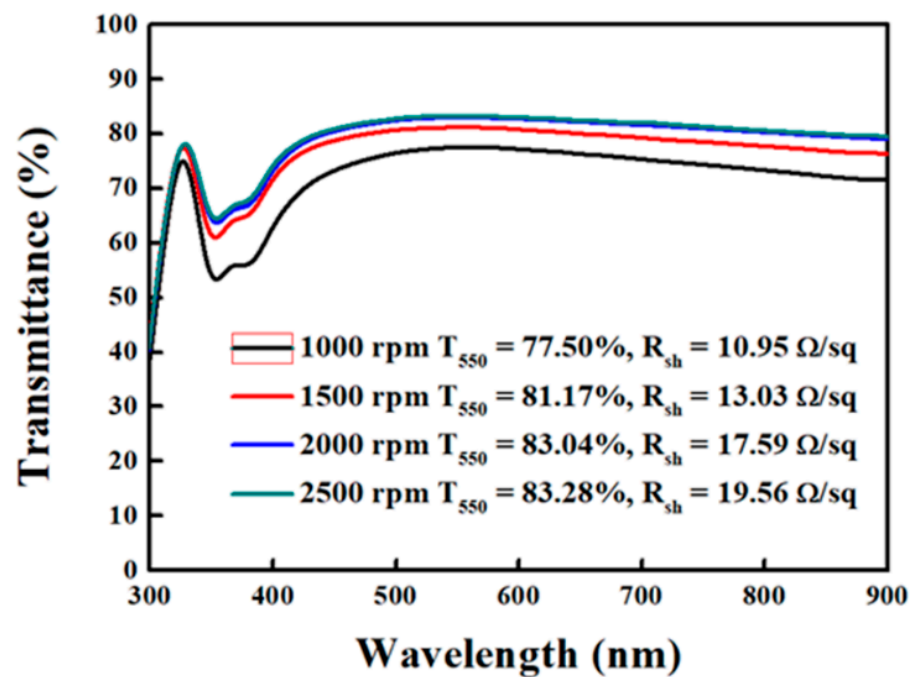


Figure S2. Transmittance of thin Ag NWs network at various spin rate.

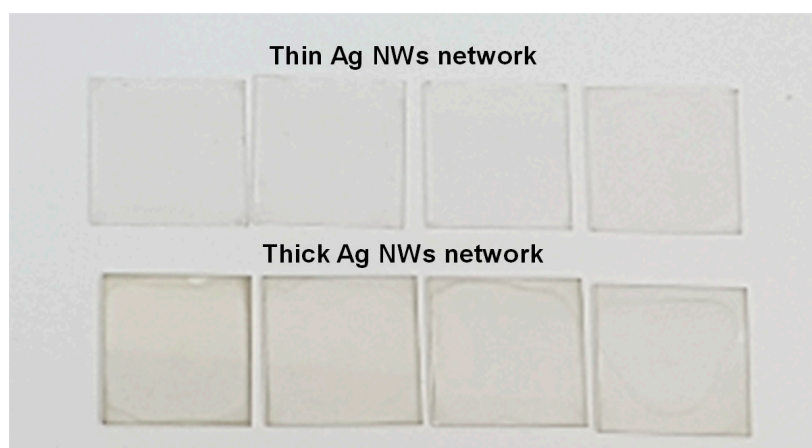


Figure S3. Photographic images of AgNWs network with the thick and thin diameter at the various spin coating speed (left to right: 1000 rpm, 1500 rpm, 2000 rpm, 2500 rpm).

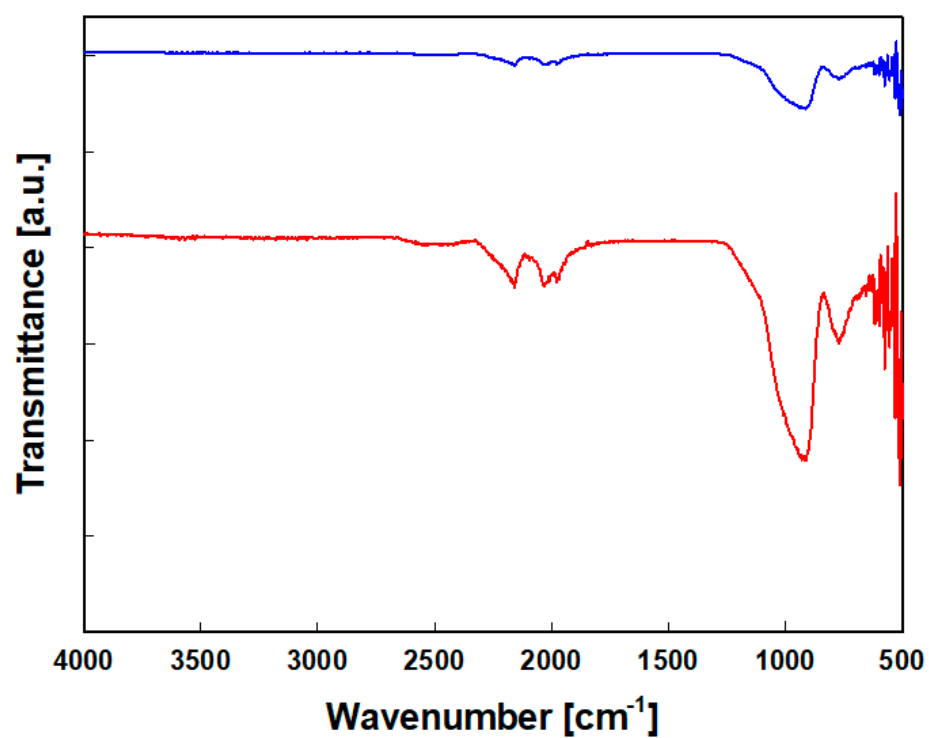


Figure S4. FT-IR spectra of Ag NWs network films after ethanol dipping process. (**blue**: thin Ag NWs network, **red**: thick Ag NWs network).

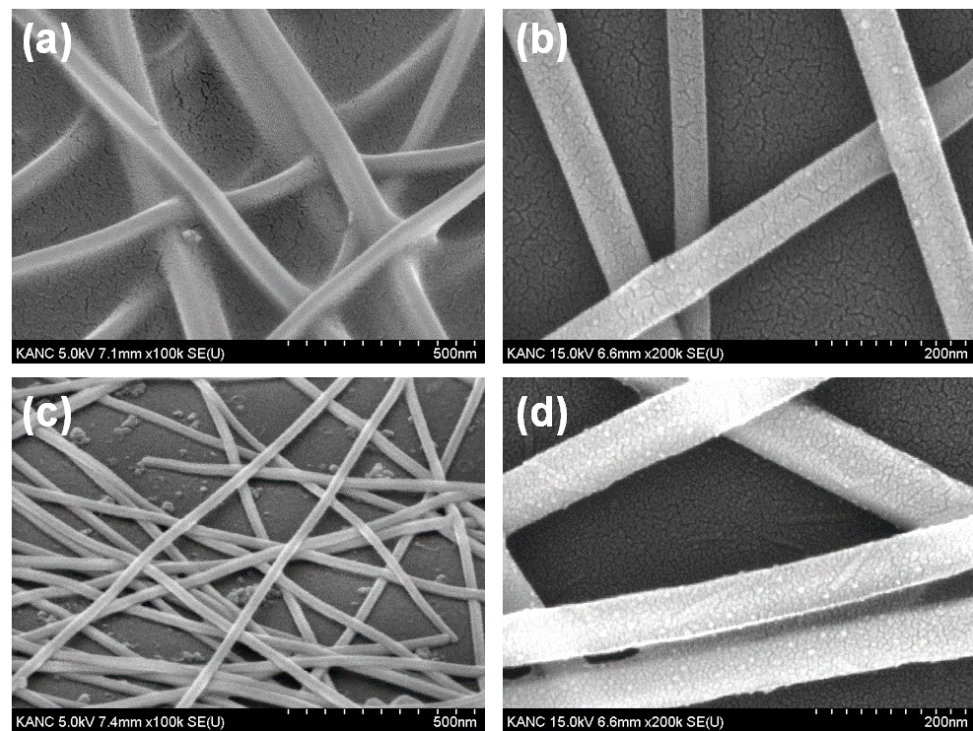


Figure S5. SEM images of thick Ag NWs network followed by different post-treatment. (a) SEM images of the pristine thin Ag NWs network, (b) thin Ag NWs network after thermal annealing at 130 °C for 20 min, (c) thin Ag NWs network after solvent dipping, and (d) thin Ag NWs after N₂ gas-blowing.

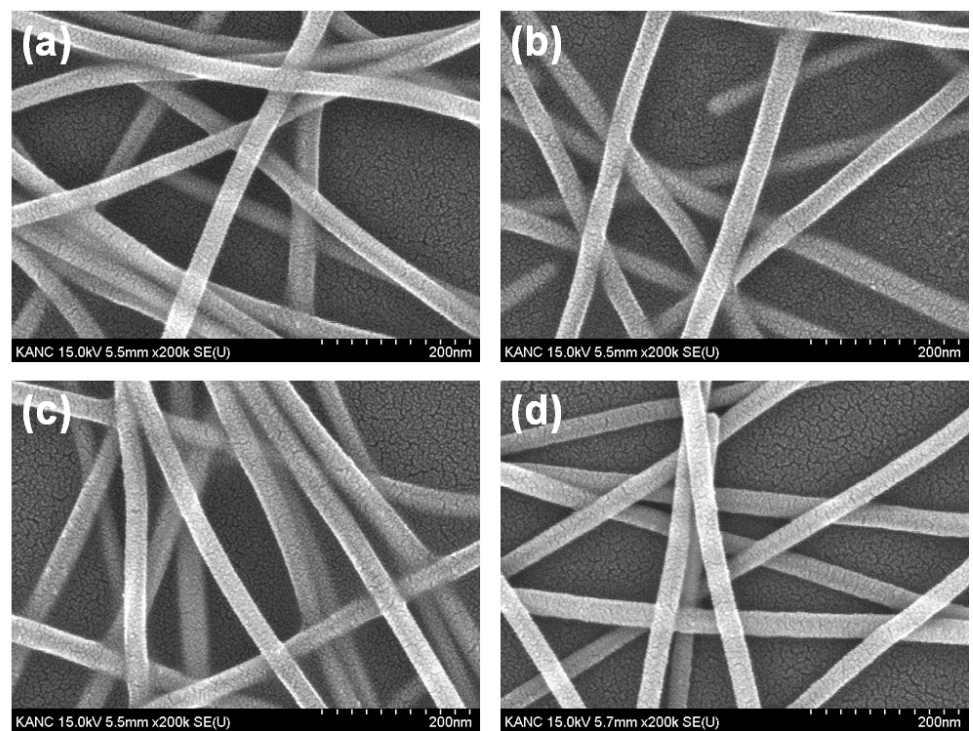


Figure S6. SEM images of thin Ag NWs network followed by different post-treatment. (a) SEM images of the pristine thin Ag NWs network, (b) thin Ag NWs network after thermal annealing at 130 °C for 20 min, (c) thin Ag NWs network after solvent dipping, and (d) thin Ag NWs after N₂ gas-blowing.

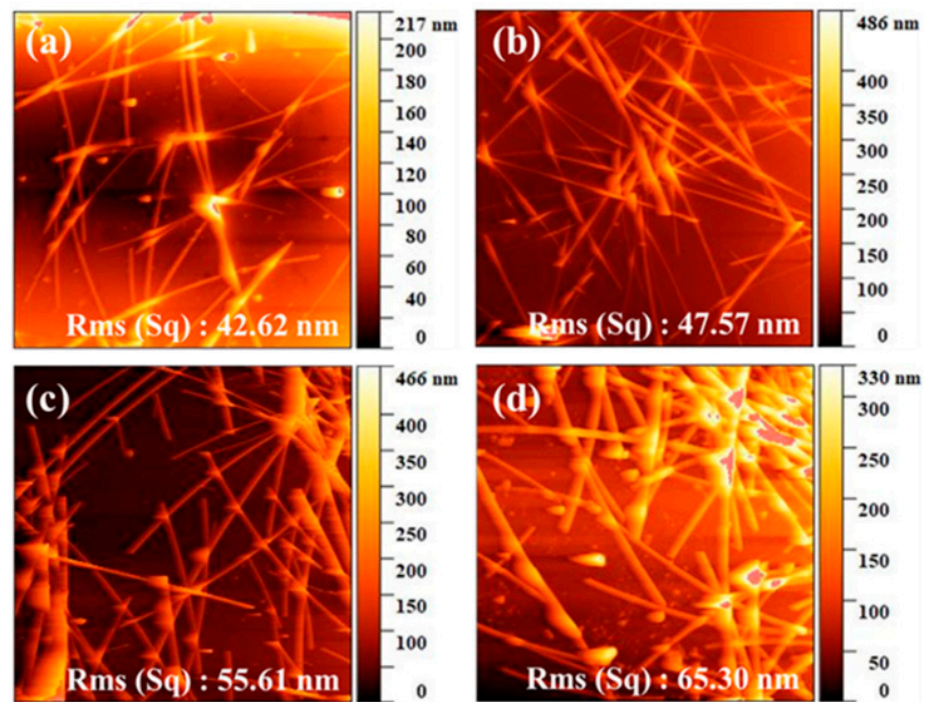


Figure S7. AFM topographic images of thick Ag NWs network. (a) Pristine Ag NWs network. (b) Ag NWs network after thermal annealing at 130 °C for 20 min. (c) Ag NWs network with solvent dipping. (d) Ag NWs network after N₂ gas-blowing.

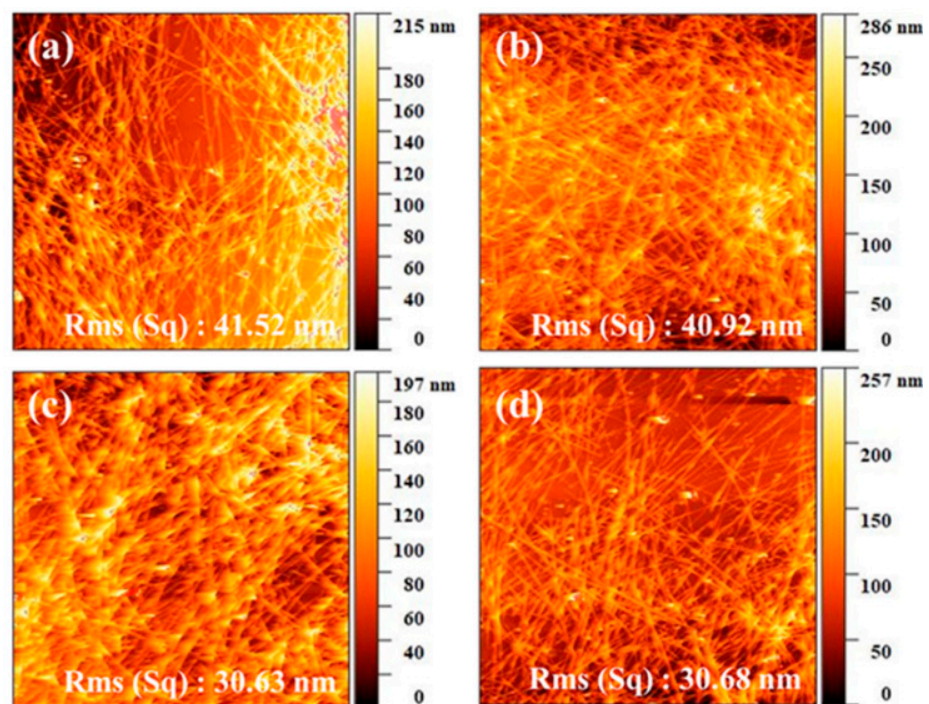


Figure S8. AFM topographic images of thin Ag NWs network. (a) Pristine Ag NWs network. (b) Ag NWs network after thermal annealing at 130 °C for 20 min. (c) Ag NWs network with solvent dipping. (d) Ag NWs network after N₂ gas-blowing.

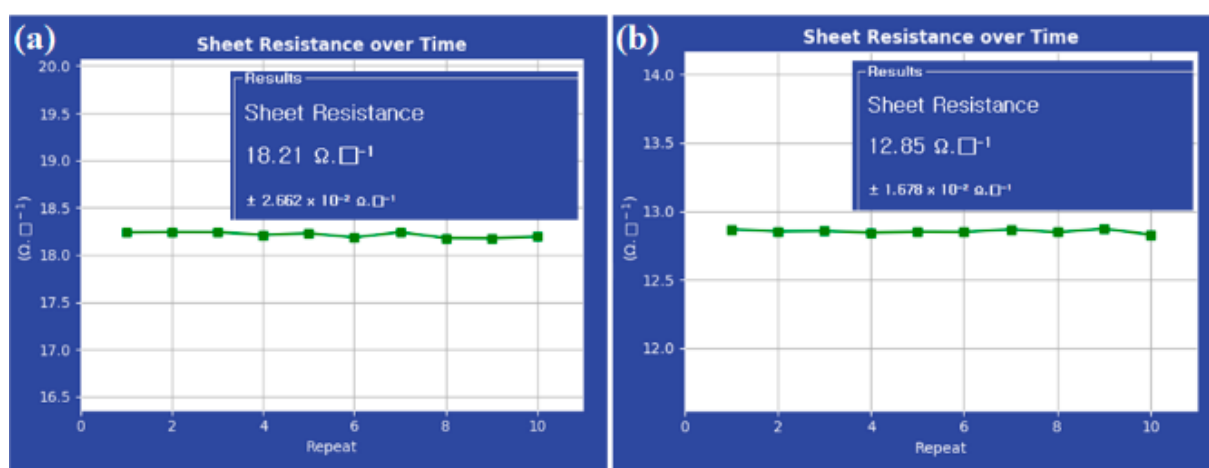


Figure S9. (a) Sheet resistance of Ag NWs network with thin diameter (a) and thick diameter (b).

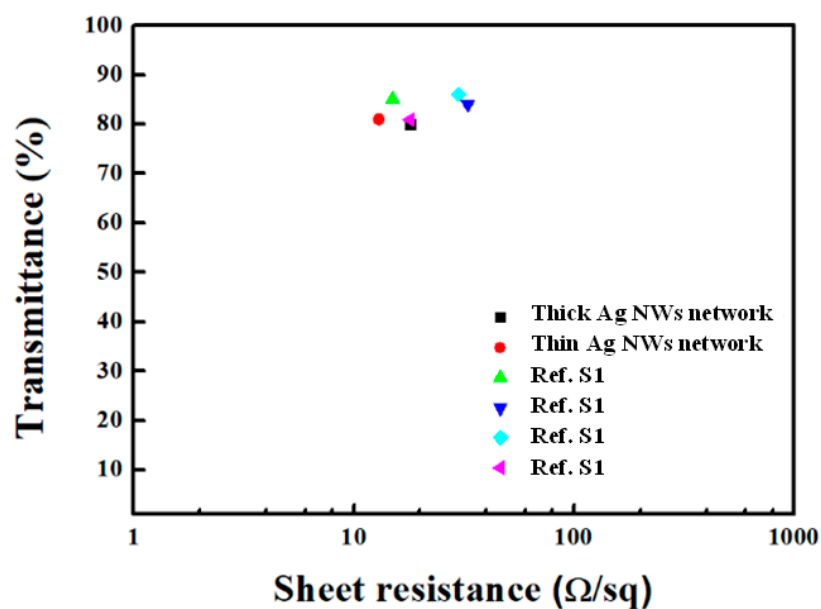


Figure S10. Sheet resistance versus transmittance from selected publications are also plotted for comparison.

Supplementary reference

- S1. ACS Nano 2014, 8, 1590-1600.
- S2. ACS Nano 2010, 4, 2955-2963.
- S3. Nanoscale 2017, 9, 1978-1985.
- S4. Nat. Nanotech. 2011, 6, 788