

Supporting Information

Interface Engineering of Solution-Grown Silver Nanofiber Networks Designed as Flexible Transparent Electrodes†

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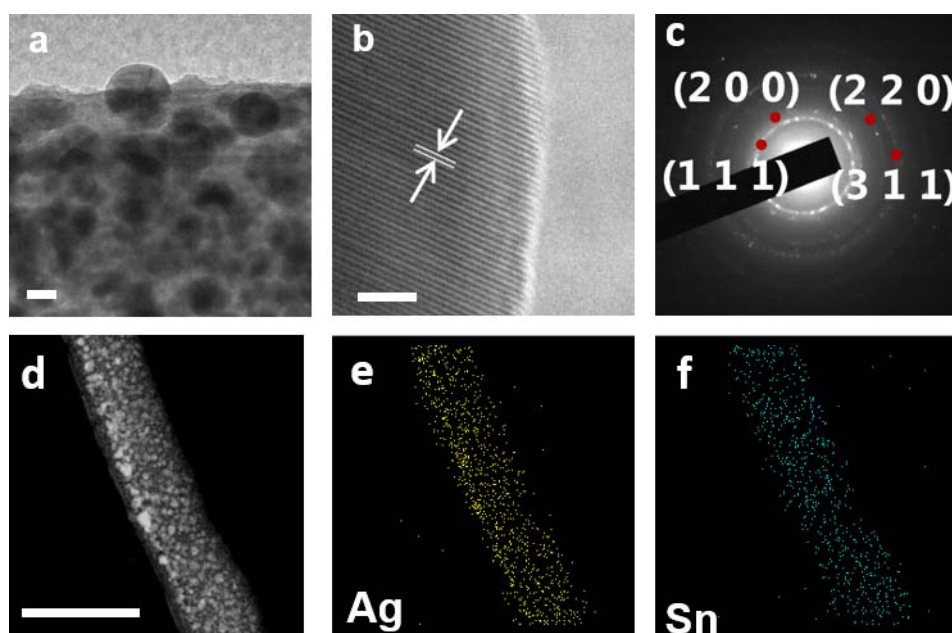


Figure S1. (a) TEM images of Ag nano-seeds grown on the argon plasma-treated PVB NFs. Scale bar = 20 nm. (b) HR-TEM image of Ag nano-seed. Scale bar = 5 nm. (c) SAED ring pattern of Ag nano-seed. (d) The EDS mapping region of an individual Ag NF, the corresponding EDS mapping of Ag e) and Sn f). Scale bar = 300 nm.

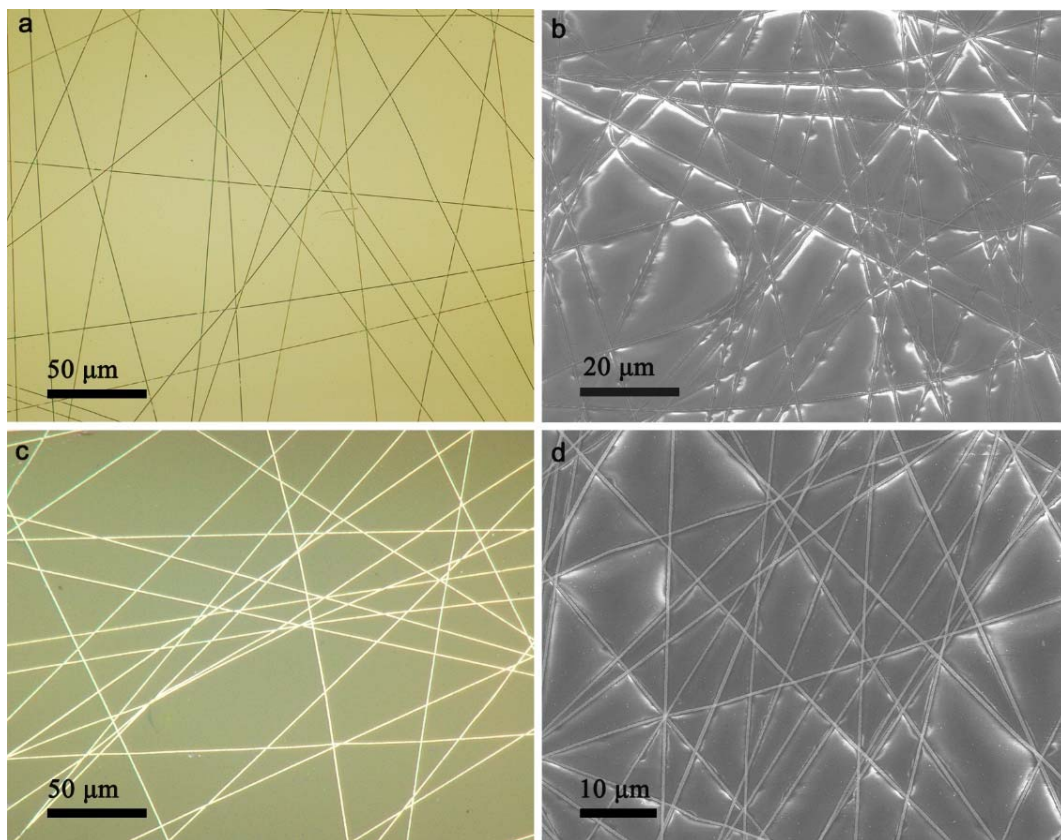


Figure S2. Optical and SEM images of the PVB/SnCl₂ nanofibers (a,b) and Ag-coated nanofibers (c,d).

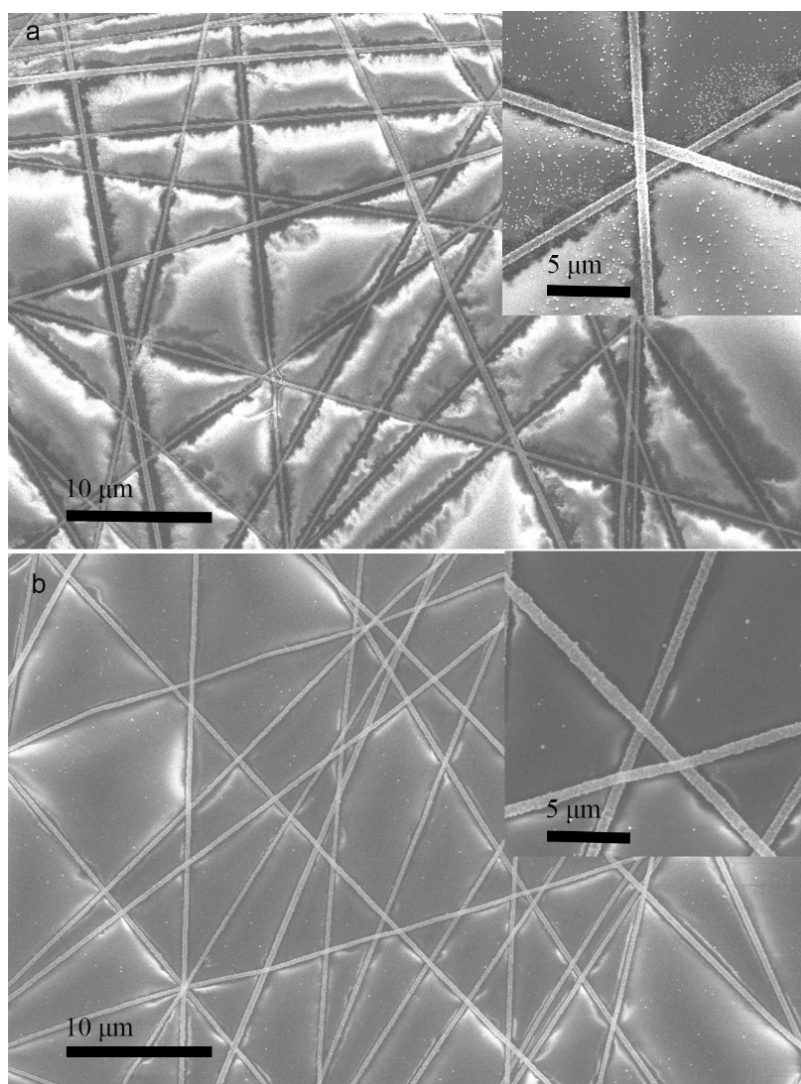


Figure S3. SEM images of Ag NF network FTEs prepared using the PVB NF templates without a) and with b) argon plasma treatment. The electroless deposition time was 30 minutes. The insets are the corresponding high-magnification SEM images showing the substrate surface with and without Ag nanoparticles, respectively.

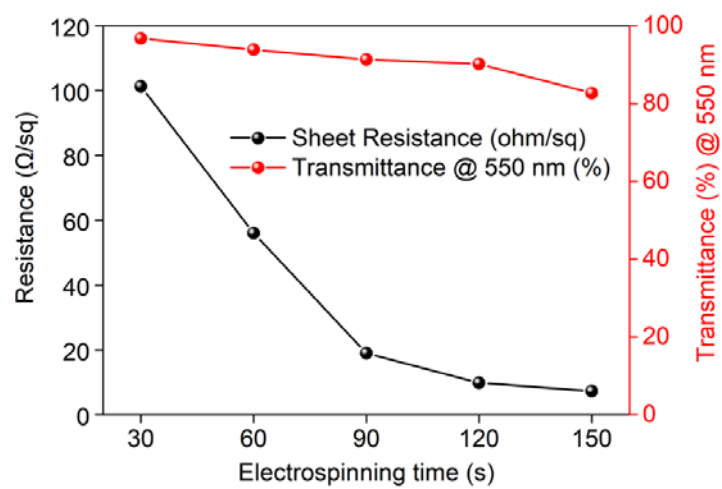


Figure S4. Electrospinning time dependence of sheet resistance and transmittance (@550 nm) of Ag NF network FTEs.

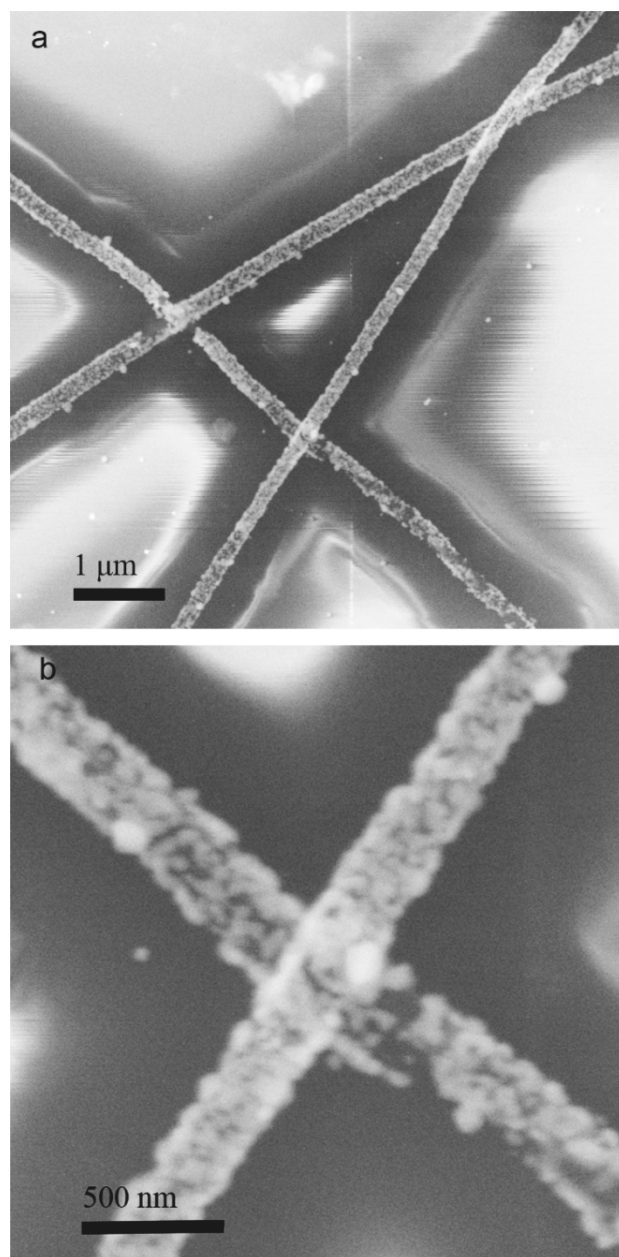


Figure S5. SEM images of Ag NF network FTE under 10 V applied voltage. The average surface temperature of the Ag NF network FTEs was 200 °C before the Ag NFs melt.

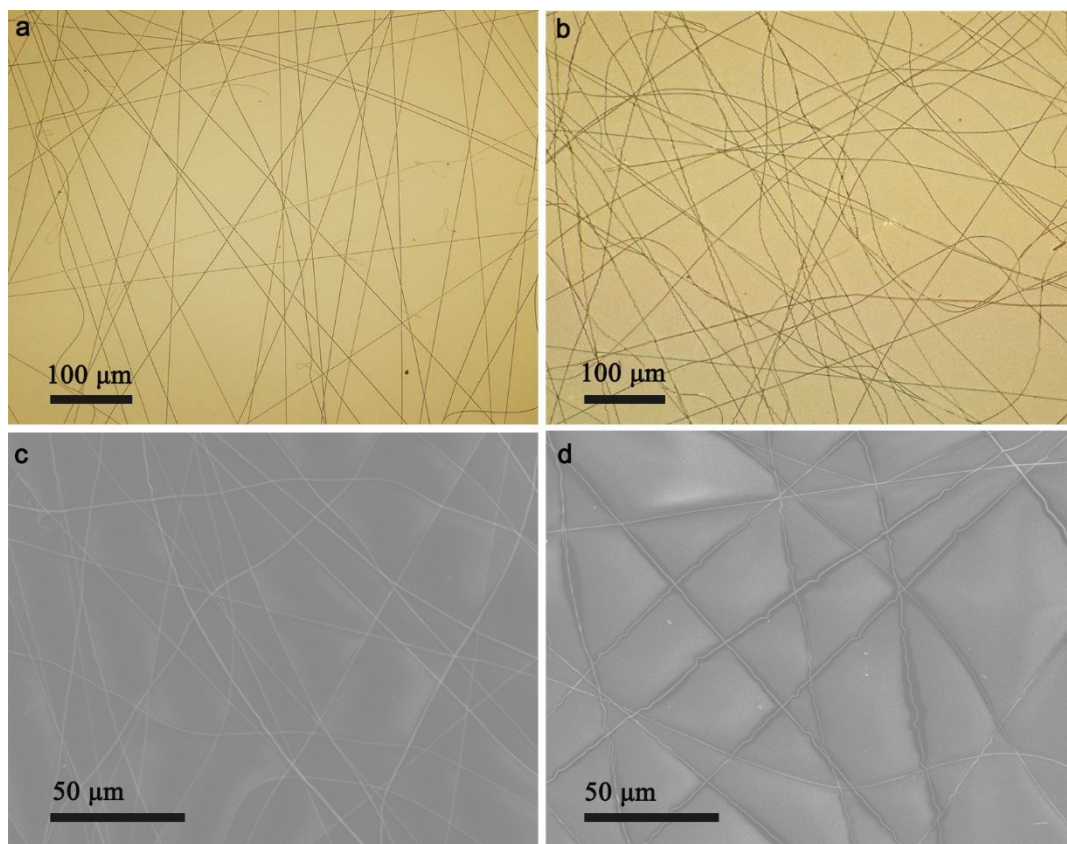


Figure S6. Optical and SEM images of the Ag-coated nanofiber network FTE before (a,c) and after (b,d) 200 stretch/release cycles.

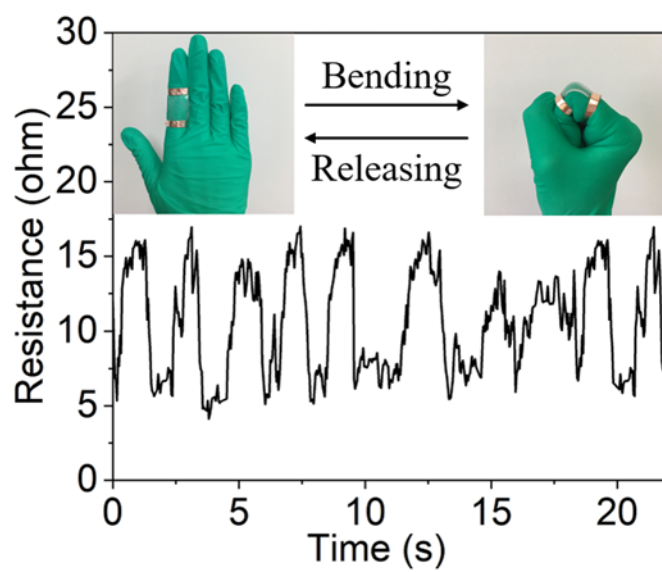


Figure S7. Real-time resistance of the Ag-coated nanofiber network FTE changes with finger joint motion.