

*Electronic Supplementary Information for*

## **Highly Flexible and Transparent Metal Grids Made of Metal Nanowire Networks**

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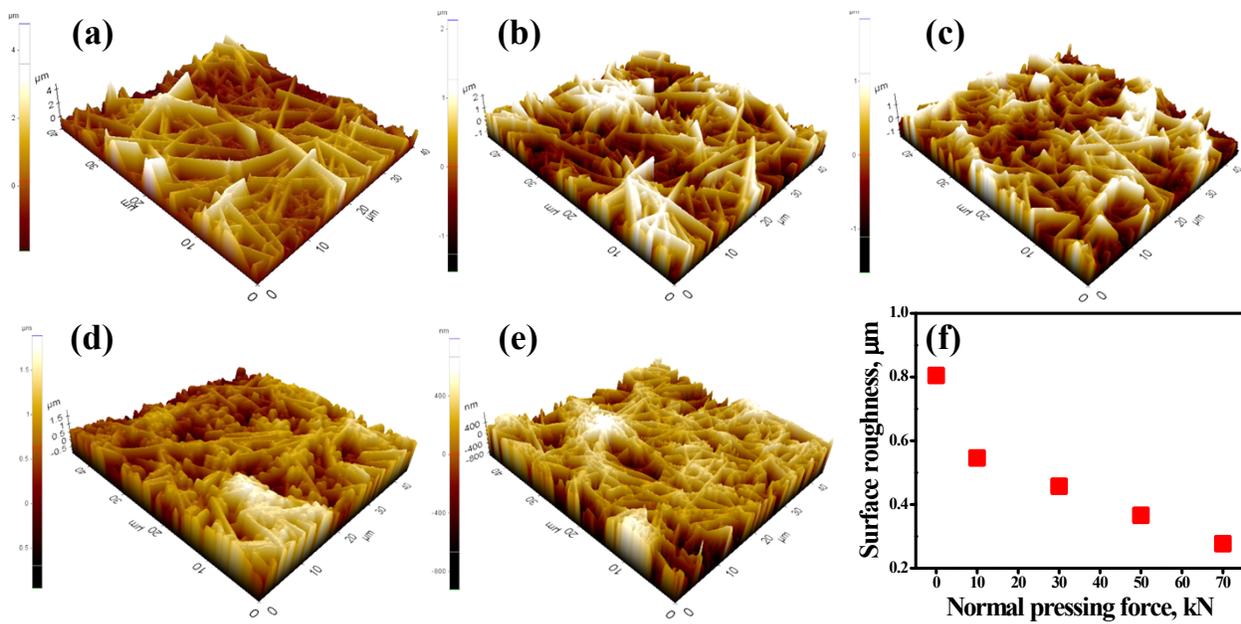
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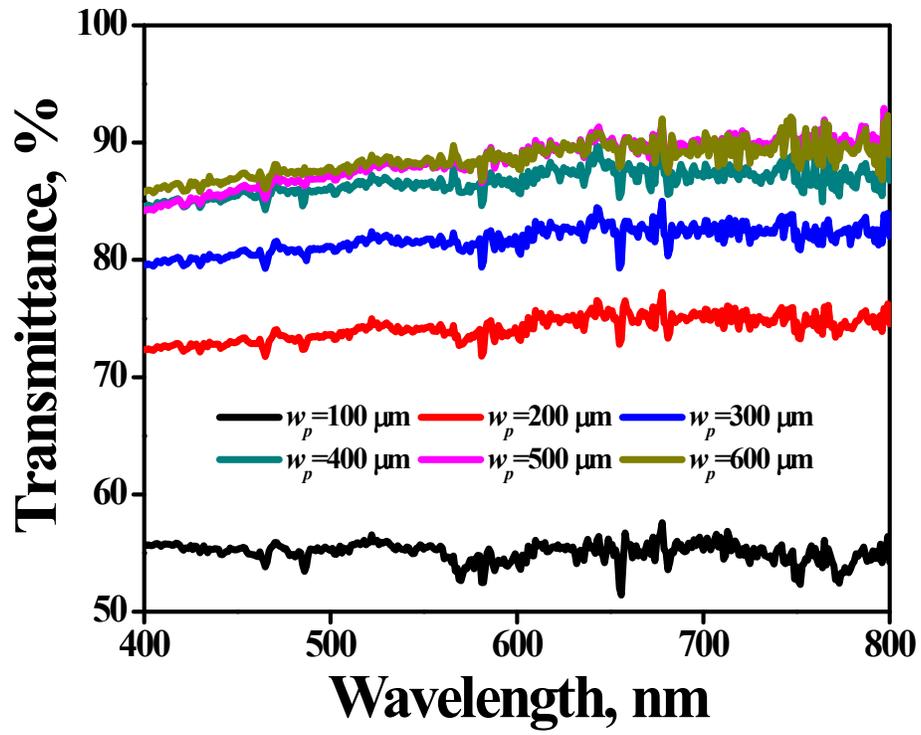
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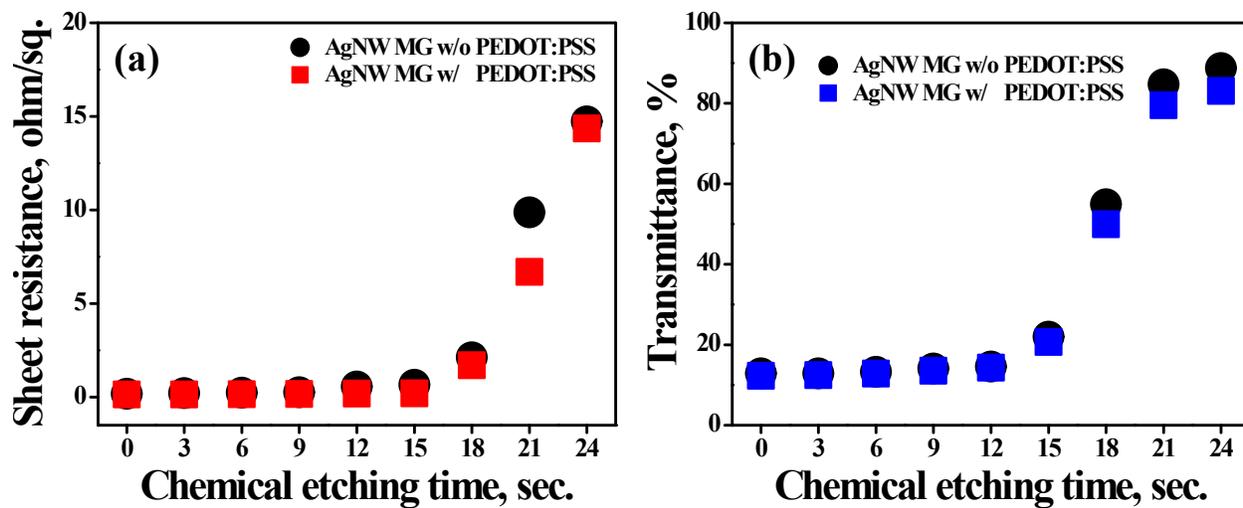
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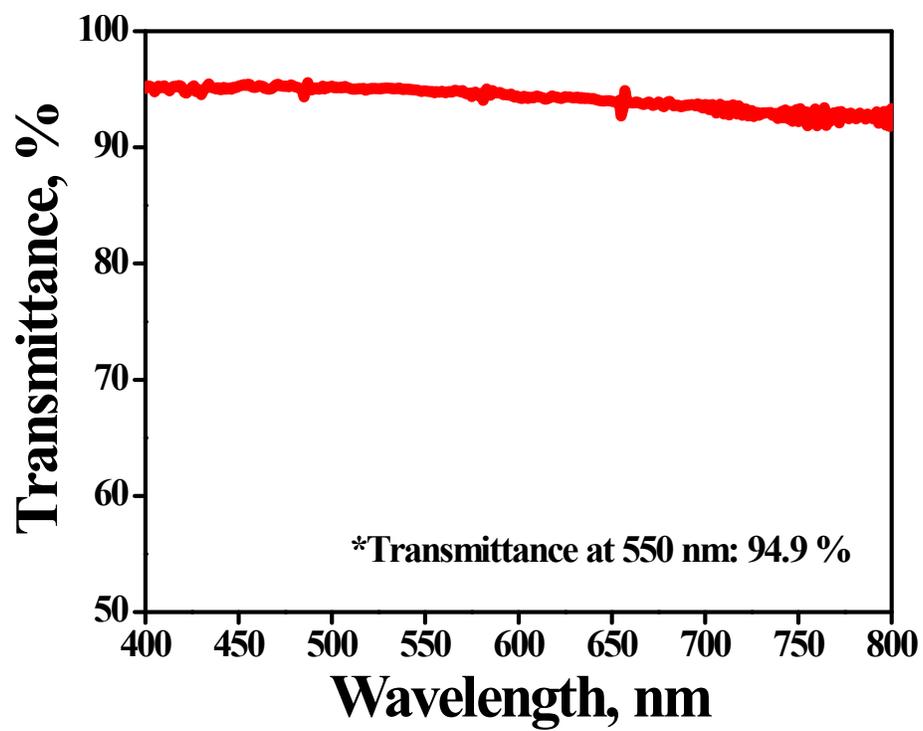
**Fig. S1** Surface morphologies of AgNW films with different pressing force. AFM images of AgNW films pressed at (a) 0 N, (b) 10 kN, (c) 30 kN, (d) 50 kN, and (e) 70 kN. (f) Average roughness (Ra) value as a function of pressing force.



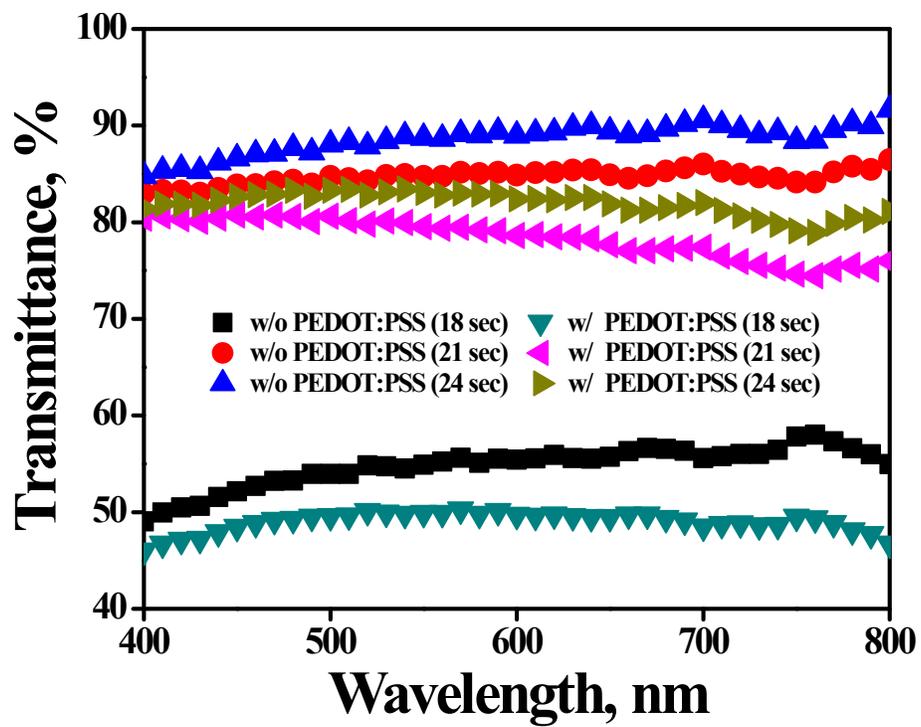
**Fig. S2** Transmittance spectra (400 nm to 800 nm) of AgNW MGs with different grid-to-grid pitch ( $w_p$ ) ranging from 100  $\mu\text{m}$  to 600  $\mu\text{m}$  and a step of 100  $\mu\text{m}$ .



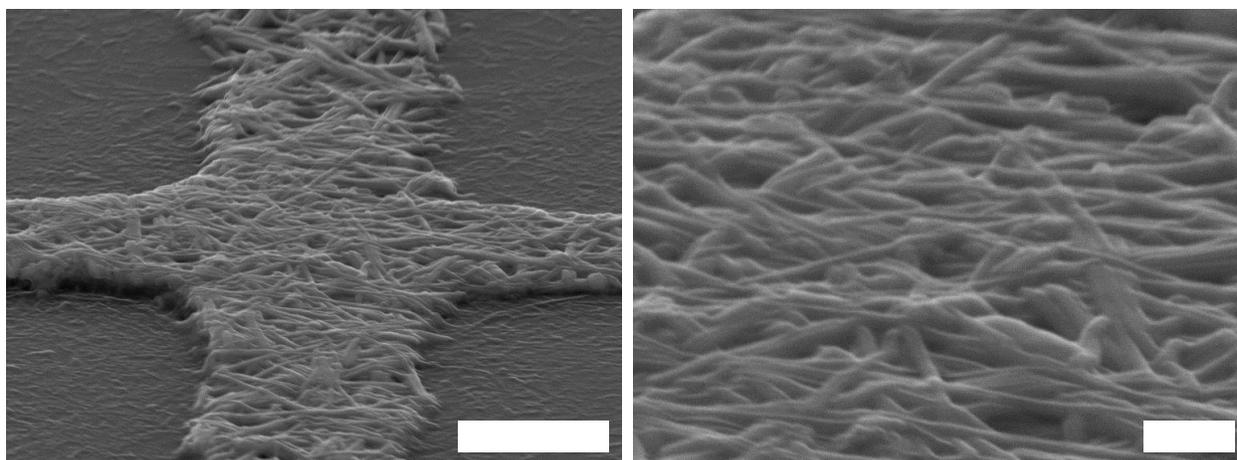
**Fig. S3** The optoelectronic performance of AgNW MGs processed with different chemical etching times of 0 sec to 24 sec with a step of 3 sec with and without PEDOT:PSS over-coating. (a) Sheet resistances and (b) transmittances at 550-nm wavelength of each AgNW MG.



**Fig. S4** Transmittance spectrum (400 nm to 800 nm) of spray-coated PEDOT:PSS layer.



**Fig. S5** Transmittance spectra (400 nm to 800 nm) of AgNW MGs processed with different chemical etching time (18, 21, 24 sec) with and without PEDOT:PSS over-coating.



**Fig. S6** SEM images of PEDOT:PSS-coated AgNW MG after repetitive bending tests for up to 500 cycles (scale bars: 10  $\mu\text{m}$  (left), 2  $\mu\text{m}$  (right)).