

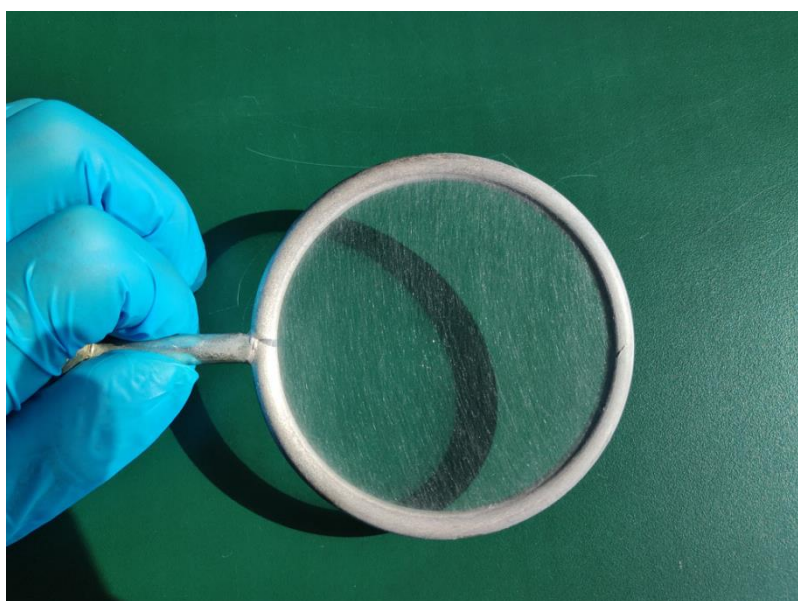
# UV-Vis transparent conductive film based on cross-linked Ag nanowire network: a design for photoelectrochemical device

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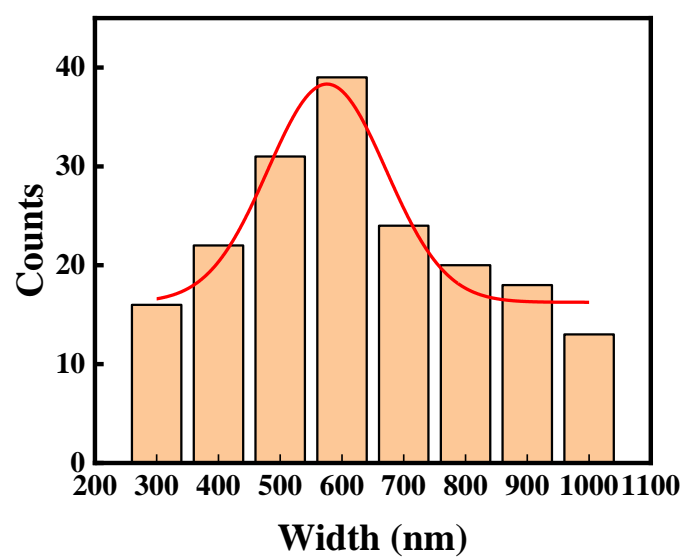
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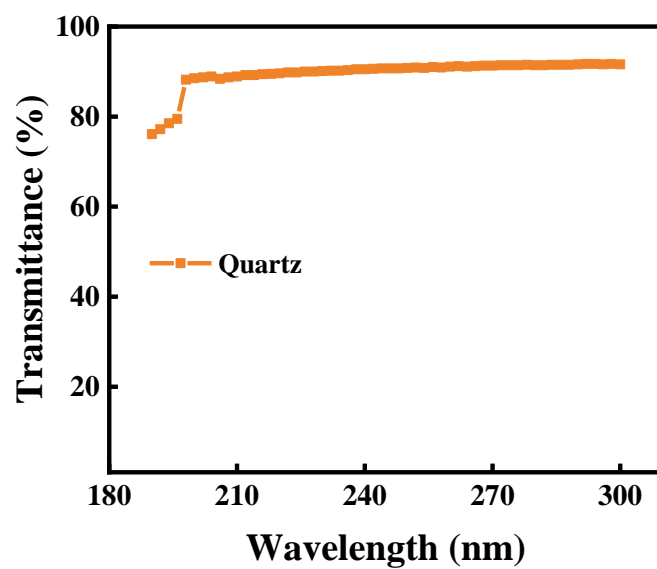
## Supplementary Data



**Figure S1.** The Ag layer under side light illumination.



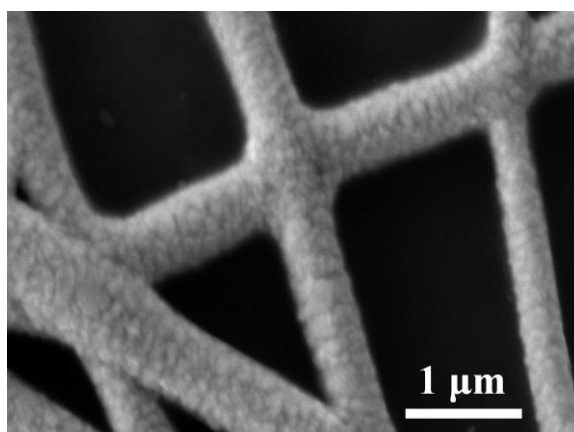
**Figure S2.** The counts under different width of AgNWs acquired by SEM image.



**Figure S3.** The transmittance of quartz from 190 to 300 nm.

**Table S1.** Thickness of TiO<sub>2</sub> layer, sheet resistance and transmittance versus different sputtering time.

Sputtering time (min)	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0
Thickness of TiO <sub>2</sub> (nm)	27.75	55.5	83.25	111	138.75	166.5	194.5	222
Sheet resistance ( $\Omega/\text{sq}$ )	3.662	5.373	6.903	9.478	11.775	15.493	21.083	27.309
Transmittance (%)	46	41.5	37.3	33.6	26.7	21.2	13.6	6.9



**Figure S4.** The cross-linked intersection of different AgNWs.



**Figure S5.** Diagram of 3M-Scotch tape testing.