Supporting Information

Microchannel Wetting for Controllable Patterning and Alignment of Silver Nanowire with High Resolution

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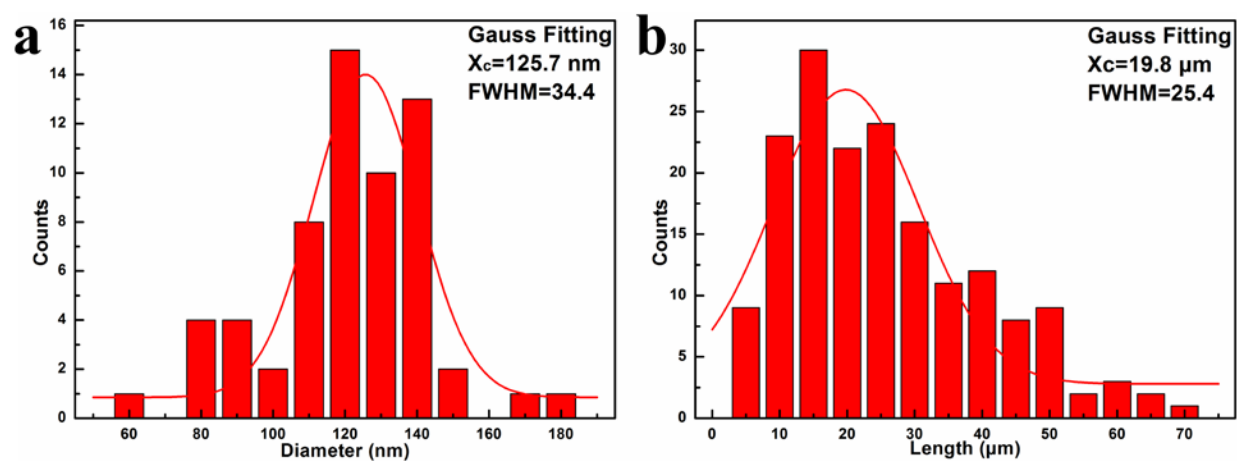*E-mail: liuchuan5@sysu.edu.cn

Supplementary/Supporting Information:

Figure S1. Histograms of statistics relating to the diameter (a) and length (b) of AgNWs (X_c is the mathematical expectation of Gauss fitting)
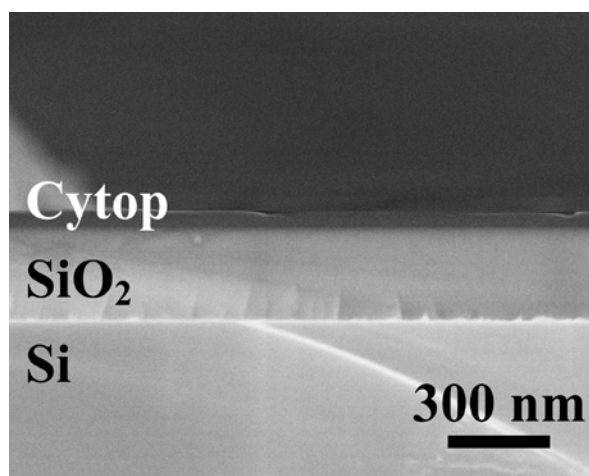

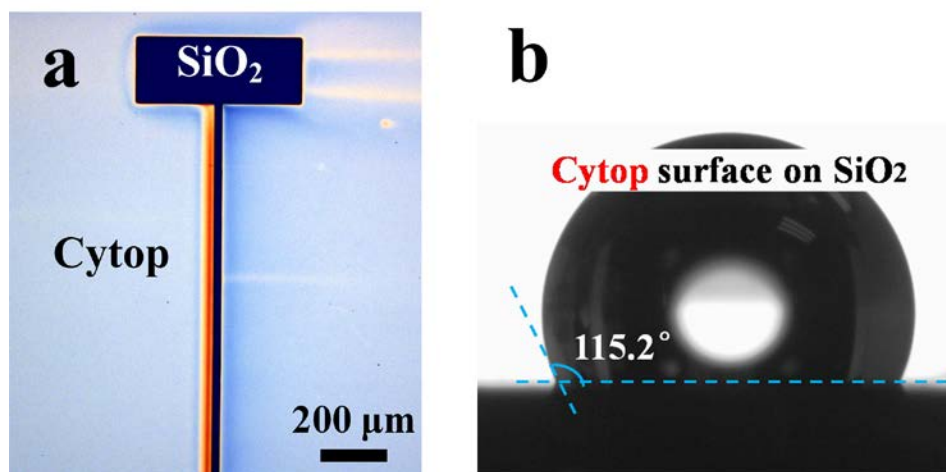**Figure S2.** SEM section image of the substrate with Cytop pattern.

Figure S3. OM images of Cytop pattern fabricated by lift-off (a) and contact angle with DI-H_2O
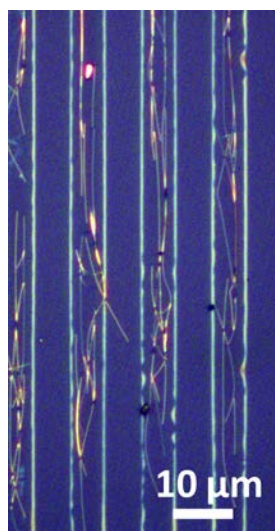
on hydrophobic Cytop (b).

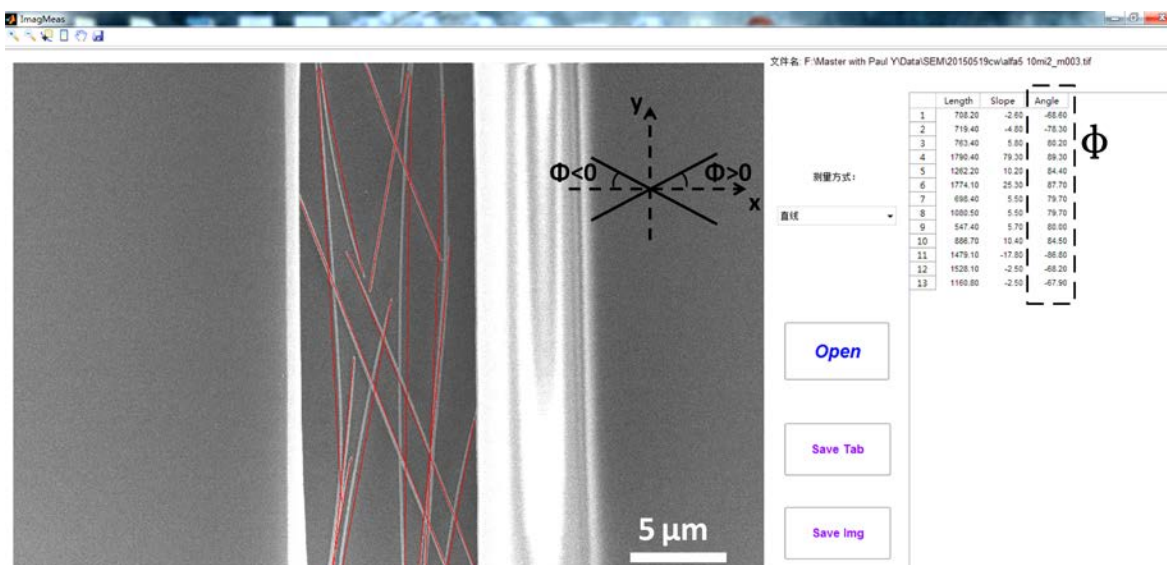**Figure S4.** OM image of precisely patterned stripes without Cytop.

Figure S5. Graphic user interface of the tool used for measuring the angle distribution of NWs.

Description: The used tool called ImagMeas was compiled with Matlab language combining with graphic user interface design. It is an executive file (.exe) which can be executed individually for length or angle measurement.

Table S1. F(X_c)/F(0) and S_{FWHM}/S of each channel with different W/L_{NW}.

W/L_{NW}	0.51	0.76	1.01	1.26	1.52	2.53	∞
F(Xc)	45.6	43.5	96.0	101.2	107.3	87.1	148.9
F(0)	1.4	1.1	5.5	9.9	11.3	13.0	34.9
F(Xc)/F(0)	32.6	39.5	17.5	10.2	9.5	6.7	4.3
S_{FWHM}/S	69.6	72.1	67.6	65.5	65.3	68.9	46.5

Movie S1. Video of the coating and deposition procedures.