Supporting Information

Stretchable superhydrophobic fluororubber fabricated by transferring mesh microstructure

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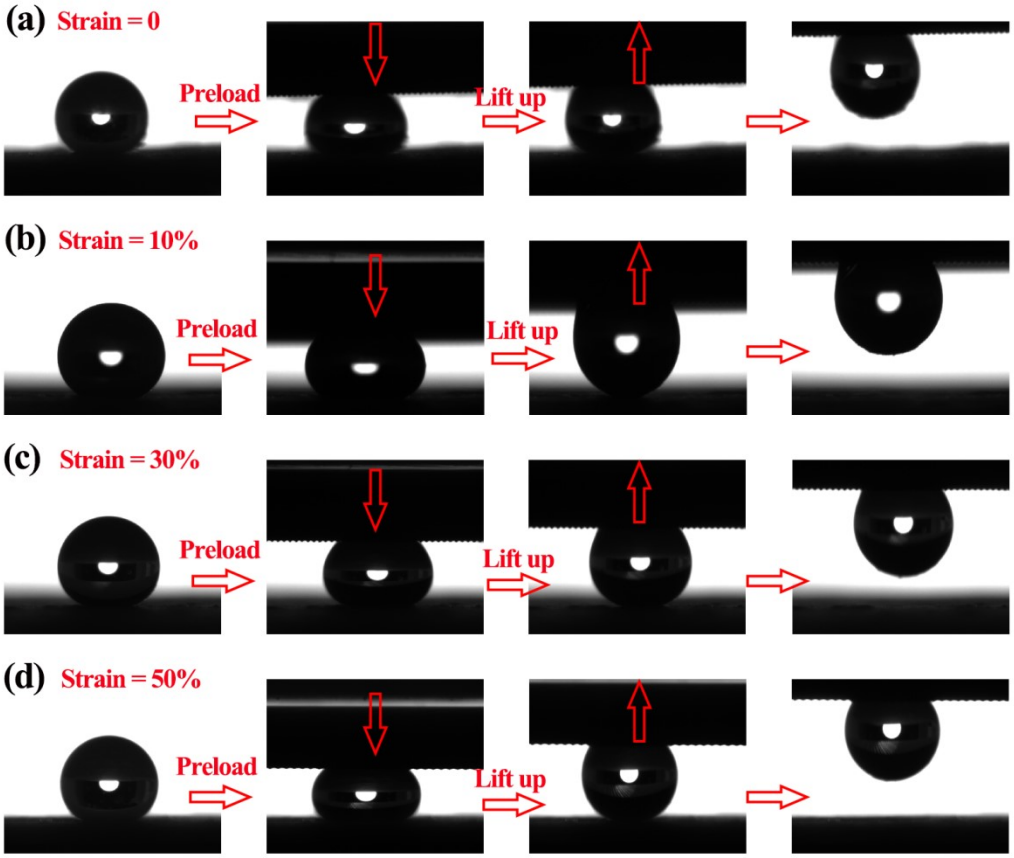

Fig. S1 Droplet transfer behavior of 1600# superhydrophobic fluororubber surface at different stretching strains

The vulcanization degree of rubber was verified by hydrolysis experiment (Fig. S2). In this work, the sample is put into high-temperature water to accelerate the dissolution and extraction of the residual substances in the sample. This method can accelerate the simulation of high-temperature and high-humidity aging conditions, and the precipitated residual substances will form white spray cream on the surface of the sample. The specific steps are as follows: pour deionized water into a beaker, immerse the sample in water, and then put it in a 90℃ oven for 22 hours. After taking out the sample, use a non-woven fabric to absorb the residual water stains on the surface, and observe the surface of the non-woven fabric after natural drying for 30min. If the sample is not fully vulcanized, white hydrolysate will be produced. From the high-definition experimental photos, it can be seen that there is no white material residue on the surface of the sample and non-woven fabric, which indicates that the sample is fully vulcanized, and it is also confirmed that the use of templates during vulcanization will not affect the rubber cross-linking.

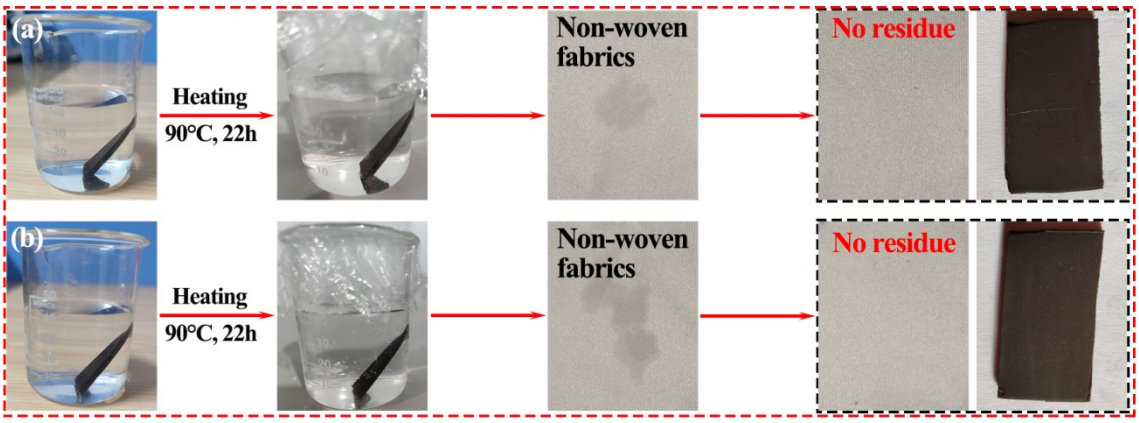

Fig. S2 High-definition photos of sample hydrolysis process: (a) Original rubber, (b) 1600#rubber.