

Figure S1. Composition analysis of *Cerambycini Latreille* hair.

(a) EDS test image of the *Cerambycini Latreille* hair. (b) FTIR test image of the *Cerambycini Latreille* hair.

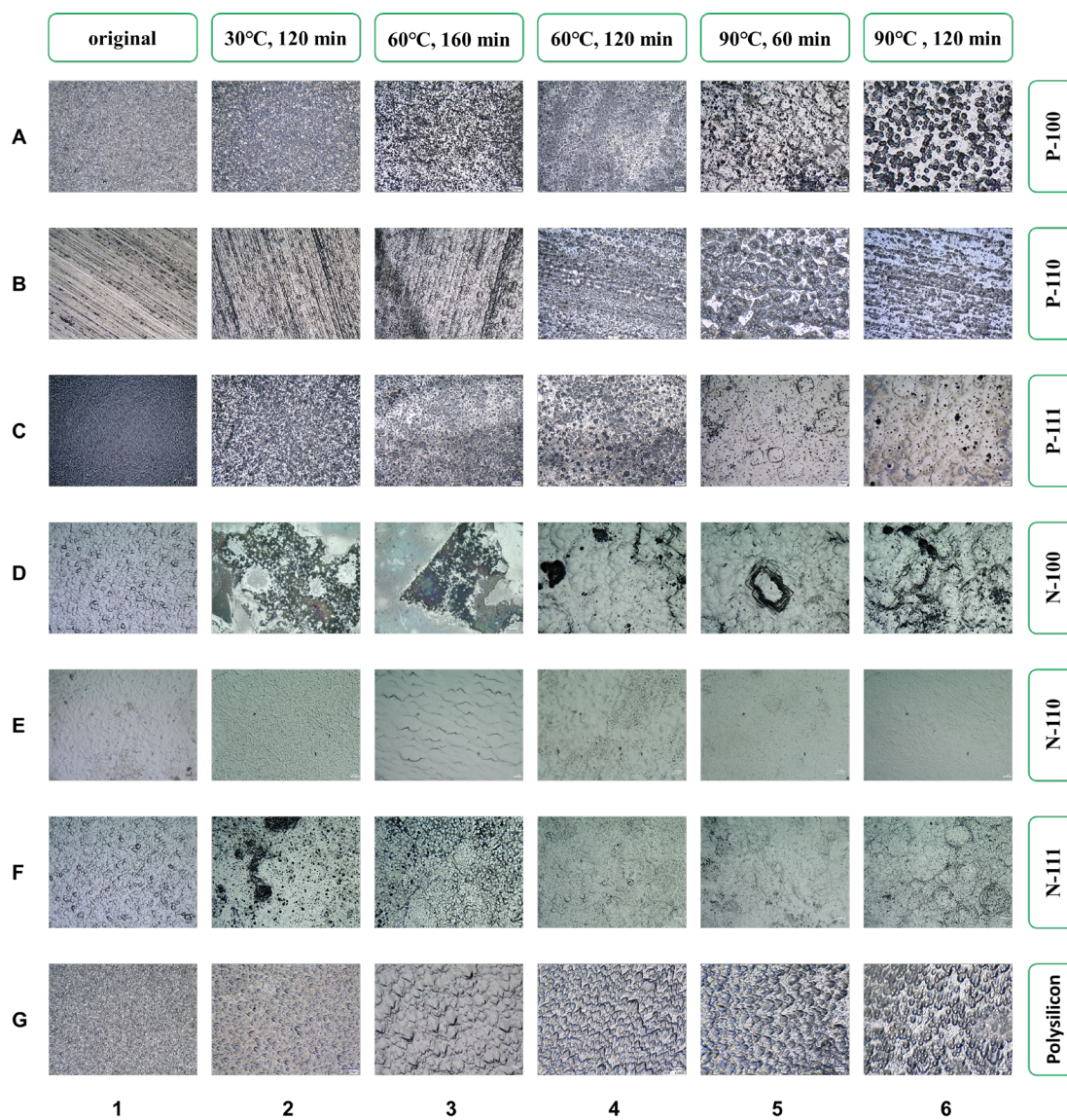
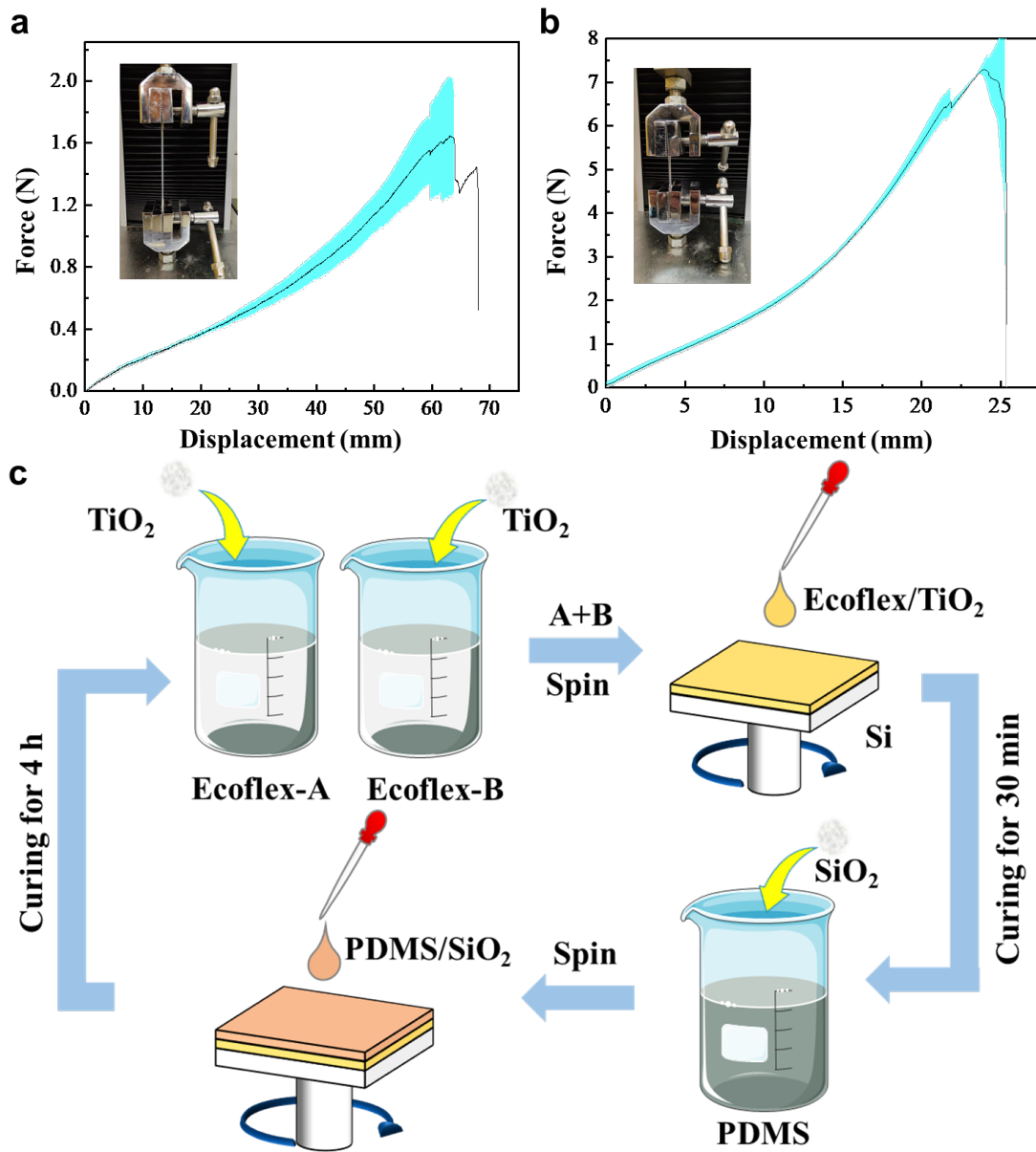


Figure S2. Surface morphology of template prepared by silicon wafer alkaline etching method.

A) Surface morphology changes of P-100 silicon wafers under different reaction conditions. B) Surface morphology changes of P -110 silicon wafers under different reaction conditions. C) Surface morphology changes of P-111 silicon wafers under different reaction conditions. D) Surface morphology changes of N-100 silicon wafers under different reaction conditions. E) Surface morphology changes of N-110 silicon wafers under different reaction conditions. F) Surface morphology changes of N-111 silicon wafers under different reaction conditions. G) Surface morphology changes of polycrystalline silicon wafers under different reaction conditions.



**Figure S3.** Fabrication process of the BRCF.

**a)** The force–displacement curve of Ecoflex. **b)** The force–displacement curve of PDMS. **c)** Fabrication process diagram.