

Scalable and continuous fabrication of bioinspired dry adhesives with a thermosetting polymer

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KEYWORDS: Continuous production, PDMS, Roll type equipment, Dry adhesive, Biomimetics.

Supporting Information.

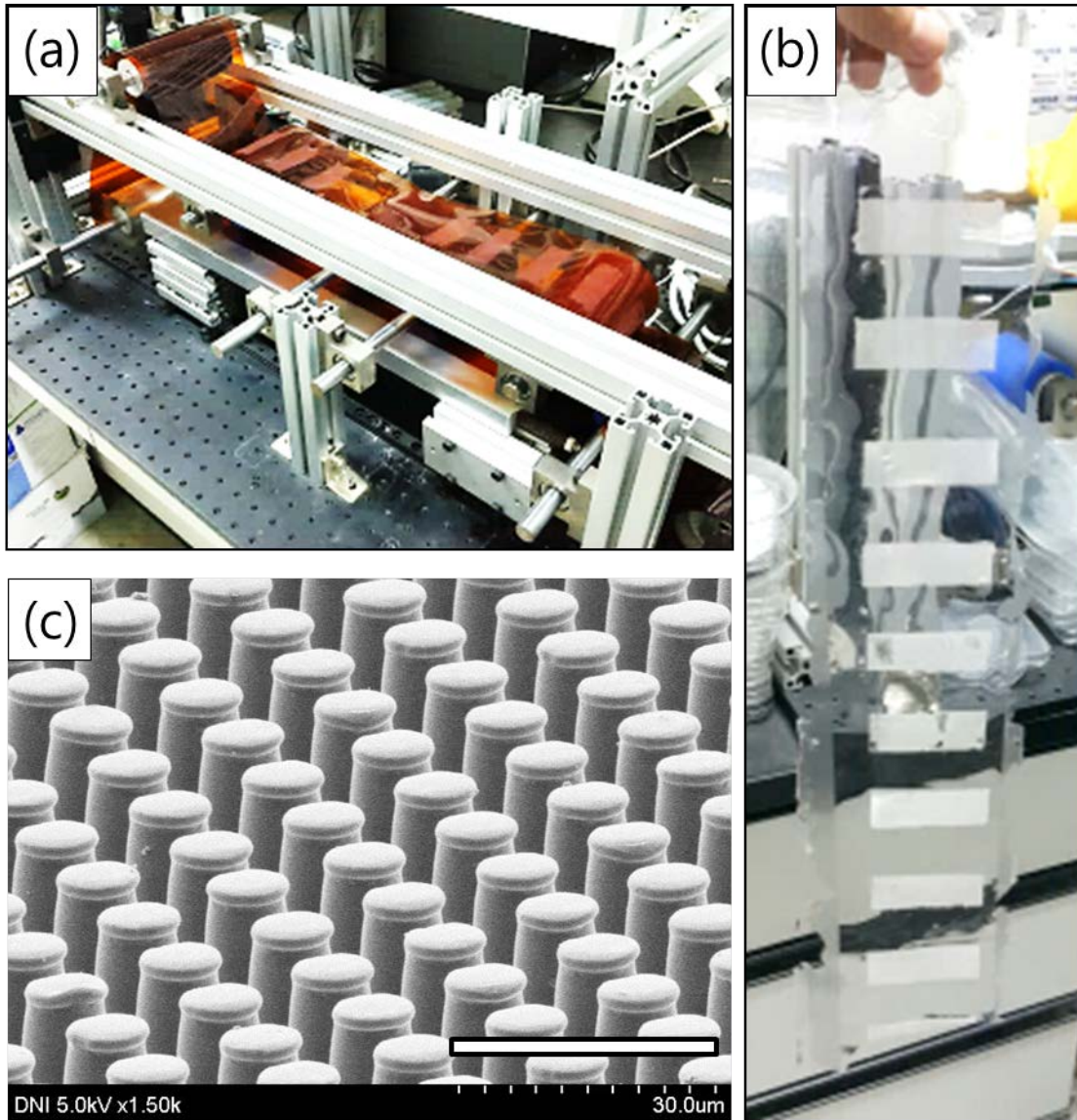


Figure S1. (a) Photograph of TRL equipment. (b) Photography of the dry adhesive fabricated by TRL equipment (c) SEM image of the dry adhesive. Scale bar is 30 μm .

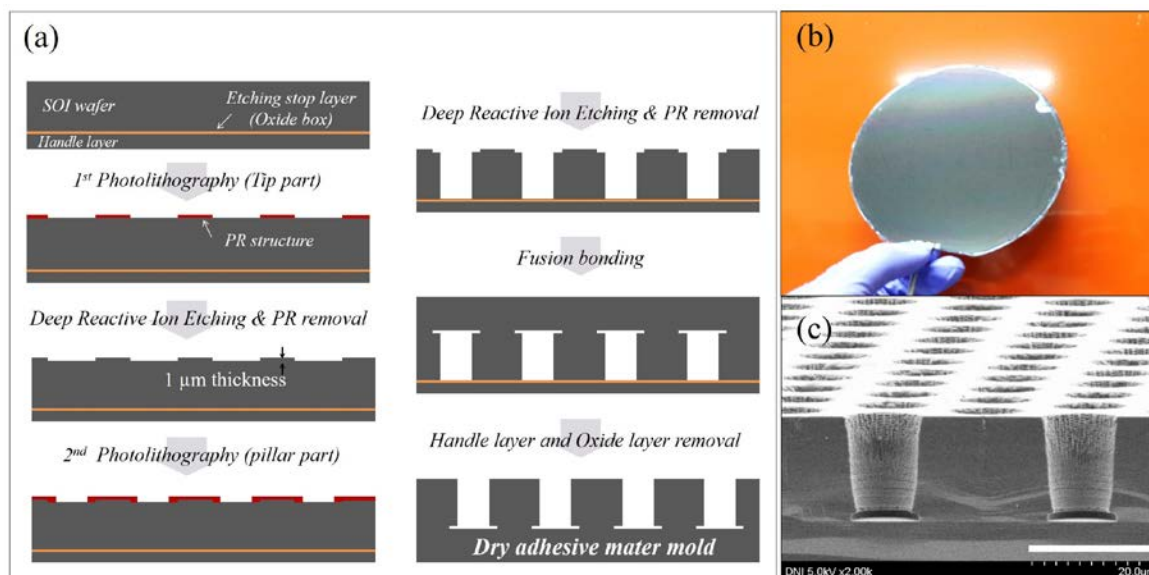


Figure S2. (a) Schematic image of the fabrication process for dry adhesive mold inspired by Gecko-foot. (b)(c) Photograph and SEM image of the dry adhesive master mold. Scale bar is 20 μm.

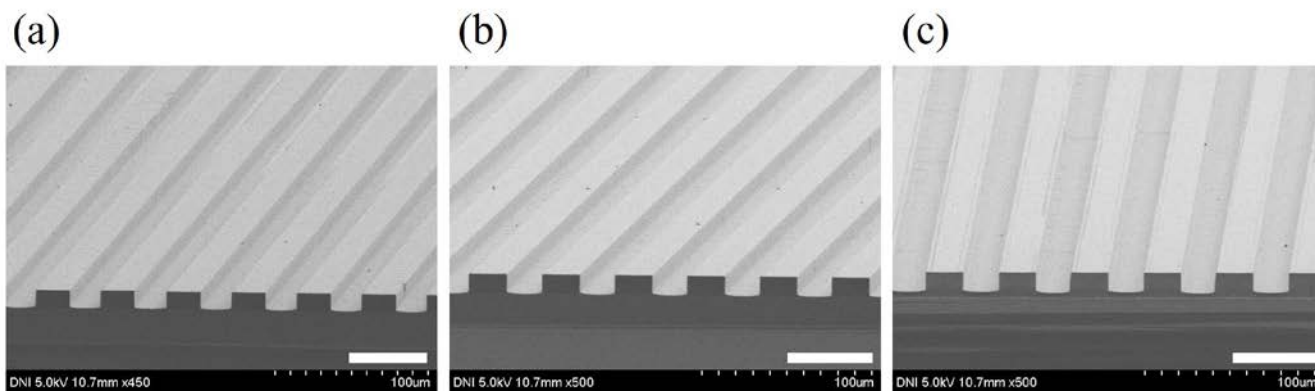


Figure S3. Result of the PUA baking experiment (a) control (b) 1-hour baking at 100 °C (c) 1-hour baking at 150 °C. Scale bars are 50 μm .

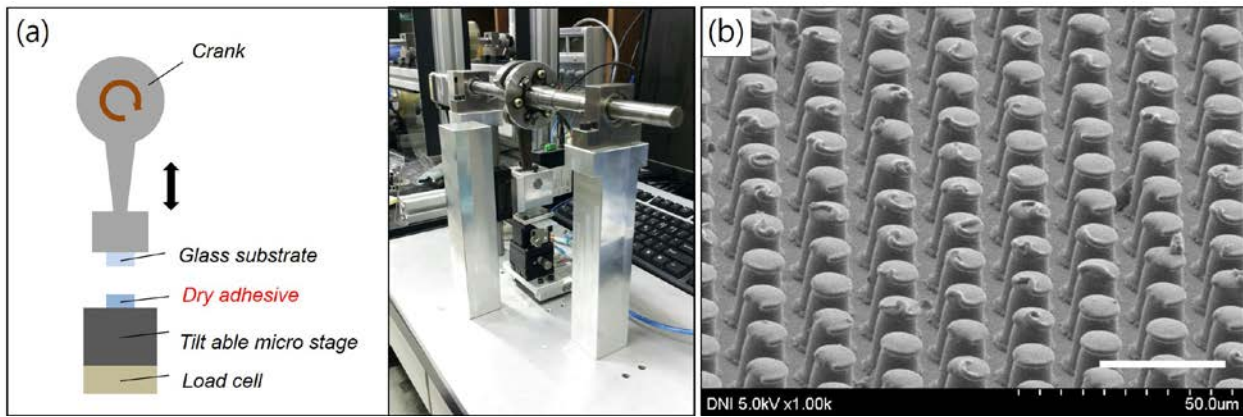


Figure S4. (a) Schematic illustration and photograph of custom-built measurement equipment. (b) SEM image of dry adhesive after durability test. Scale bar is 30 μm

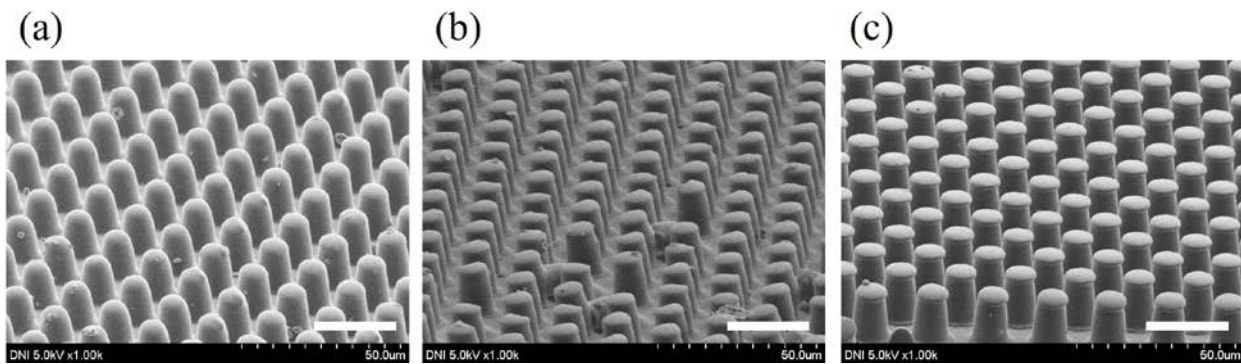


Figure S5. SEM images with respect to PDMS filling time in 500 μm thickness PDMS (a) 50s (b) 100s (c) 150s. Scale bar is 30 μm

(a)



(b)

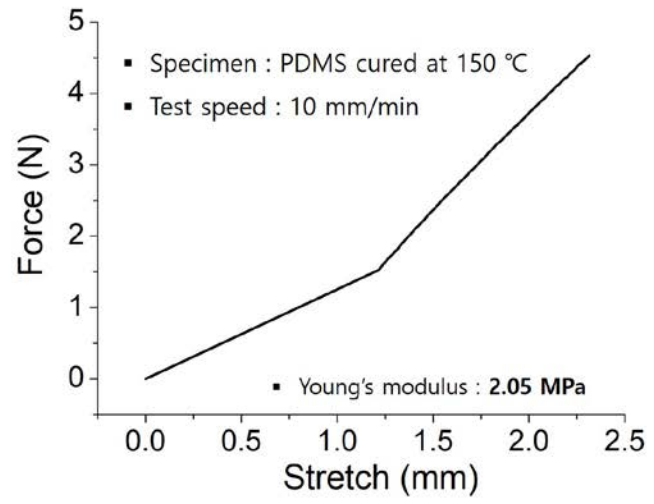


Figure S6. (a) Time lapse images of tensile test. (b) Result of tensile test.