SUPPLEMENTARY INFORMATION

Cost-Effective Fabrication of Submicron-Scale Patterns Enabled by Microcontact Printing with a Pre-Strained Soft Elastomeric Stamp

Eunhwan Jo[a] and Jaesam Sim[b]*

[a] Department of Mechanical Engineering, Kumoh National Institute of Technology, 61 Daehak-ro, Gumi, Gyeongbuk, 39177, Republic of Korea.

[b] Purpose Built Mobility Group, Korea Institute of Industrial Technology, 6 Cheomdangwagi-ro 208 beon-gil, Buk-gu, Gwangju 61012, Republic of Korea.

*Corresponding author: sjswkd3@kitech.re.kr (JS)

Supplementary Information includes:

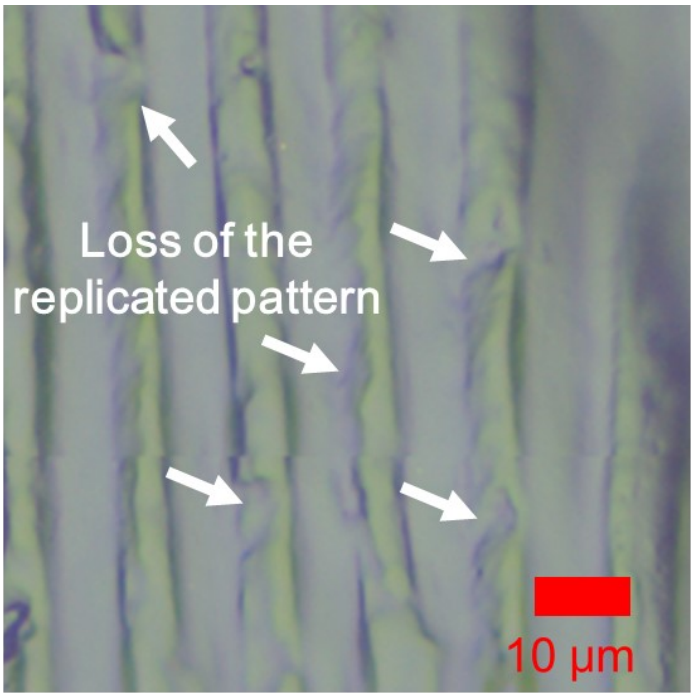

Figure S1. An optical image of replicated patterns indicating the loss of the pattern with the adhesive promoter.

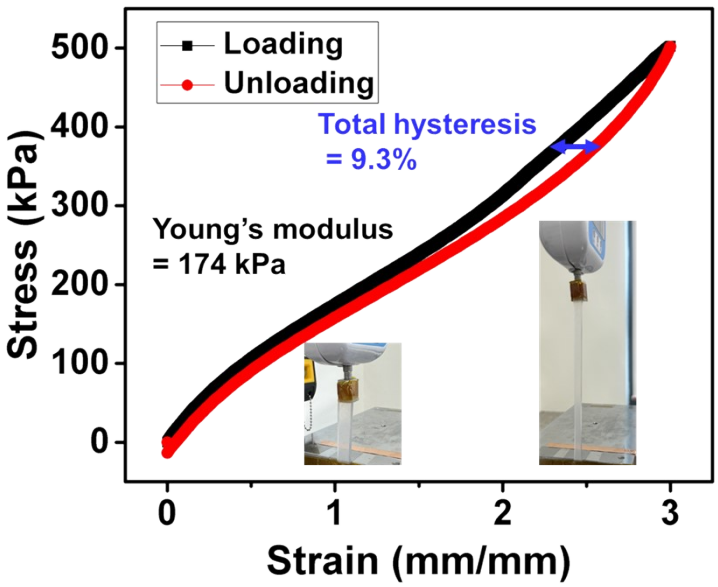

Figure S2. A tensile stress versus strain curve of an Ecoflex elastomeric stamp.

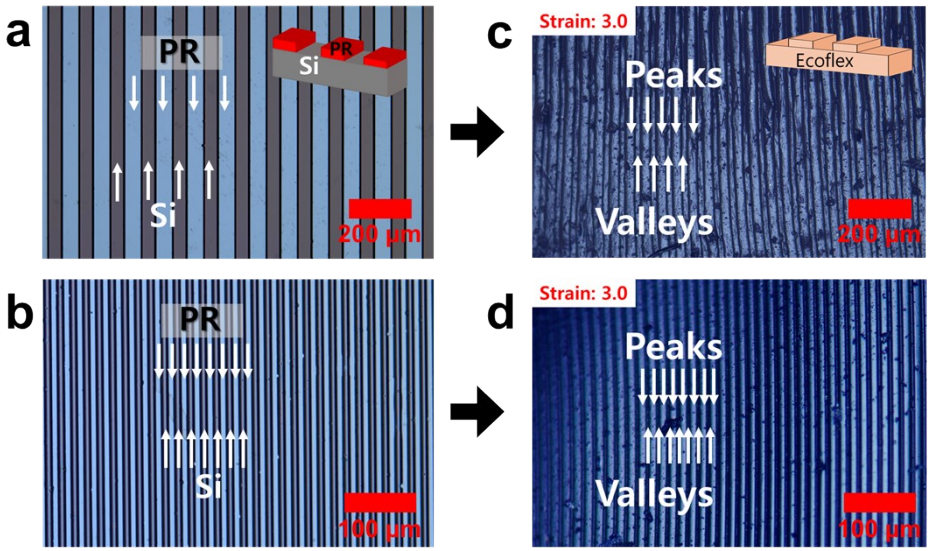

Figure S3. Optical microscope images of the PR pattern on the master mold with a periodic line pattern with width and gap of (a) 50 μm and (b) 10 μm, respectively. Optical microscope images of the replicated mold after pre-stretching and subsequent release, showing a reduction of 60% in dimensions of (c) 20-μm and (d) 4-μm periodic line pattern, respectively.