SUPPORTING INFORMATION

UV-Modulated Substrate Rigidity for Multiscale Study of Mechanoresponsive Cellular Behaviors

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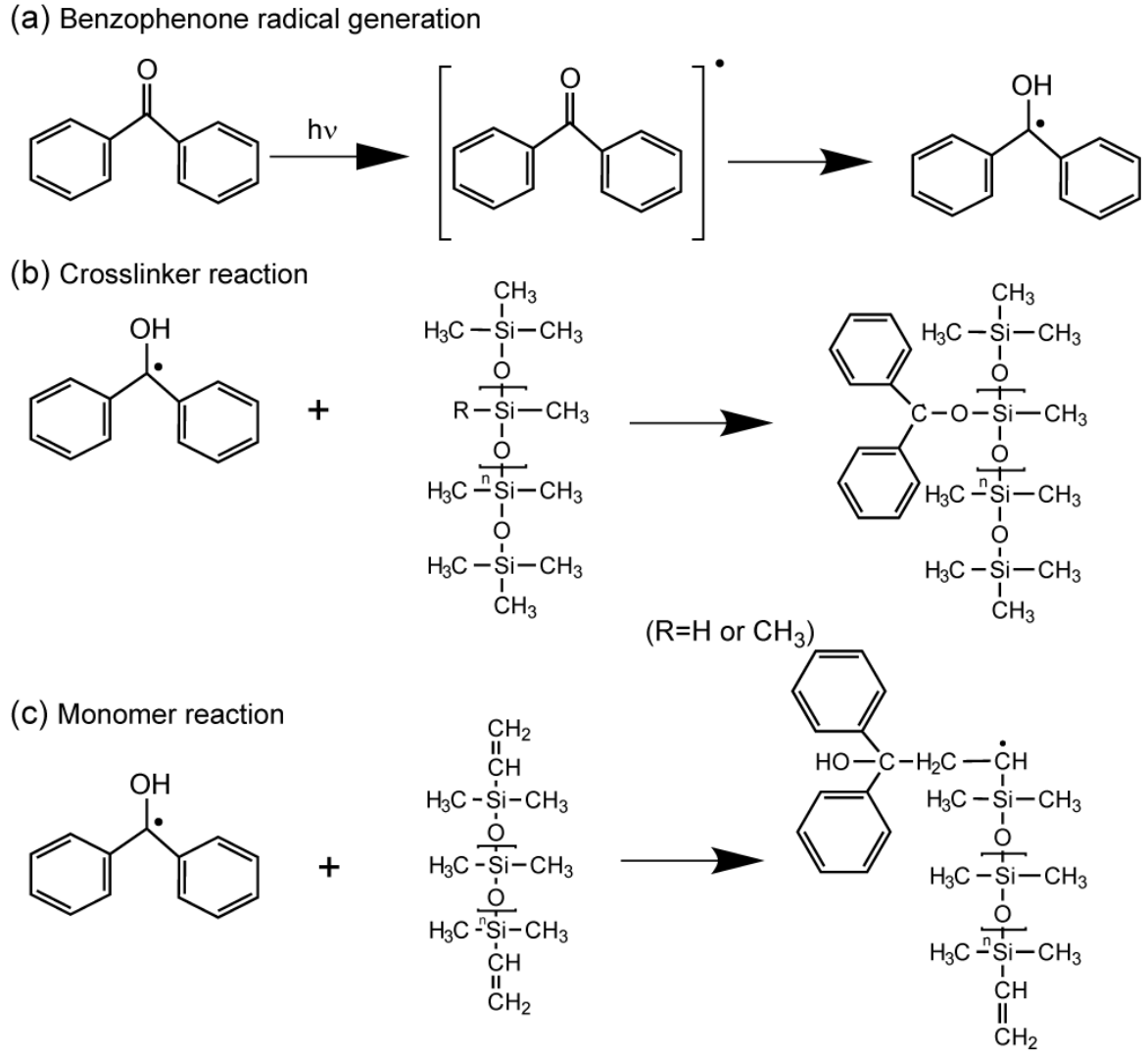
SUPPORTING SCHEME
Supporting Scheme S1



Scheme S1. Benzophenone radical generation mechanism under UV light exposure.

SUPPORTING FIGURES
Supporting Figure S1

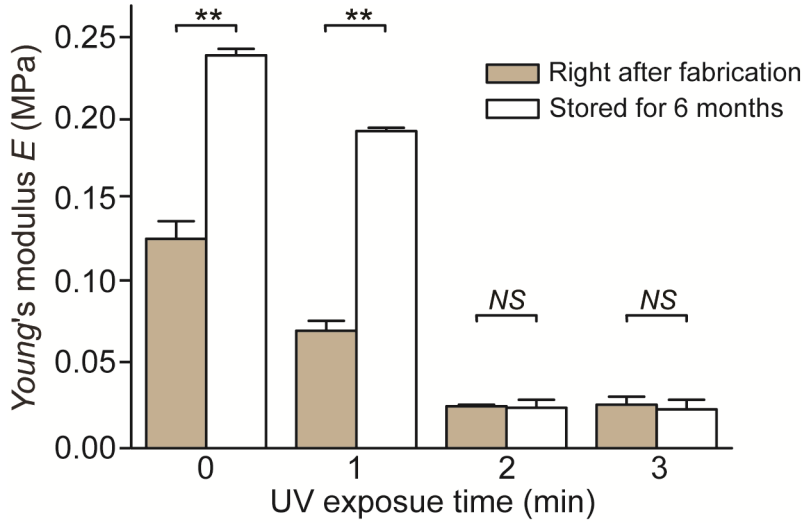


Figure S1. Bar plot of *Young*'s modulus *E* of 1:30 photoPDMS post-exposure baked for 20 min. Tensile testing was performed either right after sample fabrication or after a 6-month storage at room temperature, as indicated. **, $p < 0.01$. *NS*, statistically not significant ($p > 0.05$).

Supporting Figure S2

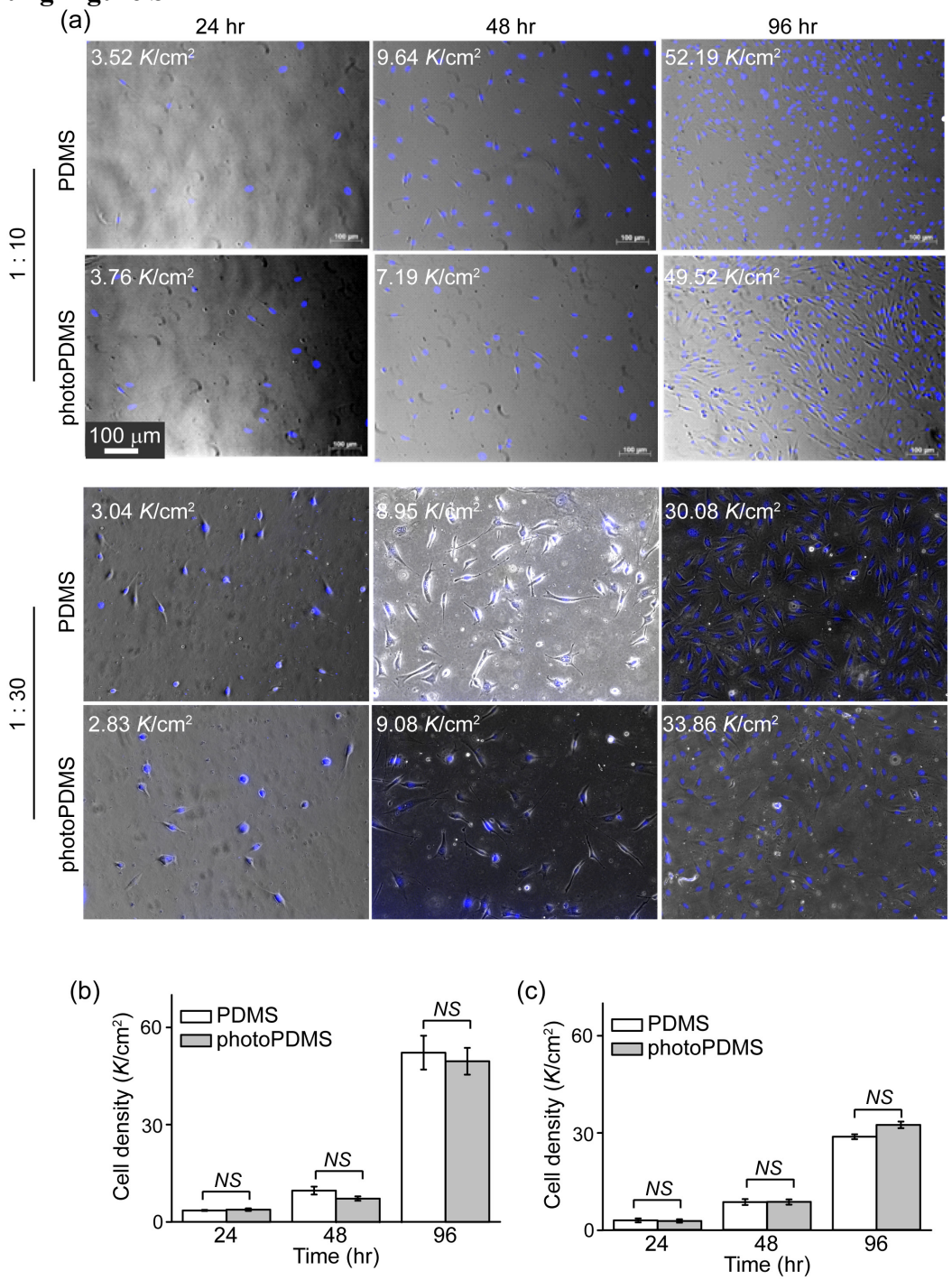


Figure S2. Cell proliferation assays on both PDMS and photoPDMS (with 0 min UV exposure) substrates. NIH/3T3 cells were plated at a density of 3,000 cells/cm^2. (a) Representative images of NIH/3T3 stained with DAPI (*blue*) after 24, 48, and 96 hr of culture on 1:10 PDMS and photoPDMS (top) and 1:30 PDMS and photoPDMS (bottom) substrates. (b-c) Bar plot showing density of NIH/3T3 cells as a function of culture time. Data represents the means ± s.e.m from 3 independent experiments. *NS*, statistically not significant ($p > 0.05$).

Supporting Figure S3

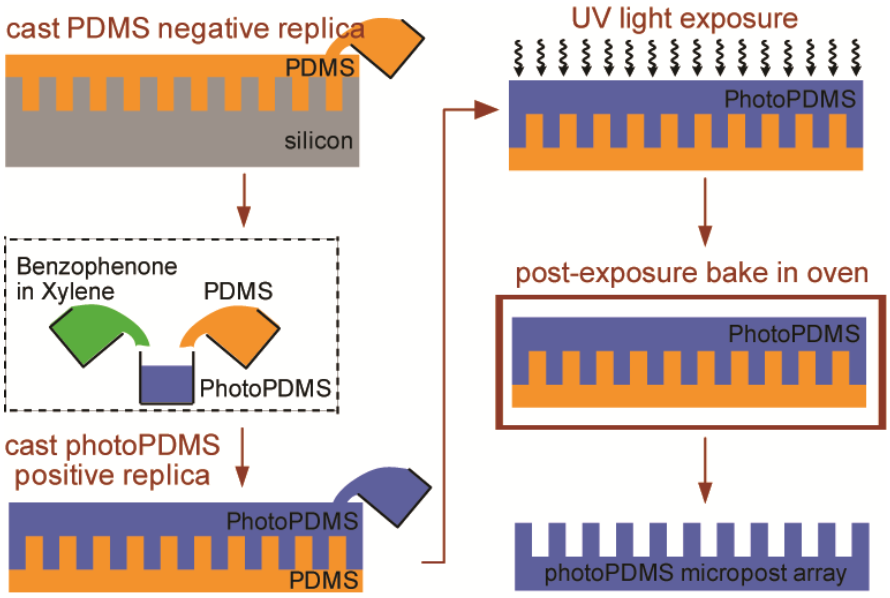


Figure S3. Fabrication process of photoPDMS micropost array.

Supporting Figure S4

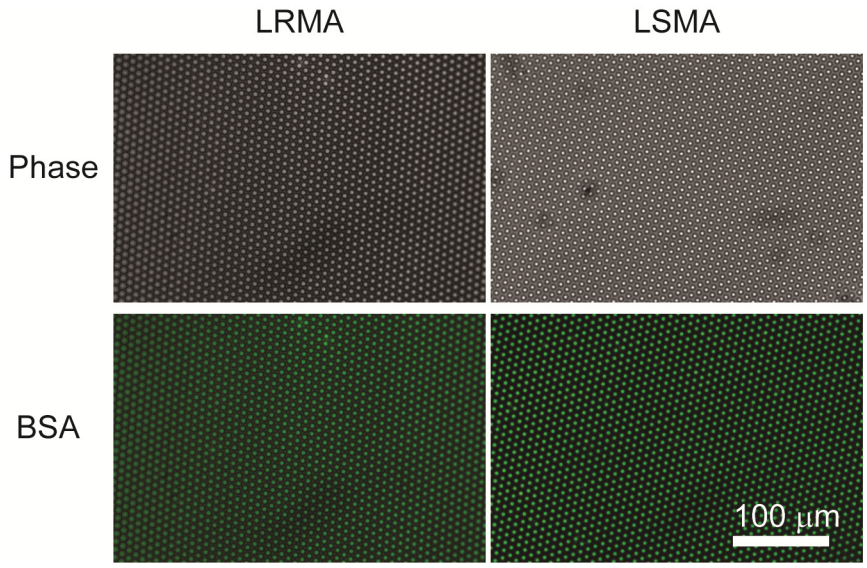


Figure S4. Phase (top) and fluorescent (bottom) images showing constant surface protein densities on LRMA and LSMA. 50 μg mL^{-1} Alexa-488 conjugated BSA was printed onto the tops of LRMA and LSMA using microcontact printing.