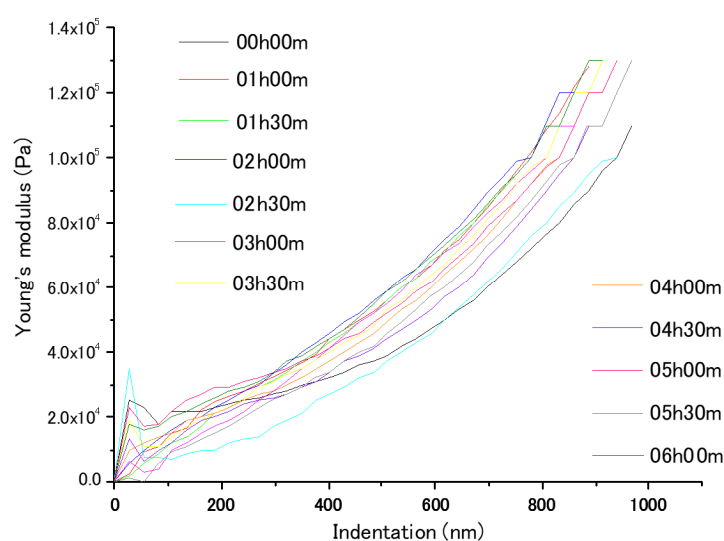


# Hydrophobic recovery of PDMS surfaces in the contact with hydrophilic entities: relevance to biomedical applications

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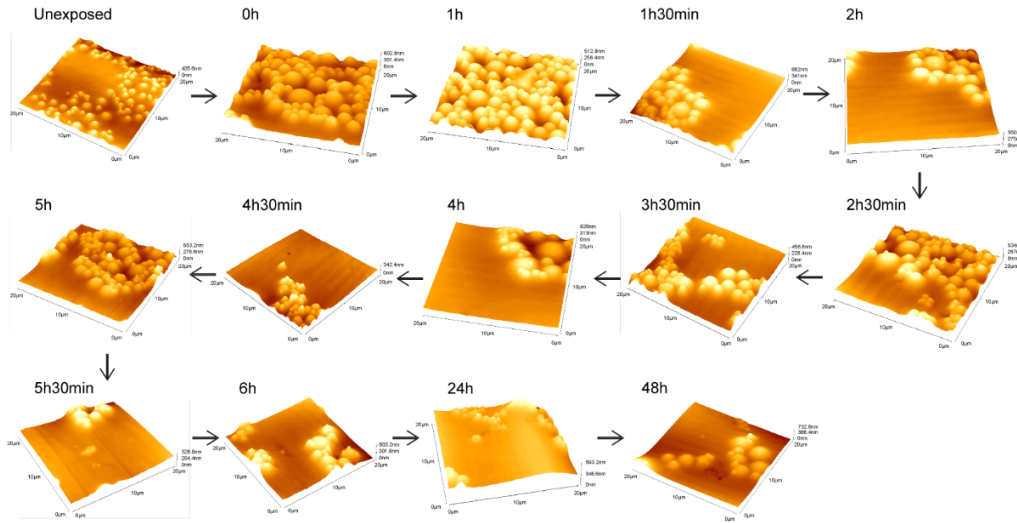
## Supplementary Information



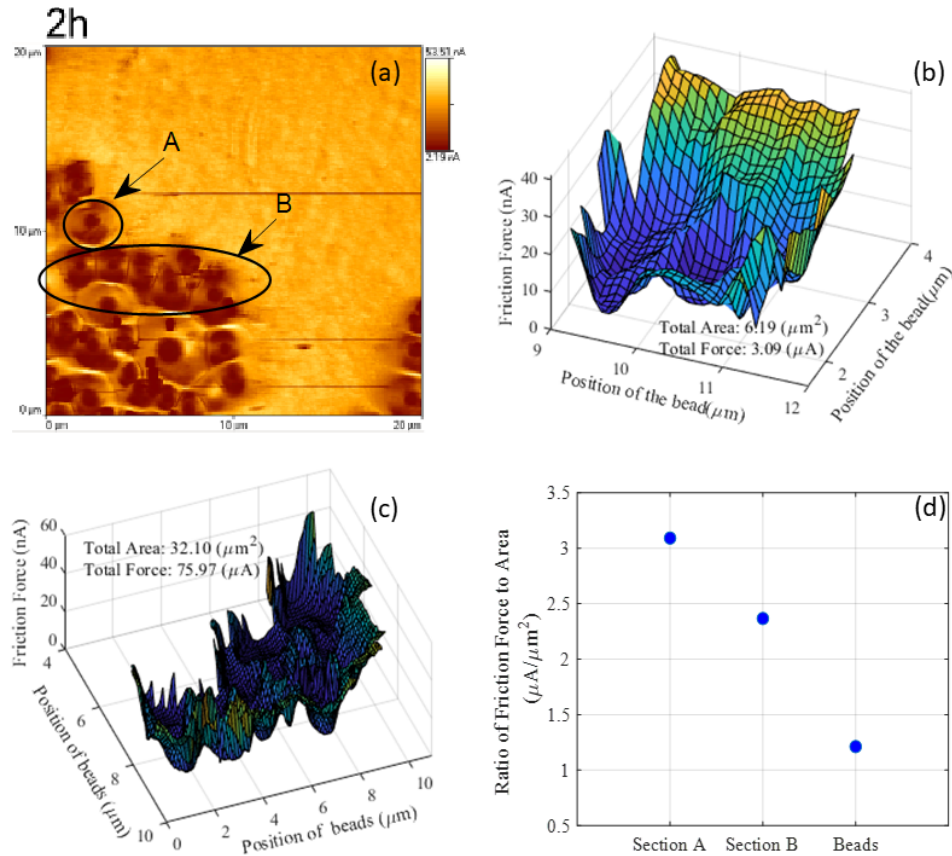
**Figure S1.** Estimated Young's modulus for AFM F-d measurements for various stages of hydrophobic recovery.

**Table S1.** Assignment of the FTIR peaks in Figure 3.

Peak	IR region (cm <sup>-1</sup> )	Description
1	785–815	–CH <sub>3</sub> rocking and ≡Si–C≡ stretching in ≡Si–CH <sub>3</sub>
2	825–865	≡Si–O stretching in ≡Si–OH
3	875–920	≡Si–O stretching in ≡Si–OH
4	1015–1150	In-phase and out-of-phase wagging vibrations of –(CH <sub>2</sub> )– in ≡Si–(CH <sub>2</sub> ) <sub>2</sub> –Si≡ and ≡Si–CH <sub>2</sub> –Si≡
5	1055–1090	Asymmetric ≡Si–O–Si≡ stretching in [–(CH <sub>2</sub> ) <sub>2</sub> Si–O–] <sub>x</sub>
6	1100–1170	In-phase and out-of-phase wagging vibrations of –(CH <sub>2</sub> )– in ≡Si–(CH <sub>2</sub> ) <sub>2</sub> –Si≡
7	1245–1270	Symmetric –CH <sub>3</sub> deformation in ≡Si–CH <sub>3</sub>
8	2950–2970	Asymmetric –CH <sub>3</sub> stretching in ≡Si–CH <sub>3</sub>
9	3050–3700	–OH stretching in ≡Si–OH, possibly also in ≡C–OH (3610–3640 cm <sup>-1</sup> )



**Figure S2.** Sequence of AFM scans of the topography of PDMS embedded with beads, unexposed, immediately after UV exposure, and at various stages of hydrophobic recovery.



**Figure S3.** (a) AFM lateral force scans of PDMS surfaces with embedded hydrophilic beads, (b, c) friction forces on the beads and surrounding area in A and B section (d) ratio of friction forces to the area of beads and their vicinity.