

# **Effect of wettability and adhesion property of solid margins on water drainage**

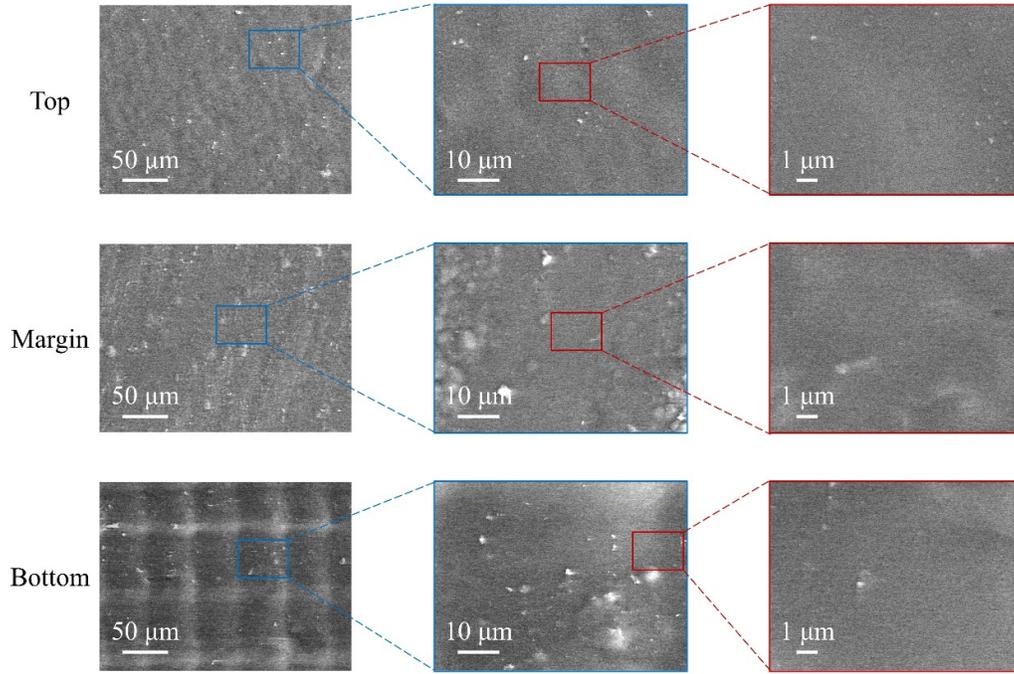
*Can Gao<sup>1,2</sup>, Lei Jiang<sup>1,2</sup>, and Zhichao Dong<sup>1,2\*</sup>*

<sup>1</sup>CAS Key Laboratory of Bio-inspired Materials and Interfacial Science, Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing 100190, China

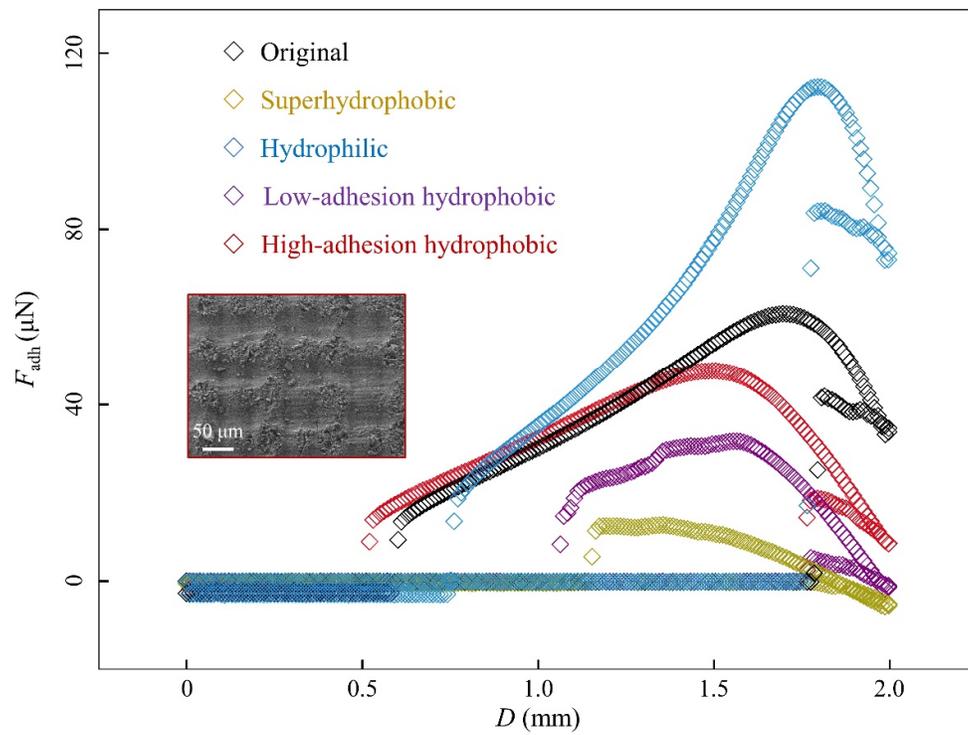
<sup>2</sup>School of Future Technology, University of Chinese Academy of Sciences, Beijing 100049, China

Corresponding Authors: Zhichao Dong, E-mail: [dongzhichao@mail.ipc.ac.cn](mailto:dongzhichao@mail.ipc.ac.cn)

**Supplementary information**

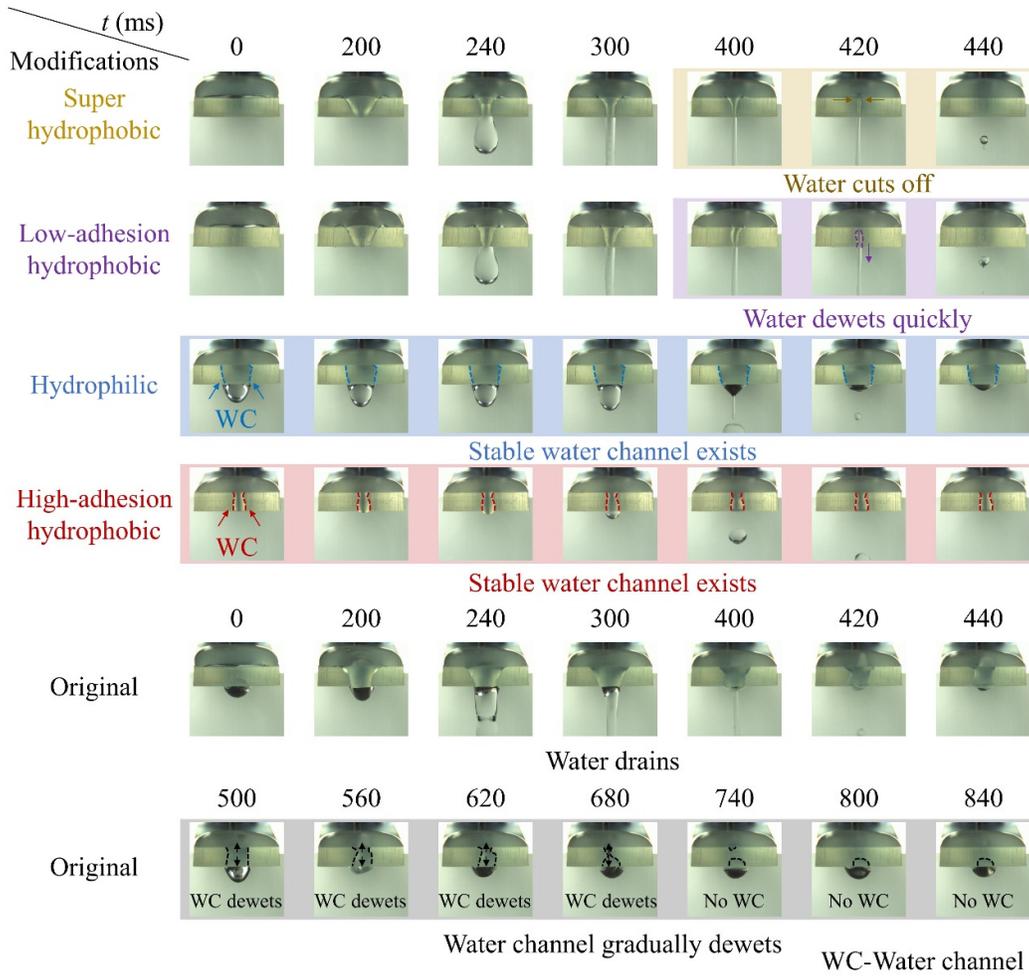


**Figure S1.** SEM images of top, front margin and bottom of the 3D-printed samples.



**Figure S2.** Adhesion forces of margin surfaces with different wettability modifications.

(inset) SEM image of rubbed high-adhesion hydrophobic margin surface.



**Figure S3.** Selected drainage snapshots for samples of margins with different wettability modifications at  $Q = 5.0$  mL/min from the front view.