Electronic Supplementary Information

Flexible-templated Imprinting for Fluorine-free, Omniphobic Plastics with Re-entrant Structures

Xiaoxiao Zhao,^a Daniel S. Park,^a Junseo Choi,^a Sungook Park,^a Steven A. Soper,^b Michael C. Murphy^{*a}

^{a.} Center for BioModular Multiscale Systems for Precision Medicine, Department of Mechanical & Industrial Engineering, Louisiana State University, Baton Rouge, LA 70803, United States
^{b.} Departments of Chemistry and Mechanical Engineering, University of Kansas, Lawrence, KS 66045, United States

*E-mail: murphy@lsu.edu



Fig. S1 Silica nanoparticles of 30 nm with epoxy resin on re-entrant micro-pillar PMMA surface. The PMMA substrates were imprinted at 115 $^{\circ}$ C, 35 Bar, and 35 min.



Fig. S2 Silica nanoparticles of 30 nm with epoxy resin on re-entrant micro-pillar PMMA surface.



Fig. S3 Aggregation of 650 nm silica nanoparticles with epoxy resin on flat PMMA surface.



Fig. S4 Dip coating of 200 nm silica nanoparticles/ epoxy resin mixture (immersion rate of 5 cm/min and withdrawn at a rate of 5 cm/min) on flat PMMA surface.