Dynamic Wetting Properties of Silica-Poly (acrylic acid) Superhydrophilic Coatings

Sevil Turkoglu¹, Jinde Zhang¹, Hanna Dodiuk², Samuel Kenig², Jo Ann Ratto³, Joey Mead^{1*}

^{*}Corresponding author, <u>Joey Mead@uml.edu</u>

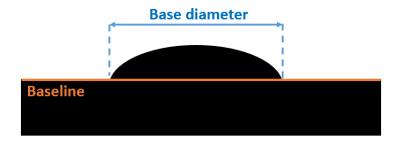


Figure S1. The sketch of a water droplet on a substrate

¹ Department of Plastics Engineering and Center for High-rate Nanomanufacturing, University of Massachusetts Lowell 40 University Avenue Lowell, MA 01854

² Department of Plastics Engineering, Shenkar College, Anne Frank St 12, Ramat Gan, İsrail

³ US Army Combat Capabilities Development Command Soldier Center, Natick, MA 21005, USA

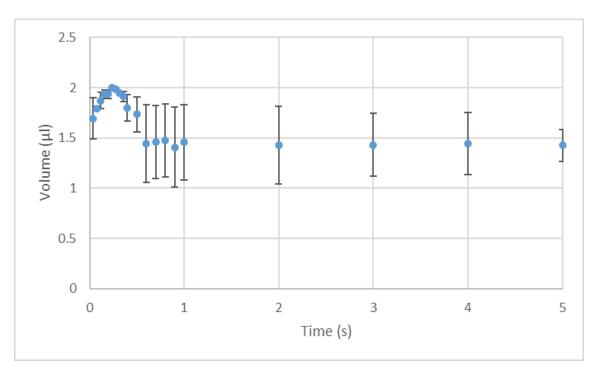


Figure S2. Plot of volume vs time for PAA

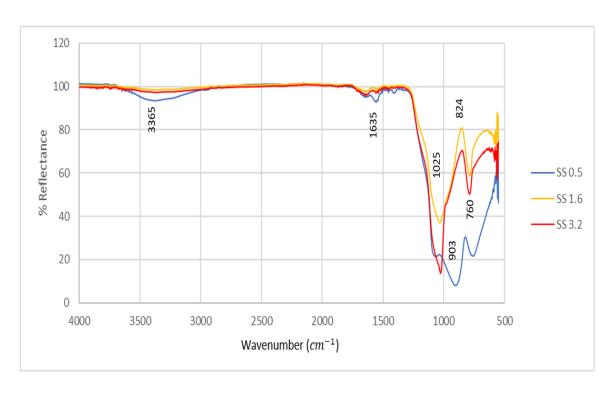


Figure S3. FTIR spectrum of several samples

Table S1. IR Absorptions and their assignments

Wavenumber (cm ⁻¹)	Tentative assignment of functional group
3365	OH stretching and hydrogen bonding
1025	Si–O–Si stretching
903	Si- OH
760	Si-O bending
1635	C=O stretching
1122	C-O stretching vibrations
824	C-H bending