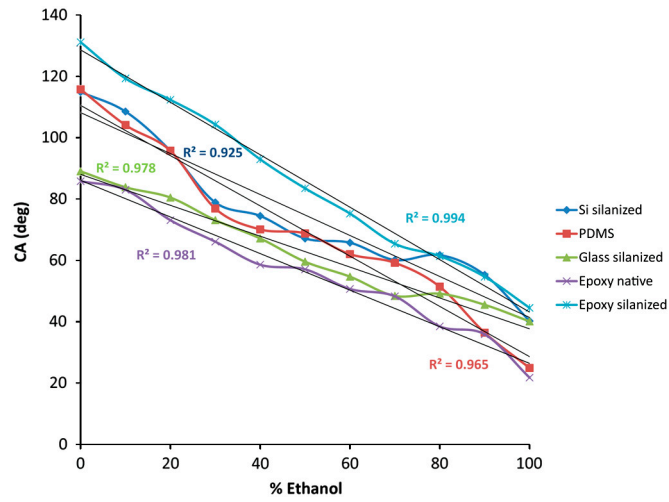
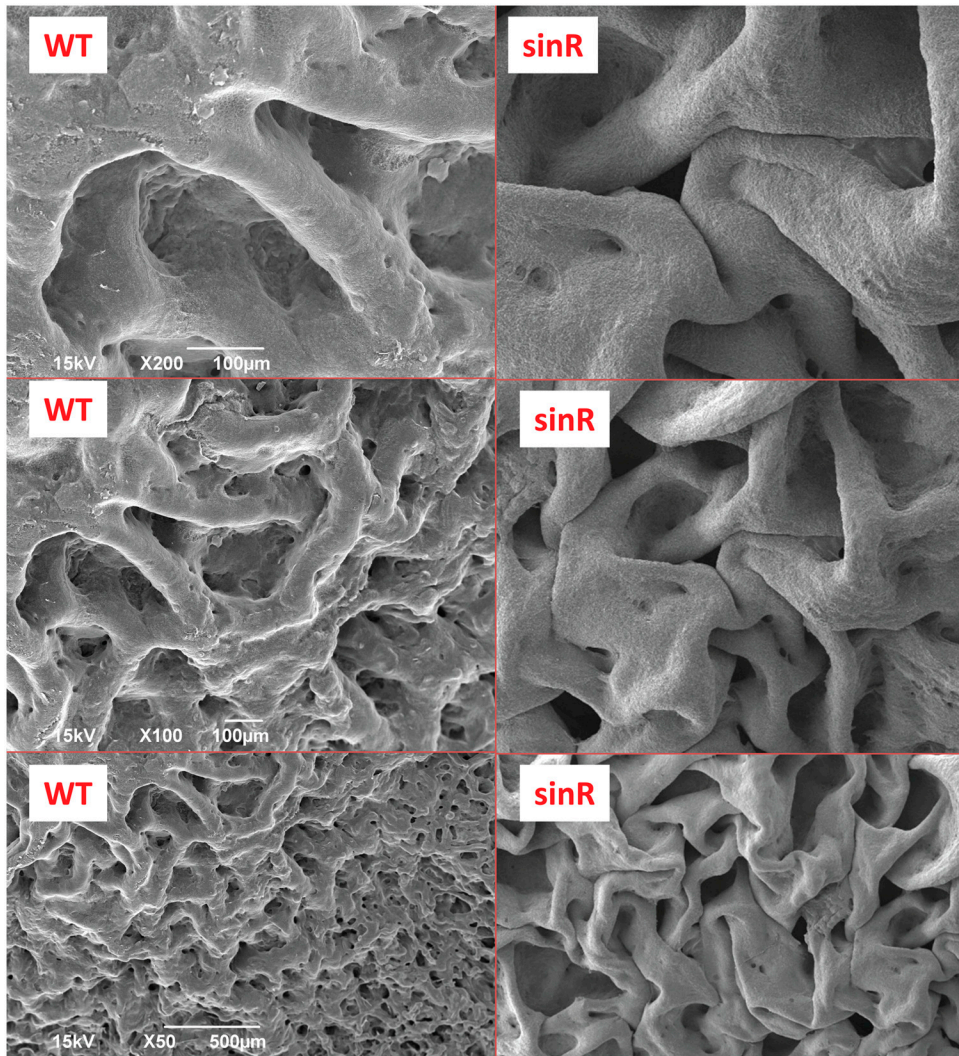


# Supporting Information

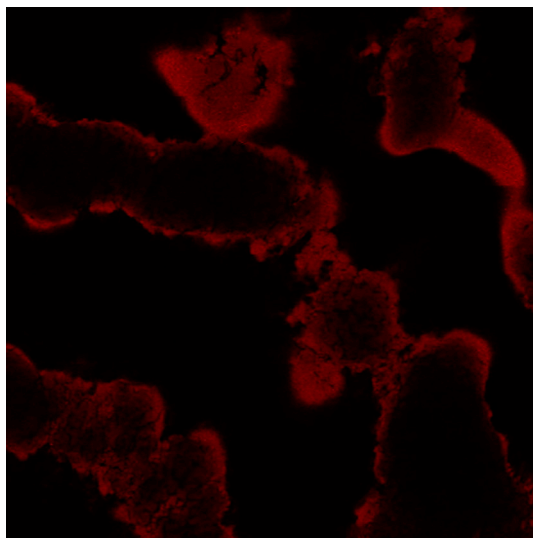
Epstein et al. 10.1073/pnas.1011033108



**Fig. S1.** The linearly decreasing trend of contact angle as a function of increasing ethanol concentration observed in a range of hydrophobic materials, in addition to polytetrafluoroethylene (PTFE, or Teflon). Linear fits with  $R^2$  values are shown for each material. PDMS: polydimethylsiloxane.

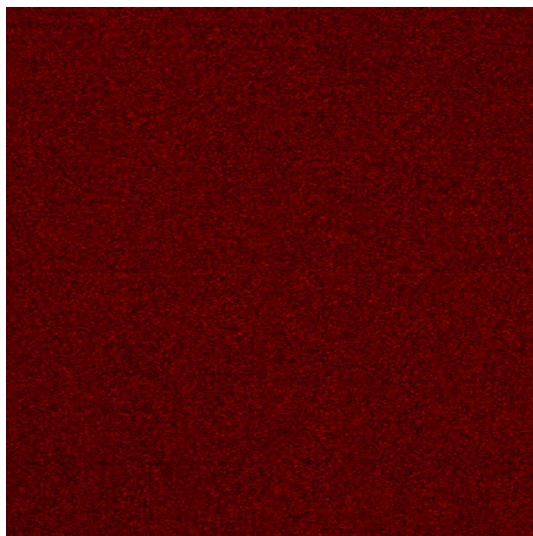


**Fig. S2.** Comparison of the WT and overproduced exopolysaccharide and protein (*sinR*) mutant morphologies at corresponding magnifications via scanning electron microscopy. The *sinR* mutant, which overproduces matrix protein and exopolysaccharides, is seen to slightly overexpress the larger scale wrinkled topography but appears smoother than the wild type at the 10- to 100- $\mu\text{m}$  scale.



**Movie S1.** Fly-through confocal microscopy of rhodamine-stained wild-type biofilm–liquid interface. To assay 3D penetration of liquid into *Bacillus subtilis* colony texture, dilute rhodamine was deposited on a wild-type colony, staining regions of the biofilm it contacted, and then removed by compressed air. A  $1.2 \times 1.2$  mm field of view was collected by image merging multiple z stacks. The complex topography that is a factor in preventing liquid penetration is visible throughout the movie.

[Movie S1 \(AVI\)](#)



**Movie S2.** Fly-through confocal microscopy of a  $1.2 \times 1.2$ -mm area of rhodamine-stained epsH biofilm–liquid interface. Uniform fluorescent staining of the epsH biofilm indicates complete wetting by the dilute rhodamine, in contrast to the wild type.

[Movie S2 \(AVI\)](#)