Supporting Information

Scaling up Nature — Large Area Flexible Biomimetic Surfaces

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Figure S1. (a) and (b) XPS spectra of pure PR and PR with 1wt.% PFDA. (c) XPS analysis of surface fluorine percentage as a function of PFDA mass fraction. Open square: 15° takeoff angle; solid circle: 75° takeoff angle.



Figure S2. (a) Schematics of the formation of hierarchical wrinkle; (b) and (c) SEM images of hierarchically wrinkled structures on master mold; (d) and (e) SEM images of R2R imprinted patterns on PET. Scale bar: $5 \mu m$.



Figure S3. Optical transparency enhancement of SLIPS (left) as compared with SHS.



Figure S4. Water advancing contact angles and contact angle hysteresis of SLIPS as a function of incubation time in growth media (M9 minimal media).



Figure S5. The assessment of cytotoxicity of the lubricant. The cytotoxicity of Krytox was assessed through standard Live/Dead staining of bacteria in solution. *E. coli* was incubated in growth media (M9 minimal media) containing the lubricant (2.5% and 5%) for 2 hr at 37°C. Viability of *E. coli* was >95% under tested conditions, indicating that Krytox is not cytotoxic.