

Electronic Supplementary Information

Robust superhydrophobic coating and the anti-icing study of its lubricants-infused-composited surface under condensing condition

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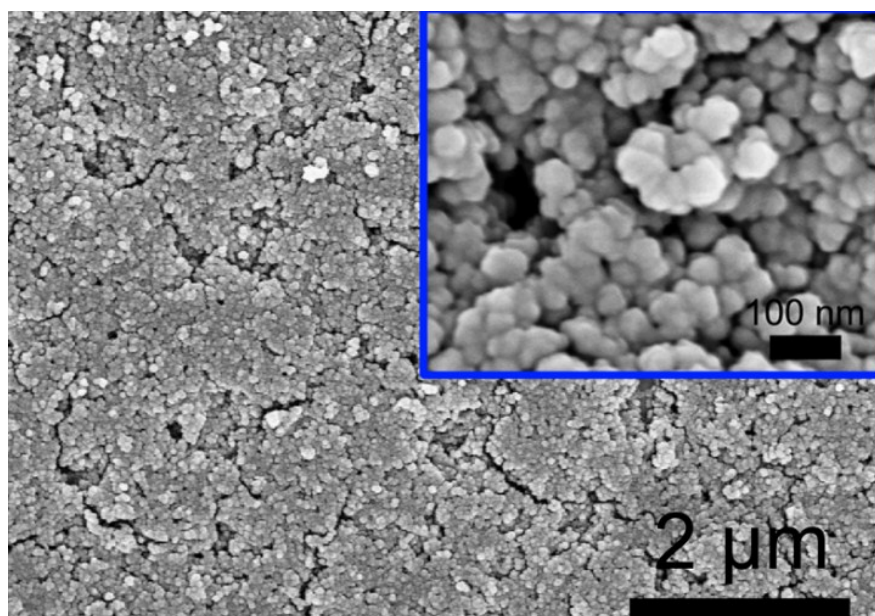


Figure S1. SEM images of SiO₂ nanoparticles.

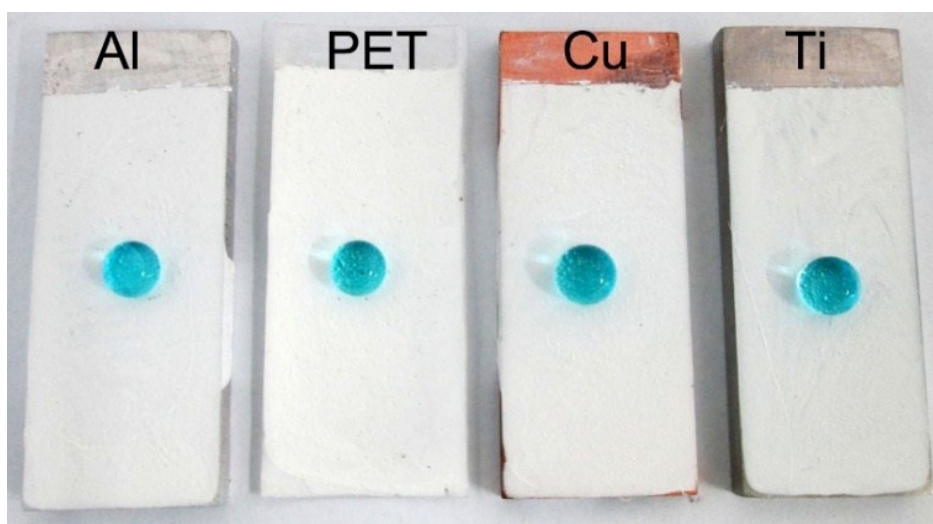


Figure S2. Superhydrophobic coatings on Al, PET (wallpaper), Cu and Ti alloy substrates.

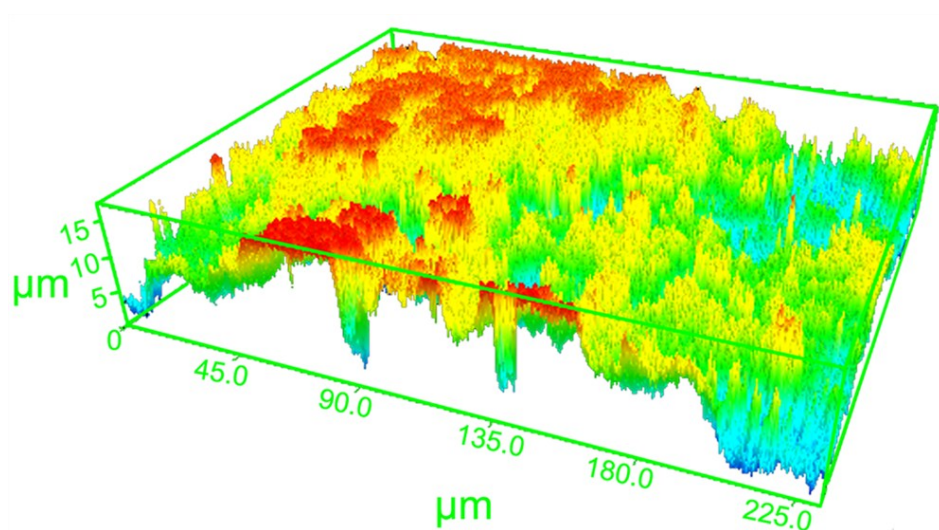


Figure S3. True color confocal microscopy images of P4.

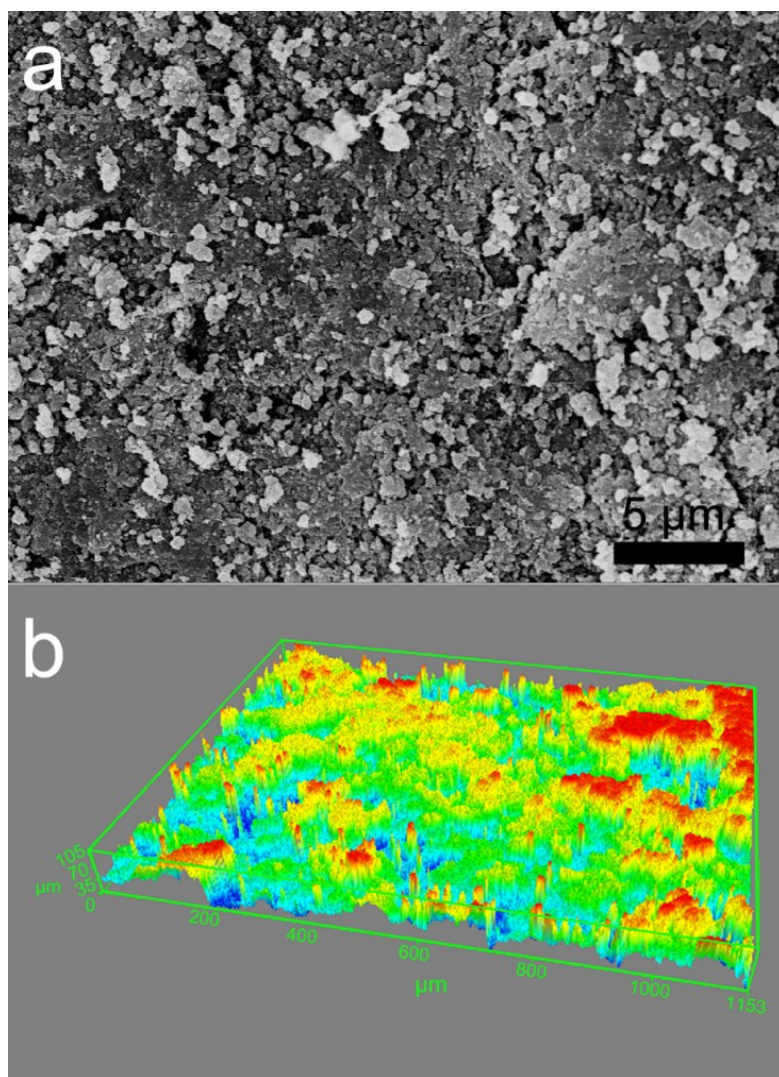


Figure S4. (a) SEM and (b) 3D morphology of P4 after being abraded for over 10 m.

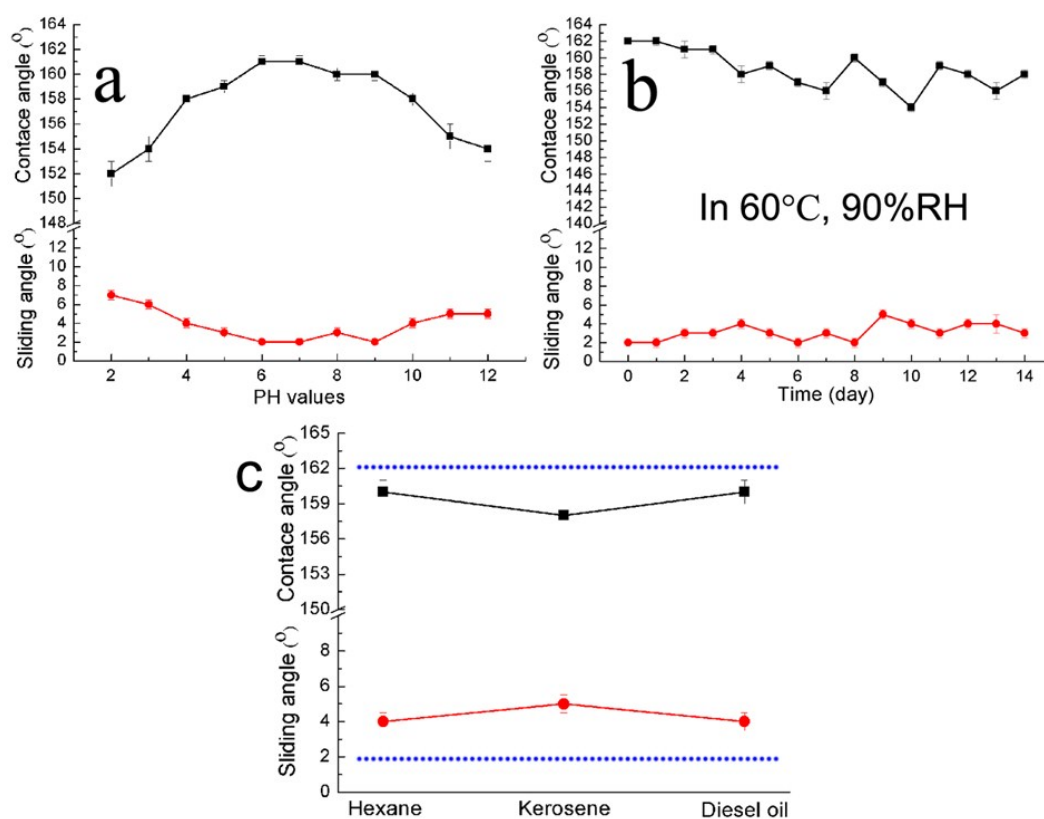


Figure S5. **(a)** Surface wettability after being immersed in water with different pH values. **(b)** Variations of CA and SA values in 60 °C, 90 %RH condition. **(c)** Wettability after being immersed in different oil

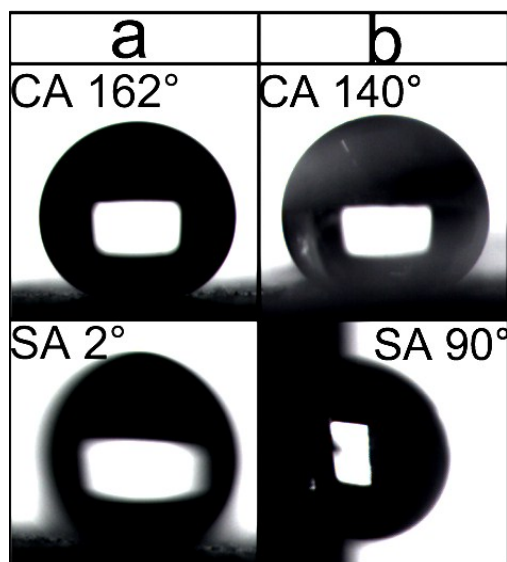


Figure S6. Contact/sliding angles of P4 in the **(a)** ambient and **(b)** 0 °C condition.

Table S1. Loss in thickness of different bare substrates

	Steel	Al	Cu	Ti	PET
Wear loss (μm)	4.4	6.3	5.5	4.6	9