Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting Information

Durable and transparent super anti-wetting coatings with excellent liquid repellency and anti-fouling performance based on fluorinated polysiloxane

Wenrui Dong,†[a] Bucheng Li,†[c] Jinfei Wei,[c] Weidong Liang,*[a] Junping Zhang*[b,c]

[a] Department of Chemical Engineering, College of Petrochemical Engineering, Lanzhou University of Technology, Lanzhou 730050, P.R. China. E-mail: wdliangh@lut.edu.cn.

[b] Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences, Beijing 100049, P.R. China. E-mail: jpzhang@licp.cas.cn.

[c] Center of Eco-Material and Green Chemistry, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, P.R. China.

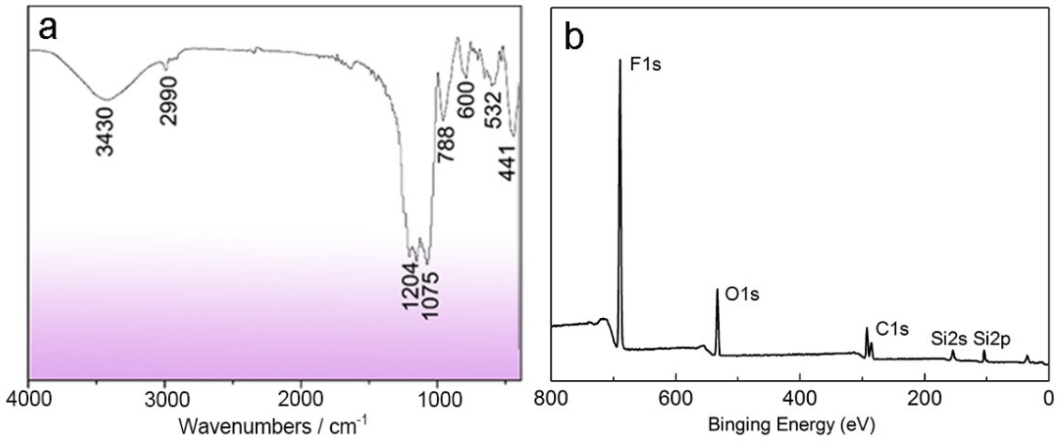

Fig. S1 (a) FTIR spectrum of fluoroPOS and (b) XPS survey spectrum of the fluoroPOS coating.

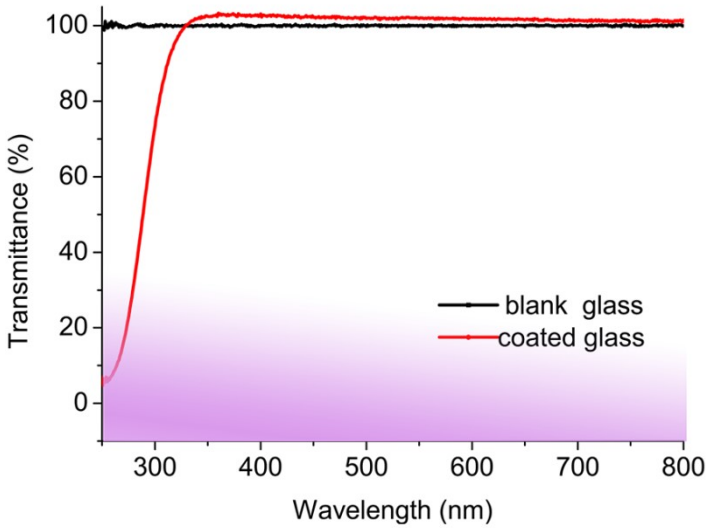

Fig. S2 Transmittance of the fluoroPOS coated glass slide with the bare glass slide as the reference.

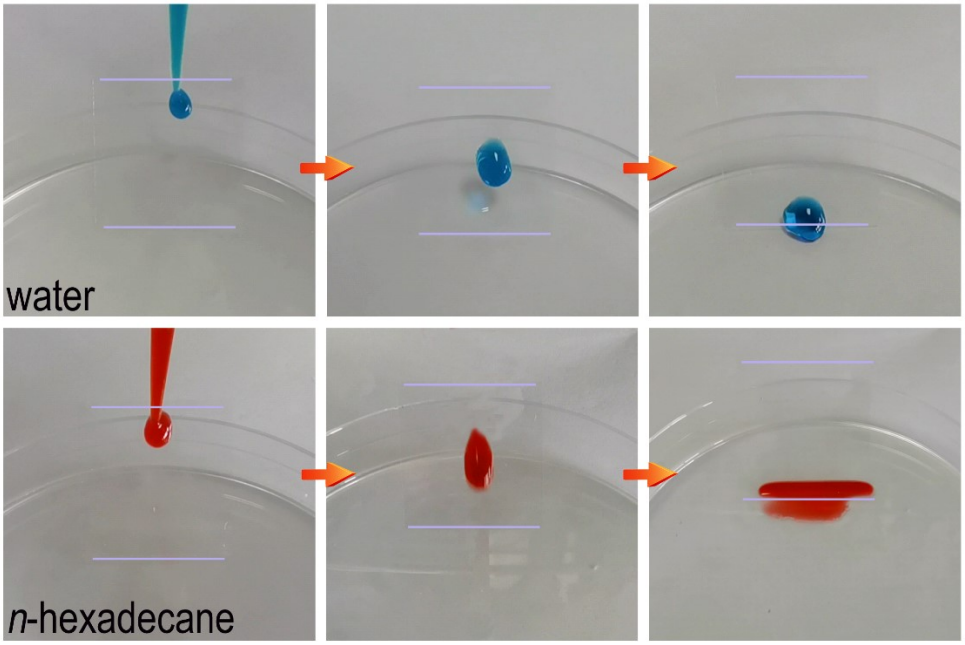

Fig. S3 Sliding off of water (dyed blue) and *n*-hexadecane (dyed red) droplets (20 µL) from the 20° tilted fluoroPOS coating (slide distance = 24 mm).

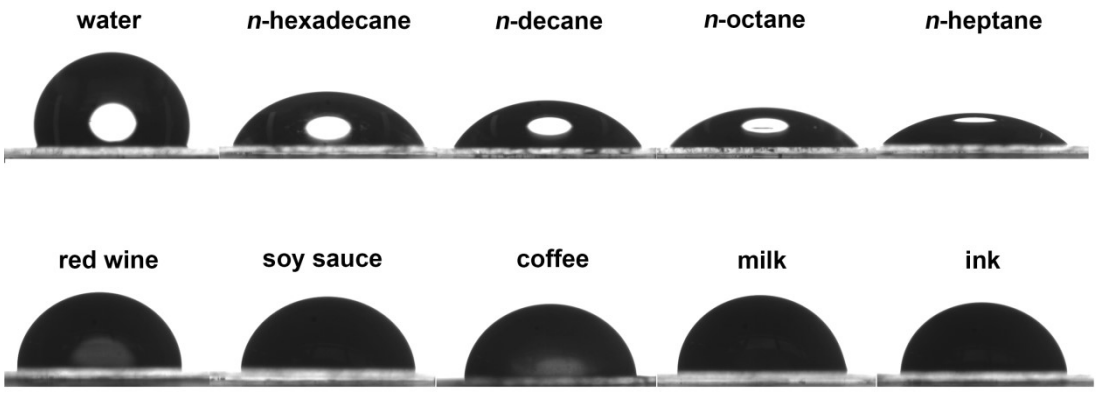

Fig. S4 Static CA images of various liquids (20 µL) on the surface of the fluoroPOS super anti-wetting coating.

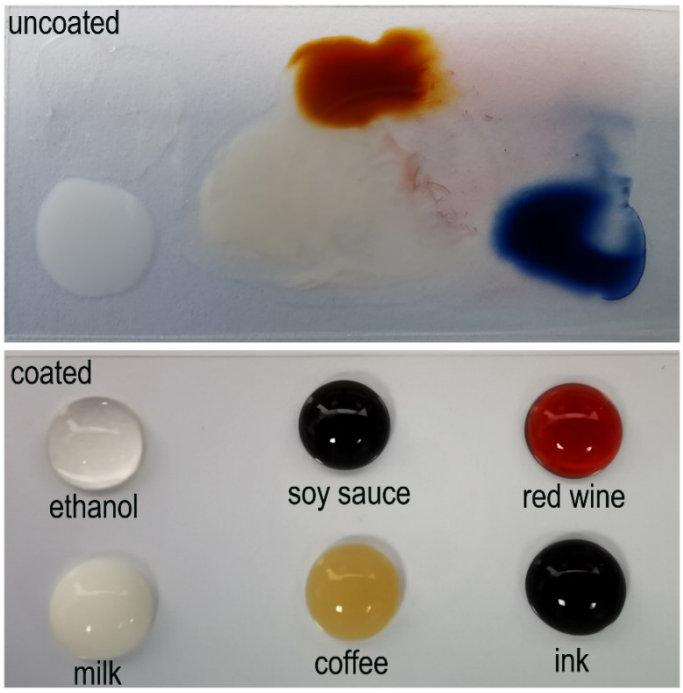

Fig. S5 Photographs showing difference in repellency towards various liquids (20 µL) between the bare glass slide and fluoroPOS coated glass slide.

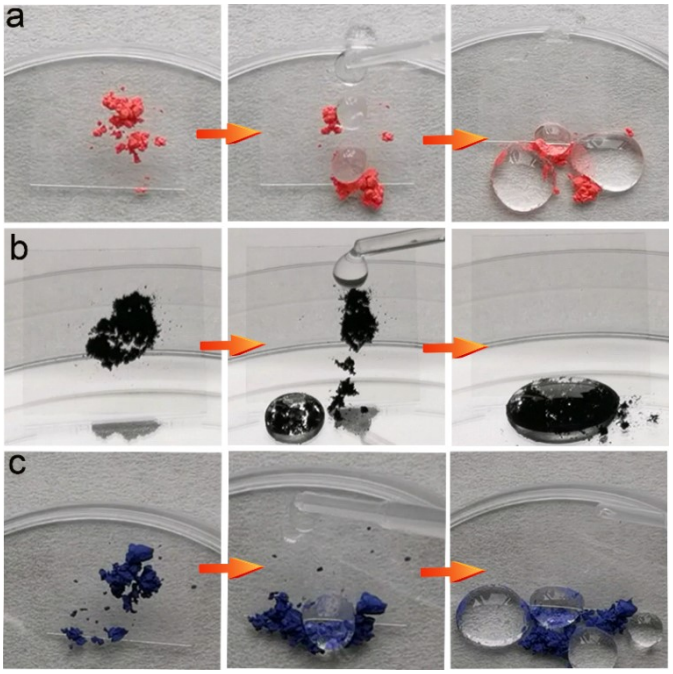

Fig. S6 Removal of the (a) carbon nanotubes (b) red and (c) blue thermochromic powder on the 20° tilted fluoroPOS coated glass slide at room temperature.

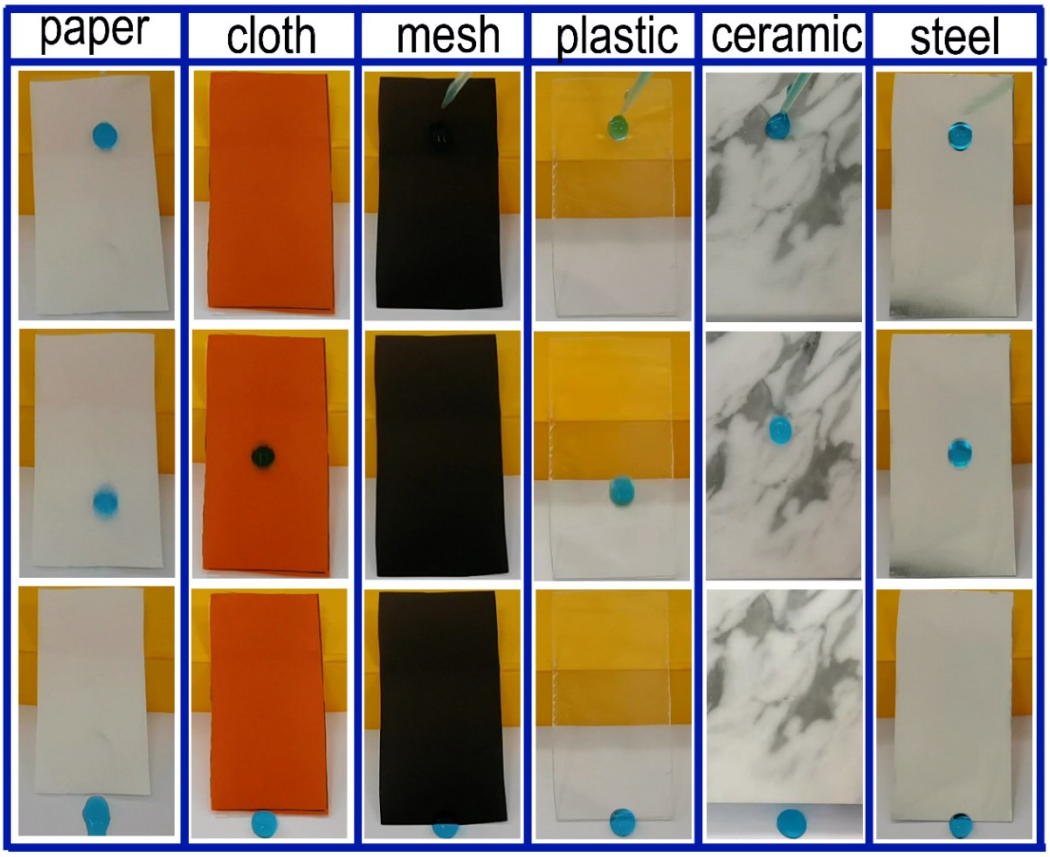

Fig. S7 Sliding off of water (dyed blue, 20 µL) from the 20° tilted fluoroPOS coatings on different substrates.