Electronic Supplementary Material (ESI) for Soft Matter.

Durable superamphiphobic coatings from one-step electrostatic dusting

Youfa Zhang, Zhen Xiao, Chengzhi Liu, Xinquan Yu*

Jiangsu Key Laboratory of Advanced Metallic Materials, School of Materials Science and Engineering, Southeast University, Nanjing 211189, P. R. China

*corresponding author: E-mail: yfzhang@seu.edu.cn (Y. Z.)

Supporting Information

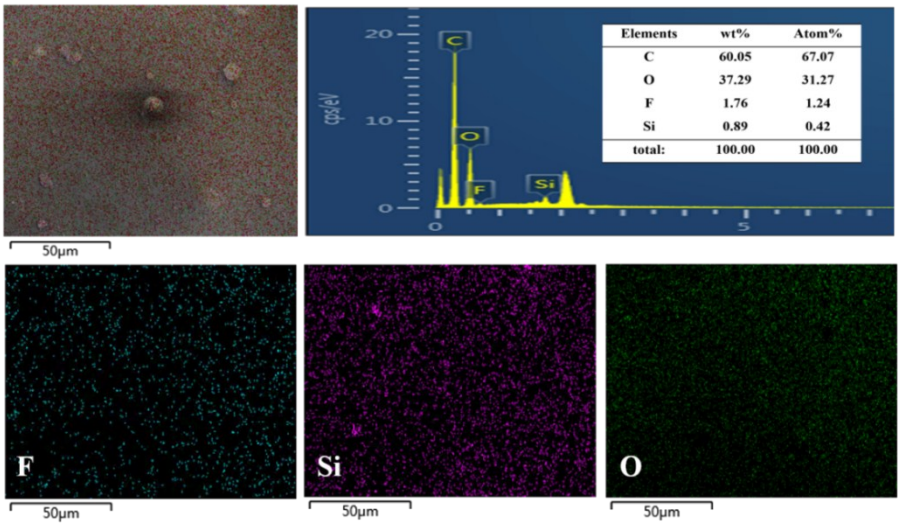

Fig. S1 EDS mapping images of F, Si and O elements of coatings.

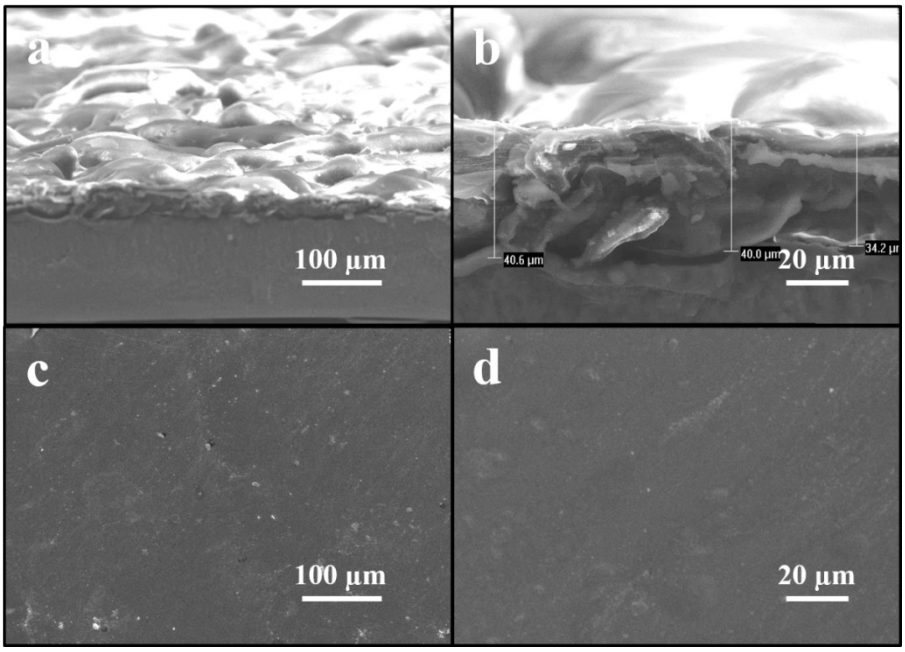

Fig. S2 SEM images of (a, b) cross section of SiO_2/PMMA coatings and surface of (c, d) PMMA resin.

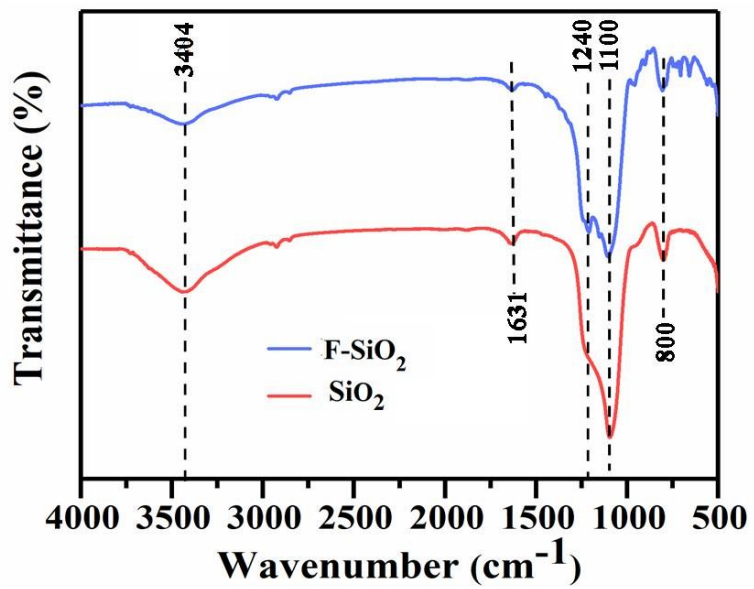

Fig. S3 FTIR spectra of nano-SiO_2 particles before and after modification.

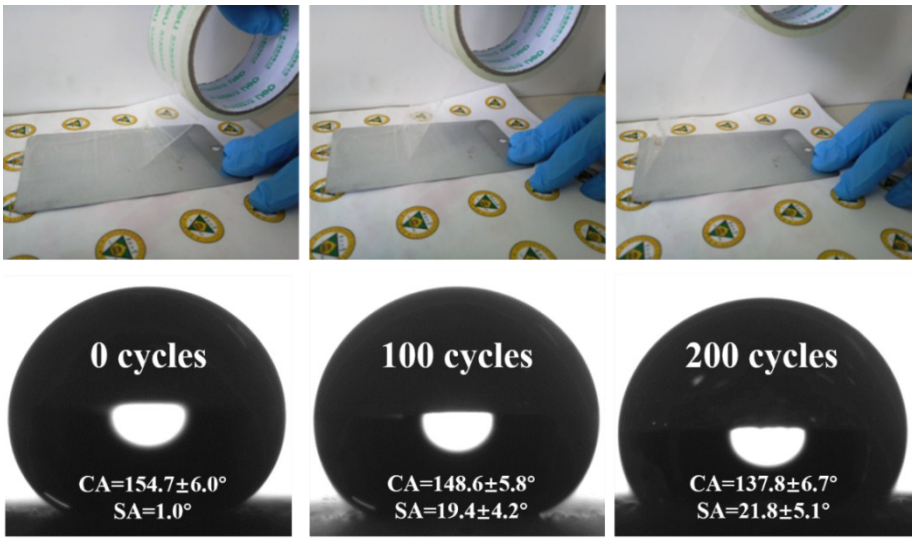

Fig. S4 Illustration of the tape peeling test for superamphiphobic surface and the wettability of oil after 0, 100, 200 cycles.

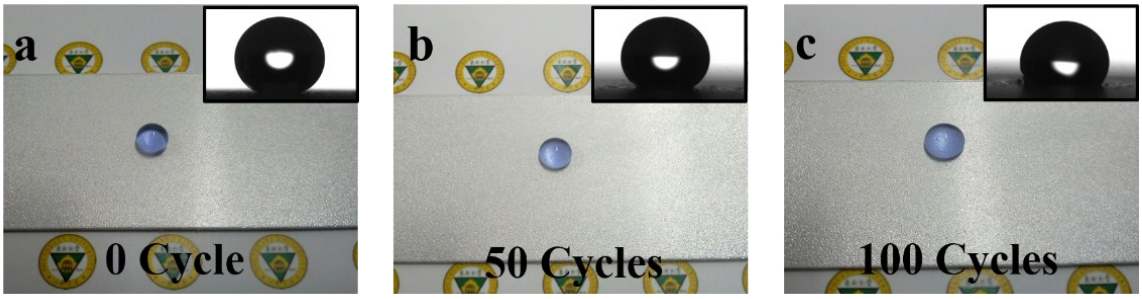

Fig. S5 Wetting behavior of coatings afterabrasion of tester for (a) 0, (b) 50 and (c) 100 cycles.

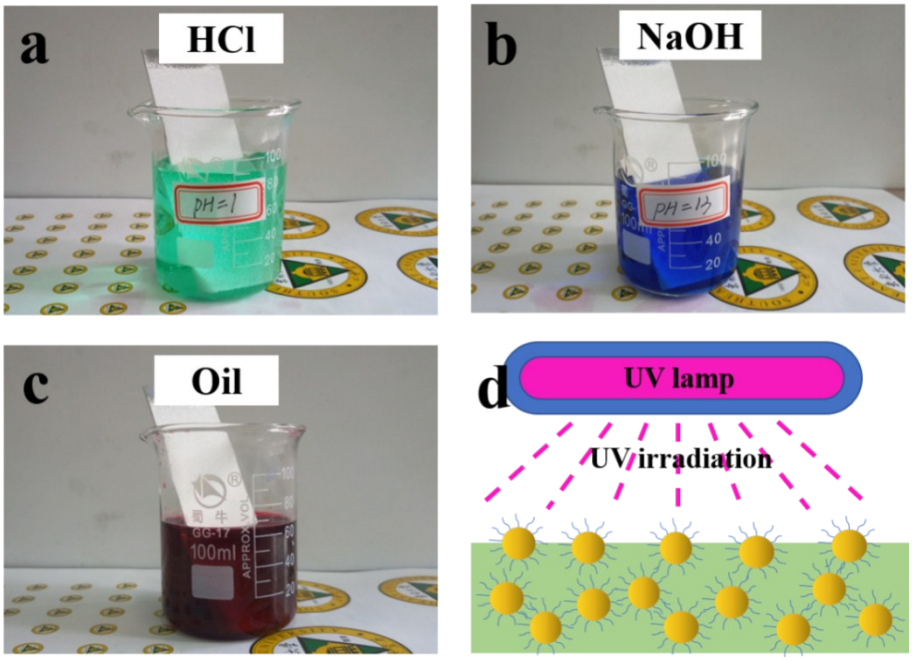

Fig. S6 Schematic diagrams of superamphiphobic coatings soaking in (a) acid, (b) alkali, (c) oil and. (d) UV-irradiation .

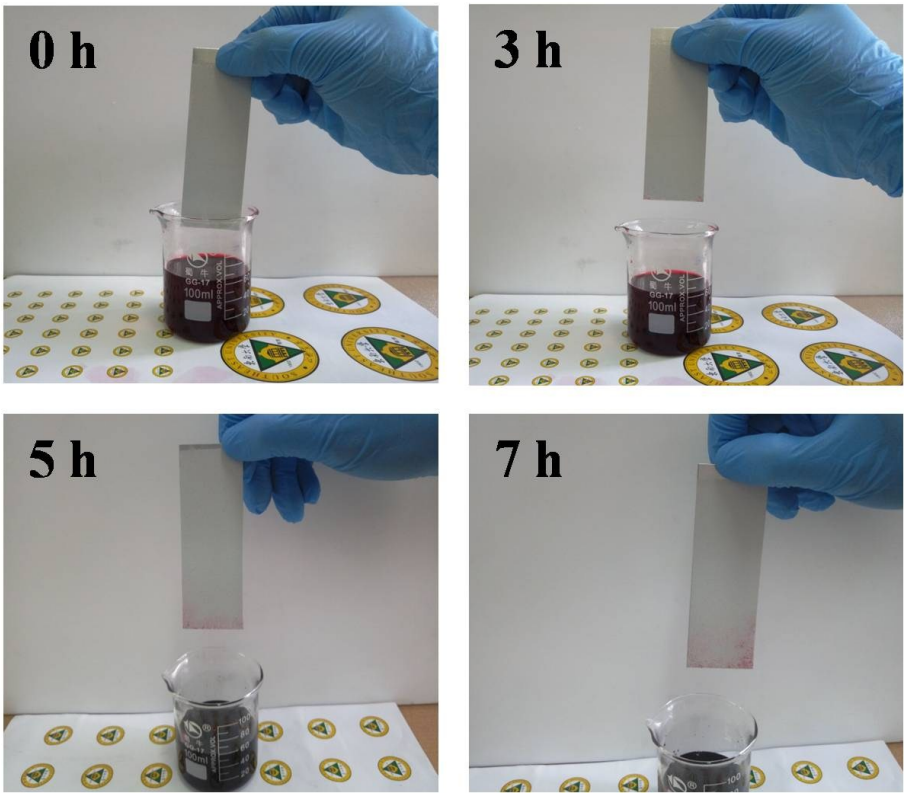

Fig. S7 Illustration of the oil soaking test for superamphiphobic surface after 0, 3, 5, 7 h, respectively.