

Electronic Supplementary Information (ESI)

Durable superhydrophobic ZnO–SiO₂ films: A new approach to enhance the abrasion resistant property of trimethylsilyl functionalized SiO₂ nanoparticles on glass†

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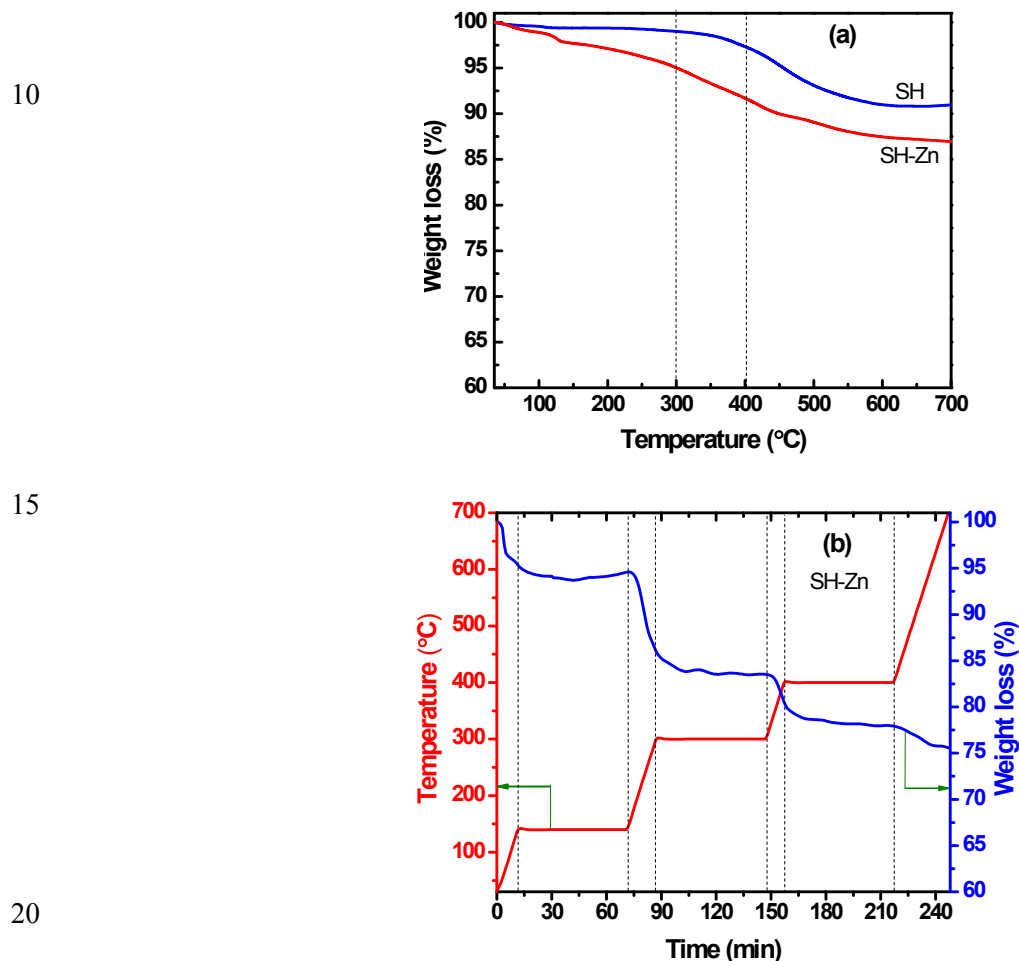
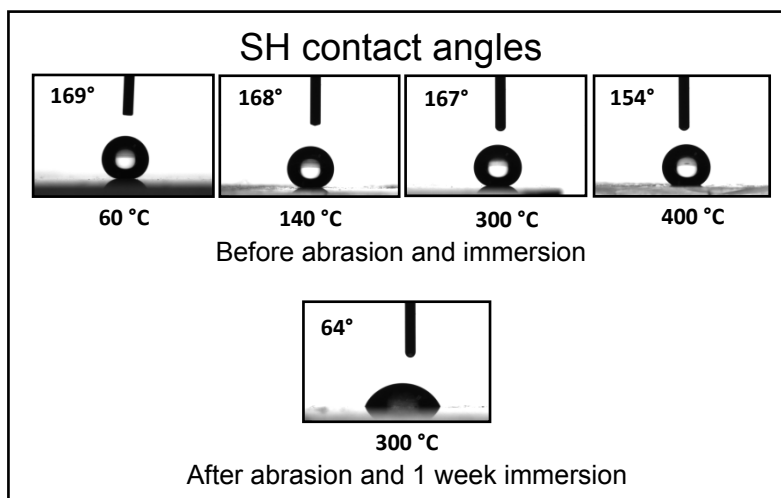


Fig. S1 TGA of SH-Zn and SH powders. The dynamic TGA of SH-Zn and SH powders previously heated at 100 °C (a). The TGA of as-prepared SH-Zn powder with 1 h isothermal at 140, 300 and 400 °C (b). Both measurements were performed at heating rate of 10 °C min⁻¹ in pure nitrogen.



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Fig. S2 Contact angle images of water drops (volume 6 μ l) on SH coatings heated at 60, 140, 300 and 400 °C before and after abrasion and immersion.

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Table S1. Increasing trend of transparency of SH-Zn coatings on glass with systematic heat treatment from 60 to 400 °C under nitrogen atmosphere.

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| Sample (SH-Zn) heated at different temperature (°C) | Average % T in the range 400-800 nm |
|---|-------------------------------------|
| 60 | 63.0 |
| 140 | 77.5 |
| 300 | 81.0 |
| 400 | 86.0 |