

## Supporting Information

### Superhydrophobic Surface with Stepwise Multilayered Micro- and Nanostructure and an Investigation of Its Corrosion Resistance

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#### Supplementary materials:

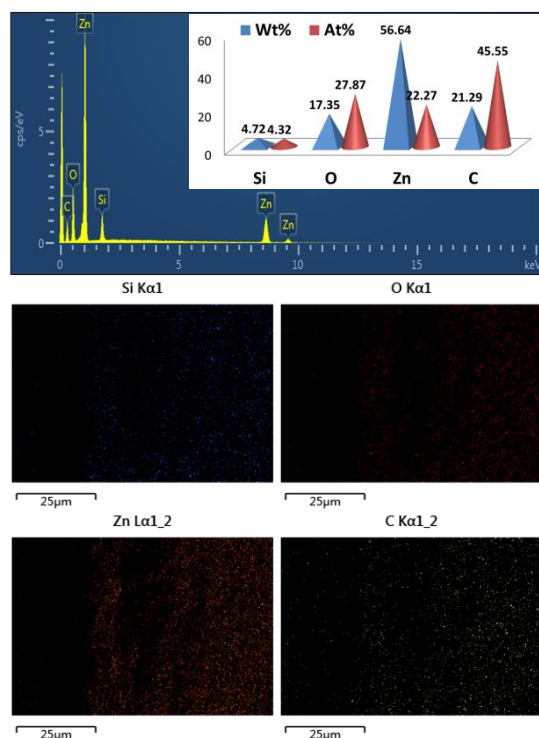
**Fig. S1.** EDS data of aluminum matrix superhydrophobic surface (STA-PDMS-ZnO sample) and further showing the corresponding ratio of Si, O, Zn and C on this scanned surface.

**Fig. S2.** SEM images of the surfaces in the different preparation processes. (a) Bare aluminum alloy surface. (b) Aluminum surface after the laser ablation. (c) Control sample surface (The modified film).

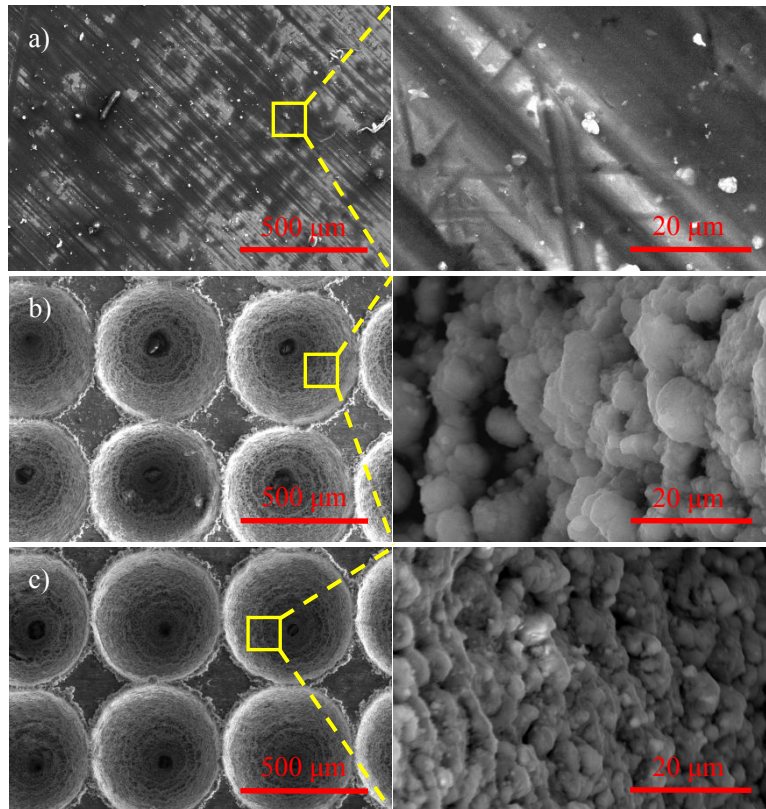
**Fig. S3.** Surface morphologies and the corresponding parameters for the surfaces in the different preparation processes. (a) Bare aluminum alloy surface. (b) Aluminum surface after the laser ablation. (c) Control sample surface (The modified film). (d) Aluminum matrix superhydrophobic surface (STA-PDMS-ZnO sample).

**Fig. S4.** Nyquist impedance and the corresponding equivalent circuit for the modified film (Control sample) after the immersion in 3.5 wt % NaCl for 1 h.

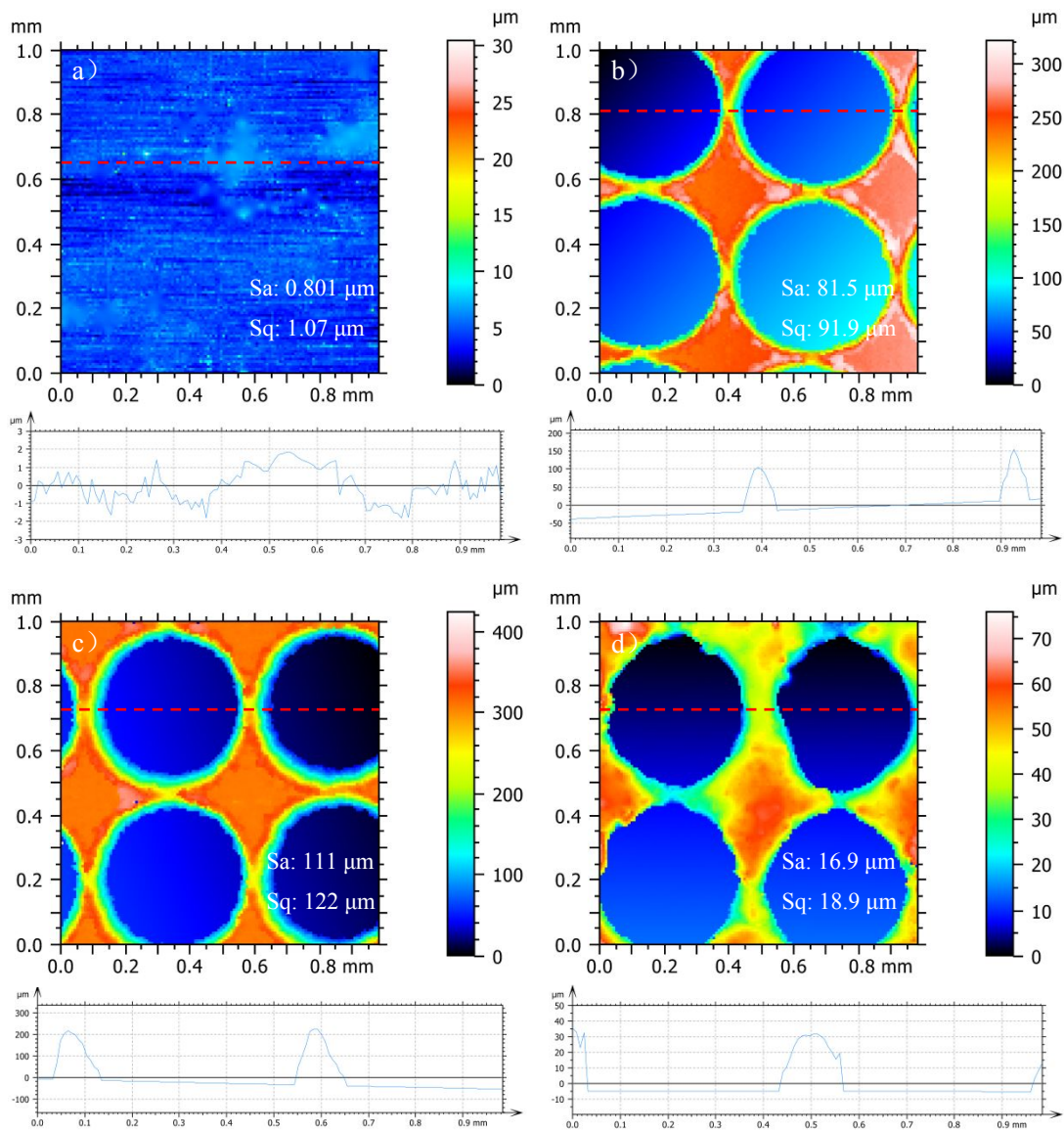
**Fig. S5.** Bode plots of the modified film (Control sample) by lasting the NaCl immersion for 1 h.



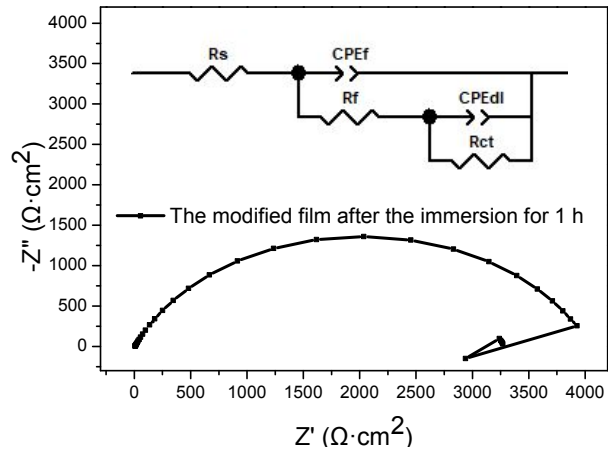
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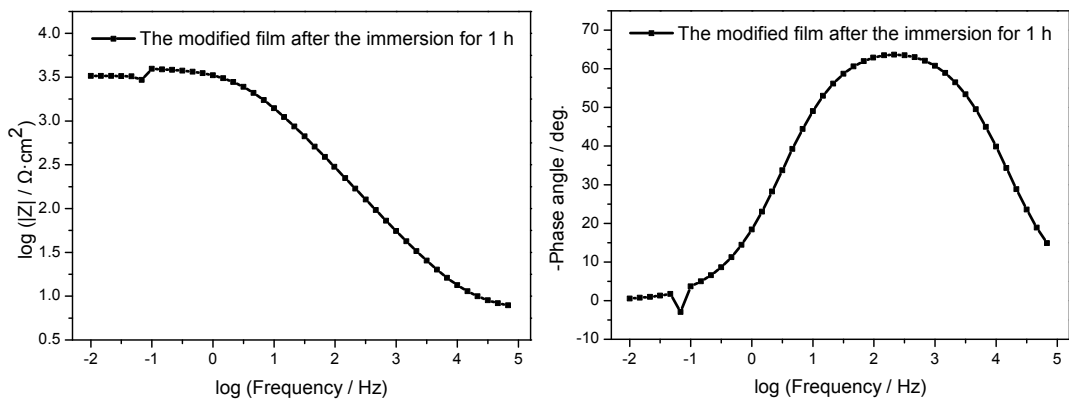
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