

Synergistic effect of diethylene triamine penta(methylene phosphonic acid) and graphene oxide barrier on anti-scaling and anti-corrosion performance of superhydrophobic coatings

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Supplementary material

Figures

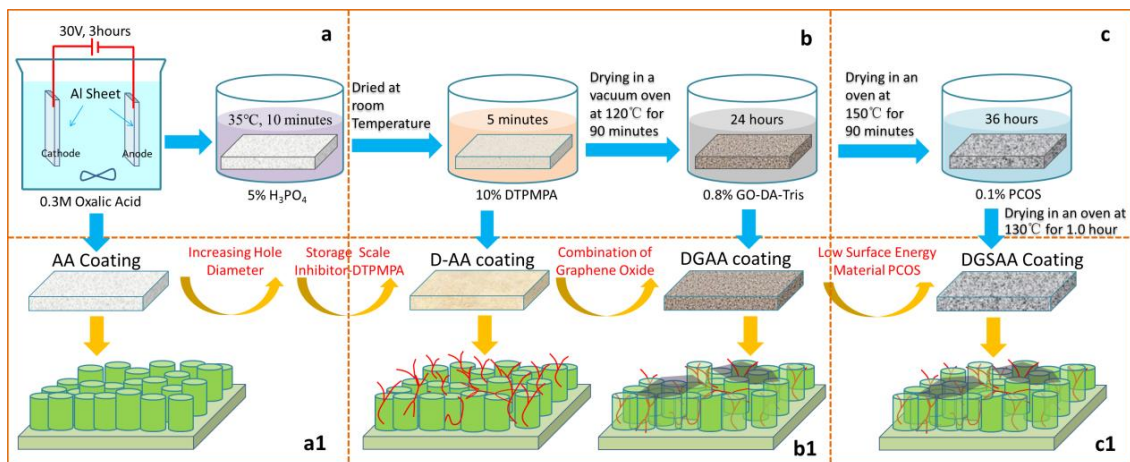


Fig. S1 (a)(b)(c) Diagrams of the DGSAA coating fabrication and (a₁)(b₁)(c₁) corresponding aims of each operation.

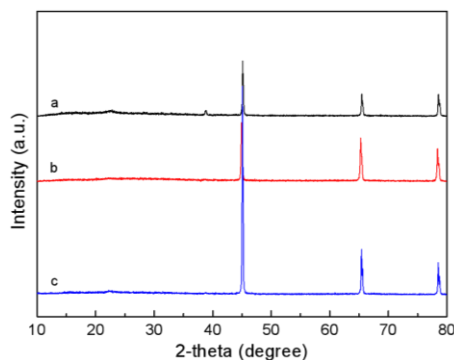


Fig. S2 XRD patterns of the SAA coating (a), the DSAA coating (b), and the DGSAA coating (c).

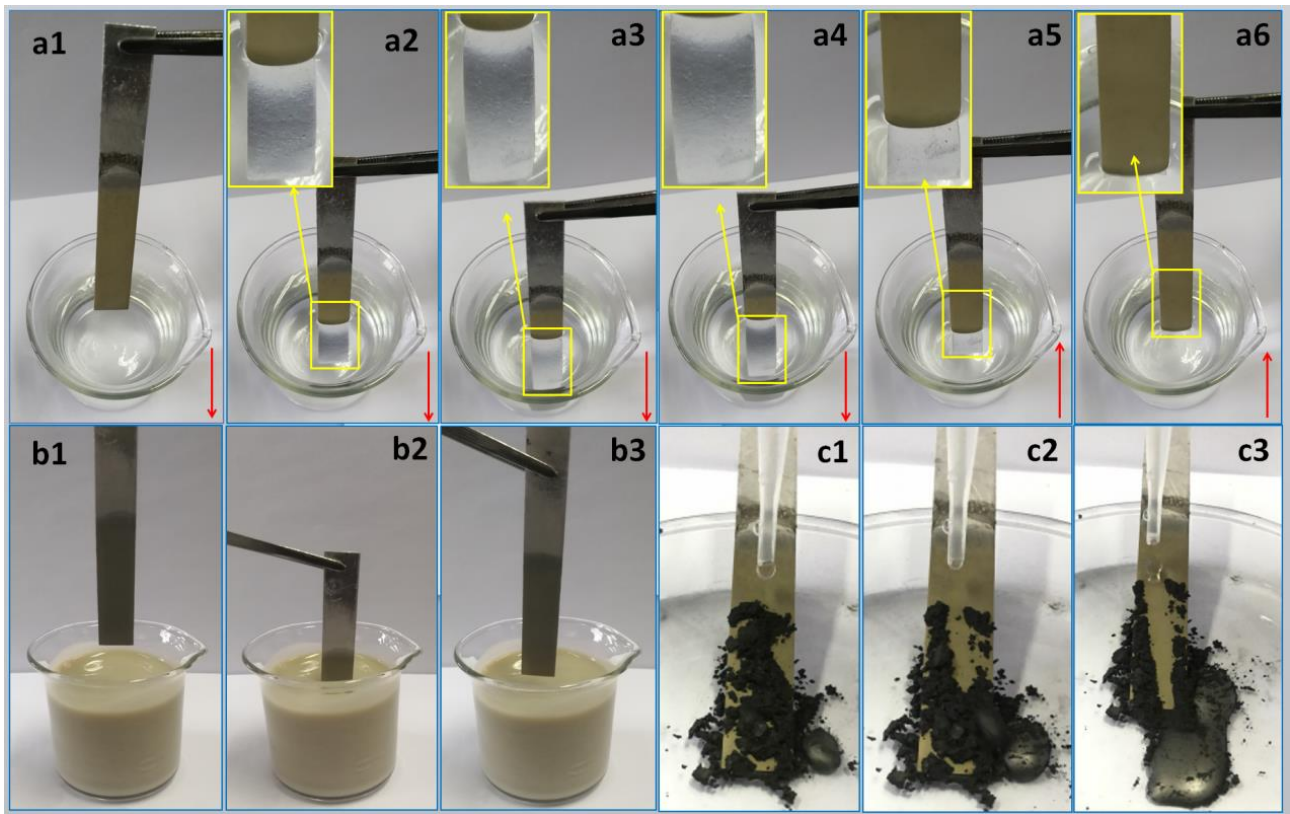


Fig. S3 (a₁)(a₂)(a₃)(a₄)(a₅)(a₆) Air layer and self-cleaning of the DGSAA coating in pure water, (b₁)(b₂)(b₃) diatomite in water, and (c₁)(c₂)(c₃) flush testing of carbon powders by water.

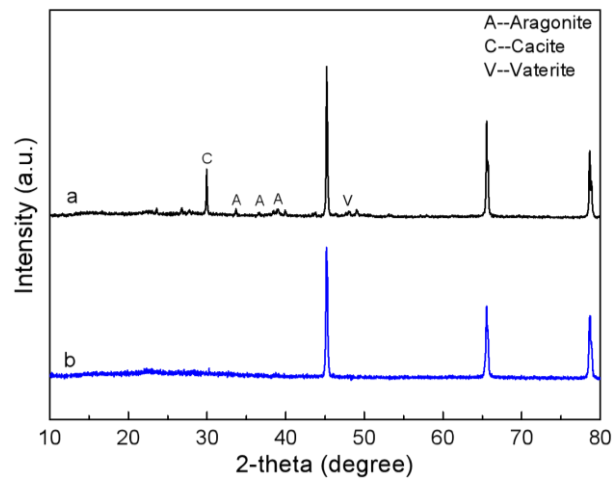


Fig. S4 XRD patterns of the CaCO₃ scaling on the SAA coating (a) and the DGSAA coating (b) at the immersion time for 72 h.