

# **A TA–APTES Coating as a Chemical Playground: Engineering the Shift from Chemical Traits to Bactericidal Power in Superhydrophobic PU Sponges**

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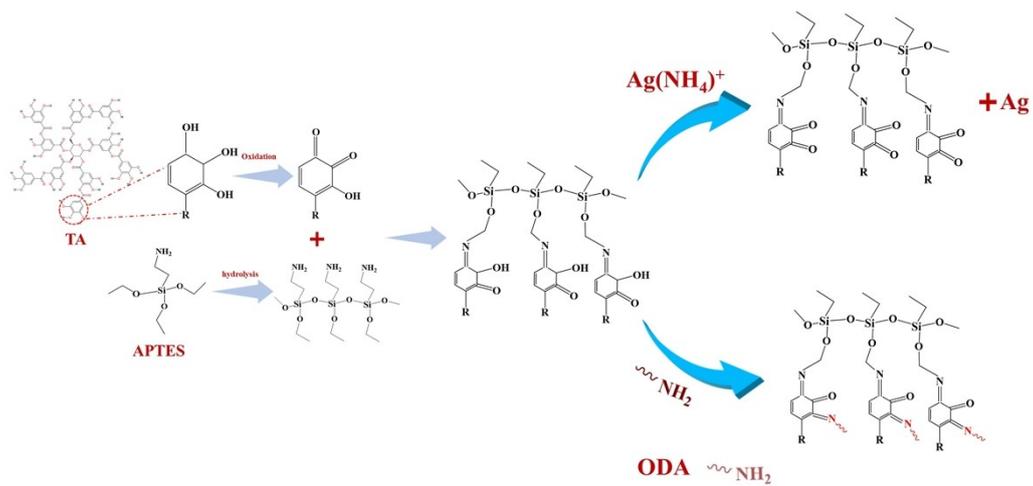


Fig. S1 A hypothesized mechanism for the generation of the resultant TA-APTES coating and the development of a superhydrophobic surface

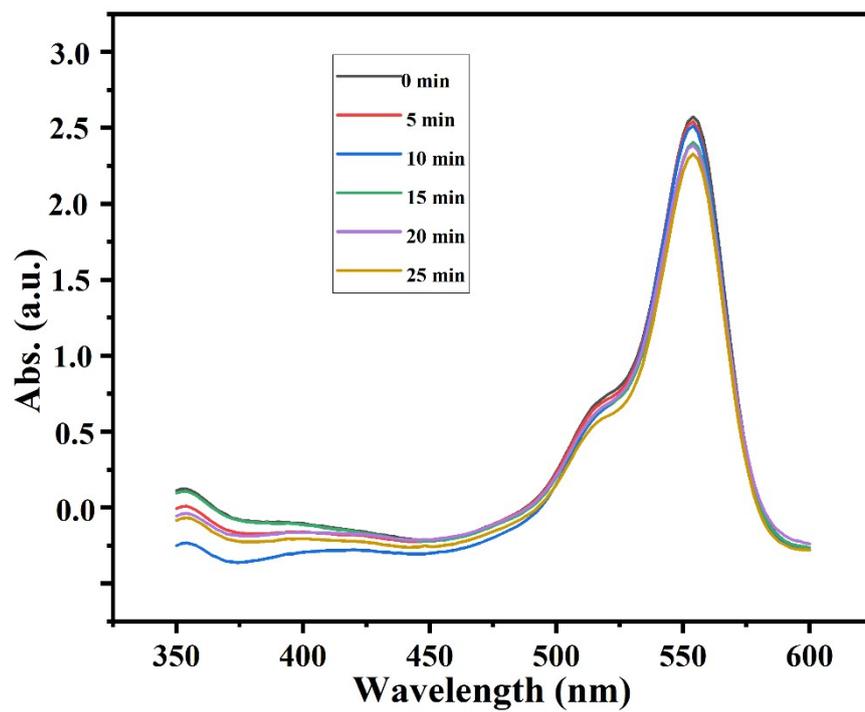


Fig. S2 UV-visible absorption spectra for catalytic reduction of RhB solution by TA-APTES@PU

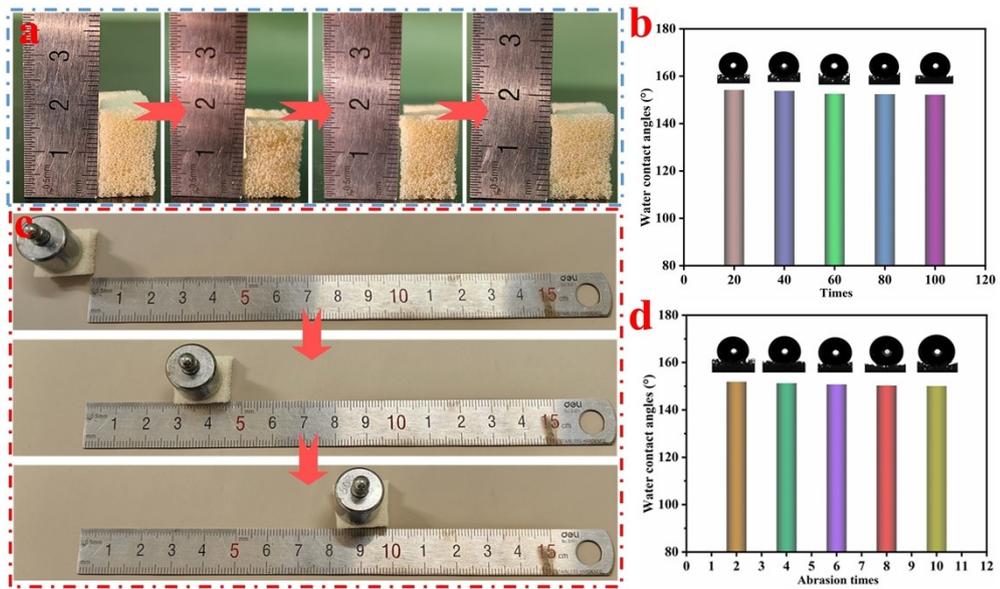


Fig. S3 Mechanical compression test for ODA@TA-APTES@PU (a), and the corresponding WCA values during 100 cycles (b); abrasion resistance test for ODA@TA-APTES@PU (c), and the corresponding WCA values during 10 cycles (d)