

Fig. S1 Photos of a series of PI coatings on SiC after cross-cut adhesion tests.

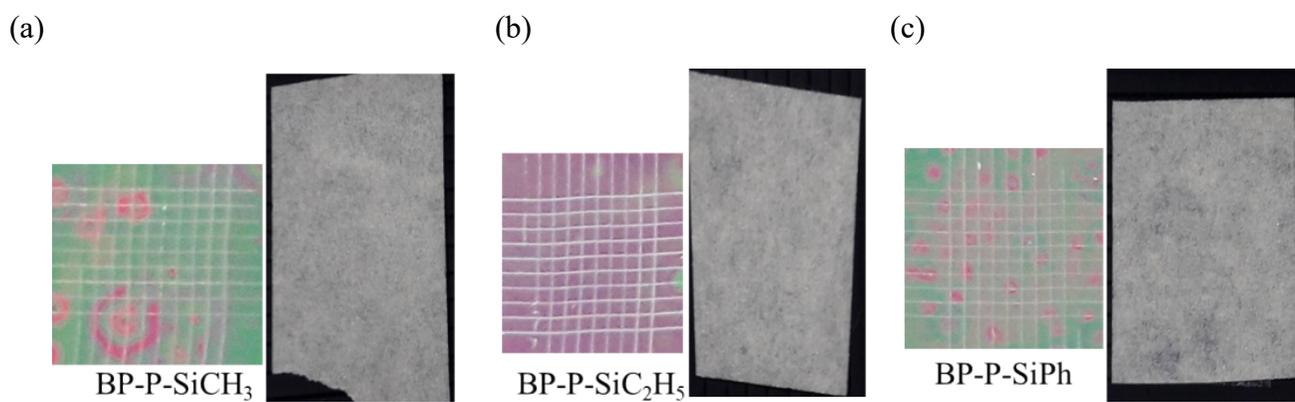


Fig. S2 Photos of PI-silane hybrid coatings, (a) BP-P-SiCH₃, (b) BP-P-SiC₂H₅, and (c) BP-P-SiPh, on SiC substrates (Left) and their corresponding adhesive tapes (Right) after cross-cut adhesion tests.

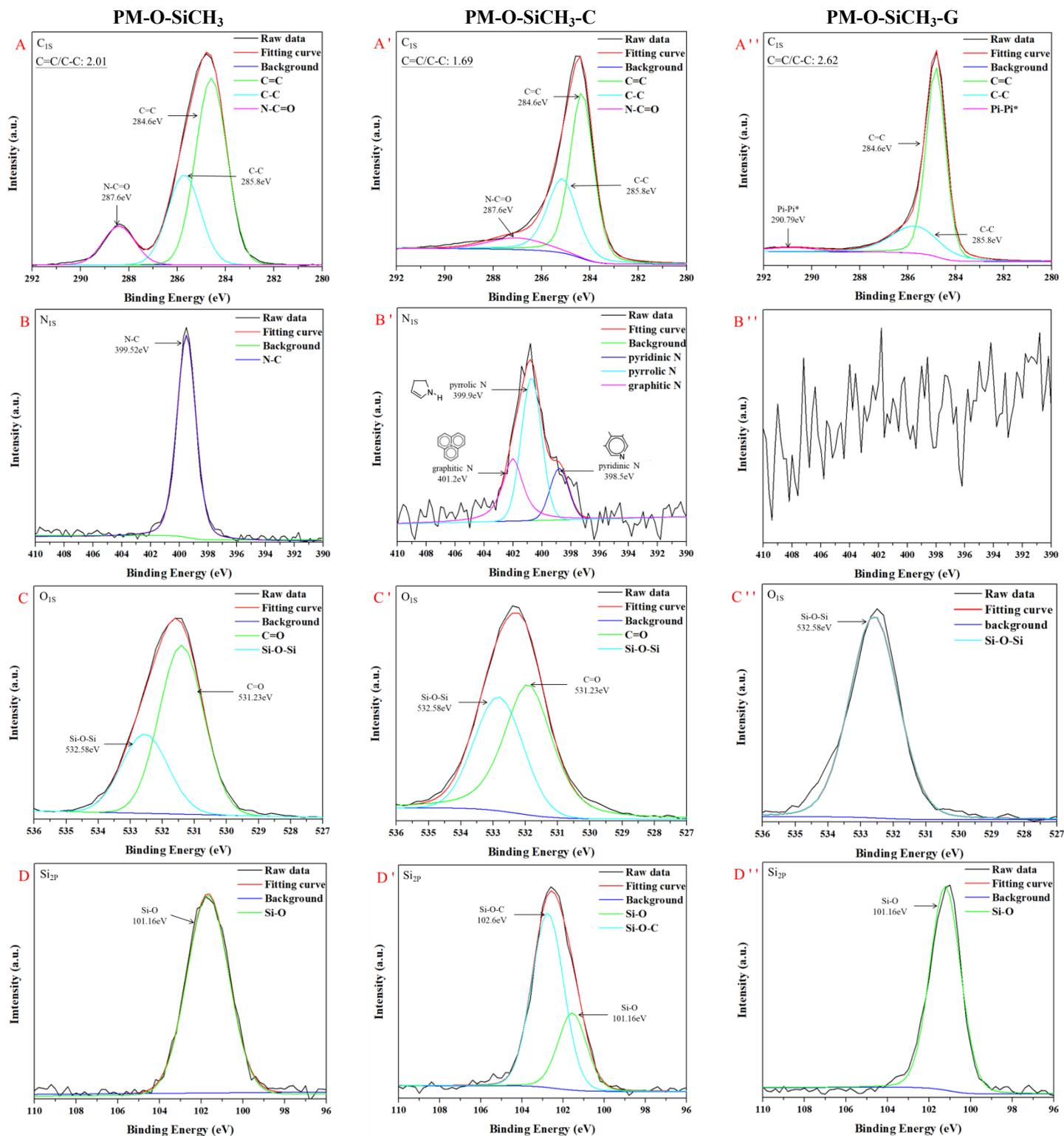


Fig. S3 High resolution XPS spectra in (A, A', A'') C1s, (B, B', B'') N1s, (C, C', C'') O1s, (D, D', D'') Si2p regions for (A, B, C, D) PM-O-SiCH₃, (A', B', C', D') PM-O-SiCH₃-C and (A'', B'', C'', D'') PM-O-SiCH₃-G.

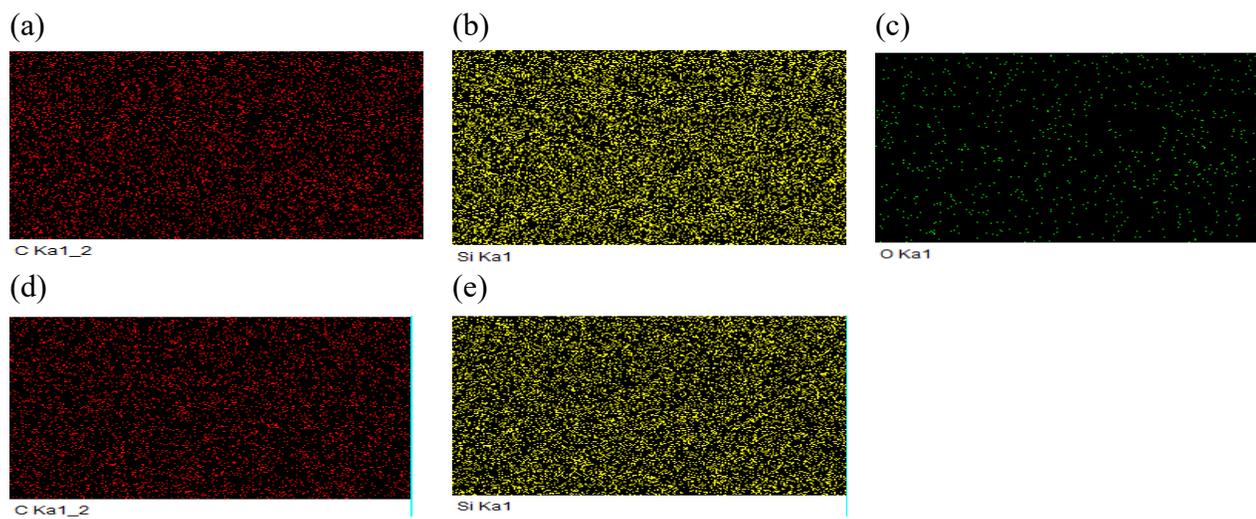


Fig. S4 SEM-EDS elemental mapping results of (a, d) C, (b, e) Si, and (c) O from (a-c) PM-O-SiCH₃-C and (d, e) PM-O-SiCH₃-G coatings on SiC.