

Bio-inspired nacre-like composites with excellent mechanical properties, gas-barrier function and fire-retardant performances based on self-assembly between hyperbranched poly(amido amine)s and montmorillonite

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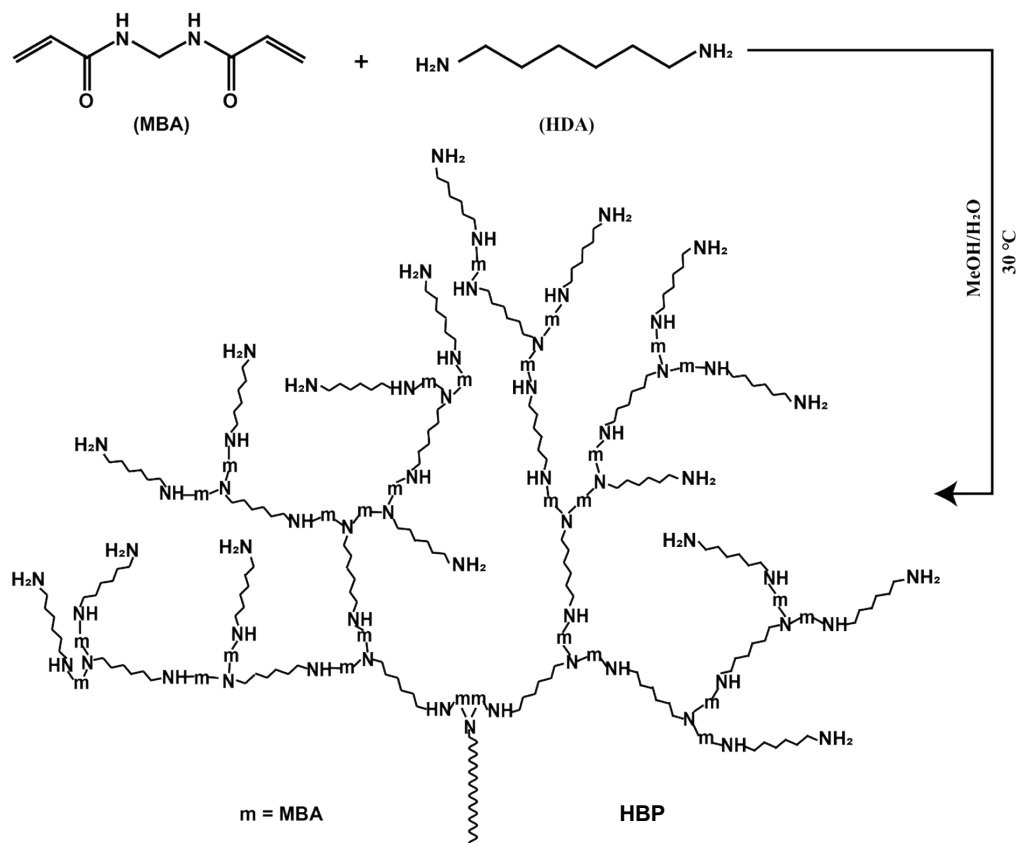


Figure S1 Schematic diagram of the synthesis route of HBP

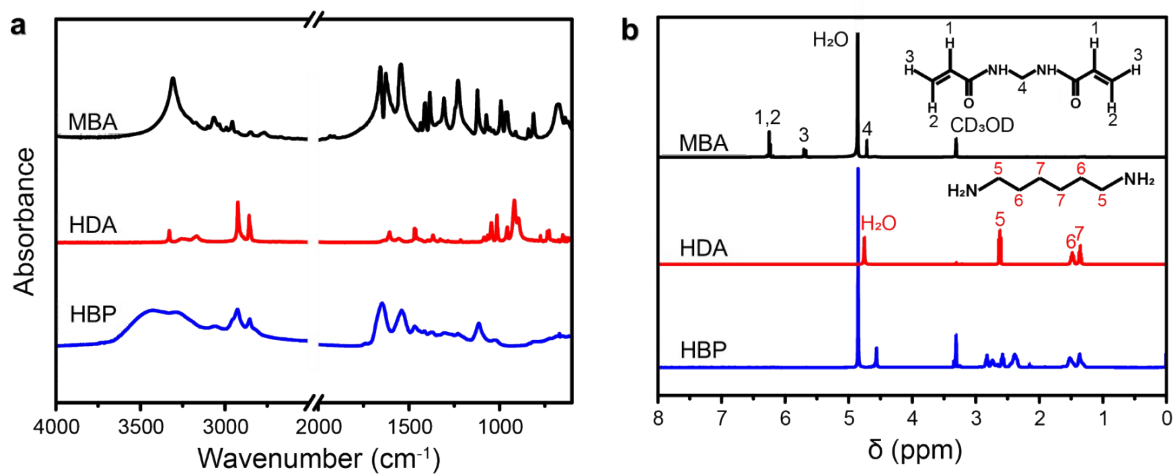


Figure S2 FTIR and NMR analysis of MBA, HDA and HBP

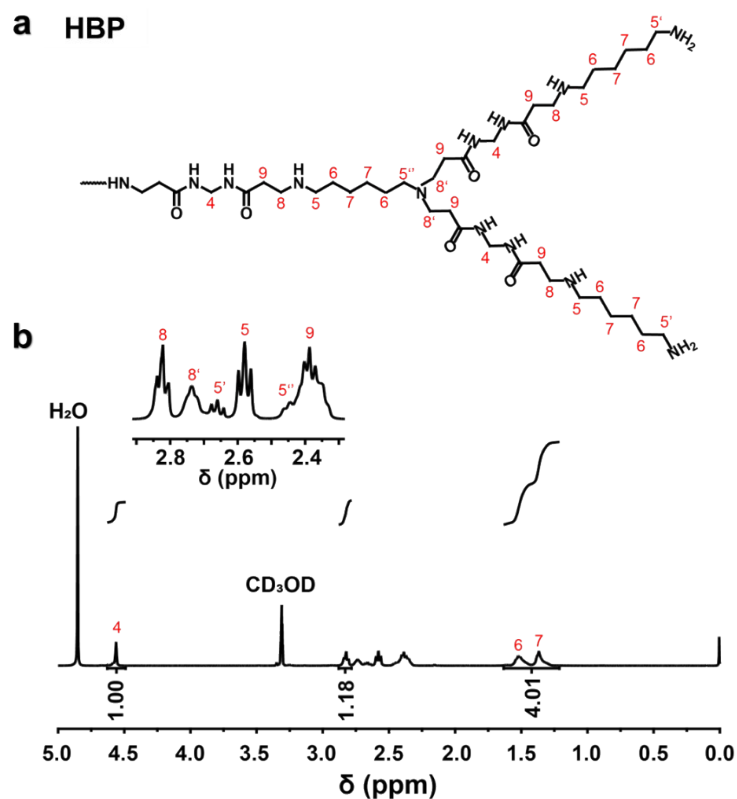


Figure S3 (a) Chemical structure of HBP. (b) ^1H NMR spectrum of HBP (400 MHz, in CD_3OD).

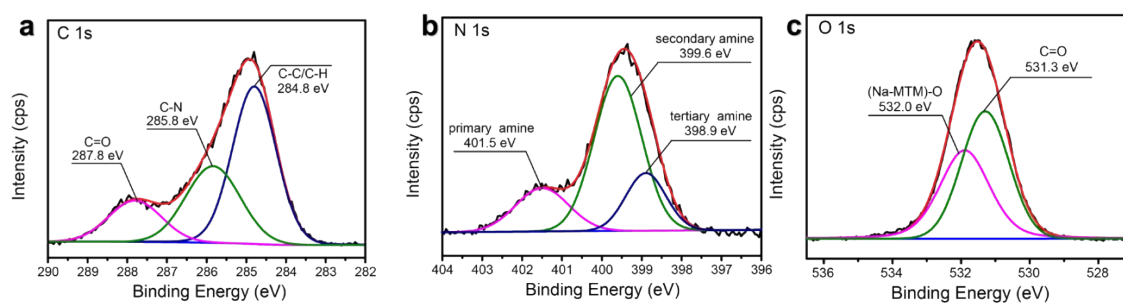


Figure S4 (a) C 1s core-level spectra of Na-MTM/HBP. (c) N 1s core-level spectra of Na-MTM/HBP. (d) O 1s core-level spectra of Na-MTM/HBP.

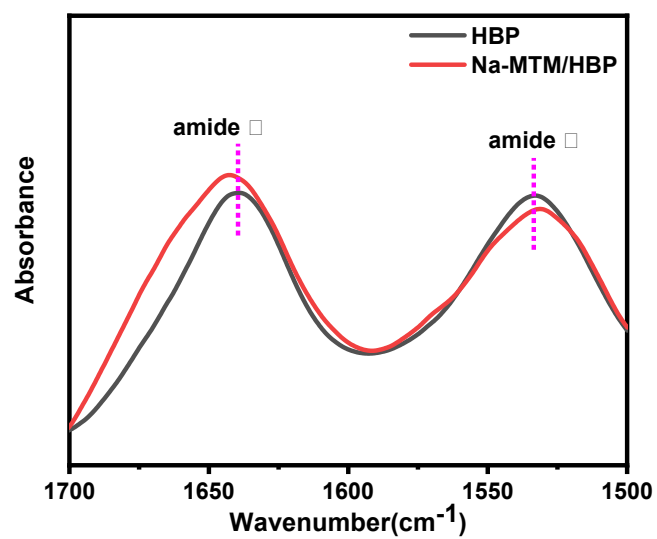


Figure S5 Comparison the position shift of amide I band and the amide II band in HBP and Na-MTM/HBP