

Supporting Information

Soluble and Meltable Hyperbranched Polyborosilazanes toward High-temperature Stable SiBCN Ceramics

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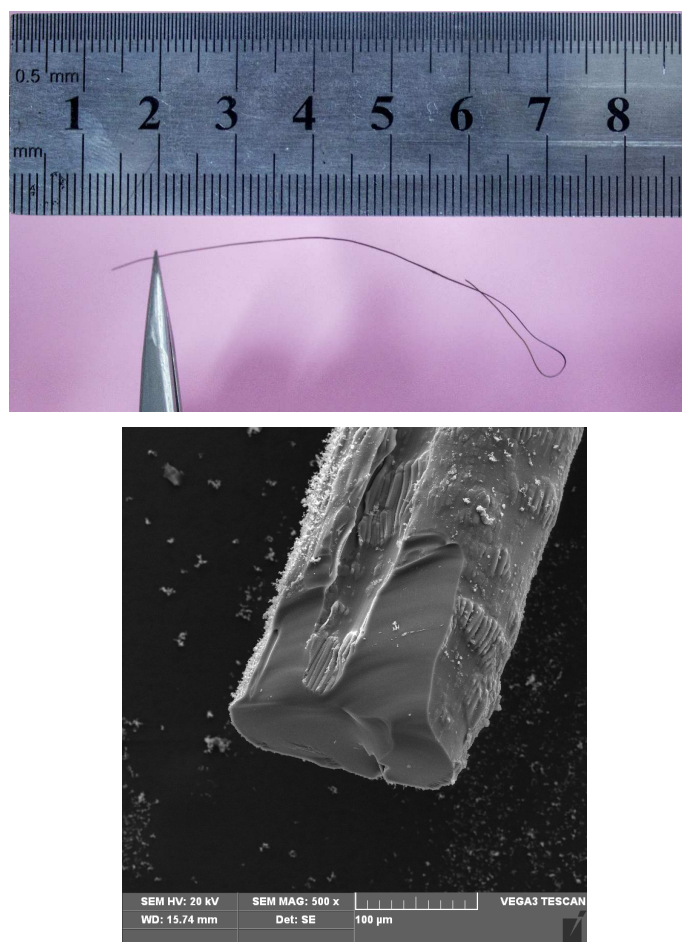


Figure S1 The SiBCN fibers from melt spinning of hb-PBSZ-SiH-Vi (P3) under 120 °C and subsequent pyrolysis under 1100 °C

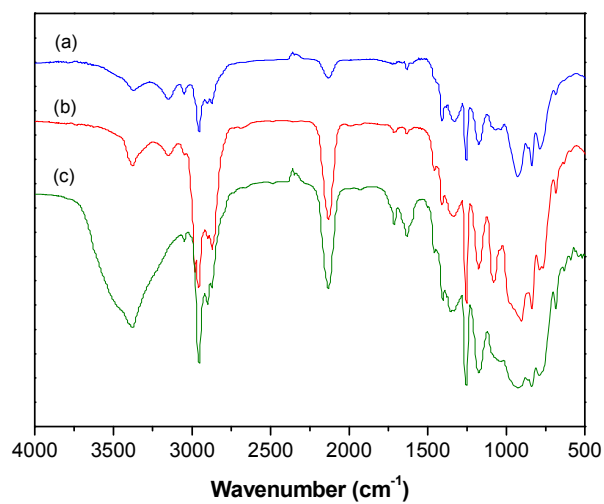


Figure S2 FTIR spectra of the soluble hyperbranched polyborosilazanes (a) hb-PBSZ-SiH (P1), (b) hb-PBSZ-SiH (P2), (c) hb-PBSZ-SiH-Vi (P4).

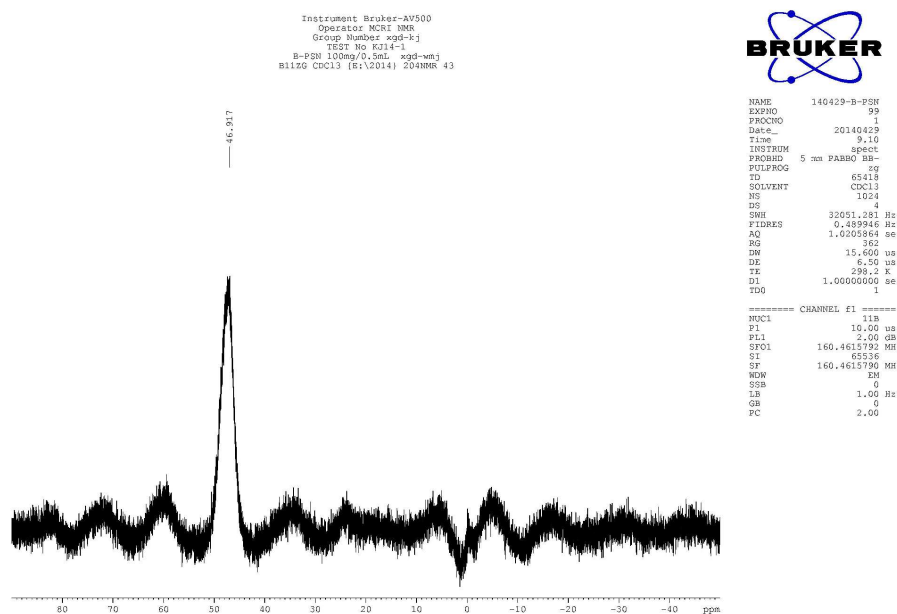


Figure S3 ^{11}B NMR spectrum of hb-PBSZ-SiH-Vi (P4) in CDCl_3

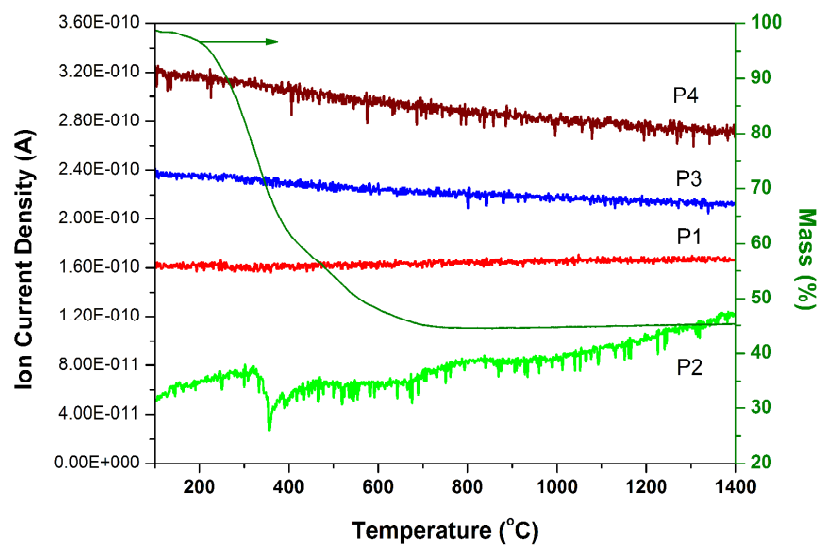


Figure S4 Thermograms of simultaneous thermalgravimetry and mass spectrometry analysis of the precursors P1, P2, P3 and P4 with the evolution of hydrogen chloride with $m/z=36$ under an argon atmosphere

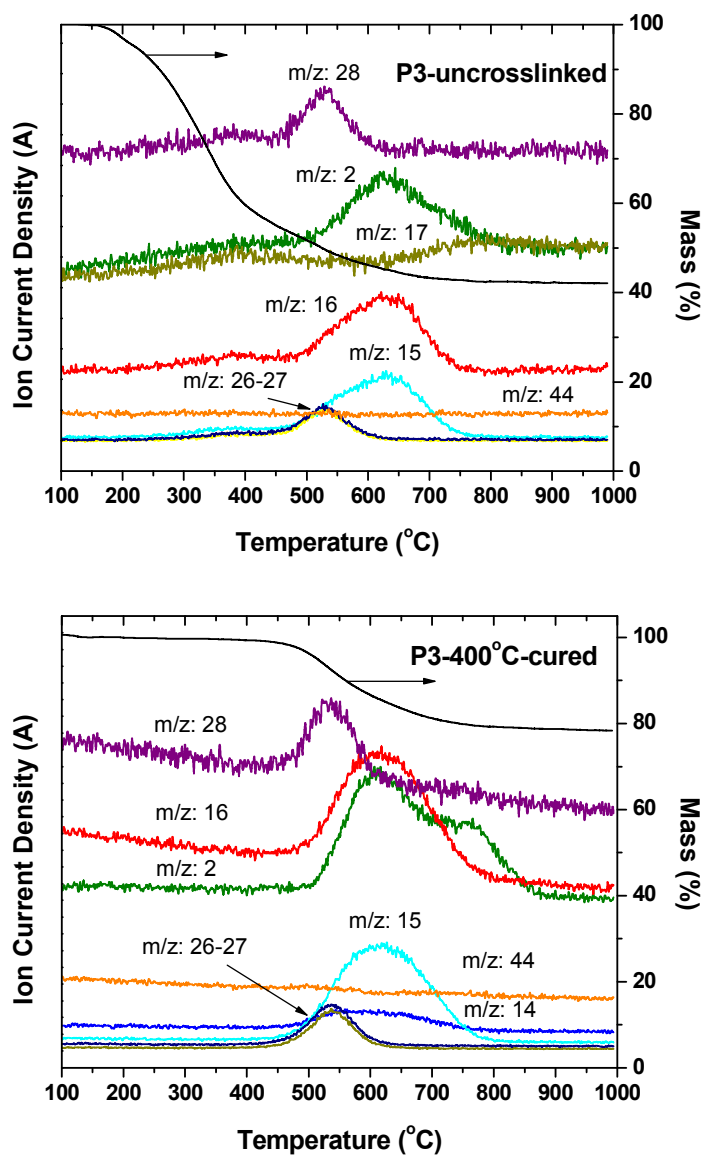


Figure S5 TGA-mass spectrum curves of representative hb-PBSZ samples of P3 measured at a scanning rate of 10 K/min under an argon atmosphere