

1. Characterization of the monomer CB

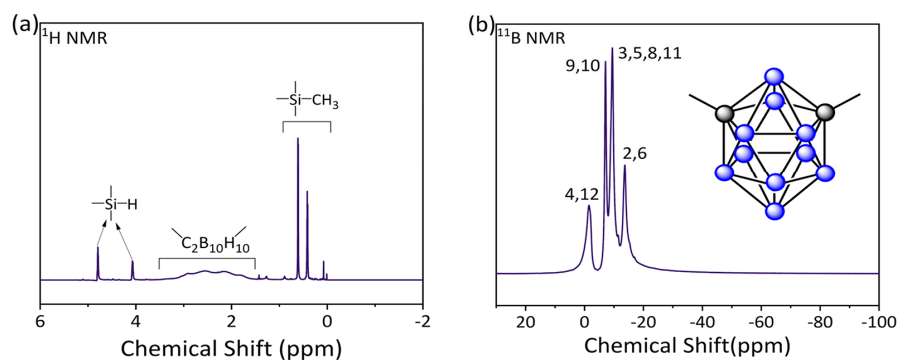
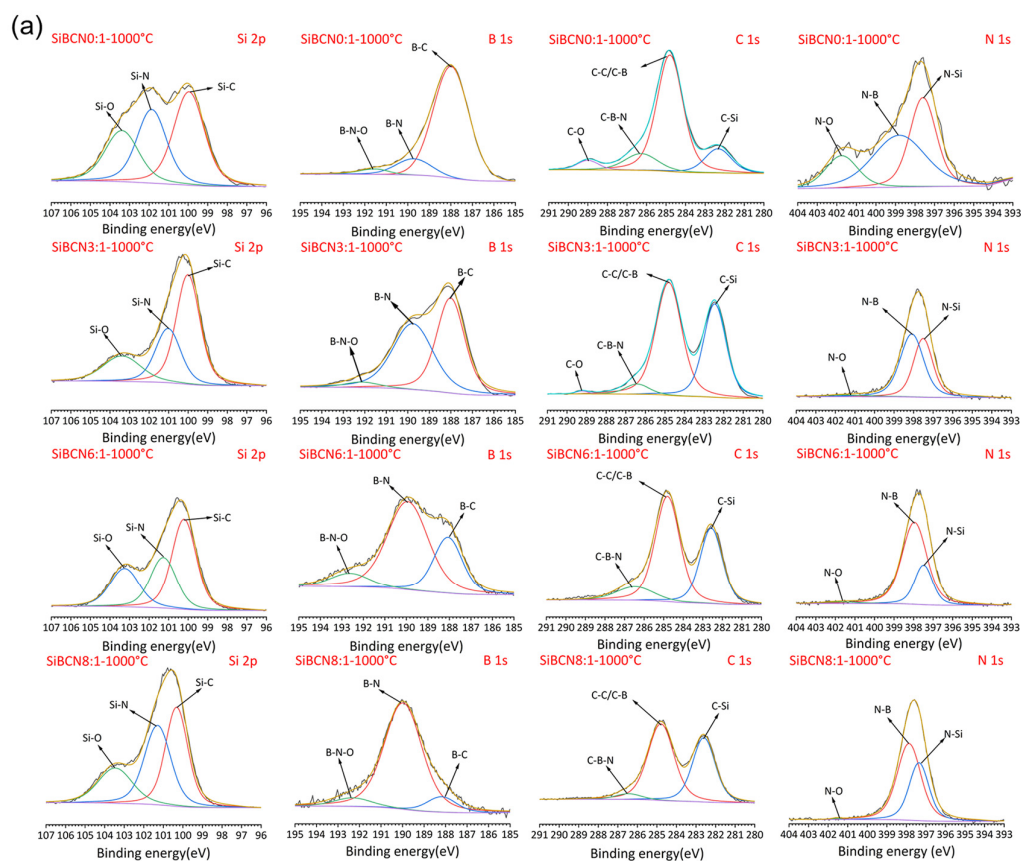
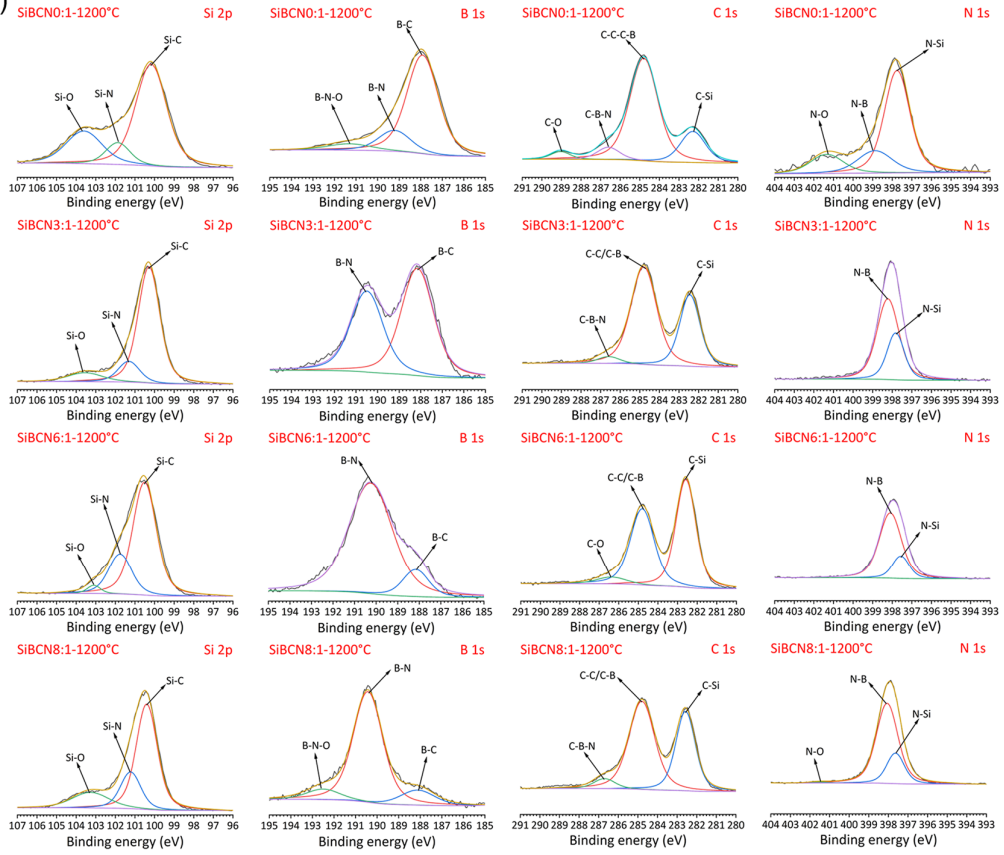


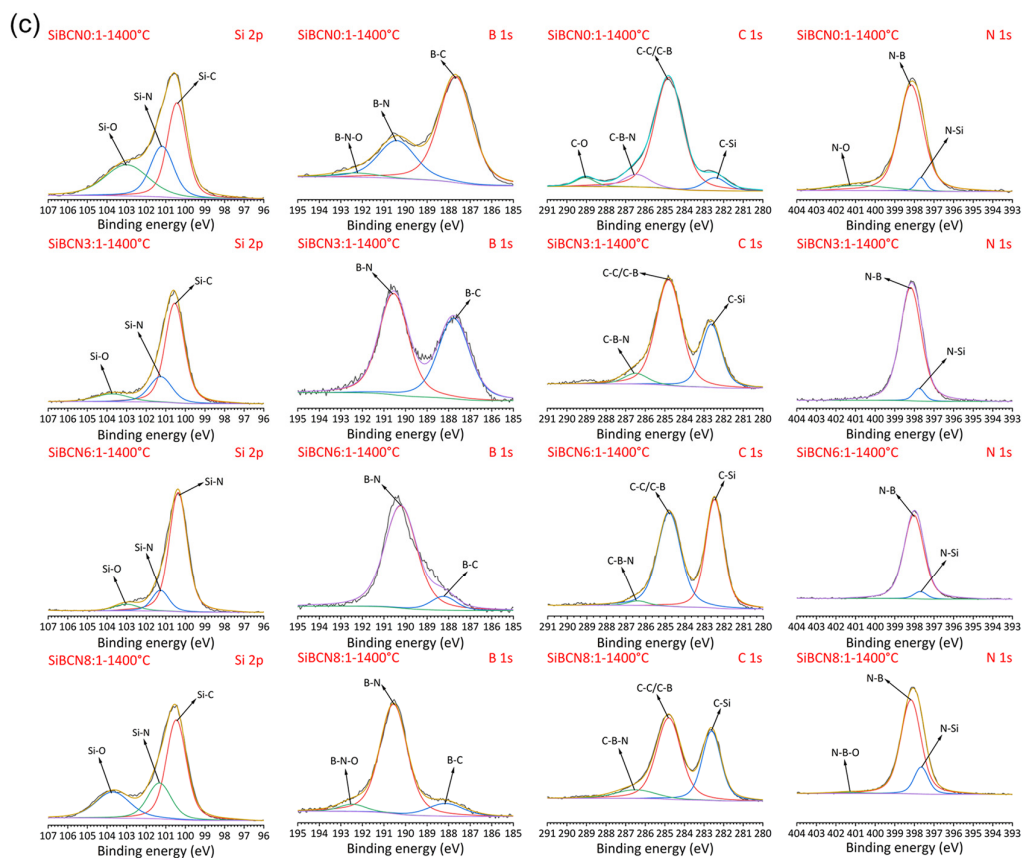
Figure S1. (a) ^1H NMR, and (b) ^{11}B NMR recorded for monomer CB.

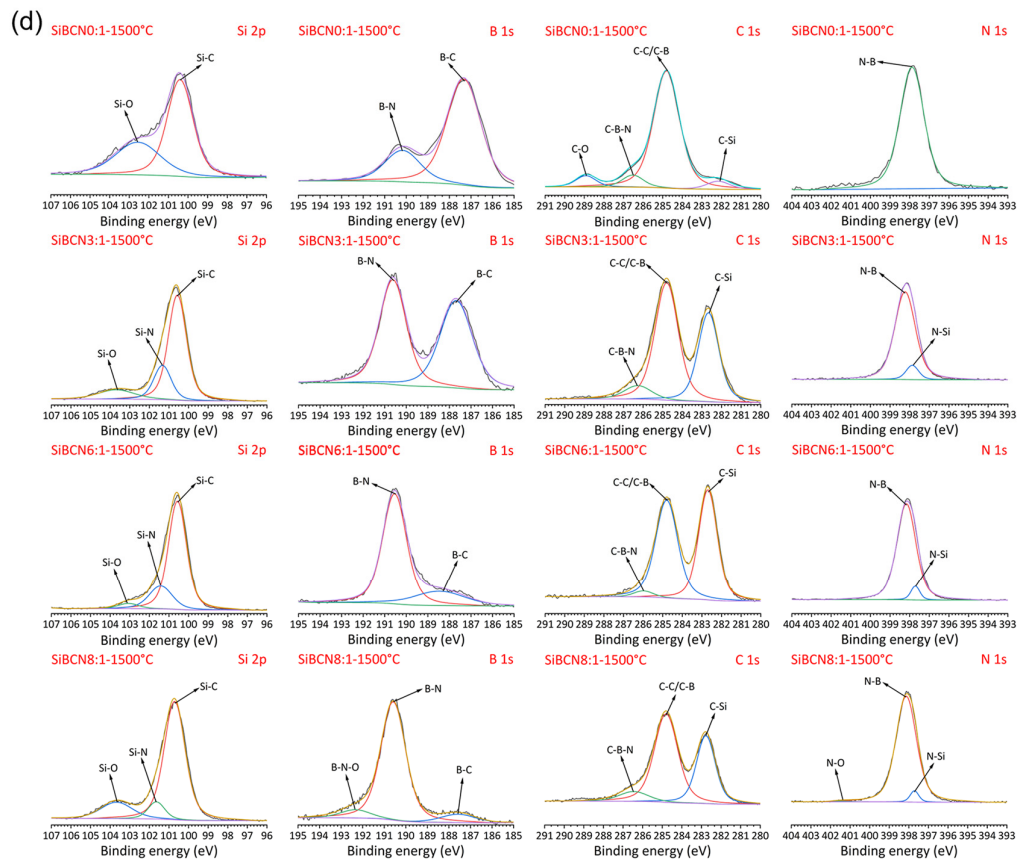
2. Structural evolution of the polymer-derived ceramics



(b)







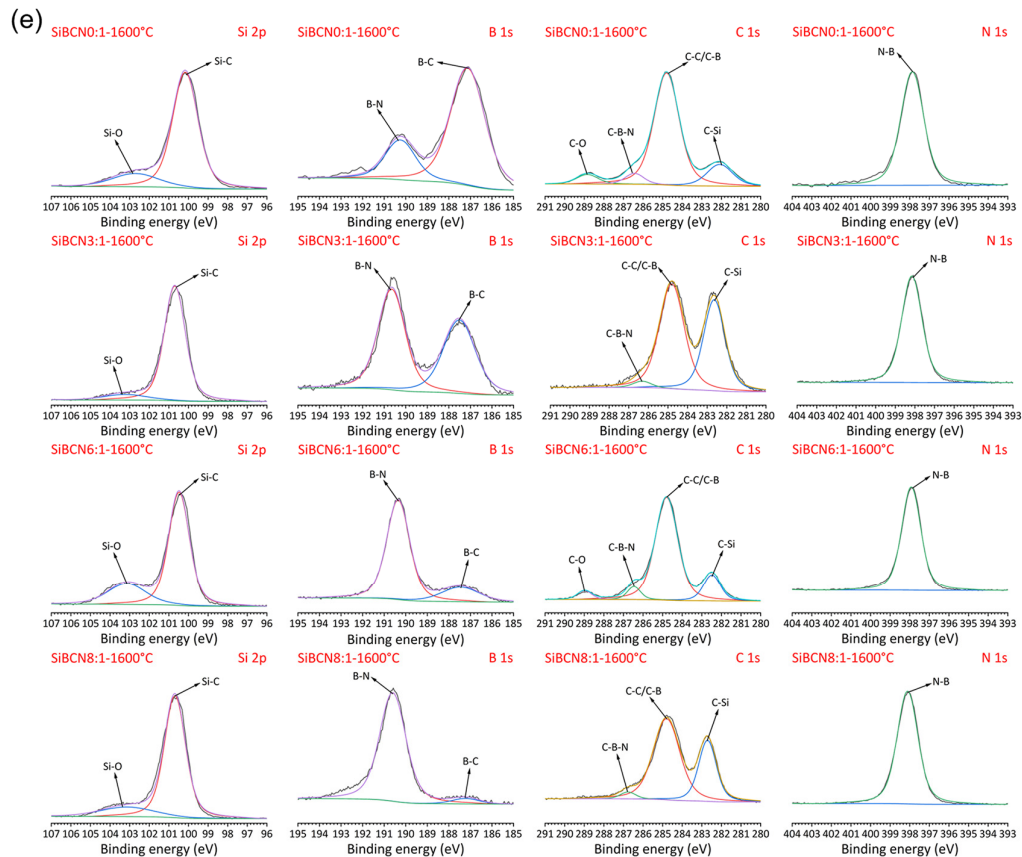


Figure S2. XPS spectra of SiBCN_{x:y} pyrolyzed under Ar atmosphere at 1000 °C (a), 1200 °C (b), 1400 °C (c), 1500 °C (d), 1600 °C (e).

3. The surface topography of the ceramic bulk

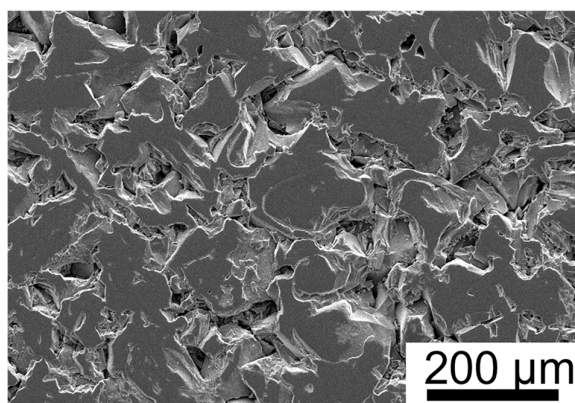


Figure S3. SEM image of the ceramic bulk.