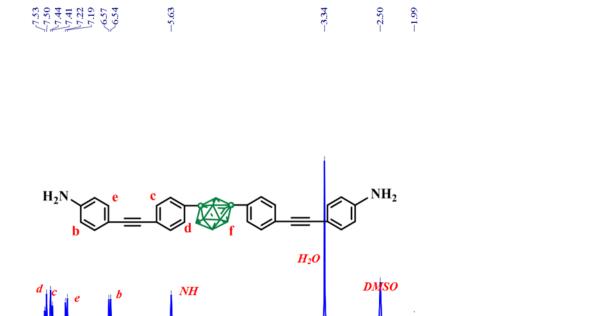
## Carborane Polyimides, Synthesis and Characterization

Tao Xing,\* Yuhong Huang, Kai Zhang and Juying Wu



3.5 ppm 2.5

2.0

1.5

1.0

0.0

Figure S1 <sup>1</sup>H NMR spectrum of diamine 2

5.5

5.0

4.5

6.0



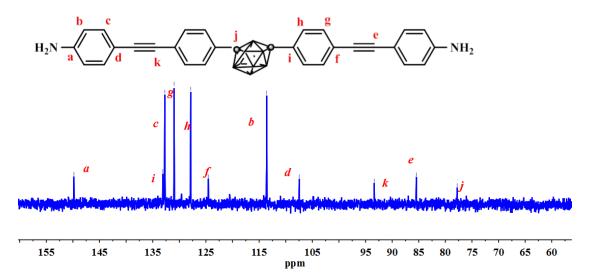


Figure S2 <sup>13</sup>C NMR spectrum of diamine 2

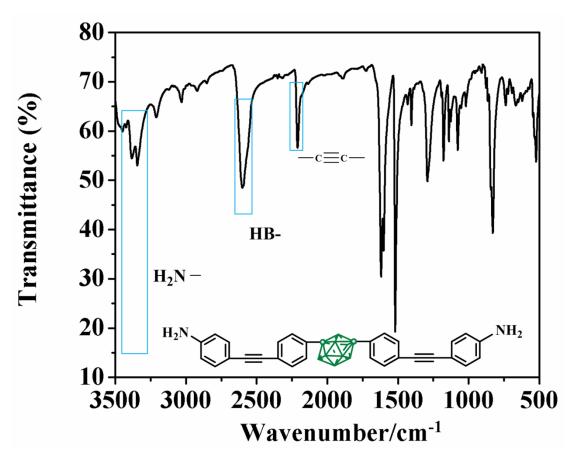


Figure S3 FT-IR spectrum of diamine 2

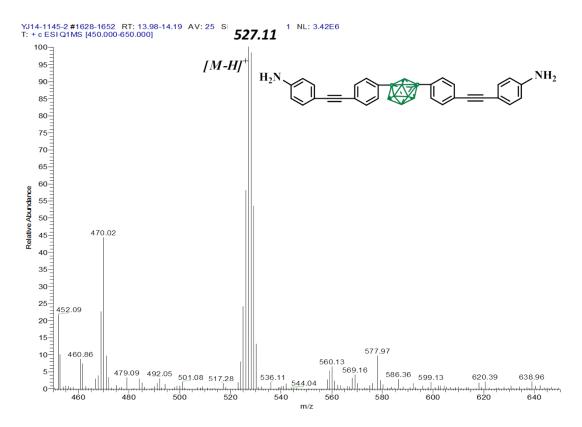


Figure S4 mass spectrum of diamine 2



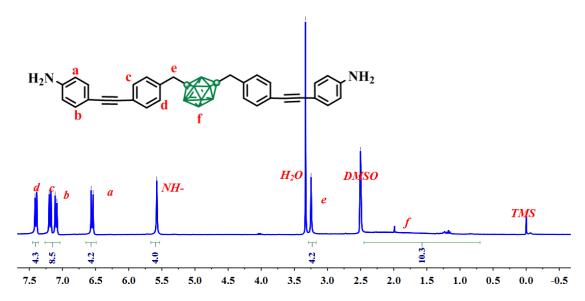


Figure S5 <sup>1</sup>H NMR spectrum of diamine 4

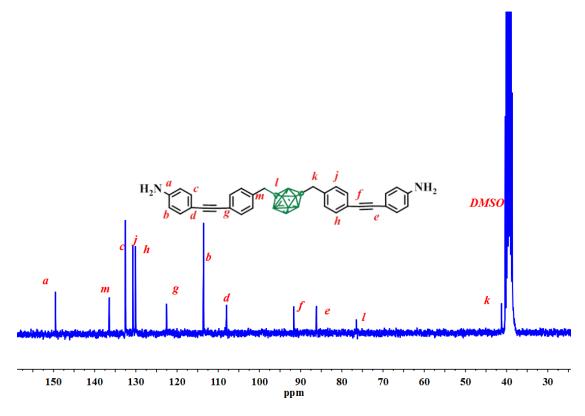


Figure S6 <sup>13</sup>C NMR spectrum of diamine 4

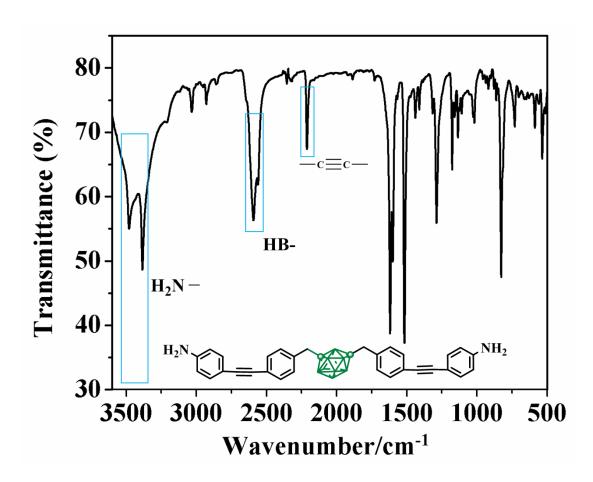


Figure S7 FT-IR spectrum of diamine 4

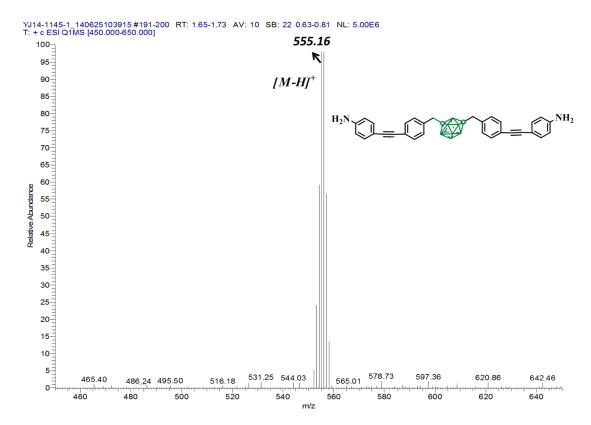


Figure S8 mass spectrum of diamine 4

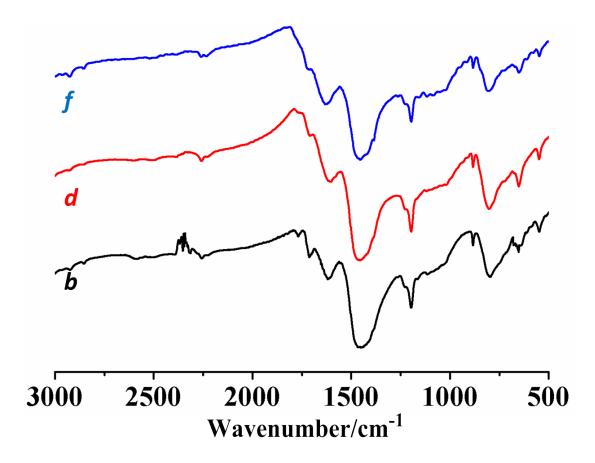


Figure S9 FT-IR spectra of polyimide b, d and f after heating to 500  $^{\circ}$ C and keeping at 500  $^{\circ}$ C for 3 h