

Electronic Supplementary Information

Ferrocene-based hyperbranched poly(phenyltriazolylcarboxylate)s: synthesis by phenylpropiolate-azide polycycloaddition and use as precursors to nanostructured magnetoceramics

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Table of Contents

Fig. S1 DSC curves of *hb-P1–P4* measured under nitrogen at a scanning rate of 2 °C min⁻¹.

Fig. S2 FT-IR spectra of monomers **1a** (A) and **2b** (B) and their polymer *hb-P2* (C).

Fig. S3 FT-IR spectra of monomers **1b** (A) and **2a** (B) and their polymer *hb-P3* (C).

Fig. S4 FT-IR spectra of monomers **1b** (A) and **2b** (B) and their polymer *hb-P4* (C).

Fig. S5 ¹H NMR spectra of monomers **1a** (A) and **2b** (B) and their polymer *hb-P2* (C) in CDCl₃.
The solvent and water peaks are marked with asterisks.

Fig. S6 ¹H NMR spectra of monomers **1b** (A) and **2a** (B) and their polymer *hb-P3* (C) in CDCl₃.
The solvent and water peaks are marked with asterisks.

Fig. S7 ¹H NMR spectra of monomers **1b** (A) and **2b** (B) and their polymer *hb-P4* (C) in CDCl₃.
The solvent and water peaks are marked with asterisks.

Fig. S8 ¹³C NMR spectra of monomers **1a** (A) and **2a** (B) and their polymer *hb-P1* (C) in CDCl₃.
The solvent peaks are marked with asterisks.

Fig. S9 ¹³C NMR spectra of monomers **1a** (A) and **2b** (B) and their polymer *hb-P2* (C) in CDCl₃.
The solvent peaks are marked with asterisks.

Fig. S10 ¹³C NMR spectra of monomers **1b** (A) and **2a** (B) and their polymer *hb-P3*(C) in CDCl₃.
The solvent peaks are marked with asterisks.

Fig. S11 ¹³C NMR spectra of monomers **1b** (A) and **2b** (B) and their polymer *hb-P4* (C) in CDCl₃.
The solvent peaks are marked with asterisks.

Fig. S12 XRD patterns of **C1**, **C2**, **C3** and **C4**.

Table S1. Compositions of **C1**, **C2**, **C3** and **C4** estimated by XPS measurements.

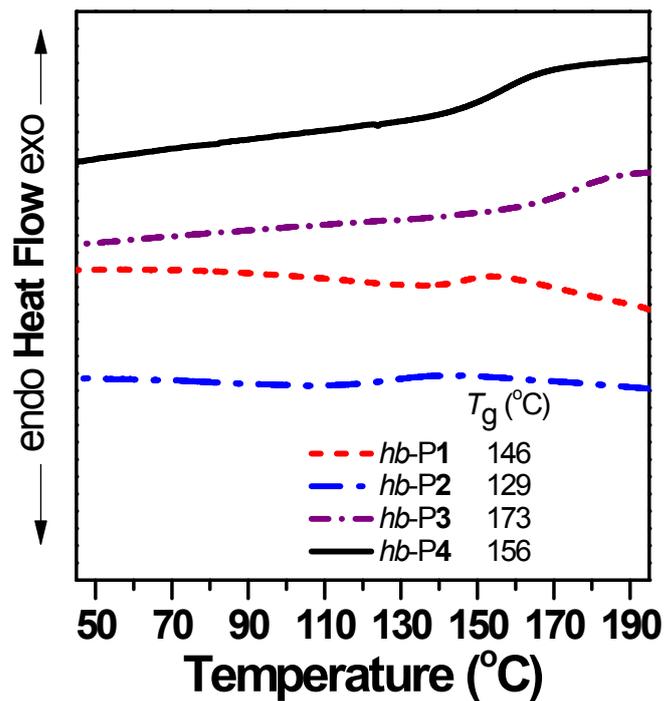


Fig. S1 DSC curves of *hb*-P1–P4 measured under nitrogen at a scanning rate of 2 °C min⁻¹.

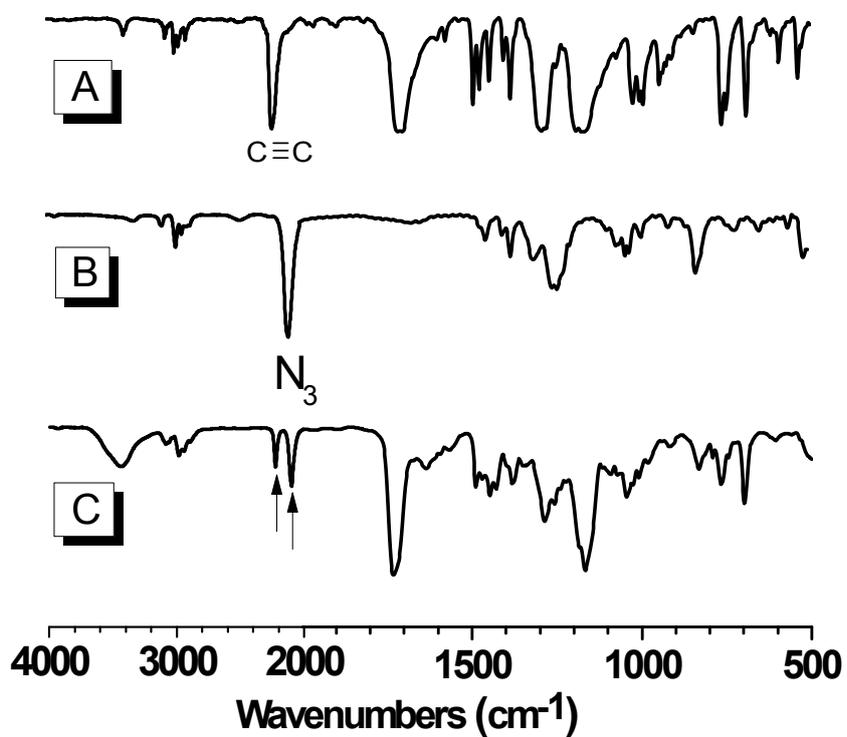


Fig. S2 FT-IR spectra of monomers **1a** (A) and **2b** (B) and their polymer *hb*-P2 (C).

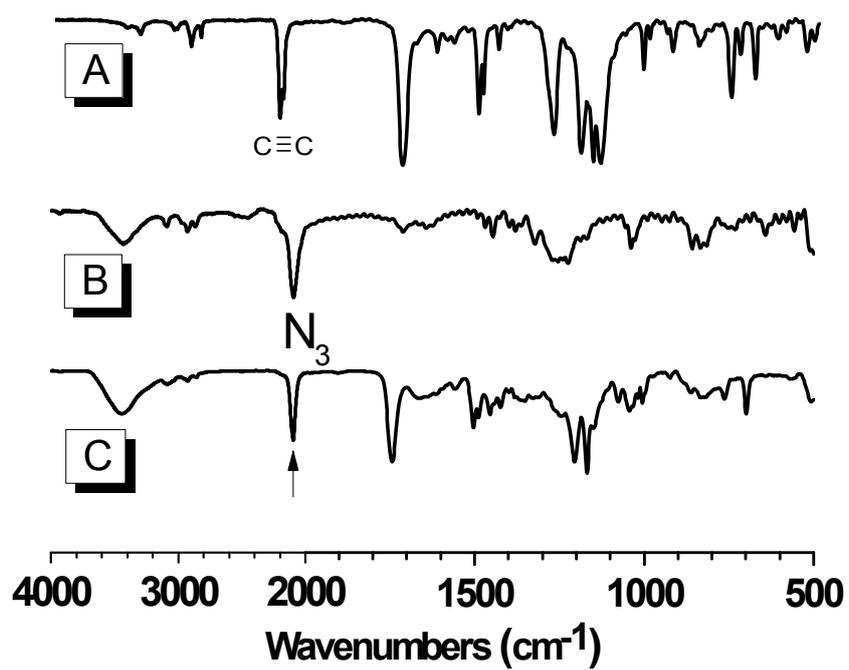


Fig. S3 FT-IR spectra of monomers **1b** (A) and **2a** (B) and their polymer *hb-P3* (C).

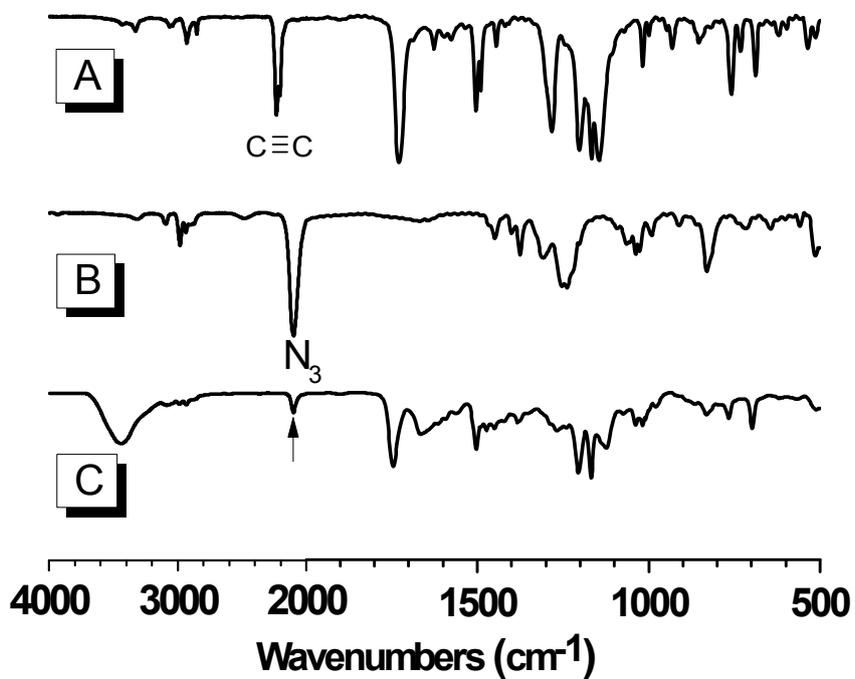


Fig. S4 FT-IR spectra of monomers **1b** (A) and **2b** (B) and their polymer *hb-P4* (C).

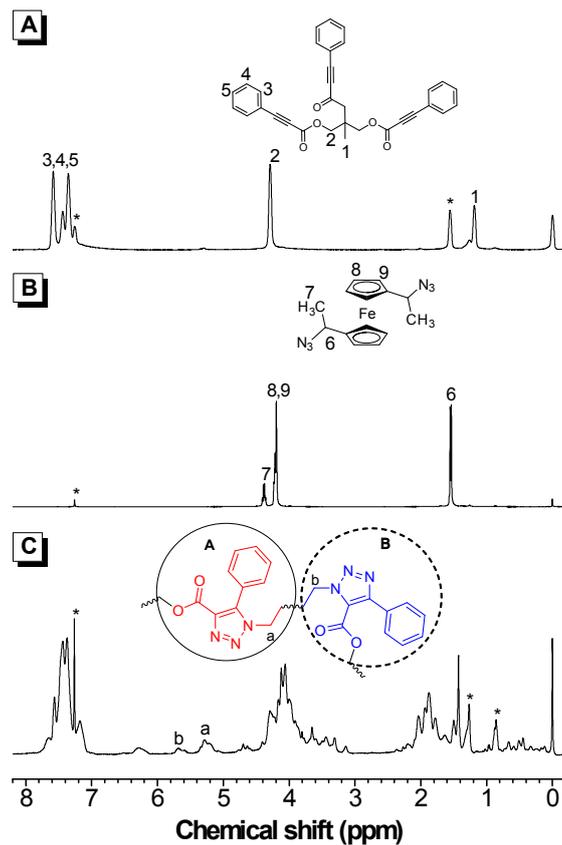


Fig. S5 ^1H NMR spectra of monomers **1a** (A) and **2b** (B) and their polymer *hb-P2* (C) in CDCl_3 . The solvent and water peaks are marked with asterisks

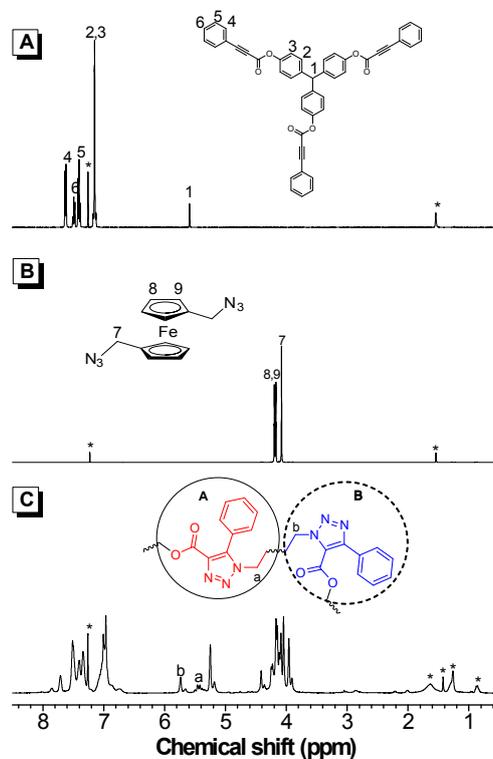


Fig. S6 ^1H NMR spectra of monomers **1b** (A) and **2a** (B) and their polymer *hb-P3* (C) in CDCl_3 . The solvent and water peaks are marked with asterisks.

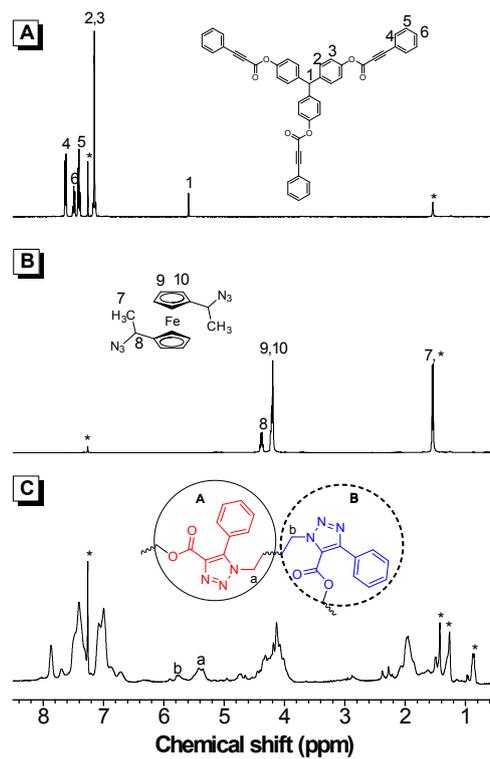


Fig. S7 ^1H NMR spectra of monomers **1b** (A) and **2b** (B) and their polymer *hb-P4* (C) in CDCl_3 . The solvent and water peaks are marked with asterisks

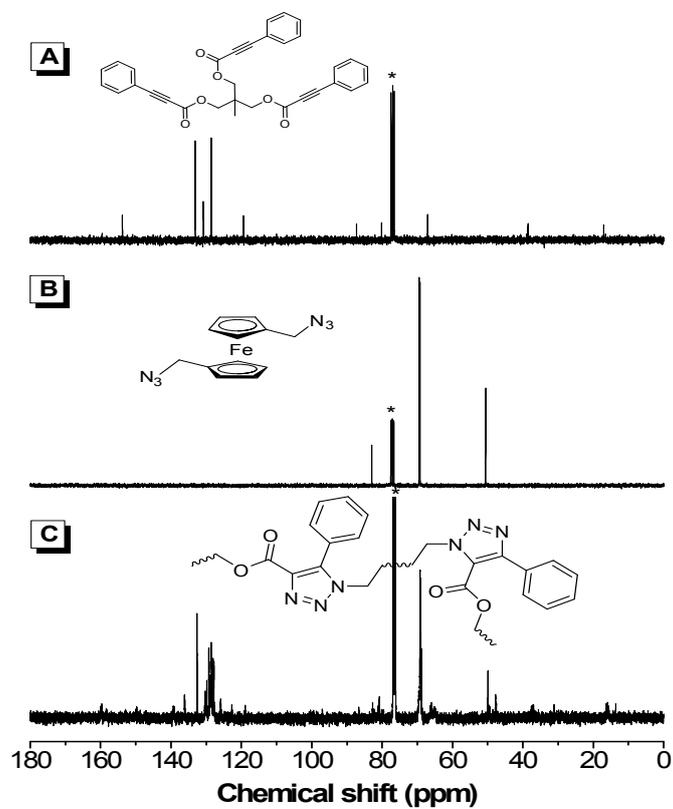


Fig. S8 ^{13}C NMR spectra of monomers **1a** (A) and **2a** (B) and their polymer *hb-P1* (C) in CDCl_3 . The solvent peaks are marked with asterisks.

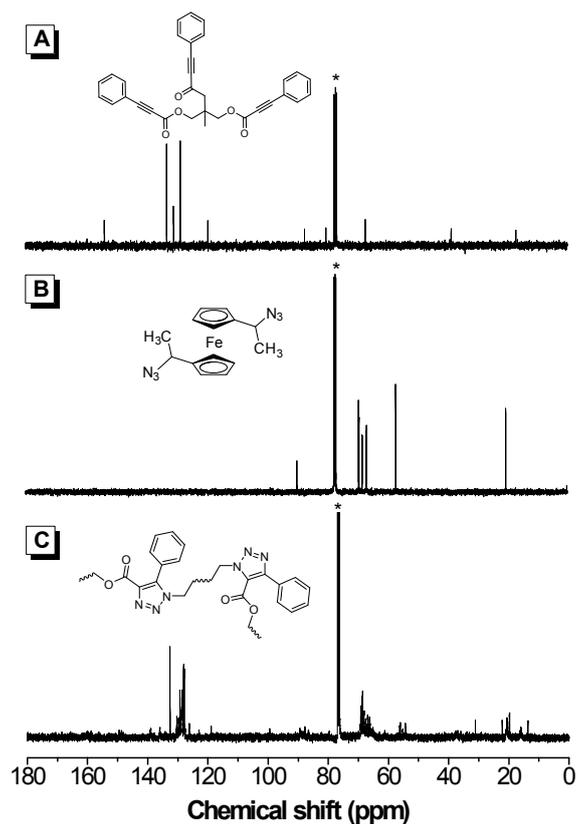


Fig. S9 ^{13}C NMR spectra of monomers **1a** (A) and **2b** (B) and their polymer *hb-P2* (C) in CDCl_3 . The solvent peaks are marked with asterisks.

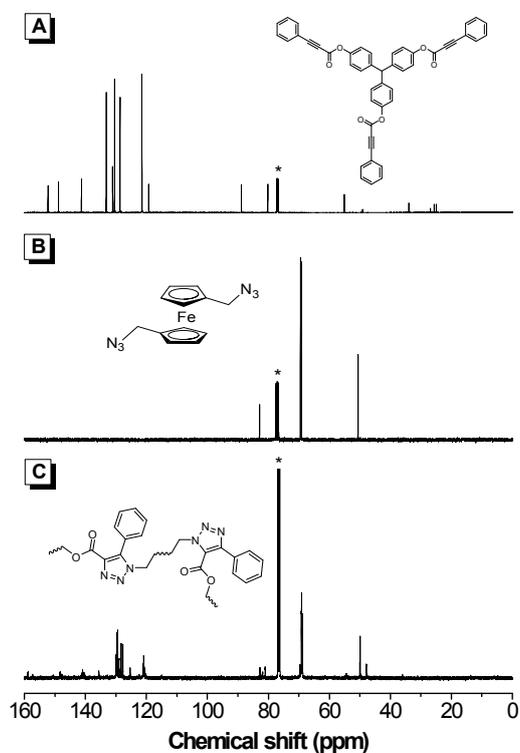


Fig. S10 ^{13}C NMR spectra of monomers **1b** (A) and **2a** (B) and their polymer *hb-P3* (C) in CDCl_3 . The solvent peaks are marked with asterisks.

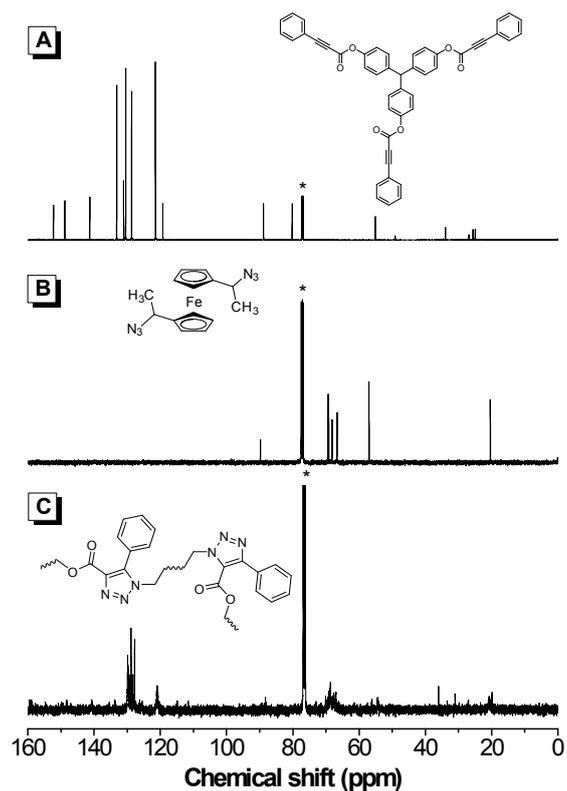


Fig. S11 ^{13}C NMR spectra of monomers **1b** (A) and **2b** (B) and their polymer *hb*-P4 (C) in CDCl_3 . The solvent peaks are marked with asterisks.

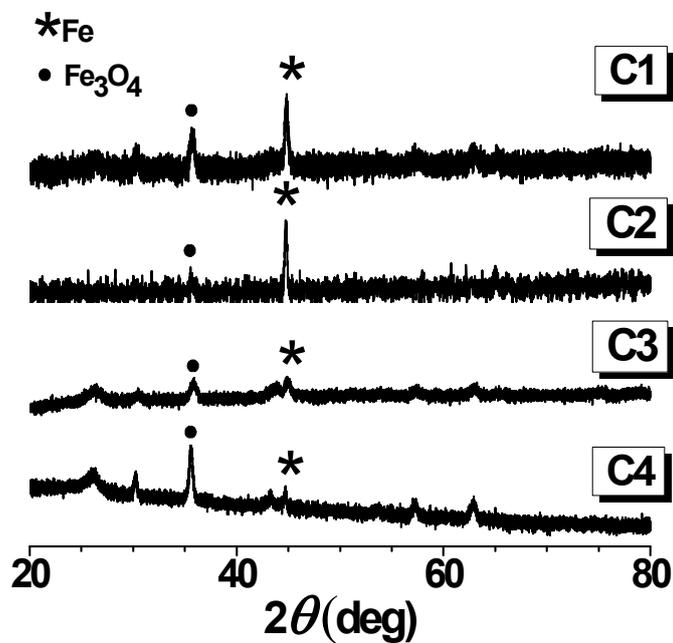


Fig. S12 XRD patterns of C1, C2, C3 and C4.

Table S1. Compositions of **C1**, **C2**, **C3** and **C4** estimated by XPS measurements

Ceramics	C (%)	O (%)	Fe (%)
C1	93.05	4.02	2.93
C2	94.07	2.86	3.07
C3	93.88	4.09	2.03
C4	93.26	4.81	1.93