

Supporting information

Syndiospecific Coordination (Co)Polymerization of Carbazole-Substituted Styrene Derivatives by Scandium Catalyst System

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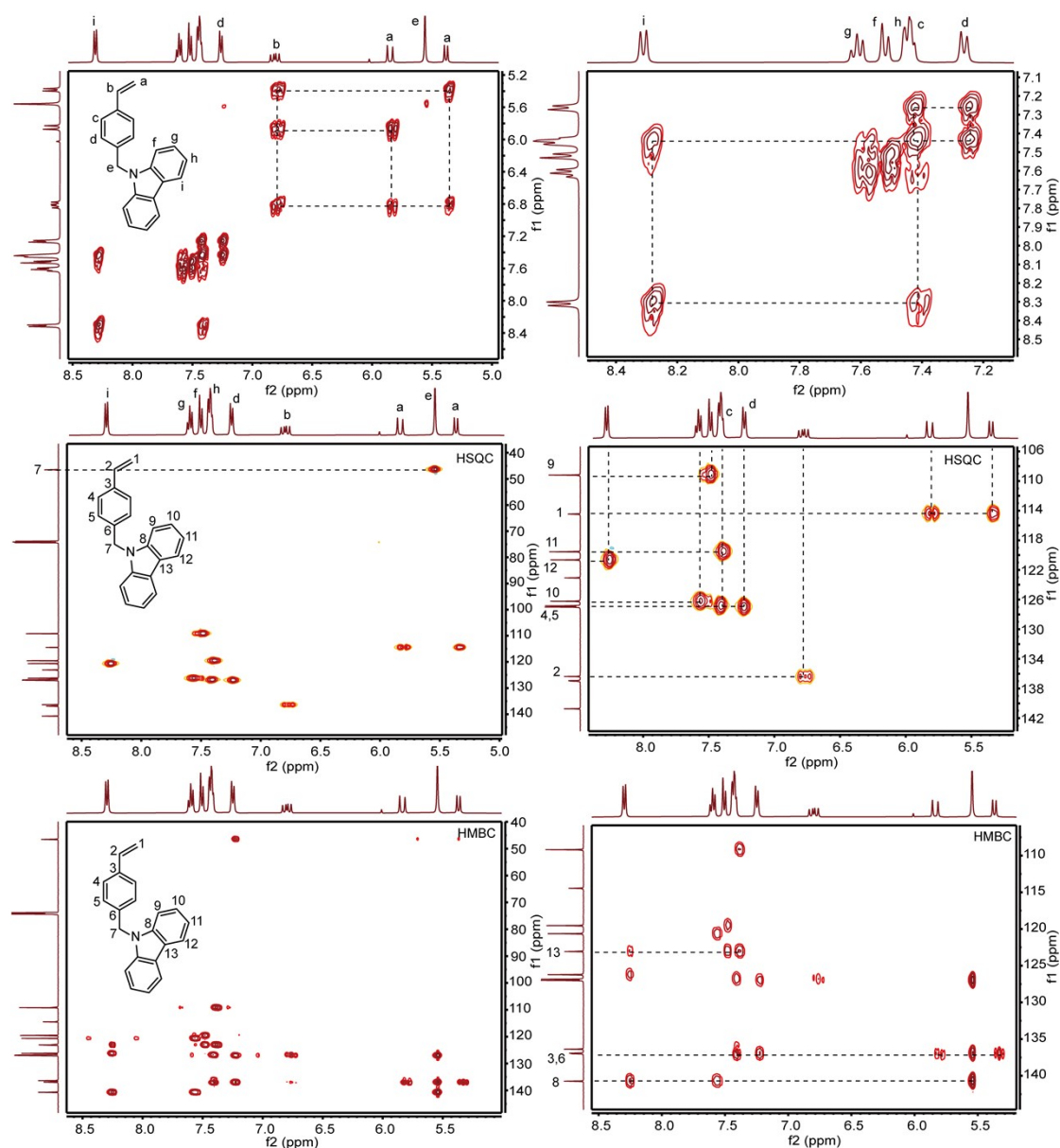


Fig. S1 COSY, HSQC and HMBC spectra of FSt1.

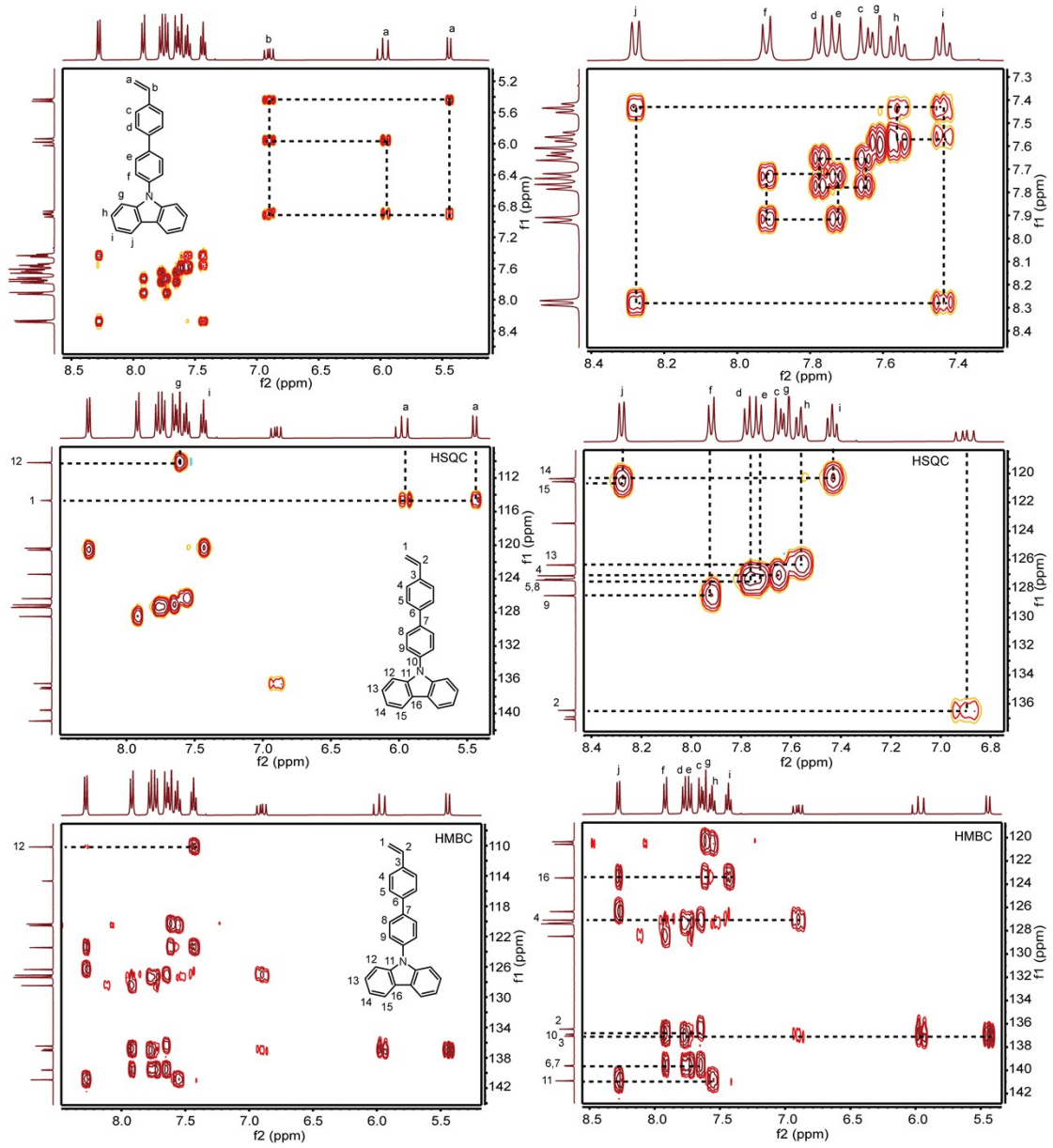


Fig. S2 COSY, HSQC and HMBC spectra of FSt2.

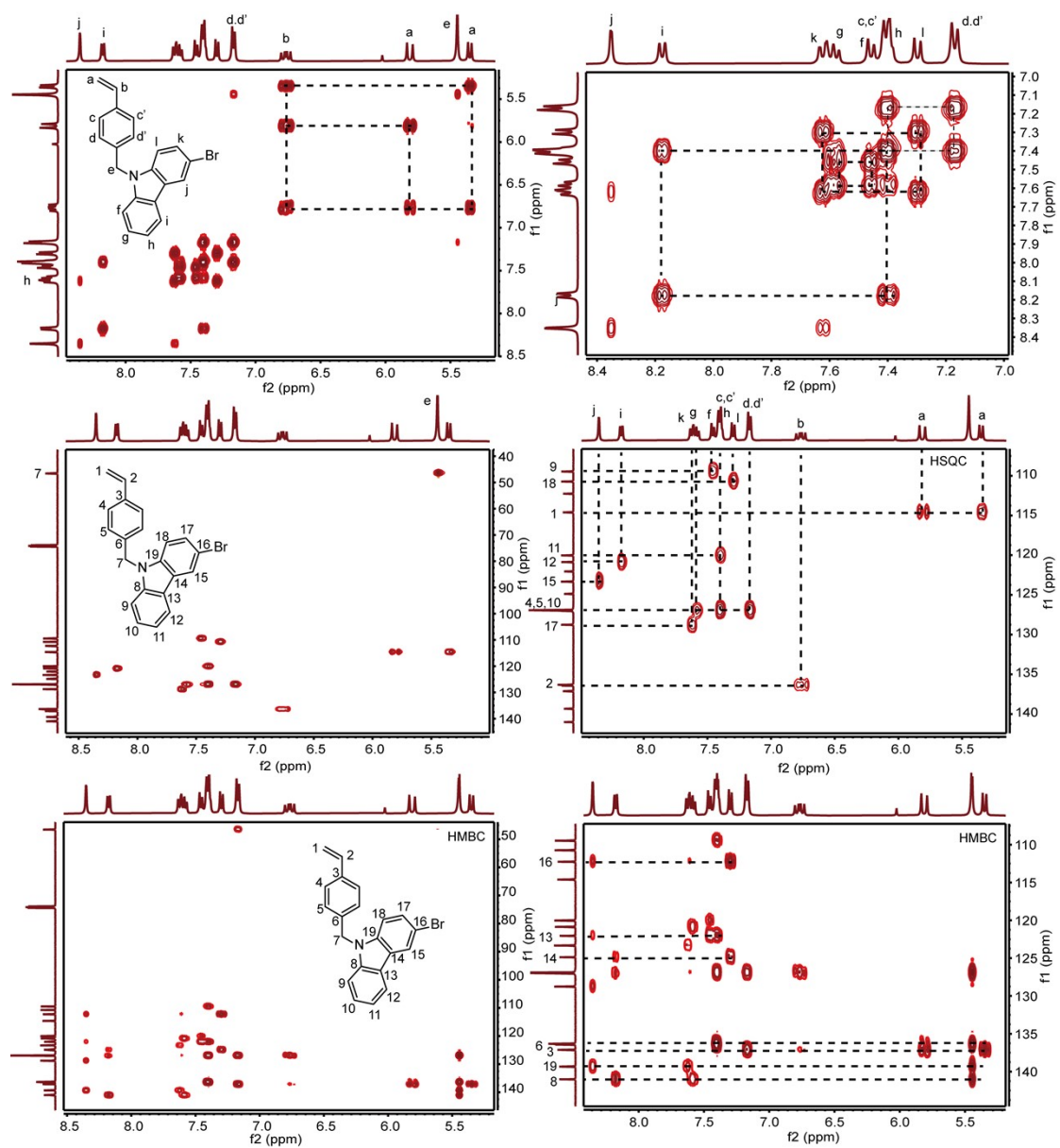


Fig. S3 COSY, HSQC and HMBC spectra of FSt3.

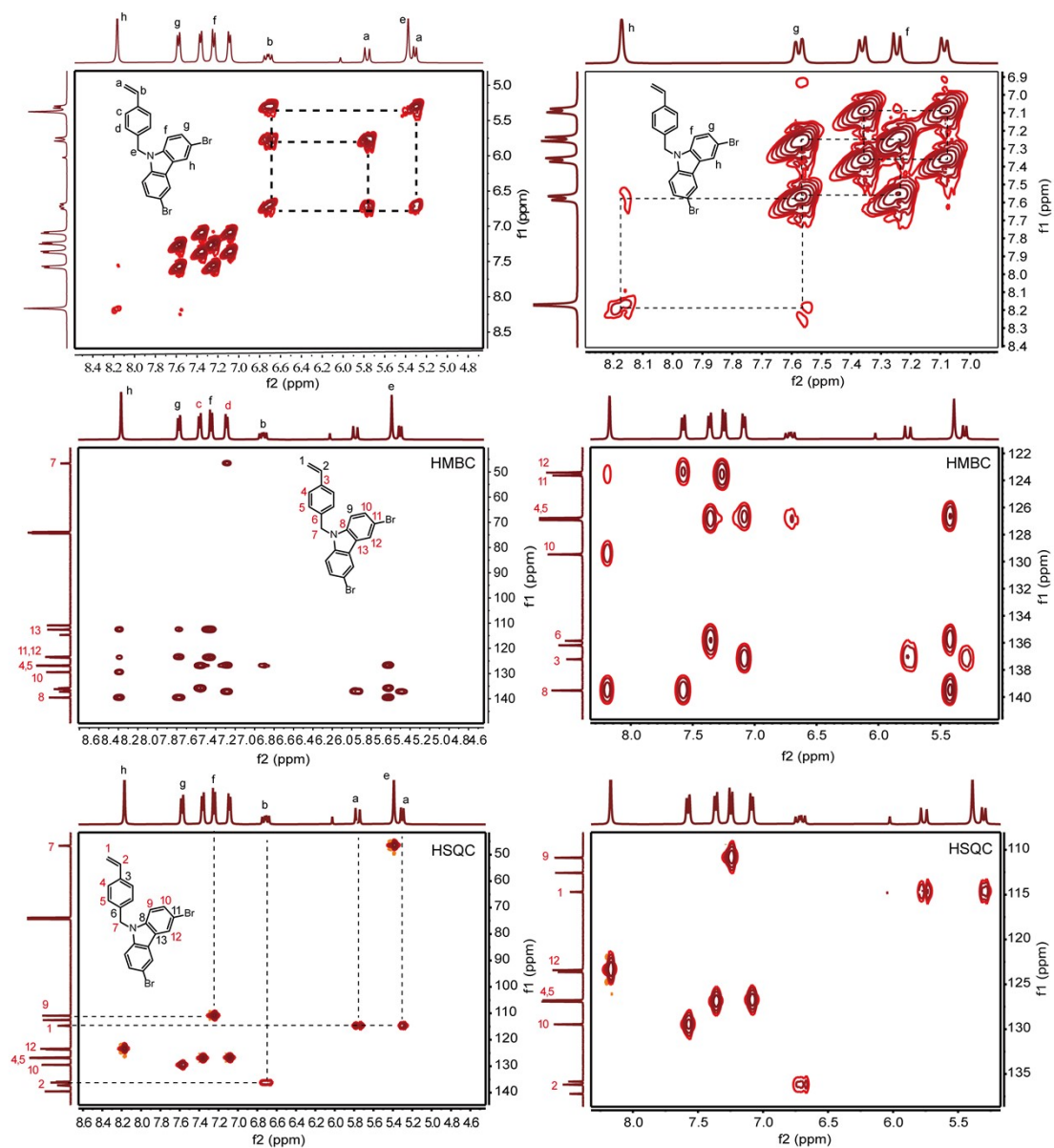


Fig. S4 COSY, HSQC and HMBC spectra of FSt4.

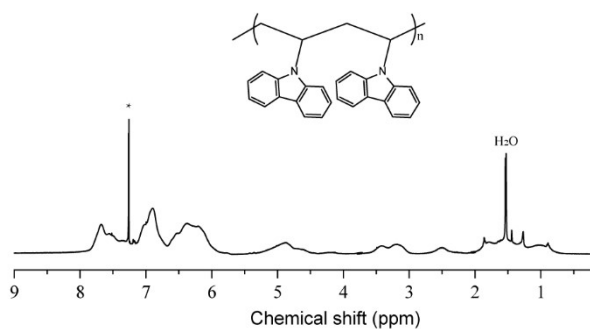


Fig. S5 ^1H NMR spectra of homopolymer of NVC by Sc complex. (Table 1, run 1)

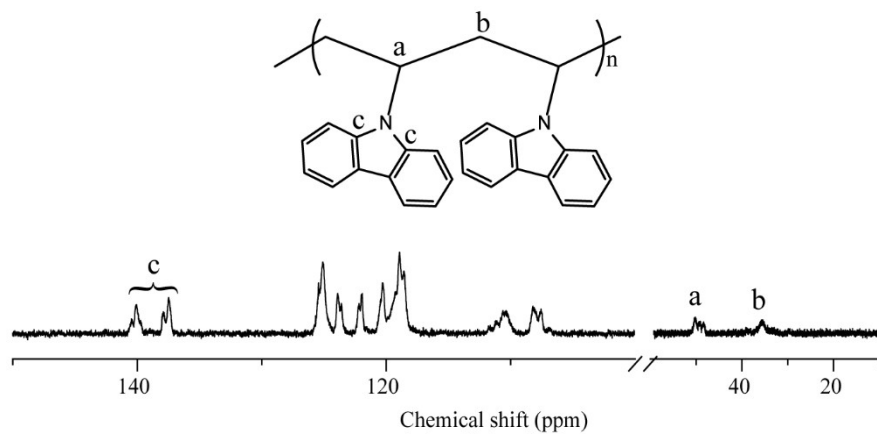


Fig. S6 ^{13}C NMR spectra of homopolymer of NVC by Sc complex. (Table 1, run 1)

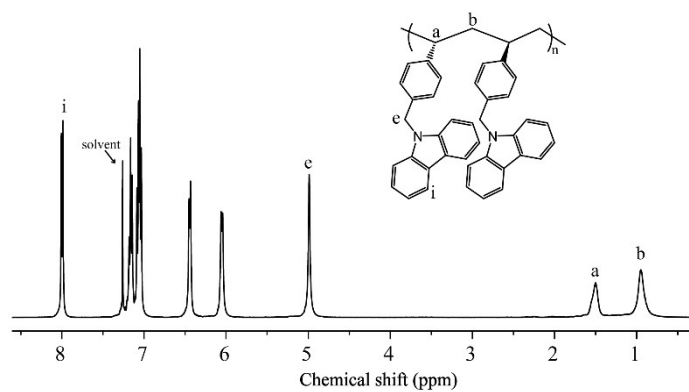


Fig. S7 ^1H NMR spectra of homopolymer of FSt1 by Sc complex. (CDCl_3 , Table 1, run 3)

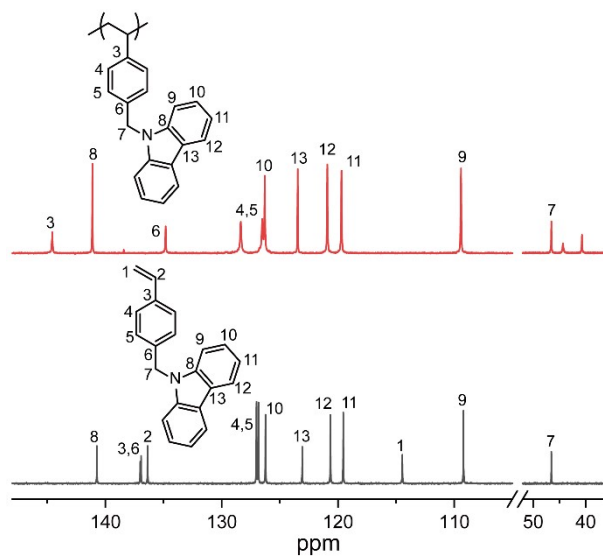


Fig. S8 ^{13}C NMR spectra of monomer and homopolymer of FSt1 by Sc complex.

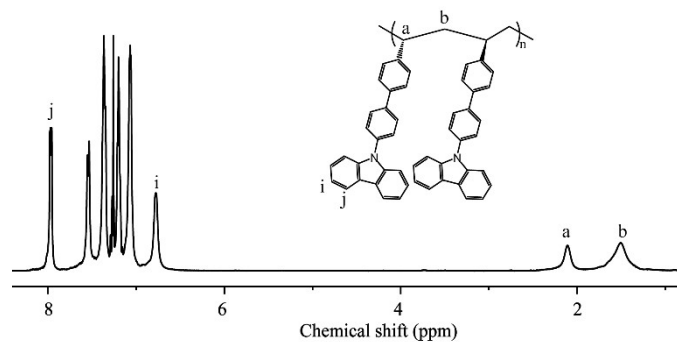


Fig. S9 ^1H NMR spectra of homopolymer of FSt2 by Sc complex. (CDCl_3 , Table 1, run 7)

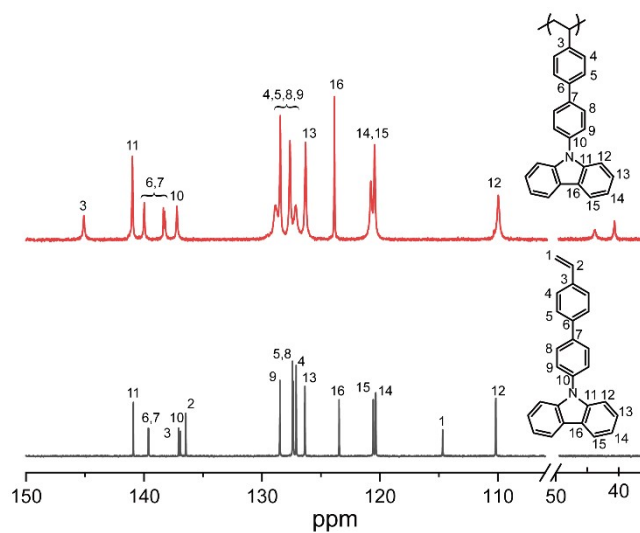


Fig. S10 ^{13}C NMR spectra of monomer and homopolymer of FSt2 by Sc complex.

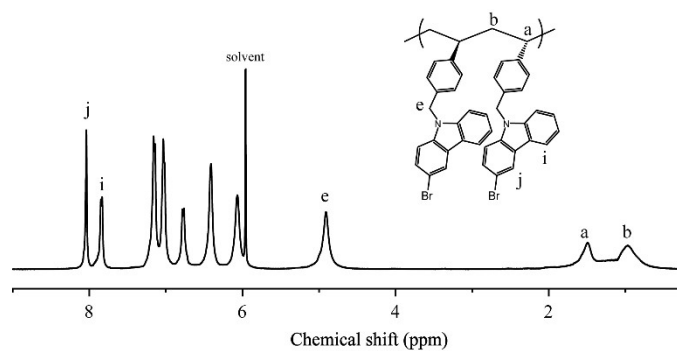


Fig. S11 ^1H NMR spectra of homopolymer of FSt3 by Sc complex. ($\text{C}_2\text{D}_2\text{Cl}_4$, Table 1, run 12)

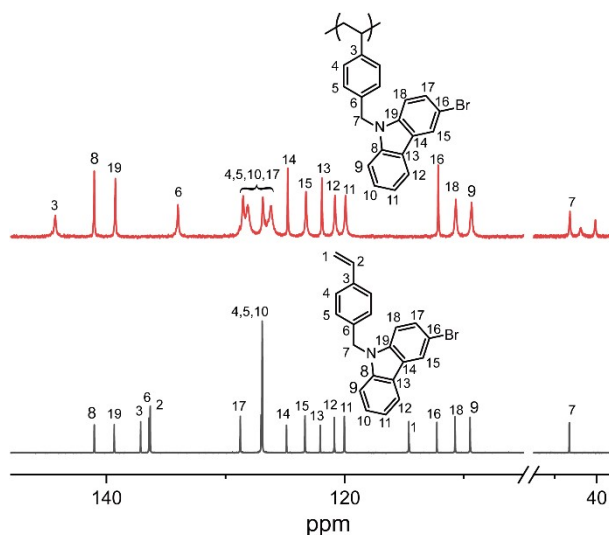


Fig. S12 ^{13}C NMR spectra of monomer and homopolymer of FSt3 by Sc complex.

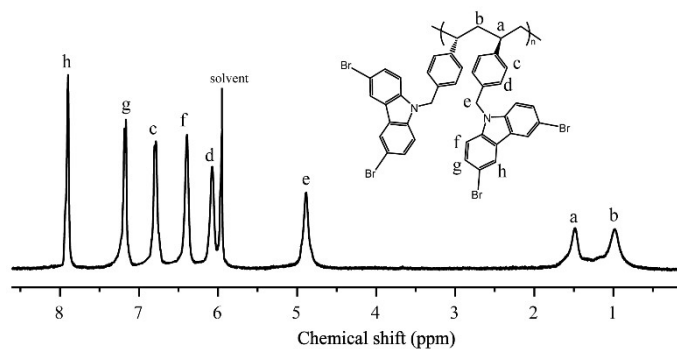


Fig. S13 ^1H NMR spectra of homopolymer of FSt4 by Sc complex. ($\text{C}_2\text{D}_2\text{Cl}_4$, Table 1, run 15)

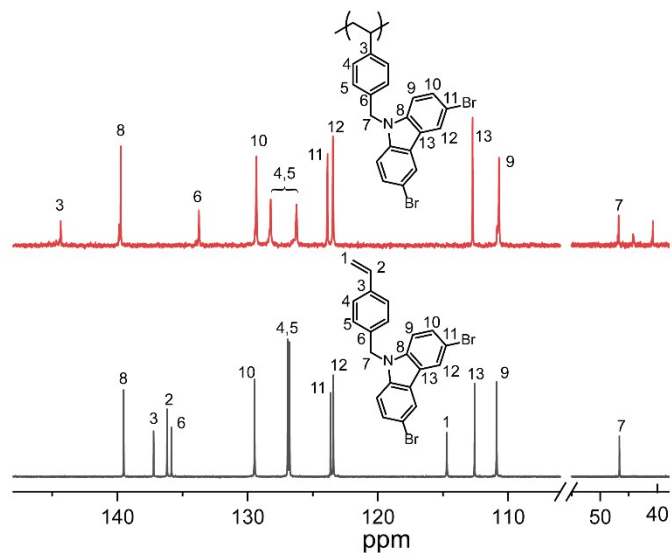


Fig. S14 ^{13}C NMR spectra of monomer and homopolymer of FSt4 by Sc complex.

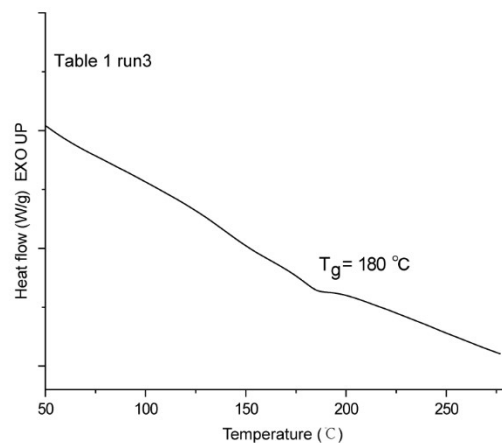


Fig. S15 DSC curves of homopolymer of FSt1 by Sc complex (Table 1, run 1).

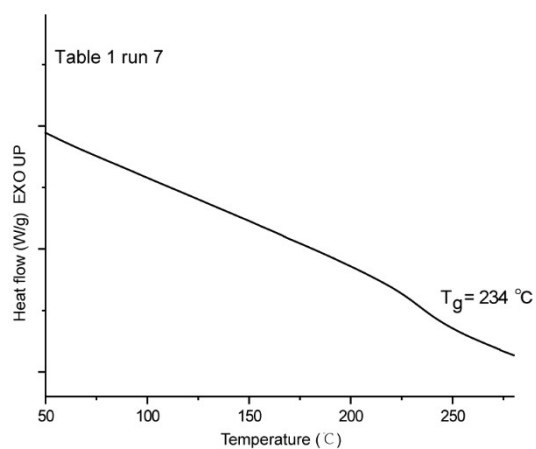


Fig. S16 DSC curves of homopolymer of FSt2 by Sc complex (Table 1, run 7).

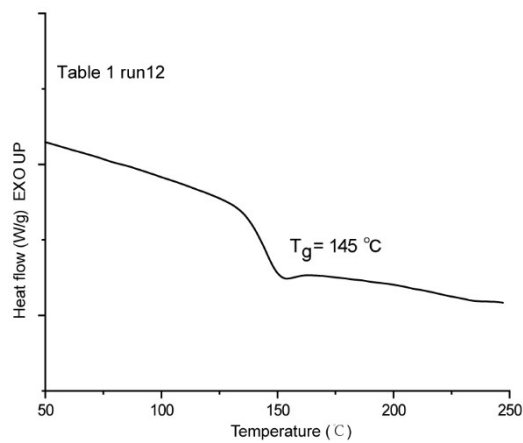


Fig. S17 DSC curves of homopolymer of FSt3 by Sc complex (Table 1, run 12).

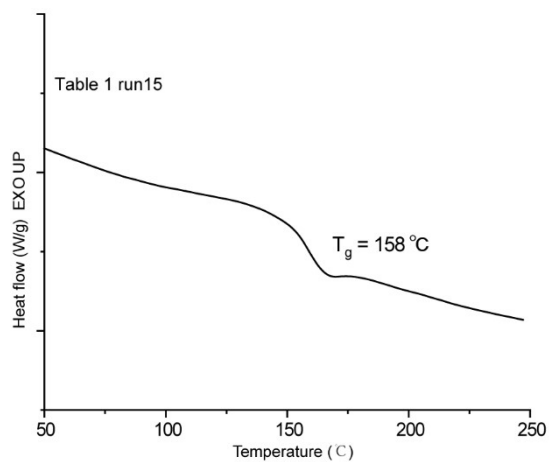


Fig. S18 DSC curves of homopolymer of FSt4 by Sc complex (Table 1, run 15).

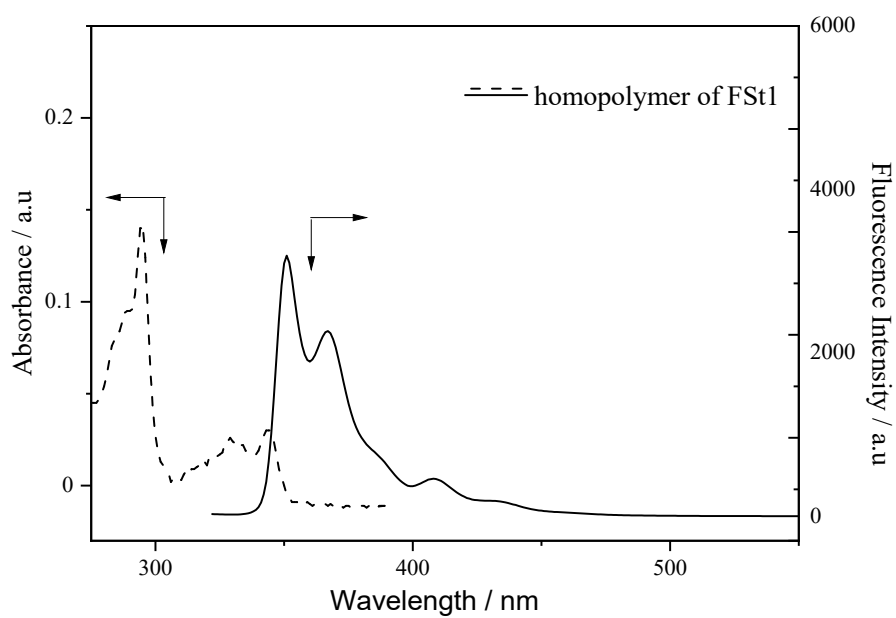


Fig. S19 UV-vis and FL curves of FSt1 homopolymer in THF (dashed lines represent UV and solid lines represent FL curves)

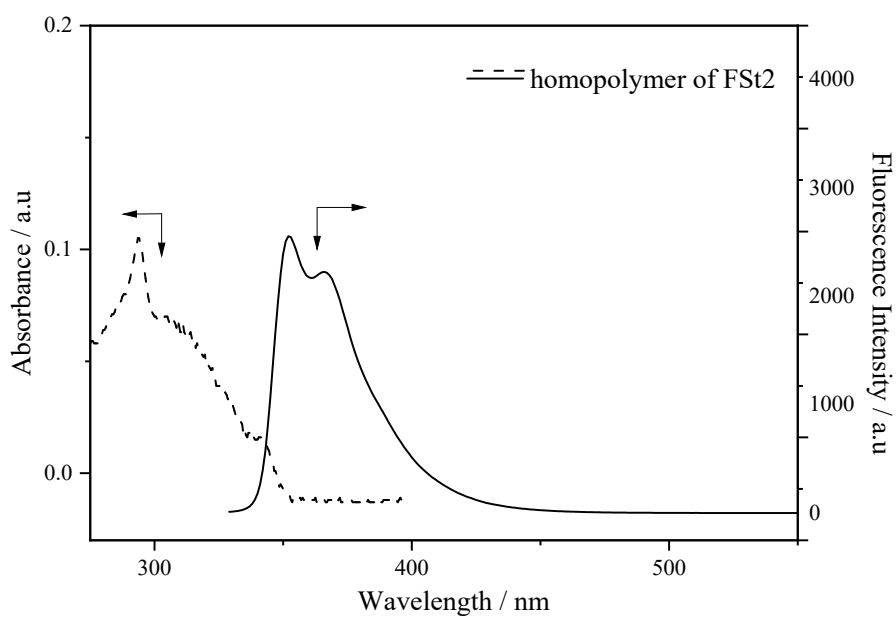


Fig. S20 UV-vis and FL curves of FSt2 homopolymer in THF (dashed lines represent UV and solid lines represent FL curves)

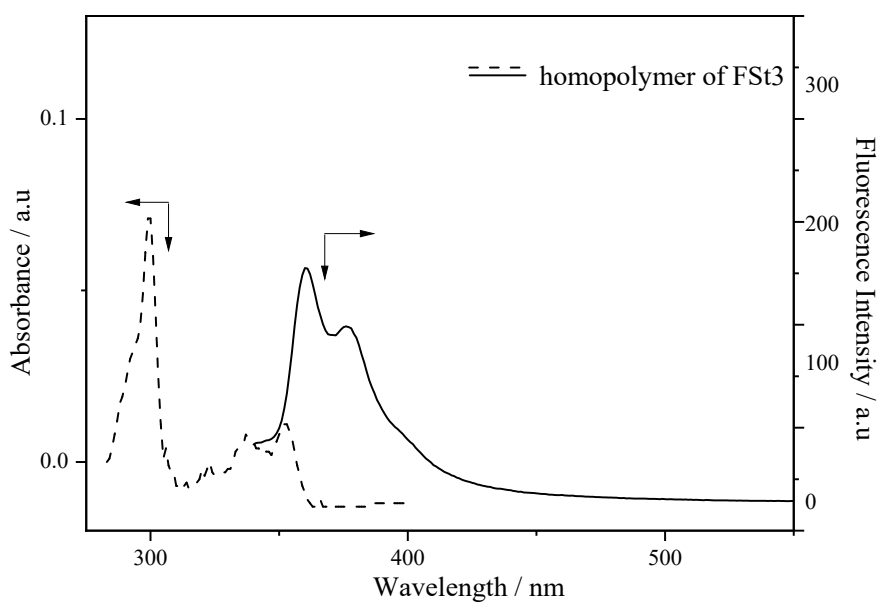


Fig. S21 UV-vis and FL curves of FSt3 homopolymer in THF (dashed lines represent UV and solid lines represent FL curves)

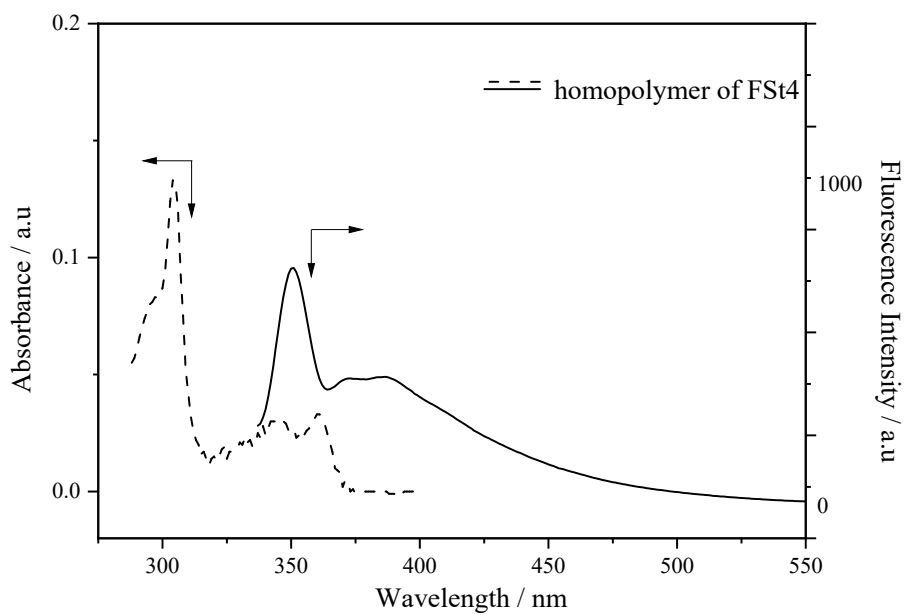


Fig. S22 UV-vis and FL curves of FSt4 homopolymer in THF (dashed lines represent UV and solid lines represent FL curves)

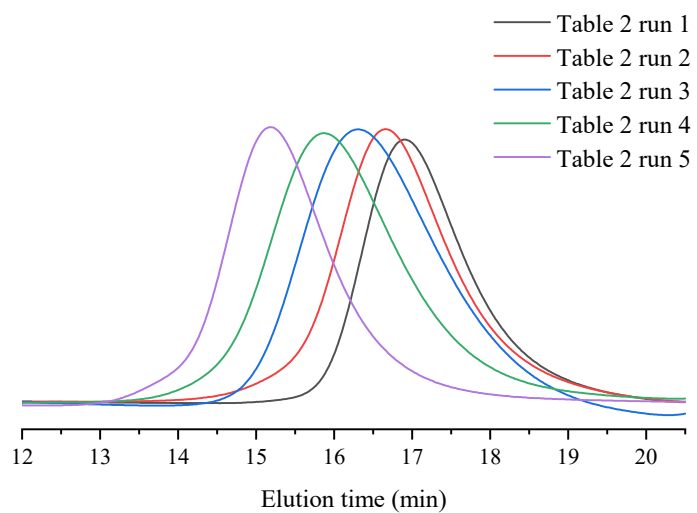


Fig. S23 GPC curves of FSt1 with St copolymers with different FSt1 contents. (Table 2, run 1-5).

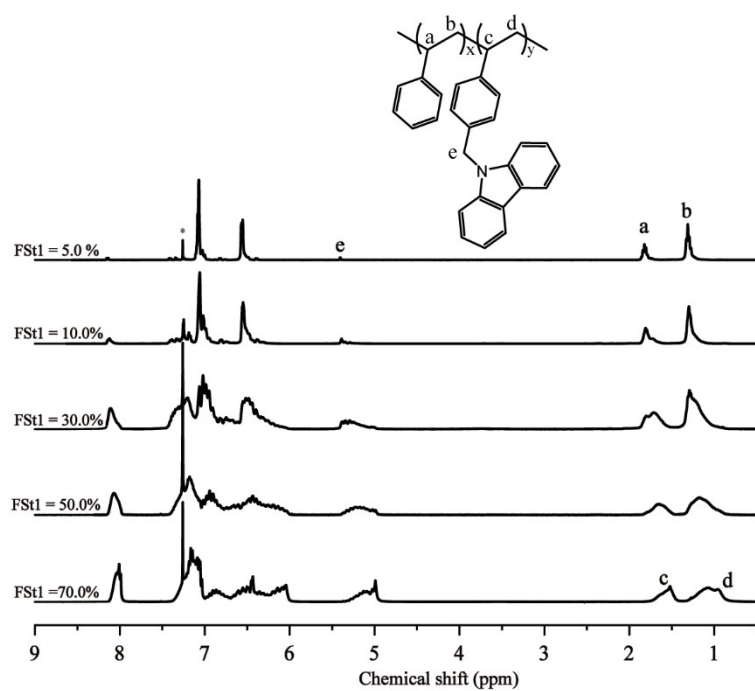


Fig. S24 ^1H NMR spectra of FSt1 with St copolymers with different FSt1 contents. (Table 2, run 1-5)

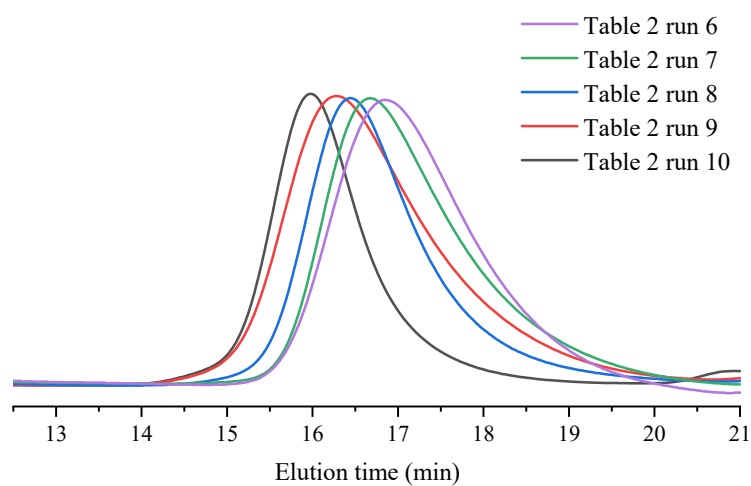


Fig. S25 GPC curves of FSt2 with St copolymers with different FSt2 contents. (Table 2, run 6-10).

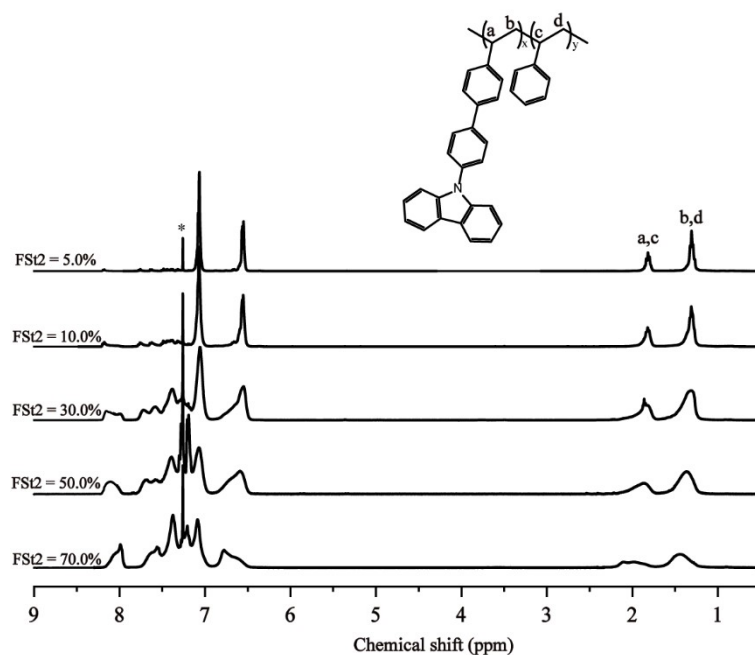


Fig. S26 ^1H NMR spectra of FSt2 with St copolymers with different FSt2 contents. (Table 2, run 6-10)

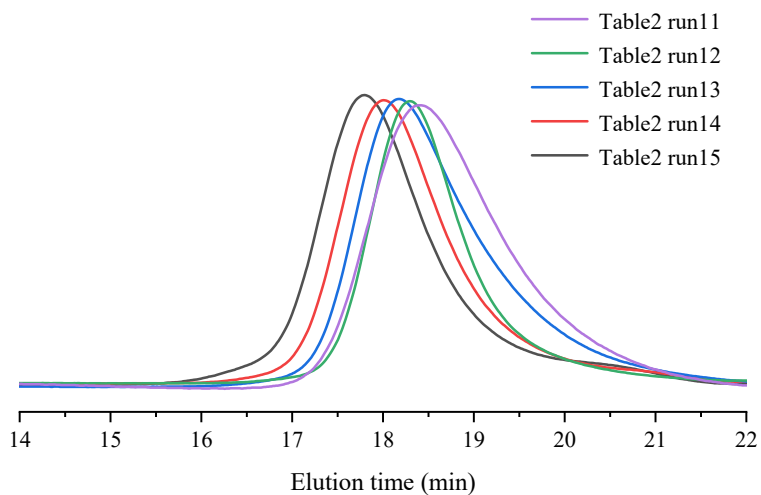


Fig. S27 GPC curves of FSt3 with St copolymers with different FSt3 contents. (Table 2, run 11-15).

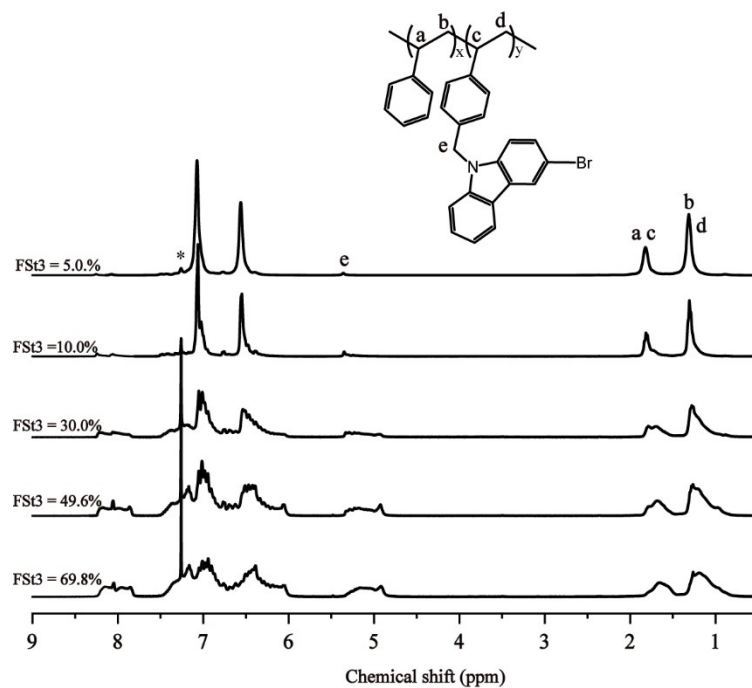


Fig. S28 ^1H NMR spectra of FSt3 with St copolymers with different FSt3 contents. (Table 2, run 11-15)

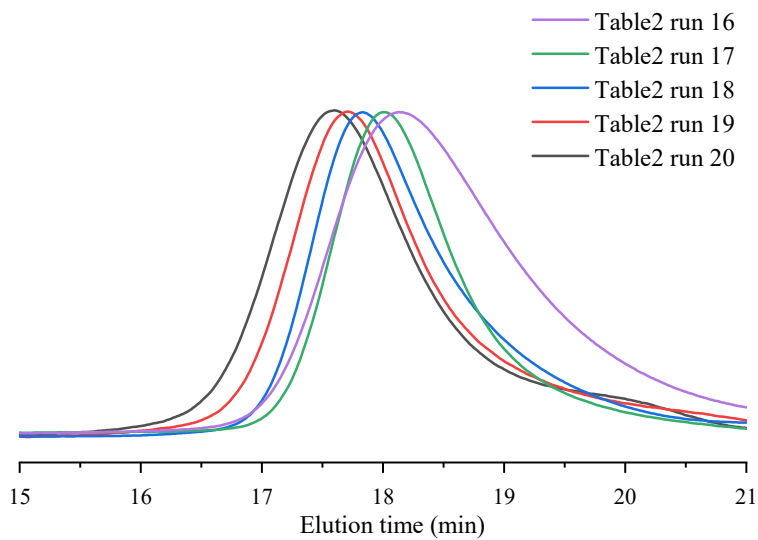


Fig. S29 GPC curves of FSt4 with St copolymers with different FSt4 contents. (Table 2, run 16-20).

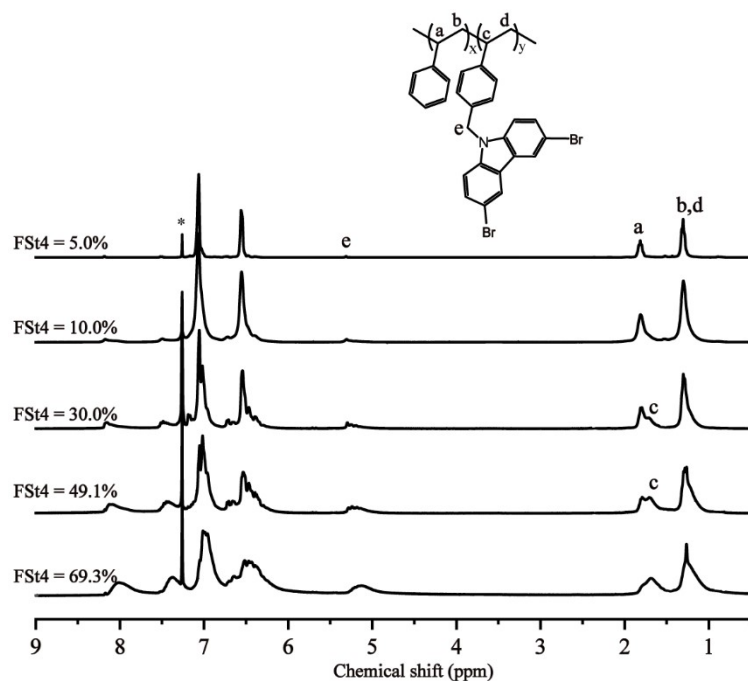


Fig. S30 ^1H NMR spectra of FSt4 with St copolymers with different FSt4 contents. (Table 2, run 16-20)

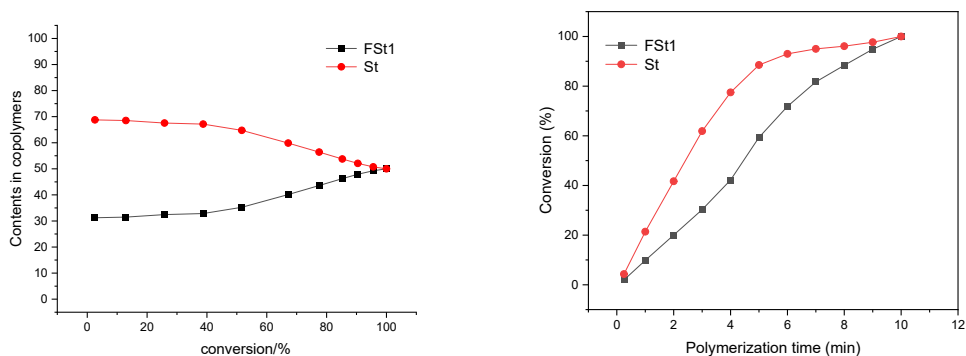


Fig. S31 (a) Plots of the contents of FSt1 and styrene units in the copolymers versus the conversions; (b) Monomer conversions versus polymerization time.

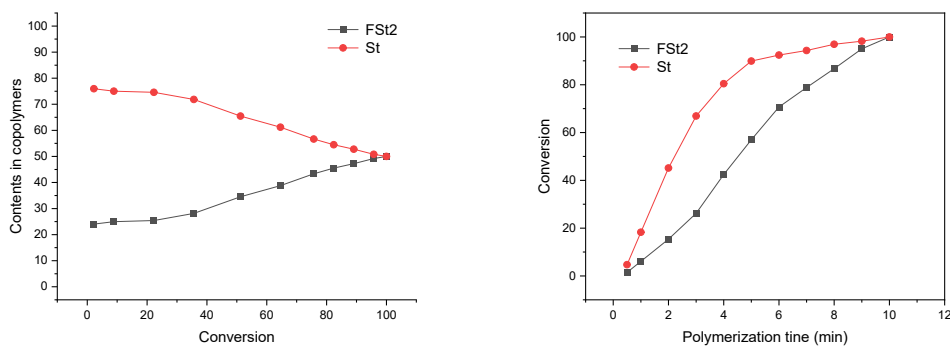


Fig. S32 (a) Plots of the contents of FSt2 and styrene units in the copolymers versus the conversions; (b) Monomer conversions versus polymerization time.

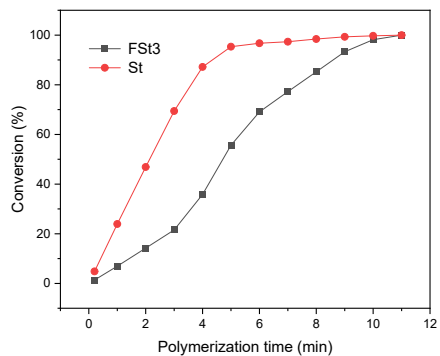
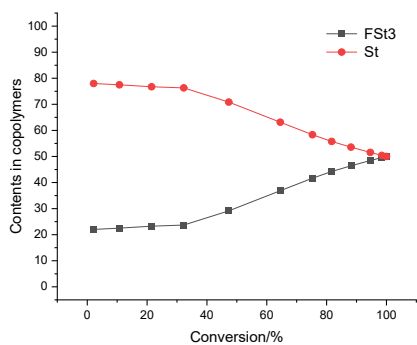


Fig. S33 (a) Plots of the contents of FSt3 and styrene units in the copolymers versus the conversions; (b) Monomer conversions versus polymerization time.

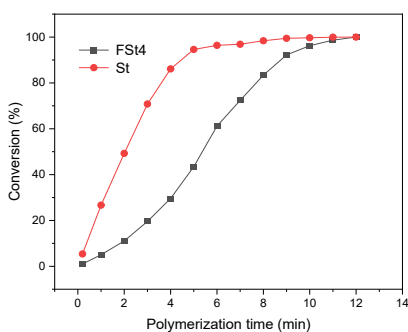
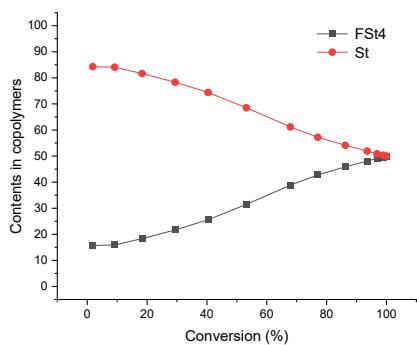


Fig. S34 (a) Plots of the contents of FSt4 and styrene units in the copolymers versus the conversions; (b) Monomer conversions versus polymerization time.