

## Supporting Information

# Synthesis and Stereospecific Polymerization of a Novel Bulky Styrene Derivative

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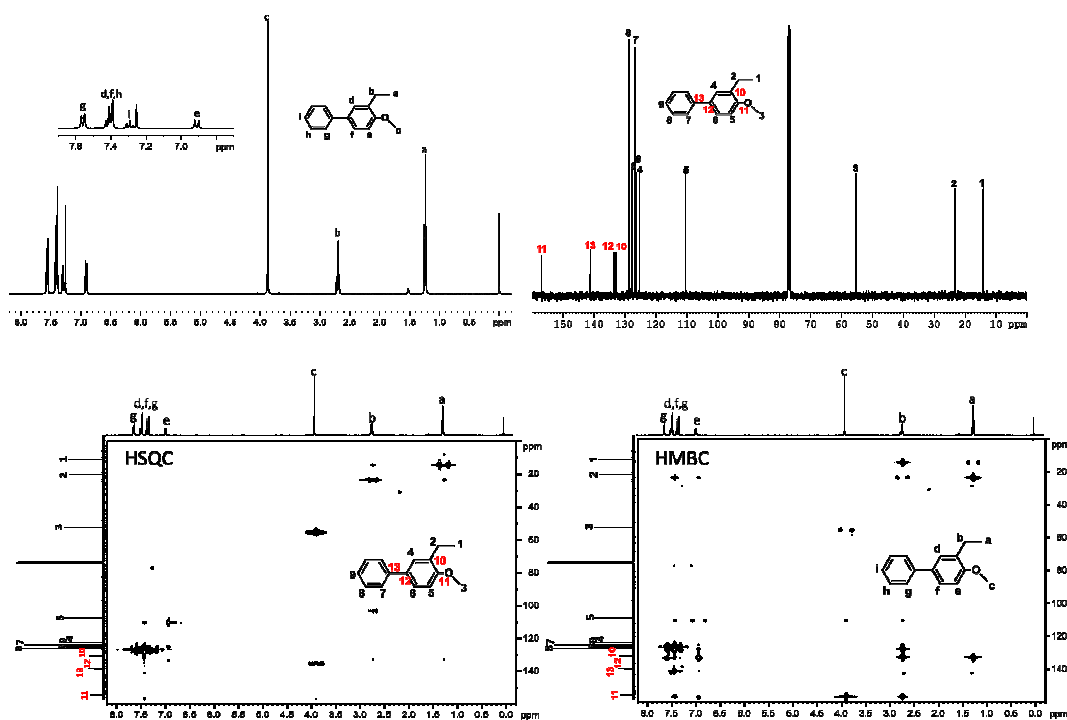
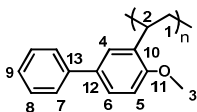
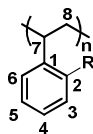


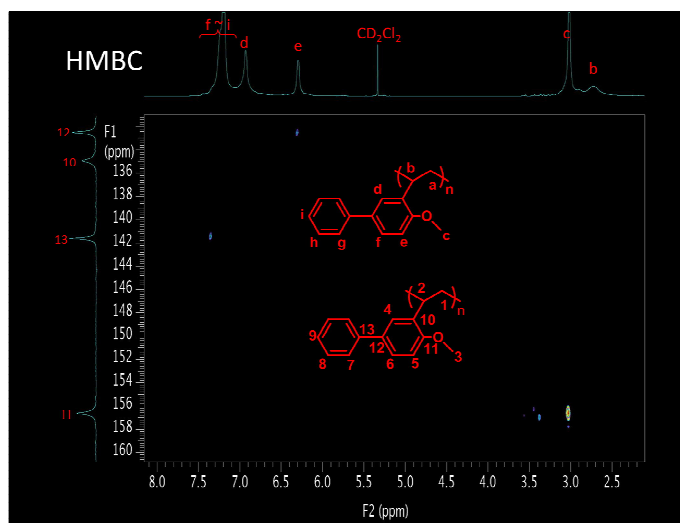
Fig. S1 <sup>1</sup>H/<sup>13</sup>C NMR, HSQC and HMBC spectra of model compound measured in CDCl<sub>3</sub> at 25 °C

**Table S1** Chemical shifts (ppm) of monomer, model compound, and P4

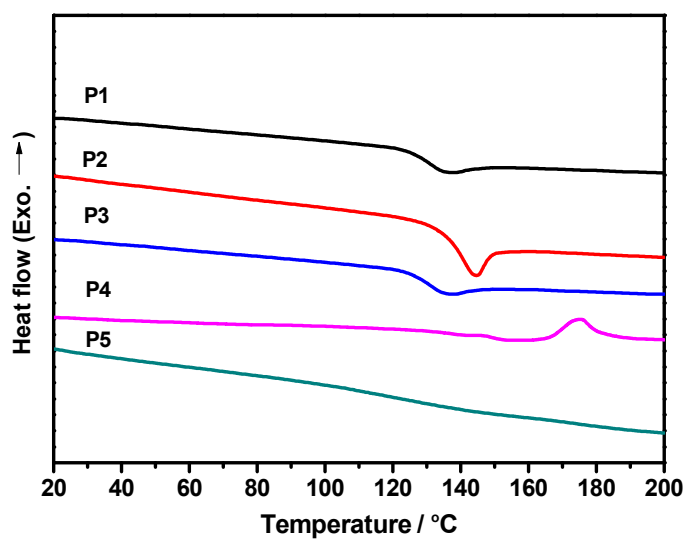
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13
Monomer	111.3	131.9	55.8	125.6	115.1	127.7	127.1	128.9	127.0	126.9	156.5	133.9	141.1
Model compound	14.4	23.6	55.6	125.5	110.6	128.1	127.0	128.8	126.7	133.1	157.2	133.7	141.4
Polymer	41.5	31.6	55.2	124.7	110.6	127.1	127.1	126.5	124.7	135.5	157.2	133.0	142.1

**Table S2**  $^{13}\text{C}$  Chemical shifts (ppm) of ring substituted styrenes and their polymers

	C1	C2	C3	C4	C5	C6	C7	C8
St	137.6	126.3	128.5	127.8	128.5	126.3	136.9	113.7
PSt	146.4	128.2	127.5	125.7	127.5	128.2	40.7	43.1
<i>o</i> -Methyl-St	136.9	135.3	130.3	127.7	125.4	126.1	134.9	115.0
P( <i>o</i> -Methyl-St)	144.5	135.3	130.1	125.9	125.4	126.0	34.5	43.3
<i>o</i> -Methoxyl-St	126.8	156.8	114.3	128.8	120.7	126.6	131.8	110.9
P( <i>o</i> -Methoxyl-St)	135.5	157.3	110.1	128.3	119.8	125.6	33.9	40.8



**Fig. S2** HMBC spectrum of **P4** measured in  $\text{CD}_2\text{Cl}_2$  at  $25^\circ\text{C}$



**Fig. S4** DSC curves of the polymers as prepared