

Supporting Information

# Integrating Boronic Esters and Anthracene into Covalent Adaptable Networks toward Stimuli-Responsive Elastomers

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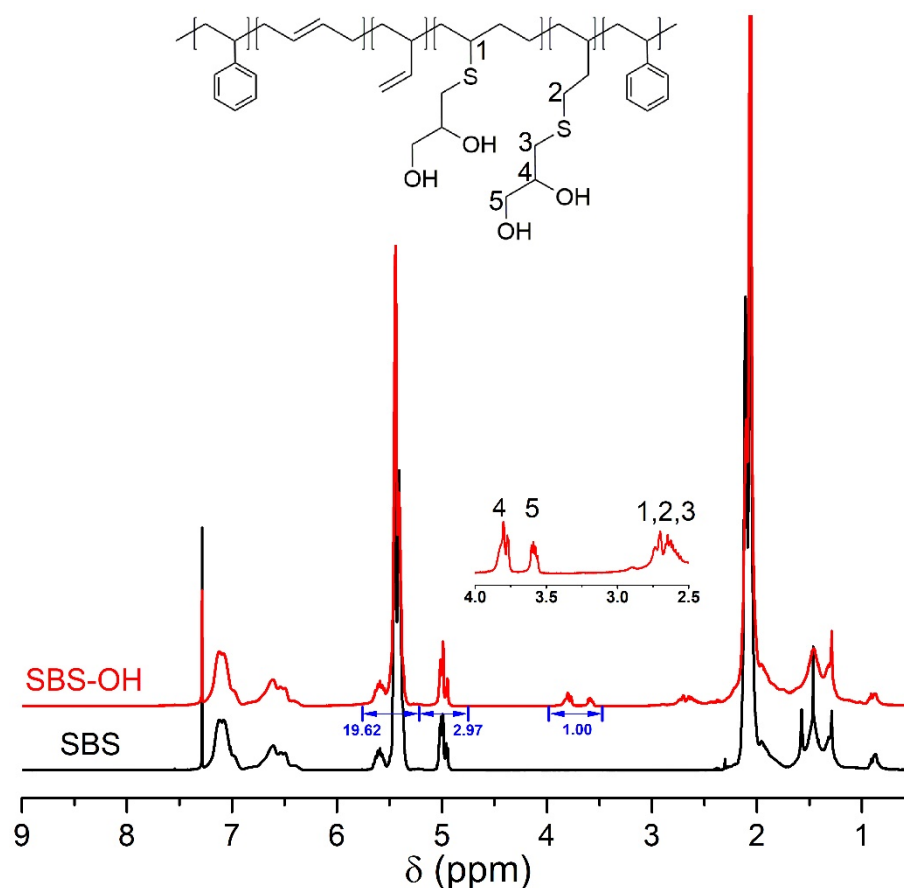
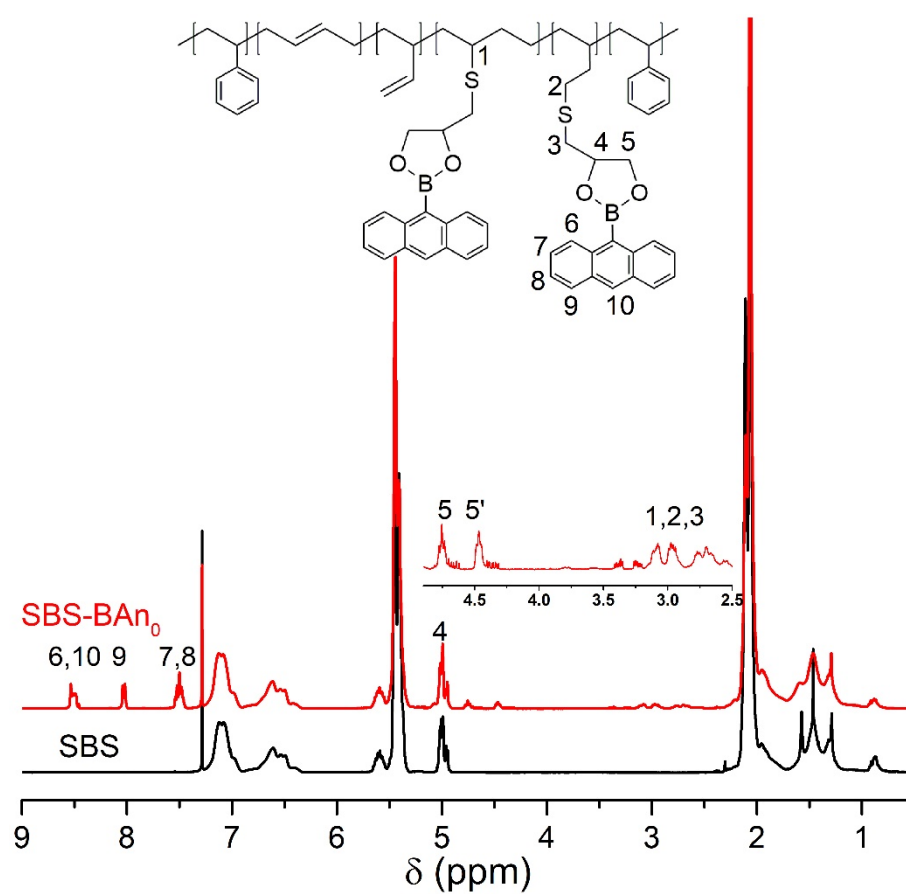
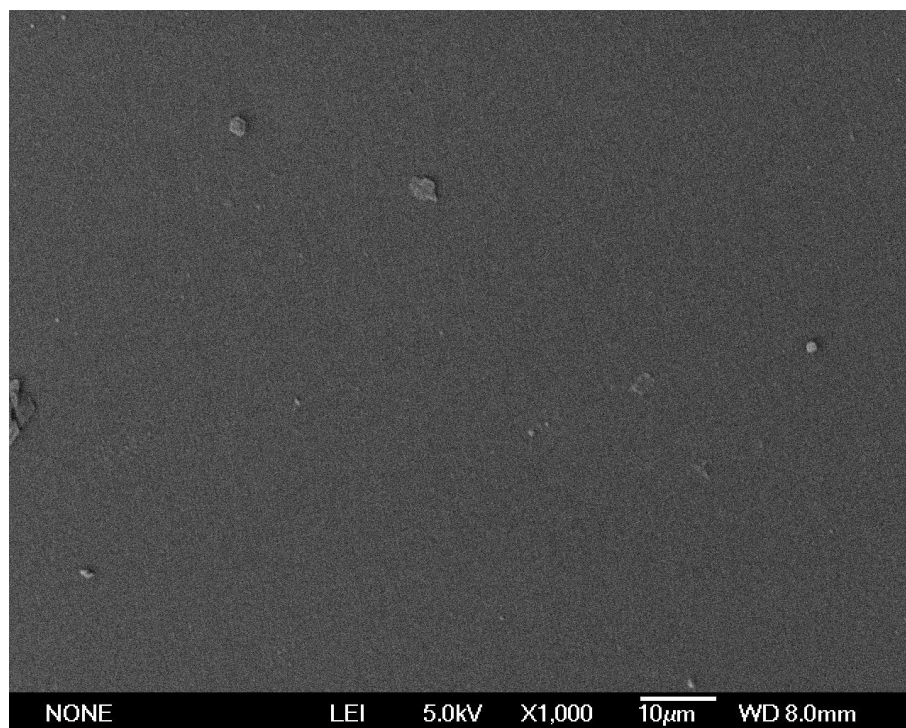


Figure S1. <sup>1</sup>H NMR spectra of SBS and SBS-OH.



**Figure S2.**  $^1\text{H}$  NMR spectra of SBS and SBS-BAn<sub>0</sub>, in which “0” means the obtained elastomer without ultraviolet radiation.



**Figure S3.** The SEM image of SBS-BAn<sub>30</sub>.

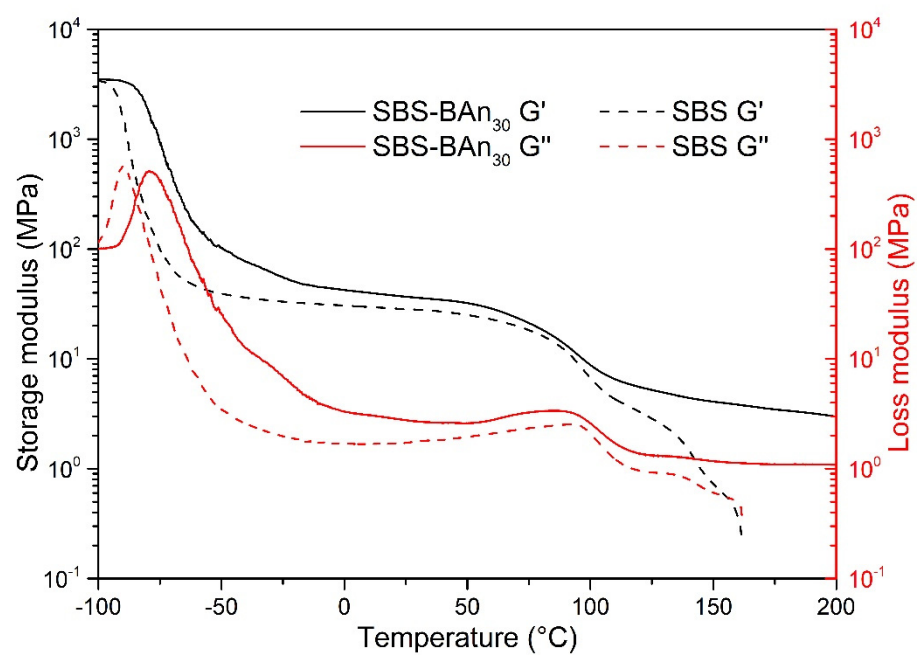


Figure S4. The DMA curves of SBS and SBS-BAn<sub>30</sub>.

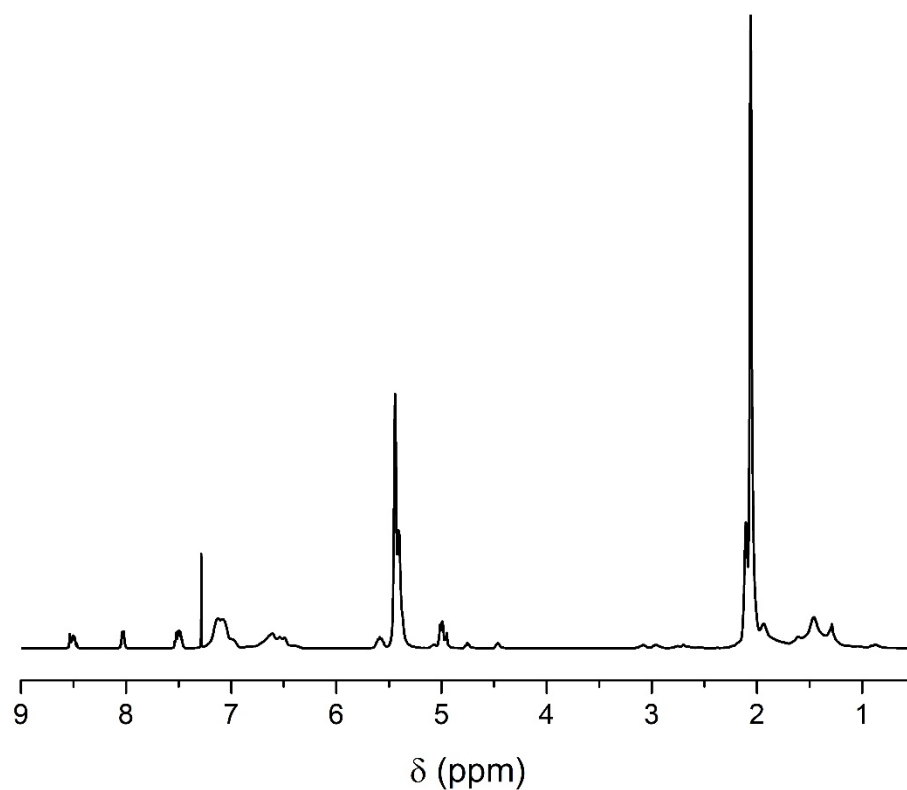
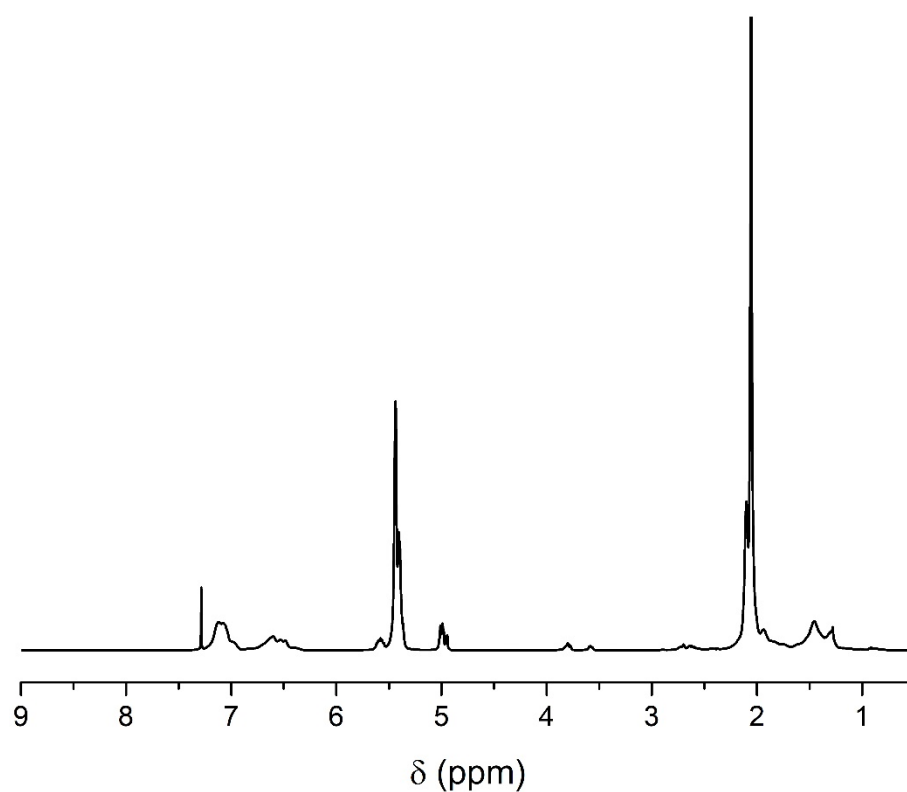


Figure S5. <sup>1</sup>H NMR spectrum of the resulted polymer after heating SBS-BAn<sub>30</sub> for 30min at 160°C.



**Figure S6.**  $^1\text{H}$  NMR spectrum of the polymer extracted from the benzyl alcohol resulted solution.

**Table S1.** Summarized properties of SBS-BAn<sub>x</sub>.

Sample	GF (%)	SR (%)	Strain at break (%)	Stress at break (MPa)
SBS-BAn <sub>2</sub>	50 ± 2	890 ± 40	2239 ± 200	14.83 ± 2
SBS-BAn <sub>5</sub>	65 ± 2	708 ± 33	1463 ± 120	15.83 ± 2
SBS-BAn <sub>30</sub>	73 ± 3	600 ± 36	1209 ± 100	21.94 ± 3

**Table S2.** Summarized properties of SBS-BAn<sub>30</sub> heat for different times at 160°C.

Sample	Strain at break (%)	Stress at break (MPa)
Original	1209 ± 100	21.94 ± 3
10min	1781 ± 130	15.62 ± 2
30min	2547 ± 200	13.17 ± 2