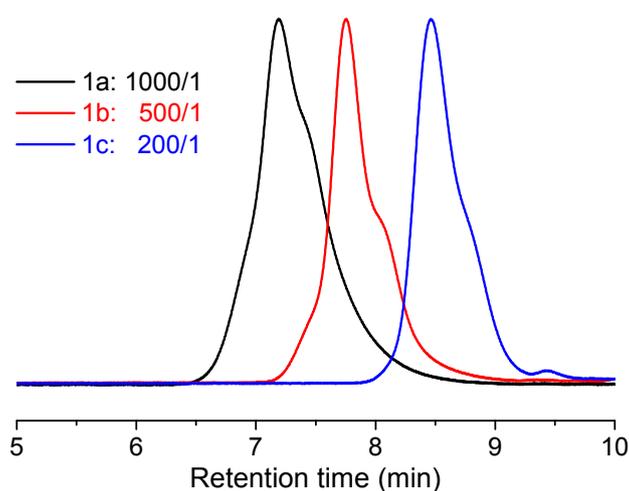
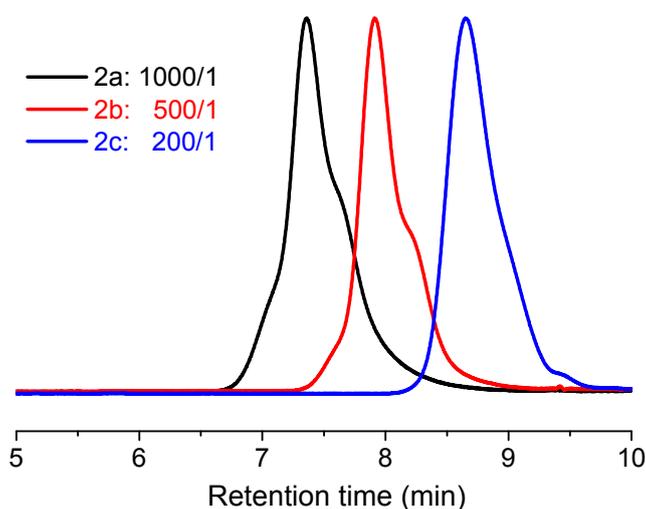


# Supplementary Materials: A Green Platform for Preparation of the Well-Defined Polyacrylonitrile: $^{60}\text{Co}$ $\gamma$ -ray-Irradiation-Initiated RAFT Polymerization at Room Temperature

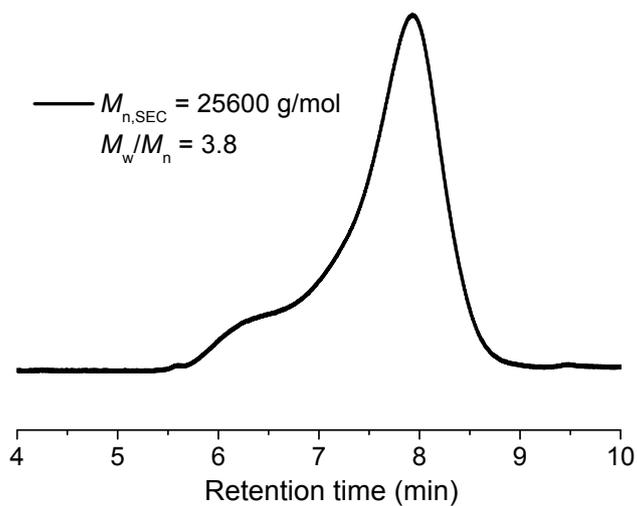
Shuangshuang Zhang, Lu Yin, Junzhi Wang, Wei Zhang, Lifen Zhang and Xiulin Zhu



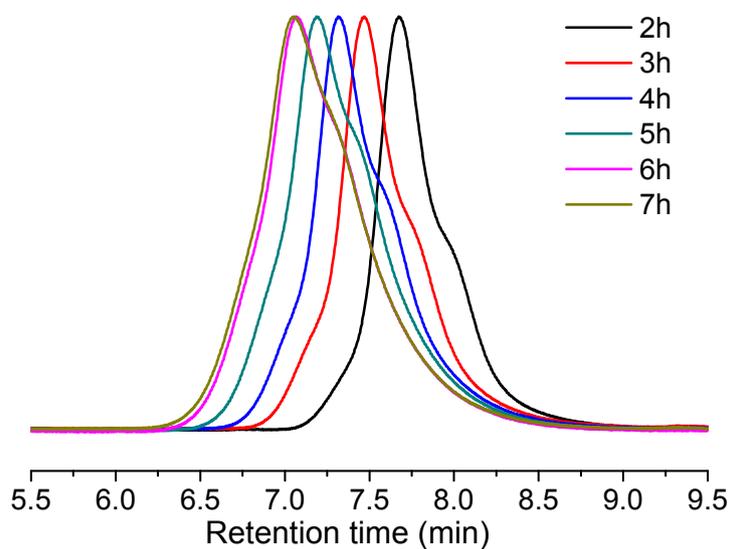
**Figure S1.** SEC chromatograms of 1a, 1b, 1c (Table 1). DMF was used as the eluent and PS as the calibration standard.  $[\text{AN}]_0/[\text{CPDN}]_0 = 1000/1, 500/1$  or  $200/1$ .



**Figure S2.** SEC chromatograms of 2a, 2b, 2c (Table 1). DMF was used as the eluent and PS as the calibration standard.  $[\text{AN}]_0/[\text{CPDN}]_0 = 1000/1, 500/1$  or  $200/1$ .



**Figure S3.** SEC chromatograms of PAN. DMF was used as the eluent and PS as the calibration standard. (1.8 kGy/h;  $t = 5 \text{ h}$ ;  $[AN]_0 = 10.18 \text{ mol/L}$ ;  $[AN]_0/[CPDN]_0 = 1000/1$ ).



**Figure S4.** SEC chromatograms of polymerization of AN at 1.8 kGy/h ( $[AN]_0/[CPDN]_0 = 1000/1$ ). DMF was used as the eluent and PS as the calibration standard.