Electronic Supplementary Material

Controlled Self-Assembly into Diverse Stimuli-Responsive Microstructures:

From Microsphere to Branched Cylindrical Micelle and Vesicle

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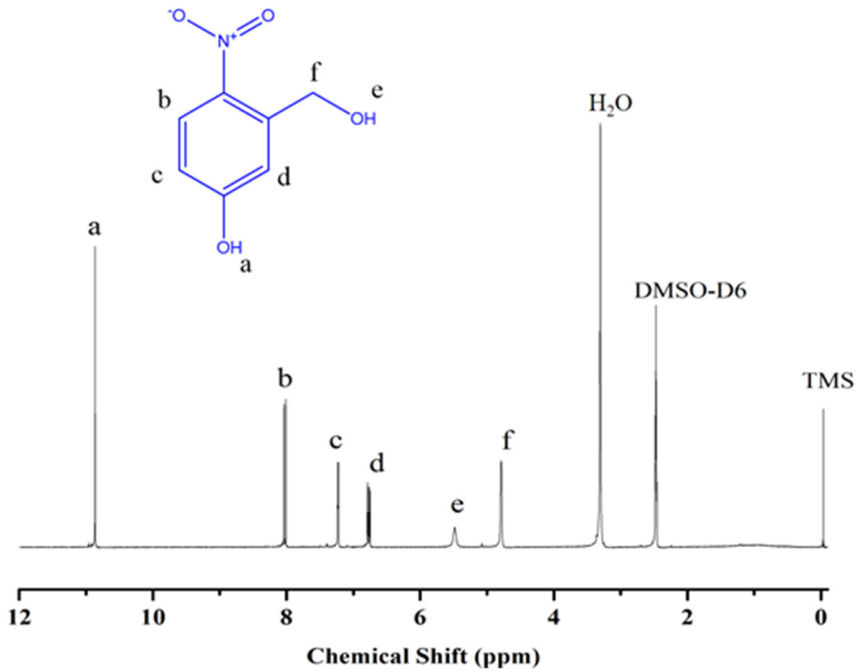

Fig. S1. ^{1}H NMR spectrum of 5-hydroxy-2-nitrobenzyl alcohol in DMSO-D6.

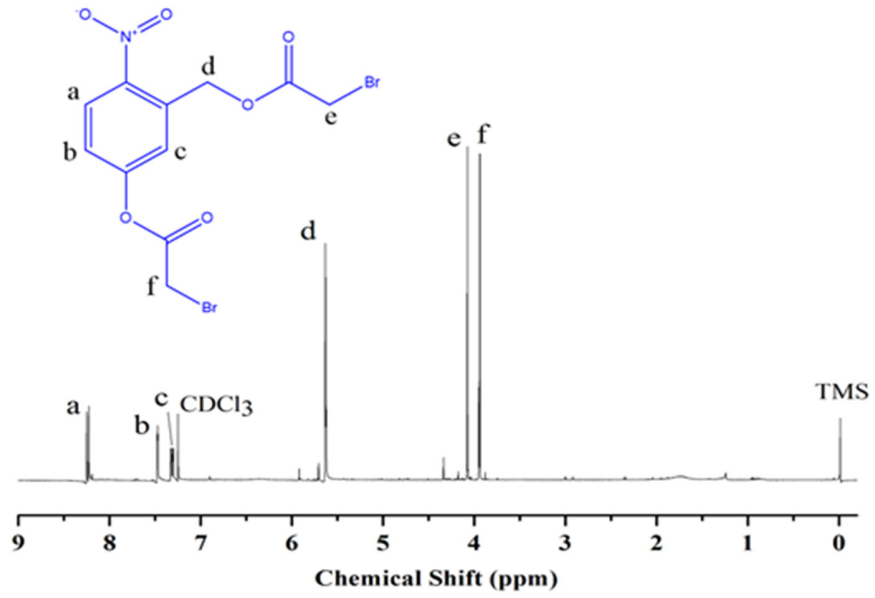

Fig. S2. ^{1}H NMR spectrum of the cross-linker Br-ONB-Br in $CDCl_3$.

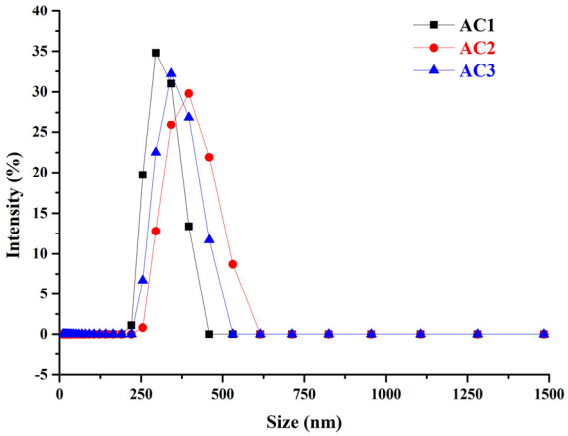

Fig. S3. Size and its distribution of the micelles originated from the linear PDMAEMA$_n$-SS-PCL$_m$.

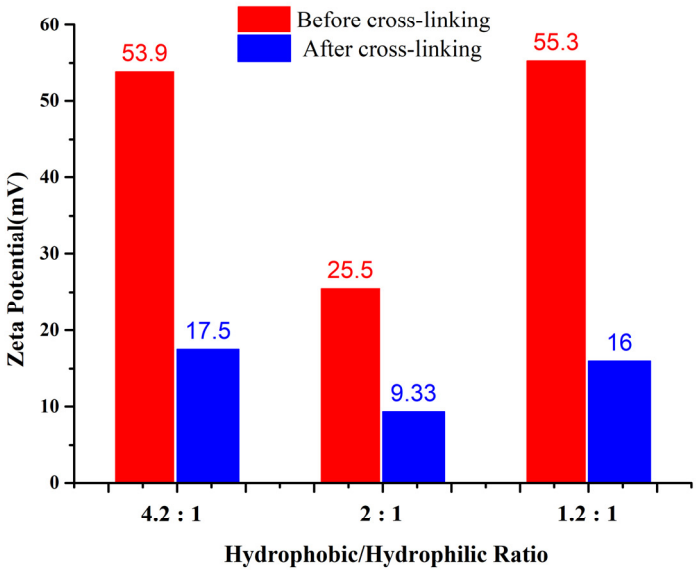

Fig. S4. Zeta potential of the PDMAEMA$_n$-SS-PCL$_m$ with diverse hydrophobic/hydrophilic ratios before and after cross-linking.

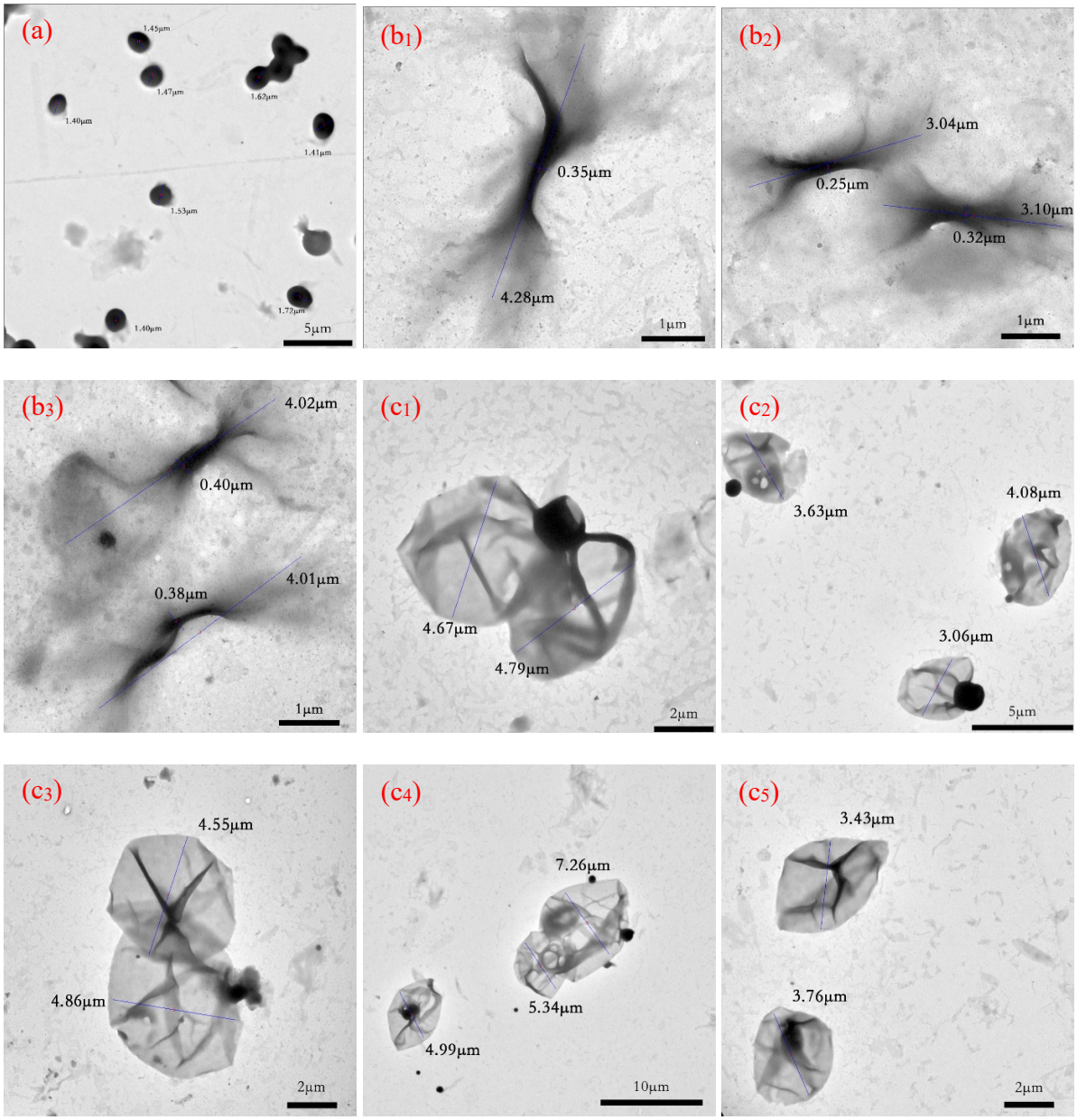

Fig. S5. The size measured from the TEM images of the microstructures originated from the cross-linked PDMAEMA$_n$-SS-PCL$_m$: (a) x-AC1, microspheres; (b$_1$-b$_3$) x-AC2, branched cylindrical micelles; and (c$_1$-c$_5$) x-AC3, vesicles.

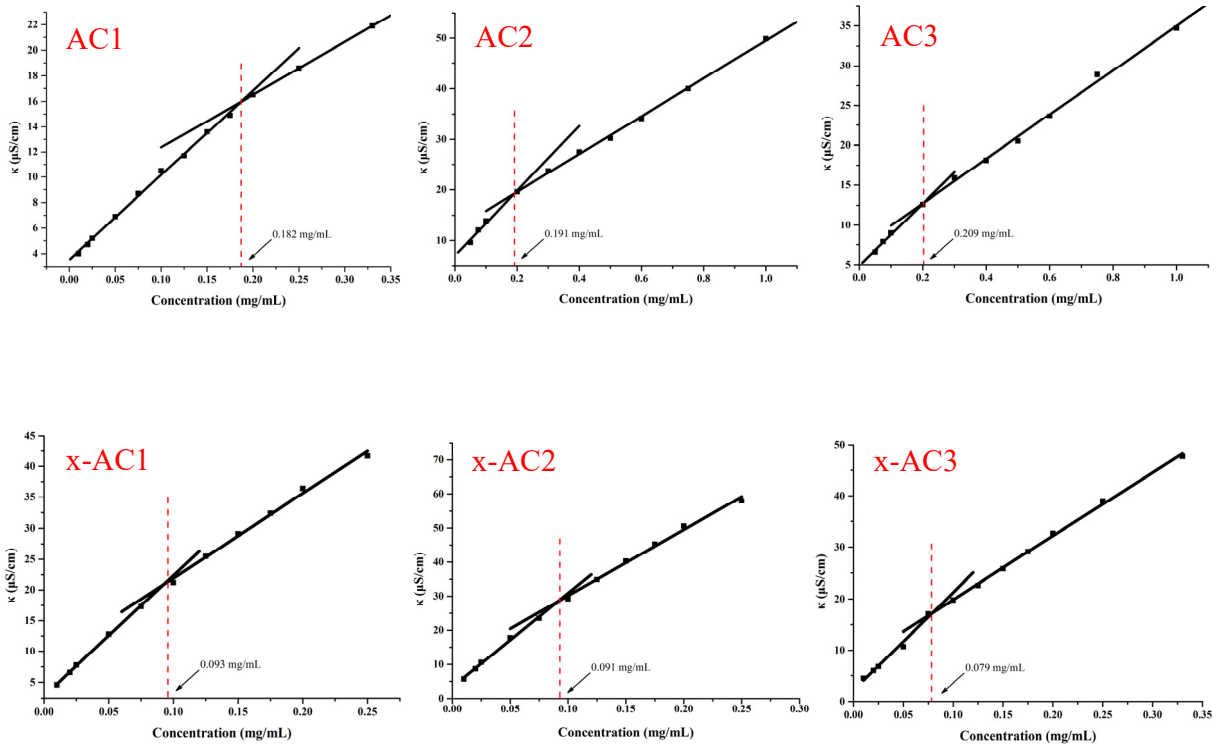

Fig. S6. Measurement of the critical aggregate concentration (CAC) of the synthesized copolymers by the conductometric titration.

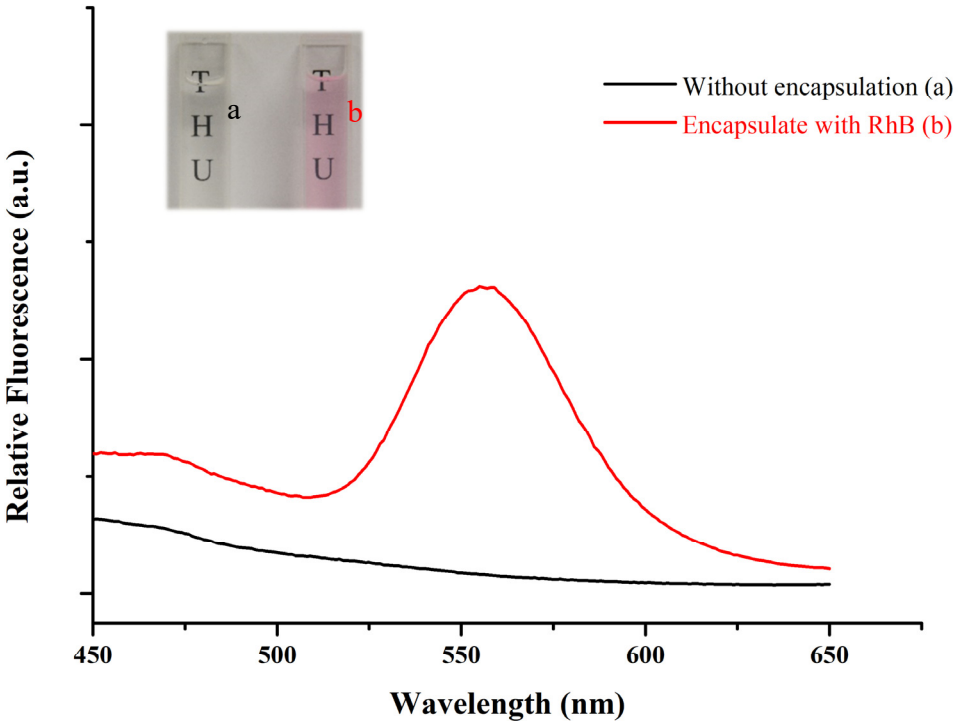

Fig. S7. Fluorescence emission spectra of dispersion of the microspheres originated from x-AC1.

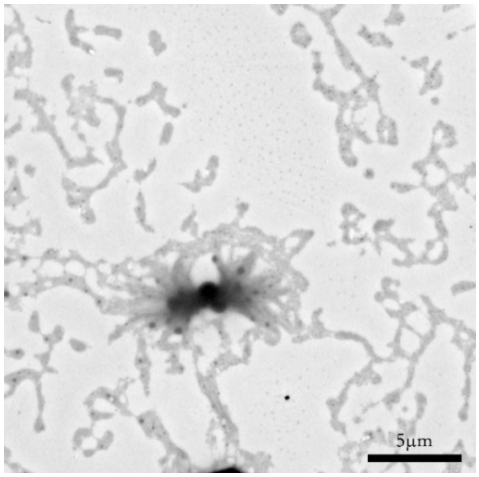

Fig. S8. Morphology of the branched micelles originated from x-AC2 in DTT environment for 5 days which is significant different from the other fragments.

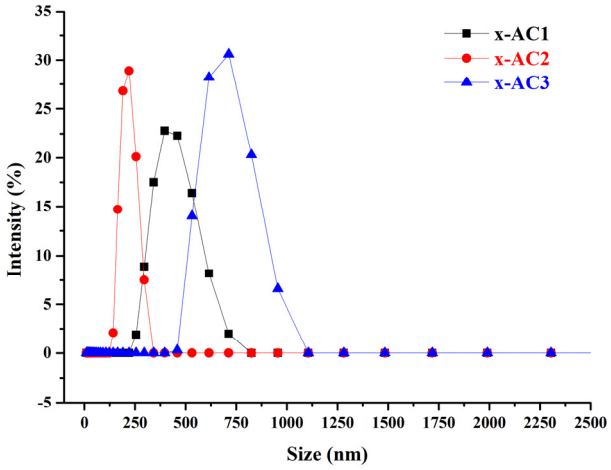

Fig. S9. Size and its distribution of three types of the microstructures originated from the cross-linked PDMAEMA$_n$-SS-PCL$_m$ in DTT environment for 5 days.

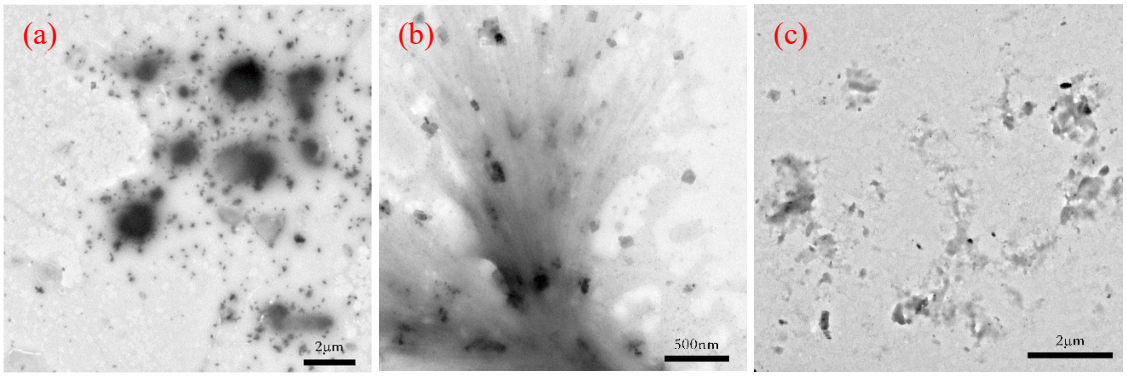

Fig. S10. TEM images of the irradiated microstructures by UV light: (a) microspheres, (b) the magnified TEM image of the tail of the branched micelles, and (c) vesicles.