Electronic Supplementary Material (ESI) for Polymer Chemistry.

Polymerization-induced self-assembly of liquid crystalline ABC triblock copolymers with long solvophilic chain

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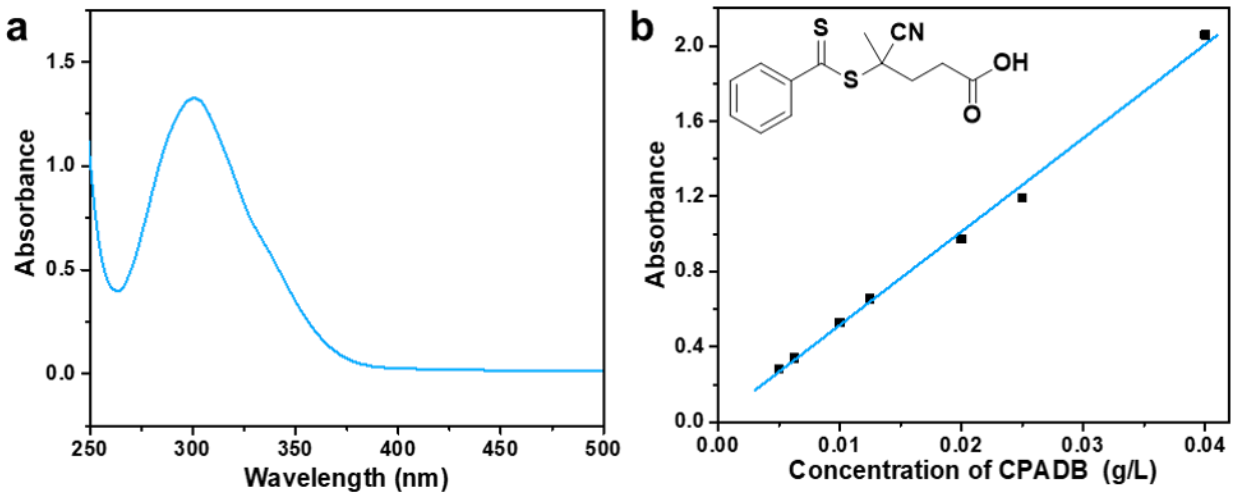

Fig. S1. a) Ultraviolet–visible spectrum of $PDMA_{72}$ solution (solvent: THF; concentration: 1.0 mg mL^{-1}). b) Absorbance of gradient solutions of CPADB in THF at 301 nm.

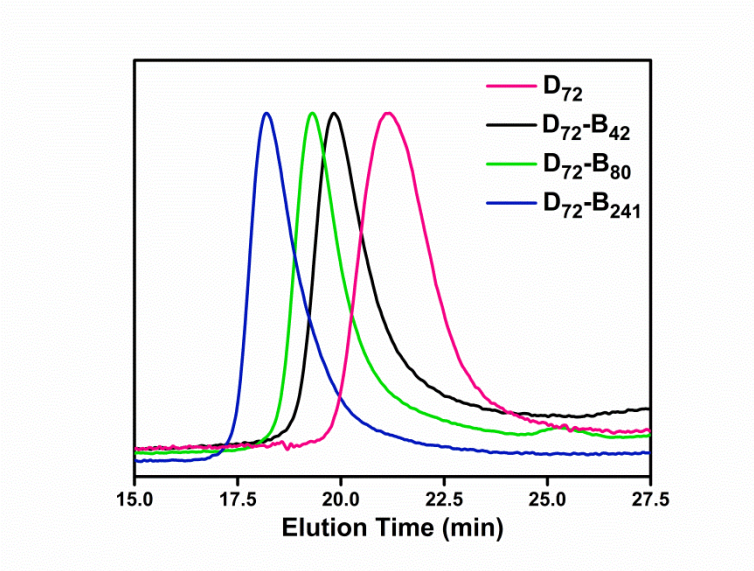

Fig. S2. SEC trace of $PDMA_{72}$ and D_{72}-B_x (x = 42, 80, 241) copolymers.

Table S1. Molecular and size characteristics of diblock copolymers D_{72}-B_x.

Entry	Molar feed ratio (BzMA/PDMA)	DP_{BzMA} [a]	Monomer conversion [b]	$M_{n,\,SEC}$ /kDa [c]	$Đ$ [d]	Diameter /nm [e]	PDI [e]
D_{72}-B_{42}	50	42	83%	10.8	1.22	23.35	0.130
D_{72}-B_{80}	100	80	83%	16.2	1.19	29.94	0.037
D_{72}-B_{241}	250	241	96%	33.6	1.23	56.98	0.056

[a] Determined by ^{1}H NMR spectra;

[b] Calculated by ^{1}H NMR spectra;

[c] Characterized by SEC;

[d] $Đ = M_w/M_n$;

[e] Hydrodynamic diameter measured by DLS.

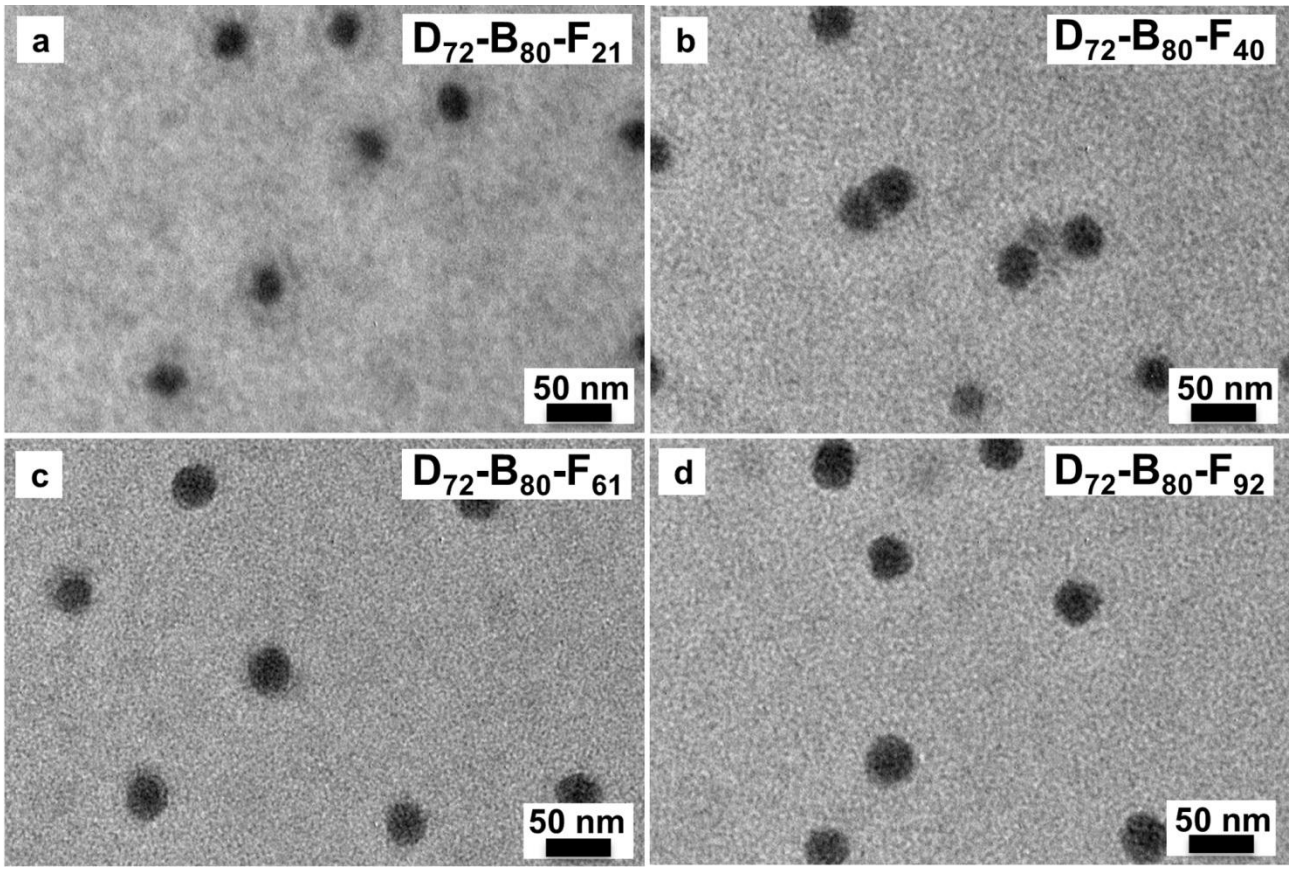

Fig. S3. TEM images of a) D_{72}-B_{80}-F_{21}, b) D_{72}-B_{80}-F_{40}, c) D_{72}-B_{80}-F_{61}, and d) D_{72}-B_{80}-F_{92} assemblies unstained.

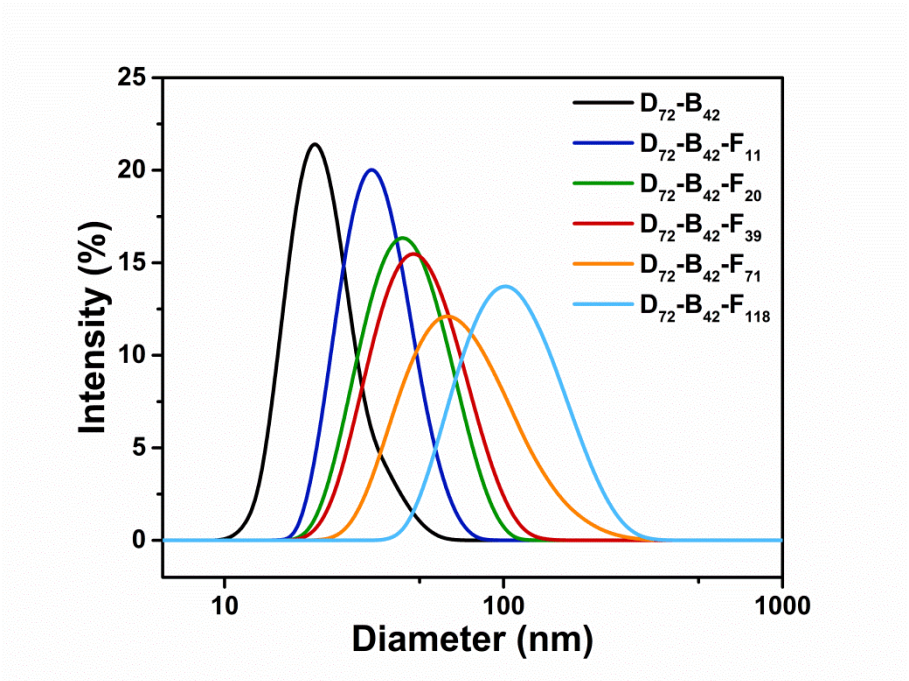

Fig. S4. DLS characterization of D_{72}-B_{42} and D_{72}-B_{42}-F_y (y = 11, 20, 39, 71, 118) assemblies in ethanol.

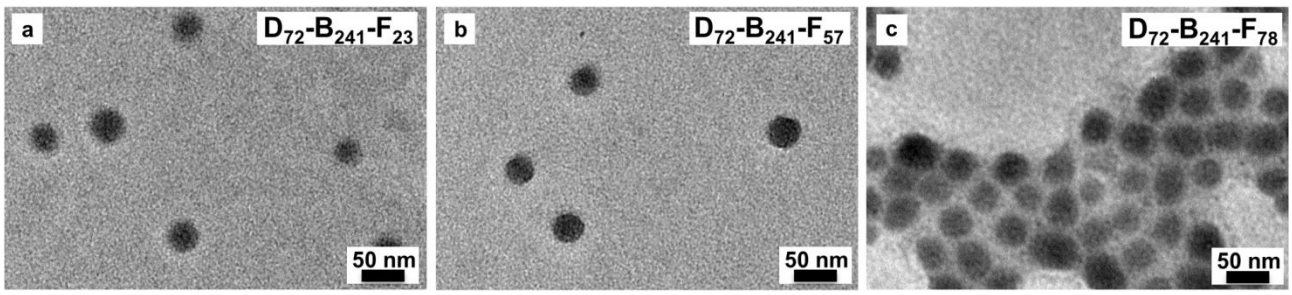

Fig. S5. TEM images of a) D_{72}-B_{241}-F_{23}, b) D_{72}-B_{241}-F_{57} and c) D_{72}-B_{241}-F_{78} assemblies unstained.