Electronic Supporting Information

Design, synthesis and applications of thermosensitive linear poly(ether amide)s with unconventional cluster luminescence and tunable LCST

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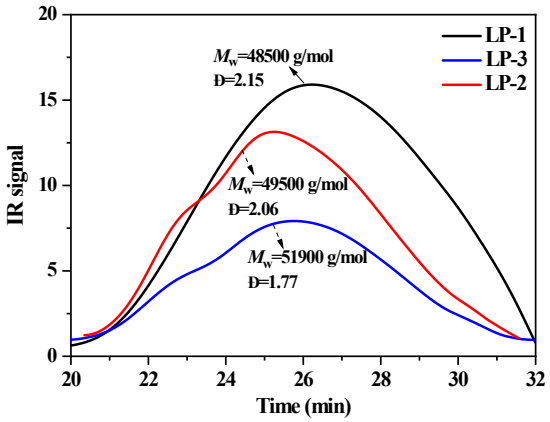

Fig.S1 Dri-SEC curves of linear poly(ether amide)s LP-1, LP-2, and LP-3.

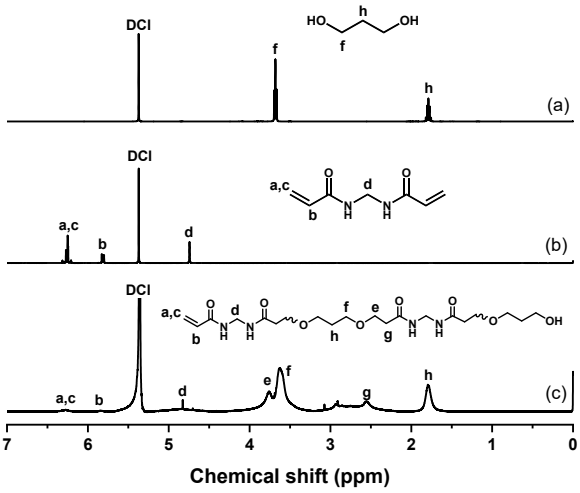

Fig. S2 ^{1}H NMR spectra of (a) PO, (b) MBA, and (c) LP-1 in 4%DCl.

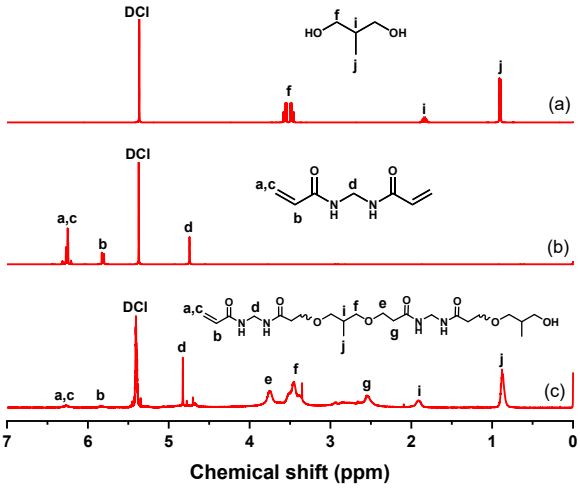

Fig. S3 ^{1}H NMR spectra of (a) MPO, (b) MBA, and (c) LP-2 in 4%DCl.

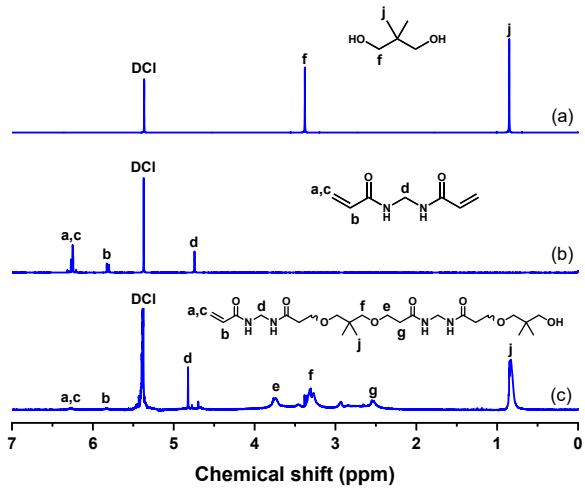

Fig. S4 ^{1}H NMR spectra of (a) DPO, (b) MBA, and (c) LP-3 in 4%DCl.

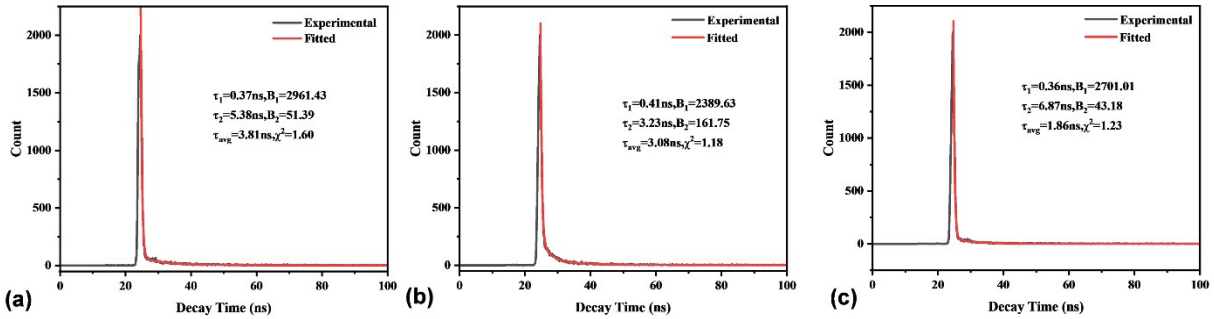

Fig.S5 Fluorescence decay curves of (A) LP-1, (B) LP-2, and (C) LP-3 in solid state.

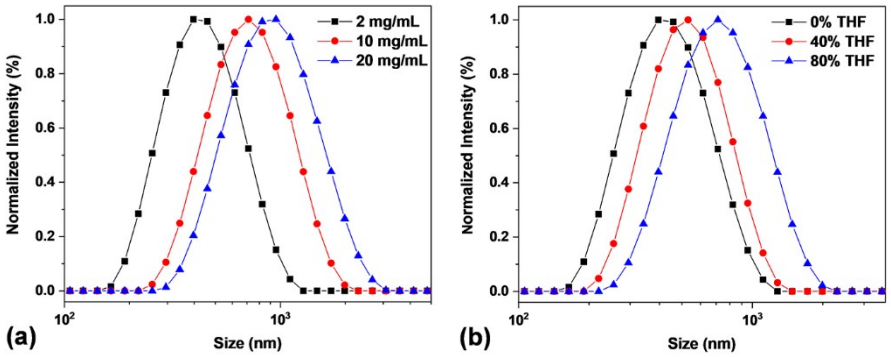

Fig.S6 Size distribution of LP-1 (a) in aqueous solutions with different concentrations and (b) in H_2O/THF mixtures with different THF fractions at 2 mg/mL.

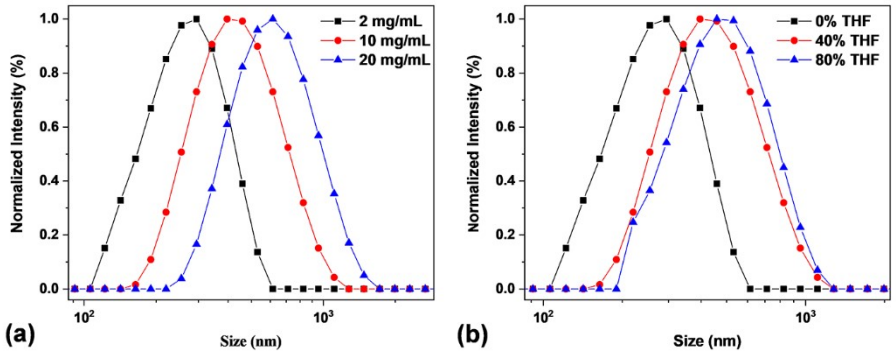

Fig.S7 Size distribution of LP-2 (a) in aqueous solutions with different concentrations and (b) in H_2O/THF mixtures with different THF fractions at 2 mg/mL.

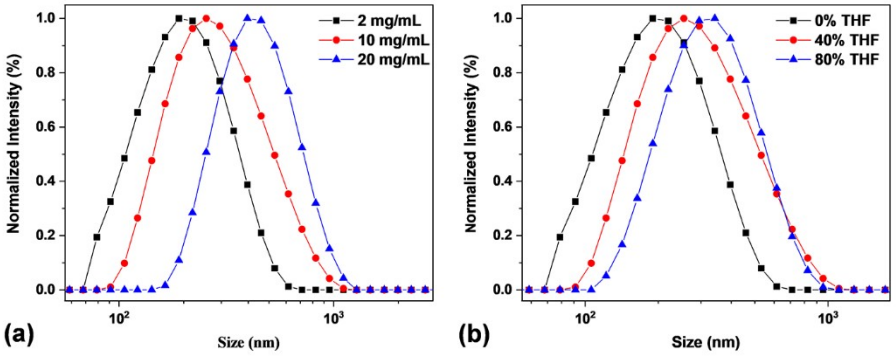

Fig.S8 Size distribution of LP-3 (a) in aqueous solutions with different concentrations and (b) in H_2O/THF mixtures with different THF fractions at 2 mg/mL.

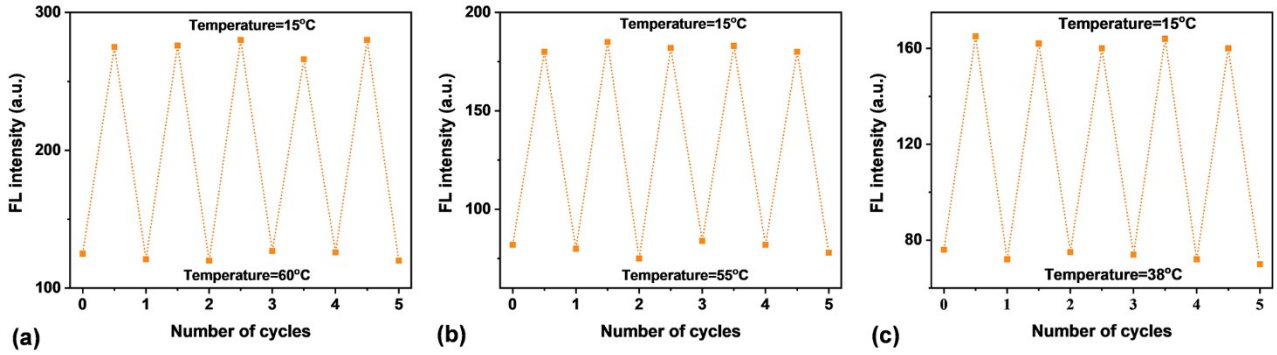

Fig.S9 Reversibility of the fluorescent switching of the (a) LP-1, (b) LP-2, and (c) LP-3 by changing the temperature. Polymer concentration: 20 mg/ml, λ_{ex}=320nm.

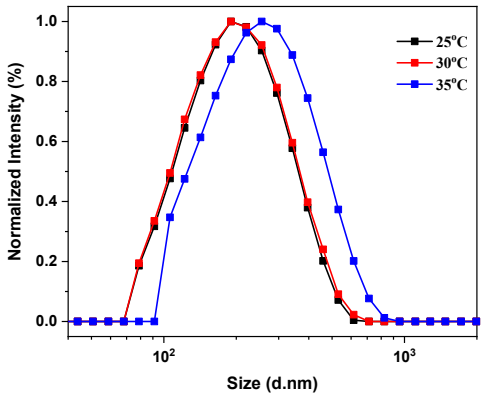

Fig.S10 Size distribution of LP-3 in aqueous solutions (2 mg/mL) with different temperatures.

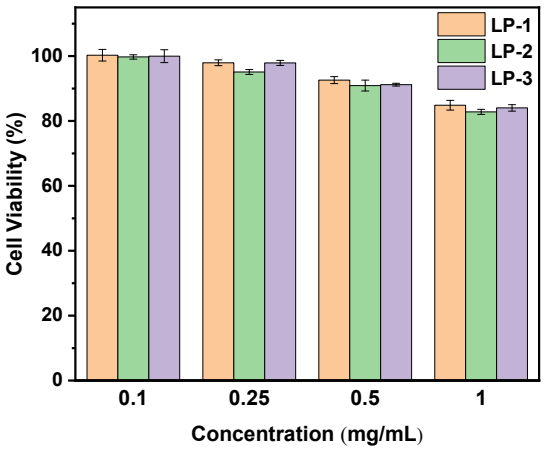

Fig.S11 Cell viability in MCF-7 cell lines for 4 h at different concentrations of the linear poly(ether amide)s LP-1, LP-2, and LP-3 (mean ± SD, n = 3).

Equation S1.

The ^{1}H NMR spectrum (Figure 1a) was used to calculate the number of repeating units (n) of the polymers via the following equations:

$$n = (\frac{Sd}{2} - Sb)/Sb$$

n represents the number of the repeating units of polymers;

Sd and Sb represent the peak areas of the related signals.