

Supporting Information

Synthesis of temperature/pH dual-stimuli response multicompartamental microcapsules via Pickering emulsion for preprogrammable payload release

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Table S1: Specific formula of pNIPAM particles

sample	MBA(g)	pNIPAM (g)	Crosslinker content (wt%)	APS(g)	Deionized water (mL)	Observations
1	0.0	4.0	0.0	0.08	196	/
2	0.1	3.9	2.5	0.08	196	Coagula
3	0.2	3.8	5.0	0.08	196	Stable latex
4	0.3	3.7	7.5	0.08	196	Stable latex
5	0.4	3.6	10.0	0.08	196	Stable latex
6	0.5	3.5	12.5	0.08	196	Coagula

NOTE: 1 sample as comparison

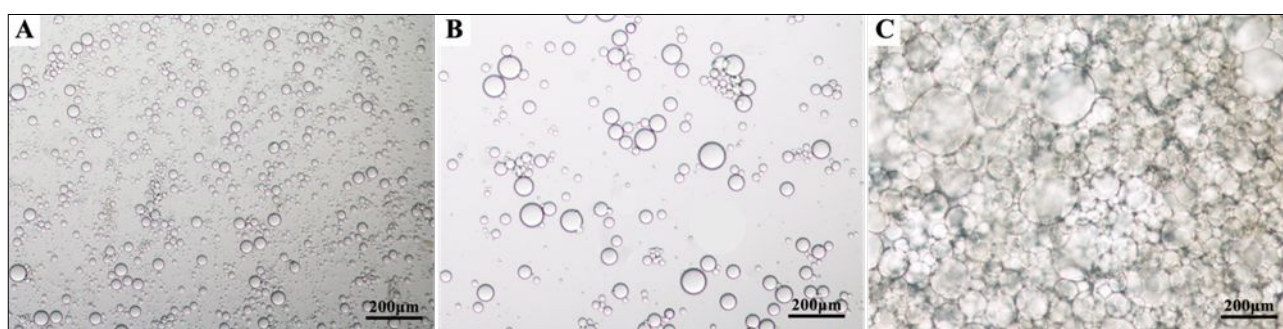


Figure S1 pNIPAM@NR particles stabilized emulsion with crosslinker content of 5 wt% (A), 7.5 wt% (B), and 10 wt% (C), respectively

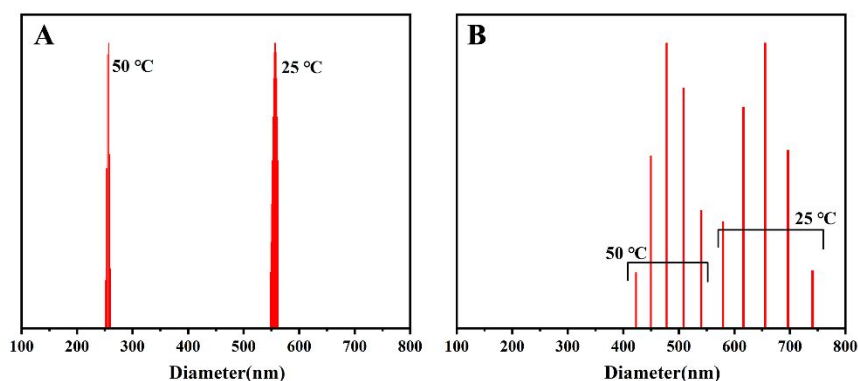


Figure S2 The particle size and distribution of pNIPAM particles (A) and pNIPAM@NR particles (B) at 25°C and 50°C.

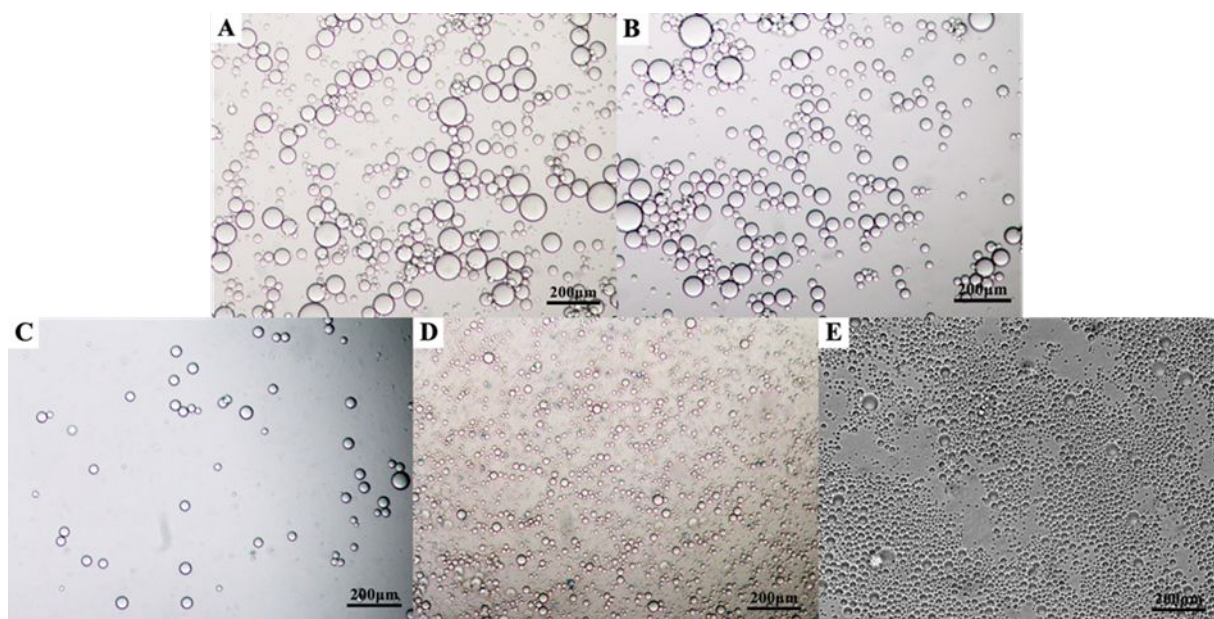


Figure S3 Emulsion with oil to water ratio of 1:2 at different emulsifier concentrations: 2 mg/mL (A), 4 mg/mL (B), 8 mg/mL (C), 16 mg/mL (D), 32 mg/mL (E).

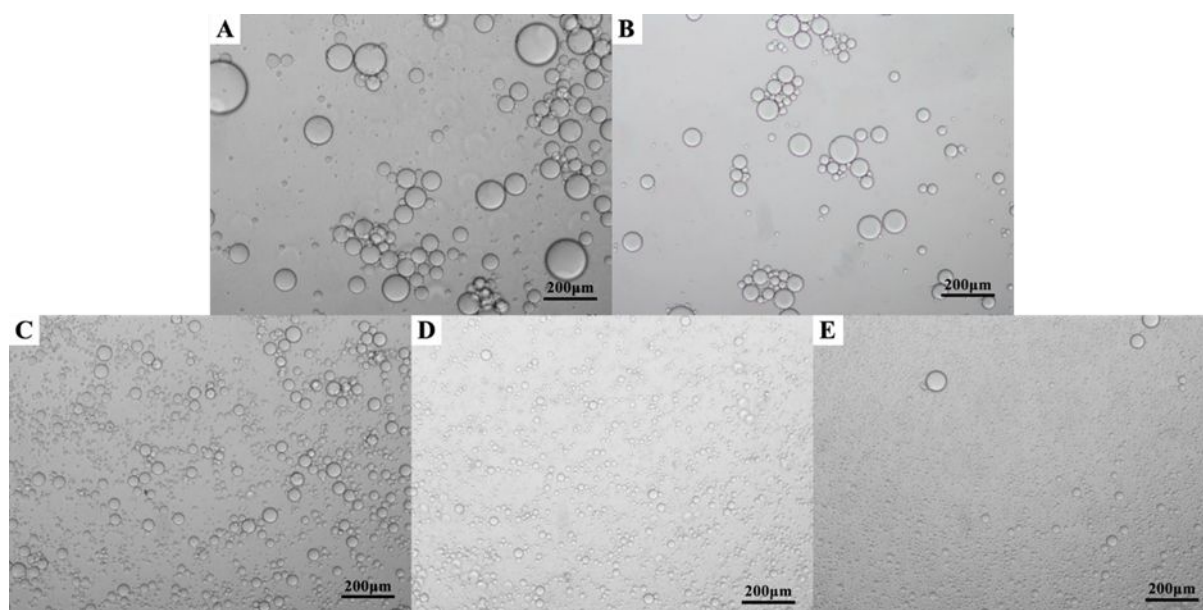


Figure S4 Emulsion with emulsifier concentration of 16 mg/mL at different oil/water ratio: 4:1 (A), 2:1 (B), 1:1 (C), 1:2 (D), 1:4 (E).

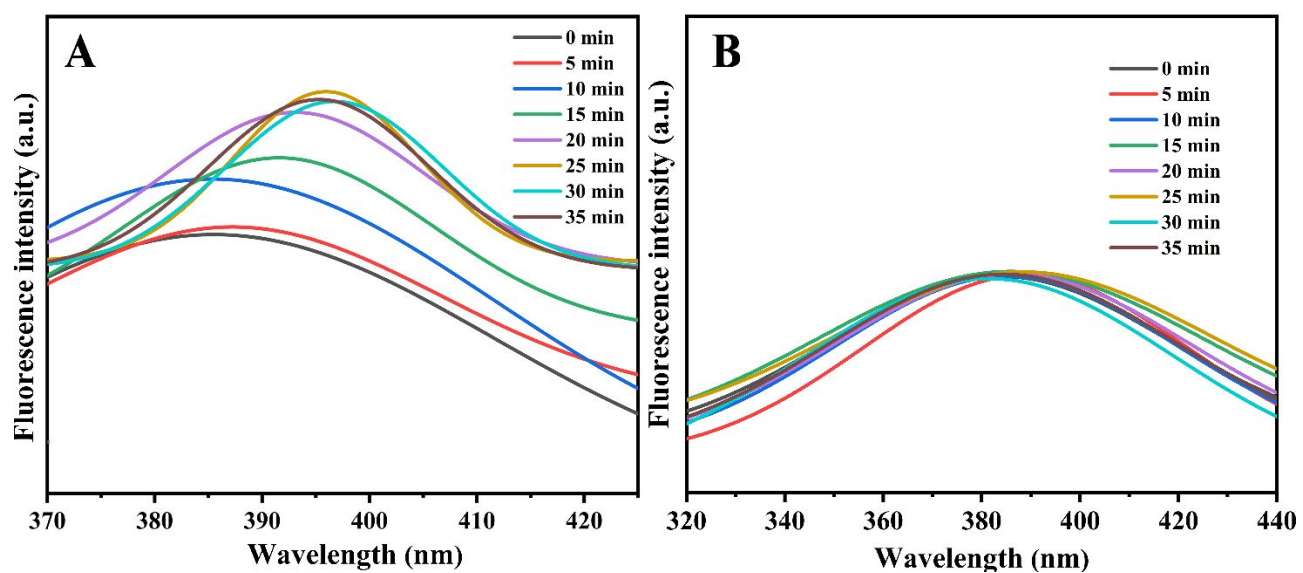


Figure S5 pH-induced release of OG from the microcapsule interior was measured by fluorescent intensity change of dialysis bath at pH=3 (A) and pH=9 (B).