

Supplementary Information

Enhanced Emulsifying Ability of Deoxycholate through Dynamic Interaction with Layered Double Hydroxide

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1. DLS

Table S1. Z-average diameters and Polydispersity indices (PDI) of emulsions with respect to dilution factor of (10, 20, and 50) times for F1, F1', F2, F2', F3, and F3'.

Sample	Z-Average Diameter (nm)			Polydispersity Indices		
	10	20	50	10	20	50
F1	1,450.0	2,036.3	2,615.0	0.34	0.74	~ 1.00
F1'	363.9	355.7	322.0	0.25	0.23	0.28
F2	885.8	844.6	885.9	0.47	0.44	0.46
F2'	302.7	248.2	235.1	0.24	0.23	0.31
F3	508.4	551.4	549.9	0.34	0.31	0.30
F3'	248.2	248.5	249.5	0.28	0.28	0.28

2. Zeta potentials

Table S2. Zeta potentials of emulsions diluted by 10 times for F1, F1', F2, F2', F3, and F3'.

Sample	Zeta Potential (mV)
F1	-75.27 ± 3.71
F1'	-35.31 ± 3.16
F2	-34.84 ± 2.22
F2'	-30.33 ± 1.07
F3	-60.42 ± 5.59
F3'	-35.75 ± 0.83

3. Turbiscan profiles

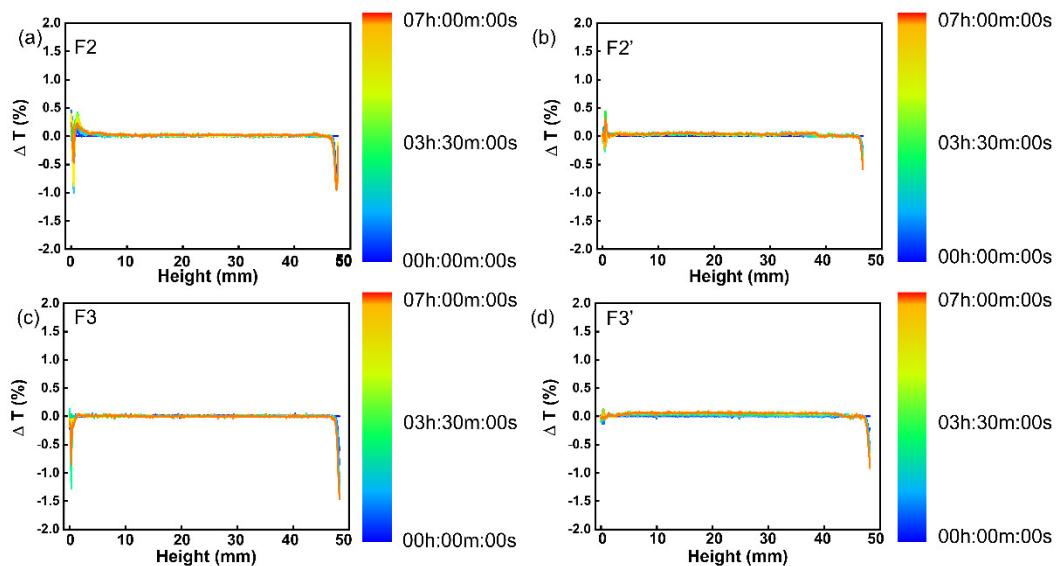


Figure S1. Turbiscan profiles of transmission for (a) F2, (b) F2', (c) F3, and (d) F3', over 7 hours.