

Supporting Information

Fabrication and characterization of superior stable Pickering emulsions stabilized by propylene glycol alginate gliadin nanoparticles

Table. S1 Secondary structure content of GPPs with different gliadin/PGA mass ratios

	α -helix	β -sheet-	β -turn	Unordered coil
GPPs1:0	13.8	41.6	7.9	36.7
GPPs1:0.25	19.4	30.3	13.5	36.8
GPPs1:0.5	22.1	26.1	13.7	38.1
GPPs1:0.75	27.8	12.1	22.7	37.4
GPPs1:1	28.4	8.2	25.2	38.1
GPPs0:1	-	-	-	-

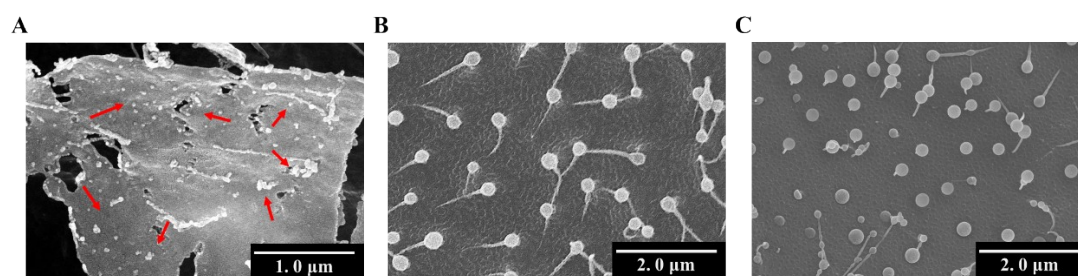


Fig. S 1 Cryo-SEM images of the physical combination of gliadin particles(A),and GPPs with the gliadin/PGA mass ratios of 1:0.05 (B) and 1:0.02 (C). The arrow shows gliadin particles.

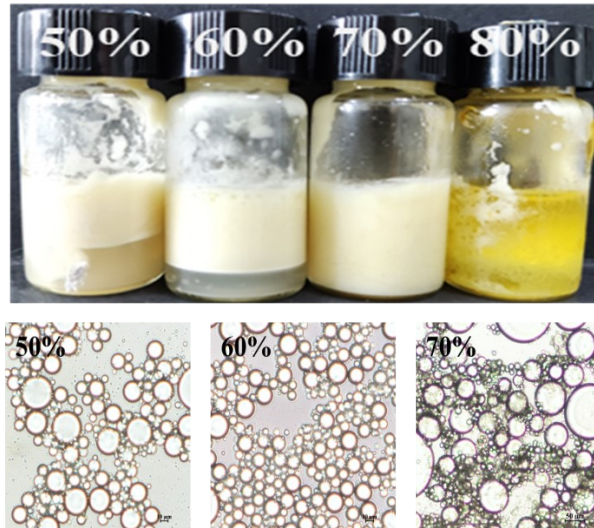


Fig. S 2 Appearance and micrograph of emulsions stabilized by GPPs 1:1 after storage for 6 months.

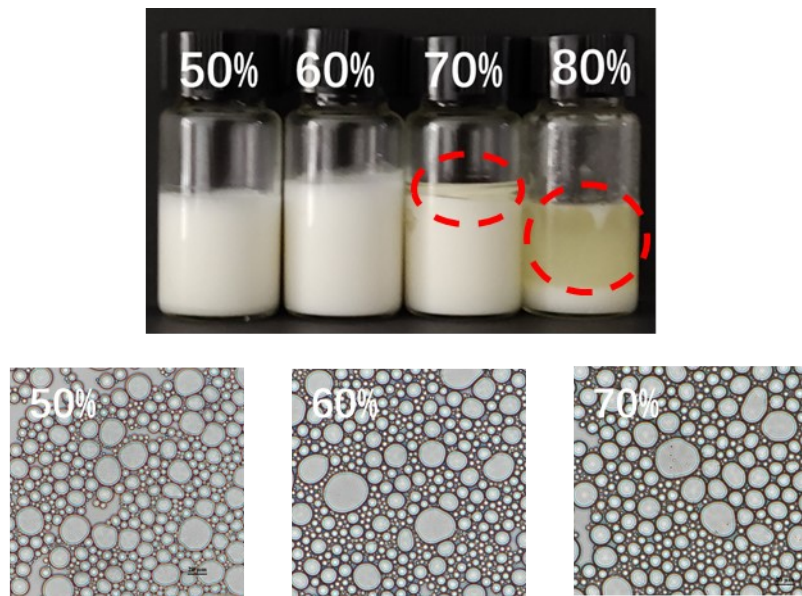


Fig. S 3 Appearance and micrograph of Pickering emulsion co-stabilized by gliadin particles and PGA. The red cycle shows the oil layer.