

Support information

The Relationship between Secondary Structure and the Emulsifying Ability of Protein-based Particles and the Pickering Emulsions Stabilized by Zein-Lysine Complex

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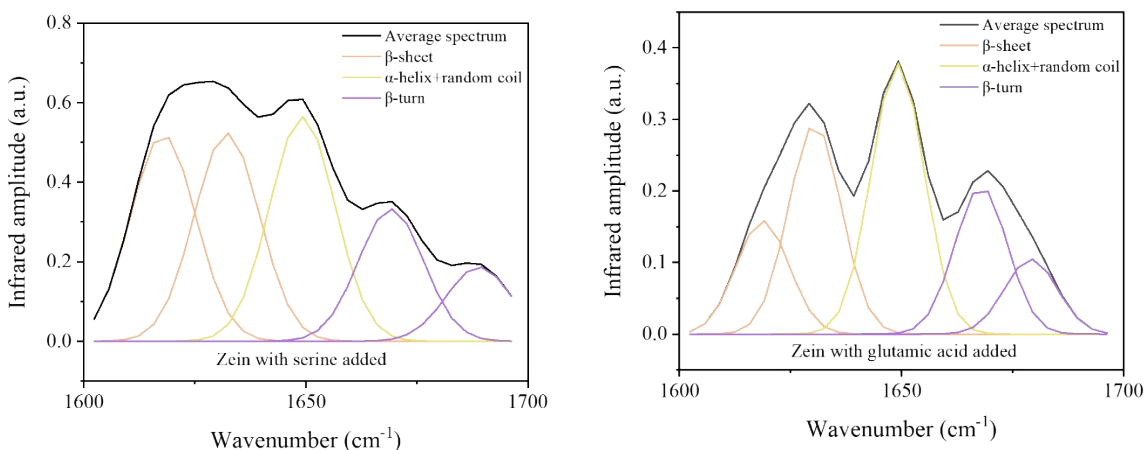


Figure S1. Second derivative of the ATR-FTIR spectra of zein-serine and zein-glutamate complex particles.

Fluorescence microscopy.

The emulsion droplets stabilized by zein and zein complex particles were observed using a fluorescence microscope (Nikon 80i Fluorescence Microscope), where corn oil was stained with Nile Red, and zein with FITC. Specifically, zein and zein complex particles (15 mg/mL) was first incubated with FITC, then mixed with corn oil pre-stained with Nile Red. The volume fraction of oil was 30% of the total sample volume. After mixing, to facilitate observation, the emulsion was manually shaken to achieve relatively larger droplets.

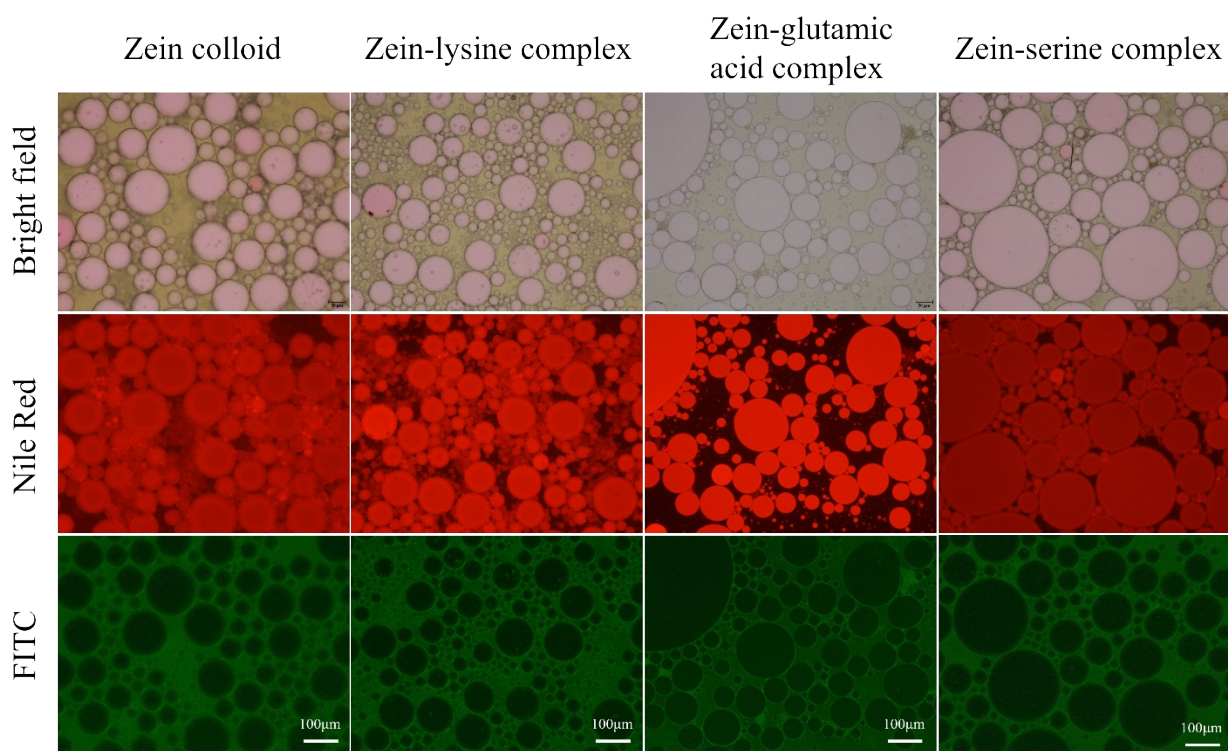


Figure S2. Fluorescence microscopy images of an emulsion stabilized by zein and zein complex particles.