Supplementary Materials

**Figure S1.** Schematic diagram of gel electrophoresis results of BSA in the presence of different concentrations of Al-Mal. A. Native-PAGE of supernatant of Al-Mal-BSA system; B. Native-PAGE of precipitation of the Al-Mal-BSA system; C. SDS-PAGE of the supernatant of the Al-Mal-BSA system; D. SDS-PAGE of precipitation of Al-Mal-BSA system. c (BSA) =1×10^{-6} M, The molar ratios [Al-Mal]/[BSA]=0, 1.25, 2.5, 5, 10, 20 from “1” to “6”

**Figure S2.** UV-vis absorption spectra of Al-Mal. c(Al-Mal)=2×10^{-5}M, when the molar ratio of Al-Mal to BSA is 20, the concentration of Al-Mal in the solution is 2×10^{-3}M