

Stability and gelation behavior of bovine serum albumin pre-aggregates in the presence of calcium chloride

—Electronic Supplementary Information

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A. Characterization of the BSA-PAs using TEM and AFM:

Samples for transmission electron microscopy (TEM) were loaded on a carbon grid (Quantifoil, DE) and stained with a 1% sodium phosphotungstate aqueous solution. Pictures were recorded on a FEI Morgagni 268. For atomic force microscopy (AFM), 10 μ L of 150 fold diluted samples were spotted on a freshly cleaved mica surface for 30 seconds before washing with Milli-Q (Milli-pore) deionized water to remove unattached material and gently drying under nitrogen flux. Samples were imaged at room temperature by a Nanoscope IIIa (Digital Instrument, USA) operating in tapping mode. Scan rate of 0.8 Hz and antimony doped silicon cantilevers with resonance frequency in the range 325-382 kHz and tip radius of 8 nm (Veeco, Plainview, NY, USA) were used.

B. Characterization of the BSA-PAs using SLS and DLS:

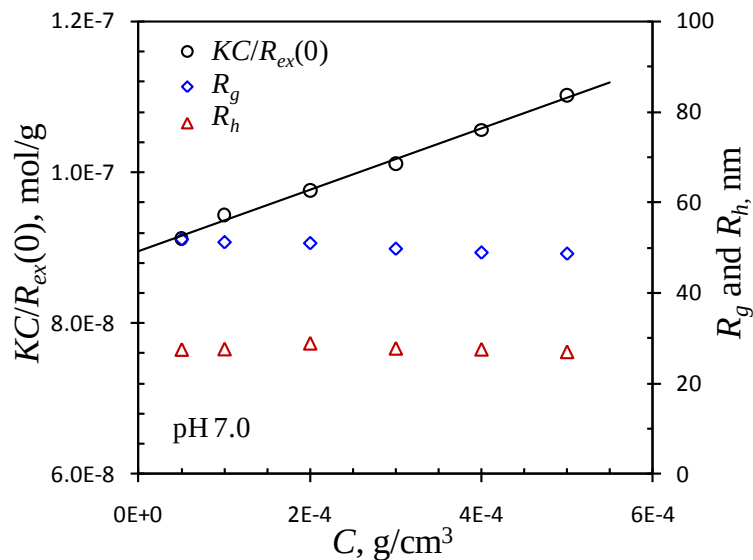


Fig. S1 The quantity, $KC/R_{ex}(0)$, the radius of gyration, $\langle R_g \rangle_0$, and the hydrodynamic radius, $\langle R_h \rangle_0$, of the BSA-PAs, estimated from the SLS and DLS experiments, as a function of the BSA concentration, C .

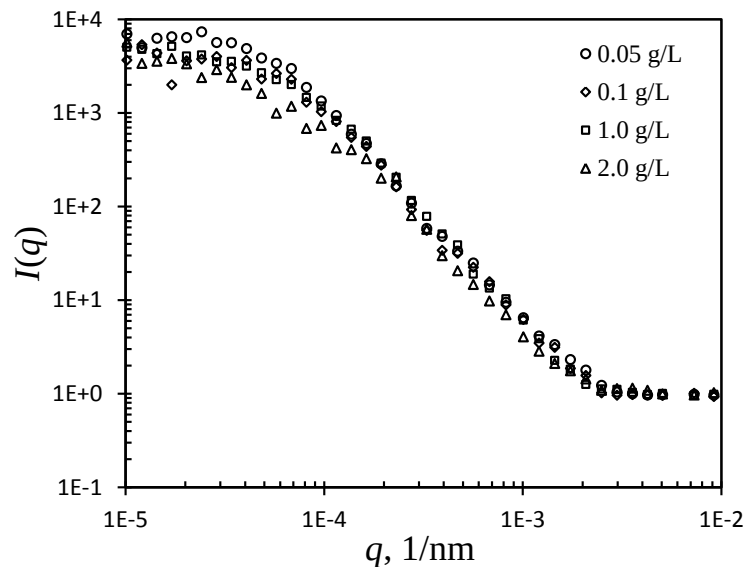


Fig. S2 Intensity curves of the original dispersion of the BSA-PAs measured by the SALS instrument at different BSA concentrations, $C=0.05, 0.1, 1$ and 2 g/L. Note that all the curves have been shifted vertically to overlap in the large q range.