GISAXS and GIWAXS study on self-assembling processes of nanoparticle based superlattices

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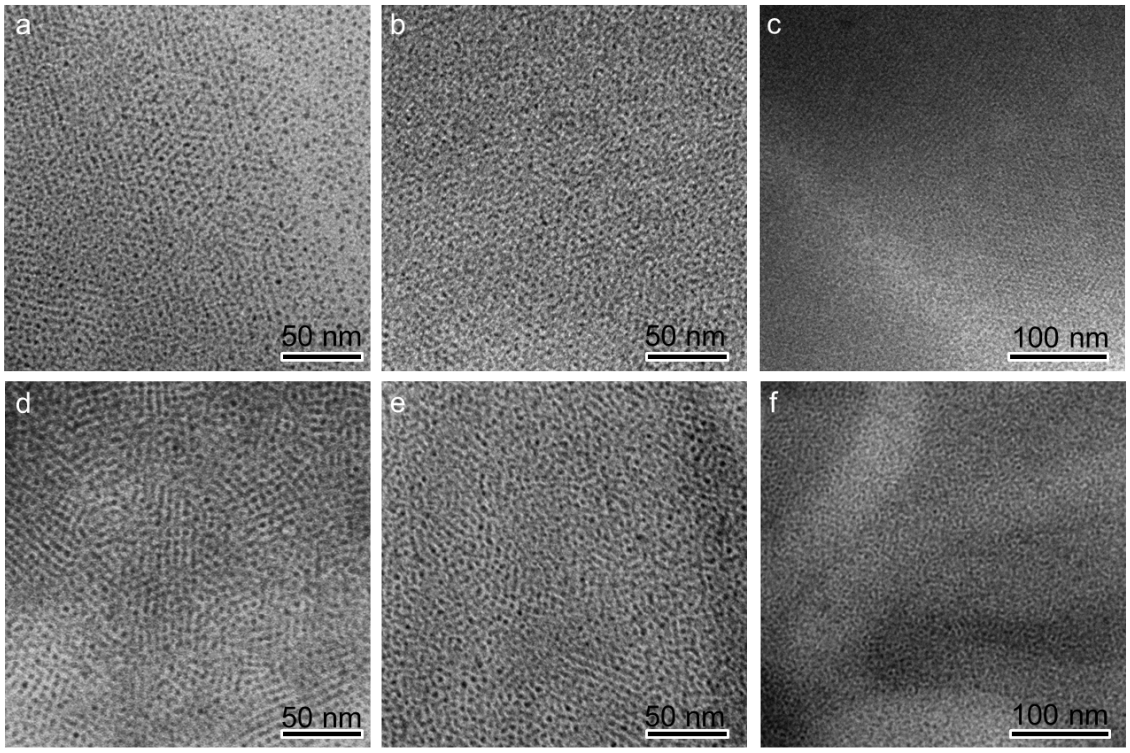

Figure S1. TEM micrographs of PbS NC with a size of 2.7 nm (a-c) and 3.3 nm (d-f), respectively, and concentrations equal to $4 \cdot 10^{-7}$ M (a, d), $8 \cdot 10^{-7}$ M (b, e) and $1.2 \cdot 10^{-6}$ M (c, f), respectively.

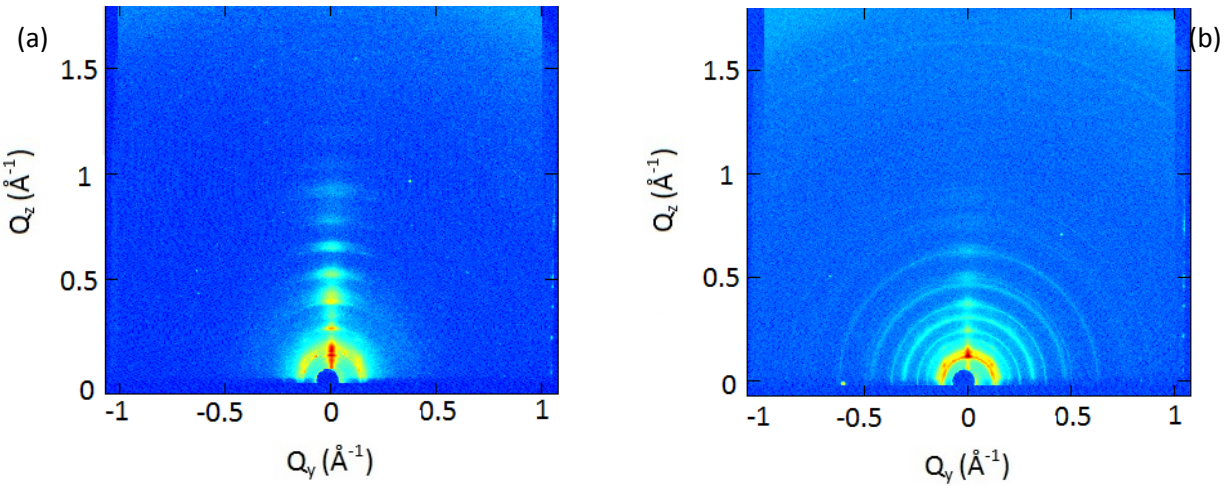

Figure S2. Replicas of Figure 6a-b with a larger field of view (q-range), giving an overview of lamellar scattering contributions**.**

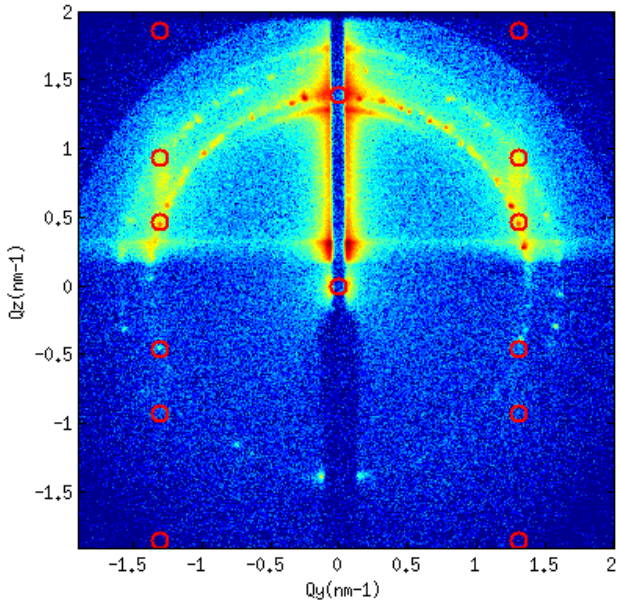

Figure S3. GISAXS pattern of the $PbS_{2.7}$ assembly obtained from a 1:100 diluted low concentration aged *solution* (indexed as *fcc* superlattice).

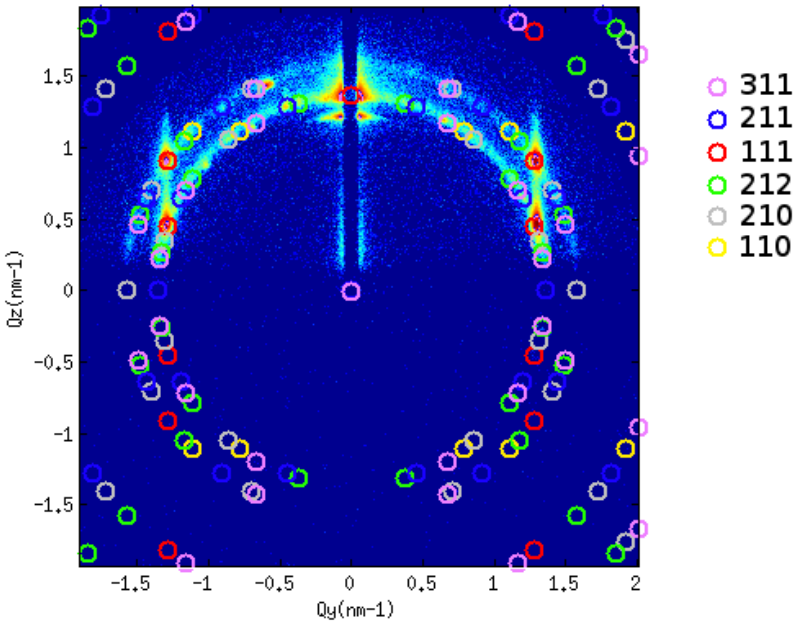

Figure S4. GISAXS pattern of the $PbS_{2.7}$ low concentration sample from aged *solution*. The different color spots represent different SL orientations, as marked in the legend.