

Expanded View Figures

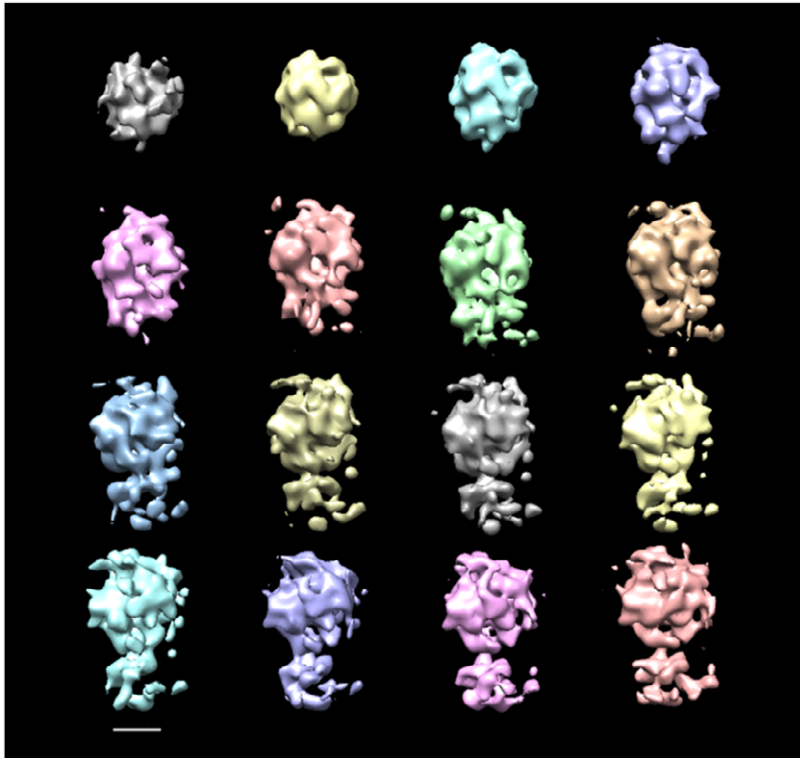


Figure EV1. Subtomogram averaging of decorative nucleosomes.

Initial random reference and averaged subvolumes of decorative nucleosomes like those shown in Fig 2A (region N) through 15 reference-free alignment iterations; the averaged maps are shown without filtering. Scale bar: 5 nm.

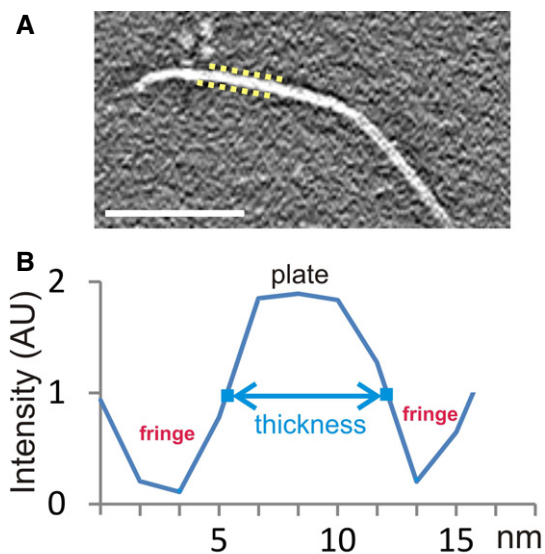


Figure EV2. Measurement of plate thickness, adjusted for CTF fringes.

A The discontinuous yellow lines indicate the position of the CTF fringes on a select region of a plate. These fringes (black in reverse contrast) surround both sides of the plates in the tomograms. Scale bar: 100 nm.

B Example of an intensity profile along a vector perpendicular to a plate. Because of the CTF, the plate's intensity values do not have a hard edge, but rather gradually slope from the peak intensities of the plate to the valley of the surrounding CTF fringes. The plate thickness values presented in Table 1 correspond to the distance between the points (indicated in blue), approximately halfway between the peak and the valley. The intensities at these measurement points also roughly correspond to the background intensity of the tomogram. AU, arbitrary units.

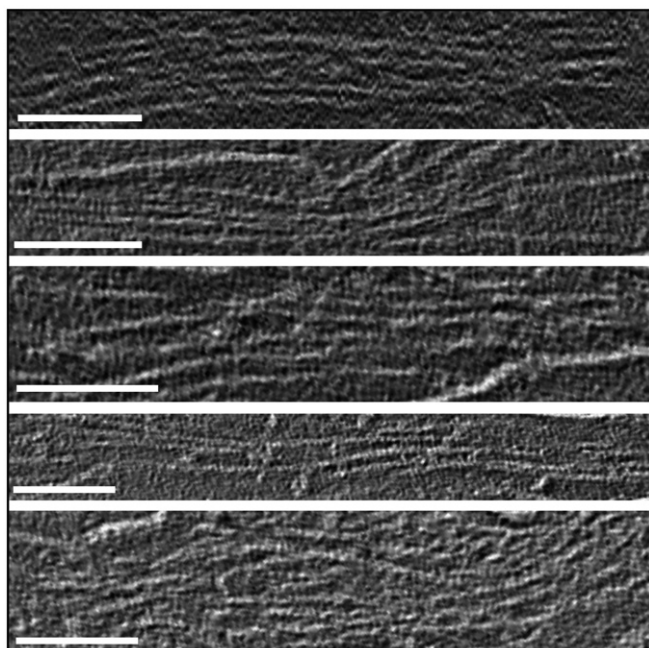


Figure EV3. Additional examples of large multilayered plates.

Slices from tomographic volumes containing large multilayered plates. Scale bars: 100 nm.

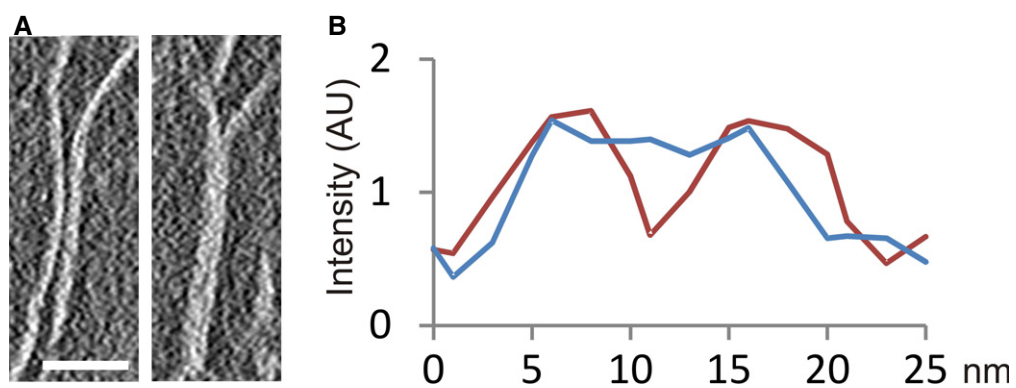


Figure EV4. Contact between two plates.

A Slice showing a region of a tomographic volume in which there are two independent plates (left); in another region, these two plates are in close contact (right). Scale bar: 50 nm.

B Intensity profile (red) along a vector perpendicular to the two independent plates shown in (A), and profile (blue) of the same plates in a region in which they are in contact. AU, arbitrary units.