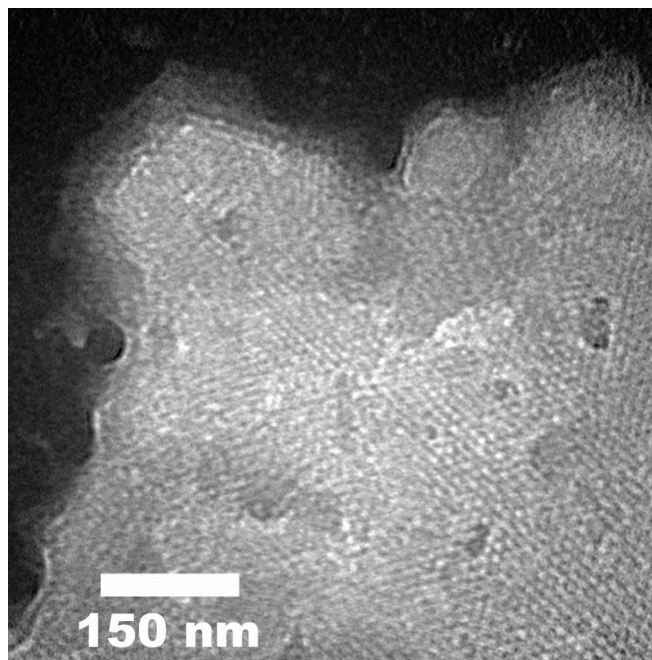


**Figure 1** Control experiment showing DIC (left) and fluorescent (right) images of non-cys-mutated chaperonin crystals after incubation with CdSe-ZnS QDs. The weak luminescence intensity of the fluorescent image indicates minimal QD binding.



**Figure 2** An Energy Filtered TEM thickness map of a typical 2D chaperonin crystal. The intensity in this image is the ratio of the inelastic signal to the elastic signal and is proportional to the ratio of  $t/\lambda$ , where  $\lambda$  is the mean free path for inelastic scattering and  $t$  is the local mass thickness. Regions of nominally uniform intensity indicate regions of nominally constant mass thickness. Increasing intensity indicates increased thickness. The transitions visible at the edges and in various regions on this crystal indicate some crystals can be composed of several chaperonin layers.