## SUPPORTING INFORMATION

Figure SI1. FE-SEM image of a highly uniform film formed by 12 nm  $BaTiO_3$  nanocubes on a silicon wafer

**Figure SI2.** Powder X-Ray diffraction pattern of a superlattice assembly formed by 10 nm BaTiO<sub>3</sub> nanocubes.

**Figure SI3.** TEM images of a superparticle formed by self-assembled 10 nm BaTiO<sub>3</sub> nanocubes (Figure SI3b represents a close-up of the area defined by the yellow rectangle in Figure SI3a).



Figure SI1



Figure SI2



Figure SI3