Description of Additional Supplementary Files

**Supplementary Movie 1.** HPMC simulation of hard-TT ($a = 1.20$, $c = 2.16$) in a fluid-solid (cubic diamond) coexistence state ($\phi = 0.582$) for the capillary fluctuation method.

**Supplementary Movie 2.** HPMC simulation of hard spheres in a fluid-solid (fcc) coexistence state ($\phi = 0.515$) for the capillary fluctuation method.