

Supplementary movie information

Supplementary movie 1- This movie shows the aggregation of annular patchy particles starting from a random distribution till it forms stable spherical closed shells. The parameter for self-assembling patchy subunit system is $\Omega = 74^\circ$, $\frac{k_B T}{u_0} = 0.142$, $\Delta\omega = 0.075$ and $\epsilon = 0.25$. The grey subunits are gas particle, the red subunits are part of the spherical shell but with less than 5 bonded neighbors. The cyan and yellow colored subunits are part of the curved cluster having 5 and 6 bonded neighbors respectively.

Supplementary movie 2- This movie shows the aggregation of annular patchy particles starting from a random distribution till it forms stable spherical closed shells. The parameter for self-assembling patchy subunit system is $\Omega = 84^\circ$, $\frac{k_B T}{u_0} = 0.142$, $\Delta\omega = 0.05$ and $\epsilon = 0.4$. The grey subunits are gas particle, the red subunits are part of the spherical shell but with less than 5 bonded neighbors. The cyan and yellow colored subunits are part of the curved cluster having 5 and 6 bonded neighbors respectively.