

Supporting Information for

Mix and Match — a Versatile Equilibrium Approach for Hybrid Colloidal Synthesis

Matan Yah Ben Zion^{†‡}, Yaelin Caba[†], Ruojie Sha[§], Nadrian C. Seeman[§], Paul M. Chaikin[†]*

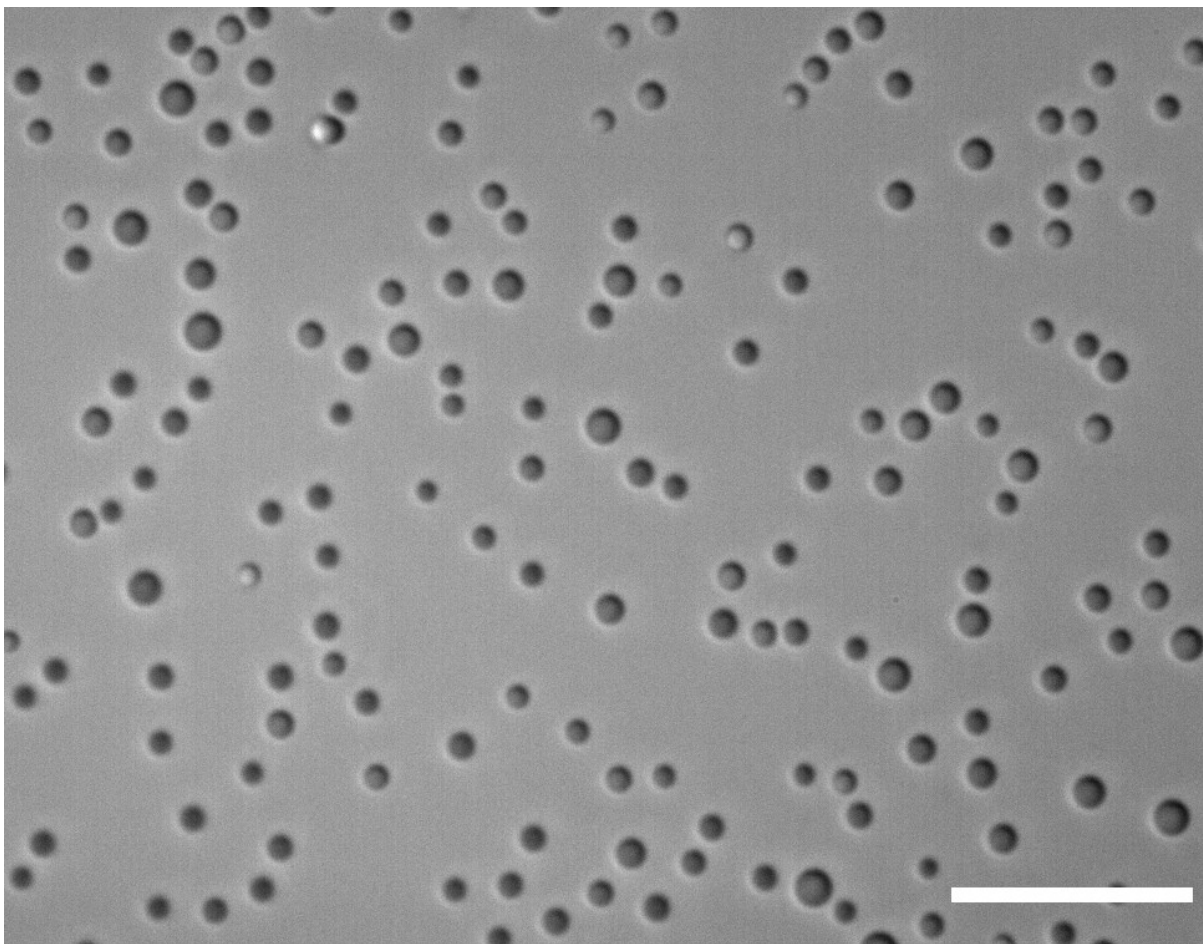


Figure S1. n-Tetradecane oil in water emulsion, stabilized with 0.1% w/w SPAN80, synthesized using membrane emulsification. scale bar: 20 μm .

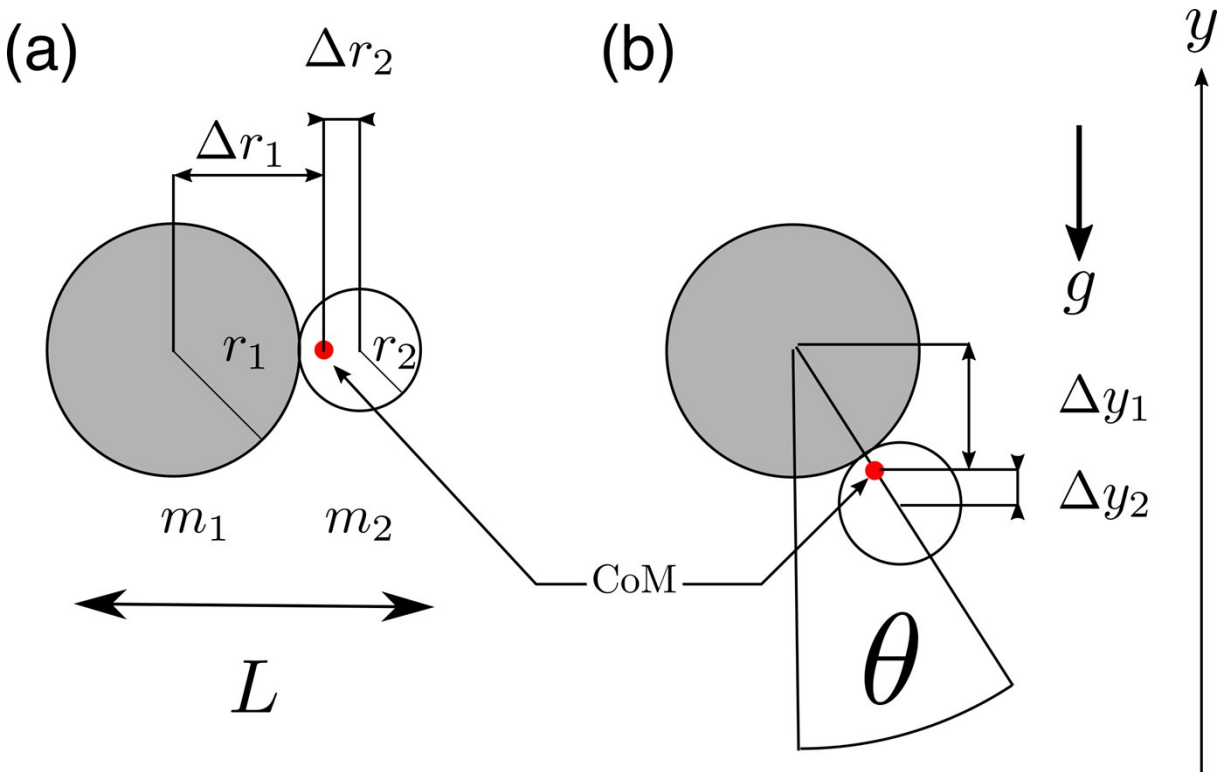


Figure S2. Geometrical parameters of the target dimer. a) A dimer of an overall length L is made of two spheres of each of mass m_1 and m_2 , radius r_1 and r_2 , each displaced from the cluster's Center of Mass (CoM, red dot) by Δr_1 and Δr_2 , respectively. b) The contribution to the potential energy of having the dimer oriented at angle θ relative to gravity is given by the vertical displacement of the center of each sphere from the CoM, Δy_1 , and Δy_2 . Using the dimers' geometry and mass distribution, we can extract the reduced mass of the particle showing quantitative agreement with the design (see Figure 1b in main text and Supporting Movie 1).