Abstract Submitted
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Computational Study of Nanoparticle Clustering via DNA Hyperdyzation[1] XU MA, MARK J. BOWICK, Syracuse University, RASTKO SKNEPNEK, University of Dundee — We use molecular dynamics simulation to study the self-assembly of small clusters through DNA hybridization in a binary mixture of spherical nucleic acid gold nanoparticles(SNA-GNPs) system. The resultant structures are self-assembled clusters with a varying number of large SNA-GNPs clusters around the small ones, forming dimers, trimmers, tetramers etc. The outcome structures can be tuned by adjusting external factors including temperature, particle hydrodynamics size ratio.

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