

# STM Observation of Temperature Dependent Phase Transition of All-Trans-Retinoic Acid (ReA) on Au(111)

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Temperature dependent phase transition of all-trans-retinoic acid (ReA) molecules have been achieved on Au(111) surface under UHV conditions. Using scanning tunneling microscopy (STM), we clearly demonstrate that chiral supramolecular structures constructed by pentamers, tetramers and dimer, both in the form of clusters and large islands, can be formed separately on the surface at different deposition/annealing temperatures.

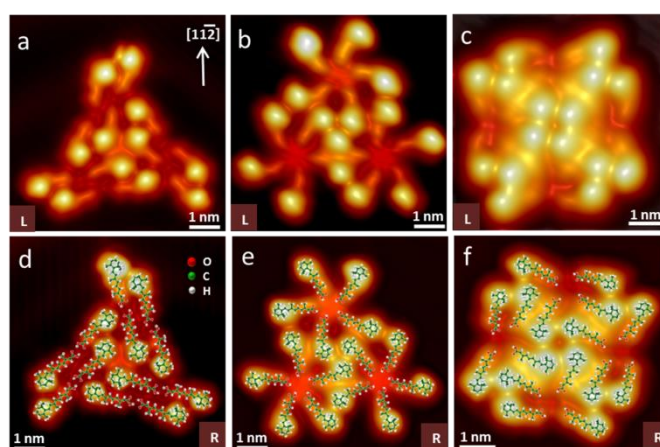


Figure 1. STM image of assembly of ReA molecules on Au(111) surface.