Wetting transition of a nanocluster deposited on a solid surface.

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Nanocluster is an aggregates of molecules containing the number of particles ranging from 10 to 10,000. And, especially, there has been growing interest in the nanostructures obtained by nano-cluster deposition on a solid surface. Although there are many researches, the thermodynamic behavoir and the wetting properties is not well understood. We study nanocluster deposition on the basis of Lennard-Jones potential model and we explain how the incident energy of nanocluster affects adsorption and wetting properties. And we will show our analysis of the transition from multilayer adsorption (partial-wetting) to monolayer adsorption (complete-wetting).