

Title:

New Insights to the Heterogeneous Nucleation by Nanoparticles

Abstract:

Heterogeneous nucleation is known as an important process in cloud microphysics and atmospheric particle formation and is utilized in condensation particle counters for the detection of nanoparticles. Recent improvement of experimental techniques has contributed to a substantial progress in fundamental heterogeneous nucleation research. Particles down to the sizes of single molecules have been investigated successfully providing insight to the gas-liquid phase transition on molecular level. This talk presents recent progress made in critical cluster analysis by applying the heterogeneous nucleation theorem to experimental data.