

Abstract Submitted
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Growth and Scaling Dynamics of Condensed Water Drops around a NaCl crystal nucleus¹ WENCESLAO GONZÁLEZ-VIÑAS, RAMCHANDRA D. NARHE², JOSÉ M. GUADARRAMA³, University of Navarra, DANIEL BEYSENS, CEA-ESEME, ESPCI-PMMH, France — We report experimental results on the evolution of condensed water drops in presence of a NaCl crystal nucleus on an ITO substrate. Initially, a drop of radius R starts to grow on the nucleus. At the same time, at distance r from the nucleus center, a condensation pattern is also growing. A region of inhibited condensation is present between the central drop and the pattern. The width of this region δ asymptotically decreases as $t^{-1/6}$. The mean size of drops in the condensation patterns follows a power law r^γ , where γ evolves in time and has an average value of 0.16 ± 0.07 . The role of surface diffusion on this system behavior is discussed.

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