

Supplemental Document

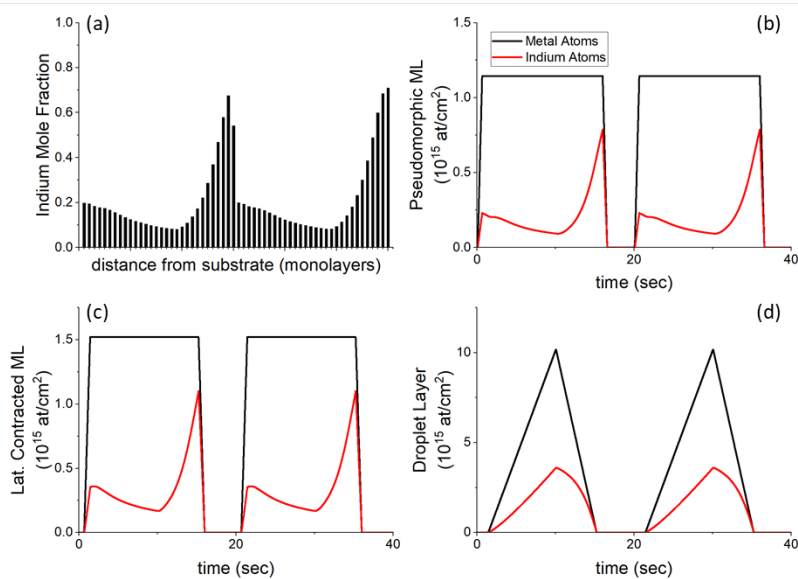


Figure 1: (a) Indium composition profile of a simulated InGaN film with a 20% target composition and arbitrarily chosen segregation coefficients. Evolution of group III (black) and indium (red) adatoms (b) in the pseudomorphic monolayer, (c) in the laterally contracted monolayer, and (d) in the droplets as a function of time during the simulated growth.

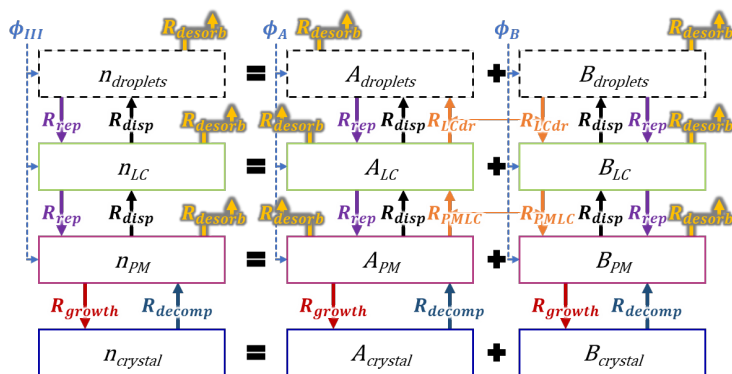


Figure 2: Cascade diagram illustrating the system of coupled differential equations at the core of this dynamic model. Columns represent different atomic species (n = total cations, A = cation A), and rows represent different surface layers.

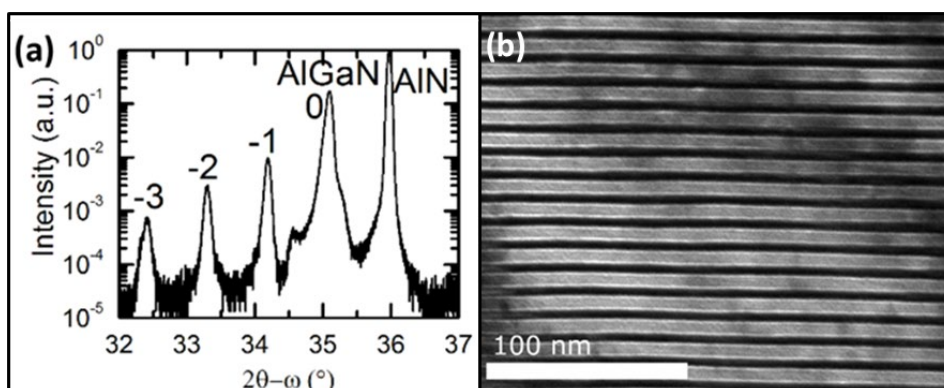


Figure 3: XRD (a) and TEM (b) evidence of self-assembled super lattices in AlGaIn, which does not phase separate in the traditional sense.