## spinodal decomposition

A clustering reaction in a homogeneous, supersaturated solution (solid or liquid) which is unstable against infinitesimal fluctuations in density or composition. The solution therefore separates spontaneously into two phases, starting with small fluctuations and proceeding with a decrease in the Gibbs energy without a nucleation barrier.

## Source:

PAC, 1994, 66, 577 (Definitions of terms relating to phase transitions of the solid state (IUPAC Recommendations 1994)) on page 591