



Figure 6. Electron diffraction patterns taken from In particles in (a) Al and (b) Fe matrices.^{23,24} Note the alignment of diffraction spots between the In particles and matrix in (a), but not in (b). Transmission electron microscopy images of partially molten In particles in (c) Al and (d) Fe, with contact angles indicated.

Growth of Al-rich solid into liquid Al-Si alloy occurs in the diffusion-controlled regime by a continuous mechanism of atomic attachment, at undercoolings as low as 5.8×10^{-8} K.

4. The equilibrium melting temperature of small particles embedded in a matrix can be elevated or depressed, depending on the contact angle that the S–L interface makes at the junction among the solid, liquid, and matrix phases.

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