

Supplementary Material to

Stable and metastable phase equilibria involving the Cu_6Sn_5 intermetallic

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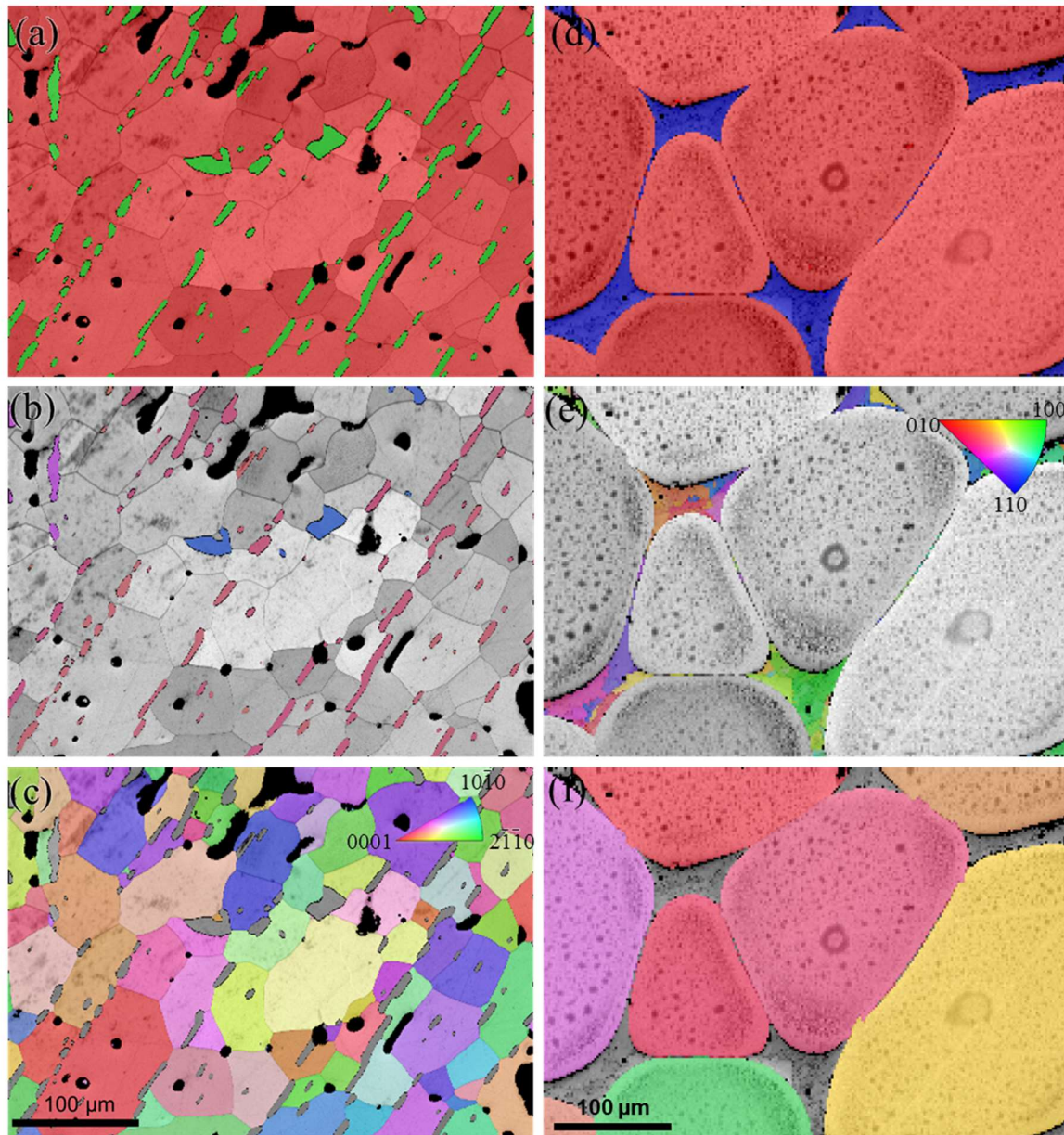


Figure S1 Electron backscatter diffraction maps of $\text{Cu}_{57}\text{Sn}_{43}$ (left column, a, b, c) and $\text{Cu}_{52}\text{Sn}_{48}$ (right column, d, e, f) after homogenization at 653 K for 120 h and quenching. Color is superposed by image quality in grey scale (dark: poor image quality). (a) and (d): phase map with red: η , green: Cu_3Sn and blue: $\beta\text{-Sn}$. (b) and (e): orientation maps for the respective minority phase. (c) and (f): orientation maps for the η majority phase. The color representation of the η -phase and Cu_3Sn in (b), (c) and (f) is given by the stereographic triangle in (c).

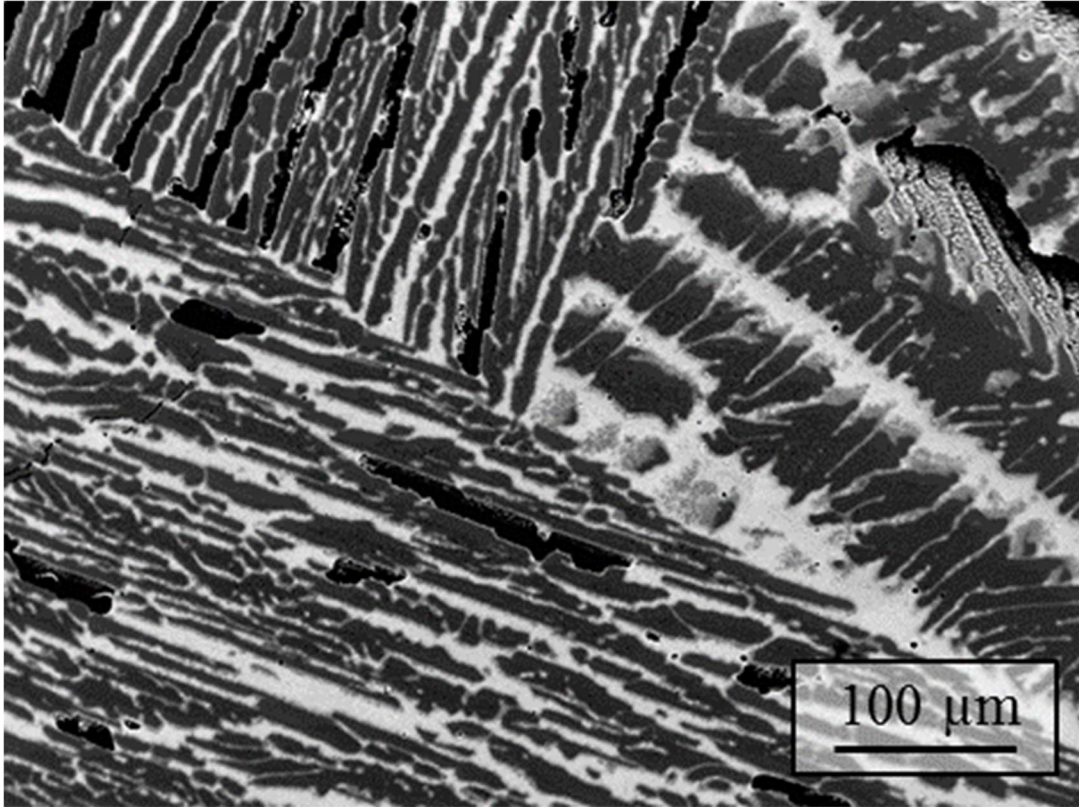


Figure S2 Scanning electron microscopy image taken with backscattered electrons from a polished cross-section of Cu₅₇Sn₄₃ alloy obtained by quenching the melt from 1073 K. Dark primary Cu₃Sn dendrites surrounded by medium dark Cu₆Sn₅ (unspecified state of order) and light β-Sn rich regions. Note the porous regions in interdendritic space.