JPEDAV (2005) 26:198
DOI: 10.1361/15477030523229
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Co-Sb (Cobalt-Antimony)

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The Co-Sb phase diagram in [Massalski2] was updated by [1991Oka] based on [1990Han]. A unique feature in the updated diagram is that the width of the CoSb phase is nearly constant below ~900 °C (dashed line in Fig. 1). This result was obtained by detailed lattice parameter measurements by [1990Han].

Solid lines in Fig. 1 show the CoSb phase diagram as thermodynamically assessed by [2004Li]. The solubility range of the CoSb phase appears to be more normal (the width must become 0 at 0 K smoothly) in comparison with the result of [1990Han]. This result is more consistent with the phase boundary shown in [Massalski2].

The $CoSb_2$ phase in the phase diagram calculated by [1990Han] was reported in [Massalski2] and [1991Oka] as dimorphic γ occurring at ~65 at.% Sb (dashed line in Fig. 1).

These disagreements described above should be clarified.

References

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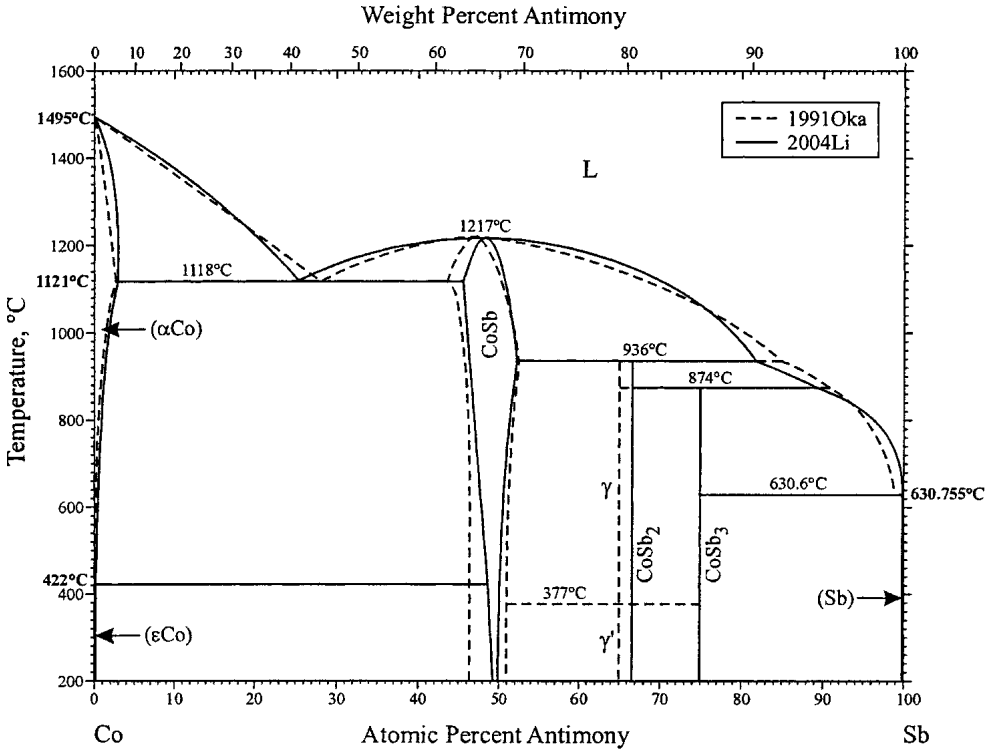

Fig. 1 Co-Sb phase diagram