

B-Fe (Boron-Iron)

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The Fe-B phase diagram in [Massalski2] was based on thermodynamic modeling done by [1993Lia] (dashed lines in Fig. 1). An almost identical phase diagram was obtained by [1994Hal], as reported in [1995Oka]. [2002Van] obtained

two slightly different Fe-B phase diagrams using two thermodynamic models. Solid lines in Fig. 1 show the result based on the "interstitial model." Because experimental phase boundary data are scattered, no preference be-

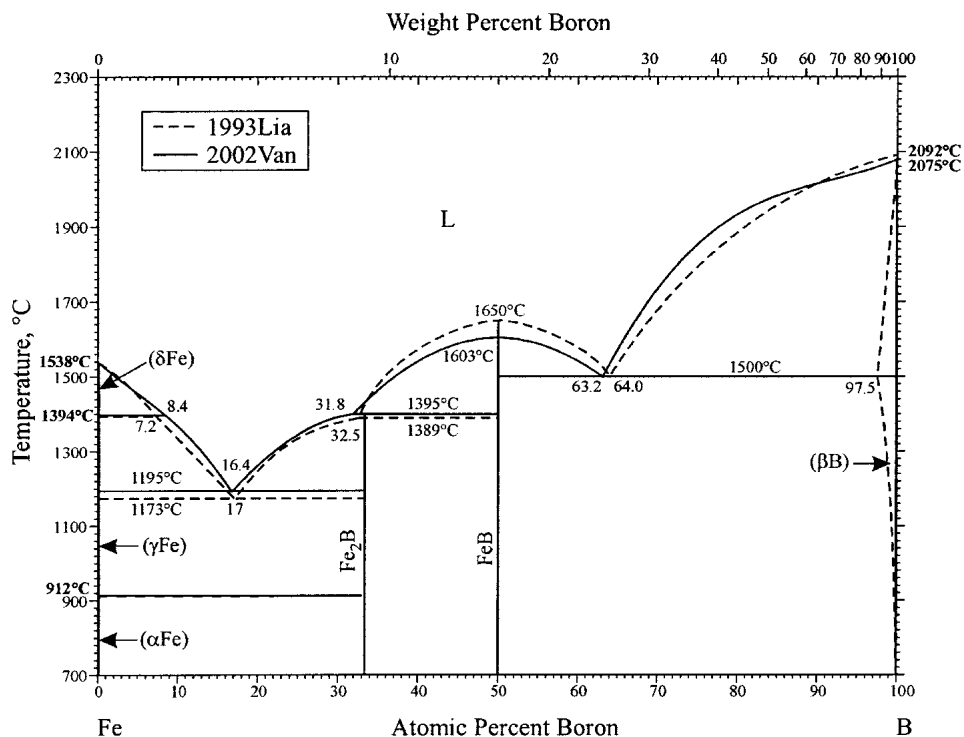


Fig. 1 Fe-B phase diagram

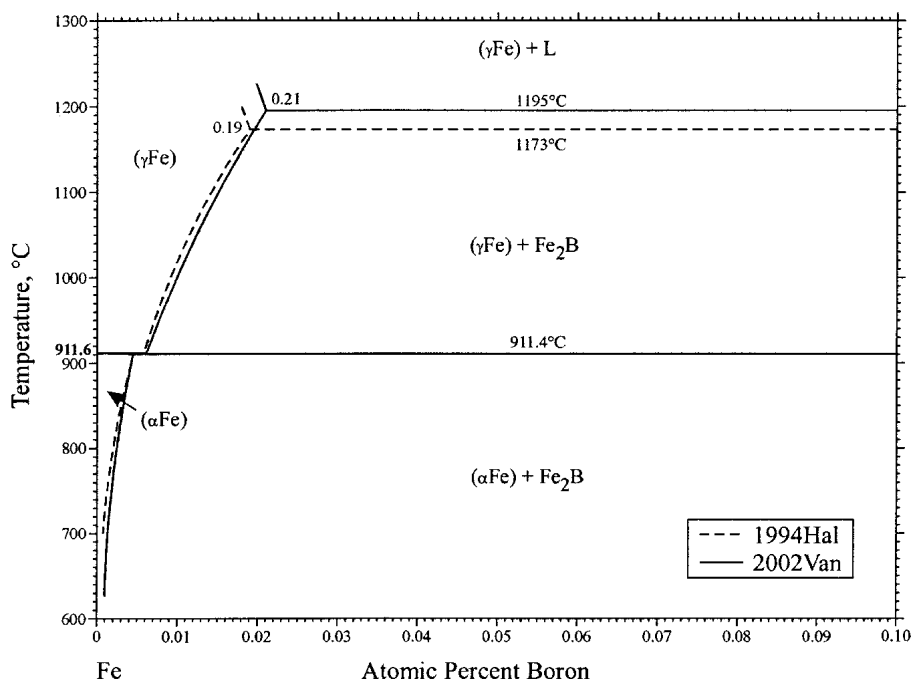


Fig. 2 (γFe) and (αFe) solvus curves

Section III: Supplemental Literature Review

tween [1993Lia] and [2002Van] can be made at this moment.

Figure 2 shows (γ Fe) and (α Fe) solvus curves calculated by [1994Hal] and [2002Van]. The results are almost identical except the difference related to the $L \rightarrow (\gamma\text{Fe}) + \text{Fe}_2\text{B}$ eutectic temperature.

References

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