

# Al-Hf (Aluminum-Hafnium)

H. Okamoto

The Al-Hf phase diagram in [Massalski2] was redrawn from preprint of [1998Mur]. The diagram of [1998Mur] is shown with dashed lines in Fig. 1. Due to large uncertainty in the experimental data, most phase boundaries were speculative. Some liquidus boundaries are strongly asymmetric, which is unlikely.

Solid lines in Fig. 1 show the Al-Hf phase diagram calculated by [2002Wan]. Invariant reaction temperatures and compositions in the figure are for this phase diagram. The asymmetry problem was solved by [2002Wan]. However, because the experimental data used in the thermodynamic modeling were essentially the same as those used by

[1998Mur], the accuracy of the phase diagram must be confirmed. Figure 2 is the Al-Hf phase diagram enlarged in the Al-rich end of Fig. 1.

## References

- 1998Mur:** J.L. Murray, A.J. McAlister, and D.J. Kahan, The Al-Hf (Aluminum-Hafnium) System, *J. Phase Equilibria*, **19**(4), 1998, p 376-379
- 2002Wan:** T. Wang, Z. Jin, and J.C. Zhao, Thermodynamic Assessment of the Al-Hf Binary System, *J. Phase Equilibria*, **23**(5), 2002, p 416-423

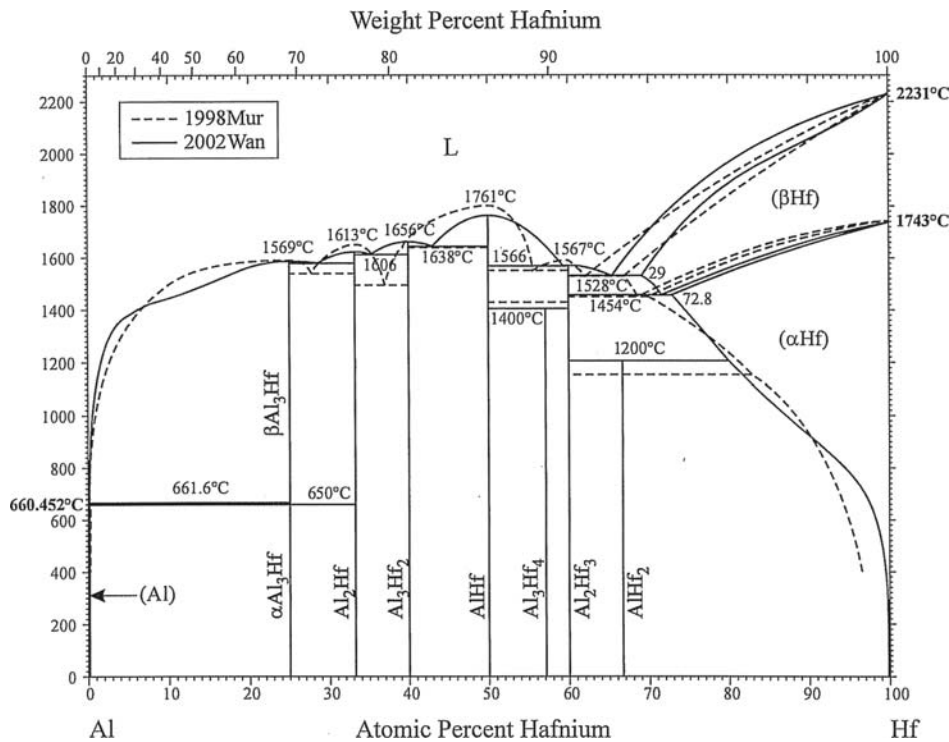


Fig. 1 Al-Hf phase diagram

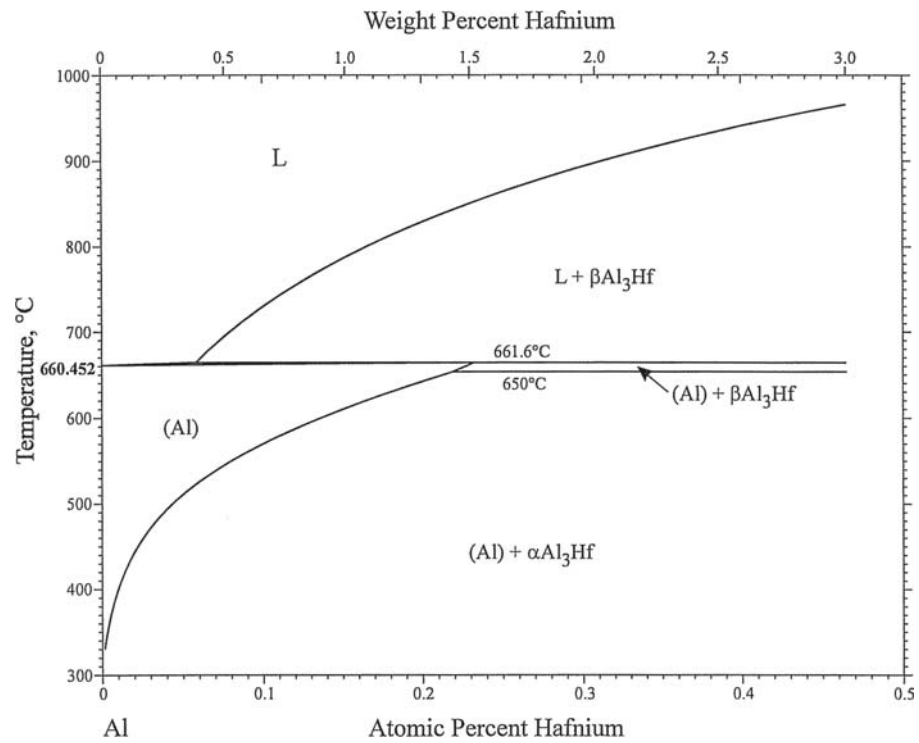


Fig. 2 Al-rich end of the Al-Hf phase diagram