

Ni-Ru (Nickel-Ruthenium)

H. Okamoto

The Ni-Ru phase diagram in [Massalski2] was redrawn from [1986Nas]. [1994Oka] pointed out that this phase diagram may need further studies because the (Ni) solvus and the (Ru) solvus would intersect in the metastable state unless an unlikely abrupt change of slope is introduced.

[2004Hal] obtained the Ni-Ru phase diagram by thermodynamic modeling. The problem described above was solved. Figure 1 shows the Ni-Ru phase diagram assessed by [2008Hal], which superseded [2004Hal].

Reference

- 1986Nas:** P. Nash, The Ni-Ru (Nickel-Ruthenium) System, *Bull. Alloy Phase Diagr.*, 1986, **7**(2), p 130-133
- 1994Oka:** H. Okamoto and T.B. Massalski, Binary Alloy Phase Diagrams Requiring Further Studies, *J. Phase Equilib.*, 1994, **15**(5), p 500-521
- 2004Hal:** S. Hallström, Thermodynamic Assessment of the Ni-Ru system, *J. Phase Equilib. Diffus.*, 2004, **25**(3), p 252-254
- 2008Hal:** S. Hallström, D. Andersson, A. Ruban, and J. Ågren, Thermodynamic Reassessment of the Ni-Ru System and Assessment of the Al-Ni-Ru System at 1273-1523 K Using Ab Initio Calculations, *Acta Mater.*, 2008, **56**(15), p 4062-4069

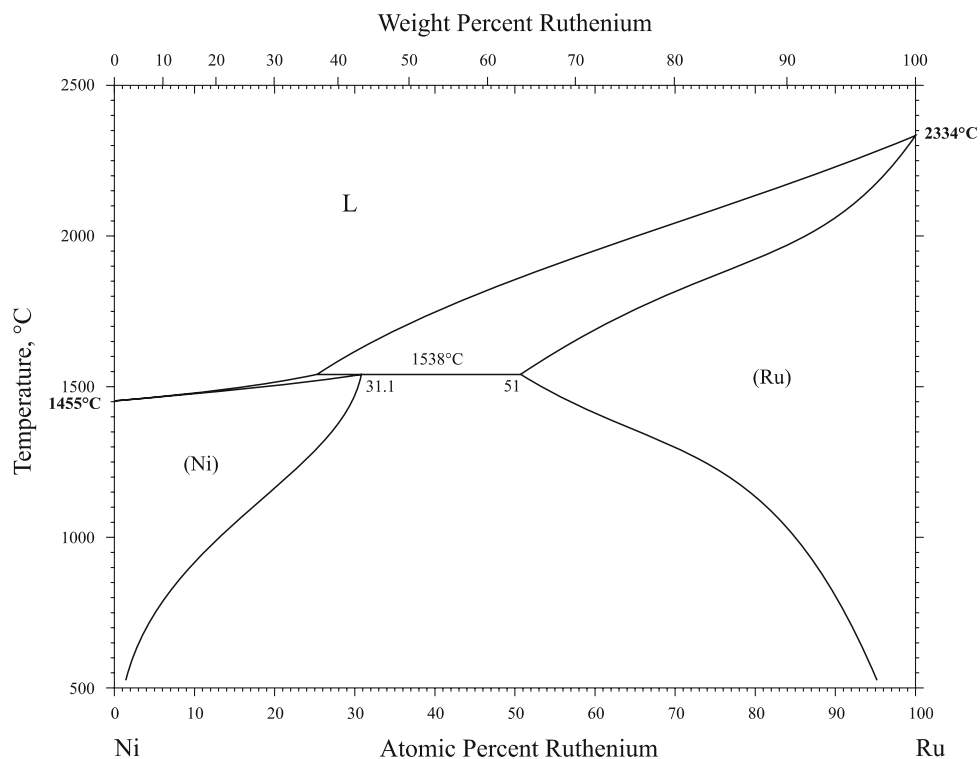


Fig. 1 Ni-Ru phase diagram