

Pd-Zr (Palladium-Zirconium)

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The Pd-Zr phase system was reinvestigated by [1999Wat], as reported by [2002Oka] in this section. The Pd-Zr phase diagram is shown with dashed lines in Fig. 1.

[2003Du] evaluated this system thermodynamically. The phase boundary data were adopted from [1999Wat]. The result is shown with solid lines in Fig. 1. The most significant difference in the interpretation of the same data between [1999Wat] and [2003Du] is found in the formation reaction of Pd_4Zr_3 on cooling, i.e., peritectic [1999Wat] or eutectoid [2003Du]. The disagreement in the forms of liquidus and solidus of (Pd) and (βZr) phases is also noticeable. Further experimental refinement may be needed par-

ticularly in regions where the thermodynamic model could not reproduce the experimentally determined boundaries, as described above.

References

- 1999Wat:** R.M. Waterstrat, A. Shapiro, and A. Jeremie: "The Palladium-Zirconium Phase Diagram," *J. Alloys Compd.*, 1999, 290, pp. 63-70.
- 2002Oka:** H. Okamoto: "Pd-Zr (Palladium-Zirconium)," *J. Phase Equilibria*, 2002, 23(3), p. 290.
- 2003Du:** "Thermodynamic Assessment of the Pd-Zr System," *Z. Metallkde.*, 2003, 94(8), pp. 864-70.

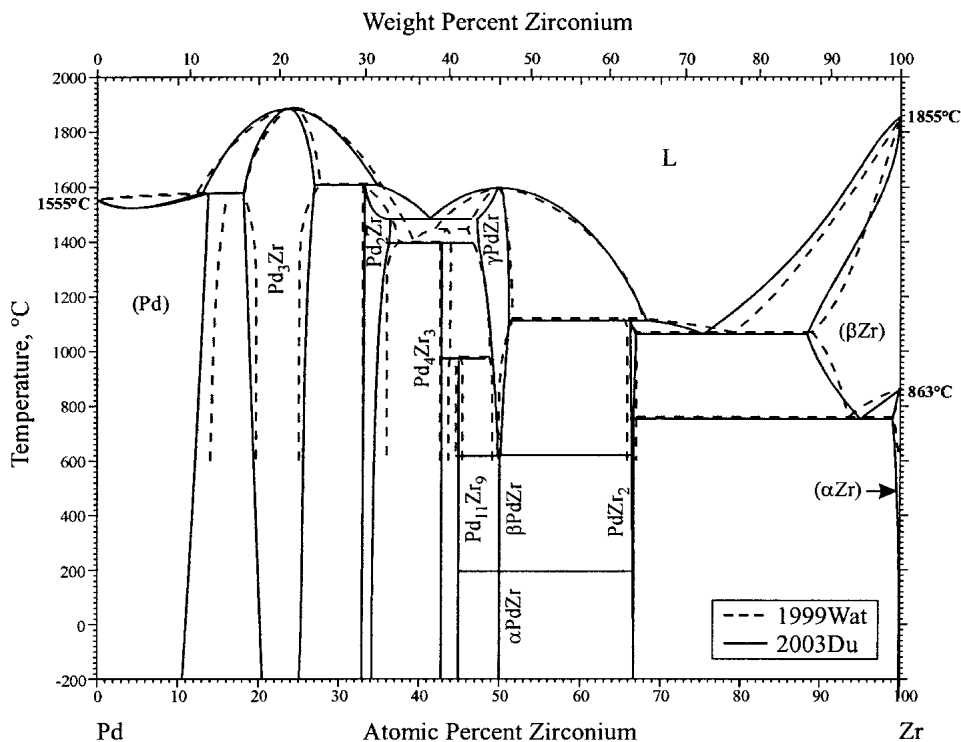


Fig. 1 Pd-Zr phase diagram