

Pd-Zr (Palladium-Zirconium)

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The Pd-Zr phase diagram has been updated several times [1993Oka, 1994Oka, 2002Oka, 2004Oka]. The last update [2004Oka] was based on the thermodynamic assessment done by [2003Du]. This update was revised by the same author's group [2006Guo]. The result is shown in Fig. 1.

Figure 1 may require further revision because a new phase diagram has been reported for the near equiatomic range by [2006Nis] based on diffusion couple and DSC measurements. The result is shown in Fig. 2. Pd₁₂Zr₁₃ in Fig. 2 appears to correspond to βPdZr in Fig. 1, but further clarification is needed due to absence of crystallographic data for these phases.

1994Oka: H. Okamoto, Pd-Zr (Palladium-Zirconium), *J. Phase Equilib.*, 1994, **15**(6), p 654-655

2002Oka: H. Okamoto, Pd-Zr (Palladium-Zirconium), *J. Phase Equilib.*, 2002, **23**(3), p 290

2003Du: Z. Du, Thermodynamic Assessment of the Pd-Zr System, *Z. Metallkd.*, 2003, **96**(8), p 864-870

2004Oka: H. Okamoto, Pd-Zr (Palladium-Zirconium), *J. Phase Equilib. Diffus.*, 2004, **25**(3), p 299

2006Guo: C. Guo, Z. Du, and C. Li, Thermodynamic Modeling of the Pd-Zr System, *Calphad*, 2006, **30**, p 482-488

2006Nis: T. Nishiura, T. Yamamuro, D. Hashimoto, Y. Morizono, M. Nishida, Martensitic Transformation and Phase Equilibrium in Near Equiatomic Zr-Pd Alloys, *Mater. Sci. Eng., A*, 2006, **438-440**, p 852-856

References

1993Oka: H. Okamoto, Pd-Zr (Palladium-Zirconium), *J. Phase Equilib.*, 1993, **14**(2), p 266

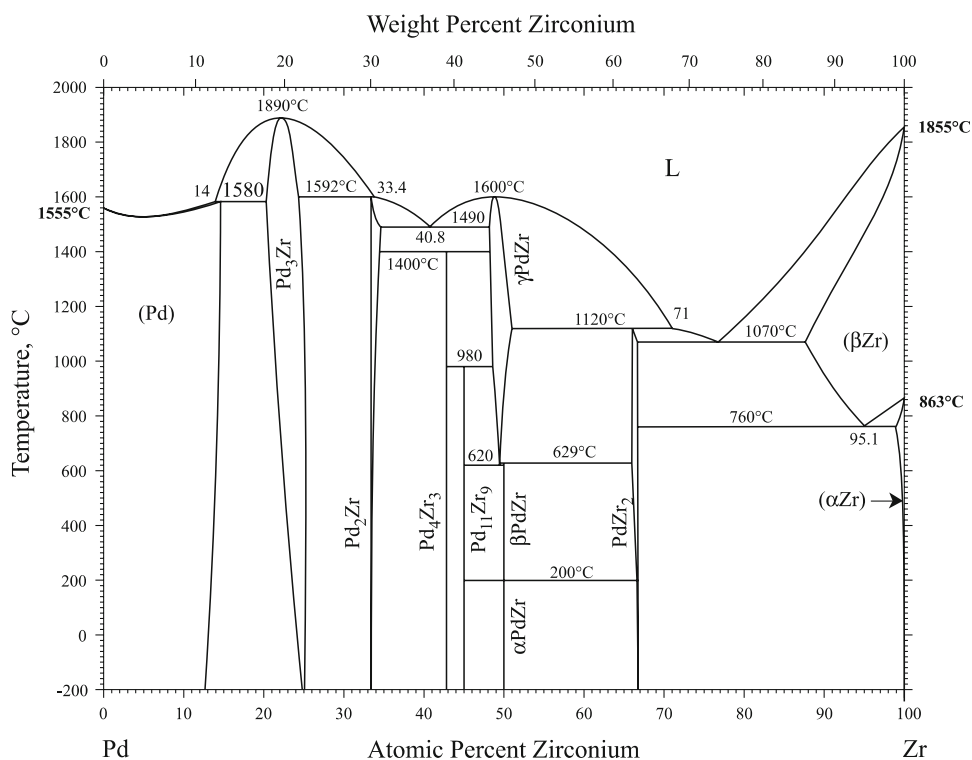


Fig. 1 Pd-Zr phase diagram according to [2006Guo]

Section III: Supplemental Literature Review

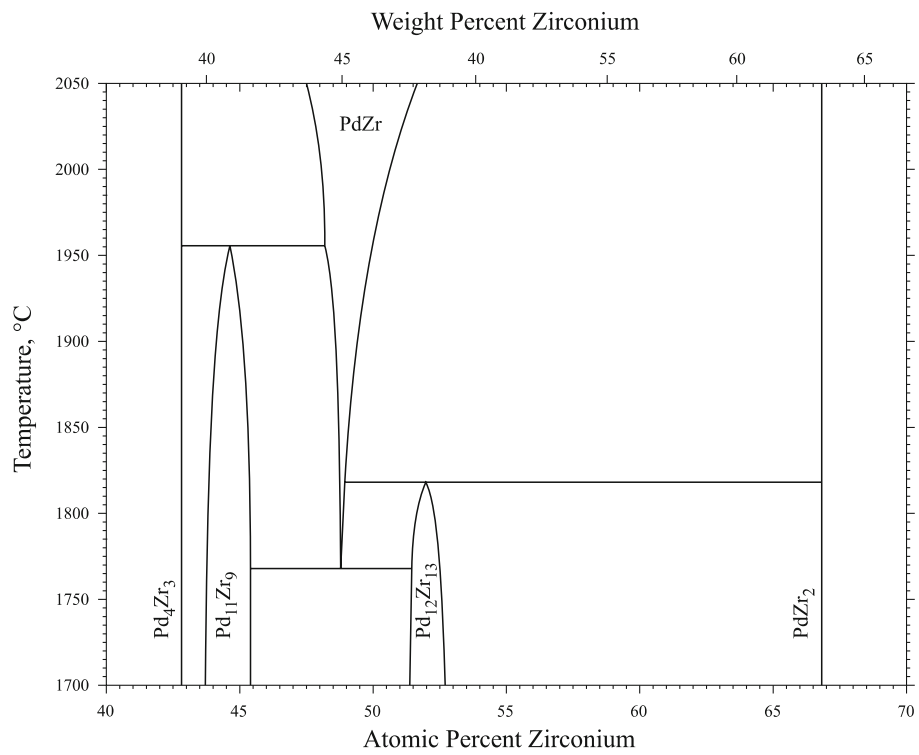


Fig. 2 Pd-Zr phase diagram according to [2006Nis]