

Au – K (Gold – Potassium)

Phase diagram

On the basis of recent EMF measurements performed by Egan et al. [92 Ega] – unpublished up to now – however, Pelton [92 Pel] stated that the accuracy of the liquids in Fig. 1 (from [92 Ega]) seems to be rather poor. There is some need of confirmation.

Crystal structure

Crystallographic data of intermediate phases have been calculated by [Pearson] and are given in Table 1.

Table 1. Au–K. Structure and lattice parameters of intermediate phases (from [Massalski] and [Pearson]).

Phase	Structure	Prototype	Lattice parameters [nm]			Reference
			<i>a</i>	<i>b</i>	<i>c</i>	
Au ₂ K	hex	MgZn ₂	0.5623		0.9791	[88 Ran]
Au ₃ K ₂	ort	Ca ₂ Cu ₂ Ga	0.4875	0.5454	1.0004	[89 Kri]
Au ₅ K	hex	CaCu ₅	0.5663		0.4483	[64 Rau], [93 Zac]
AuK						
AuK ₂						

Figure

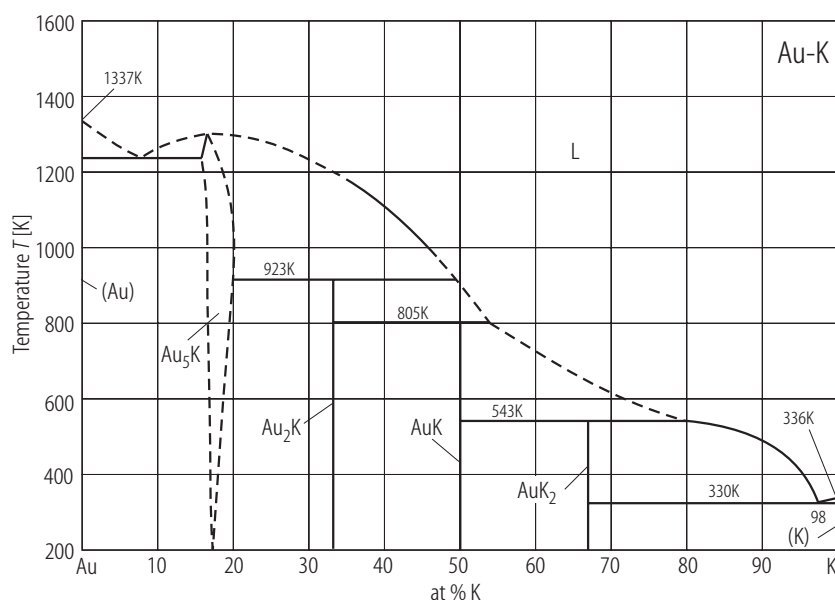


Fig. 1. Au–K. Tentative phase diagram [92 Ega].

References

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