

Ca-Sr (Calcium-Strontium)

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The Ca-Sr phase diagram in [Massliski2] was redrawn from [1986Alc], who accepted the liquidus and solidus from [1958Sch]. [1986Alc] speculated the boundaries between (β Ca, β Sr) and (α Ca, α Sr) because [1958Sch] reported three allotropic forms in both Ca and Sr instead of the currently accepted two forms.

Figure 1 shows the Ca-Sr phase diagram calculated by [2003Zho]. This phase diagram based on thermodynamics is expected to be a better presentation of the Ca-Sr system than [1986Alc]. The two-phase field between (β Ca, β Sr) and (α Ca, α Sr) is so narrow that it is invisible in Fig. 1.

[2008Alj] also calculated the Ca-Sr phase diagram based on the same [1958Sch] data. However, the phase diagram expressed in weight percent in [1958Sch] was reproduced in terms of atomic percent, judged from the location of data points. Nevertheless, [2008Alj] is in agreement with

[2003Zho] with regard to the very narrow (β Ca, β Sr) + (α Ca, α Sr) two-phase field.

References

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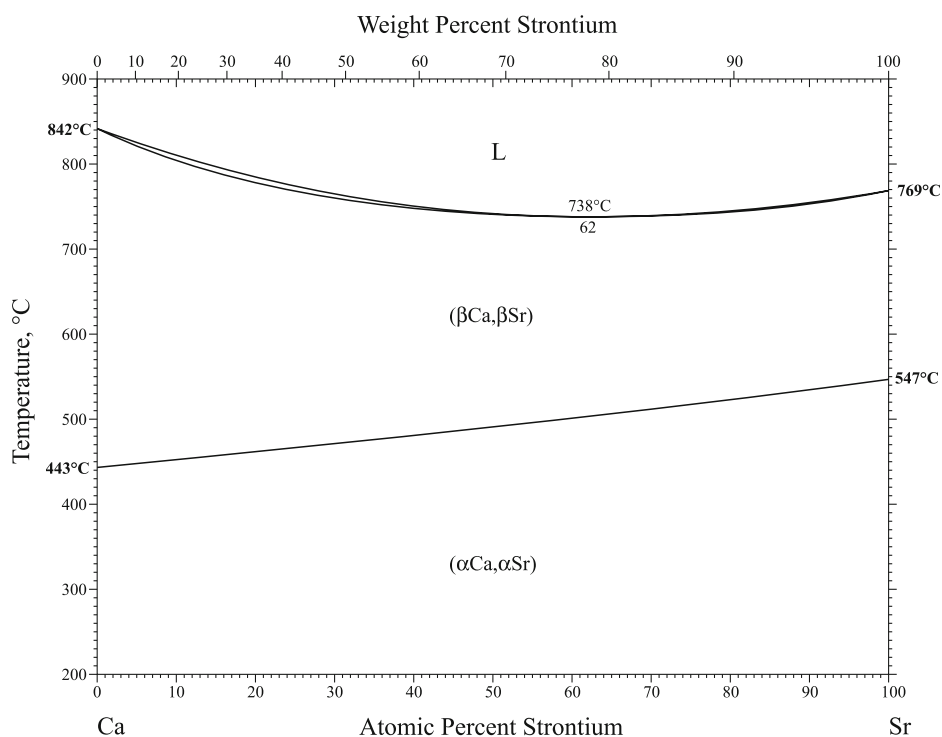


Fig. 1 Ca-Sr phase diagram