

# O-Sr (Oxygen-Strontium)

H. Okamoto

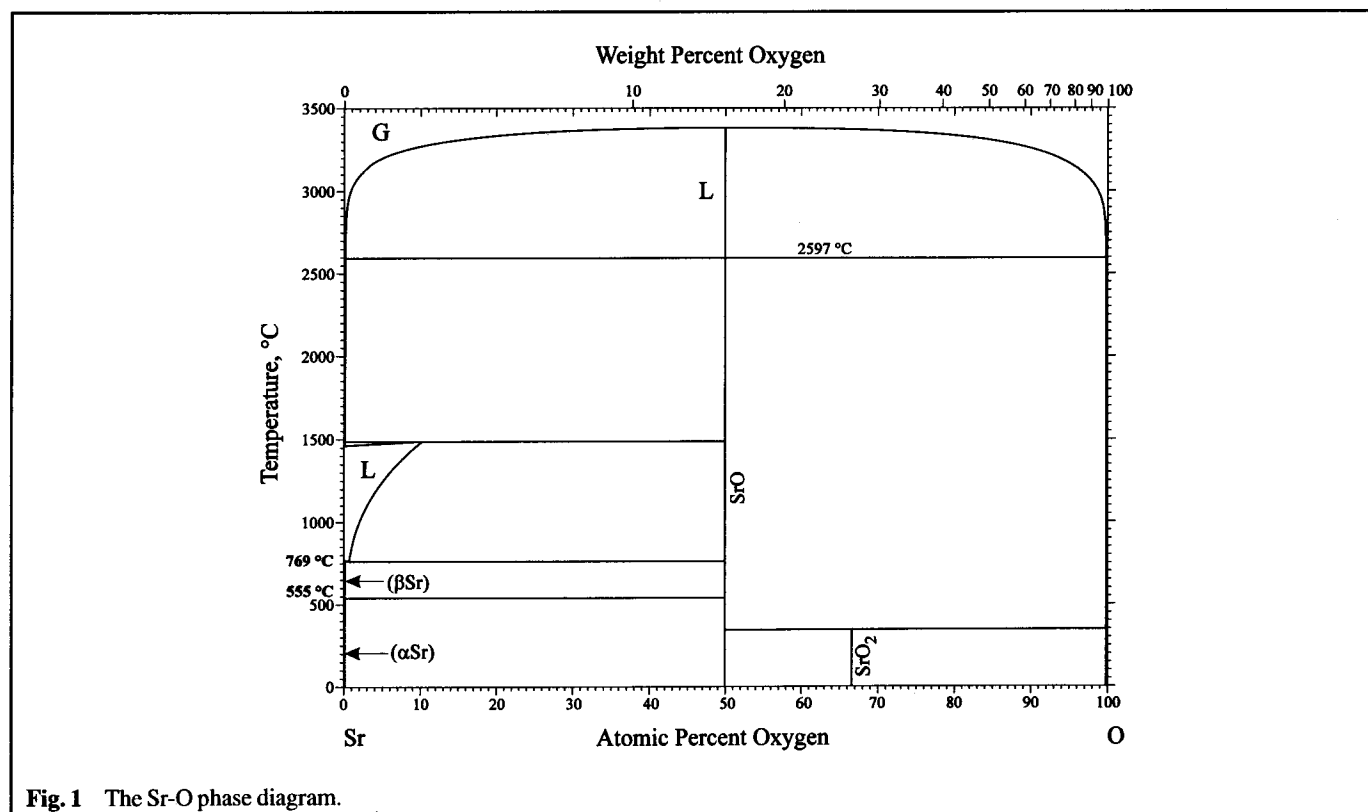
Figure 1 shows the Sr-O phase diagram at 1 bar total pressure calculated by [96Ris]. Crystal structure data (Table 1) are from [56Swa]. [Massalski2] quoted the melting point of SrO at 2420 °C from [63Sch]. [96Ris] accepted a much higher temperature in Fig. 1 from [69Nog].

## Cited References

- 56Swa:** H.E. Swanson, N.T. Gilfrich, and G.M. Ugrinic, *NBS Circ.*, 539 (1956).  
**63Sch:** S.J. Schneider, *NBS Monograph 68*, 31 pages (1963).  
**69Nog:** T. Noguchi, *Advances in High Temperature Chemistry*, L. Eyring, Ed., Vol. 2, Academic Press, New York, 235-262 (1969).  
**96Ris:** D. Risold, B. Hallstedt, and L.J. Gauckler, *Calphad*, 20(3), 353-361 (1996).

**Table 1** Sr-O Crystal Structure Data

Phase	Composition, at. % O	Pearson symbol	Space group	Strukturbericht designation	Prototype
(βSr).....	0	<i>cI2</i>	<i>Im</i> $\bar{3}m$	A2	W
(αSr).....	0	<i>cF4</i>	<i>Fm</i> $\bar{3}m$	A1	Cu
SrO.....	50	<i>cF8</i>	<i>Fm</i> $\bar{3}m$	B1	NaCl
SrO <sub>2</sub> .....	66.7	<i>tI6</i>	<i>I4/mmm</i>	C11 <sub>a</sub>	CaC <sub>2</sub>



**Fig. 1** The Sr-O phase diagram.