

No. 1C-a68 PbTiO₃–PbHfO₃

1b	Phase diagram: Fig. 1C-a68-001, Fig. 1C-a68-002; see also	64Hal
5a	Dielectric constant: see	55Jaf
7a	Electromechanical properties: see	55Jaf

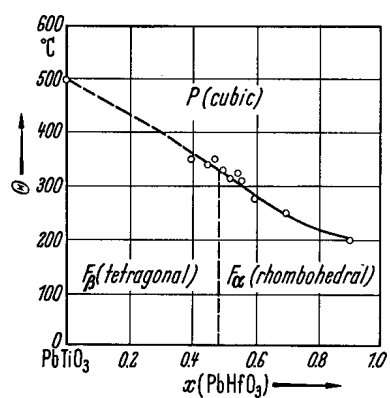


Fig. 1C-a68-001. $\text{Pb}(\text{Ti}_{1-x}\text{Hf}_x)\text{O}_3$. Θ vs. x [55Jaf].

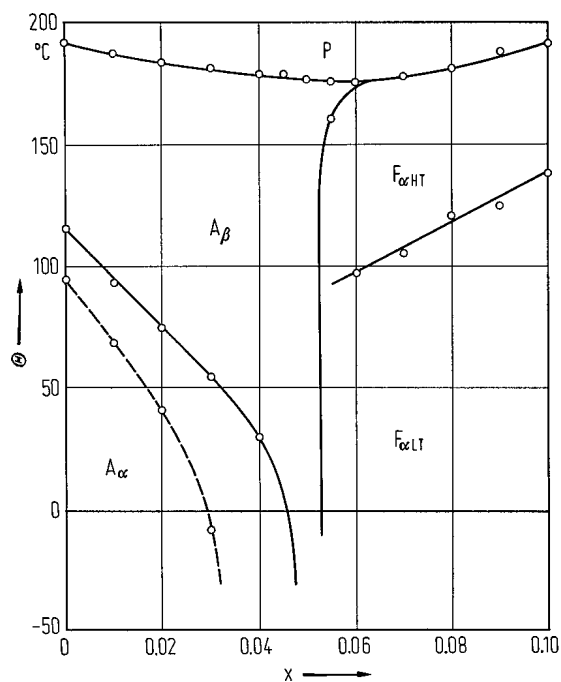


Fig. 1C-a68-002. $\text{Pb}_{0.99}[(\text{Hf}_{1-x}\text{Ti}_x)_{0.98}\text{Nb}_{0.02}]\text{O}_3$. Θ vs. x [77Gra]. Dotted curve: cooling run. Phases: F_{α} , $F_{\alpha\text{LT}}$, $F_{\alpha\text{HT}}$: ferroelectric rhombohedral, F_{β} : ferroelectric tetragonal, A_{α} : anti-ferroelectric orthorhombic, A_{β} : antiferroelectric tetragonal, P : paraelectric cubic.

References

- 55Jaf Jaffe, B., Roth, R.S., Marzullo, S.: J. Res. Natl. Bur. Stand., Sect. A **55** (1955) 239.
64Hal Hall, C.A., Dungan, R.H., Stark, A.H.: J. Am. Ceram. Soc. **47** (1964) 259.
77Gra Grange, G., Troccaz, M.: C. R. Acad. Sci., Ser. B **284** (1977) 279.