**No. 1C-c26 $PbTiO_3$–$PbZrO_3$–$PbO·SnO_2$–$PbNb_2O_6$**

| | | |
|---|---|---|
| 1b | Phase diagram: Fig. 1C-c26-001, Fig. 1C-c26-002. | |
| 4 | Thermal expansion: Fig. 1C-c26-003. | |
| 5a | Effect of pressure on dielectric constant: Fig. 1C-c26-004. | |
| b | Effect of electric field on polarization: Fig. 1C-c26-005. | |
| d | Electrocaloric effect of $Pb_{0.99}(Ti_{0.07}Zr_{0.68}Sn_{0.25})_{0.98}Nb_{0.02}O_3$ ceramics: see | 82Ols |
| | Pyroelectricity of the same ceramics: see | 82Ols |
| 7b | Electrostriction: Fig. 1C-c26-005. | |
| 8b | Effect of hydrostatic pressure on strains: see | 64Ber |
| 13c | Mössbauer effect: see | 70Sun |
| 16 | Thin film: see | 93Aki |

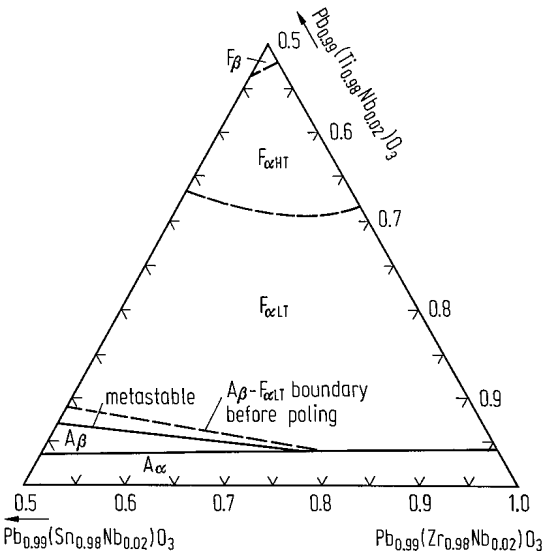


**Fig. 1C-c26-001**. $Pb_{0.99}[(Ti,Zr,Sn)_{0.98}Nb_{0.02}]O_3$. Phase diagram at 25 °C (for poled ceramics) [66Ber].

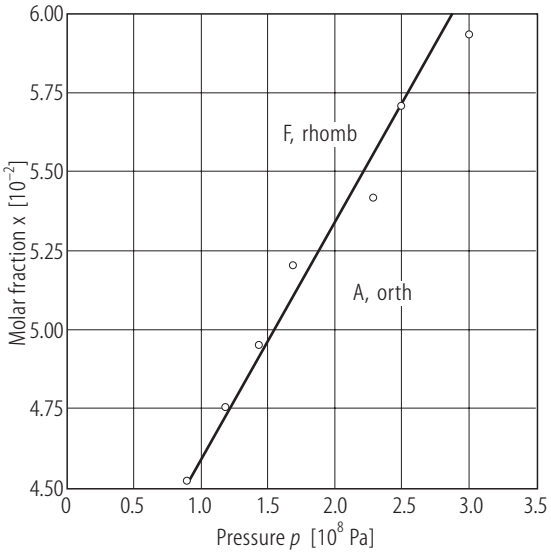


**Fig. 1C-c26-002**. $Pb_{0.995}\{[Ti_x(Sn_yZr_{1-y})_{1-x}]_{0.99}Nb_{0.01}\}O_3$ (ceramics). x vs. $p$ for y = 0.20 [86Gul]. $p$: hydrostatic pressure of the phase transition.

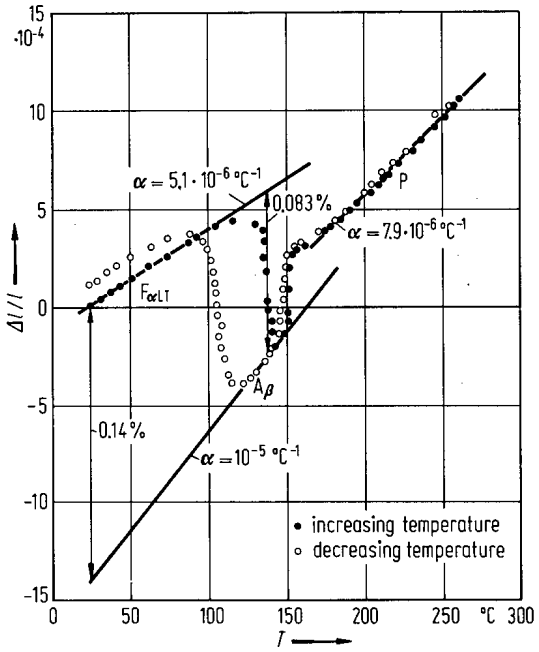


**Fig. 1C-c26-003**. $Pb_{0.99}[(Zr_{0.68}Sn_{0.25}Ti_{0.07})_{0.98}Nb_{0.02}]O_3$ (ceramics). $\Delta l/l$ vs. $T$ [66Ber].

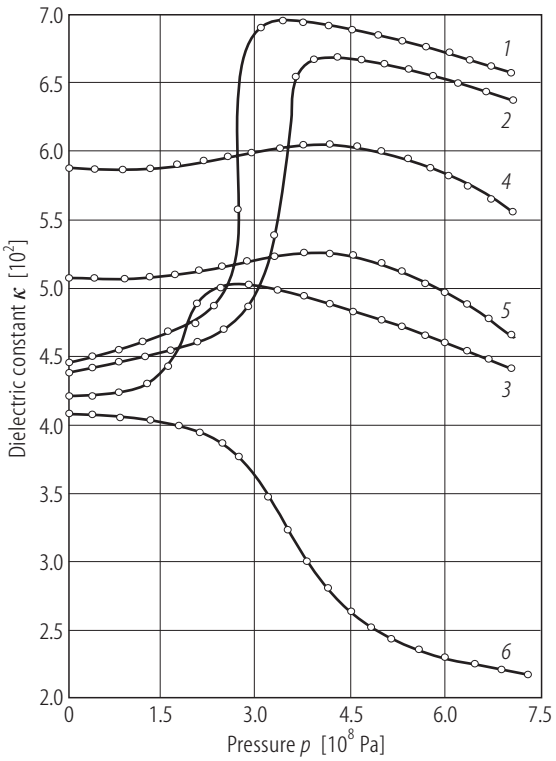


**Fig. 1C-c26-004**. $Pb_{0.995}\{[Ti_x(Sn_{0.30}Zr_{0.70})_{1-x}]_{0.99}Nb_{0.01}\}O_3$ (ceramics). $\kappa$ vs. $p$ [86Gul]. Parameter: x. $p$: hydrostatic pressure. Curve *1*: x = 0.0750. *2*: x = 0.0700. *3*: x = 0.0650. *4*: x = 0.0600. *5*: x = 0.0550. *6*: x = 0.0500.

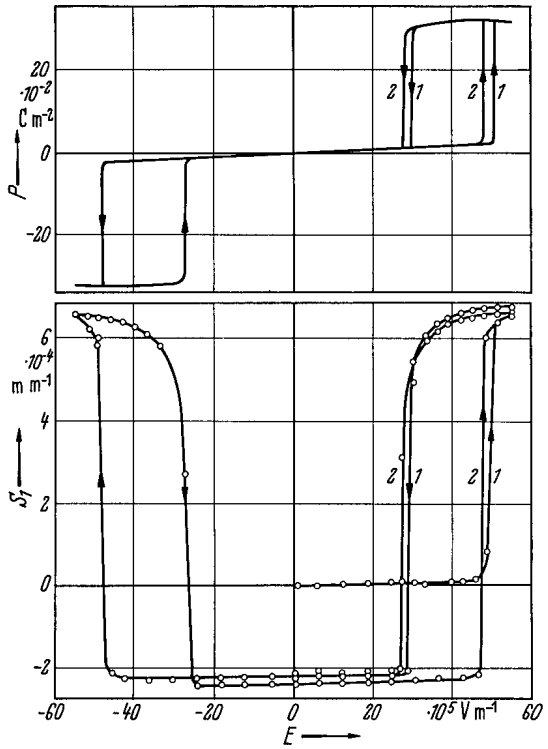


**Fig. 1C-c26-005**. $Pb_{0.99}[(Zr_{0.57}Sn_{0.38}Ti_{0.05})_{0.98}Nb_{0.02}]O_3$ (ceramics). $P$, $S_1$ vs. $E$ [64Ber]. $P$: polarization. $S_1$: strain.

**References**

64Ber Berlincourt, D., Krueger, H.H.A., Jaffe, H.: J. Phys. Chem. Solids **25** (1964) 659.
66Ber Berlincourt, D.: IEEE Trans. Sonics Ultrason. SU **13** (1966) 116.
70Sun Sundaram, V.S., Subbarao, E.C.: J. Phys. Soc. Jpn. **28**, Suppl. (1970) 134.
82Ols Olsen, R.B., Brown, D.D.: Ferroelectrics **40** (1982) 17.
86Gul Gulish, O.K., Polandov, I.N., Alekhina, N.S., Feronov, A.D.: Vestn. Moskov. Univ. Kim. **27** (1986) 428; Moscow Univ. Chem. Bull. (English Transl.) **41** (1986) 98.
93Aki Akiyama, Y., Kimura, S., Fujimura, I.: Jpn. J. Appl. Phys. **32** (1993) 4154.