

No. 1C-a82 BaZrO₃–PbZrO₃

1b Phase diagram: Fig. 1C-a82-001, Fig. 1C-a82-002.

3a Lattice parameters: Fig. 1C-a82-003, Fig. 1C-a82-004.

4 Thermal expansion: see Fig. 1C-a81-003.

5a Dielectric constant: Fig. 1C-a82-005.

Effect of electric field bias: Figs. 1C-a82-006...1C-a82-008; see also

50Rob

c Remanent polarization: Figs. 1C-a82-009, 1C-a82-010.

6a Specific heat: see Fig. 1C-a81-005.

Transition heat: see Table 1C-a81-001.

8 Elastic property: Fig. 1C-a82-011.

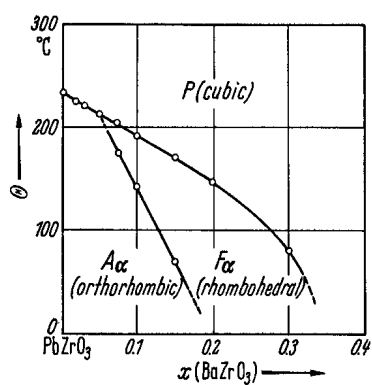


Fig. 1C-a82-001. $(\text{Pb}_{1-x}\text{Ba}_x)\text{ZrO}_3$. Θ vs. x [52Shi].

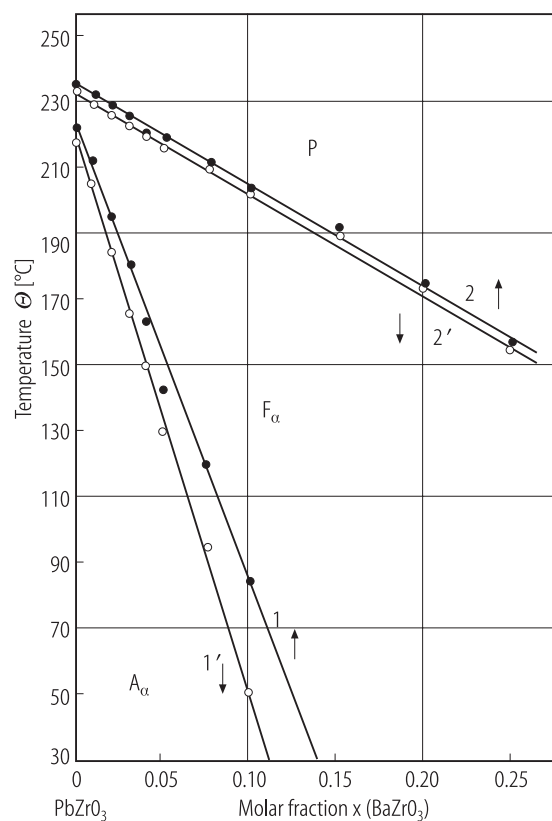


Fig. 1C-a82-002. $(\text{Pb}_{1-x}\text{Ba}_x)\text{ZrO}_3$. Θ vs. x [92Ujm]. Curves 1, 2: heating, 1', 2': cooling.

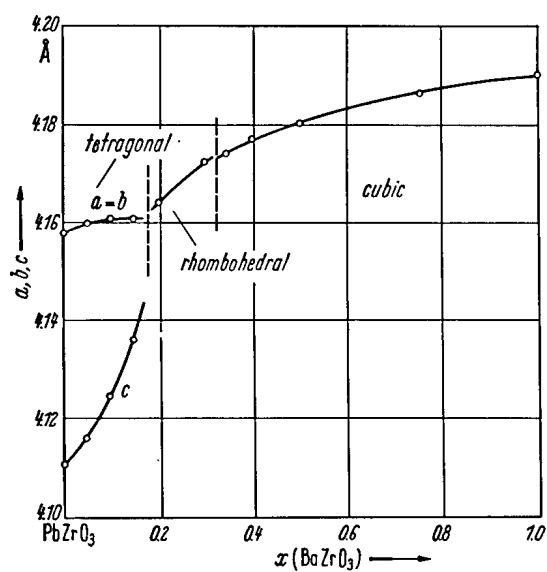


Fig. 1C-a82-003. (Pb_{1-x}Ba_x)ZrO₃. Lattice parameters vs. x [54Shi]. Pseudotetragonal cell constants are given for $x < 0.18$.

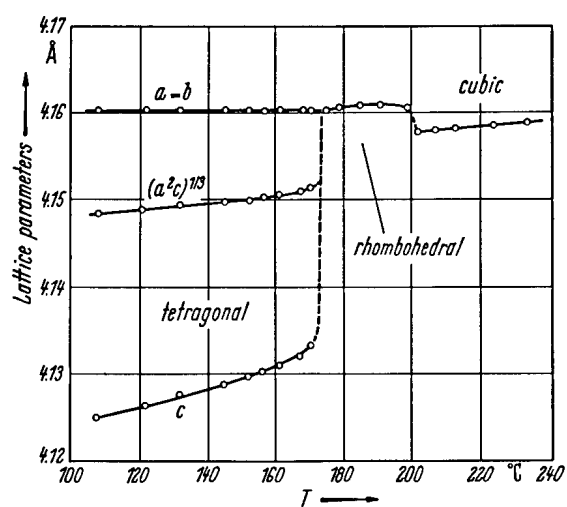


Fig. 1C-a82-004. $(\text{Pb}_{0.925}\text{Ba}_{0.075})\text{ZrO}_3$. Lattice parameters vs. T [54Shi].

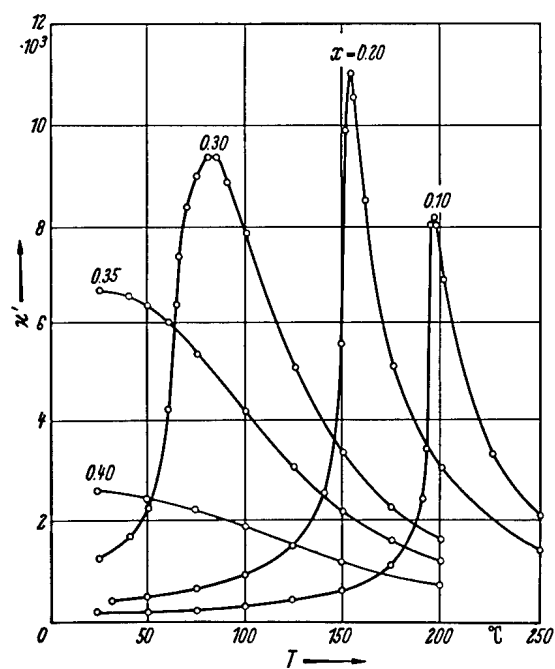


Fig. 1C-a82-005. $(\text{Pb}_{1-x}\text{Ba}_x)\text{ZrO}_3$ (ceramics). κ' vs. T [50Rob]. Parameter: x .

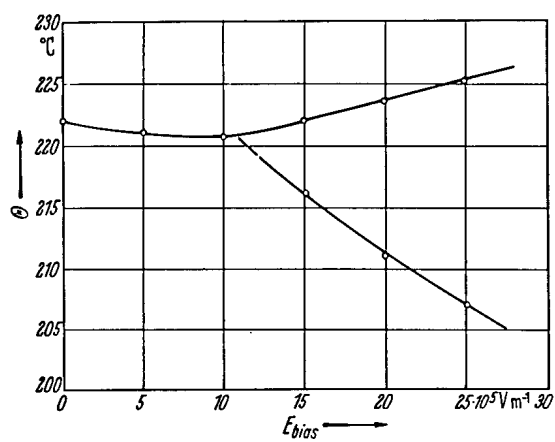


Fig. 1C-a82-006. $(\text{Pb}_{0.97}\text{Ba}_{0.03})\text{ZrO}_3$. Θ vs. E_{bias} [52Shi].

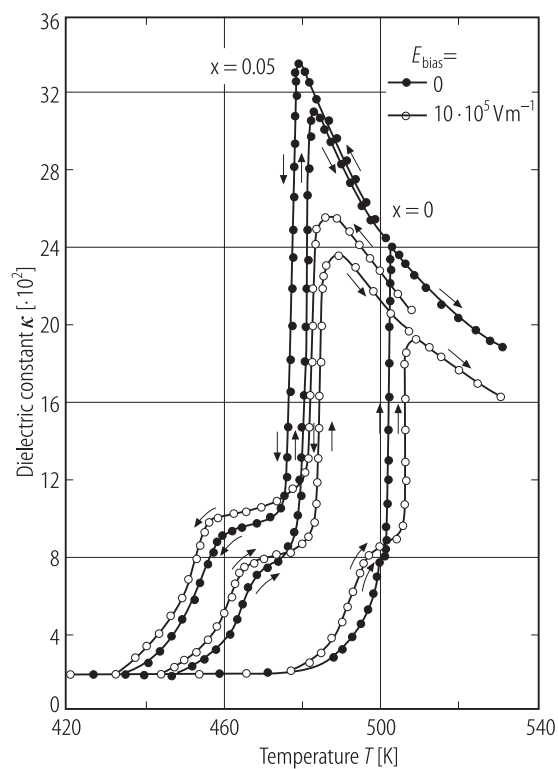


Fig. 1C-a82-007. $(\text{Pb}_{1-x}\text{Ba}_x)\text{ZrO}_3$ (ceramics). κ vs. T [85Ism]. Parameter: x , E_{bias} . $f = 75$ kHz. Arrows indicate run direction (heating or cooling).

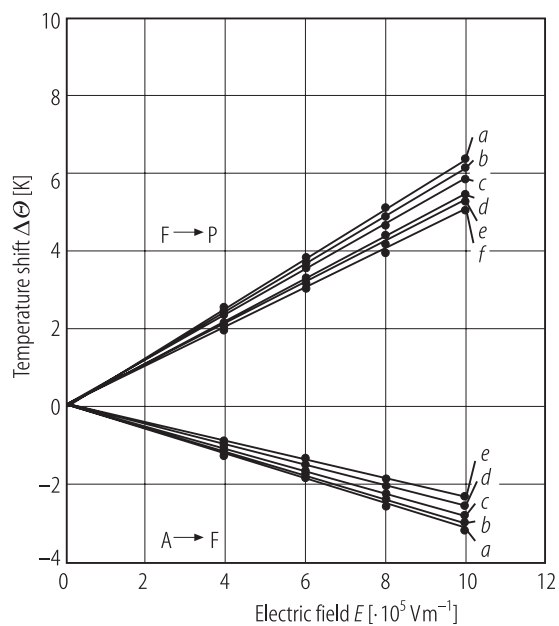


Fig. 1C-a82-008. $(\text{Pb}_{1-x}\text{Ba}_x)\text{ZrO}_3$ (ceramics). $\Delta\Theta$ vs. E [85Ism]. Parameter: x . $\Delta\Theta$: shift of the phase transition temperatures. Curve a : $x = 0$, b : $x = 0.03$, c : $x = 0.05$, d : $x = 0.075$, e : $x = 0.15$, f : $x = 0.20$.

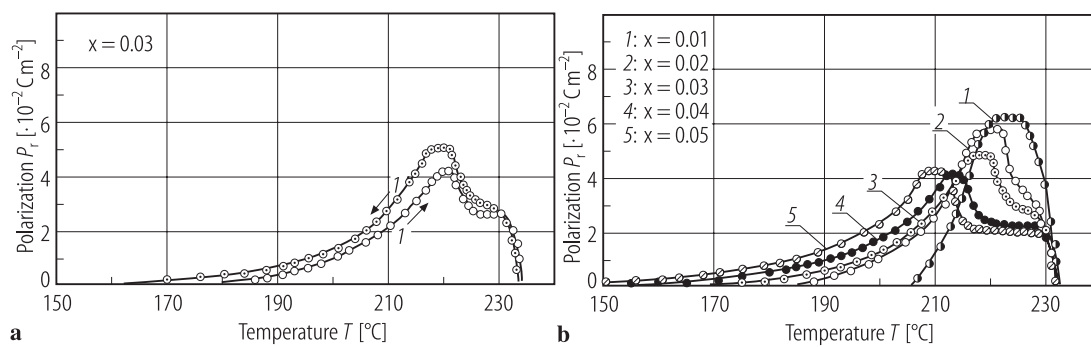


Fig. 1C-a82-009. $(\text{Pb}_{1-x}\text{Ba}_x)\text{ZrO}_3$ (ceramics). P_r vs. T [92Ujm]. Parameter: x (≤ 0.05).

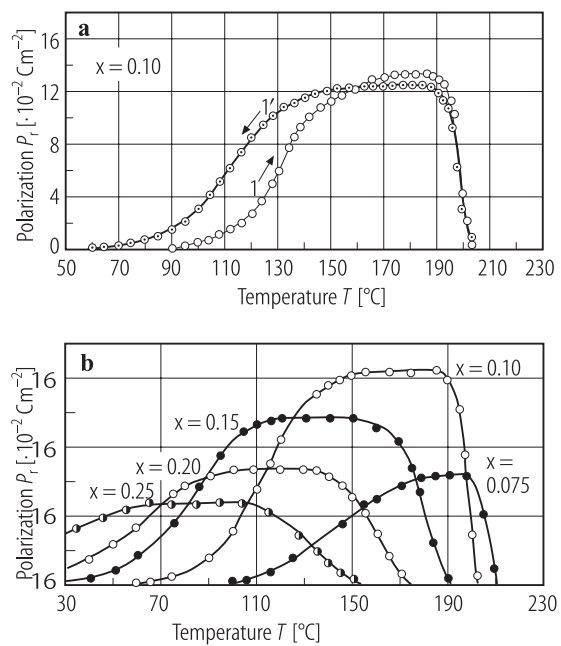


Fig. 1C-a82-010. $(\text{Pb}_{1-x}\text{Ba}_x)\text{ZrO}_3$ (ceramics). P_r vs. T [92Ujm]. Parameter: x (> 0.05).

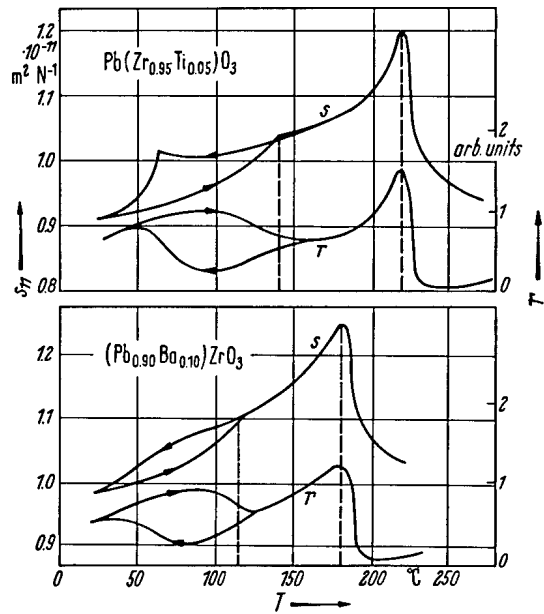


Fig. 1C-a82-011. $(\text{Pb}_{0.90}\text{Ba}_{0.10})\text{ZrO}_3$ and $\text{Pb}(\text{Zr}_{0.95}\text{Ti}_{0.05})\text{O}_3$ (ceramics). s_{11} , r vs. T [55Mar]. Composite-bar method. r : minimum-to-maximum admittance ratio which gives approximate measure of $(Q_{\text{mech}}^{-1})^2$.

References

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