

No. 1B-d7 $\text{Pb}(\text{Co}_{1/3}\text{Nb}_{2/3})\text{O}_3$
($M = 336.8$)

1a	Ferroelectricity in $\text{Pb}(\text{Co}_{1/3}\text{Nb}_{2/3})\text{O}_3$ was found by Bokov and Myl'nikova in 1960.		60Bok
b	phase	II	I
	state	F	P
	crystal system	pseudocubic	cubic
	Θ [°C]	−70 (average)	
	Transition is diffuse phase transition smeared around −70 °C.		
	Color: brown.		60Bok
2a	Crystal growth: flux method with PbO.		60Bok
3a	Crystal structure: $a = 4.046 \text{ \AA}$ at RT.		87Hac
5a	Dielectric constant: Effect of p on κ : Fig. 1B-d7-001. Phase diagram in regard to p : Fig. 1B-d7-002.		
c	Spontaneous polarization and coercive field: Fig. 1B-d7-003.		

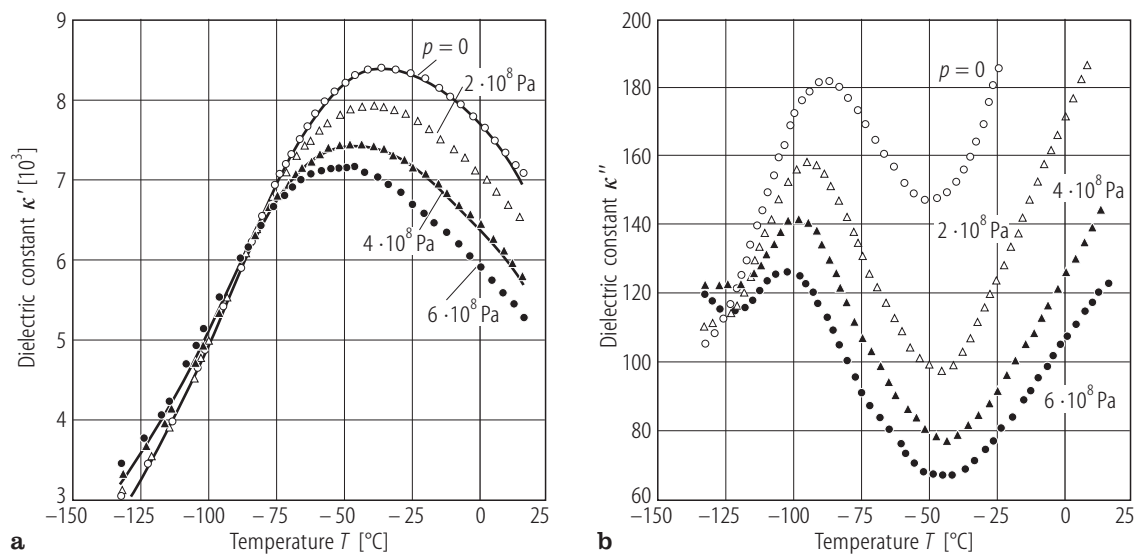


Fig. 1B-d7-001. $\text{Pb}(\text{Co}_{1/3}\text{Nb}_{2/3})\text{O}_3$ (single crystal). κ' , κ'' vs. T [87Hac]. Parameter: p .

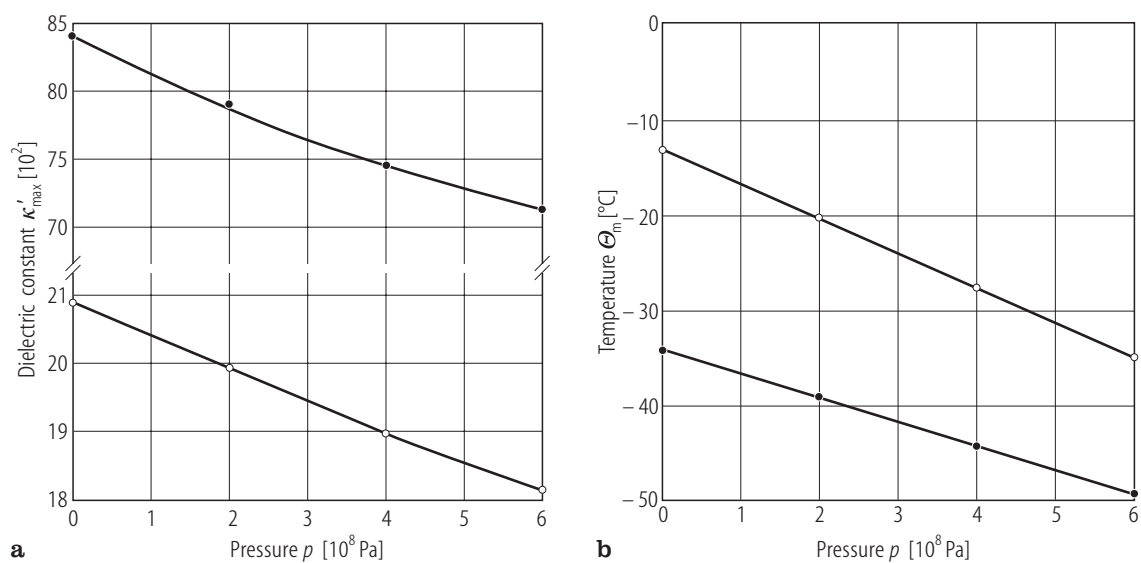


Fig. 1B-d7-002. $\text{Pb}(\text{Co}_{1/3}\text{Nb}_{2/3})\text{O}_3$. κ'_{\max} , Θ_m vs. p [87Hac]. κ'_{\max} : maximum value of κ' . Θ_m : temperature of κ'_{\max} . Open circle: ceramics. Full circle: single crystal.

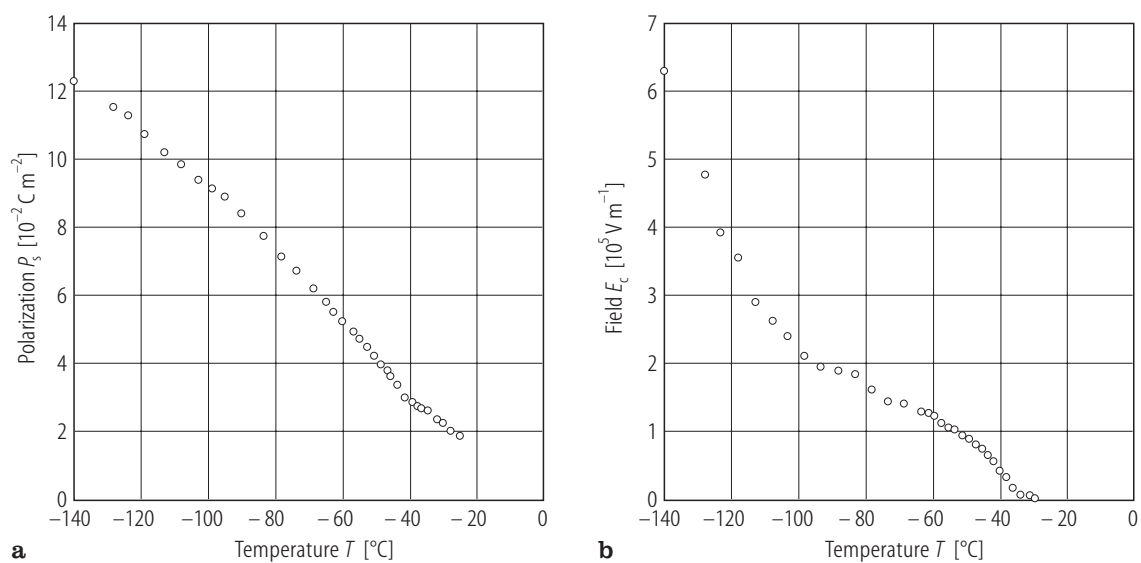


Fig. 1B-d7-003. $\text{Pb}(\text{Co}_{1/3}\text{Nb}_{2/3})\text{O}_3$. P_s , E_c vs. T [87Hac].

References

- 60Bok Bokov, V.A., Myl'nikova, I.E.: Fiz. Tverd. Tela **2** (1960) 2728; Sov. Phys. Solid State (English Transl.) **2** (1961) 2428.
- 87Hac Hachiga, T., Fujimoto, S., Yasuda, N.: J. Phys. D **20** (1987) 1291.