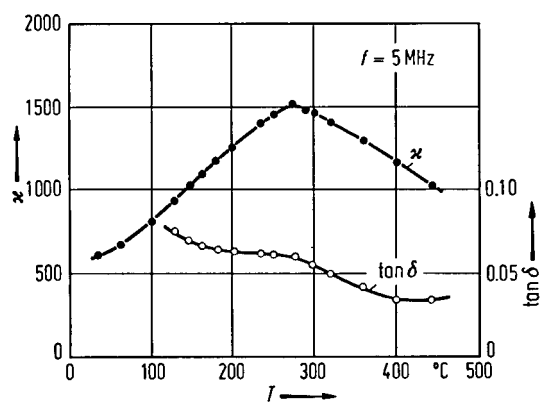
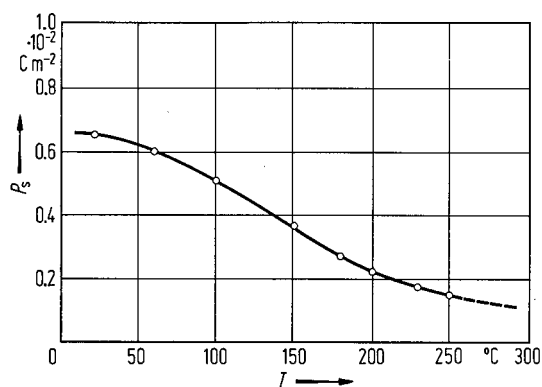


**No. 1B-d6 Pb(Cd<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>**  
(*M* = 354.6)

1a	Dielectric anomaly in Pb(Cd <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> was first found by Tomashpol'skii et al. in 1965. The ferroelectric activity was reported on a single crystal by Ichinose et al. in 1971.		65Tom 71Ich
b	phase	II	I
	state	F	P
	crystal system	pseudocubic	cubic
	Θ [°C]	270 (average)	
	Transition is diffuse phase transition smeared around 270 °C. Color: Green yellow.		71Ich
2a	Crystal growth: flux method with PbO.		71Ich
3a	Crystal structure: disordered perovskite, <i>a</i> = 4.135 Å at RT.		71Ich
b	No ordering of Cd <sup>2+</sup> and Nb <sup>5+</sup> ions exists in octahedral position of perovskite structure.		71Ich
5a	Dielectric constant: Fig. 1B-d6-001.		
c	Spontaneous polarization: Fig. 1B-d6-002.		
11	Electrical conductivity: $\sigma = 1.05 \cdot 10^{-8} \Omega^{-1} \text{m}^{-1}$ at RT.		71Ich



**Fig. 1B-d6-001.**  $\text{Pb}(\text{Cd}_{1/3}\text{Nb}_{2/3})\text{O}_3$ .  $\kappa$ ,  $\tan \delta$  vs.  $T$  [71Ich].  
 $f = 5 \text{ MHz}$ .



**Fig. 1B-d6-002.**  $\text{Pb}(\text{Cd}_{1/3}\text{Nb}_{2/3})\text{O}_3$ .  $P_{s[101]}$  vs.  $T$  [71Ich].  $P_s$  was determined from  $P$ - $E$  hysteresis loop. The saturation was not complete with an applied electric field over  $3 \cdot 10^5 \text{ V m}^{-1}$ .

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**References**

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- 71Ich Ichinose, N., Takahashi, T., Yokomizo, Y.: J. Phys. Soc. Jpn. **31** (1971) 1848.