

**No. 1B-d10  $\text{Pb}(\text{Co}_{1/3}\text{Ta}_{2/3})\text{O}_3$**   
( $M = 395.5$ )

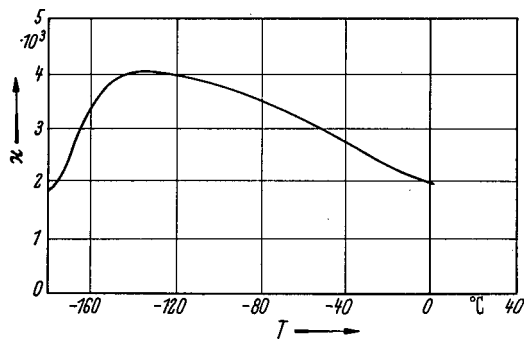
1a Ferroelectricity in  $\text{Pb}(\text{Co}_{1/3}\text{Ta}_{2/3})\text{O}_3$  was found by Bokov and Myl'nikova in 1960. 60Bok

b	phase	II	I	
	state	F	P	
	crystal system		cubic	60Bok
	space group		Pm3m –O <sub>h</sub> <sup>1</sup>	
	Θ [°C]	–140 (average)		
	Transition is diffuse phase transition smeared around –140 °C.			
	Color: brown.			

2a Crystal growth: flux method with  $\text{PbO}$ . 60Bok

3a Crystal structure: disordered perovskite,  $a = 4.01 \text{ \AA}$  at RT. 60Bok

5a Dielectric constant: Fig. 1B-d10-001.



**Fig. 1B-d10-001.**  $\text{Pb}(\text{Co}_{1/3}\text{Ta}_{2/3})\text{O}_3$ .  $\kappa$  vs.  $T$  [60Bok].  
 $f = 1 \text{ kHz}$ .

**Reference**

60Bok Bokov, V.A., Myl'nikova, I.E.: Fiz. Tverd. Tela **2** (1960) 2728; Sov. Phys. Solid State (English Transl.) **2** (1961) 2428.