
No. 1C-c44 $\text{PbTiO}_3\text{--PbZrO}_3\text{--Ba}(\text{Ca}_{1/3}\text{Nb}_{2/3})\text{O}_3$

5a Dielectric constant: Fig. 1C-c44-001, Fig. 1C-c44-002.

c Spontaneous polarization: Fig. 1C-c44-003.

9a Transmittance: see

86Yok2

b Electrooptic effect: Table 1C-c44-001.

Table 1C-c44-001. $(1-x)\text{Pb}(\text{Zr}_y\text{Ti}_{1-y})\text{O}_3 \cdot x \text{Ba}(\text{Ca}_{1/3}\text{Nb}_{2/3})\text{O}_3$ (ceramics). r_c , \bar{L} : Linear and quadratic electrooptic coefficients [86Yok2]. $\lambda = 632.8 \text{ nm}$.

Composition		r_c	\bar{L}
x	y	$[\cdot 10^{-10} \text{ mV}^{-1}]$	$[\cdot 10^{-16} \text{ m}^2 \text{ V}^{-2}]$
0.15	0.50	5.91	
0.13	0.50	4.58	
0.17	0.42	3.02	
0.15	0.45	2.64	
0.164	0.425	2.59	
0.13	0.45	2.27	
0.17	0.40	1.88	
0.155	0.45	1.79	
0.15	0.40	1.60	
0.165	0.475		5.30
0.17	0.45		4.25
0.16	0.50		3.57
0.18	0.45		2.21
0.18	0.50		1.10
0.25	0.30		0.70

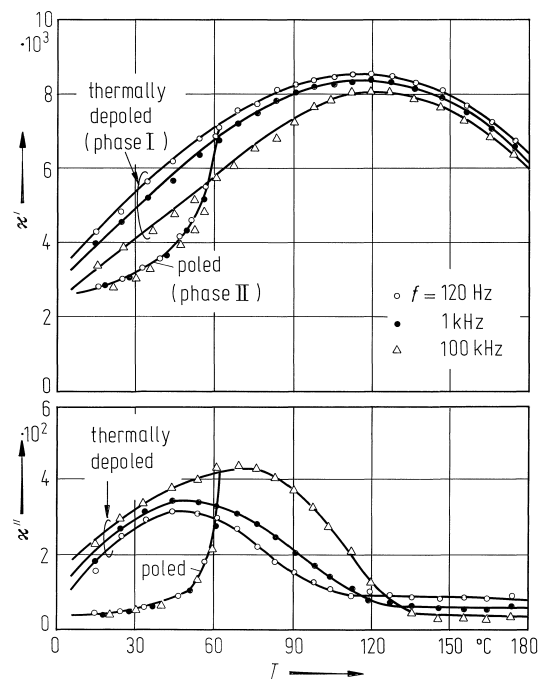


Fig. 1C-c44-001. $0.84 \text{ Pb}(\text{Zr}_{0.45}\text{Ti}_{0.55})\text{O}_3 \cdot 0.16 \text{ Ba}(\text{Ca}_{1/3}\text{Nb}_{2/3})\text{O}_3$ (ceramics). κ' , κ'' vs. T [86Yok1]. Parameter: f .

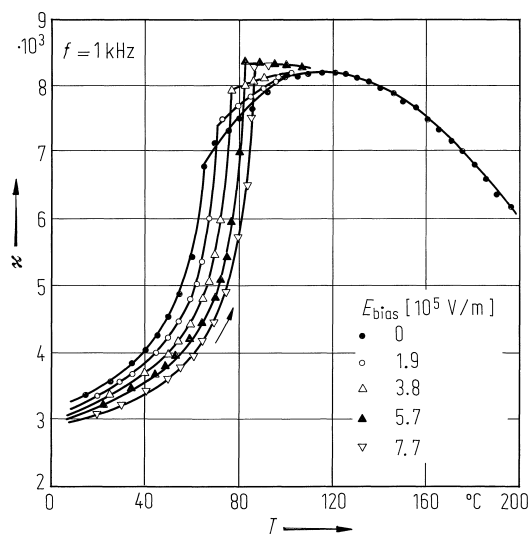


Fig. 1C-c44-002. $0.84 \text{ Pb}(\text{Zr}_{0.45}\text{Ti}_{0.55})\text{O}_3 \cdot 0.16 \text{ Ba}(\text{Ca}_{1/3}\text{Nb}_{2/3})\text{O}_3$ (ceramics). κ vs. T [86Yok1]. Parameter: E_{bias} .

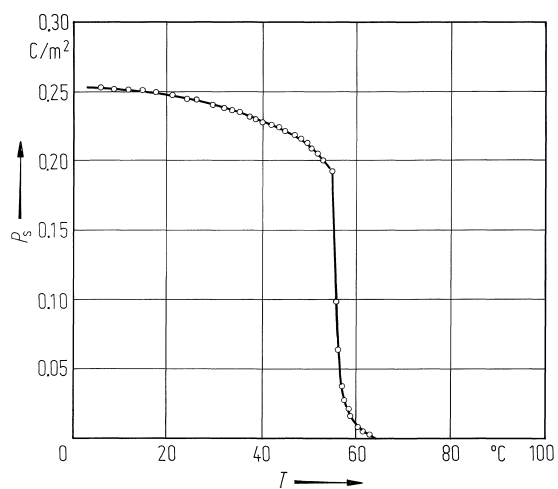


Fig. 1C-c44-003. $0.84 \text{ Pb}(\text{Zr}_{0.45}\text{Ti}_{0.55})\text{O}_3 \cdot 0.16 \text{ Ba}(\text{Ca}_{1/3}\text{Nb}_{2/3})\text{O}_3$ (ceramics). P_s vs. T [86Yok1].

References

- 86Yok1 Yokosuka, M.: Jpn. J. Appl. Phys. **25** (1986) 1183.
86Yok2 Yokosuka, M.: Jpn. J. Appl. Phys. **25** (1986) 993.