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**No. 1C-b48  $\text{PbTiO}_3\text{--La}(\text{Mg}_{2/3}\text{Nb}_{1/3})\text{O}_3$** 

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3a Lattice parameters: Fig. 1C-b48-001.

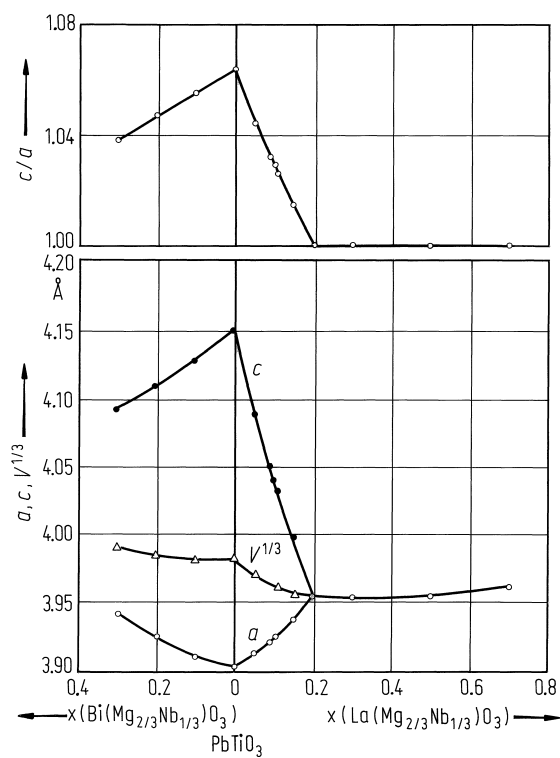
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5a Dielectric constant: Fig. 1C-b48-002.

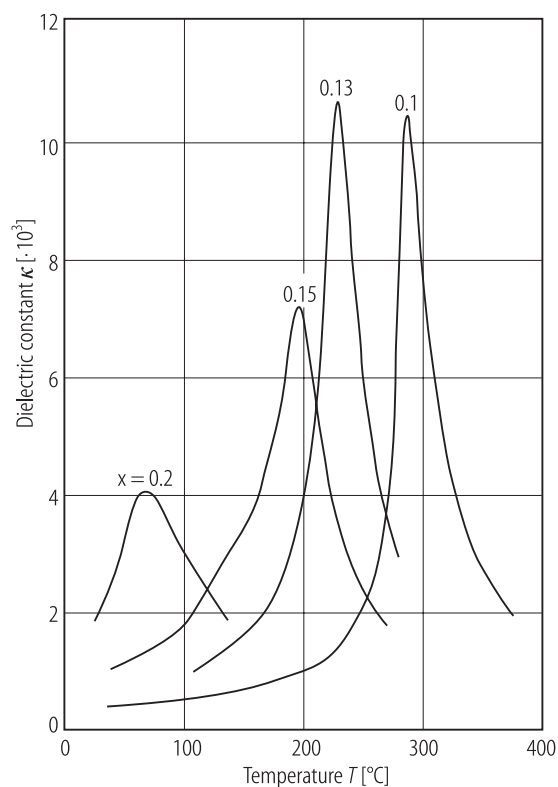
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7a Electromechanical property: Fig. 1C-b48-003.

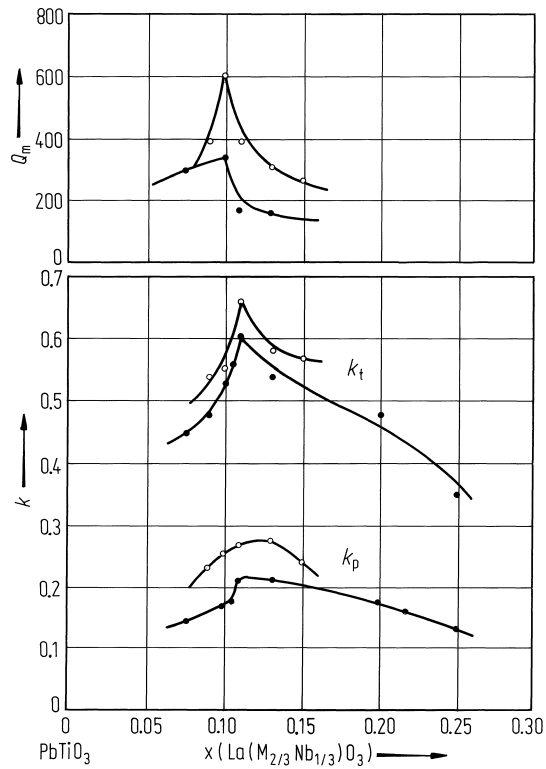
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**Fig. 1C-b48-001.**  $(1-x)\text{PbTiO}_3 \cdot x \text{M}(\text{Mg}_{2/3}\text{Nb}_{1/3})\text{O}_3$   
( $\text{M} = \text{La, Bi}$ ).  $a, c, c/a, V^{1/3}$  vs.  $x$  [82Nom].



**Fig. 1C-b48-002.**  $(1-x)\text{PbTiO}_3 \cdot x \text{La}(\text{Mg}_{2/3}\text{Nb}_{1/3})\text{O}_3$  (ceramics).  $\kappa$  vs.  $T$  [82Nom]. Parameter:  $x$ .  $f = 1 \text{ kHz}$ .



**Fig. 1C-b48-003.**  $(1-x)\text{PbTiO}_3 \cdot x \text{La}(\text{M}_{2/3}\text{Nb}_{1/3})\text{O}_3$  ( $\text{M} = \text{Mg}, \text{Zn}$ ) (ceramics).  $k_t$ ,  $k_p$ ,  $Q_m$  vs.  $x$  [81Nom].  $k_t$ : electromechanical coupling coefficient for thickness extensional mode,  $k_p$ : that for radial mode.  $Q_m$ : mechanical quality factor. Open circles:  $\text{M} = \text{Mg}$ , full circles:  $\text{M} = \text{Zn}$ .

**References**

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82Nom Nomura, S., Kaneta, K., Kuwata, J., Uchino, K.: *Mater. Res. Bull.* **17** (1982) 1471.