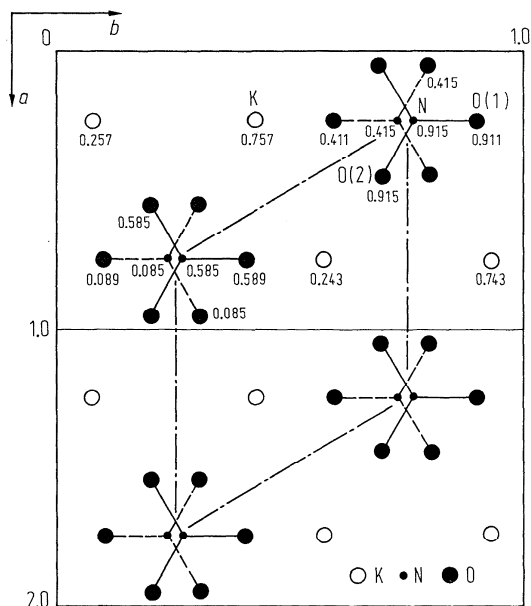
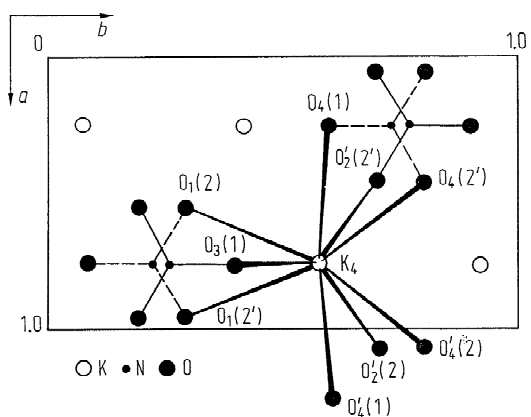


**Fig. 30A-2-001.** KNO<sub>3</sub>. Crystal form grown from aqueous solution [65Saw].  $a$ ,  $b$ ,  $c$  correspond to the crystalline axes in phase II.



**Fig. 30A-2-002.** KNO<sub>3</sub>. Structure of phase II [76Nim]. The pseudohexagonal cell is shown by dashed-dotted lines. The figure is drawn by the reported fractional coordinates at 25 °C in [73Nim]. K atoms lie on 4 sets of planes, parallel to the  $ab$  face of each unit cell. See Table 30A-2-003.



**Fig. 30A-2-003.** KNO<sub>3</sub>. Structure of phase II [73Nim]. Projection along the  $c$  axis.

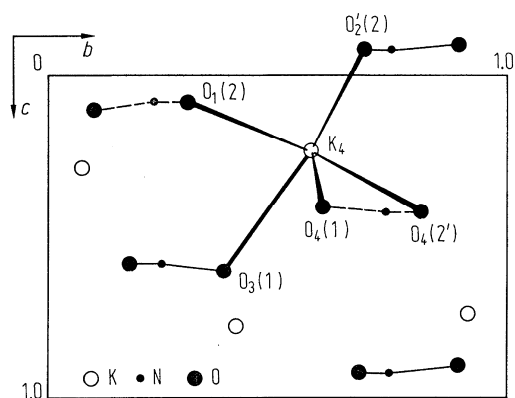


Fig. 30A-2-004. KNO<sub>3</sub>. Structure of phase II [73Nim]. Projection along the *a* axis.

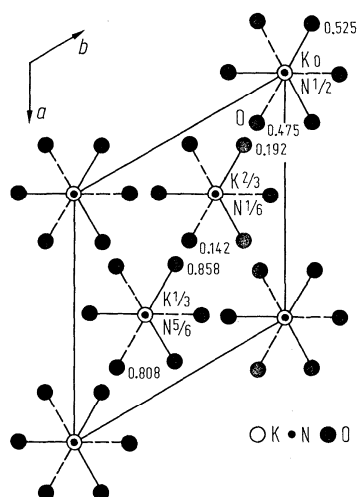


Fig. 30A-2-005. KNO<sub>3</sub>. Structure of phase I [76Nim]. Projection along the hexagonal *c* direction. NO<sub>3</sub> on each site is in dynamical disorder between two orientations. Numbers in figure indicate fractional coordinate *z* at 151 °C.

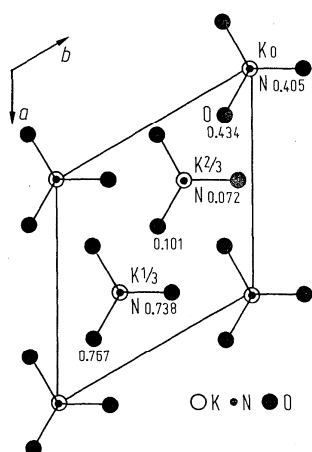
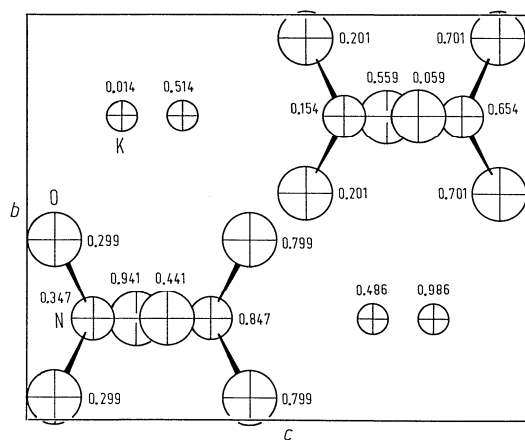
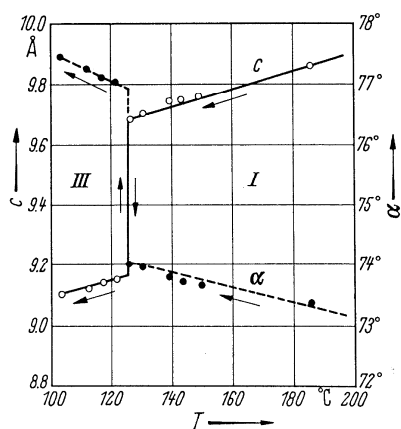


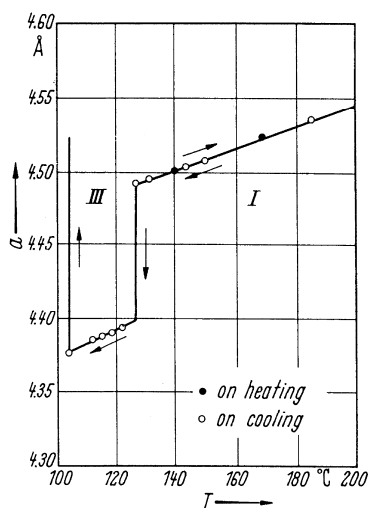
Fig. 30A-2-006. KNO<sub>3</sub>. Structure of phase III [76Nim]. Projection along the hexagonal *c* direction. Numbers in figure indicate fractional coordinate *z* at 91 °C.



**Fig. 30A-2-007.** KNO<sub>3</sub>. Structure of high pressure phase IV [86Wor].  $p = 0.36$  GPa,  $T = \text{RT}$ . Projection along the  $a$  axis. The numbers represent  $x$  coordinates of atoms. N–O bonds are drawn.



**Fig. 30A-2-008.** KNO<sub>3</sub>.  $\alpha$ ,  $c$  vs.  $T$  [65Kaw].  $\alpha$ : trigonal angle.  $c$ : hexagonal unit cell parameter.



**Fig. 30A-2-009.** KNO<sub>3</sub>.  $a$  vs.  $T$  [65Kaw].  $a$ : trigonal unit cell parameter.

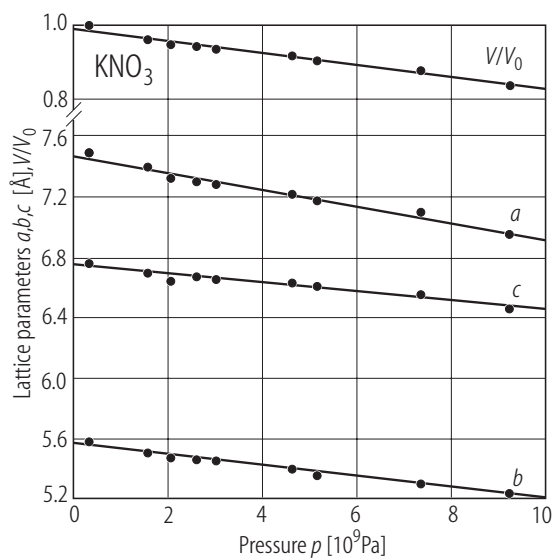


Fig. 30A-2-010. KNO<sub>3</sub>.  $a$ ,  $b$ ,  $c$ ,  $V/V_0$  vs.  $p$  [88Ada].  $T = \text{RT}$ .  $V$ : unit cell volume,  $V_0$ : unit cell volume at zero pressure.

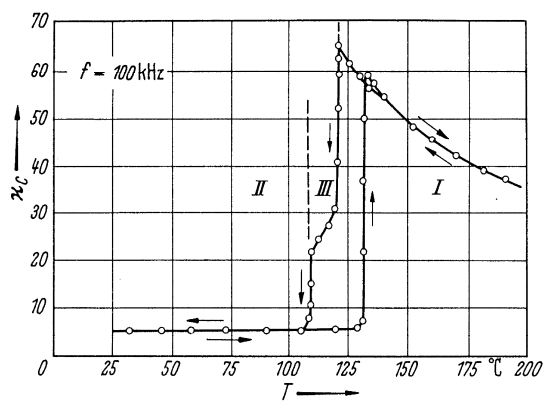


Fig. 30A-2-011. KNO<sub>3</sub>.  $\kappa_a$ ,  $\kappa_b$ ,  $\kappa_c$  vs.  $T$  [61Saw].

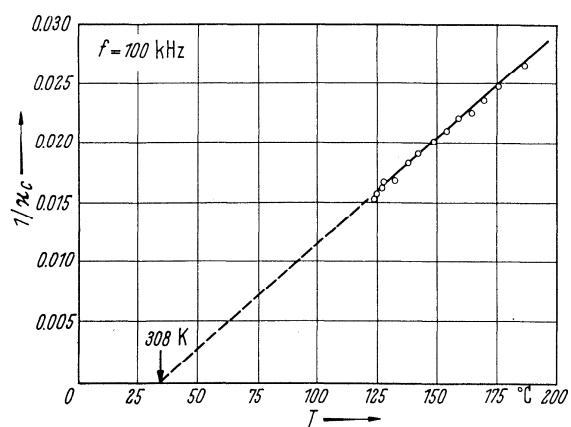
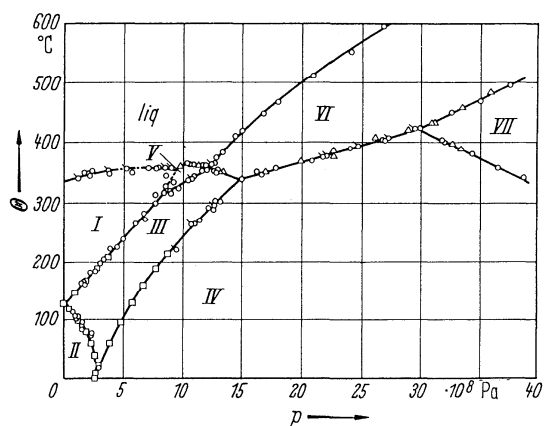
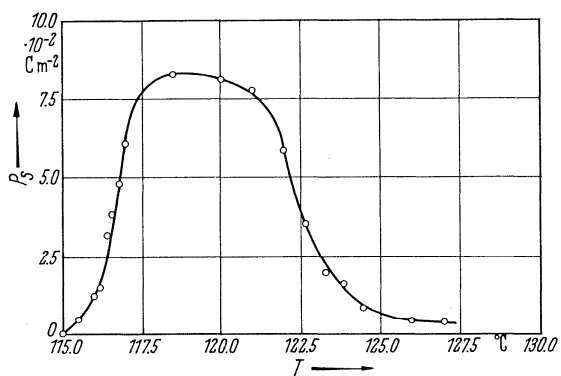
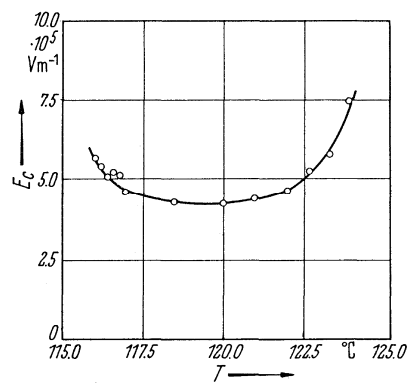
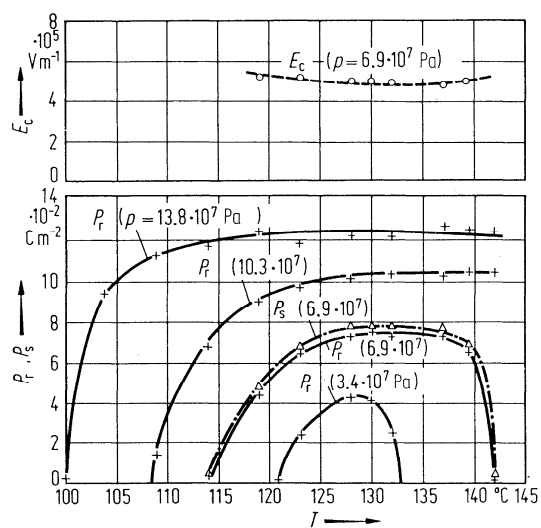
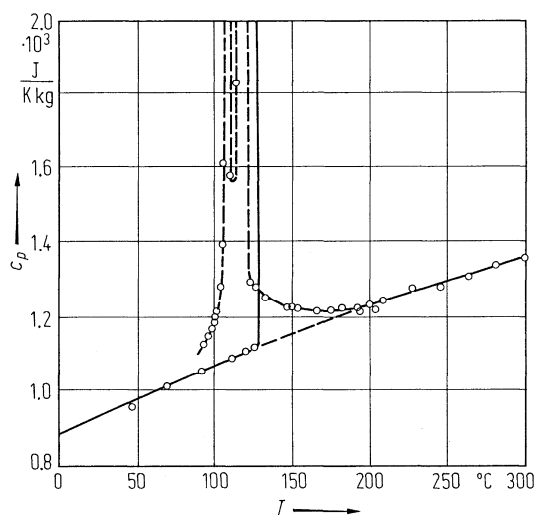


Fig. 30A-2-012. KNO<sub>3</sub>.  $1/\kappa_c$  vs.  $T$  [61Saw].

Fig. 30A-2-013. KNO<sub>3</sub>.  $\Theta$  vs.  $p$  [65Rap].Fig. 30A-2-014. KNO<sub>3</sub>.  $P_s$  vs.  $T$  [61Saw].Fig. 30A-2-015. KNO<sub>3</sub>.  $E_c$  vs.  $T$  [61Saw].



**Fig. 30A-2-016.** KNO<sub>3</sub>.  $P_s$ ,  $P_r$ ,  $E_c$  vs.  $T$  [68Tay]. Parameter:  $p$ .  $P_r$ : remanent polarization. As to the reproducibility, see [71Mid].



**Fig. 30A-2-017.** KNO<sub>3</sub>.  $c_p$  vs.  $T$  [41Mie]. Full line: on heating. Dashed line: on cooling.

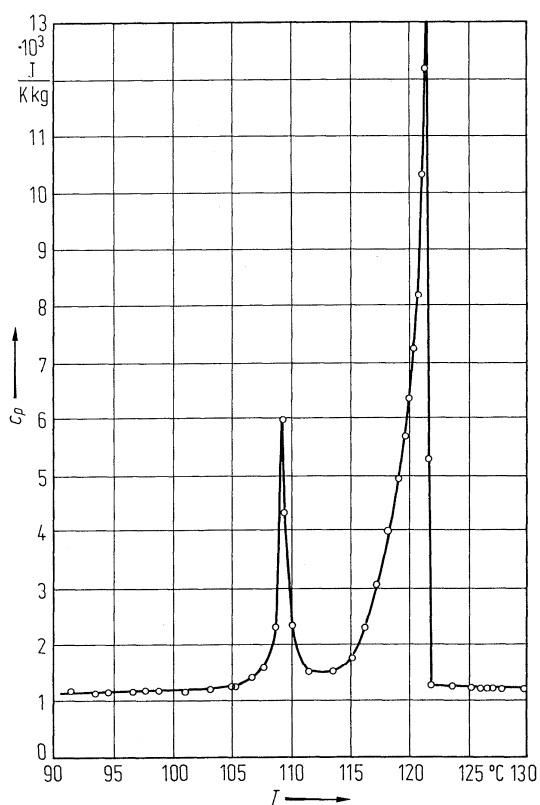


Fig. 30A-2-018.  $\text{KNO}_3$ .  $c_p$  vs.  $T$  in the vicinity of I–III–II transitions [41Mie].

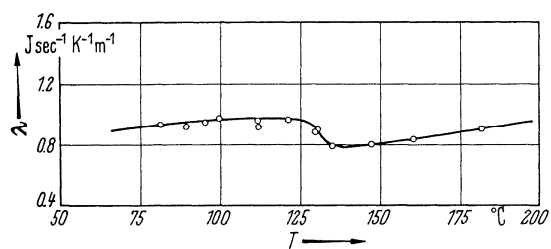


Fig. 30A-2-019.  $\text{KNO}_3$  (polycrystal).  $\lambda$  vs.  $T$  [60Yos].  $\lambda$ : thermal conductivity.

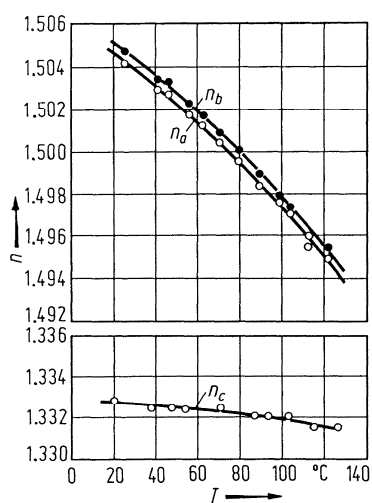


Fig. 30A-2-020. KNO<sub>3</sub>.  $n_i$  vs.  $T$  [68Yan].

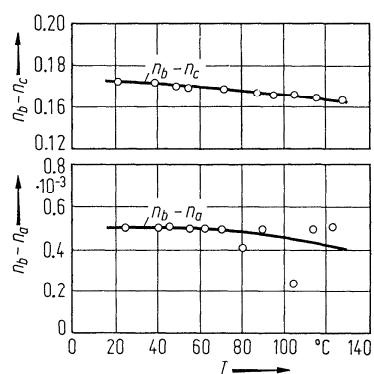
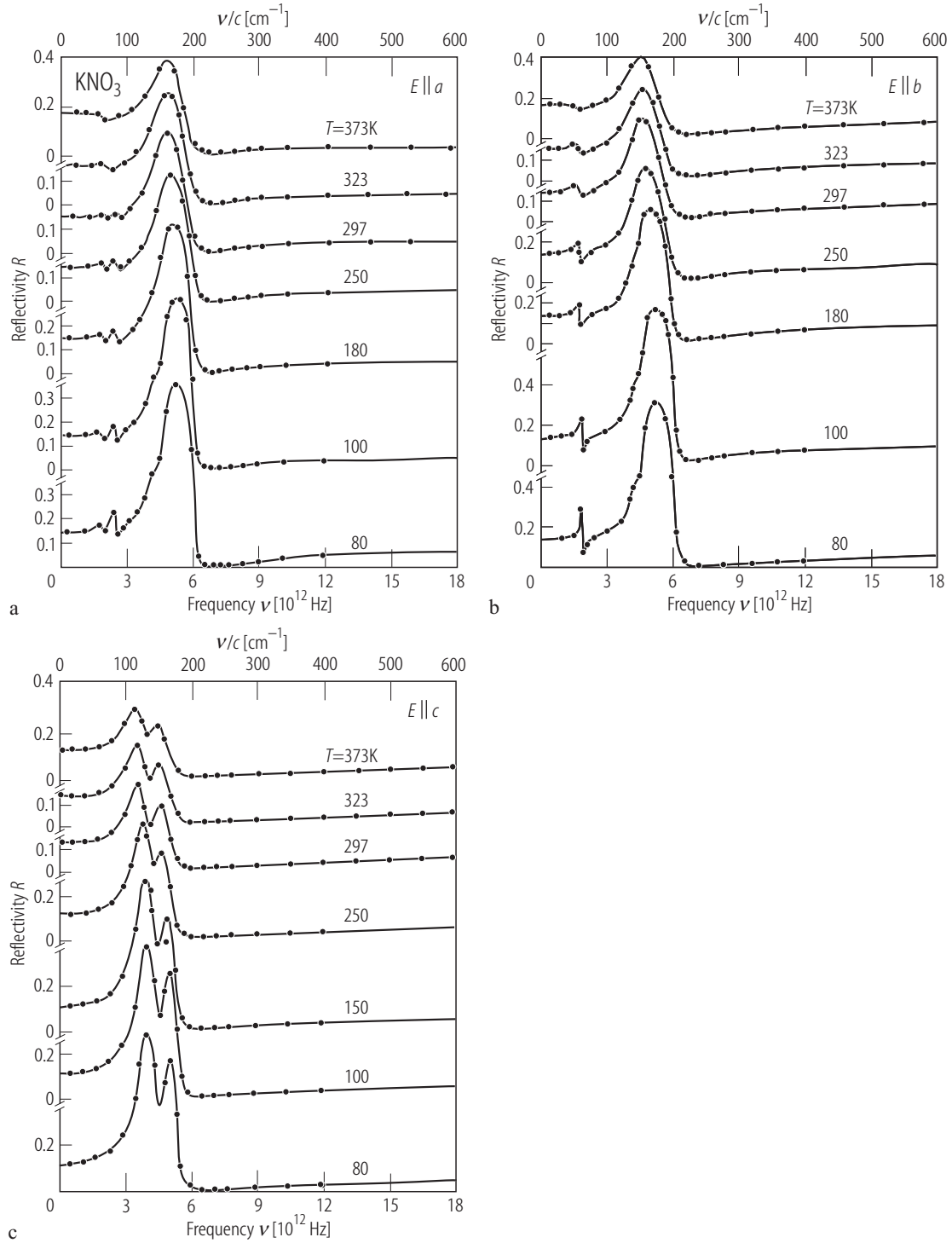
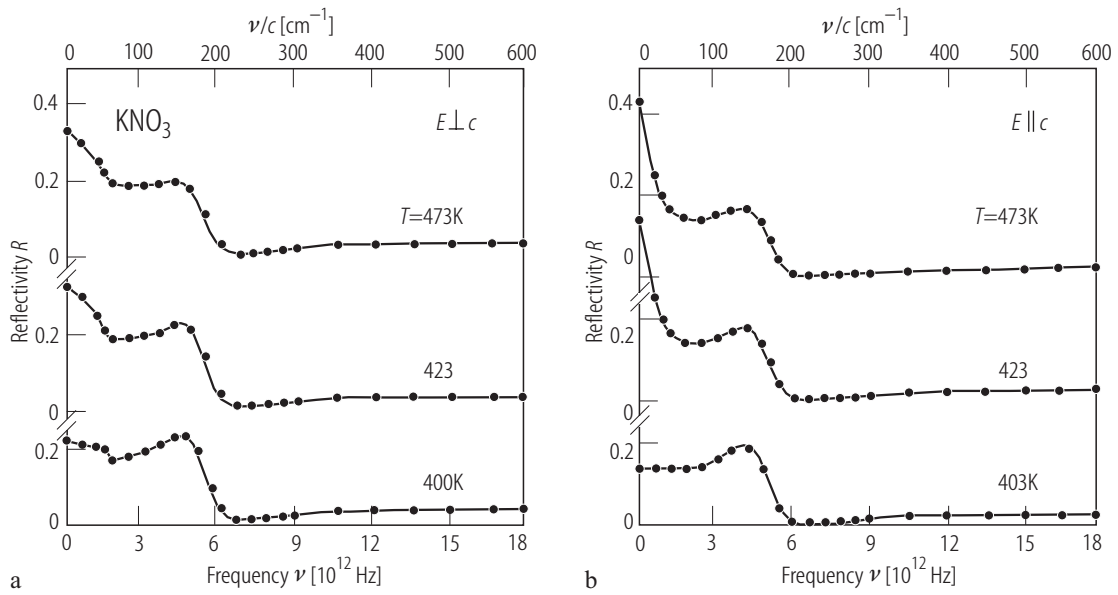


Fig. 30A-2-021. KNO<sub>3</sub>.  $n_b - n_a$ ,  $n_b - n_c$  vs.  $T$  [68Yan].

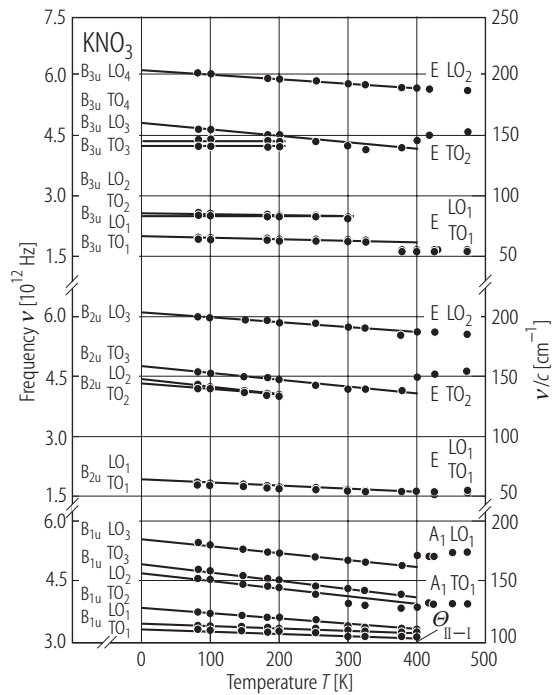




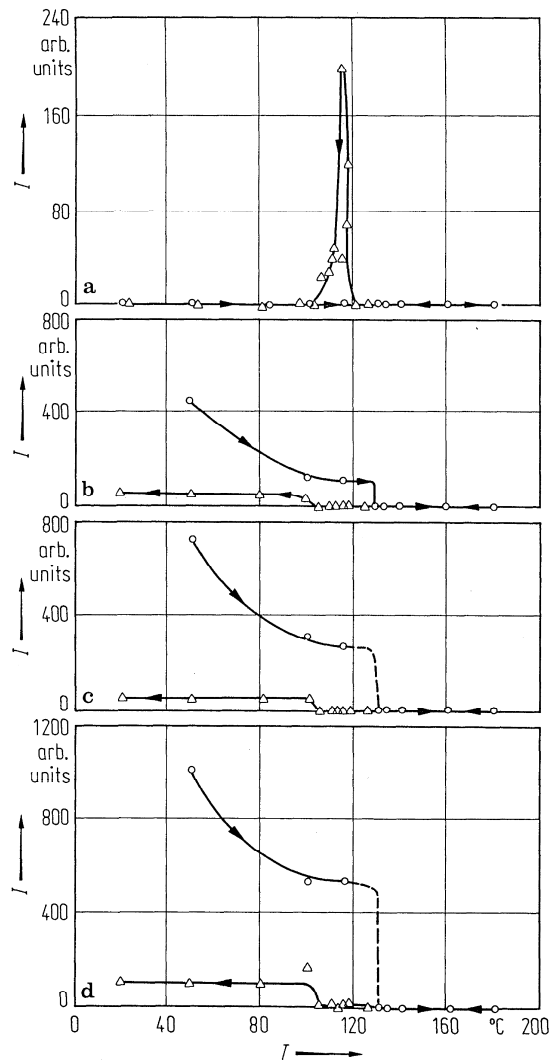
**Fig. 30A-2-022.** KNO<sub>3</sub>.  $R$  vs.  $\nu$  in phase II [88Bre]. Parameter:  $T$ . (a)  $E \parallel a$ , (b)  $E \parallel b$ , (c)  $E \parallel c$ .  $R$ : far infrared reflectivity.



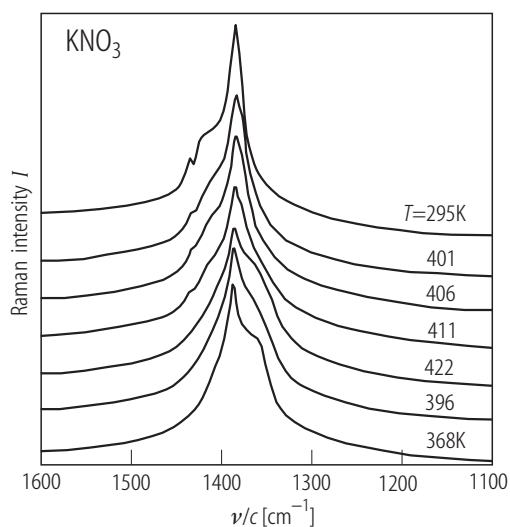
**Fig. 30A-2-023.** KNO<sub>3</sub>.  $R$  vs.  $\nu$  in phase I [88Bre]. Parameter:  $T$ . (a)  $E \perp c$ , (b)  $E \parallel c$ .  $R$ : far infrared reflectivity.  $c$ : unit cell vector in hexagonal lattice.



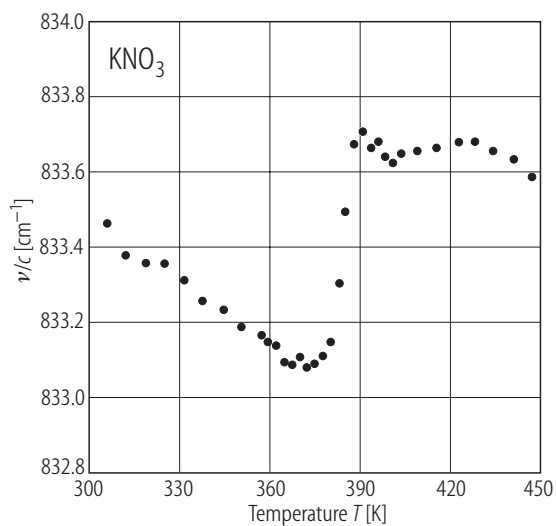
**Fig. 30A-2-024.** KNO<sub>3</sub>.  $\nu$  vs.  $T$  [88Bre].  $\nu$ : lattice mode frequency measured by far infrared spectroscopy.



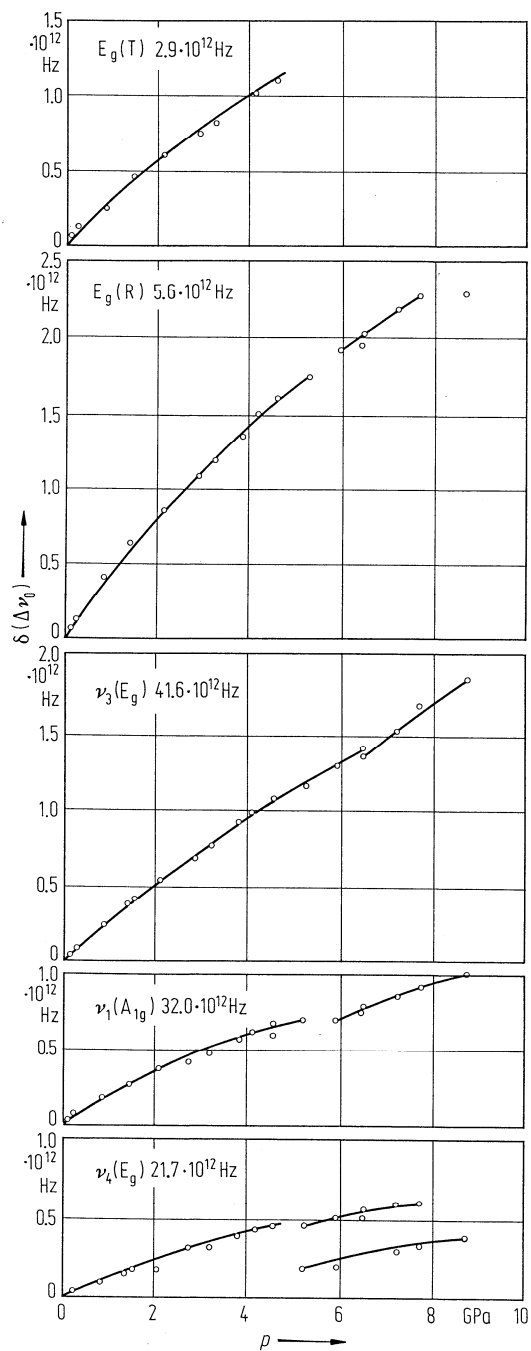
**Fig. 30A-2-025.** KNO<sub>3</sub>.  $I$  vs.  $T$  for several phonon modes [68Ba].  $I$ : Raman scattering intensity. (a) line at 120 cm<sup>-1</sup>, (b) line at 83 cm<sup>-1</sup> performed with the geometry of  $Y(ZY)X$ , (c) line at 83 cm<sup>-1</sup> performed with the geometry of  $Y(XZ)Y$ , (d) line at 50 cm<sup>-1</sup>. Circles: on heating, triangles: on cooling.



**Fig. 30A-2-026.** KNO<sub>3</sub>.  $I$  vs.  $\nu/c$  for  $\nu_2$  mode [92Har]. Parameter:  $T$ .  $I$ : Raman intensity.  $\nu$ : frequency of Raman scattering. Temperature was changed from RT (phase II) to 422 K (phase I), then cooled down to phase III (396 K, 368 K).



**Fig. 30A-2-027.** KNO<sub>3</sub>.  $\nu/c$  vs.  $T$  [92Har].  $\nu$ : frequency of Raman scattering. On cooling. The I-III transition takes place at about 390 K.



**Fig. 30A-2-028.** KNO<sub>3</sub>.  $\delta(\Delta\nu_0)$  vs.  $p$  [81Ada].  $T = 293$  K.  $\delta(\Delta\nu_0)$ : change in Raman shift. Raman shifts at 0 GPa are described in figures.

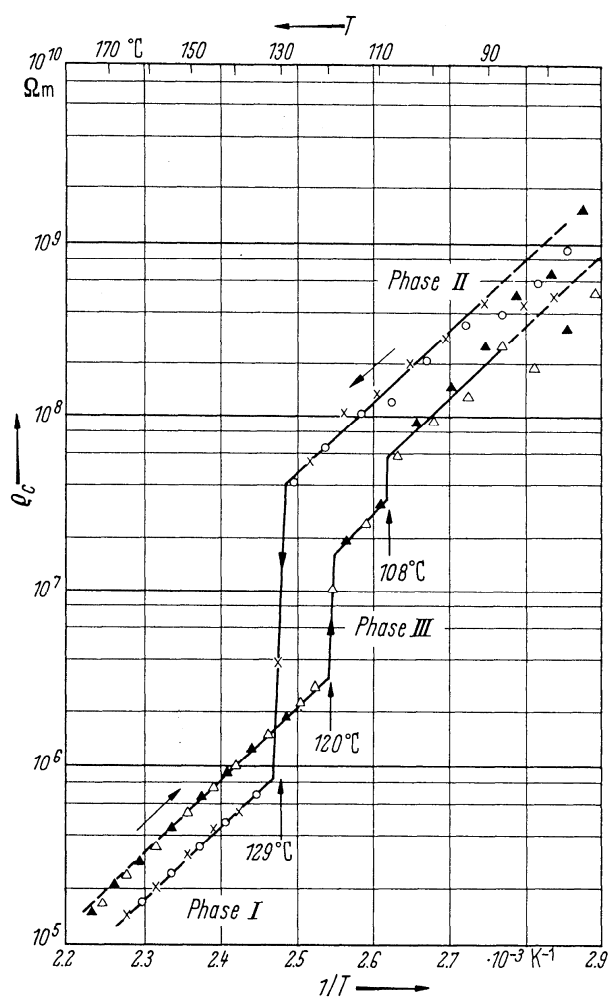
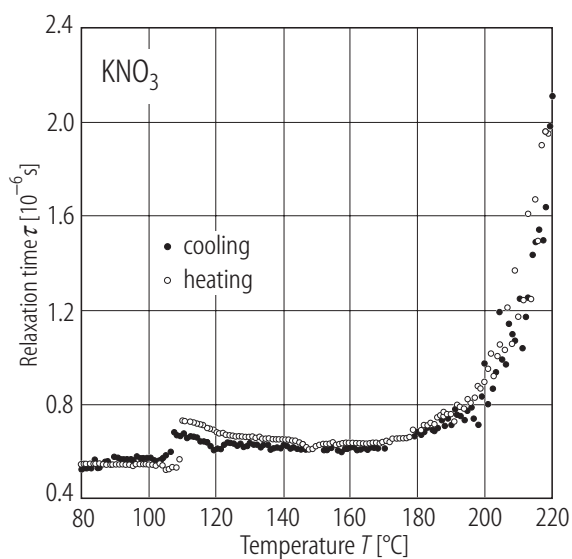
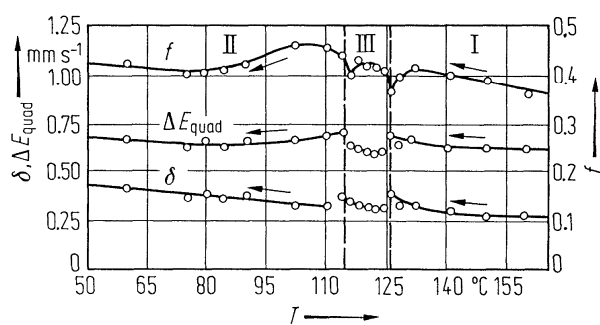


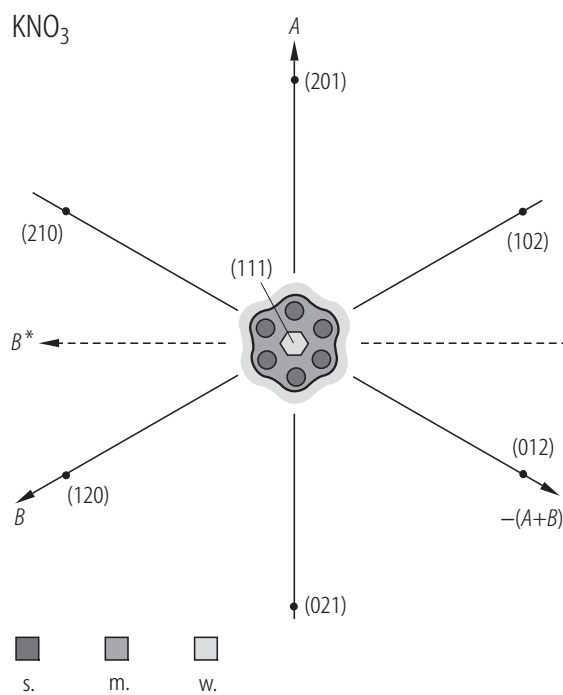
Fig. 30A-2-029. KNO<sub>3</sub>.  $\rho_c$  vs.  $1/T$  [62Asa].



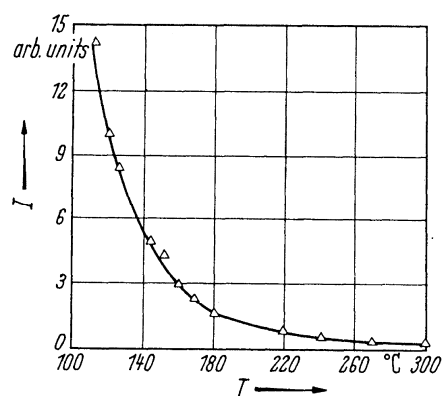
**Fig. 30A-2-030.** KNO<sub>3</sub>.  $\tau$  vs.  $T$  [90Kaw].  $\tau$ : relaxation time derived from the frequency dependence of complex electrical conductivity along the  $c$  axis.



**Fig. 30A-2-031.** KNO<sub>3</sub>.  $\delta$ ,  $\Delta E_{\text{quad}}$ ,  $f$  vs.  $T$  [68Lig].  $\delta$ : isomer shift,  $\Delta E_{\text{quad}}$ : quadrupole splitting,  $f$ : Debye-Waller factor for  $^{57}\text{Co}$  in KNO<sub>3</sub>.

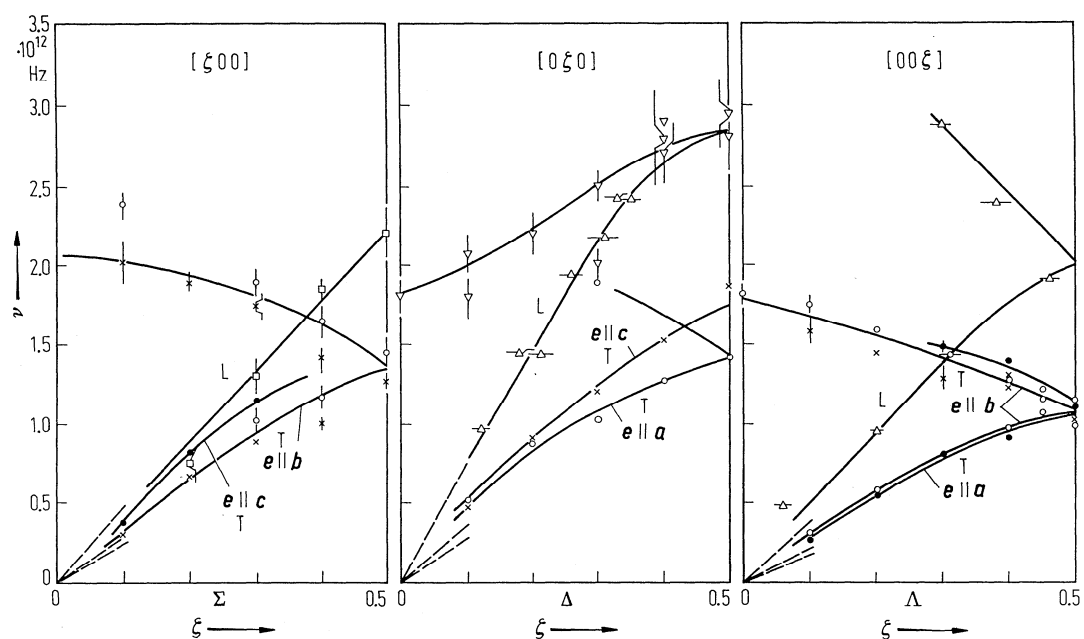


**Fig. 30A-2-032.**  $\text{KNO}_3$ . Intensity distribution of X-ray diffuse scattering around the  $(111)$  reciprocal lattice point [62Shi].  $T = 130^\circ\text{C}$ . s, m, w: strong, medium, weak intensity region, respectively.  $A$ ,  $B$  are the axes of the hexagonal unit cell.



**Fig. 30A-2-033.**  $\text{KNO}_3$ .  $I$  vs.  $T$  [62Shi].  $I$ : intensity of X-ray diffuse maximum in the vicinity of  $(111)$ .





**Fig. 30A-2-034.** KNO<sub>3</sub>.  $\nu$  vs.  $\zeta$  [78Rao].  $T = RT$ .  $\nu$ : phonon frequency,  $\zeta$ : reduced wave vector coordinate,  $e$ : polarization vector. Dashed lines indicate initial slopes of phonon branches estimated from sound velocities.

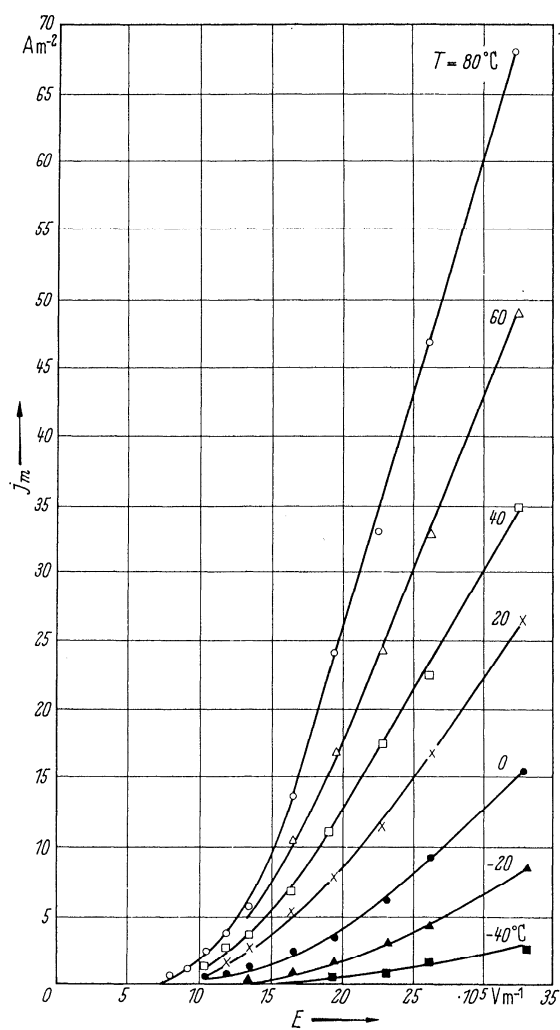
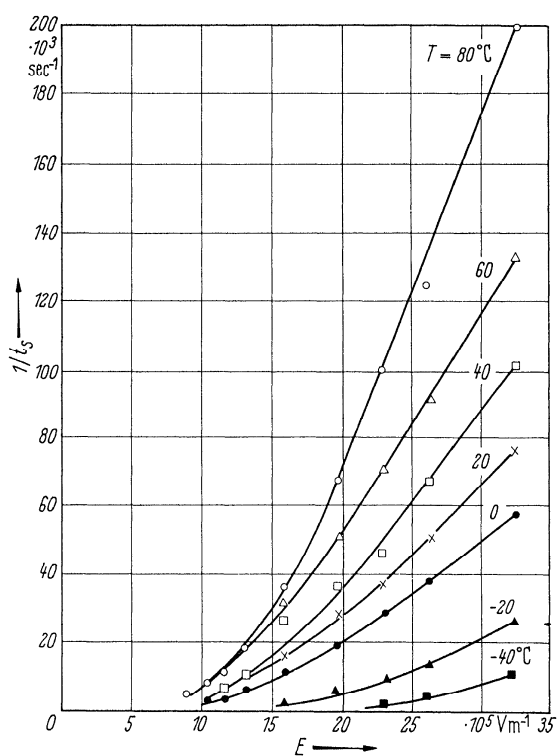


Fig. 30A-2-035. KNO<sub>3</sub> (polycrystal).  $j_m$  vs.  $E$  [64Dor]. Parameter:  $T$ .  $j_m$ : maximum switching current density.



**Fig. 30A-2-036.** KNO<sub>3</sub> (polycrystal).  $1/t_s$  vs.  $E$  [64Dor]. Parameter:  $T$ .  $t_s$ : switching time.