

Fig. 41A-4-001. CsLiSO_4 . The room temperature crystal growth habit composed of six twin domains [88Asa]. The orientations of the crystal a and b axes for domain 1 are indicated below the figure, while those for domain 2...6 are indicated by small arrows in the domains themselves.

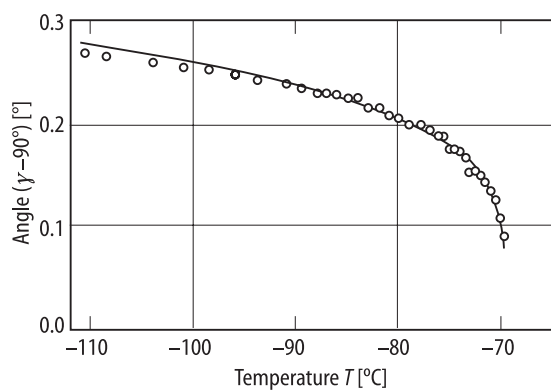


Fig. 41A-4-002. CsLiSO_4 . $(\gamma - 90^\circ)$ vs. T [88Asa]. The solid line represents the relation $(\gamma - 90^\circ) \propto (-69.5 - T)^{0.22}$.

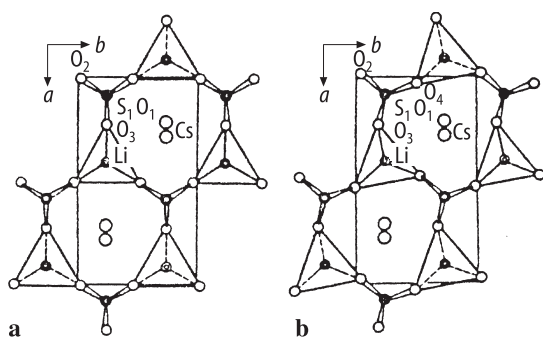


Fig. 41A-4-003. CsLiSO_4 . Crystal structure of phase I and phase II [79Kru]. Projection along $[001]$. (a) phase I ($T = 293$ K); (b) phase II ($T = 163$ K). One layer of tetrahedra is shown. A second layer is linked to the first by n -glide symmetry operation.

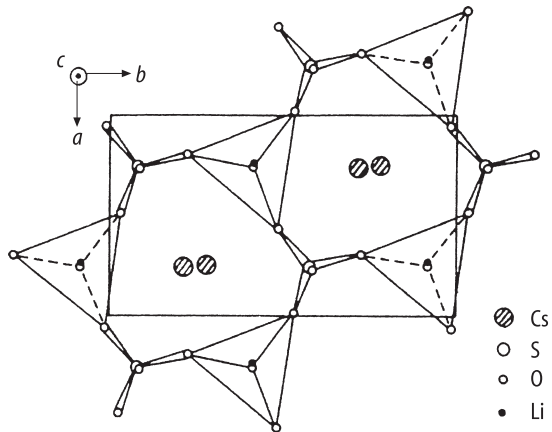


Fig. 41A-4-004. CsLiSO_4 . Crystal structure of phase II [88Asa]. $T = -78^\circ\text{C}$. Projection along $[001]$. One layer of tetrahedra ($z \approx 1/4$) is shown. Configurations with small occupation probability are not drawn.

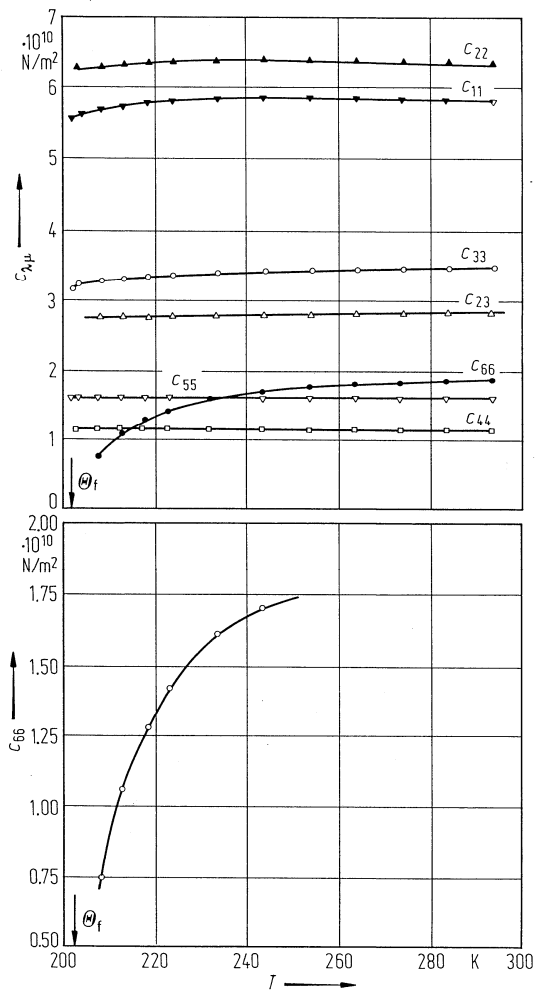


Fig. 41A-4-005. CsLiSO_4 . $c_{\lambda\mu}$ vs. T [81Ale]. $f = 10.0 \text{ MHz}$.

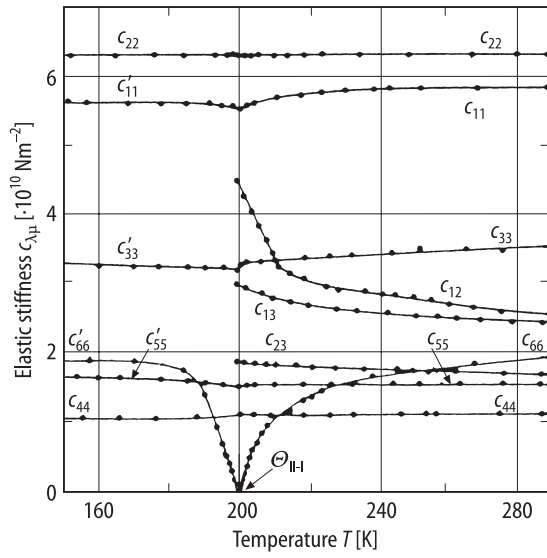


Fig. 41A-4-006. CsLiSO_4 . $c_{\lambda\mu}$ vs. T [88Mro]. $c_{\lambda\mu}$: elastic stiffness constants obtained by Brillouin scattering.

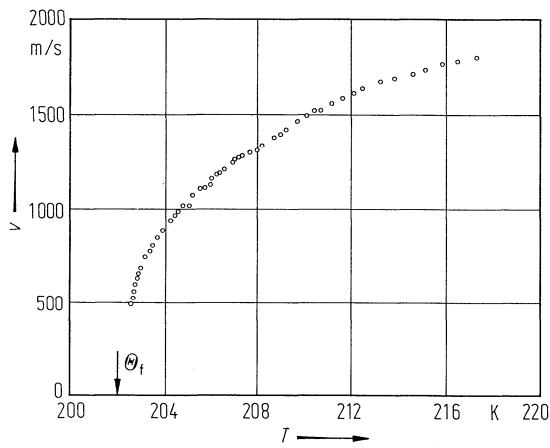


Fig. 41A-4-007. CsLiSO_4 . v vs. T [82Oze]. v : velocity of transverse sound wave. Propagation along $[100]$ with polarization along $[010]$. $f = 3.3 \text{ MHz}$.

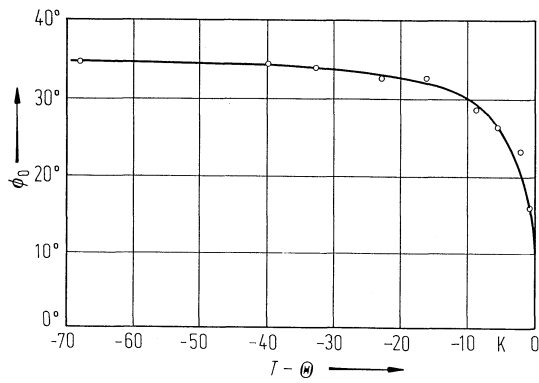


Fig. 41A-4-008. CsLiSO_4 . ϕ_0 vs. $T - \Theta$ [81Pie]. ϕ_0 : rotation angle of optical indicatrix. $\Theta_{\text{II-I}} = 203 \text{ K}$.

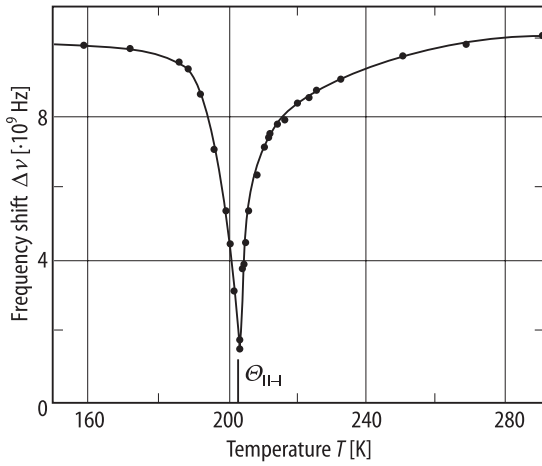


Fig. 41A-4-009. CsLiSO_4 . $\Delta\nu$ vs. T [88Mro]. $\Delta\nu$: Brillouin scattering of soft acoustic c_{66} mode.

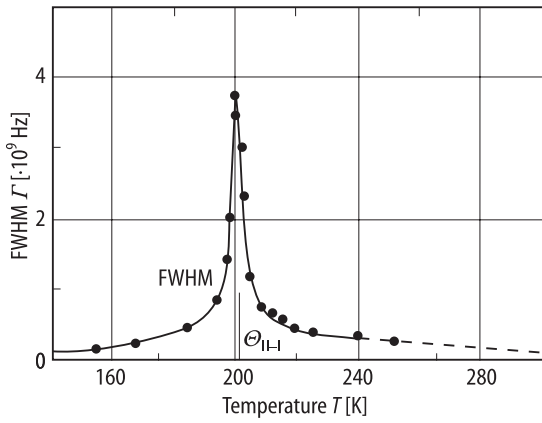


Fig. 41A-4-010. CsLiSO_4 . Γ vs. T [88Mro]. Γ : full width at half maximum of Brillouin scattering spectrum of soft acoustic c_{66} mode.

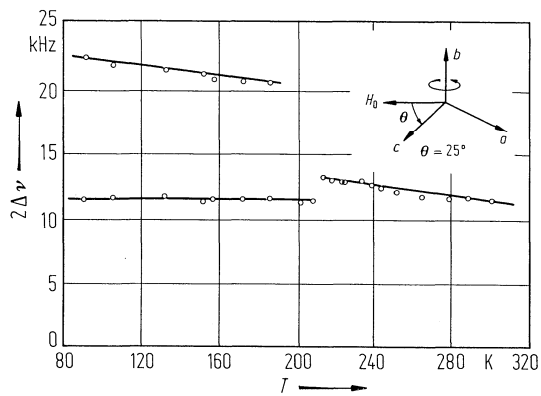


Fig. 41A-4-011. CsLiSO_4 . $2\Delta\nu$ vs. T [82Roz]. $2\Delta\nu$: quadrupole splitting of ^7Li nuclei.

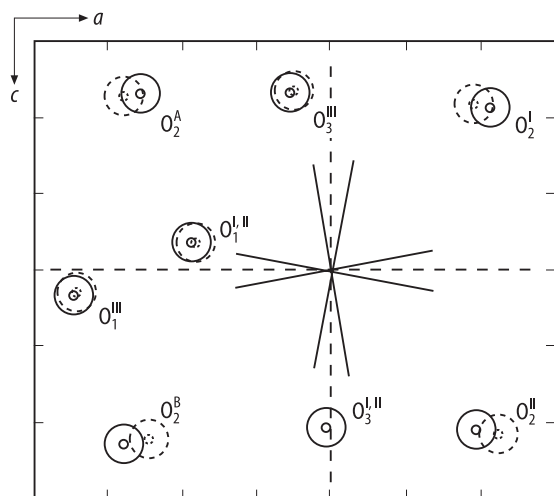


Fig. 41A-4-012. CsLiSO_4 . Two possible orientations of the electric field gradient tensor of ^{133}Cs on the ac plane [86Hol].

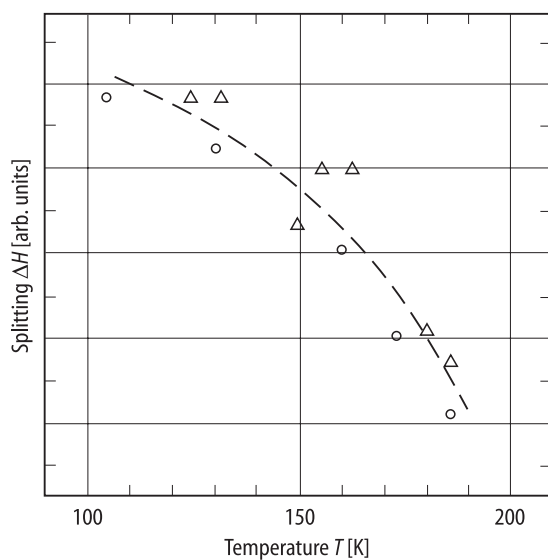


Fig. 41A-4-013. CsLiSO_4 . ΔH vs. T [86Hol]. ΔH : splitting of the $\pm 5/2 - \pm 3/2$ component of ^{133}Cs at two orientations in the ab plane. Open circle and triangle: signals correspond to the two kind of orientations, see Fig. 41A-4-012.

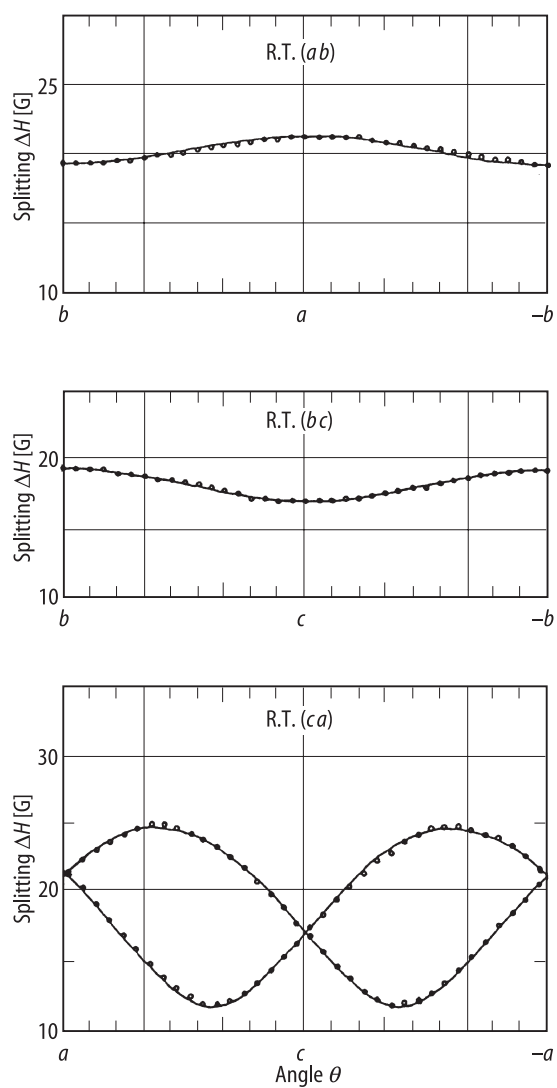


Fig. 41A-4-014. CsLiSO_4 . ΔH vs. θ [87Hua]. $T = \text{R.T.}$ ΔH : hyperfine splitting of nitrogen. θ : angle between the magnetic field and crystallographic axes. Solid lines are numerical plot.

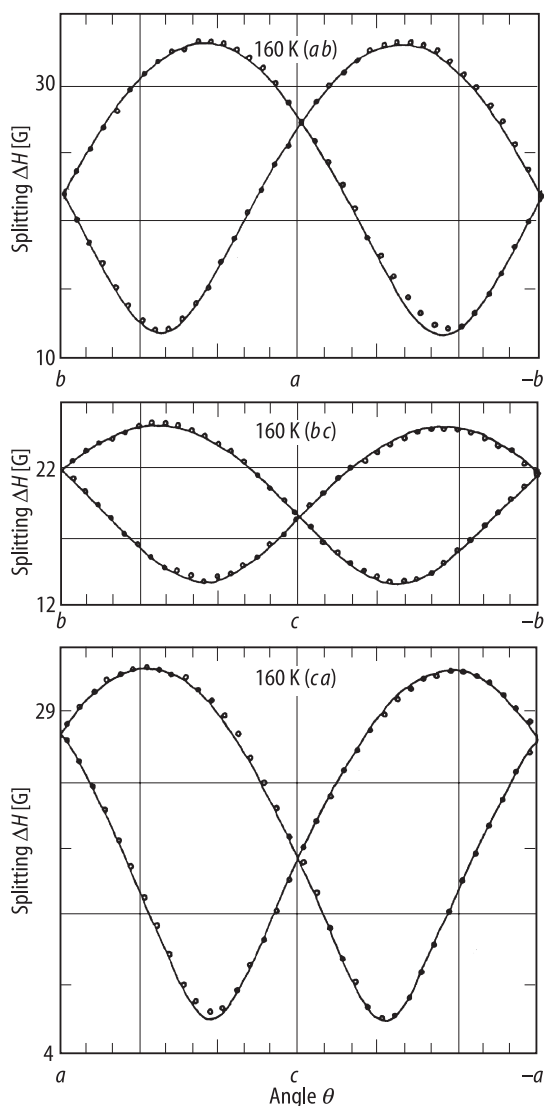


Fig. 41A-4-015. CsLiSO_4 . ΔH vs. θ [87Hua]. $T = 160$ K. ΔH : hyperfine splitting of nitrogen. θ : angle between the magnetic field and crystallographic axes. Solid lines are numerical plot.

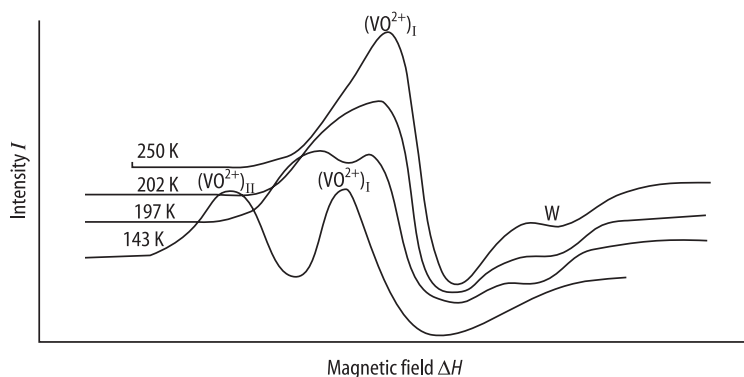


Fig. 41A-4-016. CsLiSO_4 . I vs. ΔH [93Ana]. I : intensity of the hyperfine line of VO^{2+} along $H \parallel c$. ΔH : relative value of magnetic field. Parameter: T . W: a small but temperature dependent signal ($197 \text{ K} \leq T \leq 250 \text{ K}$) indicating occurrence of a stable phase.

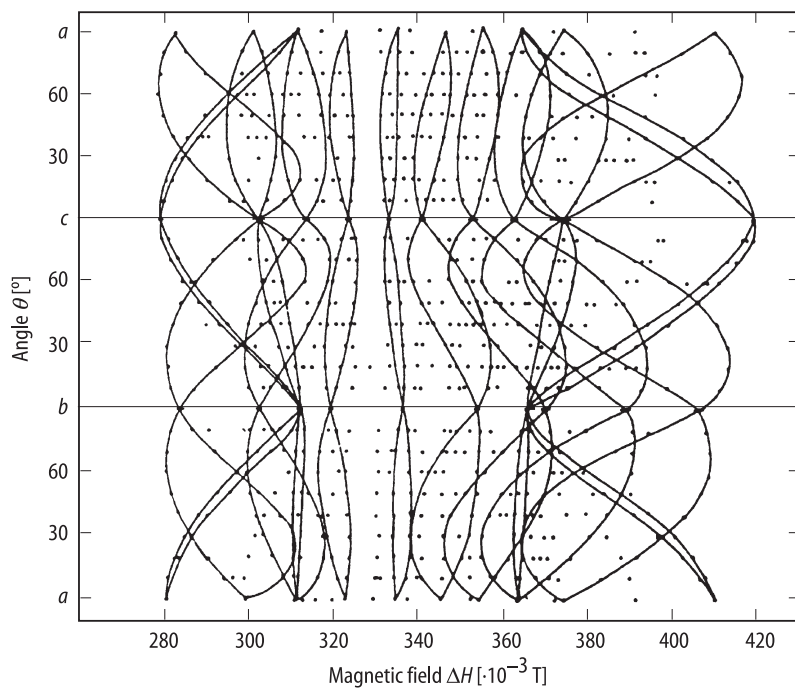


Fig. 41A-4-017. CsLiSO_4 . θ vs. ΔH [93Ana]. $T = \text{RT}$. θ : angles [°] in the three orthogonal planes ac , bc , ca . ΔH : hyperfine resonance magnetic field.

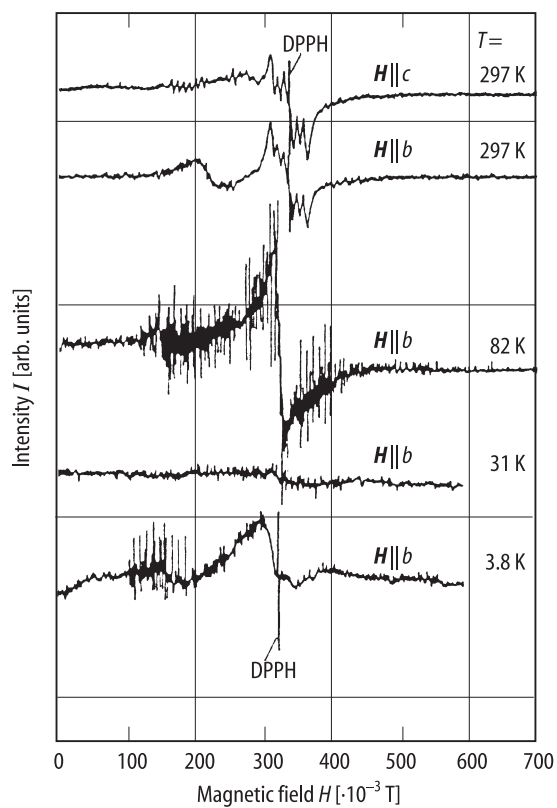


Fig. 41A-4-018. CsLiSO_4 . I vs. H [93Mis]. I : electron paramagnetic resonance intensity of Mn^{2+} for $H \parallel c$ and $H \parallel b$. Parameter: T .

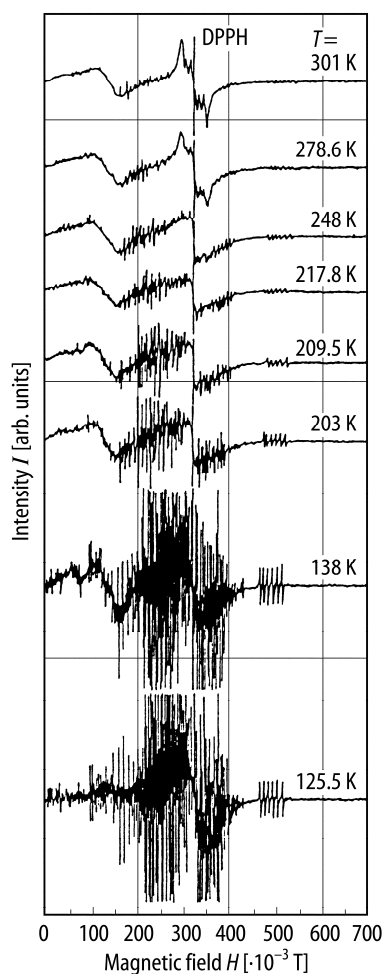


Fig. 41A-4-019. CsLiSO_4 . I vs. H [93Mis]. I : electron paramagnetic resonance intensity of Mn^{2+} for H at -25° from the c axis in the ac plane. Parameter: T .

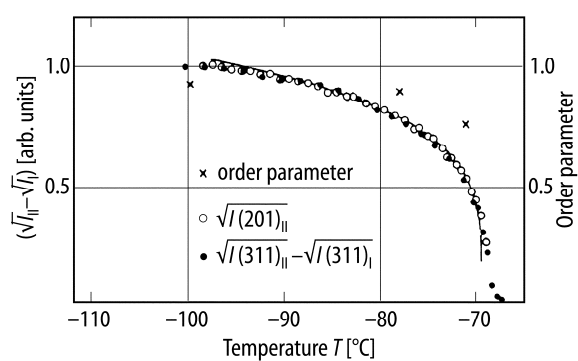


Fig. 41A-4-020. CsLiSO_4 . $(\sqrt{I_{II}} - \sqrt{I_I})$ and order parameter vs. T [88Asa]. $I(201)_I = 0$.

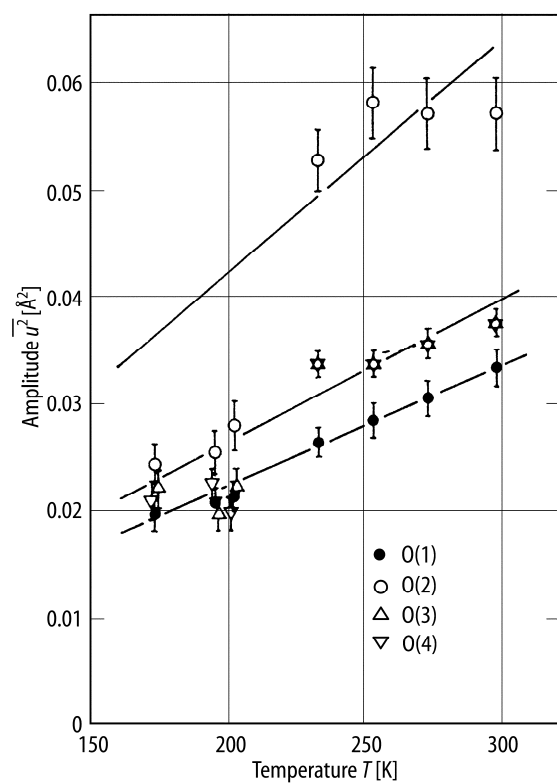


Fig. 41A-4-021. CsLiSO_4 . $\overline{u^2}$ vs. T [88Asa]. $\overline{u^2}$: mean square amplitude of oxygens in the displacive-type model. The solid lines represent the relation $\overline{u^2} \propto T$. See also Table 41A-4-002.