

substance: MnO

property: phonon dispersion, phonon wavenumbers

phonon dispersion curves: Fig. 1, neutron scattering experiments, see [71H, 77K].

phonon wavenumbers

(v/c) _{TO}	262 cm ⁻¹	RT	from IR reflectance	69P
	268 cm ⁻¹	RT	from IR reflectance	69K
	262 cm ⁻¹	<i>T</i> = 4.2 K	from UV absorption at 4.2 K	77Y
(v/c) _{LO}	552 cm ⁻¹	RT		69P
	550 cm ⁻¹	RT		69K
	485 cm ⁻¹	<i>T</i> = 4.2K		77Y

References:

- 69K Kinney, T. B., O'Keefe, M.: Solid State Commun. 7 (1969) 977.
- 69P Plendl, J. N., Mansur, L. C., Mitra, S. S., Chang, I. F.: Solid State Commun. 7 (1969) 107.
- 71H Haywood, B. C. G., Collins, M. F.: J. Phys. C4 (1971) 1299.
- 77K Kress, M.: Proc. Int. Conf. Lattice Dynamics, Balkanski, M. (ed.), 1977, p. 77.
- 77Y Yokogawa, M., Taniguchi, K., Hamaguchi, C.: J. Phys. Soc. Jpn. 42 (1977) 591.
- 79A Agarwal, S.: Solid. State Commun. 29 (1979) 197.

Fig. 1.

MnO. Phonon dispersion curves along symmetry directions at 300 K (experimental data and theoretical curves)
[77K, 79A].

