

HIGH-FREQUENCY COLLECTIVE EXCITATIONS IN MOLTEN AND GLASSY TELLURIUM.

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The spectra of collective excitations of liquid and glassy Tellurium have been studied by means of inelastic neutron scattering. Here we report on the dynamics of liquid Te as measured at two different temperatures, just above melting ($T_m = 723$ K) and at ~ 1000 K as well as the glass that is studied at room temperature. Estimates for the velocity of propagating excitations for both temperatures have been obtained from the experimental data and a contrasting behaviour is found with respect to anomalies shown by the adiabatic sound velocity measured by ultrasound methods. The origin of such differences is finally discussed.