Ae - Te - O

Al_2TeO_6

1981

95: 228299b **Infrared and Raman spectra and normal coordinate calculations on trirutile-type compounds.** Haeuseler, H. (Lab. Anorg. Chem., Univ. Siegen, D-5900 Siegen, 21 Fed. Rep. Ger.). *Spectrochim. Acta, Part A* 1981, 37A(7), 487-95 (Eng). The Raman spectra are reported of the trirutiles MM'_2O_6 (M = Mg, Co, Ni, M' = Sb, Ta; M = Zn, M' = Sb) and M_2TeO_6 (M = Al, Ga, Cr, Fe). The IR spectra are also reported for M_2TeO_6 (M = Al, Ga, Cr, Fe, Mn). A normal coordinate and force const. calcn. was performed based on trirutile-type structure Cartesian sym. coordinates. The Te–O stretching force const. has a value of 3.1 mdyn/Å, which indicates a covalent single bond. The normal modes are discussed in relation to the potential energy distribution and to the vibrations of a free octahedron.

спец. посм.,
Di

X

(+4) Ga_2TeO_6, ● Cr_2TeO_6, Fe_2TeO_6,
Mn_2TeO_6

C. A. 1981, 95, N 26.