Infrared spectra of GeO$_2$ with the rutile structure and prediction of inactive modes for isostructural compounds

Anne M. Hofmeister, Joanne Horgan, Julie M. Campbell

For deposit: Figures 6, 7, 8, 9

American Mineralogist. 75, 11-12, 1238-1248.
Infrared spectra of GeO$_2$ with the rutile structure and prediction of inactive modes for isosstructural compounds

Anne M. Hofmeister, Joanne Horigan, Julie M. Campbell

For deposit: Figures 6

American Mineralogist. 75, 11-12, 1238-1248.

Fig. 6. Dependence of the square of the vibrational frequency of the ungerade TO modes on force constant. (a) Oxides. (b) Fluorides. Force constants were calculated from eq. 4. See caption of Fig. 2 for further details.
Infrared spectra of $\text{GeO}_2$ with the rutile structure and prediction of inactive modes for isostructural compounds

Anne M. Hofmeister, Joanne Horigan, Julie M. Campbell

For deposit: Figures 7

American Mineralogist, 75, 11-12, 1238-1248.

Fig. 7. Dependence of the square of the vibrational frequency on reduced mass. (a) Gerade modes of the oxides. (b) Gerade modes of the fluorides. (c) Ungerade modes of the oxides. (d) Ungerade modes of the fluorides. See caption of Fig. 2 for further details.
RAMAN

WAVENUMBERS SQUARED

SiO₂
TiO₂
GeO₂
RuO₂
SnO₂
B₂g
A₁g
A₂g
E₉
B₁g

REDUCED MASS
Infrared spectra of GeO$_2$ with the rutile structure and prediction of inactive modes for isostructural compounds

Anne M. Hofmeister, Joanne Horgan, Julie M. Campbell

For deposit: Figures 8

American Mineralogist, 75, 11-12, 1238-1248.

Fig. 8. Dependence of the squared of vibrational frequencies on force constant divided by reduced mass. (a) Gerade modes for both oxides and fluorides. (b) Ungerade TO modes. Force constants were calculated from eq. 4. See caption of Fig. 2 for further details.
Infrared spectra of \( \text{GeO}_2 \) with the rutile structure and prediction of inactive modes for isostructural compounds

Anne M. Hofmeister, Joanne Horigan, Julie M. Campbell

For deposit: Figures 9

American Mineralogist, 75, 11-12, 1238-1248.

**Fig. 9.** Dependence of the squared of vibrational frequencies on force constant. (a) Gerade modes for both oxides and fluorides. (b) Ungerade TO modes. Force constants were calculated from eq. 4. See caption of Fig. 2 for further details.