

neighbor Sn-Sn and Mg-Mg interactions. The requirements of symmetry greatly reduce the number of independent constants.

$$D^{\text{Sn core-Sn Shell}} = \begin{pmatrix} \delta & 0 & 0 \\ 0 & \delta & 0 \\ 0 & 0 & \delta \end{pmatrix}$$

$$D^{\text{Mg-Sn}} = \begin{pmatrix} \alpha_1 & \beta_1 & \beta_1 \\ \beta_1 & \alpha_1 & \beta_1 \\ \beta_1 & \beta_1 & \alpha_1 \end{pmatrix}$$

$$D^{\text{Sn-Sn}} = \begin{pmatrix} \alpha_2 & 0 & 0 \\ 0 & \beta_2 & \gamma_2 \\ 0 & \gamma_2 & \beta_2 \end{pmatrix},$$

$$D^{\text{Mg-Mg}} = \begin{pmatrix} \beta_3 & 0 & 0 \\ 0 & \beta_3 & 0 \\ 0 & 0 & \alpha_3 \end{pmatrix}.$$

Proc. 7th Int. Conf. (1964).

Bull. Phys.

Soc. Am. 30,

1953.

Physics 7, 218

Semiconductors Academic Press,

ELLER E., Phys.

Phys. Rev. 112,

Proc. Int. Conf. (1963).

Electronics 1, 629

and HOSLER W. R.

109, 819 (1962).

Phys. Rev. 129, 2024

Soc. (London)

Can. J. Phys. 40,

1955 (1949).

(1950).

K., Phys. Rev.

Lattice Dynamics,

²⁴) we define the ion and another. ally as

) is evaluated at two-body potential between one ion

ants for the Sn Sn, next nearest