

MPG No. 2.3.5 $\bar{1}'$ [Type III, triclinic] [T tensor]

* Rank 0 tensor. * Rank 1 tensor.

$$[T_x \quad T_y \quad T_z]$$

$$T_x = T_{px}^{(1)}$$

$$T_y = T_{py}^{(1)}$$

$$T_z = T_{pz}^{(1)}$$

* Rank 2 tensor (s). * Rank 2 tensor (a). * Rank 3 tensor (s).

$$\begin{bmatrix} T_{xxx} & T_{xxy} & T_{xxz} \\ T_{yyx} & T_{yyy} & T_{yyz} \\ T_{zzx} & T_{zzy} & T_{zzz} \\ T_{yzz} & T_{yzy} & T_{yzz} \\ T_{zxz} & T_{zxy} & T_{zxz} \\ T_{xyx} & T_{xyy} & T_{xyz} \end{bmatrix}$$

$$T_{xxx} = 2T_{fax}^{(1)} + T_{px}^{(1)} + 2T_{px}^{(2)}$$

$$T_{xxy} = 2M_{dxz}^{(1)} - T_{fay}^{(1)} - T_{fbz}^{(1)} + T_{py}^{(1)}$$

$$T_{xxz} = -2M_{dyz}^{(1)} - T_{faz}^{(1)} + T_{fbz}^{(1)} + T_{pz}^{(1)}$$

$$T_{yyx} = -2M_{dyz}^{(1)} - T_{fax}^{(1)} + T_{fbx}^{(1)} + T_{px}^{(1)}$$

$$T_{yyy} = 2T_{fay}^{(1)} + T_{py}^{(1)} + 2T_{py}^{(2)}$$

$$T_{yyz} = 2M_{dxy}^{(1)} - T_{faz}^{(1)} - T_{fbz}^{(1)} + T_{pz}^{(1)}$$

$$T_{zzx} = 2M_{dyz}^{(1)} - T_{fax}^{(1)} - T_{fbx}^{(1)} + T_{px}^{(1)}$$

$$T_{zzy} = -2M_{dxz}^{(1)} - T_{fay}^{(1)} + T_{fbz}^{(1)} + T_{py}^{(1)}$$

$$T_{zzz} = 2T_{faz}^{(1)} + T_{pz}^{(1)} + 2T_{pz}^{(2)}$$

$$T_{yzz} = -3M_{du}^{(1)} - M_{dv}^{(1)} + T_{f3}^{(1)}$$

$$T_{yzy} = -M_{dxy}^{(1)} - T_{faz}^{(1)} - T_{fbz}^{(1)} + T_{pz}^{(2)}$$

$$T_{yzz} = M_{dxz}^{(1)} - T_{fay}^{(1)} + T_{fbz}^{(1)} + T_{py}^{(2)}$$

$$T_{zxz} = M_{dxy}^{(1)} - T_{faz}^{(1)} + T_{fbz}^{(1)} + T_{pz}^{(2)}$$

$$T_{zxy} = 3M_{du}^{(1)} - M_{dv}^{(1)} + T_{f3}^{(1)}$$

$$T_{zxz} = -M_{dyz}^{(1)} - T_{fax}^{(1)} - T_{fbx}^{(1)} + T_{px}^{(2)}$$

$$T_{xyx} = -M_{dxz}^{(1)} - T_{fay}^{(1)} - T_{fbz}^{(1)} + T_{py}^{(2)}$$

$$T_{xyy} = M_{dyz}^{(1)} - T_{fax}^{(1)} + T_{fbx}^{(1)} + T_{px}^{(2)}$$

$$T_{xyz} = 2M_{dv}^{(1)} + T_{f3}^{(1)}$$

* Rank 3 tensor (a).

$$\begin{bmatrix} T_{yzz} & T_{yzy} & T_{yzz} \\ T_{zxz} & T_{zxy} & T_{zxz} \\ T_{xyx} & T_{xyy} & T_{xyz} \end{bmatrix}$$

$$T_{yzz} = -M_{du}^{(2)} + M_{dv}^{(2)} + M_s^{(1)}$$

$$T_{yzy} = M_{dxy}^{(2)} + T_{pz}^{(3)}$$

$$T_{yzz} = M_{dxz}^{(2)} - T_{py}^{(3)}$$

$$T_{zxx} = M_{dxy}^{(2)} - T_{pz}^{(3)}$$

$$T_{zxy} = -M_{du}^{(2)} - M_{dv}^{(2)} + M_s^{(1)}$$

$$T_{zxz} = M_{dyz}^{(2)} + T_{px}^{(3)}$$

$$T_{xyx} = M_{dxz}^{(2)} + T_{py}^{(3)}$$

$$T_{xyy} = M_{dyz}^{(2)} - T_{px}^{(3)}$$

$$T_{xyz} = 2M_{du}^{(2)} + M_s^{(1)}$$

* Rank 4 tensor (sss). * Rank 4 tensor (ssa). * Rank 4 tensor (aas). * Rank 4 tensor (aaa). * Rank 4 tensor (sa). * Rank 4 tensor (as). * Rank 4 tensor (s). * Rank 4 tensor (a). * Rank 4 tensor (t).