* Rank 0 tensor.

$[Q]$

$Q = Q_s^{(1)}$

* Rank 1 tensor.

$[Q_x \quad Q_y \quad Q_z]$

$Q_x = Q_{px}^{(1)}$

$Q_y = Q_{py}^{(1)}$

$Q_z = Q_{pz}^{(1)}$

* Rank 2 tensor (s).

$$\begin{bmatrix} Q_{xx} & Q_{xy} & Q_{xz} \\ Q_{xy} & Q_{yy} & Q_{yz} \\ Q_{xz} & Q_{yz} & Q_{zz} \end{bmatrix}$$

$Q_{xx} = -Q_{du}^{(1)} + Q_{dv}^{(1)} + Q_s^{(1)}$

$Q_{xy} = Q_{dxy}^{(1)}$

$Q_{xz} = Q_{dxz}^{(1)}$

$Q_{yy} = -Q_{du}^{(1)} - Q_{dv}^{(1)} + Q_s^{(1)}$

$Q_{yz} = Q_{dyz}^{(1)}$

$Q_{zz} = 2Q_{du}^{(1)} + Q_s^{(1)}$

* Rank 2 tensor (a).

$$\begin{bmatrix} 0 & Q_{xy} & Q_{xz} \\ -Q_{xy} & 0 & Q_{yz} \\ -Q_{xz} & -Q_{yz} & 0 \end{bmatrix}$$

$Q_{xy} = G_{pz}^{(1)}$

$Q_{xz} = -G_{py}^{(1)}$

$Q_{yz} = G_{px}^{(1)}$

* Rank 3 tensor (s).

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

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

$$Q_{xxy} = 2G_{dxz}^{(1)} - Q_{fay}^{(1)} - Q_{fby}^{(1)} + Q_{py}^{(1)}$$

$$Q_{xxz} = -2G_{dxy}^{(1)} - Q_{faz}^{(1)} + Q_{fbz}^{(1)} + Q_{pz}^{(1)}$$

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

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

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

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

$$Q_{zzy} = -2G_{dxz}^{(1)} - Q_{fay}^{(1)} + Q_{fby}^{(1)} + Q_{py}^{(1)}$$

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

$$Q_{yzx} = -3G_{du}^{(1)} - G_{dv}^{(1)} + Q_{f3}^{(1)}$$

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

$$Q_{yzz} = G_{dxz}^{(1)} - Q_{fay}^{(1)} + Q_{fby}^{(1)} + Q_{py}^{(2)}$$

$$Q_{zxx} = G_{dxy}^{(1)} - Q_{faz}^{(1)} + Q_{fbz}^{(1)} + Q_{pz}^{(2)}$$

$$Q_{zxy} = 3G_{du}^{(1)} - G_{dv}^{(1)} + Q_{f3}^{(1)}$$

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

$$Q_{xyx} = -G_{dxz}^{(1)} - Q_{fay}^{(1)} - Q_{fby}^{(1)} + Q_{py}^{(2)}$$

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

$$Q_{xyz} = 2G_{dv}^{(1)} + Q_{f3}^{(1)}$$

* Rank 3 tensor (a).

$$\begin{bmatrix} Q_{yzx} & Q_{yzy} & Q_{yzz} \\ Q_{zxx} & Q_{zxy} & Q_{zxz} \\ Q_{xyx} & Q_{xyy} & Q_{xyz} \end{bmatrix}$$

$$Q_{yzx} = -G_{du}^{(2)} + G_{dv}^{(2)} + G_{s}^{(1)}$$

$$Q_{yzy} = G_{dxy}^{(2)} + Q_{pz}^{(3)}$$

$$Q_{yzz} = G_{dxz}^{(2)} - Q_{py}^{(3)}$$

$$Q_{zxx} = G_{dxy}^{(2)} - Q_{pz}^{(3)}$$

$$Q_{zxy} = -G_{du}^{(2)} - G_{dv}^{(2)} + G_{s}^{(1)}$$

$$Q_{zxz} = G_{dyz}^{(2)} + Q_{px}^{(3)}$$

$$Q_{xyx} = G_{dxz}^{(2)} + Q_{py}^{(3)}$$

$$Q_{xyy} = G_{dyz}^{(2)} - Q_{px}^{(3)}$$

$$Q_{xyz} = 2G_{du}^{(2)} + G_{s}^{(1)}$$

* Rank 4 tensor (sss).

$$\begin{bmatrix} Q_{xxxx} & Q_{xxyy} & Q_{xxzz} & Q_{xxyz} & Q_{xxzx} & Q_{xxxy} \\ Q_{xxyy} & Q_{yyyy} & Q_{yyzz} & Q_{yyyz} & Q_{yyzx} & Q_{yyxy} \\ Q_{xxzz} & Q_{yyzz} & Q_{zzzz} & Q_{zzyz} & Q_{zzzx} & Q_{zzxy} \\ Q_{xxyz} & Q_{yyyz} & Q_{zzyz} & Q_{yzyz} & Q_{yzzx} & Q_{yzxy} \\ Q_{xxzx} & Q_{yyzx} & Q_{zzzx} & Q_{yzzx} & Q_{zxzx} & Q_{zxxy} \\ Q_{xxxy} & Q_{yyxy} & Q_{zzxy} & Q_{yzxy} & Q_{zxxy} & Q_{xyxy} \end{bmatrix}$$

$$Q_{xxxx} = -2Q_{du}^{(1)} - 4Q_{du}^{(2)} + 2Q_{dv}^{(1)} + 4Q_{dv}^{(2)} - Q_{gu}^{(1)} + Q_{gv}^{(1)} + 2Q_g^{(1)} + Q_s^{(1)} + 2Q_s^{(2)}$$

$$Q_{xxyy} = -2Q_{du}^{(1)} + 2Q_{gu}^{(1)} - Q_g^{(1)} + Q_s^{(1)}$$

$$Q_{xxzz} = Q_{du}^{(1)} + Q_{dv}^{(1)} - Q_{gu}^{(1)} - Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(1)}$$

$$Q_{xxyz} = Q_{dyz}^{(1)} + 2Q_{gbx}^{(1)}$$

$$Q_{xxzx} = Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} - Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{xxxy} = Q_{dxy}^{(1)} + 2Q_{dxy}^{(2)} + Q_{gaz}^{(1)} - Q_{gbz}^{(1)}$$

$$Q_{yyyy} = -2Q_{du}^{(1)} - 4Q_{du}^{(2)} - 2Q_{dv}^{(1)} - 4Q_{dv}^{(2)} - Q_{gu}^{(1)} - Q_{gv}^{(1)} + 2Q_g^{(1)} + Q_s^{(1)} + 2Q_s^{(2)}$$

$$Q_{yyzz} = Q_{du}^{(1)} - Q_{dv}^{(1)} - Q_{gu}^{(1)} + Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(1)}$$

$$Q_{yyyz} = Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} + Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{yyzx} = Q_{dxz}^{(1)} + 2Q_{gby}^{(1)}$$

$$Q_{yyxy} = Q_{dxy}^{(1)} + 2Q_{dxy}^{(2)} - Q_{gaz}^{(1)} - Q_{gbz}^{(1)}$$

$$Q_{zzzz} = 4Q_{du}^{(1)} + 8Q_{du}^{(2)} + 2Q_{gu}^{(1)} + 2Q_g^{(1)} + Q_s^{(1)} + 2Q_s^{(2)}$$

$$Q_{zzyz} = Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} - Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{zzzx} = Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} + Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{zzxy} = Q_{dxy}^{(1)} + 2Q_{gbz}^{(1)}$$

$$Q_{yzyz} = Q_{du}^{(2)} - Q_{dv}^{(2)} - Q_{gu}^{(1)} + Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(2)}$$

$$Q_{yzzx} = Q_{dxy}^{(2)} + 2Q_{gbz}^{(1)}$$

$$Q_{yzxy} = Q_{dxz}^{(2)} + 2Q_{gby}^{(1)}$$

$$Q_{zxzx} = Q_{du}^{(2)} + Q_{dv}^{(2)} - Q_{gu}^{(1)} - Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(2)}$$

$$Q_{zxxy} = Q_{dyz}^{(2)} + 2Q_{gbx}^{(1)}$$

$$Q_{xyxy} = -2Q_{du}^{(2)} + 2Q_{gu}^{(1)} - Q_g^{(1)} + Q_s^{(2)}$$

* Rank 4 tensor (ssa).

$$
\begin{bmatrix}
0 & Q_{xxyy} & Q_{xxzz} & Q_{xxyz} & Q_{xxzx} & Q_{xxxy} \\
-Q_{xxyy} & 0 & Q_{yyzz} & Q_{yyyz} & Q_{yyzx} & Q_{yyxy} \\
-Q_{xxzz} & -Q_{yyzz} & 0 & Q_{zzyz} & Q_{zzzx} & Q_{zzxy} \\
-Q_{xxyz} & -Q_{yyyz} & -Q_{zzyz} & 0 & Q_{yzzx} & Q_{yzxy} \\
-Q_{xxzx} & -Q_{yyzx} & -Q_{zzzx} & -Q_{yzzx} & 0 & Q_{zxxy} \\
-Q_{xxxy} & -Q_{yyxy} & -Q_{zzxy} & -Q_{yzxy} & -Q_{zxxy} & 0
\end{bmatrix}
$$

$$Q_{xxyy} = 4G_{f3}^{(1)} - 2Q_{dv}^{(3)}$$

$$Q_{xxzz} = -4G_{f3}^{(1)} + 3Q_{du}^{(3)} - Q_{dv}^{(3)}$$

$$Q_{xxyz} = -4G_{fbx}^{(1)} + Q_{dyz}^{(3)}$$

$$Q_{xxzx} = 2G_{fay}^{(1)} + 2G_{fby}^{(1)} - 2G_{py}^{(1)} + Q_{dxz}^{(3)}$$

$$Q_{xxxy} = -2G_{faz}^{(1)} + 2G_{fbz}^{(1)} + 2G_{pz}^{(1)} + Q_{dxy}^{(3)}$$

$$Q_{yyzz} = 4G_{f3}^{(1)} + 3Q_{du}^{(3)} + Q_{dv}^{(3)}$$

$$Q_{yyyz} = -2G_{fax}^{(1)} + 2G_{fbx}^{(1)} + 2G_{px}^{(1)} + Q_{dyz}^{(3)}$$

$$Q_{yyzx} = -4G_{fby}^{(1)} + Q_{dxz}^{(3)}$$

$$Q_{yyxy} = 2G_{faz}^{(1)} + 2G_{fbz}^{(1)} - 2G_{pz}^{(1)} + Q_{dxy}^{(3)}$$

$$Q_{zzyz} = 2G_{fax}^{(1)} + 2G_{fbx}^{(1)} - 2G_{px}^{(1)} + Q_{dyz}^{(3)}$$

$$Q_{zzzx} = -2G_{fay}^{(1)} + 2G_{fby}^{(1)} + 2G_{py}^{(1)} + Q_{dxz}^{(3)}$$

$$Q_{zzxy} = -4G_{fbz}^{(1)} + Q_{dxy}^{(3)}$$

$$Q_{yzzx} = -4G_{faz}^{(1)} - G_{pz}^{(1)}$$

$$Q_{yzxy} = 4G_{fay}^{(1)} + G_{py}^{(1)}$$

$$Q_{zxxy} = -4G_{fax}^{(1)} - G_{px}^{(1)}$$

* Rank 4 tensor (aas).

$$\begin{bmatrix} Q_{yzyz} & Q_{yzzx} & Q_{yzxy} \\ Q_{yzzx} & Q_{zxzx} & Q_{zxxy} \\ Q_{yzxy} & Q_{zxxy} & Q_{xyxy} \end{bmatrix}$$

$$Q_{yzyz} = -2Q_{du}^{(4)} + 2Q_{dv}^{(4)} + Q_{s}^{(3)}$$

$$Q_{yzzx} = 2Q_{dxy}^{(4)}$$

$$Q_{yzxy} = 2Q_{dxz}^{(4)}$$

$$Q_{zxzx} = -2Q_{du}^{(4)} - 2Q_{dv}^{(4)} + Q_{s}^{(3)}$$

$$Q_{zxxy} = 2Q_{dyz}^{(4)}$$

$$Q_{xyxy} = 4Q_{du}^{(4)} + Q_{s}^{(3)}$$

* Rank 4 tensor (aaa).

$$\begin{bmatrix} 0 & Q_{yzzx} & Q_{yzxy} \\ -Q_{yzzx} & 0 & Q_{zxxy} \\ -Q_{yzxy} & -Q_{zxxy} & 0 \end{bmatrix}$$

$$Q_{yzzx} = -G_{pz}^{(2)}$$

$$Q_{yzxy} = G_{py}^{(2)}$$

$$Q_{zxxy} = -G_{px}^{(2)}$$

* Rank 4 tensor (sa).

$$\begin{bmatrix} Q_{xxyz} & Q_{xxzx} & Q_{xxxy} \\ Q_{yyyz} & Q_{yyzx} & Q_{yyxy} \\ Q_{zzyz} & Q_{zzzx} & Q_{zzxy} \\ Q_{yzyz} & Q_{yzzx} & Q_{yzxy} \\ Q_{zxyz} & Q_{zxzx} & Q_{zxxy} \\ Q_{xyyz} & Q_{xyzx} & Q_{xyxy} \end{bmatrix}$$

$$Q_{xxyz} = 2G^{(2)}_{fax} + G^{(3)}_{px} + 2G^{(4)}_{px}$$

$$Q_{xxzx} = -G^{(2)}_{fay} - G^{(2)}_{fby} + G^{(3)}_{py} + 2Q^{(5)}_{dxz}$$

$$Q_{xxxy} = -G^{(2)}_{faz} + G^{(2)}_{fbz} + G^{(3)}_{pz} - 2Q^{(5)}_{dxy}$$

$$Q_{yyyz} = -G^{(2)}_{fax} + G^{(2)}_{fbx} + G^{(3)}_{px} - 2Q^{(5)}_{dyz}$$

$$Q_{yyzx} = 2G^{(2)}_{fay} + G^{(3)}_{py} + 2G^{(4)}_{py}$$

$$Q_{yyxy} = -G^{(2)}_{faz} - G^{(2)}_{fbz} + G^{(3)}_{pz} + 2Q^{(5)}_{dxy}$$

$$Q_{zzyz} = -G^{(2)}_{fax} - G^{(2)}_{fbx} + G^{(3)}_{px} + 2Q^{(5)}_{dyz}$$

$$Q_{zzzx} = -G^{(2)}_{fay} + G^{(2)}_{fby} + G^{(3)}_{py} - 2Q^{(5)}_{dxz}$$

$$Q_{zzxy} = 2G^{(2)}_{faz} + G^{(3)}_{pz} + 2G^{(4)}_{pz}$$

$$Q_{yzyz} = G^{(2)}_{f3} - 3Q^{(5)}_{du} - Q^{(5)}_{dv}$$

$$Q_{yzzx} = -G^{(2)}_{faz} - G^{(2)}_{fbz} + G^{(4)}_{pz} - Q^{(5)}_{dxy}$$

$$Q_{yzxy} = -G^{(2)}_{fay} + G^{(2)}_{fby} + G^{(4)}_{py} + Q^{(5)}_{dxz}$$

$$Q_{zxyz} = -G^{(2)}_{faz} + G^{(2)}_{fbz} + G^{(4)}_{pz} + Q^{(5)}_{dxy}$$

$$Q_{zxzx} = G^{(2)}_{f3} + 3Q^{(5)}_{du} - Q^{(5)}_{dv}$$

$$Q_{zxxy} = -G^{(2)}_{fax} - G^{(2)}_{fbx} + G^{(4)}_{px} - Q^{(5)}_{dyz}$$

$$Q_{xyyz} = -G^{(2)}_{fay} - G^{(2)}_{fby} + G^{(4)}_{py} - Q^{(5)}_{dxz}$$

$$Q_{xyzx} = -G^{(2)}_{fax} + G^{(2)}_{fbx} + G^{(4)}_{px} + Q^{(5)}_{dyz}$$

$$Q_{xyxy} = G^{(2)}_{f3} + 2Q^{(5)}_{dv}$$

* Rank 4 tensor (as).

$$\begin{bmatrix} Q_{yzxx} & Q_{yzyy} & Q_{yzzz} & Q_{yzyz} & Q_{yzzx} & Q_{yzxy} \\ Q_{zxxx} & Q_{zxyy} & Q_{zxzz} & Q_{zxyz} & Q_{zxzx} & Q_{zxxy} \\ Q_{xyxx} & Q_{xyyy} & Q_{xyzz} & Q_{xyyz} & Q_{xyzx} & Q_{xyxy} \end{bmatrix}$$

$$Q_{yzxx} = 2G^{(3)}_{fax} + G^{(5)}_{px} + 2G^{(6)}_{px}$$

$$Q_{yzyy} = -G^{(3)}_{fax} + G^{(3)}_{fbx} + G^{(5)}_{px} - 2Q^{(6)}_{dyz}$$

$$Q_{yzzz} = -G^{(3)}_{fax} - G^{(3)}_{fbx} + G^{(5)}_{px} + 2Q^{(6)}_{dyz}$$

$$Q_{yzyz} = G^{(3)}_{f3} - 3Q^{(6)}_{du} - Q^{(6)}_{dv}$$

$$Q_{yzzx} = -G^{(3)}_{faz} + G^{(3)}_{fbz} + G^{(6)}_{pz} + Q^{(6)}_{dxy}$$

$$Q_{yzxy} = -G^{(3)}_{fay} - G^{(3)}_{fby} + G^{(6)}_{py} - Q^{(6)}_{dxz}$$

$$Q_{zxxx} = -G^{(3)}_{fay} - G^{(3)}_{fby} + G^{(5)}_{py} + 2Q^{(6)}_{dxz}$$

$$Q_{zxyy} = 2G^{(3)}_{fay} + G^{(5)}_{py} + 2G^{(6)}_{py}$$

$$Q_{zxzz} = -G^{(3)}_{fay} + G^{(3)}_{fby} + G^{(5)}_{py} - 2Q^{(6)}_{dxz}$$

$$Q_{zxyz} = -G^{(3)}_{faz} - G^{(3)}_{fbz} + G^{(6)}_{pz} - Q^{(6)}_{dxy}$$

$$Q_{zxzx} = G^{(3)}_{f3} + 3Q^{(6)}_{du} - Q^{(6)}_{dv}$$

$$Q_{zxxy} = -G^{(3)}_{fax} + G^{(3)}_{fbx} + G^{(6)}_{px} + Q^{(6)}_{dyz}$$

$$Q_{xyxx} = -G^{(3)}_{faz} + G^{(3)}_{fbz} + G^{(5)}_{pz} - 2Q^{(6)}_{dxy}$$

$$Q_{xyyy} = -G^{(3)}_{faz} - G^{(3)}_{fbz} + G^{(5)}_{pz} + 2Q^{(6)}_{dxy}$$

$$Q_{xyzz} = 2G^{(3)}_{faz} + G^{(5)}_{pz} + 2G^{(6)}_{pz}$$

$$Q_{xyyz} = -G^{(3)}_{fay} + G^{(3)}_{fby} + G^{(6)}_{py} + Q^{(6)}_{dxz}$$

$$Q_{xyzx} = -G^{(3)}_{fax} - G^{(3)}_{fbx} + G^{(6)}_{px} - Q^{(6)}_{dyz}$$

$$Q_{xyxy} = G^{(3)}_{f3} + 2Q^{(6)}_{dv}$$

* Rank 4 tensor (s).

$$\begin{bmatrix} Q_{xxxx} & Q_{xxyy} & Q_{xxzz} & Q_{xxyz} & Q_{xxzx} & Q_{xxxy} & Q_{xxzy} & Q_{xxxz} & Q_{xxyx} \\ Q_{yyxx} & Q_{yyyy} & Q_{yyzz} & Q_{yyyz} & Q_{yyzx} & Q_{yyxy} & Q_{yyzy} & Q_{yyxz} & Q_{yyyx} \\ Q_{zzxx} & Q_{zzyy} & Q_{zzzz} & Q_{zzyz} & Q_{zzzx} & Q_{zzxy} & Q_{zzzy} & Q_{zzxz} & Q_{zzyx} \\ Q_{yzxx} & Q_{yzyy} & Q_{yzzz} & Q_{yzyz} & Q_{yzzx} & Q_{yzxy} & Q_{yzzy} & Q_{yzxz} & Q_{yzyx} \\ Q_{zxxx} & Q_{zxyy} & Q_{zxzz} & Q_{zxyz} & Q_{zxzx} & Q_{zxxy} & Q_{zxzy} & Q_{zxxz} & Q_{zxyx} \\ Q_{xyxx} & Q_{xyyy} & Q_{xyzz} & Q_{xyyz} & Q_{xyzx} & Q_{xyxy} & Q_{xyzy} & Q_{xyxz} & Q_{xyyx} \end{bmatrix}$$

$$Q_{xxxx} = -2Q_{du}^{(1)} - 4Q_{du}^{(2)} + 2Q_{dv}^{(1)} + 4Q_{dv}^{(2)} - Q_{gu}^{(1)} + Q_{gv}^{(1)} + 2Q_g^{(1)} + Q_s^{(1)} + 2Q_s^{(2)}$$

$$Q_{xxyy} = 4G_{f3}^{(1)} - 2Q_{du}^{(1)} - 2Q_{dv}^{(3)} + 2Q_{gu}^{(1)} - Q_g^{(1)} + Q_s^{(1)}$$

$$Q_{xxzz} = -4G_{f3}^{(1)} + Q_{du}^{(1)} + 3Q_{du}^{(3)} + Q_{dv}^{(1)} - Q_{dv}^{(3)} - Q_{gu}^{(1)} - Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(1)}$$

$$Q_{xxyz} = 2G_{fax}^{(2)} - 4G_{fbx}^{(1)} + G_{px}^{(3)} + 2G_{px}^{(4)} + Q_{dyz}^{(1)} + Q_{dyz}^{(3)} + 2Q_{gbx}^{(1)}$$

$$Q_{xxzx} = 2G_{fay}^{(1)} - G_{fay}^{(2)} + 2G_{fby}^{(1)} - G_{fby}^{(2)} - 2G_{py}^{(1)} + G_{py}^{(3)} + Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} + Q_{dxz}^{(3)} + 2Q_{dxz}^{(5)} - Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{xxxy} = -2G_{faz}^{(1)} - G_{faz}^{(2)} + 2G_{fbz}^{(1)} + G_{fbz}^{(2)} + 2G_{pz}^{(1)} + G_{pz}^{(3)} + Q_{dxy}^{(1)} + 2Q_{dxy}^{(2)} + Q_{dxy}^{(3)} - 2Q_{dxy}^{(5)} + Q_{gaz}^{(1)} - Q_{gbz}^{(1)}$$

$$Q_{xxzy} = -2G_{fax}^{(2)} - 4G_{fbx}^{(1)} - G_{px}^{(3)} - 2G_{px}^{(4)} + Q_{dyz}^{(1)} + Q_{dyz}^{(3)} + 2Q_{gbx}^{(1)}$$

$$Q_{xxxz} = 2G_{fay}^{(1)} + G_{fay}^{(2)} + 2G_{fby}^{(1)} + G_{fby}^{(2)} - 2G_{py}^{(1)} - G_{py}^{(3)} + Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} + Q_{dxz}^{(3)} - 2Q_{dxz}^{(5)} - Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{xxyx} = -2G_{faz}^{(1)} + G_{faz}^{(2)} + 2G_{fbz}^{(1)} - G_{fbz}^{(2)} + 2G_{pz}^{(1)} - G_{pz}^{(3)} + Q_{dxy}^{(1)} + 2Q_{dxy}^{(2)} + Q_{dxy}^{(3)} + 2Q_{dxy}^{(5)} + Q_{gaz}^{(1)} - Q_{gbz}^{(1)}$$

$$Q_{yyxx} = -4G_{f3}^{(1)} - 2Q_{du}^{(1)} + 2Q_{dv}^{(3)} + 2Q_{gu}^{(1)} - Q_g^{(1)} + Q_s^{(1)}$$

$$Q_{yyyy} = -2Q_{du}^{(1)} - 4Q_{du}^{(2)} - 2Q_{dv}^{(1)} - 4Q_{dv}^{(2)} - Q_{gu}^{(1)} - Q_{gv}^{(1)} + 2Q_g^{(1)} + Q_s^{(1)} + 2Q_s^{(2)}$$

$$Q_{yyzz} = 4G_{f3}^{(1)} + Q_{du}^{(1)} + 3Q_{du}^{(3)} - Q_{dv}^{(1)} + Q_{dv}^{(3)} - Q_{gu}^{(1)} + Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(1)}$$

$$Q_{yyyz} = -2G_{fax}^{(1)} - G_{fax}^{(2)} + 2G_{fbx}^{(1)} + G_{fbx}^{(2)} + 2G_{px}^{(1)} + G_{px}^{(3)} + Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} + Q_{dyz}^{(3)} - 2Q_{dyz}^{(5)} + Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{yyzx} = 2G_{fay}^{(2)} - 4G_{fby}^{(1)} + G_{py}^{(3)} + 2G_{py}^{(4)} + Q_{dxz}^{(1)} + Q_{dxz}^{(3)} + 2Q_{gby}^{(1)}$$

$$Q_{yyxy} = 2G_{faz}^{(1)} - G_{faz}^{(2)} + 2G_{fbz}^{(1)} - G_{fbz}^{(2)} - 2G_{pz}^{(1)} + G_{pz}^{(3)} + Q_{dxy}^{(1)} + 2Q_{dxy}^{(2)} + Q_{dxy}^{(3)} + 2Q_{dxy}^{(5)} - Q_{gaz}^{(1)} - Q_{gbz}^{(1)}$$

$$Q_{yyzy} = -2G_{fax}^{(1)} + G_{fax}^{(2)} + 2G_{fbx}^{(1)} - G_{fbx}^{(2)} + 2G_{px}^{(1)} - G_{px}^{(3)} + Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} + Q_{dyz}^{(3)} + 2Q_{dyz}^{(5)} + Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{yyxz} = -2G_{fay}^{(2)} - 4G_{fby}^{(1)} - G_{py}^{(3)} - 2G_{py}^{(4)} + Q_{dxz}^{(1)} + Q_{dxz}^{(3)} + 2Q_{gby}^{(1)}$$

$$Q_{yyyx} = 2G_{faz}^{(1)} + G_{faz}^{(2)} + 2G_{fbz}^{(1)} + G_{fbz}^{(2)} - 2G_{pz}^{(1)} - G_{pz}^{(3)} + Q_{dxy}^{(1)} + 2Q_{dxy}^{(2)} + Q_{dxy}^{(3)} - 2Q_{dxy}^{(5)} - Q_{gaz}^{(1)} - Q_{gbz}^{(1)}$$

$$Q_{zzxx} = 4G_{f3}^{(1)} + Q_{du}^{(1)} - 3Q_{du}^{(3)} + Q_{dv}^{(1)} + Q_{dv}^{(3)} - Q_{gu}^{(1)} - Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(1)}$$

$$Q_{zzyy} = -4G_{f3}^{(1)} + Q_{du}^{(1)} - 3Q_{du}^{(3)} - Q_{dv}^{(1)} - Q_{dv}^{(3)} - Q_{gu}^{(1)} + Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(1)}$$

$$Q_{zzzz} = 4Q_{du}^{(1)} + 8Q_{du}^{(2)} + 2Q_{gu}^{(1)} + 2Q_g^{(1)} + Q_s^{(1)} + 2Q_s^{(2)}$$

$$Q_{zzyz} = 2G_{fax}^{(1)} - G_{fax}^{(2)} + 2G_{fbx}^{(1)} - G_{fbx}^{(2)} - 2G_{px}^{(1)} + G_{px}^{(3)} + Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} + Q_{dyz}^{(3)} + 2Q_{dyz}^{(5)} - Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{zzzx} = -2G_{fay}^{(1)} - G_{fay}^{(2)} + 2G_{fby}^{(1)} + G_{fby}^{(2)} + 2G_{py}^{(1)} + G_{py}^{(3)} + Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} + Q_{dxz}^{(3)} - 2Q_{dxz}^{(5)} + Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{zzxy} = 2G_{faz}^{(2)} - 4G_{fbz}^{(1)} + G_{pz}^{(3)} + 2G_{pz}^{(4)} + Q_{dxy}^{(1)} + Q_{dxy}^{(3)} + 2Q_{gbz}^{(1)}$$

$$Q_{zzzy} = 2G_{fax}^{(1)} + G_{fax}^{(2)} + 2G_{fbx}^{(1)} + G_{fbx}^{(2)} - 2G_{px}^{(1)} - G_{px}^{(3)} + Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} + Q_{dyz}^{(3)} - 2Q_{dyz}^{(5)} - Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{zzxz} = -2G_{fay}^{(1)} + G_{fay}^{(2)} + 2G_{fby}^{(1)} - G_{fby}^{(2)} + 2G_{py}^{(1)} - G_{py}^{(3)} + Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} + Q_{dxz}^{(3)} + 2Q_{dxz}^{(5)} + Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{zzyx} = -2G_{faz}^{(2)} - 4G_{fbz}^{(1)} - G_{pz}^{(3)} - 2G_{pz}^{(4)} + Q_{dxy}^{(1)} + Q_{dxy}^{(3)} + 2Q_{gbz}^{(1)}$$

$$Q_{yzxx} = 4G_{fbx}^{(1)} + Q_{dyz}^{(1)} - Q_{dyz}^{(3)} + 2Q_{gbx}^{(1)}$$

$$Q_{yzyy} = 2G_{fax}^{(1)} - 2G_{fbx}^{(1)} - 2G_{px}^{(1)} + Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} - Q_{dyz}^{(3)} + Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{yzzz} = -2G_{fax}^{(1)} - 2G_{fbx}^{(1)} + 2G_{px}^{(1)} + Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} - Q_{dyz}^{(3)} - Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{yzyz} = G_{f3}^{(2)} + Q_{du}^{(2)} - 3Q_{du}^{(5)} - Q_{dv}^{(2)} - Q_{dv}^{(5)} - Q_{gu}^{(1)} + Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(2)}$$

$$Q_{yzzx} = -4G_{faz}^{(1)} - G_{faz}^{(2)} - G_{fbz}^{(2)} - G_{pz}^{(1)} + G_{pz}^{(4)} + Q_{dxy}^{(2)} - Q_{dxy}^{(5)} + 2Q_{gbz}^{(1)}$$

$$Q_{yzxy} = 4G_{fay}^{(1)} - G_{fay}^{(2)} + G_{fby}^{(2)} + G_{py}^{(1)} + G_{py}^{(4)} + Q_{dxz}^{(2)} + Q_{dxz}^{(5)} + 2Q_{gby}^{(1)}$$

$$Q_{yzzy} = -G_{f3}^{(2)} + Q_{du}^{(2)} + 3Q_{du}^{(5)} - Q_{dv}^{(2)} + Q_{dv}^{(5)} - Q_{gu}^{(1)} + Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(2)}$$

$$Q_{yzxz} = -4G_{faz}^{(1)} + G_{faz}^{(2)} + G_{fbz}^{(2)} - G_{pz}^{(1)} - G_{pz}^{(4)} + Q_{dxy}^{(2)} + Q_{dxy}^{(5)} + 2Q_{gbz}^{(1)}$$

$$Q_{yzyx} = 4G_{fay}^{(1)} + G_{fay}^{(2)} - G_{fby}^{(2)} + G_{py}^{(1)} - G_{py}^{(4)} + Q_{dxz}^{(2)} - Q_{dxz}^{(5)} + 2Q_{gby}^{(1)}$$

$$Q_{zxxx} = -2G_{fay}^{(1)} - 2G_{fby}^{(1)} + 2G_{py}^{(1)} + Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} - Q_{dxz}^{(3)} - Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{zxyy} = 4G_{fby}^{(1)} + Q_{dxz}^{(1)} - Q_{dxz}^{(3)} + 2Q_{gby}^{(1)}$$

$$Q_{zxzz} = 2G_{fay}^{(1)} - 2G_{fby}^{(1)} - 2G_{py}^{(1)} + Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} - Q_{dxz}^{(3)} + Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{zxyz} = 4G_{faz}^{(1)} - G_{faz}^{(2)} + G_{fbz}^{(2)} + G_{pz}^{(1)} + G_{pz}^{(4)} + Q_{dxy}^{(2)} + Q_{dxy}^{(5)} + 2Q_{gbz}^{(1)}$$

$$Q_{zxzx} = G_{f3}^{(2)} + Q_{du}^{(2)} + 3Q_{du}^{(5)} + Q_{dv}^{(2)} - Q_{dv}^{(5)} - Q_{gu}^{(1)} - Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(2)}$$

$$Q_{zxxy} = -4G_{fax}^{(1)} - G_{fax}^{(2)} - G_{fbx}^{(2)} - G_{px}^{(1)} + G_{px}^{(4)} + Q_{dyz}^{(2)} - Q_{dyz}^{(5)} + 2Q_{gbx}^{(1)}$$

$$Q_{zxzy} = 4G_{faz}^{(1)} + G_{faz}^{(2)} - G_{fbz}^{(2)} + G_{pz}^{(1)} - G_{pz}^{(4)} + Q_{dxy}^{(2)} - Q_{dxy}^{(5)} + 2Q_{gbz}^{(1)}$$

$$Q_{zxxz} = -G_{f3}^{(2)} + Q_{du}^{(2)} - 3Q_{du}^{(5)} + Q_{dv}^{(2)} + Q_{dv}^{(5)} - Q_{gu}^{(1)} - Q_{gv}^{(1)} - Q_g^{(1)} + Q_s^{(2)}$$

* Rank 4 tensor (a).

$$\begin{bmatrix} Q_{yzxx} & Q_{yzyy} & Q_{yzzz} & Q_{yzyz} & Q_{yzzx} & Q_{yzxy} & Q_{yzzy} & Q_{yzxz} & Q_{yzyx} \\ Q_{zxxx} & Q_{zxyy} & Q_{zxzz} & Q_{zxyz} & Q_{zxzx} & Q_{zxxy} & Q_{zxzy} & Q_{zxxz} & Q_{zxyx} \\ Q_{xyxx} & Q_{xyyy} & Q_{xyzz} & Q_{xyyz} & Q_{xyzx} & Q_{xyxy} & Q_{xyzy} & Q_{xyxz} & Q_{xyyx} \end{bmatrix}$$

$Q_{yzxx} = 2G_{fax}^{(3)} + G_{px}^{(5)} + 2G_{px}^{(6)}$

$Q_{yzyy} = -G_{fax}^{(3)} + G_{fbx}^{(3)} + G_{px}^{(5)} - 2Q_{dyz}^{(6)}$

$Q_{yzzz} = -G_{fax}^{(3)} - G_{fbx}^{(3)} + G_{px}^{(5)} + 2Q_{dyz}^{(6)}$

$Q_{yzyz} = G_{f3}^{(3)} - 2Q_{du}^{(4)} - 3Q_{du}^{(6)} + 2Q_{dv}^{(4)} - Q_{dv}^{(6)} + Q_s^{(3)}$

$Q_{yzzx} = -G_{faz}^{(3)} + G_{fbz}^{(3)} - G_{pz}^{(2)} + G_{pz}^{(6)} + 2Q_{dxy}^{(4)} + Q_{dxy}^{(6)}$

$Q_{yzxy} = -G_{fay}^{(3)} - G_{fby}^{(3)} + G_{py}^{(2)} + G_{py}^{(6)} + 2Q_{dxz}^{(4)} - Q_{dxz}^{(6)}$

$Q_{yzzy} = G_{f3}^{(3)} + 2Q_{du}^{(4)} - 3Q_{du}^{(6)} - 2Q_{dv}^{(4)} - Q_{dv}^{(6)} - Q_s^{(3)}$

$Q_{yzxz} = -G_{faz}^{(3)} + G_{fbz}^{(3)} + G_{pz}^{(2)} + G_{pz}^{(6)} - 2Q_{dxy}^{(4)} + Q_{dxy}^{(6)}$

$Q_{yzyx} = -G_{fay}^{(3)} - G_{fby}^{(3)} - G_{py}^{(2)} + G_{py}^{(6)} - 2Q_{dxz}^{(4)} - Q_{dxz}^{(6)}$

$Q_{zxxx} = -G_{fay}^{(3)} - G_{fby}^{(3)} + G_{py}^{(5)} + 2Q_{dxz}^{(6)}$

$Q_{zxyy} = 2G_{fay}^{(3)} + G_{py}^{(5)} + 2G_{py}^{(6)}$

$Q_{zxzz} = -G_{fay}^{(3)} + G_{fby}^{(3)} + G_{py}^{(5)} - 2Q_{dxz}^{(6)}$

$Q_{zxyz} = -G_{faz}^{(3)} - G_{fbz}^{(3)} + G_{pz}^{(2)} + G_{pz}^{(6)} + 2Q_{dxy}^{(4)} - Q_{dxy}^{(6)}$

$Q_{zxzx} = G_{f3}^{(3)} - 2Q_{du}^{(4)} + 3Q_{du}^{(6)} - 2Q_{dv}^{(4)} - Q_{dv}^{(6)} + Q_s^{(3)}$

$Q_{zxxy} = -G_{fax}^{(3)} + G_{fbx}^{(3)} - G_{px}^{(2)} + G_{px}^{(6)} + 2Q_{dyz}^{(4)} + Q_{dyz}^{(6)}$

$Q_{zxzy} = -G_{faz}^{(3)} - G_{fbz}^{(3)} - G_{pz}^{(2)} + G_{pz}^{(6)} - 2Q_{dxy}^{(4)} - Q_{dxy}^{(6)}$

$Q_{zxxz} = G_{f3}^{(3)} + 2Q_{du}^{(4)} + 3Q_{du}^{(6)} + 2Q_{dv}^{(4)} - Q_{dv}^{(6)} - Q_s^{(3)}$

$Q_{zxyx} = -G_{fax}^{(3)} + G_{fbx}^{(3)} + G_{px}^{(2)} + G_{px}^{(6)} - 2Q_{dyz}^{(4)} + Q_{dyz}^{(6)}$

$Q_{xyxx} = -G_{faz}^{(3)} + G_{fbz}^{(3)} + G_{pz}^{(5)} - 2Q_{dxy}^{(6)}$

$Q_{xyyy} = -G_{faz}^{(3)} - G_{fbz}^{(3)} + G_{pz}^{(5)} + 2Q_{dxy}^{(6)}$

$Q_{xyzz} = 2G_{faz}^{(3)} + G_{pz}^{(5)} + 2G_{pz}^{(6)}$

$Q_{xyyz} = -G_{fay}^{(3)} + G_{fby}^{(3)} - G_{py}^{(2)} + G_{py}^{(6)} + 2Q_{dxz}^{(4)} + Q_{dxz}^{(6)}$

$Q_{xyzx} = -G_{fax}^{(3)} - G_{fbx}^{(3)} + G_{px}^{(2)} + G_{px}^{(6)} + 2Q_{dyz}^{(4)} - Q_{dyz}^{(6)}$

$Q_{xyxy} = G_{f3}^{(3)} + 4Q_{du}^{(4)} + 2Q_{dv}^{(6)} + Q_s^{(3)}$

$Q_{xyzy} = -G_{fay}^{(3)} + G_{fby}^{(3)} + G_{py}^{(2)} + G_{py}^{(6)} - 2Q_{dxz}^{(4)} + Q_{dxz}^{(6)}$

$Q_{xyxz} = -G_{fax}^{(3)} - G_{fbx}^{(3)} - G_{px}^{(2)} + G_{px}^{(6)} - 2Q_{dyz}^{(4)} - Q_{dyz}^{(6)}$

$Q_{xyyx} = G_{f3}^{(3)} - 4Q_{du}^{(4)} + 2Q_{dv}^{(6)} - Q_s^{(3)}$

* Rank 4 tensor (t).

$$\begin{bmatrix} Q_{xxxx} & Q_{xxxy} & Q_{xxxz} \\ Q_{yyyx} & Q_{yyyy} & Q_{yyyz} \\ Q_{zzzx} & Q_{zzzy} & Q_{zzzz} \\ Q_{yyzx} & Q_{yyzy} & Q_{yyzz} \\ Q_{zzxx} & Q_{zzxy} & Q_{zzxz} \\ Q_{xxyx} & Q_{xxyy} & Q_{xxyz} \\ Q_{yzzx} & Q_{yzzy} & Q_{yzzz} \\ Q_{zxxx} & Q_{zxxy} & Q_{zxxz} \\ Q_{xxyy} + Q_{yyzz} - Q_{yzzy} - Q_{zxxz} + Q_{zzxx} & Q_{xyyy} & Q_{xyyz} \\ -\frac{Q_{yyyz}}{2} + \frac{Q_{yyzy}}{2} + Q_{zxxy} & Q_{xyyz} + \frac{Q_{zzxx}}{2} - \frac{Q_{zzzx}}{2} & \frac{Q_{xxxy}}{2} - \frac{Q_{xxyx}}{2} + Q_{xyyy} - Q_{yyyx} + Q_{zzxy} \end{bmatrix}$$

$$Q_{xxxx} = -2Q_{du}^{(1)} - 4Q_{du}^{(2)} + 2Q_{dv}^{(1)} + 4Q_{dv}^{(2)} - Q_{gu}^{(1)} + Q_{gv}^{(1)} + 2Q_{g}^{(1)} + 3Q_{s}^{(1)}$$

$$Q_{xxxy} = Q_{dxy}^{(1)} + 2Q_{dxy}^{(2)} + Q_{dxy}^{(3)} - 2Q_{dxy}^{(5)} + Q_{gaz}^{(1)} - Q_{gbz}^{(1)}$$

$$Q_{xxxz} = Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} + Q_{dxz}^{(3)} - 2Q_{dxz}^{(5)} - Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{yyyx} = Q_{dxy}^{(1)} + 2Q_{dxy}^{(2)} + Q_{dxy}^{(3)} - 2Q_{dxy}^{(5)} - Q_{gaz}^{(1)} - Q_{gbz}^{(1)}$$

$$Q_{yyyy} = -2Q_{du}^{(1)} - 4Q_{du}^{(2)} - 2Q_{dv}^{(1)} - 4Q_{dv}^{(2)} - Q_{gu}^{(1)} - Q_{gv}^{(1)} + 2Q_{g}^{(1)} + 3Q_{s}^{(1)}$$

$$Q_{yyyz} = Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} + Q_{dyz}^{(3)} - 2Q_{dyz}^{(5)} + Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{zzzx} = Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} + Q_{dxz}^{(3)} - 2Q_{dxz}^{(5)} + Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{zzzy} = Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} + Q_{dyz}^{(3)} - 2Q_{dyz}^{(5)} - Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{zzzz} = 4Q_{du}^{(1)} + 8Q_{du}^{(2)} + 2Q_{gu}^{(1)} + 2Q_{g}^{(1)} + 3Q_{s}^{(1)}$$

$$Q_{yyzx} = Q_{dxz}^{(1)} + Q_{dxz}^{(3)} + 2Q_{gby}^{(1)}$$

$$Q_{yyzy} = Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} + Q_{dyz}^{(3)} + 2Q_{dyz}^{(5)} + Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{yyzz} = Q_{du}^{(1)} + 3Q_{du}^{(3)} - Q_{dv}^{(1)} + Q_{dv}^{(3)} - Q_{gu}^{(1)} + Q_{gv}^{(1)} - Q_{g}^{(1)} + Q_{s}^{(1)}$$

$$Q_{zzxx} = Q_{du}^{(1)} - 3Q_{du}^{(3)} + Q_{dv}^{(1)} + Q_{dv}^{(3)} - Q_{gu}^{(1)} - Q_{gv}^{(1)} - Q_{g}^{(1)} + Q_{s}^{(1)}$$

$$Q_{zzxy} = Q_{dxy}^{(1)} + Q_{dxy}^{(3)} + 2Q_{gbz}^{(1)}$$

$$Q_{zzxz} = Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} + Q_{dxz}^{(3)} + 2Q_{dxz}^{(5)} + Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{xxyx} = Q_{dxy}^{(1)} + 2Q_{dxy}^{(2)} + Q_{dxy}^{(3)} + 2Q_{dxy}^{(5)} + Q_{gaz}^{(1)} - Q_{gbz}^{(1)}$$

$$Q_{xxyy} = -2Q_{du}^{(1)} - 2Q_{dv}^{(3)} + 2Q_{gu}^{(1)} - Q_{g}^{(1)} + Q_{s}^{(1)}$$

$$Q_{xxyz} = Q_{dyz}^{(1)} + Q_{dyz}^{(3)} + 2Q_{gbx}^{(1)}$$

$$Q_{yzzx} = Q_{dxy}^{(2)} - Q_{dxy}^{(5)} + 2Q_{gbz}^{(1)}$$

$$Q_{yzzy} = Q_{du}^{(2)} + 3Q_{du}^{(5)} - Q_{dv}^{(2)} + Q_{dv}^{(5)} - Q_{gu}^{(1)} + Q_{gv}^{(1)} - Q_{g}^{(1)} + Q_{s}^{(1)}$$

$$Q_{yzzz} = Q_{dyz}^{(1)} + 2Q_{dyz}^{(2)} - Q_{dyz}^{(3)} - Q_{gax}^{(1)} - Q_{gbx}^{(1)}$$

$$Q_{zxxx} = Q_{dxz}^{(1)} + 2Q_{dxz}^{(2)} - Q_{dxz}^{(3)} - Q_{gay}^{(1)} - Q_{gby}^{(1)}$$

$$Q_{zxxy} = Q_{dyz}^{(2)} - Q_{dyz}^{(5)} + 2Q_{gbx}^{(1)}$$

$$Q_{zxxz} = Q_{du}^{(2)} - 3Q_{du}^{(5)} + Q_{dv}^{(2)} + Q_{dv}^{(5)} - Q_{gu}^{(1)} - Q_{gv}^{(1)} - Q_{g}^{(1)} + Q_{s}^{(1)}$$

$$Q_{xyyy} = Q_{dxy}^{(1)} + 2Q_{dxy}^{(2)} - Q_{dxy}^{(3)} - Q_{gaz}^{(1)} - Q_{gbz}^{(1)}$$

$$Q_{xyyz} = Q_{dxz}^{(2)} - Q_{dxz}^{(5)} + 2Q_{gby}^{(1)}$$