

208th Eigenvector

$$N_e = 5 \quad s = \frac{1}{2} \quad m_s = \frac{1}{2}$$

Irred. Representation : $\Gamma_{5,1}$

$$E_{208} = \frac{1}{2} (-J + 2t + 3U + 34W + \sqrt{A_4})$$

$$\begin{aligned} |\Psi_{208}\rangle &= |5, \frac{1}{2}, \frac{1}{2}, \Gamma_{5,1}\rangle \\ &= C_{208,1} (|022u\rangle - |0u22\rangle - |20u2\rangle - |220u\rangle + |22u0\rangle + |2u02\rangle + |u022\rangle - |u220\rangle) \\ &+ C_{208,2} (|2duu\rangle + |2uud\rangle + |d2uu\rangle + |duu2\rangle + |u2du\rangle + |ud2u\rangle + |uu2d\rangle + |uud2\rangle) \\ &+ C_{208,3} (|2udu\rangle + |du2u\rangle + |u2ud\rangle + |udu2\rangle) \end{aligned}$$

$$C_{208-1} = -\frac{1}{2} \sqrt{\frac{3}{2}} t$$

$$C_{208-2} = \frac{J - 2t + U - 2W - \sqrt{A_4}}{4\sqrt{6}}$$

$$C_{208-3} = -\frac{J - 2t + U - 2W - \sqrt{A_4}}{2\sqrt{6}}$$

$$N_{208} = 2\sqrt{2C_{208,1}^2 + 2C_{208,2}^2 + C_{208,3}^2}$$