139^{th} Eigenvector

$\boldsymbol{N_e} \;=\; \mathbf{4} \qquad \boldsymbol{s = 0} \qquad \boldsymbol{m_s = 0}$

Irred. Representation : $\boldsymbol{\Gamma_{5,2}}$

$$E_{139} \;=\; -J + U + 10W$$

$$\begin{aligned}
|\Psi_{139}\rangle \;&=\; |4, 0, 0, \Gamma_{5,2}\rangle \\
&=\; \frac{1}{4}\left(|0d2u\rangle - |0du2\rangle - |0u2d\rangle + |0ud2\rangle - |2d0u\rangle + |2du0\rangle + |2u0d\rangle - |2ud0\rangle \right. \\
&\qquad \left. -|d02u\rangle + |d0u2\rangle + |d20u\rangle - |d2u0\rangle + |u02d\rangle - |u0d2\rangle - |u20d\rangle + |u2d0\rangle\right)
\end{aligned}$$