$\hat{H} = \hbar[D(\hat{S}_z^2 - \frac{2}{3}I_3) + E(\hat{S}_x^2 - \hat{S}_y^2) + \gamma_{nv}\vec{B} \cdot \hat{\vec{S}}]$

$\Delta E_{[m_s=+1]} = +g_e\mu_B \mid \vec{B} \cdot \hat{u} \mid$

$\Delta E_{[m_s=-1]} = -g_e\mu_B \mid \vec{B} \cdot \hat{u} \mid$

$\Delta E_{[m_s=0]} = 0$

$\hat{H} = \hbar[D(\hat{S}_z^2 - \frac{2}{3}I_3) + \gamma_{nv}B_z\hat{S}_z]$

$m_s = +1$

$m_s = -1$

$\Delta\nu_i = \nu_{i[+1]} - \nu_{i[-1]}$

$B_i = \Delta\nu_i/\gamma_{nv}$

$$\begin{cases} \Delta\nu_i = \nu_{i[+1]} - \nu_{i[-1]} \\ \\ B_i = \Delta\nu_i/\gamma_{nv} \end{cases} \tag{1}$$

$[\hat{u}_1, \hat{u}_2, \hat{u}_3, \hat{u}_4]; [-1, -1,\ 1,\ 1]$

$$\begin{cases} \vec{B} \cdot \hat{u}_{list}[i]_1 = B_1 \\ \vec{B} \cdot \hat{u}_{list}[i]_2 = B_2 \\ \vec{B} \cdot \hat{u}_{list}[i]_3 = B_3 \end{cases} \tag{2}$$

$$\begin{cases} \vec{B} \cdot \hat{u}_1 = B_i \\ \vec{B} \cdot \hat{u}_2 = B_i \\ \vec{B} \cdot \hat{u}_3 = B_i \end{cases} \tag{3}$$

$\vec{B} \cdot \hat{u}_{list}[i]_4 = B_4$