

Maximal and non-maximal MG for the parent SG 227 ($Fd\bar{3}m$) at gamma point $k = (0, 0, 0)$ generated by one irrep for 16d ($1/2, 1/2, 1/2$), 16c (0,0,0) position : pyrochlore crystal structure

$$\Gamma_{\text{mag}} = \Gamma_2^+(1D) \oplus \Gamma_3^+(2D) \oplus \Gamma_5^+(3D) \oplus 2\Gamma_4^+(3D)$$

