

PG No. 9 C_4 4 [tetragonal]

Table 1: Representation matrices

Irrep.										
A	1 :	$\begin{bmatrix} 1 \end{bmatrix}$		$2_{001} :$	$\begin{bmatrix} 1 \end{bmatrix}$		$4^+_{001} :$	$\begin{bmatrix} 1 \end{bmatrix}$	$4^-_{001} :$	$\begin{bmatrix} 1 \end{bmatrix}$
B	1 :	$\begin{bmatrix} 1 \end{bmatrix}$		$2_{001} :$	$\begin{bmatrix} 1 \end{bmatrix}$		$4^+_{001} :$	$\begin{bmatrix} -1 \end{bmatrix}$	$4^-_{001} :$	$\begin{bmatrix} -1 \end{bmatrix}$
E	1 :	$\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$		$2_{001} :$	$\begin{bmatrix} -1 & 0 \\ 0 & -1 \end{bmatrix}$		$4^+_{001} :$	$\begin{bmatrix} 0 & -1 \\ 1 & 0 \end{bmatrix}$	$4^-_{001} :$	$\begin{bmatrix} 0 & 1 \\ -1 & 0 \end{bmatrix}$