

## SUPPLEMENTARY INFORMATION

The orientation matrices of the monoclinic  $\alpha$ -**1d** and triclinic  $\beta$ -**1d** are

$\alpha$ - <b>1d</b>	$\beta$ - <b>1d</b>
-0.04498 0.03470 -0.05025	0.09575 0.00268 0.00270
0.01226 0.04616 0.04715	0.01456 0.04294 -0.08065
0.05998 0.01658 -0.02612	-0.04025 0.08283 0.00623

The phase transformation is described by matrices

$\alpha$ - <b>1d</b>	$\beta$ - <b>1d</b>	$\alpha$ - <b>1d</b>	$\beta$ - <b>1d</b>		
-1/2	1/2	-1/2	-1	1	0
1/2	1/2	-1/2	1	1	-1
0	0	-1	0	0	-1

which give the calculated orientation matrices

for $\alpha$ - <b>1d</b>	for $\beta$ - <b>1d</b>
-0.04654 0.04922 -0.05192	0.07965 -0.01028 0.01556
0.01419 0.02876 0.05189	0.03390 0.05844 -0.09332
0.06154 0.02129 -0.02752	-0.04340 0.07656 0.00953

(note that the crystal tilted on its mount during the phase transition; this may in part account for the discrepancy between the calculated and measured orientation matrices)

The  $\beta$ -**1d** unit cell calculated from the transformation matrix is

$a=11.924$ ,  $b=13.598$ ,  $c=13.936$ ,  $\alpha=51.28$ ,  $\beta=62.88$ ,  $\gamma=63.57$ ;

cf. the measured one of

$a=10.209$ ,  $b=12.334$ ,  $c=13.904$ ,  $\alpha=63.78$ ,  $\beta=74.73$ ,  $\gamma=70.54$