Table 4. Powder pattern for In_2Te_3 *specimen subjected to 29 kbar and 760°C*

Rel. I_{obs}	d_{obs} (Å)	In_3Te_4-type d_{calc} (Å)	In_3Te_4-type $hk \cdot l$	Bi_2Te_3-type d_{calc} (Å)	Bi_2Te_3-type $hk \cdot l$
23	4·82*				
11	4·685*				
9	4·538	4·533	00·9		
5	3·722*				
3	3·655			3·661	10·1
12	3·579			3·585	01·2
6	3·399	3·400	00·12		
22	3·365	3·366	01·5		
283	3·136	3·120	10·7	3·136	01·5
12	2·999	2·992	01·8		
7	2·906*				
9	2·757	2·739	10·10	2·784	10·7
4	2·627			2·617	01·8
70	2·313			2·312	10·10
26	2·292	2·288	01·14		
13	2·167			2·178	01·11
100	2·133	2·133	11·0	2·133	11·0
19	1·994	2·013	01·17		
18	1·977			1·977	00·15
16	1·944	1·943	00·21	1·941	10·13
8	1·853	1·855	10·19		
37	1·763	1·761	02·7	1·764	20·5
16	1·681	1·683	02·10		
16	1·566			1·567	02·10
13	1·448			1·450	11·15
6	1·436	1·436	11·21	1·436	02·13
25	1·358	1·360 1·358 1·356	00·30 21·7 10·28	1·359	12·5
4	1·332	1·329	11·24		
6	1·305			1·307 1·304	12·8 11·18
8	1·262	1·259	12·14	1·263	21·10
9	1·239	1·240	10·31	1·240	12·11
21	1·229	1·231 1·227 1·225	30·0 30·3 21·16	1·231	30·0

* Unidentified.

melted at 760°C. (About 60 per cent of the specimen became superconducting at 1·3–0·97°K.) The pattern (Table 4) contains four unidentified lines which are rather weak and shows the presence of both the In_3Te_4 and In_2Te_3 pressure-induced phases.* The observed relative intensities given in Table 4 probably suffer from preferred orientation as the crystallites of all the pressure-induced phases, including the NaCl-type, tend to grow along (110) directions.

* Calculations of spacings in Table 4 are based on the hexagonal lattice constants $a = 4{\cdot}266$, $c = 40{\cdot}8$ Å for the In_3Te_4 phase and $a = 4{\cdot}266$, $c = 29{\cdot}65$ Å for the In_2Te_3 phase.

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1. GELL
Ap
2. GELL
13,
3. KLEM
219
4. KENN
Phy
5. SHAW
120
6. GOOD
(195
7. SCHUI
46,
8. KETEL
POL
9. GELLI
(195
10. HÄGG
913
11. BLOEM
21. INUZU