

$^{46}\text{Ti}(\text{t}, ^3\text{He})$ 1985Aj03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. -c. Wu	NDS 91, 1 (2000)	15-Jul-2000

E=25 MeV.

Q3D magnetic spectrometer at $\theta=5.5^\circ$ to 50° , position-sensitive detector; measured angular distributions. ^{46}Sc Levels

E(level)	J^π	L	Comments
0.0	4^+	4	
52 5	6^+	6	
143 5			
228 5	3^+	2+4	
288 8	$2^- \& (5,6)^+$	1+3	Includes unresolved known levels at 280.7 $(5,6)^+$ and 289.5 2^- .
446 5	2^+	2	
586 5	$2^+, 3^-$		
625 8	4^-	3+5	
772 5	5^+	4+6	
826 15	4^+	4	
981 10			Unresolved from 997 level; $J=1^+$, $L=0+2$ measured.
997 15			Unresolved from 981 level; $J=1^+$, $L=0+2$ measured.
1092 15	3^+	2+4	
1130 15			Unresolved from 1150 level; $J=4^-$, $L=3+5$ measured.
1150 15			Unresolved from 1130 level; $J=4^-$, $L=3+5$ measured.
1274 [†] 10	2^-	1+3	
1322 [†] 20	2^-	1+3	
1392 15	2^+	2	
1427 10	2^-	1+3	
1525 15			
1642 10	$3^-, 4^-$		
1708 10	$3^-, 2^-$		
1735 20			
1802 10			Includes unresolved known levels at 1799.4 and 1804.
1848 10	(1^+)	$(0+2)$	
1917 10	2^+	2	
2047 15			
2074 15			
2113 15	$3^+, 2^+$		
2210 15	2^+	2	Includes unresolved known levels at 2208 and 2222.5.
2246 15	3^+	2+4	
2287 15	2^-	1+3	
2320 20	2^+	2	Includes unresolved known levels at 2307 and 2334.
2397 20	3^+	2+4	
2434 [†] 20	3^+	2+4	Includes unresolved known levels at 2441.7 and 2455.
2557 15	4^+	4	
2585 [†] 15	$3^-, 4^-$		
2734 15	2^+	2	
2770 [†] 20			Includes unresolved known levels at 2770 and 2786.
2814 15			
2851 [†] 20			Includes unresolved known levels at 2833.7 and 2863.1.
2882 [†] 15			Includes unresolved known levels at 2863.1 and 2897.
2950 [†] 20			Includes unresolved known levels at 2939 and 2956.8.
2974 15	$(2,3)^+$		
3016 15	1^+	0+2	Includes unresolved known levels at 3005 and 3017.3.

Continued on next page (footnotes at end of table)

$^{46}\text{Ti}(\text{t}, ^3\text{He})$ 1985Aj03 (continued) ^{46}Sc Levels (continued)

E(level)	$J\pi^{\ddagger}$	L	Comments
3100 [†] 30	1 ⁺	0+2	Includes unresolved known levels at 3087 and 3116.
3185 20			
3220 15			
3268 [†] 15	1 ⁺	0+2	Includes unresolved known levels at 3241 and 3287.
3335 15			
3377 15			
3420 15			
3446 15			
3489 [†] 15	1 ⁺	0+2	Includes unresolved known levels at 3472.2 and 3493.0.
3523 [†] 20			
3607 15			
3648 [†] 15	3 ⁺	2+4	Includes unresolved known levels at 3618, 3630, 3661.
3700 [†] 20			
3745 [†] 20			
3784 [†] 20			Includes unresolved known levels at 3695 and 3715.
3860 20			
3899 [†] 20			
3980 15			
4010 [†] 15			
4070 15			
4098 15			
4136 15			
4167 15			
4220 20			
4257 20			
4509 15			
4650 20			
4700 20			

[†] Width of group indicated probable multiplet.

[‡] From coupled-channels analysis of angular distributions.