

$^{48}\text{Ti}(\text{t},\alpha)$ 1971Ba53

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. W. Burrows	NDS 108, 923 (2007)	20-Feb-2007

E=11.8 MeV measured $\sigma(\theta=5^\circ-130^\circ$ in 7.5° steps). DWBA. Other: see 1977Ha45.

 ^{47}Sc Levels

L(α),J(β) from the J $^\pi$ In the Adopted Levels.

E(level)	J $^\pi$ [†]	L	C ² S [‡]	E(level)	J $^\pi$ [†]	L	C ² S [‡]	E(level)	J $^\pi$ [†]	L	C ² S [‡]
0.0	7/2 ⁻	3	1.83	3860 5	1/2 ⁺	0	0.07	5659 6			
767 2	3/2 ⁺	2	3.47	3958 5	3/2 ⁺	2	0.17	5760 6	(3/2 ⁺)	(2) [@]	$\approx 0.23^\#$
810 7	3/2 ⁻	1	0.22	4014 5	(3/2 ⁺)	(2) [@]	$\approx 0.44^\#$	5923 9	(3/2 ⁺)	(2) [@]	$\approx 0.09^\#$
1145 2				4031 5	(7/2 ⁻)	(3) [@]	$\approx 0.10^\#$	5987 9			
1297 8	(5/2 ⁻)	(3)	$\approx 0.04^\#$	4081 5	(3/2 ⁻)	(1) [@]	$\approx 0.03^\#$	6015 15	(5/2 ⁺)	(2) [@]	$\approx 0.29^\#$
1391 1	1/2 ⁺	0	1.73	4291 7				6223 5			
1798 6	1/2 ⁺	0	0.02	4389 5				6262 8			
1856 5				4505 9	(3/2 ⁻)	(1) [@]	$\approx 0.01^\#$	6441 6			
2001 2	3/2 ⁺	2	0.19	4561 6	3/2 ⁺	2	≈ 0.13	6523 5			
2204 1	7/2 ⁻	3	0.17	4614 6	1/2 ⁺	0	≈ 0.12	6621 8			
2377 2	3/2 ⁺	2	0.34	4687 7				6786 7			
2524 3	1/2 ⁺	0	0.06	4753 7				6876 6			
2806 4	3/2 ⁻	1	0.06	4860 7				6964 5			
2831 8	(3/2 ⁻)	(1) [@]	$\approx 0.03^\#$	4996 9	(3/2 ⁻)	(1) [@]	$\approx 0.07^\#$	7117 5			
2900 3				5108 6				7427 6			
3135 8				5306 5	(3/2 ⁻)	(1) [@]	$\approx 0.01^\#$	7683 7			
3201 4	3/2 ⁻	1	0.04	5361 5				7807 5			
3256 3	3/2 ⁻	1	0.10	5542 6							
3804 4	3/2 ⁺	2	0.14	5571 7	(3/2 ⁻)	(1) [@]	$\approx 0.05^\#$				

[†] Assumed for DWBA analysis.

[‡] Normalization procedure differed from usual procedure. L=3 (except 1297 state) data normalized to $\Sigma C^2S(1f7/2)=2$; L=2, to $\Sigma C^2S(1d3/2)=4$; and L=0, to $\Sigma C^2S(2s1/2)=2$. L=1 normalized by averaging the normalization factors for L=2 and L=3.

[#] Calculated with L-value from other work.

[@] From ($^3\text{He},\alpha$) (1967Sc03).