^{47}Ti(t,p) E=12.0 MeV 1972Ba18

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	T. W. Burrows[a]	NDS 109, 1879 (2008)	14-Jul-2008

Target $J^\pi=5/2^-$. Measured $\sigma(\theta)$. FWHM≈20 keV. θ(C.M.)≈15°−65°. DWBA.

^{49}Ti Levels

E(d),J(E) possible doublet with $J^\pi=1/2^-,3/2^-$ and $5/2^-$ from L(t,p)=0+2 and L(d,p)=1+3. However, see comment In (d,p) (evaluator).

E(level)[†]	J^π[‡]	L	E(level)[†]	J^π[‡]	L	E(level)[†]	J^π[‡]	L
0.0		2[#]	3510 *10*	$5/2^-$	0	5070 *15*	$(5/2^-)$	0+2
1589 *10*		2	3625 *10*	$5/2^-$	0	5140 *15*	$(5/2^-)$	0+2
1624 *10*		2	3781 *10*		2+4	5200 *15*		1
1724 *10*		2	3848 *10*	$5/2^-$	0	5232 *15*		2[#]
1766 *10*	$5/2^-$	0	3936 *10*			5347 *15*	$(5/2^-)$	0
2263 *10*		(4)	3990 *10*		(2,3)[#]	5662 *15*		2
2471 *10*		(4)	4083 *10*		2	5861 *15*	$5/2^-$	0
2513[@] *10*		4	4134 *10*	$(5/2^-)$	0	5910[&] *15*		2
3162 *10*		2	4300 *15*		2[#]	5946 *15*		2
3266 *10*		2	4340 *15*		2	6011 *15*	$5/2^-$	0
3427 *10*	$3/2^-,1/2^-$&$5/2^-$	0+2[#]	4489 *15*		2	6279 *15*	$(5/2^-)$	0
3454 *10*		2[#]	4915 *15*		(2)[#]			

[†] From (p,p′) measurements by 1972Ba18 for states up to 4.21 MeV.

[‡] Assuming transferred neutrons are In a relative S-state. This seems to Be a valid assumption except for those states where J^π is parenthesized; maximum $\sigma(\theta)$<0.2 mb/Sr for these latter states (evaluator).

[#] Anomalous angular distribution, cannot Be fitted with any combination of L=2+4 or L=3.

[@] Possible doublet. See Adopted Levels.

[&] Not the same As 5931 level seen In (d,p).