

Ti(n,n'),(n,n'γ) E=1.0-5.9 MeV 1978Sm04,1974Di08

Type	History		
Citation	Literature Cutoff Date		
Full Evaluation	T. W. Burrows ^a		
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 ^{49}Ti Levels

1978Sm04 measured $\sigma(\theta)$; tof. Identification made by comparison to Nuclear Data Sheets available to authors. Most “states” observed have possible contributions from several isotopes of titanium.

E(level) [†]	J [‡]
0.	7/2 ⁻
1382 [#] 4	3/2 ⁻
1541 30	11/2 ⁻
1586 [#] 4	3/2 ⁻
1670 80	
1761 [#] 5	5/2 ⁻
2304? 22	
2615? 10	
2845?	
3010?	

[†] From 1978Sm04, except As noted.

[‡] From the Adopted Levels.

[#] From E γ of 1974Di08.

 $\gamma(^{49}\text{Ti})$

1974Di08 measured σ_γ (THETA); tof.

E γ	σ_γ , mb/sr [†]	E _i (level)	J $^\pi_i$	E _f	J $^\pi_f$	Comments
1382 4	0.5 2	1382	3/2 ⁻	0.	7/2 ⁻	σ_γ , mb/sr: peak likely due to more than one G.
1586 4	0.3 1	1586	3/2 ⁻	0.	7/2 ⁻	
1761 5	0.5 2	1761	5/2 ⁻	0.	7/2 ⁻	
^x 1863 [‡] 5	0.4 2					probably associated with ^{47}Ti , ^{49}Ti , or ^{51}Ti .

[†] E(n)=4.9 MeV 2 and $\theta=125^\circ$. Additional data taken At 5.40 MeV 15 and 5.90 MeV 15, $\theta=55^\circ$.

[‡] Placement of transition in the level scheme is uncertain.

^x γ ray not placed in level scheme.

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Legend

Level Scheme

Intensities: σ_γ , mb/sr

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$

