

⁴⁸Ti(μ^- ,n γ): At rest **2006Eg04**

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

Enriched target. μ E4 beam line of the Paul Scherrer Institute, Villigen, Switzerland. Measured $E\gamma$'s and muon lifetimes; three HPGe γ -detectors, two thin pass-through counters. Compared to Primakoff formula.
 $\tau(\mu)=362.9$ ns 18. Total capture rate= 2756×10^3 13 per second.

⁴⁷Sc Levels

<u>E(level)[†]</u>	<u>Jπ[†]</u>
0.0	7/2 ⁻
767	(3/2) ⁺
808	3/2 ⁻
1297	5/2 ⁻
1404	5/2 ⁺

[†] From the Adopted Levels. Energies are nominal values.

$\gamma(^{47}\text{Sc})$

<u>Eγ</u>	<u>E_i(level)</u>	<u>Jπ_i</u>	<u>E_f</u>	<u>Jπ_f</u>	<u>Comments</u>
^x 121					
^x 131					
^x 147					
^x 227					
^x 370					
767 [†]	767	(3/2) ⁺	0.0	7/2 ⁻	272 ns delay.
808	808	3/2 ⁻	0.0	7/2 ⁻	
1297	1297	5/2 ⁻	0.0	7/2 ⁻	
1404	1404	5/2 ⁺	0.0	7/2 ⁻	

[†] Placement of transition in the level scheme is uncertain.
^x γ ray not placed in level scheme.

$^{48}\text{Ti}(\mu^{-},n\gamma)$: At rest 2006Eg04

Legend

Level Scheme

-----► γ Decay (Uncertain)

