^{46}Ti(d,pγ) 1972Fi15

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. Ota and E. A. Mccutchan	NDS 203,1 (2025)	1-Apr-2025

E(p)=5 MeV. Measured p$\gamma(\theta)$ using Si(Li) (at θ=0°) and NaI (θ=0°,45°,90°−135°,15° steps). Deduced mixing ratios and population ratios of the m=3/2 to the m=1/2 substates.

^{47}Ti Levels

E(level)	J$^{\pi}$[†]
0.0	5/2$^-$
157	7/2$^-$
1547	3/2$^-$

[†] From 1972Fi15.

$\gamma(^{47}$Ti)

E$_i$(level)	J$_i^{\pi}$	E$_\gamma$	I$_\gamma$[†]	E$_f$	J$_f^{\pi}$	Mult.[‡]	δ[‡]	Comments
157	7/2$^-$	157		0.0	5/2$^-$	D+Q	−0.06 *4*	δ: from −0.08 *2* ≤ δ ≤ −0.05 *2*. Mult.,δ: A$_2$=−0.46 *4*.
1547	3/2$^-$	1390	50 *5*	157	7/2$^-$	Q		Mult.: A$_2$=+0.10 *6*.
		1547	50 *5*	0.0	5/2$^-$	D+Q	+0.35 *15*	δ: from +0.20 *5*≤δ≤+0.50 *10*. Other: δ≥4.5 *+30−15*. Mult.,δ: A$_2$=−0.33 *4*.

[†] Relative photon branching ratio from the state. Based on 135° ratios and $\gamma(\theta)$.
[‡] From $\gamma(\theta)$. Corrections included for compound-nuclear effects. Limits on δ are based on an estimated upper limit of the population parameter of 0.3 and a lower limit of 0.0.

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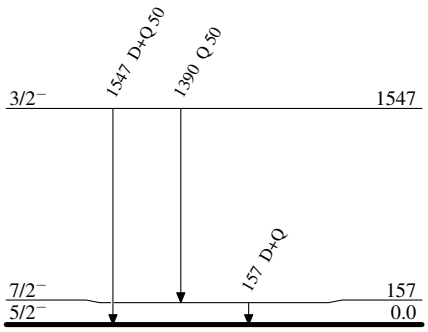
Level Scheme

Intensities: % photon branching from each level



$^{47}_{22}Ti_{25}$