

$^{48}\text{Ca}(\alpha,3n\gamma) \text{E}=30\text{-}55 \text{ MeV}$ [1981Be37](#)

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

Measured γ 's, γ -excitation functions, $\gamma\gamma$, $\gamma(\theta)$. DSAM. Identification by comparison of excitation functions to the one for the 1542γ .

 ^{49}Ti Levels

E(level)	J^π [†]	$T_{1/2}$	Comments
0.	$7/2^-$		J^π : from the Adopted Levels.
1542.5 3	$11/2^-$		J^π : $\gamma(\theta)$ corresponds to stretched ($\Delta J=2$) Q.
2505.8 5	$15/2^-$	>3.5 ps	J^π : $\gamma(\theta)$ corresponds to stretched ($\Delta J=2$) Q.
3290.6 6	$(17/2)^-$	<0.07 ps	J^π : $\gamma(\theta)$ consistent with $\Delta J \leq 1$. No sizable crossover transitions. Parentheses added by evaluator.
4382.7 8	$(19/2)^-$	<0.12 ps	J^π : $\gamma(\theta)$ consistent with $\Delta J \leq 1$. No sizable crossover transitions. Parentheses added by evaluator.

[†] Parity from the Adopted Levels.

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

E_γ	I_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [‡]	Comments
784.8 3	36 4	3290.6	$(17/2)^-$	2505.8	$15/2^-$	D(+Q)	$\delta \geq -0.10 \leq +0.04$
963.3 3	70 5	2505.8	$15/2^-$	1542.5	$11/2^-$	Q	
1092.0 5	14 6	4382.7	$(19/2)^-$	3290.6	$(17/2)^-$	D+Q	$\delta \geq +0.03 \leq +0.12$
1542.5 3	100 5	1542.5	$11/2^-$	0.	$7/2^-$	Q	

[†] Relative photon intensity At 45 MeV.

[‡] From $\gamma(\theta)$.

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Legend

Level Scheme

Intensities: Relative I_γ

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

