

$^{48}\text{Ti}(^{12}\text{C},2n\gamma)$ 1976Ba10

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Caroline D. Nesaraja, Scott D. Geraedts and Balraj Singh		NDS 111,897 (2010)	12-Jan-2010

E=26 to 48 MeV.

Measured: γ , $\gamma(\theta)$, $\gamma\gamma$, directional correlation of γ 's from oriented nuclei. ^{58}Ni Levels

E(level)	J^π [†]	Comments
0.0	0 ⁺	
1454	2 ⁺	
2459	4 ⁺	
3619	4 ⁺	
4381	(5 ⁺)	
5125	6 ⁺	
5662?	7	E(level): this level is questionable and omitted In Adopted Levels due to the reassignment of 537 γ from 6604,8 ⁺ level In recent high-spin studies.

[†] From Adopted Levels. $\gamma(^{58}\text{Ni})$

E_γ	I_γ [†]	E_i (level)	J_i^π	E_f	J_f^π	Mult. [‡]	δ [‡]	Comments
537 [#]	30	5662?	7	5125	6 ⁺	D+Q	-0.20 +5-9	E_γ : this γ is assigned to a 6604,8 ⁺ level In recent high-spin studies.
744	35	5125	6 ⁺	4381	(5 ⁺)	D+Q		I_γ : from $\gamma\gamma$ uncertainty $\approx 20\%$ due to $\gamma(\theta)$.
762	40	4381	(5 ⁺)	3619	4 ⁺	(D)		δ : $\delta = -2.5 +6-8$ or $-0.20 +10-15$.
1005	90	2459	4 ⁺	1454	2 ⁺			δ : $\delta = -4 +1-6$ or $+0.03 +6-8$.
1160	60	3619	4 ⁺	2459	4 ⁺			
1454	100	1454	2 ⁺	0.0	0 ⁺			
1922 [#]		4381	(5 ⁺)	2459	4 ⁺			I_γ : weak G.

[†] Relative values at E=35 MeV.[‡] From $\gamma(\theta)$ data.[#] Placement of transition in the level scheme is uncertain.

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Level Scheme

Intensities: Relative I_γ

Legend

- ▶ $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- ▶ $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- ▶ $I_\gamma > 10\% \times I_\gamma^{\text{max}}$
- - - -▶ γ Decay (Uncertain)

