

$^{27}\text{Al}(^{12}\text{C},2\text{p}\gamma)$ [1976Me03](#),[1978Ba56](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	John Cameron, Jun Chen and Balraj Singh, Ninel Nica		NDS 113, 365 (2012)	15-Jan-2012

[1976Me03](#): E=31 MeV. Measured $E\gamma$, $I\gamma$. Deduced $T_{1/2}$ for the levels of 3103 and 4011 keV using Recoil Distance Method (RDM).

[1978Ba56](#): E=27-45 MeV ^{12}C beams produced from the Strasbourg tandem accelerator. Target of $350\text{ }\mu\text{g}/\text{cm}^2$ Al on Ta backings. Two Ge(Li) detectors. Measured $E\gamma$, $I\gamma$. Deduced $T_{1/2}$ using Recoil Distance Method (RDM) for the level of 7020 keV.

 ^{37}Cl Levels

E(level)	J^π [†]	$T_{1/2}$
0	$3/2^+$	
3103	$7/2^-$	$13.6^{\ddagger}$ ps <i>21</i>
4011	$9/2^-$	$22.7^{\ddagger}$ ps <i>14</i>
5270		
7020		$2.1^{\#}$ ps <i>10</i>

[†] From Adopted Levels.

[‡] From RDM in [1976Me03](#).

[#] From RDM in [1978Ba56](#).

 $\gamma(^{37}\text{Cl})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
908	4011	$9/2^-$	3103	$7/2^-$
1750	7020		5270	
3103	3103	$7/2^-$	0	$3/2^+$
4011	4011	$9/2^-$	0	$3/2^+$

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Level Scheme

