

$^3\text{H}(^{35}\text{Cl},\text{p}\gamma)$  1976Co11

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

1976Co11: E=55 MeV  $^{35}\text{Cl}^{5+}$  ions produced from the upgraded Chalk River MP tandem accelerator. Target of a 300  $\mu\text{g}/\text{cm}^2$  tritiated titanium hydride on a 1  $\text{mg}/\text{cm}^2$  Cu backing. A counter telescope of a 50  $\mu\text{m}$  silicon surface barrier detector and a 5 mm intrinsic Ge detector. Measured  $E_\gamma$ ,  $I_\gamma$ . Deduced levels, life-times for levels of  $^{37}\text{Cl}$ ,  $^{36}\text{Cl}$ , and  $^{34}\text{S}$  using Recoil Distance Method (RDM).

 $^{37}\text{Cl}$  Levels

<u>E(level)<sup>†</sup></u>	<u>J<sup>π</sup><sup>‡</sup></u>	<u>T<sub>1/2</sub></u>
0	3/2 <sup>+</sup>	
3105.2 9	7/2 <sup>-</sup>	14 ps 2
4012.2 9	9/2 <sup>-</sup>	24 ps 3

<sup>†</sup> From a least-square fit to  $E_\gamma$ 's.

<sup>‡</sup> From Adopted Levels.

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

<u>E<sub>γ</sub></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>
907 1	4012.2	9/2 <sup>-</sup>	3105.2	7/2 <sup>-</sup>
3105 1	3105.2	7/2 <sup>-</sup>	0	3/2 <sup>+</sup>
4012 1	4012.2	9/2 <sup>-</sup>	0	3/2 <sup>+</sup>

 $^3\text{H}(^{35}\text{Cl},\text{p}\gamma)$  1976Co11Level Scheme