

$^{147}\text{Sm}(\alpha,4n\gamma)$  1975K101

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	N. Nica and B. Singh		NDS 181, 1 (2022)	9-Mar-2022

E=57 MeV.

$\gamma(\theta)$  at two angles and two-detector four-parameter coincidences were used to determine the decay scheme. Half-lives were obtained from  $\gamma\gamma(t)$ .

 $^{147}\text{Gd}$  Levels

E(level) <sup>†</sup>	J <sup>π</sup> <sup>†</sup>	T <sub>1/2</sub>	Comments
0.0	7/2 <sup>-</sup>		
997.4	13/2 <sup>+</sup>	20 ns 3	J <sup>π</sup> : proposed by 1975K101 based on E3 to 7/2 <sup>-</sup> and syst (same as adopted value). T <sub>1/2</sub> : from 1975K101 ( $\gamma\gamma(t)$ ).
2492.6	17/2 <sup>+</sup>		
2764.4	21/2 <sup>+</sup>		

<sup>†</sup> From 1975K101.

 $\gamma(^{147}\text{Gd})$ 

E <sub>γ</sub> <sup>†</sup>	E <sub>i</sub> (level)	J <sub>i</sub> <sup>π</sup>	E <sub>f</sub>	J <sub>f</sub> <sup>π</sup>	Mult.	Comments
271.8	2764.4	21/2 <sup>+</sup>	2492.6	17/2 <sup>+</sup>		
997.4	997.4	13/2 <sup>+</sup>	0.0	7/2 <sup>-</sup>	E3	Mult.: deduced by 1975K101 from comparison with single-particle estimate of T <sub>1/2</sub> (confirmed by RUL).
1495.2	2492.6	17/2 <sup>+</sup>	997.4	13/2 <sup>+</sup>		

<sup>†</sup> From 1975K101.

$^{147}\text{Sm}(\alpha,4n\gamma)$  1975K101Level Scheme