

Sm($^3\text{He},\text{xn}\gamma$) [1971SpZS](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yu. Khazov, A. Rodionov and G. Shulyak		NDS 136, 163 (2016)	14-Jul-2016

[1971SpZS](#): $^{150}\text{Sm}(^3\text{He},7\text{n})$, $^{149}\text{Sm}(^3\text{He},6\text{n})$, $^{148}\text{Sm}(^3\text{He},5\text{n})$, $E=50\text{--}80\text{ MeV}$; measured $E\gamma$; ΔE and $I\gamma$ are not given; confirmed the level scheme of ^{146}Gd obtained in the $^{144}\text{Sm}(\alpha,2\text{n})$ measurements.

 ^{146}Gd Levels

$E(\text{level})^\dagger$	$J^\pi^\ddagger$	$T_{1/2}$	Comments
0.0	0^+	48.27 d 9	$T_{1/2}$: from 'Adopted Levels'.
1579.40 5	3^-		
2658.04 8	5^-		
2982.15 9	7^-		
3182.58 10	8^-		
3293.74 11	8^-		
3429.42 12	9^-		
3864.83 13	10^+		

† From 'Adopted Levels'.

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 $\gamma(^{146}\text{Gd})$

$E_\gamma^\dagger$	$E_i(\text{level})$	J_i^π	E_f	J_f^π
110.2	3293.74	8^-	3182.58	8^-
135.0	3429.42	9^-	3293.74	8^-
199.2	3182.58	8^-	2982.15	7^-
311.3	3293.74	8^-	2982.15	7^-
323.8	2982.15	7^-	2658.04	5^-
436.0	3864.83	10^+	3429.42	9^-
1078.7	2658.04	5^-	1579.40	3^-
1581.2	1579.40	3^-	0.0	0^+

† From [1971SpZS](#).

Sm($^3\text{He},\text{xn}\gamma$) 1971SpZSLevel Scheme