

$^{150}\text{Sm}(\alpha, ^3\text{He})$ 1981Lo14

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 110, 1 (2009)	20-Nov-2008

E=40 MeV.

Magnetic spectrometer. FWHM=25 keV. $\sigma(\theta)$ data from 10° (C.M.) to 75° (C.M.) in steps of 6.5° . Absolute σ 's accurate to 30%.

Relative σ 's accurate to 10%. DWBA analysis of $\sigma(\theta)$ data.

 ^{151}Sm Levels

E(level) [†]	L [#]	S [‡]	Comments
0.0?			Very weakly populated.
67 10		0.93	
148 10		0.93	
175 10		2.02	
481 10			
727 10			
867 10	(6)	0.84	
1117 30			
1431 30			
1480 30	(6)	0.45	
1524 30			
1611 30			

[†] Normalized by authors to the 148-keV level.

[‡] Nuclear structure factor which is comparable to C^2S .

[#] Consistent with L(n)=6 and 5. However, L(n)=6 more probable since level not populated in (d,p) reaction.