^{144}Sm(n,γ) E=thermal 1978WaZM

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 110, 507 (2009)	1-Oct-2008

Measured: G.
1979Wa22: same work as 1978WaZM.
1993Ma18: capture cross sections, resonance parameters.

^{145}Sm Levels

E(level)†	J$^{\pi}$†	Comments
0.0	7/2$^-$	
893.729 *24*	3/2$^-$	
1607.29 *5*	1/2$^-$	
1972.63 *9*	3/2$^-$	
2133.47 *7*	3/2$^-$	
2160.3 *5*	1/2$^-$	
2678.3 *5*	1/2$^-$,3/2$^-$	
3140.1 *5*	3/2$^-$	
(6757.07 *30*)	1/2$^+$	E(level),J$^{\pi}$: E=S(n) from 1985Wa02; L=0 capture.

† Adopted values.

γ(^{145}Sm)

E$_{\gamma}$	I$_{\gamma}$†	E$_i$(level)	J$_i^{\pi}$	E$_f$	J$_f^{\pi}$
3617.1 *4*	1.29 *8*	(6757.07)	1/2$^+$	3140.1	3/2$^-$
4078.8 *4*	3.36 *15*	(6757.07)	1/2$^+$	2678.3	1/2$^-$,3/2$^-$
4596.7 *4*	2.35 *10*	(6757.07)	1/2$^+$	2160.3	1/2$^-$
4624.1 *3*	4.96 *21*	(6757.07)	1/2$^+$	2133.47	3/2$^-$
4784.5 *3*	16.5 *7*	(6757.07)	1/2$^+$	1972.63	3/2$^-$
5149.8 *2*	48.6 *20*	(6757.07)	1/2$^+$	1607.29	1/2$^-$
5862.96 *20*	100 *4*	(6757.07)	1/2$^+$	893.729	3/2$^-$

† Intensity per 100 neutron captures.

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Level Scheme

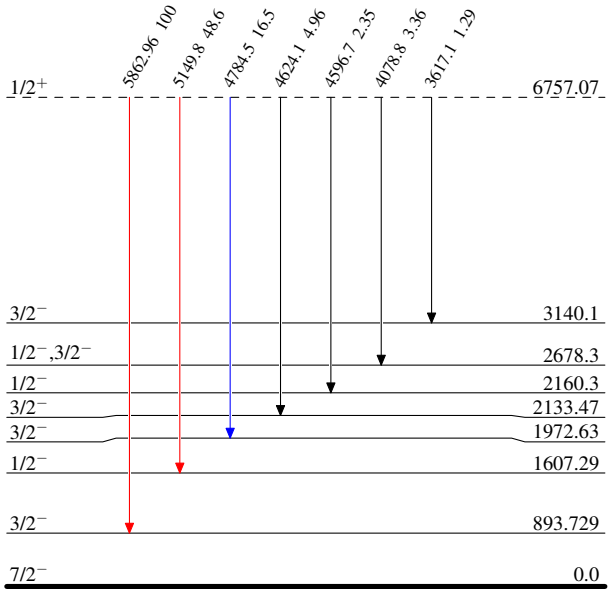
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{145}_{62}Sm_{83}$