^{25}Mg(α,t) 1990Ya07,1986Pe01,1989Ya03

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia and A. M. Hurst	NDS 134,1 (2016)	1-Feb-2016

Other: 1990Ya07.

1990Ya07: Self-supporting metallic 97.9% enriched ^{25}Mg target (thickness 80 μg/cm^2); 50 MeV α beam; Reaction products were momentum analyzed using magnetic spectrograph; Single wire proportional counter, ΔE and E counters; FWHM 25 MeV; Deduced excited levels of ^{26}Al, spectroscopic factors.

1986Pe01: 98.25% enriched ^{25}Mg target (thickness 513 μg/cm^2) bombarded with α beam, E=80.9 MeV; Quadrupole-dipole-dipole magnetic spectrometer; Measured triton spectra, FWHM 80 keV; DWBA calculations; Deduced spectroscopic factors.

1989Ya03: 97.9% enriched ^{25}Mg target (thickness 80 μg/cm^2) bombarded with α beam, E=80.9 MeV; Quadrupole-dipole-dipole magnetic spectrometer; Measured triton spectra, FWHM 20 keV; DWBA calculations; Deduced spectroscopic factors.

^{26}Al Levels

E(level)[†]	J$^\pi$[‡]	L	S[@]	Comments
0.0	5$^+$		1.03	
227	0$^+$		1.01	
415	3$^+$		0.90	
1061	1$^+$		1.0	
1758	2$^+$		1.43	
1851	1$^+$		1.32	
2066	(2$^+$)		1.07	
2364	3$^+$		1.25	
2546	3$^+$		1.33	
2659	2$^+$		0.56	
2742	1$^+$		1.25	
2913	2$^+$			
3073	3$^+$		1.43	
3162	2$^+$		1.0	
3401	5$^+$		1.0	
3511	6$^+$			
3598	3$^+$		2.17	
3677	3$^+$		3.08	
3753	2$^+$		1.0	
3926	7$^+$,(5$^+$)			
3964	(3$^+$)		0.33	
4194	(3$^+$)		1.56	
4350	3$^+$		2.5	
4430	2$^-$			
4482	0$^-$			
4551	2$^+$		1.36	
4698	(4$^+$)		2.25	
4769	4$^+$		4.33	
4947	(3$^+$)		2.0	
5018	(1$^+$)		1.43	
5145	(2$^+$)		0.89	
5261	(4$^+$)		1.9	
5551	(2$^+$)		1.38	
5730	(4$^+$)		0.46	
5848	(2$^+$)		5.3	
5890	(3$^+$)		(0.9)	
6891.70[#] *4*	(6$^-$)	3	0.17[&]	S: Other: 0.16 (1989Ya03).
6964.48[#] *9*	(3$^-$)	3	0.17[*a*]	
7108.71[#] *8*	(4$^-$)	3	0.03[&]	

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^{25}Mg(α,t) 1990Ya07,1986Pe01,1989Ya03 (continued)

^{26}Al Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	L	S[@]	Comments
7167.65[#] *6*	(4$^-$)	3	0.04[&]	
7347.89[#] *10*	(4$^-$)	3	0.16[&]	
7409.62[#] *8*	(4$^-$)	3	0.12[&]	
7529.26[#] *5*	(6$^-$)	3	0.09[&]	S: Other: 1.9 (1989Ya03).
7548.20[#] *9*	(5$^-$)	3	0.03[&]	
8011[#]	(5$^-$)	3	0.15[&]	S: Other: 1.5 (1989Ya03).
8067[#]	(5$^-$)	3	0.2[&]	S: Other: 2.1 (1989Ya03).
9271[#]		3	0.22[&]	S: Other: 2.5 (1989Ya03).

[†] From 1990Ya07, except otherwise noted.
[‡] From Adopted Levels.
[#] From Adopted Levels.
[@] From 1990Ya07.
[&] From (2J+1)S in 1986Pe01, except otherwise noted.
[a] From (2J+1)S in 1989Ya03.