^{25}Mg(^{3}He,^{4}He) 1975El05,1976No08

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia, Anagha Chakraborty	NDS 186, 2 (2022)	31-Mar-2022

$J^{\pi}(^{25}Mg)=5/2^{+}$.

1975El05: ^{25}Mg(^{3}He,α), E=18 MeV. Measured σ(Eα,θ). Deduced levels, L, relative spectroscopic strengths.

1976No08: ^{25}Mg(^{3}He,α), E=9-13 MeV; measured σ(E,Eα,θ). Deduced levels, relative spectroscopic strengths.

^{24}Mg Levels

E(level)†	L†	S_{rel}‡	Comments
0	2	0.23	
1366 *10*	2	0.48	E(level): Other: 1.37 × 10^3 (1976No08). S_{rel}: Other: 0.55, from 2.4 in 1976No08, with respect to S=0.023 for g.s. S=1.0 in 1976No08.
4130 *10*	2	0.14	E(level): Other: 4.12 × 10^3 (1976No08) from a doublet.
4233 *10*	2	0.01	E(level): Other: 4.24 × 10^3 (1976No08) from a doublet.
5231 *10*	2	0.02	E(level): Other: 5.22 × 10^3 (1976No08).
6014 *10*	2	0.05	E(level): Other: 6.01 × 10^3 (1976No08).
6448 *10*			
7352 *10*	2	0.09	
7552 *10*	3	0.01	
7610	1	0.23	
7755	2	0.02	
7820 *10*			
8123 *10*			
8367 *10*	3	0.01	
8446 *10*	2	0.40	E(level): Doublet.
8661 *10*	2	0.01	
8866 *10*	1	0.02	
9012 *10*	2	0.03	
9166 *10*	1	0.03	
9291 *10*			E(level): Multiplet.
9452 *10*	2	0.06	
9521 *10*	2	1.6	
9650 *10*	2		
9832 *10*	2	0.01	
9980 *10*	2	0.25	
10070 *10*	2	0.65	
10163 *10*			
10359 *10*	2	0.07	
10588 *10*	2	0.01	E(level): Doublet.
10689 *10*	2	0.02	
10739 *10*	2	0.07	E(level): Doublet.
10832 *10*	2		
10928 *10*	2	0.01	
11022 *10*	2	0.28	
11228 *10*	2	0.08	E(level): Doublet.
11325 *10*	2	0.12	E(level): Multiplet.
11397 *10*	1	0.18	
11465 *10*			
11529 *10*			
11601 *10*			
11701 *10*			
11939 *10*	2		
12051 *10*	2		

Continued on next page (footnotes at end of table)

^{25}Mg(^{3}He,^{4}He) 1975El05,1976No08 (continued)

^{24}Mg Levels (continued)

† From 1975El05. L values are deduced from measured dσ/dΩ and DWBA analysis.
‡ From 1975El05. Relative S-factor, based on the data in Table 1 (1975El05) with respect to S=0.23 for g.s. from (p,d) in 1969HaZD.