

$^{24}\text{Mg}(\text{t},\text{p})$ 1986Al06,1965Hi05

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

Others: 1965Hi05, 1961Hi11.

1986Al06: 99% enriched ^{24}Mg target (thickness 580 $\mu\text{g}/\text{cm}^2$); tritium beam, $E=18$ MeV; Protons were detected using a delay-line counter at focal plane of Enge spectrograph; FWHM about 40 keV; Measured proton spectra and angular distribution in 5° steps from 10° to 60°; deduced excited levels of ^{26}Mg , L values.

1965Hi05: Target – Separated isotopes of ^{24}Mg on thin carbon backing; Projectile – 11.0 MeV triton; Measured proton spectrum at 27.5° and angular distribution of proton using a broad-range magnetic spectrograph; Deduced L value, J^π .

 ^{26}Mg Levels

E(level) [†]	J^π [‡]	L [†]	Comments
0.0	0 ⁺	0	
1805	2 ⁺	2	
2941	2 ⁺	2	
3584	0 ⁺	0	
3943			
4319			
4331			
4350	2 ⁺	2	
4830	2 ⁺	2	
4896			
4970	0 ⁺	0	
5287			
5472	4 ⁺	4	
5686			
5710			
6120	(2 ⁺)	(2)	
6253	0 ⁺	0	
6616			
6737	2 ⁺	2	
6870	3 ⁻	3	
6970			
7056	1 ⁻	1	
7068 10	(0)		E(level): Level reported in 1986Al06 considered same as 7056 in 1965Hi05.
7342 10	3		
7410 10	(2)		
7525 10	4		L: Presumably erroneous. E(level): Unresolved doublet (1986Al06).
7659			
7687 10			
7804 10	5		L: Presumably erroneous.
7958 10	5		
8045 10	2		
8240 10	1		
8627 10	5		
8866 10	2		
8934 10	0		L: Presumably erroneous.
9271 10	4		
9358 10	4		
9583 10	4		
9859 10	2		
9974 10	2		
10052 10	5		
10108 10	4		
10156 10	0		
10283 10	2		

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$^{24}\text{Mg}(\text{t},\text{p})$ **1986Al06,1965Hi05 (continued)**

^{26}Mg Levels (continued)

E(level) [†]	L [‡]	Comments
10359		E(level): Unresolved doublet (1986Al06).
10421 <i>I</i> 0	4	
10518 <i>I</i> 0	(2)	

[†] Up to 7056 from [1965Hi05](#), above energies from [1986Al06](#).

[‡] In [1965Hi05](#), based on L values.