

²⁶Mg(³He,t) 2006Ze01,2003Fu07

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

$J^\pi(^{26}\text{Mg})=0^+$.

Other reaction: ²⁵Mg(⁶Li,⁶He): 1999Ue03 – Deduced Gamow-Teller transition strengths.

2006Ze01: E=140 MeV/nucleon. Measured tritons, $\sigma(\theta)$ using the Grand Raiden spectrometer. FWHM=100 keV, DWBA analysis. Deduced Gamow- Teller B(>) strengths.

2003Fu07: E=140 MeV/nucleon. Measured tritons using a QDD-type Grand Raiden spectrometer with a multiwire drift-chamber system. FWHM=100 keV, DWBA analysis. Deduced Gamow-Teller B(>) strengths.

²⁶Al Levels

R=DWBA_(corrected)/experiment.

E(level) [†]	J ^{πa}	L ^c	B(GT) ^e	Comments
0.0 [‡]	5 ⁺			
228 [@] 2	0 ⁺	0		T=1 Isobaric analogue state (2006Ze01). $d\sigma/d\Omega(0^\circ)=4.0$ mb/sr 1 (2006Ze01). R=1.80 5 (2006Ze01).
417 [‡] 2	3 ⁺	d		
1058 ^{&} 2	1 ⁺	0	1.09 3	T=0 Other B(>)=1.08 3 (2003Fu07). $d\sigma/d\Omega(0^\circ)=13.9$ mb/sr 3 (2006Ze01). R=1.62 4 (2006Ze01).
1850 ^{&} 2	1 ⁺	0	0.54 2	Other B(>)=0.527 15 (2003Fu07). $d\sigma/d\Omega(0^\circ)=6.7$ mb/sr 2 (2006Ze01). R=1.60 5 (2006Ze01).
2071 ^{&} 2	1 ⁺	0	0.114 8	Other B(>)=0.112 4 (2003Fu07). $d\sigma/d\Omega(0^\circ)=1.45$ mb/sr 3 (2006Ze01). R=1.43 3 (2006Ze01).
2545 [‡] 2		d		
2739 ^{&} 2	1 ⁺	0	0.119 8	Other B(>)=0.117 4 (2003Fu07). $d\sigma/d\Omega(0^\circ)=1.50$ mb/sr 3 (2006Ze01). R=1.31 3 (2006Ze01).
2915 [‡] 2		d		
3158 [@] 2	2 ⁺	d		T=1
3597 [‡] 2		d		
3726 2		0	0.109 8	Other B(>)=0.106 4 (2003Fu07).
4428 [@] 2	2 ⁻	d		T=0
4603 [‡] 2		d		
5010 2		0	0.28 1	Other B(>)=0.271 8 (2003Fu07).
5583 [‡] 2			0.020 ^f 1	
5949 2		0	0.041 5	E(level): Other: 5940 keV (2006Ze01). Other B(>)=0.037 2 (2003Fu07).
6269 2		0	0.134 8	Other B(>)=0.126 4 (2003Fu07).
6683 [‡] 2		d		
6875 2		0	0.028 4	E(level): Other: 6870 keV (2006Ze01). Other B(>)=0.028 1 (2003Fu07).
7199 2		0	0.089 6	Other B(>)=0.085 3 (2003Fu07).
7457 2		0	0.036 4	Other B(>)=0.038 2 (2003Fu07).

Continued on next page (footnotes at end of table)

$^{26}\text{Mg}(\text{}^3\text{He,t})$ [2006Ze01,2003Fu07](#) (continued) ^{26}Al Levels (continued)

E(level) [†]	J ^π ^a	L ^c	B(GT) ^e	Comments
7608 [‡] 2		<i>d</i>		
7813 2		0	0.037 4	Other B(>)=0.040 2 (2003Fu07).
8276 [‡] 4		<i>d</i>		
8532 [‡] 4		<i>d</i>		
8774 [‡] 4		<i>d</i>		
8930 4		0	0.041 ^g 2	
9007 4		0	0.079 ^g 3	
9430 [#]			0.136 8	
9620 [#]			0.079 7	
9860 [#]			0.058 6	
10240 [#]			0.158 9	
10450 [#]			0.29 1	
10810 [#]			0.47 2	
11220 [#]			0.164 9	
11500 [#]			0.021 5	
11620 [#]			0.17 1	
12010 [#]			0.015 3	
12410 [#]			0.022 4	
13570 [#]	1+ ^b		0.068 3	T=2
14530 [#]			0.015 4	
14880 [#]			0.018 5	
15910 [#]			0.029 6	
18320 [#]			0.021 5	

[†] From [2003Fu07](#), except otherwise noted. Also reported in [2006Ze01](#).

[‡] Reported only in [2003Fu07](#).

[#] Reported only in [2006Ze01](#).

@ From figure 4 of [2006Ze01](#).

& Gamow-Teller transition ([2006Ze01](#)).

^a From Adopted Levels, except otherwise noted.

^b From [2006Ze01](#).

^c From [2003Fu07](#).

^d ≠0 ([2003Fu07](#)).

^e From [2006Ze01](#), except otherwise noted.

^f From [2003Fu07](#).

^g B(>)=0.123 8 in [2006Ze01](#) for 8980 keV level is comparable with total B(>) value for levels 8930 and 9007 in [2003Fu07](#).