^{26}Mg(e,e′) 1974Le17,1995Se03

History

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

1974Le17: Target: 99.7% enriched self-supporting ^{26}Mg foil (thickness 46.8 mg/cm^2); Electron beam, E=56.89,81.36,82.75,84.16,85.09,91.28, 95.74,110.45,110.71 MeV; Inelastic electron spectra were measured; Deduced ^{26}Mg excited level energies, form factors.

1995Se03: 99.4% enriched ^{26}Mg target; Electron beam of energy 85 to 360 MeV; QDD spectrometer was used to collect data between 33° and 154°. Deduced excited level energy, spin and parity.

^{26}Mg Levels

E(level)[†]	J$^\pi$[#]	L	Comments
0.0			
1809 *5*	2^+	2	
2945 *10*	2^+	2	
3579 *11*	0^+	0	
3941[‡] *5*	3^+[‡]		
4337 *25*	2^+	2	
4350[‡] *5*	3^+[‡]		
4875 *15*	4^+	4	
4979 *16*	0^+	0	
5294 *19*	2^+	2	
5449 *50*	4^+	4	
5720 *22*	4^+	4	
6125[‡] *5*	3^+[‡]		
6216 *20*	0^+	0	
6876 *14*	3^-	3	
7082 *16*	2^+	2	
7242[‡] *5*	3^+[‡]		
7364 *15*	2^+	2	
7691 *18*	3^-	3	J$^\pi$: Poor form factor fitting for 3^-.
7724[‡] *5*	3^+[‡]		
7830 *17*	3^-	3	
8181 *16*	3^-	3	
8220	(1^-)	(1)	
8248[‡] *5*	3^+[‡]		
8456[‡] *5*	3^+[‡]		
8526 *19*	(2^+)	(2)	
8892 *14*	2^+	2	
9042[‡] *5*	3^+[‡]		
9250	(1^-)	(1)	
9287 *19*	2^+	2	
9423[‡] *5*	3^+[‡]		
9727 *25*			
9800	(1^-)	(1)	
9860 *18*	2^+	2	
9902[‡] *5*	3^+[‡]		
10199 *27*	1^-	1	
10330[@] *20*	(3^-)	(3)	
10491 *23*	2^+	2	
10650[@] *50*	1^-	1	
10680[@] *34*	4^+	4	

Continued on next page (footnotes at end of table)

^{26}Mg(e,e′) 1974Le17,1995Se03 (continued)

^{26}Mg Levels (continued)

E(level)[†]	Jπ[#]	L
10838 *24*	2^+	2
10990 *27*	2^+	2

† From 1974Le17, except otherwise noted.
‡ From 1995Se08. Uncertainty for excited levels are ≤ 5 keV noted in 1995Se03, evaluators list as 5 keV. Spin and parity assignments are based on form factors, γ decay and shell model calculations.
# From 1974Le17, based on relations of experimental form factors and reduced transition probability for transition of multipolarity L, except otherwise noted.
@ Level energy overlaps with more than three excited level energies in Adopted Levels and not referenced.