^{24}Mg(d,α) 1964Hi05,1976Sc06

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 127, 69(2015)	1-Apr-2015

$J^\pi(^{24}Mg)=0^+$.

Others: 1966Ja05.

1964Hi05: ^{23}Na(d,α), E=6, 13.02 MeV. Magnetic spectrograph.

1976Sc06: ^{23}Na(d,α), E=17-26 MeV. Multigap spectrometer, enriched targets.

^{22}Na Levels

E(level)	J^π[†]	L[‡]	S[#]	Comments
0.0	$^-$	2(+4)	1.3	
585 *5*	$^-$	0(+2)	0.34	
655 *5*	$^+$			
888 *5*	$^+$	4	4.7	
1527 *5*	$^-$	4	1.0	
1933 *7*	$^-$	0+2	0.72	
1946 *7*	$^+$			
1980 *7*	$^-$	2+4	1.3	
2210 *7*	$^+$	1		
2566 *7*	$^-$	1+3		
2965 *7*	$^-$	2(+4)	0.57	
3055 *7*	$^+$	2	1.0	
3521 *10*	$^+$	3		
3710 *10*	$^+$			
3943 *10*	$^-$	0(+2)	0.48	
4082 *10*	$^+$			
4300	$^-$			J^π: Probably 0^-.
4329 *10*	$^-$			
4365 *10*	$^+$			
4474 *10*	3^+	3		J^π: From (pol d,$\alpha\gamma$) (1977Ku02). Unnatural parity.
4532 *10*	$^-$			
4593 *10*	$^-$			
4631 *10*				
4721 *10*	$^-$	4	1.4	
4786 *10*				
5076 *10*				
5111 *15*	$^+$			
5139 *10*				
5330 *15*	$^-$			
5446 *10*				
5615 *15*				
5741 *15*				
5752 *15*				
5842 *10*				
5876 *10*				
5938 *15*				
6001 *15*				
6092 *10*				
6200 *15*				
6251 *15*				
6338 *15*				
6434 *10*				
6450? *15*				
6533 *10*				
6563 *15*				

Continued on next page (footnotes at end of table)

^{24}Mg(d,α) 1964Hi05,1976Sc06 (continued)

^{22}Na Levels (continued)

E(level)	E(level)	E(level)	E(level)
6591 *15*	6955 *10*	7276 *20*	7573 *20*
6643 *10*	7017 *20*	7364 *20*	7628 *20*
6727 *15*	7094? *20*	7409 *20*	7677 *20*
6752 *15*	7155 *20*	7513 *20*	7822 *20*
6863 *10*	7212 *20*	7548 *20*	7882 *20*

† From ^{24}Mg(pol d,α), Boerma, Jahresbericht ETH Zurich (1976), summarized in 1978En02.
‡ From 1976Sc06.
# (d,α) normalization divided by the average (d,α) normalization for eight states (1976Sc06).