^{22}Ne(t,p)

History

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

1989Cl03: ^{22}Ne(t,p) E=33.4 MeV. Measured $\sigma(\theta)$, σ(Ep). DWBA analysis.

1970Ho17: ^{22}Ne(t,p) E=3.3 MeV. Measured proton spectra, angular distribution, DWBA analysis, deduce L value. FWHM ~100 keV.

1961Si03: ^{22}Ne(t,p) E=2.6 MeV, Charged reaction products were analyzed at a laboratory angle of 30° with a 1.6-in. radius, 180° double-focusing magnetic spectrometer. Measured: proton spectra. Deduce excited level energies. FWHM=30 keV (for protons), 50 keV (for α groups).

^{24}Ne Levels

E(level)[†]	Jπ[@]	L[#]	Comments
0	0^+	0	
1986[‡] *18*			
3873[‡] *18*	2^+	2	
3962[‡] *18*			
4764[‡] *18*	0^+	0	L: From 1970Ho17.
4886[‡] *18*			
5576 *18*			
5641?[‡] *25*			
5700 *60*	0^+		
6030[‡] *18*	(2^+)[&]		E(level): Other: 6070 *60* (1989Cl03). Jπ: From 1989Cl03.
6370 *60*	$(2^+,3^-)$[&]		
6870 *60*			
7320 *60*			
7550 *60*			
7830 *60*	$2^+,3^+,4^+$[&]		
8040 *60*	$(2^+,3^+)$[&]		
8160 *60*			
8370 *60*	$(2^+,3^+)$[&]		
8530 *60*			
8860 *60*	$(2^+,3^+)$[&]		
9040 *60*			
9180 *60*	$2^+,3^+,4^+,5^+$[&]		
9380 *60*	$(2^+,3^+)$[&]		
9630 *60*	$(2^-,1^-,3^-)$[&]		
9780 *60*	$2^+,3^+,4^+,5^+$[&]		
9960 *60*	$2^+,3^+,4^+,5^+$[&]		
10200 *60*			
10630 *60*	$3^+,4^+,5^+$[&]		
11080 *60*	$2^+,3^+,4^+,5^+$[&]		
11180 *60*			
11470 *60*	$3^+,4^+,5^+$[&]		

[†] From 1989Cl03, except as noted.
[‡] From 1961Si03.
[#] From 1970Ho17.

Continued on next page (footnotes at end of table)

^{22}Ne(t,p) (continued)

^{24}Ne Levels (continued)

@ From L-transfer or inferred by comparison of differential cross sections with DWBA calculations in 1989Cl03.
& May represent more than one level, spin-parity not adopted by the evaluators.