

$^{22}\text{Ne}(\alpha, \text{d})$ [1986Ka36](#)

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

The reaction $^{22}\text{Ne}(\alpha, \text{d})$ with the projectile energy of 64.3 MeV was used. The reaction products were detected on the focal plane of a QDD spectrograph by using a single-wire proportional counter. Enriched gas target was used. Measured $\sigma(E_d, \theta)$, from 10.5° to 78° (laboratory angle). Performed DWBA analysis. Extracted L, π , J values. FWHM=70 to 110 keV. Other: [1975La11](#).

 ^{24}Na Levels

E(level) [†]	J π [†]	L [†]	Comments
0	4 ⁺	4	
470	1 ⁺	(0,2)	
1510	5 ⁺	4	
1890	3 ⁺	2	
2510	3 ⁺	2	
2900	3 ⁺	2	
3600	(3 ⁺)	2	
3900			
4140		5	
4570		3	
5040		6	L: Inconsistent with the γ decay of adopted level $J^\pi=2^-$.
5220	(1 ⁻)	1	
5930		5	E(level),L: Probably doublet.
6270		(4,5)	
6640		(2,3)	
6920			
7200			
7510		3	
7890		(4)	
8080			
8390		0	
8610		(4,5)	
8860		(5)	
9280		(5)	
9630		(6)	
10790	(7 ⁺)	6	
11190		(2,3)	
11610			
11900		(4,5)	
12190			
12540		(5)	

[†] From [1986Ka36](#).