

$^{22}\text{Ne}(\text{d,n})$ 1993Te05,1973Ch07

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia [#] , A. Chakraborty ^{##}		NDS 171,1 (2021)	1-Jun-2020

$J^\pi(^{22}\text{Ne})=0^+$.

Other references: 1973Ch07, 1967Mu13, 1964Pa08.

1993Te05: $^{22}\text{Ne}(\text{d,n})$ E=25 MeV. Measured $\sigma(\theta)$. FWHM 170-200 keV.

1973Ch07: $^{22}\text{Ne}(\text{d,n})$ E=2.5-5.5 MeV. Measured $\sigma(\text{E;En},\theta)$. FWHM 50-320 keV.

 ^{23}Na Levels

E(level) [†]	L [‡]	(2J+1)C ² S [@]	Comments
0	(2)	(0.33)	(2J+1)C ² S: Other: (1.09) (1973Ch07).
440 10	2	2.91	(2J+1)C ² S: Other: (1.28) (1973Ch07).
2080	(4) [#]	(0.10) [#]	
2390 10	0	0.50	(2J+1)C ² S: Other: 0.28 (1973Ch07).
2980 10	2	1.68	(2J+1)C ² S: Other: 0.69 (1973Ch07).
3680 30	1	0.15	(2J+1)C ² S: Other: 0 (1973Ch07).
3910 30	2	0.39	
4430	(0) [#]	0 [#]	
4780	(4) [#]	(0) [#]	
5380	2 [#]	0.16 [#]	
5740 10	2	0.47	(2J+1)C ² S: Other: 0.20 (1973Ch07).
5940	(1) [#]	0 [#]	
6310 10	0	0.27	(2J+1)C ² S: Other: 0.18 (1973Ch07).
6920 10	1	0.53	(2J+1)C ² S: Other: 0.19 (1973Ch07).
7080 10	1	0.31	(2J+1)C ² S: Other: 0.08 (1973Ch07).
7450 10	(2)	1.62	L: Other: 1 (1973Ch07). (2J+1)C ² S: Other: 0.11 (1973Ch07).
7750	(2) [#]	0.05 [#]	
7890 10	2	0.87	(2J+1)C ² S: Other: 0.40 (1973Ch07).
8300 10	3	0.44	
8420 10	2	0.52	L: Other: 3 (1973Ch07). (2J+1)C ² S: Other: 0.16 (1973Ch07).
8660 10	0	1.16	(2J+1)C ² S: Other: 0.50 (1973Ch07).
8800	0 [#]	0.08 [#]	(2J+1)C ² S: Other: (0.08) (1973Ch07).
8940	3 [#]	(0.24) [#]	
9700 10	2	0.32	
10010 30	2	0.19	
10840 30	(1)	0.35	
10940 10	2	0.42	
11290 10	2	0.71	
11540 10	3	0.49	
11760 10	3	0.40	
11880 10	3	0.24	
14370 10	3		

[†] From 1993Te05, except where otherwise noted. Uncertainty 10 keV for prominent peaks and 30 keV for weakly populated peaks.

Based on the excitation energy spectrum presented in Fig. 2, evaluators identified possible prominent and weak peaks and assigned the uncertainty. Excitation levels without uncertainty are from 1973Ch07.

[‡] From 1993Te05, except otherwise noted.

[#] From 1973Ch07.

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