

$^{21}\text{Ne}(\text{p,p}),(\text{p,p}')$ 1975Ch15

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

$J^\pi(^{21}\text{Ne})=3/2^+$.

Target: Enriched (91%) ^{21}Ne target with 3.3% ^{20}Ne and 5.7% ^{22}Ne isotopes; Projectile: P, E=0.6-2.0 MeV; The reaction particles were detected simultaneously by eight surface barrier detectors placed at angles between 40° and 160° in the laboratory system. Measured proton spectrum, deduced resonance energies, L, Γ_p .

 ^{22}Na Levels

E(level) [†]	J^π [‡]	L	Γ_p [#]	Comments
7408.6 5	(1,2) ⁺	0	<2 [@]	
7471.7 12	(1,2) ⁺	0	2	
7599 3	(1 to 3) ⁻	1	2.5	
7778.2 10	(1 to 3) ⁻	1	<2 [@]	
7800.6 10	(1,2) ⁺	0	1.8	
7889.1 11	(0 to 4) ⁺	2	<0.5 ^{&}	
7919 2	1 ⁻	1	23	E(level): Possible doublet (1975Ch15).
7977 2	(1 to 3) ⁻	1	2	
8101 4	(1,2) ⁺	0	<4 [@]	
8114 2	2 ⁻ ,3 ⁻	1	0.6	
8165 2	3 ⁻	1	15	
8211 2	2 ⁺	0	4.5	
8234 2	2 ⁺	0	4.4	
8288 2	(1 to 3) ⁻	1	5	
8328 2	1 ⁻ ,2 ⁻	1	2	
8436 2	(1 to 3) ⁻	1	8	
8496 2	2 ⁺	0	29	
8538 2	(1 to 3) ⁻	1	<8 [@]	
8567 2	(0 to 4) ⁺	2	<4.5 [@]	
8602 2	(1 to 3) ⁻	1	2.1	
8636 2	3 ⁻	1	5	

[†] Resonance energies from Adopted Levels.

[‡] Assignment in 1975Ch15.

[#] In units of keV.

[@] The upper limit corresponds to the proposed upper spin value.

[&] For weak widths only an upper limit is given.