

$^{20}\text{Ne}(t,p\gamma)$ 1972Ho52

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

3.0 MeV tritons impinge upon a ^{20}Ne gas target of 99.9% isotopic and 97% elemental purity; protons were detected by a thick (500 μm) annular charged-particle detector, resolution ~ 70 keV; γ -rays were detected using NaI(Tl) detector, measured E_γ , I_γ , and proton-gamma angular correlations.

 ^{22}Ne Levels

E(level) [†]	J^π [†]	Comments
0.0	0 ⁺	
1274.537 7	2 ⁺	
3357.2 5	4 ⁺	
4456.2 9	2 ⁺	
5146.0 9	2 ⁻	
5329.6 13	1 ⁺	
5363.4 11	2 ⁺	
5523.3 6	(4) ⁺	
5641.2 7	3 ⁺	
5910.1 9	3 ⁻	
6119.9 16	2 ⁺	
6345.1 10	4 ⁺	
7051 3	1 ⁻	
7341.1 11	0 ⁺	J^π : (1 ⁻) in 1972Ho52.
7489 5	1 ⁻	

[†] From Adopted Levels.

 $\gamma(^{22}\text{Ne})$

$E_i(\text{level})$	J_i^π	E_γ [†]	I_γ [‡]	E_f	J_f^π	$E_i(\text{level})$	J_i^π	E_γ [†]	I_γ [‡]	E_f	J_f^π
1274.537	2 ⁺	1274.537 7	100	0.0	0 ⁺	5910.1	3 ⁻	2552.7	5 [#] 5	3357.2	4 ⁺
3357.2	4 ⁺	2082.6 5	100	1274.537	2 ⁺			4635.0	85 [#] 5	1274.537	2 ⁺
4456.2	2 ⁺	3181.4	100	1274.537	2 ⁺	6119.9	2 ⁺	1663.6	8 [#] 1	4456.2	2 ⁺
5146.0	2 ⁻	689.8	47 [#] 3	4456.2	2 ⁺			4844.8	78 [#] 3	1274.537	2 ⁺
		3871.1	53 [#] 3	1274.537	2 ⁺			6119.0	14 [#] 2	0.0	0 ⁺
5329.6	1 ⁺	4054.6	40 [#] 10	1274.537	2 ⁺	6345.1	4 ⁺	2987.7 9	100	3357.2	4 ⁺
		5328.9	60 [#] 10	0.0	0 ⁺	7051	1 ⁻	5776	91 [#] 1	1274.537	2 ⁺
5363.4	2 ⁺	4088.4	>90	1274.537	2 ⁺			7050	9 [#] 1	0.0	0 ⁺
		5362.7	<10	0.0	0 ⁺	7341.1	0 ⁺	2011.4	90 [#] 2	5329.6	1 ⁺
5523.3	(4) ⁺	2166.1 5	100	3357.2	4 ⁺			2884.7	10 [#] 2	4456.2	2 ⁺
5641.2	3 ⁺	2283.9 7	23 [#] 3	3357.2	4 ⁺	7489	1 ⁻	2125	22 [#] 4	5363.4	2 ⁺
		4366.1 10	77 [#] 3	1274.537	2 ⁺			7487	78 [#] 4	0.0	0 ⁺
5910.1	3 ⁻	1453.8	10 [#] 5	4456.2	2 ⁺						

[†] From Adopted Gammas, except otherwise noted.

[‡] 1972Ho52 quote from literature.

From 1972Ho52.

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Level Scheme

Intensities: % photon branching from each level

