

Table 16.5 from (1959AJ76): Levels of ^{16}O from $^{15}\text{N}(\text{p}, \text{p})^{15}\text{N}$, $^{15}\text{N}(\text{p}, \gamma)^{16}\text{O}$ and $^{15}\text{N}(\text{p}, \alpha)^{12}\text{C}$

E_p (keV)	Γ_{lab} (keV)	Γ_p (keV)	$\sigma(\alpha_0)$ (mb)	$\sigma(\alpha_1)$ (mb)	$\sigma(\gamma_0)$ (μb)	$\sigma(\gamma_1)$ (μb)	θ_p^2 (%)	$J^\pi; T$	E_x (MeV)
(190)	40				res ^f				12.29
338 ^a	94	0.8 ^{a, f}	75 ^{a, f}	0.03 ^f	7 ^f	0.4 ^f	4 ^{f, c}	1 ⁻ ; 0 ^c	12.430
429 ± 1 ^a	0.9	0.020 ^f	n.r. ^g	200 ^{a, f}		1300 ^f	4 ^b	2 ⁻	12.515
710 ± 7 ^b	40 ± 4	40 ^b	n.r.	n.r.	n.r.	res	11	0 ⁻ ; 1 ^b	12.779
898 ± 1 ^a	2.2 ± 0.2	1.2	n.r.	800			8.8	2 ⁻ ; 1	12.955
1028 ± 10 ^b	140 ± 10	110	500 ⁱ	15	1000 ^a	< 1.3 ^h	10	1 ⁻ ; 1	13.088
1210 ± 3 ^a	22.5 ± 1	4.1	600 ⁱ	425 ^d			7.4	3 ⁻ ; 1	13.247
1640 ± 3 ^c	68 ± 3	10	n.r. ^d	340			0.8	1 ⁺ ; 0	13.651
1979 ± 3	23 ± 2	0.5 ^c	n.r.	35				2 ⁻ ^d	13.968
3000 ± 30 ^d	45 ± 10		50	600				4 ⁺	14.93
3300 ± 35	75 ± 15		n.r.	270				2 ⁻ , 3 ⁺	15.21
3350 ± 50	750 ± 100		50	205				2 ⁺	15.25
3520 ± 40	100 ± 25		100	80					15.41
3920 ^e	30			res ^e					15.79
4610	25			res					16.44
(5020)				(res)					(16.82)
(5140)				(res)					(16.93)

^a (1952SC28); values for 338-keV resonance corrected for s-wave penetration: observed $E_{\text{max}} = 360$ keV, $\sigma_{\alpha_0}(\text{max}) = 90$ mb.

^b (1957HA98).

^c (1957HG01).

^d (1957BA03).

^e (1956LI1C); see also Table 16.6.

^f (1958HE52).

^g n.r. = non-resonant.

^h (1954GO1F).

ⁱ (1952SC28); (1957HG01) find 340 and 300 mb respectively.