

Table 15.21 from (1986AJ01): Resonances in $^{14}\text{N} + \text{p}$ ^a

E_p (keV)	Γ_{lab} (keV)	$\omega\Gamma_\gamma$ (eV)	Particles out	J^π	E_x (MeV)
278.1 ± 0.4	1.3 ± 0.2	0.014 ^b	γ	$\frac{1}{2}^+$	7.5564
1058.0 ± 0.5	3.9 ± 0.7	0.95	γ	$\frac{3}{2}^+$	8.2839
1550 ± 6	34	0.16	γ	$\frac{1}{2}^+$	8.743
1742 ± 2 ^c	3.5 ± 0.3	0.16	γ, p_0	$\frac{5}{2}^+$	8.922
1742 ± 2 ^c	8	0.06	γ, p_0	$\frac{1}{2}^+$	8.922
1806.4 ± 1.5	4.2 ± 0.4	0.52	γ	$(\frac{3}{2})^-$	8.9821
2348 ± 3	10.8 ± 0.5	2.4	γ	$\frac{5}{2}^-$	9.488
2368 ± 32	300 ± 26		γ, p_0	$(\frac{3}{2}^+)$	9.506
2479 ± 1.7	9.4 ± 0.5	3.3	γ	$\frac{3}{2}^-$	9.609
2537 ± 4	2 ± 1		p_0	$(\frac{7}{2}, \frac{9}{2})^-$	9.664
3209	3 ± 1		p_0	$(\frac{5}{2}^-)$	10.291
3215	12 ± 2		p_0	$\frac{5}{2}^+$	10.296
3392 ± 5	< 2	0.029 ± 0.010	γ_2, γ_6	$(\frac{9}{2}^+)$	10.461
3410	27 ± 5		$\gamma_0, \gamma_2, \text{p}_0$	$(\frac{3}{2})^-$	10.478
3440	150 ± 45		γ, p_0	$(\frac{3}{2})^+$	10.506
3880 ± 15	97		p_0	$\frac{7}{2}^+$	10.916
		Γ_{γ_0} (eV)			
3903 ± 3	106 ± 5	14 ± 3	$\gamma, \text{p}_0, \text{p}_1$	$\frac{1}{2}^+$	10.938
3996 ± 3	27 ± 2	1.4 ± 0.4	$\gamma, \text{p}_0, \text{p}_1$	$\frac{1}{2}^-$	11.025
4130 ± 15	< 10		p_0		11.150
4203 ± 3	43 ± 4	5.2 ± 0.4	γ, p_0	$\frac{3}{2}^+$	11.218
4575 ± 15	< 10		p_0		11.565
4580 ± 15	21 ± 15	0.7 ± 0.2	γ, p_0	$\frac{5}{2}^-$	11.569
4580	150		γ		11.57
4630 ± 15	86 ± 50		γ, p_0	$(\frac{3}{2}, \frac{1}{2})^-$	11.616
4740 ± 15	< 10		p_0		11.718
4772 ± 3	106 ± 5		$\gamma, \text{p}_0, \text{p}_1$	$\frac{5}{2}^+$	11.748
4877 ± 3	70 ± 3		$\gamma, \text{p}_0, \text{p}_1$	$\frac{5}{2}^-$	11.846
5025 ± 15	21 ± 5		p_0, p_1	$\frac{5}{2}^-$	11.984
5180 ± 15	214 ± 50		p_0, p_1	$\frac{5}{2}^+$	12.129
5280 ± 20	106 ± 50		p_1 ^d		12.222

Table 15.21 from (1986AJ01): Resonances in $^{14}\text{N} + \text{p}^{\text{a}}$ (continued)

E_{p} (keV)	Γ_{lab} (keV)	$\omega\Gamma_{\gamma}$ (eV)	Particles out	J^{π}	E_{x} (MeV)
5547 ± 3	82 ± 4		p_1, p_2	$\frac{5}{2}^{-} (\frac{3}{2}^{-})$	12.471
5900	≈ 250		γ		12.80
5937 ± 3	17 ± 1		p_2^{e}		12.835
(6100)	30		$\text{p}_0 \rightarrow \text{p}_2, \alpha_0$	$\frac{5}{2}^{+}$	(12.99)
6123 ± 3	230 ± 30		p_2^{e}		13.008
6141 ± 3	43 ± 30		p_2^{e}		13.025
6600	≈ 1000		$\gamma, (\text{p}_2, \alpha_0)$	$(\frac{1}{2}, \frac{3}{2})^{+}$	13.45
6640			$(\text{p}_0), (\text{p}_2)$	$(\frac{3}{2}^{+})$	13.49
6760			α_0	$\frac{5}{2}^{+}$	13.60
6870			p_2	$\frac{3}{2}^{-}$	13.70
6960			$\text{p}_1, \text{p}_2, \text{p}_4, \alpha_0$	$\frac{3}{2}^{-}$	13.79
7050	≈ 150		γ		13.87
7370			α_0	$\frac{5}{2}^{-}$	14.17
7500	≈ 500		$\text{n}, \text{p}_0 \rightarrow \text{p}_2, {}^3\text{He}, \alpha$		14.29
7550			α_0	$\frac{5}{2}^{+}$	14.34
7700			$\text{n}, \text{p}_0, \alpha_0$		14.48
7950	170 ± 50		n		14.71
8200			$\text{n}, \text{p}_2 \rightarrow \text{p}_6, {}^3\text{He}, \alpha_0, \alpha_1$		14.94
8400	≈ 1000		γ	$(\frac{1}{2}, \frac{3}{2})^{+}$	15.1
9050			n		15.74
f					
9370 ± 20	≈ 200		$\text{n}, \text{p}_2, \text{p}_8, \alpha_1$		16.04
9580 ± 20	≈ 150		$\text{p}_0, \text{p}_1, \text{p}_3 \rightarrow \text{p}_7, \text{p}_9, {}^3\text{He}, \alpha_1$		16.23
9850 ± 50	600 ± 100		$\text{n}, {}^3\text{He}$		16.48
10300	≈ 1000		γ	$(\frac{1}{2}, \frac{3}{2})^{+}$	16.9
10600			$\text{p}_4 \rightarrow \text{p}_9, \alpha_0, \alpha_1$		17.2
11900	≈ 1000		γ	$(\frac{1}{2}, \frac{3}{2})^{+}$	18.4
14200	≈ 2000		γ	$(\frac{1}{2}, \frac{3}{2})^{+}$	20.5
15800	≈ 2000		γ	$(\frac{1}{2}, \frac{3}{2})^{+}$	22.0

^a For references see (1970AJ04, 1976AJ04, 1981AJ01). See also [Table 15.18](#) here.

^b ± 0.001 ([1982BE29](#)).

^c Separated by 0.5 ± 0.5 keV: see, however, [reaction 14](#) in (1981AJ01).

^d Weak.

^e Strong.

^f See [footnote ^e](#) in [Table 15.23](#) of (1981AJ01).