

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

$E_p$ (keV)	$\Gamma_{\text{lab}}$ (keV)	$\omega\Gamma_\gamma$ (eV)	Particles out	$J^\pi$	$E_x$ (MeV)
278.1 ± 0.4	1.3 ± 0.2	0.014 <sup>b</sup>	$\gamma$	$\frac{1}{2}^+$	7.5564
1058.0 ± 0.5	3.9 ± 0.7	0.95	$\gamma$	$\frac{3}{2}^+$	8.2839
1550 ± 6	34	0.16	$\gamma$	$\frac{1}{2}^+$	8.743
1742 ± 2 <sup>c</sup>	3.5 ± 0.3	0.16	$\gamma, \text{p}_0$	$\frac{5}{2}^+$	8.922
1742 ± 2 <sup>c</sup>	8	0.06	$\gamma, \text{p}_0$	$\frac{1}{2}^+$	8.922
1806.4 ± 1.5	4.2 ± 0.4	0.52	$\gamma$	$(\frac{3}{2})^-$	8.9821
2348 ± 3	10.8 ± 0.5	2.4	$\gamma$	$\frac{5}{2}^-$	9.488
2368 ± 32	300 ± 26		$\gamma, \text{p}_0$	$(\frac{3}{2}^+)$	9.506
2479 ± 1.7	9.4 ± 0.5	3.3	$\gamma$	$\frac{3}{2}^-$	9.609
2537 ± 4	2 ± 1		$\text{p}_0$	$(\frac{7}{2}, \frac{9}{2})^-$	9.664
3209	3 ± 1		$\text{p}_0$	$(\frac{5}{2}^-)$	10.291
3215	12 ± 2		$\text{p}_0$	$\frac{5}{2}^+$	10.296
3392 ± 5	< 2	0.029 ± 0.010	$\gamma_2, \gamma_6$	$(\frac{9}{2}^+)$	10.461
3410	27 ± 5		$\gamma_0, \gamma_2, \text{p}_0$	$(\frac{3}{2})^-$	10.478
3440	150 ± 45		$\gamma, \text{p}_0$	$(\frac{3}{2})^+$	10.506
3880 ± 15	97		$\text{p}_0$	$\frac{7}{2}^+$	10.916
		$\Gamma_{\gamma_0}$ (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		$\text{p}_0$		11.150
4203 ± 3	43 ± 4	5.2 ± 0.4	$\gamma, \text{p}_0$	$\frac{3}{2}^+$	11.218
4575 ± 15	< 10		$\text{p}_0$		11.565
4580 ± 15	21 ± 15	0.7 ± 0.2	$\gamma, \text{p}_0$	$\frac{5}{2}^-$	11.569
4580	150		$\gamma$		11.57
4630 ± 15	86 ± 50		$\gamma, \text{p}_0$	$(\frac{3}{2}, \frac{1}{2})^-$	11.616
4740 ± 15	< 10		$\text{p}_0$		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		$\text{p}_0, \text{p}_1$	$\frac{5}{2}^-$	11.984
5180 ± 15	214 ± 50		$\text{p}_0, \text{p}_1$	$\frac{5}{2}^+$	12.129
5280 ± 20	106 ± 50		$\text{p}_1$ <sup>d</sup>		12.222

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

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

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

<sup>b</sup>  $\pm 0.001$  ([1982BE29](#)).

<sup>c</sup> Separated by  $0.5 \pm 0.5$  keV: see, however, [reaction 14](#) in (1981AJ01).

<sup>d</sup> Weak.

<sup>e</sup> Strong.

<sup>f</sup> See [footnote <sup>e</sup>](#) in [Table 15.23](#) of (1981AJ01).