Table 18.16 from (1987AJ02): Resonances in $^{14}\mathrm{N} + \alpha$ below $E_\alpha = 5$ MeV [a]

E_α (MeV $\pm$ keV)	Particles out	$\Gamma_{\mathrm{c.m.}}$ (keV)	$(2J+1)\Gamma_\gamma\Gamma_\alpha/\Gamma$ (eV)	$J^\pi; T$	E_x (MeV)
			$< 2 \times 10^{-5}$		4.657
0.559	γ		$(2.8 \pm 0.5) \times 10^{-4}$	1; 0	4.850
0.698			$< 0.5 \times 10^{-4}$	2^+; 1	4.958
1.136 ± 3	γ		0.084 ± 0.004	4^+; 0	5.299
1.398 ± 3	γ		0.022 ± 0.003	$3^{(-)}$; 0	5.502
1.527	γ, α_0		1.44 ± 0.14	1^+	5.603 [e]
1.529 ± 2	γ, α_0	< 1.2	2.60 ± 0.21	$1^-; 0+1$	5.604 [f]
1.618 ± 2	γ, α_0	< 0.8	1.4 ± 0.2 [b]	$1^-; 0+1$	5.673 [g]
1.765 ± 4	γ		0.047 ± 0.018	2^-; 0	5.788
2.160 ± 4	γ		0.20 ± 0.04	4^-; 0	6.095
2.166 ± 7	γ, α_0		0.08 ± 0.03 [c]	1, 2, $3^{(-)}$; 0	6.100
2.348 ± 3	γ, α_0	< 0.8		$3^-; 0+1$	6.241 [h]
2.372 ± 3	γ, α_0	< 3	[d]	1^+; (0)	6.260 [i]
2.438 ± 4	γ		0.52 ± 0.12	3^+; 0	6.311
2.532 ± 4	γ		1.6 ± 0.4	$2^+; 0+1$	6.384
	γ		0.16 ± 0.06	3^+; (0)	6.480
2.767 ± 4	γ, α_0	(< 0.8)	0.29 ± 0.06	5^+; 0	6.567
2.870 ± 4	γ, p_0	< 1.6	2.7 ± 0.5	2^-; 1	6.647
2.870 ± 6	α_0	93 ± 5	$\Gamma_\alpha/\Gamma = 0.85$	1^-	6.647
			0.12 ± 0.07	4^+; 0	6.78
			< 0.2	1^+, 2, 3^+; (0)	6.803
3.080 ± 6	p_0, α_0	101 ± 5		2^-	6.810
3.576 ± 4	α_0	< 4		(4^+)	7.196
3.67	α_0	45 ± 10		(1^+)	7.27
3.72	p_0, α_0	53 ± 6		(3^-)	7.31
4.00	p_0, α_0	35		(3^-)	7.53
4.05	p_0, α_0	60			7.57
4.11	p_0, α_0	40			7.61

Table 18.16 from (1987AJ02): Resonances in $^{14}\mathrm{N} + \alpha$ below $E_\alpha = 5$ MeV [a] (continued)

E_α (MeV $\pm$ keV)	Particles out	$\Gamma_{\mathrm{c.m.}}$ (keV)	$(2J+1)\Gamma_\gamma\Gamma_\alpha/\Gamma$ (eV)	$J^\pi; T$	E_x (MeV)
4.28	p_0, α_0	120			7.74
4.50	p_0, α_0	30		(2^-)	7.92
4.55	p_0, α_0	70		(1^+)	7.95

[a] References are displayed in Tables 18.13 of (1972AJ02, 1978AJ03). Higher resonances observed in $^{14}\mathrm{N}(\alpha, \alpha_1)$ are listed in Table 18.14 of (1978AJ03).

[b] $\omega\gamma = 0.45 \pm 0.02$ (1982BE29).

[c] ≤ 0.07 for ^{18}F*(6.11, 6.16) (1973RO03).

[d] ≤ 0.03 for ^{18}F*(6.28) (1973RO03).

[e] $\Gamma_\alpha = 42.8 \pm 1.6$ eV, $\Gamma_\gamma = 0.485 \pm 0.046$ eV, $l_\alpha = 0$ (1980MA26). See also Table 18.19.

[f] $\Gamma_\alpha = 32.0 \pm 2.1$ eV, $\Gamma_\gamma = 0.891 \pm 0.074$ eV, $l_\alpha = 1$. ΔE_x for ^{18}F*(5.603, 5.605) is 1.84 ± 0.04 keV (1980MA26). See also Table 18.19.

[g] $\Gamma_\alpha = 130 \pm 5$ eV, $\Gamma_\gamma = 1.4 \pm 0.3$ eV, $l_\alpha = 1$ (1980MA26).

[h] This resonance corresponds to two states at $E_\mathrm{x} = 6240$ and 6242 keV. The lower member of the doublet (both of which have $J^\pi = 3^-$ and mixed isospin) has $\Gamma_\alpha = 133 \pm 4$ eV, $\Gamma_\gamma = 0.80 \pm 0.11$ eV; the higher has $\Gamma_\alpha = 137 \pm 4$ eV, $\Gamma_\gamma = 0.73 \pm 0.11$ eV (1979KI12).

[i] $\Gamma_\alpha = 580 \pm 12$ eV, $\Gamma_\mathrm{p} = 25^{+35}_{-25}$ eV (1979KI12).