

Table 18.14 from (1983AJ01): Resonances in $^{14}\text{N} + \alpha$ below $E_\alpha = 5 \text{ MeV}$ ^a

E_α (MeV \pm keV)	Particles out	$\Gamma_{\text{c.m.}}$ (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	4.851
0.698			$< 0.5 \times 10^{-4}$	2 ⁺ ; 1	4.959
1.136 \pm 3	γ		0.084 \pm 0.004	4 ⁺ ; 0	5.299
1.398 \pm 3	γ		0.022 \pm 0.003	3 ⁽⁻⁾ ; 0	5.503
1.527	γ, α_0		1.44 \pm 0.14	1 ⁺	5.603 ^d
1.529 \pm 2	γ, α_0	< 1.2	2.60 \pm 0.21	1 ⁻ ; 0 + 1	5.605 ^e
1.618 \pm 2	γ, α_0	< 0.8	1.4 \pm 0.2	1 ⁻ ; 0 + 1	5.674 ^f
1.765 \pm 4	γ		0.047 \pm 0.018	2 ⁻ ; 0	5.788
2.160 \pm 4	γ		0.20 \pm 0.04	4 ⁻ ; 0	6.096
2.166 \pm 7	γ, α_0		0.08 \pm 0.03	1, 2, 3 ⁽⁻⁾ ; 0	6.100
			^b		
2.348 \pm 3	γ, α_0	< 0.8		3 ⁻ ; 0 + 1	6.242 ^g
2.372 \pm 3	γ, α_0	< 3		1 ⁺ ; (0)	6.261 ^h
			^c		
2.438 \pm 4	γ		0.52 \pm 0.12	3 ⁺ ; 0	6.312
2.532 \pm 4	γ		1.6 \pm 0.4	2 ⁺ ; 0 + 1	6.385
	γ		0.16 \pm 0.06	3 ⁺ ; (0)	6.480
2.767 \pm 4	γ, α_0	(< 0.8)	0.29 \pm 0.06	5 ⁺ ; 0	6.568
2.870 \pm 4	γ, p_0	< 1.6	2.7 \pm 0.5	2 ⁻ ; 1	6.648
2.870 \pm 6	α_0	93 \pm 5	$\Gamma_\alpha/\Gamma = 0.85$	1 ⁻	6.648
			0.12 \pm 0.07	4 ⁺ ; 0	6.78
			< 0.2	1 ⁺ , 2, 3 ⁺ ; (0)	6.803
3.080 \pm 6	p_0, α_0	101 \pm 5		2 ⁻	6.811
3.576 \pm 4	α_0	< 4		(4 ⁺)	7.197
3.67	α_0	45 \pm 10		(1 ⁺)	7.27
3.72	p_0, α_0	53 \pm 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 18.14 from (1983AJ01): Resonances in $^{14}\text{N} + \alpha$ below $E_\alpha = 5 \text{ MeV}$ ^a (continued)

E_α (MeV \pm keV)	Particles out	$\Gamma_{\text{c.m.}}$ (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 $^{14}\text{N}(\alpha, \alpha_1)$ are listed in Table 18.14 of (1978AJ03).

^b ≤ 0.07 for $^{18}\text{F}^*(6.11, 6.16)$ (1973RO03). See also (1978BE63).

^c ≤ 0.03 for $^{18}\text{F}^*(6.28)$ (1973RO03).

^d $\Gamma_\alpha = 42.8 \pm 1.6 \text{ eV}$, $\Gamma_\gamma = 0.485 \pm 0.046 \text{ eV}$, $l_\alpha = 0$ (1980MA26). See also Table 18.17.

^e $\Gamma_\alpha = 32.0 \pm 2.1 \text{ eV}$, $\Gamma_\gamma = 0.891 \pm 0.074 \text{ eV}$, $l_\alpha = 1$. ΔE_x for $^{18}\text{F}^*(5.603, 5.605)$ is $1.84 \pm 0.04 \text{ keV}$ (1980MA26). See also Table 18.17.

^f $\Gamma_\alpha = 130 \pm 5 \text{ eV}$, $\Gamma_\gamma = 1.4 \pm 0.3 \text{ eV}$, $l_\alpha = 1$ (1980MA26).

^g This resonance corresponds to two states at $E_x = 6240$ and 6242 keV . The lower member of the doublet (both of which have $J^\pi = 3^-$ and mixed isospin) has $\Gamma_\alpha = 133 \pm 4 \text{ eV}$, $\Gamma_\gamma = 0.80 \pm 0.11 \text{ eV}$; the higher has $\Gamma_\alpha = 137 \pm 4 \text{ eV}$, $\Gamma_\gamma = 0.73 \pm 0.11 \text{ eV}$ (1979KI12). See also (1978BE63).

^h $\Gamma_\alpha = 580 \pm 12 \text{ eV}$, $\Gamma_p = 25_{-25}^{+35} \text{ eV}$ (1979KI12).