

Table 18.13 from (1978AJ03): Resonances in $^{14}\text{N} + \alpha$ below $E_\alpha = 5 \text{ MeV}$

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)	Refs.
0.559	γ		$< 2 \times 10^{-5}$		4.657	(1972CO1C)
0.698	γ		$(2.8 \pm 0.5) \times 10^{-4}$	1; 0	4.851	(1972CO1C)
1.136 \pm 3	γ		$< 0.5 \times 10^{-4}$	2 ⁺ ; 1	4.959	(1972CO1C)
			0.059 \pm 0.021	4 ⁺ ; 0	5.299	(1968PA10, 1972CO1C, 1973RO03, 1973RO05)
			0.084 \pm 0.004			
			0.108 \pm 0.015			
1.398 \pm 3	γ		0.017 \pm 0.003	3 ⁽⁻⁾ ; 0	5.503	(1968PA10, 1973RO03, 1973RO06)
			0.027 \pm 0.003			
1.527	γ		1.44 \pm 0.14	1 ⁺	5.603 ^d	(1977BE46)
1.529 \pm 2	γ, α_0	< 1.2	2.60 \pm 0.21	1 ⁻ ; 0 + 1	5.605 ^d	A, (1973RO03, 1977BE46)
1.618 \pm 2	γ, α_0	< 0.8	1.4 \pm 0.3	1 ⁻ ; 0 + 1	5.674	A, (1973RO03, 1977BE46)
			1.37 \pm 0.19			
1.765 \pm 4	γ		0.047 \pm 0.018	2 ⁻ ; 0	5.788	(1973RO03, 1973RO06)
2.160 \pm 4	γ		0.20 \pm 0.04	4 ⁻ ; 0	6.096	(1973RO03, 1973RO06)
2.166 \pm 7	γ, α_0		0.08 \pm 0.03	1, 2, 3 ⁽⁻⁾ ; 0	6.100	(1973RO03)
			a			
2.348 \pm 3	γ, α_0	< 0.8	7.5 \pm 1.3	3 ⁻ ; 1	6.242	A, (1973RO03, 1973RO06)
2.372 \pm 3	γ	< 3		1 ⁺ ; (0)	6.261	(1973RO03, 1973RO07)
			b			
2.438 \pm 4	γ		0.52 \pm 0.12	3 ⁺ ; 0	6.312	(1973RO03, 1973RO07)
2.532 \pm 4	γ		1.6 \pm 0.4	2 ⁺ ; 0 + 1	6.385	(1973RO03, 1973RO07)
	γ		0.16 \pm 0.06	3 ⁺ ; (0)	6.480	(1973RO03, 1973RO07)

Table 18.13 from (1978AJ03): Resonances in $^{14}\text{N} + \alpha$ below $E_\alpha = 5$ MeV (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)	Refs.
2.767 \pm 4	γ, α_0	(< 0.8)	0.29 \pm 0.06	5 ⁺ ; 0	6.568	A, (1973RO03, 1973RO05)
2.870 \pm 4	γ, p_0	< 1.6	2.7 \pm 0.5	2 ⁻ ; 1	6.648	A, (1973RO03, 1973RO06)
2.870 \pm 6	α_0	93 \pm 5	$\Gamma_\alpha/\Gamma = 0.85$	1 ⁻	6.648	A, (1973RO03)
			0.12 \pm 0.07	4 ⁺ ; 0	6.78	A, (1973RO03, 1973RO07)
			< 0.2	1 ⁺ , 2, 3 ⁺ ; (0)	6.803	(1973RO03, 1973RO07)
3.080 \pm 6	p_0, α_0	101 \pm 5		2 ⁻	6.811	(1958HE54, 1958HE56)
3.576 \pm 4	α_0	< 4		(4 ⁺)	7.197	(1958HE54, 1958HE56, 1958KA32)
3.67	α_0	45 \pm 10		(1 ⁺)	7.27	(1958HE54, 1958HE56, 1958KA32)
3.72	p_0, α_0	53 \pm 6		(3 ⁻)	7.31	(1958HE54, 1958HE56, 1958KA32)
4.00	p_0, α_0	35		(3 ⁻)	7.53	(1958KA32)
4.05	p_0, α_0	60			7.57	(1958KA32)
4.11	p_0, α_0	40			7.61	(1958KA32)
4.28	p_0, α_0	120			7.74	(1958KA32)
4.50	p_0, α_0	30		(2 ⁻)	7.92	(1958KA32)
4.55	p_0, α_0	70		(1 ⁺)	7.95	(1958KA32)

A: see references listed for this resonance in Table 18.13 of (1972AJ02).

^a See Table 18.14 for higher resonances observed in $^{14}\text{N}(\alpha, \alpha_1)$.

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

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

^d See Table 18.19.