Table 18.18 from (1983AJ01): Resonances in $^{17}O + p$ [a]

E_p (keV)	Yield of [b]	$\Gamma_{c.m.}$ (keV)	$(2J+1)\Gamma_\gamma\Gamma_p/\Gamma$ (eV)	$J^\pi; T$	E_x (MeV ± keV)
517.0 ± 1.0	γ, α_0	0.24 ± 0.03	0.26 ± 0.05	$4^-; 0$	6.095
525	α_0	0.034 ± 0.003		(1^+)	6.102
561.2 ± 1.0	γ	≤ 1	2.2 ± 0.6	$0^+; 1$	6.137
587.1 ± 1.0	γ, p_0, α_0	14 ± 0.5	6.7 ± 1.8	$3^+; 1$	6.161
670.5 ± 1.0	γ, p_0, α_0	0.19 ± 0.03	[h]	$3^-; 0+1$	6.240
673.0	γ, α_0	0.18 ± 0.04	[h]	$3^-; 0+1$	6.242
690 ± 4	α_0	0.60 ± 0.12	≤ 0.02	$1^+; 0$	6.258
714.2 ± 1.0	γ, p_0, α_0	10.0 ± 0.5	9.1 ± 2.3	$2^+; 1$	6.281
741 ± 2	γ, p_0, α_0	0.95 ± 0.14	0.64 ± 0.17	$3^+; 0$	6.307
826 ± 2	γ, α_0	0.40 ± 0.09	0.60 ± 0.18	$2^+; 0+1$	6.387
926 ± 2	γ, α_0	0.40 ± 0.10	0.36 ± 0.15	$3^+; 0$	6.481
1015	α_0	0.56 ± 0.13	≤ 0.0023	$5^+; 0$	6.564
1090	α_0	80 ± 2		1	6.635
1098.9 ± 0.4	γ, α	0.60 ± 0.07	4.3 ± 1.2	$2^-; 1$	6.6444
1101 ± 4	α_0	89 ± 5			6.646
1240 ± 2 [c]	γ, p_0, α_0	9.2 ± 1.0	2.8 ± 0.7	$4^+; 0$	6.778
1269	γ, p_0	≤ 2	0.54 ± 0.20	$1^+, 2, 3^+; 0$	6.8031 ± 1.5
1274 ± 5	α_0	88 ± 2		2^-	6.810
1276	α_0	3.0 ± 0.5		(2^+)	6.811
1338	α_0	5.0 ± 1.0		(3^-)	6.869
1345 ± 3	γ, α_0	≤ 2	1.0 ± 0.4	$3, 4^-; 0$	6.877
E_p (keV)	Yield of [b]	$\Gamma_{c.m.}$ (keV)	$(2J+1)\Gamma_p\Gamma_\alpha/\Gamma$ (keV)	$J^\pi; T$	E_x (MeV ± keV)
1687.5 ± 1	α_0	6.5	3.9	$(4^+); 0$	7.201
1738 ± 2	α_0	46.5	8.8	$(1^+); 0$	7.248
1784 ± 2	p_0, α_0	38	47	3^-	7.292
1810 ± 4	α_0	52	8.5	$(3^-; 0)$	7.316
1832.5 ± 1	γ, p_0, p_1	16 ± 2	[d]	$1^-; 1$	7.338
1906 ± 2	p_0, p_1	14.6 ± 1.4		1^+	7.407
1950 ± 10	α_0	140	5.6		7.449

Table 18.18 from (1983AJ01): Resonances in $^{17}O + p$ [a] (continued)

E_p (keV)	Yield of [b]	$\Gamma_{c.m.}$ (keV)	$(2J+1)\Gamma_p\Gamma_\alpha/\Gamma$ (keV)	$J^\pi; T$	E_x (MeV $\pm$ keV)
1957 ± 2	p_0	6		1^-	7.455
1983 ± 2	γ, p_1, α_0	12 ± 3	1.5	(2)	7.480
(1990 ± 2)	p_0	32		(1^-)	(7.486)
2012 ± 2	p_0, α_0	12 ± 2	7.2	4^-	7.507
2020 ± 2	γ	< 4			7.515
2036 ± 2	γ, p_0, p_1, α_0	16.5 ± 3.0	5.5 [e]	$2^-; 1$	7.530
2040 ± 5	p_1, α_0	75			7.534
2064 ± 2	p_0	30		(1^-)	7.556
2095 ± 2	γ, p_0, p_1, α_0	9 ± 2	3.7 [f]	[g]	7.586
2202 ± 2	p_0, p_1, α_0	36 ± 4	25.1	3^+, 4^+ [g]	7.687
2248 ± 4	p_1, α_0	66 ± 5	28.2	≥ 1	7.730
2284 ± 4	p_1	70			7.764
2406 ± 3	p_1, α_0	20	24.4	≥ 2	7.879
2429 ± 2	α_0	38	42	(2^-)	7.901
2473 ± 12	α_0	112	80	(1^+)	7.943
2603 ± 6	p_1, α_0	60	11	≥ 4	8.065
E_p (keV)	Yield of [b]	$\Gamma_{c.m.}$ (keV)	$(2J+1)\Gamma_p\Gamma_\alpha/\Gamma$ (eV)	$J^\pi; T$	E_x (MeV $\pm$ keV)
2657 ± 8	p_1	96			8.116
2757 ± 2	p_0, α_0	52	63	2^-	8.211
2788 ± 2	p_0	20		4^+	8.240
2928	α_0	≈ 50			8.371
3915 ± 20	n	95			9.302
(4163 ± 20)	n	19			(9.537)
4235 ± 10	n	33			9.605
4330 ± 10	n	33			9.694
4490 ± 20	n	≈ 100			9.845
(4790 ± 10)	n	28			(10.128)
4900 ± 20	n	≈ 140			10.232

[a] For references see Table 18.18 in (1978AJ03). For resonances with $E_{\rm p} < 1.8$ MeV see (1979KI13) [R-matrix analysis]; for resonances with $1.69 < E_{\rm p} < 2.8$ MeV see (1977SE12, 1978SE08) [values of $\Gamma_{\rm p}$, $\Gamma_{\rm p'}$, and Γ_α are also obtained].

[b] See also Table 18.11.

[c] See reference in footnote [d] in Table 18.18 (1978AJ03).

[d] $\Gamma_\gamma = 3.5 \pm 1.0$ eV (1978SE08).

[e] $\Gamma_\gamma = 0.44 \pm 0.10$ eV (1978SE08).

[f] $\Gamma_\gamma = 0.11 \pm 0.03$ eV (1978SE08).

[g] Assumed to be unresolved.

[h] This corresponds to a doublet of 3^-, mixed isospin states, separated by 2.09 ± 0.04 keV. $\omega\gamma_{\rm p,\gamma} = 2.04 \pm 0.45$ eV for the lower resonance and 1.16 ± 0.26 eV for the higher one (1979KI12).