

Table 20.17 from (1998TI06): Energy Levels of ^{20}Ne ^a

E_x (MeV \pm keV)	$J^\pi; T$	K^π	τ_m^b or Γ_{cm} (keV)	Decay	Reactions
0	$0^+; 0$	0_1^+		stable	3, 4, 8, 9, 16, 19, 20, 22, 24, 28, 29, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59, 61, 63, 64, 65, 68, 69, 70, 71, 72, 74
1.633674 ± 0.015	$2^+; 0$	0_1^+	$\tau_m = 1.05 \pm 0.06$ ps $g = +0.54 \pm 0.04$	γ	3, 4, 8, 9, 12, 14, 16, 19, 20, 22, 23, 24, 27, 28, 29, 33, 34, 35, 36, 37, 39, 40, 46, 47, 48, 49, 52, 53, 55, 58, 59, 61, 62, 63, 64, 69, 70
4.2477 ± 1.1	$4^+; 0$	0_1^+	$\tau_m = 93 \pm 9$ fs $g = +0.13 \pm 0.15$	γ	3, 4, 8, 9, 12, 16, 19, 20, 22, 23, 24, 27, 28, 33, 34, 35, 36, 37, 40, 41, 43, 47, 48, 53, 59, 61, 64, 69, 70
4.96651 ± 0.20	$2^-; 0$	2^-	$\tau_m = 4.8 \pm 0.5$ ps	γ	3, 4, 8, 9, 12, 16, 19, 28, 29, 33, 34, 35, 36, 37, 59, 61, 63, 64, 69, 70
5.6214 ± 1.7	$3^-; 0$	2^-	$\tau_m = 200 \pm 50$ fs	γ, α	3, 4, 8, 9, 16, 19, 33, 34, 36, 37, 62, 63, 64, 69, 70
5.7877 ± 2.6	$1^-; 0$	0^-	$\Gamma_{\text{cm}} = (2.8 \pm 0.3) \times 10^{-2}$	γ, α	3, 4, 8, 9, 16, 18, 19, 20, 22, 34, 36, 37, 58, 62, 69
6.706 ± 47				α	59
6.725 ± 5	$0^+; 0$	0_2^+	19.0 ± 0.9	γ, α	9, 16, 18, 19, 28, 33, 34, 36, 37, 40, 58, 69
7.004 ± 4	$4^-; 0$	2^-	$\tau_m = 440 \pm 90$ fs	γ	3, 8, 9, 19, 34, 37, 63, 69
7.1563 ± 0.5	$3^-; 0$	0^-	8.2 ± 0.3	γ, α	3, 5, 8, 9, 18, 19, 20, 22, 24, 27, 28, 33, 34, 58
7.191 ± 3	$0^+; 0$	0_3^+	3.4 ± 0.2	γ, α	6, 7, 8, 16, 18, 40, 69

Table 20.17 from (1998TI06): Energy Levels of ^{20}Ne ^a (continued)

E_x (MeV \pm keV)	$J^\pi; T$	K^π	τ_m^b or Γ_{cm} (keV)	Decay	Reactions
7.4219 ± 1.2	$2^+; 0$	0_2^+	15.1 ± 0.7	γ, α	3, 6, 7, 8, 16, 18, 19, 33, 34, 36, 40, 41, 59, 62, 69
7.8334 ± 1.5	$2^+; 0$	0_3^+	2	γ, α	3, 7, 8, 16, 18, 28, 34, 40, 59, 62, 69
8.453 ± 4	$5^-; 0$	2^-	0.013 ± 0.004	γ, α	3, 7, 8, 16, 18, 19, 34, 69
≈ 8.7	$0^+; 0$	0_4^+	> 800	α	18
8.708 ± 7	$1^-; 0$		2.1 ± 0.8	γ, α	8, 16, 18, 34, 69
8.7776 ± 2.2	$6^+; 0$	0_1^+	0.11 ± 0.02	γ, α	3, 5, 7, 8, 10, 16, 18, 19, 20, 22, 23, 24, 27, 28, 34, 41, 58, 69
8.82	$(5^-); 0$		< 1	α	18
8.854 ± 5	$1^-; 0$	1^-	19	α	8, 18, 62
9.00 ± 180	$2^+; 0$	0_4^+	≈ 800	α	18, 34, 41
9.031 ± 7	$4^+; 0$	0_3^+	3	γ, α	3, 7, 8, 16, 18, 28, 34, 41, 69
9.116 ± 3	$3^-; 0$		3.2	γ, α	3, 8, 16, 18, 33, 34, 69
9.196 ± 30	2^+			α	59
9.318 ± 2	$(2^-); 0$			γ	8, 16, 34, 69
9.483 ± 3	$2^+; 0$		29 ± 15	γ, α	16, 18, 59, 69
9.873 ± 4	$3^+; 0$			γ	8, 34, 59
9.935 ± 12	$(1^+); 0$		$\tau_m < 35$ fs	γ	8, 34, 69
9.990 ± 8	$4^+; 0$	0_2^+	155 ± 30	γ, α	3, 8, 16, 18, 33, 34, 41, 69
10.262 ± 5	$5^-; 0$	0^-	145 ± 40	α	3, 5, 8, 18, 19, 20, 22, 24, 34, 58
10.2732 ± 1.9	$2^+; 1$		≤ 0.3	γ, α	16, 18, 59, 62
10.406 ± 5	$3^-; 0$	1^-	80	α	8, 18, 34, 69
10.553 ± 5	$4^+; 0$		16	α	8, 18, 34
10.584 ± 5	$2^+; 0$		24	α	18, 34, 59, 69
10.609 ± 6	$6^-; 0$	2^-	$\tau_m = 23 \pm 7$ fs	γ	3, 7, 8
10.694 ± 6	$4^-, 3^+; 0$			γ	7, 8

Table 20.17 from (1998TI06): Energy Levels of ^{20}Ne ^a (continued)

E_x (MeV \pm keV)	$J^\pi; T$	K^π	τ_m^b or Γ_{cm} (keV)	Decay	Reactions
10.80 \pm 80	4 ⁺ ; 0	0 ₄ ⁺	350	α	18, 19, 34, 41
10.840 \pm 6	3 ⁻ ; 0		45	γ, α	8, 18
10.843 \pm 4	2 ⁺ ; 0		13	α	18, 59, 69
10.884 \pm 3	3 ⁺ ; 1		$\tau_m < 30$ fs	γ	59, 62
10.917 \pm 6	3 ⁺ ; 0			γ	8
10.941 \pm 9	2 ⁺			α	59
10.97 \pm 120	0 ⁺ ; 0	0 ₅ ⁺	580	α	18
11.020 \pm 8	4 ⁺ ; 0		24	α	7, 8, 18, 69
11.090 \pm 3	4 ⁺ ; 1		≤ 0.5	γ, α	16, 18, 34, 62
11.116 \pm 9	2 ⁺			α	59
11.24 \pm 30	1 ⁻ ; 0		175	α	18, 34
11.2623 \pm 1.9	1 ⁺ ; 1			γ	16, 39, 40, 43, 59
11.270 \pm 5	1 ⁻ ; 1		≤ 0.3	γ, α	16, 18
11.320 \pm 9	2 ⁺ ; 0		40 \pm 10	α	18, 59
11.528 \pm 6	3 ⁺ , 4 ⁻ ; 0		$\tau_m \leq 30$ fs	γ	8, 34
11.555 \pm 6	(3 ⁺); 0			γ	8, 34
11.558 \pm 4	0 ⁺ ; 0	0 ₆ ⁺	1.1 \pm 0.4	γ, α	16, 18
11.601 \pm 10	2 ⁻ ; 1				62
11.653 \pm 5	(3 ⁺); 0			γ	7, 8, 40
11.885 \pm 7	2 ⁺ ; 0		46	γ, α	8, 18, 34, 59, 69
11.928 \pm 4	4 ⁺ ; 0		0.44 \pm 0.15	γ, α	16, 18, 69
11.951 \pm 4	8 ⁺ ; 0	0 ₁ ⁺	$(3.5 \pm 1.0) \times 10^{-2}$	γ, α	5, 7, 8, 9, 16, 18, 19, 20, 22, 23, 27, 34, 58
11.985 \pm 16	1 ⁻ ; 0		30 \pm 5	γ, α	8, 16, 18
12.098 \pm 6	2 ⁻ ; 1			γ	8, 34, 43, 62
12.137 \pm 5	6 ⁺ ; 0	0 ₃ ⁺		α	6, 7, 8, 9, 18, 19
12.221 \pm 4	2 ⁺ ; 1		< 1	γ, α	8, 16
12.253 \pm 10	4 ⁺ ; 0		155 \pm 15	α	18
12.256 \pm 3	3 ⁻ ; 1		< 1	γ, α	16, 18
12.327 \pm 10	2 ⁺ ; 0	0 ₅ ⁺	390 \pm 50	α	18
12.401 \pm 5	3 ⁻ ; (1)	0 ₇ ⁺	37.3 \pm 0.9	γ, α	7, 8, 16, 18, 33, 69

Table 20.17 from (1998TI06): Energy Levels of ^{20}Ne ^a (continued)

E_x (MeV \pm keV)	$J^\pi; T$	K^π	τ_m^b or Γ_{cm} (keV)	Decay	Reactions
12.436 \pm 4	0 ⁺ ; 0		24.4 \pm 0.5	γ, α	8, 16, 18
12.472 \pm 10	(2 ⁺); 0		124 \pm 6	α	18
12.585 \pm 5	6 ⁺ ; 0	(0 ₂ ⁺)	72 \pm 9	α	7, 8, 18, 19, 20, 22, 23
12.592 \pm 15	(2 ⁺); 0		145 \pm 25	α	18
12.713 \pm 5	5 ⁻ ; 0	1 ⁻	84 \pm 8	α	7, 8, 18
12.743 \pm 10	(2 ⁺); 0		61 \pm 12	α	7, 8, 18
12.836 \pm 5	1 ⁻ ; 0		30 \pm 5	α	8, 18
12.957 \pm 5	2 ⁺ ; 0	(0 ₇ ⁺)	38 \pm 4	α	8, 18, 69
13.048 \pm 5	4 ⁺ ; 0		18 \pm 3	α	7, 8, 18
13.0607 \pm 2.1	2 ⁻		1.0	p, α	32
13.095 \pm 6	2 ⁺ ; 0		162 \pm 13	α	3, 5, 18
13.105 \pm 5	6 ⁺ ; 0	(0 ₂ ⁺)	102 \pm 5	α	18
13.137 \pm 5	3 ⁻ ; 0		48 \pm 4	α	18
13.1713 \pm 2.1	1 ⁺ ; (1)		2.3 \pm 0.2	γ, p, α	29, 30, 32, 33
13.222 \pm 10	0 ⁺ ; 0		40 \pm 13	α	8, 18, 32
13.224 \pm 15	1 ⁻ ; 0		80	p, α	18, 32
13.226 \pm 5	3 ⁻ ; 0		53 \pm 4	α	18
13.3075 \pm 2.1	1 ⁺		0.9 \pm 0.1	γ, p, α	29, 30, 32
13.338 \pm 5	7 ⁻ ; 0	2 ⁻	(8 \pm 3) \times 10 ⁻²	α	7, 8, 9, 18
13.341 \pm 5	4 ⁺ ; 0		26 \pm 3	α	18
13.414 \pm 2	3 ⁻ ; 0		24 \pm 3	α	18, 29, 30, 32
13.426 \pm 5	(5 ⁻); 0		49 \pm 7	α	18
13.461 \pm 10	1 ⁻		195 \pm 25	p, α	18, 32
13.484 \pm 2	1 ⁺ ; 1		6.4 \pm 0.3	γ, p, α	29, 30, 32, 43
13.507 \pm 5	1 ⁻ ; 0		24 \pm 8	p, α	18, 30, 32
13.529 \pm 5	2 ⁺ ; 0		61 \pm 8	α	18
13.530 \pm 15	(0 ⁺); 0		76 \pm 32	α	18
13.573 \pm 5	2 ⁺ ; 0		12 \pm 5	α	8, 18, 32
13.586 \pm 3	2 ⁺		9 \pm 1	p, α	30, 32
13.642 \pm 3	0 ⁺ ; 1		17 \pm 1	p, α	8, 30, 32, 33
13.676 \pm 3	(2 ⁻)		4.5 \pm 0.2	γ, p, α	29, 30, 32

Table 20.17 from (1998TI06): Energy Levels of ^{20}Ne ^a (continued)

E_x (MeV \pm keV)	$J^\pi; T$	K^π	τ_m^b or Γ_{cm} (keV)	Decay	Reactions
13.677 \pm 5	5 ⁻ ; 0		11 \pm 2	α	7, 18
13.692 \pm 10	7 ⁻ ; 0	0 ⁻	310 \pm 30	α	18
13.736 \pm 3	7 ⁻ ; 0	0 ⁻	7.7 \pm 0.5	γ, p, α	29, 30, 32
13.744 \pm 20	0 ⁺ ; 0		\approx 80	α	18
13.827 \pm 10	3 ⁻ ; 0		136 \pm 15	α	8, 18
13.866 \pm 30	1 ⁻ ; 0		\approx 175	p, α	8, 18, 32
13.881 \pm 3	2 ⁺ ; 1		0.14 \pm 0.05	γ, p, α	8, 9, 29, 30, 32, 33
13.908 \pm 5	2 ⁺ ; 0		74 \pm 10	α	18, 32
13.926 \pm 3	(0 ⁺)		3.5 \pm 0.4	p, α	32
13.928 \pm 5	6 ⁺ ; 0		65 \pm 3	α	18, 19, 20
13.948 \pm 10	0 ⁺ ; 0		79 \pm 15	α	18
13.965 \pm 5	4 ⁺ ; 0	(0 ₆ ⁺)	8.1 \pm 1	α	18
14.02	1 ⁻		\approx 70	p, α	32
14.063 \pm 3	2 ⁺		\approx 140	p, α	30, 32
14.115 \pm 5	2 ⁺ ; 0		42 \pm 6	α	18
14.128 \pm 2	2 ⁻		4.7 \pm 0.7	γ, p, α	29, 30, 32
14.150 \pm 3	2 ⁻		11.8 \pm 1.0	γ, p, α	29, 30, 32
14.20	1 ⁺		14 \pm 1	γ, p	29, 30
14.270 \pm 10	4 ⁺ ; 0		92 \pm 9	α	18
14.304 \pm 10	(6 ⁺); 0		60 \pm 13	α	7, 8, 18
14.311 \pm 5	6 ⁺ ; 0		117 \pm 8	α	7, 8, 18, 19, 20, 22
14.313 \pm 15	(3 ⁻); 0		\approx 45	α	18
14.370 \pm 3			\approx 5	p, α	30, 32
14.454 \pm 5	5 ⁻ ; 0		\approx 15	α	18
14.455 \pm 3	(0 ⁺ , 2 ⁺); 0		33 \pm 3	p, α	18, 30, 32
14.475 \pm 6	0 ⁺		68 \pm 2	p, α	30, 32
14.593 \pm 10	4 ⁺ ; 0		260 \pm 25	α	18
14.597 \pm 7	1 ⁻ ; 0		116 \pm 5	p, α	18, 32
14.653 \pm 10	(0 ⁺)		25	p, α	30, 32
14.699 \pm 4	(1 ⁺)		36 \pm 10	p, α	18, 30, 32
14.731 \pm 10	(4 ⁺); 0		60 \pm 25	α	18

Table 20.17 from (1998TI06): Energy Levels of ^{20}Ne ^a (continued)

E_x (MeV \pm keV)	$J^\pi; T$	K^π	τ_m^b or Γ_{cm} (keV)	Decay	Reactions
14.761 \pm 5	6 ⁺ ; 0		7.3 \pm 4.8	α	18
14.776 \pm 4	(1 ⁻)		110 \pm 20	p, α	30, 32
14.807 \pm 5	6 ⁺ ; 0		86 \pm 7	α	7, 18, 32
14.816 \pm 5	5 ⁻ ; 0		117 \pm 13	α	7, 18
14.839 \pm 10	(4 ⁺); 0		79 \pm 15	α	18
14.888 \pm 10	2 ⁺ ; 0		100 \pm 30	p, α	18, 32
15.047 \pm 10	2 ⁺ ; 0		66 \pm 20	p, α	8, 18, 32
15.073 \pm 10	5 ⁻ ; 0		160 \pm 25	α	18
15.142 \pm 15	(2 ⁺); 0		\approx 60	α	18
15.159 \pm 5	6 ⁺ ; 0		60 \pm 15	α	8
15.174 \pm 10	5 ⁻ ; 0		230 \pm 25	α	7, 18
15.23			28	p, α	32
15.27	(1 ⁻)		285	p, α	5, 7, 8, 18, 19, 20, 22
15.330 \pm 5	4 ⁺ ; 0		34 \pm 10	α	5, 7, 8, 18
15.346 \pm 2	6 ⁺ ; 0			α	18
15.366 \pm 5	7 ⁻ ; 0		110 \pm 10	α	18, 19, 20, 22, 23
15.436 \pm 15	(3 ⁻); 0		90 \pm 20	p, α	8, 18, 32
15.5			55	p, α	18, 32
15.70 \pm 20	(8 ⁻); 0	(2 ⁻)		α	7, 8, 18
15.874 \pm 9	8 ⁺		100 \pm 15	α	6, 7, 8, 19, 22, 23
15.97	(6 ⁺); 0			α	18
16.01 \pm 30	(2 ⁺ ; 1)		100	p, α	32
16.139 \pm 15			38	α	7, 8, 18, 32
16.25				α	7, 18
16.329 \pm 11	4 ⁺ ; 0		45	p, α	18, 32
16.437 \pm 11	(0,2,4) ⁺ ; 0		35	α	18
16.505 \pm 15	6 ⁺ ; 0	(0 ₆ ⁺)	24 \pm 4	α	7, 18
16.559 \pm 15	5 ⁻ ; 0		90 \pm 30	α	18
16.581 \pm 15	7 ⁻ ; 0	1 ⁻	92 \pm 8	α	8, 18
16.628 \pm 20	3 ⁻ ; 0		80 \pm 25	α	18
16.63 \pm 20	(7 ⁻)			α	19, 20, 22

Table 20.17 from (1998TI06): Energy Levels of ^{20}Ne ^a (continued)

E_x (MeV \pm keV)	$J^\pi; T$	K^π	τ_m^b or Γ_{cm} (keV)	Decay	Reactions
16.667 \pm 15	4 ⁺ ; 0		100 \pm 25	α	18
16.717 \pm 15	5 ⁻ ; 0		\approx 25	α	7, 8, 18
16.7329 \pm 2.7	0 ⁺ ; 2		2.0 \pm 0.5	γ, p, α	28, 29, 30, 32, 63
16.746 \pm 25	8 ⁺ ; 0		160 \pm 50	α	18
16.847 \pm 15	5 ⁻ ; 0		16 \pm 8	α	18
16.871 \pm 20	6 ⁺ ; 0		350 \pm 50	α	18
17.072 \pm 20	4 ⁺ ; 0		180 \pm 30	α	18
17.155 \pm 15	5 ⁻ ; 0		26 \pm 5	α	18
17.213 \pm 15	4 ⁺ ; 0		225 \pm 30	α	18
17.284 \pm 15	3 ⁻ ; 0		86 \pm 25	α	18
17.295 \pm 15	8 ⁺ ; 0		200 \pm 25	α	5, 18, 19, 20, 22, 23
17.390 \pm 15			< 10	α	18
17.430 \pm 15	9 ⁻ ; 0	(0 ⁻)	220 \pm 25	α	7, 8, 9, 18
17.541 \pm 15	6 ⁺ ; 0		86 \pm 9	α	18
17.55 \pm 10	(2 ⁺ ; 1)		19	n, p, α	31, 32
17.606 \pm 15	5 ⁻ ; 0		140 \pm 20	α	18
17.769 \pm 20	4 ⁺ ; 0		\approx 125	p, α	18, 32
17.851 \pm 15	5 ⁻ ; 0		200 \pm 30	α	18
17.91 \pm 20	(0 ⁺)			n, p	31
18.005 \pm 15	7 ⁻ ; 0		< 10	α	18
18.024 \pm 5	5 ⁻ ; 0		34 \pm 7	α	18
18.083 \pm 25	4 ⁺ ; 0		140 \pm 60	α	18
18.125 \pm 5	7 ⁻ ; 0		29 \pm 6	α	7, 8, 9, 18
18.286 \pm 10	6 ⁺ ; 0		190 \pm 300	α	7, 18
18.430 \pm 7	2 ⁺ ; 2		9.5 \pm 3.0	γ, n, p, α	29, 30, 31, 32, 63
18.430 \pm 20	7 ⁻ ; 0		185 \pm 40	α	18
18.494 \pm 20	5 ⁻ ; 0		130 \pm 30	α	18
18.538 \pm 7	8 ⁺		138 \pm 33	α	8
18.621 \pm 20	8 ⁺ ; 0	(0 ₆ ⁺)	185 \pm 30	α	18
18.745 \pm 25	6 ⁺ ; 0		140 \pm 50	α	18
18.768 \pm 20	7 ⁻ ; 0		140 \pm 35	α	18, 19

Table 20.17 from (1998TI06): Energy Levels of ^{20}Ne ^a (continued)

E_x (MeV \pm keV)	$J^\pi; T$	K^π	τ_m^b or Γ_{cm} (keV)	Decay	Reactions
18.960 \pm 25	8 ⁺ ; 0		200 \pm 60	α	18
19.051 \pm 15	5 ⁻ ; 0		\approx 90	α	18
19.15 \pm 20	6 ⁺ ; 0		200 \pm 50	α	9, 18
19.284 \pm 15	6 ⁺ ; 0		140 \pm 25	α	18
19.298 \pm 25	7 ⁻ ; 0		430 \pm 60	α	18, 19
19.443 \pm 10	6 ⁺ ; 0	(0 ₇ ⁺)	130 \pm 15	α	18
19.536 \pm 25	6 ⁺ ; 0		250 \pm 60	α	18
19.655 \pm 20	6 ⁺ ; 0		140 \pm 35	α	18
19.731 \pm 20	8 ⁺ ; 0		330 \pm 60	α	18
19.845 \pm 40	6 ⁺ ; 0		360 \pm 120	α	18
19.859 \pm 10	5 ⁻ ; 0		170 \pm 25	α	18
19.884 \pm 40	7 ⁻ ; 0		\approx 120	α	18, 19
19.991 \pm 30	4 ⁺ ; 0		130 \pm 100	α	18
20.027 \pm 15	6 ⁺ ; 0		80 \pm 35	α	18
20.106 \pm 25	7 ⁻ ; 0		190 \pm 35	α	18
20.15 \pm 150			broad	γ, n	38
20.168 \pm 35	6 ⁺ ; 0		285 \pm 100	α	18
20.296 \pm 15	7 ⁻ ; 0		255 \pm 40	α	18
20.341 \pm 20	5 ⁻ ; 0		190 \pm 40	α	18
20.344 \pm 15	7 ⁻ ; 0		135 \pm 35	α	18
20.419 \pm 30	6 ⁺ ; 0		215 \pm 90	α	18
20.445 \pm 25	6 ⁺ ; 0		370 \pm 55	α	18
20.468 \pm 30	5 ⁻ ; 0		280 \pm 70	α	18
20.686 \pm 6	9 ⁻ ; 0	(1 ⁻)	78 \pm 11	α	8, 18, 20
20.76 \pm 30	7 ⁻ ; 0		240 \pm 50	α	18, 19
20.800 \pm 25	5 ⁻ ; 0		170 \pm 60	α	18
20.95 \pm 40	7 ⁻ ; 0		300 \pm 50	α	8, 18
21.062 \pm 6	9 ⁻ ; 0	(1 ⁻)	60 \pm 6	α	5, 8, 18, 20, 22, 23
21.3 \pm 100	7 ⁻ ; 0		300	α	10, 18, 19
21.8 \pm 100	7 ⁻ ; 0		300	α	8, 10, 18, 19
22.3 \pm 100	7 ⁻ ; 0		500	α	8, 10, 18, 19

Table 20.17 from (1998TI06): Energy Levels of ^{20}Ne ^a (continued)

E_x (MeV \pm keV)	$J^\pi; T$	K^π	τ_m ^b or Γ_{cm} (keV)	Decay	Reactions
22.6 \pm 300			broad	γ, n	38
22.8 \pm 100	9 ⁻ ; 0		500	α	8, 18
22.87 \pm 40	9 ⁻ ; 0		225 \pm 40	α	5, 8, 18, 20, 22
23.4 \pm 200	8 ⁺ ; 0		500	α	18
23.70 \pm 30	(9 ⁻)		\leq 200	α	19, 20
24.21 \pm 30	8 ⁺ ; 0		350	α	18, 20
24.9 \pm 500			broad	γ, n	38
25.10 \pm 50	8 ⁺ ; 0		\approx 200	α	18, 20
25.67 \pm 50			\approx 400	α	18, 20
27.1 \pm 100	(9 ⁻)		700	α	18, 19, 22
27.5	10 ⁺		broad	γ, n	10, 38
28	8 ⁺ ; 0		1600	α	18
28.2 \pm 300			700	α	18

^a See also Tables 20.18 and 20.19. For other states with $E_x > 15.5$ MeV see Tables 20.30 in (1978AJ03), and 20.27, 20.28 and 20.29 here, and reactions 2, 38, and 40. It is clear that there are many states with low angular momentum and with unnatural parity which have not been located at high E_x .

^b See Table 20.20 in (1978AJ03).