Table 20.18 from (1983AJ01): Radiative decays in ^{20}Ne [a]

E_i (MeV)	$J_i^\pi; T$	E_f (MeV)	Branch (%)	Γ_γ (meV)
1.63	$2^+; 0$	0	100	0.63 ± 0.04 [b]
4.25	$4^+; 0$	1.63	≈ 100	7.1 ± 0.7 [b]
4.97	$2^-; 0$	0	0.6 ± 0.2	$(8 \pm 3) \times 10^{-4}$ [b]
		1.63	99	0.14 ± 0.02 [b]
				δ(M2/E1) $= 0.076 \pm 0.011$
				δ(E3/E1) $= 0.043 \pm 0.016$
5.62	$3^-; 0$	0	7.6 ± 1.0	0.018 ± 0.006 [n]
		1.63	87.6 ± 1.0	0.21 ± 0.06 [n]
		4.97	4.8 ± 1.6	0.012 ± 0.005 [n]
5.79	$1^-; 0$	0	18 ± 5	0.8 ± 0.3 [o]
		1.63	82 ± 5	3.8 ± 0.8 [o]
6.72	$0^+; 0$	0		$\lvert M\rvert^2 = 7.4 \pm 2.0$ fm^2 [i]
		1.63	100	33
7.00	$4^-; 0$	1.63	0.5 ± 0.2	$(7 \pm 3) \times 10^{-3}$ [b]
		4.25	63.5	0.95 [b]
		4.97	11	0.16 [b]
		5.62	25	0.37 [b]
7.16 [c]	$3^-; 0$	4.25	60 ± 5	0.97 ± 0.11
		5.79	40 ± 5	0.64 ± 0.10
7.19	$0^+; 0$	0		$\Gamma_\pi = 3.9 \times 10^{-2}$
				6.9 ± 1.4 fm^2 [i]
		1.63	100	4.35 ± 0.75
7.42	$2^+; 0$	0	$\leq 9.4 \pm 1.4$	$\leq 3.0 \pm 0.6$
		1.63	$\geq 90.6 \pm 1.4$ [m]	29 ± 4
		4.25	≤ 7.6	
7.83	$2^+; 0$	0	83 ± 1	57 ± 7
		1.63	17 ± 1	11.7 ± 1.6
		4.25	< 3	< 2
8.45	$5^-; 0$	5.62	100	13 ± 3
8.70 [d]	$1^-; 0$	0	87 ± 8	61 ± 16
		1.63	13 ± 8	9 ± 6
8.78	$6^+; 0$	4.25	100	100 ± 15

Table 20.18 from (1983AJ01): Radiative decays in ^{20}Ne [a] (continued)

E_i (MeV)	$J_i^\pi; T$	E_f (MeV)	Branch (%)	Γ_γ (meV)
9.03	$4^+; 0$	1.63	100	340 ± 42
		4.25	< 2	< 6.8
9.11 [d]	$3^-; 0$	1.63	50 ± 5	13 ± 2
		4.97	33 ± 5	8.6 ± 1.7
		5.62	17 ± 4	4.4 ± 1.1
9.51	$2^+; 0$	0		$\lesssim 60$
		1.63	(100)	260 ± 100
9.87	$3^+; 0$	0	< 0.5	
		1.63	78	[k]
		4.25	12 ± 3	
		4.97	≤ 5	
		5.62	≈ 7	
		7.42	≈ 3	
9.94	$(1^+); 0$	1.63	78 ± 5	
		4.97	22 ± 5	
10.01	$4^+; 0$	0		$\lesssim 70$
		1.63	(100)	900 ± 400
10.27	$2^+; 1$	0	0.65 ± 0.14	29 ± 8
		1.63	88.9 ± 0.5	4080 ± 440
		4.97	1.3 ± 0.1	60 ± 8
		5.62	2.1 ± 0.2	97 ± 14
		7.42	6.9 ± 0.4	310 ± 40
		7.83	0.22 ± 0.06	8 ± 2
10.61	$6^-; 0$	7.00	95.5 ± 1.2	29 ± 9 [b]
		8.45	4.5 ± 1.2	1.3 ± 0.4 [o]
10.69	$4^-, 3^+; 0$	4.25	25 ± 4	
		4.97	75 ± 4	
10.89	$3^+; 1$	1.63	26 ± 3	
		4.25	74 ± 3	[l]
11.09 [d,e]	$4^+; 1$	1.63	0.5 ± 0.25	2 ± 1
		4.25 [p]	99.5 ± 0.25	338 ± 40
11.27 [d,e]	$1^-; 1$	0	55 ± 2	390 ± 47

Table 20.18 from (1983AJ01): Radiative decays in ^{20}Ne [a] (continued)

E_i (MeV)	$J_i^\pi; T$	E_f (MeV)	Branch (%)	Γ_γ (meV)
		1.63	2.5 ± 1	18 ± 7
		4.97	6.5 ± 1	46 ± 9
		8.85	27 ± 1.5	189 ± 24
		9.31	9 ± 1	63 ± 10
11.53	$3^+, 4^-; 0$	4.25	30 ± 3	
		4.97	70 ± 3	
		7.00	[f]	
11.555 [f]	$1^+, 2^-, 3^+; 0$	1.63		
		7.00		
11.556 [d]	$(0^+, 2^+); 0$	1.63	100	
		4.25	< 8	
11.66	(3^+)	1.63	14 ± 3	
		4.25	86 ± 3	
11.93 [d]	$4^+; 0$	1.63	21 ± 11	5.5 ± 3.0
		4.25	79 ± 11	20.5 ± 5.5
11.95 [g]	$8^+; 0$	8.78	100	7.7 ± 1.1
12.25 [d]	$3^-; 1$	1.63	63 ± 1.5	
		5.62	37 ± 1.5	
12.39 [h]	$3^-; (1)$	0	≈ 1	
		1.63	≈ 29	80
		4.25	≈ 70	200
12.44 [h]	$0^+; 0$	1.63	100	170 ± 50
13.48	$1^+; 1$	1.63	95	
		4.97	5	
13.88		1.63	20	
		4.97	80	
16.73	$0^+; 2$	1.63	[j]	
		5.79	[j]	
		11.23	(100)	≈ 5000 [j]
18.43	$2^+; 2$	12.22	(100)	≈ 300

[a] For earlier references see Table 20.19 in (1978AJ03). See also Tables 20.21 and 20.25 here.
[b] From $\tau_{\rm m}$: see Table 20.20 in (1978AJ03) and branching ratios.
[c] (1980MA27).
[d] (1980FI01).
[e] See also Table 20.19 in (1978AJ03).
[f] See discussion in (1976FI10).
[g] (1980HU08).
[h] (1978ST08).
[i] Monopole matrix element.
[j] See footnote [a] in Table 2 of (1976MA01).
[k] $\Gamma_\gamma({\rm total})/\Gamma = 0.82 \pm 0.27$.
[l] $\Gamma_\gamma({\rm total})/\Gamma < 0.3$.
[m] δ(E2/M1) $= -8.36^{+1.0}_{-1.5}$.
[n] $\Gamma_\gamma({\rm total}) = 240 \pm 64$ μeV: see Table 20.20 (P.M. Endt, private communication).
[o] P.M. Endt, private communication.
[p] $\delta = +0.01 \pm 0.06$ (1980FI01).