Table 20.2 from (1987AJ02): Energy levels of ^{20}F [a]

E_x (MeV ± keV)	$J^\pi; T$	τ	Decay	Reactions
0	$2^+; 1$	$\tau_{1/2} = 11.00 \pm 0.02$ sec	β^-	1, 2, 4, 6, 7, 9, 10, 11, 14, 16, 17, 19, 20
0.65600 ± 0.04	3^+	$\tau_m = 0.39 \pm 0.03$ psec	γ	6, 7, 9, 10, 11, 14, 19
0.82268 ± 0.08	4^+	79 ± 6 psec	γ	5, 6, 7, 9, 10, 11, 14, 17, 19
0.98371 ± 0.05	1^-	2.0 ± 0.2 psec	γ	6, 7, 9, 11, 14, 17, 19
1.056818 ± 0.004	1^+	45 ± 13 fsec	γ	6, 7, 9, 10, 11, 14, 15, 16, 17, 19
1.30934 ± 0.05	2^-	1.6 ± 0.3 psec	γ	6, 7, 9, 11, 14, 16, 17, 19
1.8244 ± 1.2	5^+	≤ 65 fsec	(γ)	2, 6, 9, 10, 14, 19
1.84397 ± 0.08	2^-	30 ± 20 fsec	γ	2, 7, 9, 11, 14, 17
1.97080 ± 0.07	(3^-)		γ	2, 5, 6, 7, 9, 11, 14, 19
2.04405 ± 0.06	2^+	37 ± 16 fsec	γ	2, 6, 7, 9, 11, 14, 17, 19
2.19436 ± 0.08	(3^+)	< 12 fsec	γ	2, 6, 7, 9, 10, 11, 14, 17, 19
2.8649 ± 1.5	(3^-)		(γ)	6, 7, 9, 14, 19
2.96616 ± 0.08	3^+	60 ± 40 fsec	γ	6, 7, 9, 11, 14, 19
2.968 ± 1.5	(4^-)		(γ)	5, 6, 7, 19
3.17258 ± 0.42	(1^+)		γ	6, 7, 9, 11, 14, 19
3.48849 ± 0.06	1^+	44 ± 11 fsec	γ	6, 7, 9, 11, 14, 15, 19
3.52628 ± 0.07	0^+	30 ± 15 fsec	γ	9, 11, 14
3.58656 ± 0.09	$(1, 2)^+$	≤ 60 fsec	γ	6, 7, 9, 11, 14, 19
3.68013 ± 0.06	1, 2		γ	6, 7, 9, 11, 14, 19
3.7611 ± 1.9	$(2^-, 3^+)$		(γ)	6, 7, 9, 14, 19
3.96519 ± 0.16	1^+		γ	6, 7, 9, 11, 14, 19
4.08208 ± 0.11	$(1)^+$		γ	6, 7, 9, 11, 14, 19
4.1989 ± 2.7			(γ)	6, 14

Table 20.2 from (1987AJ02): Energy levels of ^{20}F [a] (continued)

E_x (MeV ± keV)	$J^\pi; T$	τ	Decay	Reactions
4.2077 ± 2.6			(γ)	7, 14, 19
4.27722 ± 0.14	$(1, 2)^+$		γ	6, 7, 11, 14, 19
4.3154 ± 2.0	$(0, 1)^+$		(γ)	14
4.37138 ± 0.12	(2^+)		γ	6, 7, 11, 14, 19
4.5087 ± 0.4	1^+ (2)		γ	6, 7, 11, 14, 19
4.5808 ± 1.8			(γ)	6, 7, 14
4.5922 ± 2.9			(γ)	14, 19
4.7310 ± 2.0	$(3^-, 4^-, 4^+, 5^+)$		(γ)	6, 7, 14, 19
4.7656 ± 2.0			(γ)	6, 7, 14, 19
4.8916 ± 2.8			(γ)	6, 14, 19
4.8982 ± 2.8			(γ)	7, 14
5.047 ± 4	$(2)^-$		(γ)	6, 14, 19
5.068 ± 3	$(1^-, 2, 3^+)$		(γ)	6, 14
5.1310 ± 2.5	$(2^-, 3, 4^+)$		(γ)	6, 14, 19
5.2239 ± 2.3	$(1, 2)^-$		(γ)	6, 7, 14, 19
5.2819 ± 2.5			(γ)	6, 14, 19
5.31887 ± 0.17	0, 1, 2		γ	6, 11, 14, 19
5.349 ± 0.4	$(3)^+$		(γ)	6, 14
5.4131 ± 0.6			γ	6, 7, 14, 19
5.4503 ± 3.8			(γ)	14, 19
5.4554 ± 3.2			(γ)	14
5.463 ± 3	$(1, 2, 3)^+$		(γ)	14
5.55534 ± 0.13	$1, 2^+$		γ	7, 11, 14, 19
5.5881 ± 1.5			(γ)	14
5.620 ± 3			(γ)	7, 14, 19
5.713 ± 2			γ	6, 14, 19
5.7640 ± 2.5	$(3)^+$		(γ)	6, 14, 19
5.8104 ± 2.5	(1^+)		(γ)	6, 14, 19
5.93609 ± 0.05	2^-		γ	11, 14, 19
6.01777 ± 0.03	2^-		γ	11, 14
6.04498 ± 0.08	0, 1, 2		γ	11, 14, 19
6.090 ± 7	(0^-)		(γ)	6

Table 20.2 from (1987AJ02): Energy levels of ^{20}F [a] (continued)

E_x (MeV ± keV)	$J^\pi; T$	τ	Decay	Reactions
6.161 ± 4	$(2, 3^+)$		(γ)	6, 19
6.200 ± 4	$(2^-, 3, 4^+)$		(γ)	6, 19
6.240 ± 7			(γ)	19
6.299 ± 4			(γ)	6, 19
6.339 ± 4			(γ)	6, 19
6.375 ± 4			(γ)	6, 19
6.416 ± 4			(γ)	6, 19
6.441 ± 9			(γ)	19
6.474 ± 3			(γ)	6, 19
6.519 ± 3	$0^+; T = 2$		γ	9, 18
6.588 ± 5			(γ)	19
6.6270 ± 0.3	2^-	0.31 ± 0.02	γ, n	11, 12
6.6426 ± 0.3	(3, 4)	< 0.08	γ, n	11
6.6475 ± 0.4	1^-	1.59 ± 0.10	γ, n	11, 12
6.6934 ± 0.6	1^-	13.8 ± 0.8	γ, n	6, 11, 12
6.7661 ± 0.9	$(2^-, 3, 4^+)$	≤ 0.6	γ, n	6, 11, 19
6.825 ± 5			n	6, 12, 19
6.8567 ± 1.0	2	10 ± 2	γ, n	11
6.905 ± 8				19
6.936 ± 4				6
6.9678 ± 1.0	1^-	5 ± 1	γ, n	6, 11, 12
(7.0670 ± 1.2)	0^-	(2.4 ± 0.6)	γ, n	11, 12
7.08	(1^+)	24	n	6, 12
7.166 ± 2	$2^{(+)}$	8 ± 1	γ, n	6, 11, 12, 13
7.232 ± 7				6
7.283 ± 4				6
7.319 ± 8	(1)	33	γ, n	6, 11, 12
7.37 ± 20	(1)	19	n	6, 12
7.42 ± 20	(2^+)	10	γ, n	6, 11, 12
7.495 ± 5	(2)	80	γ, n	6, 11, 12
7.655 ± 5	(2^+)	65	γ, n	6, 11, 12
7.734 ± 6		140	n	6, 12

Table 20.2 from (1987AJ02): Energy levels of ^{20}F [a] (continued)

E_x (MeV $\pm$ keV)	$J^\pi; T$	τ	Decay	Reactions
7.843 ± 11	1^-	(50 ± 10)	γ, n	6, 11
7.985 ± 4	1	14 ± 2	γ, n	6, 11
8.05 ± 100	$2^+; T = 2$			18
8.062 ± 8				6
8.113 ± 4		195	γ, n	6, 11, 12
8.147 ± 6		15	n	6, 12
8.268 ± 12				6
8.349 ± 4				6
8.421		27	n	12
8.50		140	n	12
8.72		≤ 30	n	6, 12
8.77		76	n	6, 12
8.94		73	n	6, 12
9.01				6
9.2			n	10, 12
9.52		110	n	12
9.65		100	n	12
9.83		33	n	12
9.85		120	n	12
(9.886 ± 10)			n	12
9.90		≤ 30	n	12
(9.929 ± 10)			n	12
(9.981 ± 10)			n	12
10.024 ± 10		150	n, α	12, 13
10.10 ± 50			n, α	13
10.228 ± 10	0^-, 1	≈ 200	n, α	12, 13
10.480 ± 10		≈ 10	n, α	12, 13
10.641 ± 10	1, 2	70	n	12
10.807 ± 10	0^-, 1	≈ 310	n, α	12, 13
10.99		190	n	12
(11.045 ± 10)		≈ 30	n	12
(11.130 ± 10)		< 25	n	12

Table 20.2 from (1987AJ02): Energy levels of ^{20}F [a] (continued)

E_x (MeV $\pm$ keV)	$J^\pi; T$	τ	Decay	Reactions
(11.244 ± 10)		< 25	n	12
(11.287 ± 10)			n	12
11.49 ± 50			n, α	13
12.0			n, α	13
12.2 ± 100			n, α	13
12.4			n, α	13
12.7			n, α	10, 13
13.2			n, α	13
13.7			n, α	12, 13
14.0			n, α	13

[a] See also Tables 20.3, 20.4 and 20.5.