

Table 19.26 from (1978AJ03): Radiative decay of ^{19}Ne levels

E_i (MeV)	J_i^π	E_f (MeV)	J_f^π	Branch (%)	τ_m	Γ_γ^a (meV)	Refs.
0.24	$\frac{5}{2}^+$	0	$\frac{1}{2}^+$	100	26.6 ± 1.2 nsec 25.5 ± 1.0 nsec		(1967BE14) (1969BL02)
0.28	$\frac{1}{2}^-$	0	$\frac{1}{2}^+$	(100) ^b	61.4 ± 3.0 psec		(1970BH02)
1.51	$\frac{5}{2}^-$	0	$\frac{1}{2}^+$	< 3			(1970GI09)
		0.24	$\frac{5}{2}^+$	12 ± 3			(1970GI09)
		0.28	$\frac{1}{2}^-$	88 ± 3	$4.1^{+3.5}_{-1.4}$ psec $1.4^{+0.5}_{-0.6}$ psec ^d	0.17 ± 0.08	(1970GI09) (1971IT02)
1.54	$\frac{3}{2}^+$	0	$\frac{1}{2}^+$	< 6			(1970GI09)
		0.24	$\frac{5}{2}^+$	95 ± 3	28 ± 15 fsec 28^{+18}_{-16} fsec ^d	24^{+27}_{-8}	(1970GI09) (1971IT02)
		0.28	$\frac{1}{2}^-$	5 ± 3			(1970GI09)
1.62	$\frac{3}{2}^-$	0	$\frac{1}{2}^+$	20 ± 3	180 ± 60 fsec 130 ± 35 fsec	$3.7^{+1.8}_{-0.9}$	(1970GI09) (1977LE03)
		0.24	$\frac{5}{2}^+$	10 ± 3			(1970GI09)
		0.28	$\frac{1}{2}^-$	70 ± 4			(1970GI09)
		0.28	$\frac{1}{2}^+$	< 10			(1970GI09)
2.79	$\frac{9}{2}^+$	0	$\frac{1}{2}^+$	< 10			(1970GI09)
		0.24	$\frac{5}{2}^+$	100	330 ± 130 fsec 140 ± 35 fsec ^A	$2.0^{+1.3}_{-0.6}$	(1970GI09) (1977LE03)
		0.28	$\frac{1}{2}^-$	< 10			(1970GI09)
		1.51	$\frac{5}{2}^-$	< 12			(1970GI09)
		1.54	$\frac{3}{2}^+$	< 10			(1970GI09)
		1.62	$\frac{3}{2}^-$	< 10			(1970GI09)
		0.28	$\frac{1}{2}^+$	80 ± 15	< 50 fsec		(1973DA31)
4.03	$(\frac{3}{2}, \frac{5}{2})^+$	0	$\frac{1}{2}^+$	80 ± 15	< 50 fsec		(1973DA31)
		0.28	$\frac{1}{2}^-$	5 ± 5			(1973DA31)
		1.54	$\frac{3}{2}^+$	15 ± 5			(1973DA31)
4.14	$(\frac{9}{2})^-$	1.51	$\frac{5}{2}^-$	100	< 0.3 psec		(1973DA31)
4.20	$(\frac{7}{2})^-$	0.24	$\frac{5}{2}^+$	20 ± 5			(1973DA31)
		1.51	$\frac{5}{2}^-$	80 ± 5	< 0.35 psec		(1973DA31)
4.38	$\frac{7}{2}^+$	0.24	$\frac{5}{2}^+$	85 ± 4	< 0.12 psec		(1973DA31)
		2.79	$\frac{9}{2}^+$	15 ± 4			(1973DA31)

Table 19.26 from (1978AJ03): Radiative decay of ^{19}Ne levels (continued)

E_i (MeV)	J_i^π	E_f (MeV)	J_f^π	Branch (%)	τ_m	Γ_γ^a (meV)	Refs.
4.55	$(\frac{1}{2}, \frac{3}{2})^-$	0	$\frac{1}{2}^+$	35 ± 25	< 80 fsec		(1973DA31)
		0.28	$\frac{1}{2}^-$	65 ± 25			
4.60	$(\frac{5}{2}^+)$	0.24	$\frac{5}{2}^+$	90 ± 5	< 0.16 psec		(1973DA31)
		1.54	$\frac{3}{2}^+$	10 ± 5			
4.64	$\frac{13}{2}^+$	2.79	$\frac{9}{2}^+$	100	> 1 psec		(1973DA31)
5.09 ^c	$(\frac{5}{2}, \frac{7}{2})^-$						

A = adopted.

^a Total Γ_γ .

^b $B(E1) = (1.06 \pm 0.05) \times 10^{-3}$ W.u. (1970BH02).

^c Decay not certain: possibly to $^{19}\text{Ne}^*(0.24, 1.62)$.

^d See also (1977LE03).