

Table 19.24 from (1978AJ03): Energy levels of ^{19}Ne ^a

E_x (MeV \pm keV)	$J^\pi; T$	K^π	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
0	$\frac{1}{2}^+; \frac{1}{2}$	$\frac{1}{2}^+$	$\tau_{1/2} = 17.22 \pm 0.02$ sec	β^+	1, 3, 4, 8, 9, 10, 11, 14, 15
0.23827 ± 0.11	$\frac{5}{2}^+$	$\frac{1}{2}^+$	$\tau_m = 26.0 \pm 0.8$ nsec $g = -0.296 \pm 0.003$	γ	3, 4, 8, 9, 10, 14, 15
0.27509 ± 0.13	$\frac{1}{2}^-$	$\frac{1}{2}^-$	$\tau_m = 61.4 \pm 3.0$ psec	γ	3, 4, 8, 14
1.50756 ± 0.3	$\frac{5}{2}^-$	$\frac{1}{2}^-$	$1.4^{+0.5}_{-0.6}$ psec	γ	3, 4, 8, 14
1.5360 ± 0.4	$\frac{3}{2}^+$	$\frac{1}{2}^+$	28 ± 11 fsec	γ	3, 4, 5, 8, 9, 10, 14
1.6156 ± 0.5	$\frac{3}{2}^-$	$\frac{1}{2}^-$	143 ± 31 fsec	γ	3, 4, 8, 14
2.7947 ± 0.6	$\frac{9}{2}^+$	$\frac{1}{2}^+$	140 ± 35 fsec	γ	3, 4, 5, 8, 9, 10, 14, 15
4.0329 ± 2.4	$(\frac{3}{2}, \frac{5}{2})^+$		< 50 fsec	γ	4, 7, 14
4.140 ± 4	$(\frac{9}{2})^-$	$(\frac{1}{2})^-$	< 0.3 psec	γ	4, 7, 14
4.1971 ± 2.4	$(\frac{7}{2})^-$	$(\frac{1}{2})^-$	< 0.35 psec	γ	4, 5, 7, 14
4.3791 ± 2.2	$\frac{7}{2}^+$		< 0.12 psec	γ	4, 7, 10, 14
4.549 ± 4	$(\frac{1}{2}, \frac{3}{2})^-$		< 80 fsec	γ	4, 7, 14
4.600 ± 4	$(\frac{5}{2})^+$		< 0.16 psec	γ	4, 7, 14
4.635 ± 4	$\frac{13}{2}^+$	$\frac{1}{2}^+$	> 1 psec	γ	4, 5, 6, 7, 14
4.712 ± 10	$(\frac{5}{2})^-$				4, 14
4.783 ± 20					4, 14
5.092 ± 6	$(\frac{5}{2}, \frac{7}{2})^-$			γ	14
5.351 ± 10	$\frac{1}{2}^+$				14
5.424 ± 7	$(\frac{7}{2})^+$	$\frac{1}{2}^+$			4, 14
5.463 ± 20					14
5.539 ± 9					14
5.832 ± 9					14
6.013 ± 7	$(\frac{3}{2}, \frac{1}{2})^-$				14
6.094 ± 8					14
6.149 ± 20					14
6.289 ± 7					4, 5, 14
6.437 ± 9					14
6.742 ± 7	$(\frac{3}{2}, \frac{1}{2})^-$				5, 14
6.862 ± 7					4, 14
7.067 ± 9					14
(7.178 ± 15)					14

Table 19.24 from (1978AJ03): Energy levels of ^{19}Ne ^a (continued)

E_x (MeV \pm keV)	$J^\pi; T$	K^π	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions				
7.253 \pm 10	$\frac{3}{2}^+; \frac{3}{2}$				14				
(7.326 \pm 15)					14				
(7.531 \pm 15)					4, 14				
7.616 \pm 16					5, 14, 15				
7.700 \pm 10					14				
(7.788 \pm 10)					14				
7.994 \pm 15					14				
8.063 \pm 15					14				
8.236 \pm 10 ^b					5, 14				
8.440 \pm 10					5, 14				
8.523 \pm 10					14				
(8.810 \pm 25)					14				
8.915 \pm 10					5, 14				
9.013 \pm 10					14				
9.100 \pm 20					14				
9.240 \pm 20					14				
9.489 \pm 25					14				
9.886 \pm 50 ^b					5, 14				
10.407 \pm 30 ^b					$\frac{3}{2}^+$		45	p, ^3He , α	2, 14
10.46									$\frac{1}{2}^+$
10.613 \pm 20					14				
11.09 \pm 100 ^b	$\frac{3}{2}^-(\frac{1}{2}^-)$				5				
11.51					$\frac{5}{2}^+$	25	^3He , α	2	
12.23 \pm 50					$\frac{7}{2}^+$	200 \pm 25	^3He , α	2	
12.43 \pm 50					$\frac{1}{2}^+$	180 \pm 25	^3He , α	2, 5	
12.69 \pm 50						180 \pm 40	p, ^3He , α	2	
14.17 \pm 100								5	
14.61 \pm 100								5	
15.40 \pm 100						620 \pm 130	γ , ^3He	5	

^a See also Tables 19.13 and 19.26.

^b Broad or unresolved states.