^{19}Ne β^+ decay

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Tilley, Weller, Cheves, Chasteler	NP A595, 1 (1995)	31-Oct-1994

Parent: ^{19}Ne: E=0; J$^\pi$=1/2$^+$; $T_{1/2}$=17.22 s *2*; Q(β^+)=3238.4 *6*; %β^+ decay=100.0

Additional information 1.

Eγ values are from recoil-corrected E(level) differences, and the Iγ are deduced from the β feedings and γ branching ratios given in 1987Aj02.

^{19}F Levels

E(level)	J$^\pi$
0	1/2$^+$
109.894 *5*	1/2$^-$
197.143 *4*	5/2$^+$
1554.038 *9*	3/2$^+$

ε,β^+ radiations

E(decay)	E(level)	Iβ^+†	Log *ft*	I($\varepsilon+\beta^+$)†	Comments
(1684.4 *6*)	1554.038	0.00213 *20*	5.71 *5*	0.00222 *21*	av Eβ=262.9 *3*; εK=0.03802 *11*; εL=0.002287 *7*
(3128.5 *6*)	109.894	0.012 *2*	7.06 *8*	0.012 *2*	av Eβ=911.5 *3*; εK=0.001096; εL=6.590×10^{-5}
(3238.4 *6*)	0	99.888 *2*	3.2329 *24*	99.988 *2*	av Eβ=963.1 *3*; εK=0.0009409; εL=5.657×10^{-5}

† Absolute intensity per 100 decays.

γ(^{19}F)

E$_\gamma$	I$_\gamma$†	E$_i$(level)	J$^\pi_i$	E$_f$	J$^\pi_f$	Mult.
109.894 *5*	0.012 *2*	109.894	1/2$^-$	0	1/2$^+$	[E1]
197.142 *4*	0.00206 *20*	197.143	5/2$^+$	0	1/2$^+$	[E2]
1356.843 *10*	0.00206 *20*	1554.038	3/2$^+$	197.143	5/2$^+$	[M1]
1444.085 *10*	0.000108 *11*	1554.038	3/2$^+$	109.894	1/2$^-$	[E1]
1553.970 *9*	0.000057 *6*	1554.038	3/2$^+$	0	1/2$^+$	[M1]

† Absolute intensity per 100 decays.

^{19}Ne β^+ decay

Decay Scheme