^{14}O β^+ decay 1991Aj01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	F. Ajzenberg-selove	NP A523,1 (1991)	1-Jul-1990

Parent: ^{14}O: E=0; $J^\pi=0^+$; $T_{1/2}$=70.606 s *18*; Q(β^+)=5143.04 *7*; %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 1991Aj01 (M. J. Martin).

^{14}N Levels

E(level)	J^π
0	1^+
2312.798 *11*	0^+
3948.10 *20*	1^+

ε,β^+ radiations

E(decay)	E(level)	Iβ^+[†]	Iε[†]	Log *ft*	I($\varepsilon+\beta^+$)[†]	Comments
(1194.94 *21*)	3948.10	0.019 *1*	0.035 *1*	3.131 *17*	0.054 *2*	av Eβ=64.37 *9*; εK=0.6089 *10*; εL=0.03548 *6*
(2830.24 *7*)	2312.798	99.249 *10*	0.087 *1*	3.4825 *2*	99.336 *10*	av Eβ=770.55; εK=0.0008274; εL=4.819×10^{-5}
(5143.04 *7*)	0	0.61 *1*		7.279 *8*	0.61 *1*	av Eβ=1875.95

[†] Absolute intensity per 100 decays.

$\gamma(^{14}N)$

Eγ	Iγ[‡]	E$_i$(level)	J_i^π	E$_f$	J_f^π	Mult.	δ[†]
1635.20 *20*	0.052 *2*	3948.10	1^+	2312.798	0^+	[M1]	
2312.593 *11*	99.388 *11*	2312.798	0^+	0	1^+	[M1]	
3947.50 *20*	0.00211 *13*	3948.10	1^+	0	1^+	[M1+E2]	+2.8 *3*

[†] The signature has been changed, where necessary, from that given in 1991Aj01 in order to conform to the convention used in the Nuclear Data SHEETS.

[‡] Absolute intensity per 100 decays.

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Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays