^{10}C β^+ decay 1999Fu04,1989Ba28,2004Ti06

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. L. Godwin, et al.	NP A745 155 (2004)	31-Mar-2004

Parent: ^{10}C: E=0.0; $J^\pi=0^+$; $T_{1/2}$=19.290 s *12*; Q(β^+)=3648.0 *6*; %β^+ decay=100.0

1989KrZW: ^{10}C, measured β-decay branching ratio.

1991Kr19: ^{10}B(p,p′) E=7.8 MeV, measured E_γ, I_γ, P_γ-coin, β-delayed γ-spectra. ^{10}C deduced superallowed β-decay branching ratio.

1999Fu04: ^{10}C(β+) [from ^{10}B(p,n) E=8 MeV], measured β-delayed E_γ, I_γ. Deduced superallowed transition branching ratio.

^{10}B Levels

E(level)	J^π[†]	Comments
0.0	3^+	
718.380 *11*	1^+	from (1989Ba28); previous value 718.32 keV *9* (1969Fr02).
1740.05 *4*	0^+	from (1989Ba28); previous value 1740.16 keV *17* (1969Fr02).

[†] From Adopted Levels.

ε,β^+ radiations

E(decay)	E(level)	Iβ^+[†]	Iε[†]	Log *ft*	I($\varepsilon+\beta^+$)[†]	Comments
(1907.9 *6*)	1740.05	1.4601 *19*	0.00438 *5*	3.4829 *14*	1.4645 *19*	av Eβ=353.45 *26*; εK=0.002848 *6*; εL=0.0001454 *3*
(2929.6 *6*)	718.380	98.50 *2*	0.0285 *3*	3.0426 *7*	98.53 *2*	av Eβ=814.26 *28*; εK=0.0002751 *3*; εL=1.404×10^{-5} *2*

[†] Absolute intensity per 100 decays.

γ(^{10}B)

E_γ	I_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Comments
718.353 *19*	100	718.380	1^+	0.0	3^+	from (1989Ba28); previous value 718.29 keV *9* (1969Fr02).
1021.646 *14*	1.4615 *19*	1740.05	0^+	718.380	1^+	from (1989Ba28); previous value 1021.78 keV *14* (1969Fr02).

[†] Absolute intensity per 100 decays.

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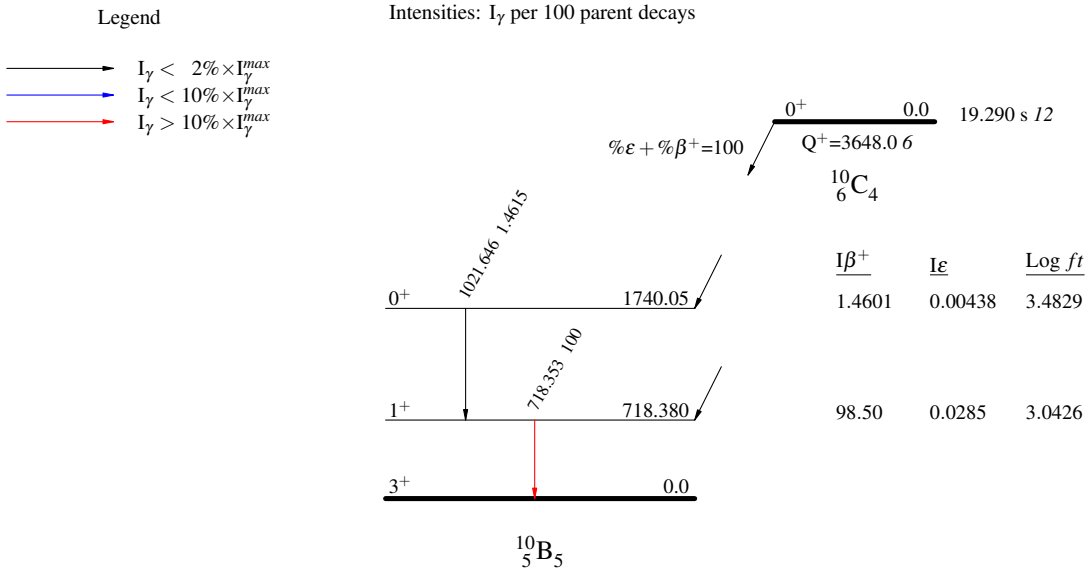
Decay Scheme

Intensities: I_γ per 100 parent decays



	Iβ+	Iε	Log *ft*
0+ 1740.05	1.4601	0.00438	3.4829
1+ 718.380	98.50	0.0285	3.0426