^{36}Si β^- decay (0.45 s) 1986Du07,1987DuZU

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, John Cameron and Balraj Singh	NDS 113, 1 (2012)	31-Dec-2011

Parent: ^{36}Si: E=0; $J^\pi=0^+$; $T_{1/2}$=0.45 s *6*; Q(β^-)=7833 *58*; %β^- decay=100.0
^{36}Si-Q(β^-): From 2011AuZZ. 2003Au03 give 7770 *120*.
Data from 1986Du07 updated in private communication from J.P. Dufour to P.M. Endt.
Theoretical calculations of β decay: 1988Wa04.

^{36}P Levels

E(level)	J^π[†]	Comments
0	4^-	
249.9 *2*		
424.9 *2*	(1^+)	
1303.1 *2*	1^+	
1346.3 *3*		E(level): see comment in ^{36}P Adopted Levels for alternate energy.
2281.0 *3*	1^+	

[†] From Adopted Levels.

β^- radiations

E(decay)	E(level)	Iβ^-[†]	Log *ft*	Comments
(5.55×10^3 *6*)	2281.0	48 *6*	4.01 *9*	av Eβ=2549 *29*
(6.49×10^3 *6*)	1346.3	<3	>5.5	av Eβ=3009 *29*
(6.53×10^3 *6*)	1303.1	37 *4*	4.45 *8*	av Eβ=3030 *29*
(7.41×10^3 *6*)	424.9	15 *9*	5.1 *3*	av Eβ=3462 *29*

[†] Absolute intensity per 100 decays.

γ(^{36}P)

E_γ	I_γ[†‡]	E_i(level)	J_i^π	E_f	J_f^π	Comments
175.0	100 *6*	424.9	(1^+)	249.9		
249.9	100 *5*	249.9		0	4^-	
424.9	47 *6*	424.9	(1^+)	0	4^-	
878.2	65 *5*	1303.1	1^+	424.9	(1^+)	
921.4	19 *3*	1346.3		424.9	(1^+)	See comment in ^{36}P adopted gammas for alternate placement.
934.7	19 *3*	2281.0	1^+	1346.3		See comment in ^{36}P adopted gammas for alternate placement.
977.9	12 *2*	2281.0	1^+	1303.1	1^+	
1053.2	3 *2*	1303.1	1^+	249.9		
1856.0	41 *8*	2281.0	1^+	424.9	(1^+)	

[†] From private communication (J.P. Dufour to P.M. Endt).
[‡] For absolute intensity per 100 decays, multiply by 0.68 *4*.

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Decay Scheme

Intensities: I_γ per 100 parent decays