^{122}Ag β^- decay (0.529 s) 1978Sh03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. Tamura	NDS 108, 455 (2007)	30-Sep-2006

Parent: ^{122}Ag: E=0.0; $J^\pi=(3^+)$; $T_{1/2}$=0.529 s *13*; Q(β^-)=9500 *SY*; %β^- decay=99.8
Produced in ^{235}U(n,f), on-line MS; semi γ, semi-semi $\gamma\gamma$-coin.
Other: 1971Fo22.
The decay scheme is that proposed by 1978Sh03; Since Q_β=9.5 MeV and the highest level studied is ≈2 MeV, the decay scheme is probably incomplete.

^{122}Cd Levels

E(level)	J^π†
0.0	0^+
569.45 *8*	2^+
1329.15 *12*	(4^+)
1367.8 *3*	$(2)^+$
1979.35 *17*	$(3,4^+)$

† From Adopted Levels.

β^- radiations

Iβ normalization: %β-=99.8 and assumed no branching to gs.
β-branchings and log *ft* are approximate values.

E(decay)	E(level)	Iβ^-†	Log *ft*	Comments
(7520 *SY*)	1979.35	20	5.5	av Eβ=3.39×10^3 *10*
(8132 *SY*)	1367.8	17	5.7	av Eβ=3.68×10^3 *10*
(8170 *SY*)	1329.15	13	5.9	av Eβ=3.70×10^3 *10*
(8930 *SY*)	569.45	50	5.4	av Eβ=4.06×10^3 *10*

† Absolute intensity per 100 decays.

$\gamma(^{122}Cd)$

Iγ normalization: Assumed no branching to ground state. This is consistent with β feeding to (4^+).

E_γ†	I_γ‡#	E_i(level)	J_i^π	E_f	J_f^π
569.45 *8*	100	569.45	2^+	0.0	0^+
650.20 *12*	21 *3*	1979.35	$(3,4^+)$	1329.15	(4^+)
759.70 *8*	34 *3*	1329.15	(4^+)	569.45	2^+
798.4 *3*	13 *5*	1367.8	$(2)^+$	569.45	2^+
1367.8 *5*	4.3 *19*	1367.8	$(2)^+$	0.0	0^+
x1423.1 *9*	3.2 *25*				

† From 1978Sh03.
‡ Relative to I(569.45γ)=100.

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^{122}Ag β^- decay (0.529 s) 1978Sh03 (continued)

$\gamma(^{122}Cd)$ (continued)

For absolute intensity per 100 decays, multiply by 0.96 *3*.
x γ ray not placed in level scheme.

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Decay Scheme

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