

^{118}In β^- decay (5.0 s) 1977De10

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	K. Kitao	NDS 75,99 (1995)	1-Feb-1993

Parent: ^{118}In : E=0.0; $J^\pi=1^+$; $T_{1/2}=5.0$ s 3; $Q(\beta^-)=4423$ 8; % β^- decay=100.0

The decay scheme is that proposed by 1977De10.

 ^{118}Sn Levels

E(level) [‡]	J^π [†]
0.0	0 ⁺
1229.9 4	2 ⁺
1758.0 5	0 ⁺
2043.1 4	2 ⁺
2056.8 5	0 ⁺
2326.9 7	2 ⁺
2403.3 7	2 ⁺
3138.1 7	0 ⁺

[†] From Adopted Levels.

[‡] From a least-squares fit to E(γ 's).

 β^- radiations

E(decay)	E(level)	$I\beta^-$ [†]	Log ft	Comments
(1285 8)	3138.1	0.13 6	5.45 21	av $E\beta=467$ 4
(2020 8)	2403.3	0.43 20	5.70 21	av $E\beta=793$ 4
(2096 8)	2326.9	0.10 6	6.4 3	av $E\beta=828$ 4
(2366 8)	2056.8	0.035 21	7.1 3	av $E\beta=951$ 4
(2380 8)	2043.1	0.30 13	6.15 19	av $E\beta=958$ 4
(2665 8)	1758.0	0.7 3	5.98 19	av $E\beta=1089$ 4
(3193 8)	1229.9	3.4 14	5.63 18	av $E\beta=1336$ 4
(4423 8)	0.0	94.9 1	4.79 3	av $E\beta=1916$ 4 $E(\beta)=4200$ 300 (1964Ka10).

[†] Absolute intensity per 100 decays.

 $\gamma(^{118}\text{Sn})$

I_γ normalization: From absolute intensity of 1230g=5% 2.

E_γ [†]	I_γ [#]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [‡]	$I_{(\gamma+ce)}$ [#]	Comments
(298.58)		2056.8	0 ⁺	1758.0	0 ⁺	E0	0.0012 6	Inferred from ^{118}Sb ε decay (5.00 h).
528.0 5	14 2	1758.0	0 ⁺	1229.9	2 ⁺			
813.0 5	3.9 8	2043.1	2 ⁺	1229.9	2 ⁺			
827.0 5	0.7 3	2056.8	0 ⁺	1229.9	2 ⁺			
1097.0 5	2.0 7	2326.9	2 ⁺	1229.9	2 ⁺			
1173.4 5	8.6 17	2403.3	2 ⁺	1229.9	2 ⁺			
1229.7 5	100	1229.9	2 ⁺	0.0	0 ⁺			
(1758)		1758.0	0 ⁺	0.0	0 ⁺	E0	0.0018 3	Inferred from ^{118}Sb ε decay (5.00 h).
1908.2 5	2.6 6	3138.1	0 ⁺	1229.9	2 ⁺			

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^{118}In β^- decay (5.0 s) **1977De10** (continued) $\gamma(^{118}\text{Sn})$ (continued)

E_γ [†]	I_γ [#]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [‡]	$I_{(\gamma+ce)}$ [#]	Comments
2043.2 5 (2056.9)	2.1 6	2043.1 2056.8	2 ⁺ 0 ⁺	0.0	0 ⁺	E0	0.0012 6	Inferred from ^{118}Sb ε decay (5.00 h).

[†] Assumed uncertainty of 0.5 keV (evaluators).

[‡] From ^{118}Sb ε decay (5.00 h).

[#] For absolute intensity per 100 decays, multiply by 0.05 2.

$^{118}\text{In} \beta^-$ decay (5.0 s) 1977De10

Decay Scheme

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

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- - - - - γ Decay (Uncertain)

