^{144}Tb ε decay (1 s) 1986Re11

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni	NDS 93, 599 (2001)	1-Dec-2000

Parent: ^{144}Tb: E=0.0; $J^\pi=1^+$; $T_{1/2}\approx1$ s; Q(ε)=9074 *SY*; %ε+%β^+ decay=100.0
Source: ^{35}Cl on ^{112}Sn, ms. Measured (K x ray)G.

^{144}Gd Levels

E(level)‡	J^π†
0.0	0^+
743.01 *22*	2^+
1876.41 *24*	(2^+)
1886.9 *4*	(0^+)
2226.52 *24*	(2^+)
2462.1 *4*	$(0^+,1^+,2^+)$

† Authors′ assignments, also adopted values.
‡ From least-square fit.

ε,β^+ radiations

E(decay)	E(level)	Log *ft*	I($\varepsilon+\beta^+$)†
(6611 *SY*)	2462.1	≈5.1	≈1.6
(6847 *SY*)	2226.52	≈5.1	≈2.0
(7187 *SY*)	1886.9	≈4.9	≈4.1
(7197 *SY*)	1876.41	≈5.3	≈1.5
(8330 *SY*)	743.01	≈4.8	≈13.6
(9074 *SY*)	0.0	≈4.4	≈77

† Absolute intensity per 100 decays.

$\gamma(^{144}Gd)$

Iγ normalization: from g.s. feeding, presumably estimated from assumed log *ft* for 1^+ to 0^+ transition.

E_γ	I_γ†	E_i(level)	J_i^π	E_f	J_f^π
743.0 *3*	100 *10*	743.01	2^+	0.0	0^+
1133.4 *3*	3.0 *3*	1876.41	(2^+)	743.01	2^+
1143.9 *3*	19.0 *19*	1886.9	(0^+)	743.01	2^+
1483.5 *3*	5.0 *5*	2226.52	(2^+)	743.01	2^+
1719.1 *3*	8.0 *8*	2462.1	$(0^+,1^+,2^+)$	743.01	2^+
1876.4 *3*	4.0 *4*	1876.41	(2^+)	0.0	0^+
2226.5 *3*	4.0 *4*	2226.52	(2^+)	0.0	0^+

† For absolute intensity per 100 decays, multiply by 0.21.

^{144}Tb ε decay (1 s) 1986Re11

Decay Scheme

Intensities: I_γ per 100 parent decays