

Adopted Levels, Gammas

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 110,507 (2009)	1-Oct-2008

Q(β^-)=7460 14; S(n)=4.86×10³ 3; S(p)=10472 12; Q(α)=-2.58×10³ syst 2012Wa38

Note: Current evaluation has used the following Q record 7865 504858 2710070 syst-1960 syst 2003Au03.

Q(β^-): On-line mass separator ISOLDE (1992Pr04). Other values: 7930 keV 75 (1988GrZX); 7358 keV 70 (1981De25); 7360 keV 70, mass-adjusted value (2003Au03).

See 2006Ho05 for measured yields from fast-neutron induced fission of ²³⁸U.

¹⁴⁵Cs Levels

Cross Reference (XREF) Flags

A ²⁴⁸Cm SF decay

E(level) [†]	J ^π	T _{1/2}	XREF	Comments
0.0 [‡]	3/2 ⁺	0.587 s 5		% β^- =100; % β^- n=14.7 9 μ =+0.784 4 (1989Ra17,1981Th06) Q=+0.62 6 (1989Ra17,1981Th06) T _{1/2} : Weighted average of 0.579 s 6 (1993Ru01), 0.594 s 13 (1982Ra13), 0.610 s 30 (1981En02), 0.650 s 40 (1980ReZQ), 0.605 s 30 (1979En02), 0.616 s 20 (1979Ri09), 0.590 s 20 (1978Wo09), 0.611 s 21 (1974Ro15), and 0.563 s 27 (1971Tr02). μ : μ =0.95 15, deduced from experimental γ -ray intensity branching ratios (1995Rz01). J ^π : 1979Ek02, atomic beam magnetic resonance, 3/2[422] Nilsson orbital (1979Ek02) from analysis of μ . % β^- n: Weighted average of 14.4% 6 (1993Ru01), 19.5% 15 (1981En05), 13.6% 9 (1980Lu04), 18.1% 12 and 13.3% 14 (1980ReZQ), 12.2% 9 (1979Ri09), 12.5% 30 (1978Cr03), 21.8% 15 (1977Re06), and 12.1% 4 (1974Ro15). Other evaluated value: 13.6% 8, recommended in 1984Ma39. This value includes the effect of possible correlations among various experimental results.
88.7 [‡]			A	
203.8 [‡]			A	
359.4 [‡]			A	
550.8 [‡]			A	
742.8 [#]			A	
1068.1 [#]			A	
1510.8 [#]			A	

[†] From 1995Rz01.
[‡] Band(A): 3/2[422].
[#] Band(B): Band Sequence.

γ (¹⁴⁵Cs)

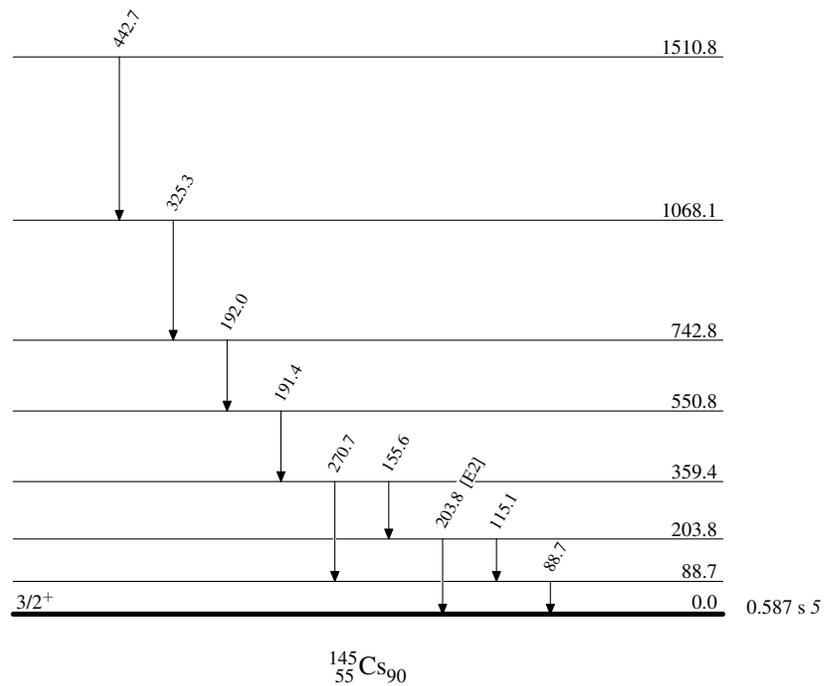
E _i (level)	E _{γ} [†]	E _f	J _f ^π	Mult.	Comments
88.7	88.7	0.0	3/2 ⁺		
203.8	115.1	88.7			
359.4	203.8	0.0	3/2 ⁺	[E2]	Mult.: From systematics in ¹⁴¹ Cs and ¹⁴³ Cs (1995Rz01).
	155.6	203.8			

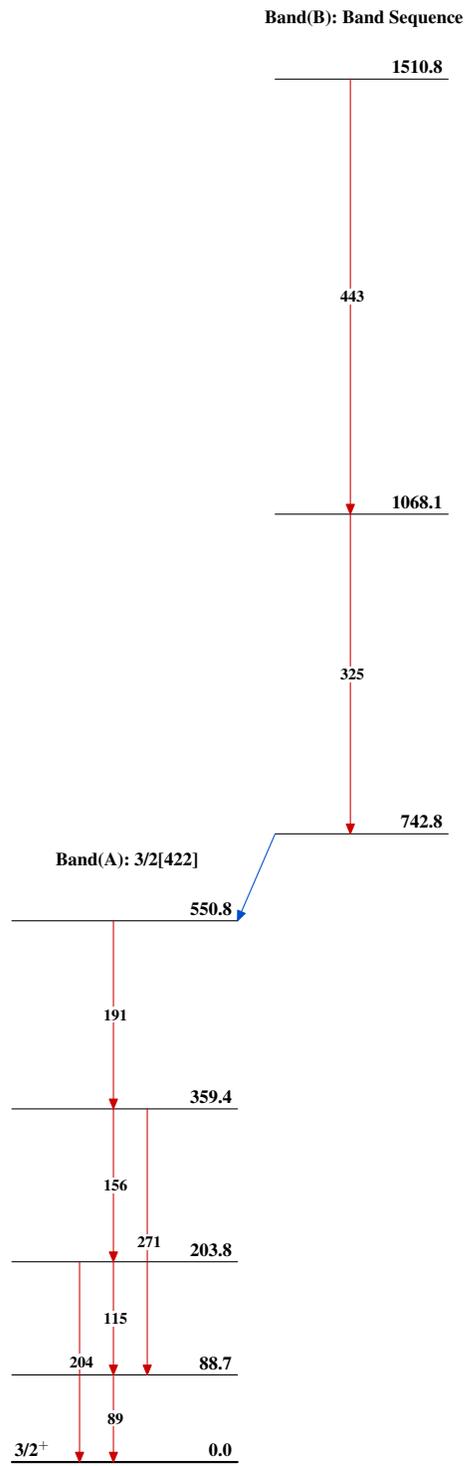
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Adopted Levels, Gammas (continued) $\gamma(^{145}\text{Cs})$ (continued)

<u>$E_i(\text{level})$</u>	<u>E_γ^\dagger</u>	<u>E_f</u>
359.4	270.7	88.7
550.8	191.4	359.4
742.8	192.0	550.8
1068.1	325.3	742.8
1510.8	442.7	1068.1

[†] From [1995Rz01](#).

Adopted Levels, GammasLevel Scheme

Adopted Levels, Gammas $^{145}_{55}\text{Cs}_{90}$