

^{252}Cf SF decay 2010Hw03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 112, 1163 (2011)	15-Dec-2010

Parent: ^{252}Cf : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=2.645$ y 8; %SF decay=?

62 νCi ^{252}Cf source sandwiched between Fe foils inside a CH plastic ball which absorbed β radiation, conversion electrons and some neutrons; GAMMASPHERE array (101 detectors); measured E_γ , triple and higher-fold $\gamma\gamma$ coin (1 μs time window).

 ^{93}Kr Levels

<u>$E(\text{level})^\dagger$</u>	<u>$J^\pi^\ddagger$</u>	<u>$T_{1/2}$</u>
0.0 [#]	1/2 ⁺	
117.4 [#]	(3/2 ⁺)	
354.8 [#]	(7/2 ⁺)	10 ns 2
983.2 [#]	(11/2 ⁺)	
1516.9 [#]	(15/2 ⁺)	
2401.7 [#]	(19/2 ⁺)	
3199.8 [#]	(23/2 ⁺)	

[†] From E_γ .

[‡] From Adopted Levels.

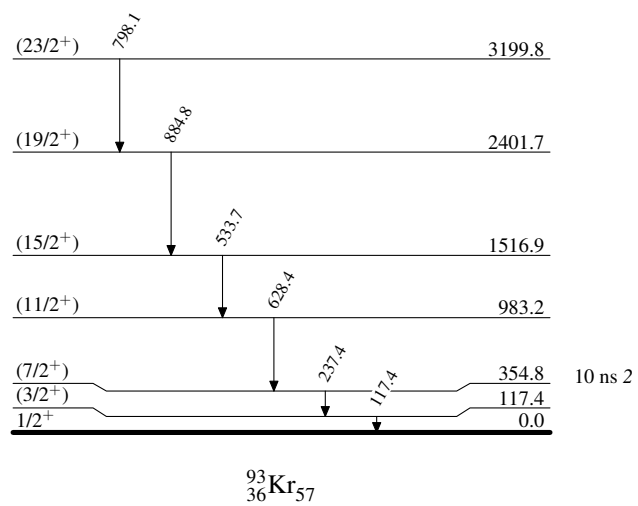
[#] Band(A): $\pi=+$ sequence.

 $\gamma(^{93}\text{Kr})$

<u>E_γ</u>	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>
117.4	117.4	(3/2 ⁺)	0.0	1/2 ⁺
237.4	354.8	(7/2 ⁺)	117.4	(3/2 ⁺)
533.7	1516.9	(15/2 ⁺)	983.2	(11/2 ⁺)
628.4	983.2	(11/2 ⁺)	354.8	(7/2 ⁺)
798.1	3199.8	(23/2 ⁺)	2401.7	(19/2 ⁺)
884.8	2401.7	(19/2 ⁺)	1516.9	(15/2 ⁺)

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Level Scheme



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$^{93}_{36}\text{Kr}_{57}$