

^{248}Cm SF decay [1990Ho12,1991Ho16](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 108,2035 (2007)	30-Mar-2007

Parent: ^{248}Cm : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=3.48\times 10^5$ y 6; %SF decay=?

Assignment: (fragment)(fragment)(K x ray)(γ) coin and (fragment)(γ)(γ) coin.

^{248}Cm SF decay [1990Ho12](#). 6.5×10^4 fissions/s. Argonne Notre Dame γ facility 10 Bi-germinate-suppressed Ge detectors, 2 small Ge detector, 1 array of 50 Bi-Gescin used as a multiplicity filter. They select only fission fragments with an average γ multiplicity of ≈ 10 . The assignment is mainly based on coin with complementary Ba isotopes.

 ^{104}Zr Levels

E(level)	J^π [†]
0.0 [‡]	0 ⁺
140.3 [‡]	(2 ⁺)
452.8 [‡]	(4 ⁺)
926.5 [‡]	(6 ⁺)
1551.3 [‡]	(8 ⁺)

[†] From Adopted Levels.

[‡] Band(A): g.s. band.




 $\gamma(^{104}\text{Zr})$

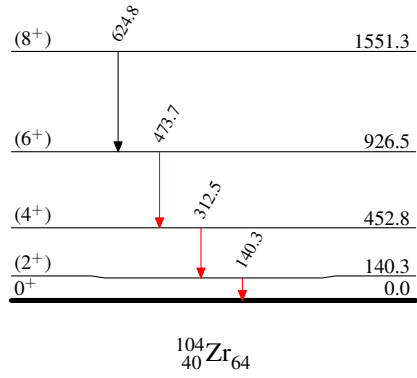
E_γ [†]	I_γ [†]	E_i (level)	J_i^π	E_f	J_f^π
140.3	100	140.3	(2 ⁺)	0.0	0 ⁺
312.5	93	452.8	(4 ⁺)	140.3	(2 ⁺)
473.7	46	926.5	(6 ⁺)	452.8	(4 ⁺)
624.8	10	1551.3	(8 ⁺)	926.5	(6 ⁺)

[†] From [1991Ho16](#).

^{248}Cm SF decay 1990Ho12,1991Ho16Level SchemeIntensities: Relative $I_{(\gamma+ce)}$

Legend

-  $I_{\gamma} < 2\% \times I_{\gamma}^{max}$
-  $I_{\gamma} < 10\% \times I_{\gamma}^{max}$
-  $I_{\gamma} > 10\% \times I_{\gamma}^{max}$



^{248}Cm SF decay 1990Ho12,1991Ho16