$$^{202}\text{Hg}(^{48}\text{Ca},2\text{n}\gamma) \qquad \textbf{2010KeZY}$$

	Type	Author	History Citation	Literature Cutoff Date
	Full Evaluation	M. J. Martin	NDS 122, 377 (2014)	1-Sep-2014

E=211 MeV.

^{248}Fm Levels

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$	Comments
0	0$^+$	32.3 s 15	
46 1	2$^+$		
152 2	4$^+$		
317.2 3	6$^+$		
538.6 4	8$^+$		
813.3 5	10$^+$		
>1074?		10.1 ms 6	E(level): the 904γ which follows decay of the 10.1-ms isomer, is In coincidence with electrons with energy up to≈170 keV. J$^\pi$: No definitive configuration assignment can be made. See 2010KeZY for a discussion of several possibilities.
1137.3 6	12$^+$		
1507.7 7	14$^+$		
1921 2	16$^+$		
2372 2	18$^+$		

[†] Relative to E(4$^+$)=152.
[‡] From the authors and based on a fit to a rotational band.

$\gamma(^{248}$Fm)

E$_\gamma$	I$_\gamma$[@]	E$_i$(level)	J$^\pi_i$	E$_f$	J$^\pi_f$	Mult.	α[&]	Iγ[‡]
46[†#] 1		46	2$^+$	0	0$^+$	[E2]	1.05×10^3 12	
106[†#] 1		152	4$^+$	46	2$^+$	[E2]	20.2 10	
165.2 3	26 7	317.2	6$^+$	152	4$^+$	[E2]	2.88 5	
^{x}181.1 4								11 4
221.4 4	45 8	538.6	8$^+$	317.2	6$^+$	[E2]	0.905 14	
274.7 3	30 7	813.3	10$^+$	538.6	8$^+$	[E2]	0.419 6	
324.0 3	26 7	1137.3	12$^+$	813.3	10$^+$	[E2]	0.246 4	
370.4 3	26 7	1507.7	14$^+$	1137.3	12$^+$	[E2]	0.165 3	
^{x}383 1								7 3
^{x}396 1								8 3
413 1	11 5	1921	16$^+$	1507.7	14$^+$	[E2]	0.122 2	
^{x}423 1								7 3
451 1	9 5	2372	18$^+$	1921	16$^+$	[E2]	0.0967 15	
^{x}805[†#] 1								
^{x}904[†#] 1								

[†] The transitions from the 2$^+$ and 4$^+$ levels are not seen. The energies of these transitions are deduced by the authors from the energy-J relationship E(J)=a[1+b J(J+1)]$^{1/2}$−a of Holmberg and Lipas.
[‡] Values are peak intensities uncorrected for detector efficiency and are relative to Ti(165γ)=100 25.
[#] The 805 and 904γ's follow decay of the 10.1-ms isomer. The 904γ is the stronger of the two and the author suggests that IT decays directly from the isomer or from an intermediate state.
[@] Relative photon intensity normalized to Ti(165γ)=100 25.

^{202}Hg(^{48}Ca,2nγ)   **2010KeZY (continued)**

γ(^{248}Fm) (continued)

$^{\&}$ Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation
   based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.
^{x} γ ray not placed in level scheme.

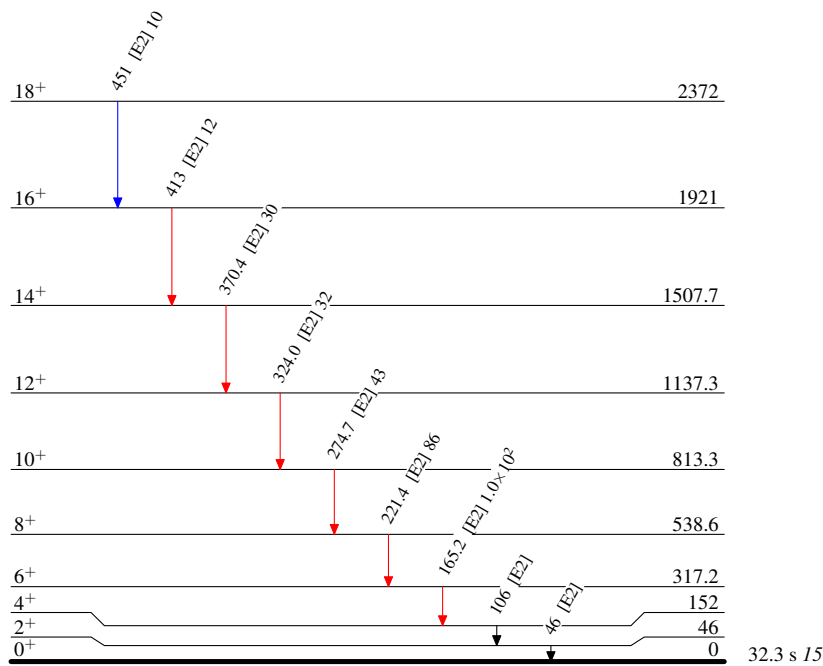^{202}Hg(^{48}Ca,2nγ)   **2010KeZY**

Level Scheme

Intensities: Relative $I_{(\gamma+ce)}$

Legend

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

$^{248}_{100}$Fm$_{148}$