

^{248}Cm SF decay 2000Rz02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan and A. A. Sonzogni		NDS 115, 135 (2014)	1-Nov-2013

Parent: ^{248}Cm : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=3.48\times 10^5$ y 6; %SF decay=8.39 16

Measured E_γ , $\gamma\gamma$ and $\gamma\gamma(\theta)$ using EUROAM2 array consisting of a total of 52 Compton-suppressed Ge detectors (24 of them 4 crystal Clover detectors) and 4 LEPS detectors.

 ^{88}Kr Levels

E(level) [†]	J^π [‡]
0.0	0^+
775.3	2^+
1643.9	4^+
2103.9	$(4^+)^\#$
2397.4?	
2404.1?	
3921.1	

[†] From least-squares fit to E_γ 's by evaluators.

[‡] Assignments of 2000Rz02 based on $\gamma\gamma(\theta)$ and decay properties of the levels. Differences with assignments given in the Adopted Levels are indicated.

[#] Assignment of $J^\pi=(3^-)$ in the Adopted Levels.

 $\gamma(^{88}\text{Kr})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	Comments
460.0	2103.9	(4^+)	1643.9	4^+		
753.5 ^{†#}	2397.4?		1643.9	4^+		
760.2 ^{‡#}	2404.1?		1643.9	4^+		
775.3	775.3	2^+	0.0	0^+	E2	Mult.: from the Adopted Gammas.
868.6	1643.9	4^+	775.3	2^+	(Q)	Mult.: $(869\gamma)(775\gamma)(\theta)$: $A_2=+0.13$ 3, $A_4=-0.09$ 1.
1517.0 ^{‡#}	3921.1		2404.1?			
1523.7 ^{†#}	3921.1		2397.4?			

[†] Ordering of the 754 γ -1524 γ cascade is reversed in ^{252}Cf SF decay (2011Li34).

[‡] Ordering of the 760 γ -1517 γ cascade is reversed in ^{252}Cf SF decay (2011Li34).

[#] Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme

-----► γ Decay (Uncertain)