

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. Hashizume	NDS 112,1647 (2011)	1-Oct-2009

Q(β^-)=8408 24; S(n)=4305 13; S(p)=1.500×10⁴ syst; Q(α)=-1.050×10⁴ syst 2012Wa38
 Note: Current evaluation has used the following Q record 8470 60 4260 90 14790 syst-10330 syst 2003Au03.
 $\Delta(S(p))=310$, $\Delta(Q(\alpha))=600$ (2003Au03).
 Q(β^-): Experimental value is 8468 63 from $\beta\gamma$ -coin (1987Sp09).
 Assignment: ²³⁵U(n,F) E=th, on-line mass separation.
 Nuclear structure calculations on the levels and their properties: (1996Bo11).

¹²⁷Cd Levels

Cross Reference (XREF) Flags

A ⁹Be(¹³⁶Xe,X γ)

E(level)	J $^\pi$	T _{1/2}	XREF	Comments
0.0	(3/2 ⁺)	0.37 s 7		$\% \beta^- = 100$ J $^\pi$: syst of odd-Cd isotopes. T _{1/2} : from γ multiscaling. Value from weighted av of 0.43 s 3 (1986Go10,1986Ho24) and 0.30 s 3 (1986Ma42). Other: 1.3 s (1981Al25).
0+x	11/2 ⁻ †		A	
738.70+x 20	(15/2 ⁻) †		A	
1560.1+x 8	(19/2 ⁻) †		A	
2331.0+x 9	(23/2 ⁻) †		A	
3239.9+x 11	(27/2 ⁻) †		A	
y		?	A	T _{1/2} : Microsecond isomer from observation of delayed γ rays.

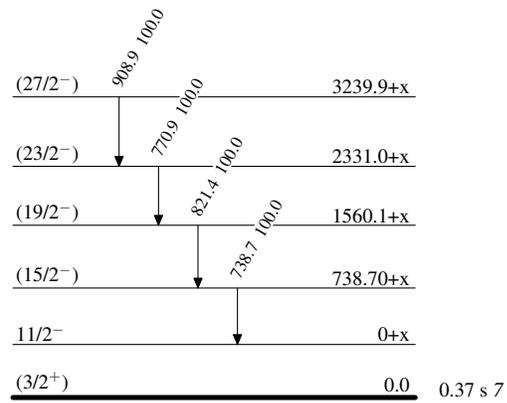
† From systematics and band assignments (2007Ho22).

$\gamma(^{127}\text{Cd})$

E _i (level)	J $^\pi_i$	E $_\gamma$	I $_\gamma$	E _f	J $^\pi_f$
738.70+x	(15/2 ⁻)	738.7 2	100.0	0+x	11/2 ⁻
1560.1+x	(19/2 ⁻)	821.4 7	100.0	738.70+x	(15/2 ⁻)
2331.0+x	(23/2 ⁻)	770.9 4	100.0	1560.1+x	(19/2 ⁻)
3239.9+x	(27/2 ⁻)	908.9 6	100.0	2331.0+x	(23/2 ⁻)

Adopted Levels, GammasLevel Scheme

Intensities: Relative photon branching from each level

 $^{127}_{48}\text{Cd}_{79}$