

Adopted Levels, Gammas

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	Jean Blachot	ENSDF	1-Jul-2006

$Q(\beta^-) = -7.2 \times 10^3$ syst; S(n)=9713.2 23; S(p)=4987 6; $Q(\alpha) = -456$ 5 [2012Wa38](#)

Note: Current evaluation has used the following Q record -7130 SY9.57E+3 18 4.89e+317-370 340 [2003Au03](#).

$\Delta Q(\beta^-) = 334$ ([2003Au03](#)).

A 15-min activity assigned to ^{101}Cd by [1966Bu05](#) via 340-MeV p on cadmium was not observed by [1970Hn03](#). The Sn(p,3pxn) yield ratio of activities 15 min/1.2 min < 0.004 ([1970Hn03](#)).

 ^{101}Cd LevelsCross Reference (XREF) Flags

A ^{101}In β^+ decay
B $^{92}\text{Mo}(^{12}\text{C}, 3n\gamma)$
C (HI,xn γ)

E(level)	J^π	$T_{1/2}$	XREF	Comments
0.0 [‡]	(5/2 ⁺)	1.36 min 5	ABC	$\% \varepsilon + \% \beta^+ = 100$ $T_{1/2}$: weighted average of: 1.37 min 5 (1980Ka05) and 1.2 min 2 (1969Ha03) β^+ decay; on-line ms of Sn(p,spallation) products. J^π : based on syst with ^{105}Cd , ^{107}Cd , ^{109}Cd g.s. and γ decays.
252.0 [‡] 1	(7/2 ⁺)		A C	
891.1 [#] 6	(9/2 ⁺)		C	
1143.7 [‡] 6	(11/2 ⁺)		C	
1672.6 [#] 1	(13/2 ⁺)		C	
1799.0 [‡] 1	(15/2 ⁺)		C	
2127.7 2	(15/2 ⁺)		C	
2284.8 [‡] 2	(19/2 ⁺)	4.6 ns 4	C	$T_{1/2}$: from 1992Al17 in (HI,xn γ).
2301.2 [#] 2	(17/2 ⁺)		C	
2404.1 2			C	
2479.8 [#] 2	(19/2 ⁺)		C	
2638.3 [‡] 2	(21/2 ⁺)		C	
2918.1 2			C	
3034.1 2			C	
3062.3 [#] 2	(21/2)		C	
3398.5 [‡] 2	(23/2 ⁺)		C	
3561.1 [@] 2	(23/2 ⁺)		C	
3657.3 2			C	
3700.8 [#] 2	(23/2)		C	
3717.6 5			C	
3739.5 [‡] 2	(25/2 ⁺)		C	
3991.3 [#] 2	(25/2)		C	
4062.3 [‡] 3	(27/2)		C	
4217.3 2			C	
4288.6 [@] 2	(25/2 ⁺)		C	
4380.9 2			C	
4504.2 [#] 2	(27/2)		C	
4687.9 3			C	
5039.4 [@] 2	(27/2,29/2)		C	

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Adopted Levels, Gammas (continued) ^{101}Cd Levels (continued)

E(level)	J^π [†]	XREF	E(level)	J^π [†]	XREF	E(level)	J^π [†]	XREF
5128.2 [‡] 3	(29/2)	C	6105.0 [@] 2	(31/2)	C	6531.9 [‡] 4	(33/2)	C
5612.7 [#] 2	(29/2)	C	6131.0 2		C	6824.8 [‡] 4	(35/2)	C
6014.4 4		C	6262.8 [‡] 3	(31/2)	C	7099.6 [‡] 4	(37/2)	C
6077.4 [#] 2	(31/2)	C	6363.2 [@] 2	(33/2)	C	7178.9 [@] 2	(35/2)	C

[†] J^π without comments are preliminary based on $\gamma(\theta)$.

[‡] Band(A): g.s. band.

[#] Band(B): band 2 Based on Gammas sequence.

[@] Band(C): band 3 Based on Gammas sequence.

 $\gamma(^{101}\text{Cd})$

$E_i(\text{level})$	J^π_i	E_γ	I_γ	E_f	J^π_f	Mult.	Comments
252.0	(7/2 ⁺)	252.0 1	100	0.0	(5/2 ⁺)		
891.1	(9/2 ⁺)	639.2 1	58 5	252.0	(7/2 ⁺)		
		891.1 1	100 12	0.0	(5/2 ⁺)		
1143.7	(11/2 ⁺)	250.2 6	2.7 3	891.1	(9/2 ⁺)		
		891.6 1	100 5	252.0	(7/2 ⁺)	(E2)	
1672.6	(13/2 ⁺)	528.8 1	44 3	1143.7	(11/2 ⁺)		
		781.6 1	100 6	891.1	(9/2 ⁺)		
1799.0	(15/2 ⁺)	126.5 1	5.6 3	1672.6	(13/2 ⁺)		
		655.3 1	100 5	1143.7	(11/2 ⁺)	(E2)	
2127.7	(15/2 ⁺)	328.7 1	97 7	1799.0	(15/2 ⁺)		
		984.1 2	100 17	1143.7	(11/2 ⁺)		
2284.8	(19/2 ⁺)	157.1 1	2.0 1	2127.7	(15/2 ⁺)		
		485.7 1	100 6	1799.0	(15/2 ⁺)	(E2)	B(E2)(W.u.)=0.160 20
2301.2	(17/2 ⁺)	502.4 1	42 9	1799.0	(15/2 ⁺)		
		628.5 1	100 7	1672.6	(13/2 ⁺)		
2404.1		103.0 1	100	2301.2	(17/2 ⁺)		
2479.8	(19/2 ⁺)	75.9 1	33.3 23	2404.1			
		178.6 1	100 6	2301.2	(17/2 ⁺)		
2638.3	(21/2 ⁺)	158.4 1	4.1 3	2479.8	(19/2 ⁺)		
		353.4 1	100 5	2284.8	(19/2 ⁺)		
2918.1		633.3 1	100	2284.8	(19/2 ⁺)		
3034.1		395.7 1	100	2638.3	(21/2 ⁺)		
3062.3	(21/2)	582.5 1	30.1 18	2479.8	(19/2 ⁺)		
		777.5 1	100 6	2284.8	(19/2 ⁺)		
3398.5	(23/2 ⁺)	760.2 1	100 6	2638.3	(21/2 ⁺)		
		918.8 1	21.8 14	2479.8	(19/2 ⁺)		
3561.1	(23/2 ⁺)	922.8 1	100	2638.3	(21/2 ⁺)		
3657.3		258.8 1	48 5	3398.5	(23/2 ⁺)		
		1019.0 1	100 8	2638.3	(21/2 ⁺)		
3700.8	(23/2)	638.5 1	100	3062.3	(21/2)		
3717.6		157.6 6	100	3561.1	(23/2 ⁺)		
3739.5	(25/2 ⁺)	82.0 1	5.4 4	3657.3			
		178.2 3	1.2 4	3561.1	(23/2 ⁺)		
		341.1 1	100 5	3398.5	(23/2 ⁺)		
		679.0 9	5.0 4	3062.3	(21/2)		
		1101.2 1	58 3	2638.3	(21/2 ⁺)		
3991.3	(25/2)	290.4 1	100 5	3700.8	(23/2)		
		334.0 1	45 4	3657.3			
		592.7 1	68 4	3398.5	(23/2 ⁺)		

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Adopted Levels, Gammas (continued) $\gamma(^{101}\text{Cd})$ (continued)

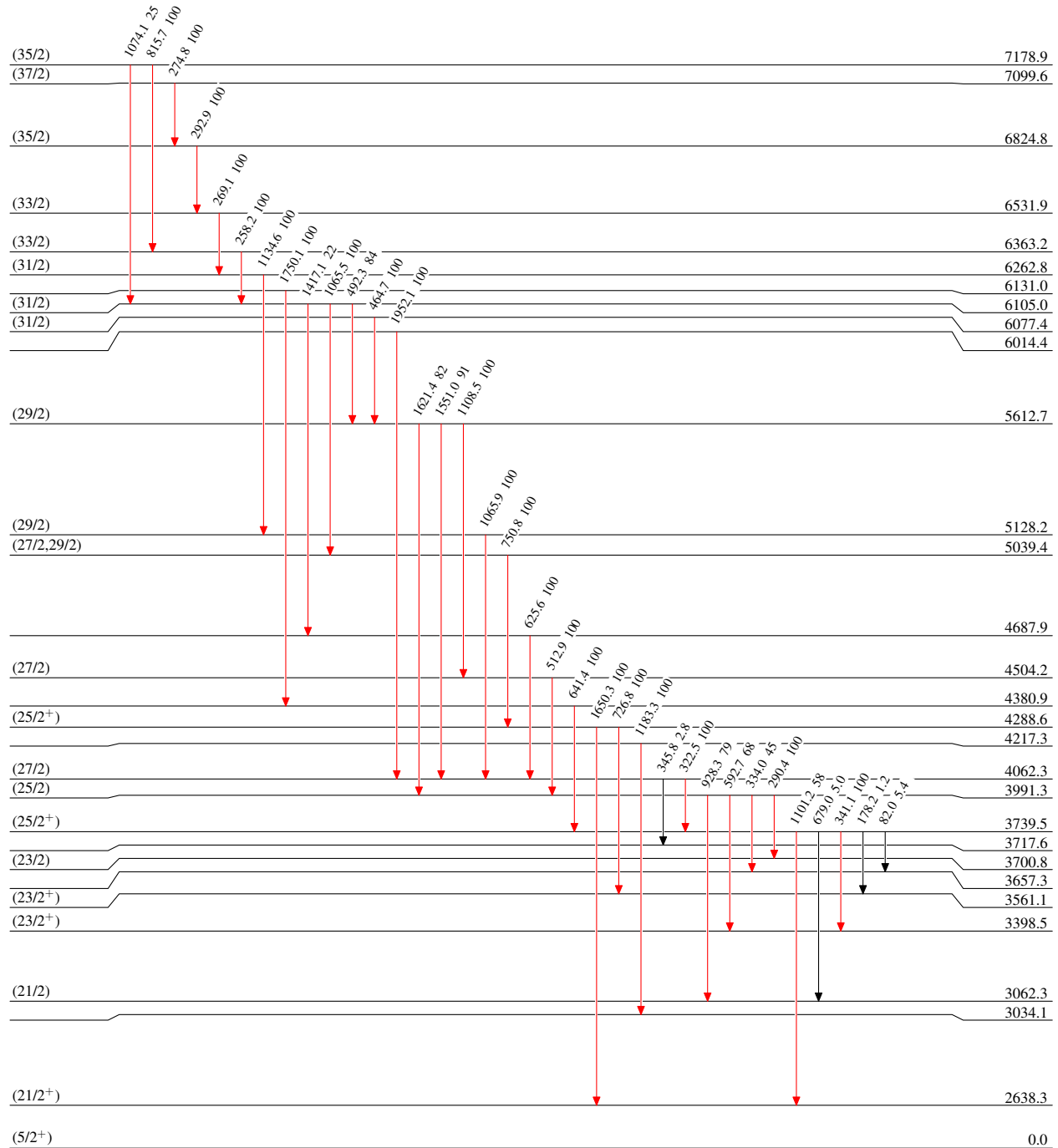
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π
3991.3	(25/2)	928.3 6	79 5	3062.3	(21/2)
4062.3	(27/2)	322.5 1	100 5	3739.5	(25/2 ⁺)
		345.8 6	2.8 4	3717.6	
4217.3		1183.3 1	100	3034.1	
4288.6	(25/2 ⁺)	726.8 6	100 6	3561.1	(23/2 ⁺)
		1650.3 1	100 6	2638.3	(21/2 ⁺)
4380.9		641.4 1	100	3739.5	(25/2 ⁺)
4504.2	(27/2)	512.9 1	100	3991.3	(25/2)
4687.9		625.6 1	100	4062.3	(27/2)
5039.4	(27/2,29/2)	750.8 1	100	4288.6	(25/2 ⁺)
5128.2	(29/2)	1065.9 1	100	4062.3	(27/2)
5612.7	(29/2)	1108.5 1	100 9	4504.2	(27/2)
		1551.0 6	91 5	4062.3	(27/2)
		1621.4 2	82 9	3991.3	(25/2)
6014.4		1952.1 2	100	4062.3	(27/2)
6077.4	(31/2)	464.7 1	100	5612.7	(29/2)
6105.0	(31/2)	492.3 1	84 5	5612.7	(29/2)
		1065.5 1	100 7	5039.4	(27/2,29/2)
		1417.1 2	22 3	4687.9	
6131.0		1750.1 1	100	4380.9	
6262.8	(31/2)	1134.6 1	100	5128.2	(29/2)
6363.2	(33/2)	258.2 1	100	6105.0	(31/2)
6531.9	(33/2)	269.1 1	100	6262.8	(31/2)
6824.8	(35/2)	292.9 1	100	6531.9	(33/2)
7099.6	(37/2)	274.8 1	100	6824.8	(35/2)
7178.9	(35/2)	815.7 1	100 6	6363.2	(33/2)
		1074.1 2	25 4	6105.0	(31/2)

Adopted Levels, GammasLevel Scheme

Intensities: Type not specified

Legend

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



1.36 min 5

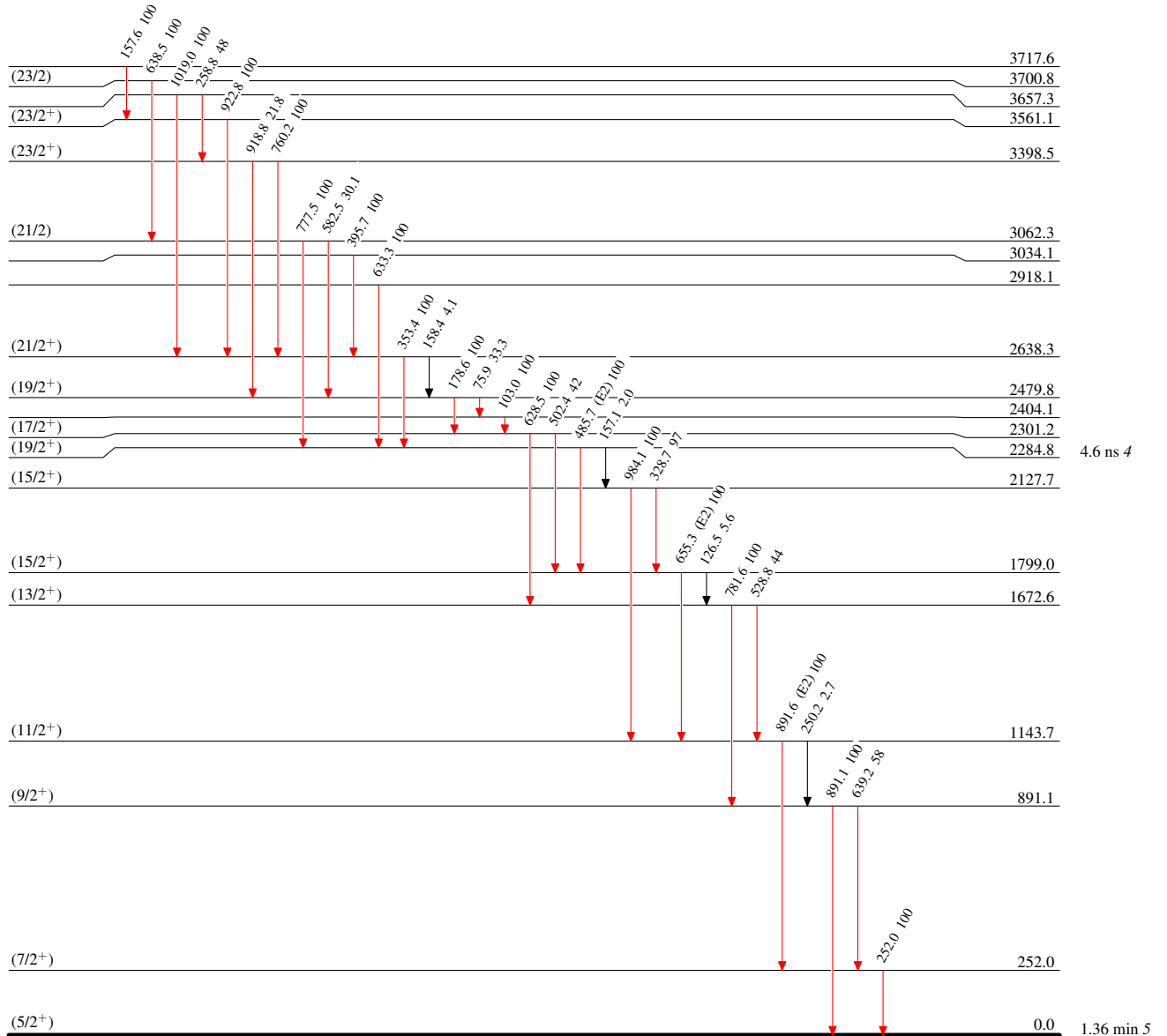
 $^{101}_{48}\text{Cd}_{53}$

Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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

 $^{101}_{48}\text{Cd}_{53}$

Adopted Levels, Gammas