

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne	NDS 110,1745 (2009)	31-Dec-2008

$Q(\beta^-) = -8966.5$; $S(n) = 11894.4$ 23; $S(p) = 5614$ 6; $Q(\alpha) = -763$ 5 [2012Wa38](#)

Note: Current evaluation has used the following Q record $-897\text{E}+1$ 1112000 15574e+1 11-802 36 [2003Au03](#).

Mass excess: -79672 7 ([2007Ma92](#)).

 ^{102}Cd Levels

All band information from [1997Pe25](#) and [2001Li24](#) in (HI,xn γ).

Cross Reference (XREF) Flags

A ^{102}In ε decay
B ^{103}Sn εp decay: 7.0 s
C (HI,xn γ)

E(level) [†]	J ^π [‡]	T _{1/2} ^{@&}	XREF	Comments
0.0 ^a	0 ⁺	5.5 min 5	ABC	$\% \varepsilon + \% \beta^+ = 100$ $\langle r^2 \rangle^{1/2} = 4.4704$ fm 95 (2004An14 , evaluation). T _{1/2} : from 1969Ha03 . T _{1/2} : from (2007Bo17). T _{1/2} : Other: 5.6 ns < (2001Li24). J ^π : From E2 to 0 ⁺ . J ^π : From E2 to 2 ⁺ . E(level): Only observed by 1996Ra23 , J ^π =(0 ⁺) suggested.
776.55 ^a 14	2 ⁺	3.5 ps 6	ABC	J ^π : (2 ⁺) suggested from (HI,xn γ). J ^π : E2 to 4 ⁺ . ε branch from (6 ⁺).
1637.9 ^a 3	4 ⁺	<5.6 ps	A C	J ^π : γ to 4 ⁺ . ε branch from (6 ⁺).
1649.3?			C	Q=0.87 10 $\mu = +10.32$ 24 Q: From 1992Al17 . μ : From 1992Al17 . T _{1/2} : 2001Li24 quote from 1992Al17 . Also 38.8 ns 28 2007Bo17 , 17 ns 7 (1982Tr04). J ^π : from PAD in (HI,xn γ) 157 γ stretched E2 to 6 ⁺ (1992Al17).
2035.2 3	(5 ⁺ , 6 ⁺) [#]		A	
2230.8 ^a 3	6 ⁺	19.4 ps 14	A C	
2387.3 4	(6 ⁺) [#]		A	
2402.8 4			A	
2482.6?			C	
2561.3 3	(6 ⁺)		A C	
2589.9 4			A	
2597.63 21			A	
2674.6			A	
2676.78 ^c	(6 ⁺) [#]		A C	
2718.6 3	(8 ⁺)	39 ns 3	A C	
2730.6 20			A	
2827.95 22			A	
2856.2 9			A	
2868.1 10			A	
2874.24 18			A	
2930.9 6			A	
2985.0 5			A	
3029.8 11			A	
3041.9 11			A	
3052.9 ^a 4	8 ⁺	3.1 ps 7	A C	

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Adopted Levels, Gammas (continued) ^{102}Cd Levels (continued)

E(level) [†]	J^{π} [‡]	XREF	Comments
3058.6		A	
3072.7 20		A	
3098.9 8		A	
3115.4 20		A	
3128.9 3		A	
3149.7 20		A	
3187.49? ^c 19		C	Ordering of the 1081-952-849-511 cascade is not certain in this band so no J^{π} values given here by 2001Li24 .
3193.7 7		A	
3197.2 5		A	
3218.3 8		A	
3228.8 6		A	
3263.4 20		A	
3268.1 5		A	
3271.0 3		A	
3276.9 7		A	
3339.0 10		A	
3370.9 20		A	
3381.3 8		A	
3385.1 8		A	
3389.2 4		A	
3422.2 5		A	
3449.67 25		A	
3477.6 11		A	
3481.8 20		A	
3494.7 6		A	
3498.7 20		A	
3537.6 5		A	
3552.0 3		A	
3563.2 3		A	
3572.7 10		A	
3577.4 9		A	
3577.67 11	(8 ⁺)	C	
3583.3 20		A	
3590.0 15		A	
3594.9 6		A	
3598.4 8		A	
3604.8 20		A	
3609.1 4		A	
3613.3 20		A	
3637.4 4		A	
3649.0 4		A	
3689.4 20		A	
3702.9 5		A	
3724.0 9		A	
3735.7 20		A	
3741.0 4		A	
3750.1 11		A	
3753.0 3		A	
3780.5 7		A	
3805.6 5		A	
3810.4 4	(9 ⁺)	C	
3829.5 4		A	
3847.3 11		A	
3853.5 5		A	
3864.3 5		A	
3874.4 15		A	

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Adopted Levels, Gammas (continued) ^{102}Cd Levels (continued)

E(level) [†]	J ^π [‡]	T _{1/2} ^{@&}	XREF	Comments
3877.4 4			A	
3894.4 8			A	
3907.1 8			A	
3908.4 ^a 4	10 ⁺	1.2 ps 4	C	
3911.5 4			A	
3920.1 9			A	
3938.1 7			A	
3952.2 9			A	
3961.7 5			A	
3976.3 4			A	
3989.6 10			A	
3999.2 5			A	
4008.03 10	(10 ⁺)	0.62 ps 14	C	
4015.3 7			A	
4022.3 7			A	
4028.0 11			A	
4034.6 6			A	
4036.50 ^c 20			C	Ordering of the 1081-952-849-511 cascade is not certain in this band so no J ^π values given here by 2001Li24.
4039.7 7			A	
4048.9 4			A	
4071.7 4			A	
4082.4 11			A	
4085.9 6			A	
4088.1 10			A	
4103.9 11			A	
4121.4 10			A	
4131.2 6			A	
4142.4 20			A	
4147.0 3			A	
4162.0 21			A	
4175.8 10			A	
4182.8 4			A	
4189.5 8			A	
4197.2 15			A	
4206.2 3			A	
4224.1 7			A	
4227.9 5			A	
4242.5 20			A	
4252.7 15			A	
4265.63 25			A	
4277.0 ^d 4	(11) ⁺	1.04 ps 14	C	J ^π : π=+ from measured short lifetime of yrast states above the 10 ⁺ level which rules out any change of parity and determines the stretched M1 character of the upper transitions in the cascade (2001Li24).
4282.8 5			A	
4311.7 4			A	
4332.7 20			A	
4335.2 10			A	
4340.2 5			A	
4349.78 ^b 11	(9 ⁻)		C	
4357.9 8			A	
4360.6 8			A	
4368.1 21			A	
4373.0 7			A	
4377.4 11			A	
4385.7 5			A	

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Adopted Levels, Gammas (continued) ^{102}Cd Levels (continued)

E(level) [†]	J^π [‡]	$T_{1/2}$ ^{@&}	XREF	Comments
4416.0 4			A	
4424.3 11			A	
4427.6 5			A	
4440.8 10			A	
4446.0 21			A	
4453.6 7			A	
4460.1 20			A	
4479.3 11			A	
4497.1 7			A	
4512.8 15			A	
4518.3 ^d 5	(12) ⁺	1.73 ps 14	C	
4525.3 5			A	
4528.8 21			A	
4536.4 9			A	
4569.3 10			A	
4582.0 6			A	
4601.1 5			A	
4628.9 10			A	
4640.5 7			A	
4657.3 20			A	
4664.5 6			A	
4668.9 15			A	
4672.7 20			A	
4680.3 7			A	
4685.3 11			A	
4689.8 7			A	
4709.4 11			A	
4716.9 20			A	
4720.9 15			A	
4735.8 9			A	
4736.57 15	(13)		C	
4739.7 5			A	
4754.3 15			A	
4777.3 4			A	
4797.9 20			A	
4821.1 8			A	
4824.0 10			A	
4827.8 9			A	
4845.5 6			A	
4861.8 20			A	
4872.1 8			A	
4886.4 8			A	
4906.7 7			A	
4909.6 9			A	
4915.6 5			A	
4925.0 5			A	
4930.1 ^b 20			A	
4960.53? 15	(12)		C	
4981.8 5			A	
4988.97? ^c 20			C	Ordering of the 1081-952-849-511 cascade is not certain in this band so no J^π values given here by 2001Li24.
4996.1 20			A	
5004.1 20			A	
5022.1 20			A	
5040.7 9			A	
5055.3 20			A	

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Adopted Levels, Gammas (continued) ^{102}Cd Levels (continued)

E(level) [†]	J^{π} [‡]	$T_{1/2}$ ^{@&}	XREF	Comments
5064.8 8			A	
5068.1 6			A	
5071.6 11			A	
5105.4 11			A	
5107.4 7			A	
5127.5 9			A	
5130.5 11			A	
5141.2 5			A	
5149.7 21			A	
5175.6 5			A	
5182.3 21			A	
5191.3 10			A	
5193.9 6			A	
5196.75? ^b 11	(11 ⁻)		C	
5237.5 7			A	
5246.2 9			A	
5273.8 12			A	
5298.2 10			A	
5308.77 ^d 11	(13) ⁺	0.28 ps 7	C	
5332.5 10			A	
5361.6 11			A	
5387.9 11			A	
5396.6 7			A	
5399.1 5			A	
5407.21? ^c 21			C	Ordering of the 1081-952-849-511 cascade is not certain in this band so no J^{π} values given here by 2001Li24.
5420.7 9			A	
5435.9 10			A	
5441.2 20			A	
5462.2 20			A	
5477.7 20			A	
5489.2 7			A	
5506.9 7			A	
5508.7 5			A	
5540.1 8			A	
5570.5 7			A	
5614.1 20			A	
5621.2 9			A	
5654.8 5			A	
5670.9 6			A	
5691.7 4			A	
5702.1 10			A	
5705.4 11			A	
5722.7 6			A	
5737.4 20			A	
5752.7 6			A	
5758.8 15			A	
5769.24 11	14		C	
5769.6 20			A	
5779.8 8			A	
5787.2 10			A	
5797.3 11			A	
5811.6 21			A	
5838.9 20			A	
5849.0 10			A	
5857.8 12			A	

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Adopted Levels, Gammas (continued) ^{102}Cd Levels (continued)

E(level) [†]	J ^π [‡]	T _{1/2} ^{@&}	XREF	Comments
5861.6 20			A	
5865.6 8			A	
5879.9 11			A	
5888.3 20			A	
5895.0 20			A	
5902.4 21			A	
5909.2 7			A	
5918.9 8			A	
5926.23 ^d 11	(14) ⁺	1.52 ps 14	C	T _{1/2} : effective lifetime.
5932.6 6			A	
5934.5 5			A	
5945.4 9			A	
5948.3 9			A	
6018.9 11			A	
6057.6 11			A	
6066.3 21			A	
6069.71 ^c 19	(12)		C	
6080.65 ^b 11	(13 ⁻)		C	
6083.5 11			A	
6111.2 20			A	
6146.0 20			A	
6150.4 12			A	
6169.4 11			A	
6195.6 6			A	
6225.9 8			A	
6244.3 20			A	
6255.7 15			A	
6287.11 [?] 19	(15)		C	
6292.2 6			A	
6320.5 11			A	
6323.54 13	(13 ⁻)		C	
6344.1 11			A	
6352.2 10			A	
6418.6 15			A	
6447.9 11			A	
6504.8 20			A	
6525.8 11			A	
6554.8 11			A	
6563.18 13	(14 ⁻)		C	
6612.1 11			A	
6650.9 20			A	
6666.8 20			A	
6688.8 20			A	
6712.38 [?] 24	(16)		C	
6746.16 ^c 15	(14 ⁻)	>5.5 ps	C	
6746.7			A	
6773.21 ^d 14	(15)		C	
6800.0			A	
6827.49 12	(14)		C	
6963.8 20			A	
7007.2 ^b 20			A	
7011.10 ^b 12	(15 ⁻)		C	
7124.1 11			A	
7261.96 13	(15)		C	
7332.00 ^d 14	(16)		C	

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Adopted Levels, Gammas (continued) ^{102}Cd Levels (continued)

E(level) [†]	J^π [‡]	$T_{1/2}$ ^{@&}	XREF	Comments
7361.0 20			A	
7788.93? ^c 18	(16)	>5.5 ps	C	
7943.66 15	(16)		C	
8099.66 ^b 13	(17 ⁻)	>1.25 ps	C	
8367.42 ^d 21	(17)		C	
8508.34 18	(17)		C	
8845.38? ^c 23	(18)	1.80 ps 14	C	$T_{1/2}$: effective lifetime.
8942.69 ^b 18	(18 ⁻)	>1.25 ps	C	
9233.43 ^b 21	(19 ⁻)	1.59 ps 14	C	$T_{1/2}$: effective lifetime.
10513.7? ^c 3	(20)		C	

[†] Calculated with least squares procedure using adopted gammas.

[‡] Unless noted otherwise, from $\gamma(\theta)$, in (HI,xn γ) and level systematics of light Cd isotopes. Members of the $\Delta J=2$ g.s. band up to $J^\pi=6^+$ connected by stretched E2's.

[#] From ε decay feeding from (6^+) and γ decay pattern.

[@] Unless noted otherwise, from 2001Li24 in (HI,xn γ). Lifetime measurements were determined using recoil distance Doppler shift technique (RDDS).

[&] For some levels the effective lifetime was obtained. This half-life is obtained assuming 100% side-feeding into the top of the band via a cascade of transitions with the same moment of inertia as the in-band transitions. The highest γ ray for which a line shape was observed was then fitted and the extracted life time is called effective lifetime. This lifetime was used as input parameter to extract the lifetimes of the states lower in the cascade (see also 2005Si23).

^a Band(A): member of $\Delta J=2$ g.s. band.

^b Band(B): band based on $9^{(-)}$.

^c Band(C): Band based on (6^+). Ordering of the 1081-952-849-511 cascade is not certain in this band.

^d Band(D): Band based on $11^{(+)}$. continuation of g.s. band.

 $\gamma(^{102}\text{Cd})$

$E_i(\text{level})$	J^π_i	E_γ [†]	I_γ [†]	E_f	J^π_f	Mult. ^{#@}	Comments
776.55	2 ⁺	776.55 14	100	0.0	0 ⁺	E2	B(E2)(W.u.)=20 4
1637.9	4 ⁺	861.3 3	100	776.55	2 ⁺	E2	B(E2)(W.u.)>7.5
1649.3?		873 ^{&}		776.55	2 ⁺		
2035.2	(5 ⁺ ,6 ⁺)	397.3 [‡] 1	100 [‡] 5	1637.9	4 ⁺		
		1258.8 [‡] 4	27 [‡] 2	776.55	2 ⁺		
2230.8	6 ⁺	593.07 9	100	1637.9	4 ⁺	E2	B(E2)(W.u.)=14.0 11
2387.3	(6 ⁺)	749.4 2	100	1637.9	4 ⁺		
2402.8		368.5 6	100	2035.2	(5 ⁺ ,6 ⁺)		
		765.3 6	100	1637.9	4 ⁺		
2482.6?		833.3 ^{&}		1649.3?			
2561.3	(6 ⁺)	157.0 [‡] 8	0.74 [‡] 11	2402.8			
		330.4 [‡] 2	10.3 [‡] 3	2230.8	6 ⁺	D+Q	
		526.9 [‡] 8	0.9 [‡] 3	2035.2	(5 ⁺ ,6 ⁺)		
		923.5 [‡] 1	100 [‡] 2	1637.9	4 ⁺	E2	
2589.9		952.4 [‡] 8	100 [‡]	1637.9	4 ⁺		
2597.63		563.0 [‡] 3	100 [‡] 5	2035.2	(5 ⁺ ,6 ⁺)		
		959.9 [‡] 2	92 [‡] 9	1637.9	4 ⁺		
2674.6		271.7 [‡] 7	74 [‡] 5	2402.8			

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Adopted Levels, Gammas (continued)

$\gamma(^{102}\text{Cd})$ (continued)							
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult. #@	Comments
2674.6		287.8 $\frac{3}{2}$ 2	100 $\frac{3}{2}$ 9	2387.3	(6 ⁺)		
2676.78	(6 ⁺)	1038.96 5	100	1637.9	4 ⁺	Q	
2718.6	(8 ⁺)	157.22 5	100 4	2561.3	(6) ⁺	Q	B(E2)(W.u.)=2.7 3
		487.43 4	65 7	2230.8	6 ⁺	(E2)	B(E2)(W.u.)=0.0061 9
		684.1 $\frac{3}{2}$ 3	24.7 $\frac{3}{2}$ 13	2035.2	(5 ⁺ ,6 ⁺)		
		1942.2 $\frac{3}{2}$ 10	7.3 $\frac{3}{2}$ 13	776.55	2 ⁺		
2730.6		500.0 $\frac{3}{2}$ 20	100 $\frac{3}{2}$	2230.8	6 ⁺		
2827.95		266.5 $\frac{3}{2}$ 6	8.5 $\frac{3}{2}$ 16	2561.3	(6) ⁺		
		425.1 $\frac{3}{2}$ 7	7 $\frac{3}{2}$ 3	2402.8			
		440.9 $\frac{3}{2}$ 5	21 $\frac{3}{2}$ 3	2387.3	(6 ⁺)		
		597.4 $\frac{3}{2}$ 8	10 $\frac{3}{2}$ 3	2230.8	6 ⁺		
		793.7 $\frac{3}{2}$ 2	100 $\frac{3}{2}$ 5	2035.2	(5 ⁺ ,6 ⁺)		
2856.2		469.4 $\frac{3}{2}$ 8	100 $\frac{3}{2}$	2387.3	(6 ⁺)		
2868.1		481.3 $\frac{3}{2}$ 9	100 $\frac{3}{2}$	2387.3	(6 ⁺)		
2874.24		313.2 $\frac{3}{2}$ 1	94.6 $\frac{3}{2}$ 17	2561.3	(6) ⁺		
		487.6 $\frac{3}{2}$ 8	4.3 $\frac{3}{2}$ 11	2387.3	(6 ⁺)		
		644.2 $\frac{3}{2}$ 10	4.3 $\frac{3}{2}$ 11	2230.8	6 ⁺		
		1236.6 $\frac{3}{2}$ 20	100 $\frac{3}{2}$ 7	1637.9	4 ⁺		
2930.9		700.3 $\frac{3}{2}$ 5	100 $\frac{3}{2}$	2230.8	6 ⁺		
2985.0		423.9 $\frac{3}{2}$ 7	100 $\frac{3}{2}$	2561.3	(6) ⁺		
3029.8		995.5 $\frac{3}{2}$ 10	100 $\frac{3}{2}$	2035.2	(5 ⁺ ,6 ⁺)		
3041.9		480.8 10	100	2561.3	(6) ⁺		
3052.9	8 ⁺	822.03 3	100	2230.8	6 ⁺	E2	B(E2)(W.u.)=17 4
3058.6		1024.3 $\frac{3}{2}$ 10	100 $\frac{3}{2}$	2035.2	(5 ⁺ ,6 ⁺)		
3072.7		842.1 $\frac{3}{2}$ 20	100 $\frac{3}{2}$	2230.8	6 ⁺		
3098.9		696.1 $\frac{3}{2}$ 7	100 $\frac{3}{2}$	2402.8			
3115.4		884.8 $\frac{3}{2}$ 20	100 $\frac{3}{2}$	2230.8	6 ⁺		
3128.9		567.9 $\frac{3}{2}$ 4	100 $\frac{3}{2}$ 6	2561.3	(6) ⁺		
		742.4 $\frac{3}{2}$ 3	66 $\frac{3}{2}$ 6	2387.3	(6 ⁺)		
		898.6 $\frac{3}{2}$ 10	61 $\frac{3}{2}$ 6	2230.8	6 ⁺		
3149.7		762.9 $\frac{3}{2}$ 20	100 $\frac{3}{2}$	2387.3	(6 ⁺)		
3187.49?		510.70 4	100	2676.78	(6 ⁺)		
3193.7		963.1 $\frac{3}{2}$ 6	100 $\frac{3}{2}$	2230.8	6 ⁺		
3197.2		810.4 $\frac{3}{2}$ 6	25 $\frac{3}{2}$ 7	2387.3	(6 ⁺)		
		1162.9 $\frac{3}{2}$ 7	100 $\frac{3}{2}$ 23	2035.2	(5 ⁺ ,6 ⁺)		
3218.3		987.7 $\frac{3}{2}$ 7	100 $\frac{3}{2}$	2230.8	6 ⁺		
3228.8		667.9 $\frac{3}{2}$ 7	85 $\frac{3}{2}$ 12	2561.3	(6) ⁺		
		997.9 $\frac{3}{2}$ 10	100 $\frac{3}{2}$ 24	2230.8	6 ⁺		
3263.4		876.6 $\frac{3}{2}$ 20	100 $\frac{3}{2}$	2387.3	(6 ⁺)		
3268.1		706.4 $\frac{3}{2}$ 20	5.6 $\frac{3}{2}$ 12	2561.3	(6) ⁺		
		1038.3 $\frac{3}{2}$ 6	100 $\frac{3}{2}$ 5	2230.8	6 ⁺		
		1232.8 $\frac{3}{2}$ 7	7.6 $\frac{3}{2}$ 16	2035.2	(5 ⁺ ,6 ⁺)		
		1630.2 $\frac{3}{2}$ 20	23 $\frac{3}{2}$ 4	1637.9	4 ⁺		
3271.0		884.6 $\frac{3}{2}$ 4	100 $\frac{3}{2}$	2387.3	(6 ⁺)		

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Adopted Levels, Gammas (continued) $\gamma(^{102}\text{Cd})$ (continued)

$E_i(\text{level})$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π
3276.9	873.9 $^{+20}_{-10}$	71 $^{+8}_{-8}$	2402.8	
	1243.7 $^{+10}_{-10}$	100 $^{+32}_{-32}$	2035.2	(5 ⁺ ,6 ⁺)
3339.0	1304.7 $^{+9}_{-9}$	100 $^{+32}_{-32}$	2035.2	(5 ⁺ ,6 ⁺)
3370.9	1336.6 $^{+20}_{-20}$	100 $^{+32}_{-32}$	2035.2	(5 ⁺ ,6 ⁺)
3381.3	994.5 $^{+7}_{-7}$	100 $^{+32}_{-32}$	2387.3	(6 ⁺)
3385.1	824.0 $^{+7}_{-7}$	100 $^{+32}_{-32}$	2561.3	(6 ⁺)
3389.2	828.4 $^{+9}_{-9}$	24 $^{+4}_{-4}$	2561.3	(6 ⁺)
	1002.5 $^{+5}_{-5}$	9.6 $^{+9}_{-9}$	2387.3	(6 ⁺)
	1158.6 $^{+10}_{-10}$	11.6 $^{+19}_{-19}$	2230.8	6 ⁺
	1354.4 $^{+10}_{-10}$	33 $^{+6}_{-6}$	2035.2	(5 ⁺ ,6 ⁺)
	1751.2 $^{+8}_{-8}$	100.0 $^{+12}_{-12}$	1637.9	4 ⁺
3422.2	703.9 $^{+8}_{-8}$	80 $^{+16}_{-16}$	2718.6	(8 ⁺)
	1035.7 $^{+7}_{-7}$	40 $^{+12}_{-12}$	2387.3	(6 ⁺)
	1191.5 $^{+9}_{-9}$	76 $^{+20}_{-20}$	2230.8	6 ⁺
	1387.4 $^{+20}_{-20}$	100 $^{+16}_{-16}$	2035.2	(5 ⁺ ,6 ⁺)
3449.67	575.7 $^{+3}_{-3}$	100 $^{+4}_{-4}$	2874.24	
	851.4 $^{+3}_{-3}$	36 $^{+5}_{-5}$	2597.63	
	889.1 $^{+7}_{-7}$	14 $^{+4}_{-4}$	2561.3	(6 ⁺)
	1064.9 $^{+9}_{-9}$	13 $^{+5}_{-5}$	2387.3	(6 ⁺)
	1416.6 $^{+8}_{-8}$	45 $^{+4}_{-4}$	2035.2	(5 ⁺ ,6 ⁺)
	1813.3 $^{+20}_{-20}$	50 $^{+7}_{-7}$	1637.9	4 ⁺
3477.6	1443.3 $^{+10}_{-10}$	100 $^{+32}_{-32}$	2035.2	(5 ⁺ ,6 ⁺)
3481.8	763.7 $^{+20}_{-20}$	100 $^{+32}_{-32}$	2718.6	(8 ⁺)
3494.7	933.8 $^{+6}_{-6}$	100 $^{+15}_{-15}$	2561.3	(6 ⁺)
	1263.4 $^{+10}_{-10}$	51 $^{+12}_{-12}$	2230.8	6 ⁺
3498.7	1464.4 $^{+20}_{-20}$	100 $^{+32}_{-32}$	2035.2	(5 ⁺ ,6 ⁺)
3537.6	947.4 $^{+4}_{-4}$	100 $^{+13}_{-13}$	2589.9	
	1152.2 $^{+10}_{-10}$	84 $^{+13}_{-13}$	2387.3	(6 ⁺)
3552.0	499.6 $^{+10}_{-10}$	20.0 $^{+19}_{-19}$	3052.9	8 ⁺
	676.5 $^{+20}_{-20}$	78 $^{+11}_{-11}$	2874.24	
	990.4 $^{+9}_{-9}$	8.6 $^{+24}_{-24}$	2561.3	(6 ⁺)
	1150.4 $^{+20}_{-20}$	17.3 $^{+24}_{-24}$	2402.8	
	1165.9 $^{+10}_{-10}$	9 $^{+3}_{-3}$	2387.3	(6 ⁺)
	1321.4 $^{+3}_{-3}$	100 $^{+6}_{-6}$	2230.8	6 ⁺
	1519.3 $^{+10}_{-10}$	16 $^{+5}_{-5}$	2035.2	(5 ⁺ ,6 ⁺)
3563.2	688.9 $^{+3}_{-3}$	100 $^{+6}_{-6}$	2874.24	
	1002.1 $^{+10}_{-10}$	16.4 $^{+15}_{-15}$	2561.3	(6 ⁺)
	1176.6 $^{+10}_{-10}$	12 $^{+3}_{-3}$	2387.3	(6 ⁺)
	1527.1 $^{+20}_{-20}$	18 $^{+4}_{-4}$	2035.2	(5 ⁺ ,6 ⁺)
	1926.9 $^{+20}_{-20}$	19 $^{+8}_{-8}$	1637.9	4 ⁺
	2785.6 $^{+20}_{-20}$	5.9 $^{+21}_{-21}$	776.55	2 ⁺
3572.7	854.3 $^{+10}_{-10}$	68 $^{+20}_{-20}$	2718.6	(8 ⁺)
	1171.0 $^{+20}_{-20}$	100 $^{+20}_{-20}$	2402.8	

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

$\gamma(^{102}\text{Cd})$ (continued)						
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult. # @
3577.4		1346.6 $^{+20}_{-10}$	69 $^{+17}_{-17}$	2230.8	6 $^+$	
		1543.1 $^{+10}_{-10}$	100 $^{+31}_{-31}$	2035.2	(5 $^+$,6 $^+$)	
3577.67	(8 $^+$)	858.99 5	100 5	2718.6	(8 $^+$)	D+Q
		1016.29 4	84 4	2561.3	(6 $^+$)	Q
3583.3		709.1 $^{+20}_{-20}$	100 $^{+20}_{-20}$	2874.24		
3590.0		1185.8 $^{+20}_{-20}$	100 $^{+20}_{-20}$	2402.8		
		1557.0 $^{+20}_{-20}$	31 $^{+12}_{-12}$	2035.2	(5 $^+$,6 $^+$)	
3594.9		1034.4 $^{+7}_{-7}$	48 $^{+16}_{-16}$	2561.3	(6 $^+$)	
		1207.4 $^{+8}_{-8}$	22 $^{+8}_{-8}$	2387.3	(6 $^+$)	
		1364.0 $^{+20}_{-20}$	100 $^{+20}_{-20}$	2230.8	6 $^+$	
3598.4		613.5 $^{+6}_{-6}$	15 $^{+3}_{-3}$	2985.0		
		723.7 $^{+20}_{-20}$	100 $^{+16}_{-16}$	2874.24		
3604.8		1570.5 $^{+20}_{-20}$	100 $^{+20}_{-20}$	2035.2	(5 $^+$,6 $^+$)	
3609.1		1222.4 $^{+4}_{-4}$	38 $^{+12}_{-12}$	2387.3	(6 $^+$)	
		1378.3 $^{+5}_{-5}$	100 $^{+14}_{-14}$	2230.8	6 $^+$	
		1971.2 $^{+20}_{-20}$	31 $^{+12}_{-12}$	1637.9	4 $^+$	
3613.3		1579.0 $^{+20}_{-20}$	100 $^{+20}_{-20}$	2035.2	(5 $^+$,6 $^+$)	
3637.4		919.6 $^{+5}_{-5}$	4.2 $^{+16}_{-16}$	2718.6	(8 $^+$)	
		1251.2 $^{+20}_{-20}$	15 $^{+5}_{-5}$	2387.3	(6 $^+$)	
		1407.3 $^{+5}_{-5}$	41 $^{+8}_{-8}$	2230.8	6 $^+$	
		1998.8 $^{+5}_{-5}$	100 $^{+14}_{-14}$	1637.9	4 $^+$	
3649.0		1246.8 $^{+5}_{-5}$	26 $^{+12}_{-12}$	2402.8		
		1417.9 $^{+5}_{-5}$	100 $^{+18}_{-18}$	2230.8	6 $^+$	
		1614.3 $^{+7}_{-7}$	100 $^{+15}_{-15}$	2035.2	(5 $^+$,6 $^+$)	
3689.4		1655.1 $^{+20}_{-20}$	100 $^{+20}_{-20}$	2035.2	(5 $^+$,6 $^+$)	
3702.9		1142.4 $^{+6}_{-6}$	100 $^{+10}_{-10}$	2561.3	(6 $^+$)	
		1668.2 $^{+20}_{-20}$	28 $^{+10}_{-10}$	2035.2	(5 $^+$,6 $^+$)	
		2065.5 $^{+20}_{-20}$	20 $^{+8}_{-8}$	1637.9	4 $^+$	
3724.0		1493.6 $^{+9}_{-9}$	100 $^{+7}_{-7}$	2230.8	6 $^+$	
		2085.2 $^{+20}_{-20}$	3.5 $^{+18}_{-18}$	1637.9	4 $^+$	
3735.7		2098.1 $^{+20}_{-20}$	100 $^{+20}_{-20}$	1637.9	4 $^+$	
3741.0		469.8 $^{+10}_{-10}$	12 $^{+3}_{-3}$	3271.0		
		1354.4 $^{+10}_{-10}$	29 $^{+6}_{-6}$	2387.3	(6 $^+$)	
		1510.4 $^{+4}_{-4}$	100 $^{+11}_{-11}$	2230.8	6 $^+$	
		2963.4 $^{+20}_{-20}$	20 $^{+11}_{-11}$	776.55	2 $^+$	
3750.1		765.1 $^{+9}_{-9}$	100 $^{+9}_{-9}$	2985.0		
3753.0		700.5 $^{+3}_{-3}$	100 $^{+11}_{-11}$	3052.9	8 $^+$	
		1034.7 $^{+4}_{-4}$	43 $^{+9}_{-9}$	2718.6	(8 $^+$)	
3780.5		1395.1 $^{+10}_{-10}$	100 $^{+27}_{-27}$	2387.3	(6 $^+$)	
		1745.3 $^{+8}_{-8}$	41 $^{+7}_{-7}$	2035.2	(5 $^+$,6 $^+$)	
3805.6		1244.0 $^{+10}_{-10}$	50 $^{+15}_{-15}$	2561.3	(6 $^+$)	
		1575.0 $^{+9}_{-9}$	58 $^{+13}_{-13}$	2230.8	6 $^+$	
		1771.4 $^{+6}_{-6}$	100 $^{+20}_{-20}$	2035.2	(5 $^+$,6 $^+$)	
		2168.4 $^{+20}_{-20}$	100 $^{+8}_{-8}$	1637.9	4 $^+$	

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Adopted Levels, Gammas (continued)

$\gamma(^{102}\text{Cd})$ (continued)						
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult. # @
3810.4	(9 ⁺)	1091.88 5	100	2718.6	(8 ⁺)	D
3829.5		954.9 ^{±5}	11 ^{±4}	2874.24		
		1426.2 ^{±20}	22 ^{±7}	2402.8		
		1599.0 ^{±4}	100 ^{±26}	2230.8	6 ⁺	
		1795.3 ^{±10}	67 ^{±11}	2035.2	(5 ⁺ , 6 ⁺)	
		2192.6 ^{±20}	12 ^{±4}	1637.9	4 ⁺	
3847.3		576.3 ^{±10}	100 [±]	3271.0		
3853.5		1623.8 ^{±20}	64 ^{±16}	2230.8	6 ⁺	
		2215.9 ^{±5}	100 ^{±16}	1637.9	4 ⁺	
3864.3		593.3 ^{±3}	100 [±]	3271.0		
3874.4		1276.8 ^{±20}	69 ^{±31}	2597.63		
		2236.8 ^{±20}	100 ^{±31}	1637.9	4 ⁺	
3877.4		606.0 ^{±9}	13 ^{±3}	3271.0		
		1491.1 ^{±10}	11 ^{±3}	2387.3	(6 ⁺)	
		1646.8 ^{±4}	100 ^{±14}	2230.8	6 ⁺	
3894.4		1065.9 ^{±10}	100 ^{±12}	2827.95		
		1492.2 ^{±10}	23 ^{±7}	2402.8		
3907.1		1079.1 ^{±8}	44 ^{±13}	2827.95		
		1346.2 ^{±20}	100 ^{±27}	2561.3	(6 ⁺)	
3908.4	10 ⁺	855.4 2	100	3052.9	8 ⁺	E2
3911.5		640.2 ^{±10}	9 ^{±3}	3271.0		B(E2)(W.u.)=36 13
		1524.1 ^{±4}	92 ^{±5}	2387.3	(6 ⁺)	
		1682.6 ^{±7}	100 ^{±16}	2230.8	6 ⁺	
3920.1		1045.9 ^{±8}	100 [±]	2874.24		
3938.1		1536.3 ^{±10}	100 ^{±28}	2402.8		
		1550.7 ^{±8}	83 ^{±33}	2387.3	(6 ⁺)	
3952.2		1391.1 ^{±8}	100 [±]	2561.3	(6 ⁺)	
3961.7		1401.2 ^{±10}	35 ^{±9}	2561.3	(6 ⁺)	
		1559.0 ^{±6}	100 ^{±14}	2402.8		
		1730.7 ^{±7}	53 ^{±12}	2230.8	6 ⁺	
		2322.9 ^{±20}	16 ^{±9}	1637.9	4 ⁺	
3976.3		923.6 ^{±3}	100 [±]	3052.9	8 ⁺	
3989.6		1428.5 ^{±9}	100 [±]	2561.3	(6 ⁺)	
3999.2		1438.1 ^{±4}	100 [±]	2561.3	(6 ⁺)	
4008.03	(10 ⁺)	99.40 4	10.7 6	3908.4	10 ⁺	D+Q
		197.59 4	16.6 6	3810.4	(9 ⁺)	D
		955.07 4	38.8 15	3052.9	8 ⁺	Q
		1289.44 3	100 4	2718.6	(8 ⁺)	Q
4015.3		962.6 ^{±6}	100 [±]	3052.9	8 ⁺	
4022.3		1037.6 ^{±6}	48 ^{±8}	2985.0		
		1147.4 ^{±10}	100 ^{±16}	2874.24		
4028.0		1466.9 ^{±10}	100 [±]	2561.3	(6 ⁺)	
4034.6		763.5 ^{±7}	19 ^{±6}	3271.0		
		1647.8 ^{±8}	100 ^{±12}	2387.3	(6 ⁺)	
4036.50?		849.00 5	100	3187.49?		

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Adopted Levels, Gammas (continued) $\gamma(^{102}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π
4039.7		987.0 $^{+6}_{-6}$	100 $^{+3}_{-3}$	3052.9	8 ⁺
4048.9		1460.9 $^{+20}_{-20}$	17 $^{+4}_{-4}$	2589.9	
		1487.8 $^{+3}_{-3}$	100 $^{+9}_{-9}$	2561.3	(6) ⁺
		1661.6 $^{+20}_{-20}$	7.1 $^{+24}_{-24}$	2387.3	(6 ⁺)
4071.7		800.7 $^{+9}_{-9}$	20 $^{+4}_{-4}$	3271.0	
		1510.3 $^{+7}_{-7}$	30 $^{+10}_{-10}$	2561.3	(6) ⁺
		1685.2 $^{+7}_{-7}$	45 $^{+5}_{-5}$	2387.3	(6 ⁺)
		1841.1 $^{+4}_{-4}$	100 $^{+17}_{-17}$	2230.8	6 ⁺
4082.4		1695.6 $^{+10}_{-10}$	100 $^{+17}_{-17}$	2387.3	(6 ⁺)
4085.9		696.7 $^{+4}_{-4}$	100 $^{+17}_{-17}$	3389.2	
		1525.5 $^{+20}_{-20}$	9 $^{+7}_{-7}$	2561.3	(6) ⁺
4088.1		1685.3 $^{+9}_{-9}$	100 $^{+17}_{-17}$	2402.8	
4103.9		540.7 $^{+10}_{-10}$	100 $^{+17}_{-17}$	3563.2	
4121.4		1734.6 $^{+9}_{-9}$	100 $^{+17}_{-17}$	2387.3	(6 ⁺)
4131.2		1256.6 $^{+7}_{-7}$	57 $^{+14}_{-14}$	2874.24	
		1744.9 $^{+9}_{-9}$	100 $^{+19}_{-19}$	2387.3	(6 ⁺)
4142.4		1424.3 $^{+20}_{-20}$	100 $^{+17}_{-17}$	2718.6	(8 ⁺)
4147.0		876.6 $^{+5}_{-5}$	26 $^{+5}_{-5}$	3271.0	
		1761.4 $^{+20}_{-20}$	28 $^{+8}_{-8}$	2387.3	(6 ⁺)
		1916.1 $^{+3}_{-3}$	100 $^{+20}_{-20}$	2230.8	6 ⁺
4162.0		712.3 $^{+20}_{-20}$	100 $^{+17}_{-17}$	3449.67	
4175.8		723.8 $^{+20}_{-20}$	100 $^{+20}_{-20}$	3449.67	
		1789.6 $^{+10}_{-10}$	100 $^{+30}_{-30}$	2387.3	(6 ⁺)
4182.8		1465.2 $^{+8}_{-8}$	20 $^{+7}_{-7}$	2718.6	(8 ⁺)
		1780.1 $^{+5}_{-5}$	50 $^{+13}_{-13}$	2402.8	
		1951.1 $^{+10}_{-10}$	100 $^{+33}_{-33}$	2230.8	6 ⁺
		2148.3 $^{+10}_{-10}$	24 $^{+7}_{-7}$	2035.2	(5 ⁺ ,6 ⁺)
4189.5		1136.8 $^{+7}_{-7}$	100 $^{+17}_{-17}$	3052.9	8 ⁺
4197.2		1144.4 $^{+20}_{-20}$	100 $^{+40}_{-40}$	3052.9	8 ⁺
		2559.6 $^{+20}_{-20}$	87 $^{+67}_{-67}$	1637.9	4 ⁺
4206.2		1152.2 $^{+10}_{-10}$	7.3 $^{+15}_{-15}$	3052.9	8 ⁺
		1332.5 $^{+4}_{-4}$	39 $^{+6}_{-6}$	2874.24	
		1488.2 $^{+6}_{-6}$	100 $^{+6}_{-6}$	2718.6	(8 ⁺)
		1644.6 $^{+9}_{-9}$	27 $^{+4}_{-4}$	2561.3	(6) ⁺
		1818.4 $^{+9}_{-9}$	4.1 $^{+12}_{-12}$	2387.3	(6 ⁺)
		1975.3 $^{+7}_{-7}$	7.5 $^{+25}_{-25}$	2230.8	6 ⁺
4224.1		1821.0 $^{+8}_{-8}$	96 $^{+24}_{-24}$	2402.8	
		2190.2 $^{+10}_{-10}$	100 $^{+40}_{-40}$	2035.2	(5 ⁺ ,6 ⁺)
4227.9		1354.4 $^{+7}_{-7}$	75 $^{+25}_{-25}$	2874.24	
		1666.3 $^{+8}_{-8}$	88 $^{+25}_{-25}$	2561.3	(6) ⁺
		1996.9 $^{+7}_{-7}$	100 $^{+25}_{-25}$	2230.8	6 ⁺
4242.5		1855.7 $^{+20}_{-20}$	100 $^{+17}_{-17}$	2387.3	(6 ⁺)
4252.7		1865.7 $^{+20}_{-20}$	87 $^{+27}_{-27}$	2387.3	(6 ⁺)

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Adopted Levels, Gammas (continued)

$\gamma(^{102}\text{Cd})$ (continued)						
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult. # @
4252.7		2022.2 $\pm$ 20	100 $\pm$ 20	2230.8	6 ⁺	
4265.63		994.5 $\pm$ 5	<6.3 $\pm$	3271.0		
		1211.8 $\pm$ 8	4.1 $\pm$ 13	3052.9	8 ⁺	
		1391.6 $\pm$ 4	32 $\pm$ 4	2874.24		
		1437.8 $\pm$ 6	9.6 $\pm$ 22	2827.95		
		1704.7 $\pm$ 20	13 $\pm$ 6	2561.3	(6) ⁺	
		1878.8 $\pm$ 3	100 $\pm$ 6	2387.3	(6 ⁺)	
		2035.0 $\pm$ 5	59 $\pm$ 10	2230.8	6 ⁺	
4277.0	(11) ⁺	269.11 $\pm$ 3	100 $\pm$ 3	4008.03	(10 ⁺)	M1+E2
		368.5 $\pm$ 2	78.1 $\pm$ 24	3908.4	10 ⁺	M1+E2
						Mult.: From 2001Li24. M1/E2 from 1997Pe25. Mult.: Measured short lifetime excludes parity change (2001Li24).
						I _γ : Other: 49 15 (1996Ra23). Mult.: From 2001Li24, no δ given. M1/E2 from (1997Pe25). Mult.: Measured short lifetime excludes parity change (2001Li24).
4282.8		1454.5 $\pm$ 8	30 $\pm$ 7	2827.95		
		1895.8 $\pm$ 8	100 $\pm$ 11	2387.3	(6 ⁺)	
4311.7		1437.5 $\pm$ 3	100 $\pm$ 5	2874.24		
		2080.8 $\pm$ 20	63 $\pm$ 14	2230.8	6 ⁺	
		2277.0 $\pm$ 7	45 $\pm$ 10	2035.2	(5 ⁺ ,6 ⁺)	
4332.7		2102.0 $\pm$ 20	100 $\pm$	2230.8	6 ⁺	
4335.2		885.5 $\pm$ 9	100 $\pm$	3449.67		
4340.2		1466.0 $\pm$ 4	100 $\pm$	2874.24		
4349.78	(9 ⁻)	772.08 4	100 4	3577.67	(8 ⁺)	D
		1296.95 7	23 1	3052.9	8 ⁺	D
		1631.26 8	22 1	2718.6	(8 ⁺)	D
4357.9		1305.3 $\pm$ 10	52 $\pm$ 8	3052.9	8 ⁺	
		2127.1 $\pm$ 10	100 $\pm$ 24	2230.8	6 ⁺	
4360.6		1375.3 $\pm$ 6	100 $\pm$ 21	2985.0		
		2726.4 $\pm$ 20	12 $\pm$ 5	1637.9	4 ⁺	
4368.1		1315.4 $\pm$ 20	100 $\pm$	3052.9	8 ⁺	
4373.0		2142.3 $\pm$ 6	100 $\pm$	2230.8	6 ⁺	
4377.4		1659.3 $\pm$ 10	100 $\pm$	2718.6	(8 ⁺)	
4385.7		1982.9 $\pm$ 7	22 $\pm$ 6	2402.8		
		1998.8 $\pm$ 9	51 $\pm$ 16	2387.3	(6 ⁺)	
		2154.9 $\pm$ 10	57 $\pm$ 12	2230.8	6 ⁺	
		2748.3 $\pm$ 8	100 $\pm$ 20	1637.9	4 ⁺	
4416.0		1363.2 $\pm$ 10	37 $\pm$ 6	3052.9	8 ⁺	
		1854.9 $\pm$ 5	100 $\pm$ 14	2561.3	(6) ⁺	
		2185.3 $\pm$ 4	61 $\pm$ 8	2230.8	6 ⁺	
		2779.4 $\pm$ 20	10 $\pm$ 32	1637.9	4 ⁺	
4424.3		2037.5 $\pm$ 10	100 $\pm$	2387.3	(6 ⁺)	
4427.6		977.9 $\pm$ 4	100 $\pm$	3449.67		
4440.8		2803.1 $\pm$ 10	100 $\pm$	1637.9	4 ⁺	

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Adopted Levels, Gammas (continued)

$\gamma(^{102}\text{Cd})$ (continued)						
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. #@
						Comments
4446.0		1771.4 $^{+20}_{-20}$	100 $^{+20}_{-20}$	2674.6		
4453.6		890.3 $^{+8}_{-8}$	100 $^{+19}_{-19}$	3563.2		
		1064.6 $^{+10}_{-10}$	88 $^{+19}_{-19}$	3389.2		
4460.1		3683.4 $^{+20}_{-20}$	100 $^{+20}_{-20}$	776.55	2 $^{+}$	
4479.3		1208.3 $^{+10}_{-10}$	100 $^{+20}_{-20}$	3271.0		
4497.1		1668.2 $^{+10}_{-10}$	67 $^{+19}_{-19}$	2827.95		
		2095.9 $^{+20}_{-20}$	52 $^{+14}_{-14}$	2402.8		
		2860.0 $^{+10}_{-10}$	100 $^{+24}_{-24}$	1637.9	4 $^{+}$	
4512.8		1951.1 $^{+20}_{-20}$	62 $^{+62}_{-62}$	2561.3	(6) $^{+}$	
		2282.8 $^{+20}_{-20}$	100 $^{+31}_{-31}$	2230.8	6 $^{+}$	
4518.3	(12) $^{+}$	241.3 2	100	4277.0	(11) $^{+}$	M1(+E2) Mult.: From (HI,xn γ) in 2001Li24 . Other: d from (HI,xn γ) in 1997Pe25 . Measured short lifetime excludes parity change (2001Li24).
4525.3		1136.0 $^{+3}_{-3}$	100 $^{+3}_{-3}$	3389.2		
4528.8		1476.1 $^{+20}_{-20}$	100 $^{+20}_{-20}$	3052.9	8 $^{+}$	
4536.4		2149.3 $^{+9}_{-9}$	88 $^{+38}_{-38}$	2387.3	(6) $^{+}$	
		2900.3 $^{+20}_{-20}$	100 $^{+50}_{-50}$	1637.9	4 $^{+}$	
4569.3		2008.2 $^{+9}_{-9}$	100 $^{+20}_{-20}$	2561.3	(6) $^{+}$	
4582.0		1311.5 $^{+10}_{-10}$	8 $^{+6}_{-6}$	3271.0		
		2022.0 $^{+10}_{-10}$	100 $^{+19}_{-19}$	2561.3	(6) $^{+}$	
		2193.0 $^{+10}_{-10}$	9 $^{+3}_{-3}$	2387.3	(6) $^{+}$	
		2353.0 $^{+20}_{-20}$	41 $^{+9}_{-9}$	2230.8	6 $^{+}$	
4601.1		1548.8 $^{+10}_{-10}$	18 $^{+6}_{-6}$	3052.9	8 $^{+}$	
		1883.0 $^{+4}_{-4}$	100 $^{+18}_{-18}$	2718.6	(8) $^{+}$	
		2369.5 $^{+20}_{-20}$	45 $^{+12}_{-12}$	2230.8	6 $^{+}$	
4628.9		1239.7 $^{+9}_{-9}$	100 $^{+20}_{-20}$	3389.2		
4640.5		2079.4 $^{+6}_{-6}$	100 $^{+20}_{-20}$	2561.3	(6) $^{+}$	
4657.3		3019.6 $^{+20}_{-20}$	100 $^{+20}_{-20}$	1637.9	4 $^{+}$	
4664.5		2103.4 $^{+5}_{-5}$	100 $^{+20}_{-20}$	2561.3	(6) $^{+}$	
4668.9		2079.9 $^{+20}_{-20}$	29 $^{+9}_{-9}$	2589.9		
		2437.2 $^{+20}_{-20}$	100 $^{+36}_{-36}$	2230.8	6 $^{+}$	
4672.7		3035.0 $^{+20}_{-20}$	100 $^{+20}_{-20}$	1637.9	4 $^{+}$	
4680.3		977.5 $^{+8}_{-8}$	52 $^{+13}_{-13}$	3702.9		
		1230.5 $^{+9}_{-9}$	100 $^{+17}_{-17}$	3449.67		
4685.3		2454.6 $^{+10}_{-10}$	100 $^{+20}_{-20}$	2230.8	6 $^{+}$	
4689.8		987.0 $^{+10}_{-10}$	100 $^{+19}_{-19}$	3702.9		
		1816.3 $^{+20}_{-20}$	48 $^{+48}_{-48}$	2874.24		
		2302.6 $^{+10}_{-10}$	64 $^{+21}_{-21}$	2387.3	(6) $^{+}$	
4709.4		2148.3 $^{+10}_{-10}$	100 $^{+20}_{-20}$	2561.3	(6) $^{+}$	
4716.9		1998.8 $^{+20}_{-20}$	100 $^{+20}_{-20}$	2718.6	(8) $^{+}$	
4720.9		2159.0 $^{+20}_{-20}$	100 $^{+38}_{-38}$	2561.3	(6) $^{+}$	
		2334.8 $^{+20}_{-20}$	5 $^{+5}_{-5}$	2387.3	(6) $^{+}$	
4735.8		1346.6 $^{+8}_{-8}$	100 $^{+20}_{-20}$	3389.2		
4736.57	(13)	218.46 $^{+4}_{-4}$	100	4518.3	(12) $^{+}$	D+Q Mult.: From (HI,xn γ) in 1997Pe25 .

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

$\gamma(^{102}\text{Cd})$ (continued)						
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult. #@
4739.7		1471.6 $\frac{+}{-}$ 20	23 $\frac{+}{-}$ 7	3271.0		
		1687.0 $\frac{+}{-}$ 9	22 $\frac{+}{-}$ 6	3052.9	8 ⁺	
		2021.3 $\frac{+}{-}$ 10	95 $\frac{+}{-}$ 21	2718.6	(8 ⁺)	
		2142.2 $\frac{+}{-}$ 8	100 $\frac{+}{-}$ 21	2597.63		
		2178.4 $\frac{+}{-}$ 10	47 $\frac{+}{-}$ 16	2561.3	(6 ⁺)	
		2508.5 $\frac{+}{-}$ 8	100 $\frac{+}{-}$ 24	2230.8	6 ⁺	
4754.3		1304.4 $\frac{+}{-}$ 20	100 $\frac{+}{-}$ 26	3449.67		
		2079.9 $\frac{+}{-}$ 20	52 $\frac{+}{-}$ 19	2674.6		
4777.3		1648.6 $\frac{+}{-}$ 4	61 $\frac{+}{-}$ 13	3128.9		
		2187.5 $\frac{+}{-}$ 5	100 $\frac{+}{-}$ 50	2589.9		
		2389.5 $\frac{+}{-}$ 7	51 $\frac{+}{-}$ 16	2387.3	(6 ⁺)	
4797.9		2236.8 $\frac{+}{-}$ 20	100 $\frac{+}{-}$	2561.3	(6 ⁺)	
4821.1		1549.3 $\frac{+}{-}$ 20	52 $\frac{+}{-}$ 15	3271.0		
		2103.1 $\frac{+}{-}$ 8	100 $\frac{+}{-}$ 15	2718.6	(8 ⁺)	
4824.0		2262.9 $\frac{+}{-}$ 9	100 $\frac{+}{-}$	2561.3	(6 ⁺)	
4827.8		2237.8 $\frac{+}{-}$ 8	100 $\frac{+}{-}$	2589.9		
4845.5		1716.5 $\frac{+}{-}$ 5	35 $\frac{+}{-}$ 8	3128.9		
		2615.3 $\frac{+}{-}$ 20	100 $\frac{+}{-}$ 21	2230.8	6 ⁺	
4861.8		4085.1 $\frac{+}{-}$ 20	100 $\frac{+}{-}$	776.55	2 ⁺	
4872.1		2641.4 $\frac{+}{-}$ 7	100 $\frac{+}{-}$	2230.8	6 ⁺	
4886.4		2482.9 $\frac{+}{-}$ 10	93 $\frac{+}{-}$ 30	2402.8		
		3249.3 $\frac{+}{-}$ 10	100 $\frac{+}{-}$ 50	1637.9	4 ⁺	
4906.7		1517.5 $\frac{+}{-}$ 6	100 $\frac{+}{-}$	3389.2		
4909.6		2348.4 $\frac{+}{-}$ 20	0.51 $\frac{+}{-}$ 17	2561.3	(6 ⁺)	
		2679.7 $\frac{+}{-}$ 20	100 $\frac{+}{-}$ 23	2230.8	6 ⁺	
		2875.1 $\frac{+}{-}$ 10	21 $\frac{+}{-}$ 7	2035.2	(5 ⁺ , 6 ⁺)	
4915.6		1466.4 $\frac{+}{-}$ 8	100 $\frac{+}{-}$ 17	3449.67		
		2528.6 $\frac{+}{-}$ 10	94 $\frac{+}{-}$ 28	2387.3	(6 ⁺)	
		3277.8 $\frac{+}{-}$ 6	83 $\frac{+}{-}$ 28	1637.9	4 ⁺	
4925.0		2206.9 $\frac{+}{-}$ 4	100 $\frac{+}{-}$ 17	2718.6	(8 ⁺)	
		2363.6 $\frac{+}{-}$ 10	20 $\frac{+}{-}$ 6	2561.3	(6 ⁺)	
4930.1		2699.4 $\frac{+}{-}$ 20	100 $\frac{+}{-}$	2230.8	6 ⁺	
4960.53?	(12)	683.61 $\frac{+}{-}$ 5	100	4277.0	(11) ⁺	D
4981.8		1534.3 $\frac{+}{-}$ 10	<18 $\frac{+}{-}$	3449.67		
		2419.1 $\frac{+}{-}$ 20	32 $\frac{+}{-}$ 11	2561.3	(6 ⁺)	
		2578.4 $\frac{+}{-}$ 8	17 $\frac{+}{-}$ 4	2402.8		
		2750.4 $\frac{+}{-}$ 9	100 $\frac{+}{-}$ 21	2230.8	6 ⁺	
		3343.9 $\frac{+}{-}$ 10	21 $\frac{+}{-}$ 5	1637.9	4 ⁺	
4988.97?		952.46 4	100	4036.50?		
4996.1		3358.4 $\frac{+}{-}$ 20	100 $\frac{+}{-}$	1637.9	4 ⁺	
5004.1		3366.4 $\frac{+}{-}$ 20	100 $\frac{+}{-}$	1637.9	4 ⁺	
5022.1		2461.0 $\frac{+}{-}$ 20	100 $\frac{+}{-}$	2561.3	(6 ⁺)	
5040.7		1488.5 $\frac{+}{-}$ 9	100 $\frac{+}{-}$ 33	3552.0		

Mult.: From (HI,xn γ) (1997Pe25).

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

$\gamma(^{102}\text{Cd})$ (continued)							
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult. # @	Comments
5040.7		3403.6 $^{+20}_{-20}$	74 $^{+74}_{-74}$	1637.9	4 ⁺		
5055.3		3417.6 $^{+20}_{-20}$	100 $^{+100}_{-100}$	1637.9	4 ⁺		
5064.8		1210.6 $^{+10}_{-10}$	100 $^{+33}_{-33}$	3853.5			
		1936.4 $^{+9}_{-9}$	67 $^{+20}_{-20}$	3128.9			
5068.1		2350.0 $^{+5}_{-5}$	100 $^{+100}_{-100}$	2718.6	(8 ⁺)		
5071.6		1682.3 $^{+10}_{-10}$	100 $^{+100}_{-100}$	3389.2			
5105.4		2544.3 $^{+10}_{-10}$	100 $^{+100}_{-100}$	2561.3	(6 ⁺)		
5107.4		1555.4 $^{+6}_{-6}$	100 $^{+100}_{-100}$	3552.0			
5127.5		2409.4 $^{+8}_{-8}$	100 $^{+100}_{-100}$	2718.6	(8 ⁺)		
5130.5		2743.7 $^{+10}_{-10}$	100 $^{+100}_{-100}$	2387.3	(6 ⁺)		
5141.2		1691.5 $^{+4}_{-4}$	100 $^{+100}_{-100}$	3449.67			
5149.7		1760.4 $^{+20}_{-20}$	100 $^{+100}_{-100}$	3389.2			
5175.6		1473.1 $^{+6}_{-6}$	40 $^{+9}_{-9}$	3702.9			
		1899.9 $^{+10}_{-10}$	32 $^{+15}_{-15}$	3276.9			
		2190.7 $^{+5}_{-5}$	83 $^{+15}_{-15}$	2985.0			
		2300.0 $^{+10}_{-10}$	100 $^{+23}_{-23}$	2874.24			
		2500.3 $^{+10}_{-10}$	36 $^{+18}_{-18}$	2674.6			
		3536.6 $^{+20}_{-20}$	62 $^{+15}_{-15}$	1637.9	4 ⁺		
5182.3		2053.3 $^{+20}_{-20}$	100 $^{+100}_{-100}$	3128.9			
5191.3		3553.6 $^{+10}_{-10}$	100 $^{+100}_{-100}$	1637.9	4 ⁺		
5193.9		1744.2 $^{+5}_{-5}$	100 $^{+32}_{-32}$	3449.67			
		2065.1 $^{+20}_{-20}$	48 $^{+16}_{-16}$	3128.9			
5196.75?	(11 ⁻)	846.95 $^{+3}_{-3}$	100 $^{+100}_{-100}$	4349.78	(9 ⁻)	Q	Mult.: From (HI,xn γ) (1997Pe25).
5237.5		1534.6 $^{+5}_{-5}$	100 $^{+14}_{-14}$	3702.9			
		3599.0 $^{+20}_{-20}$	31 $^{+9}_{-9}$	1637.9	4 ⁺		
5246.2		2528.6 $^{+20}_{-20}$	100 $^{+35}_{-35}$	2718.6	(8 ⁺)		
		3213.6 $^{+20}_{-20}$	18 $^{+18}_{-18}$	2035.2	(5 ⁺ ,6 ⁺)		
		3607.9 $^{+10}_{-10}$	48 $^{+15}_{-15}$	1637.9	4 ⁺		
5273.8		1736.2 $^{+10}_{-10}$	100 $^{+100}_{-100}$	3537.6			
5298.2		3067.5 $^{+9}_{-9}$	100 $^{+100}_{-100}$	2230.8	6 ⁺		
5308.77	(13 ⁺)	790.51 $^{+3}_{-3}$	100	4518.3	(12 ⁺)	M1+E2	Mult.: From (HI,xn γ) 2001Li24 , . Other d (1997Pe25). Mult.: Measured short lifetime excludes parity change (2001Li24).
5332.5		2614.4 $^{+9}_{-9}$	100 $^{+100}_{-100}$	2718.6	(8 ⁺)		
5361.6		2958.8 $^{+10}_{-10}$	100 $^{+100}_{-100}$	2402.8			
5387.9		3001.1 $^{+10}_{-10}$	100	2387.3	(6 ⁺)		
5396.6		2569.3 $^{+10}_{-10}$	18 $^{+6}_{-6}$	2827.95			
		2994.2 $^{+20}_{-20}$	34 $^{+10}_{-10}$	2402.8			
		3165.2 $^{+10}_{-10}$	100 $^{+19}_{-19}$	2230.8	6 ⁺		
5399.1		2348.4 $^{+10}_{-10}$	75 $^{+25}_{-25}$	3052.9	8 ⁺		
		3011.8 $^{+5}_{-5}$	100 $^{+31}_{-31}$	2387.3	(6 ⁺)		
5407.21?		418.23 $^{+5}_{-5}$	100	4988.97?			
5420.7		1881.1 $^{+20}_{-20}$	41 $^{+13}_{-13}$	3537.6			
		2702.6 $^{+20}_{-20}$	44 $^{+13}_{-13}$	2718.6	(8 ⁺)		

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Adopted Levels, Gammas (continued)

$\gamma(^{102}\text{Cd})$ (continued)						
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult. #@
						Comments
5420.7		2860.0 $\frac{1}{2}^+$ 10	100 $\frac{1}{2}^+$ 31	2561.3	(6) $^+$	
5435.9		2717.3 $\frac{1}{2}^+$ 10	100 $\frac{1}{2}^+$ 44	2718.6	(8) $^+$	
		2876.8 $\frac{1}{2}^+$ 20	18 $\frac{1}{2}^+$ 18	2561.3	(6) $^+$	
5441.2		3803.5 $\frac{1}{2}^+$ 20	100 $\frac{1}{2}^+$	1637.9	4 $^+$	
5462.2		3824.5 $\frac{1}{2}^+$ 20	100 $\frac{1}{2}^+$	1637.9	4 $^+$	
5477.7		3090.9 $\frac{1}{2}^+$ 20	100 $\frac{1}{2}^+$	2387.3	(6) $^+$	
5489.2		1926.7 $\frac{1}{2}^+$ 10	40 $\frac{1}{2}^+$ 10	3563.2		
		3258.0 $\frac{1}{2}^+$ 9	56 $\frac{1}{2}^+$ 24	2230.8	6 $^+$	
		3851.3 $\frac{1}{2}^+$ 20	100 $\frac{1}{2}^+$ 19	1637.9	4 $^+$	
5506.9		2945.4 $\frac{1}{2}^+$ 9	25.7 $\frac{1}{2}^+$ 24	2561.3	(6) $^+$	
		3869.7 $\frac{1}{2}^+$ 10	100 $\frac{1}{2}^+$ 19	1637.9	4 $^+$	
5508.7		2918.9 $\frac{1}{2}^+$ 8	100 $\frac{1}{2}^+$ 29	2589.9		
		3277.7 $\frac{1}{2}^+$ 7	58.8 $\frac{1}{2}^+$ 21	2230.8	6 $^+$	
		3474.7 $\frac{1}{2}^+$ 10	44 $\frac{1}{2}^+$ 12	2035.2	(5 $^+$,6 $^+$)	
5540.1		2866.4 $\frac{1}{2}^+$ 20	8 $\frac{1}{2}^+$ 8	2674.6		
		3309.2 $\frac{1}{2}^+$ 8	100 $\frac{1}{2}^+$ 16	2230.8	6 $^+$	
5570.5		1387.7 $\frac{1}{2}^+$ 5	51 $\frac{1}{2}^+$ 17	4182.8		
		3932.6 $\frac{1}{2}^+$ 20	100 $\frac{1}{2}^+$ 21	1637.9	4 $^+$	
5614.1		3383.4 $\frac{1}{2}^+$ 20	100 $\frac{1}{2}^+$	2230.8	6 $^+$	
5621.2		1743.7 $\frac{1}{2}^+$ 8	100 $\frac{1}{2}^+$	3877.4		
5654.8		3093.4 $\frac{1}{2}^+$ 7	100 $\frac{1}{2}^+$ 29	2561.3	(6) $^+$	
		3267.9 $\frac{1}{2}^+$ 6	30 $\frac{1}{2}^+$ 9	2387.3	(6) $^+$	
		3424.8 $\frac{1}{2}^+$ 10	21 $\frac{1}{2}^+$ 21	2230.8	6 $^+$	
		3619.2 $\frac{1}{2}^+$ 20	16 $\frac{1}{2}^+$ 5	2035.2	(5 $^+$,6 $^+$)	
5670.9		1387.7 $\frac{1}{2}^+$ 5	74 $\frac{1}{2}^+$ 26	4282.8		
		2120.0 $\frac{1}{2}^+$ 9	100 $\frac{1}{2}^+$ 26	3552.0		
5691.7		2638.9 $\frac{1}{2}^+$ 6	100 $\frac{1}{2}^+$ 19	3052.9	8 $^+$	
		2976.1 $\frac{1}{2}^+$ 20	8 $\frac{1}{2}^+$ 3	2718.6	(8) $^+$	
		3130.5 $\frac{1}{2}^+$ 5	25 $\frac{1}{2}^+$ 8	2561.3	(6) $^+$	
		3305.2 $\frac{1}{2}^+$ 20	11 $\frac{1}{2}^+$ 4	2387.3	(6) $^+$	
5702.1		1519.3 $\frac{1}{2}^+$ 9	100 $\frac{1}{2}^+$	4182.8		
5705.4		3474.7 $\frac{1}{2}^+$ 10	100 $\frac{1}{2}^+$	2230.8	6 $^+$	
5722.7		3335.8 $\frac{1}{2}^+$ 5	100 $\frac{1}{2}^+$ 33	2387.3	(6) $^+$	
		4085.7 $\frac{1}{2}^+$ 20	21 $\frac{1}{2}^+$ 7	1637.9	4 $^+$	
5737.4		4099.7 $\frac{1}{2}^+$ 20	100 $\frac{1}{2}^+$	1637.9	4 $^+$	
5752.7		2699.4 $\frac{1}{2}^+$ 6	100 $\frac{1}{2}^+$ 34	3052.9	8 $^+$	
		3164.5 $\frac{1}{2}^+$ 10	49 $\frac{1}{2}^+$ 17	2589.9		
5758.8		3196.3 $\frac{1}{2}^+$ 20	100 $\frac{1}{2}^+$ 33	2561.3	(6) $^+$	
		3725.8 $\frac{1}{2}^+$ 20	44 $\frac{1}{2}^+$ 17	2035.2	(5 $^+$,6 $^+$)	
5769.24	14	460.43 4	50.7 20	5308.77	(13) $^+$	D Mult.: From (HI,xn γ) (1997Pe25).
		808.94 $\frac{1}{2}^+$ 5	25.9 15	4960.53?	(12)	Q Mult.: From (HI,xn γ) (1997Pe25).
		1250.95 4	100 3	4518.3	(12) $^+$	Q Mult.: From (HI,xn γ) (1997Pe25).
5769.6		4131.9 $\frac{1}{2}^+$ 20	100 $\frac{1}{2}^+$	1637.9	4 $^+$	
5779.8		3549.0 $\frac{1}{2}^+$ 8	100 $\frac{1}{2}^+$ 31	2230.8	6 $^+$	

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Adopted Levels, Gammas (continued)

$\gamma(^{102}\text{Cd})$ (continued)							
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult. # @	Comments
5779.8		5003.5 [±] 20	11 [±] 4	776.55	2 ⁺		
5787.2		2224.0 [±] 10	100 [±] 26	3563.2			
		3225.9 [±] 20	66 [±] 40	2561.3	(6) ⁺		
5797.3		2744.6 [±] 10	100 [±]	3052.9	8 ⁺		
5811.6		2758.9 [±] 20	100 [±]	3052.9	8 ⁺		
5838.9		4201.2 [±] 20	100 [±]	1637.9	4 ⁺		
5849.0		3130.9 [±] 9	100 [±]	2718.6	(8) ⁺		
5857.8		2320.1 [±] 10	100 [±]	3537.6			
5861.6		3827.2 [±] 20	100 [±]	2035.2	(5 ⁺ ,6 ⁺)		
5865.6		3478.8 [±] 8	40 [±] 24	2387.3	(6) ⁺		
		4227.7 [±] 20	100 [±] 27	1637.9	4 ⁺		
5879.9		2827.2 [±] 10	100 [±]	3052.9	8 ⁺		
5888.3		4250.6 [±] 20	100 [±]	1637.9	4 ⁺		
5895.0		3860.6 [±] 20	100 [±]	2035.2	(5 ⁺ ,6 ⁺)		
5902.4		3499.5 [±] 20	100 [±]	2402.8			
5909.2		2345.5 [±] 10	49 [±] 16	3563.2			
		2359.4 [±] 20	71 [±] 24	3552.0			
		3190.7 [±] 10	100 [±] 66	2718.6	(8) ⁺		
		3349.9 [±] 20	75 [±] 29	2561.3	(6) ⁺		
5918.9		2866.4 [±] 10	60 [±] 19	3052.9	8 ⁺		
		3200.6 [±] 10	100 [±] 29	2718.6	(8) ⁺		
5926.23	(14) ⁺	617.45 3	100	5308.77	(13) ⁺	M1+E2	Mult.: From (HI,xn γ) 2001Li24 . Other d (1997Pe25). Mult.: Measured short lifetime excludes parity change (2001Li24).
5932.6		3529.4 [±] 10	33 [±] 11	2402.8			
		3702.0 [±] 6	100 [±] 22	2230.8	6 ⁺		
		3897.7 [±] 20	32 [±] 17	2035.2	(5 ⁺ ,6 ⁺)		
5934.5		2082.2 [±] 10	40 [±] 15	3853.5			
		3344.2 [±] 5	88 [±] 28	2589.9			
		4296.8 [±] 7	100 [±] 25	1637.9	4 ⁺		
5945.4		3224.3 [±] 20	70 [±] 19	2718.6	(8) ⁺		
		3715.5 [±] 10	100 [±] 36	2230.8	6 ⁺		
5948.3		4310.6 [±] 8	100 [±]	1637.9	4 ⁺		
6018.9		3457.7 [±] 10	100 [±]	2561.3	(6) ⁺		
6057.6		1745.9 [±] 10	100 [±]	4311.7			
6066.3		1754.6 [±] 20	100 [±]	4311.7			
6069.71?	(12)	662.50 7	100 5	5407.21?			
		1080.72 8	100 5	4988.97?			
6080.65	(13 ⁻)	883.89 3	100 3	5196.75?	(11 ⁻)	Q	Mult.: From (HI,xn γ) (1997Pe25).
		1562.15 8	12 7	4518.3	(12) ⁺		
6083.5		1900.7 [±] 10	100 [±]	4182.8			
6111.2		4473.5 [±] 20	100 [±]	1637.9	4 ⁺		
6146.0		4111.6 [±] 20	100 [±]	2035.2	(5 ⁺ ,6 ⁺)		
6150.4		3762.7 [±] 20	100 [±] 29	2387.3	(6) ⁺		

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Adopted Levels, Gammas (continued)

$\gamma(^{102}\text{Cd})$ (continued)						
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult. #@
6150.4		3920.7 $^{+20}_{-20}$	50 $^{+14}_{-14}$	2230.8	6 $^+$	
		4512.4 $^{+20}_{-20}$	61 $^{+14}_{-14}$	1637.9	4 $^+$	
6169.4		3764.9 $^{+20}_{-20}$	21 $^{+10}_{-10}$	2402.8		
		3782.8 $^{+20}_{-20}$	100 $^{+30}_{-30}$	2387.3	(6 $^+$)	
		4137.0 $^{+20}_{-20}$	75 $^{+20}_{-20}$	2035.2	(5 $^+$,6 $^+$)	
		4530.9 $^{+20}_{-20}$	41 $^{+13}_{-13}$	1637.9	4 $^+$	
6195.6		1883.9 $^{+5}_{-5}$	67 $^{+21}_{-21}$	4311.7		
		4557.6 $^{+20}_{-20}$	100 $^{+24}_{-24}$	1637.9	4 $^+$	
6225.9		1943.8 $^{+10}_{-10}$	100 $^{+32}_{-32}$	4282.8		
		2835.9 $^{+10}_{-10}$	74 $^{+32}_{-32}$	3389.2		
6244.3		3683.1 $^{+20}_{-20}$	100 $^{+}$	2561.3	(6 $^+$)	
6255.7		3869.7 $^{+20}_{-20}$	100 $^{+33}_{-33}$	2387.3	(6 $^+$)	
		4617.1 $^{+20}_{-20}$	22 $^{+10}_{-10}$	1637.9	4 $^+$	
6287.11?	(15)	360.88 $^{+4}_{-4}$	100	5926.23	(14) $^+$	D
6292.2		3164.5 $^{+10}_{-10}$	77 $^{+27}_{-27}$	3128.9		
		4060.2 $^{+10}_{-10}$	100 $^{+23}_{-23}$	2230.8	6 $^+$	
		4259.4 $^{+20}_{-20}$	28 $^{+9}_{-9}$	2035.2	(5 $^+$,6 $^+$)	
		4654.0 $^{+10}_{-10}$	12 $^{+6}_{-6}$	1637.9	4 $^+$	
6320.5		2008.8 $^{+10}_{-10}$	100 $^{+}$	4311.7		
6323.54	(13 $^-$)	242.93 $^{+4}_{-4}$	100 $^{+3}_{-3}$	6080.65	(13 $^-$)	D+Q
		1805.17 $^{+8}_{-8}$	31.4 $^{+11}_{-11}$	4518.3	(12) $^+$	D
6344.1		3941.2 $^{+10}_{-10}$	100 $^{+}$	2402.8		
6352.2		2962.9 $^{+9}_{-9}$	100 $^{+}$	3389.2		
6418.6		2714.9 $^{+20}_{-20}$	100 $^{+38}_{-38}$	3702.9		
		4781.5 $^{+20}_{-20}$	69 $^{+69}_{-69}$	1637.9	4 $^+$	
6447.9		3058.6 $^{+10}_{-10}$	100 $^{+}$	3389.2		
6504.8		4867.1 $^{+20}_{-20}$	100 $^{+}$	1637.9	4 $^+$	
6525.8		3473.1 $^{+10}_{-10}$	100 $^{+}$	3052.9	8 $^+$	
6554.8		2851.8 $^{+10}_{-10}$	100 $^{+}$	3702.9		
6563.18	(14 $^-$)	239.24 $^{+7}_{-7}$	41 $^{+3}_{-3}$	6323.54	(13 $^-$)	D+Q
		1254.36 $^{+7}_{-7}$	100 $^{+6}_{-6}$	5308.77	(13) $^+$	
		1826.76 $^{+8}_{-8}$	59 $^{+3}_{-3}$	4736.57	(13)	
6612.1		3559.4 $^{+10}_{-10}$	100 $^{+}$	3052.9	8 $^+$	
6650.9		5013.2 $^{+20}_{-20}$	100 $^{+}$	1637.9	4 $^+$	
6666.8		5029.1 $^{+20}_{-20}$	100 $^{+}$	1637.9	4 $^+$	
6688.8		5051.1 $^{+20}_{-20}$	100 $^{+}$	1637.9	4 $^+$	
6712.38?	(16)	425.27 $^{+4}_{-4}$	100	6287.11?	(15)	D
6746.16	(14 $^-$)	422.70 $^{+5}_{-5}$	71 $^{+3}_{-3}$	6323.54	(13 $^-$)	(D)
		665.43 $^{+8}_{-8}$	58 $^{+3}_{-3}$	6080.65	(13 $^-$)	D+Q
		676.44 $^{+5}_{-5}$	100 $^{+3}_{-3}$	6069.71?	(12)	Q
6746.7		5109.0 $^{+20}_{-20}$	100 $^{+}$	1637.9	4 $^+$	
6773.21	(15)	847.07 $^{+4}_{-4}$	100 $^{+4}_{-4}$	5926.23	(14) $^+$	
		1003.9 $^{+9}_{-9}$	25 $^{+18}_{-18}$	5769.24	14	
6800.0		3236.8 $^{+20}_{-20}$	100 $^{+}$	3563.2		

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

$\gamma(^{102}\text{Cd})$ (continued)							
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. # [@]	Comments
6827.49	(14)	264.04 3	100 3	6563.18	(14 ⁻)	D	Mult.: From (HI,xn γ) 1997Pe25 .
		504.20 4	96 4	6323.54	(13 ⁻)	D	Mult.: From (HI,xn γ) 1997Pe25 .
		746.92 6	65 3	6080.65	(13 ⁻)		
		1519.02 10	35 3	5308.77	(13 ⁺)	D	Mult.: From (HI,xn γ) 1997Pe25 .
6963.8		4402.6 20	100	2561.3	(6 ⁺)		
7007.2		4972.8 20	100	2035.2	(5 ⁺ ,6 ⁺)		
7011.10	(15 ⁻)	183.42 4	41.3 12	6827.49	(14)		
		930.30 4	100 4	6080.65	(13 ⁻)	Q	Mult.: From (HI,xn γ) 1997Pe25 .
		1085.12 7	21.6 12	5926.23	(14 ⁺)	D	Mult.: From (HI,xn γ) 1997Pe25 .
		1241.81 4	67.7 24	5769.24	14	D	Mult.: From (HI,xn γ) 1997Pe25 .
7124.1		3421.1 [‡] 10	100 [‡]	3702.9			
7261.96	(15)	435.02 4	100 5	6827.49	(14)		
		1335.70 15	22 17	5926.23	(14 ⁺)		
		1492.43 8	5 3	5769.24	14	D	Mult.: From (HI,xn γ) 1997Pe25 .
7332.00	(16)	558.81 4	100 3	6773.21	(15)	D	Mult.: From (HI,xn γ) 1997Pe25 .
		1405.38 15	13 1	5926.23	(14 ⁺)	Q	Mult.: From (HI,xn γ) 1997Pe25 .
		1563.86 23	12 2	5769.24	14		E_γ : poor fit, level energy difference=1562.76.
7361.0		5326.6 20	100	2035.2	(5 ⁺ ,6 ⁺)		
7788.93?	(16)	1042.76 4	100	6746.16	(14 ⁻)	Q	B(E2)(W.u.)<2.9 Mult.: From (HI,xn γ) 2001Li24 and 1997Pe25 .
7943.66	(16)	681.64 5	75 4	7261.96	(15)		
		932.18 5	100 5	7011.10	(15 ⁻)		
8099.66	(17 ⁻)	767.77 5	24.7 13	7332.00	(16)	D	B(E1)(W.u.)<9.4×10 ⁻⁵ Mult.: From (HI,xn γ) 2001Li24 and 1997Pe25 .
		837.98 ^{&} 8	19 13	7261.96	(15)		
		1088.56 4	100 4	7011.10	(15 ⁻)	Q	B(E2)(W.u.)<7.3 Mult.: From (HI,xn γ) 2001Li24 and 1997Pe25 .
8367.42	(17)	1035.42 6	100	7332.00	(16)	D	Mult.: From (HI,xn γ) 1997Pe25 .
8508.34	(17)	564.25 4	100	7943.66	(16)	D	Mult.: From (HI,xn γ) 1997Pe25 .
8845.38?	(18)	1056.45 4	100	7788.93?	(16)	Q	B(E2)(W.u.)=8.4 7 Mult.: From (HI,xn γ) 2001Li24 and 1997Pe25 .
8942.69	(18 ⁻)	433.92 ^{&} 6	30.8 13	8508.34	(17)		
		843.46 4	100 4	8099.66	(17 ⁻)	D+Q	E_γ : poor fit, level energy difference=843.03. Mult.: From (HI,xn γ) 2001Li24 . Other: d (1997Pe25).
9233.43	(19 ⁻)	290.74 3	100	8942.69	(18 ⁻)	D+Q	Mult.: From (HI,xn γ) (2001Li24). Other: d (1997Pe25).
10513.7?	(20)	1668.27 11	100	8845.38?	(18)	Q	

[†] Unless noted otherwise, weighted averages of ε decay data and (HI,xn γ), if both available, if not data of corresponding data set used.

[‡] From ^{102}In ε decay.

From $\gamma(\theta)$ in (HI,xn γ). From [1997Pe25](#) and/or [2001Li24](#). No δ given for mixed transitions.

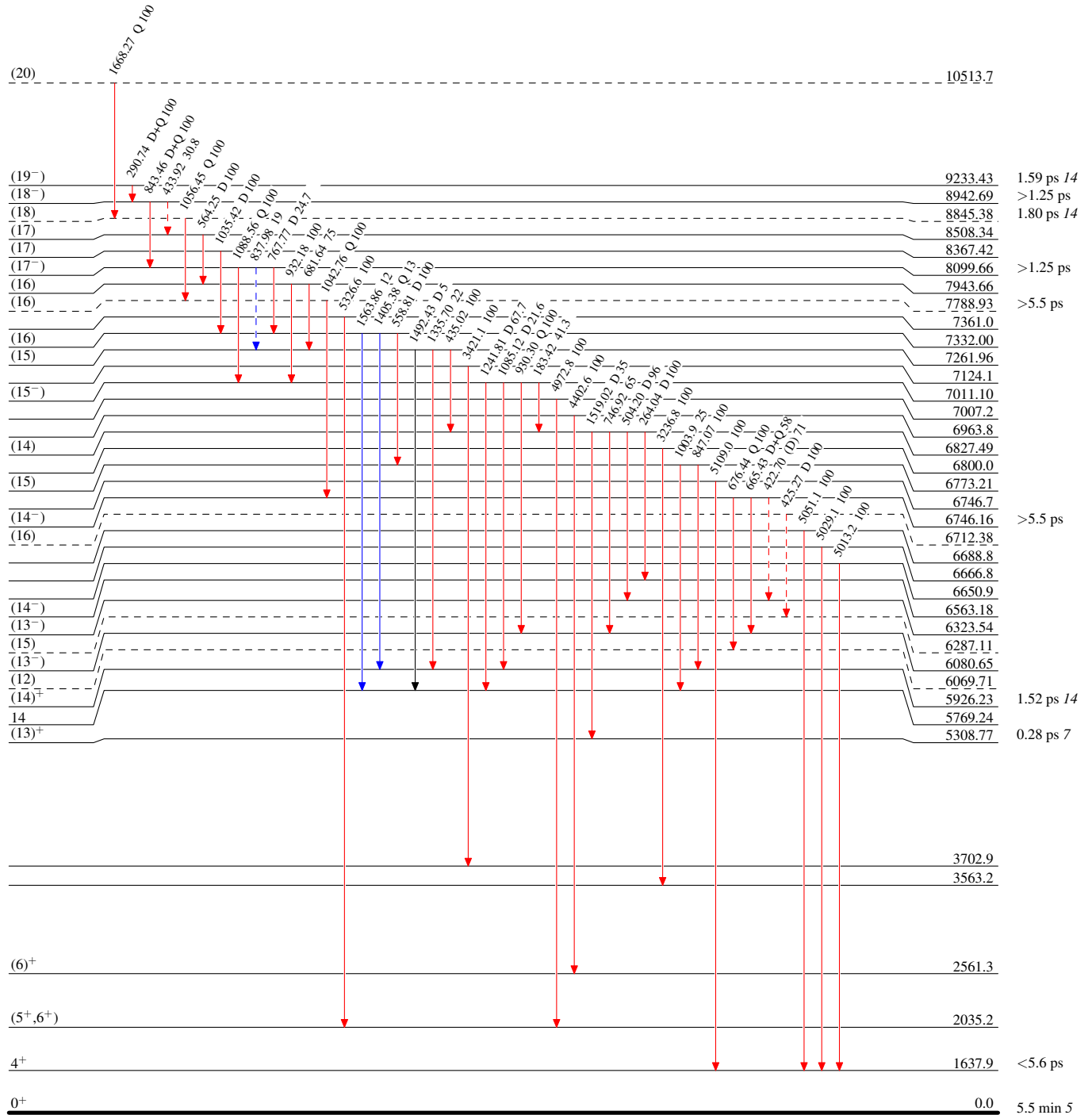
@ Dipole transitions are considered E1 if the energy is large in connection with a R value characteristic for a stretched dipole ([1997Pe25](#)). D+Q considered M1+E2 due to measured short $T_{1/2}$ for high energy levels ([2001Li24](#)). Inband Q transitions considered E2 by [1997Pe25](#) and [2001Li24](#). For mixed transitions no δ given in (HI,xn γ).

& Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas**Legend****Level Scheme**

Intensities: Type not specified

- $I_\gamma < 2\% \times I_\gamma^{\max}$
 —→ $I_\gamma < 10\% \times I_\gamma^{\max}$
 —→ $I_\gamma > 10\% \times I_\gamma^{\max}$
 - - - - -→ γ Decay (Uncertain)



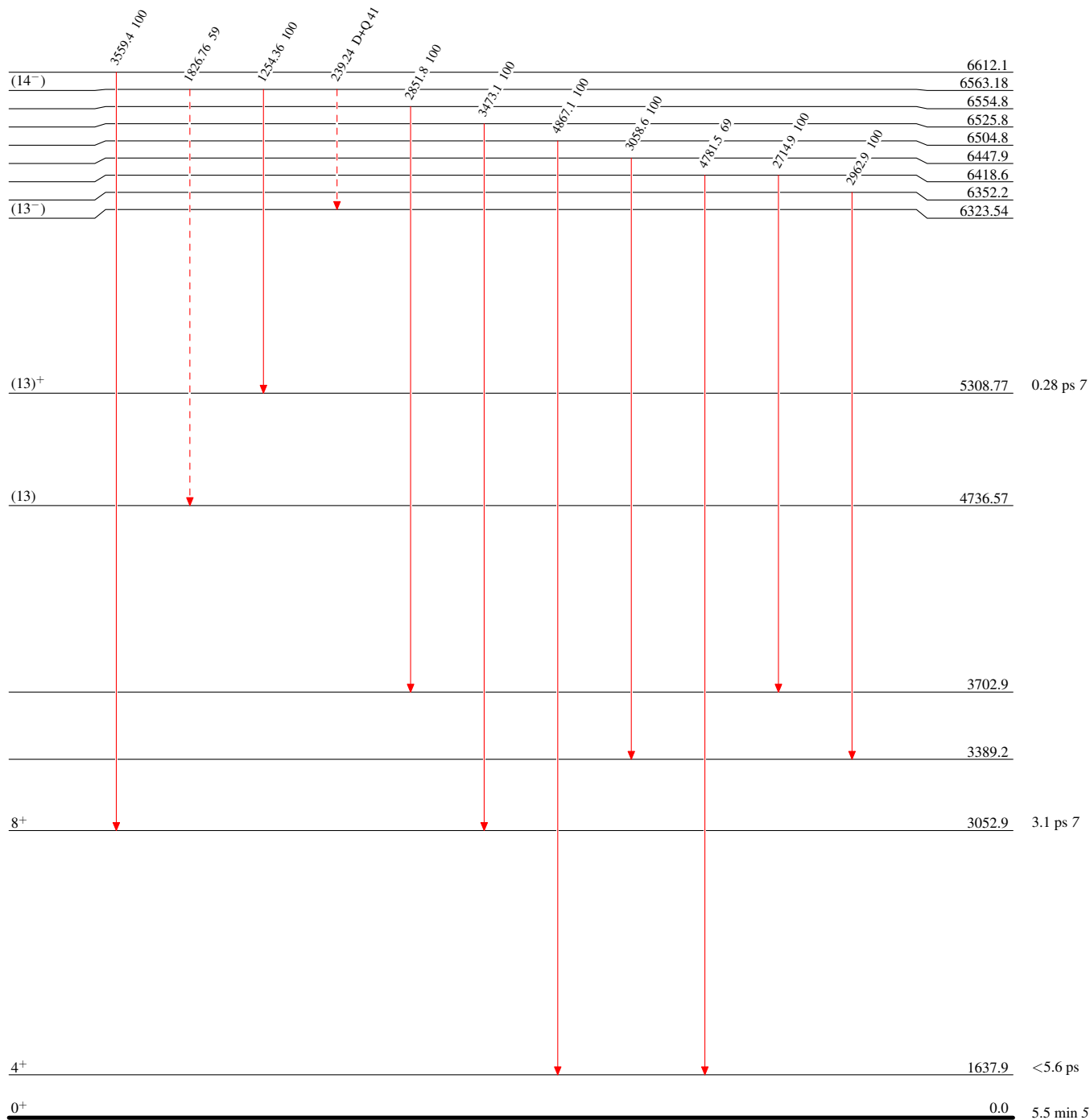
Adopted Levels, Gammas

Legend

Level Scheme (continued)

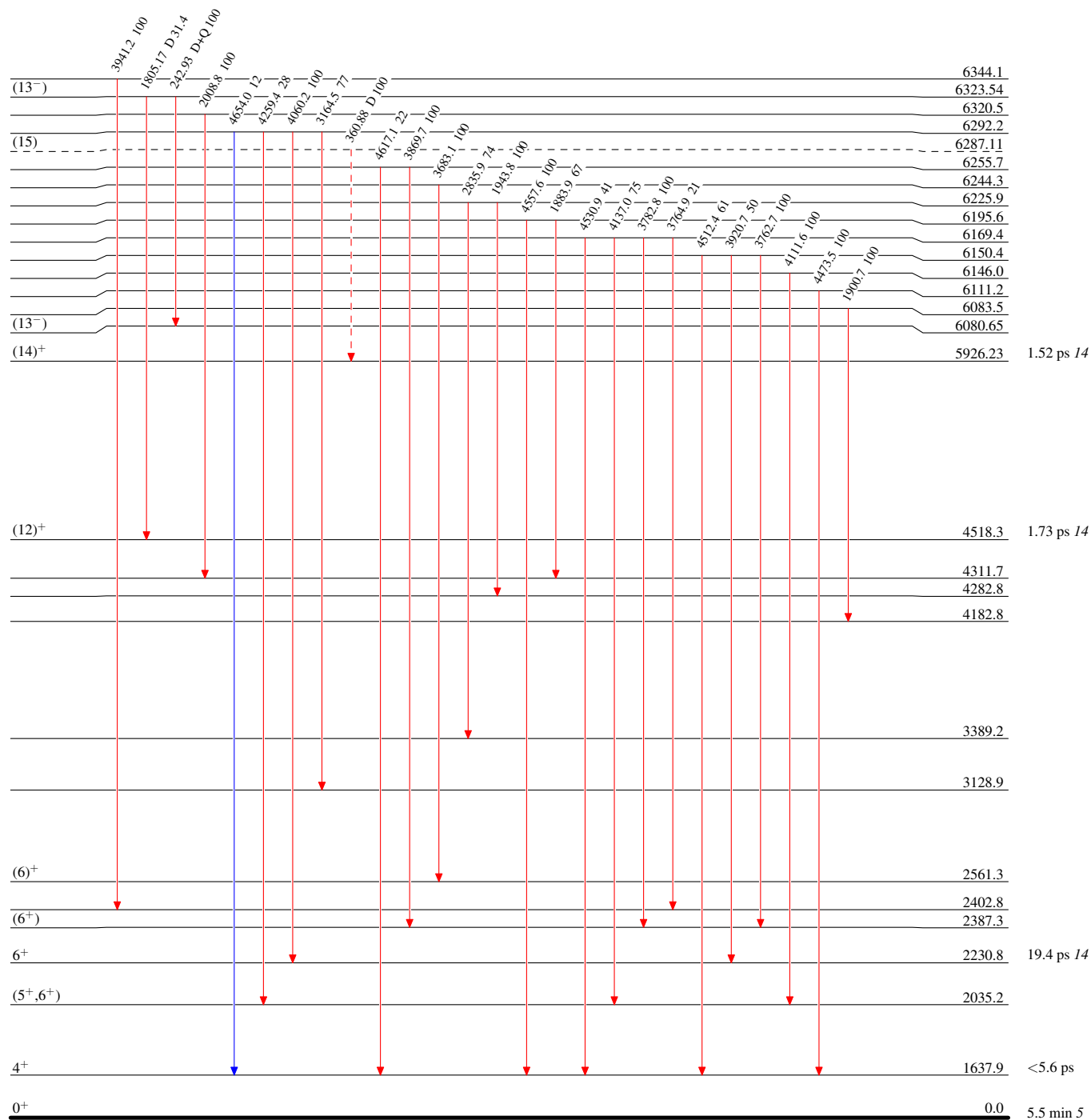
Intensities: Type not specified

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$
- - - - -→ γ Decay (Uncertain)



Legend

 $I_\gamma < 2\% \times I_\gamma^{\max}$
 $I_\gamma < 10\% \times I_\gamma^{\max}$
 $I_\gamma > 10\% \times I_\gamma^{\max}$
 γ Decay (Uncertain)

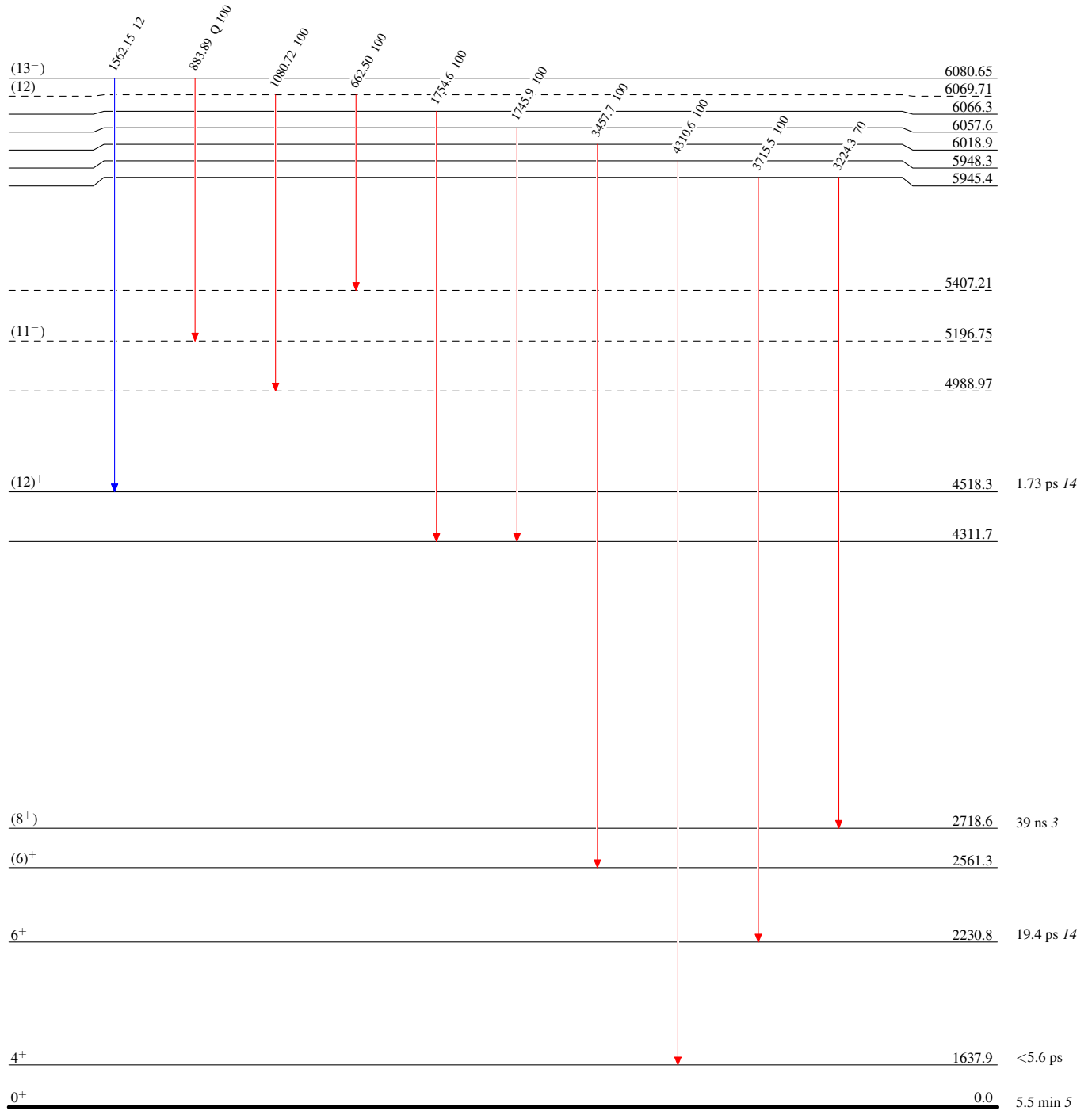
 $^{102}_{48}\text{Cd}_{54}$

Adopted Levels, GammasLevel Scheme (continued)

Intensities: Type not specified

Legend

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

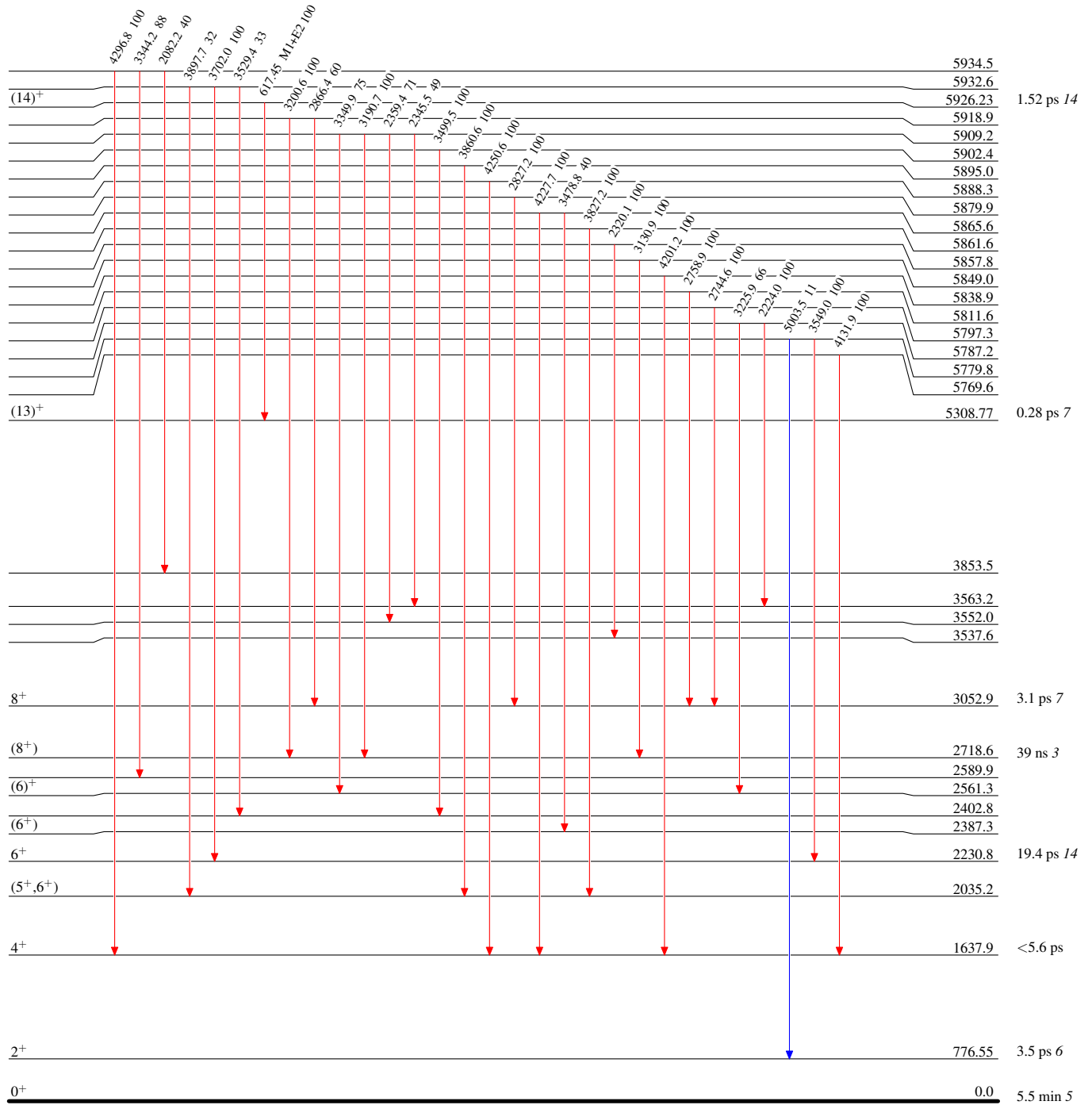
 $^{102}_{48}\text{Cd}_{54}$

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

Intensities: Type not specified

Legend

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



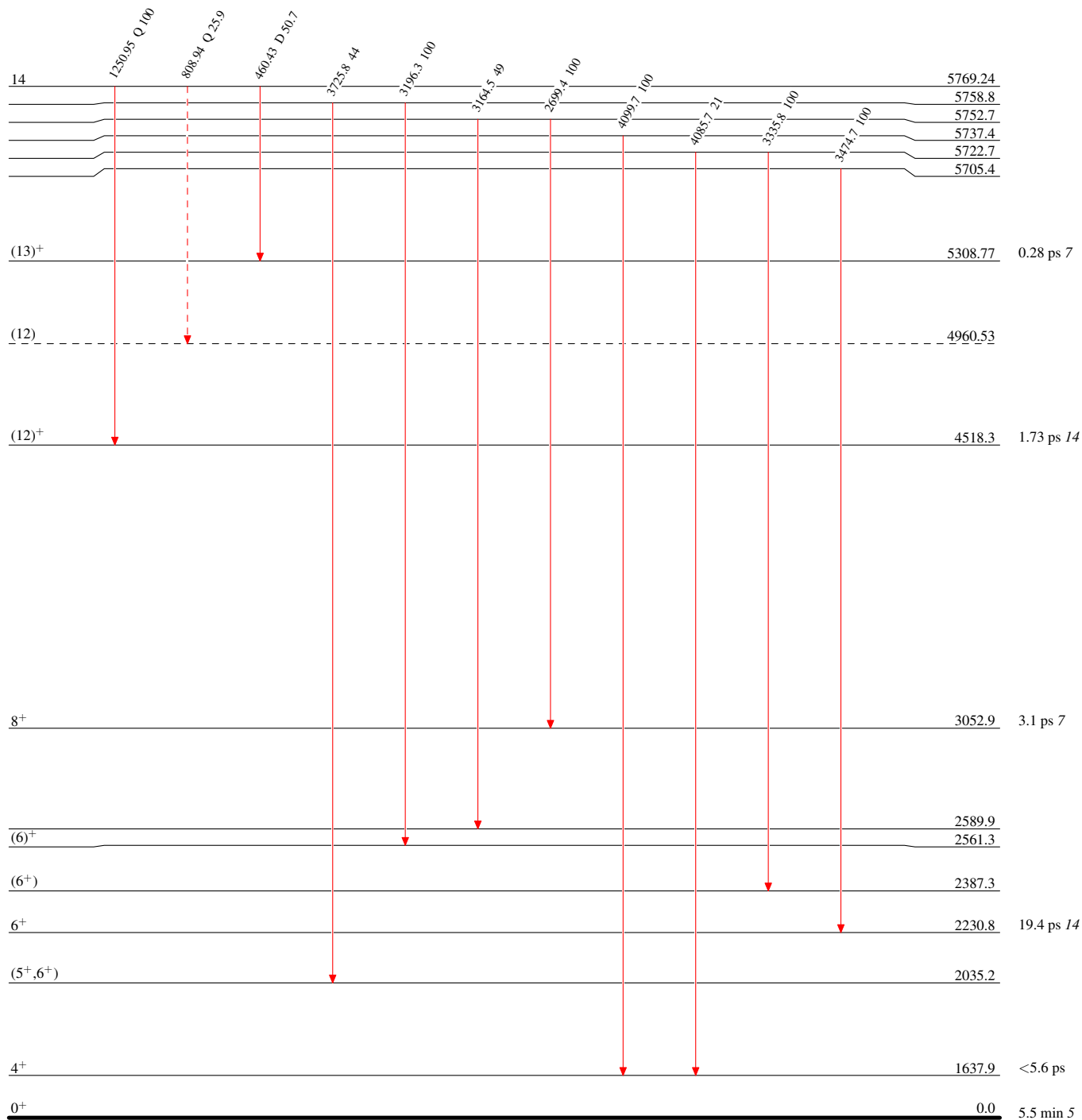
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Type not specified

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$
- - - - - → γ Decay (Uncertain)

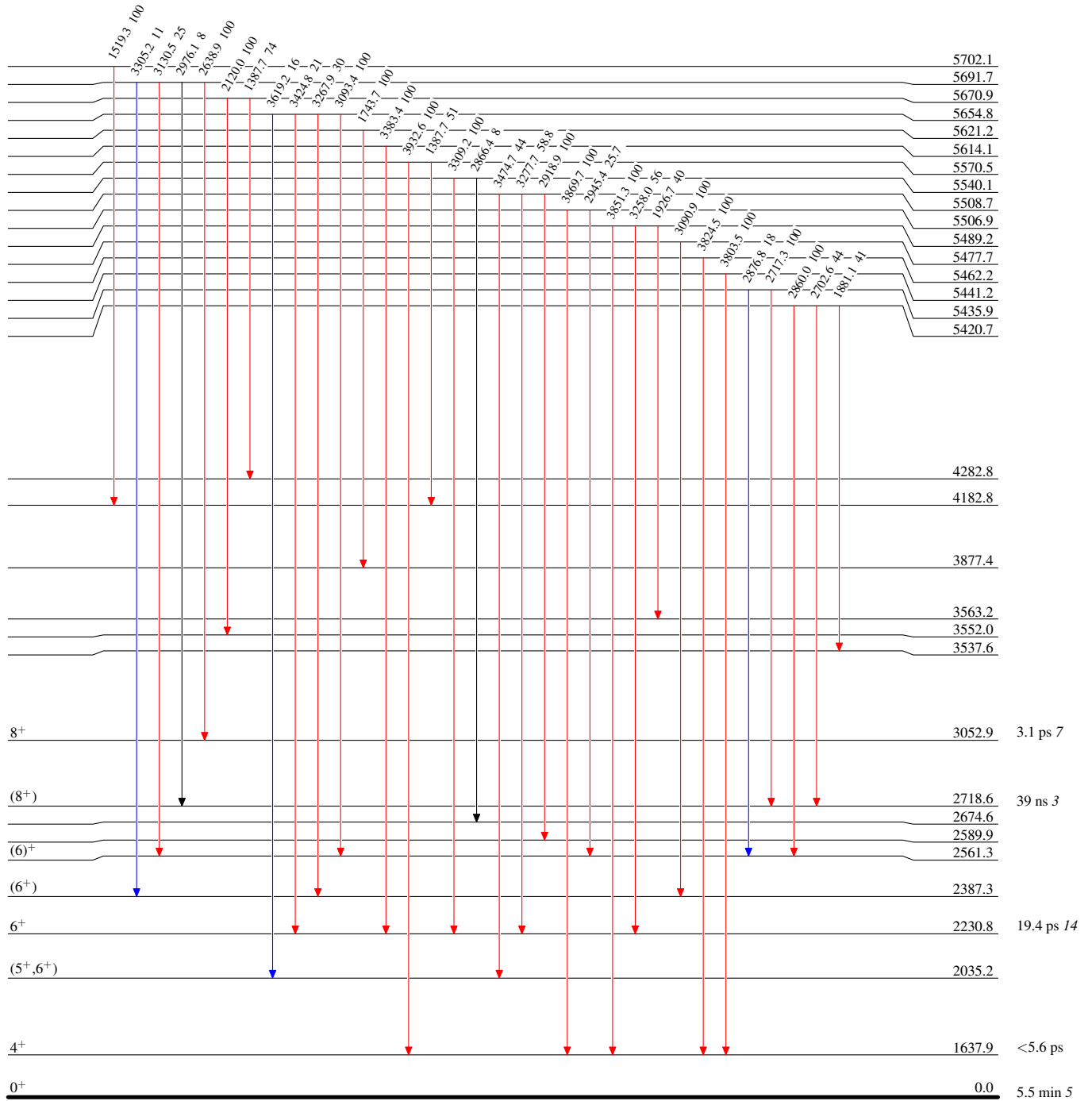


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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

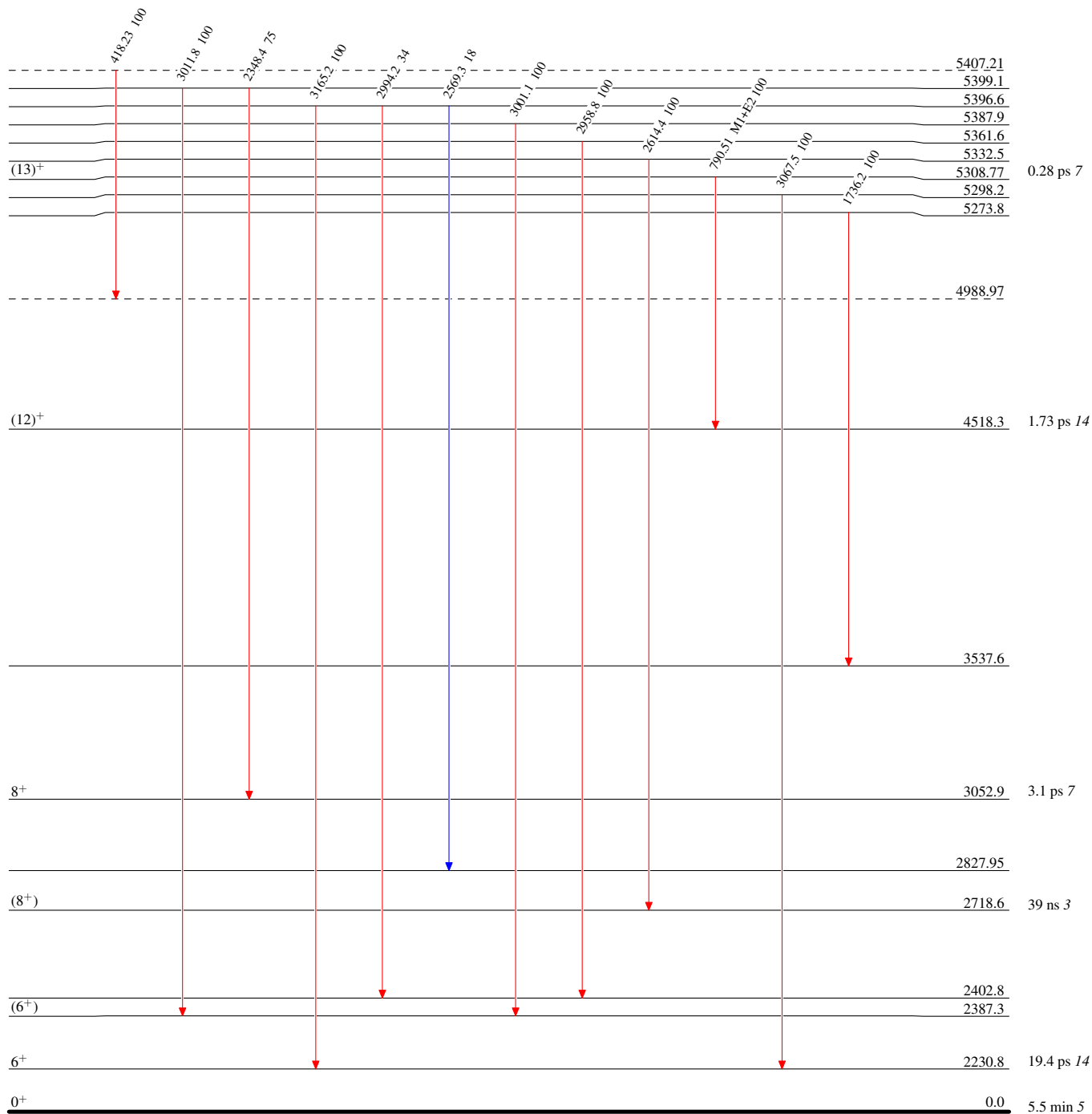


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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



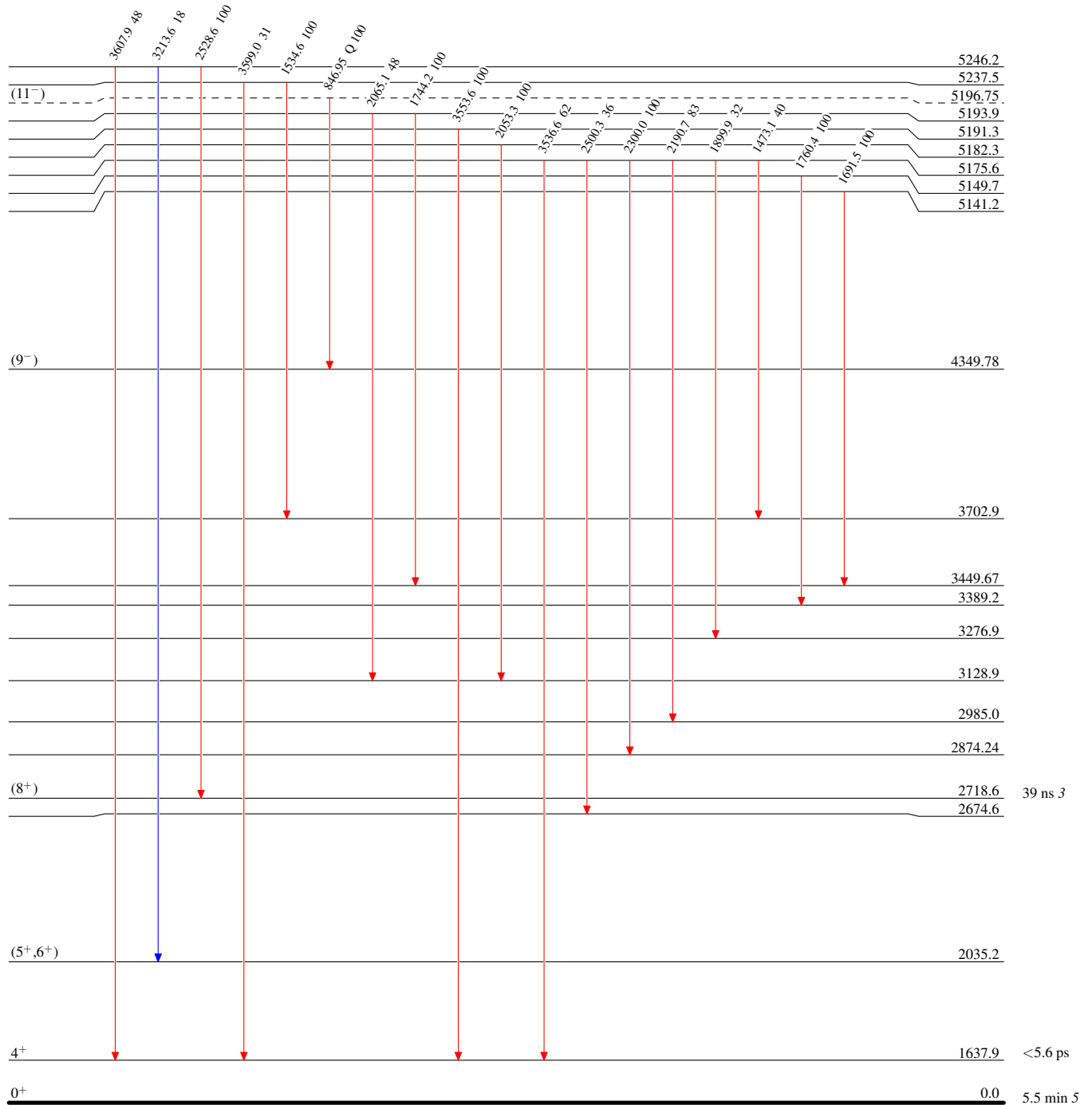
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

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

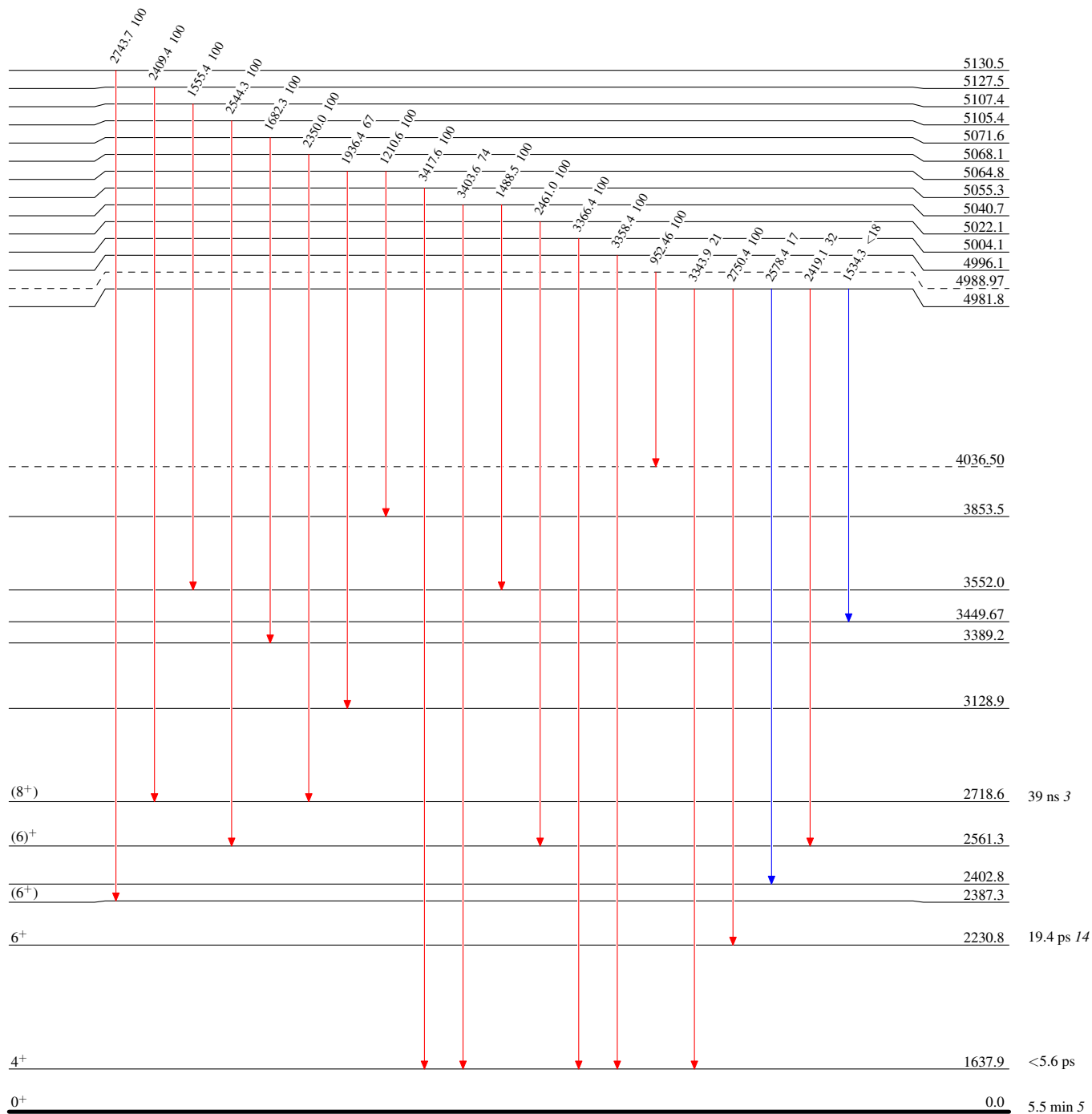


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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

 $^{102}_{48}\text{Cd}_{54}$

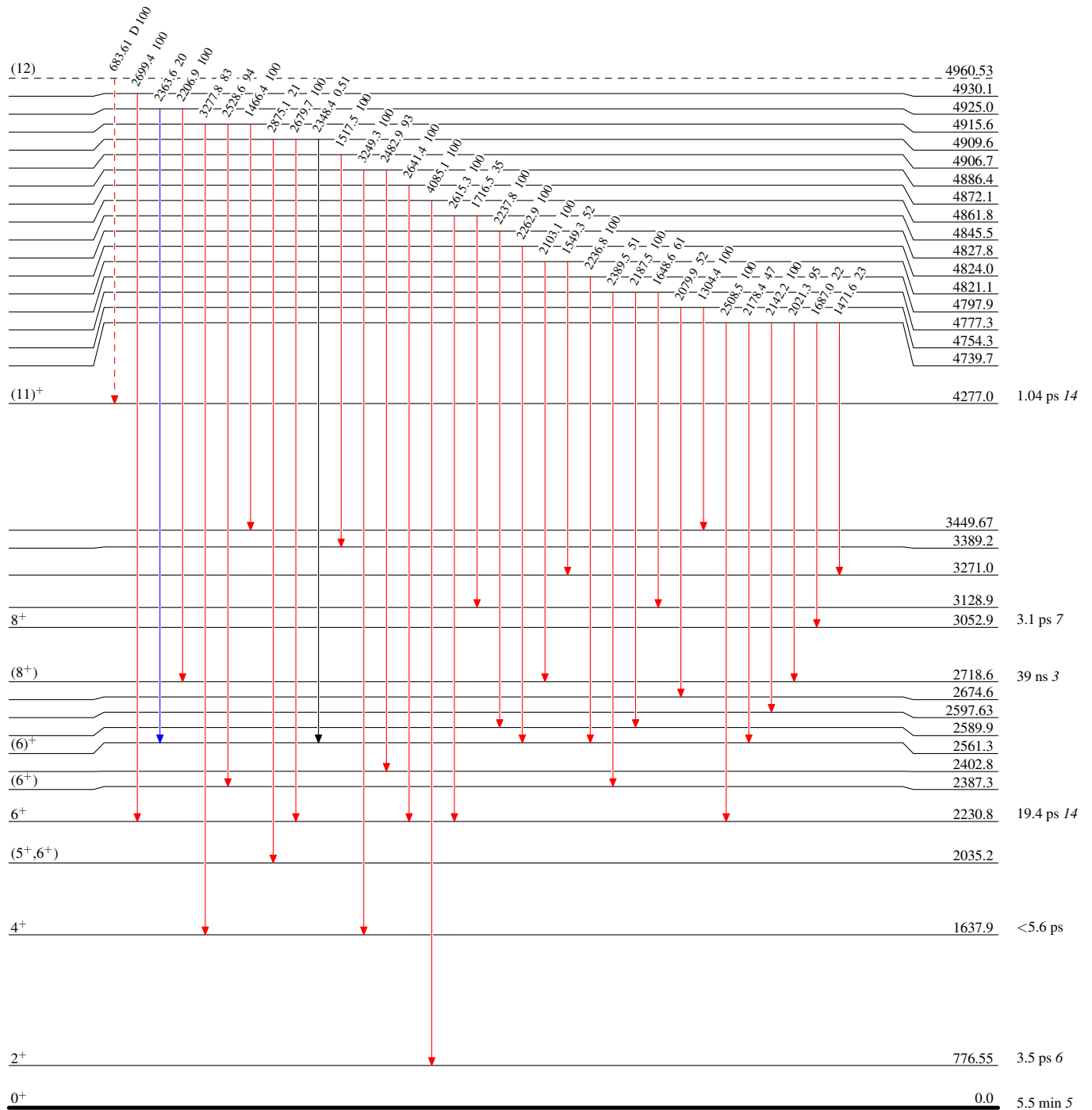
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Type not specified

- ▶ $I_\gamma < 2\% \times I_\gamma^{\max}$
—▶ $I_\gamma < 10\% \times I_\gamma^{\max}$
—▶ $I_\gamma > 10\% \times I_\gamma^{\max}$
- - -▶ γ Decay (Uncertain)



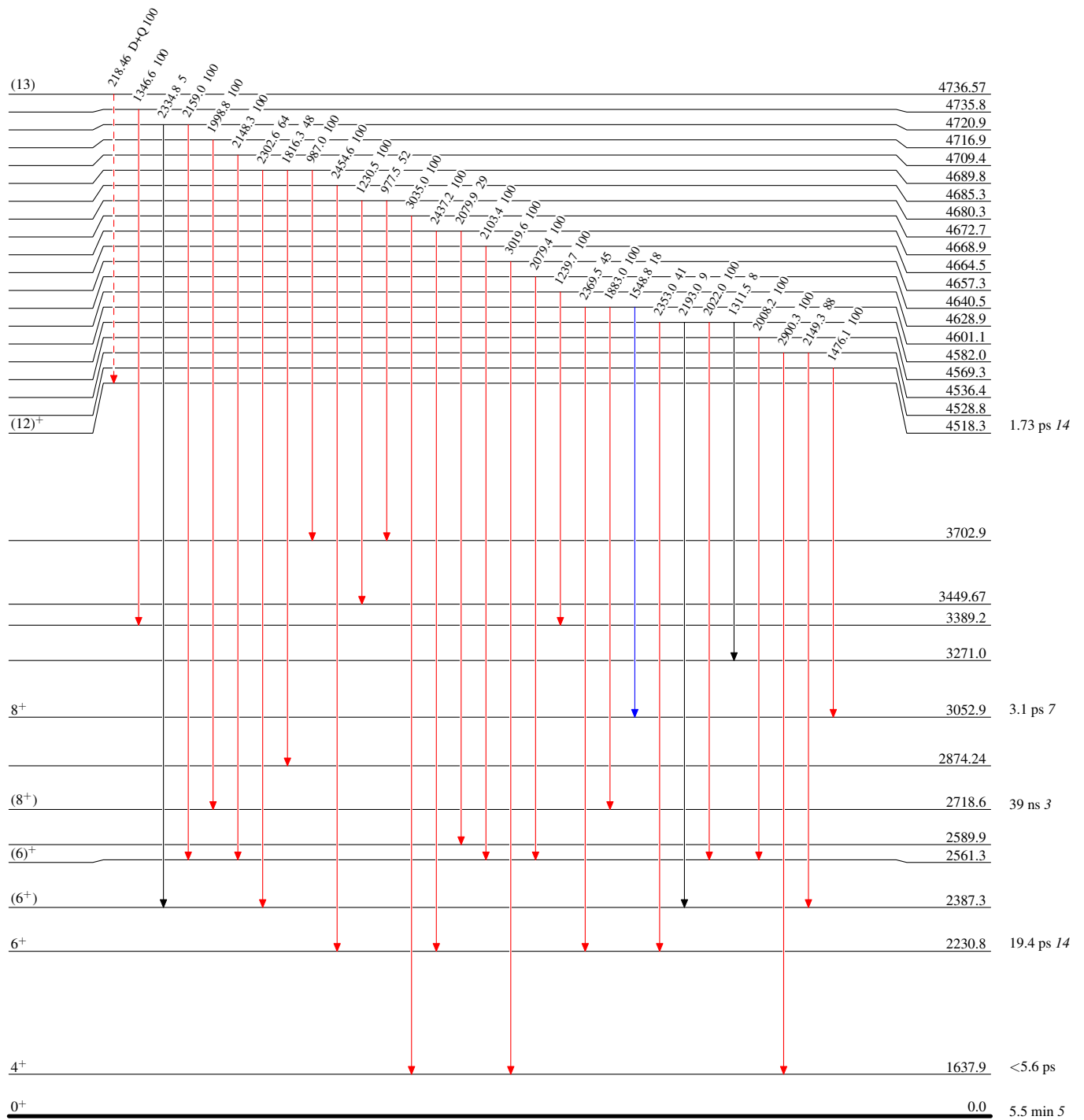
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Type not specified

- ▶ $I_\gamma < 2\% \times I_\gamma^{\max}$
- ▶ $I_\gamma < 10\% \times I_\gamma^{\max}$
- ▶ $I_\gamma > 10\% \times I_\gamma^{\max}$
- - - -▶ γ Decay (Uncertain)

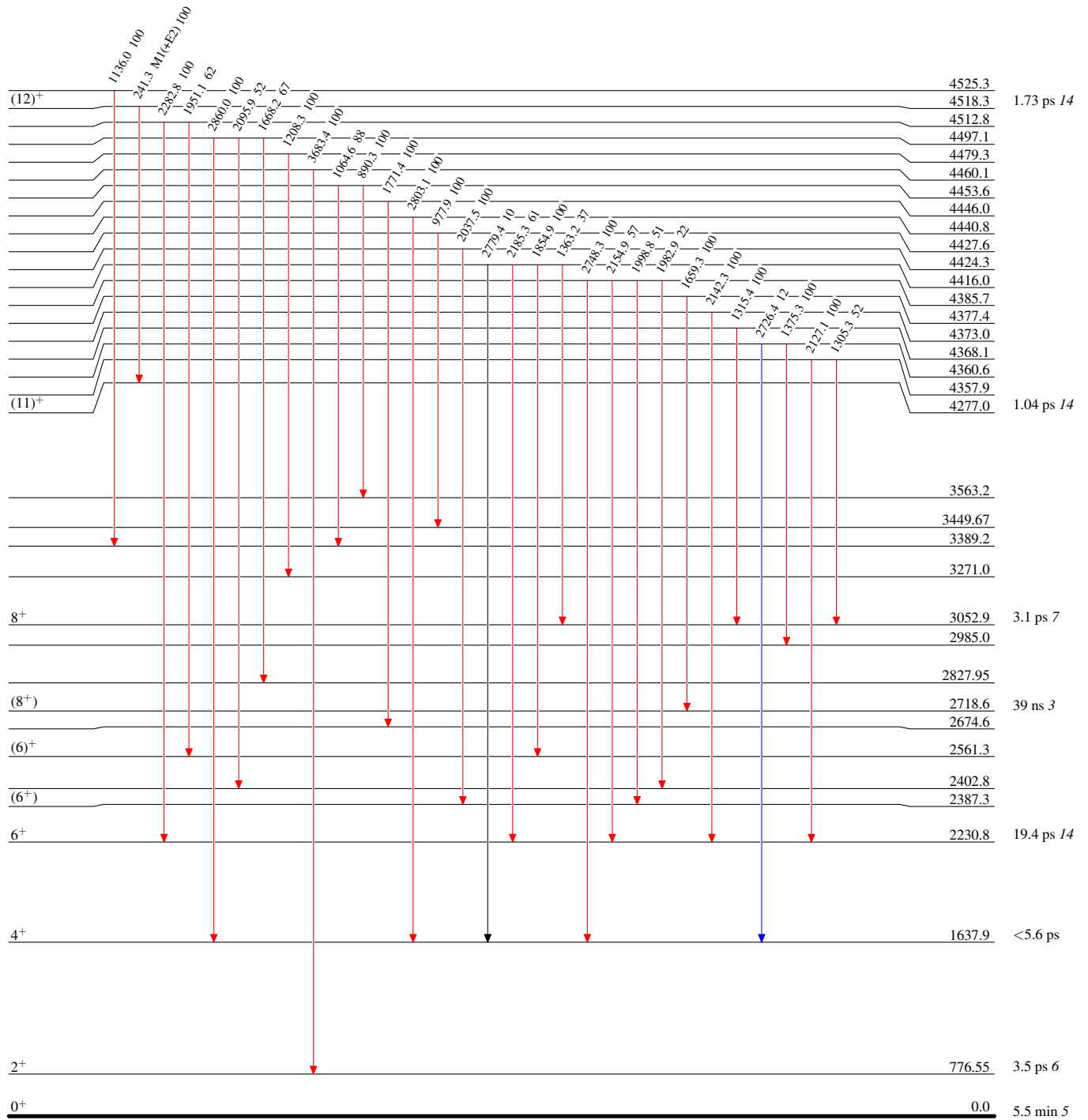


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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

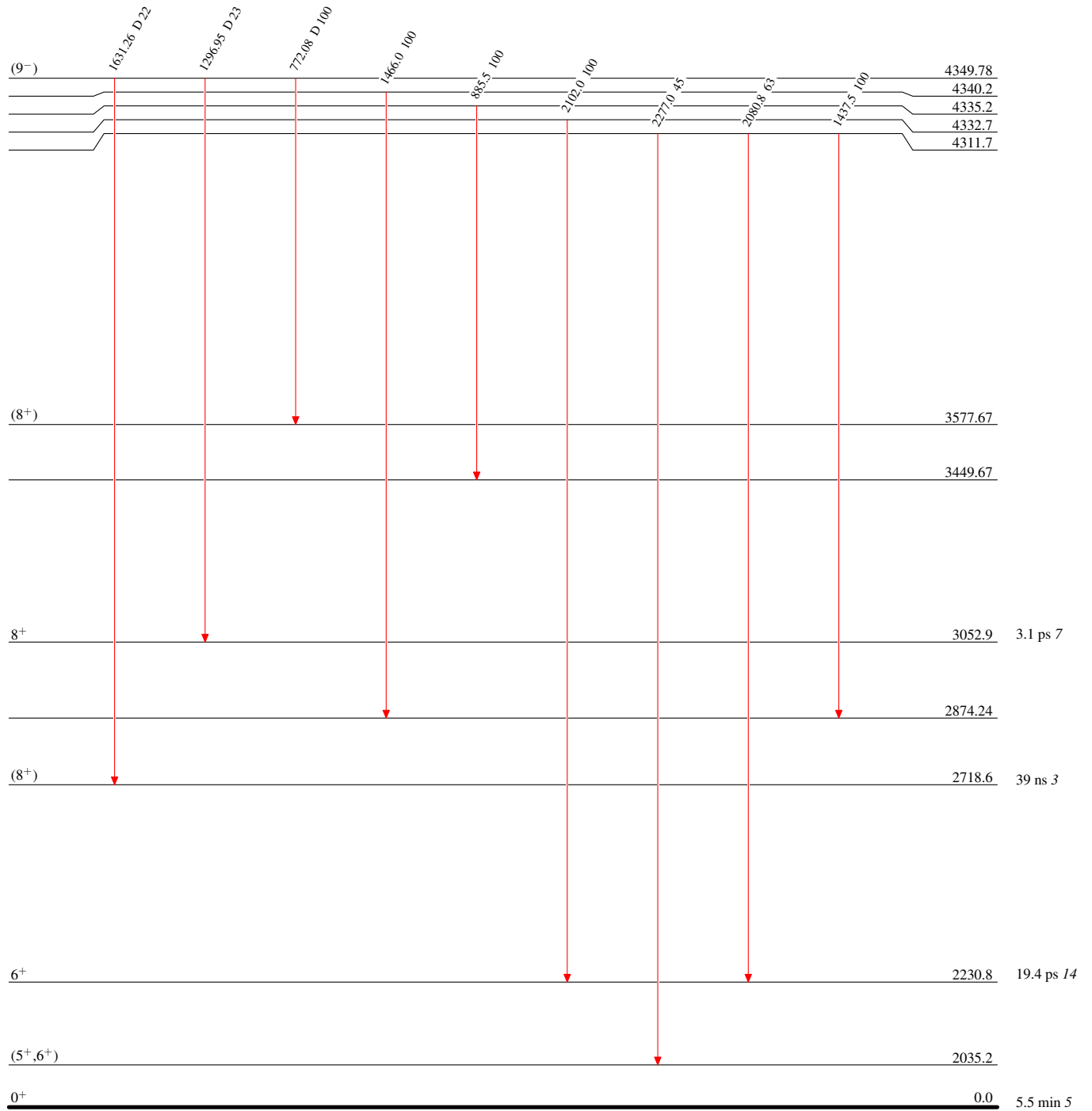


Adopted Levels, GammasLevel Scheme (continued)

Intensities: Type not specified

Legend

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

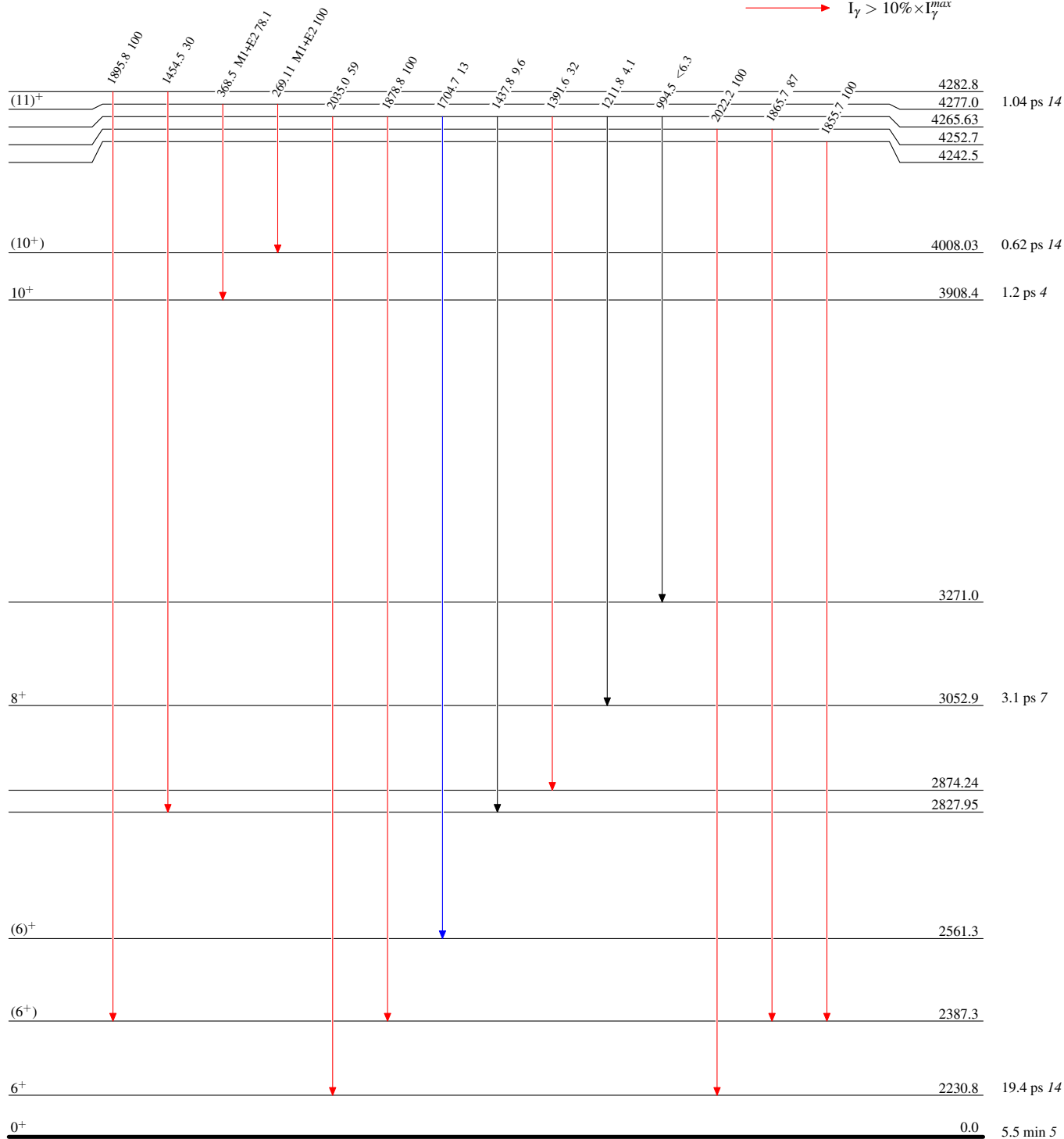


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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

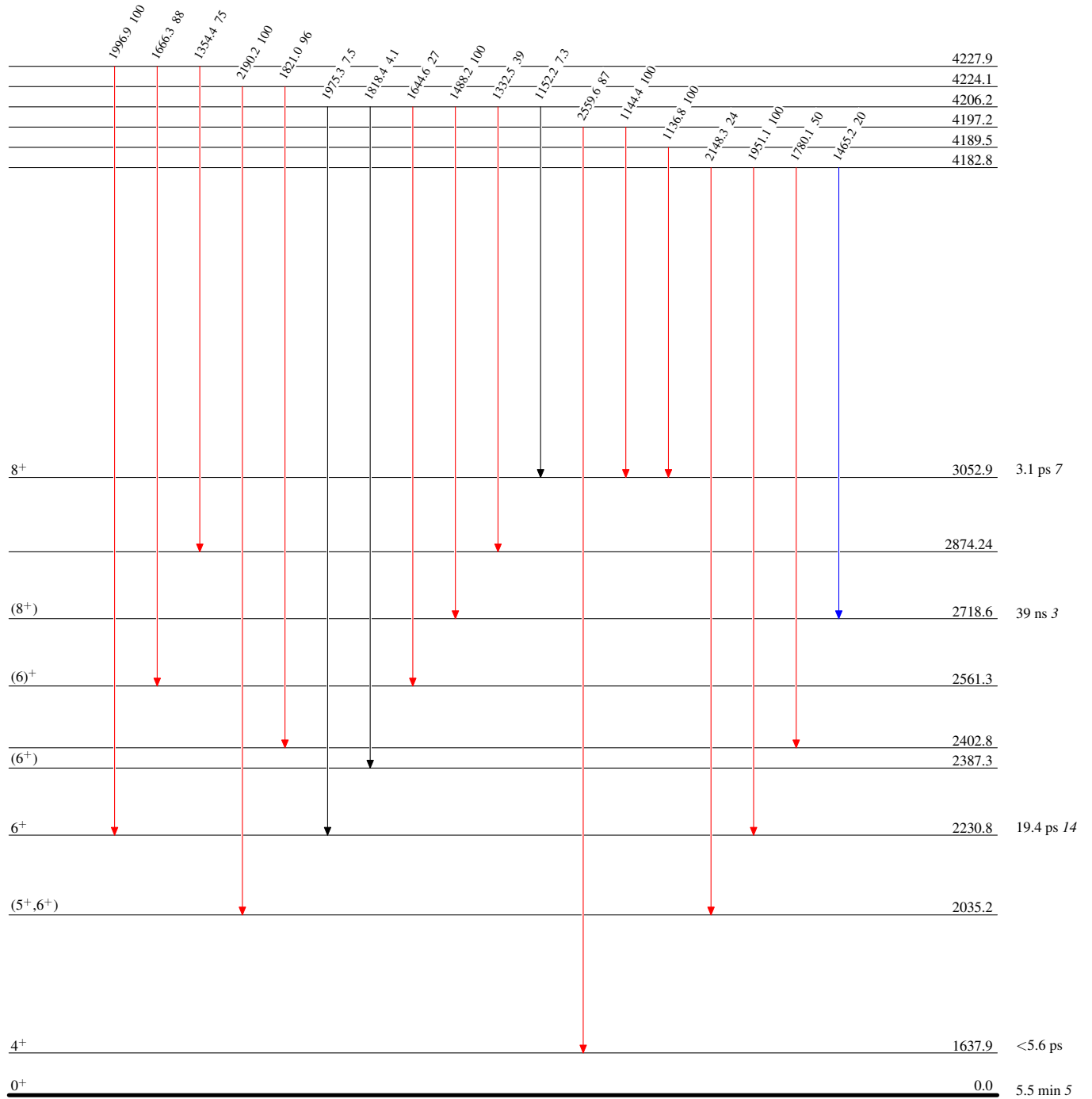


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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

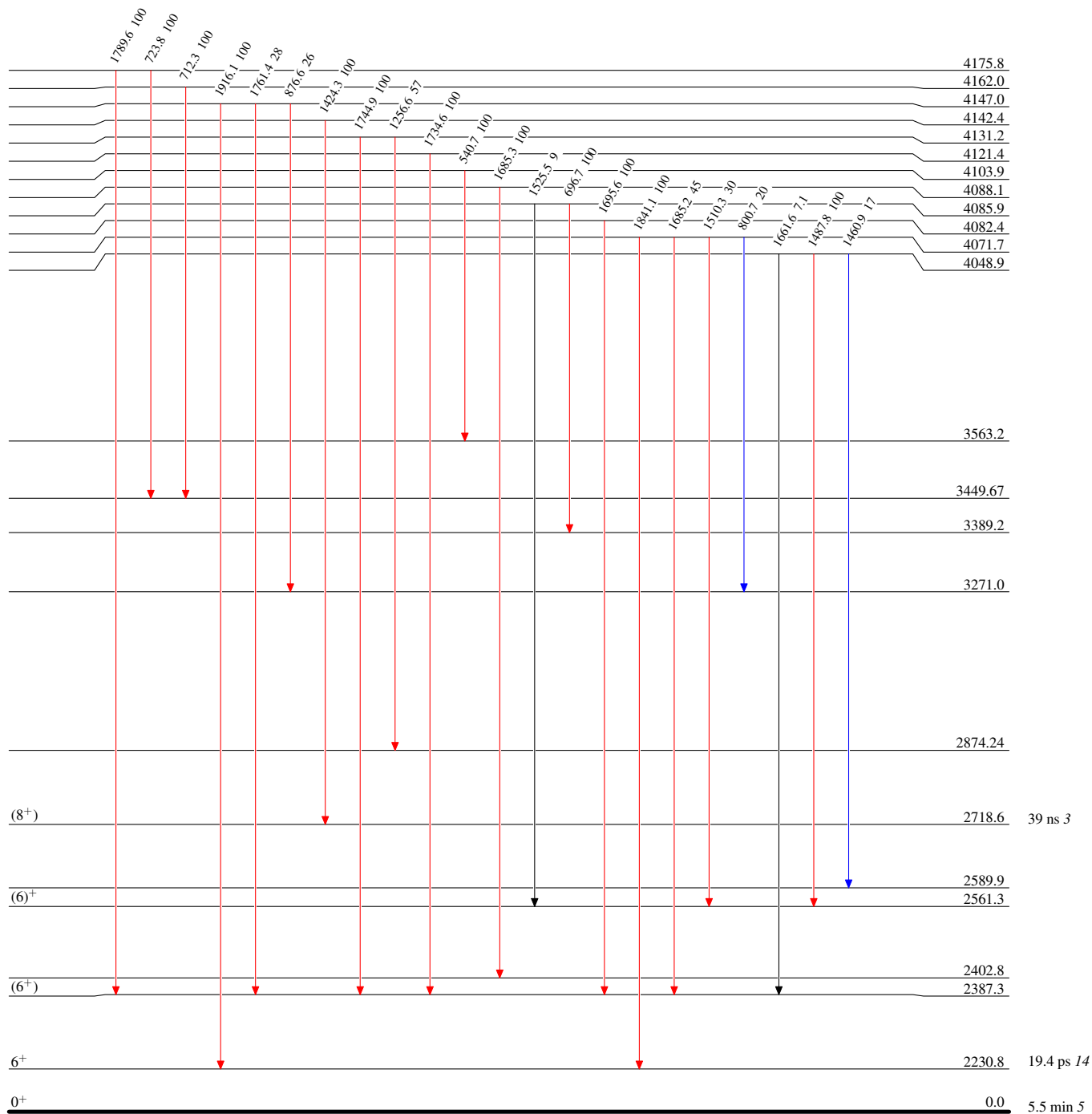


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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

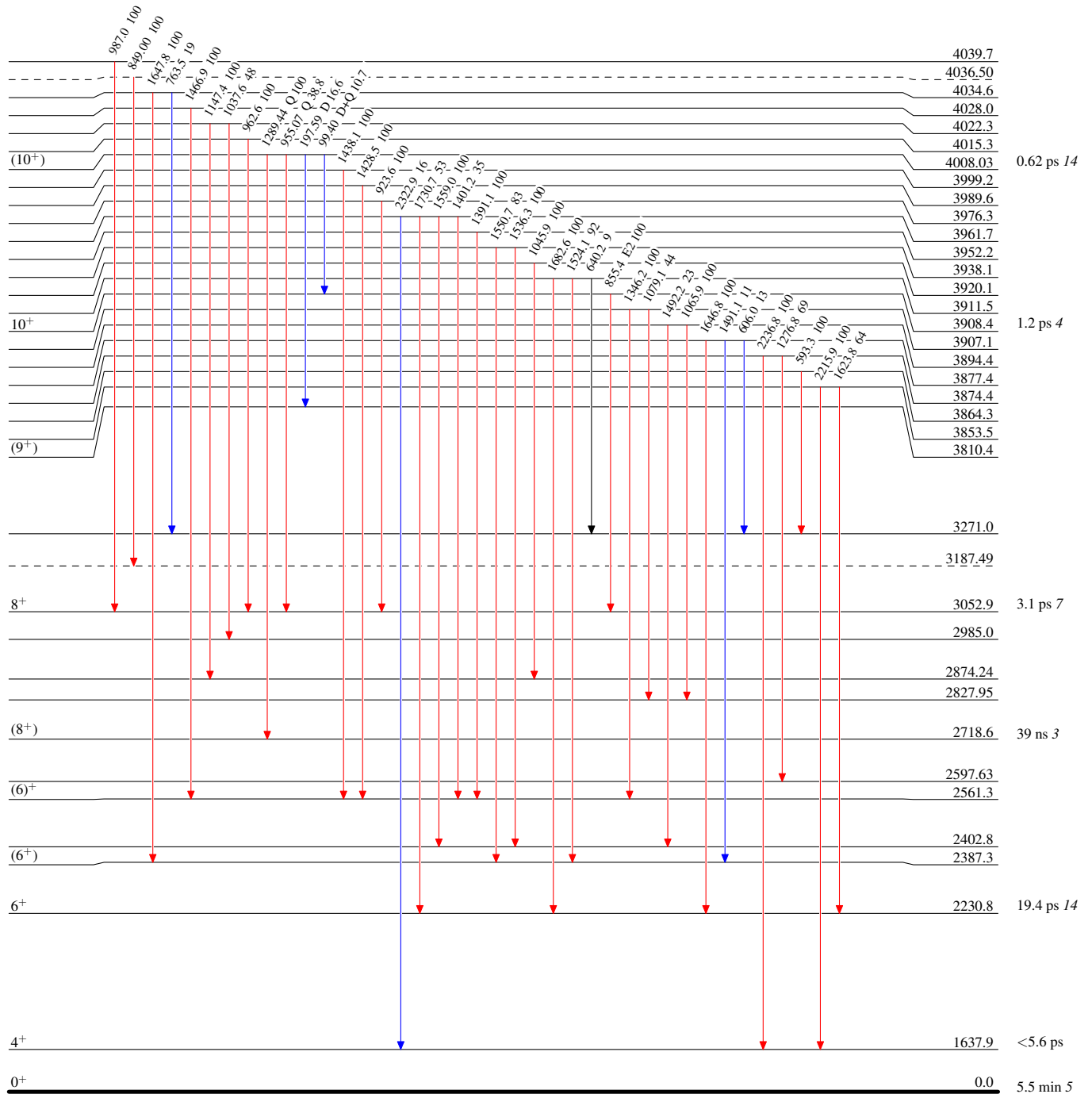


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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

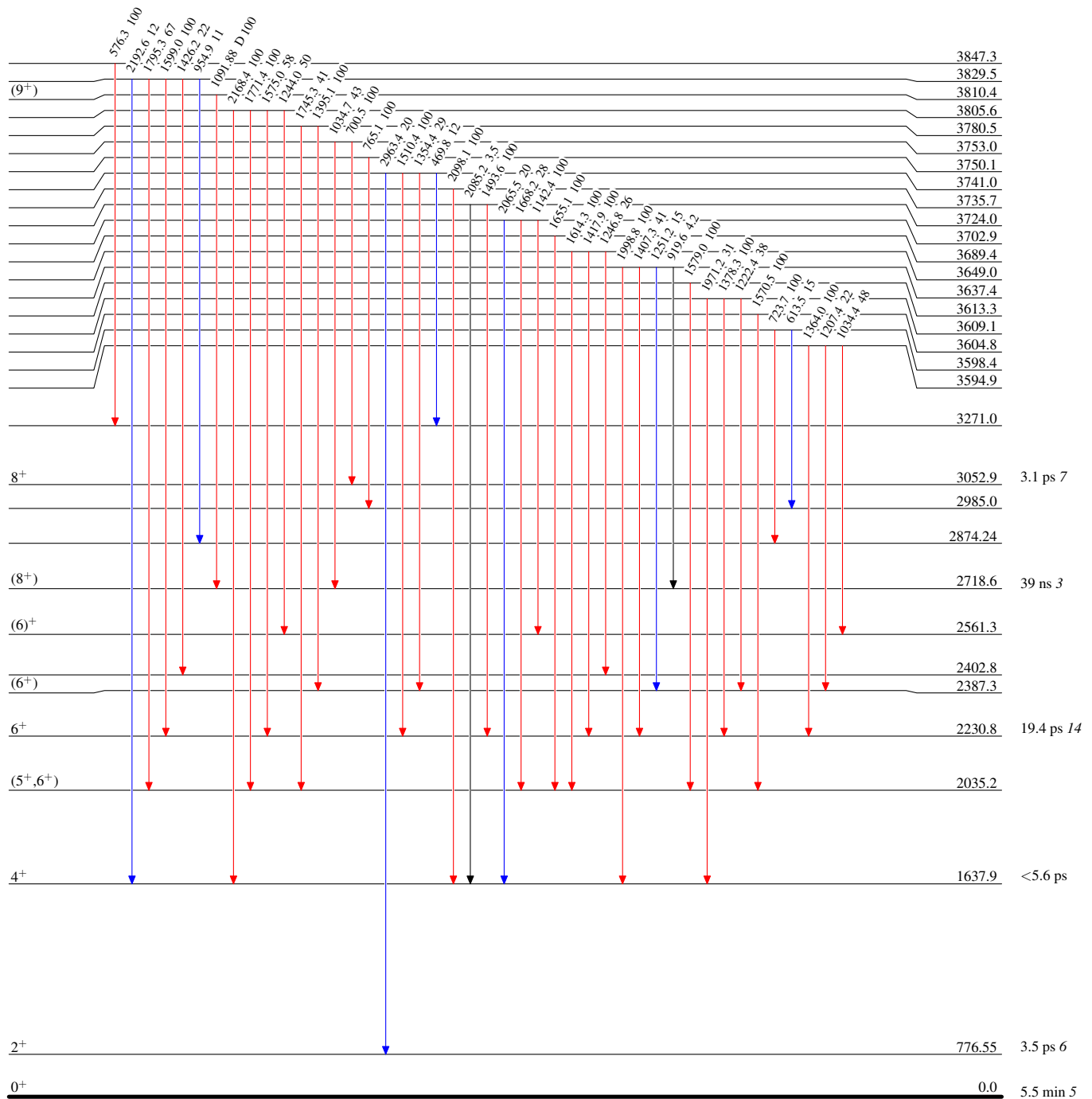


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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

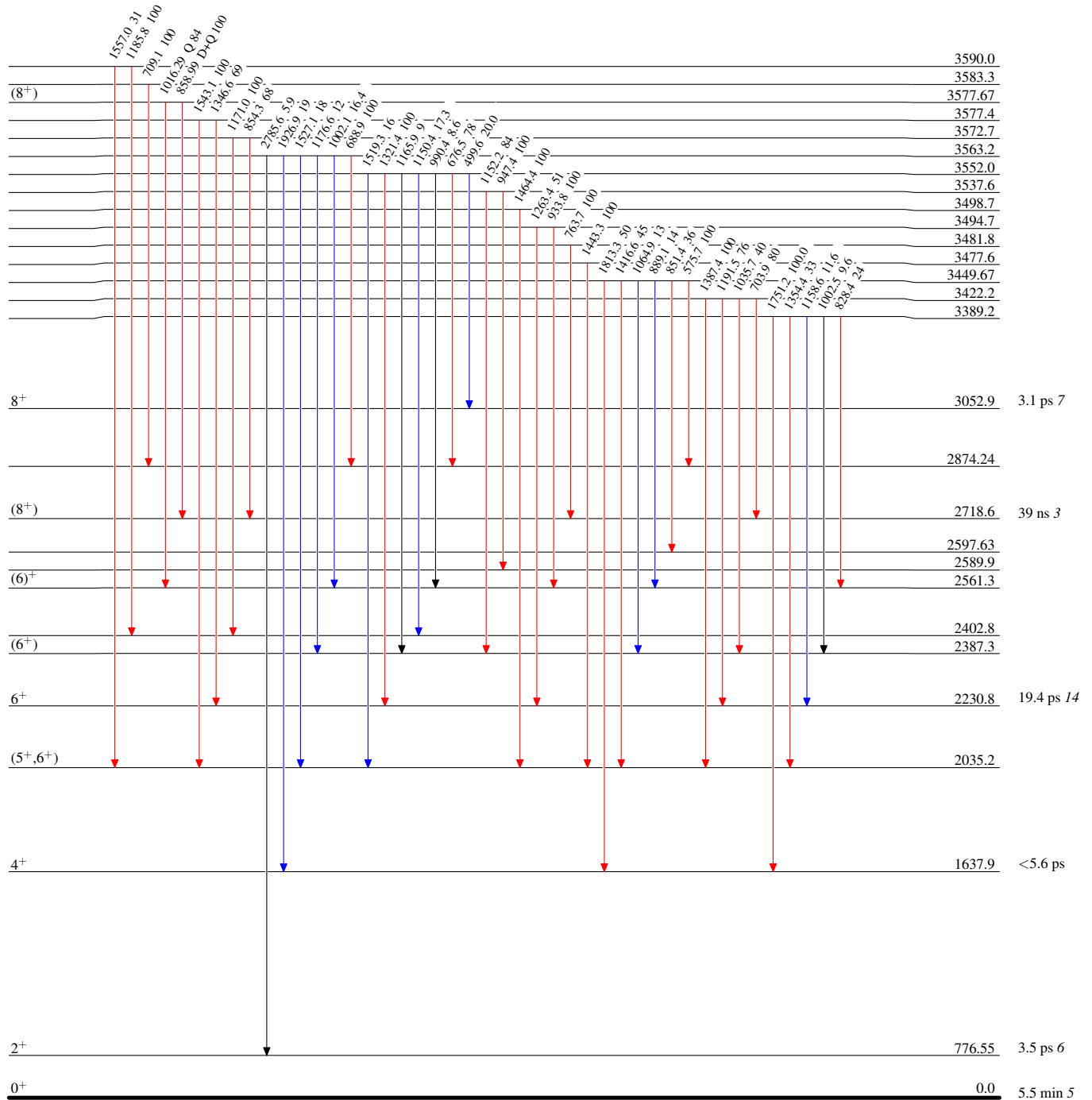


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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



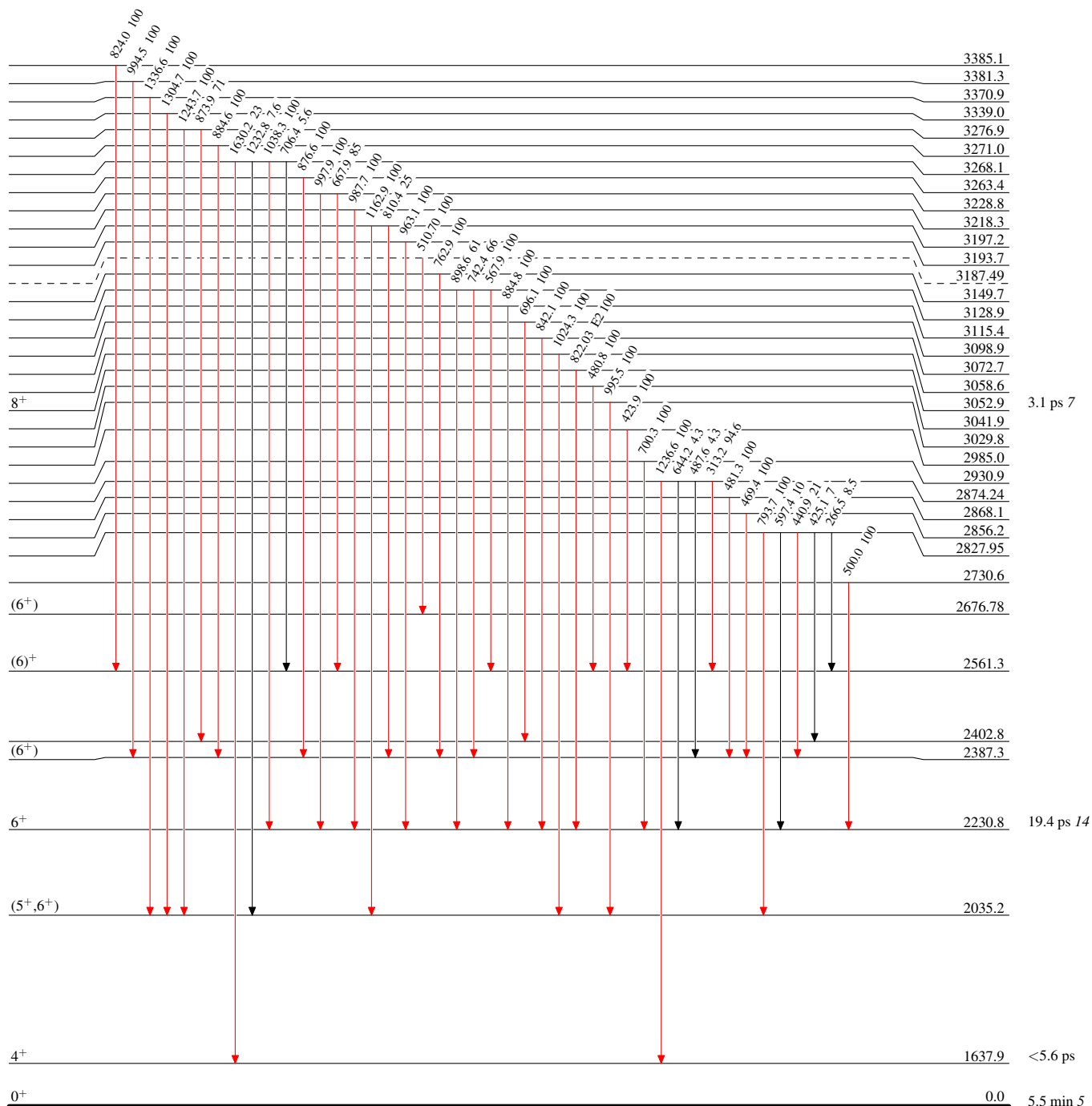
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

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



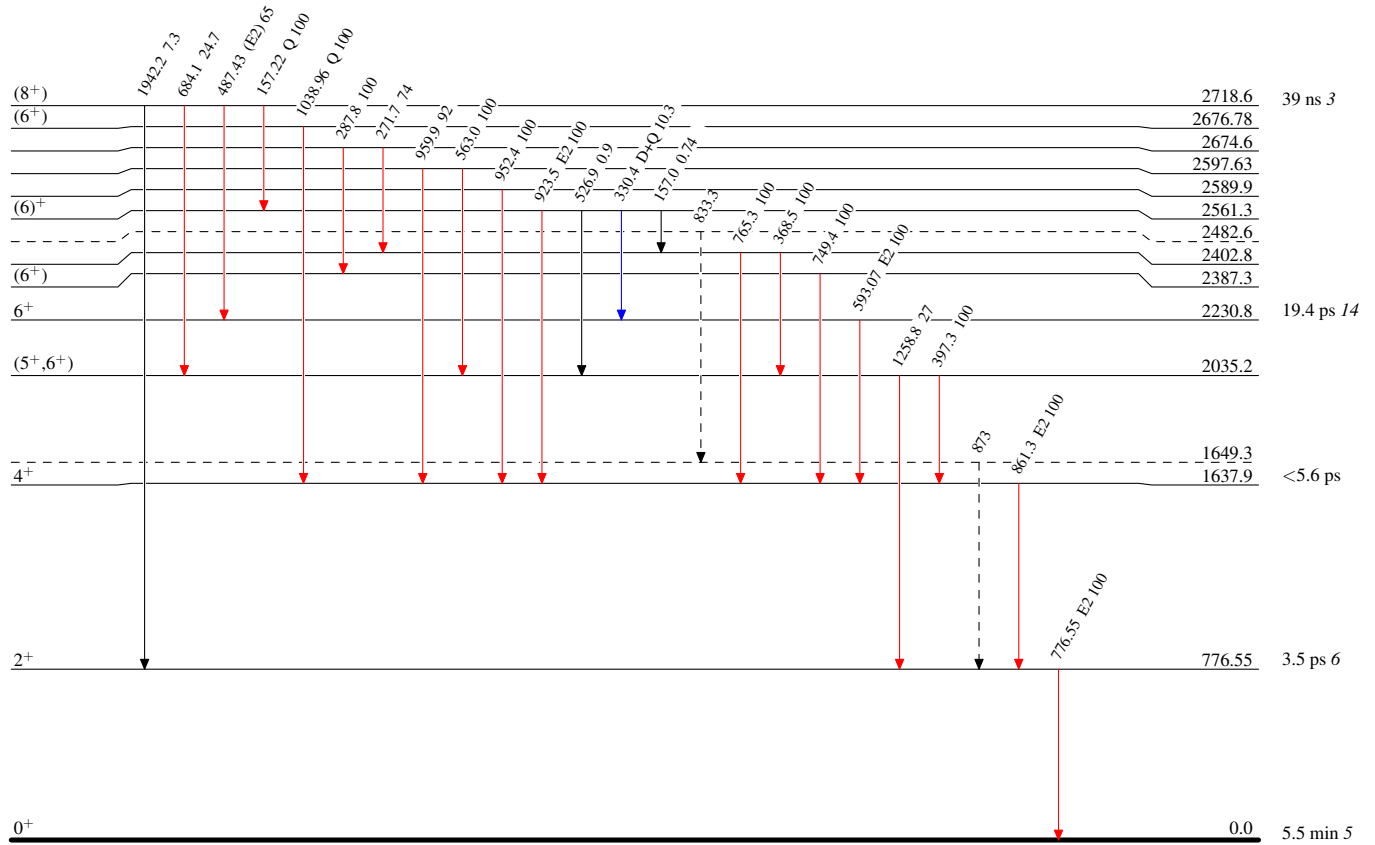
Adopted Levels, Gammas

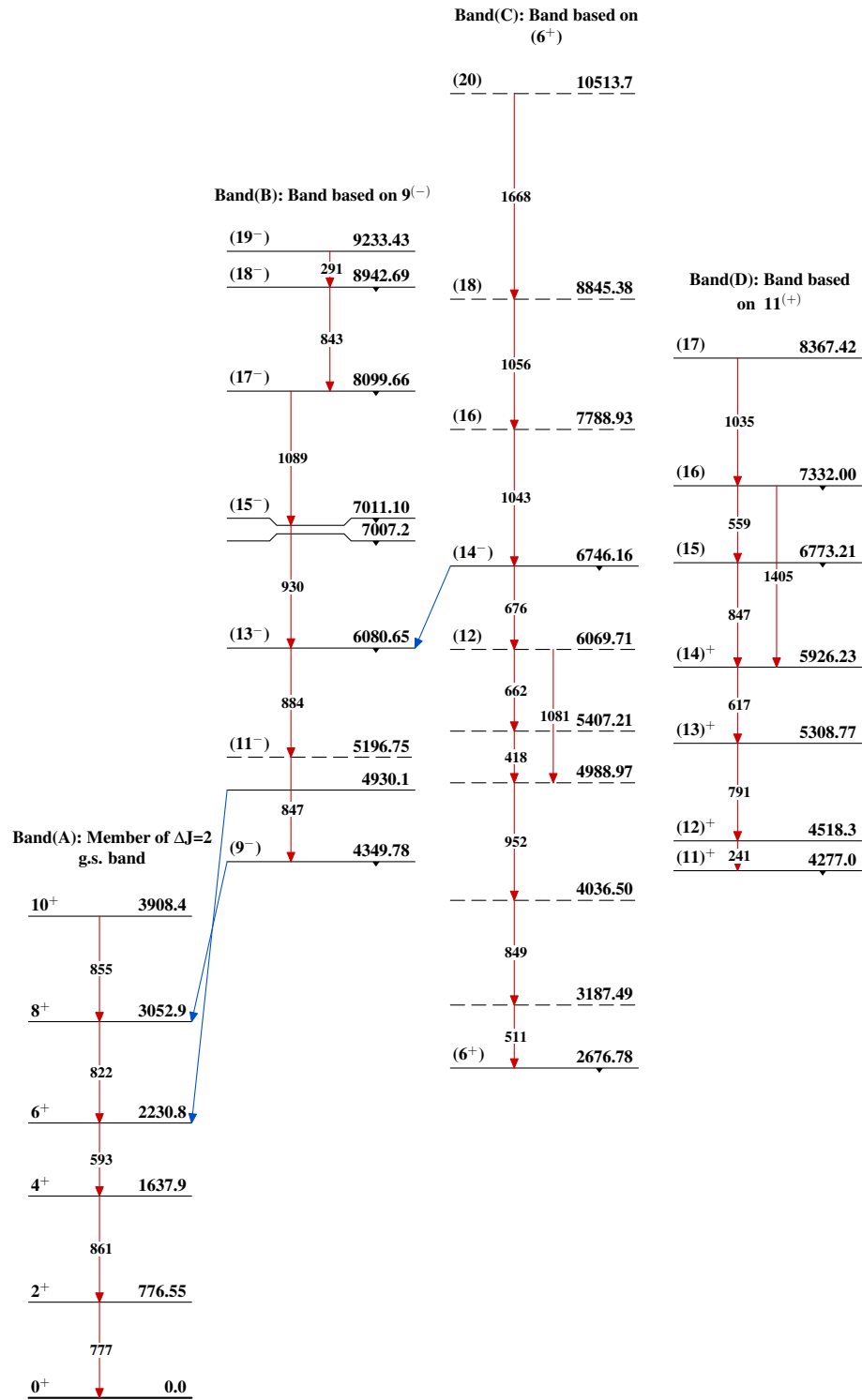
Legend

Level Scheme (continued)

Intensities: Type not specified

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$
- - - - - γ Decay (Uncertain)

 $^{102}_{48}\text{Cd}_{54}$

Adopted Levels, Gammas $^{102}_{48}\text{Cd}_{54}$