

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 110,1239 (2009)	1-Feb-2008

$Q(\beta^-) = -862.4$; $S(n) = 6975.63$ 17; $S(p) = 9084.3$ 13; $Q(\alpha) = -3305.5$ 14 [2012Wa38](#)

Note: Current evaluation has used the following Q record -862 5 6975.85 199085.9 16-3315 5 [2003Au03](#).

 ^{111}Cd LevelsCross Reference (XREF) Flags

A	Coulomb excitation	F	$^{111}\text{Cd}(d,d')$ E=15 MeV	K	$^{110}\text{Pd}(^3\text{He},2n\gamma)$
B	$^{110}\text{Cd}(d,p)$, $^{112}\text{Cd}(d,t)$	G	$^{111}\text{Cd}(p,p')$	L	$^{111}\text{Cd}(\gamma,\gamma')$
C	$^{110}\text{Pd}(\alpha,3n\gamma)$	H	^{111}Cd IT decay (48.54 min)	M	$^{110}\text{Cd}(n,\gamma)$ E=0.02-1 keV
D	^{111}Ag β^- decay (64.8 s)	I	^{111}In ε decay	N	$^{110}\text{Cd}(n,\gamma)$:E=th,reactor,res
E	^{111}Ag β^- decay (7.45 d)	J	$^{111}\text{Cd}(n,n'\gamma)$	O	(HL,xn γ)

E(level) [†]	J $^\pi$	T _{1/2}	XREF	Comments
0.0	1/2 ⁺	stable		$\mu = -0.5948861$ 9 (1989Ra17) J $^\pi$: J=1/2 (1976Fu06), L(d,p)=0.
245.390 16	5/2 ⁺	84.5 ns 4	ABCDEF HIJK MN	Q=+0.77 12 (1989Ra17); $\mu = -0.7656$ 25 Q: others: +0.80 10 (1983Er01), +0.83 13 (1983He02). μ : other: -0.76 5 (1989Be22). T _{1/2} : weighted average: 84.1 ns 5 (1957Ma26) $\gamma\gamma(t)$, 84.8 ns +8-5 (1957Si63) $\gamma\gamma(t)$ from ε decay, and 85.0 ns 7 (1968Mc04) from β^- decay.
342.135 16	3/2 ⁺	24 ps 3	AB DEFG JK MN	J $^\pi$: E2 γ decay to ground state; E3 γ from J=11/2. $\mu = +0.03$ 120 (1989Ra17 , 1989Be22) T _{1/2} : from B(E2)=0.110 9 in Coul. ex. and $\delta(342\gamma)=0.36$ 2. Others: 59 ps 12 (1970Ra16) 62 ps 17 (1961Fr08), 42 ps 6 (1971Sh21) res scattering cross section as a function of temperature. A weighted av of these other values gives 47 ps 5 which requires $\delta(342\gamma)=0.53$ 5 if B(E2)=0.110 9.
396.214 [‡] 21	11/2 ⁻	48.50 min 9	BC HIJKL O	J $^\pi$: M1+E2 γ decay to 1/2 ⁺ state. %IT=100 Q=-0.85 9 (1989Ra17); $\mu = -1.1051$ 4 J $^\pi$: optical double resonance (1976Fu06), L(d,p)=5. Measured moments of odd-mass ^{105}Cd - ^{115}Cd are compared with theoretical predictions (1989Be22). T _{1/2} : from weighted average with Limitation of Relative Statistical Weight, lrs, method (1985ZiZY , 1992Ra09) of 48.7 m 3 (1945Wi11), 50 m 2 (1948Ho37), 48.6 m 3 (1949He06), 49.4 m 7 (1968Bo28), 48.54 m 5, (1987Ne01), and 48.30 m 15 [Xiao-qiong Wen et al. Nucl. Instr. & Meth. A379 (1997) 478]. In the lrs process the uncertainty for the value of 1987Ne01 is increased from 0.05 to 0.12 to decrease its relative weight to 50%.
416.72 3	7/2 ⁺	0.12 ns 3	ABCD F IJK	μ : other: -1.1055 (1989Be22). T _{1/2} : from 1964Sp07 (ce(K) Auger)(ce(L) 171 γ)(t).
620.18 3	5/2 ⁺	9.7 ps	AB DEFG JK	J $^\pi$: L=4 (d,p),(d,t) and γ to 3/2 ⁺ . $\mu = +0.28$ 12 (1989Ra17 , 1989Be22) T _{1/2} : from $\gamma\gamma(t)$ in Coul. ex. Other: 11 ps 2 (1968Mc04). J $^\pi$: L=2 and cross-section ratio (d,p)/(d,t); allowed β^- transition from 7/2 ⁺ excludes 3/2 ⁺ .
680.48 5 700 10	(9/2) ⁻ (7/2 ⁺ , 9/2 ⁺)		J M B	J $^\pi$: M1+E2 γ to 11/2 ⁻ , $\gamma(\theta)$ and linear polarization in (n,n' γ). J $^\pi$: L=(4) in (d,p), (d,t).

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Adopted Levels, Gammas (continued) ^{111}Cd Levels (continued)

E(level) [†]	J ^π	T _{1/2}	XREF		Comments
704.93 10	7/2 ⁺	>1 ns		J	J ^π : γ(θ) and linear polarization in (n,n'γ).
736 10	3/2 ⁺ , 5/2 ⁺		G	L	T _{1/2} : deduced from photoactivation (1988Ne04). J ^π : L(p,p')=2.
752.81 5	5/2 ⁺		D	JK M	J ^π : based on probable γ decay to 1/2 ⁺ g.s. and allowed (log ft=4.6) β ⁻ transition from 7/2 ⁺ ^{111}Ag isomer.
754.9 4	3/2 ⁺		A	E K	J ^π : γ's to 1/2 ⁺ , 5/2 ⁺ states, excit in $^{110}\text{Pd}(^3\text{He}, 2n\gamma)$.
831.26 9	(7/2 ⁻)			J M	J ^π : fed by transitions from 3/2 ⁻ and 9/2 ⁻ levels. Syst.
853.94 7	7/2 ⁺			JK M	J ^π : γ's to 5/2 ⁺ and 7/2 ⁺ and excit in $^{110}\text{Pd}(^3\text{He}, 2n\gamma)$.
855.6 10	3/2 ⁺		A		J ^π : M1+E2 γ to 1/2 ⁺ g.s.
864.8 3	3/2 ⁺		b	E n	J ^π : M1 γ to 1/2 ⁺ g.s., av res (n,γ).
866.60 6	3/2 ⁺	2.8 ps +7-4	Ab	E J Mn	J ^π : L=2 (d,p), (d,t). M1+E2 γ to 1/2 ⁺ .
967.90 [‡] 7	15/2 ⁻		C	JK 0	J ^π : E2 γ to 11/2 ⁻ , excit in $^{110}\text{Pd}(^3\text{He}, 2n\gamma)$.
986.53 9	9/2 ⁺		C	JK	J ^π : γ(θ) and linear polarization in (n,n'γ).
1016.76 8	3/2 ⁺			J MN	J ^π : M1+E2 γ to 1/2 ⁺ g.s., γ(θ) and linear polarization in (n,n'γ). E(level): 1991NeZX suggest correspondence with the 1020 level, but this would require the γ(θ) and γ(pol) for the 1016γ giving mult=M1+E2 to be in error.
1020 10	1/2 ⁺		B		J ^π : from L=0 via (d,p), (d,t), IAR.
1046.76 7	(7/2 ⁺)			K	J ^π : γ's to 3/2 ⁺ and 5/2 ⁺ . Excit in ($^3\text{He}, 2n\gamma$).
1057.49 9				J M	
1078.25 7	3/2 ⁺			J MN	J ^π : M1+E2 γ to 1/2 ⁺ .
1115.56 9	3/2 ⁺	0.08 ps 4	AB	JK MN	XREF: B(1130). J ^π : L=2 (d,p), M1+E2 to 1/2 ⁺ g.s.
1118.41 7	7/2 ⁺			J M	T _{1/2} : from B(E2) in Coul. ex.
1130 1		80 ps		L	J ^π : E2 γ to 3/2 ⁺ . T _{1/2} : deduced from photoactivation (1988Ne04). J ^π : authors suggest a J ^π =5/2 ⁺ .
1151.00 9	(5/2 ⁺)			J	J ^π : M1+E2 γ to 7/2 ⁺ , γ(θ) and linear polarization in (n,n'γ).
1185.73 10	1/2 ⁺		B	J MN	J ^π : from L=0 (d,p), (d,t).
1189.96 10	3/2 ⁺			J M	J ^π : M1+E2 given in (n,n'γ) is inconsistent with 1/2 ⁺ to 1/2 ⁺ placement which requires pure M1.
1256.59 9	11/2 ⁺		C	JK	J ^π : γ's to 7/2 ⁺ and (9/2 ⁺), excit in $^{110}\text{Pd}(^3\text{He}, 2n\gamma)$.
1274.68 8	(5/2 ⁺)			JK M	J ^π : γ to 3/2 ⁺ , γ(θ) in $^{110}\text{Pd}(^3\text{He}, 2n\gamma)$.
1288.89 25				M	
1298.58 9				K N	J ^π : γ(θ) 5/2 ⁺ in (n,n'γ). (9/2 ⁺) in $^{110}\text{Pd}(^3\text{He}, 2n\gamma)$.
1321.61 10				J	
1325.94 10	3/2 ⁺			J MN	J ^π : M1(+E2) γ to 1/2 ⁺ g.s.
1326.62 10	5/2 ⁻			J M	J ^π : E2 γ to 9/2 ⁻ and E1 γ to 3/2 ⁺ .
1330		1 ps		L	T _{1/2} : deduced from photoactivation (1988Ne04).
1339.72 12	(13/2 ⁻)		C	JK	J ^π : γ to 11/2 ⁻ , excit in $^{110}\text{Pd}(^3\text{He}, 2n\gamma)$.
1340.67 6	1/2, 3/2			JK MN	J ^π : d, D+Q γ to 1/2 ⁺ g.s.
1341.33 10	(5/2)			JK M	J ^π : based on the (n,γ)/(n,n'γ) intensity ratio and syst.
1346.19 10				M	
1391.81 7	3/2 ⁺			J MN	J ^π : M1 γ to 5/2 ⁺ and 3/2 ⁺ . γ from 1/2 ⁺ in (n,γ) E=res.
1472.98 12	3/2 ⁺			J MN	J ^π : M1 γ to 3/2 ⁺ , γ(θ) and linear polarization in (n,n'γ).
1506.05 10	(9/2 ⁻)			J N	J ^π : based on the (n,γ)/(n,n'γ) intensity ratio and syst.
1511.57 10				JK N	
1546.33 10	3/2 ⁺		B	J MN	XREF: B(1550). J ^π : L=2 (d,p) (d,t). γ's to 1/2 ⁺ g.s. and (5/2 ⁺). γ from 1/2 ⁺ in (n,γ) E=res.
1552.10 8	3/2 ⁺		B	J MN	J ^π : M1 γ to 5/2 ⁺ , γ(θ) and linear polarization in (n,n'γ).
1552.44 13	(7/2 ⁺ , 9/2 ⁺)			K	J ^π : excit in $^{110}\text{Pd}(^3\text{He}, 2n\gamma)$.
1565.72 10	(11/2 ⁻)		C	JK	J ^π : γ(θ) and linear polarization in (n,n'γ), excit in

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Adopted Levels, Gammas (continued) ^{111}Cd Levels (continued)

E(level) [†]	J ^π	XREF	Comments
1613.32 13		J	$^{110}\text{Pd}(^3\text{He},2n\gamma)$.
1660 10	(1/2 ⁺)	B	J ^π : L=(0) (d,p) (d,t).
1666.00 15		C JK M	
1682.75 12		J M	
1691.95 18	3/2 ⁺	FG J	J ^π : $\gamma(\theta)$ and linear polarization in (n,n' γ).
1717.47 22	3/2 ⁺ ,5/2 ⁺	B J M	XREF: B(1720).
			J ^π : L=2 (d,p) (d,t).
1739.73 10	3/2 ⁺	J MN	J ^π : M1 γ to 5/2 ⁺ and 3/2 ⁺ .
1789.30 12	3/2 ⁺	F J MN	J ^π : M1 γ to 5/2 ⁺ , $\gamma(\theta)$ and linear polarization in (n,n' γ).
1800.94 14	(7/2 ⁻)	G J M	J ^π : $\gamma(\theta)$ and linear polarization in (n,n' γ).
1826.71 17	9/2,11/2	K	J ^π : γ 's to 7/2 ⁺ , excit in $^{110}\text{Pd}(^3\text{He},2n\gamma)$.
1828.63 11	3/2 ⁺	J MN	J ^π : M1 γ to 1/2 ⁺ , $\gamma(\theta)$ and linear polarization in (n,n' γ).
1842.50 18	3/2,1/2	J MN	J ^π : d,D+Q γ to 1/2 ⁺ g.s., $\gamma(\theta)$ and linear polarization in (n,n' γ).
1849.0 4		M	
1852.1 [‡] 3	19/2 ⁻	C K O	J ^π : E2 γ to 15/2 ⁻ , excit in $^{110}\text{Pd}(^3\text{He},2n\gamma)$.
1860 10	3/2 ⁺ ,5/2 ⁺	B	J ^π : L=2 (d,p) (d,t).
1895.0		J	
1907.4 3		JK	
1921.1 10	(13/2 ⁺)	C K	J ^π : excit in $^{110}\text{Pd}(^3\text{He},2n\gamma)$.
1960		F	
1971.80 12	7/2 ⁻	J M	J ^π : E2 γ to 11/2 ⁻ and γ to 7/2 ⁻ .
1974.75 15	3/2 ⁺ ,5/2 ⁺	B FG J	J ^π : L=2 (d,p) (d,t).
1992.71 16		J M	
2005.8 3		J M	
2016.0 5	3/2 ⁺ ,5/2 ⁺	B M	J ^π : L=2 (d,p) (d,t).
2038.6 4		J M	
2045.29 23	(3/2 ⁺)	J MN	J ^π : M1 γ to 5/2 ⁺ , $\gamma(\theta)$ and linear polarization in (n,n' γ).
2096.95 21	(5/2 ⁺ ,7/2 ⁺)	J M	
2134.88 19	(1/2,3/2)	B J M	
2147.5 4	(17/2 ⁻)	C K O	J ^π : γ to (15/2 ⁻ and 13/2 ⁻), excit in $^{110}\text{Pd}(^3\text{He},2n\gamma)$.
2154.21 14	(5/2 ⁺ ,7/2 ⁺)	J N	
2165.6 5		N	
2195.7 10	(15/2 ⁺)	C K	J ^π : γ to (11/2 ⁺), excit in $^{110}\text{Pd}(^3\text{He},2n\gamma)$.
2197		J L	B(E1)↑=0.41×10 ⁻⁵ 5
2200 10		B	
2226.3 11		K	
2236.1 3		C J L N	B(E1)↑=0.18×10 ⁻⁵ 3
2242.5 4		N	
2280.5 4	1/2 ⁺ ,3/2 ⁺	B J MN	J ^π : $\gamma(\theta)$ and linear polarization in (n,n' γ), fed by primary gammas.
2311		L	B(E1)↑=0.32×10 ⁻⁵ 3
2325.6 5	1/2,3/2	J MN	J ^π : γ to 3/2 ⁺ , $\gamma(\theta)$ and linear polarization in (n,n' γ).
2331.5 6		C	
2382.9 3		N	
2384		L	B(E1)↑=0.04×10 ⁻⁵ 1
2415		L	B(E1)↑=0.19×10 ⁻⁵ 6
2419		L	B(E1)↑=0.63×10 ⁻⁵ 5
2446.1 4		J M	
2449		L	B(E1)↑=0.05×10 ⁻⁵ 1
2475.3 11		C	
2495.1 4		J M	
2538		L	B(E1)↑=0.09×10 ⁻⁵ 1
2556.9 4		J M	
2560		L	B(E1)↑=0.27×10 ⁻⁵ 2

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Adopted Levels, Gammas (continued) ^{111}Cd Levels (continued)

E(level) [†]	J ^π	XREF	Comments
2566.2		N	
2588.2 5		M	
2653.2 7		M	
2659		L	B(E1)↑=0.07×10 ⁻⁵ 1
2671		L	B(E1)↑=0.20×10 ⁻⁵ 2
2690		L	B(E1)↑=0.08×10 ⁻⁵ 1
2692.3 5		M	
2698		L	B(E1)↑=0.08×10 ⁻⁵ 1
2708		L	B(E1)↑=0.16×10 ⁻⁵ 1
2709.9 4		M	
2714.5 4		M	
2730		L	B(E1)↑=0.08×10 ⁻⁵ 1
2733.2 3		M	
2740.1 5	(19/2)	C	J ^π : D+Q to (17/2 ⁻) and γ to 19/2 ⁻ .
2756		L	B(E1)↑=0.07×10 ⁻⁵ 1
2768.4 5		M	
2775		L	B(E1)↑=0.13×10 ⁻⁵ 1
2788		L	B(E1)↑=0.04×10 ⁻⁵ 1
2831		L	B(E1)↑=0.05×10 ⁻⁵ 1
2847.0 [‡] 6	23/2 ⁻	C	J ^π : E2 γ to 19/2 ⁻ .
2858		L	B(E1)↑=0.25×10 ⁻⁵ 2
2860.1 11		C	
2950.88 11		M	
2977.9 5		M	
3039		L	B(E1)↑=0.20×10 ⁻⁵ 1
3059		L	B(E1)↑=0.10×10 ⁻⁵ 3
3076.11 24		M	
3100.6 6		C	0
3113		L	B(E1)↑=0.04×10 ⁻⁵ 1
3126.4 6		M	
3131		L	B(E1)↑=0.35×10 ⁻⁵ 2
3147		L	B(E1)↑=0.05×10 ⁻⁵ 1
3173		L	B(E1)↑=0.15×10 ⁻⁵ 1
3185		L	B(E1)↑=0.06×10 ⁻⁵ 1
3207		L	B(E1)↑=0.08×10 ⁻⁵ 1
3230.3 10	(23/2 ⁺)	C	0 J ^π : stretched Q to (19/2 ⁺).
3246		L	B(E1)↑=0.06×10 ⁻⁵ 1
3259		L	B(E1)↑=0.05×10 ⁻⁵ 1
3302		L	B(E1)↑=0.14×10 ⁻⁵ 1
3323		L	B(E1)↑=0.09×10 ⁻⁵ 1
3351		L	B(E1)↑=0.12×10 ⁻⁵ 7
3362		L	B(E1)↑=0.08×10 ⁻⁵ 1
3384		L	B(E1)↑=0.07×10 ⁻⁵ 1
3394			B(E1)↑=0.06×10 ⁻⁵ 1
3455		L	B(E1)↑=0.19×10 ⁻⁵ 2
3467		L	B(E1)↑=0.48×10 ⁻⁵ 2
3483		L	B(E1)↑=0.25×10 ⁻⁵ 2
3498		L	B(E1)↑=0.19×10 ⁻⁵ 1
3526		L	B(E1)↑=0.61×10 ⁻⁵ 6
3542		L	B(E1)↑=0.11×10 ⁻⁵ 1
3553		L	B(E1)↑=0.05×10 ⁻⁵ 1
3566		L	B(E1)↑=0.06×10 ⁻⁵ 1

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Adopted Levels, Gammas (continued) ^{111}Cd Levels (continued)

E(level) [†]	J ^π	XREF	Comments
3573		L	B(E1)↑=0.05×10 ⁻⁵ <i>I</i>
3671		L	B(E1)↑=0.02×10 ⁻⁵ <i>I</i>
3691		L	B(E1)↑=0.04×10 ⁻⁵ <i>I</i>
3702		L	B(E1)↑=0.10×10 ⁻⁵ <i>I</i>
3710		L	B(E1)↑=0.15×10 ⁻⁵ <i>I</i>
3715			B(E1)↑=0.04×10 ⁻⁵ <i>I</i>
3717.4 7	(27/2 ⁺)	C	0 J ^π : stretched Q to (23/2 ⁺).
3733			B(E1)↑=0.03×10 ⁻⁵ <i>I</i>
3740		L	B(E1)↑=0.18×10 ⁻⁵ <i>I</i>
3756		L	B(E1)↑=0.04×10 ⁻⁵ <i>I</i>
3763.0 [‡] 7	27/2 ⁻	C	0 J ^π : E2 γ to 23/2 ⁻ .
3781		L	B(E1)↑=0.04×10 ⁻⁵ <i>I</i>
3801		L	B(E1)↑=0.06×10 ⁻⁵ <i>I</i>
3828		L	B(E1)↑=0.23×10 ⁻⁵ <i>3</i>
3856		L	B(E1)↑=0.31×10 ⁻⁵ <i>4</i>
3900		L	B(E1)↑=0.18×10 ⁻⁵ <i>I</i>
3921		L	B(E1)↑=0.05×10 ⁻⁵ <i>I</i>
4555.9 [‡] 9	31/2 ⁻	C	0 J ^π : E2 γ to 27/2 ⁻ .
5501.7 [‡] 10	35/2 ⁻		0 J ^π : E2 γ to 31/2 ⁻ .
6648.8 [‡] 11	39/2 ⁻		0 J ^π : E2 γ to 35/2 ⁻ .
7951.2 [‡] 12	43/2 ⁻		0 J ^π : E2 γ to 39/2 ⁻ .
9407.2 [‡] 15	47/2 ⁻		0 J ^π : E2 γ to 43/2 ⁻ .

[†] From least-squares fit to Eγ's.[‡] Band(A): (ν h_{11/2}) decoupled band. ΔJ=2 spacing corresponds to ^{110}Cd g.s. band.

Adopted Levels, Gammas (continued)

$\gamma(^{111}\text{Cd})$									
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. [‡]	$\delta^\ddagger$	$\alpha^\#$	Comments
245.390	5/2 ⁺	245.395 20	100	0.0	1/2 ⁺	E2		0.0638	B(E2)(W.u.)=0.2218 19 Mult.: from $\alpha(\text{K})\text{exp}$ and subshell ratios in ¹¹¹ Ag β^- decay. E_γ : from it decay.
342.135	3/2 ⁺	96.75 2	1.73 9	245.390	5/2 ⁺	M1+E2	0.12 4	0.531 11	B(M1)(W.u.)=0.0205 2 Mult.: from ¹¹¹ Ag β^- decay. $\delta \approx 0.1$ (1975Sh29). B(E2)(W.u.)=11.7 14; B(M1)(W.u.)=5.7 $\times 10^{-3}$ 12 δ : weighted average of 0.31 2 and 0.39 2 in Coul. ex. and 0.39 2 in (n,n' γ).
		342.13 2	100	0.0	1/2 ⁺	M1+E2	+0.36 2	0.0186 2	
396.214	11/2 ⁻	150.824 13	100	245.390	5/2 ⁺	E3		2.30	B(E3)(W.u.)=9.7 $\times 10^{-5}$ 2 Mult.: from $\alpha(\text{K})\text{exp}$ in ¹¹¹ Cd it decay. 1987Ne05 report $\alpha(\text{K})\text{exp}$ 11% lower than theory.
416.72	7/2 ⁺	171.28 3	100	245.390	5/2 ⁺	M1+E2	-0.144 3	0.107	B(E2)(W.u.)=23 6; B(M1)(W.u.)=0.0041 10 δ : from $\gamma\gamma(\theta)$ in ¹¹¹ In ε decay. Other: -0.17 5 (n,n' γ). E_γ, I_γ : from (n,n' γ) and (n, γ). B(E2)(W.u.)=20.5 2; B(M1)(W.u.)=0.0019 1 δ : +0.45 +25-13 or -1.2 +2-4.
620.18	5/2 ⁺	203.29 12	0.67 10	416.72	7/2 ⁺	M1+E2			
		278.04 5	6.1 5	342.135	3/2 ⁺				
		374.75 5	28.6 20	245.390	5/2 ⁺	M1+E2	+2.8 5		
		620.26 13	100 9	0.0	1/2 ⁺	E2			Mult.: Q from $\gamma(\theta)$, M2 ruled out by RUL.
680.48	(9/2) ⁻	284.28 5	100 5	396.214	11/2 ⁻	M1+E2	+0.16 1		
704.93	7/2 ⁺	24.1		680.48	(9/2) ⁻	M1+E2			E_γ : not observed, but required by the level scheme (1991NeZX). E_γ, I_γ : from (n,n' γ).
752.81	5/2 ⁺	336.16 10	14 3	416.72	7/2 ⁺				
		410.77 10	37 9	342.135	3/2 ⁺				
		507.6 3	100 5	245.390	5/2 ⁺				
		752.85 10	44 9	0.0	1/2 ⁺	E2			
754.9	3/2 ⁺	413.0	40	342.135	3/2 ⁺				I_γ : unweighted av of $I_\gamma/I_\gamma(755\gamma)$ from 1968Mc04 and 1975AnYZ in Coul ex. I_γ : from β^- decay. Others: $I_\gamma(509\gamma)/I_\gamma(755\gamma)=10 6$ (³ He,2n γ), 1.8 (1968Mc04 in Coul ex.), and 0.98 (1975AnYZ) in Coul ex. these values are strongly affected by $\gamma\pm$. I_γ : see comment for $I_\gamma(509.4\gamma)$.
		509.4 5	50	245.390	5/2 ⁺				
		754.9 5	100	0.0	1/2 ⁺				
831.26	(7/2) ⁻	435.06 10	100	396.214	11/2 ⁻				
853.94	7/2 ⁺	437.05 9	37 3	416.72	7/2 ⁺				
		608.68 9	100	245.390	5/2 ⁺	M1+E2			
855.6	3/2 ⁺	855.6	100	0.0	1/2 ⁺				
864.8	3/2 ⁺	522.4 4	61 9	342.135	3/2 ⁺				
		619.3 4	36 18	245.390	5/2 ⁺	(M1,E2)			Mult.: $\alpha(\text{K})\text{exp}$ in ¹¹¹ Ag β^- decay.
		865.9 8	100 18	0.0	1/2 ⁺	M1+E2			
866.60	3/2 ⁺	449.81 10	5.9 17	416.72	7/2 ⁺				E_γ, I_γ : from (n,n' γ) only.
		524.33 20	34 4	342.135	3/2 ⁺	M1+E2	+2.4 4		
		621.6 6	100 21	245.390	5/2 ⁺	(M1,E2)		0.004	Mult.: from $\alpha(\text{K})\text{exp}$ in ¹¹¹ Ag β^- decay.
		866.61 10	62 5	0.0	1/2 ⁺	M1+E2			Mult.: $\delta=-0.10 5$ or $-1.42 7$.

Adopted Levels, Gammas (continued)

$\gamma(^{111}\text{Cd})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. [‡]	$\delta^\ddagger$	Comments
967.90	15/2 ⁻	571.72 7	100	396.214	11/2 ⁻	E2		
986.53	9/2 ⁺	569.8 5	100 9	416.72	7/2 ⁺			I_γ : from ($^3\text{He}, 2n\gamma$). Multiply placed in (n,n' γ).
		741.16 10	39 2	245.390	5/2 ⁺	E2		
1016.76	3/2 ⁺	263.84 15	8.2 10	752.81	5/2 ⁺			
		770.9 4	7.5 10	245.390	5/2 ⁺			
		1016.77 10	100	0.0	1/2 ⁺	M1+E2	-3.2 6	
1046.76	(7/2 ⁺)	293.91 8	7 2	752.81	5/2 ⁺			
		426.65 15	15 4	620.18	5/2 ⁺			
		704.66 15	100 10	342.135	3/2 ⁺			
		801.43 20	10 8	245.390	5/2 ⁺			
1057.49		304.4 3	2.2	752.81	5/2 ⁺			
		437.21 20	<89	620.18	5/2 ⁺			
		715.65 15	100 20	342.135	3/2 ⁺			
		811.95 15	25 2	245.390	5/2 ⁺			
		1057.4 4	13	0.0	1/2 ⁺			
1078.25	3/2 ⁺	211.7 3	3.1 13	866.60	3/2 ⁺			
		458.15 20	6.1 11	620.18	5/2 ⁺			
		832.91 10	100 10	245.390	5/2 ⁺	M1+E2	+0.20 4	
		1078.35 10	94 15	0.0	1/2 ⁺	M1+E2	+0.27 +5-3	
1115.56	3/2 ⁺	495.38 15	26 4	620.18	5/2 ⁺	M1+E2		δ : +0.09 9 or -9 +60-4. E_γ, I_γ : from (n,n' γ) only.
		773.40 20	50 16	342.135	3/2 ⁺	M1+E2	+2.8 +6-4	
		1115.57 15	100 20	0.0	1/2 ⁺	M1+E2	-0.17 3	
1118.41	7/2 ⁺	365.5	10 5	752.81	5/2 ⁺	M1+E2		
		498.30 15	23 6	620.18	5/2 ⁺	M1+E2		
		701.4 4	≤ 44	416.72	7/2 ⁺	M1+E2		
		776.29 10	86 20	342.135	3/2 ⁺	E2		
		873.06 10	100 12	245.390	5/2 ⁺			
1151.00	(5/2 ⁺)	446.13 5	100 5	704.93	7/2 ⁺	M1+E2		δ : $\delta = -0.29$ 10 or -2.4 2.
		1150.74 10	9 1	0.0	1/2 ⁺			
1185.73	1/2 ⁺	1185.72 10	100	0.0	1/2 ⁺			
1189.96	3/2 ⁺	323.41 @ 25	≤ 2.7 @	866.60	3/2 ⁺			
		569.0 10	100	620.18	5/2 ⁺			δ : -0.29 10 or -2.4 2.
		1190.19 15	3.4 17	0.0	1/2 ⁺	M1+E2		δ : +0.19 3 or -2.9 3. I_γ : from (n,n' γ). $I_\gamma=14$ 5 in (n, γ).
1256.59	11/2 ⁺	270.01 13	5 2	986.53	9/2 ⁺			
		839.90 10	100 12	416.72	7/2 ⁺			
1274.68	(5/2 ⁺)	420.70 20	23 5	853.94	7/2 ⁺			
		858.0 4	18 8	416.72	7/2 ⁺			
		932.56 @ 15	≤ 230 @	342.135	3/2 ⁺			
		1029.35 10	100 10	245.390	5/2 ⁺			

Adopted Levels, Gammas (continued)

$\gamma(^{111}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. [‡]	Comments
1288.89		457.8 6	18	831.26	(7/2 ⁻)		
		608.4 3	100	680.48	(9/2) ⁻		
		892.2 10	3 1	396.214	11/2 ⁻		
1298.58		467.42 25		831.26	(7/2 ⁻)		
		881.85 9	100 12	416.72	7/2 ⁺		
		1053.2 5	80 40	245.390	5/2 ⁺		
1321.61		979.5 5	4 1	342.135	3/2 ⁺		
		1321.59 10	100 12	0.0	1/2 ⁺		
1325.94	3/2 ⁺	1325.93 10	100 12	0.0	1/2 ⁺	M1(+E2)	δ : $\delta=-0.05$ 5 or -1.6 3.
1326.62	5/2 ⁻	646.13 10	100 15	680.48	(9/2) ⁻	E2	
		984.55 20	25 1	342.135	3/2 ⁺	E1	
1339.72	(13/2 ⁻)	371.90 20	3.3 17	967.90	15/2 ⁻		
		943.42 15	100 17	396.214	11/2 ⁻		
1340.67	1/2,3/2	323.41 @ 25	≤ 9.7 @	1016.76	3/2 ⁺		
		588.20 7	30.3 6	752.81	5/2 ⁺		I_γ : complex peak.
		720.02 @ 15	≤ 125 @	620.18	5/2 ⁺		
		1340.27 20	100 19	0.0	1/2 ⁺	M1+E2	δ : $\delta=+0.21$ 9 or -3.0 +7-14.
1341.33	(5/2)	924.7 4	34 9	416.72	7/2 ⁺		
		999.18 10	100 2	342.135	3/2 ⁺		
1346.19		725.4 4	100 35	620.18	5/2 ⁺		
		929.43 20	37 11	416.72	7/2 ⁺		
		1004.14 15	9.1 26	342.135	3/2 ⁺		
		1100.83 15	37 9	245.390	5/2 ⁺		
1391.81	3/2 ⁺	638.91 @ 15	7.9 @ 17	752.81	5/2 ⁺		
		1049.67 10	40 5	342.135	3/2 ⁺	M1+E2	δ : $\delta=+0.16$ 6 or $+2.3$ +5-3.
		1146.46 10	100 9	245.390	5/2 ⁺	M1+E2	δ : $\delta=-0.16$ 2 or $+14$ +30-5.
		1391.77 25	11.8 17	0.0	1/2 ⁺		
1472.98	3/2 ⁺	395.88 25	5.6 22	1078.25	3/2 ⁺		
		455.0 15	13 3	1016.76	3/2 ⁺		
		720.0 @	≤ 150 @	752.81	5/2 ⁺		
		1130.56 15	100 11	342.135	3/2 ⁺	M1+E2	δ : $\delta=-0.21$ 3 or $+64$ 22.
		1472.8 3	61 10	0.0	1/2 ⁺		
1506.05	(9/2 ⁻)	825.64 10	100 9	680.48	(9/2) ⁻		
		1109.55 20	55 9	396.214	11/2 ⁻		
1511.57		393.24 20	44 8	1118.41	7/2 ⁺		
		891.25 15	75 8	620.18	5/2 ⁺		
		1094.8 2	38 12	416.72	7/2 ⁺		
		1266.58 @ 25	100 @ 23	245.390	5/2 ⁺		
		1511.4 3	7.7 23	0.0	1/2 ⁺		
1546.33	3/2 ⁺	793.39 10	100 22	752.81	5/2 ⁺		

Adopted Levels, Gammas (continued) $\gamma(^{111}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. [‡]	$\delta^\ddagger$	Comments
1546.33	3/2 ⁺	926.3 4	84 25	620.18	5/2 ⁺			
		1301.22 20	84 17	245.390	5/2 ⁺			
		1547.0 4	75 38	0.0	1/2 ⁺			
1552.10	3/2 ⁺	932.2 @ 4	<75 @	620.18	5/2 ⁺			
		1135.16 @ 20	<3.8 @	416.72	7/2 ⁺			
		1209.9 4	100 19	342.135	3/2 ⁺			
		1306.87 20	47 7	245.390	5/2 ⁺			
		1552.09 10	24 5	0.0	1/2 ⁺			
1552.44	(7/2 ⁺ , 9/2 ⁺)	932.56 @ 15	@	620.18	5/2 ⁺	M1+E2	-0.16 2	
		1135.16 20		416.72	7/2 ⁺			
1565.72	(11/2 ⁻)	598.1 3	60 8	967.90	15/2 ⁻			
		1169.48 10	100 10	396.214	11/2 ⁻			
1613.32		746.6 4	10 3	866.60	3/2 ⁺			
		758.8 @ 8	31 @ 12	853.94	7/2 ⁺			
		993.30 @ 20	20 @ 6	620.18	5/2 ⁺			
		1271.08 25	100 18	342.135	3/2 ⁺			
		1367.87 25	74 18	245.390	5/2 ⁺			
1666.00		679.65 20	100 4	986.53	9/2 ⁺	D+Q		δ : $\delta=+0.01$ 3 or -10 +36-2 for J=7/2.
		1249.11 20	57 18	416.72	7/2 ⁺			
1682.75		408.48 25	20 4	1274.68	(5/2 ⁺)			
		976.95 20	$\approx$ 46	704.93	7/2 ⁺			
		1266.58 @ 25	100 @ 23	416.72	7/2 ⁺			
		1437.60 20	28 5	245.390	5/2 ⁺			
1691.95	3/2 ⁺	939.3 6	15 4	752.81	5/2 ⁺			
		1349.3 9	10 4	342.135	3/2 ⁺			
		1691.95 20	70 5	0.0	1/2 ⁺	M1+E2		δ : $+0.34$ +1-2 or -5.0 2.
1717.47	3/2 ⁺ , 5/2 ⁺	601.9 5	36 13	1115.56	3/2 ⁺			
		701.3 7	$\leq$ 258	1016.76	3/2 ⁺			
		1097.3 3	100 20	620.18	5/2 ⁺			
		1471.8 8	$\leq$ 236	245.390	5/2 ⁺			
		1717.2 5	97 20	0.0	1/2 ⁺			
1739.73	3/2 ⁺	873.06 10	100 12	866.60	3/2 ⁺	M1+E2		δ : $\delta=-0.08$ 3 or $+6.3$ +25-13.
		1494.60 20	41 11	245.390	5/2 ⁺	M1+E2		δ : $\delta=-0.10$ +5-8 or -3.0 7.
		1740.0 8	12 5	0.0	1/2 ⁺			
1789.30	3/2 ⁺	1036.20 15	76 15	752.81	5/2 ⁺	M1+E2		δ : $\delta=+0.02$ 3 or -5.4 +11-7.
		1447.4 3	100 21	342.135	3/2 ⁺			
		1544.7 4	86 39	245.390	5/2 ⁺			
		1789.59 25	64 15	0.0	1/2 ⁺			
1800.94	(7/2 ⁻)	235.3 3	22 6	1565.72	(11/2 ⁻)			
		969.66 20	100 10	831.26	(7/2 ⁻)			

Adopted Levels, Gammas (continued)

$\gamma(^{111}\text{Cd})$ (continued)						
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. [‡]
1800.94	(7/2 ⁻)	1404.7 2	53 9	396.214	11/2 ⁻	
1826.71	9/2,11/2	779.95 15	100	1046.76	(7/2 ⁺)	
1828.63	3/2 ⁺	638.91 @ 15	≤27 @	1189.96	3/2 ⁺	
		811.95 15	100 20	1016.76	3/2 ⁺	M1+E2
		1486.01 25	73 22	342.135	3/2 ⁺	δ: δ=+0.06 +12-10 or 3.1 +16-9.
		1828.0 3	54 21	0.0	1/2 ⁺	
1842.50	3/2,1/2	976.95	100 20	864.8	3/2 ⁺	
		1222.0 4	19 9	620.18	5/2 ⁺	
		1597.1 10	26 6	245.390	5/2 ⁺	
		1842.54 20	54 16	0.0	1/2 ⁺	M1+E2
1849.0		1432.3 6	32 6	416.72	7/2 ⁺	δ: δ=+0.30 10 or -4.5 +3-15.
		1506.0	100 35	342.135	3/2 ⁺	
		1849.2 5	88 18	0.0	1/2 ⁺	
1852.1	19/2 ⁻	884.2 3	100	967.90	15/2 ⁻	E2
1907.4		1053.4	16 8	853.94	7/2 ⁺	
		1490.7 3	100	416.72	7/2 ⁺	
1921.1	(13/2 ⁺)	934.6 10	100	986.53	9/2 ⁺	
1971.80	7/2 ⁻	1140.53 20	57 10	831.26	(7/2 ⁻)	
		1291.5 3	51 12	680.48	(9/2 ⁻)	
		1575.52 15	100 25	396.214	11/2 ⁻	E2
1974.75	3/2 ⁺ ,5/2 ⁺	784.69 25	7 3	1189.96	3/2 ⁺	
		958.0 10	≤27	1016.76	3/2 ⁺	
		1222.0 4	15 7	752.81	5/2 ⁺	
		1354.8 3	47 16	620.18	5/2 ⁺	
		1632.5 3	100 16	342.135	3/2 ⁺	
1992.71		666.1 10	58 15	1325.94	3/2 ⁺	
		1161.6	80	831.26	(7/2 ⁻)	
		1312.24 15	100 25	680.48	(9/2 ⁻)	
2005.8		680.0 5	≤100	1325.94	3/2 ⁺	
		1174.0 8	32 12	831.26	(7/2 ⁻)	
		1664.4 8	12 6	342.135	3/2 ⁺	
		2005.6 4	68 16	0.0	1/2 ⁺	
2016.0	3/2 ⁺ ,5/2 ⁺	900.2 10	20 8	1115.56	3/2 ⁺	
		1263.0 8	100 30	752.81	5/2 ⁺	
		2016.2 8	95 31	0.0	1/2 ⁺	
2038.6		1697.2 5	100 42	342.135	3/2 ⁺	
		1792.7 7	74 25	245.390	5/2 ⁺	
		2037.9 6	23 6	0.0	1/2 ⁺	
2045.29	(3/2 ⁺)	353.4 5	41 7	1691.95	3/2 ⁺	
		493.1 5	100 16	1552.10	3/2 ⁺	
		2045.2 3	52 14	0.0	1/2 ⁺	

Adopted Levels, Gammas (continued)

 $\gamma(^{111}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π
2096.95	(5/2 ⁺ , 7/2 ⁺)	907.0 8	27 11	1189.96	3/2 ⁺	2415		2073 &		342.135	3/2 ⁺
		979.5 5	13 6	1118.41	7/2 ⁺			2170	140 44	245.390	5/2 ⁺
		1243.0 4	100 20	853.94	7/2 ⁺			2415	100	0.0	1/2 ⁺
		1343.2 8	32 13	752.81	5/2 ⁺	2419		2419		0.0	1/2 ⁺
		1391.8 3	≤32	704.93	7/2 ⁺	2446.1		1105.7 6	57 14	1340.67	1/2, 3/2
2134.88	(1/2, 3/2)	662.7 6	57 30	1472.98	3/2 ⁺			1740.0 8	14 6	704.93	7/2 ⁺
		808.9 10	79 30	1325.94	3/2 ⁺			1826.4 6	57 25	620.18	5/2 ⁺
		1792.67 20	100 30	342.135	3/2 ⁺			2103.6	100 21	342.135	3/2 ⁺
		1888.8 10	50 25	245.390	5/2 ⁺	2449		2449		0.0	1/2 ⁺
2147.5	(17/2 ⁻)	807.5 5	40 4	1339.72	(13/2 ⁻)	2475.3		623.2 10	100	1852.1	19/2 ⁻
		1180.1 6	100 25	967.90	15/2 ⁻	2495.1		1022.5 10	46 12	1472.98	3/2 ⁺
2154.21	(5/2 ⁺ , 7/2 ⁺)	964.5 5	60 30	1189.96	3/2 ⁺			1155.3 4	37 10	1339.72	(13/2 ⁻)
		1038.7 3	18 6	1115.56	3/2 ⁺			2152.9 5	100 11	342.135	3/2 ⁺
		1737.3 2	100 30	416.72	7/2 ⁺			2495.2 8	79 20	0.0	1/2 ⁺
		1812.1 4	18 6	342.135	3/2 ⁺	2538		2538		0.0	1/2 ⁺
		1909.0 3	31 7	245.390	5/2 ⁺	2556.9		1235.1 4	50 12	1321.61	
2165.6		1299.0 5	100 30	866.60	3/2 ⁺			2311.7 5	100 25	245.390	5/2 ⁺
		2165.6 8	33 11	0.0	1/2 ⁺	2560		2560		0.0	1/2 ⁺
2195.7	(15/2 ⁺)	939.1 10	100	1256.59	11/2 ⁺	2588.2		1248.4 8	18.5 21	1340.67	1/2, 3/2
2197		2197		0.0	1/2 ⁺			2171.2	100 21	416.72	7/2 ⁺
2226.3		374.2	100	1852.1	19/2 ⁻			2245.7 6	86 21	342.135	3/2 ⁺
2236.1		762.9 10	20 7	1472.98	3/2 ⁺	2653.2		2032.8 8	100 29	620.18	5/2 ⁺
		1157.7 10	12 6	1078.25	3/2 ⁺			2408.2 10	71 23	245.390	5/2 ⁺
		1219.2 8	100 30	1016.76	3/2 ⁺	2659		2659	100	0.0	1/2 ⁺
		1483.6 10	42 18	752.81	5/2 ⁺	2671		2671		0.0	1/2 ⁺
		1990.6 6	44 15	245.390	5/2 ⁺	2690		2690		0.0	1/2 ⁺
		2236.1 5	100 25	0.0	1/2 ⁺	2692.3		1573.7 8	27 9	1118.41	7/2 ⁺
2242.5		1225.6 5	100 35	1016.76	3/2 ⁺			1940.0 10	100 38	752.81	5/2 ⁺
		1621.9 8	36 12	620.18	5/2 ⁺			2275.6 10	58 20	416.72	7/2 ⁺
		1901.2 9	40 18	342.135	3/2 ⁺			2692.2 10	83 29	0.0	1/2 ⁺
2280.5	1/2 ⁺ , 3/2 ⁺	1090.4 9	27 9	1189.96	3/2 ⁺	2698		2356 &		342.135	3/2 ⁺
		1660.4 4	100 33	620.18	5/2 ⁺			2698		0.0	1/2 ⁺
		1937.9 10	33 12	342.135	3/2 ⁺	2708		2708		0.0	1/2 ⁺
2311		2311		0.0	1/2 ⁺	2709.9		1384.0 5	16 4	1325.94	3/2 ⁺
2325.6	1/2, 3/2	1983.4 5	100 30	342.135	3/2 ⁺			1421.0 5	100 14	1288.89	
		2325.9 10	70 20	0.0	1/2 ⁺	2714.5		1374.6 8	25 7	1340.67	1/2, 3/2
2331.5		991.8 5	100	1339.72	(13/2 ⁻)			1667.9 7	55 13	1046.76	(7/2 ⁺)
2382.9		1042.5 5	92 23	1340.67	1/2, 3/2			1860.5 10	47 18	853.94	7/2 ⁺
		1528.1 6	100 25	853.94	7/2 ⁺			2297.7 7	100 17	416.72	7/2 ⁺
		1966.4 4	93 19	416.72	7/2 ⁺	2730		2730	100	0.0	1/2 ⁺
2384		2384		0.0	1/2 ⁺	2733.2		687.1 10	40 14	2045.29	(3/2 ⁺)

Adopted Levels, Gammas (continued)

							$\gamma(^{111}\text{Cd})$ (continued)						
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. [‡]	$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. [‡]
2733.2		758.8 8	19 7	1971.80	7/2 ⁻		3173		3173	100	0.0	1/2 ⁺	
		993.6 8	43 17	1739.73	3/2 ⁺		3185		3185	100	0.0	1/2 ⁺	
		1387.2 5	51 10	1346.19			3207		3207	100	0.0	1/2 ⁺	
		1617.5 5	45 15	1115.56	3/2 ⁺		3230.3	(23/2 ⁺)	490.2 9	100	2740.1	(19/2)	Q
		2390.9 6	100 20	342.135	3/2 ⁺		3246		3246		0.0	1/2 ⁺	
2740.1	(19/2)	592.7 6	86 28	2147.5	(17/2 ⁻)	D+Q	3259		3259	100	0.0	1/2 ⁺	
		887.9 4	100 28	1852.1	19/2 ⁻		3302		3302	100	0.0	1/2 ⁺	
2756		2756	100	0.0	1/2 ⁺		3323		3078	62.0 16	245.390	5/2 ⁺	
2768.4		2351.4 7	87 24	416.72	7/2 ⁺				3323	100	0.0	1/2 ⁺	
		2426.9 9	33 8	342.135	3/2 ⁺		3351		3106	244 17	245.390	5/2 ⁺	
		2768.2 9	100 28	0.0	1/2 ⁺				3351	100	0.0	1/2 ⁺	
2775		2775	100	0.0	1/2 ⁺		3362		3362	100	0.0	1/2 ⁺	
2788		2446 ^{&}		342.135	3/2 ⁺		3384		3384	100	0.0	1/2 ⁺	
		2788		0.0	1/2 ⁺		3394		3394	100	0.0	1/2 ⁺	
2831		2489 ^{&}		342.135	3/2 ⁺		3455		3455	100	0.0	1/2 ⁺	
		2831		0.0	1/2 ⁺		3467		3222	21.7 24	245.390	5/2 ⁺	
2847.0	23/2 ⁻	994.9 5	100	1852.1	19/2 ⁻	E2			3467	100	0.0	1/2 ⁺	
2858		2858	100	0.0	1/2 ⁺		3483		3238	54 7	245.390	5/2 ⁺	
2860.1		664.4 4	2.4 4	2195.7	(15/2 ⁺)				3483	100	0.0	1/2 ⁺	
2950.88		2083.1 8	39 10	866.60	3/2 ⁺		3498		3498	100	0.0	1/2 ⁺	
		2330.7 1	5.8 20	620.18	5/2 ⁺		3526		3281	378 27	245.390	5/2 ⁺	
		2608.0 10	31 11	342.135	3/2 ⁺				3526	100	0.0	1/2 ⁺	
		2705.1 10	100 37	245.390	5/2 ⁺		3542		3542		0.0	1/2 ⁺	
2977.9		1930.7 10	50 19	1046.76	(7/2 ⁺)		3553		3553	100	0.0	1/2 ⁺	
		2124.0 5	100 19	853.94	7/2 ⁺		3566		3566	100	0.0	1/2 ⁺	
3039		3039	100	0.0	1/2 ⁺		3573		3573	100	0.0	1/2 ⁺	
3059		2814	133 56	245.390	5/2 ⁺		3671		3671	100	0.0	1/2 ⁺	
		3059	100	0.0	1/2 ⁺		3691		3691	100	0.0	1/2 ⁺	
3076.11		1410.5 9	10 3	1666.00			3702		3702	100	0.0	1/2 ⁺	
		1958.0 5	12 4	1118.41	7/2 ⁺		3710		3710	100	0.0	1/2 ⁺	
		2059.0 4	57 9	1016.76	3/2 ⁺		3715		3715	100	0.0	1/2 ⁺	
		2455.8 5	71 24	620.18	5/2 ⁺		3717.4	(27/2 ⁺)	616.8 3	100	3100.6		Q
		2659.6 6	100 19	416.72	7/2 ⁺		3733		3733	100	0.0	1/2 ⁺	
3100.6		360.5 4	100	2740.1	(19/2)		3740		3740	100	0.0	1/2 ⁺	
3113		3113		0.0	1/2 ⁺		3756		3756	100	0.0	1/2 ⁺	
3126.4		1786.5 10	6.6 25	1340.67	1/2,3/2		3763.0	27/2 ⁻	916.0 3	100	2847.0	23/2 ⁻	E2
		2373.2 8	26 8	752.81	5/2 ⁺		3781		3781	100	0.0	1/2 ⁺	
		2506.1 10	100 27	620.18	5/2 ⁺		3801		3801	100	0.0	1/2 ⁺	
3131		2886	31 4	245.390	5/2 ⁺		3828		3583	136 20	245.390	5/2 ⁺	
		3131	100	0.0	1/2 ⁺				3828	100	0.0	1/2 ⁺	
3147		3147		0.0	1/2 ⁺		3856		3514	101 15	342.135	3/2 ⁺	

Adopted Levels, Gammas (continued)

$\gamma(^{111}\text{Cd})$ (continued)

<u>E_i(level)</u>	<u>J^{π}_i</u>	<u>E_{γ}[†]</u>	<u>I_{γ}[†]</u>	<u>E_f</u>	<u>J^{π}_f</u>	<u>Mult.[‡]</u>	<u>E_i(level)</u>	<u>J^{π}_i</u>	<u>E_{γ}[†]</u>	<u>I_{γ}[†]</u>	<u>E_f</u>	<u>J^{π}_f</u>	<u>Mult.[‡]</u>
3856		3611	62 12	245.390	5/2 ⁺		5501.7	35/2 ⁻	945.8 3	100	4555.9	31/2 ⁻	E2
		3856	100	0.0	1/2 ⁺		6648.8	39/2 ⁻	1147.1 5	100	5501.7	35/2 ⁻	E2
3900		3900	100	0.0	1/2 ⁺		7951.2	43/2 ⁻	1302.3 5	100	6648.8	39/2 ⁻	E2
3921		3921	100	0.0	1/2 ⁺		9407.2	47/2 ⁻	1456.0 8	100	7951.2	43/2 ⁻	E2
4555.9	31/2 ⁻	792.9 6	100	3763.0	27/2 ⁻	E2							

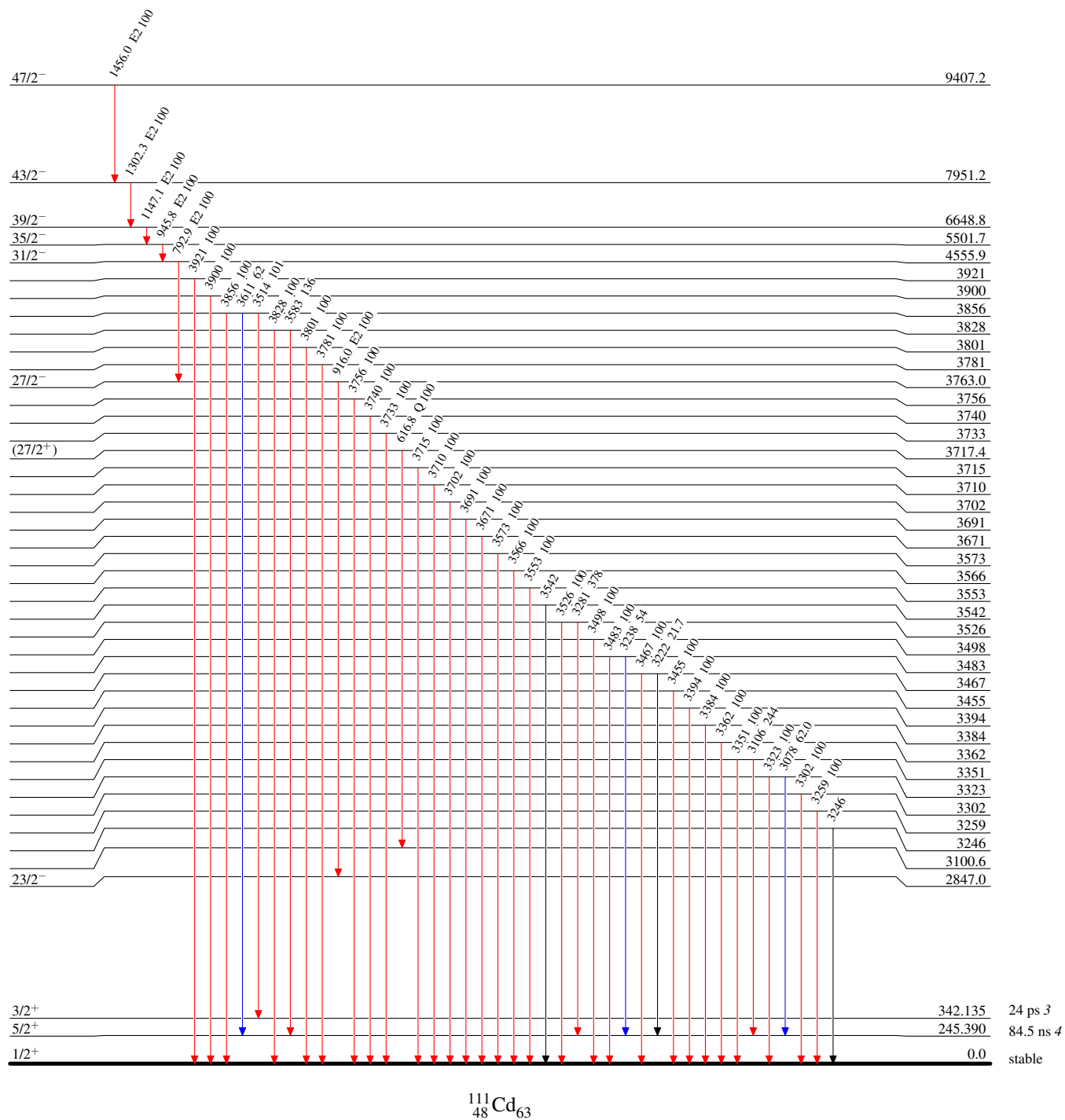
† Mainly from [1991NeZX](#) in (n,n'γ).
‡ From ¹¹¹Cd(n,n'γ), unless otherwise noted.
Total theoretical internal conversion coefficients, calculated using the BrIcc code ([2008Ki07](#)) with Frozen orbital approximation based on γ-ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.
@ Multiply placed with undivided intensity.
& Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas**Level Scheme**

Intensities: Type not specified

Legend

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

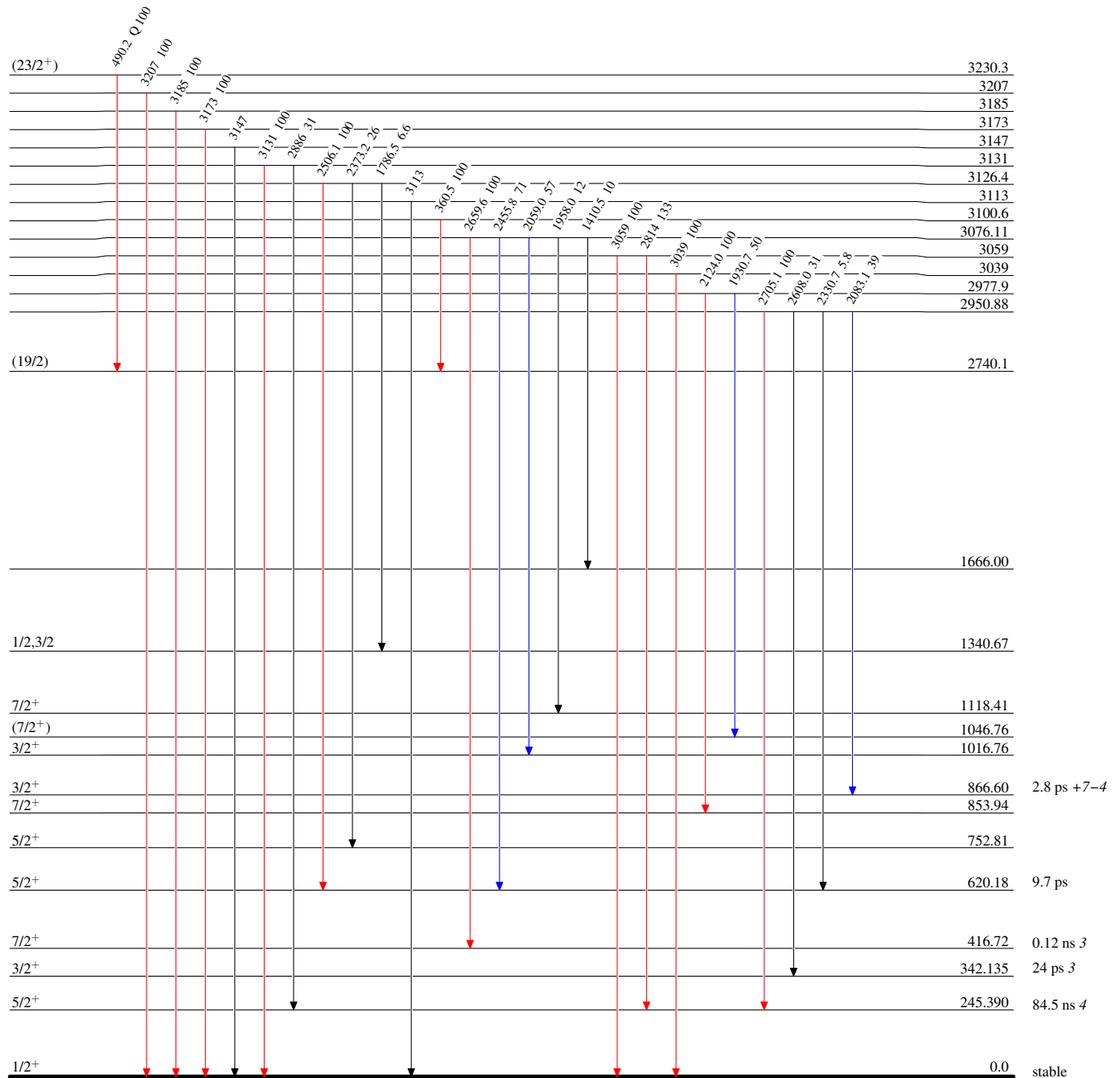


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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

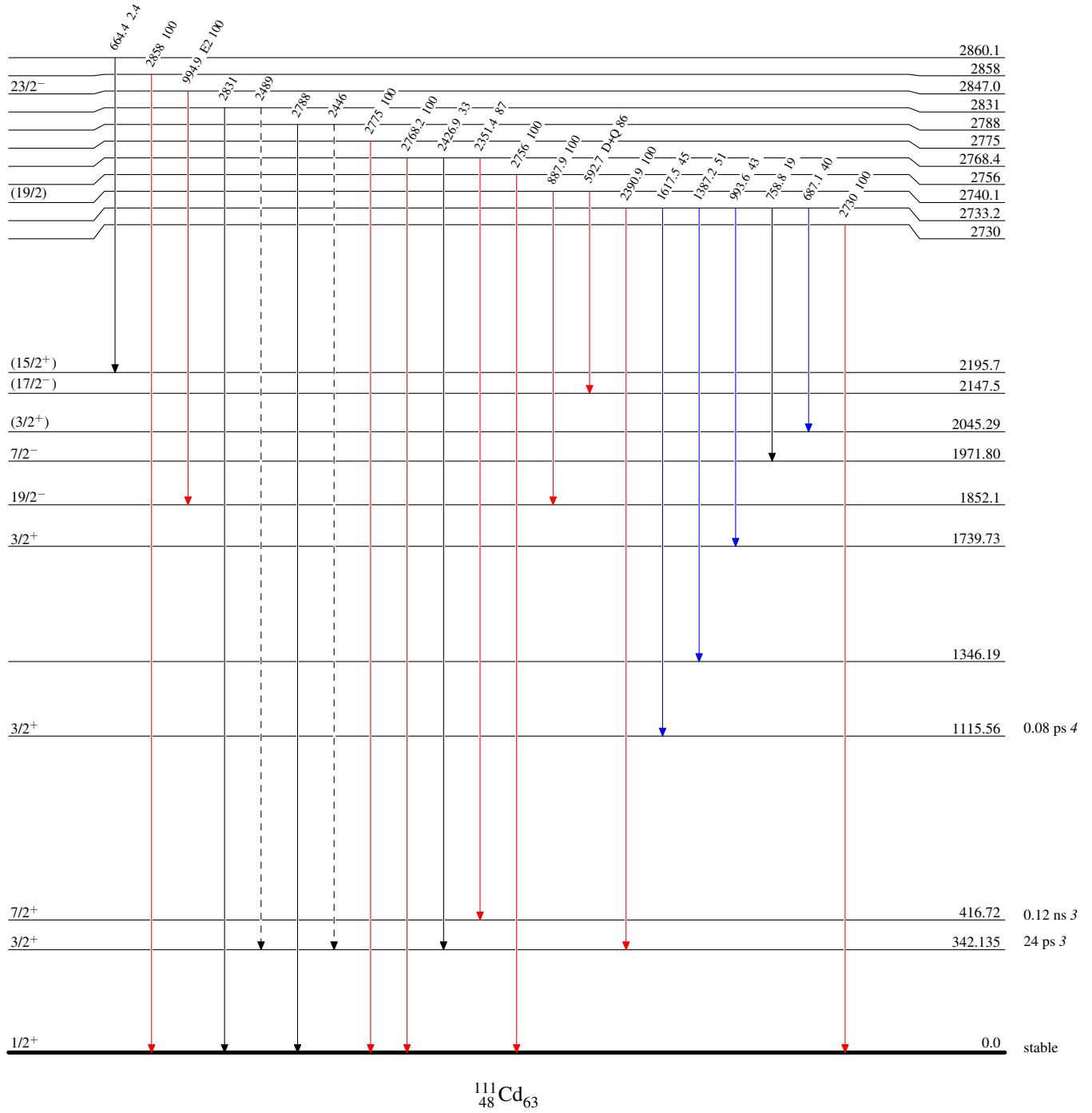
 $^{111}_{48}\text{Cd}_{63}$

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

Intensities: Type not specified

Legend

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



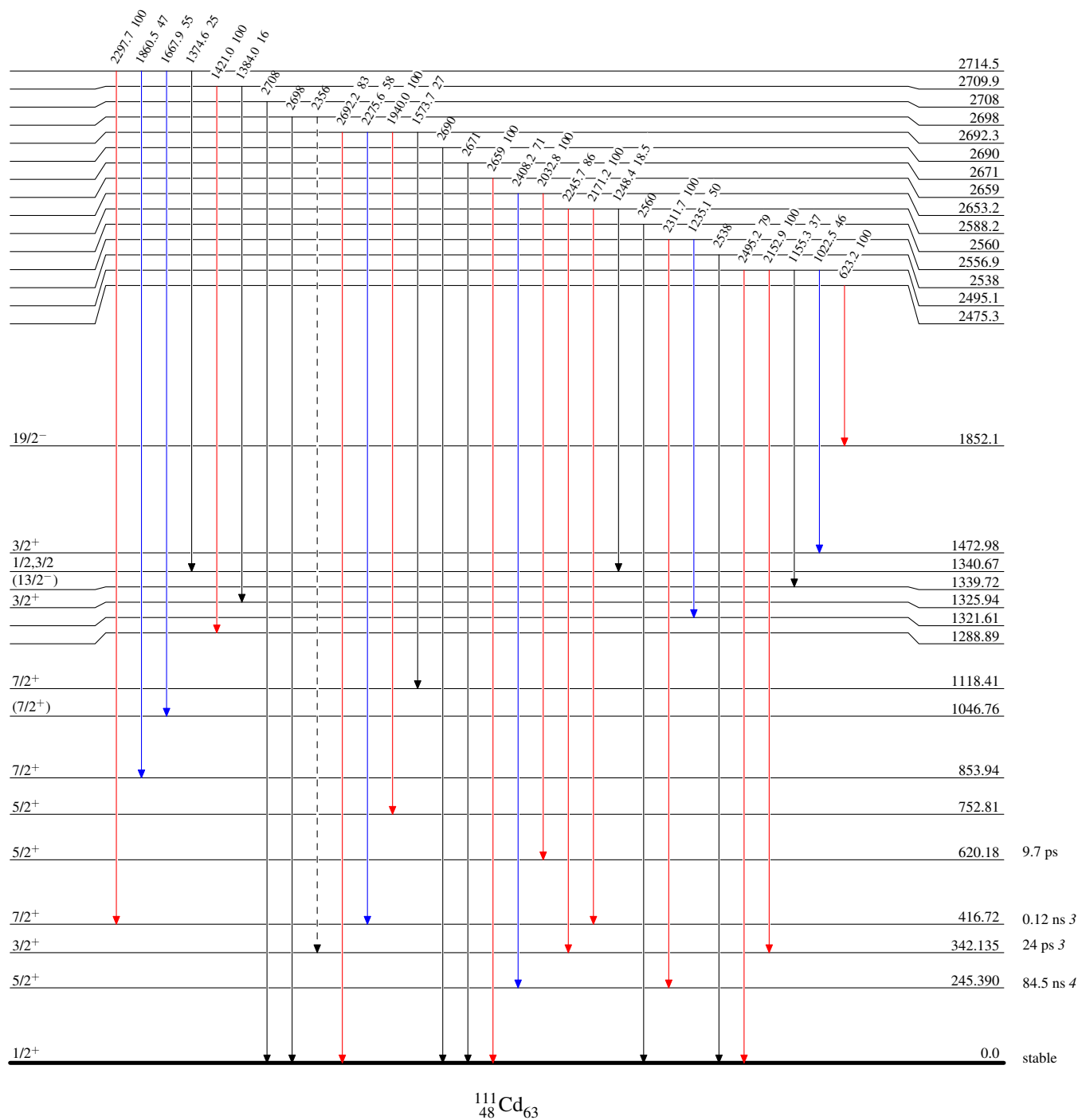
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

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



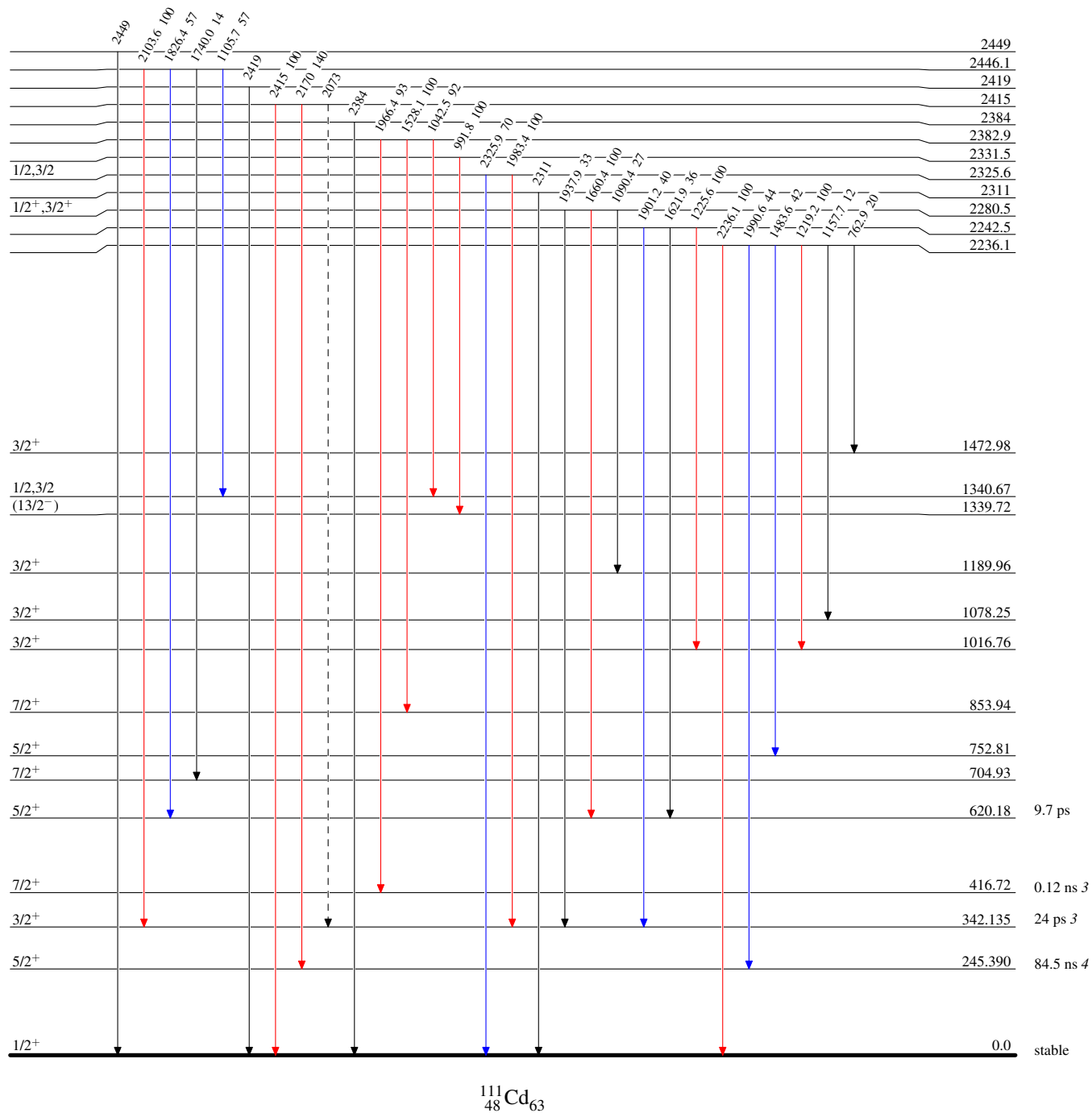
Adopted Levels, Gammas

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)

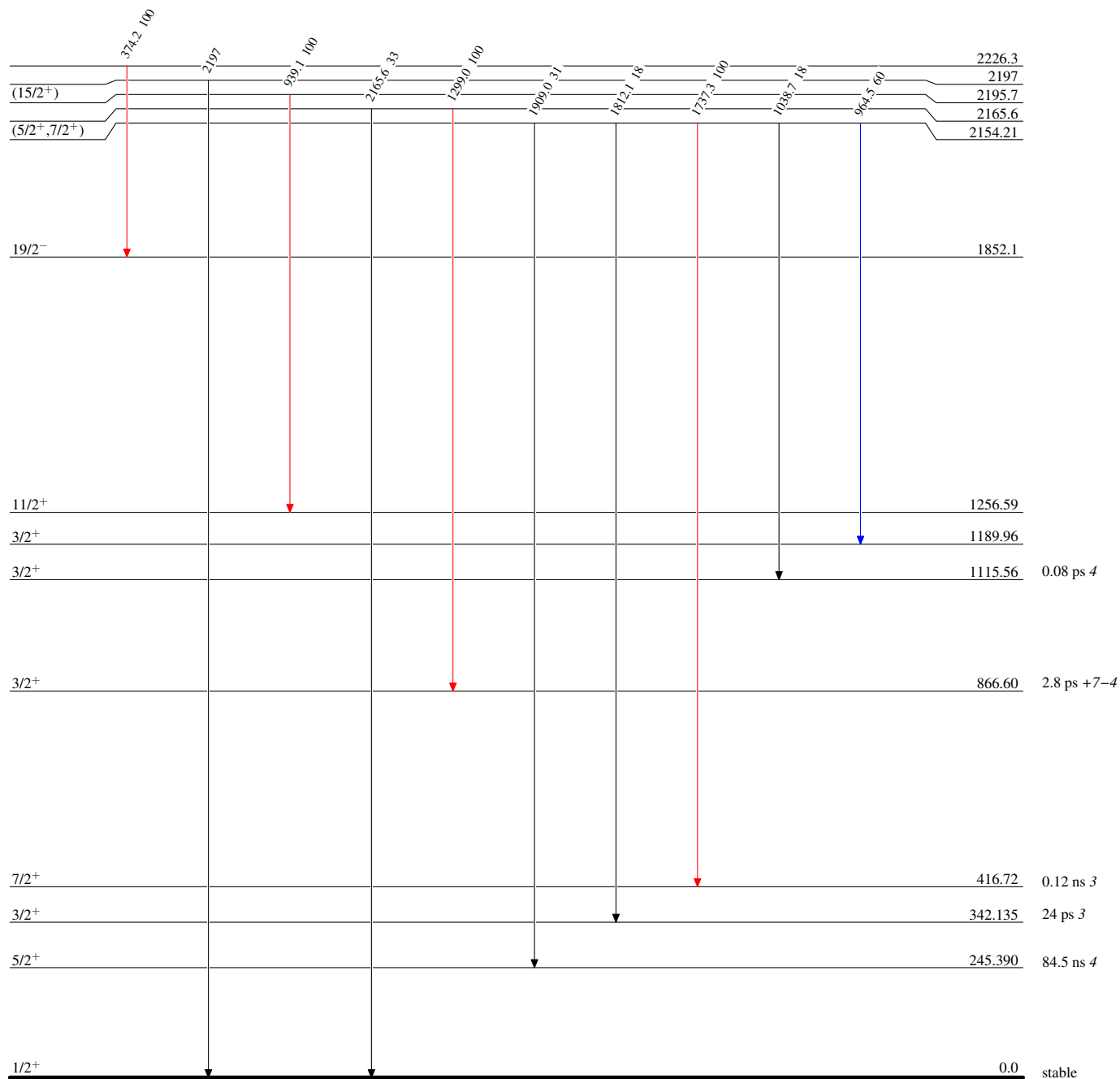
 $^{111}_{48}\text{Cd}_{63}$

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

Intensities: Type not specified

Legend

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

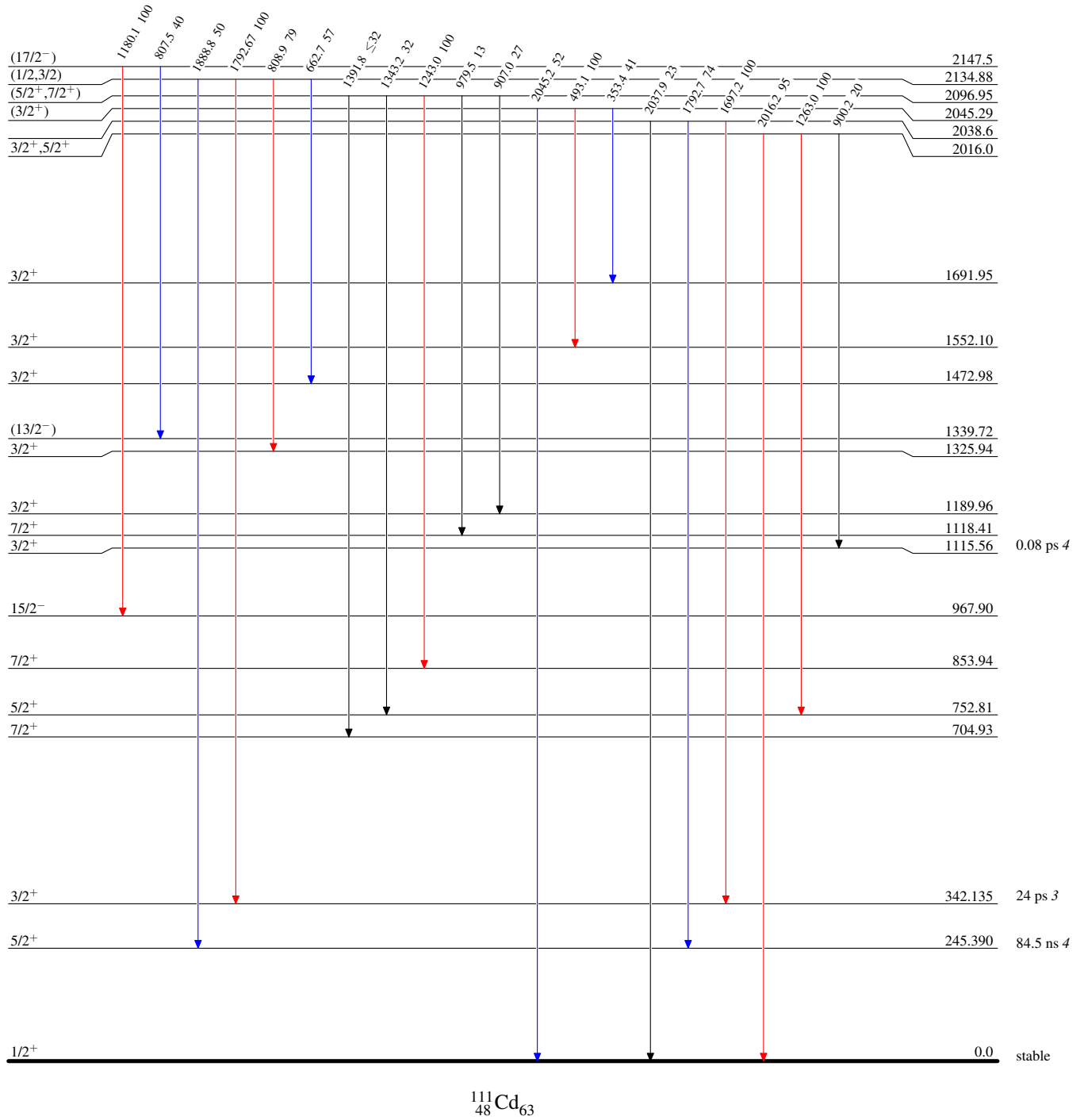
 $^{111}_{48}\text{Cd}_{63}$

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

Intensities: Type not specified

Legend

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



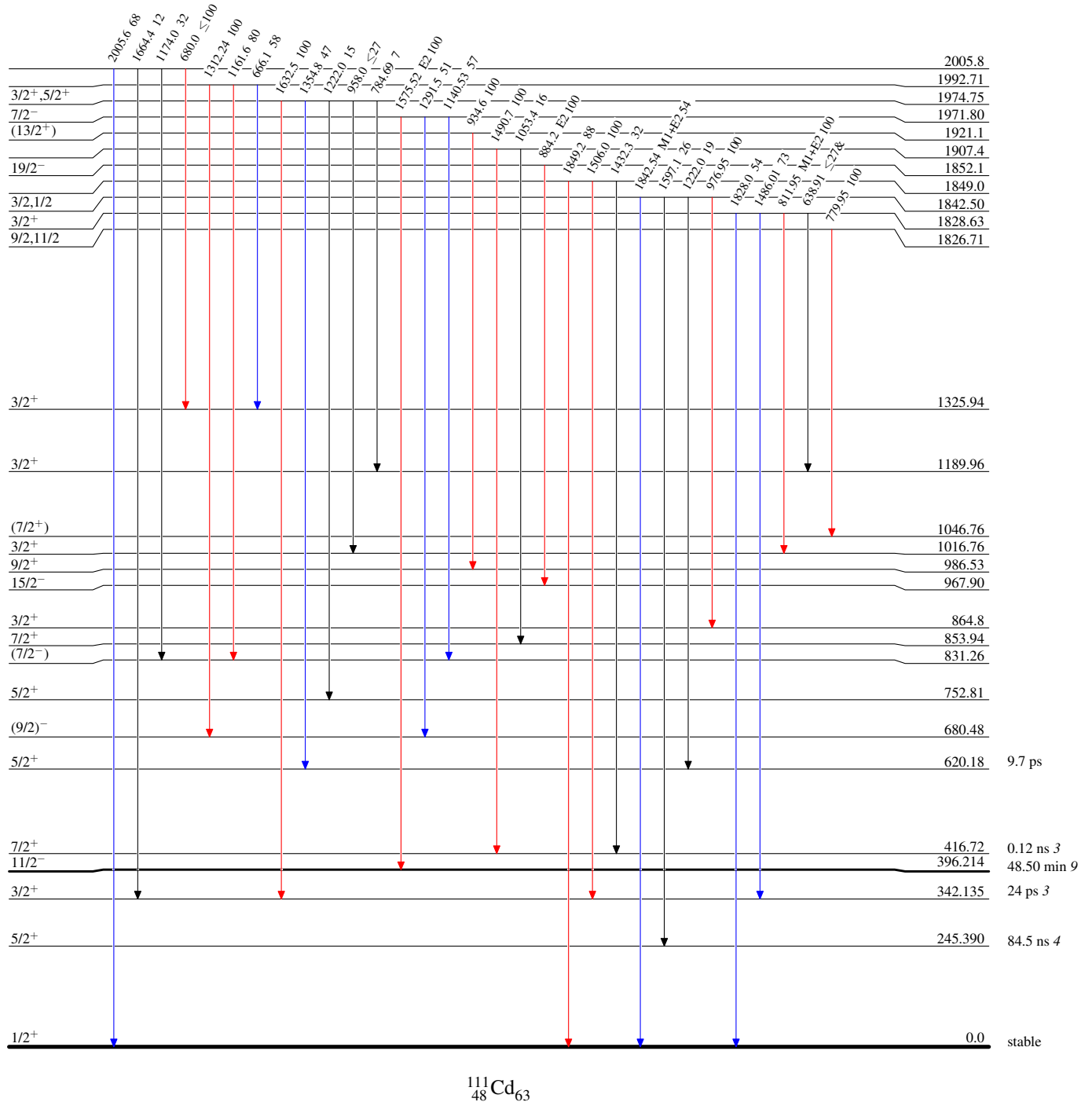
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given

Legend

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



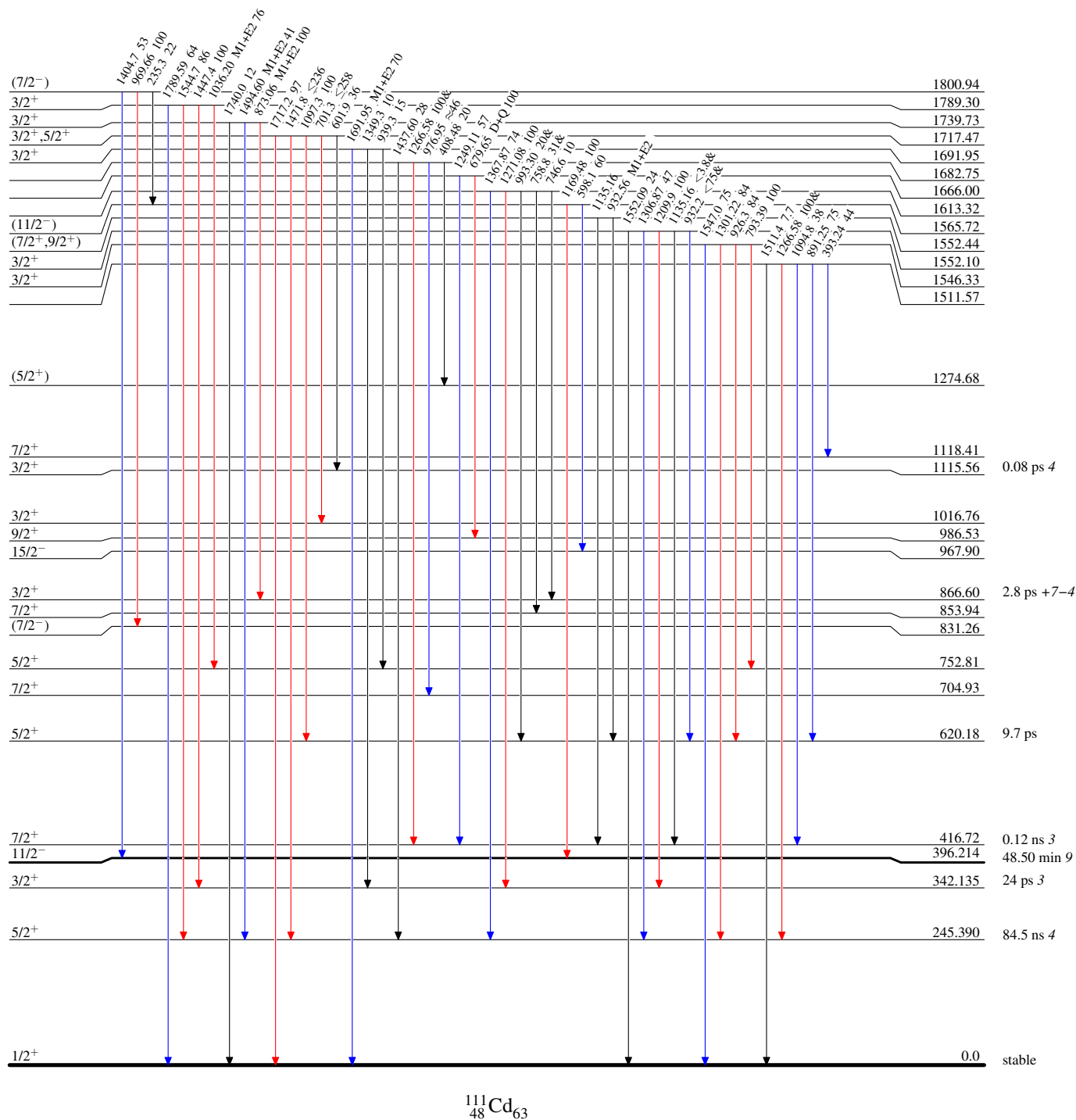
Adopted Levels, Gammas

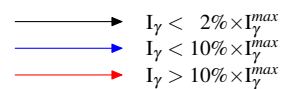
Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given

Legend

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

 $^{111}_{48}\text{Cd}_{63}$



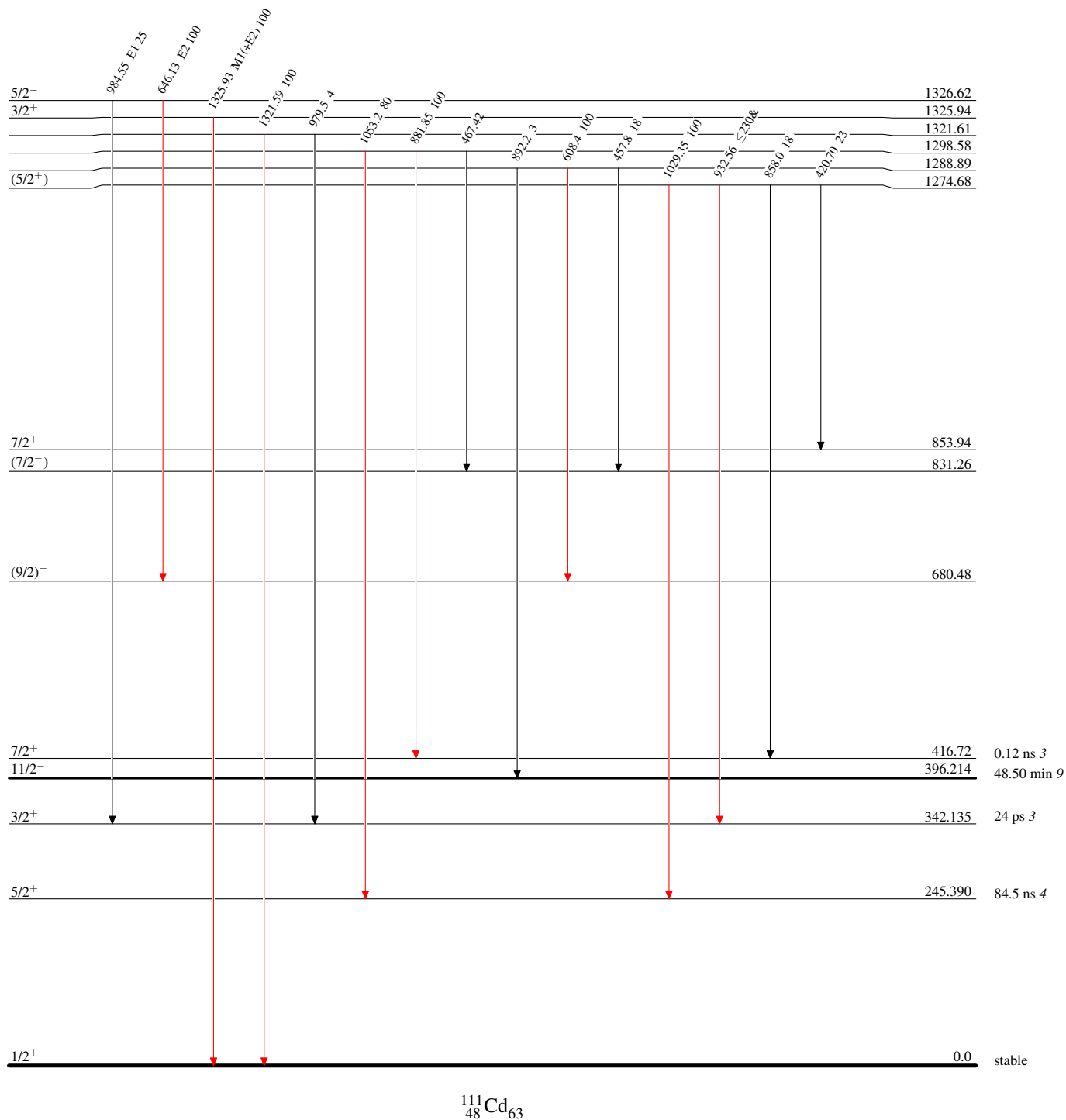
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given

Legend

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



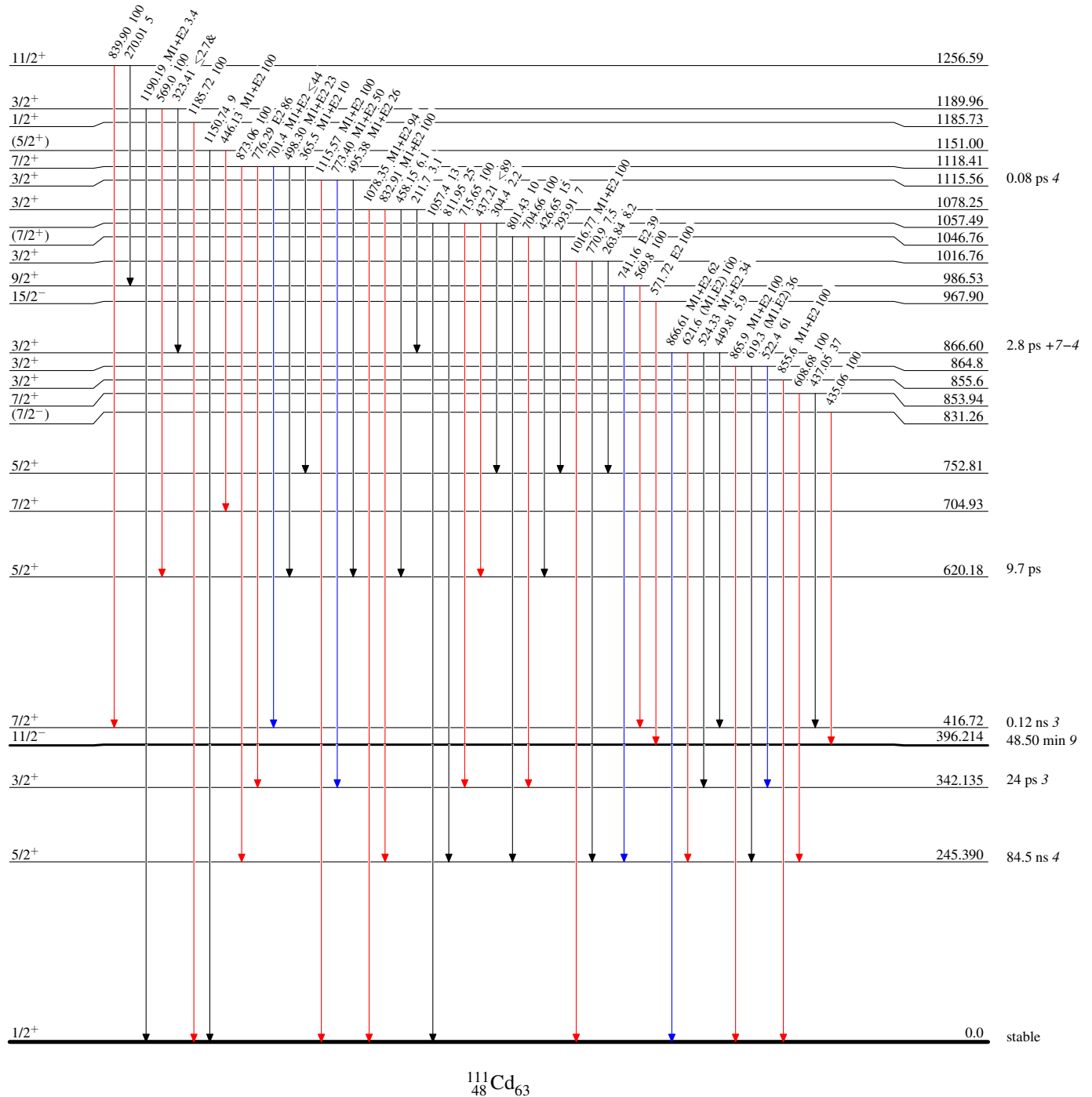
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given

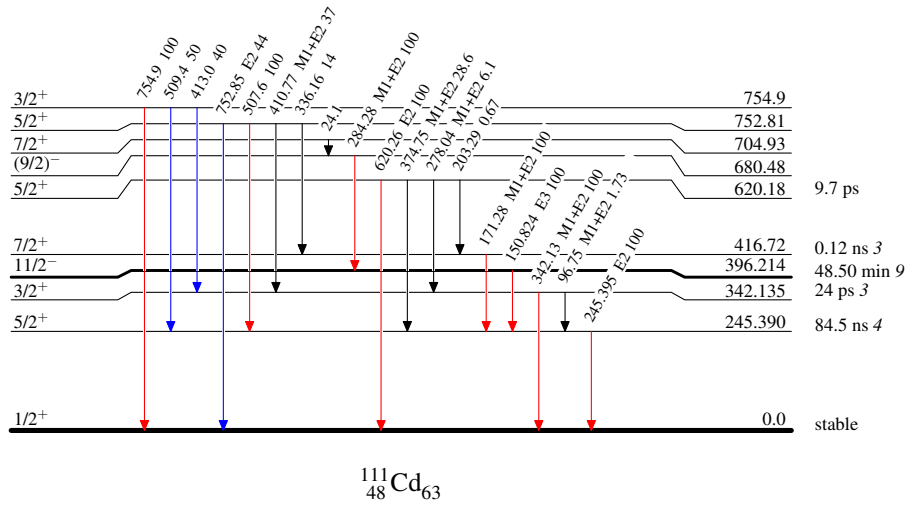
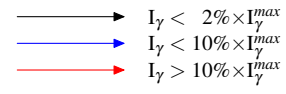
Legend

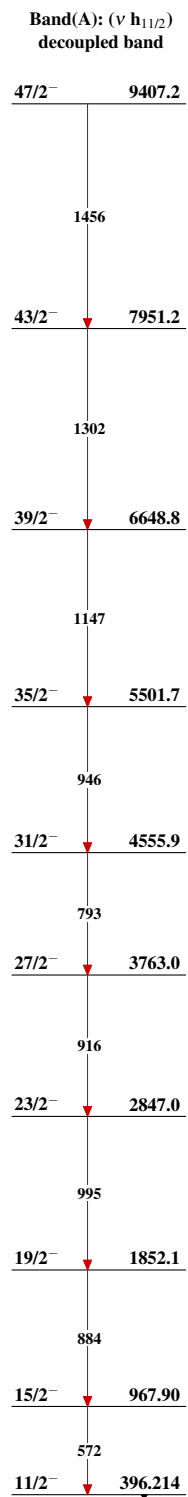
—→ $I_\gamma < 2\% \times I_\gamma^{\max}$
 —→ $I_\gamma < 10\% \times I_\gamma^{\max}$
 —→ $I_\gamma > 10\% \times I_\gamma^{\max}$

 $^{111}_{48}\text{Cd}_{63}$

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

Intensities: Type not specified
& Multiply placed: undivided intensity given

Legend

Adopted Levels, Gammas $^{111}_{48}\text{Cd}_{63}$