

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113,515 (2012)	1-Jan-2012

Q(β^-)=-1446.4 9; S(n)=9042.91 14; S(p)=10277 17; Q(α)=-4108.2 8 [2012Wa38](#)
 Note: Current evaluation has used the following Q record -1447.2 9 9042.98 1410277 17-4095 7 [2011AuZZ](#).
[1991De27](#) have compared the even-even isotopes ¹⁰⁶⁻¹¹⁶Cd.

¹¹⁴Cd Levels

Cross Reference (XREF) Flags

A	¹¹⁴ Ag β^- decay	G	¹¹⁸ Sn(d, ⁶ Li)	M	Coulomb excitation
B	¹¹⁴ In ϵ decay (71.9 s)	H	¹¹² Cd(t,p)	N	¹¹⁵ In(d, ³ He)
C	¹¹⁴ In ϵ decay (49.51 d)	I	(HL,xn γ)	O	¹¹⁴ Cd(γ,γ')
D	¹¹³ Cd(n, γ) E=thermal	J	¹¹⁴ Cd(n,n' γ)	P	¹¹⁴ Cd(e,e')
E	¹¹³ Cd(n, γ) E=2,24 keV	K	¹¹⁴ Cd(p,p')	Q	¹¹⁴ Cd(α,α')
F	¹¹³ Cd(d,p)	L	¹¹⁴ Cd(d,d')	R	¹¹⁴ Cd($\gamma,\text{pol } \gamma'$)

E(level)	J π^\dagger	T _{1/2} [‡]	XREF	Comments
0 [#]	0 ⁺	stable	ABCDEFGHIJKLMNOQ	E(level): g-factor=+0.321 21 (2011Ch23). T _{1/2} : an upper limit is given for the double β decay: >92. $\times 10^{15}$ y (1995Tr07), >6.0 $\times 10^{17}$ y (2003Da24), >1.3 $\times 10^{18}$ y (2008Be22).
558.456 [#] 2	2 ⁺	10.2 ps 6	ABCDEFGHIJKLMNOQ	Q=-0.35 5 (2005St24) μ =+0.642 40 (2011Ch23) μ : other: +0.58 14 (1980Br01,2005St24). J π : L(p,p')=2.
1134.532 6	0 ⁺	9.9 ps 6	AB DEFGH JKLM Q	XREF: L(1150). J π : L(p,p')=0.
1209.708 6	2 ⁺	3.1 ps 3	A DEFGH JKLM PQ	J π : L(p,p')=2.
1283.739 [#] 8	4 ⁺	1.39 ps 8	A CD FGHIJKLMNO Q	J π : L(d,p)=4, E2 γ to 2 ⁺ . T _{1/2} : from $\gamma\gamma(\theta)$ in ¹¹⁴ In β^- decay (1970Mu11); other: 5.2 ps +8-18 from (γ,γ') (1962Ak01). J π : L(d,p)=0.
1305.609 6	0 ⁺	4.7 ns 3	AB DEFGH JK M	T _{1/2} : from ¹⁶ O, $\gamma(t)$ (1980Ju05). J π : L(d,p)=2, E2 γ to 0 ⁺ .
1364.344 6	2 ⁺	5.2 ps 4	A DEFGH JKLMN Q	J π : E2 γ to 2 ⁺ . Not fed by primary gammas in arc
1732.246 8	4 ⁺	4.8 ps 3	D H J M	(1967Eg01). L(t,p)=(2) is discrepant. J π : L(t,p)=(2).
1784 5	(2 ⁺)		H	T _{1/2} : T _{1/2} = >0.83 ps (2007Ba73). J π : E2 γ to 0 ⁺ g.s.
1841.947 8	2 ⁺	0.65 ps 12	A DEFG J M	T _{1/2} : T _{1/2} = >0.73 ps (2007Ba73). J π : from L(d,p)=0.
1859.698 10	0 ⁺	1.8 ps 4	A DEFGH J LM	T _{1/2} : From 2007Ba73 . J π : M1 γ 's to 2 ⁺ and 4 ⁺ .
1864.262 8	3 ⁺	>0.87 ps	DE J	T _{1/2} : From 2007Ba73 . J π : M1 γ to 4 ⁺ and E2 γ to 2 ⁺ , possible E0 component in transition to 4 ⁺ .
1932.077 8	(4) ⁺	>0.31 ps	D J	T _{1/2} : From 2007Ba73 . J π : E1 γ to 2 ⁺ , L(d, ³ He)=1.
1958.094 8	3 ⁻	0.60 ps +15-10	DEFGH JK MN PQ	XREF: L(1980). J π : E2 γ to 4 ⁺ , no γ to J<4.
1990.3 [#] 2	6 ⁺	0.82 ps 10	IJ LM	T _{1/2} : T _{1/2} =0.57 ps +25-14 (2007Ba73), 0.00024 eV 11
2048.026 8	2 ⁺	0.38 ps 11	A DEF H J M	

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Adopted Levels, Gammas (continued)

¹¹⁴ Cd Levels (continued)					
E(level)	J ^π †	T _{1/2} ‡	S	XREF	Comments
2152.266 8	3 ⁺ ,4 ⁺	>0.35 ps		D J	(2005Ko32). J ^π : E1 γ to 3 ⁻ , M1,E2 γ to 0 ⁺ . T _{1/2} : From 2007Ba73.
2204.561 8	3 ⁺	>0.55 ps		DE J	J ^π : M1 γ's to 4 ⁺ , 3 ⁺ , M1+E2 γ to 4 ⁺ . T _{1/2} : From 2007Ba73.
2218.860 16	2 ⁺	89 fs +8-7		A DEF H JK	J ^π : E1 γ to 3 ⁻ . M1 γ to 2 ⁺ , arc. T _{1/2} : From 2007Ba73.
2298.93 @ 2	5 ⁻	>1.04 ps		D IJKL N Q	J ^π : from L(t,p)=2, M1,E2 to 4 ⁺ rules out 1 ⁺ . T _{1/2} : From 2007Ba73.
2317.1 7	2 ⁺			J l	J ^π : L(³ He,d)=1 from 9/2 ⁺ , E1 γ to 4 ⁺ .
2384.760 8	3 ⁻	0.55 ps +16-10		D F n	J ^π : M1+E2 γ to 2 ⁺ and γ(θ) in (n,n'γ). T _{1/2} : From 2007Ba73.
2387.3 10	3 ⁻			J n q	J ^π : E1 γ to 2 ⁺ and M1 γ to 3 ⁺ .
2391.50 4	4 ⁺	187 fs +24-21		D H JK n q	J ^π : J=3 from γ(θ) in (n,n'γ). L(d, ³ He)=1 for E=2390 15 yields π=-. 1976De42 in (n,n'γ) suggest π=+, but δ discrepant with 1987Ar24. T _{1/2} : From 2007Ba73.
2396	1 ⁻	0.0007 eV 2	1.4 4		J ^π : L(e,e')=4. γ(θ) data in (e,e') analyzed as L=2+4 doublet, possibly distorted by 2387 J=(3) level.
2400.2 20	(6) ⁺	1.0 ps 3		J LM	B(E1)↑=0.14×10 ⁻⁵ 4 T _{1/2} : from 2005Ko32. XREF: L(2410). E(level): a level at 2412.5 is also seen in (n,n'γ) with suggested J=(6). J ^π : E2 γ to 4 ⁺ .
2412.5 5	(6)			J	J ^π : from γ(θ) in (n,n'γ).
2437.64 8	0 ⁺	>0.90 ps		DE J	T _{1/2} : From 2007Ba73.
2456.005 14	1 ⁻	39 fs 4		A DE J N R	J ^π : E0 γ to g.s. B(E1)↑=2.1×10 ⁻⁵ 4 T _{1/2} : From 2007Ba73, T _{1/2} =0.0110 eV 18 (2005Ko32).
2460.757 12	4 ⁻	>0.68 ps		D J N	J ^π : E1 γ to 0 ⁺ g.s. T _{1/2} : From 2007Ba73.
2465.2 7				J	J ^π : E1 γ's to 3 ⁺ and 4 ⁺ , γ(θ) in (n,n'γ).
2503.24 9	(4)	152 fs +35-28		J	
2505 6	0 ⁺ ,1 ⁺			F	J ^π : from L(d,p)=0.
2525.420 10	2 ⁺	>0.35 ps		DEF Jk	T _{1/2} : From 2007Ba73.
2535.81 2	(5 ⁻)	0.18 ps +28-8		H Jkl N	J ^π : from L(d,p)=2, E1 γ to 3 ⁻ . T _{1/2} : From 2007Ba73.
2553.87 8	0 ⁺	0.32 ps +12-7		A DEF J l	J ^π : from angular distribution in (d, ³ He). T _{1/2} : From 2007Ba73.
2580.357 12	2 ⁻	0.42 ps +9-6		DE J	J ^π : from L(d,p)=0, E0 γ to 0 ⁺ . T _{1/2} : From 2007Ba73.
2636.52 6	0 ⁺	0.25 ps +6-4		A DEF J	J ^π : E1 γ to 2 ⁺ . M1 γ to 3 ⁻ , arc. T _{1/2} : From 2007Ba73.
2646	1	0.0006 eV 2	1.0 3		J ^π : from L(d,p)=0, arc. B(M1)↑=0.008 2; B(E1)↑=0.09×10 ⁻⁵ 3 T _{1/2} : From 2005Ko32.
2650.120 12	2 ⁺	0.41 ps +13-8		DE h J l	B(M1)↑=0.010 3; B(E1)↑=0.12×10 ⁻⁵ 4 T _{1/2} : From 2007Ba73, T _{1/2} =0.0008 eV 2 (2005Ko32).
2660.90 3	2 ⁺	22.2 fs 14		A DEF h JKl	J ^π : E2 γ to 0 ⁺ g.s. T _{1/2} : From 2007Ba73.

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Adopted Levels, Gammas (continued)

¹¹⁴Cd Levels (continued)

E(level)	J ^π †	T _{1/2} ‡	XREF	Comments
2669.3# 20	(8 ⁺)	1.4 ps 4	IJ M	J ^π : from L(d,p)=2. E2 γ to 6 ⁺ .
2701.066 20	3 ⁺	0.31 ps +11-7	DE J	T _{1/2} : From 2007Ba73. J ^π : primary γ in (n,γ), res, E1 γ to 3 ⁻ .
2735.2@ 4	(7 ⁻)		I	
2747.21 10	(5)		J	
2749.265 20	2 ⁺	0.69 ps +10-7	DEF h J	T _{1/2} : From 2007Ba73. J ^π : L(d,p)=2, E2 γ to 4 ⁺ .
2756.92 7	3 ⁻ ,(4 ⁻)	0.51 ps +73-19	DE h Jkl	T _{1/2} : From 2007Ba73. J ^π : E1 γ to 4 ⁺ .
2767.85 10	1 ⁻	29.8 fs 28	D F Jkl N	T _{1/2} : From 2007Ba73, T _{1/2} =0.0072 eV 8 (2005Ko32). J ^π : E1 γ to 0 ⁺ g.s.
2788.501 24	(1,2) ⁺	0.25 ps +5-4	DE J l	T _{1/2} : From 2007Ba73. J ^π : M1, E2 γ to g.s.
2799.99 5	(1 ⁺ ,2 ⁺)	19.4 fs 21	A DE J l	T _{1/2} : From 2007Ba73, T _{1/2} =0.0113 eV 13 (2005Ko32). J ^π : M1, E2 γ to 0 ⁺ g.s.
2806.59 3	3 ⁺	125 fs +18-15	DEF J	T _{1/2} : From 2007Ba73. J ^π : M1 γ to 2 ⁺ , E1 γ to 2 ⁻ .
2812.050 20	2 ⁺	0.36 ps +23-10	DE J	T _{1/2} : From 2007Ba73. J ^π : E1 γ to 3 ⁻ , M1 γ to 3 ⁺ , γ to 0 ⁺ g.s.
2820.22 3	4 ⁺		D H	XREF: H(2830). J ^π : E2 γ to 2 ⁺ , L(t,p)=(4).
2827.88 10	(4) ⁺	0.38 ps +44-14	J	T _{1/2} : From 2007Ba73. J ^π : E2 γ to 2 ⁺ .
2828.2 2	0 ⁺ ,1 ⁺		EF	J ^π : from L(d,p)=0.
2847 6	2 ⁻ ,3 ⁻ ,4 ⁻		F	J ^π : L(d,p)=3.
2869 4	(4 ⁺)		H	J ^π : L(t,p)=4,(2).
2871.63 7	2,3	125 fs +17-14	J	T _{1/2} : From 2007Ba73.
2874.26 6	2,4	>0.62 ps	J	T _{1/2} : From 2007Ba73.
2880.56 10	4,3	111 fs +21-17	J	T _{1/2} : From 2007Ba73.
2902.6 8	3 ⁺ ,(0 ⁺)		E	J ^π : arc.
2910.2 3	0 ⁺ ,1 ⁺		EF	J ^π : from L(d,p)=0.
2918.45 10	3	69 fs +17-14	J	T _{1/2} : From 2007Ba73.
2932.97 10	4 ⁺	125 fs +21-17	H J	J ^π : L(t,p)=4. T _{1/2} : From 2007Ba73.
2935.76 6	2 ⁺	>0.35 ps	J	T _{1/2} : From 2007Ba73.
2936.12 5	(3 ⁻)		DE	J ^π : E1 γ to 4 ⁺ . Arc gives 0 ⁺ ,3 ⁺ .
2941.27 7	2,3 ⁺	0.24 ps +12-6	EF J	T _{1/2} : From 2007Ba73.
2953.00 10	3 ⁺	62 fs 7	A D J l	T _{1/2} : From 2007Ba73. J ^π : E2 γ to 4 ⁺ , M1 γ to 2 ⁺ .
2957.26 5	1 ⁻ ,2 ⁻ ,3 ⁻	166 fs +28-21	DEF J l	T _{1/2} : From 2007Ba73. J ^π : E1 γ to 2 ⁺ . Tentative γ to 0 ⁺ would rule out 2 ⁻ ,3 ⁻ . Doubly placed E1 to 3 ⁺ would rule out 1 ⁻ . Doubly placed γ to 4 ⁻ would rule out 1 ⁻ .
2999.56 2	1 ⁻	25.0 fs 28	DE J l	B(M1)↑=0.107 10; B(E1)↑=1.18×10 ⁻⁵ 11 T _{1/2} : From 2007Ba73, T _{1/2} =0.0111 eV 11 (2005Ko32). J ^π : E1 γ to 0 ⁺ g.s.
3001.63 12	4 ⁺		J	
3002.22 3	2 ⁺	145 fs +49-28	DEF J l	T _{1/2} : From 2007Ba73. J ^π : E2 γ to 0 ⁺ g.s.
3025.04 11	2,3	0.33 ps +19-9	F J	T _{1/2} : From 2007Ba73.
3051.54 11	(2)		J	
3052.90 4	0 ⁺		A DEF H l N	J ^π : L(d,p)=0, L(t,p)=0.
3061.48 8	2 ⁺	121 fs +24-17	J	T _{1/2} : From 2007Ba73.
3077.44 3	2 ⁺	139 fs +66-35	DE G J l	XREF: E(3080).

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Adopted Levels, Gammas (continued)

¹¹⁴Cd Levels (continued)

E(level)	J ^π †	T _{1/2} ‡	XREF		Comments
3087	1,2	0.00086 eV 26			T _{1/2} : From 2007Ba73. J ^π : M1 γ to 2 ⁺ , γ to 0 ⁺ g.s., L(d,p)=2.
3108.640 24	1 ⁻	22 fs 6	DE	J	R
3110	1	0.0051 eV 14			T _{1/2} : From 2007Ba73, T _{1/2} =0.0095 eV 19 (2005Ko32). J ^π : E1 γ to 0 ⁺ g.s. E(level): from 1994Ge07, energy of 3110 in 2005Ko32 is 3109+3110 unresolved doublet.
3111.74 10	(2)			J	
3115.56 7	3,2	146 fs +21-17		J	T _{1/2} : From 2007Ba73.
3119 6			F		J ^π : L(d,p)=(2,3).
3130 6			F		J ^π : L(d,p)=(2,3).
3140.34 9	3,2	229 fs +42-35		J	T _{1/2} : From 2007Ba73.
3142 5			H		J ^π : L(t,p)=(6+0).
3143.3# 20	(10 ⁺)			I	
3157.16 4	1 ⁻ ,(2 ⁻ ,3 ⁻)		DE	H J	XREF: H(3142). J ^π : E1 γ to 2 ⁺ .
3167.1 3	0 ⁺ ,1 ⁺ ,2 ⁺		A	E J	J ^π : log ft=5.8 from 1 ⁺ parent.
3168.72 13	2	90 fs +35-21		J	T _{1/2} : From 2007Ba73.
3176.14 7	2,3	0.22 ps +10-6		J	T _{1/2} : From 2007Ba73.
3192.19 14	2,3	0.17 ps +12-6		J	T _{1/2} : From 2007Ba73.
3193 6	2 ⁻ ,3 ⁻ ,4 ⁻		F		J ^π : L(d,p)=3.
3206.0 3	2 ⁺	173 fs +49-35	DE	J	T _{1/2} : From 2007Ba73. J ^π : E1 γ to 3 ⁻ , E2 γ to 0 ⁺ .
3213.2 3	(1,2) ⁻	42 fs +5-4	A	E J	T _{1/2} : From 2007Ba73. J ^π : γ to 0 ⁺ g.s., arc.
3214	1 ⁽⁺⁾	0.0025 eV 3			R B(M1)↑=0.019 2; B(E1)↑=0.21×10 ⁻⁵ 3
3218.56 4	1 ⁻ ,(2 ⁻)	33.3 fs 35	DE	J	J ^π : E1 γ to 2 ⁺ . Fed by primary γ in (n,γ).
3220	1 ⁽⁺⁾	0.0126 eV 8			R B(M1)↑=0.098 6; B(E1)↑=1.08×10 ⁻⁵ 7
3221 6	1 ⁺ ,2 ⁺ ,3 ⁺		F		J ^π : L(d,p)=2.
3222.76 15	0	0.14 ps +9-4		J	T _{1/2} : From 2007Ba73.
3232.41 12	1,2,3	121 fs +24-17		J	T _{1/2} : From 2007Ba73.
3249.18 11	1	62 fs +42-21		J	T _{1/2} : From 2007Ba73.
3250 15	(8 ⁺)				N J ^π : from angular distributions in (d, ³ He).
3254 5			H		J ^π : L(t,p)=(5+0).
3258.093 11	1 ⁻ ,2 ⁻	132 fs +62-35	DEF	H J	XREF: H(3253). T _{1/2} : From 2007Ba73. J ^π : E1 γ to 2 ⁺ , M1 γ to 1 ⁻ .
3267.27 10	1 ⁺ ,2 ⁺		A		J ^π : L(d,p)=2.
3282.6@ 4	(9 ⁻)			I	
3285.09 12	2,3 ⁺	121 fs +28-21	F	J	N J ^π : L(d,p)=2. T _{1/2} : From 2007Ba73.
3296.57 11				J	
3298.52 13	2,3	42 fs +10-7		J	T _{1/2} : From 2007Ba73.
3315.7 3	(0,1,2)		A		J ^π : γ to 2 ⁺ .
3322.29 8	1	0.18 ps +17-7		J	T _{1/2} : From 2007Ba73.
3334.34 9	2,3,4	114 fs +38-28		J	T _{1/2} : From 2007Ba73.
3343 9			H		J ^π : L(t,p)=(4).
3350.8 3	0 ⁺ ,1 ⁺		A	F J	J ^π : L(d,p)=0.
3365 1				F J	
3381.95 13	1,2,3			F J	
3409.62 16	1,2			F J	N J ^π : L(d,p)=2. L(d, ³ He)=1+4.
3445.1 3			A	EF	
3462.1 3	(1 ⁺ ,2 ⁺ ,3 ⁺)		EF	H J	J ^π : L(d,p)=2, av res (n,γ) gives π=-?, L(t,p)=1,(2)

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Adopted Levels, Gammas (continued)

¹¹⁴Cd Levels (continued)

E(level)	J ^π †	T _{1/2} ‡	S	XREF	Comments
3478.54 19				J	suggests π=-, maybe it is another level.
3480 6	-			F N	J ^π : L(d, ³ He)=1.
3488.79 22				J	
3501.15 8	0 ⁺ ,1 ⁺ ,2 ⁺		A	F	J ^π : log ft=5.5 from 1 ⁺ parent.
3503.80 13				J	
3504.0& 5	(10 ⁺)			I	
3521 6	-			F N	J ^π : L(d, ³ He)=1.
3543.74 23				J	
3552.14 25				J	
3557 6				F	
3566 6	(4 ⁺ ,1 ⁻)			H	J ^π : L(t,p)=(4,1).
3582 6				F	
3604 7	(0)			H	J ^π : L(t,p)=(0).
3610.7 3				J	
3613 6				F N	J ^π : L(d, ³ He)=1+4 for E=3610 15.
3670 6				F	
3682	1,2	0.0027 eV 7			R
3690 15					N
3707	1,2	0.0026 eV 9			R
3711.3# 20	(12 ⁺)			I	
3712 6	1 ⁺ ,2 ⁺ ,3 ⁺			F	J ^π : L(d,p)=2.
3747 6				F	
3748	1	0.0119 eV 9			R
					B(M1)↑=0.058 4; B(E1)↑=0.65×10 ⁻⁵ 5 Γ=0.022 eV 8 (1994Ge07), with R(exp)=0.82 21 (1994Ge07).
3789 6	1 ⁺ ,2 ⁺ ,3 ⁺			F N	J ^π : L(d,p)=2. L(d, ³ He)=1 for E=3780 15 gives π=-.
3791	1	0.0014 eV 5			R
3796	1	0.0031 eV 9			R
3823 6				F	
3827	1	0.0045 eV 14			R
3853 6				F	B(M1)↑=0.021 6; B(E1)↑=0.23×10 ⁻⁵ 7
3857	1	0.0032 eV 6	2.5 5		R
3876 6				F N	B(M1)↑=0.014 3; B(E1)↑=0.16×10 ⁻⁵ 3 J ^π : L(d, ³ He)=1 for 3880 15.
3902 6				F	
3916	1	0.0078 eV 16			R
3936	1,2	0.0039 eV 14			R
3940 6				F	
3949	1	0.0062 eV 15	4.6 11		R
3962 6				F	B(M1)↑=0.026 6; B(E1)↑=0.29×10 ⁻⁵ 7
3994		0.0126 eV 26			R
3996 6				F	B(M1)↑=0.051 11; B(E1)↑=0.57×10 ⁻⁵ 12
4017 6				F	
4027.3@ 5	(11 ⁻)			I	
4056	1	0.0141 eV 35			R
4075	1,2	0.0115 eV 32			R
4099 6				F	
4142 6				F	
4177 6				F	
4211 6				F	
4256.4& 5	(12 ⁺)			I	

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Adopted Levels, Gammas (continued)

 ^{114}Cd Levels (continued)

<u>E(level)</u>	<u>J^π</u> [†]	<u>XREF</u>
4604.2 [#] 6	(14 ⁺)	I
4605.2 [@] 5	(13 ⁻)	I

[†] Most of the spins are coming from average resonance neutron capture (arc) and conversion electron measurements.

[‡] From B(E2) in Coulomb excitation ([1976Es02](#),[1988Fa07](#)), unless otherwise noted.

[#] Band(A): g.s. band.

[@] Band(B): Rotational band based on 5⁻.

[&] Band(C): Side band based on (10⁺).

Adopted Levels, Gammas (continued)

$\gamma(^{114}\text{Cd})$										
$E_i(\text{level})$	J_i^π	E_γ^\dagger	$I_\gamma^@$	E_f	J_f^π	Mult. [‡]	δ^\ddagger	$\alpha\&$	$I_{(\gamma+ce)}$	Comments
558.456	2 ⁺	558.456 2	100	0	0 ⁺	E2				B(E2)(W.u.)=31.1 19
1134.532	0 ⁺	576.079 4	100	558.456	2 ⁺	E2				B(E2)(W.u.)=27.4 17
		1134.60 5		0	0 ⁺	E0			0.135 8	
1209.708	2 ⁺	75.177 5	1.9×10 ⁻⁴ 3	1134.532	0 ⁺	E2		4.2		B(E2)(W.u.)=3.4 7
		651.256 5	100 5	558.456	2 ⁺	M1+E2	-1.2 3			B(E2)(W.u.)=22 6; B(M1)(W.u.)=0.008 3
		1209.713 7	29 2	0	0 ⁺	E2				Mult.: from $\alpha(\text{K})\text{exp}$ (1984Mh01). B(E2)(W.u.)=0.48 6 I _γ : I _γ =44 2 in β^- decay. Mult.: M1+E2 from $\alpha(\text{K})\text{exp}$, but M1 is ruled out since $\Delta J=2$. $\delta>1.52$.
1283.739	4 ⁺	725.298 9	100	558.456	2 ⁺	E2				B(E2)(W.u.)=62 4
1305.609	0 ⁺	95.902 3	100 8	1209.708	2 ⁺	E2		1.76		B(E2)(W.u.)=127 16
		171.077 5		1134.532	0 ⁺	E0			1.4 7	
		747.151 6	58 5	558.456	2 ⁺	E2				B(E2)(W.u.)=0.0026 4
		1305.59 4		0	0 ⁺	E0			20.8 11	
1364.344	2 ⁺	80.605 3	0.0090 10	1283.739	4 ⁺	E2				B(E2)(W.u.)=45 7
		154.639 3	0.178 16	1209.708	2 ⁺	(M1+E2)	1.95			B(E2)(W.u.)=(27 4); B(M1)(W.u.)=(0.00022 3)
		229.812 6	2.45 23	1134.532	0 ⁺	E2				B(E2)(W.u.)=65 9
		805.887 5	100 7	558.456	2 ⁺	M1+E2	+0.050 25			B(E2)(W.u.)<0.045; B(M1)(W.u.)>0.0037 δ : from Bull. Rus. Acad. Sci. Ser. Phys. 51, 45 (1987).
1732.246	4 ⁺	1364.339 6	91 6	0	0 ⁺	E2				B(E2)(W.u.)=0.33 4
		367.893 9	64 4	1364.344	2 ⁺	E2				B(E2)(W.u.)=119 12 Mult.: M1+E2 from $\alpha(\text{K})\text{exp}$ with $\delta=1$, but M1 is ruled out ($\Delta J=2$).
		448.518 4	33.4 15	1283.739	4 ⁺	M1+E2	-1.6 [#] +10-4			B(E2)(W.u.)=17 6; B(M1)(W.u.)=0.0017 15
		522.542 11	100 10	1209.708	2 ⁺	E2				B(E2)(W.u.)=32 4
		1173.782 19	90 5	558.456	2 ⁺	E2				B(E2)(W.u.)=0.50 5
1841.947	2 ⁺	477.604 6	20.1 10	1364.344	2 ⁺	M1+E2	2.3 [#] +37-13			B(E2)(W.u.)=7.E+1 4; B(M1)(W.u.)=0.004 +11-4
		536.350 12	14.1 13	1305.609	0 ⁺	E2				B(E2)(W.u.)=34 8 Mult.: $\alpha(\text{K})\text{exp}$ suggests M1,E2; placement on decay scheme requires $\Delta J=2$.
		632.247 6	5.2 2	1209.708	2 ⁺	E2				B(E2)(W.u.)=5.6 11
		707.419 5	69 3	1134.532	0 ⁺	E2				B(E2)(W.u.)=42 9
		1283.495 14	100 7	558.456	2 ⁺	M1+E2	+2.4 +4-2			B(E2)(W.u.)=0.84 17; B(M1)(W.u.)=0.0048 10 δ : from Bull. Rus. Acad. Sci. Ser. Phys. 51, 45 (1987).
		1841.98 8	37 3	0	0 ⁺	E2				B(E2)(W.u.)=0.19 4 Mult.: $\alpha(\text{K})\text{exp}$ suggests M1,E2; placement on decay scheme requires $\Delta J=2$.
1859.698	0 ⁺	495.354 4	6 1	1364.344	2 ⁺	E2				B(E2)(W.u.)=18 6

Adopted Levels, Gammas (continued)

$\gamma(^{114}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\oplus	E_f	J_f^π	Mult. [‡]	δ^\ddagger	Comments
1859.698	0 ⁺	1301.234 18 1859.70 5	100 8	558.456 0	2 ⁺ 0 ⁺	E2		B(E2)(W.u.)=2.4 6 Mult.: could be E0.
1864.262	3 ⁺	132.015 9 499.92 3 580.516 5	0.041 0.4 1 22.8 12	1732.246 1364.344 1283.739	4 ⁺ 2 ⁺ 4 ⁺	M1+E2 M1 M1	<0.65	
		654.551 5 1305.783 21	100 5 86 5	1209.708 558.456	2 ⁺ 2 ⁺	M1+E2 M1+E2	-4.2 [#] +8-6 -0.10 +6-2	
1932.077	(4) ⁺	199.833 4 567.74 3 648.316 17 722.368 6	2.4 10 34.5 15 66 6 100 5	1732.246 1364.344 1283.739 1209.708	4 ⁺ 2 ⁺ 4 ⁺ 2 ⁺	M1 E2 M1,E2(+E0) E2		
1958.094	3 ⁻	225.852 5 593.755 16 674.30 5 748.385 7	0.07 2 1.0 3 0.3 22 35 2	1732.246 1364.344 1283.739 1209.708	4 ⁺ 2 ⁺ 4 ⁺ 2 ⁺	E1 E1 E1 E1		
1990.3	6 ⁺	1399.638 11	100 10	558.456	2 ⁺	E1		
2048.026	2 ⁺	706.6 2 89.929 2 183.782 8	100 0.168 17 0.088 21	1283.739 1958.094 1864.262	4 ⁺ 3 ⁻ 3 ⁺	(E2) E1 (M1)		B(E2)(W.u.)=119 15 B(E1)(W.u.)=0.0014 5 B(M1)(W.u.)=0.007 3 Mult.: $\alpha(K)$ exp allows E1 or M1; level scheme requires $\Delta\pi$ =no.
		206.090 4 742.419 7	0.113 11 10.4 6	1841.947 1305.609	2 ⁺ 0 ⁺	M1 (E2)		B(M1)(W.u.)=0.0061 19 B(E2)(W.u.)=17 5 Mult.: $\alpha(K)$ exp allows M1,E2; level scheme requires ΔJ =2.
		838.309 6 1489.560 10 2047.7 3	4.5 4 100 5 7.6 13	1209.708 558.456 0	2 ⁺ 2 ⁺ 0 ⁺	M1(+E2) M1,E2 (E2)	<0.75	B(E2)(W.u.)<1.9; B(M1)(W.u.)>0.0016 δ : 0.00 10 or 2.3 +10-5 (1976De42). B(E2)(W.u.)=0.08 3 Mult.: $\alpha(K)$ exp allows M1,E2; level scheme requires ΔJ =2.
2152.266	3 ⁺ ,4 ⁺	220.189 4 287.981 9 310.316 6 420.023 4 786.8 ^b 4	4.5 4 24.3 12 20.2 11 37 3 <13	1932.077 1864.262 1841.947 1732.246 1364.344	(4) ⁺ 3 ⁺ 2 ⁺ 4 ⁺ 2 ⁺	M1,E2 M1 E2 M1+E2		δ : $\delta=-0.55$ 13 or +3.2 +21-8. I_γ : reported by 1976De42 in (n,n' γ) with $I_\gamma=56$ 28, not reported in (n, γ); evaluator estimates $I_\gamma<13$ in (n, γ). I_γ : from (n, γ), $I_\gamma=151$ 51 in (n,n' γ). δ : 0.00 10 or 2.3 +10-5 (1976De42).
		868.513 17 942.55 3 1593.3 ^b 6	63 4 100 9 <43	1283.739 1209.708 558.456	4 ⁺ 2 ⁺ 2 ⁺	M1,E2 M1+E2		I_γ : reported by 1976De42 in (n,n' γ) with $I_\gamma=124$ 11, not reported in (n, γ); evaluator estimates $I_\gamma<43$ in (n, γ).
2204.561	3 ⁺	156.531 3 246.472 4 340.294 7 362.608 5	0.3 3 1 1 3.8 2 4.4 2	2048.026 1958.094 1864.262 1841.947	2 ⁺ 3 ⁻ 3 ⁺ 2 ⁺	M1(+E2) E1 M1,E2+E0 M1(+E2)	<0.42 <0.82	

Adopted Levels, Gammas (continued)

$\gamma(^{114}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ°	E_f	J_f^π	Mult. [‡]	δ^\ddagger	Comments
2204.561	3 ⁺	472.310 8	4.5 2	1732.246	4 ⁺	M1		
		840.217 12	43 5	1364.344	2 ⁺	M1		
		920.791 13	73 6	1283.739	4 ⁺	M1		
		994.852 9	71 4	1209.708	2 ⁺	M1+E2	0.8 [#] +7-3	
2218.860	2 ⁺	1646.12 4	100 5	558.456	2 ⁺	M1+E2	-0.10 [#] +3-5	
		170.857 15	0.016 3	2048.026	2 ⁺			
		359.20 5	0.06 2	1859.698	0 ⁺			
		486.647 19	0.20 5	1732.246	4 ⁺	(E2)		
		854.62 4	1.2 2	1364.344	2 ⁺	M1,E2		
2298.93	5 ⁻	1660.368 16	100 6	558.456	2 ⁺	M1+E2		δ : +0.17 6 or +1.5 +8-10 (1987Ar24).
		366.91 4	3 1	1932.077	(4) ⁺			
2317.1	2 ⁺	1015.178 17	100	1283.739	4 ⁺	E1		
		1107.4 6	100 8	1209.708	2 ⁺	M1+E2	<+0.5 [#]	
2384.760	3 ⁻	1183.7 9	31 7	1134.532	0 ⁺			
		2316.1 9	20 6	0	0 ⁺			
		165.895 6	0.250 22	2218.860	2 ⁺	E1		
		180.198 6	0.180 8	2204.561	3 ⁺	E1		
		336.743 11	0.31 7	2048.026	2 ⁺			
2387.3	3 ⁻	426.666 6	7.9 6	1958.094	3 ⁻	M1		
		1175.076 20	25.1 13	1209.708	2 ⁺	E1		
		1826.30 4	100 6	558.456	2 ⁺	E1		
		1828.8 8	100 4	558.456	2 ⁺	E1(+M2)	+0.01 [#] 3	Mult.: δ is from 1987Ar24. $\delta=-0.10 +2-3$ (1976De42). Mult=E1 from polarization (1987Ar24).
2391.50	4 ⁺	1107.761 21	100 8	1283.739	4 ⁺	M1		
		459.393 25	2.5 3	1932.077	(4) ⁺	M1		
2396	1 ⁻	659.20 5	4.5 9	1732.246	4 ⁺			
		2396		0	0 ⁺	E1		
2400.2	(6) ⁺	1107.761 21	100 8	1283.739	4 ⁺	M1		
2412.5	(6)	668 1	100	1732.246	4 ⁺	E2		B(E2)(W.u.)=1.3×10 ² 4
2437.64	0 ⁺	113.6 2		2298.93	5 ⁻			
		1228.00 10	8.6 11	1209.708	2 ⁺	E2		
		1879.10 5	100 6	558.456	2 ⁺	E2		
2456.005	1 ⁻	2437.7 1	14	0	0 ⁺	E0		
		1091.64 9	15 4	1364.344	2 ⁺	E1		
		2456.0 1	100 40	0	0 ⁺	E1		
2460.757	4 ⁻	256.195 ^a 4	12.5 ^a 6	2204.561	3 ⁺	E1		
		502.667 10	18.0 13	1958.094	3 ⁻	M1,E2		
		596.485 5	61 6	1864.262	3 ⁺	E1		
		728.56 6	9.7 17	1732.246	4 ⁺			
		1177.04 3	100 7	1283.739	4 ⁺	E1		
		1902.19 14	97 17	558.456	2 ⁺			

Adopted Levels, Gammas (continued)

$\gamma(^{114}\text{Cd})$ (continued)								
$E_i(\text{level})$	J_i^π	E_γ^\dagger	$I_\gamma^@$	E_f	J_f^π	Mult. [‡]	δ^\ddagger	Comments
2465.2		1100.9 1	100	1364.344	2 ⁺			
2503.24	(4)	1219.62 8		1283.739	4 ⁺			
2525.420	2 ⁺	140.659 3	0.5 1	2384.760	3 ⁻	E1		
		306.560 7	7.6 4	2218.860	2 ⁺	E2+M1	>0.82	
		320.835 13	0.7 1	2204.561	3 ⁺	M1		
		567.328 7	30 6	1958.094	3 ⁻	E1		
		661.21 3	5.4 6	1864.262	3 ⁺	M1		
		665.735 15	10.0 6	1859.698	0 ⁺	E2		
		1161.06 3	56 5	1364.344	2 ⁺	M1		
		1219.78 3	73 5	1305.609	0 ⁺	E2		
		1315.677 22	100 10	1209.708	2 ⁺	M1		
		1966.80 20	87 16	558.456	2 ⁺			
		2525.1 1	58 10	0	0 ⁺			
2535.81	(5 ⁻)	236.897 9	100	2298.93	5 ⁻	M1		
2553.87	0 ⁺	694.45 12		1859.698	0 ⁺	E0		
		1995.06 17	100 10	558.456	2 ⁺	E2		
		2554.0 1		0	0 ⁺	E0		
2580.357	2 ⁻	361.501 16	0.3 1	2218.860	2 ⁺			
		375.3 10	1.5 4	2204.561	3 ⁺			
		532.320 10	5.1 7	2048.026	2 ⁺	E1(+M2)	+0.07 +27-18	
		622.259 6	5.7 2	1958.094	3 ⁻	M1+E2	+1.2 +13-6	
		738.35 ^a 3	1.4 ^a 1	1841.947	2 ⁺			
		1370.617 22	100 6	1209.708	2 ⁺	E1(+M2)	+0.01 3	
		2021.9 1	41 8	558.456	2 ⁺	E1(+M2)	+0.12 +7-6	
2636.52	0 ⁺	1426.6 3	8.5 3	1209.708	2 ⁺	E2		
		2078.1 1	100 6	558.456	2 ⁺	E2		
2646	1	2646		0	0 ⁺			
2650.120	2 ⁺	124.698 3	0.15 5	2525.420	2 ⁺	M1		
		194.116 6	0.18 11	2456.005	1 ⁻	E1		
		212.488 16	0.10 5	2437.64	0 ⁺			
		431.263 7	2.5 1	2218.860	2 ⁺	M1		
		602.117 16	2.7 2	2048.026	2 ⁺			
		692.10 3	4.0 4	1958.094	3 ⁻	E1		
		1285.83 8	28 4	1364.344	2 ⁺	M1+E2	+0.03 6	
		1344.59 9	12.1 5	1305.609	0 ⁺	E2		
		2650.1 1	100 6	0	0 ⁺	E2		
2660.90	2 ⁺	276.139 19	0.3 1	2384.760	3 ⁻			
		2102.4 1	100 5	558.456	2 ⁺	M1+E2		
2669.3	(8 ⁺)	270		2400.2	(6) ⁺			
		678.2 3	100	1990.3	6 ⁺	E2		
2701.066	3 ⁺	240.301 7	4.0 2	2460.757	4 ⁻	E1		
		309.567 15	1.2 2	2391.50	4 ⁺			

δ : =+1.9 1 for J(2660.7)=2 or +0.41 +2-3 for J(2660.7)=3.
 E_γ : seen only in Coul. ex. Branching relative to 679 γ not given.
 B(E2)(W.u.)=85 25

Adopted Levels, Gammas (continued)

$\gamma(^{114}\text{Cd})$ (continued)								
$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\oplus	E_f	J_f^π	Mult. ‡	δ^\ddagger	Comments
2701.066	3 ⁺	316.327 12	1.0 2	2384.760	3 ⁻			
		496.552 ^a 21	7.7 ^a 16	2204.561	3 ⁺			
		742.945 17	59 3	1958.094	3 ⁻	E1		
		859.21 5	13.3 16	1841.947	2 ⁺			
		1491.39 23	83 11	1209.708	2 ⁺			
2735.2	(7 ⁻)	2143.2 2	100 17	558.456	2 ⁺			
		436.3		2298.93	5 ⁻			
		744.6		1990.3	6 ⁺			
2747.21	(5)	1463.59 9		1283.739	4 ⁺			
2749.265	2 ⁺	597.016 10	5 1	2152.266	3 ⁺ ,4 ⁺	E2		
		2190.8 1	100 7	558.456	2 ⁺	M1		
		2749.2 2	8 1	0	0 ⁺			
2756.92	3 ⁻ ,(4 ⁻)	300.868 17	1.4 2	2456.005	1 ⁻			
		798.92 5	14 3	1958.094	3 ⁻	M1,E2		
		1024.73 5	39 4	1732.246	4 ⁺			
		1473.40 10	49 10	1283.739	4 ⁺	E1		
		2198.0 4	100 21	558.456	2 ⁺			
2767.85	1 ⁻	908.30 10	2.1 5	1859.698	0 ⁺			
		2209.2 1	52 5	558.456	2 ⁺	E1		
		2767.5 2	100 6	0	0 ⁺	E1		
2788.501	(1,2) ⁺	138.376 12	0.060 12	2650.120	2 ⁺			
		263.081 12	0.40 4	2525.420	2 ⁺	M1		
		2230.2 1	100 7	558.456	2 ⁺	M1+E2		
		2788.4 2	30 3	0	0 ⁺	M1,E2		
2799.99	(1 ⁺ ,2 ⁺)	1590.20 10	19 1	1209.708	2 ⁺	M1+E2	<+0.24	
		2242.0 2	20 3	558.456	2 ⁺	M1+E2	+1 +62-1	
		2800.1 1	100 6	0	0 ⁺	M1,E2		
2806.59	3 ⁺	226.213 9	1.2 6	2580.357	2 ⁻	E1		
		281.12 3	0.50 8	2525.420	2 ⁺			
		1522.90 9	92 10	1283.739	4 ⁺	M1,E2		
		2248.1 3	100 20	558.456	2 ⁺	M1,E2		
2812.050	2 ⁺	110.985 5	0.35 4	2701.066	3 ⁺	M1+E2	0.42	
		175.531 13	0.09 6	2636.52	0 ⁺			
		231.684 8	0.30 16	2580.357	2 ⁻			
		607.452 14	2.2 3	2204.561	3 ⁺	M1,E2		
		853.983 14	14.6 13	1958.094	3 ⁻	E1		
		1447.63 6	16.5 13	1364.344	2 ⁺	M1,E2		
		2253.4 1	100 7	558.456	2 ⁺	M1,E2		
		2811.9 2	36 9	0	0 ⁺			
		2820.22	4 ⁺	601.354 20	23 4	2218.860	2 ⁺	E2
772.17 3	40 4			2048.026	2 ⁺	E2		
862.171 24	100 7			1958.094	3 ⁻			

Adopted Levels, Gammas (continued)

$\gamma(^{114}\text{Cd})$ (continued)									
$E_i(\text{level})$	J_i^π	E_γ^\dagger	$I_\gamma^@$	E_f	J_f^π	Mult. [‡]	δ^\ddagger	Comments	
2827.88	(4) ⁺	1618.25 9	100.0 18	1209.708	2 ⁺	E2			
2871.63	2,3	913.57 9	13 1	1958.094	3 ⁻				
2874.26	2,4	2313.24 9	100 5	558.456	2 ⁺				
		826.11 8	100 2	2048.026	2 ⁺				
		916.27 9	19 1	1958.094	3 ⁻				
		1664.77 9	33 1	1209.708	2 ⁺				
		2316.2 2		558.456	2 ⁺				
2880.56	4,3	1596.94 9	100	1283.739	4 ⁺				
2918.45	3	1634.83 9	100	1283.739	4 ⁺	M1,E2			
2932.97	4 ⁺	1649.35 9	100	1283.739	4 ⁺	E2			
2935.76	2 ⁺	1629.36 10	56 1	1305.609	0 ⁺	E2		E _γ : poor fit, level-energy difference=1630.15.	
		1652.53 9	100 2	1283.739	4 ⁺	E2		E _γ : poor fit, level-energy difference=1652.14.	
		1725.78 20	85 3	1209.708	2 ⁺	M1+E2	-1.5 +1-14		
		2377.67 9	93 6	558.456	2 ⁺	M1+E2		E _γ : level-energy difference=2377.35. δ: =+0.20 +11-7 or +1.5 3.	
2936.12	(3 ⁻)	286.021 22	0.5 1	2650.120	2 ⁺				
		475.327 21	4.5 5	2460.757	4 ⁻				
		1652.59 11	100 23	1283.739	4 ⁺	E1			
		2377.8 2	77 15	558.456	2 ⁺				
2941.27	2,3 ⁺	1731.59 9	100 2	1209.708	2 ⁺	M1+E2	-0.9 +2-38		
		2382.90 9	96 6	558.456	2 ⁺	M1+E2	+0.18 3		
2953.00	3 ⁺	800.99 4	4.4 5	2152.266	3 ⁺ ,4 ⁺	E2			
		905.08 7	3.1 7	2048.026	2 ⁺				
		2394.9 1	100 8	558.456	2 ⁺	M1,E2			
2957.26	1 ⁻ ,2 ⁻ ,3 ⁻	256.195 ^a 4	2.86 ^a 16	2701.066	3 ⁺	E1			
		496.552 ^a 21	1.8 ^a 4	2460.757	4 ⁻				
		738.35 ^a 3	2.1 ^a 3	2218.860	2 ⁺				
		1097.35 ^b 11	4.7 10	1859.698	0 ⁺				
		2398.6 1	100 7	558.456	2 ⁺	E1			
2999.56	1 ⁻	780.54 8	2.0 2	2218.860	2 ⁺				
		2440.7 3	14 3	558.456	2 ⁺				
		2999.7 1	100 6	0	0 ⁺	E1			
3001.63	4 ⁺	477.57 6		2525.420	2 ⁺	E2			
		2443.22 11		558.456	2 ⁺	E2			
3002.22	2 ⁺	341.321 17	2.2 2	2660.90	2 ⁺				
		476.80 3	4.8 11	2525.420	2 ⁺	M1,E2			
		3001.8 4	100 23	0	0 ⁺	E2			
3025.04	2,3	2466.63 10		558.456	2 ⁺				
3051.54	(2)	1841.9 1	100	1209.708	2 ⁺				
3052.90	0 ⁺	232.689 8	0.1 1	2820.22	4 ⁺				
		833.98 3	5.5 4	2218.860	2 ⁺	(E2)			

Adopted Levels, Gammas (continued)

$\gamma(^{114}\text{Cd})$ (continued)								
$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\oplus	E_f	J_f^π	Mult. [‡]	δ^\ddagger	Comments
3052.90	0 ⁺	1004.91 5	7.8 10	2048.026	2 ⁺			
		3053.1 2	100 10	0	0 ⁺			
3061.48	2 ⁺	1197.26 12	100 15	1864.262	3 ⁺			
		2503.12 9	95 10	558.456	2 ⁺	M1+E2	-1.5 +5-7	
		3062 1		0	0 ⁺			
3077.44	2 ⁺	270.804 16	0.8 1	2806.59	3 ⁺			
		277.469 12	0.7 1	2799.99	(1 ⁺ ,2 ⁺)			
		376.347 19	1.4 2	2701.066	3 ⁺			
		523.588 20	5.3 10	2553.87	0 ⁺			
		1029.471 20	40 4	2048.026	2 ⁺	M1,E2		
		2518.9 2	48 10	558.456	2 ⁺	M1+E2		
		3077.6 2	100 10	0	0 ⁺	E2		
3087	1,2	3087		0	0 ⁺			
3108.640	1 ⁻	151.378 3	0.1 1	2957.26	1 ⁻ ,2 ⁻ ,3 ⁻	M1+E2	<0.33	
		2550.1 1	100 6	558.456	2 ⁺	E1		
		3108.2 2	37 6	0	0 ⁺	E1		
3111.74	(2)	727.37 11	50 6	2387.3	3 ⁻	E2		E _γ : level-energy difference=727.03.
		1746.88 14	15 2	1364.344	2 ⁺	E1		E _γ : level-energy difference=1747.42.
3115.56	3,2	1067.07 10	86 3	2048.026	2 ⁺			E _γ : poor fit, level-energy difference=1067.61, also pure E2 not possible.
		1274.15 11	100 3	1841.947	2 ⁺			E _γ : level-energy difference=1273.80.
		1832.19 20	37 2	1283.739	4 ⁺			
		2557.36 11	91 5	558.456	2 ⁺			
3140.34	3,2	1276.65 11	46 2	1864.262	3 ⁺			E _γ : level-energy difference=1276.23.
		2581.50 11	100.0 8	558.456	2 ⁺			
3143.3	(10 ⁺)	474		2669.3	(8 ⁺)			
3157.16	1 ⁻ ,(2 ⁻ ,3 ⁻)	345.073 21	0.4 2	2812.050	2 ⁺			
		400.253 15	2.5 2	2756.92	3 ⁻ ,(4 ⁻)			
		2022.7 2	85 17	1134.532	0 ⁺	E1		
		2598.6 1	100 6	558.456	2 ⁺	E1		
3167.1	0 ⁺ ,1 ⁺ ,2 ⁺	1802.6 3	53	1364.344	2 ⁺			
		1957.5 3	59	1209.708	2 ⁺			
		2608.3 8	100	558.456	2 ⁺			
3168.72	2	1959.08 12	100	1209.708	2 ⁺			
3176.14	2,3	1128.04 10	49 3	2048.026	2 ⁺			
		1311.70 12	68 4	1864.262	3 ⁺			
		2618.17 11	100 5	558.456	2 ⁺			E _γ : poor fit, level-energy difference=2618.72.
3192.19	2,3	1982.55 13	100	1209.708	2 ⁺			
3206.0	2 ⁺	203.774 6	0.5 1	3002.22	2 ⁺	M1		
		987.20 3	66 3	2218.860	2 ⁺	M1		
		1247.85 6	37 7	1958.094	3 ⁻	E1		
		1900.3 3	100 16	1305.609	0 ⁺	E2		

Adopted Levels, Gammas (continued)

$\gamma(^{114}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\oplus	E_f	J_f^π	Mult. [‡]	δ^\ddagger	Comments
3213.2	(1,2) ⁻	3213.2 3	100	0	0 ⁺			
3214	1 ⁽⁺⁾	3214		0	0 ⁺	(M1)		
3218.56	1 ⁻ , (2 ⁻)	109.915 3	0.08 8	3108.640	1 ⁻	M1+E2	<0.35	
		418.554 14	0.2 1	2799.99	(1 ⁺ , 2 ⁺)	E1		
		999.743 19	3.6 4	2218.860	2 ⁺	E1		
		1260.56 5	4.3 5	1958.094	3 ⁻	E2		
		1853.7 4	4.7 10	1364.344	2 ⁺	E1		
		2660.02 3	100 5	558.456	2 ⁺	E1		
		3217.5 6	4.7 14	0	0 ⁺			
3220	1 ⁽⁺⁾	3220		0	0 ⁺	(M1)		
3222.76	0	2013.12 14	100	1209.708	2 ⁺			
3232.41	1,2,3	2673.99 11		558.456	2 ⁺			
3249.18	1	811.15 13	100 20	2437.64	0 ⁺			E_γ : level-energy difference=811.60.
		2040.06 14	72 8	1209.708	2 ⁺			E_γ : level-energy difference=2039.54.
3258.093	1 ⁻ , 2 ⁻	304.855 8	0.8 1	2953.00	3 ⁺			
		802.076 17	10.9 16	2456.005	1 ⁻	M1,E2		
		873.31 4	6.7 7	2384.760	3 ⁻			
		1416.10 11	26 3	1841.947	2 ⁺	E1		
		2699.5 2	100 10	558.456	2 ⁺	E1		
3282.6	(9 ⁻)	547.4	100	2735.2	(7 ⁻)			
3285.09	2,3 ⁺	2001.46 11	100	1283.739	4 ⁺			
3296.57		1092.43 12	71 4	2204.561	3 ⁺			
		2737.68 18	100 28	558.456	2 ⁺			
3298.52	2,3	2740.10 12		558.456	2 ⁺			
3315.7	(0,1,2)	2757.2 3	100	558.456	2 ⁺			
3322.29	1	865.35 11		2456.005	1 ⁻			E_γ : poor fit, level-energy difference=865.89.
		2764.51 12	100 12	558.456	2 ⁺			E_γ : poor fit, level-energy difference=2763.87.
		3322.24 13	69 14	0	0 ⁺			
3334.34	2,3,4	753.76 13		2580.357	2 ⁻			
		2124.92 14	67 3	1209.708	2 ⁺			
		2775.97 13	100 12	558.456	2 ⁺			
3365		2808.37 15		558.456	2 ⁺			
3381.95	1,2,3	2172.19 15	100 23	1209.708	2 ⁺			
		2823.81 23	68 14	558.456	2 ⁺			
3409.62	1,2	1545.50 15	100	1864.262	3 ⁺			
		3410 1		0	0 ⁺			
3445.1		1397.0 3	100	2048.026	2 ⁺			
3462.1	(1 ⁺ , 2 ⁺ , 3 ⁺)	3462.18 19	100	0	0 ⁺			
3478.54		2114.21 18	100	1364.344	2 ⁺			
3488.79		3488.73 22	100	0	0 ⁺			
3501.15	0 ⁺ , 1 ⁺ , 2 ⁺	2136.9 2	100 8	1364.344	2 ⁺			

Adopted Levels, Gammas (continued)

γ(¹¹⁴Cd) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ[@]</u>	<u>E_f</u>	<u>J_f^π</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ[@]</u>	<u>E_f</u>	<u>J_f^π</u>
3501.15	0 ⁺ ,1 ⁺ ,2 ⁺	2942.5 3	97 8	558.456	2 ⁺	3827	1	3269	168 68	558.456	2 ⁺
3503.80		1545.50 15		1958.094	3 ⁻			3827	100	0	0 ⁺
		2198.63 20		1305.609	0 ⁺	3857	1	3857		0	0 ⁺
3504.0	(10 ⁺)	835.2	100	2669.3	(8 ⁺)	3916	1	3916		0	0 ⁺
3543.74		2985.31 22	100	558.456	2 ⁺	3936	1,2	3936		0	0 ⁺
3552.14		2993.71 24	100	558.456	2 ⁺	3949	1	3949		0	0 ⁺
3610.7		3610.6 3	100	0	0 ⁺	3994		3994		0	0 ⁺
3682	1,2	3682		0	0 ⁺	4027.3	(11 ⁻)	744.7	100	3282.6	(9 ⁻)
3707	1,2	3707		0	0 ⁺	4056	1	4056		0	0 ⁺
3711.3	(12 ⁺)	568.2	100	3143.3	(10 ⁺)	4075	1,2	4075		0	0 ⁺
3748	1	3190	38 5	558.456	2 ⁺	4256.4	(12 ⁺)	752.4	100	3504.0	(10 ⁺)
		3748	100	0	0 ⁺	4604.2	(14 ⁺)	892.5	100	3711.3	(12 ⁺)
3791	1	3791		0	0 ⁺	4605.2	(13 ⁻)	577.9	100	4027.3	(11 ⁻)
3796	1	3796		0	0 ⁺						

[†] From (n,γ). See also (n,n'γ) for additional γ's.

[‡] From (n,γ), unless otherwise noted.

From 1976De42.

@ Relative photon branching from each level. Data are averages from (n,γ) and (n,n'γ). Gammas from the 2151 level (not seen in (n,γ)) are not included here.

& Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

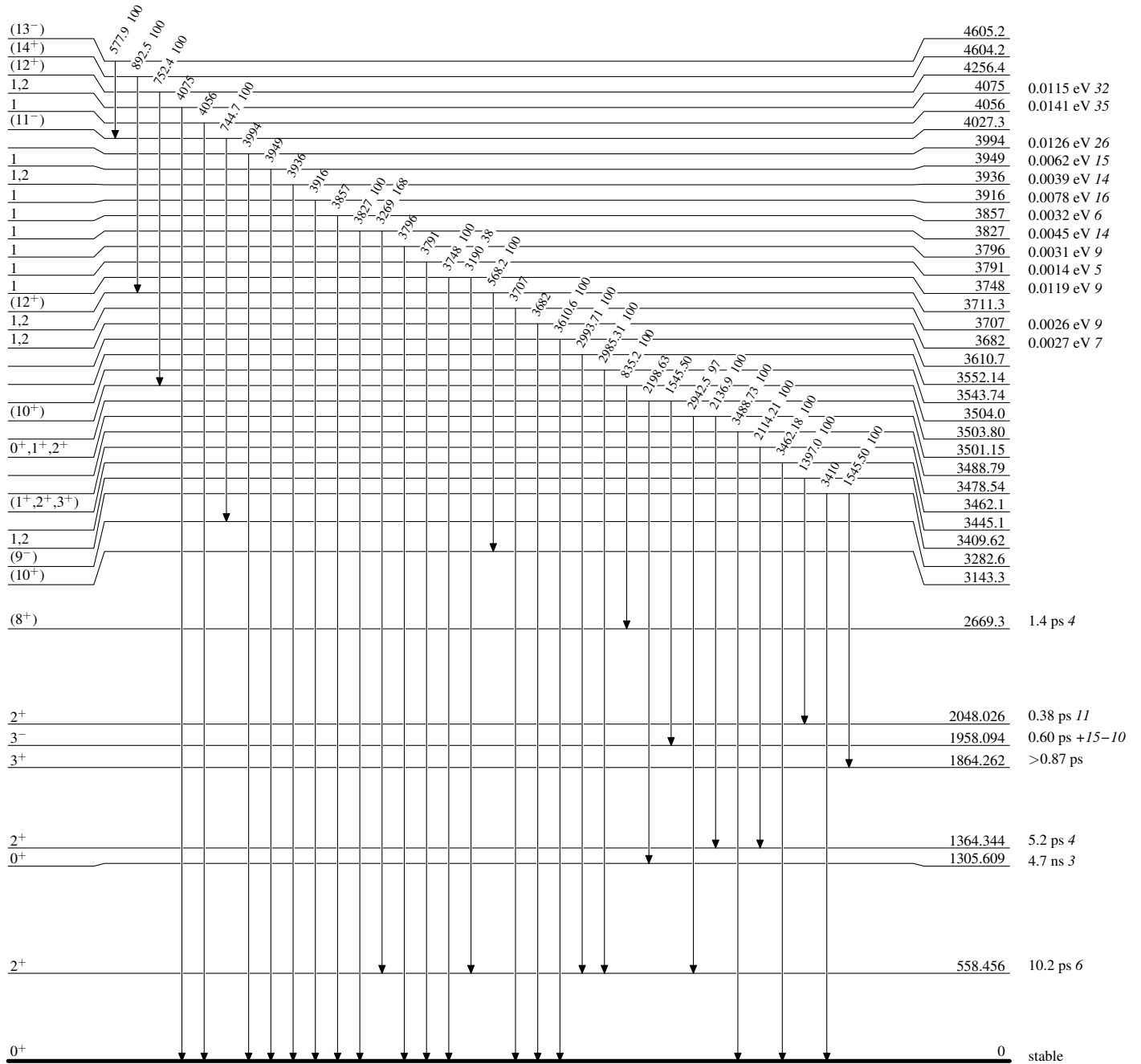
^a Multiply placed with undivided intensity.

^b Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas

Level Scheme

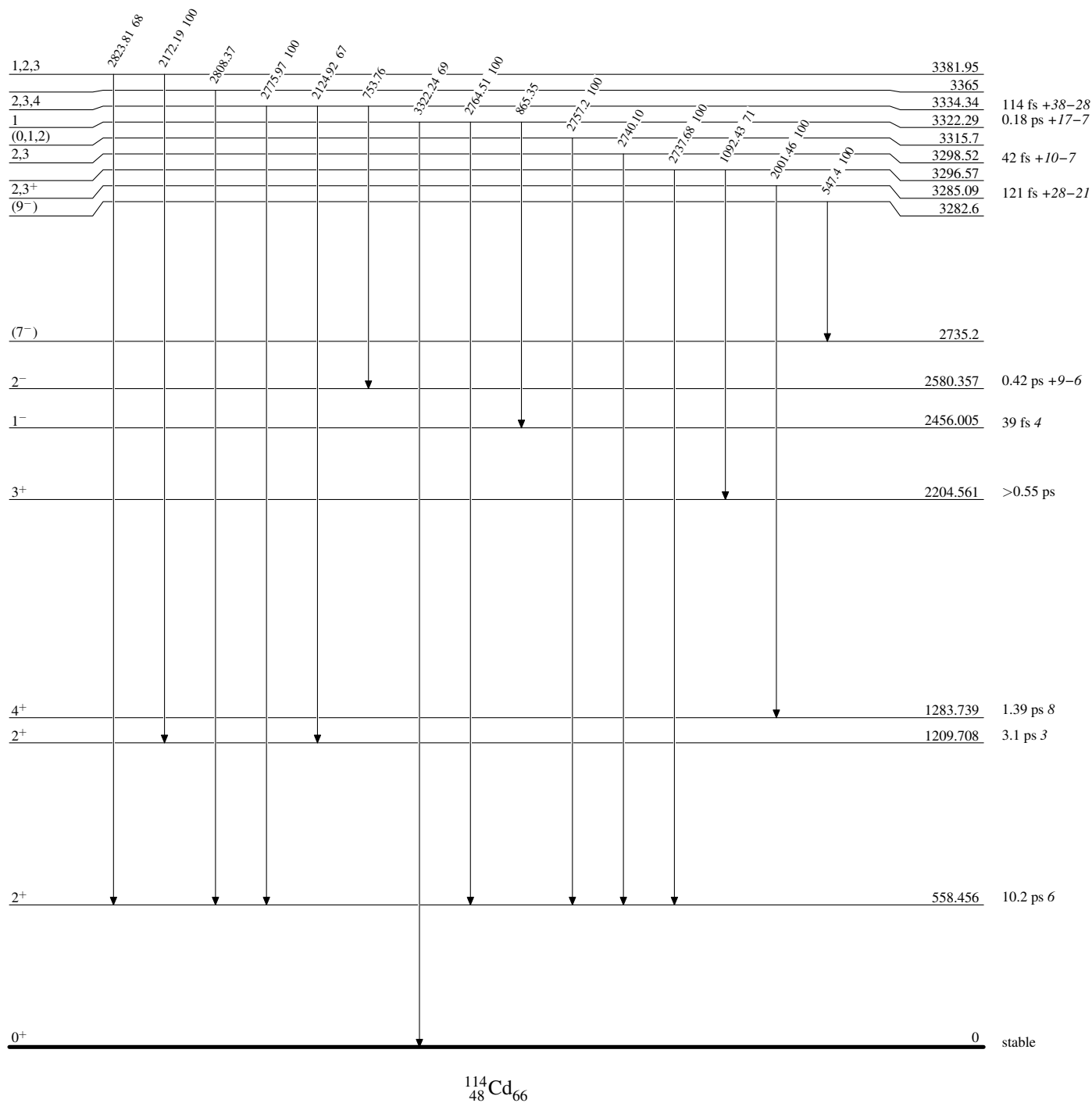
Intensities: Relative photon branching from each level



$^{114}_{48}\text{Cd}_{66}$

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

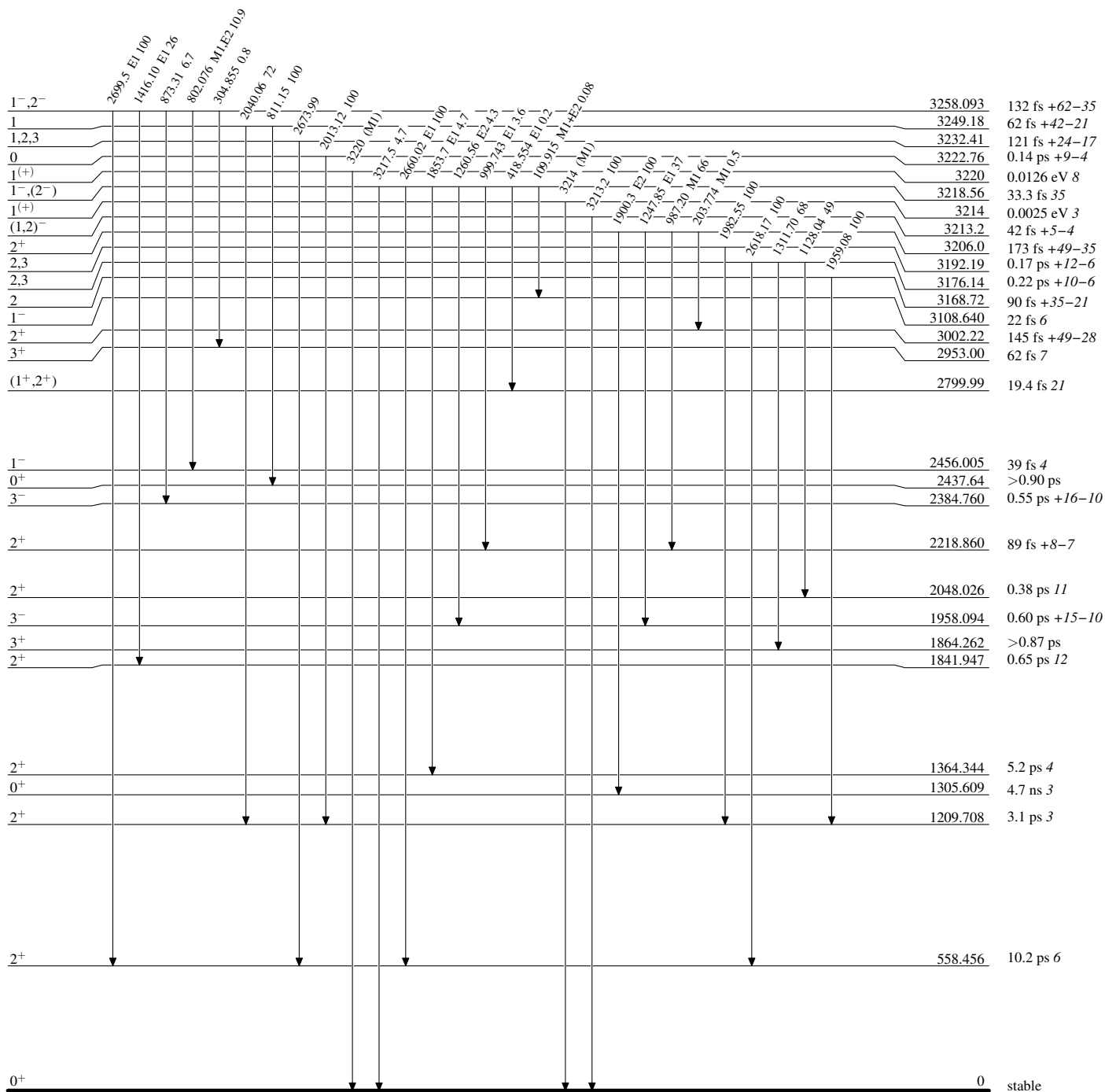
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

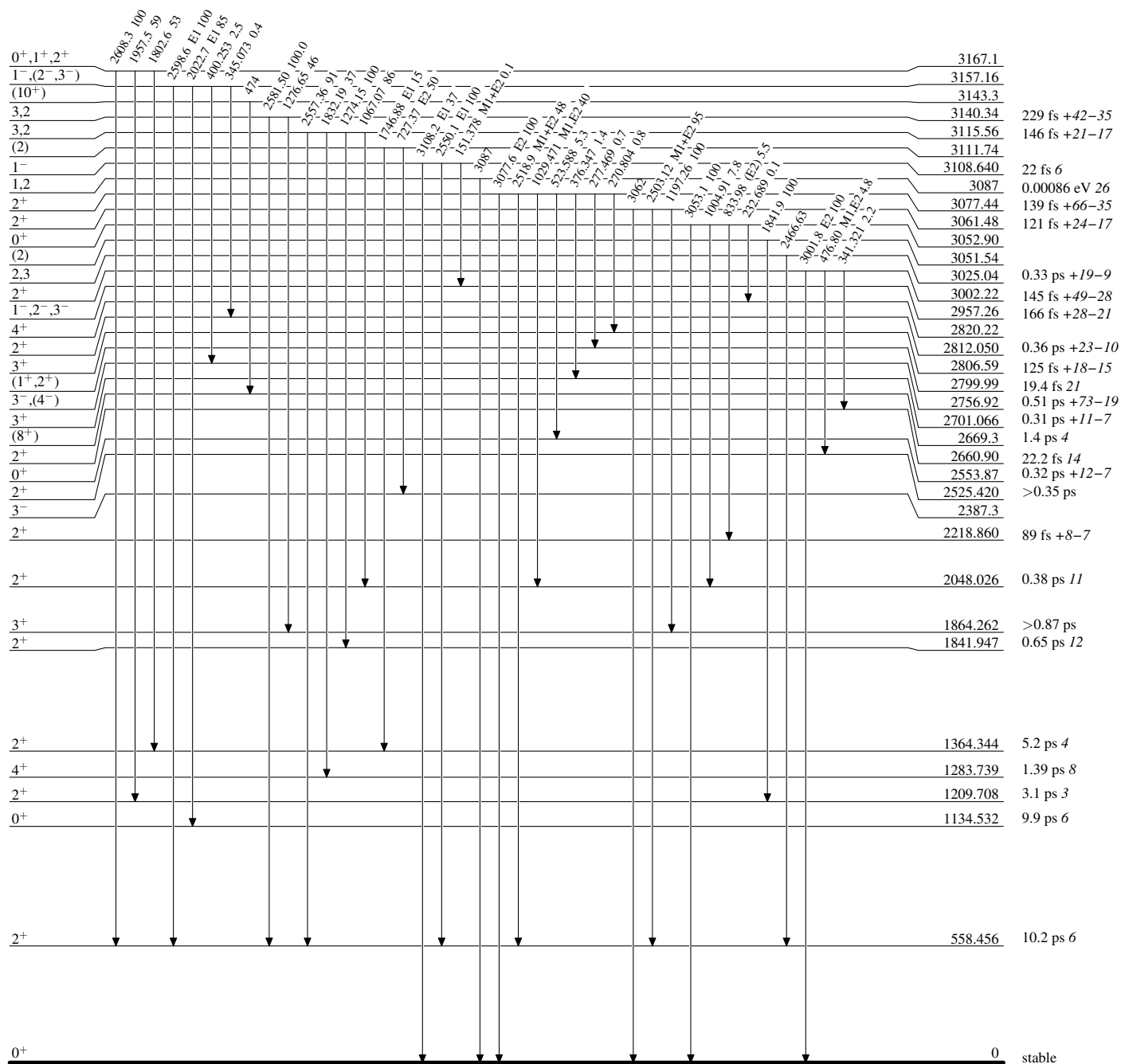


$^{114}_{48}\text{Cd}_{66}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



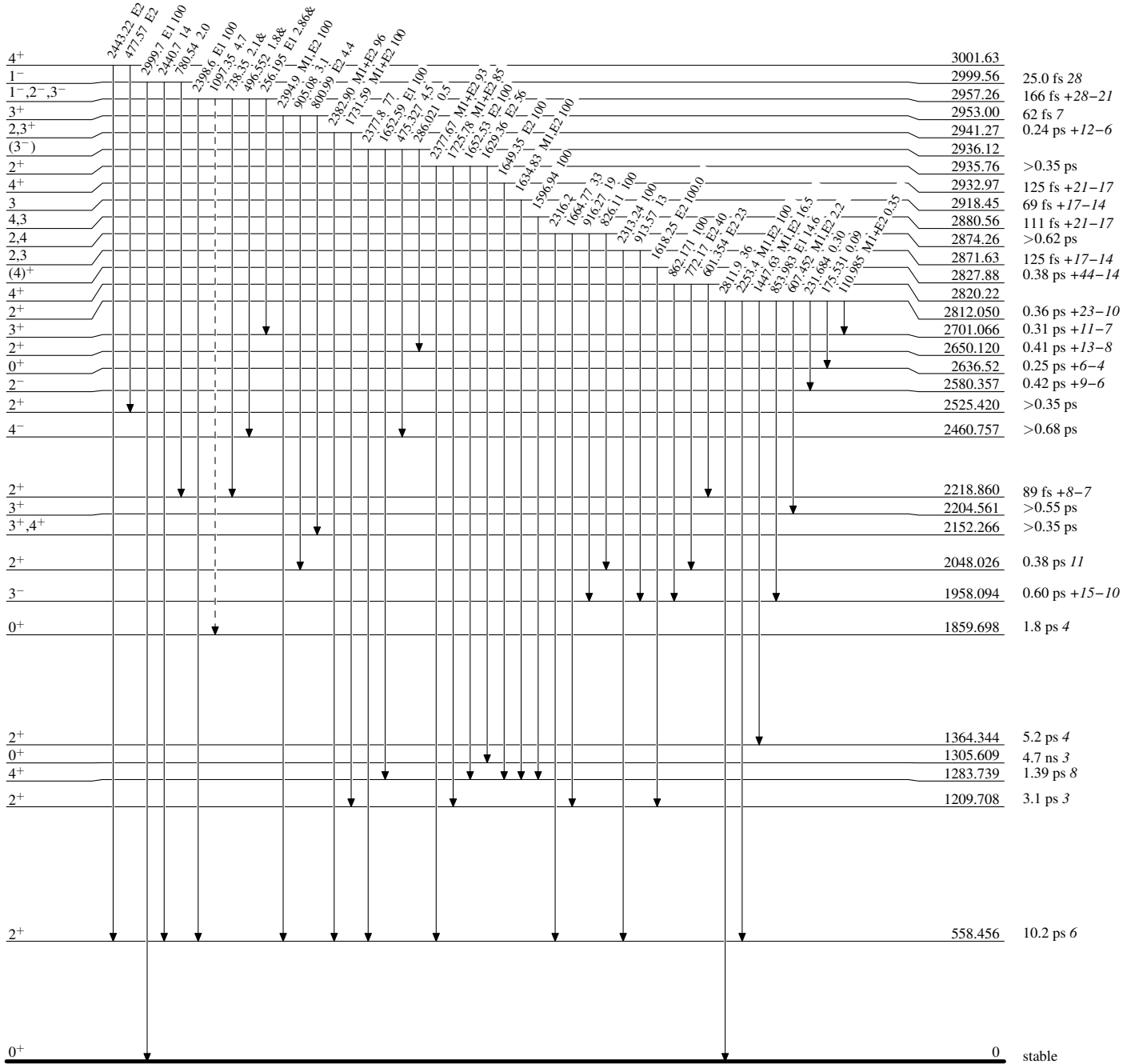
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

-----▶ γ Decay (Uncertain)

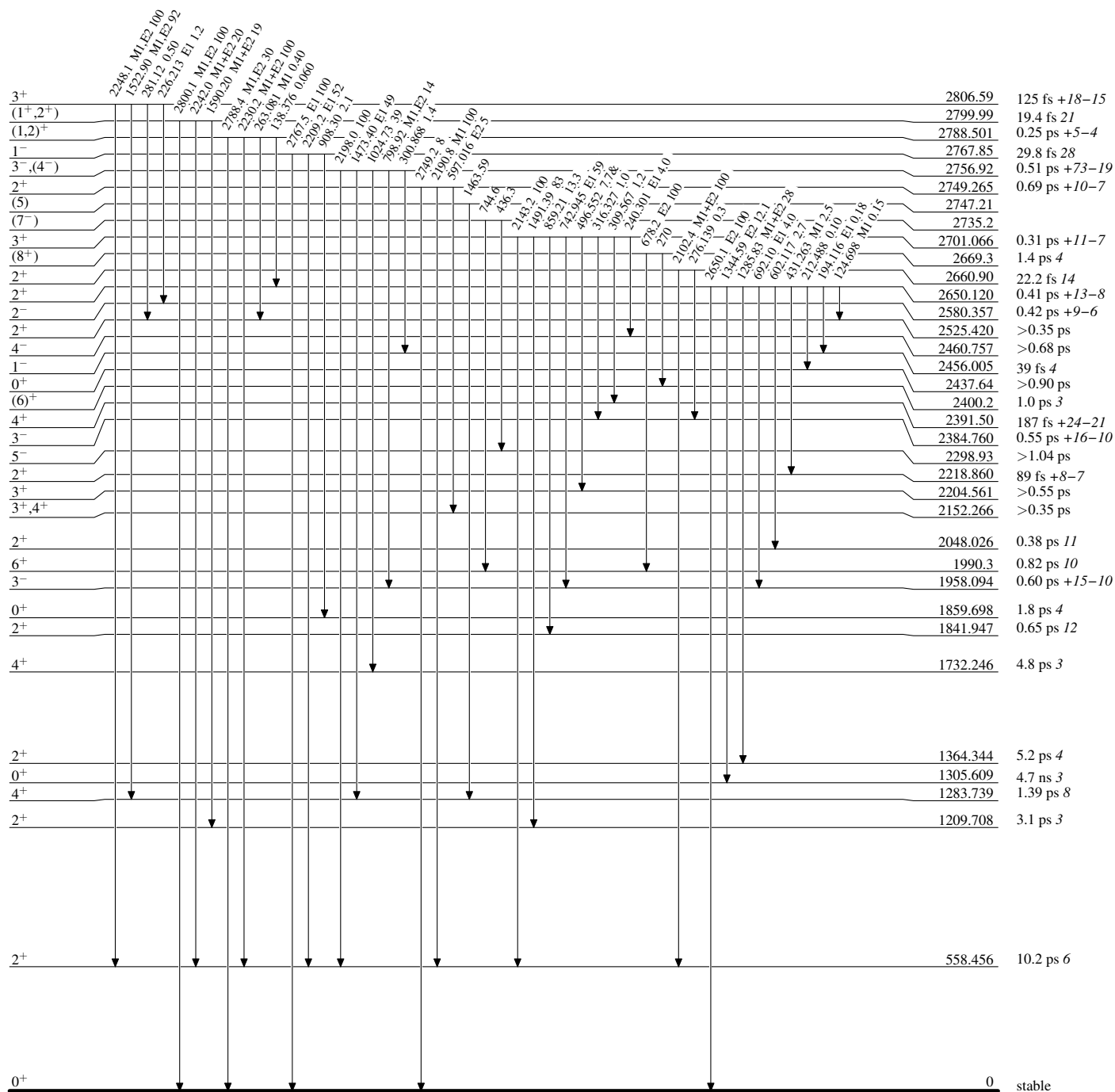


¹¹⁴₄₈Cd₆₆

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

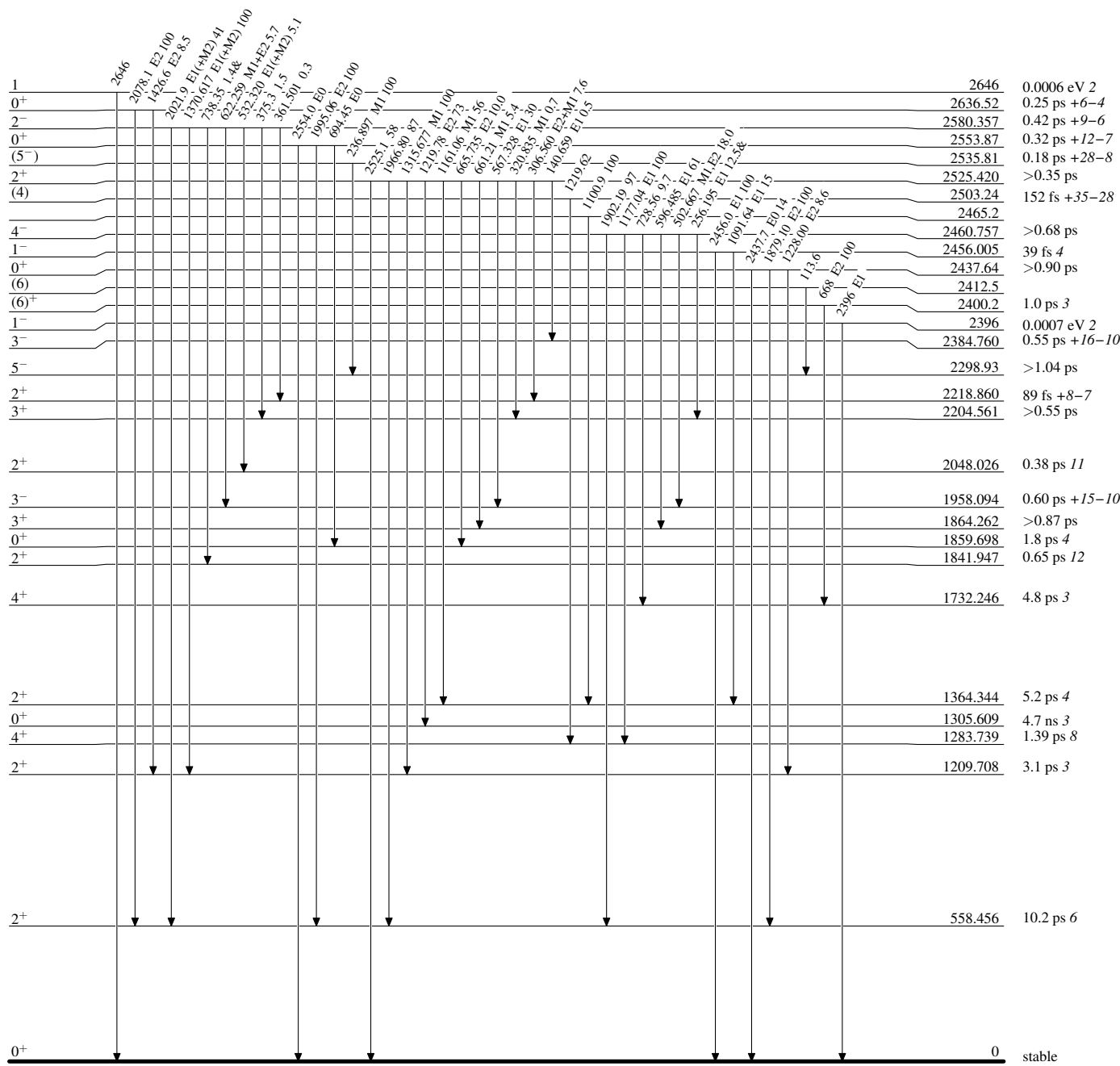


$^{114}_{48}\text{Cd}_{66}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiplied: undivided intensity given

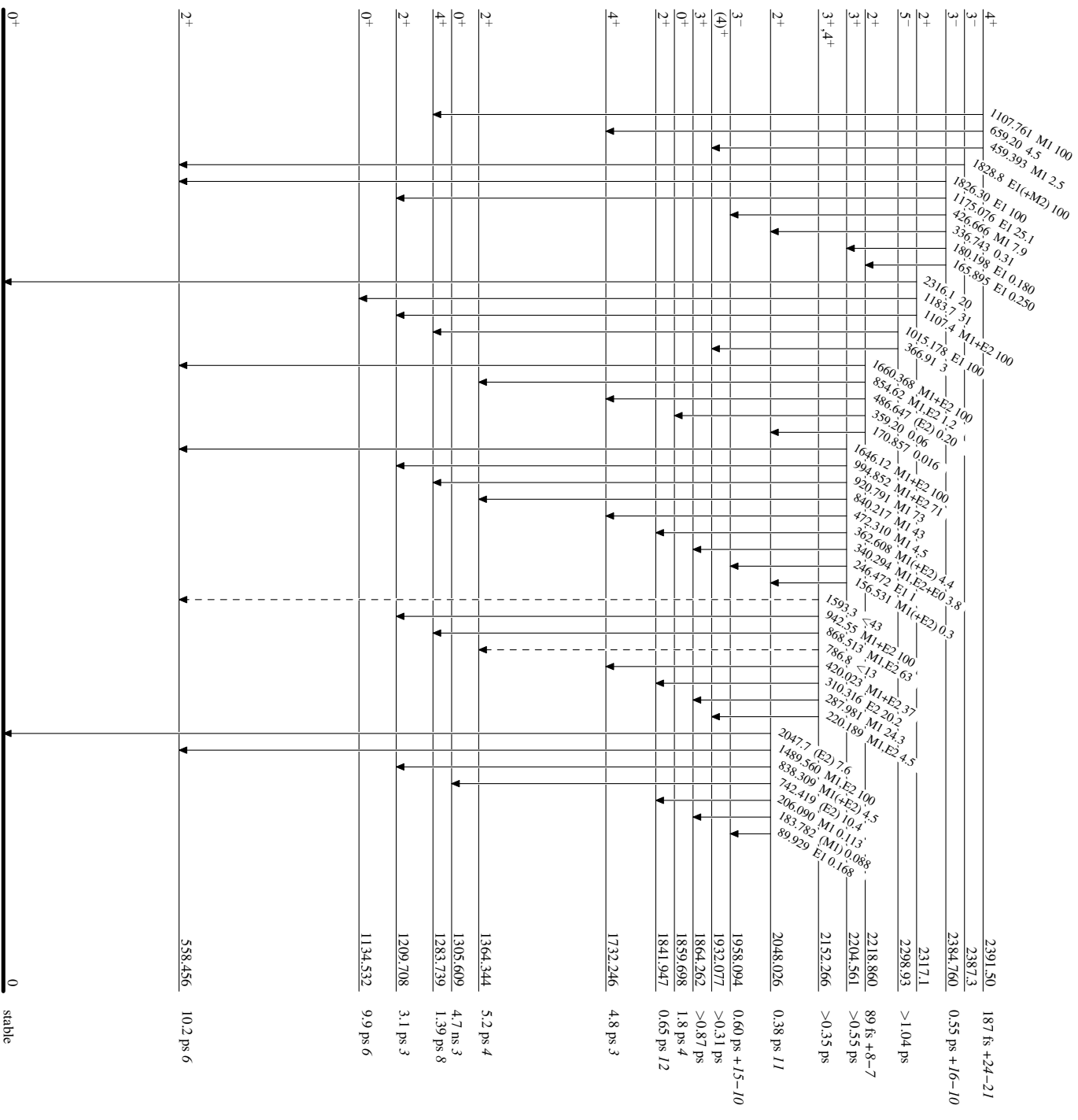


Adopted Levels, Gammas
Level Scheme (continued)

Legend

Intensities: Relative photon branching from each level
 & Multiply placed: undivided intensity given

-----▶ γ Decay (Uncertain)

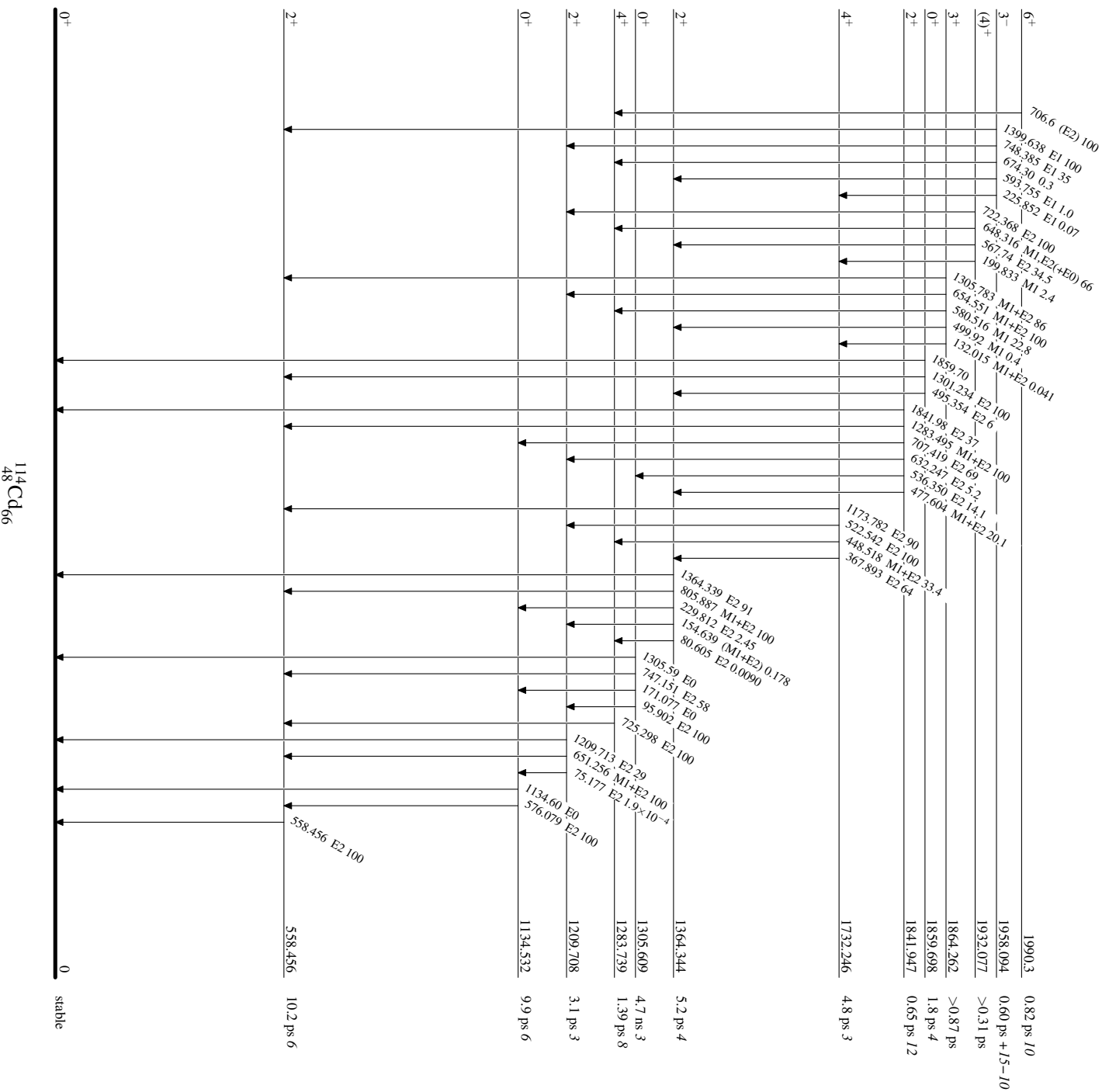


¹¹⁴Cd₆₆

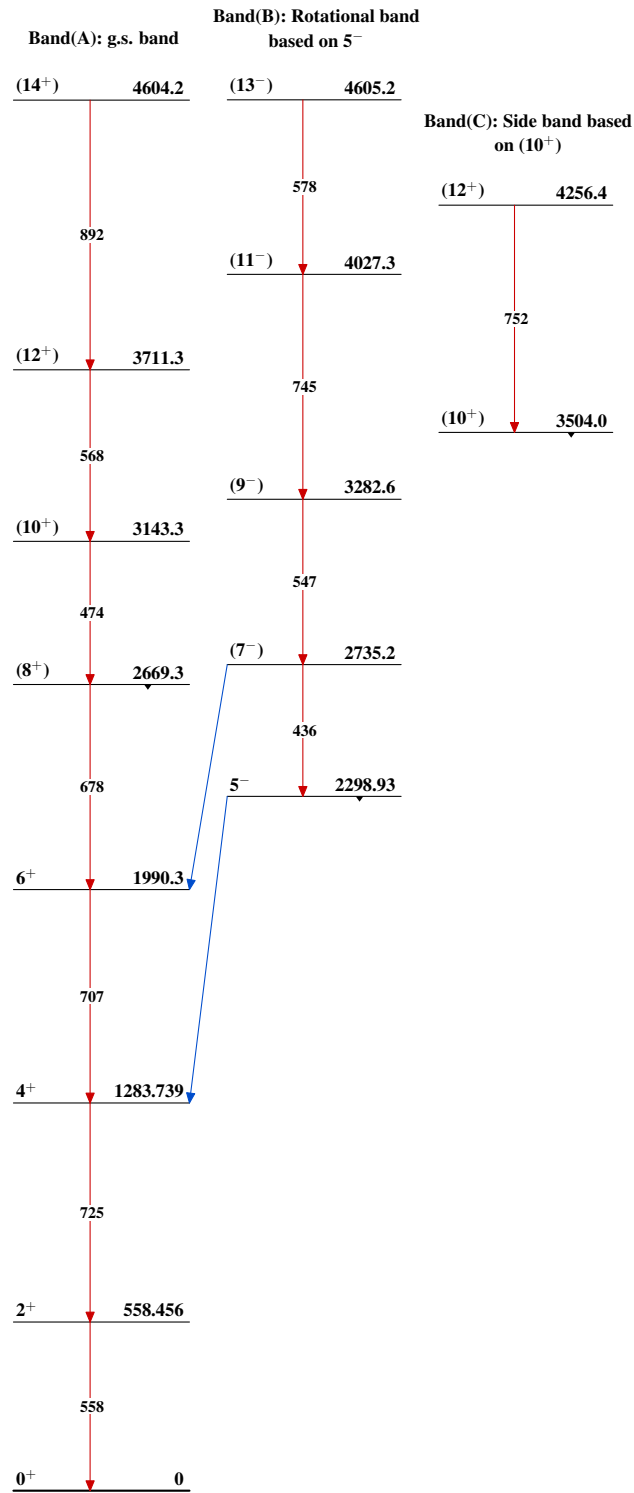
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given



¹¹⁴Cd₆₆

Adopted Levels, Gammas $^{114}_{48}\text{Cd}_{66}$