

Adopted Levels, Gammas

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

$Q(\beta^-)=1988.9$ 7; $S(n)=7273.9$ 3; $S(p)=6814.1$ 9; $Q(\alpha)=-3535.6$ 16 [2012Wa38](#)

Note: Current evaluation has used the following Q record 1988.6 6 7273.8 3 6813.4 9 -3538.4 18 [2011AuZZ](#).

Most of the levels correspond to p-n multiplets: configuration=(π 1g)⁻¹ with n(s1/2, d3/2, g7/2, h11/2) see [1976Va13](#) and [2002SaZO](#) for comparison with calculated levels, using proton hole coupled to a number of projected neutron quasiparticle wave functions.

About 75 resonances from $^{113}\text{In}(n,n),(n,g)$ are known up to about 2 keV neutron energy ([2006MuZX](#)).

 ^{114}In Levels**Cross Reference (XREF) Flags**

A	^{114}In IT decay (49.51 d)	E	$^{113}\text{In}(d,p)$
B	^{114}In IT decay (43.1 ms)	F	$^{114}\text{Cd}(p,n\gamma)$
C	$^{110}\text{Pd}(^7\text{Li},3n\gamma)$	G	$^{115}\text{In}(d,t)$
D	$^{113}\text{In}(n,\gamma)$ E=th	H	$^{113}\text{In}(n,\gamma)$: primary gammas

E(level) [†]	J^π	$T_{1/2}^\ddagger$	XREF	Comments
0.0	1 ⁺	71.9 s I	ABCDEFGHI	% β^- =99.50 15; % $\varepsilon+\beta^+$ =0.50 15 (1956Gr35) $\mu=+2.817$ 11 (1982Nu02 , 2005St24) Configuration= $\pi g_{9/2} \otimes \nu g_{7/2}$. J^π : log $ft=4.5$ to 0 ⁺ ^{114}Sn . $T_{1/2}$: from 1968Ko25 . Others: 1937La05 , 1956Br87 , 1956Gr35 . % β^- : $I\beta^+$ is from 1956Gr35 and $\varepsilon/\beta^+=142$ from theory. Note that 1956Gr35 deduce $I\varepsilon \approx 1.9\%$.
190.2682 8	5 ⁺	49.51 d I	ABCDEFGHI	%IT=96.75 24; % $\varepsilon+\beta^+=3.25$ 24 $\mu=+4.653$ 5 (1987Eb02 , 2005St24); $Q=+0.739$ 12 (1987Eb02 , 2005St24) $T_{1/2}$: from 1972Me01 . Others: 1939Ba03 , 1940La07 , 1949Bo52 , 1949Ma38 , 1957Wr37 , 1959Ca12 . J^π : atomic beam (1969Fu11), E4 γ to 1 ⁺ . %IT: from $I\gamma(190\gamma)=15.56\%$ 15 (1994Co02). Value revised in Priv. Comm. from F. Schima, May 1995), $I\gamma(725\gamma)/I\gamma(190\gamma)=0.209$ 15 and the requirement that %IT+%($\varepsilon+\beta^+$)=100. The $I\gamma$ ratio is an unweighted average of 0.150 20 (1949Bo52), 0.211 15, 0.211 15 (1967Ro22), 0.189, 0.185 (1952Jo22), 0.268, 0.250 (1957Go82). The two sets of values are from separate measurements of $I\gamma(725\gamma)$ and $I\gamma(558\gamma)$, with the assumption of negligible feeding of the 558 level from the ^{114}In g.s. via IT decay. Configuration= $\pi g_{9/2} \otimes \nu s_{1/2}$.
221.057 3	4 ⁺		DEFGH	Configuration= $\pi g_{9/2} \otimes \nu s_{1/2} + \pi g_{9/2} \otimes \nu d_{3/2}$. J^π : M1 γ to 5 ⁺ .
287.734 3	2 ⁺	<69 ps	DEFGH	J^π : M1 γ to 1 ⁺ ; $\gamma(\theta)$ in (p,ny). Configuration= $\pi g_{9/2} \otimes \nu g_{7/2}$.
497.156 3	5 ⁺	0.15 ns I	DEFGH	J^π : M1 γ to 5 ⁺ , M1 γ to 4 ⁺ . Configuration= $\pi g_{9/2} \otimes \nu d_{3/2}$.
501.948 3	8 ⁻	43.1 ms 6	BCDEF H	%IT=100 Configuration= $\pi g_{9/2} \otimes \nu h_{11/2}$. J^π : E3 γ to 5 ⁺ . $T_{1/2}$: weighted average: 43.5 ms I0 (1968Ko25), 43.5 ms I20 (1966MoZZ), 42 ms I2 (1968Al08), 39.4 ms (1967Iv04), 42 ms I5 (1958Du80), 41.8 ms I4 (1960Mo19), 46.5 ms I20 (1966Me02), 42 ms I2 (1959Gi56).
536.297 3	7 ⁻		CDEFGH	J^π : L(n)=5 (d,p), M1 γ to 8 ⁻ . Configuration= $\pi g_{9/2} \otimes \nu h_{11/2}$.
574.422 3	6 ⁻		CDEFGH	J^π : L(n)=5 (d,p), M1 γ to 7 ⁻ .

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Adopted Levels, Gammas (continued) **^{114}In Levels (continued)**

E(level) [†]	J ^π	T _{1/2} [‡]	XREF	Comments
600.354 8	3 ⁻		D F	Configuration= $\pi g_{9/2} \otimes \nu h_{11/2}$. J ^π : E1 γ to 2 ⁺ .
628.032 3	3 ⁺	<69 ps	D GH	J ^π : M1 γ to 2 ⁺ . Configuration= $\pi g_{9/2} \otimes \nu g_{7/2}$.
641.74 [#] 7	9 ⁻		C	Configuration= $\pi g_{9/2} \otimes \nu h_{11/2}$.
641.745 3	7 ⁺	4.3 ns 4	DEFGH	J ^π : γ 's to 5 ⁺ and (8 ⁻), L(n)=(4)(d,p). Configuration= $\pi g_{9/2} \otimes \nu d_{5/2}$.
687.527 4	8 ⁺		DEFGH	J ^π : M1 γ to 7 ⁺ and E1 γ to 8 ⁻ . Configuration= $\pi g_{9/2} \otimes \nu g_{7/2}$.
692.934 4	2 ⁻		D F H	J ^π : E1 γ to 1 ⁺ , E1 γ to 3 ⁺ .
696.38 8	5 ⁻	<104 ps	CDEF H	J ^π : M1 γ to 6 ⁻ , E1 γ to 4 ⁺ . Configuration= $\pi g_{9/2} \otimes \nu h_{11/2}$.
725.104 4	3 ⁺		DEF H	J ^π : M1,E2 γ to 2 ⁺ and M1,E2 γ to 4 ⁺ . Configuration= $\pi g_{9/2} \otimes \nu d_{3/2}$.
728.5300 25	4 ⁺		D FGH	J ^π : M1 γ to 5 ⁺ and M1 γ to 4 ⁺ . Configuration= $\pi g_{9/2} \otimes \nu d_{3/2} + \pi g_{9/2} \otimes \nu s_{1/2}$.
775.336 3	4 ⁺	<140 ps	DEFGH	Configuration= $\pi g_{9/2} \otimes \nu g_{7/2} + \pi g_{9/2} \otimes \nu d_{3/2}$. J ^π : M1 γ to 3 ⁺ and E2 γ to 2 ⁺ , L(n)=(4) (d,p).
824.992 4	2 ⁺		DEFGH	J ^π : M1,E2 γ to 1 ⁺ , M1,E2 to 2 ⁺ . Configuration= $\pi g_{9/2} \otimes \nu d_{5/2}$.
835.664 3	4 ⁻	<140 ps	CDEF H	J ^π : M1 γ to 5 ⁻ , fed by primary γ in (n, γ). Configuration= $\pi g_{9/2} \otimes \nu h_{11/2}$.
906.120 6	2 ⁻		D	J ^π : E1 γ to 1 ⁺ .
909.503 4	6 ⁺		DEFGH	J ^π : M1 γ to 5 ⁺ . Configuration= $\pi g_{9/2} \otimes \nu d_{3/2}$.
970.577 5	4 ^{+,5^{+,6⁺}}		D F H	J ^π : M1 γ to 4 ⁺ .
1003.133 4	5 ⁺		DEFGH	J ^π : M1,E2 γ to 5 ⁺ , M1,E2 γ to 6 ⁺ . Configuration= $\pi g_{9/2} \otimes \nu d_{3/2}$.
1006.407 7	4 ⁻		D F	J ^π : M1,E2 γ to 3 ⁻ .
1018.675 4	4 ⁻ ,5 ⁻		DEF H	J ^π : M1 γ to 5 ⁻ .
1019.750 4	7 ⁺		D F H	J ^π : L(d,t)=4+2,M1,E2 γ to 7 ⁺ . Configuration= $\pi g_{9/2} \otimes \nu g_{7/2} + \pi g_{9/2} \otimes \nu d_{5/2}$.
1032.053 4	3 ⁻	<104 ps	CDEF H	J ^π : M1 γ to 4 ⁻ , M1 γ to 2 ⁻ . Configuration= $\pi g_{9/2} \otimes \nu h_{11/2}$.
1037.182 4	3 ^{+,4^{+,5⁺}}	<210 ps	D FGH	J ^π : M1 γ to 4 ⁺ .
1044.905 5	6 ⁺		D FGH	Configuration= $\pi g_{9/2} \otimes \nu d_{5/2}$.
1047.206 4	3 ⁺		D	
1059.49 5	1 ^{+,2⁺}		D F	
1062.528 3	3 ⁺		D F H	J ^π : M1,E2 γ to 2 ⁺ , M1 to 3 ⁺ .
1068.6 20			G	
1074.03 3	1 ^{+,2⁺}		D F	J ^π : γ 's to 1 ⁺ and 2 ⁺ .
1082.7 13			G	
1095.1 9			G	
1111.797 7			D F H	
1139.10 10			E GH	
1155.358 4	3 ^{+,4⁺}		D F H	J ^π : γ 's to 2 ⁺ and M1,E2 γ to 3 ⁺ .
1164.283 10	6 ^{+,7^{+,8⁺}}		D F H	J ^π : γ 's only to positive-parity levels.
1170.25 4	2 ^{+,3^{+,4⁺}}		FGH	J ^π : M1,E2 γ to 3 ⁺ .
1178.67 5	1 ^{-,2^{-,3⁻}}		D	J ^π : E1 γ to 2 ⁺ .
1198.947 4	4 ⁻		D F H	J ^π : E1 γ to 3 ⁺ ,M1, E2 to 5 ⁻ .
1201.530 7	3 ⁻		D F H	J ^π : M1 γ to 4 ⁻ ,5 ⁻ . γ to 2 ⁺ .
1205.326 6	3 ⁺		D	J ^π : M1,E2 γ from 3 ^{+,4⁺} .
1216.8 [#] 2	10 ⁻		C	Configuration= $\pi g_{9/2} \otimes \nu h_{11/2}$.
1256.4 3			E	
1271.000 9	3 ⁻		D H	J ^π : M1,E2 γ to 4 ⁻ .

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Adopted Levels, Gammas (continued) **^{114}In Levels (continued)**

E(level) [†]	J ^π	XREF	Comments
1272.203 4	4 ⁺	D	
1295.4 3		E	
1303.557 5	3 ⁻	D H	J ^π : γ 's to (3) ⁺ , 4 ⁻ , 5 ⁻ and 4 ⁺ , 5 ⁺ , 6 ⁺ .
1311.766 4	3 ^{+,4^{+,5⁺}}	D F H	J ^π : M1 γ to 3 ^{+,4⁺} .
1319.570 9	2 ^{+,3^{+,4⁺}}	D H	J ^π : M1,E2 γ to 3 ⁺ .
1322.447 10	5 ^{+,6^{+,7⁺}}	D	
1328.920 8	6 ⁺	D H	
1336.4 3		H	
1341.8 3		E G	
1349.014 4	3 ^{-,4^{-,5⁻}}	D H	J ^π : M1 γ to 4 ⁻ .
1377.1 3		G	
1394.208 8	5 ^{+,6⁺}	DE H	XREF: E(1401). J ^π : M1 γ to 6 ⁺ .
1401.5 6		E	
1406.498 9	2 ^{-,3^{-,4⁻}}	D	J ^π : M1 γ to 3 ⁻ .
1424.77 8		D H	
1431.619 9	4 ⁻	D H	J ^π : M1,E2 γ to 3 ⁻ .
1446.5 3		H	
1456.0 3		G	
1459.2 3		H	
1476.0 3		E GH	
1484.778 13		D H	
1519.4 20		E	
1556.9 10		E	
1576.45 9	3 ^{+,4⁺}	D H	J ^π : M1,E2 γ to 4 ⁺ .
1585.1 6		D H	
1597.5		H	
1605.4 3		H	
1615.926 19	3 ^{+,4^{+,5⁺}}	D GH	XREF: G(1628).
1622.0 3		E G	
1651.6 3		H	
1658.2 3		E G	
1674.6 ^b 6	(8 ⁻)		
1677.645 21		DE H	XREF: E(1690).
1690.5 3		E G	
1695.4 3		H	
1710.5 3		H	
1729.5 3		H	
1740.8 3		H	
1794.8 3		H	
1827.5 3		H	
1858.0 4	(10 ⁻)		
1912.6 [#] 4	(11 ⁻)		
2081.5 4	(10 ⁺)		
2340.9 ^a 6	(11 ⁻)		
2505.2 [#] 5	(12 ⁻)		
2521.0 ^c 6	(9 ⁻)		
2531.5 [@] 4	(11 ⁺)		
2629.1 ^a 5	(12 ⁻)		
2679.9 [@] 5	(12 ⁺)		
2846.3 ^b 9	(10 ⁻)		
2874.2 ^a 6	(13 ⁻)		
2930.6 [@] 6	(13 ⁺)		

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Adopted Levels, Gammas (continued) **^{114}In Levels (continued)**

E(level) [†]	J ^π	XREF	Comments
3051.8 ^{&} 6	(12 ⁻)		
3093.0 [#] 6	(13 ⁻)		
3195.7 6	(13 ⁻)		
3257.5 ^{&} 10	(13 ⁻)		
3298.9 [@] 9	(14 ⁺)		
3311.3 [#] 7	(14 ⁻)		
3344.7 8	(14 ⁺)		
3503.7 ^a 7	(14 ⁻)		
3516.3 9	(15 ⁺)		
3576.5 ^{&} 12	(14 ⁻)		
3631.7 [#] 10	(15 ⁻)		
3759.0 ^c 10	(11 ⁻)		
3767.5 10	(16 ⁺)		
3791.5 [@] 11	(15 ⁺)		
3832.3 ^a 10	(15 ⁻)	J ^π : (17 ⁻) in table 1 of 2011Li43 seems a misprint.	
3852.1 11	(15 ⁺)		
3982.9 ^{&} 14	(15 ⁻)		
4042.4 ^b 12	(12 ⁻)		
4153.6 ^a 12	(16 ⁻)		
4255.7 [@] 13	(16 ⁺)		
4376.5 [#] 13	(16 ⁻)		
4606.3 ^c 12	(13 ⁻)		
4625.6 ^a 14	(17 ⁻)		
4828.8 ^b 14	(14 ⁻)		
5485.0 ^b 16	(16 ⁻)		
7273.5 3	4 ^{+,5⁺}	H	J ^π : s-wave capture in 9/2 ⁺ in-113g.s.

[†] From least-squares fit to E γ values (mostly $^{113}\text{In}(n,\gamma)$).[‡] From [1975Ra07](#) (n, γ): Primary Gammas, except where noted otherwise.[#] Band(A): $\Delta J=1$ band based on 8⁻. Proposed ([2011Li43](#)) configuration= $\pi g_{9/2}^{-1} \otimes \nu[(g_{7/2}/d_{5/2})^2(h_{11/2})]$; $\pi g_{9/2}^{-1} \otimes \nu h_{11/2}$ after the backbend.[@] Band(B): $\Delta J=1$ band based on (11⁺). Proposed ([2011Li43](#)) configuration= $\pi g_{9/2}^{-1} \otimes \nu[(g_{7/2}/d_{5/2})(h_{11/2}^2)]$, with possible magnetic-dipole rotational (shears band) character.[&] Band(C): $\Delta J=1$ band based on (12⁻). Proposed ([2011Li43](#)) configuration= $\pi g_{9/2}^{-1} \otimes \nu[(g_{7/2}/d_{5/2})^2(h_{11/2})]$.^a Band(D): $\Delta J=1$ band based on (11⁻). Proposed ([2011Li43](#)) configuration= $\pi g_{9/2}^{-1} \otimes \nu h_{11/2}^3$.^b Band(E): $\Delta J=2$ band based on (8⁻). Proposed ([2011Li43](#)) configuration= $\pi[(g_{9/2})^{-2}d_{5/2}] \otimes \nu h_{11/2}$.^c Band(F): $\Delta J=2$ band based on (9⁻). Proposed ([2011Li43](#)) configuration= $\pi[(g_{9/2})^{-2}g_{7/2}] \otimes \nu h_{11/2}$. **$\gamma(^{114}\text{In})$**

E _i (level)	J ^π _i	E _γ [†]	I _γ [†]	E _f	J ^π _f	Mult. [‡]	$\alpha^{\#}$	Comments
190.2682	5 ⁺	190.2684 8	100	0.0	1 ⁺	E4	5.04	B(E4)(W.u.)=0.0244 7
221.057	4 ⁺	30.807 4	100	190.2682	5 ⁺	M1	15.3	
287.734	2 ⁺	287.734 5	100	0.0	1 ⁺	M1	0.029	B(M1)(W.u.)>0.013
497.156	5 ⁺	276.092 5	61 4	221.057	4 ⁺	M1	0.032	B(M1)(W.u.)=0.0026 19
		306.879 6	100 6	190.2682	5 ⁺	M1	0.025	B(M1)(W.u.)=0.0031 23
501.948	8 ⁻	311.665 6	100.0	190.2682	5 ⁺	E3		B(E3)(W.u.)=0.1278 18
536.297	7 ⁻	34.350 2	100	501.948	8 ⁻	M1	11.18	

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Adopted Levels, Gammas (continued)

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

E_i (level)	J_i^π	E_γ^\dagger	I_γ^\dagger	E_f	J_f^π	Mult. ‡	$a^\#$	Comments
574.422	6 ⁻	38.122 2 384.08 4	100 7 16 5	536.297 190.2682	7 ⁻ 5 ⁺	M1 E1	8.25	
600.354	3 ⁻	312.617 9	100	287.734	2 ⁺	E1		
628.032	3 ⁺	340.290 3	100	287.734	2 ⁺	M1		B(M1)(W.u.)>0.0081
641.745	7 ⁺	67.26 8 105.458 3 139.795 3 451.471 3	4.8 24 19 4 2.3 6 100 7	574.422 536.297 501.948 190.2682	6 ⁻ 7 ⁻ 8 ⁻ 5 ⁺	E1 E1 E1 E2	0.53 0.15	B(E1)(W.u.)=8.E-9 5 B(E1)(W.u.)=8.2×10 ⁻⁹ 20 B(E1)(W.u.)=4.3×10 ⁻¹⁰ 13 B(E2)(W.u.)=0.000163 22
687.527	8 ⁺	45.78 3 185.5784 18	29 14 100 9	641.745 501.948	7 ⁺ 8 ⁻	M1 E1		
692.934	2 ⁻	405.20 5	2.7 4	287.734	2 ⁺	E1		
696.38	5 ⁻	692.934 4 121.962 2 199.207 6 475.23 3 505.99@ 10	100 13 100 20 0.13 4 0.43 13 4.2@ 9	574.422 497.156 221.057 221.057 190.2682	6 ⁻ 5 ⁺ 4 ⁺ 4 ⁺ 5 ⁺	M1 E1 E1 E1 E1	0.29 0.025	B(M1)(W.u.)>0.087 B(E1)(W.u.)>3.4×10 ⁻⁷ B(E1)(W.u.)>8.3×10 ⁻⁸ B(E1)(W.u.)>6.7×10 ⁻⁷
725.104	3 ⁺	437.384 4 504.060 4	26.5 23 100 13	287.734 221.057	2 ⁺ 4 ⁺	M1,E2 M1,E2		
728.5300	4 ⁺	231.372 5 507.482 4 538.277 4	6.8 8 46 8 100 18	497.156 221.057 190.2682	5 ⁺ 4 ⁺ 5 ⁺	M1 M1,E2 M1,E2		
775.336	4 ⁺	147.3025 15 278.175 8 487.558 18 585.12 5	100 19 3.7 4 8.8 13 2.2 5	628.032 497.156 287.734 190.2682	3 ⁺ 5 ⁺ 2 ⁺ 5 ⁺	M1 M1 E2 E2		B(M1)(W.u.)>0.043 B(M1)(W.u.)>0.00024 B(E2)(W.u.)>0.34
824.992	2 ⁺	537.253 4 825.000 6	50 7 100 12	287.734 0.0	2 ⁺ 1 ⁺	M1,E2 M1,E2		
835.664	4 ⁻	139.278 2	100	696.38	5 ⁻	M1		B(M1)(W.u.)>0.058
906.120	2 ⁻	213.184 15 618.380 10 906.102 10	8.8 22 34 6 100 13	692.934 287.734 0.0	2 ⁻ 2 ⁺ 1 ⁺			
909.503	6 ⁺	412.3420 24 719.285 14	100 8 81 9	497.156 190.2682	5 ⁺ 5 ⁺	M1,E2		
970.577	4 ^{+,5^{+,6⁺}} ,5 ⁺	473.420 3 93.626 3	100 14 3	497.156 909.503	5 ⁺ 6 ⁺	M1,E2 M1		
1003.133	5 ⁺	505.995@ 5 812.825 16	100@ 22 57 8	497.156 190.2682	5 ⁺ 5 ⁺	M1,E2 M1,E2		
1006.407	4 ⁻	277.82 3 406.050 11 816.136@ 10	20 7 35 4 100@ 16	728.5300 600.354 190.2682	4 ⁺ 3 ⁻ 5 ⁺	M1,E2		
1018.675	4 ^{-,5⁻}	243.330 3 290.136 8 322.306 4	14.0 15 6.6 17 100 10	775.336 728.5300 696.38	4 ⁺ 4 ⁺ 5 ⁻			
1019.750	7 ⁺	378.0039 20	100	641.745	7 ⁺	M1,E2		
1032.053	3 ⁻	196.3870 7 339.08 3	100 7 10.3 21	835.664 692.934	4 ⁻ 2 ⁻	M1 M1		B(M1)(W.u.)>0.025 B(M1)(W.u.)>0.00051
1037.182	3 ^{+,4^{+,5⁺}}	261.844 3 816.136@ 10	100.0 21 54@ 9	775.336 221.057	4 ⁺ 4 ⁺	M1		B(M1)(W.u.)>0.0038
1044.905	6 ⁺	357.372 4 403.181 10 508.617@ 11	86 9 30 6 100@ 12	687.527 641.745 536.297	8 ⁺ 7 ⁺ 7 ⁻			
1047.206	3 ⁺	222.2143 16 826.142 19	57 5 100 13	824.992 221.057	2 ⁺ 4 ⁺	M1		
1059.49	1 ^{+,2⁺}	771.70 5	59 11	287.734	2 ⁺			

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Adopted Levels, Gammas (continued) **$\gamma(^{114}\text{In})$ (continued)**

E _i (level)	J _i ^π	E _γ [†]	I _γ [†]	E _f	J _f ^π	Mult. [‡]	Comments
1059.49	1 ⁺ ,2 ⁺	1059.64 9	100 13	0.0	1 ⁺		
1062.528	3 ⁺	237.546 6	4.3 6	824.992	2 ⁺		
		333.9934 24	13.3 13	728.5300	4 ⁺	M1,E2	
		774.796 4	100 11	287.734	2 ⁺	M1,E2	
		841.460 16	45 8	221.057	4 ⁺		
1074.03	1 ⁺ ,2 ⁺	786.29 3	62 10	287.734	2 ⁺		
		1074.12 10	100 17	0.0	1 ⁺		
1111.797		205.675 4	28 4	906.120	2 ⁻		
		336.494 20	100 9	775.336	4 ⁺		
1139.10		101.95 10	1.7 5	1037.182	3 ^{+,4^{+,5⁺}}		
		641.0 6	7 3	497.156	5 ⁺		
		918.0 4	100 13	221.057	4 ⁺		
1155.358	3 ^{+,4⁺}	92.828 3	92 19	1062.528	3 ⁺	M1	
		380.031 16	12.9 23	775.336	4 ⁺		
		527.325 6	100 13	628.032	3 ⁺	M1,E2	
1164.283	6 ^{+,7^{+,8⁺}}	337.6 6	69 40	824.992	2 ⁺		
		522.538 10	100	641.745	7 ⁺	M1,E2	
		588.8 6	31 15	574.422	6 ⁻		
		665.7 6	100 23	497.156	5 ⁺		
		876.0 10	96 60	287.734	2 ⁺		
1170.25	2 ^{+,3^{+,4⁺}}	125.04 10	20 10	1044.905	6 ⁺		
		133.04 10	10 5	1037.182	3 ^{+,4^{+,5⁺}}		
		200.66 25	27 10	970.577	4 ^{+,5^{+,6⁺}}		
		334.06 10	<23	835.664	4 ⁻		
		344.0 10	55 20	824.992	2 ⁺	M1,E2	
		444.5 7	80 25	725.104	3 ⁺		
		473.4 5	90 50	696.38	5 ⁻		
		540.9 10	100 25	628.032	3 ⁺	M1,E2	
		673.3 7	40 15	497.156	5 ⁺		
		948.8 10	40 25	221.057	4 ⁺		
		979.1 7	85 30	190.2682	5 ⁺		
1178.67	1 ^{-,2^{-,3⁻}}	890.93 5	100	287.734	2 ⁺	E1	
1198.947	4 ⁻	166.890 14	2.3 7	1032.053	3 ⁻		
		192.525 13	2.5 5	1006.407	4 ⁻		
		363.2808 25	25 3	835.664	4 ⁻	M1,E2	
		423.59@ 3	3.6@ 9	775.336	4 ⁺		
		502.5671 24	100 20	696.38	5 ⁻	M1,E2	
		570.902 6	53 7	628.032	3 ⁺	E1	
1201.530	3 ⁻	365.854 7	100 13	835.664	4 ⁻	M1	
		508.617@ 11	93@ 11	692.934	2 ⁻		I _γ : total I _γ =8.6.
1205.326	3 ⁺	476.794 5	26.7 20	728.5300	4 ⁺		
1271.000	3 ⁻	917.66 5	100 15	287.734	2 ⁺		
		435.332 9	100 7	835.664	4 ⁻	M1,E2	
		578.09 3	22 4	692.934	2 ⁻		
1272.203	4 ⁺	269.129 16	9.2 14	1003.133	5 ⁺		
		436.577 17	46 4	835.664	4 ⁻		
		496.99 4	9.0 18	775.336	4 ⁺		
		543.73 5	39 9	728.5300	4 ⁺		
		547.14 5	100 18	725.104	3 ⁺	M1,E2	
		644.25 4	15 3	628.032	3 ⁺	M1,E2	
1303.557	3 ⁻	397.427 9	39 5	906.120	2 ⁻		
		467.894 4	100 18	835.664	4 ⁻	M1,E2	
1311.766	3 ^{+,4^{+,5⁺}}	156.4085 9	100 9	1155.358	3 ^{+,4⁺}	M1	
		536.473 21	15 3	775.336	4 ⁺		
1319.570	2 ^{+,3^{+,4⁺}}	257.018 24	14 4	1062.528	3 ⁺		

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued) **$\gamma(^{114}\text{In})$ (continued)**

E_i (level)	J_i^π	E_γ^\dagger	I_γ^\dagger	E_f	J_f^π	Mult. ‡	$\alpha^{\#}$
1319.570	$2^+, 3^+, 4^+$	691.538 9	100 11	628.032	3^+		
1322.447	$5^+, 6^+, 7^+$	158.167 24	10 2	1164.283	$6^+, 7^+, 8^+$	M1,E2	
		351.870 9	100 10	970.577	$4^+, 5^+, 6^+$		
1328.920	6^+	632.587 16	68 18	696.38	5^-		
		792.568 12	100 19	536.297	7^-		
1349.014	$3^-, 4^-, 5^-$	150.0667 16	100 21	1198.947	4^-	M1	
		573.675 12	30 4	775.336	4^+		
1394.208	$5^+, 6^+$	65.285 5	100 30	1328.920	6^+	M1	1.72
		375.555 11	100 13	1018.675	$4^-, 5^-$		
		391.05 5	93 30	1003.133	5^+		
		423.59 @ 3	39 @ 10	970.577	$4^+, 5^+, 6^+$		
1406.498	$2^-, 3^-, 4^-$	374.447 8	100	1032.053	3^-	M1,E2	
1424.77		153.46 8	15 4	1271.000	3^-		
		728.08 14	100 13	696.38	5^-		
1431.619	4^-	399.569 8	59 7	1032.053	3^-	M1,E2	
		934.44 3	100 9	497.156	5^+		
1484.778		314.20 9	95 30	1170.25	$2^+, 3^+, 4^+$		
		649.118 12	2.9 5	835.664	4^-		
		708.5 8	39 11	775.336	4^+		
		760.2 7	43 16	725.104	3^+		
		986.8 8	100 25	497.156	5^+		
1576.45	$3^+, 4^+$	151.08 13	100	1424.77		M1,E2	
1585.1		749.4 6	100	835.664	4^-		
1615.926	$3^+, 4^+, 5^+$	780.260 18	100	835.664	4^-		
1674.6	(8^-)	1172.7 7	4.6 5	501.948	8^-	M1+E2	
1677.645		841.973 23	93 15	835.664	4^-		
		952.55 4	100 18	725.104	3^+		
1858.0	(10^-)	641.3 7	2.5 2	1216.8	10^-	M1+E2	
		1217.7 7	3.4 5	641.74	9^-	M1+E2	
		1356.2 5	19.4 3	501.948	8^-	E2	
1912.6	(11^-)	695.9 3	34.1 11	1216.8	10^-	M1+E2	
		1272.3 5	13.0 5	641.74	9^-	E2	
2081.5	(10^+)	865.4 5	5.7 3	1216.8	10^-	E1	
		1393.8 5	13.9 2	687.527	8^+	E2	
2340.9	(11^-)	1124.2 5	10.4 7	1216.8	10^-	M1+E2	
2505.2	(12^-)	592.6 5	15.6 14	1912.6	(11^-)	M1+E2	
		1288.5 5	5.5 4	1216.8	10^-	E2	
2521.0	(9^-)	846.5 7	2.3 4	1674.6	(8^-)	M1+E2	
		1304.3 7	2.1 2	1216.8	10^-	M1+E2	
2531.5	(11^+)	450.6 7	3.3 5	2081.5	(10^+)	M1+E2	
		618.9 7	3.3 5	1912.6	(11^-)	E1	
		673.5 5	11.2 2	1858.0	(10^-)	E1	
		1314.5 5	7.1 2	1216.8	10^-	E1	
2629.1	(12^-)	288.2 7	1.7 4	2340.9	(11^-)	M1+E2	
		716.5 7	4.6 6	1912.6	(11^-)	M1+E2	
		1412.4 7	4.0 6	1216.8	10^-	E2	
2679.9	(12^+)	148.4 3	23.3 25	2531.5	(11^+)	M1+E2	
2846.3	(10^-)	1171.7 7	2.2 2	1674.6	(8^-)	E2	
2874.2	(13^-)	245.1 7	4.0 2	2629.1	(12^-)	M1+E2	
		369.0 7	1.3 4	2505.2	(12^-)	M1+E2	
		961.6 7	3.8 5	1912.6	(11^-)	E2	
2930.6	(13^+)	250.7 3	22.4 13	2679.9	(12^+)	M1+E2	
3051.8	(12^-)	520.3 7	0.9 3	2531.5	(11^+)	E1	
		1139.2 7	2.0 5	1912.6	(11^-)	M1+E2	
3093.0	(13^-)	587.8 7	3.6 2	2505.2	(12^-)	M1+E2	

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Adopted Levels, Gammas (continued) $\gamma(^{114}\text{In})$ (continued)

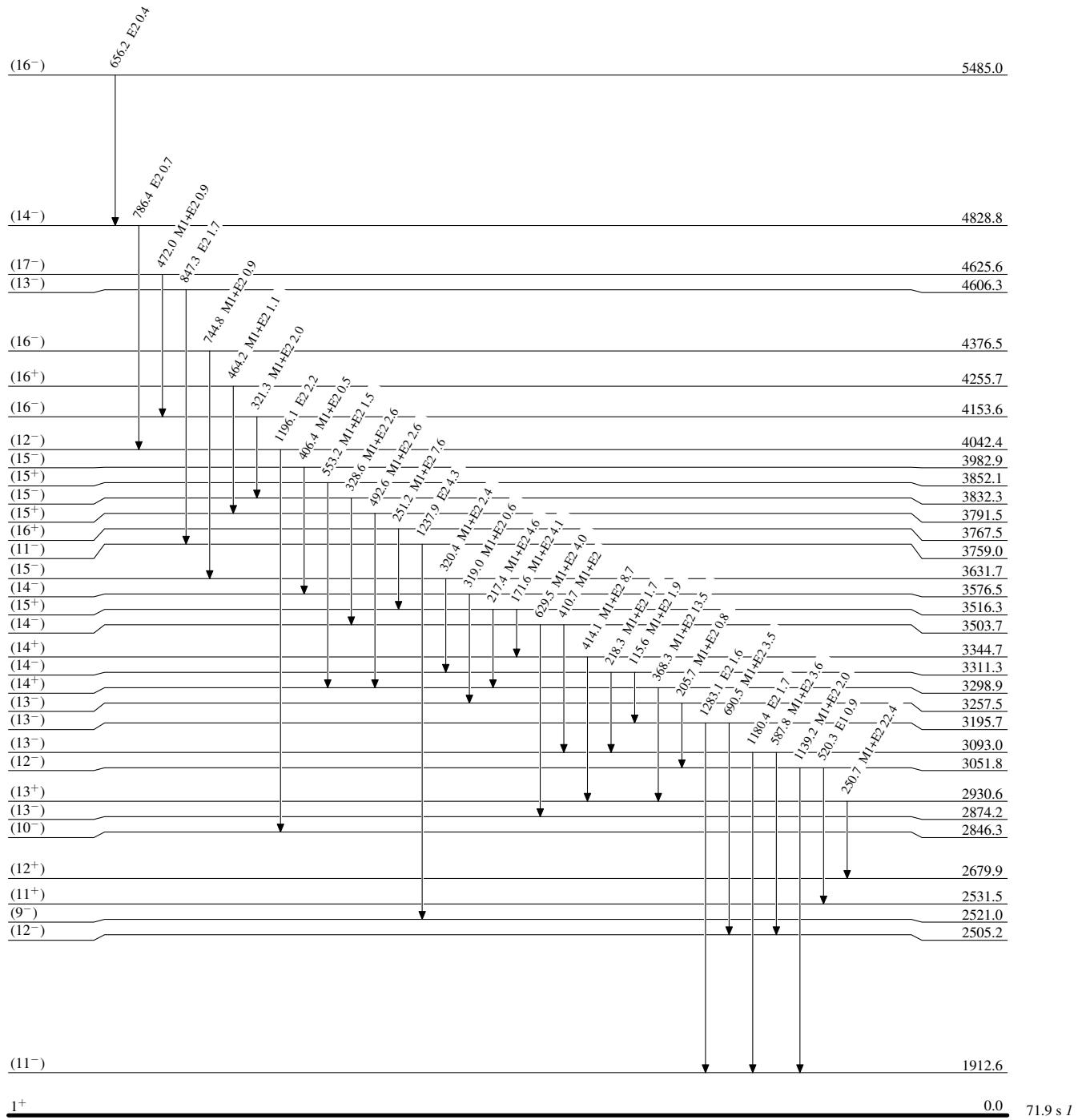
E_i (level)	J_i^π	E_γ^\dagger	I_γ^\dagger	E_f	J_f^π	Mult. [#]
3093.0	(13 ⁻)	1180.4 7	1.7 3	1912.6	(11 ⁻)	E2
3195.7	(13 ⁻)	690.5 7	3.5 3	2505.2	(12 ⁻)	M1+E2
		1283.1 7	1.6 3	1912.6	(11 ⁻)	E2
3257.5	(13 ⁻)	205.7 7	0.8 2	3051.8	(12 ⁻)	M1+E2
3298.9	(14 ⁺)	368.3 7	13.5 7	2930.6	(13 ⁺)	M1+E2
3311.3	(14 ⁻)	115.6 7	1.9 2	3195.7	(13 ⁻)	M1+E2
		218.3 7	1.7 3	3093.0	(13 ⁻)	M1+E2
3344.7	(14 ⁺)	414.1 5	8.7 6	2930.6	(13 ⁺)	M1+E2
3503.7	(14 ⁻)	410.7 7		3093.0	(13 ⁻)	M1+E2
		629.5 7	4.0 5	2874.2	(13 ⁻)	M1+E2
3516.3	(15 ⁺)	171.6 7	4.1 3	3344.7	(14 ⁺)	M1+E2
		217.4 7	4.6 6	3298.9	(14 ⁺)	M1+E2
3576.5	(14 ⁻)	319.0 7	0.6 2	3257.5	(13 ⁻)	M1+E2
3631.7	(15 ⁻)	320.4 7	2.4 2	3311.3	(14 ⁻)	M1+E2
3759.0	(11 ⁻)	1237.9 7	4.3 2	2521.0	(9 ⁻)	E2
3767.5	(16 ⁺)	251.2 5	7.6 18	3516.3	(15 ⁺)	M1+E2
3791.5	(15 ⁺)	492.6 7	2.6 2	3298.9	(14 ⁺)	M1+E2
3832.3	(15 ⁻)	328.6 7	2.6 2	3503.7	(14 ⁻)	M1+E2
3852.1	(15 ⁺)	553.2 7	1.5 3	3298.9	(14 ⁺)	M1+E2
3982.9	(15 ⁻)	406.4 7	0.5 5	3576.5	(14 ⁻)	M1+E2
4042.4	(12 ⁻)	1196.1 7	2.2 2	2846.3	(10 ⁻)	E2
4153.6	(16 ⁻)	321.3 7	2.0 3	3832.3	(15 ⁻)	M1+E2
4255.7	(16 ⁺)	464.2 7	1.1 2	3791.5	(15 ⁺)	M1+E2
4376.5	(16 ⁻)	744.8 7	0.9 3	3631.7	(15 ⁻)	M1+E2
4606.3	(13 ⁻)	847.3 7	1.7 3	3759.0	(11 ⁻)	E2
4625.6	(17 ⁻)	472.0 7	0.9 2	4153.6	(16 ⁻)	M1+E2
4828.8	(14 ⁻)	786.4 7	0.7 1	4042.4	(12 ⁻)	E2
5485.0	(16 ⁻)	656.2 7	0.4 1	4828.8	(14 ⁻)	E2

[†] From [2002SaZO](#) (n,γ) if possible.[‡] From $\alpha(K)\exp$ data of [2002SaZO](#) (n,γ) and [1986Ti01](#) in $^{114}\text{Cd}(p,n\gamma)$, except for the 311 E3 γ , whose assignment is based on ce data in IT decay.# 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.

@ Multiply placed with intensity suitably divided.

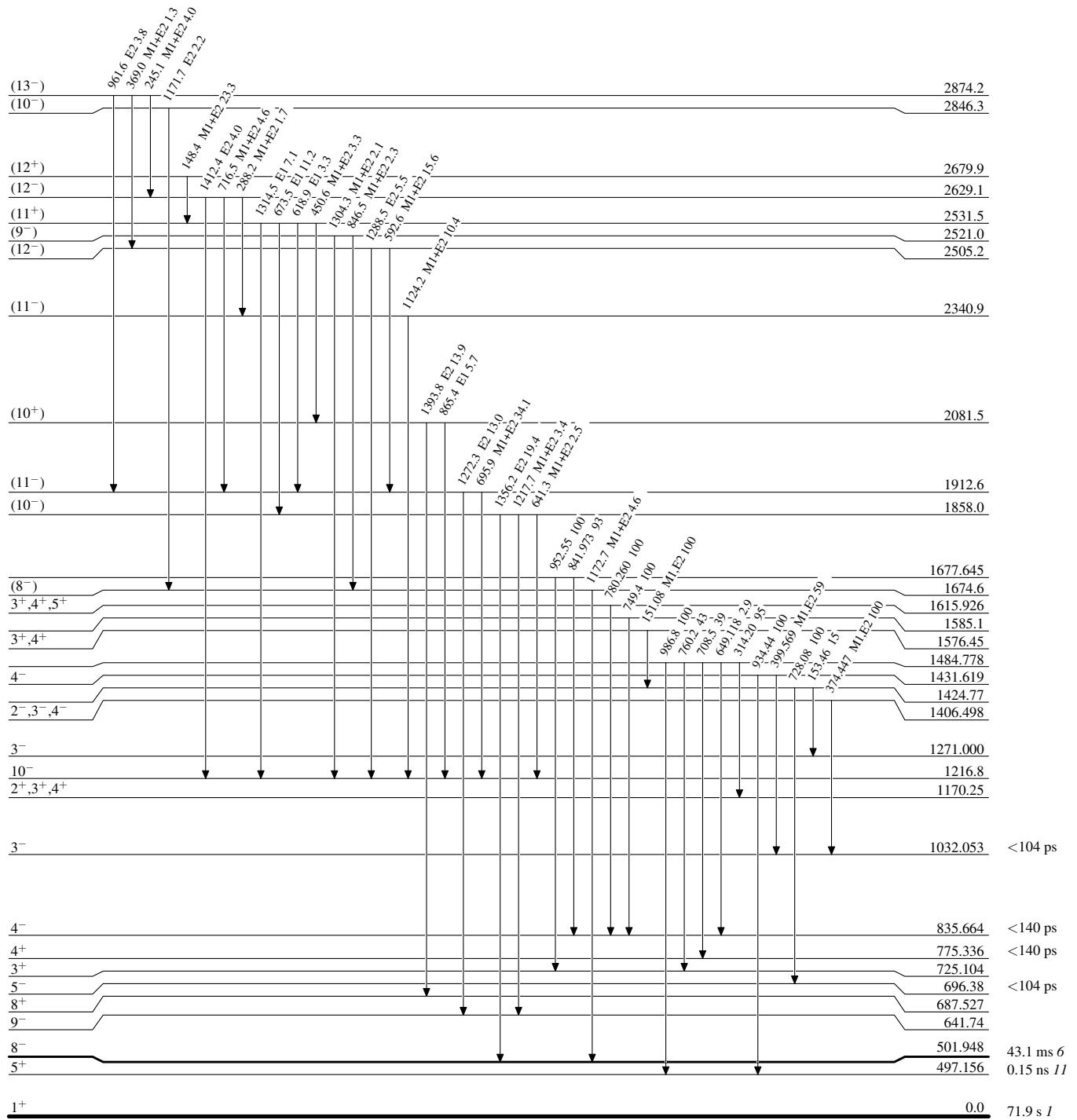
Adopted Levels, GammasLevel Scheme

Intensities: Relative photon branching from each level



Adopted Levels, GammasLevel Scheme (continued)

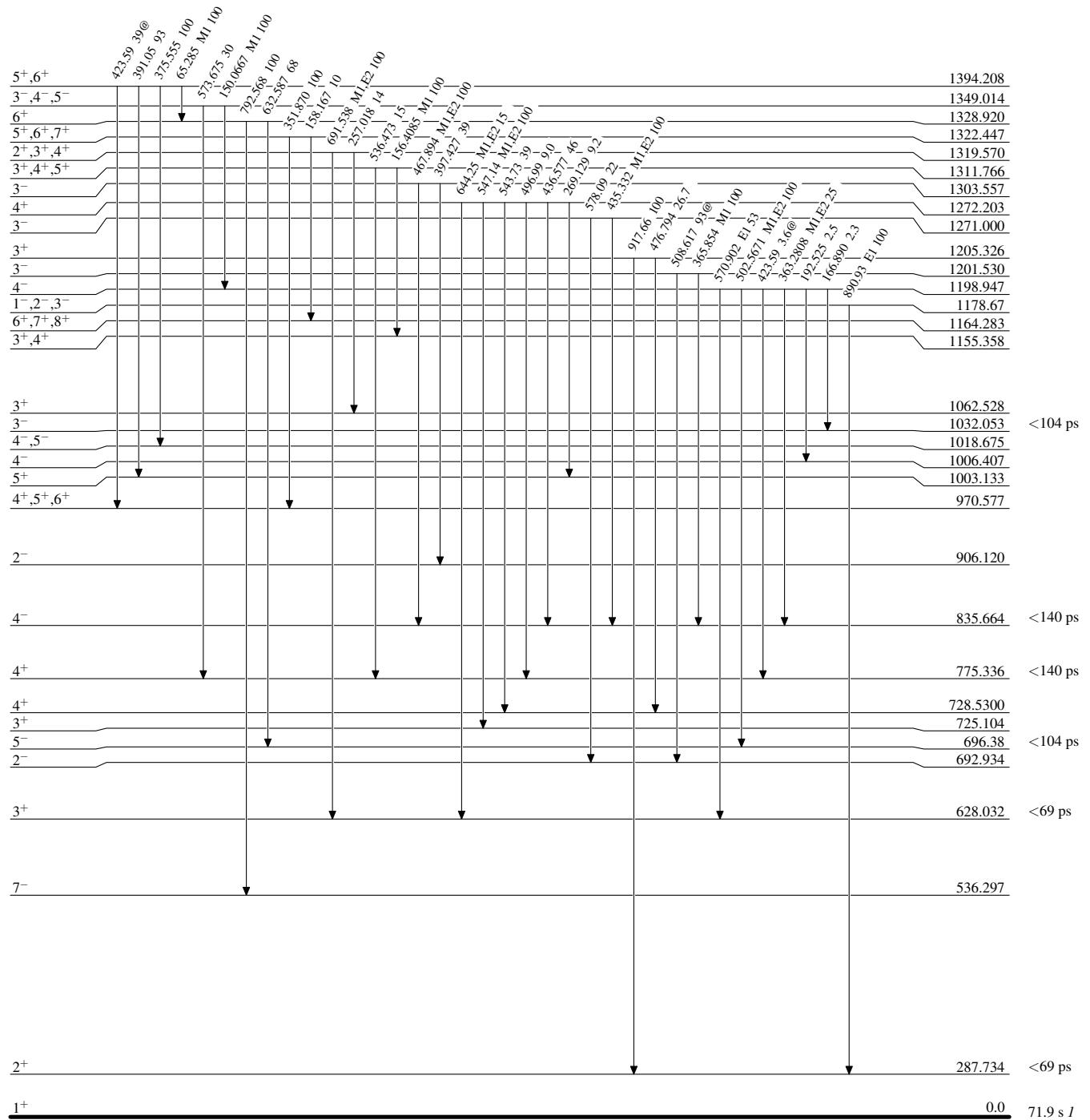
Intensities: Relative photon branching from each level



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

Intensities: Relative photon branching from each level

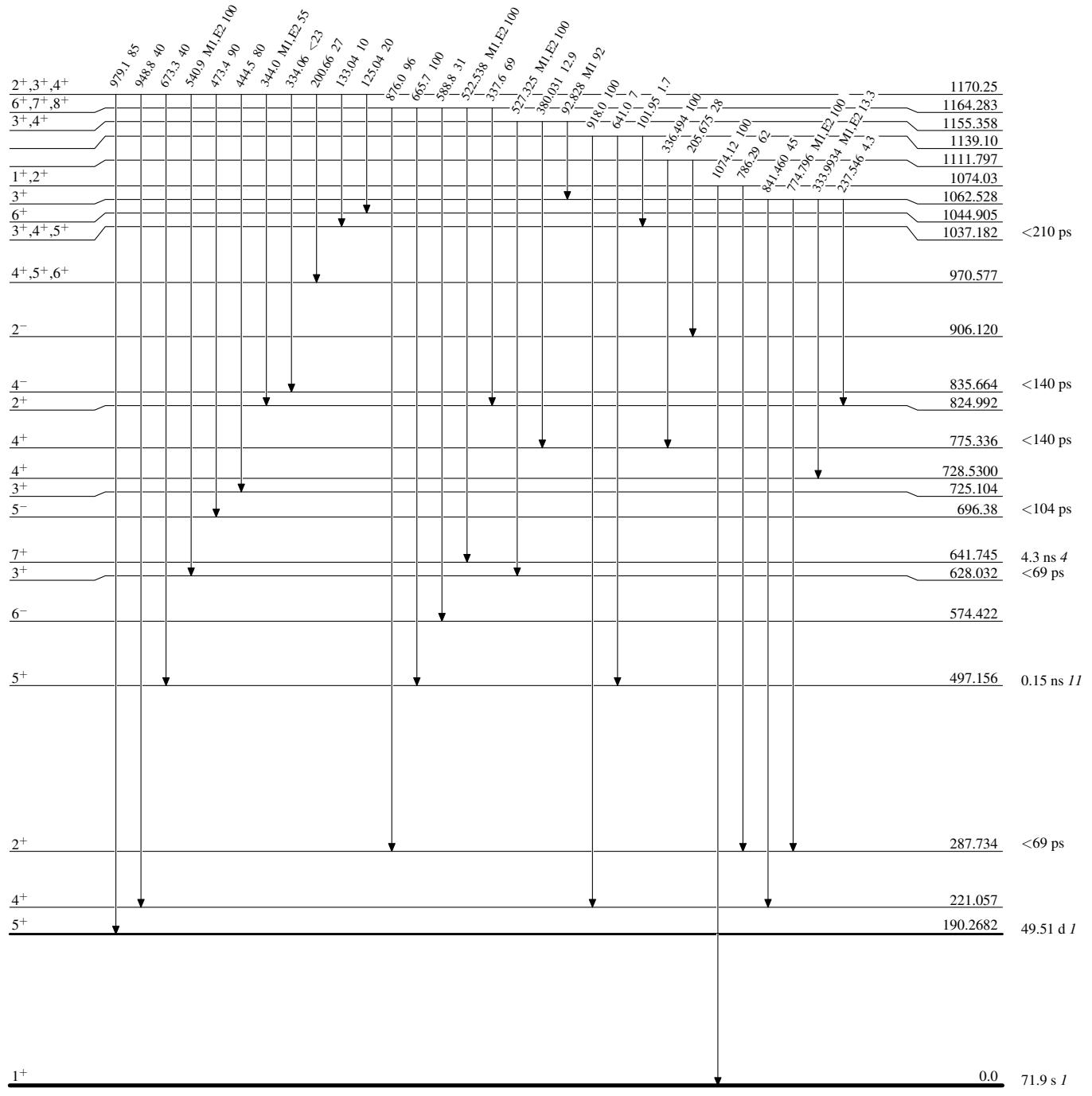
@ Multiply placed: intensity suitably divided



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

Intensities: Relative photon branching from each level

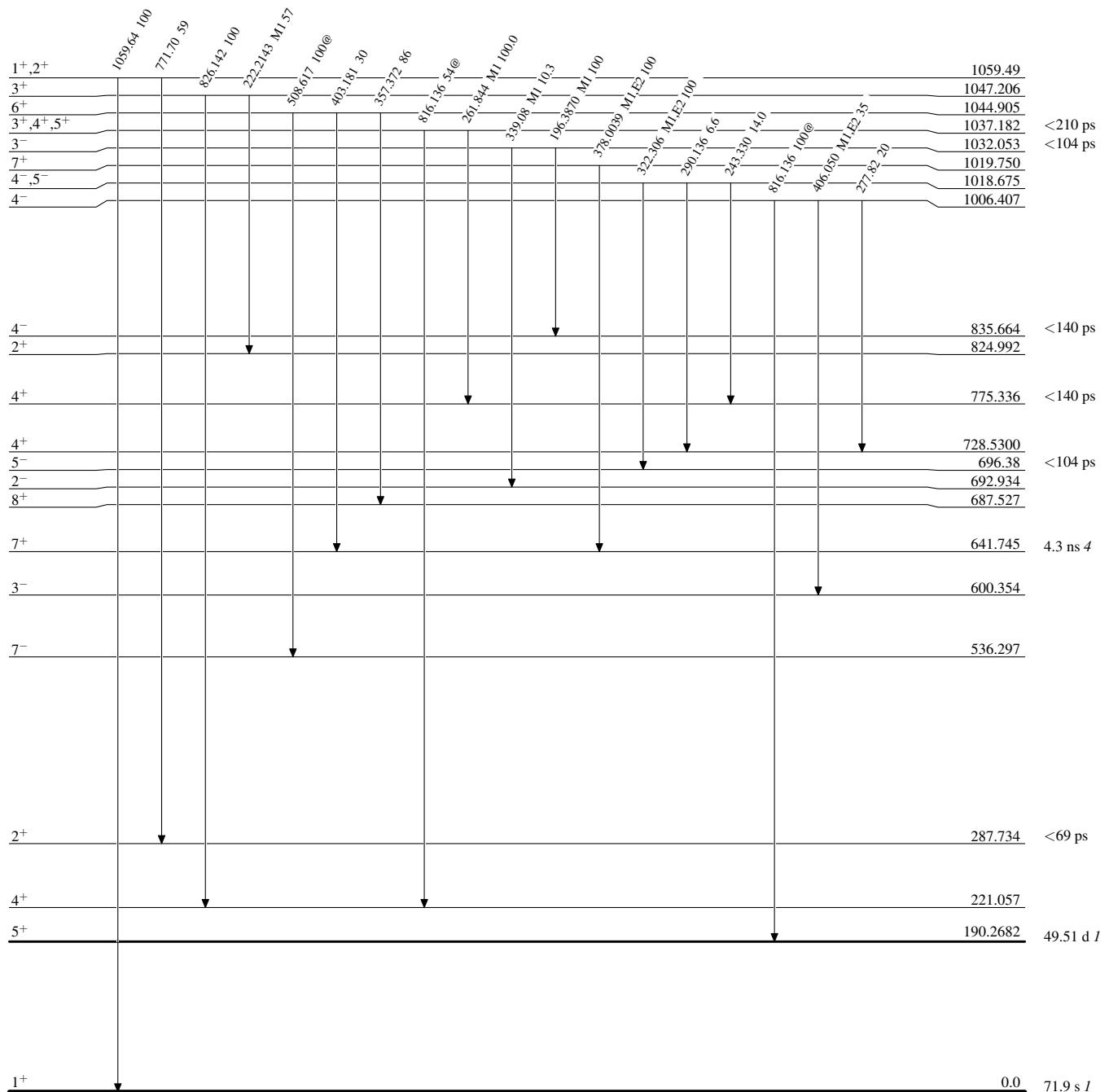
@ Multiply placed: intensity suitably divided



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

Intensities: Relative photon branching from each level

@ Multiply placed: intensity suitably divided

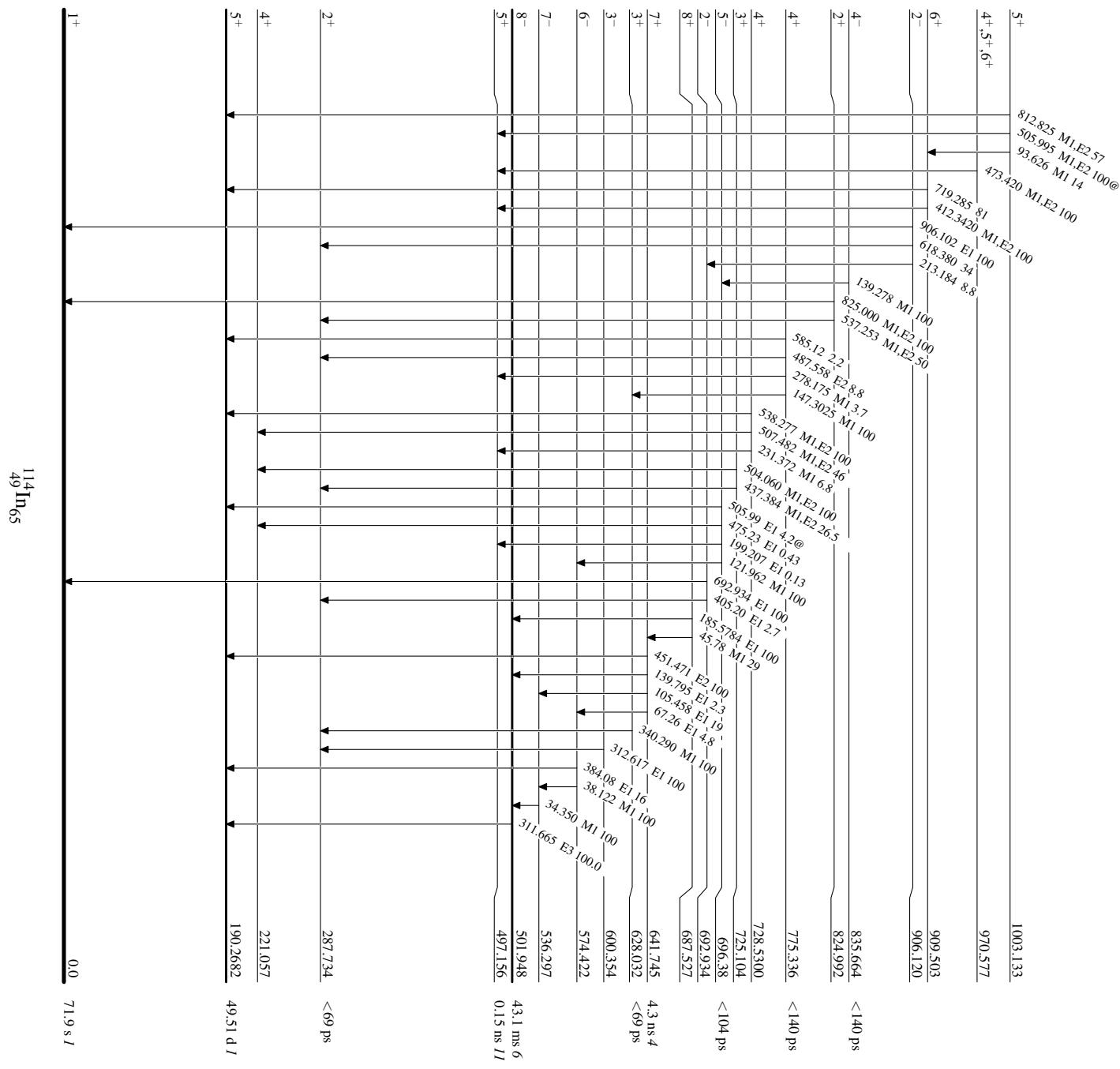


Adopted Levels, Gammas

Level Scheme (continued)

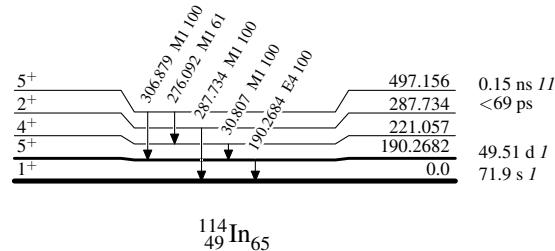
Intensities: Relative photon branching from each level

@ Multiply placed: intensity suitably divided



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

Intensities: Relative photon branching from each level
@ Multiply placed: intensity suitably divided

 $^{114}_{49}\text{In}_{65}$

Adopted Levels, Gammas