

**Adopted Levels, Gammas**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	J. Katakura	NDS 112,495 (2011)	1-Jan-2010

$Q(\beta^-) = -3105.8$ ;  $S(n) = 7603.3$ ;  $S(p) = 7116.3$ ;  $Q(\alpha) = -1.07 \times 10^3$  3 [2012Wa38](#)  
 Note: Current evaluation has used the following Q record -3104 8 7603.3 4 7116.0 29 -1076 26 [2009AuZZ](#).

 $^{125}\text{Xe}$  LevelsCross Reference (XREF) Flags

A	$^{122}\text{Te}(\alpha, n\gamma), ^{123}\text{Te}(\alpha, 2n\gamma)$	D	$^{125}\text{Cs}$ $\varepsilon$ decay
B	$^{116}\text{Cd}(^{13}\text{C}, 4n\gamma)$	E	$^{125}\text{Xe}$ IT decay
C	$^{48}\text{Ca}(^{82}\text{Se}, 5n\gamma)$		

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	T <sub>1/2</sub> <sup>#</sup>	XREF	Comments
0.0 <sup>u</sup>	1/2 <sup>(+)</sup>	16.9 h 2	ABCDE	$\% \varepsilon + \% \beta^+ = 100$ $\mu = -0.269$ 3 $J^\pi$ : From collinear LASER-fast-beam spectroscopy ( <a href="#">1990NeZY</a> ); $\log ft = 5.6$ from 1/2 <sup>(+)</sup> . T <sub>1/2</sub> : Weighted average of 16.8 h 2 ( <a href="#">1965An05</a> ), 17.3 h 4 ( <a href="#">1969Lu09</a> ). Others: 20 h 1 ( <a href="#">1950An05</a> ), 18.0 h 4 ( <a href="#">1952Be55</a> ), 17 h 1 ( <a href="#">1960Mo09</a> ). $\mu$ : From collinear LASER-fast-beam LASER spectroscopy ( <a href="#">1990NeZY</a> ). See also <a href="#">2005St24</a> compilation.
111.79 <sup>v</sup> 12	3/2 <sup>(+)</sup>	350 ps 20	ABCDE	$J^\pi$ : M1+E2 $\gamma$ to ground state 1/2 <sup>(+)</sup> . T <sub>1/2</sub> : From $^{125}\text{Cs}$ $\varepsilon$ decay.
252.61 <sup>&amp;</sup> 14	9/2 <sup>(-)</sup>	57 s 1	ABC E	$\% \text{IT} = 100$ $\mu = -0.7453$ 8; $Q = +0.424$ 15 $J^\pi$ : From collinear LASER-fast-beam LASER spectroscopy ( <a href="#">1990NeZY</a> ); E3 $\gamma$ to 3/2 <sup>(+)</sup> . T <sub>1/2</sub> : From $^{125}\text{Xe}$ IT decay. $\mu$ : From collinear LASER-fast-beam LASER spectroscopy ( <a href="#">1990NeZY</a> ). See also <a href="#">2005St24</a> compilation. Q: From collinear LASER-fast-beam LASER spectroscopy ( <a href="#">1990NeZY</a> ). See also <a href="#">2005St24</a> compilation.
265.57 <sup>x</sup> 16	7/2		A	$J^\pi$ : $\Delta J = 2$ cascades from 15/2 at 1659-keV level.
295.89 <sup>q</sup> 15	7/2 <sup>(+)</sup>	0.14 $\mu\text{s}$ 3	ABC	$\mu = +0.92$ 4 ( <a href="#">1983A121</a> ); $Q = 1.40$ 15 ( <a href="#">1983A121</a> ) T <sub>1/2</sub> : From $^{122}\text{Te}(\alpha, n\gamma), ^{123}\text{Te}(\alpha, 2n\gamma)$ data set. $J^\pi$ : From differential perturbed angular distribution ( <a href="#">1983A121</a> ). $\mu$ : From g-factor of +0.264 by differential perturbed angular distribution ( <a href="#">1983A121</a> ). See also <a href="#">2005St24</a> compilation. Q: Estimated from the relationship between B(E2) and Q using triaxial-rotor-plus-particle model ( <a href="#">1983A121</a> ) See also <a href="#">2005St24</a> compilation.
310.55 <sup>@</sup> 16	11/2 <sup>(-)</sup>		ABC	$J^\pi$ : M1+E2 $\gamma$ to 9/2 <sup>(-)</sup> .
335.37 <sup>u</sup> 12	5/2 <sup>(+)</sup>		ABC	$J^\pi$ : E2 $\gamma$ to 1/2 <sup>(+)</sup> .
471.11 <sup>2</sup> 12	3/2 <sup>(+)</sup>		A	
483.72 <sup>v</sup> 12	7/2 <sup>(+)</sup>		ABC	$J^\pi$ : E2 $\gamma$ to 3/2 <sup>(+)</sup> .
496.99 12	5/2 <sup>(+)</sup>		AB	$J^\pi$ : M1+E2 $\gamma$ to 3/2 <sup>(+)</sup> .
526.37 16	1/2 <sup>(+)</sup> , 3/2 <sup>(+)</sup>		A D	$J^\pi$ : $\log ft = 5.5$ from 1/2 <sup>(+)</sup> .
540.13 <sup>1</sup> 13	3/2 <sup>(+)</sup>		A D	
594.09 13	5/2, 7/2 <sup>(+)</sup>		A	$J^\pi$ : $\gamma$ 's to 5/2 <sup>(+)</sup> , 3/2 <sup>(+)</sup> and from (9/2, 11/2).
596.77 <sup>p</sup> 13	9/2 <sup>(+)</sup>	80 ps 17	ABC	
607.79 13	7/2 <sup>(-)</sup>		A	$J^\pi$ : Angular distribution in $^{122}\text{Te}(\alpha, n\gamma), ^{123}\text{Te}(\alpha, 2n\gamma)$ and $\gamma$ to 11/2 <sup>(-)</sup> .
708.39 <sup>w</sup> 13	3/2 <sup>(+)</sup> , 5/2 <sup>(+)</sup>		A	$J^\pi$ : $\gamma$ 's to 1/2 <sup>(+)</sup> and (7/2 <sup>(+)</sup> ).

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**Adopted Levels, Gammas (continued)** $^{125}\text{Xe}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	T <sub>1/2</sub> <sup>#</sup>	XREF	Comments
711.18 <i>I4</i>	3/2 <sup>(+)</sup>		A D	
736.85 <i>&amp; 15</i>	13/2 <sup>(-)</sup>		ABC	
741.42 <i>I4</i>	7/2 <sup>(+)</sup>		AB	
762.32 <i>I4</i>	(5/2 <sup>-</sup> )		A	J <sup>π</sup> : Angular distribution and γ to 9/2 <sup>(-)</sup> .
765.66 <i>I4</i>	3/2,5/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 1/2 <sup>(+)</sup> and 7/2.
796.63 <i>@ 16</i>	15/2 <sup>(-)</sup>	8.7 ps 9	ABC	
837.34 <i>u 13</i>	9/2 <sup>(+)</sup>		ABC	
870.62 <i>q 16</i>	11/2 <sup>(+)</sup>	7.8 ps 8	ABC	
886.96 <i>x 17</i>	9/2,11/2 <sup>(-)</sup>		A	J <sup>π</sup> : γ's to 7/2 <sup>(-)</sup> and from (13/2).
889.34 <i>I4</i>	7/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 3/2 <sup>(+)</sup> and from 11/2.
893.51 <i>s 16</i>	13/2 <sup>(-)</sup>		ABC	
896.03 <i>I6</i>	5/2 <sup>(-)</sup>		A	
919.85 <i>f 17</i>	11/2		A C	J <sup>π</sup> : ΔJ=2 from 13/2.
932.76 <i>I5</i>	3/2 <sup>(+)</sup> ,5/2,7/2 <sup>(+)</sup>		A	γ's to 3/2 <sup>(+)</sup> and 7/2 <sup>(+)</sup> .
946.24 <i>1 14</i>	5/2 <sup>(+)</sup> ,7/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 3/2 <sup>(+)</sup> and 9/2 <sup>(+)</sup> .
969.15 <i>2 15</i>	7/2 <sup>(+)</sup>		A	γ to 3/2 <sup>(+)</sup> and γ from 11/2.
987.56 <i>I7</i>			A	
1019.06 <i>I5</i>	9/2 <sup>(+)</sup>		AB	
1024.44 <i>v 18</i>	(11/2 <sup>-</sup> )		A	J <sup>π</sup> : Angular distribution and γ to 7/2 <sup>(-)</sup> .
1030.28 <i>v 15</i>	11/2 <sup>(+)</sup>		ABC	J <sup>π</sup> : Angular distribution and γ to 7/2 <sup>(+)</sup> .
1063.93 <i>I25</i>			A	
1077.10 <i>I25</i>			A	
1103.79 <i>I7</i>	(9/2,11/2 <sup>+</sup> )		A	J <sup>π</sup> : Angular distribution and γ to 7/2 <sup>(+)</sup> .
1121.1 <i>I4</i>			A	
1126.36 <i>I9</i>			A	
1137.6 <i>I4</i>			A	
1141.14 <i>I9</i>	3/2 <sup>(+)</sup> ,5/2,7/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 3/2 <sup>(+)</sup> and 7/2 <sup>(+)</sup> .
1161.81 <i>I6</i>	5/2 <sup>(+)</sup>		A	
1171.70 <i>I21</i>			A	
1193.12 <i>I6</i>	7/2 <sup>(+)</sup> ,9/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 9/2 <sup>(+)</sup> and 9/2 <sup>(-)</sup> and γ to 3/2 <sup>(+)</sup> ,5/2 <sup>(+)</sup> .
1209.93 <i>P 17</i>	13/2 <sup>(+)</sup>	2.9 ps 10	ABC	
1217.17 <i>I9</i>	5/2 <sup>(+)</sup>		A	
1245.44 <i>I8</i>	(9/2 <sup>-</sup> ,11/2,13/2 <sup>-</sup> )		A	J <sup>π</sup> : γ's to 9/2 <sup>(-)</sup> and 13/2 <sup>(-)</sup> .
1246.8 <i>I3</i>			A	
1247.74 <i>w 17</i>	11/2		A C	J <sup>π</sup> : γ's to (7/2 <sup>+</sup> ) and from (15/2).
1263.60 <i>I21</i>			A	
1281.69 <i>I9</i>			A	
1287.77 <i>I9</i>			A	
1307.2 <i>I4</i>			A	
1310.15 <i>a 18</i>	15/2 <sup>(-)</sup>		ABC	
1310.2 <i>s 4</i>	(15/2 <sup>-</sup> )		C	
1311.4 <i>I7</i>	1/2,3/2		D	J <sup>π</sup> : Log ft=6.94 from 1/2 <sup>(+)</sup> .
1312.21 <i>I9</i>	3/2,5/2,7/2		A	J <sup>π</sup> : γ's to 3/2 and (7/2).
1315.81 <i>I5</i>	(11/2 <sup>+</sup> )		AB	
1321.07 <i>I9</i>			A	
1324.9 <i>I7</i>	1/2,3/2		D	J <sup>π</sup> : Log ft=6.9 from 1/2 <sup>(+)</sup> .
1327.0 <i>I3</i>			A	
1330.88 <i>I7</i>	3/2 <sup>(+)</sup> ,5/2,7/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 3/2 <sup>(+)</sup> and 7/2 <sup>(+)</sup> .
1341.21 <i>y 21</i>	(9/2 <sup>-</sup> ,11/2,13/2 <sup>-</sup> )		A	J <sup>π</sup> : γ's to 9/2 <sup>(-)</sup> and 13/2 <sup>(-)</sup> .
1359.64 <i>I9</i>	3/2,5/2,7/2		A	J <sup>π</sup> : γ to 3/2,5/2 <sup>(+)</sup> and γ to 7/2 <sup>(-)</sup> .
1370.28 <i>I7</i>	5/2 <sup>(+)</sup> ,7/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 3/2 <sup>(+)</sup> and 9/2 <sup>(+)</sup> .
1379.95 <i>I6</i>	7/2,9/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 5/2 <sup>(+)</sup> and 11/2.

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**Adopted Levels, Gammas (continued)**

$^{125}\text{Xe}$ Levels (continued)					
E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	T <sub>1/2</sub> <sup>#</sup>	XREF		Comments
1387.92 <sup>&amp;</sup> 18	17/2		ABC		
1395.60 <sup>z</sup> 19	11/2 <sup>(-)</sup> ,13/2,15/2		A	J <sup>π</sup> : γ's to 11/2 and 15/2 <sup>(-)</sup> .	
1399.29 25			A		
1403.86 19	5/2 <sup>(+)</sup> ,7/2,9/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 5/2 <sup>(+)</sup> and 9/2 <sup>(+)</sup> .	
1416.08 19	5/2 <sup>(+)</sup>		A		
1425.3 4			A		
1438.93 18	11/2 <sup>(+)</sup>		A		
1441.16 <sup>@</sup> 18	19/2 <sup>(-)</sup>	<3 ps	ABC		
1473.9 3			A		
1477.41 21			A		
1480.71 <sup>u</sup> 19	13/2 <sup>(+)</sup>		ABC		
1489.91 19	3/2 <sup>(+)</sup> ,5/2,7/2		A	J <sup>π</sup> : γ's to 3/2 and 7/2 <sup>(+)</sup> .	
1492.60 <sup>l</sup> 18			A		
1494.7 4			A		
1510.31 19			A		
1536.24 <sup>q</sup> 18	15/2 <sup>(+)</sup>	2.6 ps 9	ABC		
1537.96 24	7/2 <sup>(+)</sup>		A		
1573.34 <sup>x</sup> 18	(13/2)		A		
1578.59 25	5/2 <sup>(+)</sup> ,7/2 <sup>(+)</sup>		A		
1579.4 7	1/2,3/2		D	J <sup>π</sup> : Log ft=6.65 from 1/2 <sup>(+)</sup> .	
1579.92 19	17/2 <sup>(-)</sup>		AB		
1580.13 24			A		
1585.53 <sup>y</sup> 18	(15/2)		A		
1600.09 <sup>2</sup> 22	(11/2)		A		
1601.84 25			A		
1603.8 4			A		
1606.09 19	5/2 <sup>(+)</sup> ,7/2,9/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 5/2 <sup>(+)</sup> and 9/2 <sup>(+)</sup> .	
1617.50 19			A		
1624.97 19			A		
1628.06 22	7/2 <sup>(+)</sup>		A		
1640.18 17	11/2 <sup>(-)</sup> ,13/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 9/2 <sup>(+)</sup> and 15/2 <sup>(-)</sup> .	
1647.73 25			A		
1648.9 4			A		
1659.69 <sup>f</sup> 19	15/2		A C		
1668.67 24	3/2 <sup>(+)</sup> ,5/2,7/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 3/2 <sup>(+)</sup> and 7/2 <sup>(+)</sup> .	
1678.87 18	7/2 <sup>(+)</sup> ,9/2,11/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 7/2 <sup>(+)</sup> and 11/2 <sup>(+)</sup> .	
1684.46 25			A		
1687.93 22			A		
1688.34 18			A		
1690.46 19	5/2 <sup>(+)</sup> ,7/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 3/2 <sup>(+)</sup> and 9/2 <sup>(+)</sup> .	
1698.3 6	1/2,3/2		D	J <sup>π</sup> : Log ft=6.46 from 1/2 <sup>(+)</sup> .	
1714.0 3			A		
1716.57 23			A		
1718.61 <sup>v</sup> 22	15/2		ABC		
1723.58 21			A		
1739.6 3			A		
1752.91 25	7/2,9/2,11/2 <sup>(+)</sup>		A	J <sup>π</sup> : γ's to 7/2 <sup>(+)</sup> and 11/2.	
1759.93 19			A		
1804.71 21			A		
1808.7 4			A		
1825.94 <sup>z</sup> 25			A		
1826.27 22	(15/2)		A		
1832.87 25	(9/2 <sup>-</sup> ,11/2,13/2 <sup>+</sup> )		A	J <sup>π</sup> : γ's to 13/2 <sup>(-)</sup> and 9/2 <sup>(+)</sup> .	

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Adopted Levels, Gammas (continued)

$^{125}\text{Xe}$ Levels (continued)					
E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	T <sub>1/2</sub> <sup>#</sup>	XREF	Comments	
1859.12 <sup>S</sup> 22	17/2 <sup>(-)</sup>		ABC		
1864.99 25			A		
1883.04 <sup>V</sup> 21	(15/2)		A		
1905.71 23			A		
1925.34 <sup>P</sup> 22	17/2 <sup>(+)</sup>	<3 ps	ABC		
1934.5 4			A		
1975.78 <sup>W</sup> 19	(15/2)		A C		
2004.61 <sup>Z</sup> 21	(15/2,17/2)		A		
2006.43 <sup>A</sup> 19	19/2 <sup>(-)</sup>		ABC		
2031.04 22	(9/2 <sup>+</sup> ,11/2,13/2 <sup>+</sup> )		A	J <sup>π</sup> : γ's to 9/2 <sup>(+)</sup> and 13/2 <sup>(+)</sup> .	
2035.7 3			A		
2046.5 4	9/2 <sup>(+)</sup>		A		
2062.8 3			A		
2082.0 3			A		
2095.04 25	(9/2 <sup>+</sup> ,11/2,13/2 <sup>+</sup> )		A	J <sup>π</sup> : γ's to 9/2 <sup>(+)</sup> and 13/2 <sup>(+)</sup> .	
2096.8 3			A		
2144.5 4			A		
2150.86 20	15/2 <sup>(-)</sup>		A		
2154.9 7	1/2,3/2		D	J <sup>π</sup> : Log ft=6.56 from 1/2 <sup>(+)</sup> .	
2166.7 4			A		
2166.73 <sup>&amp;</sup> 21	21/2		ABC		
2174.7 <sup>X</sup> 3			A		
2174.9 4			A		
2193.9 4			A		
2215.74 <sup>@</sup> 21	23/2 <sup>(-)</sup>		ABC		
2226.6 3	13/2		A		
2227.0 4			A		
2237.83 <sup>U</sup> 24	17/2		ABC		
2254.99 <sup>Y</sup> 24			A		
2272.26 <sup>Q</sup> 21	19/2 <sup>(+)</sup>	<3 ps	ABC		
2301.5 4			A		
2315.23 19			ABC		
2317.7 <sup>2</sup> 4			A		
2349.4 3			A		
2384.3 4			A		
2384.78 22	21/2 <sup>(-)</sup>		AB		
2414.9 3			A		
2423.88 20	19/2 <sup>(+)</sup>		ABC	J <sup>π</sup> : γ(θ) and γ to 15/2 <sup>(+)</sup> .	
2447.5? 4			A		
2464.7 3			A		
2485.08 <sup>C</sup> 22	(15/2 <sup>-</sup> ,17/2,19/2 <sup>-</sup> )		A	J <sup>π</sup> : γ's to 15/2 <sup>(-)</sup> and 19/2 <sup>(-)</sup> .	
2508.3 <sup>F</sup> 3	19/2		A C		
2508.7 4			A		
2524.4 7	1/2,3/2		D	J <sup>π</sup> : Log ft=6.28 from 1/2 <sup>(+)</sup> .	
2543.9 7	1/2,3/2		D	J <sup>π</sup> : Log ft=6.54 from 1/2 <sup>(+)</sup> .	
2550.79 <sup>V</sup> 21	19/2		ABC		
2572.1 4			A		
2604.3 4			A		
2616.7 3	(15/2,17/2)		AB	J <sup>π</sup> : From 1991Gr02: 1995Wi06 assigns J as 19/2 <sup>+</sup> but no angular distribution or DCO data are reported.	
2652.73 <sup>S</sup> 22	19/2		ABC		
2664.3 <sup>W</sup> 4			A C		
2671.3 3			A		

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Adopted Levels, Gammas (continued) $^{125}\text{Xe}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	XREF	Comments
2704.19 <sup>p</sup> 24	21/2 <sup>(+)</sup>	ABC	
2811.46 <sup>a</sup> 24	(23/2)	ABC	
2819.27 <sup>l</sup> 19	(17/2)	ABC	J <sup>π</sup> : From 1991Gr02.
2852.7 <sup>z</sup> 4		A	
2890.52 <sup>c</sup> 22	(21/2)	ABC	
2926.6 <sup>m</sup> 3		ABC	
2952.59 22	(19/2)	ABC	J <sup>π</sup> : From 1991Gr02: 1995Wi06 assigns J as 23/2 <sup>+</sup> but no angular distribution or DCO data are reported.
2970.35 <sup>u</sup> 25	(21/2)	ABC	
3000.1 3		ABC	
3055.2 <sup>&amp;</sup> 3	25/2	BC	
3075.14 <sup>l</sup> 19	(21/2)	BC	
3099.9 <sup>@</sup> 3	27/2 <sup>(-)</sup>	BC	
3131.3 <sup>q</sup> 3	(23/2)	BC	
3151.15 25	(21/2)	BC	
3210.8 3	(21/2)	B	
3272.2 4	(25/2)	B	
3277.91 <sup>m</sup> 20	(23/2)	BC	
3322.88 <sup>b</sup> 25	(23/2)	BC	
3379.5 3		B	
3486.4 <sup>l</sup> 3	(25/2)	BC	
3487.2 <sup>p</sup> 4	(25/2)	BC	
3519.4 <sup>c</sup> 3	(25/2)	BC	
3523.8 4		B	
3562.7 4		B	
3619.0 <sup>a</sup> 3	(27/2)	BC	
3650.0 4		B	
3752.8 4	(27/2)	B	
3898.7 5		B	
3959.8 <sup>m</sup> 4	(27/2)	BC	
4052.8 <sup>&amp;</sup> 4	29/2	BC	
4064.9 <sup>b</sup> 4	(27/2)	BC	
4070.8 <sup>@</sup> 4	(31/2 <sup>-</sup> )	ABC	
4134.7 3		BC	
4148.3 <sup>q</sup> 11	(27/2)	C	
4211.3 <sup>t</sup> 4	(29/2)	B	
4268.2 <sup>c</sup> 5	(29/2)	BC	
4292.7 <sup>l</sup> 4	(29/2)	BC	
4383.2 <sup>a</sup> 4	(31/2)	BC	
4573.5 5	(31/2)	B	
4762.9 <sup>m</sup> 4	(31/2)	BC	
4912.1 <sup>b</sup> 5	(31/2)	BC	
5066.8 <sup>@</sup> 5	(35/2)	BC	
5122.1 <sup>&amp;</sup> 5	(33/2)	BC	
5137.9 <sup>c</sup> 6	(33/2)	BC	
5162.5 <sup>l</sup> 4	(33/2)	BC	
5200.2 5		B	
5200.8 <sup>t</sup> 11	(33/2)	B	
5319.8 <sup>d</sup> 11	(35/2)	C	
5320.2 <sup>a</sup> 4	(35/2)	BC	

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Adopted Levels, Gammas (continued) $^{125}\text{Xe}$  Levels (continued)

<u>E(level)<sup>†</sup></u>	<u>J<sup>π</sup><sup>‡</sup></u>	<u>XREF</u>
5826.8 <sup>b</sup> 6	(35/2)	BC
5976.4 <sup>n</sup> 10	(37/2)	C
5995.5 <sup>m</sup> 7	(35/2)	C
6096.8 <sup>@</sup> 6	(39/2)	BC
6113.5 <sup>c</sup> 6	(37/2)	BC
6251.6 <sup>l</sup> 5	(37/2)	BC
6344.3 <sup>a</sup> ? 11	(39/2)	C
6345.4 <sup>d</sup> 5	(39/2)	BC
6752.9 <sup>m</sup> 6	(39/2)	BC
6814.8 <sup>b</sup> 12	(39/2)	C
7098.3 <sup>n</sup> 11	(41/2)	C
7174.8 12	(43/2)	C
7177.5 <sup>c</sup> 12	(41/2)	C
7215.7 <sup>@</sup> 6	(43/2)	BC
7287.0 <sup>l</sup> 6	(41/2)	BC
7334.2 <sup>@</sup> 8	(43/2)	BC
7768.9 <sup>m</sup> 9	(43/2)	C
7892.8 <sup>b</sup> 16	(43/2)	C
8242.8 <sup>d</sup> 9	(47/2)	C
8265.3 <sup>l</sup> 6	(45/2)	BC
8315.2 <sup>n</sup> 9	(45/2)	C
8331.5 <sup>c</sup> 16	(45/2)	C
8351.8 15	(47/2)	C
8398.1 <sup>@</sup> 11	(47/2)	C
8406.8 <sup>k</sup> 15	(47/2)	C
8453.2? 7		B
8496.7 <sup>@</sup> 12		C
8704.7 <sup>m</sup> 9	(47/2)	C
9289.2 <sup>n</sup> 10	(49/2)	C
9327.0 <sup>l</sup> 10	(49/2)	C
9401.4 <sup>d</sup> 11	(51/2)	C
9517.8 <sup>k</sup> 15	(51/2)	C
9568.5 <sup>c</sup> 19	(49/2)	C
9708.9 <sup>m</sup> 11	(51/2)	C
10368.2 <sup>n</sup> 14	(53/2)	C
10473.4 15	(55/2)	C
10583.4 <sup>d</sup> 15	(55/2)	C
10749.8 <sup>k</sup> 18	(55/2)	C
10847.6 <sup>c</sup> 21	(53/2)	C
11514.2 <sup>n</sup> 18	(57/2)	C
11870.4 <sup>d</sup> 18	(59/2)	C
12080.8 <sup>k</sup> 21	(59/2)	C
12770.2 <sup>n</sup> 20	(61/2)	C
13162.5 <sup>d</sup> 21	(63/2)	C
13520.8 <sup>k</sup> 23	(63/2)	C
13921 <sup>o</sup> 4	(61/2)	C
14144.3 <sup>n</sup> 23	(65/2)	C

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued) $^{125}\text{Xe}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	T <sub>1/2</sub> <sup>#</sup>	XREF	Comments
15078 <sup>k</sup> 3	(67/2)		C	
15172 <sup>o</sup> 4	(65/2)		C	
15638.3 <sup>n</sup> 25	(69/2)		C	
16492 <sup>o</sup> 4	(69/2)		C	
16758 <sup>k</sup> 3	(71/2)		C	
17248 <sup>n</sup> 3	(73/2)		C	
17888 <sup>o</sup> 3	(73/2)		C	
18557 <sup>k</sup> 3	(75/2)		C	
18967 <sup>n</sup> 3	(77/2)		C	
19356 <sup>o</sup> 3	(77/2)		C	
20457 <sup>k</sup> 3	(79/2)		C	
20775 <sup>n</sup> 3	(81/2)		C	
20911 <sup>o</sup> 3	(81/2)		C	
22339 <sup>k</sup> 4	(83/2)		C	
22472 <sup>o</sup> 3	(85/2)		C	
22508 <sup>n</sup> 3	(85/2)		C	
24130 <sup>o</sup> 3	(89/2)		C	
24252 <sup>k</sup> 4	(87/2)		C	
24341 <sup>n</sup> 4	(89/2)		C	
25880 <sup>o</sup> 4	(93/2)		C	
26172 <sup>n</sup> 4	(93/2)		C	
26275 <sup>k</sup> 4	(91/2)		C	
27741 <sup>o</sup> 4	(97/2)		C	
28098 <sup>n</sup> 4	(97/2)		C	
28413 <sup>k</sup> 4	(95/2)		C	
29720 <sup>o</sup> 4	(101/2)		C	
30117 <sup>n</sup> 4	(101/2)		C	
30702 <sup>k</sup> 4	(99/2)		C	
31826 <sup>o</sup> 4	(105/2)		C	
32226 <sup>n</sup> 4	(105/2)		C	
32856 <sup>k</sup> 4	(103/2)		C	
34058 <sup>o</sup> 4	(109/2)		C	
34408 <sup>n</sup> 4	(109/2)		C	
35201 <sup>k</sup> 4	(107/2)		C	
36413 <sup>o</sup> 4	(113/2)		C	
36668 <sup>n</sup> 4	(113/2)		C	
37618 <sup>k</sup> 5	(111/2)		C	
x <sup>e</sup>	(47/2 <sup>-</sup> )		C	<a href="#">Additional information 1.</a> E(level): x ≈ 8500 from level-scheme figure 2 of <a href="#">2007AI37</a> .
1077.0+x <sup>e</sup> 10	(51/2 <sup>-</sup> )		C	
2231.0+x <sup>e</sup> 15	(55/2 <sup>-</sup> )		C	
3455.0+x <sup>e</sup> 18	(59/2 <sup>-</sup> )		C	
4777.0+x <sup>e</sup> 20	(63/2 <sup>-</sup> )		C	
6189.0+x <sup>e</sup> 23	(67/2 <sup>-</sup> )		C	

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**Adopted Levels, Gammas (continued)** **$^{125}\text{Xe}$  Levels (continued)**

<u>E(level)<sup>†</sup></u>	<u>J<sup>π</sup><sup>‡</sup></u>	<u>T<sub>1/2</sub><sup>#</sup></u>	<u>XREF</u>	<u>Comments</u>
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**Adopted Levels, Gammas (continued)** **$^{125}\text{Xe}$  Levels (continued)**

E(level)<sup>†</sup>   J<sup>π</sup>   XREF

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Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued) $^{125}\text{Xe}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	XREF
7696.0+x <sup>e</sup> 25	(71/2 <sup>-</sup> )	C
9307+x <sup>e</sup> 3	(75/2 <sup>-</sup> )	C
11008+x <sup>e</sup> 3	(79/2 <sup>-</sup> )	C
11036+x <sup>f</sup> 3	(79/2 <sup>-</sup> )	C
12709+x <sup>e</sup> 3	(83/2 <sup>-</sup> )	C
12860+x <sup>f</sup> 3	(83/2 <sup>-</sup> )	C
14499+x <sup>e</sup> 4	(87/2 <sup>-</sup> )	C
14747+x <sup>f</sup> 3	(87/2 <sup>-</sup> )	C
16382+x <sup>e</sup> 4	(91/2 <sup>-</sup> )	C
16696+x <sup>f</sup> 4	(91/2 <sup>-</sup> )	C
18355+x <sup>e</sup> 4	(95/2 <sup>-</sup> )	C
18730+x <sup>f</sup> 4	(95/2 <sup>-</sup> )	C
20426+x <sup>e</sup> 4	(99/2 <sup>-</sup> )	C
22594+x <sup>e</sup> 4	(103/2 <sup>-</sup> )	C
24850+x <sup>e</sup> 4	(107/2 <sup>-</sup> )	C
27174+x <sup>e</sup> 4	(111/2 <sup>-</sup> )	C
y <sup>g</sup>	(49/2 <sup>-</sup> )	C
1091.0+y <sup>g</sup> 10	(53/2 <sup>-</sup> )	C
2339.0+y <sup>g</sup> 15	(57/2 <sup>-</sup> )	C
3596.0+y <sup>g</sup> 18	(61/2 <sup>-</sup> )	C
4896.0+y <sup>g</sup> 20	(65/2 <sup>-</sup> )	C
6211.0+y <sup>g</sup> 23	(69/2 <sup>-</sup> )	C
7592.0+y <sup>g</sup> 25	(73/2 <sup>-</sup> )	C
9080+y <sup>g</sup> 3	(77/2 <sup>-</sup> )	C
10684+y <sup>g</sup> 3	(81/2 <sup>-</sup> )	C
12343+y <sup>g</sup> 3	(85/2 <sup>-</sup> )	C
14056+y <sup>g</sup> 4	(89/2 <sup>-</sup> )	C
15809+y <sup>g</sup> 4	(93/2 <sup>-</sup> )	C
17671+y <sup>g</sup> 4	(97/2 <sup>-</sup> )	C
19648+y <sup>g</sup> 4	(101/2 <sup>-</sup> )	C
21752+y <sup>g</sup> 4	(105/2 <sup>-</sup> )	C
23982+y <sup>g</sup> 4	(109/2 <sup>-</sup> )	C
26337+y <sup>g</sup> 4	(113/2 <sup>-</sup> )	C
z <sup>h</sup>	(53/2 <sup>-</sup> )	C
1116.0+z <sup>h</sup> 10	(57/2 <sup>-</sup> )	C
2317.0+z <sup>h</sup> 15	(61/2 <sup>-</sup> )	C
3618.0+z <sup>h</sup> 18	(65/2 <sup>-</sup> )	C
5030.0+z <sup>h</sup> 20	(69/2 <sup>-</sup> )	C
6554.0+z <sup>h</sup> 23	(73/2 <sup>-</sup> )	C
8189.0+z <sup>h</sup> 25	(77/2 <sup>-</sup> )	C
9847+z <sup>i</sup> 3	(81/2 <sup>-</sup> )	C
9919+z <sup>h</sup> 3	(81/2 <sup>-</sup> )	C
11601+z <sup>i</sup> 3	(85/2 <sup>-</sup> )	C
11732+z <sup>h</sup> 3	(85/2 <sup>-</sup> )	C
13469+z <sup>i</sup> 3	(89/2 <sup>-</sup> )	C
13652+z <sup>h</sup> 3	(89/2 <sup>-</sup> )	C
15448+z <sup>i</sup> 3	(93/2 <sup>-</sup> )	C
15686+z <sup>h</sup> 4	(93/2 <sup>-</sup> )	C
17535+z <sup>i</sup> 4	(97/2 <sup>-</sup> )	C
17844+z <sup>h</sup> 4	(97/2 <sup>-</sup> )	C
20108+z <sup>h</sup> 4	(101/2 <sup>-</sup> )	C
u <sup>j</sup>	(55/2 <sup>+</sup> )	C

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**Adopted Levels, Gammas (continued)**

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 $^{125}\text{Xe}$  Levels (continued)

<u>E(level)<sup>†</sup></u>	<u>J<sup>π</sup><sup>‡</sup></u>	<u>XREF</u>
1223.0+u <sup>j</sup> 10	(59/2 <sup>+</sup> )	C
2548.0+u <sup>j</sup> 15	(63/2 <sup>+</sup> )	C
3940.0+u <sup>j</sup> 18	(67/2 <sup>+</sup> )	C
5427.0+u <sup>j</sup> 20	(71/2 <sup>+</sup> )	C
7015.0+u <sup>j</sup> 23	(75/2 <sup>+</sup> )	C
8711.1+u <sup>j</sup> 25	(79/2 <sup>+</sup> )	C
10517+u <sup>j</sup> 3	(83/2 <sup>+</sup> )	C
12437+u <sup>j</sup> 3	(87/2 <sup>+</sup> )	C
14467+u <sup>j</sup> 3	(91/2 <sup>+</sup> )	C
16610+u <sup>j</sup> 4	(95/2 <sup>+</sup> )	C
18861+u <sup>j</sup> 4	(99/2 <sup>+</sup> )	C
21213+u <sup>j</sup> 4	(103/2 <sup>+</sup> )	C
23630+u <sup>j</sup> 4	(107/2 <sup>+</sup> )	C

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**Adopted Levels, Gammas (continued)** $^{125}\text{Xe}$  Levels (continued)

- † From a least-squares fit to  $E\gamma$ 's.  
‡ From  $\gamma(\theta)$  and linear polarization in  $^{122}\text{Te}(\alpha, n\gamma)$ ,  $^{123}\text{Te}(\alpha, 2n\gamma)$  (1995Wi06), unless otherwise noted.  
# From recoil distance (1984A101), unless otherwise noted.  
@ Band(A): Band  $h_{11/2}$ ,  $\alpha=-1/2$ .  
& Band(a): Band  $h_{11/2}$ ,  $\alpha=+1/2$ .  
<sup>a</sup> Band(B): Band based on  $15/2^{-}$ ,  $\alpha=-1/2$ .  
<sup>b</sup> Band(C): Band based on  $23/2^{-}$ ,  $\alpha=-1/2$ .  
<sup>c</sup> Band(D): Band based on  $21/2^{-}$ ,  $\alpha=+1/2$ .  
<sup>d</sup> Band(E): Band based on  $35/2^{-}$ ,  $\alpha=-1/2$ .  
<sup>e</sup> Band(F): Band based on  $47/2^{-}$ ,  $\alpha=-1/2$ .  
<sup>f</sup> Band(f): Fork structure for band based on  $(47/2^{-})$ ,  $\alpha=-1/2$ .  
<sup>g</sup> Band(G): Band based on  $(49/2^{-})$ ,  $\alpha=+1/2$ .  
<sup>h</sup> Band(H): Band based on  $(53/2^{-})$ ,  $\alpha=+1/2$ .  
<sup>i</sup> Band(h): Fork structure for band based on  $(53/2^{-})$ ,  $\alpha=-1/2$ .  
<sup>j</sup> Band(I): Band based on  $(55/2^{+})$ ,  $\alpha=-1/2$ .  
<sup>k</sup> Band(J): Band based on  $(47/2^{-})$ ,  $\alpha=-1/2$ .  
<sup>l</sup> Band(K): Band based on  $(17/2^{+})$ ,  $\alpha=+1/2$ .  
<sup>m</sup> Band(k): Band based on  $(19/2^{+})$ ,  $\alpha=-1/2$ .  
<sup>n</sup> Band(L): Band based on  $(37/2^{+})$ ,  $\alpha=+1/2$ .  
<sup>o</sup> Band(l): Fork structure for band based on  $(37/2^{+})$ ,  $\alpha=+1/2$ .  
<sup>p</sup> Band(M): Band based on  $9/2^{+}$ ,  $\alpha=+1/2$ .  
<sup>q</sup> Band(m): Band based on  $7/2^{+}$ ,  $\alpha=-1/2$ .  
<sup>r</sup> Band(N): Band based on  $(11/2^{+})$ ,  $\alpha=-1/2$ .  
<sup>s</sup> Band(O): Band based on  $(13/2^{-})$ .  
<sup>t</sup> Band(o): Band  $h_{11/2}$ ,  $\alpha=+1/2$ .  
<sup>u</sup> Band(P): Band based on  $1/2^{+}$ ,  $\alpha=+1/2$ .  
<sup>v</sup> Band(p): Band based on  $3/2^{+}$ ,  $\alpha=-1/2$ .  
<sup>w</sup> Band(Q): Band based on  $11/2$ ,  $\alpha=-1/2$ .  
<sup>x</sup> Band(R):  $\pi=-$ .  
<sup>y</sup> Band(S): probably  $\pi=-$ .  
<sup>z</sup> Band(T): probably band.  
<sup>1</sup> Band(U): probably band-2.  
<sup>2</sup> Band(V): Probably band-2. Decaying mainly to positive-parity state.

Adopted Levels, Gammas (continued)

$\gamma(^{125}\text{Xe})$									
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma$	$E_f$	$J_f^\pi$	Mult.#	$\delta^@$	$\alpha\&$	Comments
111.79	3/2 <sup>(+)</sup>	111.8 2	100	0.0	1/2 <sup>(+)</sup>	M1+E2	0.27 +10-13	0.64 4	$\alpha(\text{K})=0.536\ 20$ ; $\alpha(\text{L})=0.083\ 12$ ; $\alpha(\text{M})=0.017\ 3$ ; $\alpha(\text{N}+..)=0.0039\ 6$ $\alpha(\text{N})=0.0035\ 5$ ; $\alpha(\text{O})=0.00042\ 5$ $\text{B}(\text{M}1)(\text{W.u.})=0.0256\ 21$ ; $\text{B}(\text{E}2)(\text{W.u.})=1.0\times 10^2\ 8$ Mult., $\delta$ : From $^{125}\text{Cs}$ $\varepsilon$ decay.
252.61	9/2 <sup>(-)</sup>	140.5 2	100	111.79	3/2 <sup>(+)</sup>	E3		4.11	$\text{B}(\text{E}3)(\text{W.u.})=0.00414\ 11$ $\alpha(\text{K})=1.94\ 3$ ; $\alpha(\text{L})=1.71\ 3$ ; $\alpha(\text{M})=0.377\ 6$ ; $\alpha(\text{N}+..)=0.0817\ 14$ $\alpha(\text{N})=0.0744\ 12$ ; $\alpha(\text{O})=0.00726\ 12$ Mult.: From $\alpha$ in $^{125}\text{Xe}$ IT decay. <b>Additional information 5.</b>
265.57	7/2	(13)		252.61	9/2 <sup>(-)</sup>				
295.89	7/2 <sup>(+)</sup>	43.3 3	12 4	252.61	9/2 <sup>(-)</sup>	(E1)		2.09 5	$\text{B}(\text{E}1)(\text{W.u.})=1.8\times 10^{-6}\ 8$ $\alpha(\text{K})=1.76\ 4$ ; $\alpha(\text{L})=0.266\ 7$ ; $\alpha(\text{M})=0.0536\ 14$ ; $\alpha(\text{N}+..)=0.0119\ 3$ $\alpha(\text{N})=0.0107\ 3$ ; $\alpha(\text{O})=0.00120\ 3$
		183.8 2	100 10	111.79	3/2 <sup>(+)</sup>	(E2)		0.215	$\text{B}(\text{E}2)(\text{W.u.})=0.32\ 9$ $\alpha(\text{K})=0.1678\ 25$ ; $\alpha(\text{L})=0.0373\ 6$ ; $\alpha(\text{M})=0.00784\ 12$ ; $\alpha(\text{N}+..)=0.00174\ 3$ $\alpha(\text{N})=0.001572\ 23$ ; $\alpha(\text{O})=0.000171\ 3$
310.55	11/2 <sup>(-)</sup>	57.8 1	100	252.61	9/2 <sup>(-)</sup>	M1+E2	-0.16 9	4.2 4	$\alpha(\text{K})=3.47\ 10$ ; $\alpha(\text{L})=0.59\ 19$ ; $\alpha(\text{M})=0.12\ 4$ ; $\alpha(\text{N}+..)=0.028\ 9$ $\alpha(\text{N})=0.025\ 8$ ; $\alpha(\text{O})=0.0029\ 8$
335.37	5/2 <sup>(+)</sup>	223.4 3	6 1	111.79	3/2 <sup>(+)</sup>	M1+E2	+3.6 +37-19	0.109 5	$\alpha(\text{K})=0.088\ 3$ ; $\alpha(\text{L})=0.0169\ 15$ ; $\alpha(\text{M})=0.0035\ 3$ ; $\alpha(\text{N}+..)=0.00079\ 7$ $\alpha(\text{N})=0.00071\ 6$ ; $\alpha(\text{O})=8.0\times 10^{-5}\ 6$
		335.1 2	100 14	0.0	1/2 <sup>(+)</sup>	E2		0.0294	$\alpha(\text{K})=0.0244\ 4$ ; $\alpha(\text{L})=0.00400\ 6$ ; $\alpha(\text{M})=0.000826\ 12$ ; $\alpha(\text{N}+..)=0.000187\ 3$ $\alpha(\text{N})=0.0001679\ 24$ ; $\alpha(\text{O})=1.95\times 10^{-5}\ 3$
471.11	3/2 <sup>(+)</sup>	135.6 3	17 5	335.37	5/2 <sup>(+)</sup>				
		359.3 3	37 1	111.79	3/2 <sup>(+)</sup>				
		471.0 2	100 14	0.0	1/2 <sup>(+)</sup>	M1+E2	-0.94 18	0.0118 3	$\alpha(\text{K})=0.0101\ 3$ ; $\alpha(\text{L})=0.001369\ 22$ ; $\alpha(\text{M})=0.000279\ 5$ ; $\alpha(\text{N}+..)=6.44\times 10^{-5}\ 11$ $\alpha(\text{N})=5.74\times 10^{-5}\ 9$ ; $\alpha(\text{O})=7.04\times 10^{-6}\ 13$
483.72	7/2 <sup>(+)</sup>	148.3 <sup>a</sup> 3	13 4	335.37	5/2 <sup>(+)</sup>	(M1+E2)		0.36 9	$\alpha(\text{K})=0.29\ 6$ ; $\alpha(\text{L})=0.06\ 3$ ; $\alpha(\text{M})=0.013\ 7$ ; $\alpha(\text{N}+..)=0.0028\ 14$ $\alpha(\text{N})=0.0025\ 13$ ; $\alpha(\text{O})=0.00028\ 12$
		187.7 3	1	295.89	7/2 <sup>(+)</sup>				
		371.8 2	100 14	111.79	3/2 <sup>(+)</sup>	E2		0.0213	$\alpha(\text{K})=0.0178\ 3$ ; $\alpha(\text{L})=0.00282\ 4$ ; $\alpha(\text{M})=0.000579\ 9$ ; $\alpha(\text{N}+..)=0.0001319\ 19$ $\alpha(\text{N})=0.0001180\ 17$ ; $\alpha(\text{O})=1.383\times 10^{-5}\ 20$
496.99	5/2 <sup>(+)</sup>	161.7 3	11 3	335.37	5/2 <sup>(+)</sup>	(M1+E2)		0.27 6	$\alpha(\text{K})=0.22\ 4$ ; $\alpha(\text{L})=0.043\ 20$ ; $\alpha(\text{M})=0.009\ 5$ ; $\alpha(\text{N}+..)=0.0020\ 9$ $\alpha(\text{N})=0.0018\ 9$ ; $\alpha(\text{O})=0.00020\ 8$
		200.9 3	7 2	295.89	7/2 <sup>(+)</sup>				

**Adopted Levels, Gammas (continued)**

$\gamma(^{125}\text{Xe})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma$	$E_f$	$J_f^\pi$	Mult.#	$\delta^@$	$\alpha^\&$	Comments
496.99	5/2(+)	231.3 3 385.2 2	12 2 100 14	265.57 7/2 111.79 3/2(+)	7/2 3/2(+)	M1+E2	-0.12 +8-12	0.0214 4	$\alpha(\text{K})=0.0184$ 3; $\alpha(\text{L})=0.00236$ 4; $\alpha(\text{M})=0.000477$ 7; $\alpha(\text{N}+..)=0.0001112$ 16 $\alpha(\text{N})=9.88 \times 10^{-5}$ 15; $\alpha(\text{O})=1.239 \times 10^{-5}$ 18
526.37	1/2(+), 3/2(+)	497.1 3 414.6 3	11 2 8 2	0.0 1/2(+) 111.79 3/2(+)	1/2(+) 3/2(+)				
540.13	3/2(+)	526.4 3 204.6 3 428.2 3 540.1 3	100 16 5 2 50 8 100 14	0.0 1/2(+) 335.37 5/2(+) 111.79 3/2(+) 0.0 1/2(+)	1/2(+) 5/2(+) 3/2(+) 1/2(+)	M1(+E2)	-0.03 +7-13	0.00921 14	$\alpha(\text{K})=0.00796$ 12; $\alpha(\text{L})=0.001002$ 15; $\alpha(\text{M})=0.000203$ 3; $\alpha(\text{N}+..)=4.73 \times 10^{-5}$ 7 $\alpha(\text{N})=4.20 \times 10^{-5}$ 6; $\alpha(\text{O})=5.28 \times 10^{-6}$ 8
594.09	5/2, 7/2(+)	259.0 3 482.3 3	2 1 100 15	335.37 5/2(+) 111.79 3/2(+)	5/2(+) 3/2(+)				
596.77	9/2(+)	286.1 3 300.9 <sup>a</sup> 3	2 1 100 14	310.55 11/2(-) 295.89 7/2(+)	11/2(-) 7/2(+)	M1+E2	-3.76 12	0.0414	B(M1)(W.u.)=0.00060 18; B(E2)(W.u.)=65 19 $\alpha(\text{K})=0.0342$ 5; $\alpha(\text{L})=0.00574$ 9; $\alpha(\text{M})=0.001186$ 18; $\alpha(\text{N}+..)=0.000269$ 4 $\alpha(\text{N})=0.000241$ 4; $\alpha(\text{O})=2.78 \times 10^{-5}$ 4
		344.1 3	5 1	252.61 9/2(-)	9/2(-)	E1		0.00731 11	B(E1)(W.u.)=3.7 $\times 10^{-6}$ 12 $\alpha(\text{K})=0.00632$ 9; $\alpha(\text{L})=0.000792$ 12; $\alpha(\text{M})=0.0001596$ 23; $\alpha(\text{N}+..)=3.69 \times 10^{-5}$ 6 $\alpha(\text{N})=3.29 \times 10^{-5}$ 5; $\alpha(\text{O})=4.05 \times 10^{-6}$ 6
607.79	7/2(-)	272.4 3 297.2 3 342.2 3	5 1 14 2 10 2	335.37 5/2(+) 310.55 11/2(-) 265.57 7/2	5/2(+) 11/2(-) 7/2				
708.39	3/2(+), 5/2(+)	355.1 3 168.2 3 211.2 3 237.2 3 372.9 3	100 15 2 1 13 2 13 3 64 9	252.61 9/2(-) 540.13 3/2(+) 496.99 5/2(+) 471.11 3/2(+) 335.37 5/2(+)	9/2(-) 3/2(+) 5/2(+) 3/2(+) 5/2(+)				
		412.7 3 596.8 3	100 15 54 9	295.89 7/2(+) 111.79 3/2(+)	7/2(+) 3/2(+)				
711.18	3/2(+)	708.4 3 240.1 3 375.6 3 599.3 3 711.1 3	81 12 2 1 34 5 100 16 97 15	0.0 1/2(+) 471.11 3/2(+) 335.37 5/2(+) 111.79 3/2(+) 0.0 1/2(+)	1/2(+) 3/2(+) 5/2(+) 3/2(+) 1/2(+)	M1(+E2)	+0.07 +7-20	0.00473 7	$\alpha(\text{K})=0.00410$ 6; $\alpha(\text{L})=0.000511$ 8; $\alpha(\text{M})=0.0001034$

## Adopted Levels, Gammas (continued)

$\gamma(^{125}\text{Xe})$ (continued)												
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma$	$E_f$	$J_f^\pi$	Mult.#	$\delta^@$	$\alpha^\&$	Comments			
736.85	13/2 <sup>(-)</sup>	426.4 3	100 15	310.55	11/2 <sup>(-)</sup>	M1+E2	-0.42 +5-7	0.0162 3	15; $\alpha(\text{N}+..)=2.41\times 10^{-5}$ 4 $\alpha(\text{N})=2.14\times 10^{-5}$ 3; $\alpha(\text{O})=2.69\times 10^{-6}$ 4 $\alpha(\text{K})=0.01394$ 23; $\alpha(\text{L})=0.00181$ 3; $\alpha(\text{M})=0.000368$ 6; $\alpha(\text{N}+..)=8.55\times 10^{-5}$ 12			
		484.3 3	29 5	252.61	9/2 <sup>(-)</sup>	E2		0.00982 14	$\alpha(\text{N})=7.60\times 10^{-5}$ 11; $\alpha(\text{O})=9.47\times 10^{-6}$ 14 $\alpha(\text{K})=0.00830$ 12; $\alpha(\text{L})=0.001214$ 18; $\alpha(\text{M})=0.000248$ 4; $\alpha(\text{N}+..)=5.69\times 10^{-5}$ 8 $\alpha(\text{N})=5.08\times 10^{-5}$ 8; $\alpha(\text{O})=6.08\times 10^{-6}$ 9			
741.42	7/2 <sup>(+)</sup>	144.6 3	3 1	596.77	9/2 <sup>(+)</sup>	(M1+E2)		0.076 6	$\alpha(\text{K})=0.063$ 4; $\alpha(\text{L})=0.0101$ 24; $\alpha(\text{M})=0.0021$ 5; $\alpha(\text{N}+..)=0.00047$ 11			
		147.3 3	5 2	594.09	5/2,7/2 <sup>(+)</sup>							
		244.4 3	100 15	496.99	5/2 <sup>(+)</sup>							
		257.8 3	11 2	483.72	7/2 <sup>(+)</sup>		M1(+E2)			-0.18 +37-15	0.0609 11	$\alpha(\text{N})=0.00042$ 10; $\alpha(\text{O})=5.0\times 10^{-5}$ 9 $\alpha(\text{K})=0.0523$ 8; $\alpha(\text{L})=0.0068$ 3; $\alpha(\text{M})=0.00139$ 6; $\alpha(\text{N}+..)=0.000324$ 12
		445.5 3	57 8	295.89	7/2 <sup>(+)</sup>		M1+E2			+0.38 +13-12	0.0145 3	$\alpha(\text{N})=0.000288$ 11; $\alpha(\text{O})=3.59\times 10^{-5}$ 11 $\alpha(\text{K})=0.0125$ 3; $\alpha(\text{L})=0.001618$ 24; $\alpha(\text{M})=0.000328$ 5; $\alpha(\text{N}+..)=7.63\times 10^{-5}$ 11
475.7 3	13 3	265.57	7/2	E1		0.00310 5	$\alpha(\text{N})=6.78\times 10^{-5}$ 10; $\alpha(\text{O})=8.46\times 10^{-6}$ 14 $\alpha(\text{K})=0.00269$ 4; $\alpha(\text{L})=0.000333$ 5; $\alpha(\text{M})=6.70\times 10^{-5}$ 10; $\alpha(\text{N}+..)=1.555\times 10^{-5}$ 22					
488.8 3	78 12	252.61	9/2 <sup>(-)</sup>									
762.32	(5/2 <sup>-</sup> )	154.5 3	72 22	607.79	7/2 <sup>(-)</sup>				$\alpha(\text{N})=1.383\times 10^{-5}$ 20; $\alpha(\text{O})=1.717\times 10^{-6}$ 25			
		278.5 <sup>b</sup> 3		483.72	7/2 <sup>(+)</sup>							
		291.3 <sup>b</sup> 3	7 2	471.11	3/2 <sup>(+)</sup>							
		496.9 3	100 16	265.57	7/2							
		509.7 <sup>a</sup> 3	83 14	252.61	9/2 <sup>(-)</sup>							
765.66	3/2,5/2 <sup>(+)</sup>	225.4 <sup>b</sup> 3	7 2	540.13	3/2 <sup>(+)</sup>							
		268.7 <sup>b</sup> 3		496.99	5/2 <sup>(+)</sup>							
		294.5 3	7 2	471.11	3/2 <sup>(+)</sup>							
		430.2 <sup>b</sup> 3	9 2	335.37	5/2 <sup>(+)</sup>							
		500.1 3	100 15	265.57	7/2							
		653.7 3	19 4	111.79	3/2 <sup>(+)</sup>							
		765.7 3	47 8	0.0	1/2 <sup>(+)</sup>							
796.63	15/2 <sup>(-)</sup>	59.7 3	0.8 2	736.85	13/2 <sup>(-)</sup>	E2		0.00972 14	B(E2)(W.u.)=64 15 $\alpha(\text{K})=0.00822$ 12; $\alpha(\text{L})=0.001201$ 17; $\alpha(\text{M})=0.000246$			
		486.0 3	100 14	310.55	11/2 <sup>(-)</sup>							

## Adopted Levels, Gammas (continued)

$\gamma(^{125}\text{Xe})$ (continued)									
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma$	$E_f$	$J_f^\pi$	Mult.#	$\delta^@$	$\alpha\&$	Comments
									$4; \alpha(\text{N}+..)=5.63 \times 10^{-5} \ 8$ $\alpha(\text{N})=5.03 \times 10^{-5} \ 8; \alpha(\text{O})=6.02 \times 10^{-6} \ 9$
837.34	9/2(+)	229.5 3 240.5 3 353.4 3 501.8 2		607.79 7/2(-) 596.77 9/2(+) 483.72 7/2(+) 335.37 5/2(+)		E2		0.00889 13	$\alpha(\text{K})=0.00753 \ 11; \alpha(\text{L})=0.001091 \ 16;$ $\alpha(\text{M})=0.000223 \ 4; \alpha(\text{N}+..)=5.11 \times 10^{-5} \ 8$ $\alpha(\text{N})=4.57 \times 10^{-5} \ 7; \alpha(\text{O})=5.48 \times 10^{-6} \ 8$
870.62	11/2(+)	273.8 3	6 1	596.77 9/2(+)		(M1+E2)		0.0540 24	$\alpha(\text{K})=0.0453 \ 10; \alpha(\text{L})=0.0070 \ 13; \alpha(\text{M})=0.0014 \ 3;$ $\alpha(\text{N}+..)=0.00033 \ 6$ $\alpha(\text{N})=0.00029 \ 6; \alpha(\text{O})=3.5 \times 10^{-5} \ 5$
		386.9 3 574.8 2	2 1 100 14	483.72 7/2(+) 295.89 7/2(+)		E2		0.00614 9	B(E2)(W.u.)=29 7 $\alpha(\text{K})=0.00523 \ 8; \alpha(\text{L})=0.000734 \ 11;$ $\alpha(\text{M})=0.0001497 \ 21; \alpha(\text{N}+..)=3.44 \times 10^{-5} \ 5$ $\alpha(\text{N})=3.07 \times 10^{-5} \ 5; \alpha(\text{O})=3.72 \times 10^{-6} \ 6$
886.96	9/2,11/2(-)	279.1 3 576.4 3 634.3 3	45 9 100 17 36 8	607.79 7/2(-) 310.55 11/2(-) 252.61 9/2(-)					
889.34	7/2(+)	292.6 <sup>b</sup> 3 295.3 3 392.4 3 405.9 2 418.1 3 554.0 3 593.3 3 623.9 <sup>b</sup> 3 777.3 3		596.77 9/2(+) 594.09 5/2,7/2(+) 496.99 5/2(+) 483.72 7/2(+) 471.11 3/2(+) 335.37 5/2(+) 295.89 7/2(+) 265.57 7/2 111.79 3/2(+)		D+Q			
893.51	13/2(-)	582.9 3	94 14	310.55 11/2(-)		M1+E2	+21 +4-3	0.00592 9	$\alpha(\text{K})=0.00504 \ 7; \alpha(\text{L})=0.000706 \ 10;$ $\alpha(\text{M})=0.0001439 \ 21; \alpha(\text{N}+..)=3.31 \times 10^{-5} \ 5$ $\alpha(\text{N})=2.95 \times 10^{-5} \ 5; \alpha(\text{O})=3.58 \times 10^{-6} \ 5$
		640.9 3	100 14	252.61 9/2(-)		E2		0.00463 7	$\alpha(\text{K})=0.00395 \ 6; \alpha(\text{L})=0.000542 \ 8;$ $\alpha(\text{M})=0.0001104 \ 16; \alpha(\text{N}+..)=2.55 \times 10^{-5} \ 4$ $\alpha(\text{N})=2.27 \times 10^{-5} \ 4; \alpha(\text{O})=2.76 \times 10^{-6} \ 4$
896.03	5/2(-)	355.7 <sup>ab</sup> 3 399.2 3 412.1 3 424.9 3		540.13 3/2(+) 496.99 5/2(+) 483.72 7/2(+) 471.11 3/2(+)		E1(+M2)	-0.03 +10-26	0.004 5	$\alpha(\text{K})=0.004 \ 4; \alpha(\text{L})=0.0005 \ 6; \alpha(\text{M})=0.00010 \ 11;$



Adopted Levels, Gammas (continued)

γ(<sup>125</sup>Xe) (continued)

<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.#</u>	<u>δ<sup>@</sup></u>	<u>α&amp;</u>	<u>Comments</u>
									α(N+..)=2.2×10 <sup>-5</sup> 25 α(N)=2.0×10 <sup>-5</sup> 22; α(O)=2.E-6 3
896.03	5/2 <sup>(-)</sup>	560.9 <sup>a</sup> 3 784.2 <sup>a</sup> 3	100 22	335.37 111.79	5/2 <sup>(+)</sup> 3/2 <sup>(+)</sup>				
919.85	11/2	610 654.3 3 667.4 3	100 17 31 6	310.55 265.57	11/2 <sup>(-)</sup> 7/2	Q			E <sub>γ</sub> : From <sup>48</sup> Ca( <sup>82</sup> Se,5nγ).
932.76	3/2 <sup>(+)</sup> ,5/2,7/2 <sup>(+)</sup>	392.5 <sup>a</sup> 3 435.6 3 449.1 3 461.7 3		540.13 496.99	3/2 <sup>(+)</sup> 5/2 <sup>(+)</sup> 7/2 <sup>(+)</sup> 3/2 <sup>(+)</sup>				
946.24	5/2 <sup>(+)</sup> ,7/2 <sup>(+)</sup>	597.7 3 204.7 3 238.0 3 338.4 <sup>b</sup> 3 349.4 3 352.2 3 406.2 3 449.2 3 462.6 3 475.2 3 610.8 3	100 22 32 6 13 3 40 7 88 15 100 16 97 16 78 12 34 6 15 3 84 12	335.37 741.42 708.39 607.79 596.77 594.09 540.13 496.99 483.72 471.11 335.37	5/2 <sup>(+)</sup> 7/2 <sup>(+)</sup> 3/2 <sup>(+)</sup> ,5/2 <sup>(+)</sup> 7/2 <sup>(-)</sup> 9/2 <sup>(+)</sup> 5/2,7/2 <sup>(+)</sup> 3/2 <sup>(+)</sup> 5/2 <sup>(+)</sup> 7/2 <sup>(+)</sup> 3/2 <sup>(+)</sup> 5/2 <sup>(+)</sup>				
969.15	7/2 <sup>(+)</sup>	131.9 3 375.1 3 429.0 3 485.3 3 498.1 3 633.8 3 857.2 3	4 2 26 4 13 2 33 5 85 13 100 16 14 3	837.34 594.09 540.13 483.72 471.11 335.37 111.79	9/2 <sup>(+)</sup> 5/2,7/2 <sup>(+)</sup> 3/2 <sup>(+)</sup> 7/2 <sup>(+)</sup> 3/2 <sup>(+)</sup> 5/2 <sup>(+)</sup> 3/2 <sup>(+)</sup>				
987.56		393.6 3 447.4 3 490.4 3 652.2 3 875.8 3		594.09 540.13 496.99 335.37 111.79	5/2,7/2 <sup>(+)</sup> 3/2 <sup>(+)</sup> 5/2 <sup>(+)</sup> 5/2 <sup>(+)</sup> 3/2 <sup>(+)</sup>				
1019.06	9/2 <sup>(+)</sup>	277.6 <sup>a</sup> 3 422.3 3	100 15 23 4	741.42 596.77	7/2 <sup>(+)</sup> 9/2 <sup>(+)</sup>	M1+E2 M1(+E2)	-0.26 +6-9 -0.13 +20-12	0.0501 8 0.0169 3	α(K)=0.0430 7; α(L)=0.00568 14; α(M)=0.00115 3; α(N+..)=0.000268 6 α(N)=0.000238 6; α(O)=2.96×10 <sup>-5</sup> 6 α(K)=0.01461 23; α(L)=0.00186 3;

## Adopted Levels, Gammas (continued)

$\gamma(^{125}\text{Xe})$ (continued)									
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma$	$E_f$	$J_f^\pi$	Mult.#	$\delta^@$	$\alpha\&$	Comments
1019.06	9/2(+)	522.1 3	79 11	496.99	5/2(+)	E2		0.00797 12	$\alpha(\text{M})=0.000377$ 6; $\alpha(\text{N}+..)=8.78\times 10^{-5}$ 13 $\alpha(\text{N})=7.80\times 10^{-5}$ 11; $\alpha(\text{O})=9.78\times 10^{-6}$ 14 $\alpha(\text{K})=0.00675$ 10; $\alpha(\text{L})=0.000969$ 14; $\alpha(\text{M})=0.000198$ 3; $\alpha(\text{N}+..)=4.55\times 10^{-5}$ 7 $\alpha(\text{N})=4.06\times 10^{-5}$ 6; $\alpha(\text{O})=4.88\times 10^{-6}$ 7
1024.44	(11/2 <sup>-</sup> )	535.5 3	13 2	483.72	7/2(+)				
		683.7 3	18 3	335.37	5/2(+)				
		708.5 3	55 9	310.55	11/2(-)				
		287.5 3		736.85	13/2(-)				
		416.6 3	9 2	607.79	7/2(-)				
1030.28	11/2(+)	713.8 3	19 4	310.55	11/2(-)				
		771.8 3	100 16	252.61	9/2(-)				
		192.9 3	3 1	837.34	9/2(+)				
1063.93		433.4 3	2 1	596.77	9/2(+)	Q			
		546.5 <sup>a</sup> 3	100 14	483.72	7/2(+)				
		456.1 3		607.79	7/2(-)				
1077.10		467.2 3		596.77	9/2(+)				
		314.7 3		762.32	(5/2 <sup>-</sup> )				
1103.79	(9/2,11/2 <sup>+</sup> )	469.4 3		607.79	7/2(-)				
		266.3 3		837.34	9/2(+)				
		362.2 3		741.42	7/2(+)				
		509.7 <sup>a</sup> 3	58 10	594.09	5/2,7/2(+)				
		619.9 3	100 14	483.72	7/2(+)				
1121.1		808.0 3		295.89	7/2(+)				
		524.3 3		596.77	9/2(+)				
1126.36		417.9 3		708.39	3/2(+),5/2(+)				
		600.0 3		526.37	1/2(+),3/2(+)				
		655.3 3		471.11	3/2(+)				
		791.0 3		335.37	5/2(+)				
		341.0 3		796.63	15/2(-)				
1137.6	3/2(+),5/2,7/2(+)	429.7 3		711.18	3/2(+)				
		657.4 3	100 15	483.72	7/2(+)				
		805.8 3	64 12	335.37	5/2(+)				
1161.81	5/2(+)	229.3 3		932.76	3/2(+),5/2,7/2(+)				
		272.3 <sup>b</sup> 3		889.34	7/2(+)				
		450.5 3		711.18	3/2(+)				
		635.4 3		526.37	1/2(+),3/2(+)				
		690.7 3		471.11	3/2(+)	M1+E2	+0.13 3	0.00506 8	$\alpha(\text{K})=0.00438$ 7; $\alpha(\text{L})=0.000547$ 8;

## Adopted Levels, Gammas (continued)

$\gamma(^{125}\text{Xe})$ (continued)									
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma$	$E_f$	$J_f^\pi$	Mult. #	$\delta^@$	$\alpha\&$	Comments
									$\alpha(\text{M})=0.0001107$ 16; $\alpha(\text{N}+..)=2.58\times 10^{-5}$ 4 $\alpha(\text{N})=2.29\times 10^{-5}$ 4; $\alpha(\text{O})=2.88\times 10^{-6}$ 4
1161.81	5/2(+)	1050.1 3		111.79	3/2(+)				
1171.70		674.6 <sup>a</sup> 3		496.99	5/2(+)				
		700.7 3		471.11	3/2(+)				
		836.3 <sup>ab</sup> 3		335.37	5/2(+)				
1193.12	7/2(+),9/2(+)	303.8 3		889.34	7/2(+)				
		355.7 <sup>a</sup> 3	23 5	837.34	9/2(+)				
		484.8 3	100 16	708.39	3/2(+),5/2(+)				
		585.3 3	4 2	607.79	7/2(-)				
		596.6 3		596.77	9/2(+)				
		709.2 3	29 6	483.72	7/2(+)				
		927.5 3		265.57	7/2				
		940.5 3		252.61	9/2(-)				
1209.93	13/2(+)	339.3 3	6 2	870.62	11/2(+)	M1+E2		0.0290 8	$\alpha(\text{K})=0.0245$ 11; $\alpha(\text{L})=0.0036$ 3; $\alpha(\text{M})=0.00073$ 7; $\alpha(\text{N}+..)=0.000167$ 13 $\alpha(\text{N})=0.000149$ 12; $\alpha(\text{O})=1.79\times 10^{-5}$ 8
		613.2 3	100 14	596.77	9/2(+)	E2		0.00519 8	B(E2)(W.u.)=57 23 $\alpha(\text{K})=0.00442$ 7; $\alpha(\text{L})=0.000612$ 9; $\alpha(\text{M})=0.0001247$ 18; $\alpha(\text{N}+..)=2.87\times 10^{-5}$ 4 $\alpha(\text{N})=2.56\times 10^{-5}$ 4; $\alpha(\text{O})=3.11\times 10^{-6}$ 5
1217.17	5/2(+)	623.0 3		594.09	5/2,7/2(+)				
		746.0 3		471.11	3/2(+)				
		881.9 3		335.37	5/2(+)				
		1105.4 3		111.79	3/2(+)	M1(+E2)	-0.05 +8-15	0.00170 3	$\alpha(\text{K})=0.001475$ 25; $\alpha(\text{L})=0.000182$ 3; $\alpha(\text{M})=3.67\times 10^{-5}$ 6; $\alpha(\text{N}+..)=9.03\times 10^{-6}$ 15 $\alpha(\text{N})=7.60\times 10^{-6}$ 13; $\alpha(\text{O})=9.58\times 10^{-7}$ 16; $\alpha(\text{IPF})=4.70\times 10^{-7}$ 9
1245.44	(9/2-,11/2,13/2-)	352.0 <sup>b</sup> 3		893.51	13/2(-)				
		358.2 3	17 4	886.96	9/2,11/2(-)				
		508.6 3	62 11	736.85	13/2(-)				
		935.0 3	55 9	310.55	11/2(-)				
		992.9 3	100 17	252.61	9/2(-)				
1246.8		509.8 3		736.85	13/2(-)				
1247.74	11/2	377.0 3	30 6	870.62	11/2(+)				
		650.9 3	80 13	596.77	9/2(+)				
		952.0 3	100 17	295.89	7/2(+)				
1263.60		522.4 3		741.42	7/2(+)				

## Adopted Levels, Gammas (continued)

$\gamma(^{125}\text{Xe})$ (continued)									
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma$	$E_f$	$J_f^\pi$	Mult.#	$\delta^@$	$\alpha^\&$	Comments
1263.60		792.4 3		471.11	3/2 <sup>(+)</sup>				
		928.1 3		335.37	5/2 <sup>(+)</sup>				
1281.69		516.0 3		765.66	3/2,5/2 <sup>(+)</sup>				
		519.4 3		762.32	(5/2 <sup>-</sup> )				
		674.0 3		607.79	7/2 <sup>(-)</sup>				
		946.2 3		335.37	5/2 <sup>(+)</sup>				
1287.77		761.4 3		526.37	1/2 <sup>(+)</sup> ,3/2 <sup>(+)</sup>				
		790.9 3		496.99	5/2 <sup>(+)</sup>				
		816.5 3		471.11	3/2 <sup>(+)</sup>				
		952.4 3		335.37	5/2 <sup>(+)</sup>				
1307.2		598.8 3		708.39	3/2 <sup>(+)</sup> ,5/2 <sup>(+)</sup>				
1310.15	15/2 <sup>(-)</sup>	416.7 3	29 5	893.51	13/2 <sup>(-)</sup>	M1+E2	-1.5 5	0.0159 6	$\alpha(\text{K})=0.0135$ 5; $\alpha(\text{L})=0.00194$ 3; $\alpha(\text{M})=0.000396$ 6; $\alpha(\text{N}+..)=9.09\times 10^{-5}$ 13 $\alpha(\text{N})=8.11\times 10^{-5}$ 12; $\alpha(\text{O})=9.77\times 10^{-6}$ 17 <sup>48</sup> Ca( <sup>82</sup> Se,5n $\gamma$ ) placed this $\gamma$ from 1307 keV level.
		513.5 3	22 4	796.63	15/2 <sup>(-)</sup>	M1+E2	-4.4 +14-18	0.00844 16	$\alpha(\text{K})=0.00716$ 15; $\alpha(\text{L})=0.001024$ 16; $\alpha(\text{M})=0.000209$ 4; $\alpha(\text{N}+..)=4.80\times 10^{-5}$ 8 $\alpha(\text{N})=4.29\times 10^{-5}$ 7; $\alpha(\text{O})=5.16\times 10^{-6}$ 9
		573.3 3	100 15	736.85	13/2 <sup>(-)</sup>	M1+E2	-1.4 1	0.00679 12	$\alpha(\text{K})=0.00581$ 10; $\alpha(\text{L})=0.000782$ 12; $\alpha(\text{M})=0.0001590$ 24; $\alpha(\text{N}+..)=3.68\times 10^{-5}$ $\alpha(\text{N})=3.27\times 10^{-5}$ 5; $\alpha(\text{O})=4.02\times 10^{-6}$ 7 From <sup>48</sup> Ca( <sup>82</sup> Se,5n $\gamma$ ).
1310.2	(15/2 <sup>-</sup> )	417		893.51	13/2 <sup>(-)</sup>				
1311.4	1/2,3/2	1200 1	86	111.79	3/2 <sup>(+)</sup>				
		1311 1	100	0.0	1/2 <sup>(+)</sup>				
1312.21	3/2,5/2,7/2	549.9 3		762.32	(5/2 <sup>-</sup> )				
		704.4 3		607.79	7/2 <sup>(-)</sup>				
		815.2 3		496.99	5/2 <sup>(+)</sup>				
		841.1 3		471.11	3/2 <sup>(+)</sup>				
1315.81	(11/2 <sup>+</sup> )	296.8 3	94 16	1019.06	9/2 <sup>(+)</sup>	D+Q			
		445.2 3	14 4	870.62	11/2 <sup>(+)</sup>				
		478.4 3		837.34	9/2 <sup>(+)</sup>				
		574.4 3	69 15	741.42	7/2 <sup>(+)</sup>	Q		0.00622	$\alpha(\text{K})=0.00524$ ; $\alpha(\text{L})=0.00073$
		578.9 3		736.85	13/2 <sup>(-)</sup>				
		718.9 3	85 15	596.77	9/2 <sup>(+)</sup>				
		1063.1 3	100 19	252.61	9/2 <sup>(-)</sup>				
1321.07		609.7 3		711.18	3/2 <sup>(+)</sup>				
		794.7 3		526.37	1/2 <sup>(+)</sup> ,3/2 <sup>(+)</sup>				
		850.0 3		471.11	3/2 <sup>(+)</sup>				

Adopted Levels, Gammas (continued)

γ(<sup>125</sup>Xe) (continued)

<u>E<sub>i</sub>(level)</u>	<u>J<sup>π</sup><sub>i</sub></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub></u>	<u>E<sub>f</sub></u>	<u>J<sup>π</sup><sub>f</sub></u>	<u>Mult.#</u>	<u>δ<sup>@</sup></u>
1321.07		1209.4 3		111.79	3/2(+)		
1324.9	1/2,3/2	1212 1	100	111.79	3/2(+)		
		1326 1	27	0.0	1/2(+)		
1327.0		843.1 3		483.72	7/2(+)		
1330.88	3/2(+),5/2,7/2(+)	619.8 3		711.18	3/2(+)		
		846.9 3		483.72	7/2(+)		
		859.7 3		471.11	3/2(+)		
		995.5 3		335.37	5/2(+)		
		1219.3 3		111.79	3/2(+)		
1341.21	(9/2 <sup>-</sup> ,11/2,13/2 <sup>-</sup> )	604.3 3	74 14	736.85	13/2(-)		
		1088.4 3	100 20	252.61	9/2(-)		
1359.64	3/2,5/2,7/2	593.9 3		765.66	3/2,5/2(+)		
		597.6 3		762.32	(5/2 <sup>-</sup> )		
		751.9 3		607.79	7/2(-)		
		1024.0 <sup>b</sup> 3		335.37	5/2(+)		
1370.28	5/2(+),7/2(+)	533.0 3		837.34	9/2(+)		
		628.7 3		741.42	7/2(+)		
		773.4 3		596.77	9/2(+)		
		776.3 3		594.09	5/2,7/2(+)		
		830.2 3		540.13	3/2(+)		
		886.6 3		483.72	7/2(+)		
1379.95	7/2,9/2(+)	349.6 3		1030.28	11/2(+)		
		447.1 3		932.76	3/2(+),5/2,7/2(+)		
		542.7 3		837.34	9/2(+)		
		783.1 3		596.77	9/2(+)		
		786.0 3		594.09	5/2,7/2(+)		
		883.0 3		496.99	5/2(+)		
		896.2 3		483.72	7/2(+)		
1387.92	17/2	591.3 3	92 15	796.63	15/2(-)	D+Q	-0.8 1
		651.1 3	100 15	736.85	13/2(-)	Q	
1395.60	11/2(-),13/2,15/2	371.1 3	29 3	1024.44	(11/2 <sup>-</sup> )		
		475.7 3	13 2	919.85	11/2		
		502.1 <sup>b</sup> 3		893.51	13/2(-)		
		599.1 3	100 10	796.63	15/2(-)		
		658.9 3		736.85	13/2(-)		
1399.29		430.1 <sup>a</sup> 3		969.15	7/2(+)		
		915.6 3		483.72	7/2(+)		
1403.86	5/2(+),7/2,9/2(+)	566.3 3		837.34	9/2(+)		

Adopted Levels, Gammas (continued)

γ(<sup>125</sup>Xe) (continued)

<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.#</u>	<u>δ<sup>@</sup></u>	<u>α&amp;</u>	<u>Comments</u>
1403.86	5/2 <sup>(+)</sup> ,7/2,9/2 <sup>(+)</sup>	809.9 3 920.3 3 1068.4 3		594.09 483.72 335.37	5/2,7/2 <sup>(+)</sup> 7/2 <sup>(+)</sup> 5/2 <sup>(+)</sup>				
1416.08	5/2 <sup>(+)</sup>	674.6 <sup>a</sup> 3 808.4 3 945.0 3 1304.2 3		741.42 607.79 471.11 111.79	7/2 <sup>(+)</sup> 7/2 <sup>(-)</sup> 3/2 <sup>(+)</sup> 3/2 <sup>(+)</sup>	M1+E2	-2.7 4	0.000981 17	α(K)=0.000829 15; α(L)=0.0001033 18; α(M)=2.09×10 <sup>-5</sup> 4; α(N+..)=2.76×10 <sup>-5</sup> α(N)=4.31×10 <sup>-6</sup> 8; α(O)=5.39×10 <sup>-7</sup> 10; α(IPF)=2.27×10 <sup>-5</sup> 4
1425.3		817.5 3		607.79	7/2 <sup>(-)</sup>				
1438.93	11/2 <sup>(+)</sup>	229.2 3 408.6 3	29 6	1209.93 1030.28	13/2 <sup>(+)</sup> 11/2 <sup>(+)</sup>	M1+E2	+0.29 +25-23	0.0183 5	α(K)=0.0157 5; α(L)=0.00203 3; α(M)=0.000411 7; α(N+..)=9.56×10 <sup>-5</sup> 14 α(N)=8.50×10 <sup>-5</sup> 13; α(O)=1.062×10 <sup>-5</sup> 17
		549.5 3 601.5 3 842.2 3	100 17 45 9	889.34 837.34 596.77	7/2 <sup>(+)</sup> 9/2 <sup>(+)</sup> 9/2 <sup>(+)</sup>	M1+E2	-4.8 12	0.00242 5	α(K)=0.00208 4; α(L)=0.000272 5; α(M)=5.51×10 <sup>-5</sup> 9; α(N+..)=1.276×10 <sup>-5</sup> 21 α(N)=1.135×10 <sup>-5</sup> 19; α(O)=1.401×10 <sup>-6</sup> 24
1441.16	19/2 <sup>(-)</sup>	644.7 3	100	796.63	15/2 <sup>(-)</sup>	E2		0.00456 7	B(E2)(W.u.)>46 α(K)=0.00389 6; α(L)=0.000534 8; α(M)=0.0001087 16; α(N+..)=2.51×10 <sup>-5</sup> 4 α(N)=2.23×10 <sup>-5</sup> 4; α(O)=2.72×10 <sup>-6</sup> 4
1473.9		580.3 3 587.1 <sup>b</sup> 3		893.51 886.96	13/2 <sup>(-)</sup> 9/2,11/2 <sup>(-)</sup>				
1477.41		736.0 <sup>a</sup> 3 993.6 3 1142.1 3		741.42 483.72 335.37	7/2 <sup>(+)</sup> 7/2 <sup>(+)</sup> 5/2 <sup>(+)</sup>				
1480.71	13/2 <sup>(+)</sup>	450.5 3 643.3 3	6 1 100 10	1030.28 837.34	11/2 <sup>(+)</sup> 9/2 <sup>(+)</sup>	E2		0.00458 7	α(K)=0.00391 6; α(L)=0.000537 8; α(M)=0.0001093 16; α(N+..)=2.52×10 <sup>-5</sup> 4 α(N)=2.25×10 <sup>-5</sup> 4; α(O)=2.73×10 <sup>-6</sup> 4
		684.2 3 1170.2 3	18 2 31 3	796.63 310.55	15/2 <sup>(-)</sup> 11/2 <sup>(-)</sup>				
1489.91	3/2 <sup>(+)</sup> ,5/2,7/2	896.0 3 1006.2 3		594.09 483.72	5/2,7/2 <sup>(+)</sup> 7/2 <sup>(+)</sup>				

**Adopted Levels, Gammas (continued)**

$\gamma(^{125}\text{Xe})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma$	$E_f$	$J_f^\pi$	Mult. #	$\delta^@$	$\alpha\&$	Comments
1489.91	3/2 <sup>(+)</sup> ,5/2,7/2	1018.8 3		471.11	3/2 <sup>(+)</sup>				
		1154.3 3		335.37	5/2 <sup>(+)</sup>				
1492.60		388.7 3		1103.79	(9/2,11/2 <sup>+</sup> )				
		473.5 3		1019.06	9/2 <sup>(+)</sup>				
		546.5 <sup>a</sup> 3		946.24	5/2 <sup>(+)</sup> ,7/2 <sup>(+)</sup>				
		655.2 3		837.34	9/2 <sup>(+)</sup>				
		895.9 3		596.77	9/2 <sup>(+)</sup>				
1494.7		997.7 3		496.99	5/2 <sup>(+)</sup>				
1510.31		673.2 3		837.34	9/2 <sup>(+)</sup>				
		913.4 3		596.77	9/2 <sup>(+)</sup>				
		915.9 3		594.09	5/2,7/2 <sup>(+)</sup>				
		1026.8 3		483.72	7/2 <sup>(+)</sup>				
1536.24	15/2 <sup>(+)</sup>	326.3 3	2 1	1209.93	13/2 <sup>(+)</sup>	D+Q			
		505.8 3	2 1	1030.28	11/2 <sup>(+)</sup>				
		665.6 3	100 10	870.62	11/2 <sup>(+)</sup>	E2		0.00421 6	B(E2)(W.u.)=43 17 $\alpha(K)=0.00359$ 5; $\alpha(L)=0.000490$ 7; $\alpha(M)=9.97\times 10^{-5}$ 14; $\alpha(N+.)=2.30\times 10^{-5}$ 4 $\alpha(N)=2.05\times 10^{-5}$ 3; $\alpha(O)=2.50\times 10^{-6}$ 4
1537.96	7/2 <sup>(+)</sup>	700.6 3		837.34	9/2 <sup>(+)</sup>				
		1202.6 3		335.37	5/2 <sup>(+)</sup>	M1+E2	-0.6 +3-5	0.00133 9	$\alpha(K)=0.00115$ 8; $\alpha(L)=0.000142$ 9; $\alpha(M)=2.86\times 10^{-5}$ 18; $\alpha(N+.)=1.31\times 10^{-5}$ 4 $\alpha(N)=5.9\times 10^{-6}$ 4; $\alpha(O)=7.5\times 10^{-7}$ 5; $\alpha(IPF)=6.46\times 10^{-6}$ 17
1573.34	(13/2)	232.0 3	11 2	1341.21	(9/2 <sup>-</sup> ,11/2,13/2 <sup>-</sup> )				
		263.4 3	20 3	1310.15	15/2 <sup>(-)</sup>				
		327.9 3	24 3	1245.44	(9/2 <sup>-</sup> ,11/2,13/2 <sup>-</sup> )				
		653.6 3	56 20	919.85	11/2				
		686.5 3	100 10	886.96	9/2,11/2 <sup>(-)</sup>				
		836.3 <sup>ab</sup> 3		736.85	13/2 <sup>(-)</sup>	D+Q	+0.6 +3-4		
1578.59	5/2 <sup>(+)</sup> ,7/2 <sup>(+)</sup>	870.2 3		708.39	3/2 <sup>(+)</sup> ,5/2 <sup>(+)</sup>	M1+E2	+14 +33-11	0.00221 8	$\alpha(K)=0.00190$ 7; $\alpha(L)=0.000248$ 8; $\alpha(M)=5.04\times 10^{-5}$ 15; $\alpha(N+.)=1.17\times 10^{-5}$ 4 $\alpha(N)=1.04\times 10^{-5}$ 4; $\alpha(O)=1.28\times 10^{-6}$ 5
		984.5 3		594.09	5/2,7/2 <sup>(+)</sup>				
1579.4	1/2,3/2	1468 1	94	111.79	3/2 <sup>(+)</sup>				
		1579 1	100	0.0	1/2 <sup>(+)</sup>				
1579.92	17/2 <sup>(-)</sup>	269.8 3	5 1	1310.15	15/2 <sup>(-)</sup>				
		686.4 3	100 10	893.51	13/2 <sup>(-)</sup>	(E2)		0.00389 6	$\alpha(K)=0.00333$ 5; $\alpha(L)=0.000451$ 7; $\alpha(M)=9.18\times 10^{-5}$ 13; $\alpha(N+.)=2.12\times 10^{-5}$ 3 $\alpha(N)=1.89\times 10^{-5}$ 3; $\alpha(O)=2.31\times 10^{-6}$ 4

Adopted Levels, Gammas (continued)

γ(<sup>125</sup>Xe) (continued)

<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult. #</u>	<u>δ<sup>@</sup></u>	<u>α<sup>&amp;</sup></u>	<u>Comments</u>
1579.92	17/2 <sup>(-)</sup>	783.4 3	26 3	796.63	15/2 <sup>(-)</sup>	(D+Q)			
1580.13		1040.0 3		540.13	3/2 <sup>(+)</sup>				
		1109.0 3		471.11	3/2 <sup>(+)</sup>				
1585.53	(15/2)	560.9 <sup>a</sup> 3	31 8	1024.44	(11/2 <sup>-</sup> )				
		665.9 3	52 11	919.85	11/2				
		691.9 3	62 13	893.51	13/2 <sup>(-)</sup>				
		789.0 3		796.63	15/2 <sup>(-)</sup>				
		848.5 3	100 21	736.85	13/2 <sup>(-)</sup>				
1600.09	(11/2)	569.6 3		1030.28	11/2 <sup>(+)</sup>				
		630.9 3	100 22	969.15	7/2 <sup>(+)</sup>				
		763.0 3		837.34	9/2 <sup>(+)</sup>				
1601.84		836.3 <sup>a</sup> 3		765.66	3/2,5/2 <sup>(+)</sup>				
		839.4 3		762.32	(5/2 <sup>-</sup> )				
1603.8		1492.0 3		111.79	3/2 <sup>(+)</sup>				
1606.09	5/2 <sup>(+)</sup> ,7/2,9/2 <sup>(+)</sup>	673.3 3		932.76	3/2 <sup>(+)</sup> ,5/2,7/2 <sup>(+)</sup>				
		1009.2 3		596.77	9/2 <sup>(+)</sup>				
		1122.3 3		483.72	7/2 <sup>(+)</sup>				
		1270.9 3		335.37	5/2 <sup>(+)</sup>				
1617.50		851.8 3		765.66	3/2,5/2 <sup>(+)</sup>				
		855.3 3		762.32	(5/2 <sup>-</sup> )				
		1023.5 3		594.09	5/2,7/2 <sup>(+)</sup>				
		1146.2 3		471.11	3/2 <sup>(+)</sup>				
1624.97		735.7 3		889.34	7/2 <sup>(+)</sup>				
		883.6 3		741.42	7/2 <sup>(+)</sup>				
		916.3 3		708.39	3/2 <sup>(+)</sup> ,5/2 <sup>(+)</sup>				
		1141.4 3		483.72	7/2 <sup>(+)</sup>				
1628.06	7/2 <sup>(+)</sup>	300.9 <sup>a</sup> 3		1327.0					
		1131.1 3		496.99	5/2 <sup>(+)</sup>				
		1292.8 3		335.37	5/2 <sup>(+)</sup>	M1+E2	-0.24 +17-53	0.00120 9	α(K)=0.00103 8; α(L)=0.000126 9; α(M)=2.55×10 <sup>-5</sup> 17; α(N+..)=2.55×10 <sup>-5</sup> 4 α(N)=5.3×10 <sup>-6</sup> 4; α(O)=6.7×10 <sup>-7</sup> 5; α(IPF)=1.95×10 <sup>-5</sup> 5
1640.18	11/2 <sup>(-)</sup> ,13/2 <sup>(+)</sup>	324.2 3		1315.81	(11/2 <sup>+</sup> )				
		392.5 <sup>a</sup> 3		1247.74	11/2				
		430.1 <sup>a</sup> 3		1209.93	13/2 <sup>(+)</sup>				
		621.1 3		1019.06	9/2 <sup>(+)</sup>				
		746.6 3		893.51	13/2 <sup>(-)</sup>				



**Adopted Levels, Gammas (continued)**

$\gamma(^{125}\text{Xe})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma$	$E_f$	$J_f^\pi$	Mult. #	$\delta^@$	$\alpha\&$	Comments
1640.18	11/2 <sup>(-)</sup> ,13/2 <sup>(+)</sup>	769.7 3		870.62	11/2 <sup>(+)</sup>				
		843.6 3		796.63	15/2 <sup>(-)</sup>				
		1043.5 3		596.77	9/2 <sup>(+)</sup>				
1647.73		1121.4 3		526.37	1/2 <sup>(+)</sup> ,3/2 <sup>(+)</sup>				
		1312.3 3		335.37	5/2 <sup>(+)</sup>				
1648.9		1151.9 <sup>a</sup> 3		496.99	5/2 <sup>(+)</sup>				
1659.69	15/2	635.2 3	42 5	1024.44	(11/2 <sup>-</sup> )	(E2)		0.00474 7	$\alpha(\text{K})=0.00404$ 6; $\alpha(\text{L})=0.000556$ 8; $\alpha(\text{M})=0.0001132$ 16; $\alpha(\text{N+..})=2.61\times 10^{-5}$ 4
		739.7 3	100 10	919.85	11/2	E2		0.00324 5	$\alpha(\text{N})=2.33\times 10^{-5}$ 4; $\alpha(\text{O})=2.83\times 10^{-6}$ 4 $\alpha(\text{K})=0.00278$ 4; $\alpha(\text{L})=0.000371$ 6; $\alpha(\text{M})=7.55\times 10^{-5}$ 11; $\alpha(\text{N+..})=1.744\times 10^{-5}$ 25 $\alpha(\text{N})=1.553\times 10^{-5}$ 22; $\alpha(\text{O})=1.90\times 10^{-6}$ 3
		766.0 3	48 6	893.51	13/2 <sup>(-)</sup>				
		863.3 3	10 10	796.63	15/2 <sup>(-)</sup>				
		922.8 3	50 6	736.85	13/2 <sup>(-)</sup>	(M1+E2)	-0.19 +2-27	0.00255 10	$\alpha(\text{K})=0.00221$ 9; $\alpha(\text{L})=0.000274$ 10; $\alpha(\text{M})=5.53\times 10^{-5}$ 19; $\alpha(\text{N+..})=1.29\times 10^{-5}$ 5 $\alpha(\text{N})=1.15\times 10^{-5}$ 4; $\alpha(\text{O})=1.44\times 10^{-6}$ 6
1668.67	3/2 <sup>(+)</sup> ,5/2,7/2 <sup>(+)</sup>	1184.8 3		483.72	7/2 <sup>(+)</sup>				
		1557.0 3		111.79	3/2 <sup>(+)</sup>				
1678.87	7/2 <sup>(+)</sup> ,9/2,11/2 <sup>(+)</sup>	537.5 3		1141.14	3/2 <sup>(+)</sup> ,5/2,7/2 <sup>(+)</sup>				
		648.5 3		1030.28	11/2 <sup>(+)</sup>				
		841.3 3		837.34	9/2 <sup>(+)</sup>				
		1082.4 3		596.77	9/2 <sup>(+)</sup>				
		1195.4 3		483.72	7/2 <sup>(+)</sup>				
1684.46		922.0 3		762.32	(5/2 <sup>-</sup> )				
		1076.8 3		607.79	7/2 <sup>(-)</sup>				
1687.93		372.0 3		1315.81	(11/2 <sup>+</sup> )				
		669.0 3		1019.06	9/2 <sup>(+)</sup>				
		817.3 3		870.62	11/2 <sup>(+)</sup>				
1688.34		440.5 <sup>b</sup> 3		1247.74	11/2				
		922.4 3		765.66	3/2,5/2 <sup>(+)</sup>				
		926.1 3		762.32	(5/2 <sup>-</sup> )				
		1080.5 3		607.79	7/2 <sup>(-)</sup>				
		1353.3 3		335.37	5/2 <sup>(+)</sup>				
1690.46	5/2 <sup>(+)</sup> ,7/2 <sup>(+)</sup>	979.4 3		711.18	3/2 <sup>(+)</sup>				

Adopted Levels, Gammas (continued)

$\gamma(^{125}\text{Xe})$ (continued)								
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma$ †	$I_\gamma$	$E_f$	$J_f^\pi$	Mult.#	$\alpha$ &	Comments
1690.46	5/2(+), 7/2(+)	982.2 3		708.39	3/2(+), 5/2(+)			
		1093.7 3		596.77	9/2(+)			
		1096.1 <sup>a</sup> 3		594.09	5/2, 7/2(+)			
1698.3	1/2, 3/2	1158 1	100	540.13	3/2(+)			
		1587 <sup>‡b</sup> 1		111.79	3/2(+)			
		1698 1	64	0.0	1/2(+)			
1714.0		794.2 3		919.85	11/2			
		827.0 3		886.96	9/2, 11/2(-)			
1716.57		796.8 3		919.85	11/2			
		822.8 3		893.51	13/2(-)			
		979.9 3		736.85	13/2(-)			
1718.61	15/2	688.4 3	100	1030.28	11/2(+)	Q		
1723.58		961.2 3		762.32	(5/2-)			
		1115.8 3		607.79	7/2(-)			
		1239.9 3		483.72	7/2(+)			
1739.6		635.6 3	90 10	1103.79	(9/2, 11/2+)			
		709.6 3	100 20	1030.28	11/2(+)			
1752.91	7/2, 9/2, 11/2(+)	722.7 3		1030.28	11/2(+)			
		1269.1 3		483.72	7/2(+)			
1759.93		872.9 3		886.96	9/2, 11/2(-)			
		922.6 3		837.34	9/2(+)			
		1151.9 <sup>a</sup> 3		607.79	7/2(-)			
		1276.5 3		483.72	7/2(+)			
1804.71		1196.9 3		607.79	7/2(-)			
		1210.6 3		594.09	5/2, 7/2(+)			
		1321.0 3		483.72	7/2(+)			
1808.7		615.6 3		1193.12	7/2(+), 9/2(+)			
1825.94		936.5 3		889.34	7/2(+)			
		1084.6 3		741.42	7/2(+)			
1826.27	(15/2)	438.5 3	36 4	1387.92	17/2			
		1029.4 3	41 5	796.63	15/2(-)			
		1089.5 3	100 11	736.85	13/2(-)			
1832.87	(9/2-, 11/2, 13/2+)	1096.1 <sup>a</sup> 3		736.85	13/2(-)			
		1236.0 3		596.77	9/2(+)			
1859.12	17/2(-)	279.2 3	7 1	1579.92	17/2(-)			
		548.9 3	100 10	1310.2	(15/2-)	M1+E2	0.0079 10	$\alpha(\text{K})=0.0068$ 9; $\alpha(\text{L})=0.00090$ 7; $\alpha(\text{M})=0.000183$ 13; $\alpha(\text{N}+..)=4.2 \times 10^{-5}$ 4 $\alpha(\text{N})=3.8 \times 10^{-5}$ 3; $\alpha(\text{O})=4.7 \times 10^{-6}$ 5
		965.8 3	19 2	893.51	13/2(-)	Q		

Adopted Levels, Gammas (continued)

γ(<sup>125</sup>Xe) (continued)

<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.#</u>	<u>δ<sup>@</sup></u>	<u>α&amp;</u>	<u>Comments</u>
1864.99		968.9 3 1324.9 3		896.03 5/2 <sup>(-)</sup> 540.13 3/2 <sup>(+)</sup>					
1883.04	(15/2)	309.8 <sup>b</sup> 3 495.1 3 541.7 3	29 4 100 11 78 9	1573.34 (13/2) 1387.92 17/2 1341.21 (9/2 <sup>-</sup> ,11/2,13/2 <sup>-</sup> )					
1905.71		1146.4 3 985.8 3	70 9 100 12	736.85 13/2 <sup>(-)</sup> 919.85 11/2					
1925.34	17/2 <sup>(+)</sup>	1012.3 3 1168.8 3 715.3 <sup>a</sup> 3	35 6 100	893.51 13/2 <sup>(-)</sup> 736.85 13/2 <sup>(-)</sup> 1209.93 13/2 <sup>(+)</sup>		E2		0.00352 5	B(E2)(W.u.)>27 α(K)=0.00301 5; α(L)=0.000405 6; α(M)=8.23×10 <sup>-5</sup> 12; α(N+.)=1.90×10 <sup>-5</sup> 3 α(N)=1.694×10 <sup>-5</sup> 24; α(O)=2.07×10 <sup>-6</sup> 3
1934.5		1172.2 3		762.32 (5/2 <sup>-</sup> )					
1975.78	(15/2)	439.4 <sup>b</sup> 3 659.9 3 728.1 3 728.8 3 765.9 3	48 7 100 10 100 11 20 3	1536.24 15/2 <sup>(+)</sup> 1315.81 (11/2 <sup>+</sup> ) 1247.74 11/2 1246.8 1209.93 13/2 <sup>(+)</sup>					
2004.61	(15/2,17/2)	1239.2 <sup>b</sup> 3 419.0 3 563.5 3 609.2 3	29 4 100 11 86 10	736.85 13/2 <sup>(-)</sup> 1585.53 (15/2) 1441.16 19/2 <sup>(-)</sup> 1395.60 11/2 <sup>(-)</sup> ,13/2,15/2					
2006.43	19/2 <sup>(-)</sup>	1207.8 3 426.4 <sup>b</sup> 3 565.4 3 618.5 3	17 3 17 2 59 6	796.63 15/2 <sup>(-)</sup> 1579.92 17/2 <sup>(-)</sup> 1441.16 19/2 <sup>(-)</sup> 1387.92 17/2		M1+E2	-0.9 3	0.0059 3	α(K)=0.0051 3; α(L)=0.000664 24; α(M)=0.000135 5; α(N+.)=3.13×10 <sup>-5</sup> 12 α(N)=2.78×10 <sup>-5</sup> 10; α(O)=3.45×10 <sup>-6</sup> 15
2031.04	(9/2 <sup>+</sup> ,11/2,13/2 <sup>+</sup> )	696.3 3 1209.9 3 715.3 <sup>a</sup> 3 821.1 3 1434.2 3	100 10	1310.15 15/2 <sup>(-)</sup> 796.63 15/2 <sup>(-)</sup> 1315.81 (11/2 <sup>+</sup> ) 1209.93 13/2 <sup>(+)</sup> 596.77 9/2 <sup>(+)</sup>					
2035.7		1142.1 3 1298.9 3		893.51 13/2 <sup>(-)</sup> 736.85 13/2 <sup>(-)</sup>					
2046.5	9/2 <sup>(+)</sup>	1562.8 3		483.72 7/2 <sup>(+)</sup>		M1+E2	-5.7 +24-33	0.000756 13	α(K)=0.000567 11; α(L)=6.98×10 <sup>-5</sup> 13;

Adopted Levels, Gammas (continued)

γ(<sup>125</sup>Xe) (continued)

<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.#</u>	<u>δ@</u>	<u>α&amp;</u>	<u>Comments</u>
									α(M)=1.41×10 <sup>-5</sup> 3; α(N+..)=0.0001054 α(N)=2.91×10 <sup>-6</sup> 6; α(O)=3.65×10 <sup>-7</sup> 7; α(IPF)=0.0001022 15
2062.8		1032.7 3		1030.28	11/2(+)				
		1325.8 3		736.85	13/2(-)				
2082.0		834.2 3		1247.74	11/2				
		1345.2 3		736.85	13/2(-)				
2095.04	(9/2 <sup>+</sup> ,11/2,13/2 <sup>+</sup> )	885.2 3		1209.93	13/2(+)				
		1257.6 <sup>a</sup> 3		837.34	9/2(+)				
2096.8		1360.0 3		736.85	13/2(-)				
2144.5		1547.7 3		596.77	9/2(+)				
2150.86	15/2(-)	577.7 3		1573.34	(13/2)				
		840.6 3		1310.15	15/2(-)				
		1257.6 <sup>a</sup> 3		893.51	13/2(-)	M1+E2	-7 +I-2	0.001020 15	α(K)=0.000869 13; α(L)=0.0001088 16; α(M)=2.20×10 <sup>-5</sup> 4; α(N+..)=1.97×10 <sup>-5</sup> α(N)=4.54×10 <sup>-6</sup> 7; α(O)=5.67×10 <sup>-7</sup> 8; α(IPF)=1.461×10 <sup>-5</sup> 21
		1354.0 3		796.63	15/2(-)				
		1413.9 3		736.85	13/2(-)				
2154.9	1/2,3/2	2044 1	33	111.79	3/2(+)				
		2154 1	100	0.0	1/2(+)				
2166.7		1246.8 3		919.85	11/2				
2166.73	21/2	725.4 3	64 6	1441.16	19/2(-)	D+Q	-0.6 1		
		778.9 <sup>a</sup> 3	100 10	1387.92	17/2	Q			
2174.7		291.8 3		1883.04	(15/2)				
		601.2 3		1573.34	(13/2)				
2174.9		1438.0 3		736.85	13/2(-)				
2193.9		1163.6 3		1030.28	11/2(+)				
2215.74	23/2(-)	774.4 3	100	1441.16	19/2(-)	E2		0.00290 4	α(K)=0.00249 4; α(L)=0.000331 5; α(M)=6.71×10 <sup>-5</sup> 10; α(N+..)=1.552×10 <sup>-5</sup> 22 α(N)=1.382×10 <sup>-5</sup> 20; α(O)=1.698×10 <sup>-6</sup> 24
2226.6	13/2	1196.1 3		1030.28	11/2(+)				
		1490.0 3		736.85	13/2(-)	D+Q	+0.9 +2-3		
2227.0		785.8 3		1441.16	19/2(-)				
2237.83	17/2	757.3 3	100 11	1480.71	13/2(+)	(Q)			
		1441.0 3	44 6	796.63	15/2(-)	(D)			
2254.99		669.4 3		1585.53	(15/2)				
		675.2 3		1579.92	17/2(-)				
		867.0 3		1387.92	17/2				

Adopted Levels, Gammas (continued)

E <sub>i</sub> (level)	J <sub>i</sub> <sup>π</sup>	E <sub>γ</sub> <sup>†</sup>	I <sub>γ</sub>	E <sub>f</sub>	J <sub>f</sub> <sup>π</sup>	γ( <sup>125</sup> Xe) (continued)			Comments
						Mult.#	δ@	α&	
2272.26	19/2 <sup>(+)</sup>	736.0 <sup>a</sup> 3	100	1536.24	15/2 <sup>(+)</sup>	E2		0.00328 5	B(E2)(W.u.)>23 α(K)=0.00281 4; α(L)=0.000376 6; α(M)=7.64×10 <sup>-5</sup> 11; α(N+..)=1.766×10 <sup>-5</sup> 25 α(N)=1.574×10 <sup>-5</sup> 22; α(O)=1.93×10 <sup>-6</sup> 3
2301.5		1408.0 3		893.51	13/2 <sup>(-)</sup>				
2315.23		218.4 3		2096.8					
		779.0 3		1536.24	15/2 <sup>(+)</sup>				
		1005.0 3	<30	1310.15	15/2 <sup>(-)</sup>				
		1518.7 3	100 10	796.63	15/2 <sup>(-)</sup>				
		1578.4 3		736.85	13/2 <sup>(-)</sup>				
2317.7		717.6 3		1600.09	(11/2)				
2349.4		490.3 3		1859.12	17/2 <sup>(-)</sup>				
		763.9 3		1585.53	(15/2)				
2384.3		2048.9 3		335.37	5/2 <sup>(+)</sup>				
2384.78	21/2 <sup>(-)</sup>	378.2 3	7 1	2006.43	19/2 <sup>(-)</sup>				
		805.0 <sup>a</sup> 3	100 10	1579.92	17/2 <sup>(-)</sup>	(E2)		0.00265 4	α(K)=0.00227 4; α(L)=0.000300 5; α(M)=6.09×10 <sup>-5</sup> 9; α(N+..)=1.409×10 <sup>-5</sup> 20 α(N)=1.255×10 <sup>-5</sup> 18; α(O)=1.543×10 <sup>-6</sup> 22
		943.7 3	15 2	1441.16	19/2 <sup>(-)</sup>	M1+E2	-5.2	0.00186 3	α(K)=0.001605 23; α(L)=0.000207 3; α(M)=4.19×10 <sup>-5</sup> 6; α(N+..)=9.71×10 <sup>-6</sup> 14 α(N)=8.64×10 <sup>-6</sup> 13; α(O)=1.070×10 <sup>-6</sup> 15 δ: Uncertainty exceeds Δδ columns; +24-260.
2414.9		555.9 3		1859.12	17/2 <sup>(-)</sup>				
		1618.1 3		796.63	15/2 <sup>(-)</sup>				
2423.88	19/2 <sup>(+)</sup>	705.1 3	100 30	1718.61	15/2				
		887.6 3	56 11	1536.24	15/2 <sup>(+)</sup>				
		982.9 3		1441.16	19/2 <sup>(-)</sup>				
		1035.9 3	87 37	1387.92	17/2	D			
2447.5?		707.9 <sup>b</sup> 3		1739.6					
2464.7		805.1 3		1659.69	15/2				
		1076.7 3		1387.92	17/2				
2485.08	(15/2 <sup>-</sup> ,17/2,19/2 <sup>-</sup> )	658.8 3		1826.27	(15/2)				
		1044.1 3		1441.16	19/2 <sup>(-)</sup>				
		1097.1 3		1387.92	17/2				
		1688.3 3		796.63	15/2 <sup>(-)</sup>				
2508.3	19/2	848.4 3		1659.69	15/2				
		1067.4 3		1441.16	19/2 <sup>(-)</sup>				
2508.7		1120.8 3		1387.92	17/2				
2524.4	1/2,3/2	2414 1	38	111.79	3/2 <sup>(+)</sup>				

## Adopted Levels, Gammas (continued)

$\gamma(^{125}\text{Xe})$ (continued)									
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma$ †	$I_\gamma$	$E_f$	$J_f^\pi$	Mult. #	$\delta^@$	$\alpha^\&$	Comments
2524.4	1/2,3/2	2523 1	100	0.0	1/2(+)				
2543.9	1/2,3/2	2431 1	100	111.79	3/2(+)				
		2545 1	40	0.0	1/2(+)				
2550.79	19/2	625.5 3	15 6	1925.34	17/2(+)				
		832.3 3	100 30	1718.61	15/2	E2		0.00245 4	$\alpha(\text{K})=0.00210$ 3; $\alpha(\text{L})=0.000276$ 4; $\alpha(\text{M})=5.61\times 10^{-5}$ 8; $\alpha(\text{N}+..)=1.298\times 10^{-5}$ 19 $\alpha(\text{N})=1.155\times 10^{-5}$ 17; $\alpha(\text{O})=1.424\times 10^{-6}$ 20
		1163.0 3	68 29	1387.92	17/2	D			
2572.1		1130.9 3		1441.16	19/2(-)				
2604.3		1807.7 3		796.63	15/2(-)				
2616.7	(15/2,17/2)	898.1 3	100	1718.61	15/2				
2652.73	19/2	646.5 3		2006.43	19/2(-)				
		793.7 3	100 30	1859.12	17/2(-)				
		1264.7 3	72 30	1387.92	17/2	M1+E2		0.00114 14	$\alpha(\text{K})=0.00097$ 12; $\alpha(\text{L})=0.000120$ 14; $\alpha(\text{M})=2.4\times 10^{-5}$ 3; $\alpha(\text{N}+..)=2.10\times 10^{-5}$ 4 $\alpha(\text{N})=5.0\times 10^{-6}$ 6; $\alpha(\text{O})=6.3\times 10^{-7}$ 8; $\alpha(\text{IPF})=1.53\times 10^{-5}$ 6
2664.3		688.5 3		1975.78	(15/2)				
2671.3		356.0 3	73 8	2315.23					
		952.8 3	100 12	1718.61	15/2				
2704.19	21/2(+)	778.9 <sup>a</sup> 3	100	1925.34	17/2(+)	E2		0.00286 4	$\alpha(\text{K})=0.00246$ 4; $\alpha(\text{L})=0.000326$ 5; $\alpha(\text{M})=6.61\times 10^{-5}$ 10; $\alpha(\text{N}+..)=1.530\times 10^{-5}$ 22 $\alpha(\text{N})=1.362\times 10^{-5}$ 20; $\alpha(\text{O})=1.674\times 10^{-6}$ 24
2811.46	(23/2)	596.1 3	53 22	2215.74	23/2(-)	(D+Q)	-0.5 4		
		805.0 <sup>a</sup> 3	100 30	2006.43	19/2(-)				
2819.27	(17/2)	202.6 <sup>a</sup> 3	12 4	2616.7	(15/2,17/2)				
		268.5 3	15 5	2550.79	19/2				
		504.2 3	12 4	2315.23					
		813.0 3	13 4	2006.43	19/2(-)				
		893.7 3	8 3	1925.34	17/2(+)				
		1378.0 3	100 20	1441.16	19/2(-)				
2852.7		848.1 3		2004.61	(15/2,17/2)				
2890.52	(21/2)	466.5 3	21 8	2423.88	19/2(+)				
		618.3 3	100 20	2272.26	19/2(+)				
		675.1 3	24 9	2215.74	23/2(-)				
		723.8 3	63 18	2166.73	21/2				
2926.6		1485.2 3	100	1441.16	19/2(-)				
2952.59	(19/2)	528.8 3	76 32	2423.88	19/2(+)				
		680.5 3	67 28	2272.26	19/2(+)				
		785.7 3	100 30	2166.73	21/2				

Adopted Levels, Gammas (continued)

γ(<sup>125</sup>Xe) (continued)

<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult. #</u>	<u>α&amp;</u>	<u>Comments</u>
2970.35	(21/2)	732.5 3	100 30	2237.83	17/2			
		1529.6 <sup>b</sup> 3	<30	1441.16	19/2 <sup>(-)</sup>			
3000.1		784.2 <sup>a</sup> 3	100	2215.74	23/2 <sup>(-)</sup>			
3055.2	25/2	839.3 3	82 34	2215.74	23/2 <sup>(-)</sup>	D+Q		
		888.5 3	100 30	2166.73	21/2	E2	0.00211 3	α(K)=0.00181 3; α(L)=0.000236 4; α(M)=4.78×10 <sup>-5</sup> 7; α(N+..)=1.108×10 <sup>-5</sup> 16 α(N)=9.86×10 <sup>-6</sup> 14; α(O)=1.218×10 <sup>-6</sup> 17
3075.14	(21/2)	105.2 3	16 7	2970.35	(21/2)			
		148.3 <sup>a</sup> 3	9 4	2926.6				
		255.9 3	43 15	2819.27	(17/2)			
		371.0 3	76 27	2704.19	21/2 <sup>(+)</sup>			
		422.6 3	14 6	2652.73	19/2			
		524.4 3	85 31	2550.79	19/2			
		690.5 3	30 13	2384.78	21/2 <sup>(-)</sup>			
		802.9 <sup>a</sup> 3	68 24	2272.26	19/2 <sup>(+)</sup>			
		859.0 <sup>a</sup> 3	43 15	2215.74	23/2 <sup>(-)</sup>			
		908.5 3	100 30	2166.73	21/2			
		1633.5 3	<9	1441.16	19/2 <sup>(-)</sup>			
3099.9	27/2 <sup>(-)</sup>	884.2 3	100	2215.74	23/2 <sup>(-)</sup>	E2	0.00213 3	α(K)=0.00183 3; α(L)=0.000239 4; α(M)=4.84×10 <sup>-5</sup> 7; α(N+..)=1.121×10 <sup>-5</sup> 16 α(N)=9.98×10 <sup>-6</sup> 14; α(O)=1.232×10 <sup>-6</sup> 18
3131.3	(23/2)	859.0 <sup>a</sup> 3	100	2272.26	19/2 <sup>(+)</sup>			
3151.15	(21/2)	331.9 3	91 23	2819.27	(17/2)			
		878.9 3	100 30	2272.26	19/2 <sup>(+)</sup>			
3210.8	(21/2)	660.3 3		2550.79	19/2			
		938.3 <sup>a</sup> 3		2272.26	19/2 <sup>(+)</sup>			
3272.2	(25/2)	887.3 3	100	2384.78	21/2 <sup>(-)</sup>			
3277.91	(23/2)	126.8 3	17 6	3151.15	(21/2)			
		146.7 3	8 3	3131.3	(23/2)			
		202.6 <sup>a</sup> 3	100 20	3075.14	(21/2)			
		277.6 <sup>a</sup> 3	9 4	3000.1				
		325.7 3	8 3	2952.59	(19/2)			
		387.6 3	19 8	2890.52	(21/2)			
		458.6 3	84 30	2819.27	(17/2)			
		466.6 3	34 14	2811.46	(23/2)			
		573.4 3	82 30	2704.19	21/2 <sup>(+)</sup>			
		1062.1 3	56 20	2215.74	23/2 <sup>(-)</sup>			
3322.88	(23/2)	370.0 3	81 34	2952.59	(19/2)			
		619.0 3	100 30	2704.19	21/2 <sup>(+)</sup>			
		1107.0 3	82 34	2215.74	23/2 <sup>(-)</sup>			

**Adopted Levels, Gammas (continued)**

γ(<sup>125</sup>Xe) (continued)

<u>E<sub>i</sub>(level)</u>	<u>J<sup>π</sup><sub>i</sub></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub></u>	<u>E<sub>f</sub></u>	<u>J<sup>π</sup><sub>f</sub></u>	<u>Mult.#</u>	<u>α&amp;</u>	<u>Comments</u>
3379.5		248.2 3	31 11	3131.3	(23/2)			
		304.4 3	100 20	3075.14	(21/2)			
3486.4	(25/2)	163.4 3	2 1	3322.88	(23/2)			
		208.3 3	100 20	3277.91	(23/2)			
3487.2	(25/2)	783.0 3	100	2704.19	21/2 <sup>(+)</sup>			
3519.4	(25/2)	464.2 3	11 4	3055.2	25/2			
		628.9 3	100 20	2890.52	(21/2)			
3523.8		1308.1 3	100	2215.74	23/2 <sup>(-)</sup>			
3562.7		1347.0 3	100	2215.74	23/2 <sup>(-)</sup>			
3619.0	(27/2)	519.2 <sup>a</sup> 3	100 30	3099.9	27/2 <sup>(-)</sup>	(D+Q)		
		807.7 3	56 24	2811.46	(23/2)			
3650.0		697.4 3	100	2952.59	(19/2)			
3752.8	(27/2)	941.3 3	100	2811.46	(23/2)			
3898.7		519.2 <sup>a</sup> 3	100	3379.5				
3959.8	(27/2)	473.3 3	100	3486.4	(25/2)			
4052.8	29/2	953.1 3	99 42	3099.9	27/2 <sup>(-)</sup>			
		997.4 3	100 30	3055.2	25/2			
4064.9	(27/2)	742.0 3	100	3322.88	(23/2)			
4070.8	(31/2 <sup>-</sup> )	970.9 3	100	3099.9	27/2 <sup>(-)</sup>	(E2)	0.001729 25	α(K)=0.001490 21; α(L)=0.000192 3; α(M)=3.88×10 <sup>-5</sup> 6; α(N+..)=9.00×10 <sup>-6</sup> 13 α(N)=8.01×10 <sup>-6</sup> 12; α(O)=9.92×10 <sup>-7</sup> 14
4134.7		648.3 3	81 34	3486.4	(25/2)			
		857.0 3	100 30	3277.91	(23/2)			
4148.3	(27/2)	1017		3131.3	(23/2)			
4211.3	(29/2)	938.3 <sup>a</sup>		3272.2	(25/2)			
		1111.5 <sup>b</sup> 3		3099.9	27/2 <sup>(-)</sup>			
4268.2	(29/2)	748.8 3	100	3519.4	(25/2)			
4292.7	(29/2)	158.1 3	9 3	4134.7				
		333.1 3	23 8	3959.8	(27/2)			
		806.2 3	100 30	3486.4	(25/2)			
4383.2	(31/2)	312.3 3	100 30	4070.8	(31/2 <sup>-</sup> )			
		764.6 3	<5	3619.0	(27/2)			
		1283.1 3	<5	3099.9	27/2 <sup>(-)</sup>	(Q)		Mult.: From (D+Q) by R(DCO) in <sup>116</sup> Cd( <sup>13</sup> C,4nγ) and relevant levels.
4573.5	(31/2)	954.5 3	100	3619.0	(27/2)			
4762.9	(31/2)	470.5 3	100 20	4292.7	(29/2)			
		802.9 <sup>a</sup> 3	13 5	3959.8	(27/2)			
4912.1	(31/2)	847.2 3	100	4064.9	(27/2)			
5066.8	(35/2)	996.6 3	100	4070.8	(31/2 <sup>-</sup> )			
5122.1	(33/2)	1069.4 3	100	4052.8	29/2			
5137.9	(33/2)	869.7 <sup>a</sup> 3	100	4268.2	(29/2)			
5162.5	(33/2)	399.6 3	24 10	4762.9	(31/2)			



Adopted Levels, Gammas (continued)

γ(<sup>125</sup>Xe) (continued)

<u>E<sub>i</sub>(level)</u>	<u>J<sup>π</sup><sub>i</sub></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub></u>	<u>E<sub>f</sub></u>	<u>J<sup>π</sup><sub>f</sub></u>	<u>Comments</u>
5162.5	(33/2)	869.7 <sup>a</sup> 3	100 30	4292.7	(29/2)	
5200.2		1147.4 3	100	4052.8	29/2	
5200.8	(33/2)	989.5		4211.3	(29/2)	
5319.8	(35/2)	1249		4070.8	(31/2 <sup>-</sup> )	
5320.2	(35/2)	936.9 <sup>b</sup> 3	<50	4383.2	(31/2)	
		1248.9 3	100 50	4070.8	(31/2 <sup>-</sup> )	
5826.8	(35/2)	914.7 3	100	4912.1	(31/2)	
5976.4	(37/2)	814		5162.5	(33/2)	
5995.5	(35/2)	833		5162.5	(33/2)	
		874 <sup>b</sup>		5122.1	(33/2)	
		1232		4762.9	(31/2)	
6096.8	(39/2)	1030.0 3	100	5066.8	(35/2)	
6113.5	(37/2)	975.6 3	100	5137.9	(33/2)	
6251.6	(37/2)	1089.1 3	100	5162.5	(33/2)	
6344.3?	(39/2)	1024 <sup>b</sup>		5320.2	(35/2)	
6345.4	(39/2)	1024.5 3	100	5320.2	(35/2)	
		1279.2 3		5066.8	(35/2)	E <sub>γ</sub> : From <sup>116</sup> Cd( <sup>13</sup> C,4nγ).
6752.9	(39/2)	501.5 3	100	6251.6	(37/2)	
6814.8	(39/2)	988 1		5826.8	(35/2)	
7098.3	(41/2)	1122		5976.4	(37/2)	
7174.8	(43/2)	1078		6096.8	(39/2)	
7177.5	(41/2)	1064 1		6113.5	(37/2)	
7215.7	(43/2)	1118.9 3	100	6096.8	(39/2)	
7287.0	(41/2)	534.3 3		6752.9	(39/2)	
		1035.2 3		6251.6	(37/2)	
7334.2	(43/2)	988.6		6345.4	(39/2)	E <sub>γ</sub> : From <sup>116</sup> Cd( <sup>13</sup> C,4nγ).
		1238 1		6096.8	(39/2)	
7768.9	(43/2)	482 1		7287.0	(41/2)	
		1016 1		6752.9	(39/2)	
7892.8	(43/2)	1078		6814.8	(39/2)	
8242.8	(47/2)	909		7334.2	(43/2)	
		1027		7215.7	(43/2)	
8265.3	(45/2)	978.3 3		7287.0	(41/2)	
8315.2	(45/2)	1028 <sup>b</sup>		7287.0	(41/2)	
		1217		7098.3	(41/2)	
8331.5	(45/2)	1154 1		7177.5	(41/2)	
8351.8	(47/2)	1177		7174.8	(43/2)	
8398.1?	(47/2)	1182 <sup>b</sup>		7215.7	(43/2)	
8406.8	(47/2)	1232		7174.8	(43/2)	
8453.2?		1237.5 <sup>b</sup> 3		7215.7	(43/2)	

Adopted Levels, Gammas (continued)

γ(<sup>125</sup>Xe) (continued)

<u>E<sub>i</sub>(level)</u>	<u>J<sup>π</sup><sub>i</sub></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>E<sub>f</sub></u>	<u>J<sup>π</sup><sub>f</sub></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sup>π</sup><sub>i</sub></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>E<sub>f</sub></u>	<u>J<sup>π</sup><sub>f</sub></u>
8496.7		1281 <i>l</i>	7215.7	(43/2)	22472	(85/2)	1561	20911	(81/2)
8704.7	(47/2)	439 <i>l</i>	8265.3	(45/2)			1697	20775	(81/2)
		936 <i>l</i>	7768.9	(43/2)	22508	(85/2)	1733	20775	(81/2)
9289.2	(49/2)	974	8315.2	(45/2)	24130	(89/2)	1658	22472	(85/2)
		1024	8265.3	(45/2)	24252	(87/2)	1913	22339	(83/2)
9327.0	(49/2)	621	8704.7	(47/2)	24341	(89/2)	1833	22508	(85/2)
		1062	8265.3	(45/2)	25880	(93/2)	1750	24130	(89/2)
9401.4	(51/2)	1003 <sup><i>b</i></sup>	8398.1?	(47/2)	26172	(93/2)	1831	24341	(89/2)
		1159	8242.8	(47/2)	26275	(91/2)	2023	24252	(87/2)
9517.8	(51/2)	1111	8406.8	(47/2)	27741	(97/2)	1861	25880	(93/2)
		1166	8351.8	(47/2)	28098	(97/2)	1926	26172	(93/2)
9568.5	(49/2)	1237	8331.5	(45/2)	28413	(95/2)	2138	26275	(91/2)
9708.9	(51/2)	381	9327.0	(49/2)	29720	(101/2)	1979	27741	(97/2)
		1005	8704.7	(47/2)	30117	(101/2)	2019	28098	(97/2)
10368.2	(53/2)	1079	9289.2	(49/2)	30702	(99/2)	2289	28413	(95/2)
10473.4	(55/2)	1072	9401.4	(51/2)	31826	(105/2)	2106	29720	(101/2)
10583.4	(55/2)	1182	9401.4	(51/2)	32226	(105/2)	2109	30117	(101/2)
10749.8	(55/2)	1232	9517.8	(51/2)	32856	(103/2)	2154	30702	(99/2)
10847.6	(53/2)	1279	9568.5	(49/2)	34058	(109/2)	2232	31826	(105/2)
11514.2	(57/2)	1146	10368.2	(53/2)	34408	(109/2)	2182	32226	(105/2)
11870.4	(59/2)	1287	10583.4	(55/2)	35201	(107/2)	2345 <sup><i>b</i></sup>	32856	(103/2)
12080.8	(59/2)	1331	10749.8	(55/2)	36413	(113/2)	2355	34058	(109/2)
12770.2	(61/2)	1256	11514.2	(57/2)	36668	(113/2)	2260 <sup><i>b</i></sup>	34408	(109/2)
13162.5	(63/2)	1292	11870.4	(59/2)	37618	(111/2)	2417 <sup><i>b</i></sup>	35201	(107/2)
13520.8	(63/2)	1440	12080.8	(59/2)	1077.0+x	(51/2 <sup>-</sup> )	1077	x	(47/2 <sup>-</sup> )
14144.3	(65/2)	1374	12770.2	(61/2)	2231.0+x	(55/2 <sup>-</sup> )	1154	1077.0+x	(51/2 <sup>-</sup> )
15078	(67/2)	1557	13520.8	(63/2)	3455.0+x	(59/2 <sup>-</sup> )	1224	2231.0+x	(55/2 <sup>-</sup> )
15172	(65/2)	1251	13921	(61/2)	4777.0+x	(63/2 <sup>-</sup> )	1322	3455.0+x	(59/2 <sup>-</sup> )
15638.3	(69/2)	1494	14144.3	(65/2)	6189.0+x	(67/2 <sup>-</sup> )	1412	4777.0+x	(63/2 <sup>-</sup> )
16492	(69/2)	1320	15172	(65/2)	7696.0+x	(71/2 <sup>-</sup> )	1507	6189.0+x	(67/2 <sup>-</sup> )
16758	(71/2)	1680	15078	(67/2)	9307+x	(75/2 <sup>-</sup> )	1611	7696.0+x	(71/2 <sup>-</sup> )
17248	(73/2)	1610	15638.3	(69/2)	11008+x	(79/2 <sup>-</sup> )	1701	9307+x	(75/2 <sup>-</sup> )
17888	(73/2)	1396	16492	(69/2)	11036+x	(79/2 <sup>-</sup> )	1729	9307+x	(75/2 <sup>-</sup> )
18557	(75/2)	1799	16758	(71/2)	12709+x	(83/2 <sup>-</sup> )	1701	11008+x	(79/2 <sup>-</sup> )
18967	(77/2)	1719	17248	(73/2)	12860+x	(83/2 <sup>-</sup> )	1824	11036+x	(79/2 <sup>-</sup> )
19356	(77/2)	1468	17888	(73/2)			1852 <sup><i>b</i></sup>	11008+x	(79/2 <sup>-</sup> )
		2108 <sup><i>b</i></sup>	17248	(73/2)	14499+x	(87/2 <sup>-</sup> )	1790	12709+x	(83/2 <sup>-</sup> )
20457	(79/2)	1900	18557	(75/2)	14747+x	(87/2 <sup>-</sup> )	1887	12860+x	(83/2 <sup>-</sup> )
20775	(81/2)	1808	18967	(77/2)	16382+x	(91/2 <sup>-</sup> )	1883	14499+x	(87/2 <sup>-</sup> )
20911	(81/2)	1555	19356	(77/2)	16696+x	(91/2 <sup>-</sup> )	1949	14747+x	(87/2 <sup>-</sup> )
		1944	18967	(77/2)	18355+x	(95/2 <sup>-</sup> )	1973	16382+x	(91/2 <sup>-</sup> )
22339	(83/2)	1882	20457	(79/2)	18730+x	(95/2 <sup>-</sup> )	2034	16696+x	(91/2 <sup>-</sup> )

## Adopted Levels, Gammas (continued)

 $\gamma(^{125}\text{Xe})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$E_f$	$J_f^\pi$
11008+x	(79/2 <sup>-</sup> )	1701	9307+x	(75/2 <sup>-</sup> )					
11036+x	(79/2 <sup>-</sup> )	1729	9307+x	(75/2 <sup>-</sup> )					
12709+x	(83/2 <sup>-</sup> )	1701	11008+x	(79/2 <sup>-</sup> )					
12860+x	(83/2 <sup>-</sup> )	1824	11036+x	(79/2 <sup>-</sup> )					
		1852 <sup>b</sup>	11008+x	(79/2 <sup>-</sup> )					
14499+x	(87/2 <sup>-</sup> )	1790	12709+x	(83/2 <sup>-</sup> )					
14747+x	(87/2 <sup>-</sup> )	1887	12860+x	(83/2 <sup>-</sup> )					
16382+x	(91/2 <sup>-</sup> )	1883	14499+x	(87/2 <sup>-</sup> )					
16696+x	(91/2 <sup>-</sup> )	1949	14747+x	(87/2 <sup>-</sup> )					
18355+x	(95/2 <sup>-</sup> )	1973	16382+x	(91/2 <sup>-</sup> )					
18730+x	(95/2 <sup>-</sup> )	2034	16696+x	(91/2 <sup>-</sup> )					
20426+x	(99/2 <sup>-</sup> )	2071	18355+x	(95/2 <sup>-</sup> )					
22594+x	(103/2 <sup>-</sup> )	2168	20426+x	(99/2 <sup>-</sup> )					
24850+x	(107/2 <sup>-</sup> )	2256	22594+x	(103/2 <sup>-</sup> )					
27174+x	(111/2 <sup>-</sup> )	2324	24850+x	(107/2 <sup>-</sup> )					
1091.0+y	(53/2 <sup>-</sup> )	1091	y	(49/2 <sup>-</sup> )					
2339.0+y	(57/2 <sup>-</sup> )	1248	1091.0+y	(53/2 <sup>-</sup> )					
3596.0+y	(61/2 <sup>-</sup> )	1257	2339.0+y	(57/2 <sup>-</sup> )					
4896.0+y	(65/2 <sup>-</sup> )	1300	3596.0+y	(61/2 <sup>-</sup> )					
6211.0+y	(69/2 <sup>-</sup> )	1315	4896.0+y	(65/2 <sup>-</sup> )					
7592.0+y	(73/2 <sup>-</sup> )	1381	6211.0+y	(69/2 <sup>-</sup> )					
9080+y	(77/2 <sup>-</sup> )	1488	7592.0+y	(73/2 <sup>-</sup> )					
12343+y	(85/2 <sup>-</sup> )	1659	10684+y	(81/2 <sup>-</sup> )					
14056+y	(89/2 <sup>-</sup> )	1713	12343+y	(85/2 <sup>-</sup> )					
15809+y	(93/2 <sup>-</sup> )	1753	14056+y	(89/2 <sup>-</sup> )					
17671+y	(97/2 <sup>-</sup> )	1862	15809+y	(93/2 <sup>-</sup> )					
19648+y	(101/2 <sup>-</sup> )	1977	17671+y	(97/2 <sup>-</sup> )					
21752+y	(105/2 <sup>-</sup> )	2104	19648+y	(101/2 <sup>-</sup> )					
23982+y	(109/2 <sup>-</sup> )	2230	21752+y	(105/2 <sup>-</sup> )					
26337+y	(113/2 <sup>-</sup> )	2355	23982+y	(109/2 <sup>-</sup> )					
1116.0+z	(57/2 <sup>-</sup> )	1116	z	(53/2 <sup>-</sup> )					
2317.0+z	(61/2 <sup>-</sup> )	1201	1116.0+z	(57/2 <sup>-</sup> )					
3618.0+z	(65/2 <sup>-</sup> )	1301	2317.0+z	(61/2 <sup>-</sup> )					
5030.0+z	(69/2 <sup>-</sup> )	1412	3618.0+z	(65/2 <sup>-</sup> )					
6554.0+z	(73/2 <sup>-</sup> )	1524	5030.0+z	(69/2 <sup>-</sup> )					
9847+z	(81/2 <sup>-</sup> )	1658 <sup>b</sup>	8189.0+z	(77/2 <sup>-</sup> )					
9919+z	(81/2 <sup>-</sup> )	1730	8189.0+z	(77/2 <sup>-</sup> )					
11601+z	(85/2 <sup>-</sup> )	1682 <sup>b</sup>	9919+z	(81/2 <sup>-</sup> )					
		1754 <sup>b</sup>	9847+z	(81/2 <sup>-</sup> )					
11732+z	(85/2 <sup>-</sup> )	1813	9919+z	(81/2 <sup>-</sup> )					
13469+z	(89/2 <sup>-</sup> )	1868	11601+z	(85/2 <sup>-</sup> )					
13652+z	(89/2 <sup>-</sup> )	1920	11732+z	(85/2 <sup>-</sup> )					
15448+z	(93/2 <sup>-</sup> )	1979	13469+z	(89/2 <sup>-</sup> )					
15686+z	(93/2 <sup>-</sup> )	2034	13652+z	(89/2 <sup>-</sup> )					
17535+z	(97/2 <sup>-</sup> )	2087	15448+z	(93/2 <sup>-</sup> )					

**Adopted Levels, Gammas (continued)**

$\gamma(^{125}\text{Xe})$  (continued)

<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>γ</sub><sup>†</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>
17844+z	(97/2 <sup>-</sup> )	2158	15686+z	(93/2 <sup>-</sup> )					
20108+z	(101/2 <sup>-</sup> )	2264	17844+z	(97/2 <sup>-</sup> )					
1223.0+u	(59/2 <sup>+</sup> )	1223	u	(55/2 <sup>+</sup> )					
2548.0+u	(63/2 <sup>+</sup> )	1325	1223.0+u	(59/2 <sup>+</sup> )					
3940.0+u	(67/2 <sup>+</sup> )	1392	2548.0+u	(63/2 <sup>+</sup> )					
5427.0+u	(71/2 <sup>+</sup> )	1487	3940.0+u	(67/2 <sup>+</sup> )					
8711.1+u	(79/2 <sup>+</sup> )	1696	7015.0+u	(75/2 <sup>+</sup> )					
10517+u	(83/2 <sup>+</sup> )	1806	8711.1+u	(79/2 <sup>+</sup> )					
12437+u	(87/2 <sup>+</sup> )	1920	10517+u	(83/2 <sup>+</sup> )					
14467+u	(91/2 <sup>+</sup> )	2030	12437+u	(87/2 <sup>+</sup> )					
16610+u	(95/2 <sup>+</sup> )	2143	14467+u	(91/2 <sup>+</sup> )					
18861+u	(99/2 <sup>+</sup> )	2251	16610+u	(95/2 <sup>+</sup> )					
21213+u	(103/2 <sup>+</sup> )	2352	18861+u	(99/2 <sup>+</sup> )					
23630+u	(107/2 <sup>+</sup> )	2417	21213+u	(103/2 <sup>+</sup> )					

**Adopted Levels, Gammas (continued)**

$\gamma(^{125}\text{Xe})$  (continued)

† From  $^{116}\text{Cd}(^{13}\text{C},4\text{nX})$  and  $^{122}\text{Te}(\alpha,\text{n}\gamma)$ ,  $^{123}\text{Te}(\alpha,2\text{n}\gamma)$  data set, unless otherwise noted.

‡ Weak  $\gamma$ -ray in  $^{127}\text{Cs}$   $\varepsilon$  decay.

# From  $^{122}\text{Te}(\alpha,\text{n}\gamma)$ ,  $^{123}\text{Te}(\alpha,2\text{n}\gamma)$  and  $^{116}\text{Cd}(^{13}\text{C},4\text{n}\gamma)$  data sets, unless otherwise noted.

@ From  $^{122}\text{Te}(\alpha,\text{n}\gamma)$ ,  $^{123}\text{Te}(\alpha,2\text{n}\gamma)$  data set, unless otherwise noted.

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

<sup>a</sup> Multiply placed.

<sup>b</sup> Placement of transition in the level scheme is uncertain.

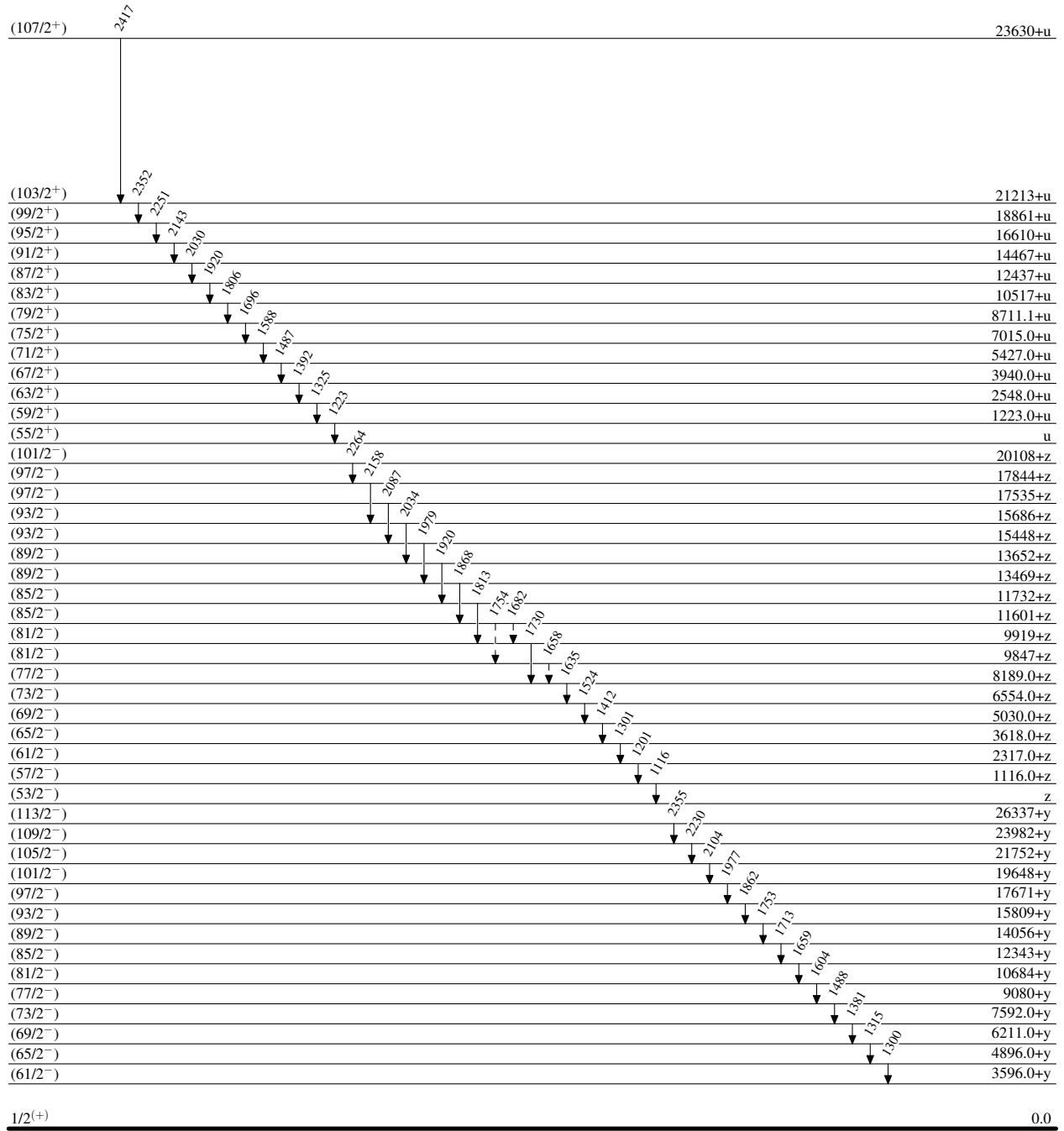
**Adopted Levels, Gammas**

Legend

Level Scheme

Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain)

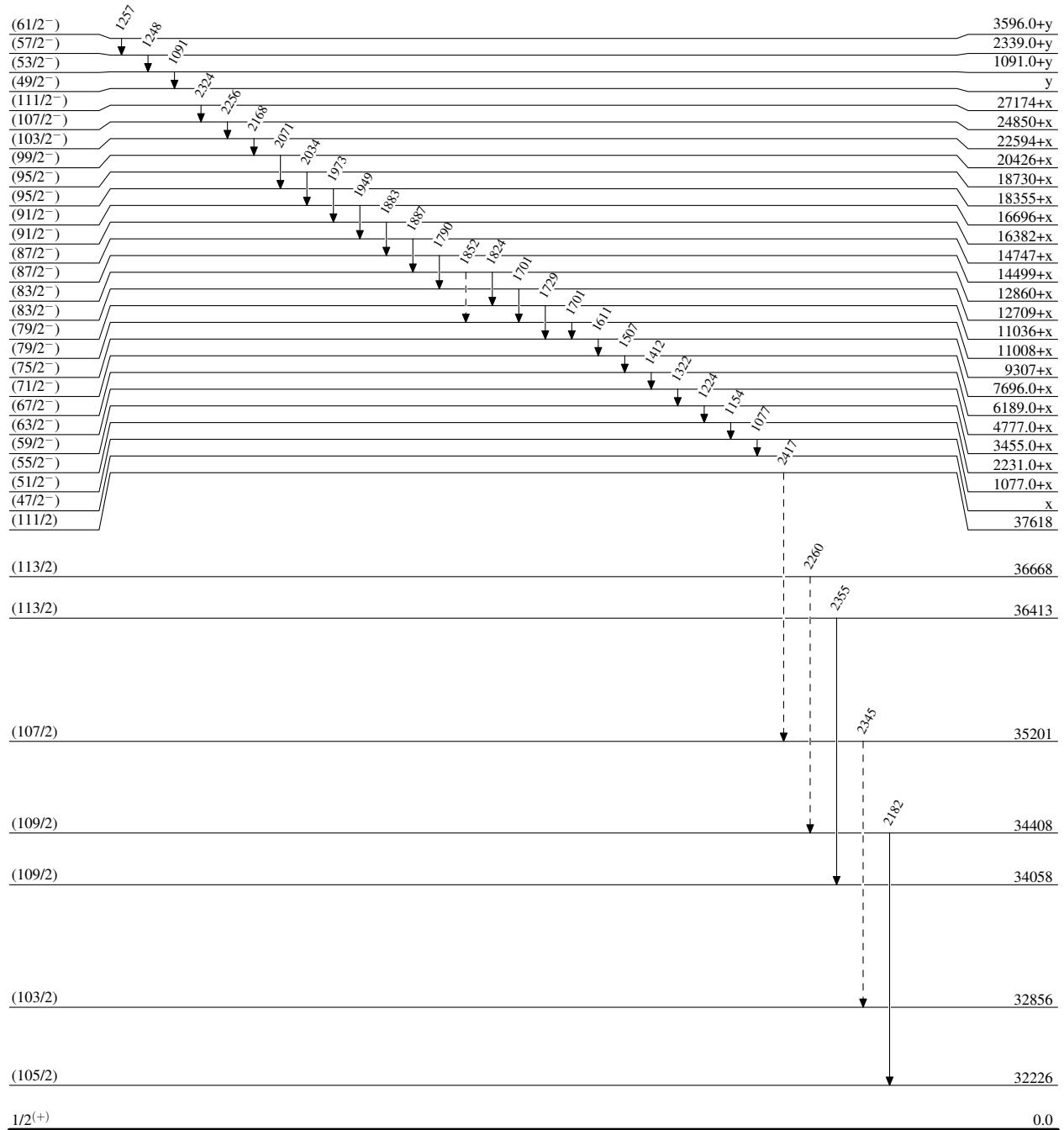


**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**

Intensities: Relative photon branching from each level

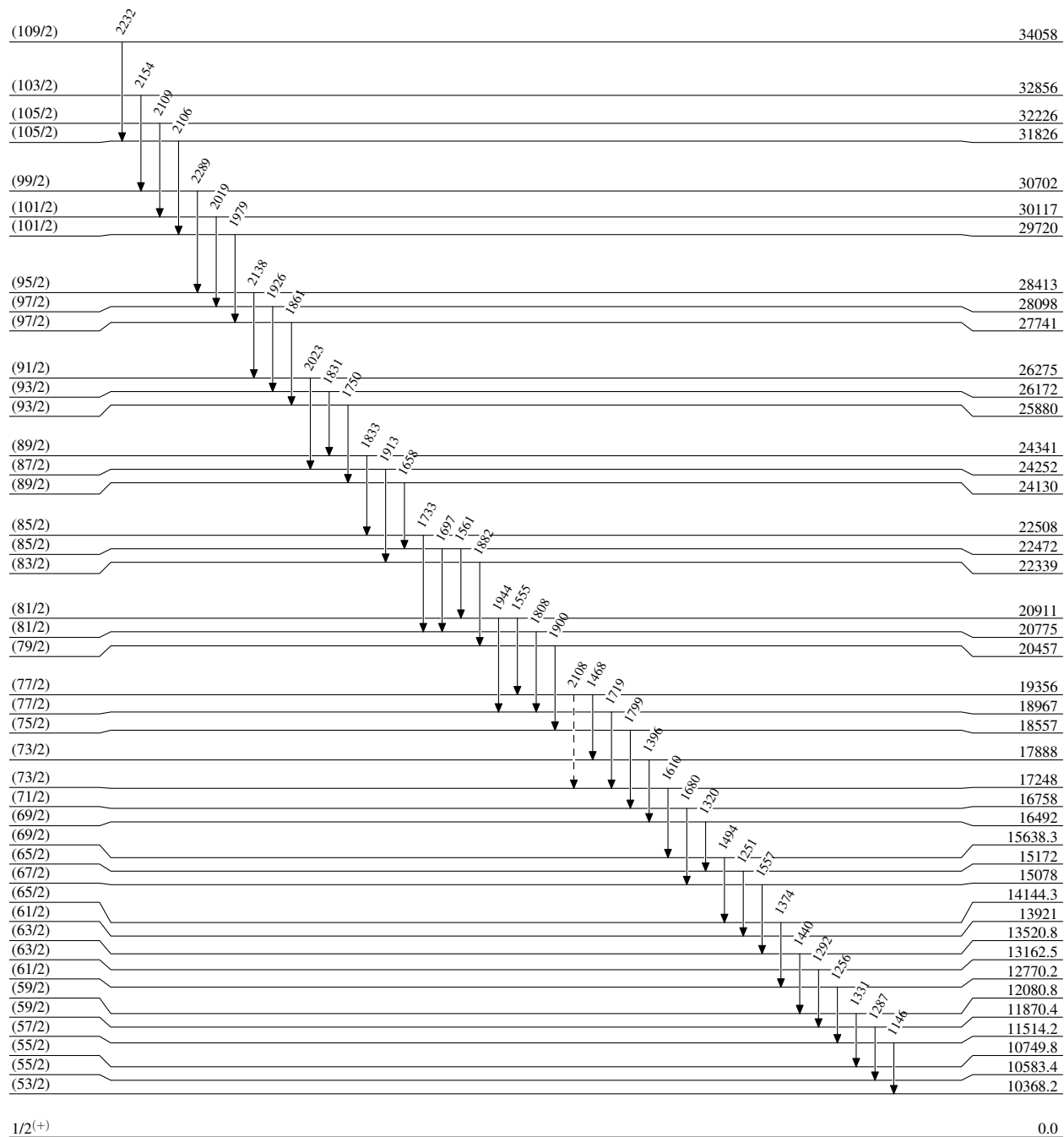
-----▶  $\gamma$  Decay (Uncertain)

**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**

Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain) $^{125}_{54}\text{Xe}_{71}$

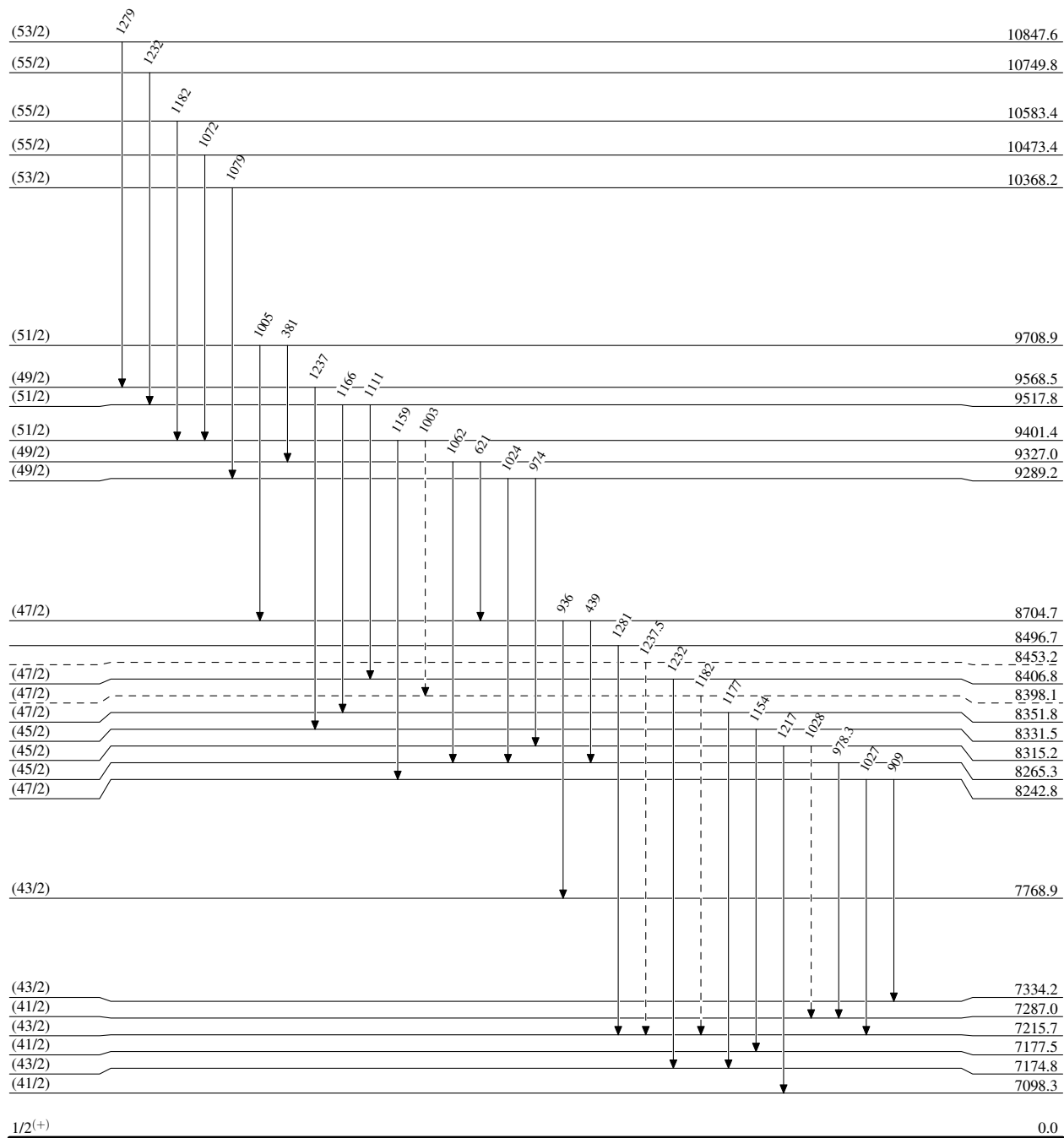


**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**

Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain)

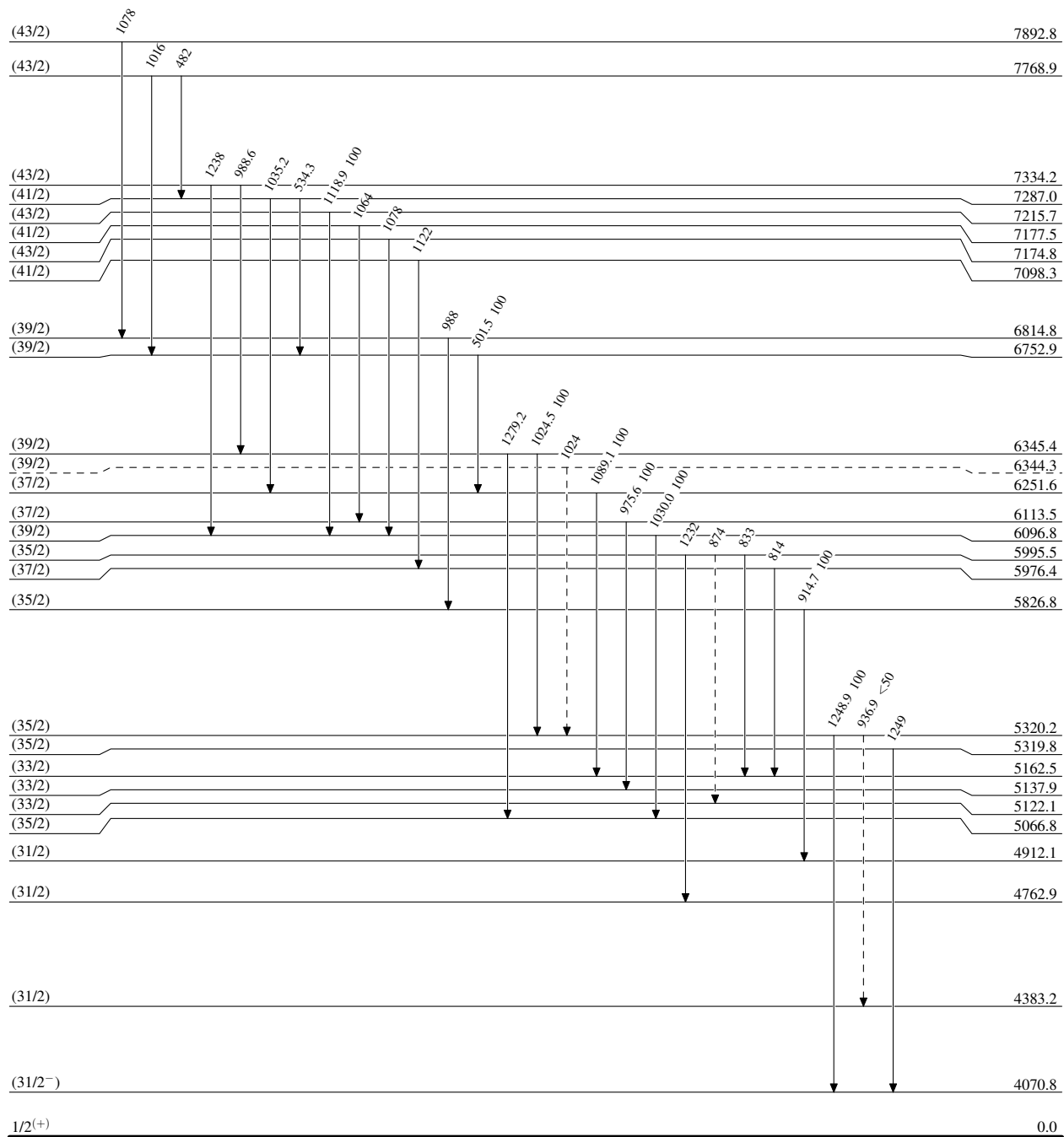
16.9 h 2

**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**

Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain)

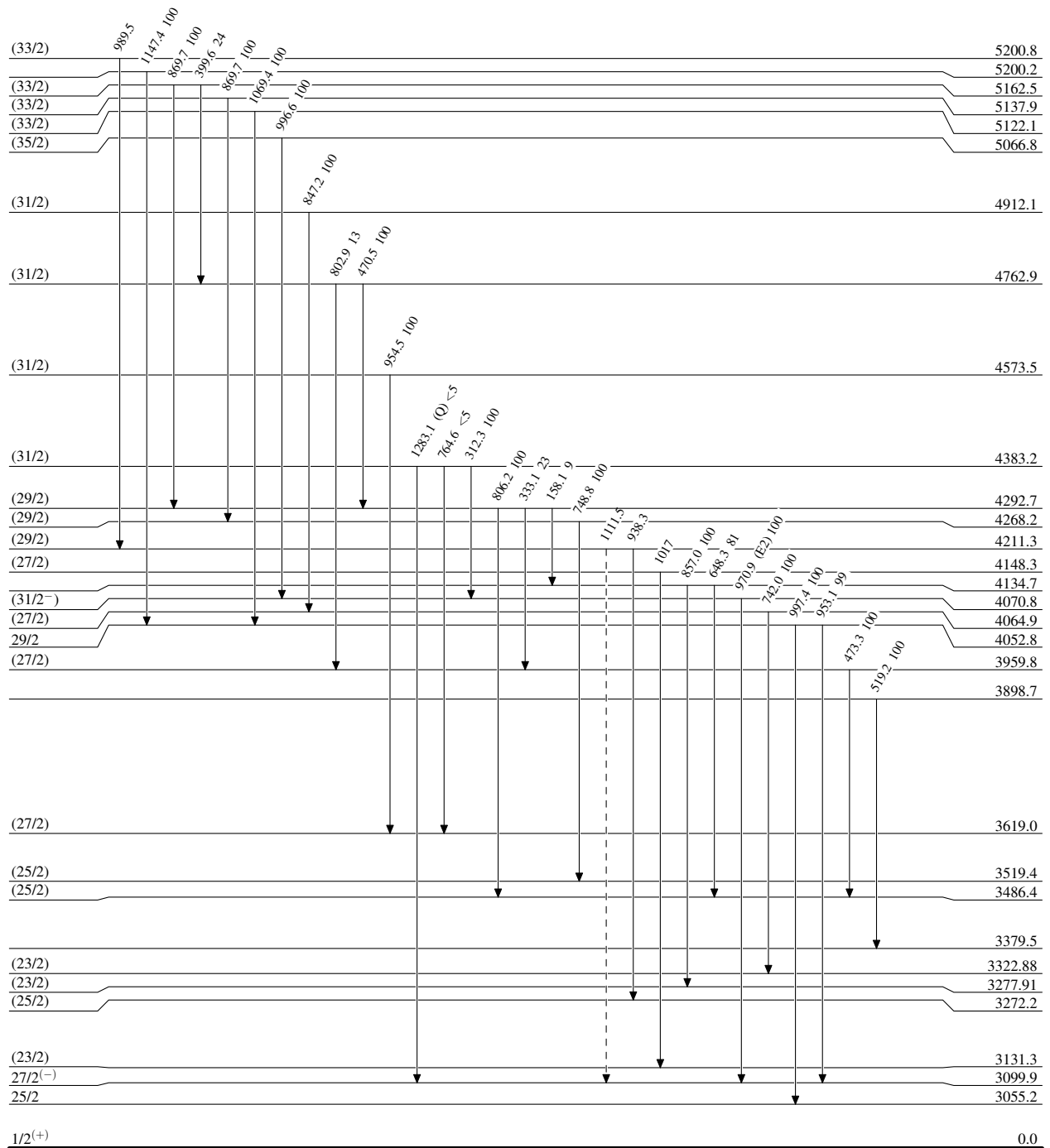
16.9 h 2

**Adopted Levels, Gammas**

Legend

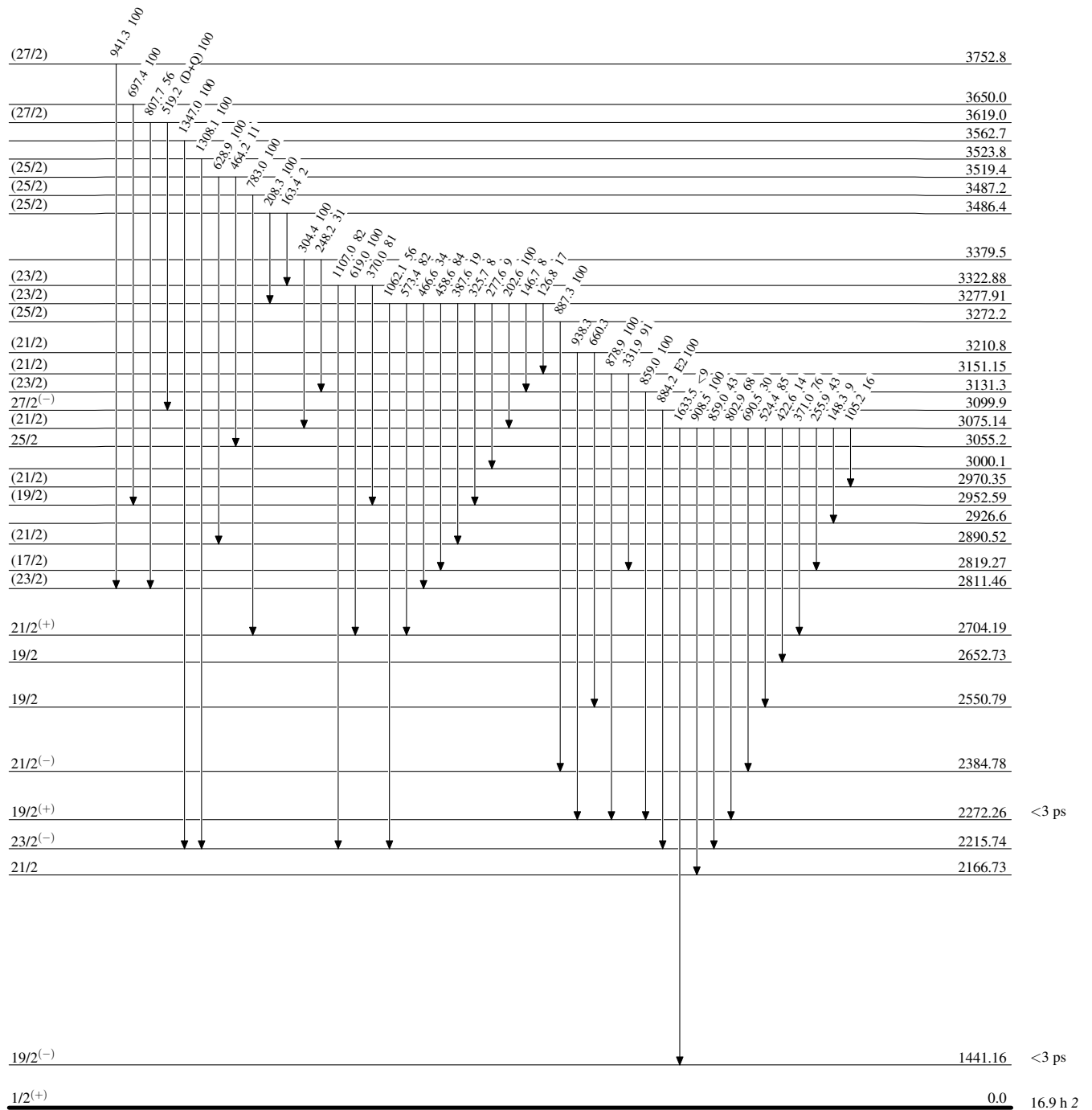
**Level Scheme (continued)**

Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain)

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

Intensities: Relative photon branching from each level

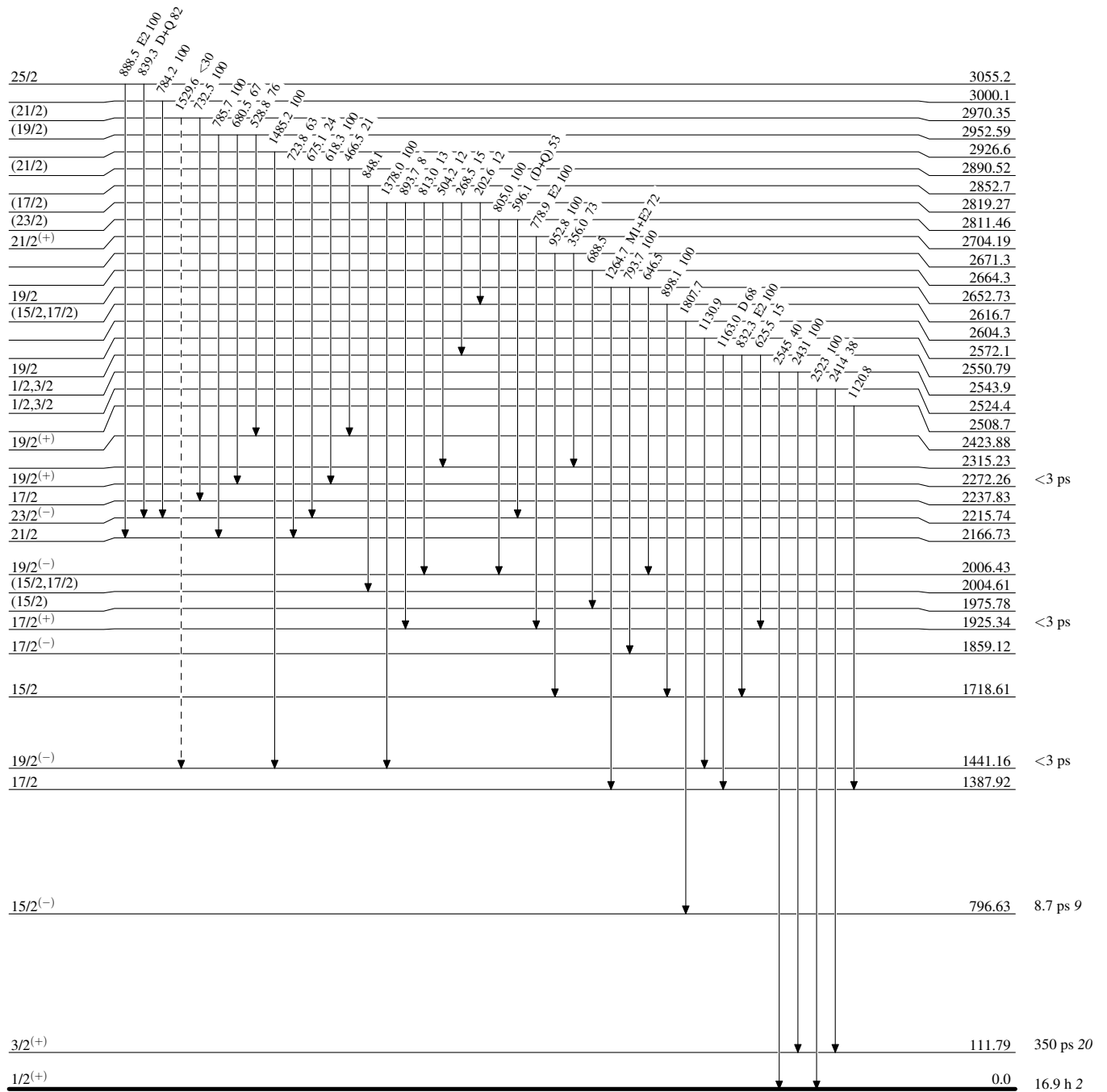


**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**

Intensities: Relative photon branching from each level

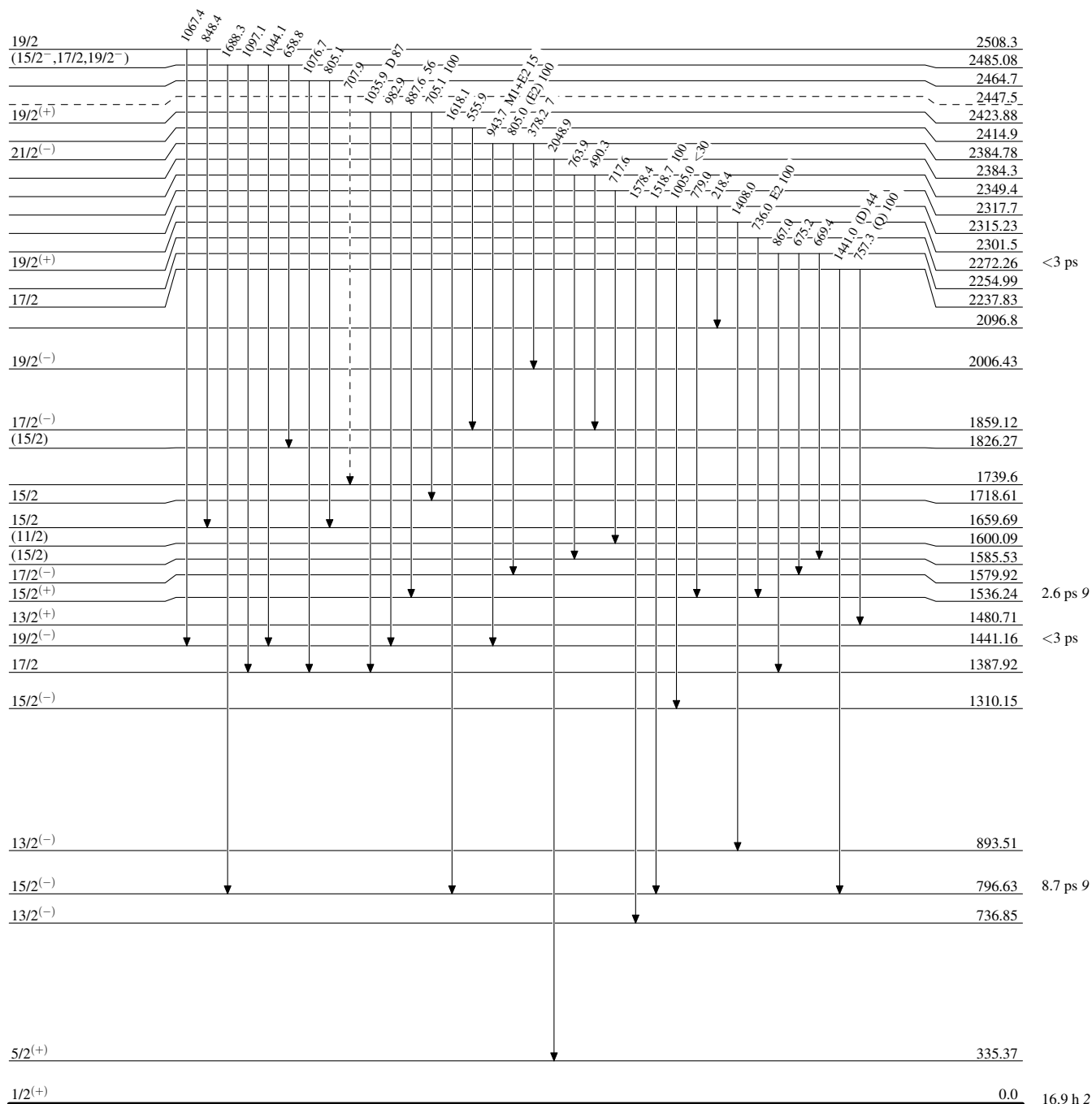
-----▶  $\gamma$  Decay (Uncertain) $^{125}_{54}\text{Xe}_{71}$

**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**

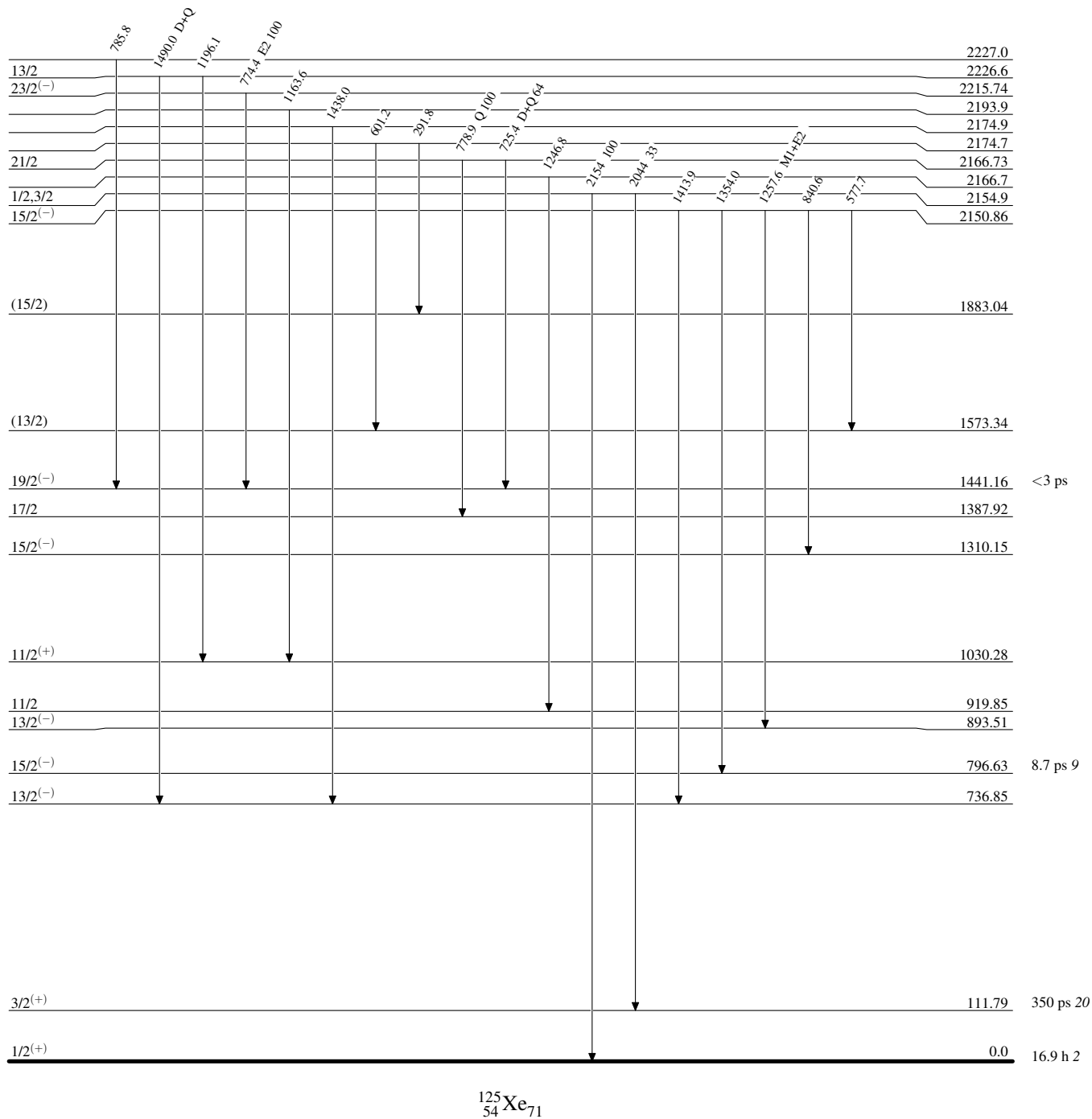
Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain) $^{125}_{54}\text{Xe}_{71}$

**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Relative photon branching from each level



$^{125}_{54}\text{Xe}_{71}$

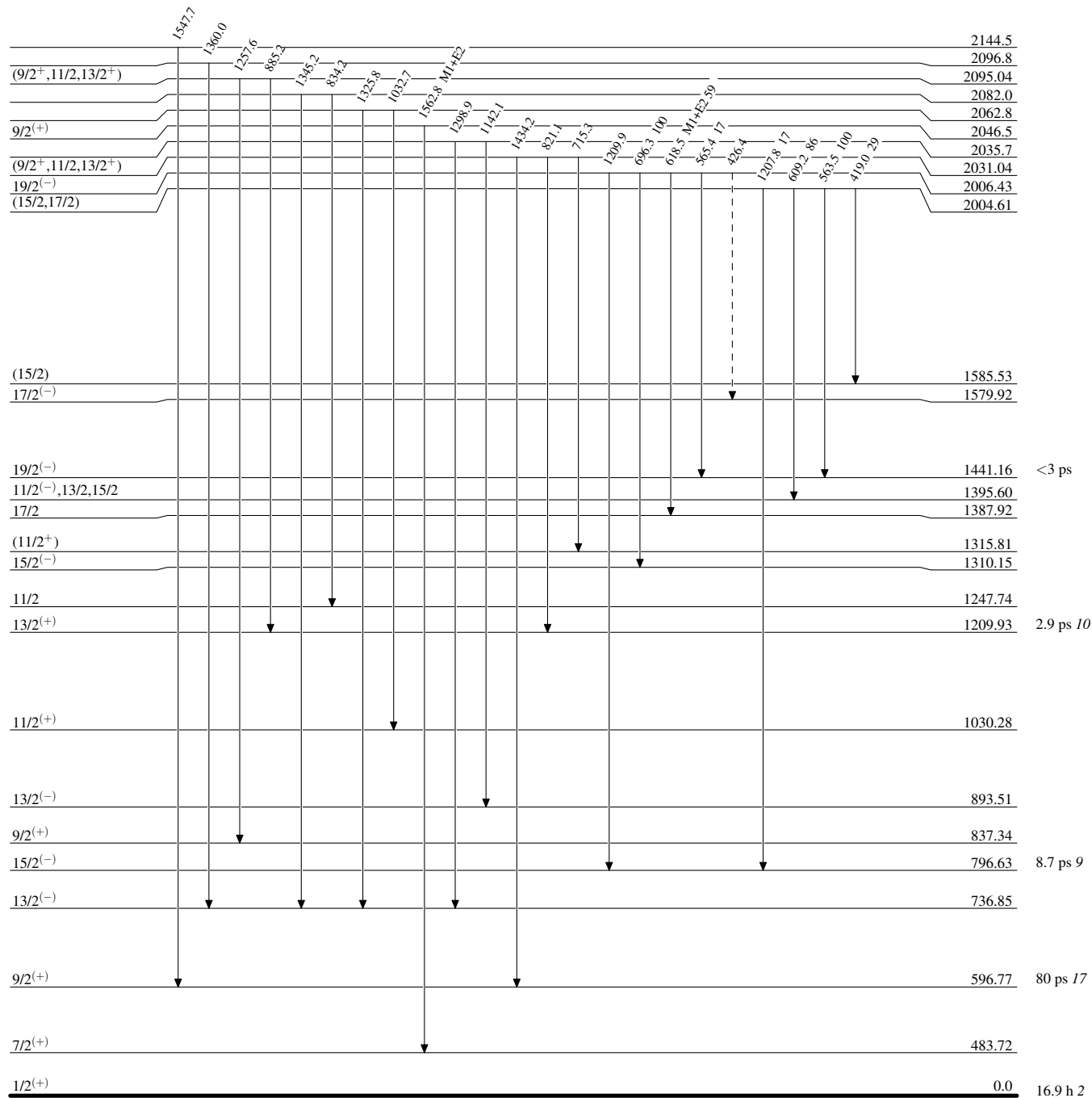
**Adopted Levels, Gammas**

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain)



$^{125}_{54}\text{Xe}_{71}$

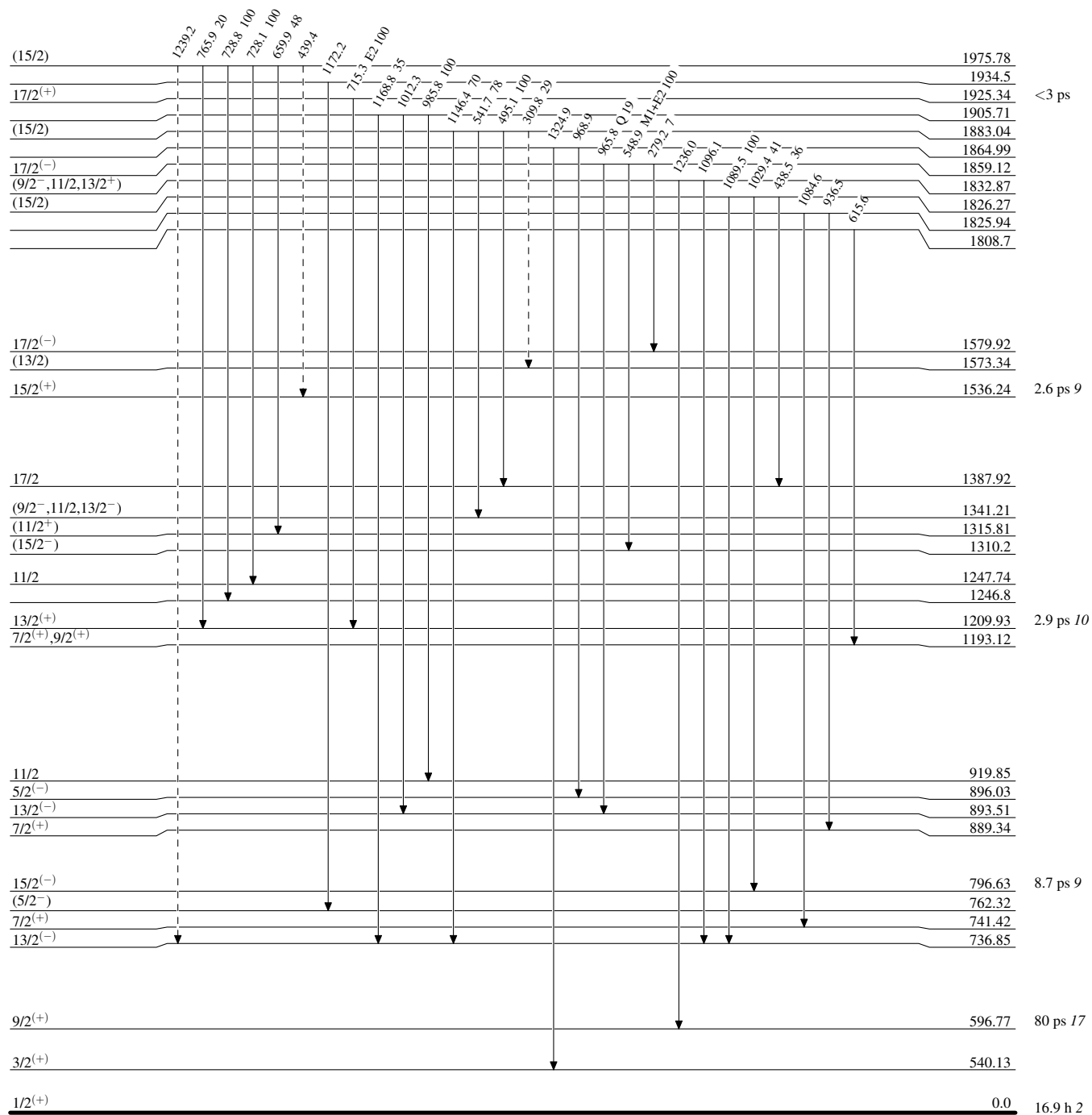


**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**

Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain) $^{125}_{54}\text{Xe}_{71}$

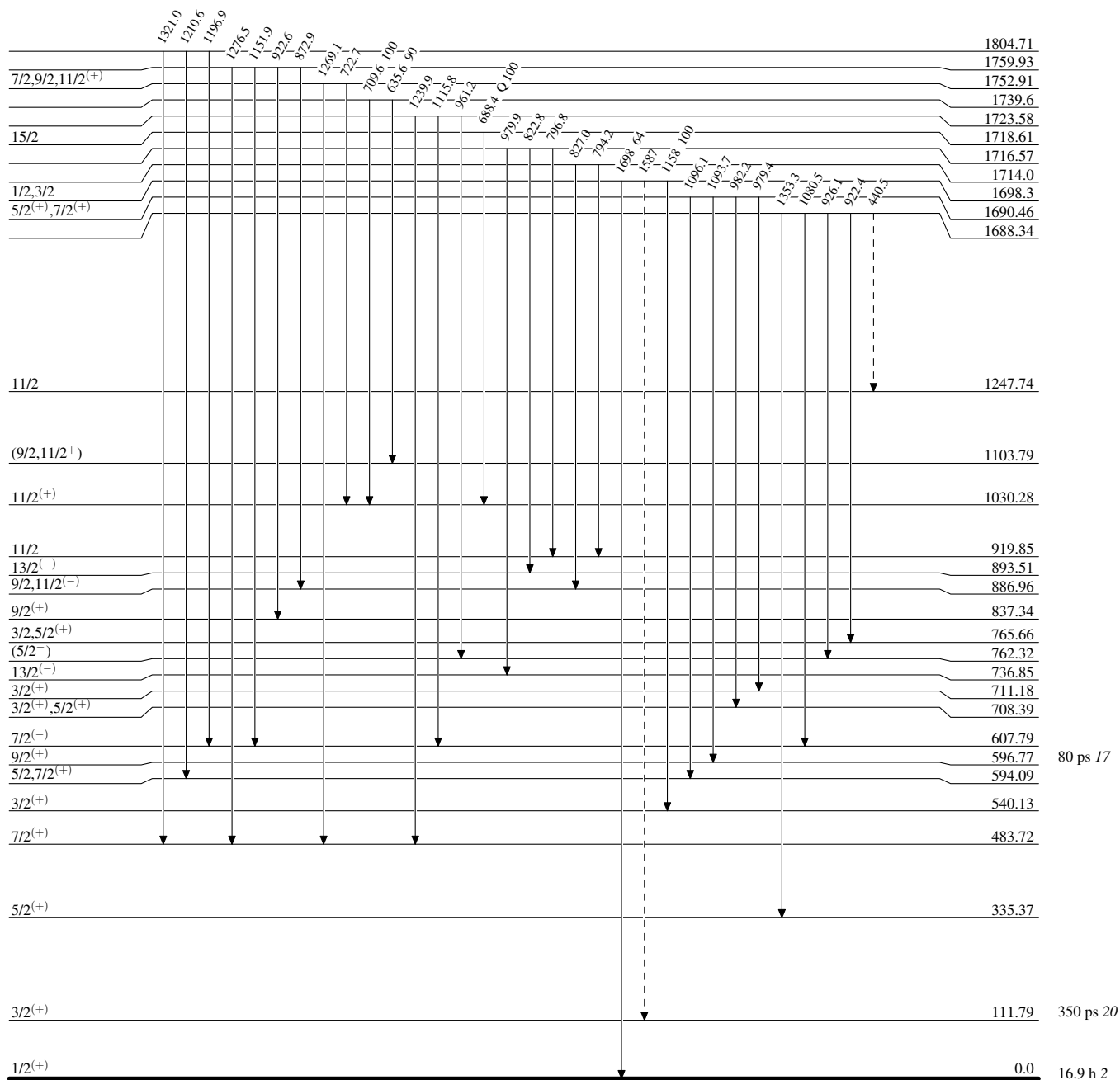
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

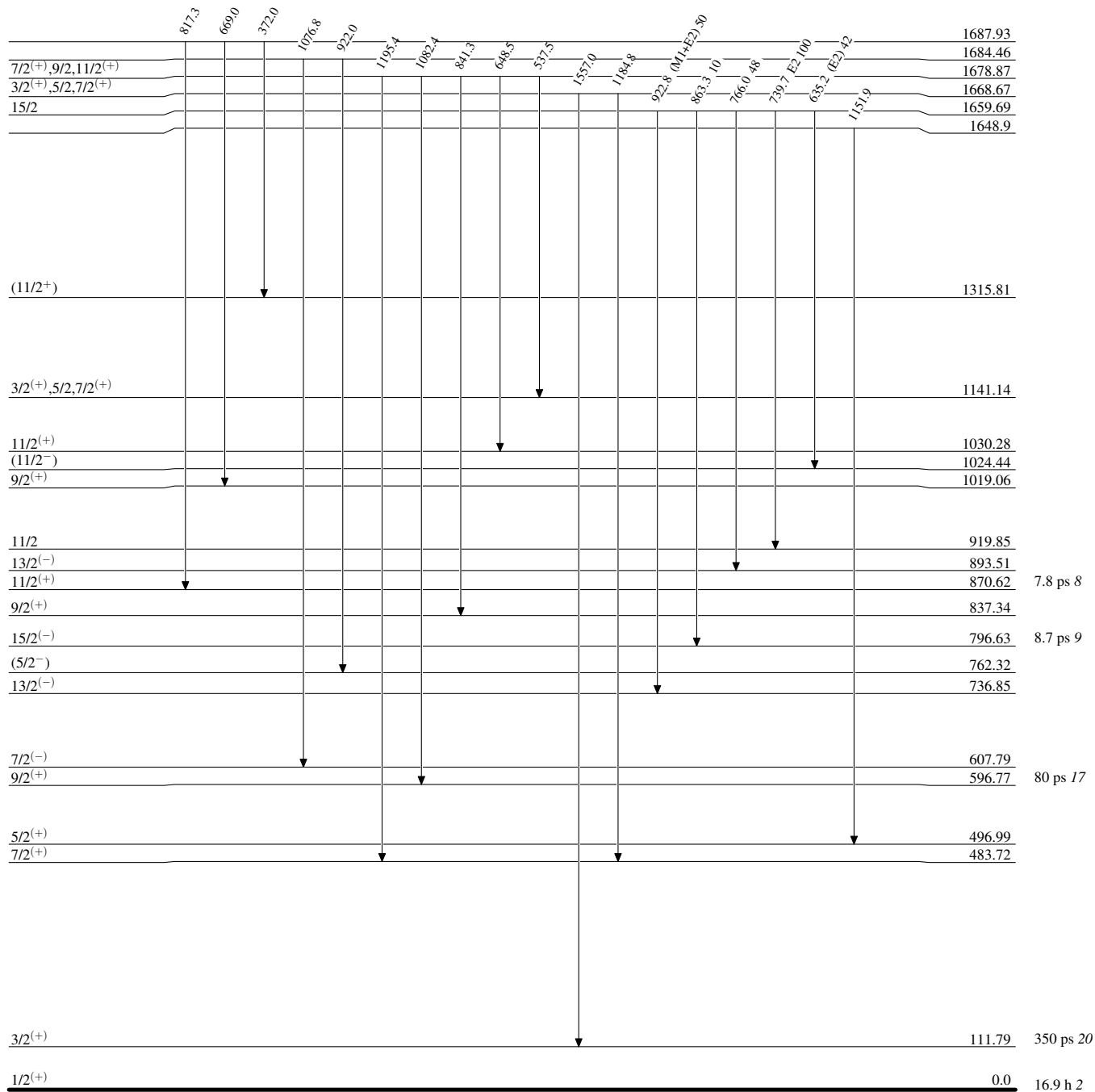
-----▶  $\gamma$  Decay (Uncertain)



<sup>125</sup><sub>54</sub>Xe<sub>71</sub>

Adopted Levels, GammasLevel Scheme (continued)

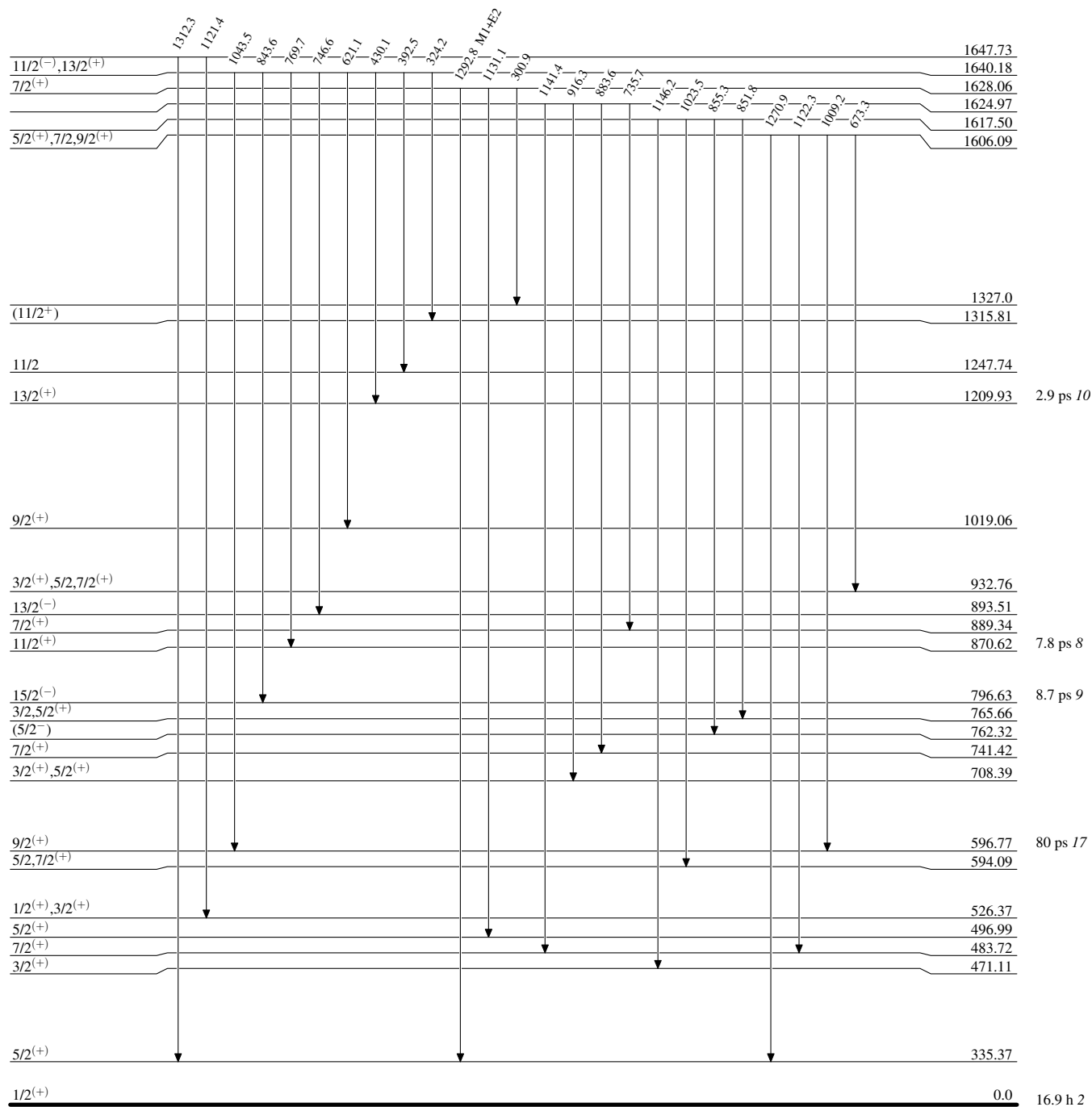
Intensities: Relative photon branching from each level

 $^{125}_{54}\text{Xe}_{71}$

**Adopted Levels, Gammas**

Level Scheme (continued)

Intensities: Relative photon branching from each level

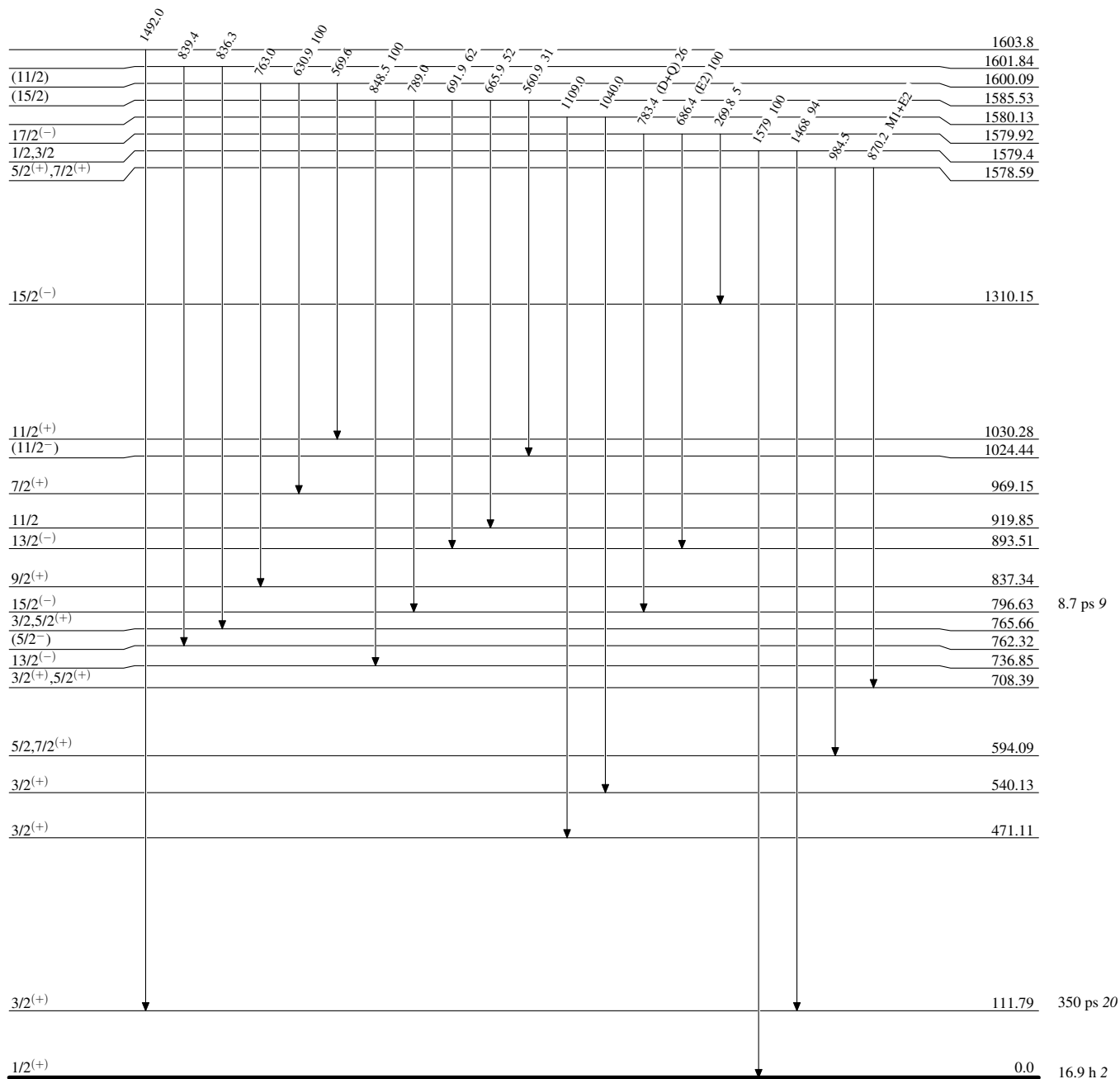


$^{125}_{54}\text{Xe}_{71}$

**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Relative photon branching from each level



$^{125}_{54}\text{Xe}_{71}$

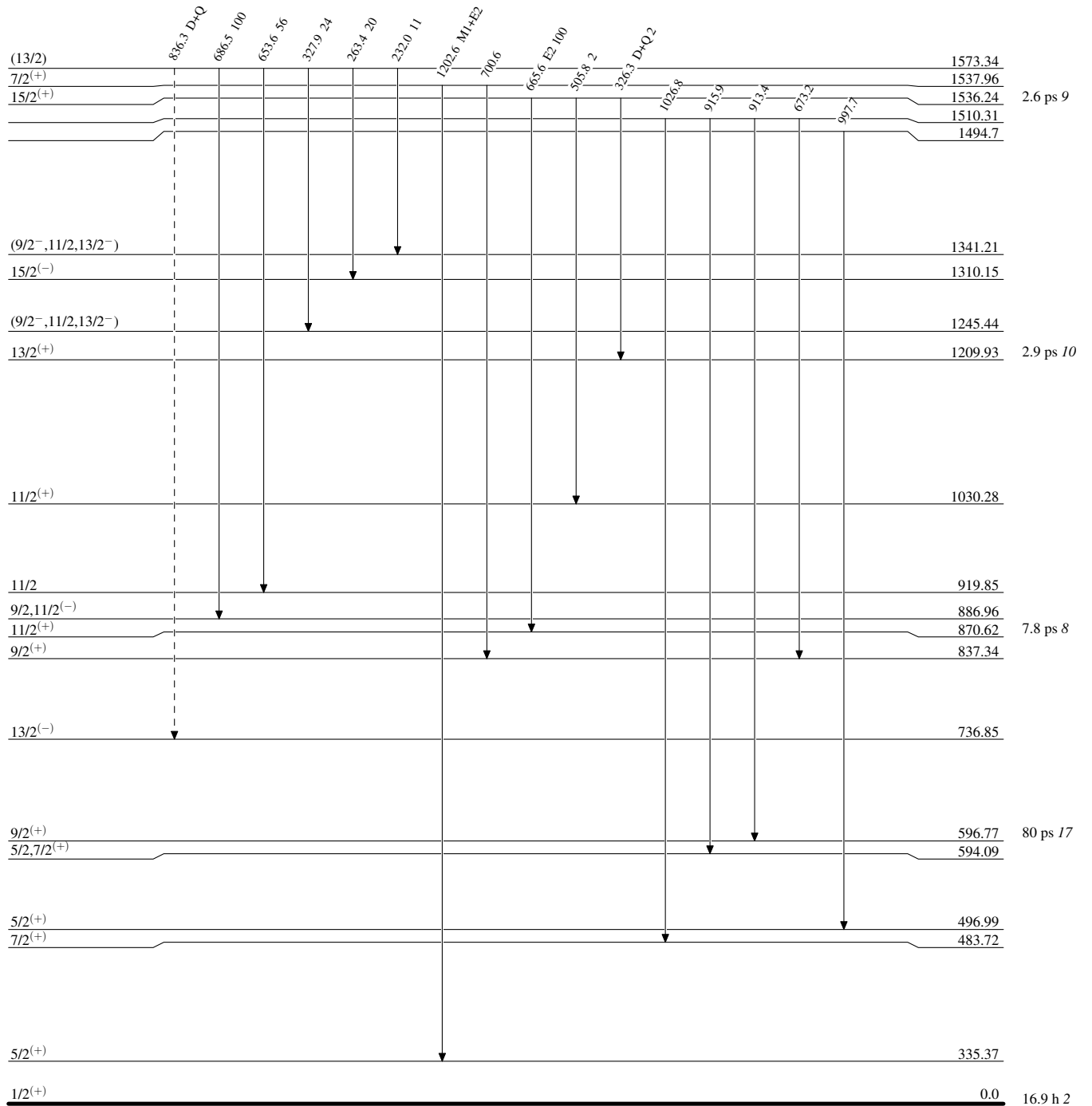
**Adopted Levels, Gammas**

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

----->  $\gamma$  Decay (Uncertain)



$^{125}_{54}\text{Xe}_{71}$

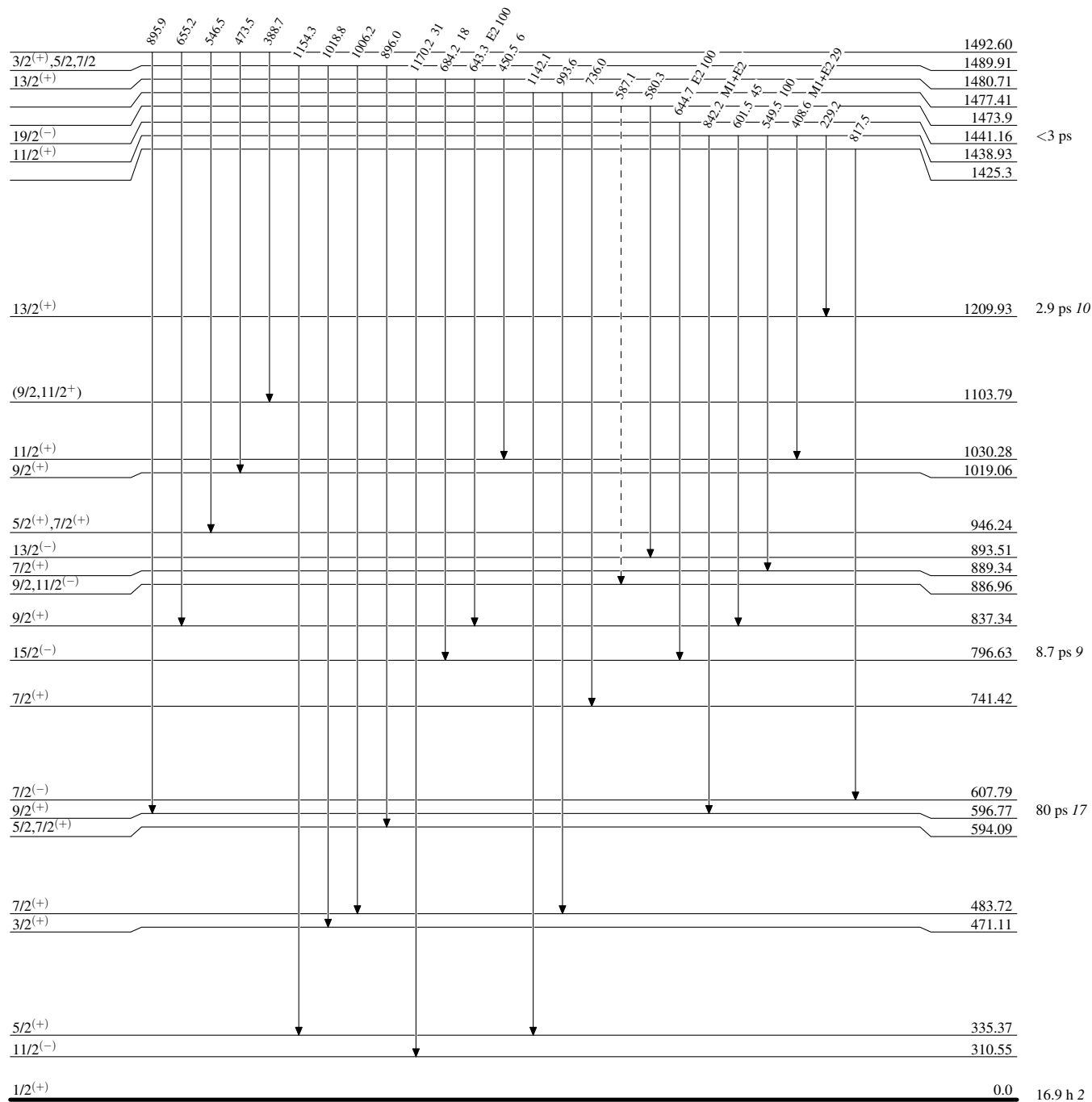
**Adopted Levels, Gammas**

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain)



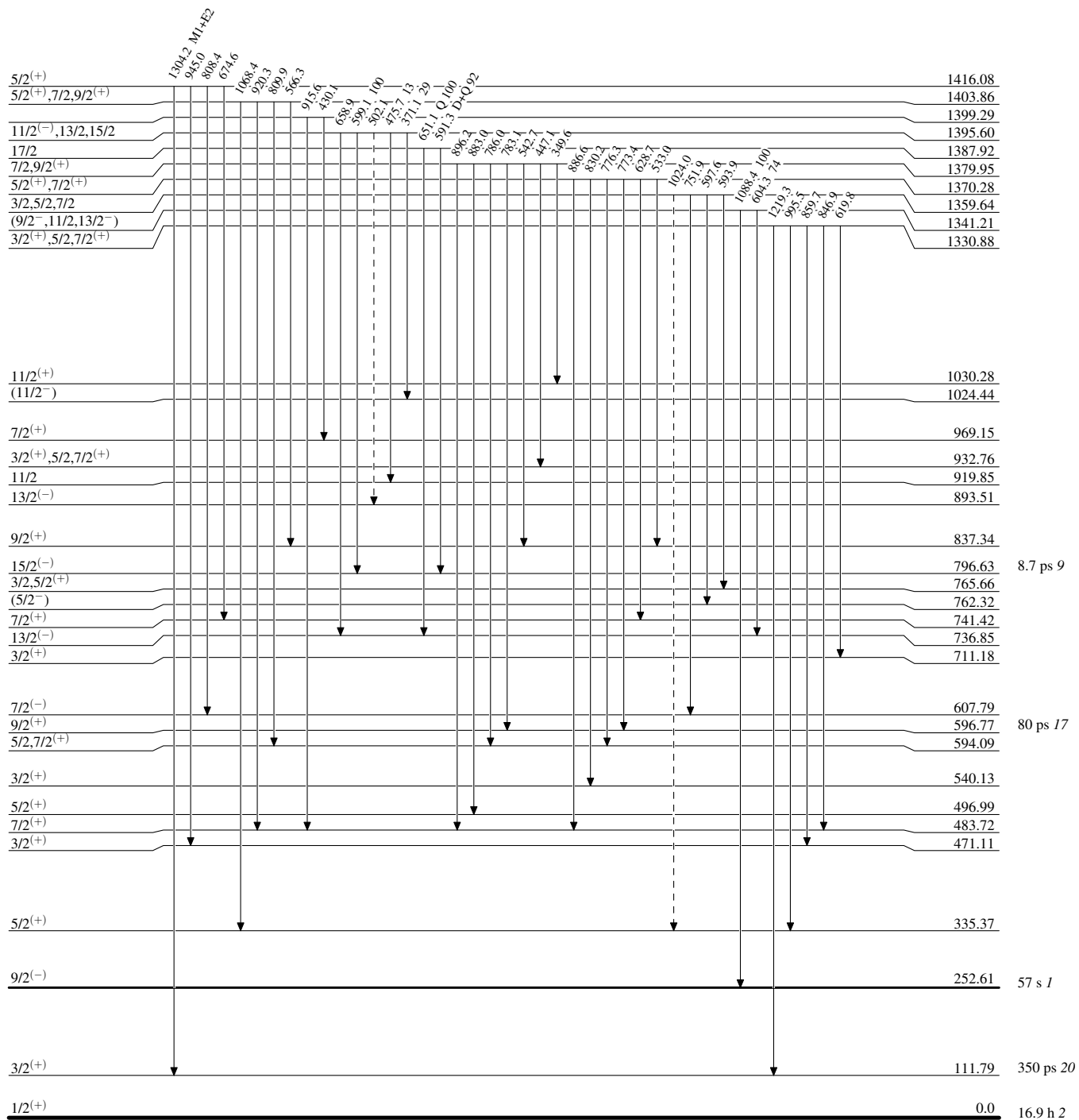
**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**

Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain)

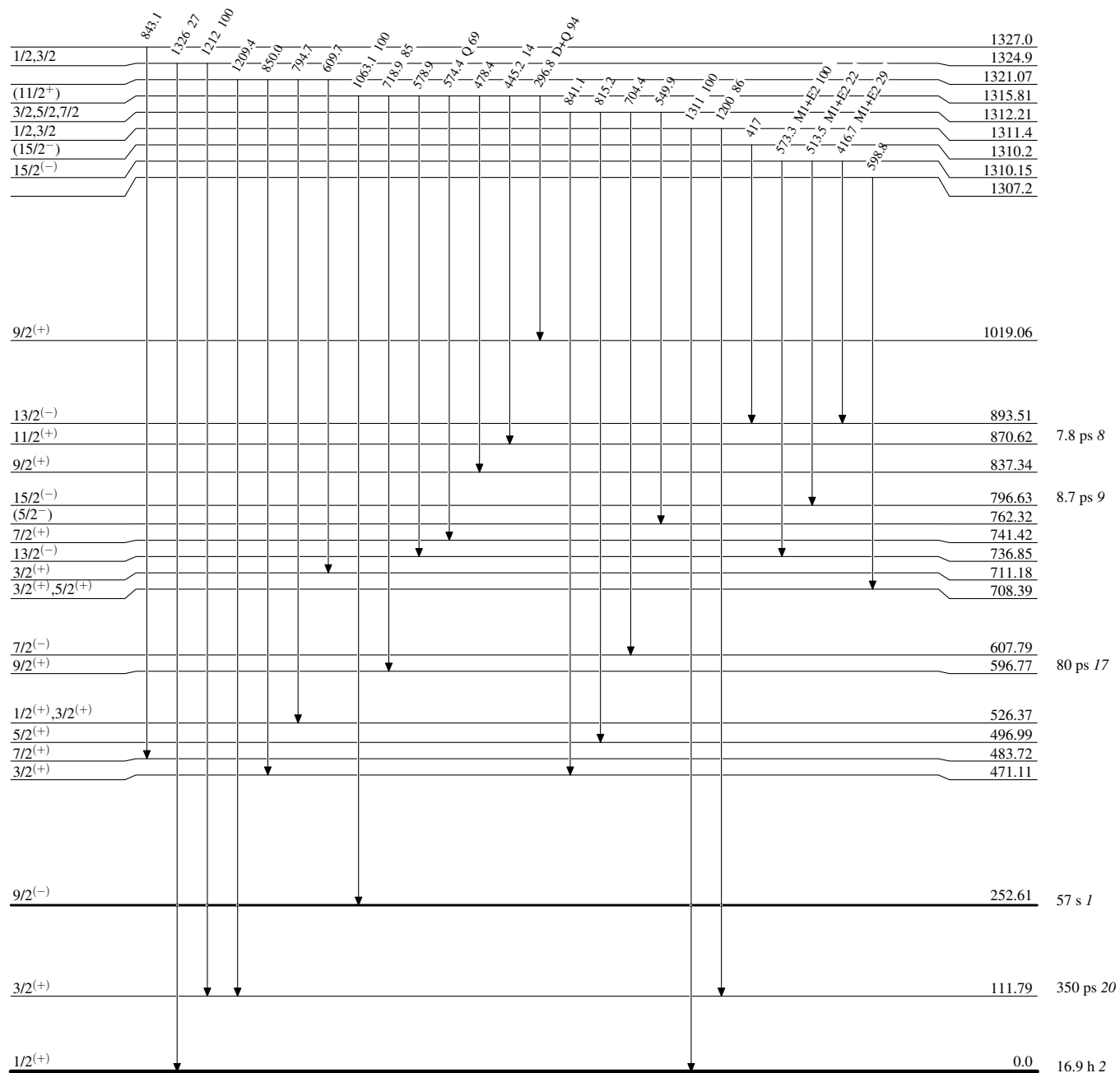


$^{125}_{54}\text{Xe}_{71}$



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

Intensities: Relative photon branching from each level

 $^{125}_{54}\text{Xe}_{71}$

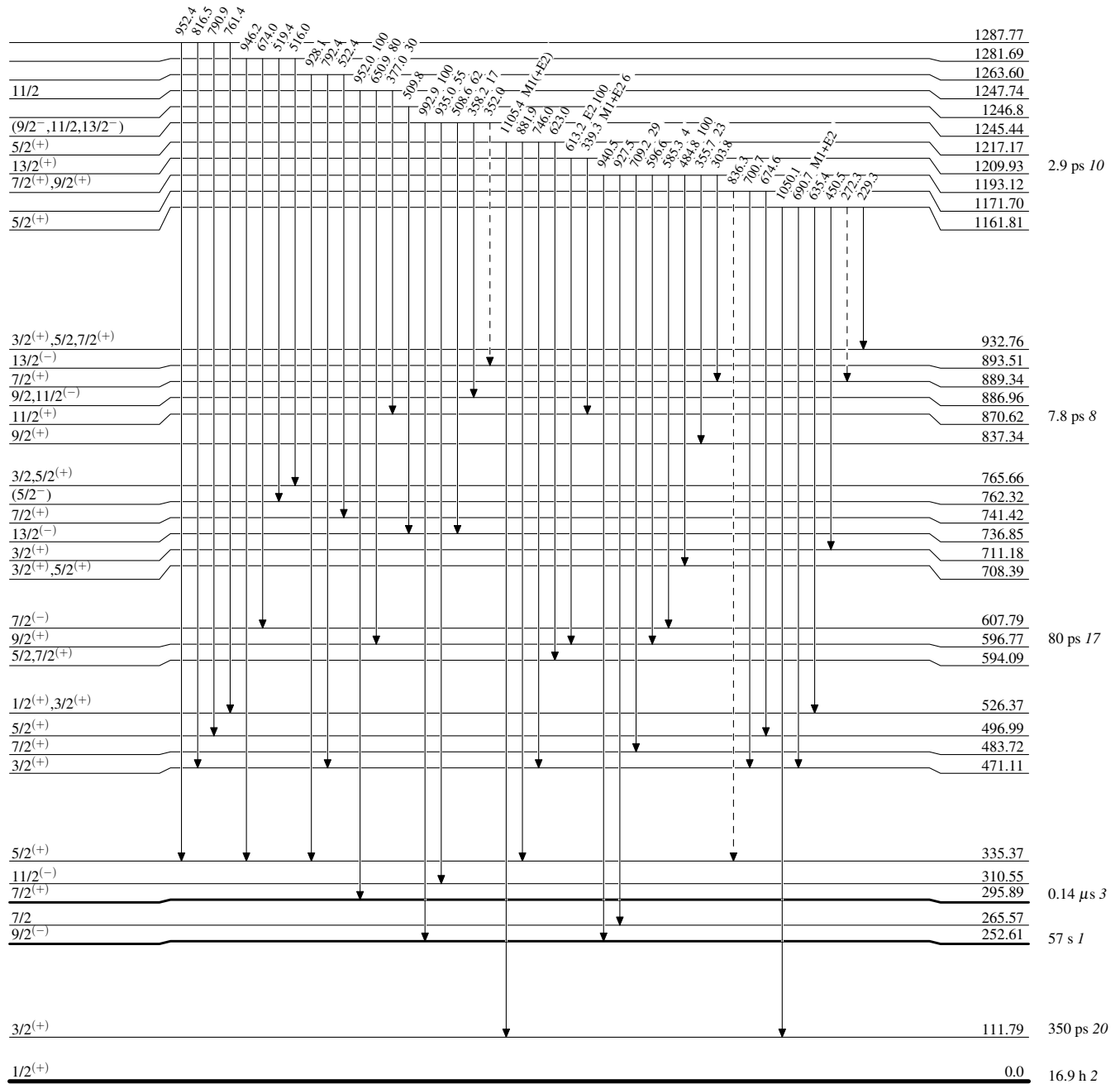
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain)

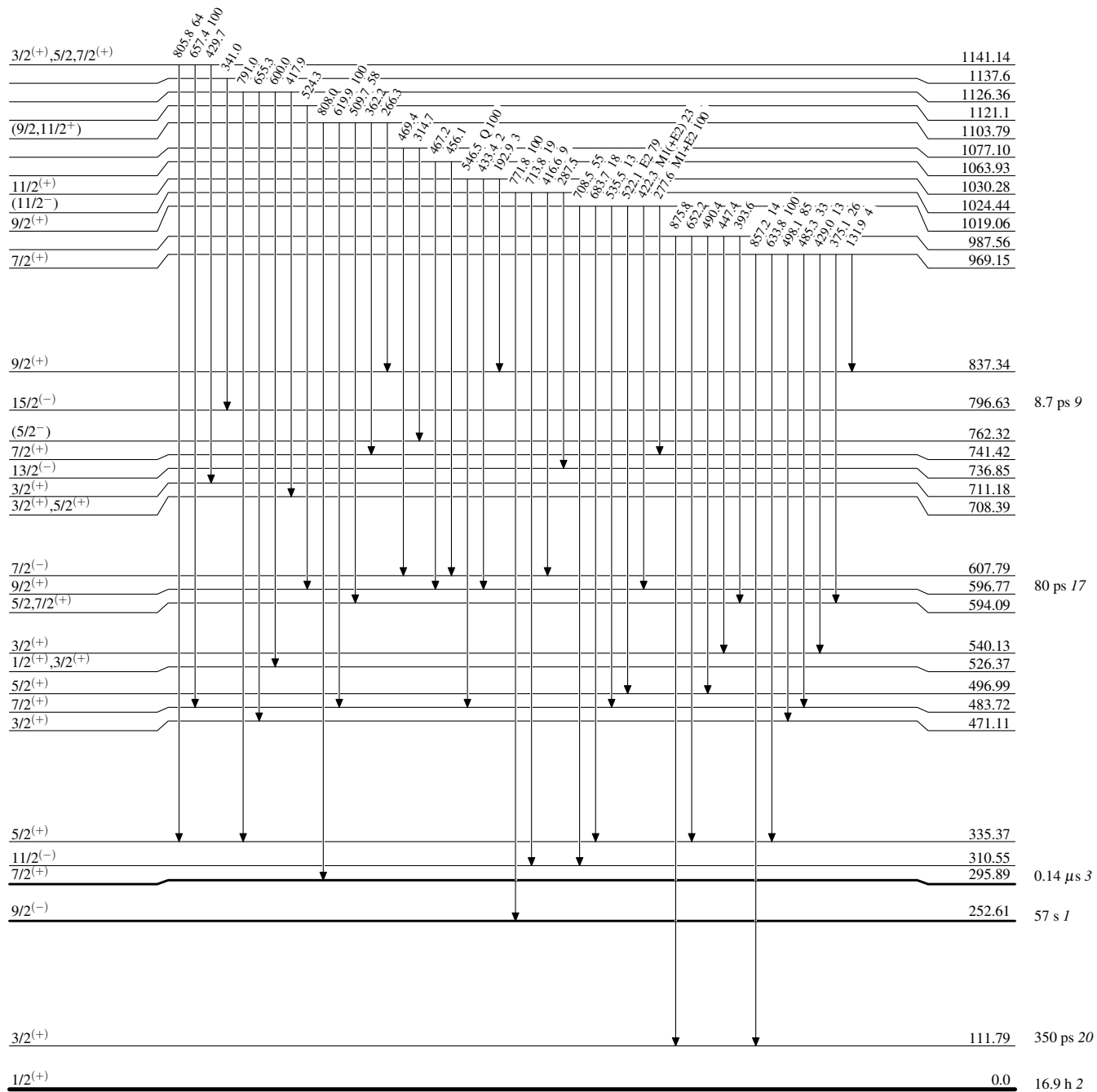


$^{125}_{54}\text{Xe}_{71}$

**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Relative photon branching from each level



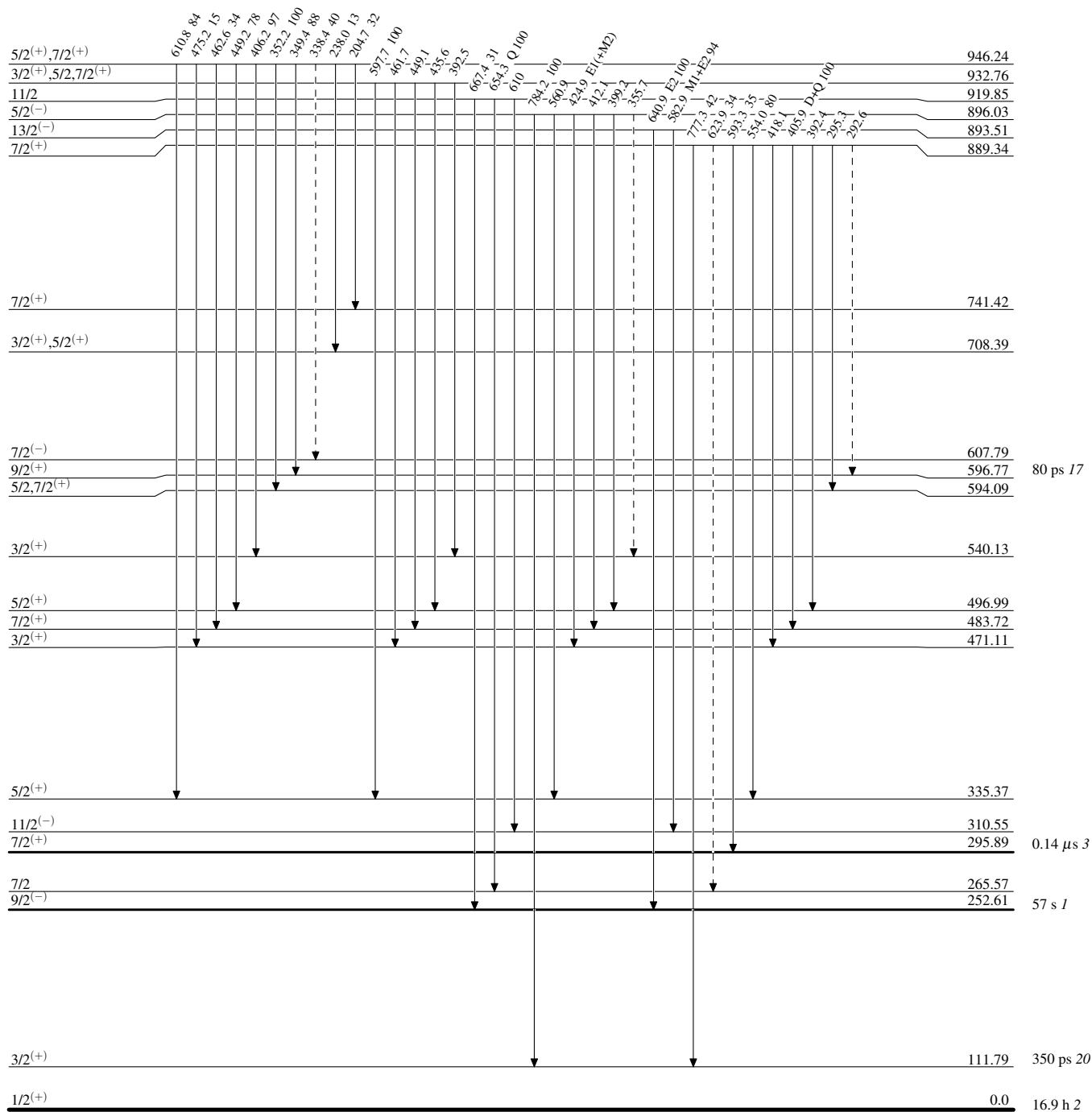
**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**

Intensities: Relative photon branching from each level

-----▶  $\gamma$  Decay (Uncertain)



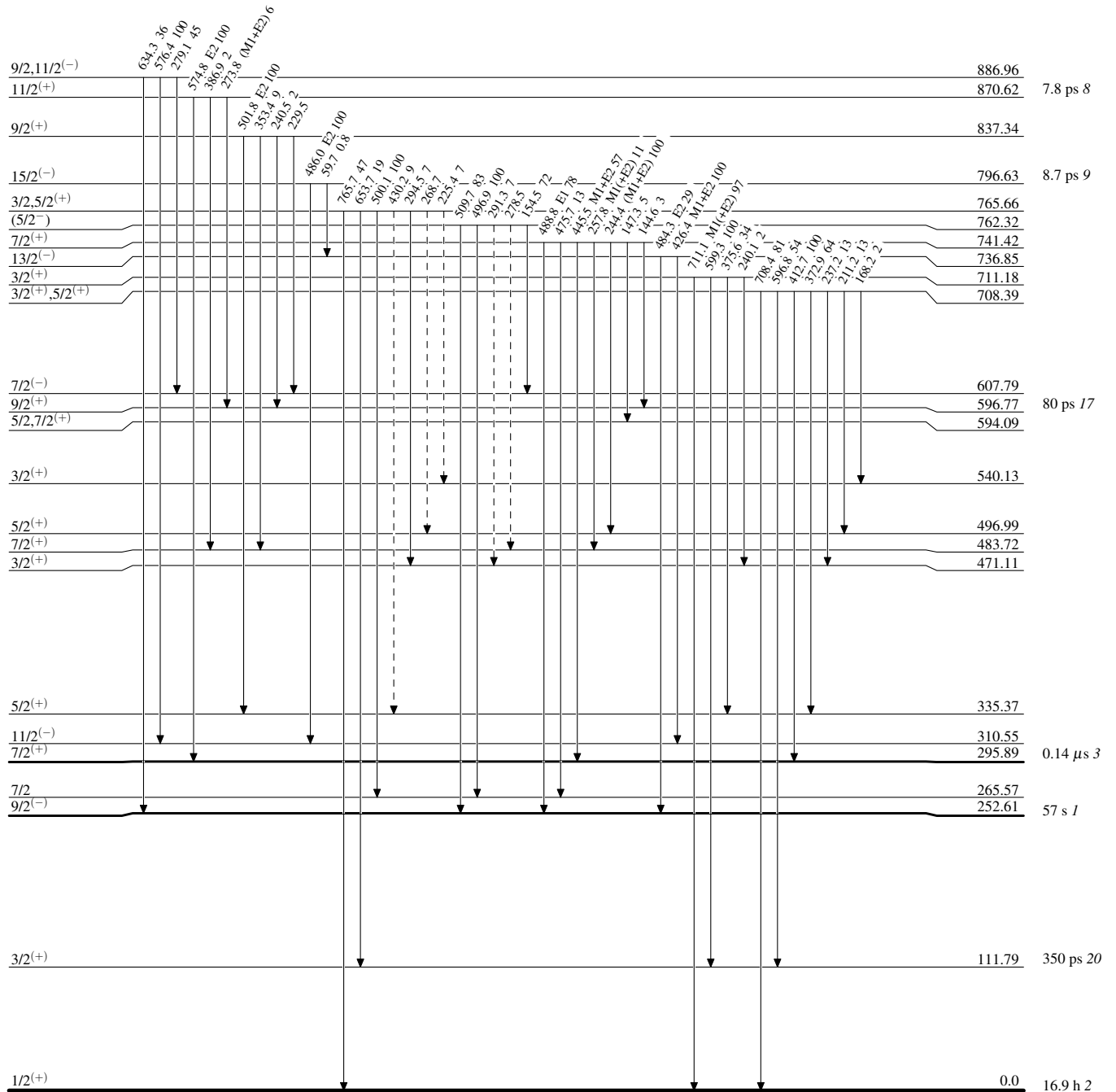
$^{125}_{54}\text{Xe}_{71}$

**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**

Intensities: Relative photon branching from each level

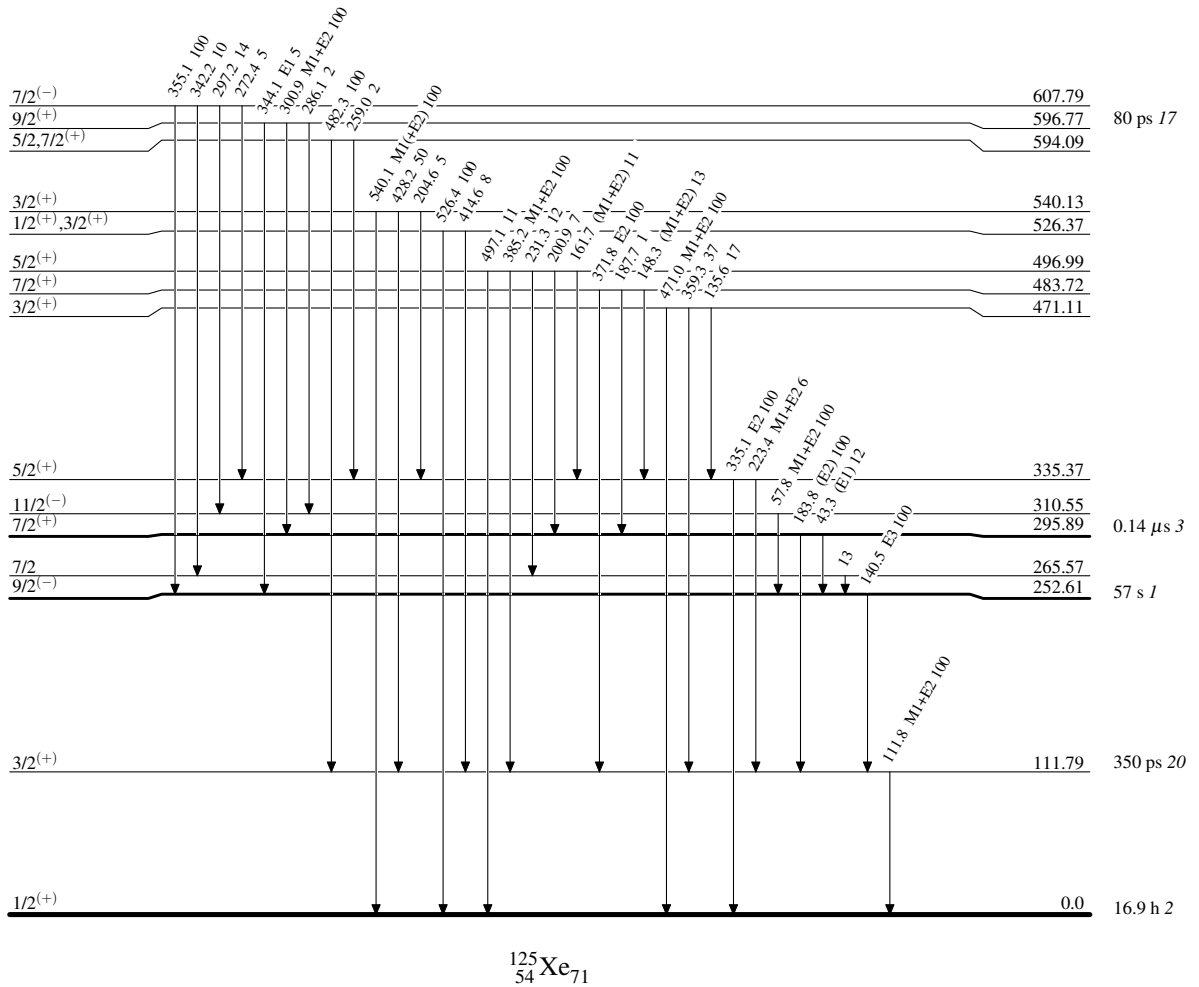
-----▶  $\gamma$  Decay (Uncertain) $^{125}_{54}\text{Xe}_{71}$

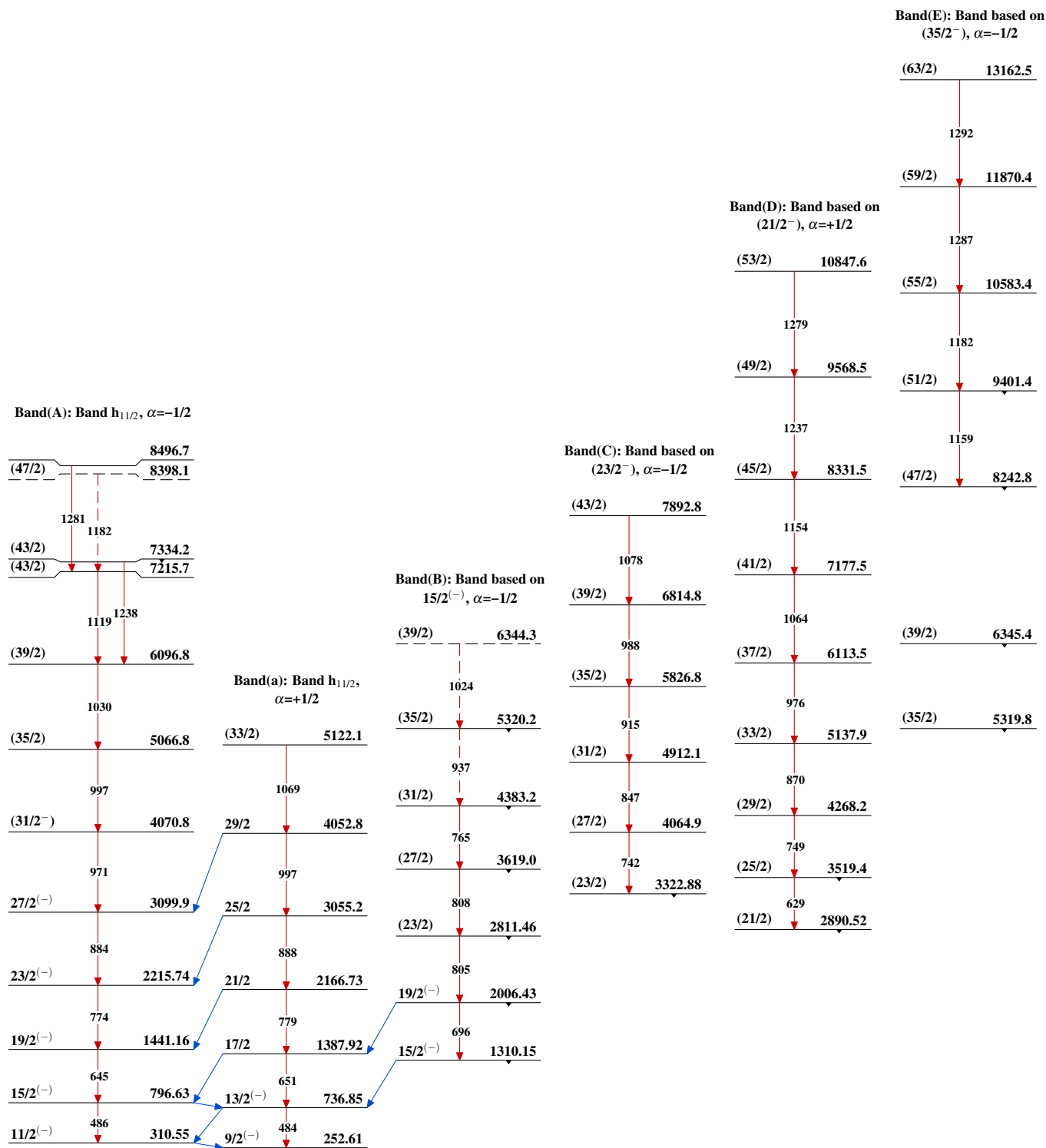
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----►  $\gamma$  Decay (Uncertain)

Adopted Levels, Gammas $^{125}_{54}\text{Xe}_{71}$

**Adopted Levels, Gammas (continued)****Band(F): Band based on**  
(47/2<sup>-</sup>),  $\alpha=-1/2$ 

(111/2 <sup>-</sup> )	27174+x
2324	
(107/2 <sup>-</sup> )	24850+x
2256	
(103/2 <sup>-</sup> )	22594+x
2168	
(99/2 <sup>-</sup> )	20426+x
2071	
(95/2 <sup>-</sup> )	18355+x
1973	
(91/2 <sup>-</sup> )	16382+x
1883	
(87/2 <sup>-</sup> )	14499+x
1790	
(83/2 <sup>-</sup> )	12709+x
1701	
(79/2 <sup>-</sup> )	11008+x
1701	
(75/2 <sup>-</sup> )	9307+x
1611	
(71/2 <sup>-</sup> )	7696.0+x
1507	
(67/2 <sup>-</sup> )	6189.0+x
1412	
(63/2 <sup>-</sup> )	4777.0+x
1322	
(59/2 <sup>-</sup> )	3455.0+x
1224	
(55/2 <sup>-</sup> )	2231.0+x
1154	
(51/2 <sup>-</sup> )	1077.0+x
1077	
(47/2 <sup>-</sup> )	x

**Band(f): Fork structure**  
for band based on  
(47/2<sup>-</sup>),  $\alpha=-1/2$ 

(95/2 <sup>-</sup> )	18730+x
2034	
(91/2 <sup>-</sup> )	16696+x
1949	
(87/2 <sup>-</sup> )	14747+x
1887	
(83/2 <sup>-</sup> )	12860+x
1824	
(79/2 <sup>-</sup> )	11036+x

**Band(G): Band based on**  
(49/2<sup>-</sup>),  $\alpha=+1/2$ 

(113/2 <sup>-</sup> )	26337+y
2355	
(109/2 <sup>-</sup> )	23982+y
2230	
(105/2 <sup>-</sup> )	21752+y
2104	
(101/2 <sup>-</sup> )	19648+y
1977	
(97/2 <sup>-</sup> )	17671+y
1862	
(93/2 <sup>-</sup> )	15809+y
1753	
(89/2 <sup>-</sup> )	14056+y
1713	
(85/2 <sup>-</sup> )	12343+y
1659	
(81/2 <sup>-</sup> )	10684+y
1604	
(77/2 <sup>-</sup> )	9080+y
1488	
(73/2 <sup>-</sup> )	7592.0+y
1381	
(69/2 <sup>-</sup> )	6211.0+y
1315	
(65/2 <sup>-</sup> )	4896.0+y
1300	
(61/2 <sup>-</sup> )	3596.0+y
1257	
(57/2 <sup>-</sup> )	2339.0+y
1248	
(53/2 <sup>-</sup> )	1091.0+y
1091	
(49/2 <sup>-</sup> )	y

**Band(H): Band based on**  
(53/2<sup>-</sup>),  $\alpha=+1/2$ 

(101/2 <sup>-</sup> )	20108+z
2264	
(97/2 <sup>-</sup> )	17844+z
2158	
(93/2 <sup>-</sup> )	15686+z
2034	
(89/2 <sup>-</sup> )	13652+z
1920	
(85/2 <sup>-</sup> )	11732+z
1813	
(81/2 <sup>-</sup> )	9919+z
1730	
(77/2 <sup>-</sup> )	8189.0+z
1635	
(73/2 <sup>-</sup> )	6554.0+z
1524	
(69/2 <sup>-</sup> )	5030.0+z
1412	
(65/2 <sup>-</sup> )	3618.0+z
1301	
(61/2 <sup>-</sup> )	2317.0+z
1201	
(57/2 <sup>-</sup> )	1116.0+z
1116	
(53/2 <sup>-</sup> )	z

**Band(h): Fork structure**  
for band based on  
(53/2<sup>-</sup>),  $\alpha=-1/2$ 

(97/2 <sup>-</sup> )	17535+z
2087	
(93/2 <sup>-</sup> )	15448+z
1979	
(89/2 <sup>-</sup> )	13469+z
1868	
(85/2 <sup>-</sup> )	11601+z
1754	
(81/2 <sup>-</sup> )	9847+z

**Band(I): Band based on**  
(55/2<sup>+</sup>),  $\alpha=-1/2$ 

(107/2 <sup>+</sup> )	23630+u
2417	
(103/2 <sup>+</sup> )	21213+u
2352	
(99/2 <sup>+</sup> )	18861+u
2251	
(95/2 <sup>+</sup> )	16610+u
2143	
(91/2 <sup>+</sup> )	14467+u
2030	
(87/2 <sup>+</sup> )	12437+u
1920	
(83/2 <sup>+</sup> )	10517+u
1806	
(79/2 <sup>+</sup> )	8711.1+u
1696	
(75/2 <sup>+</sup> )	7015.0+u
1588	
(71/2 <sup>+</sup> )	5427.0+u
1487	
(67/2 <sup>+</sup> )	3940.0+u
1392	
(63/2 <sup>+</sup> )	2548.0+u
1325	
(59/2 <sup>+</sup> )	1223.0+u
1223	
(55/2 <sup>+</sup> )	u



**Adopted Levels, Gammas (continued)****Band(J): Band based on**  
(47/2<sup>-</sup>),  $\alpha=-1/2$ 

(111/2)	37618
2417	
(107/2)	35201
2345	
(103/2)	32856
2154	
(99/2)	30702
2289	
(95/2)	28413
2138	
(91/2)	26275
2023	
(87/2)	24252
1913	
(83/2)	22339
1882	
(79/2)	20457
1900	
(75/2)	18557
1799	
(71/2)	16758
1680	
(67/2)	15078
1557	
(63/2)	13520.8
1440	
(59/2)	12080.8
1331	
(55/2)	10749.8
1232	
(51/2)	9517.8
1111	
(47/2)	8406.8

**Band(K): Band based on**  
(17/2<sup>+</sup>),  $\alpha=+1/2$ 

(49/2)	9327.0	(51/2)	9708.9	
1062	8265.3	(47/2)	1005	8704.7
978	7287.0	(43/2)	936	7768.9
1035	6251.6	(39/2)	1016	6752.9
1089	5162.5	(35/2)		5995.5
870	4292.7	(31/2)	1232	4762.9
806	3486.4	(27/2)		3959.8
256	3075.14	(23/2)	803	3277.91
	2819.27			2926.6

**Band(k): Band based on**  
(19/2<sup>+</sup>),  $\alpha=-1/2$ **Band(L): Band based on**  
(37/2<sup>+</sup>),  $\alpha=+1/2$ 

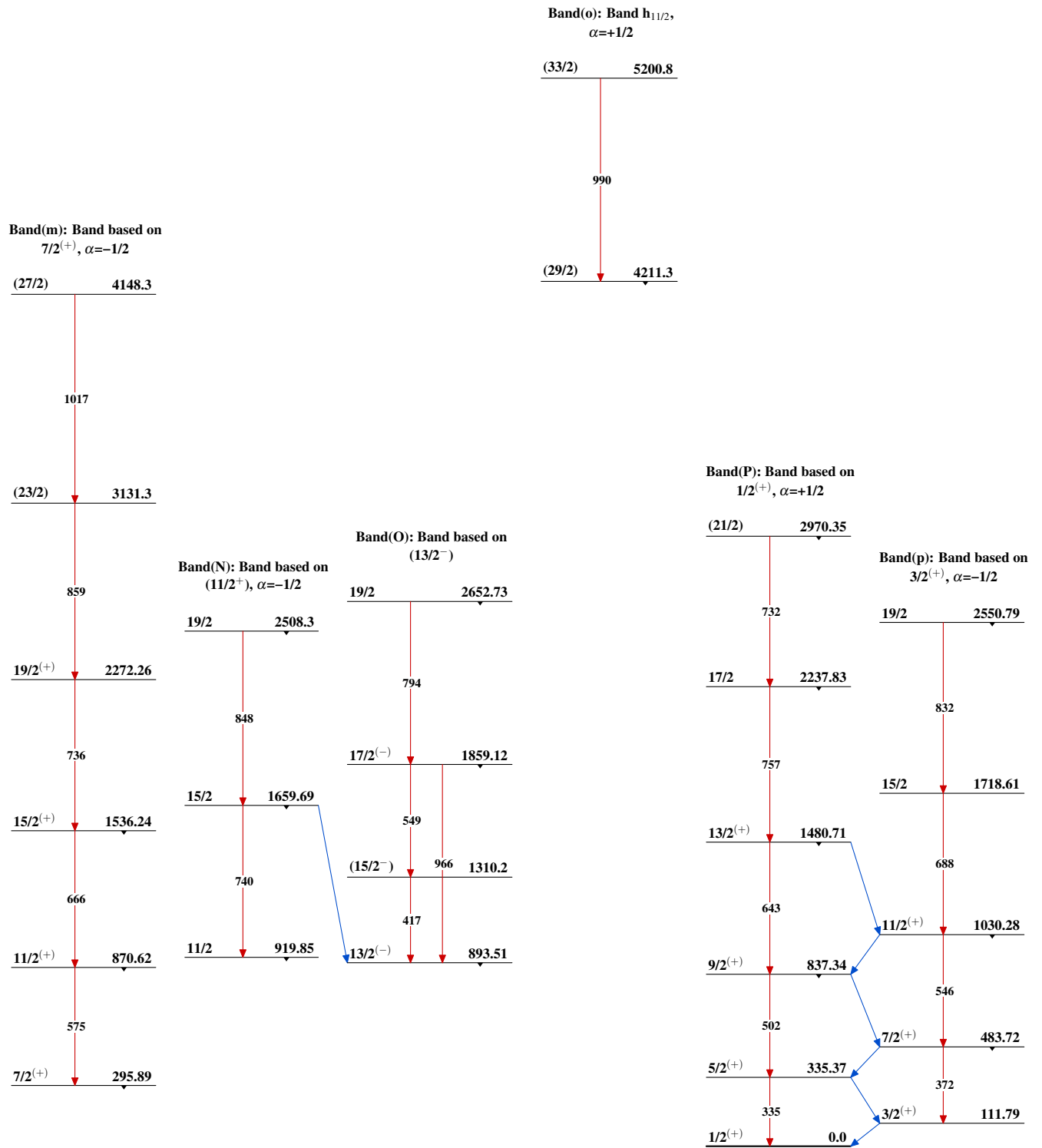
(113/2)	36668
2260	
(109/2)	34408
2182	
(105/2)	32226
2109	
(101/2)	30117
2019	
(97/2)	28098
1926	
(93/2)	26172
1831	
(89/2)	24341
1833	
(85/2)	22508
1733	
(81/2)	20775
1808	
(77/2)	18967
1719	
(73/2)	17248
1610	
(69/2)	15638.3
1494	
(65/2)	14144.3
1374	
(61/2)	12770.2
1256	
(57/2)	11514.2
1146	
(53/2)	10368.2
1079	
(49/2)	9289.2
974	
(45/2)	8315.2
1217	
(41/2)	7098.3
1122	
(37/2)	5976.4

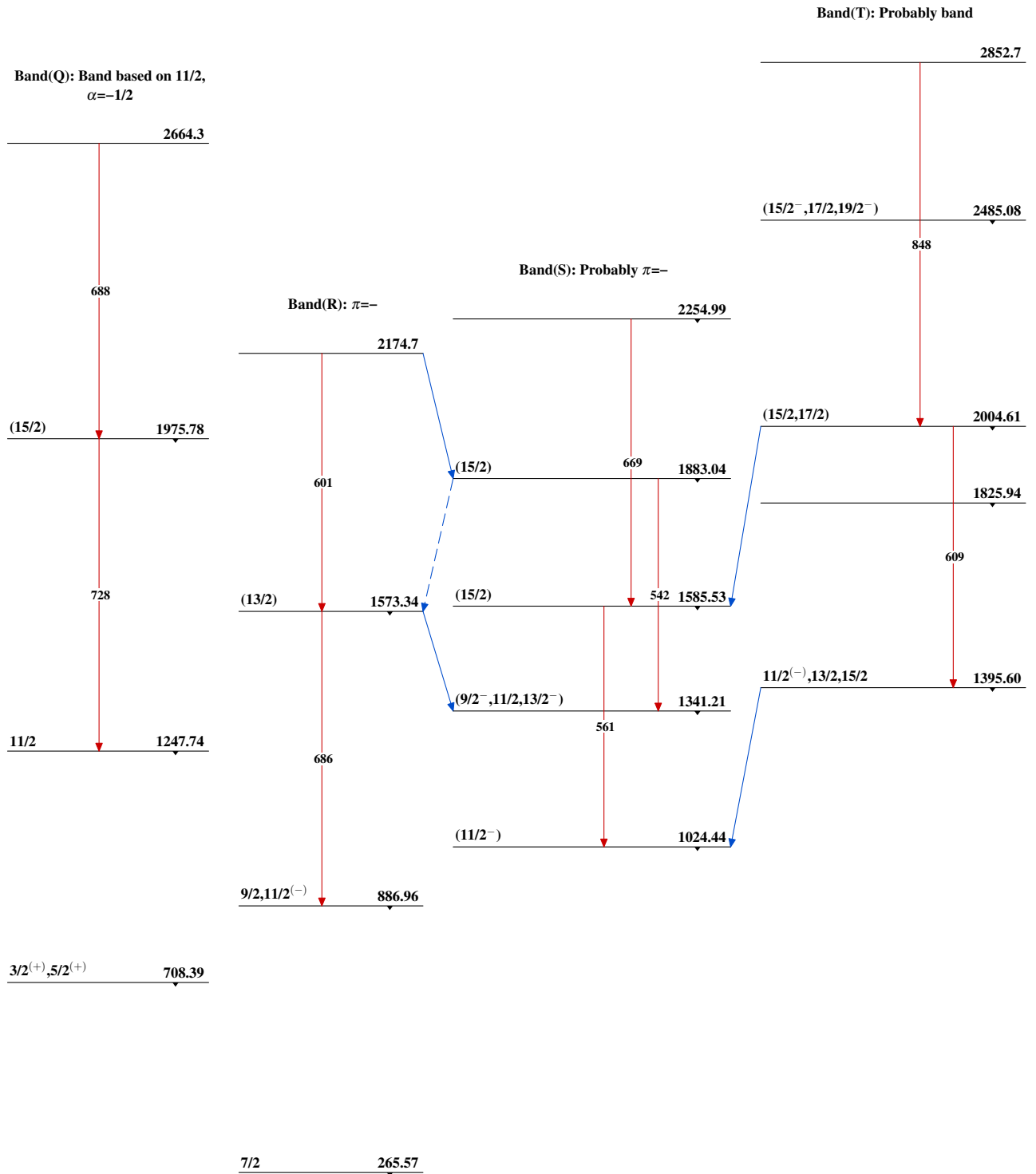
**Band(l): Fork structure**  
for band based on  
(37/2<sup>+</sup>),  $\alpha=+1/2$ 

(113/2)	36413
2355	
(109/2)	34058
2232	
(105/2)	31826
2106	
(101/2)	29720
1979	
(97/2)	27741
1861	
(93/2)	25880
1750	
(89/2)	24130
1658	
(85/2)	22472
1561	
(81/2)	20911
1555	
(77/2)	19356
1468	
(73/2)	17888
1396	
(69/2)	16492
1320	
(65/2)	15172
1251	
(61/2)	13921

**Band(M): Band based on**  
9/2<sup>(+)</sup>,  $\alpha=+1/2$ 

(25/2)	3487.2	
21/2 <sup>(+)</sup>	783	2704.19
17/2 <sup>(+)</sup>	779	1925.34
13/2 <sup>(+)</sup>	715	1209.93
9/2 <sup>(+)</sup>	613	596.77

**Adopted Levels, Gammas (continued)** $^{125}_{54}\text{Xe}_{71}$

Adopted Levels, Gammas (continued)

Adopted Levels, Gammas (continued)