

**Adopted Levels, Gammas**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. -c. Wu	NDS 106,619 (2005)	1-Nov-2005

Q( $\beta^-$ )=432.7 9; S(n)=5753.7 3; S(p)=7.84×10<sup>3</sup> 3; Q( $\alpha$ )=1590.4 20 [2012Wa38](#)

Note: Current evaluation has used the following Q record 432.5 9 5753.7 3 7837 26 1597.3 22 [2003Au03](#).

[Additional information 1](#).

Other reactions:

<sup>184</sup>W(p, $\pi^+$ ): [1988Ab05](#).

<sup>186</sup>W( $\gamma$ ,n): [2003Mo24](#), [2003So05](#).

<sup>186</sup>W(n,2n): [1989Pe04](#), [1997KoZZ](#).

<sup>185</sup>W Levels

See [1972Ca01](#) and [1969Da01](#) for discussions and calculations of Coriolis mixing between rotational bands based on N=5 Nilsson orbitals.

Cross Reference (XREF) Flags

<b>A</b>	<sup>185</sup> Ta $\beta^-$ decay	<b>E</b>	<sup>184</sup> W(n, $\gamma$ ) E=2,24 keV res: av	<b>I</b>	<sup>186</sup> W(p,d) E=18.0 MeV
<b>B</b>	<sup>185</sup> W IT decay (1.67 min)	<b>F</b>	<sup>184</sup> W(n, $\gamma$ ) E=184,311,425 eV	<b>J</b>	<sup>184</sup> W(pol d,p)
<b>C</b>	<sup>184</sup> W(n, $\gamma$ ) E=thermal	<b>G</b>	<sup>186</sup> W(d,t), <sup>184</sup> W(d,p)		
<b>D</b>	<sup>184</sup> W(n, $\gamma$ ) E=thermal: $\gamma$ coin	<b>H</b>	<sup>186</sup> W( <sup>3</sup> He, $\alpha$ ),(d,t)		

E(level) <sup>†</sup>	J $\pi^{\ddagger}$	T <sub>1/2</sub>	XREF	Comments
0.0 <sup>@</sup>	3/2 <sup>-</sup>	75.1 d 3	ABCDEFGHI	$\% \beta^- = 100$ J $^\pi$ : J=3/2, atomic beam ( <a href="#">1963Do13</a> ); $\Delta\pi$ =no 66 $\gamma$ from $\pi=-$ 66 level. Nilsson orbital 3/2[512]. T <sub>1/2</sub> : from <a href="#">1972Em01</a> . Other values: 76.6 d 15 ( <a href="#">2003So18</a> ), 74.5 d 15 ( <a href="#">1940Fa01</a> ), 73.2 d 5 ( <a href="#">1948Sa18</a> ), 74.5 d ( <a href="#">1955Kr22</a> ), 70.0 d 9 ( <a href="#">1957Th11</a> ), 75.1 d 6 ( <a href="#">1964An02</a> ), 76.4 d 7 ( <a href="#">1968Pi02</a> ). Others: <a href="#">1940Mi05</a> , <a href="#">1961Go38</a> .
23.547 <sup>&amp;</sup> 18	1/2 <sup>-</sup>		ABCDE G I	J $^\pi$ : J $^\pi$ =1/2 <sup>-</sup> ,3/2 <sup>-</sup> from (n, $\gamma$ ) E=2,24 keV res: av. J $^\pi$ =1/2 <sup>-</sup> from DWBA calculation. Nilsson orbital 1/2[510].
65.854 <sup>@</sup> 16	5/2 <sup>-</sup>		ABCDE G IJ	J $^\pi$ : M1+E2 66 $\gamma$ to J=3/2 g.s.; L=3 in (d,t),(d,p); 3/2[512] band member.
93.295 <sup>&amp;</sup> 20	3/2 <sup>-</sup>		ABCDEFG IJ	J $^\pi$ : L=1 in (d,t),(d,p). 1/2[510] band member.
173.702 <sup>@</sup> 16	7/2 <sup>-</sup>	<1.5 ns	ABCD G	J $^\pi$ : 107.8 $\gamma$ M1+E2 to 5/2 <sup>-</sup> ; 174 $\gamma$ E2 to 3/2 <sup>-</sup> ; 3/2[512] band member. T <sub>1/2</sub> : from <sup>185</sup> Ta $\beta^-$ -decay ( <a href="#">1969Ku07</a> ).
187.878 <sup>&amp;</sup> 15	5/2 <sup>-</sup>		ABCD G I	J $^\pi$ : L=3 in (d,t),(d,p); 164.3 $\gamma$ to 1/2 <sup>-</sup> . 1/2[510] band member.
197.383 <sup>a</sup> 23	11/2 <sup>+</sup>	1.67 min 3	B	$\%IT=100$ J $^\pi$ : 131.6 $\gamma$ E3 to 5/2 <sup>-</sup> , 23.54 $\gamma$ to 7/2 <sup>-</sup> ; 11/2[615] Coriolis-mixed rotational band. T <sub>1/2</sub> : weighted average of 1.67 min 8 ( <a href="#">1969Da01</a> ), 1.68 min 5 ( <a href="#">1970Gu02</a> ), and 1.65 min 5 ( <a href="#">1970Pa32</a> ). Others: <a href="#">1950Du54</a> , <a href="#">1955Po26</a> , <a href="#">1962Ma24</a> .
243.62 <sup>b</sup> 5	7/2 <sup>-</sup>	19.3 ns 5	A CD G J	J $^\pi$ : 177.6 $\gamma$ M1+E2 to 5/2 <sup>-</sup> , 69.7 $\gamma$ M1+E2 to 7/2 <sup>-</sup> ; L=3 in (d,t),(d,p). 7/2[503] band head. T <sub>1/2</sub> : from <sup>185</sup> Ta $\beta^-$ -decay ( <a href="#">1969Ku07</a> ).
302 <sup>@</sup> 6	(9/2 <sup>-</sup> )		G I	J $^\pi$ : L $\geq$ 5 from (d,t),(d,p). 3/2[512] band member.
334 <sup>&amp;</sup> 6	(7/2 <sup>-</sup> )		G IJ	J $^\pi$ : L=3 in (d,t),(d,p). 1/2[510] band member.
384 <sup>a</sup> 6	(13/2 <sup>+</sup> )		GH J	J $^\pi$ : L=6 in ( <sup>3</sup> He, $\alpha$ ); 11/2[615] band member.
390.92 <sup>b</sup> 11	(9/2 <sup>-</sup> )		A C G	XREF: G(391).

Continued on next page (footnotes at end of table)

**Adopted Levels, Gammas (continued)**

<sup>185</sup>W Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	XREF	Comments
			J <sup>π</sup> : 147.3γ (M1+E2) to 7/2 <sup>-</sup> . 7/2[503] band member.
≈478 <sup>@</sup>	(11/2 <sup>-</sup> )	G	
≈492 <sup>&amp;</sup>	(9/2 <sup>-</sup> )	G	
≈570 <sup>b</sup>	(11/2 <sup>-</sup> )	G	J <sup>π</sup> : L≥5 in (d,t),(d,p).
663.49 4	3/2 <sup>-</sup>	CDEFG J	J <sup>π</sup> : J <sup>π</sup> =1/2 <sup>-</sup> ,3/2 <sup>-</sup> from (n,γ) E=2,24 keV res: av.; L=1 in (d,t),(d,p); populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.; γ to 1/2 <sup>-</sup> and 7/2 <sup>-</sup> states.
706 <sup>&amp;</sup> 6	(11/2 <sup>-</sup> )	G	
716 <sup>c</sup> 6	(9/2 <sup>+</sup> )	GH	J <sup>π</sup> : 9/2[624] Coriolis-mixed rotational band member.
729.90 4	3/2 <sup>-</sup>	CDE G J	XREF: G(733)J(733). J <sup>π</sup> : J <sup>π</sup> =1/2,3/2 from (n,γ) E=2,24 keV res: av.; L=1,(3) in (d,t),(d,p). populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.; γ to 1/2 <sup>-</sup> and 7/2 <sup>-</sup> states.
768.22 5	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	CDEF	J <sup>π</sup> : (n,γ) E=2,24 keV res: av.; populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.; γ to 1/2 <sup>-</sup> and 5/2 <sup>-</sup> states.
774 <sup>#</sup> 1	1/2,3/2,5/2 <sup>+</sup>	C	J <sup>π</sup> : populated by primary transitions in <sup>184</sup> W(n,γ) E=thermal.
785.3 <sup>d</sup> 4	(9/2 <sup>-</sup> )	A G J	XREF: J(789). J <sup>π</sup> : L≥5,L=3 in (d,t),(d,p); 394.4γ to (9/2 <sup>-</sup> ), 541.7γ to 7/2 <sup>-</sup> .
≈801		G J	
822.71 5	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	CDEF	J <sup>π</sup> : (n,γ) E=2,24 keV res: av.; populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.; γ to 1/2 <sup>-</sup> and 5/2 <sup>-</sup> states.
827.41 5	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )	DEFG	J <sup>π</sup> : (n,γ) E=2,24 keV res: av.; populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.; γ to 1/2 <sup>-</sup> .
842.0 9	(5/2)	E	J <sup>π</sup> : (n,γ) E=2,24 keV res: av.
888.6 <sup>e</sup> 5	5/2 <sup>-</sup>	E G	J <sup>π</sup> : L=3 in (d,t),(d,p). 5/2[512] rotational band head.
904 6		G	
917.55 6	1/2,3/2	DE	J <sup>π</sup> : (n,γ) E=2,24 keV res: av.; populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.
921 6		G	
967.78 10	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D	
971		F	
979.28 15	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup> <sup>k</sup>	D	
986 <sup>e</sup> 6	7/2 <sup>-</sup>	G J	J <sup>π</sup> : L=3 in (d,t),(d,p). 5/2[512] band member.
1005.59 <sup>f</sup> 10	1/2 <sup>-</sup>	CDEFG	XREF: G(1008). J <sup>π</sup> : J <sup>π</sup> =1/2 <sup>-</sup> ,3/2 <sup>-</sup> from (n,γ) E=2,24 keV res: av.; L=1 in (d,t),(d,p); 1/2[521] rotational band.
1013 <sup>h</sup> 6	1/2 <sup>-</sup>	G	J <sup>π</sup> : L=1 in (d,t),(d,p). K-2 γ-vibrational band based on the g.s.
1020 <sup>c</sup> 6	(13/2 <sup>+</sup> )	GH	J <sup>π</sup> : L=6 in ( <sup>3</sup> He,α). 9/2[624] band member.
1035.79 <sup>h</sup> 10	3/2 <sup>-</sup>	DE G	J <sup>π</sup> : J <sup>π</sup> =1/2 <sup>-</sup> ,3/2 <sup>-</sup> from (n,γ) E=2,24 keV res: av.; L=1 in (d,t),(d,p). K=1/2 γ band member.
1041.70 15	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> ) <sup>l</sup>	D	
1058.7 <sup>g</sup> 18	7/2 <sup>-</sup>	A G j	XREF: G(1058)j(1061). J <sup>π</sup> : log ft=7.6 from <sup>185</sup> Ta (J <sup>π</sup> =7/2 <sup>+</sup> ) β <sup>-</sup> decay, L=3 in (d,t),(d,p). 7/2[514] rotational band head.
1062.5 4	(5/2 <sup>+</sup> )	C j	XREF: j(1061). E(level): not observed (n,γ) E=thermal: γ coin; or (n,γ) E=2,24 keV res: av.
1068.20 12	3/2 <sup>-</sup>	DE	J <sup>π</sup> : populated by primary transitions in <sup>184</sup> W(n,γ) E=thermal, 888.8γ to 7/2 <sup>-</sup> . J <sup>π</sup> : J=1/2 <sup>-</sup> ,3/2 <sup>-</sup> from (n,γ) E=2,24 keV res: av.; populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.; γ to 1/2 <sup>-</sup> and 7/2 <sup>-</sup> states.

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**Adopted Levels, Gammas (continued)**

<sup>185</sup>W Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	XREF	Comments
1073 <sup>h</sup> 6	(5/2 <sup>-</sup> )	G	J <sup>π</sup> : L=3,1 in (d,t),(d,p). K=1/2 γ band member.
1077.30 20	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> ) <sup>l</sup>	D	
1086.80 20	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> ) <sup>l</sup>	D	
1101.40 10	3/2 <sup>-</sup>	DEF	J <sup>π</sup> : J=1/2 <sup>-</sup> ,3/2 <sup>-</sup> from (n,γ) E=2,24 keV res: av.; populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.; γ to 1/2 <sup>-</sup> and 7/2 <sup>-</sup> states.
1106 <sup>f</sup> 6	3/2 <sup>-</sup>	G	J <sup>π</sup> : L=1,3 in (d,t),(d,p). 1/2[521] band member.
1107 6		G	
1118 <sup>f</sup> 6	(5/2 <sup>-</sup> )	g J	XREF: g(1118). J <sup>π</sup> : L=3 in (d,t),(d,p). 1/2[521] band member.
≈1118 <sup>e</sup>	(9/2 <sup>-</sup> )	g J	XREF: g(1118). J <sup>π</sup> : 5/2[512] band member.
1120 6		G	
1145.29 20	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )	DE j	XREF: j(1149). J <sup>π</sup> : (n,γ) E=2,24 keV res: av.; populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.; γ to 1/2 <sup>-</sup> .
1147.32 21	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> ) <sup>l</sup>	D FG j	XREF: j(1149).
1154 <sup>h</sup> 6	(7/2 <sup>-</sup> )	G	J <sup>π</sup> : L=3,1 in (d,t),(d,p). K=1/2 γ band member.
1181.35 8	1/2 <sup>-</sup>	CDE G J	J <sup>π</sup> : res: av.; J <sup>π</sup> not 3/2 <sup>-</sup> from <sup>184</sup> W(pol d,p); populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.; γ to 1/2 <sup>-</sup> and 5/2 <sup>-</sup> states.
1218.96 8	3/2 <sup>-</sup>	CDEFG J	XREF: G(1222). J <sup>π</sup> : J <sup>π</sup> =1/2 <sup>-</sup> ,3/2 <sup>-</sup> from (n,γ) E=2,24 keV res: av.; J <sup>π</sup> not 1/2 <sup>-</sup> from <sup>184</sup> W(pol d,p). populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.; γ to 1/2 <sup>-</sup> and 7/2 <sup>-</sup> states.
≈1219 <sup>g</sup>	(9/2 <sup>-</sup> )	G	J <sup>π</sup> : L≥5 in (d,t),(d,p). 7/2[514] band member.
1246 <sup>#</sup> 1		C	
≈1279		G	
1284.10 21	1/2,3/2,5/2 <sup>+</sup> <sup>i</sup>	D g j	XREF: g(1290)j(1290).
1286.57 9	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	CDE g j	XREF: g(1290)j(1290). J <sup>π</sup> : J <sup>π</sup> =1/2 <sup>-</sup> ,3/2 <sup>-</sup> from (n,γ) E=2,24 keV res: av.; populated by γ-transition from the neutron-capture state (J <sup>π</sup> =1/2 <sup>+</sup> ) in (n,γ) E=thermal: γ coin.; γ to 1/2 <sup>-</sup> and 5/2 <sup>-</sup> .
1312.61 20	1/2,3/2,5/2 <sup>+</sup> <sup>i</sup>	D	
1317 6		G J	Doublet observed in (d,p) and (d,t).
1327.71 20	1/2,3/2,5/2 <sup>+</sup> <sup>i</sup>	D	
1335 <sup>f</sup> 6	(7/2 <sup>-</sup> )	G	J <sup>π</sup> : 1/2[521] band member.
1343 6		G	
1346 6		G	
1353.41 20	1/2,3/2,5/2 <sup>+</sup> <sup>i</sup>	D	
1359.2 <sup>#</sup> 10		C	
1361 <sup>f</sup> 6	(9/2 <sup>-</sup> )	G	J <sup>π</sup> : 1/2[521] band member.
1365.6 6	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )	E	J <sup>π</sup> : (n,γ) E=2,24 keV res: av. Parities were determined from ratios between reduced γ-ray intensities for the 2-keV and 24-keV n-capture.
1369.98 15	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup> <sup>k</sup>	D	
1382 6		G	
1400.99 21	1/2,3/2,5/2 <sup>+</sup> <sup>i</sup>	D	
≈1402		G	
≈1410		G	
1424.5 5	(5/2)	E	J <sup>π</sup> : (n,γ) E=2,24 keV res: av. Populated from 24-keV resonance only.
1428 6		G	
1441.15 9	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	CDE	J <sup>π</sup> : (n,γ) E=2,24 keV res: av.; populated by γ-transition from the

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**Adopted Levels, Gammas (continued)** $^{185}\text{W}$  Levels (continued)

E(level) <sup>†</sup>	$J^{\pi}$ <sup>‡</sup>	XREF	Comments
1443.09 15	$(1/2^-, 3/2)^m$	D	neutron-capture state ( $J^{\pi}=1/2^+$ ) in (n, $\gamma$ ) E=thermal: $\gamma$ coin.; $\gamma$ to $1/2^-$ and $5/2^-$ .  XREF: G(1501). $J^{\pi}$ : (n, $\gamma$ ) E=2,24 keV res: av.; populated by $\gamma$ -transition from the neutron-capture state ( $J^{\pi}=1/2^+$ ) in (n, $\gamma$ ) E=thermal: $\gamma$ coin.; $\gamma$ to $1/2^-$ and $5/2^-$ .
1445 6		G	
1448 6		G	
1496.39 9	$1/2^-, 3/2^-$	DEFG	
1503.84 15	$1/2, 3/2, 5/2^+ i$	CD G	$J^{\pi}$ : L=6 in ( $^3\text{He}, \alpha$ ). N=6 ( $i_{13/2}$ ) strongly Coriolis-mixed state. $J^{\pi}$ : L=(3) in (d,t),(d,p).
1535.25 8	$(1/2^-, 3/2)^m$	CD FG	
1561 6	$(13/2^+)$	GH	$J^{\pi}$ : L=6 in ( $^3\text{He}, \alpha$ ). N=6 ( $i_{13/2}$ ) strongly Coriolis-mixed state. $J^{\pi}$ : L=(3) in (d,t),(d,p).
1561 6		G	
1562.40 15	$(1/2, 3/2)^j$	D	
1570.50 21	$1/2, 3/2, 5/2^+ i$	D	
1572.56 8	$(3/2^-)^n$	CD	
1576.99 21	$1/2, 3/2, 5/2^+ i$	D	
1603 6		G	
1612.73 12	$(3/2^-, 5/2^+)^l$	D	
1623 6		G	
1627 10		G	
1643.88 9	$(1/2^-, 3/2)^m$	D	XREF: G(1646).
1650.31 21	$1/2, 3/2, 5/2^+ i$	D G	
1658.39 10	$(1/2^-, 3/2)^m$	CD	$J^{\pi}$ : (d,t),(d,p).
1663 6		G	
1666 6	$(9/2^+)$	GH	
1669.98 20	$1/2^{(-)}, 3/2, 5/2^+ k$	D	
1673.97 9	$(1/2^-, 3/2)^m$	D	
1677 6		G	
1683.89 20	$(1/2, 3/2)^j$	D G	
1686.81 20	$(3/2^-, 5/2^+)^l$	D	
1689.64 15	$1/2, 3/2, 5/2^+ i$	D	
1694.59 21	$1/2, 3/2, 5/2^+ i$	D	
1699 6		G	
1701 10		G	
1716.78 20	$1/2^{(-)}, 3/2, 5/2^+ k$	D	XREF: G(1722).
1718.66 7	$(3/2^-)^n$	D G	
1728.90 15	$1/2^{(-)}, 3/2, 5/2^+ k$	D G	
1735.05 21	$1/2, 3/2, 5/2^+ i$	D	
1739.41 20	$1/2, 3/2, 5/2^+ i$	D	
1746.91 20	$(3/2^-, 5/2^+)^l$	D G	XREF: G(1745).
1753.59 21	$1/2, 3/2, 5/2^+ i$	D	
1774.69 12	$(1/2^-, 3/2)^m$	D	
1795.25 15	$(1/2, 3/2)^j$	D	XREF: G(1800).
1797.26 7	$(3/2^-)^n$	D G	
1826.09 20	$1/2^{(-)}, 3/2, 5/2^+ k$	D	
$\approx 1830$		G	
1839.05 7	$(3/2^-)^n$	D	
1842.36 8	$(1/2^-, 3/2)^m$	D F	
1845.45 15	$1/2, 3/2, 5/2^+ i$	D G	
1846 10	$(13/2^+)$	GH	$J^{\pi}$ : L=6 in ( $^3\text{He}, \alpha$ ).
1851.45 10	$1/2^{(-)}, 3/2, 5/2^+ k$	D	

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Adopted Levels, Gammas (continued) $^{185}\text{W}$  Levels (continued)

E(level) <sup>†</sup>	$J^{\pi\ddagger}$	XREF	Comments
1860 10		G	
1866.89 12	$(1/2,3/2)^j$	D	
1874 10		G	
1882.86 9	$1/2^{(-)},3/2,5/2^{+k}$	CD	
1888.21 20	$1/2,3/2,5/2^{+i}$	D G	XREF: G(1886).
1906.71 20	$1/2,3/2,5/2^{+i}$	D G	XREF: G(1904).
1915 10		G	
1921.88 12	$(1/2^-,3/2)^m$	D	
1926.08 15	$1/2,3/2,5/2^{+i}$	D	
1931.30 10	$(1/2^-,3/2)^m$	D	
1935.41 20	$1/2,3/2,5/2^{+i}$	D G	XREF: G(1937).
1949.27 15	$1/2,3/2,5/2^{+i}$	D	
1952.86 10	$1/2^{(-)},3/2,5/2^{+k}$	D G	
1956.17 8	$(1/2^-,3/2)^m$	D	
1959 10		G	
1972.31 20	$1/2,3/2,5/2^{+i}$	D	
1976.68 9	$(1/2^-,3/2)^m$	D	
1979.50 15	$1/2^{(-)},3/2,5/2^{+k}$	D	
1984.56 15	$(1/2,3/2)^j$	D	
1986 10		G	
1991.38 20	$1/2^{(-)},3/2,5/2^{+k}$	D	
1999.50 10	$(1/2^-,3/2)^m$	D	
2003.49 20	$1/2^{(-)},3/2,5/2^{+k}$	D	
2007.00 15	$1/2^{(-)},3/2,5/2^{+k}$	D	
2009.46 15	$(1/2,3/2)^j$	D	
2031 10		G	
2037.98 9	$(1/2^-,3/2)^m$	D G	
2043.48 20	$1/2^{(-)},3/2,5/2^{+k}$	D	
2062.08 20	$1/2^{(-)},3/2,5/2^{+k}$	D	
2067.05 8	$(1/2^-,3/2)^m$	D	
2073.89 15	$1/2^{(-)},3/2,5/2^{+k}$	D	
2078.57 12	$1/2^{(-)},3/2,5/2^{+k}$	D	
2081.48 20	$1/2^{(-)},3/2,5/2^{+k}$	D	
2094.88 20	$1/2^{(-)},3/2,5/2^{+k}$	D	
2097.50 15	$1/2^{(-)},3/2,5/2^{+k}$	D	
2108.90 21	$1/2,3/2,5/2^{+i}$	D	
2117.00 20	$(1/2,3/2)^j$	D	
2122.68 20	$1/2^{(-)},3/2,5/2^{+k}$	D	
2130.59 11	$(1/2,3/2)^j$	D	
2135.05 21	$1/2,3/2,5/2^{+i}$	D	
2138.17 12	$1/2^{(-)},3/2,5/2^{+k}$	D	
2142.51 15	$1/2,3/2,5/2^{+i}$	D	
2150.35 9	$(3/2^-,5/2^{+})^l$	D	
2153.80 20	$(1/2,3/2)^j$	D	
2157.60 20	$(1/2,3/2)^j$	D	
2161.00 21	$1/2,3/2,5/2^{+i}$	D	
2164.40 12	$(1/2,3/2)^j$	D	

Continued on next page (footnotes at end of table)

**Adopted Levels, Gammas (continued)**

<sup>185</sup>W Levels (continued)

E(level) <sup>†</sup>	J <sup>π‡</sup>	XREF	E(level) <sup>†</sup>	J <sup>π‡</sup>	XREF
2178.39 9	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D	2460.78 9	(1/2,3/2) <sup>j</sup>	D
2186.49 15	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2466.30 20	(1/2,3/2) <sup>j</sup>	D
2191.17 12	1/2,3/2,5/2 <sup>+i</sup>	D	2470.56 11	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D
2195.00 21	1/2,3/2,5/2 <sup>+i</sup>	D	2475.11 12	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2206.29 20	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2479.68 9	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2210.67 12	(1/2,3/2) <sup>j</sup>	D	2483.42 20	1/2,3/2,5/2 <sup>+i</sup>	D
2216.91 12	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> ) <sup>l</sup>	D	2485.29 9	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2226.00 9	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D	2499.80 12	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D
2233.21 20	1/2,3/2,5/2 <sup>+i</sup>	D	2502.90 15	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2236.80 12	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2508.80 21	1/2,3/2,5/2 <sup>+i</sup>	D
2240.90 12	(3/2 <sup>-</sup> ) <sup>n</sup>	D	2513.40 15	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2249.00 15	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2517.28 11	(3/2 <sup>-</sup> ) <sup>n</sup>	D
2252.80 20	(1/2,3/2) <sup>j</sup>	D	2520.58 12	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2254.78 9	(3/2 <sup>-</sup> ) <sup>n</sup>	D	2528.18 15	1/2,3/2,5/2 <sup>+i</sup>	D
2268.07 9	(1/2,3/2) <sup>j</sup>	D	2548.11 15	(1/2,3/2) <sup>j</sup>	D
2275.17 12	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2551.92 20	1/2,3/2,5/2 <sup>+i</sup>	D
2277.21 15	1/2,3/2,5/2 <sup>+i</sup>	D	2554.99 20	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D
2284.37 9	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D	2559.96 9	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2288.39 15	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2567.70 21	1/2,3/2,5/2 <sup>+i</sup>	D
2292.50 15	(1/2,3/2) <sup>j</sup>	D	2574.67 9	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2294.90 12	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2577.54 21	1/2,3/2,5/2 <sup>+i</sup>	D
2312.10 12	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D	2582.41 12	(1/2,3/2) <sup>j</sup>	D
2315.07 10	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2590.11 12	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2327.32 20	1/2,3/2,5/2 <sup>+i</sup>	D	2600.72 20	1/2,3/2,5/2 <sup>+i</sup>	D
2334.81 15	1/2,3/2,5/2 <sup>+i</sup>	D	2604.57 9	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2339.17 8	(3/2 <sup>-</sup> ) <sup>n</sup>	D	2609.79 9	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2350.00 20	(1/2,3/2) <sup>j</sup>	D	2612.81 15	(1/2,3/2) <sup>j</sup>	D
2353.14 21	1/2,3/2,5/2 <sup>+i</sup>	D	2615.79 20	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D
2363.29 20	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2619.99 20	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D
2367.65 8	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D	2623.51 15	(1/2,3/2) <sup>j</sup>	D
2370.60 15	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2626.12 20	1/2,3/2,5/2 <sup>+i</sup>	D
2375.85 10	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> ) <sup>l</sup>	D	2628.80 15	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2379.66 8	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2632.19 9	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2384.28 10	(1/2,3/2) <sup>j</sup>	D	2638.81 20	(1/2,3/2) <sup>j</sup>	D
2391.00 12	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D	2641.62 20	1/2,3/2,5/2 <sup>+i</sup>	D
2401.10 10	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D	2645.36 9	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D
2407.37 7	(3/2 <sup>-</sup> ) <sup>n</sup>	D	2649.71 20	(1/2,3/2) <sup>j</sup>	D
2415.15 11	1/2,3/2,5/2 <sup>+i</sup>	D	2651.70 12	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D
2418.08 15	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> ) <sup>l</sup>	D	2653.21 20	(1/2,3/2) <sup>j</sup>	D
2422.42 20	1/2,3/2,5/2 <sup>+i</sup>	D	2654.32 20	1/2,3/2,5/2 <sup>+i</sup>	D
2425.00 12	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D	2654.67 11	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+k</sup>	D
2434.32 20	1/2,3/2,5/2 <sup>+i</sup>	D	2657.72 20	1/2,3/2,5/2 <sup>+i</sup>	D
2439.90 20	(1/2,3/2) <sup>j</sup>	D	2663.19 9	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2442.20 10	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D	2667.51 12	(1/2,3/2) <sup>j</sup>	D
2450.61 15	(1/2,3/2) <sup>j</sup>	D	2670.81 12	(1/2 <sup>-</sup> ,3/2) <sup>m</sup>	D
2453.21 12	1(1/2,3/2) <sup>j</sup>	D	2675.11 15	(1/2,3/2) <sup>j</sup>	D
2459.32 20	1/2,3/2,5/2 <sup>+i</sup>	D	2679.61 20	(1/2,3/2) <sup>j</sup>	D

Continued on next page (footnotes at end of table)

**Adopted Levels, Gammas (continued)**

$^{185}\text{W}$  Levels (continued)

E(level) <sup>†</sup>	$J^{\pi\ddagger}$	XREF	E(level) <sup>†</sup>	$J^{\pi\ddagger}$	XREF
2682.41 12	$(1/2,3/2)^j$	D	2872.11 12	$(1/2^-,3/2)^m$	D
2685.34 12	$1/2,3/2,5/2^+i$	D	2874.80 20	$1/2^{(-)},3/2,5/2^+k$	D
2695.27 12	$1/2^{(-)},3/2,5/2^+k$	D	2881.19 10	$(1/2^-,3/2)^m$	D
2697.41 15	$(3/2^-,5/2^+)^l$	D	2882.00 15	$1/2^{(-)},3/2,5/2^+k$	D
2703.20 21	$1/2,3/2,5/2^+i$	D	2892.20 15	$1/2^{(-)},3/2,5/2^+k$	D
2706.67 12	$(1/2^-,3/2)^m$	D	2902.09 10	$(1/2,3/2)^j$	D
2709.91 12	$(1/2^-,3/2)^m$	D	2910.10 9	$(1/2^-,3/2)^m$	D
2712.79 9	$(3/2^-,5/2^+)^l$	D	2913.21 15	$(1/2^-,3/2)^m$	D
2716.75 21	$1/2,3/2,5/2^+i$	D	2914.19 20	$1/2^{(-)},3/2,5/2^+k$	D
2718.20 15	$1/2^{(-)},3/2,5/2^+k$	D	2921.71 12	$(1/2^-,3/2)^m$	D
2722.60 12	$1/2^{(-)},3/2,5/2^+k$	D	2928.41 12	$(1/2^-,3/2)^m$	D
2725.60 20	$1/2^{(-)},3/2,5/2^+k$	D	2933.81 15	$1/2^{(-)},3/2,5/2^+k$	D
2727.81 12	$(1/2,3/2)^j$	D	2943.81 12	$1/2^{(-)},3/2,5/2^+k$	D
2730.62 20	$1/2,3/2,5/2^+i$	D	2944.74 21	$1/2,3/2,5/2^+i$	D
2737.41 10	$(1/2^-,3/2)^m$	D	2950.05 15	$1/2^{(-)},3/2,5/2^+k$	D
2740.40 20	$1/2^{(-)},3/2,5/2^+k$	D	2956.10 20	$1/2^{(-)},3/2,5/2^+k$	D
2751.81 12	$1/2^{(-)},3/2,5/2^+k$	D	2964.40 20	$1/2^{(-)},3/2,5/2^+k$	D
2756.21 15	$1/2^{(-)},3/2,5/2^+k$	D	2966.90 21	$1/2,3/2,5/2^+i$	D
2760.42 15	$(1/2,3/2)^j$	D	2977.40 20	$1/2^{(-)},3/2,5/2^+k$	D
2765.09 9	$(3/2^-,5/2^+)^l$	D	2985.51 12	$1/2^{(-)},3/2,5/2^+k$	D
2770.30 15	$1/2^{(-)},3/2,5/2^+k$	D	2990.66 9	$(1/2^-,3/2)^m$	D
2772.07 12	$1/2^{(-)},3/2,5/2^+k$	D	3004.79 10	$(1/2^-,3/2)^m$	D
2778.00 20	$1/2^{(-)},3/2,5/2^+k$	D	3010.34 15	$1/2,3/2,5/2^+i$	D
2782.59 15	$1/2,3/2,5/2^+i$	D	3033.20 21	$1/2,3/2,5/2^+i$	D
2785.00 11	$(1/2,3/2)^j$	D	3037.21 12	$(1/2^-,3/2)^m$	D
2787.82 20	$1/2,3/2,5/2^+i$	D	3047.60 15	$1/2,3/2,5/2^+i$	D
2790.20 20	$1/2^{(-)},3/2,5/2^+k$	D	3052.98 9	$1/2,3/2,5/2^+i$	D
2794.38 12	$(3/2^-,5/2^+)^l$	D	3064.06 21	$1/2,3/2,5/2^+i$	D
2796.56 12	$1/2,3/2,5/2^+i$	D	3068.96 21	$1/2,3/2,5/2^+i$	D
2799.01 20	$(1/2,3/2)^j$	D	3087.72 15	$(1/2,3/2)^j$	D
2804.07 9	$(1/2^-,3/2)^m$	D	3091.90 21	$1/2,3/2,5/2^+i$	D
2812.41 15	$(1/2^-,3/2)^m$	D	3094.80 15	$1/2,3/2,5/2^+i$	D
2815.21 15	$1/2^{(-)},3/2,5/2^+k$	D	3099.82 21	$1/2,3/2,5/2^+i$	D
2821.41 20	$(1/2,3/2)^j$	D	3106.32 21	$1/2,3/2,5/2^+i$	D
2835.98 11	$(1/2^-,3/2)^m$	D	3124.44 21	$1/2,3/2,5/2^+i$	D
2838.03 15	$1/2,3/2,5/2^+i$	D	3200.36 21	$1/2,3/2,5/2^+i$	D
2839.80 20	$1/2^{(-)},3/2,5/2^+k$	D	3241.56 21	$1/2,3/2,5/2^+i$	D
2856.81 15	$1/2^{(-)},3/2,5/2^+k$	D	3249.46 21	$1/2,3/2,5/2^+i$	D
2866.61 15	$1/2^{(-)},3/2,5/2^+k$	D	3262.97 15	$1/2,3/2,5/2^+i$	D
2868.85 9	$1/2^{(-)},3/2,5/2^+k$	D	3276.86 21	$1/2,3/2,5/2^+i$	D

<sup>†</sup> From least-squares fit to  $E\gamma$ 's by evaluator. 0.2 keV uncertainty assumed for  $E\gamma$ 's from  $^{184}\text{W}(n,\gamma)$  E=thermal:  $\gamma$  coin.

<sup>‡</sup> Nilsson orbital assignments are based on the comparison of experimental (d,p) and (d,t) cross sections with values calculated using the DWBA approximation and Nilsson's model, and on the energy systematics of Nilsson orbitals in odd-A tungsten nuclei.  $J^{\pi}$  assignments are based on rotational structure, on  $\gamma$ -ray multiplicities and decay patterns. States populated by  $\gamma$ -transition

**Adopted Levels, Gammas (continued)** $^{185}\text{W}$  Levels (continued)

from the neutron-capture state ( $J^\pi=1/2^+$ ) in (n, $\gamma$ ) E=thermal:  $\gamma$  coin. are expected to have spins of 1/2, 3/2 or 5/2<sup>+</sup>, and also used for  $J^\pi$  assignment. Average resonance capture in  $^{184}\text{W}(n,\gamma)$  E=2,24 keV is expected to populate all low-lying states with  $J^\pi=1/2, 3/2$  or 5/2, and is also used as argument for  $J^\pi$  assignment. Assignments from (d,t),(d,p), and ( $^3\text{He},\alpha$ ) reactions are based on measured L-value transfers, and on the comparison of experimental cross sections with values calculated using the DWBA approximation and Nilsson model. See  $^{186}\text{W}(d,t)$ ,  $^{184}\text{W}(d,p)$  for uncertainties of L-value transfers.

# From  $^{184}\text{W}(n,\gamma)$  E=thermal.

@ Band(A): 3/2(512) rotational band. Rotational parameters: A=14.6, B=-10.8 from 3/2, 5/2, 7/2 levels.

& Band(B): 1/2(510) rotational band. Rotational parameters: A=21.1, a=0.103 from 1/2, 3/2, 5/2 levels.

<sup>a</sup> Band(C): 11/2(615) Coriolis-mixed rotational band.

<sup>b</sup> Band(D): 7/2(503) rotational band. Rotational parameters: A=16.4, B=-4.7 from 7/2, 9/2, 11/2 levels.

<sup>c</sup> Band(E): 9/2(624) Coriolis-mixed rotational band.

<sup>d</sup> Band(F): possible 9/2(505) band head.

<sup>e</sup> Band(G): 5/2(512) rotational band. Rotational parameters: A=13.3, B=47.0 from 5/2, 7/2, 9/2 levels.

<sup>f</sup> Band(H): 1/2(521) rotational band. Rotational parameters: A=17.7, a=+0.865 from 1/2, 3/2, 5/2 levels.

<sup>g</sup> Band(I): 7/2(514) rotational band. Rotational parameters: A $\approx$ 18 from 7/2 and 9/2 levels.

<sup>h</sup> Band(J): K=1/2<sup>-</sup>  $\gamma$  band, based on g.s.

<sup>i</sup> Populated by  $\gamma$ -transition from the neutron-capture state ( $J^\pi=1/2^+$ ) in (n, $\gamma$ ) E=thermal:  $\gamma$  coin.

<sup>j</sup> Populated by  $\gamma$ -transition from the neutron-capture state ( $J^\pi=1/2^+$ ) in (n, $\gamma$ ) E=thermal:  $\gamma$  coin.;  $\gamma$  to 1/2<sup>-</sup>.

<sup>k</sup> Populated by  $\gamma$ -transition from the neutron-capture state ( $J^\pi=1/2^+$ ) in (n, $\gamma$ ) E=thermal:  $\gamma$  coin.;  $\gamma$  to 5/2<sup>-</sup>.

<sup>l</sup> Populated by  $\gamma$ -transition from the neutron-capture state ( $J^\pi=1/2^+$ ) in (n, $\gamma$ ) E=thermal:  $\gamma$  coin.;  $\gamma$  to 7/2<sup>-</sup>.

<sup>m</sup> Populated by  $\gamma$ -transition from the neutron-capture state ( $J^\pi=1/2^+$ ) in (n, $\gamma$ ) E=thermal:  $\gamma$  coin.;  $\gamma$  to 1/2<sup>-</sup> and 5/2<sup>-</sup>.

<sup>n</sup> Populated by  $\gamma$ -transition from the neutron-capture state ( $J^\pi=1/2^+$ ) in (n, $\gamma$ ) E=thermal:  $\gamma$  coin.;  $\gamma$  to 1/2<sup>-</sup> and 7/2<sup>-</sup>.



Adopted Levels, Gammas (continued)

E <sub>i</sub> (level)	J <sup>π</sup> <sub>i</sub>	γ( <sup>185</sup> W)							I <sub>(γ+ce)</sub>	Comments
		E <sub>γ</sub> <sup>†</sup>	I <sub>γ</sub> <sup>†</sup>	E <sub>f</sub>	J <sup>π</sup> <sub>f</sub>	Mult. <sup>‡</sup>	δ <sup>‡</sup>	α <sup>a</sup>		
23.547	1/2 <sup>-</sup>	23.54 <sup>#</sup> 5	100 <sup>#</sup>	0.0	3/2 <sup>-</sup>	(M1+E2)	0.10 3	93 23		
65.854	5/2 <sup>-</sup>	42.29 <sup>#</sup> 5	1.3 <sup>#</sup> 4	23.547	1/2 <sup>-</sup>	E2		189		
		65.86 <sup>#</sup> 3	100 <sup>#</sup> 5	0.0	3/2 <sup>-</sup>	M1+E2	1.1 3	13 3		
93.295	3/2 <sup>-</sup>	69.7 <sup>#</sup> 3		23.547	1/2 <sup>-</sup>				1.84×10 <sup>3</sup> 26	I <sub>(γ+ce)</sub> : from <sup>185</sup> W IT decay (1.67 min).
		93.30 <sup>#</sup> 5	100 <sup>#</sup> 34	0.0	3/2 <sup>-</sup>					
173.702	7/2 <sup>-</sup>	107.85 <sup>#</sup> 2	12.4 <sup>#</sup> 9	65.854	5/2 <sup>-</sup>	M1+E2	1.2 +6-3	3.36 10		B(M1)(W.u.)≥0.00012; B(E2)(W.u.)≥8.4
		173.68 <sup>#</sup> 2	100 <sup>#</sup> 3	0.0	3/2 <sup>-</sup>	E2		0.504		B(E2)(W.u.)≥18
187.878	5/2 <sup>-</sup>	94.59 <sup>#</sup> 4	12.9 <sup>#</sup> 9	93.295	3/2 <sup>-</sup>					
		122.05 <sup>#</sup> 7	12.5 <sup>#</sup> 9	65.854	5/2 <sup>-</sup>					
		164.33 <sup>#</sup> 2	72 <sup>#</sup> 3	23.547	1/2 <sup>-</sup>					
		187.88 <sup>#</sup> 2	100 <sup>#</sup> 4	0.0	3/2 <sup>-</sup>					
197.383	11/2 <sup>+</sup>	(9.53 6)		187.878	5/2 <sup>-</sup>	[E3]		4.0×10 <sup>7</sup>	75 5	B(E3)(W.u.)=0.00066 5
		23.54 <sup>#</sup> 5	0.018 <sup>#</sup> 6	173.702	7/2 <sup>-</sup>	[M2]		8.7×10 <sup>3</sup>		I <sub>(γ+ce)</sub> : from <sup>185</sup> W IT decay (1.67 min).
		131.55 <sup>#</sup> 2	100 <sup>#</sup> 3	65.854	5/2 <sup>-</sup>	E3		19.8		B(M2)(W.u.)=1.0×10 <sup>-8</sup> 4
243.62	7/2 <sup>-</sup>	69.7 <sup>@</sup> 3	7.8 <sup>@</sup> 10	173.702	7/2 <sup>-</sup>	M1+E2	0.27 6	14.3 3		B(E3)(W.u.)=0.00038 3
		150.3 <sup>@</sup> 2	0.48 <sup>@</sup> 12	93.295	3/2 <sup>-</sup>	[E2]		0.844		B(M1)(W.u.)=7.4×10 <sup>-5</sup> 12;
		177.59 <sup>@</sup> 8	100.0 <sup>@</sup> 14	65.854	5/2 <sup>-</sup>	M1(+E2)	0.3 +4-3	0.92 9		B(E2)(W.u.)=0.46 21
		243.7 <sup>@</sup> 3	14.6 <sup>@</sup> 11	0.0	3/2 <sup>-</sup>	[E2]		0.163		B(E2)(W.u.)=0.0089 23
390.92	(9/2 <sup>-</sup> )	147.3 <sup>@</sup> 1	100 <sup>@</sup>	243.62	7/2 <sup>-</sup>	(M1+E2)	0.8 6	1.34 19		B(M1)(W.u.)=5.7×10 <sup>-5</sup> 14;
663.49	3/2 <sup>-</sup>	419.40	54.3 16	243.62	7/2 <sup>-</sup>					B(E2)(W.u.)≤0.27
		475.20	23.1 19	187.878	5/2 <sup>-</sup>					B(E2)(W.u.)=0.0242 24
		569.79	100.0 22	93.295	3/2 <sup>-</sup>					
		597.22	53.4 16	65.854	5/2 <sup>-</sup>					
		639.54	95.2 16	23.547	1/2 <sup>-</sup>					
		663.10	95.0 16	0.0	3/2 <sup>-</sup>					
729.90	3/2 <sup>-</sup>	485.90	36.1 25	243.62	7/2 <sup>-</sup>					
		636.29	100 7	93.295	3/2 <sup>-</sup>					
		663.72	74 4	65.854	5/2 <sup>-</sup>					
		706.04	61 3	23.547	1/2 <sup>-</sup>					
		729.60	20.2 25	0.0	3/2 <sup>-</sup>					
768.22	1/2 <sup>-</sup> , 3/2 <sup>-</sup>	674.39	63 25	93.295	3/2 <sup>-</sup>					
		701.82	15 12	65.854	5/2 <sup>-</sup>					
		744.14	100.0 22	23.547	1/2 <sup>-</sup>					
		767.70	54 17	0.0	3/2 <sup>-</sup>					

6

**Adopted Levels, Gammas (continued)**

$\gamma(^{185}\text{W})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$
785.3	(9/2 <sup>-</sup> )	394.4 @ 5	100 @ 33	390.92	(9/2 <sup>-</sup> )	1145.29	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )	1121.74	100	23.547	1/2 <sup>-</sup>
		541.7 @ 5	100 @ 33	243.62	7/2 <sup>-</sup>	1147.32	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> )	903.70	100	243.62	7/2 <sup>-</sup>
822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	729.29	3.5 4	93.295	3/2 <sup>-</sup>	1181.35	1/2 <sup>-</sup>	353.90	3.9 4	827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )
		756.72	59.2 12	65.854	5/2 <sup>-</sup>			451.40	34.7 13	729.90	3/2 <sup>-</sup>
		799.04	3.0 4	23.547	1/2 <sup>-</sup>			517.80	19.2 21	663.49	3/2 <sup>-</sup>
		822.60	100.0 16	0.0	3/2 <sup>-</sup>			1088.09	22.0 8	93.295	3/2 <sup>-</sup>
827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )	733.69	97 13	93.295	3/2 <sup>-</sup>			1115.52	11.7 4	65.854	5/2 <sup>-</sup>
		803.44	100 13	23.547	1/2 <sup>-</sup>			1157.84	39.8 9	23.547	1/2 <sup>-</sup>
917.55	1/2,3/2	824.19	100 11	93.295	3/2 <sup>-</sup>			1181.40	100.0 9	0.0	3/2 <sup>-</sup>
		917.50	36 11	0.0	3/2 <sup>-</sup>	1218.96	3/2 <sup>-</sup>	391.50	2.3 3	827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )
967.78	(1/2 <sup>-</sup> ,3/2)	779.90	80 8	187.878	5/2 <sup>-</sup>			555.40	12.4 25	663.49	3/2 <sup>-</sup>
		874.49	34 3	93.295	3/2 <sup>-</sup>			975.30	15.2 16	243.62	7/2 <sup>-</sup>
		901.92	29 3	65.854	5/2 <sup>-</sup>			1031.10	62.5 16	187.878	5/2 <sup>-</sup>
		944.24	100 5	23.547	1/2 <sup>-</sup>			1125.69	100.0 23	93.295	3/2 <sup>-</sup>
979.28	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	791.40	100 17	187.878	5/2 <sup>-</sup>			1153.12	40.5 19	65.854	5/2 <sup>-</sup>
		913.42	13 4	65.854	5/2 <sup>-</sup>			1195.44	79.9 6	23.547	1/2 <sup>-</sup>
1005.59	1/2 <sup>-</sup>	912.29	100.0 14	93.295	3/2 <sup>-</sup>			1219.00	15.2 6	0.0	3/2 <sup>-</sup>
		939.72	3.45 19	65.854	5/2 <sup>-</sup>	1284.10	1/2,3/2,5/2 <sup>+</sup>	554.20	100	729.90	3/2 <sup>-</sup>
		982.04	5.79 22	23.547	1/2 <sup>-</sup>	1286.57	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	556.60	49 6	729.90	3/2 <sup>-</sup>
		1005.60	33.5 7	0.0	3/2 <sup>-</sup>			1098.70	98 6	187.878	5/2 <sup>-</sup>
1035.79	3/2 <sup>-</sup>	847.90	13 6	187.878	5/2 <sup>-</sup>			1193.29	46 3	93.295	3/2 <sup>-</sup>
		942.49	100 8	93.295	3/2 <sup>-</sup>			1220.72	23.2 21	65.854	5/2 <sup>-</sup>
		1012.24	35 4	23.547	1/2 <sup>-</sup>			1263.04	38.9 21	23.547	1/2 <sup>-</sup>
		1035.80	45 4	0.0	3/2 <sup>-</sup>			1286.60	100 4	0.0	3/2 <sup>-</sup>
1041.70	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> )	868.00	9 2	173.702	7/2 <sup>-</sup>	1312.61	1/2,3/2,5/2 <sup>+</sup>	1312.60	100	0.0	3/2 <sup>-</sup>
		948.39	100 9	93.295	3/2 <sup>-</sup>	1327.71	1/2,3/2,5/2 <sup>+</sup>	1327.70	100	0.0	3/2 <sup>-</sup>
1058.7	7/2 <sup>-</sup>	965 @ 3	39 @ 12	93.295	3/2 <sup>-</sup>	1353.41	1/2,3/2,5/2 <sup>+</sup>	1353.40	100	0.0	3/2 <sup>-</sup>
		993 @ 3	100 @ 33	65.854	5/2 <sup>-</sup>	1369.98	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1276.69	100 43	93.295	3/2 <sup>-</sup>
		1059 @ 3	100 @ 33	0.0	3/2 <sup>-</sup>			1304.12	100 43	65.854	5/2 <sup>-</sup>
1062.5	(5/2 <sup>+</sup> )	239.5 & 9	5.3 &	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	1400.99	1/2,3/2,5/2 <sup>+</sup>	1307.69	100	93.295	3/2 <sup>-</sup>
		888.8 & 4	100 &	173.702	7/2 <sup>-</sup>	1441.15	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	613.70	8.4 7	827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )
1068.20	3/2 <sup>-</sup>	894.50	6.1 15	173.702	7/2 <sup>-</sup>			672.81	13.1 14	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
		974.89	100 9	93.295	3/2 <sup>-</sup>			1347.89	56.6 13	93.295	3/2 <sup>-</sup>
		1044.64	47 6	23.547	1/2 <sup>-</sup>			1375.32	1.2 4	65.854	5/2 <sup>-</sup>
1077.30	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> )	903.60	100	173.702	7/2 <sup>-</sup>			1417.64	100.0 22	23.547	1/2 <sup>-</sup>
1086.80	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> )	913.10	100	173.702	7/2 <sup>-</sup>			1441.20	31.8 9	0.0	3/2 <sup>-</sup>
1101.40	3/2 <sup>-</sup>	927.70	23 14	173.702	7/2 <sup>-</sup>	1443.09	(1/2 <sup>-</sup> ,3/2)	1377.22	14.9 25	65.854	5/2 <sup>-</sup>
		1008.09	100 11	93.295	3/2 <sup>-</sup>			1419.54	100 11	23.547	1/2 <sup>-</sup>
		1077.84	63 6	23.547	1/2 <sup>-</sup>	1496.39	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	1308.50	23 3	187.878	5/2 <sup>-</sup>
		1101.40	17 4	0.0	3/2 <sup>-</sup>			1403.09	100 4	93.295	3/2 <sup>-</sup>

**Adopted Levels, Gammas (continued)**

$\gamma(^{185}\text{W})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$
1496.39	$1/2^-, 3/2^-$	1430.52	13.3 25	65.854	$5/2^-$	1673.97	$(1/2^-, 3/2)$	1486.10	55 3	187.878	$5/2^-$
		1472.84	56 3	23.547	$1/2^-$			1580.69	7.6 23	93.295	$3/2^-$
		1496.40	17.5 25	0.0	$3/2^-$			1608.12	53 4	65.854	$5/2^-$
1503.84	$1/2, 3/2, 5/2^+$	840.30	100 13	663.49	$3/2^-$	1683.89	$(1/2, 3/2)$	1650.44	100 5	23.547	$1/2^-$
		1410.59	24 4	93.295	$3/2^-$			1660.34	100	23.547	$1/2^-$
		617.70	10 3	917.55	$1/2, 3/2$			1513.10	100	173.702	$7/2^-$
1535.25	$(1/2^-, 3/2)$	707.80	25.7 18	827.41	$(1/2^-, 3/2^-)$	1686.81	$(3/2^-, 5/2^+)$	1026.10	100 45	663.49	$3/2^-$
		805.30	90 4	729.90	$3/2^-$	1689.64	$1/2, 3/2, 5/2^+$	1596.39	30 15	93.295	$3/2^-$
		871.70	100 4	663.49	$3/2^-$	1694.59	$1/2, 3/2, 5/2^+$	1031.10	100	663.49	$3/2^-$
		1441.99	2.7 5	93.295	$3/2^-$	1716.78	$1/2^{(-)}, 3/2, 5/2^+$	1528.90	100	187.878	$5/2^-$
		1469.42	1.3 5	65.854	$5/2^-$	1718.66	$(3/2^-)$	891.20	42 3	827.41	$(1/2^-, 3/2^-)$
		1511.74	12.1 6	23.547	$1/2^-$			950.31	63 4	768.22	$1/2^-, 3/2^-$
		1535.30	14.0 8	0.0	$3/2^-$			1055.10	16 5	663.49	$3/2^-$
		1469.09	100 5	93.295	$3/2^-$			1530.80	30 3	187.878	$5/2^-$
1562.40	$(1/2, 3/2)$	1538.84	9 3	23.547	$1/2^-$			1545.00	8.5 11	173.702	$7/2^-$
		840.60	100	729.90	$3/2^-$			1625.39	52 3	93.295	$3/2^-$
1570.50	$1/2, 3/2, 5/2^+$	745.10	44 12	827.41	$(1/2^-, 3/2^-)$			1652.82	87 3	65.854	$5/2^-$
1572.56	$(3/2^-)$	842.60	100 19	729.90	$3/2^-$			1695.14	18.0 21	23.547	$1/2^-$
		1328.90	32 5	243.62	$7/2^-$			1718.70	100 4	0.0	$3/2^-$
		1398.90	3.5 18	173.702	$7/2^-$	1728.90	$1/2^{(-)}, 3/2, 5/2^+$	1541.00	55 18	187.878	$5/2^-$
		1479.29	18 5	93.295	$3/2^-$			1728.90	100 27	0.0	$3/2^-$
		1506.72	42 5	65.854	$5/2^-$	1735.05	$1/2, 3/2, 5/2^+$	912.33	100	822.71	$1/2^-, 3/2^-$
		1549.04	35 5	23.547	$1/2^-$	1739.41	$1/2, 3/2, 5/2^+$	1739.40	100	0.0	$3/2^-$
		1572.60	33 5	0.0	$3/2^-$	1746.91	$(3/2^-, 5/2^+)$	1573.20	100	173.702	$7/2^-$
		913.50	100	663.49	$3/2^-$	1753.59	$1/2, 3/2, 5/2^+$	1660.29	100	93.295	$3/2^-$
		949.20	33 6	663.49	$3/2^-$	1774.69	$(1/2^-, 3/2)$	1586.80	100 12	187.878	$5/2^-$
		1369.10	100 5	243.62	$7/2^-$			1681.39	71 18	93.295	$3/2^-$
1643.88	$(1/2^-, 3/2)$	1546.92	8.1 20	65.854	$5/2^-$			1751.14	82 18	23.547	$1/2^-$
		816.40	40 4	827.41	$(1/2^-, 3/2^-)$	1795.25	$(1/2, 3/2)$	1065.30	100 8	729.90	$3/2^-$
		1456.00	9.5 24	187.878	$5/2^-$			1771.74	9 5	23.547	$1/2^-$
		1550.59	5.9 18	93.295	$3/2^-$	1797.26	$(3/2^-)$	969.80	22 4	827.41	$(1/2^-, 3/2^-)$
		1578.02	8.3 18	65.854	$5/2^-$			974.53	21 5	822.71	$1/2^-, 3/2^-$
		1620.34	18.3 18	23.547	$1/2^-$			1028.91	13 4	768.22	$1/2^-, 3/2^-$
		1643.90	100 4	0.0	$3/2^-$			1133.70	41 9	663.49	$3/2^-$
1650.31	$1/2, 3/2, 5/2^+$	822.90	100	827.41	$(1/2^-, 3/2^-)$			1609.40	42 3	187.878	$5/2^-$
		1658.39	$(1/2^-, 3/2)$	1470.50	14 5	187.878	$5/2^-$	1623.60	8.7 10	173.702	$7/2^-$
		1565.09	100 7	93.295	$3/2^-$			1703.99	100 5	93.295	$3/2^-$
		1634.84	16 7	23.547	$1/2^-$			1731.42	60 4	65.854	$5/2^-$
1669.98	$1/2^{(-)}, 3/2, 5/2^+$	1658.40	26 7	0.0	$3/2^-$			1773.74	58 5	23.547	$1/2^-$
		1604.12	100	65.854	$5/2^-$			1797.30	15 3	0.0	$3/2^-$
		1673.97	$(1/2^-, 3/2)$	851.23	19 5	822.71	$1/2^-, 3/2^-$	1826.09	$1/2^{(-)}, 3/2, 5/2^+$	1638.20	100
		944.00	17 3	729.90	$3/2^-$	1839.05	$(3/2^-)$	1016.33	8.0 21	822.71	$1/2^-, 3/2^-$

Adopted Levels, Gammas (continued)

$\gamma(^{185}\text{W})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	
1839.05	(3/2 <sup>-</sup> )	1070.71	20 3	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	1931.30	(1/2 <sup>-</sup> ,3/2)	1931.30	100 8	0.0	3/2 <sup>-</sup>	
		1175.50	19 4	663.49	3/2 <sup>-</sup>	1935.41	1/2,3/2,5/2 <sup>+</sup>	1935.40	100	0.0	3/2 <sup>-</sup>	
		1595.40	15.4 16	243.62	7/2 <sup>-</sup>	1949.27	1/2,3/2,5/2 <sup>+</sup>	1181.01	100 13	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	
		1651.20	11.7 16	187.878	5/2 <sup>-</sup>			1219.40	30 10	729.90	3/2 <sup>-</sup>	
		1745.79	14.9 16	93.295	3/2 <sup>-</sup>	1952.86	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1125.40	100 21	827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )	
		1773.22	42 3	65.854	5/2 <sup>-</sup>			1222.90	62 12	729.90	3/2 <sup>-</sup>	
		1815.54	100 4	23.547	1/2 <sup>-</sup>			1765.00	50 9	187.878	5/2 <sup>-</sup>	
		1839.10	23.4 21	0.0	3/2 <sup>-</sup>			1859.59	68 9	93.295	3/2 <sup>-</sup>	
		1842.36	(1/2 <sup>-</sup> ,3/2)	1014.90	9.5 24	827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )	1887.02	29 9	65.854	5/2 <sup>-</sup>	
		1112.40		33 3	729.90	3/2 <sup>-</sup>	1956.17	(1/2 <sup>-</sup> ,3/2)	1226.20	9.7 9	729.90	3/2 <sup>-</sup>
1178.80	17 8	663.49		3/2 <sup>-</sup>			1292.60	5.5 16	663.49	3/2 <sup>-</sup>		
1654.50	8.3 18	187.878		5/2 <sup>-</sup>			1768.30	5.8 7	187.878	5/2 <sup>-</sup>		
1749.09	14.3 18	93.295		3/2 <sup>-</sup>			1862.89	5.8 7	93.295	3/2 <sup>-</sup>		
1818.84	46 3	23.547		1/2 <sup>-</sup>			1890.32	3.0 7	65.854	5/2 <sup>-</sup>		
1842.40	100 4	0.0		3/2 <sup>-</sup>			1932.64	3.5 7	23.547	1/2 <sup>-</sup>		
1845.45	1/2,3/2,5/2 <sup>+</sup>	1181.90		100 15	663.49	3/2 <sup>-</sup>			1956.20	100 3	0.0	3/2 <sup>-</sup>
1845.50		15 3		0.0	3/2 <sup>-</sup>	1972.31	1/2,3/2,5/2 <sup>+</sup>	1972.30	100	0.0	3/2 <sup>-</sup>	
1851.45	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	933.90		89 25	917.55	1/2,3/2	1976.68	(1/2 <sup>-</sup> ,3/2)	1313.10	100 13	663.49	3/2 <sup>-</sup>
		1121.50	32 11	729.90	3/2 <sup>-</sup>			1883.39	84 8	93.295	3/2 <sup>-</sup>	
		1187.90	100 18	663.49	3/2 <sup>-</sup>			1910.82	39 8	65.854	5/2 <sup>-</sup>	
		1785.62	18 7	65.854	5/2 <sup>-</sup>			1953.14	100 13	23.547	1/2 <sup>-</sup>	
		1851.50	18 7	0.0	3/2 <sup>-</sup>			1976.70	66 11	0.0	3/2 <sup>-</sup>	
1866.89	(1/2,3/2)	1044.13	100 18	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	1979.50	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1913.62	63 16	65.854	5/2 <sup>-</sup>	
		1843.34	45 8	23.547	1/2 <sup>-</sup>			1979.50	100 21	0.0	3/2 <sup>-</sup>	
		1866.90	68 8	0.0	3/2 <sup>-</sup>	1984.56	(1/2,3/2)	1157.10	100 29	827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )	
1882.86	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1152.90	69 7	729.90	3/2 <sup>-</sup>			1961.04	42 13	23.547	1/2 <sup>-</sup>	
		1219.30	79 12	663.49	3/2 <sup>-</sup>	1991.38	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1925.52	100	65.854	5/2 <sup>-</sup>	
		1695.00	100 6	187.878	5/2 <sup>-</sup>	1999.50	(1/2 <sup>-</sup> ,3/2)	1811.60	30 15	187.878	5/2 <sup>-</sup>	
		1789.59	35 4	93.295	3/2 <sup>-</sup>			1906.19	40 15	93.295	3/2 <sup>-</sup>	
		1817.02	78 6	65.854	5/2 <sup>-</sup>			1975.94	100 20	23.547	1/2 <sup>-</sup>	
		1882.90	59 6	0.0	3/2 <sup>-</sup>			1999.50	55 15	0.0	3/2 <sup>-</sup>	
		1888.21	1/2,3/2,5/2 <sup>+</sup>	1888.20	100	0.0	3/2 <sup>-</sup>	2003.49	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1815.60	100	187.878
1906.71	1/2,3/2,5/2 <sup>+</sup>	1906.70	100	0.0	3/2 <sup>-</sup>	2007.00	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1941.12	69 19	65.854	5/2 <sup>-</sup>	
1921.88	(1/2 <sup>-</sup> ,3/2)	1099.13	10 3	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>			2007.00	100 19	0.0	3/2 <sup>-</sup>	
		1734.00	3.8 16	187.878	5/2 <sup>-</sup>	2009.46	(1/2,3/2)	1279.50	100 7	729.90	3/2 <sup>-</sup>	
		1898.34	100 4	23.547	1/2 <sup>-</sup>			1985.94	59 7	23.547	1/2 <sup>-</sup>	
1926.08	1/2,3/2,5/2 <sup>+</sup>	1103.33	100 24	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	2037.98	(1/2 <sup>-</sup> ,3/2)	1374.40	100 29	663.49	3/2 <sup>-</sup>	
		1926.10	48 12	0.0	3/2 <sup>-</sup>			1850.10	41 18	187.878	5/2 <sup>-</sup>	
1931.30	(1/2 <sup>-</sup> ,3/2)	1743.40	21 6	187.878	5/2 <sup>-</sup>			1972.12	71 18	65.854	5/2 <sup>-</sup>	
		1837.99	15 6	93.295	3/2 <sup>-</sup>			2014.44	94 18	23.547	1/2 <sup>-</sup>	
		1907.74	19 6	23.547	1/2 <sup>-</sup>			2038.00	47 18	0.0	3/2 <sup>-</sup>	

**Adopted Levels, Gammas (continued)**

$\gamma(^{185}\text{W})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$
2043.48	$1/2^{(-)}, 3/2, 5/2^+$	1977.62	100	65.854	$5/2^-$	2164.40	$(1/2, 3/2)$	2140.84	100 15	23.547	$1/2^-$
2062.08	$1/2^{(-)}, 3/2, 5/2^+$	1996.22	100	65.854	$5/2^-$			2164.40	59 11	0.0	$3/2^-$
2067.05	$(1/2^-, 3/2)$	1149.50	11 3	917.55	$1/2^-, 3/2^-$	2178.39	$(1/2^-, 3/2)$	1355.63	12 4	822.71	$1/2^-, 3/2^-$
		1298.71	25.3 16	768.22	$1/2^-, 3/2^-$			1990.50	7 3	187.878	$5/2^-$
		1337.10	8.5 11	729.90	$3/2^-$			2085.09	47 5	93.295	$3/2^-$
		1403.50	31.6 19	663.49	$3/2^-$			2112.52	17 3	65.854	$5/2^-$
		1879.20	10.1 8	187.878	$5/2^-$			2154.84	100 6	23.547	$1/2^-$
		1973.79	38.6 16	93.295	$3/2^-$			2178.40	7 4	0.0	$3/2^-$
		2043.54	100 3	23.547	$1/2^-$	2186.49	$1/2^{(-)}, 3/2, 5/2^+$	2093.19	100 18	93.295	$3/2^-$
		2067.10	73.9 24	0.0	$3/2^-$			2120.62	41 14	65.854	$5/2^-$
2073.89	$1/2^{(-)}, 3/2, 5/2^+$	1886.00	100 12	187.878	$5/2^-$	2191.17	$1/2, 3/2, 5/2^+$	1527.60	39 8	663.49	$3/2^-$
		1980.59	73 12	93.295	$3/2^-$			2097.89	100 11	93.295	$3/2^-$
2078.57	$1/2^{(-)}, 3/2, 5/2^+$	1255.83	100 14	822.71	$1/2^-, 3/2^-$			2191.20	18 8	0.0	$3/2^-$
		1890.70	43 9	187.878	$5/2^-$	2195.00	$1/2, 3/2, 5/2^+$	2101.69	100	93.295	$3/2^-$
		2012.72	43 9	65.854	$5/2^-$	2206.29	$1/2^{(-)}, 3/2, 5/2^+$	2140.42	100	65.854	$5/2^-$
2081.48	$1/2^{(-)}, 3/2, 5/2^+$	2015.62	100	65.854	$5/2^-$	2210.67	$(1/2, 3/2)$	1383.20	38 9	827.41	$(1/2^-, 3/2^-)$
2094.88	$1/2^{(-)}, 3/2, 5/2^+$	2029.02	100	65.854	$5/2^-$			2117.39	41 9	93.295	$3/2^-$
2097.50	$1/2^{(-)}, 3/2, 5/2^+$	2031.62	54 23	65.854	$5/2^-$			2187.14	100 13	23.547	$1/2^-$
		2097.50	100 23	0.0	$3/2^-$	2216.91	$(3/2^-, 5/2^+)$	2043.20	5.7 19	173.702	$7/2^-$
2108.90	$1/2, 3/2, 5/2^+$	2015.59	100	93.295	$3/2^-$			2123.59	100 9	93.295	$3/2^-$
2117.00	$(1/2, 3/2)$	2093.44	100	23.547	$1/2^-$			2216.90	28 6	0.0	$3/2^-$
2122.68	$1/2^{(-)}, 3/2, 5/2^+$	2056.82	100	65.854	$5/2^-$	2226.00	$(1/2^-, 3/2)$	2038.10	23 3	187.878	$5/2^-$
2130.59	$(1/2, 3/2)$	1307.83	30 7	822.71	$1/2^-, 3/2^-$			2132.69	12.2 22	93.295	$3/2^-$
		2037.29	60 5	93.295	$3/2^-$			2160.12	5.6 17	65.854	$5/2^-$
		2107.04	21 4	23.547	$1/2^-$			2202.44	100 4	23.547	$1/2^-$
		2130.60	100 5	0.0	$3/2^-$			2226.00	12.2 17	0.0	$3/2^-$
2135.05	$1/2, 3/2, 5/2^+$	1312.33	100	822.71	$1/2^-, 3/2^-$	2233.21	$1/2, 3/2, 5/2^+$	2233.20	100	0.0	$3/2^-$
2138.17	$1/2^{(-)}, 3/2, 5/2^+$	1310.70	100 9	827.41	$(1/2^-, 3/2^-)$	2236.80	$1/2^{(-)}, 3/2, 5/2^+$	2143.49	100 20	93.295	$3/2^-$
		2044.89	26 7	93.295	$3/2^-$			2170.92	75 15	65.854	$5/2^-$
		2072.32	26 7	65.854	$5/2^-$			2236.80	60 15	0.0	$3/2^-$
2142.51	$1/2, 3/2, 5/2^+$	1374.21	100 12	768.22	$1/2^-, 3/2^-$	2240.90	$(3/2^-)$	2067.20	7 3	173.702	$7/2^-$
		2049.29	100 15	93.295	$3/2^-$			2175.02	27 10	65.854	$5/2^-$
2150.35	$(3/2^-, 5/2^+)$	1382.01	48 14	768.22	$1/2^-, 3/2^-$			2217.34	100 13	23.547	$1/2^-$
		1906.70	100 14	243.62	$7/2^-$	2249.00	$1/2^{(-)}, 3/2, 5/2^+$	2183.12	100 19	65.854	$5/2^-$
		2057.09	52 14	93.295	$3/2^-$			2249.00	75 19	0.0	$3/2^-$
		2084.52	48 14	65.854	$5/2^-$	2252.80	$(1/2, 3/2)$	2229.24	100	23.547	$1/2^-$
		2150.40	33 14	0.0	$3/2^-$	2254.78	$(3/2^-)$	1591.20	12 3	663.49	$3/2^-$
2153.80	$(1/2, 3/2)$	2130.24	100	23.547	$1/2^-$			2066.90	59 4	187.878	$5/2^-$
2157.60	$(1/2, 3/2)$	2134.04	100	23.547	$1/2^-$			2081.10	1.7 8	173.702	$7/2^-$
2161.00	$1/2, 3/2, 5/2^+$	2067.69	100	93.295	$3/2^-$			2161.49	65 4	93.295	$3/2^-$
2164.40	$(1/2, 3/2)$	2071.09	70 11	93.295	$3/2^-$			2188.92	10.7 25	65.854	$5/2^-$

**Adopted Levels, Gammas (continued)**

$\gamma(^{185}\text{W})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$
2254.78	(3/2 <sup>-</sup> )	2231.24	100 7	23.547	1/2 <sup>-</sup>	2339.17	(3/2 <sup>-</sup> )	2339.20	25 9	0.0	3/2 <sup>-</sup>
2268.07	(1/2,3/2)	1350.50	46 7	917.55	1/2,3/2	2350.00	(1/2,3/2)	2326.44	100	23.547	1/2 <sup>-</sup>
		1445.33	43.6 7	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	2353.14	1/2,3/2,5/2 <sup>+</sup>	1584.91	100	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
		1604.50	16 3	663.49	3/2 <sup>-</sup>	2363.29	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2297.42	100	65.854	5/2 <sup>-</sup>
		2174.79	100 6	93.295	3/2 <sup>-</sup>	2367.65	(1/2 <sup>-</sup> ,3/2)	1540.20	50 7	827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )
		2244.54	49 4	23.547	1/2 <sup>-</sup>			1599.31	48 5	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
		2268.10	5.7 21	0.0	3/2 <sup>-</sup>			1637.70	39 7	729.90	3/2 <sup>-</sup>
2275.17	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1447.70	63 21	827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )			2179.80	100 7	187.878	5/2 <sup>-</sup>
		2209.32	58 16	65.854	5/2 <sup>-</sup>			2274.39	71 7	93.295	3/2 <sup>-</sup>
		2275.20	100 21	0.0	3/2 <sup>-</sup>			2344.14	32 7	23.547	1/2 <sup>-</sup>
2277.21	1/2,3/2,5/2 <sup>+</sup>	2183.89	100 17	93.295	3/2 <sup>-</sup>			2367.70	27 9	0.0	3/2 <sup>-</sup>
		2277.20	52 17	0.0	3/2 <sup>-</sup>	2370.60	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2182.70	68 14	187.878	5/2 <sup>-</sup>
2284.37	(1/2 <sup>-</sup> ,3/2)	1461.63	76 5	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>			2370.60	100 23	0.0	3/2 <sup>-</sup>
		1620.80	62 19	663.49	3/2 <sup>-</sup>	2375.85	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> )	1553.13	27 6	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
		2096.50	43 14	187.878	5/2 <sup>-</sup>			1712.30	32 6	663.49	3/2 <sup>-</sup>
		2191.09	90 14	93.295	3/2 <sup>-</sup>			2132.20	11 5	243.62	7/2 <sup>-</sup>
		2260.84	100 19	23.547	1/2 <sup>-</sup>			2188.00	27 5	187.878	5/2 <sup>-</sup>
2288.39	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2100.50	70 30	187.878	5/2 <sup>-</sup>			2282.59	100 6	93.295	3/2 <sup>-</sup>
		2222.52	100 30	65.854	5/2 <sup>-</sup>	2379.66	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1462.10	22 6	917.55	1/2,3/2
2292.50	(1/2,3/2)	2199.19	100 13	93.295	3/2 <sup>-</sup>			1552.20	24.3 24	827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )
		2268.94	87 13	23.547	1/2 <sup>-</sup>			1556.93	16 3	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
2294.90	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2107.00	31 10	187.878	5/2 <sup>-</sup>			1649.70	23.1 24	729.90	3/2 <sup>-</sup>
		2201.59	100 14	93.295	3/2 <sup>-</sup>			2191.80	8.3 18	187.878	5/2 <sup>-</sup>
		2294.90	59 10	0.0	3/2 <sup>-</sup>			2286.39	100 4	93.295	3/2 <sup>-</sup>
2312.10	(1/2 <sup>-</sup> ,3/2)	2124.20	57 14	187.878	5/2 <sup>-</sup>			2379.70	27.2 24	0.0	3/2 <sup>-</sup>
		2218.79	100 14	93.295	3/2 <sup>-</sup>	2384.28	(1/2,3/2)	1466.70	100 5	917.55	1/2,3/2
		2288.54	71 14	23.547	1/2 <sup>-</sup>			1556.80	8.8 21	827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )
2315.07	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1651.50	31 8	663.49	3/2 <sup>-</sup>			2290.99	18.1 21	93.295	3/2 <sup>-</sup>
		2127.20	78 8	187.878	5/2 <sup>-</sup>			2360.74	15.0 21	23.547	1/2 <sup>-</sup>
		2249.22	14 6	65.854	5/2 <sup>-</sup>			2384.30	6.2 16	0.0	3/2 <sup>-</sup>
		2315.10	100 8	0.0	3/2 <sup>-</sup>	2391.00	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2203.10	64 21	187.878	5/2 <sup>-</sup>
2327.32	1/2,3/2,5/2 <sup>+</sup>	2327.30	100	0.0	3/2 <sup>-</sup>			2297.69	57 21	93.295	3/2 <sup>-</sup>
2334.81	1/2,3/2,5/2 <sup>+</sup>	2241.49	100 19	93.295	3/2 <sup>-</sup>			2325.12	100 21	65.854	5/2 <sup>-</sup>
		2334.80	75 19	0.0	3/2 <sup>-</sup>	2401.10	(1/2 <sup>-</sup> ,3/2)	2307.79	48 8	93.295	3/2 <sup>-</sup>
2339.17	(3/2 <sup>-</sup> )	1609.20	47 13	729.90	3/2 <sup>-</sup>			2335.22	100 10	65.854	5/2 <sup>-</sup>
		1675.60	44 13	663.49	3/2 <sup>-</sup>			2377.54	23 8	23.547	1/2 <sup>-</sup>
		2095.50	50 9	243.62	7/2 <sup>-</sup>			2401.10	25 8	0.0	3/2 <sup>-</sup>
		2151.30	41 9	187.878	5/2 <sup>-</sup>	2407.37	(3/2 <sup>-</sup> )	1489.80	45 10	917.55	1/2,3/2
		2245.89	56 9	93.295	3/2 <sup>-</sup>			1584.63	40 6	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
		2273.32	47 9	65.854	5/2 <sup>-</sup>			1677.40	31 5	729.90	3/2 <sup>-</sup>
		2315.64	100 13	23.547	1/2 <sup>-</sup>			1743.80	15 5	663.49	3/2 <sup>-</sup>

Adopted Levels, Gammas (continued)

$\gamma(^{185}\text{W})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$
2407.37	(3/2 <sup>-</sup> )	2219.50	12 3	187.878	5/2 <sup>-</sup>	2479.68	(1/2 <sup>-</sup> ,3/2)	2386.39	41 6	93.295	3/2 <sup>-</sup>
		2233.70	2.3 12	173.702	7/2 <sup>-</sup>			2413.82	27 6	65.854	5/2 <sup>-</sup>
		2314.09	19 3	93.295	3/2 <sup>-</sup>			2456.14	100 10	23.547	1/2 <sup>-</sup>
		2341.52	28 5	65.854	5/2 <sup>-</sup>			2479.70	16 6	0.0	3/2 <sup>-</sup>
		2383.84	100 7	23.547	1/2 <sup>-</sup>			2483.42	1/2,3/2,5/2 <sup>+</sup>	2483.40	100
2415.15	1/2,3/2,5/2 <sup>+</sup>	2407.40	26 3	0.0	3/2 <sup>-</sup>	2485.29	(1/2 <sup>-</sup> ,3/2)	1755.30	38 9	729.90	3/2 <sup>-</sup>
		1587.70	74 15	827.41	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )	2297.40	100 9	187.878	5/2 <sup>-</sup>		
		1592.43	48 15	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	2391.99	56 9	93.295	3/2 <sup>-</sup>		
		1685.20	48 15	729.90	3/2 <sup>-</sup>	2419.42	38 9	65.854	5/2 <sup>-</sup>		
		2415.20	100 15	0.0	3/2 <sup>-</sup>	2461.74	78 13	23.547	1/2 <sup>-</sup>		
2418.08	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> )	2174.40	64 27	243.62	7/2 <sup>-</sup>	2485.30	59 16	0.0	3/2 <sup>-</sup>		
		2418.10	100 27	0.0	3/2 <sup>-</sup>	2499.80	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2406.49	100 30	93.295	3/2 <sup>-</sup>
2422.42	1/2,3/2,5/2 <sup>+</sup>	2422.40	100	0.0	3/2 <sup>-</sup>	2433.92	100 30	65.854	5/2 <sup>-</sup>		
2425.00	(1/2 <sup>-</sup> ,3/2)	2331.69	40 6	93.295	3/2 <sup>-</sup>	2499.80	100 30	0.0	3/2 <sup>-</sup>		
		2359.12	79 8	65.854	5/2 <sup>-</sup>	2502.90	(1/2 <sup>-</sup> ,3/2)	2315.00	37 11	187.878	5/2 <sup>-</sup>
		2401.44	100 10	23.547	1/2 <sup>-</sup>	2479.34	100 16	23.547	1/2 <sup>-</sup>		
2434.32	1/2,3/2,5/2 <sup>+</sup>	2434.30	100	0.0	3/2 <sup>-</sup>	2508.80	1/2,3/2,5/2 <sup>+</sup>	2415.49	100	93.295	3/2 <sup>-</sup>
2439.90	(1/2,3/2)	2416.34	100	23.547	1/2 <sup>-</sup>	2513.40	(1/2 <sup>-</sup> ,3/2)	2325.50	80 20	187.878	5/2 <sup>-</sup>
2442.20	(1/2 <sup>-</sup> ,3/2)	2348.89	71 29	93.295	3/2 <sup>-</sup>	2489.84	100 20	23.547	1/2 <sup>-</sup>		
		2376.32	100 21	65.854	5/2 <sup>-</sup>	2517.28	(3/2 <sup>-</sup> )	2273.60	89 16	243.62	7/2 <sup>-</sup>
		2418.64	79 29	23.547	1/2 <sup>-</sup>	2329.40	100 16	187.878	5/2 <sup>-</sup>		
		2442.20	50 21	0.0	3/2 <sup>-</sup>	2451.42	58 16	65.854	5/2 <sup>-</sup>		
		2357.29	72 17	93.295	3/2 <sup>-</sup>	2493.74	68 16	23.547	1/2 <sup>-</sup>		
2450.61	(1/2,3/2)	2427.04	100 17	23.547	1/2 <sup>-</sup>	2520.58	(1/2 <sup>-</sup> ,3/2)	1697.83	45 12	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
		2359.89	100 15	93.295	3/2 <sup>-</sup>	2454.72	61 9	65.854	5/2 <sup>-</sup>		
2453.21	1(1/2,3/2)	2429.64	75 15	23.547	1/2 <sup>-</sup>	2497.04	100 12	23.547	1/2 <sup>-</sup>		
		2453.20	55 15	0.0	3/2 <sup>-</sup>	2528.18	1/2,3/2,5/2 <sup>+</sup>	1705.43	48 16	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
		2459.30	100	0.0	3/2 <sup>-</sup>	2434.89	100 16	93.295	3/2 <sup>-</sup>		
2459.32	1/2,3/2,5/2 <sup>+</sup>	1638.03	100 16	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	2548.11	(1/2,3/2)	2524.54	100 38	23.547	1/2 <sup>-</sup>
		1730.80	48 13	729.90	3/2 <sup>-</sup>	2548.10	100 38	0.0	3/2 <sup>-</sup>		
		2367.49	45 10	93.295	3/2 <sup>-</sup>	2551.92	1/2,3/2,5/2 <sup>+</sup>	2551.90	100	0.0	3/2 <sup>-</sup>
		2437.24	32 10	23.547	1/2 <sup>-</sup>	2554.99	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2489.12	100	65.854	5/2 <sup>-</sup>
		2460.80	61 16	0.0	3/2 <sup>-</sup>	2559.96	(1/2 <sup>-</sup> ,3/2)	1791.61	26 8	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
2460.78	(1/2,3/2)	2442.74	100	23.547	1/2 <sup>-</sup>	2372.10	100 8	187.878	5/2 <sup>-</sup>		
		1702.21	100 23	768.22	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2466.69	29 8	93.295	3/2 <sup>-</sup>		
		2282.70	62 15	187.878	5/2 <sup>-</sup>	2494.12	39 8	65.854	5/2 <sup>-</sup>		
		2377.29	100 23	93.295	3/2 <sup>-</sup>	2536.44	37 8	23.547	1/2 <sup>-</sup>		
		2470.60	62 31	0.0	3/2 <sup>-</sup>	2567.70	1/2,3/2,5/2 <sup>+</sup>	2474.39	100	93.295	3/2 <sup>-</sup>
2475.11	(1/2 <sup>-</sup> ,3/2)	2409.22	56 19	65.854	5/2 <sup>-</sup>	2574.67	(1/2 <sup>-</sup> ,3/2)	1844.70	20 5	729.90	3/2 <sup>-</sup>
		2451.54	100 19	23.547	1/2 <sup>-</sup>	1911.10	21 5	663.49	3/2 <sup>-</sup>		
		2475.10	81 25	0.0	3/2 <sup>-</sup>	2386.80	20 3	187.878	5/2 <sup>-</sup>		
2479.68	(1/2 <sup>-</sup> ,3/2)	1816.10	43 8	663.49	3/2 <sup>-</sup>	2508.82	24 4	65.854	5/2 <sup>-</sup>		

**Adopted Levels, Gammas (continued)**

$\gamma(^{185}\text{W})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$
2574.67	(1/2 <sup>-</sup> ,3/2)	2551.14	100 8	23.547	1/2 <sup>-</sup>	2645.36	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2457.50	17 6	187.878	5/2 <sup>-</sup>
		2574.70	11 4	0.0	3/2 <sup>-</sup>			2552.09	100 10	93.295	3/2 <sup>-</sup>
2577.54	1/2,3/2,5/2 <sup>+</sup>	1809.31	100	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>			2579.52	42 6	65.854	5/2 <sup>-</sup>
2582.41	(1/2,3/2)	2489.09	100 7	93.295	3/2 <sup>-</sup>			2645.40	40 6	0.0	3/2 <sup>-</sup>
		2558.84	25 5	23.547	1/2 <sup>-</sup>	2649.71	(1/2,3/2)	2626.14	100	23.547	1/2 <sup>-</sup>
		2582.40	11 4	0.0	3/2 <sup>-</sup>	2651.70	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2463.80	27 8	187.878	5/2 <sup>-</sup>
2590.11	(1/2 <sup>-</sup> ,3/2)	2524.22	63 11	65.854	5/2 <sup>-</sup>			2558.39	100 14	93.295	3/2 <sup>-</sup>
		2566.54	100 15	23.547	1/2 <sup>-</sup>			2585.82	19 8	65.854	5/2 <sup>-</sup>
		2590.10	85 11	0.0	3/2 <sup>-</sup>	2653.21	(1/2,3/2)	2629.64	100	23.547	1/2 <sup>-</sup>
2600.72	1/2,3/2,5/2 <sup>+</sup>	2600.70	100	0.0	3/2 <sup>-</sup>	2654.32	1/2,3/2,5/2 <sup>+</sup>	2654.30	100	0.0	3/2 <sup>-</sup>
2604.57	(1/2 <sup>-</sup> ,3/2)	1836.21	18 3	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	2654.67	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1991.10	100 9	663.49	3/2 <sup>-</sup>
		2416.70	23 3	187.878	5/2 <sup>-</sup>			2466.80	33 7	187.878	5/2 <sup>-</sup>
		2511.29	28 4	93.295	3/2 <sup>-</sup>			2561.39	71 11	93.295	3/2 <sup>-</sup>
		2538.72	11 3	65.854	5/2 <sup>-</sup>			2588.82	31 7	65.854	5/2 <sup>-</sup>
		2581.04	24 4	23.547	1/2 <sup>-</sup>	2657.72	1/2,3/2,5/2 <sup>+</sup>	2657.70	100	0.0	3/2 <sup>-</sup>
		2604.60	100 6	0.0	3/2 <sup>-</sup>	2663.19	(1/2 <sup>-</sup> ,3/2)	1933.20	100 25	729.90	3/2 <sup>-</sup>
2609.79	(1/2 <sup>-</sup> ,3/2)	1946.20	61 17	663.49	3/2 <sup>-</sup>			2475.30	44 19	187.878	5/2 <sup>-</sup>
		2421.90	26 9	187.878	5/2 <sup>-</sup>			2569.89	63 19	93.295	3/2 <sup>-</sup>
		2516.49	70 22	93.295	3/2 <sup>-</sup>			2597.32	56 19	65.854	5/2 <sup>-</sup>
		2543.92	100 13	65.854	5/2 <sup>-</sup>			2639.64	75 19	23.547	1/2 <sup>-</sup>
		2586.24	100 17	23.547	1/2 <sup>-</sup>			2663.20	94 19	0.0	3/2 <sup>-</sup>
		2609.80	100 17	0.0	3/2 <sup>-</sup>	2667.51	(1/2,3/2)	2574.19	38 14	93.295	3/2 <sup>-</sup>
2612.81	(1/2,3/2)	2519.49	52 19	93.295	3/2 <sup>-</sup>			2643.94	52 14	23.547	1/2 <sup>-</sup>
		2589.24	100 15	23.547	1/2 <sup>-</sup>			2667.50	100 19	0.0	3/2 <sup>-</sup>
2615.79	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2549.92	100	65.854	5/2 <sup>-</sup>	2670.81	(1/2 <sup>-</sup> ,3/2)	2604.92	50 10	65.854	5/2 <sup>-</sup>
2619.99	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2554.12	100	65.854	5/2 <sup>-</sup>			2647.24	37 10	23.547	1/2 <sup>-</sup>
2623.51	(1/2,3/2)	2530.19	100 21	93.295	3/2 <sup>-</sup>			2670.80	100 13	0.0	3/2 <sup>-</sup>
		2599.94	86 29	23.547	1/2 <sup>-</sup>	2675.11	(1/2,3/2)	2581.79	75 13	93.295	3/2 <sup>-</sup>
2626.12	1/2,3/2,5/2 <sup>+</sup>	2626.10	100	0.0	3/2 <sup>-</sup>			2651.54	100 13	23.547	1/2 <sup>-</sup>
2628.80	(1/2 <sup>-</sup> ,3/2)	2562.92	100 30	65.854	5/2 <sup>-</sup>	2679.61	(1/2,3/2)	2656.04	100	23.547	1/2 <sup>-</sup>
		2605.24	90 40	23.547	1/2 <sup>-</sup>	2682.41	(1/2,3/2)	2589.09	77 18	93.295	3/2 <sup>-</sup>
2632.19	(1/2 <sup>-</sup> ,3/2)	1902.20	89 22	729.90	3/2 <sup>-</sup>			2658.84	100 18	23.547	1/2 <sup>-</sup>
		2444.30	78 17	187.878	5/2 <sup>-</sup>			2682.40	59 14	0.0	3/2 <sup>-</sup>
		2538.89	100 22	93.295	3/2 <sup>-</sup>	2685.34	1/2,3/2,5/2 <sup>+</sup>	1767.80	100 20	917.55	1/2,3/2
		2566.32	72 17	65.854	5/2 <sup>-</sup>			1862.63	42 8	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
		2608.64	56 22	23.547	1/2 <sup>-</sup>			1955.40	24 8	729.90	3/2 <sup>-</sup>
		2632.20	83 17	0.0	3/2 <sup>-</sup>	2695.27	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1965.30	37 10	729.90	3/2 <sup>-</sup>
2638.81	(1/2,3/2)	2615.24	100	23.547	1/2 <sup>-</sup>			2601.99	100 10	93.295	3/2 <sup>-</sup>
2641.62	1/2,3/2,5/2 <sup>+</sup>	2641.60	100	0.0	3/2 <sup>-</sup>			2629.42	22 7	65.854	5/2 <sup>-</sup>
2645.36	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	1877.01	27 6	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	2697.41	(3/2 <sup>-</sup> ,5/2 <sup>+</sup> )	2523.70	13 4	173.702	7/2 <sup>-</sup>
		1915.40	25 8	729.90	3/2 <sup>-</sup>			2631.52	100 13	65.854	5/2 <sup>-</sup>



**Adopted Levels, Gammas (continued)**

$\gamma(^{185}\text{W})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$
2703.20	1/2,3/2,5/2 <sup>+</sup>	2609.89	100	93.295	3/2 <sup>-</sup>	2770.30	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2582.40	73 27	187.878	5/2 <sup>-</sup>
2706.67	(1/2 <sup>-</sup> ,3/2)	2043.10	71 19	663.49	3/2 <sup>-</sup>			2676.99	100 27	93.295	3/2 <sup>-</sup>
		2518.80	100 14	187.878	5/2 <sup>-</sup>	2772.07	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2042.10	100 36	729.90	3/2 <sup>-</sup>
		2683.14	43 14	23.547	1/2 <sup>-</sup>			2584.20	91 27	187.878	5/2 <sup>-</sup>
2709.91	(1/2 <sup>-</sup> ,3/2)	2522.00	47 16	187.878	5/2 <sup>-</sup>			2706.22	82 27	65.854	5/2 <sup>-</sup>
		2686.34	100 21	23.547	1/2 <sup>-</sup>	2778.00	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2590.10	100	187.878	5/2 <sup>-</sup>
		2709.90	95 21	0.0	3/2 <sup>-</sup>	2782.59	1/2,3/2,5/2 <sup>+</sup>	1865.00	100 21	917.55	1/2,3/2
2712.79	(3/2 <sup>-</sup> )	2469.10	12 3	243.62	7/2 <sup>-</sup>			2689.29	14 5	93.295	3/2 <sup>-</sup>
		2524.90	19 3	187.878	5/2 <sup>-</sup>	2785.00	(1/2,3/2)	1867.40	98 16	917.55	1/2,3/2
		2619.49	15 3	93.295	3/2 <sup>-</sup>			2691.69	10 5	93.295	3/2 <sup>-</sup>
		2646.92	27 3	65.854	5/2 <sup>-</sup>			2761.44	14 5	23.547	1/2 <sup>-</sup>
		2689.24	100 6	23.547	1/2 <sup>-</sup>			2785.00	100 10	0.0	3/2 <sup>-</sup>
		2712.80	30 5	0.0	3/2 <sup>-</sup>	2787.82	1/2,3/2,5/2 <sup>+</sup>	2787.80	100	0.0	3/2 <sup>-</sup>
2716.75	1/2,3/2,5/2 <sup>+</sup>	1894.03	100	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	2790.20	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2602.30	100	187.878	5/2 <sup>-</sup>
2718.20	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2624.89	100 17	93.295	3/2 <sup>-</sup>	2794.38	(3/2 <sup>-</sup> )	2550.70	32 8	243.62	7/2 <sup>-</sup>
		2652.32	38 13	65.854	5/2 <sup>-</sup>			2606.50	18 8	187.878	5/2 <sup>-</sup>
2722.60	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2534.70	24 10	187.878	5/2 <sup>-</sup>			2770.84	100 13	23.547	1/2 <sup>-</sup>
		2629.29	100 14	93.295	3/2 <sup>-</sup>	2796.56	1/2,3/2,5/2 <sup>+</sup>	2028.21	14 4	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
		2656.72	41 10	65.854	5/2 <sup>-</sup>			2703.29	100 7	93.295	3/2 <sup>-</sup>
2725.60	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2537.70	100	187.878	5/2 <sup>-</sup>			2796.60	21 5	0.0	3/2 <sup>-</sup>
2727.81	(1/2,3/2)	2634.49	50 19	93.295	3/2 <sup>-</sup>	2799.01	(1/2,3/2)	2775.44	100	23.547	1/2 <sup>-</sup>
		2704.24	100 19	23.547	1/2 <sup>-</sup>	2804.07	(1/2 <sup>-</sup> ,3/2)	2035.71	29 9	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
		2727.80	94 25	0.0	3/2 <sup>-</sup>			2616.20	32 9	187.878	5/2 <sup>-</sup>
2730.62	1/2,3/2,5/2 <sup>+</sup>	2730.60	100	0.0	3/2 <sup>-</sup>			2710.79	100 12	93.295	3/2 <sup>-</sup>
2737.41	(1/2 <sup>-</sup> ,3/2)	2644.09	66 9	93.295	3/2 <sup>-</sup>			2738.22	59 12	65.854	5/2 <sup>-</sup>
		2671.52	39 7	65.854	5/2 <sup>-</sup>			2780.54	62 12	23.547	1/2 <sup>-</sup>
		2713.84	41 11	23.547	1/2 <sup>-</sup>	2812.41	(1/2 <sup>-</sup> ,3/2)	2624.50	50 17	187.878	5/2 <sup>-</sup>
		2737.40	100 11	0.0	3/2 <sup>-</sup>			2788.84	100 22	23.547	1/2 <sup>-</sup>
2740.40	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2552.50	100	187.878	5/2 <sup>-</sup>	2815.21	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2627.30	100 18	187.878	5/2 <sup>-</sup>
2751.81	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2563.90	25 5	187.878	5/2 <sup>-</sup>			2815.20	100 24	0.0	3/2 <sup>-</sup>
		2658.49	100 9	93.295	3/2 <sup>-</sup>	2821.41	(1/2,3/2)	2797.84	100	23.547	1/2 <sup>-</sup>
		2751.80	27 7	0.0	3/2 <sup>-</sup>	2835.98	(1/2 <sup>-</sup> ,3/2)	2172.40	72 22	663.49	3/2 <sup>-</sup>
2756.21	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2690.32	100 18	65.854	5/2 <sup>-</sup>			2742.69	94 17	93.295	3/2 <sup>-</sup>
		2756.20	71 24	0.0	3/2 <sup>-</sup>			2770.12	44 17	65.854	5/2 <sup>-</sup>
2760.42	(1/2,3/2)	2736.84	41 12	23.547	1/2 <sup>-</sup>			2812.44	100 22	23.547	1/2 <sup>-</sup>
		2760.40	100 15	0.0	3/2 <sup>-</sup>	2838.03	1/2,3/2,5/2 <sup>+</sup>	2069.71	100 38	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
2765.09	(3/2 <sup>-</sup> )	2035.10	86 29	729.90	3/2 <sup>-</sup>			2838.10	100 38	0.0	3/2 <sup>-</sup>
		2591.40	14 7	173.702	7/2 <sup>-</sup>	2839.80	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2651.90	100	187.878	5/2 <sup>-</sup>
		2671.79	100 21	93.295	3/2 <sup>-</sup>	2856.81	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2790.92	36 16	65.854	5/2 <sup>-</sup>
		2741.54	79 29	23.547	1/2 <sup>-</sup>			2856.80	100 16	0.0	3/2 <sup>-</sup>
		2765.10	86 21	0.0	3/2 <sup>-</sup>	2866.61	1/2 <sup>(-)</sup> ,3/2,5/2 <sup>+</sup>	2678.70	100 38	187.878	5/2 <sup>-</sup>

**Adopted Levels, Gammas (continued)**

$\gamma(^{185}\text{W})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$
2866.61	$1/2^{(-)}, 3/2, 5/2^+$	2866.60	100 38	0.0	$3/2^-$	2943.81	$1/2^{(-)}, 3/2, 5/2^+$	2943.80	100 13	0.0	$3/2^-$
2868.85	$1/2^{(-)}, 3/2, 5/2^+$	2100.51	42 16	768.22	$1/2^-, 3/2^-$	2944.74	$1/2, 3/2, 5/2^+$	2176.51	100	768.22	$1/2^-, 3/2^-$
		2205.30	79 21	663.49	$3/2^-$	2950.05	$1/2^{(-)}, 3/2, 5/2^+$	2286.50	26 6	663.49	$3/2^-$
		2681.00	100 16	187.878	$5/2^-$			2762.20	100 6	187.878	$5/2^-$
		2775.59	63 21	93.295	$3/2^-$	2956.10	$1/2^{(-)}, 3/2, 5/2^+$	2768.20	100	187.878	$5/2^-$
		2803.02	79 16	65.854	$5/2^-$	2964.40	$1/2^{(-)}, 3/2, 5/2^+$	2776.50	100	187.878	$5/2^-$
2872.11	$(1/2^-, 3/2)$	2806.22	42 16	65.854	$5/2^-$	2966.90	$1/2, 3/2, 5/2^+$	2303.40	100	663.49	$3/2^-$
		2848.54	100 21	23.547	$1/2^-$	2977.40	$1/2^{(-)}, 3/2, 5/2^+$	2789.50	100	187.878	$5/2^-$
		2872.10	63 16	0.0	$3/2^-$	2985.51	$1/2^{(-)}, 3/2, 5/2^+$	2797.60	90 15	187.878	$5/2^-$
2874.80	$1/2^{(-)}, 3/2, 5/2^+$	2686.90	100	187.878	$5/2^-$			2892.19	100 20	93.295	$3/2^-$
2881.19	$(1/2^-, 3/2)$	1963.60	100 24	917.55	$1/2, 3/2$			2985.50	65 20	0.0	$3/2^-$
		2058.43	65 12	822.71	$1/2^-, 3/2^-$	2990.66	$(1/2^-, 3/2)$	2222.31	24 4	768.22	$1/2^-, 3/2^-$
		2693.30	35 6	187.878	$5/2^-$			2327.10	24 6	663.49	$3/2^-$
		2787.89	29 10	93.295	$3/2^-$			2802.80	100 6	187.878	$5/2^-$
		2857.64	73 10	23.547	$1/2^-$			2897.39	50 7	93.295	$3/2^-$
2882.00	$1/2^{(-)}, 3/2, 5/2^+$	2788.69	100 45	93.295	$3/2^-$			2967.14	50 7	23.547	$1/2^-$
		2816.12	100 27	65.854	$5/2^-$	3004.79	$(1/2^-, 3/2)$	2087.20	77 28	917.55	$1/2, 3/2$
2892.20	$1/2^{(-)}, 3/2, 5/2^+$	2704.30	55 14	187.878	$5/2^-$			2182.03	42 12	822.71	$1/2^-, 3/2^-$
		2798.89	100 18	93.295	$3/2^-$			2938.92	100 9	65.854	$5/2^-$
2902.09	$(1/2, 3/2)$	2238.50	26 9	663.49	$3/2^-$			2981.24	23 9	23.547	$1/2^-$
		2808.79	100 13	93.295	$3/2^-$			3004.80	16 9	0.0	$3/2^-$
		2878.54	22 9	23.547	$1/2^-$	3010.34	$1/2, 3/2, 5/2^+$	2092.80	100 33	917.55	$1/2, 3/2$
		2902.10	15 7	0.0	$3/2^-$			2280.40	36 11	729.90	$3/2^-$
2910.10	$(1/2^-, 3/2)$	2087.33	47 12	822.71	$1/2^-, 3/2^-$	3033.20	$1/2, 3/2, 5/2^+$	2369.70	100	663.49	$3/2^-$
		2722.20	41 12	187.878	$5/2^-$	3037.21	$(1/2^-, 3/2)$	2849.30	27 10	187.878	$5/2^-$
		2816.79	100 15	93.295	$3/2^-$			3013.64	73 17	23.547	$1/2^-$
		2886.54	41 12	23.547	$1/2^-$			3037.20	100 13	0.0	$3/2^-$
		2910.10	29 9	0.0	$3/2^-$	3047.60	$1/2, 3/2, 5/2^+$	2130.00	100 29	917.55	$1/2, 3/2$
2913.21	$(1/2^-, 3/2)$	2725.30	70 20	187.878	$5/2^-$			3047.60	31 11	0.0	$3/2^-$
		2889.64	100 20	23.547	$1/2^-$	3052.98	$1/2, 3/2, 5/2^+$	2323.00	74 13	729.90	$3/2^-$
2914.19	$1/2^{(-)}, 3/2, 5/2^+$	2848.32	100	65.854	$5/2^-$			2389.40	58 13	663.49	$3/2^-$
2921.71	$(1/2^-, 3/2)$	2855.82	100 20	65.854	$5/2^-$			2959.69	100 16	93.295	$3/2^-$
		2898.14	93 27	23.547	$1/2^-$			3029.44	71 13	23.547	$1/2^-$
		2921.70	100 27	0.0	$3/2^-$			3053.00	100 16	0.0	$3/2^-$
2928.41	$(1/2^-, 3/2)$	2740.50	100 10	187.878	$5/2^-$	3064.06	$1/2, 3/2, 5/2^+$	2241.33	100	822.71	$1/2^-, 3/2^-$
		2862.52	24 10	65.854	$5/2^-$	3068.96	$1/2, 3/2, 5/2^+$	2151.40	100	917.55	$1/2, 3/2$
		2904.84	41 14	23.547	$1/2^-$	3087.72	$(1/2, 3/2)$	2994.39	37 9	93.295	$3/2^-$
2933.81	$1/2^{(-)}, 3/2, 5/2^+$	2867.92	79 9	65.854	$5/2^-$			3064.14	100 11	23.547	$1/2^-$
		2933.80	100 12	0.0	$3/2^-$	3091.90	$1/2, 3/2, 5/2^+$	2428.40	100	663.49	$3/2^-$
2943.81	$1/2^{(-)}, 3/2, 5/2^+$	2755.90	45 8	187.878	$5/2^-$	3094.80	$1/2, 3/2, 5/2^+$	2272.13	100 13	822.71	$1/2^-, 3/2^-$
		2850.49	79 13	93.295	$3/2^-$			2326.51	19 6	768.22	$1/2^-, 3/2^-$

**Adopted Levels, Gammas (continued)** $\gamma(^{185}\text{W})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$
3099.82	1/2,3/2,5/2 <sup>+</sup>	2369.90	100	729.90	3/2 <sup>-</sup>	3249.46	1/2,3/2,5/2 <sup>+</sup>	2426.73	100	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
3106.32	1/2,3/2,5/2 <sup>+</sup>	2376.40	100	729.90	3/2 <sup>-</sup>	3262.97	1/2,3/2,5/2 <sup>+</sup>	2345.40	100	917.55	1/2,3/2
3124.44	1/2,3/2,5/2 <sup>+</sup>	2356.21	100	768.22	1/2 <sup>-</sup> ,3/2 <sup>-</sup>			2440.23	46	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
3200.36	1/2,3/2,5/2 <sup>+</sup>	2282.80	100	917.55	1/2,3/2	3276.86	1/2,3/2,5/2 <sup>+</sup>	2359.30	100	917.55	1/2,3/2
3241.56	1/2,3/2,5/2 <sup>+</sup>	2418.83	100	822.71	1/2 <sup>-</sup> ,3/2 <sup>-</sup>						

<sup>†</sup> From  $^{184}\text{W}(n,\gamma)$  E=thermal:  $\gamma$  coin, except as noted.

<sup>‡</sup> From  $^{185}\text{Ta}$   $\beta^-$  decay and  $^{185}\text{W}$  IT decay (1.67 min).

<sup>#</sup> From  $^{185}\text{W}$  IT decay (1.67 min).

<sup>@</sup> From  $^{185}\text{Ta}$   $\beta^-$  decay.

<sup>&</sup> From  $^{184}\text{W}(n,\gamma)$  E=thermal.  $\Delta I_\gamma=10\text{-}15\%$  for strong lines, and up to 100% for weak lines.

<sup>a</sup> 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.

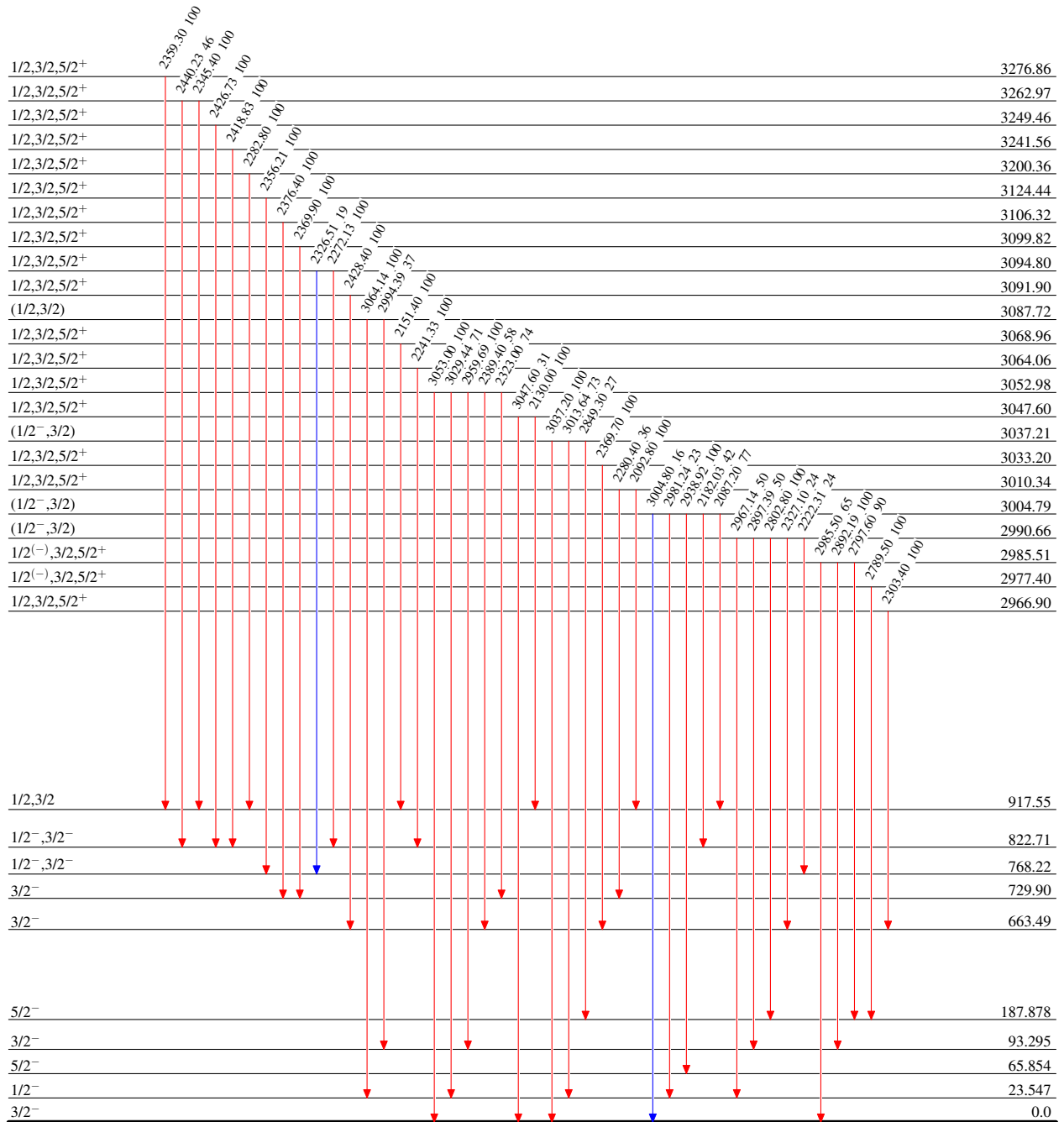
**Adopted Levels, Gammas**

**Level Scheme**

Intensities: Type not specified

**Legend**

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



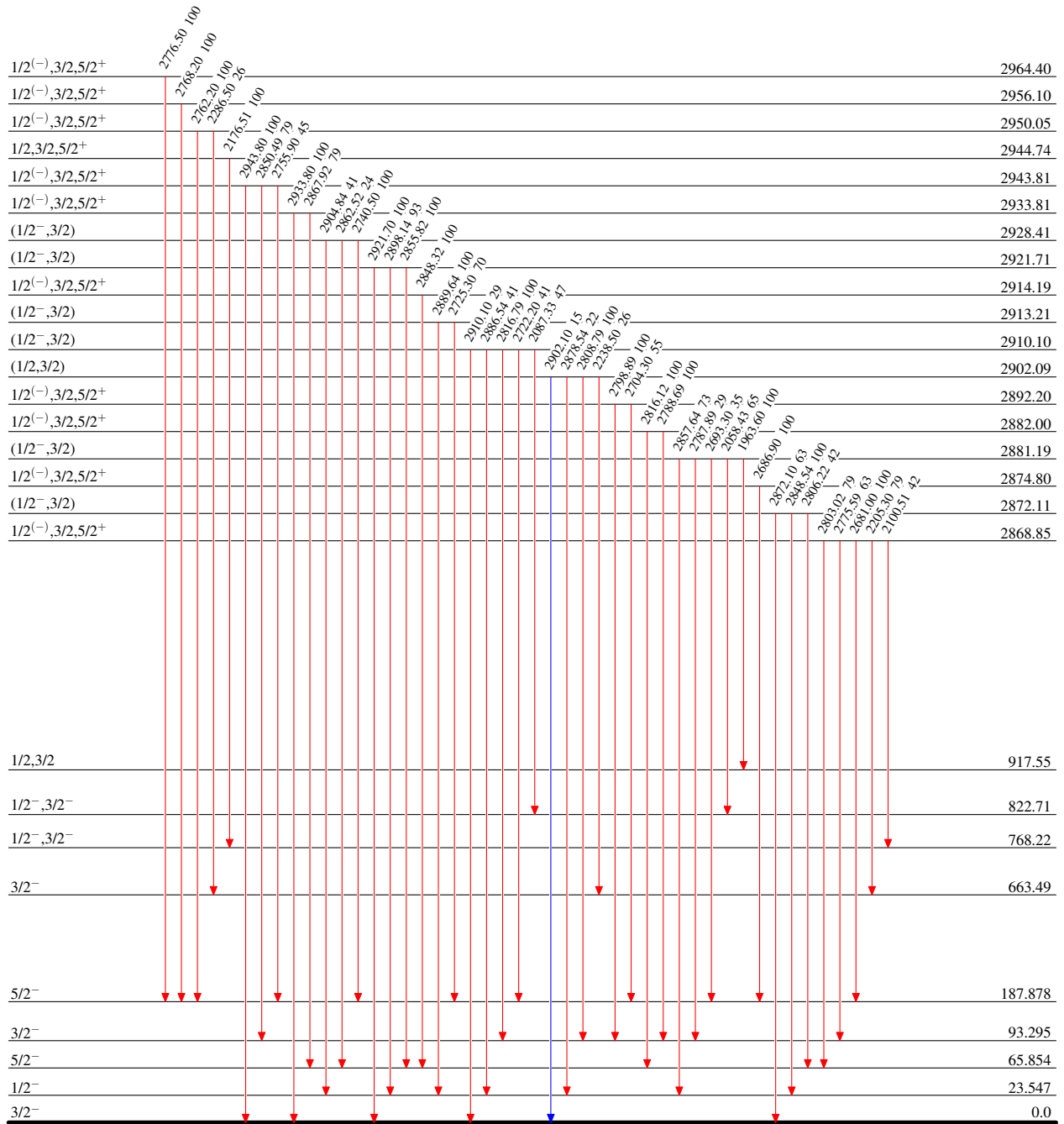
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

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



<sup>185</sup>W<sub>74</sub><sup>111</sup>

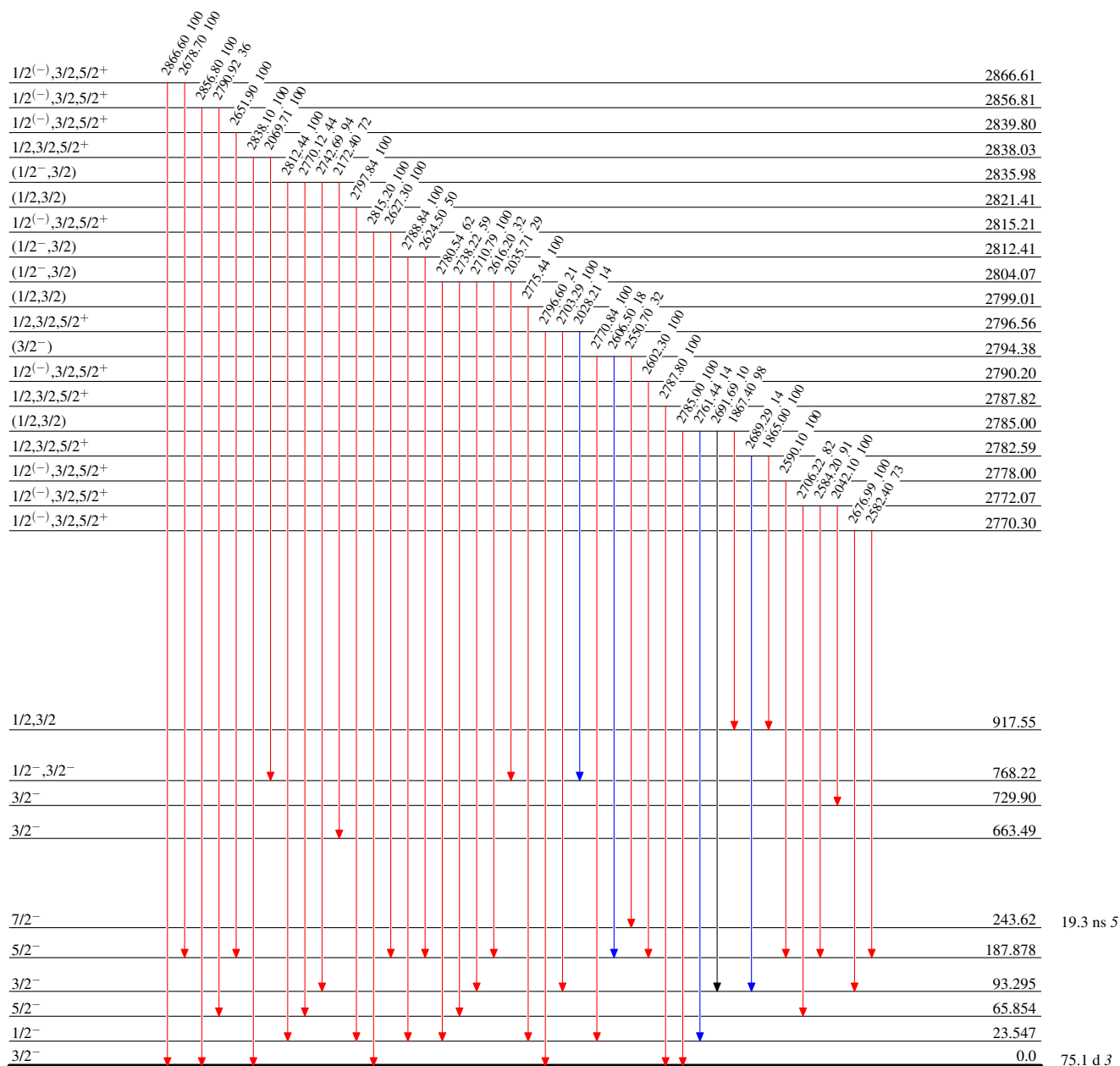
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

Legend

- ▶ I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>



<sup>185</sup>W<sub>74</sub><sup>111</sup>

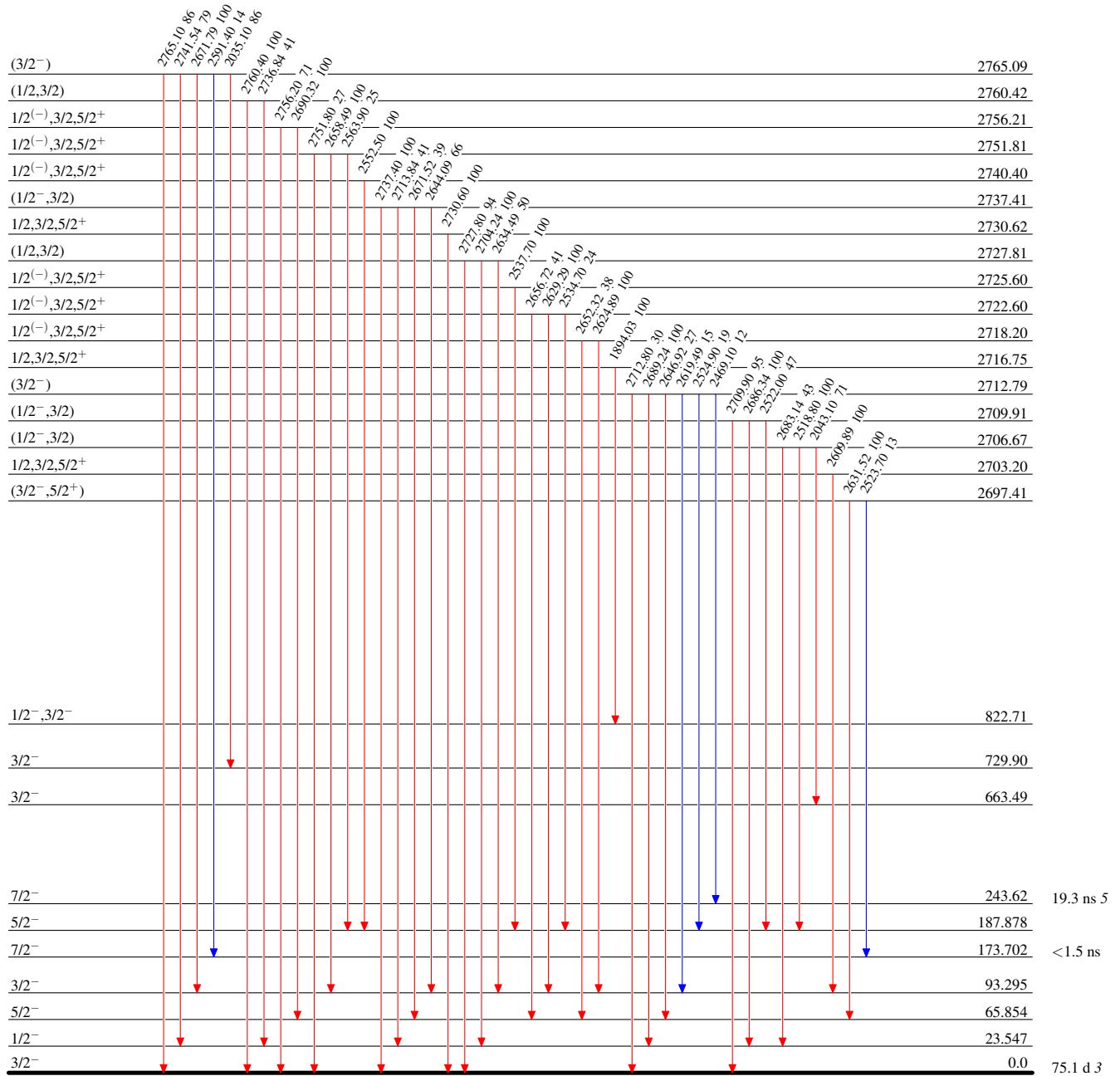
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

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



$^{185}_{74}\text{W}_{111}$

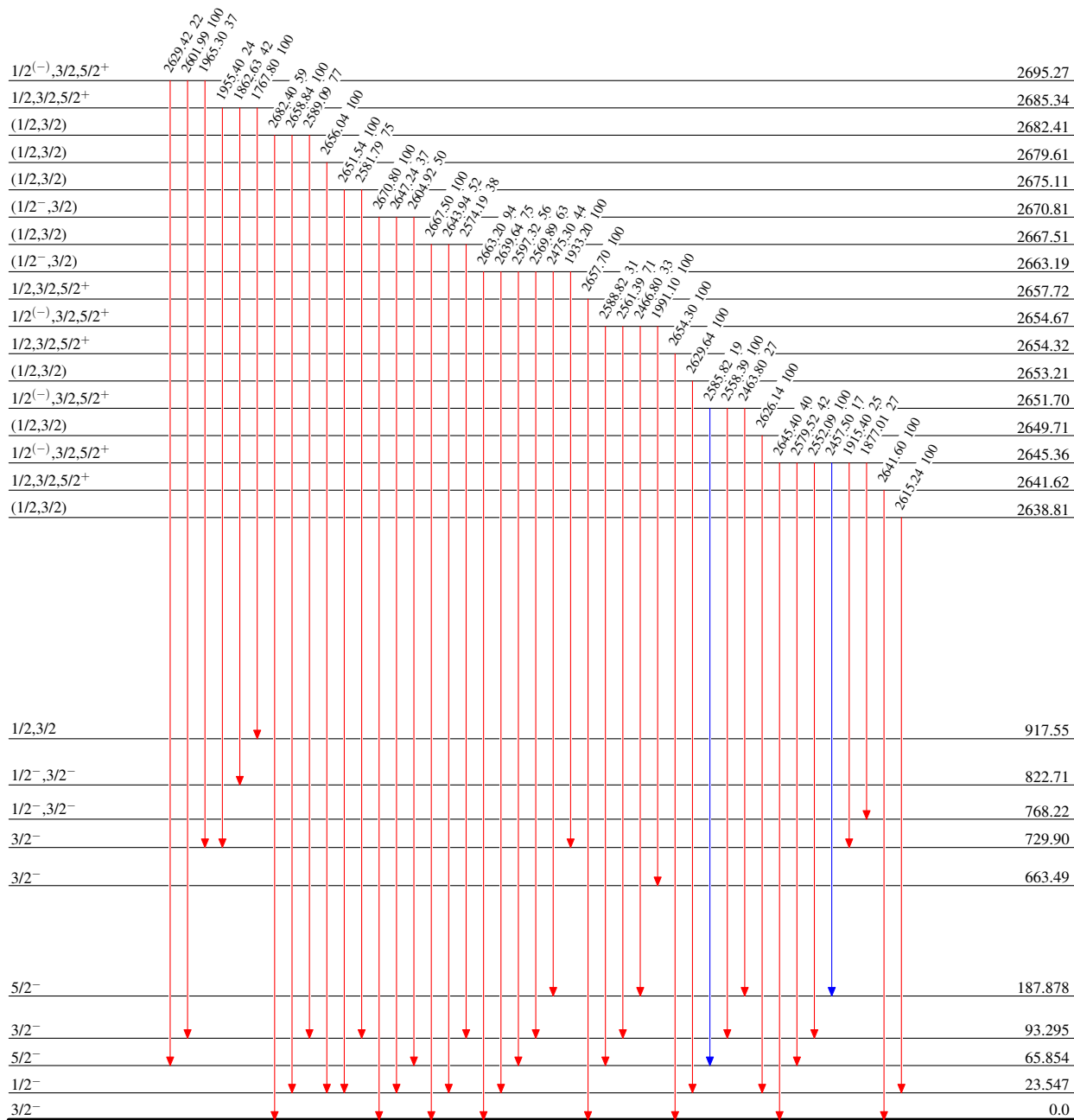
**Adopted Levels, Gammas**

Level Scheme (continued)

Intensities: Type not specified

Legend

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



75.1 d 3

$^{185}_{74}\text{W}_{111}$



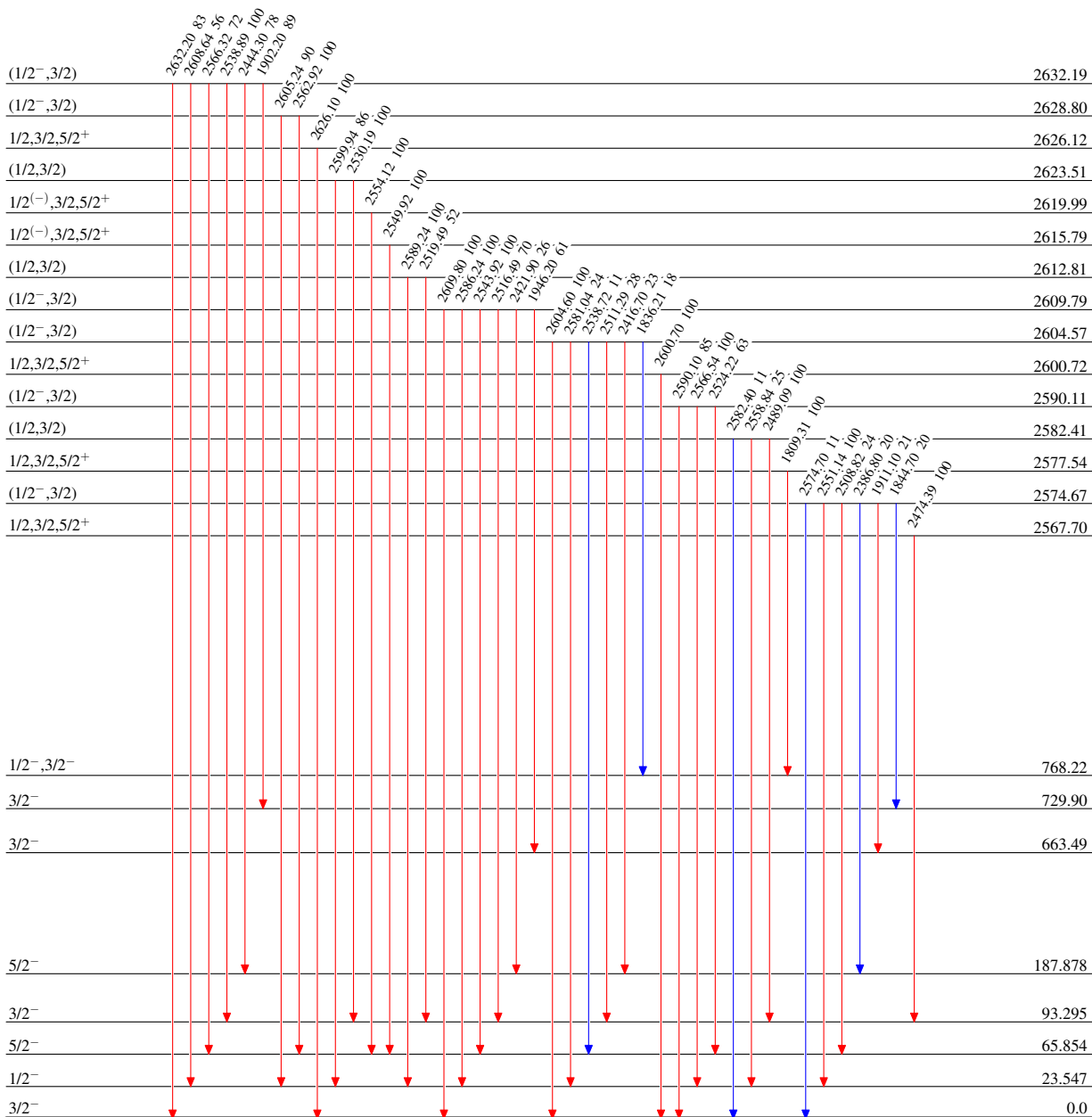
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

Legend

- ▶ I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>



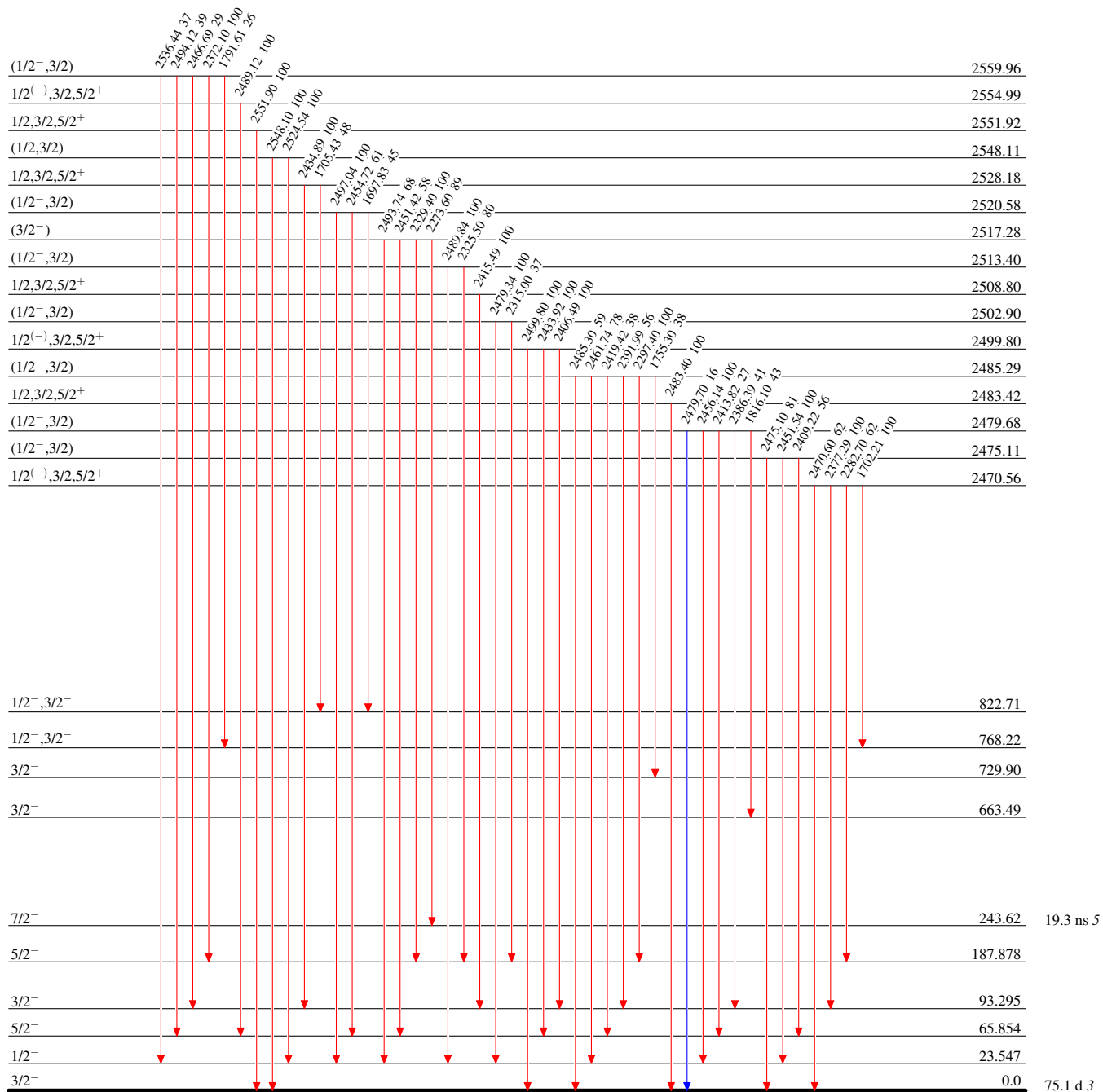
<sup>185</sup>W<sub>74</sub>111

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

Intensities: Type not specified

## Legend

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

 $^{185}_{74}\text{W}_{111}$

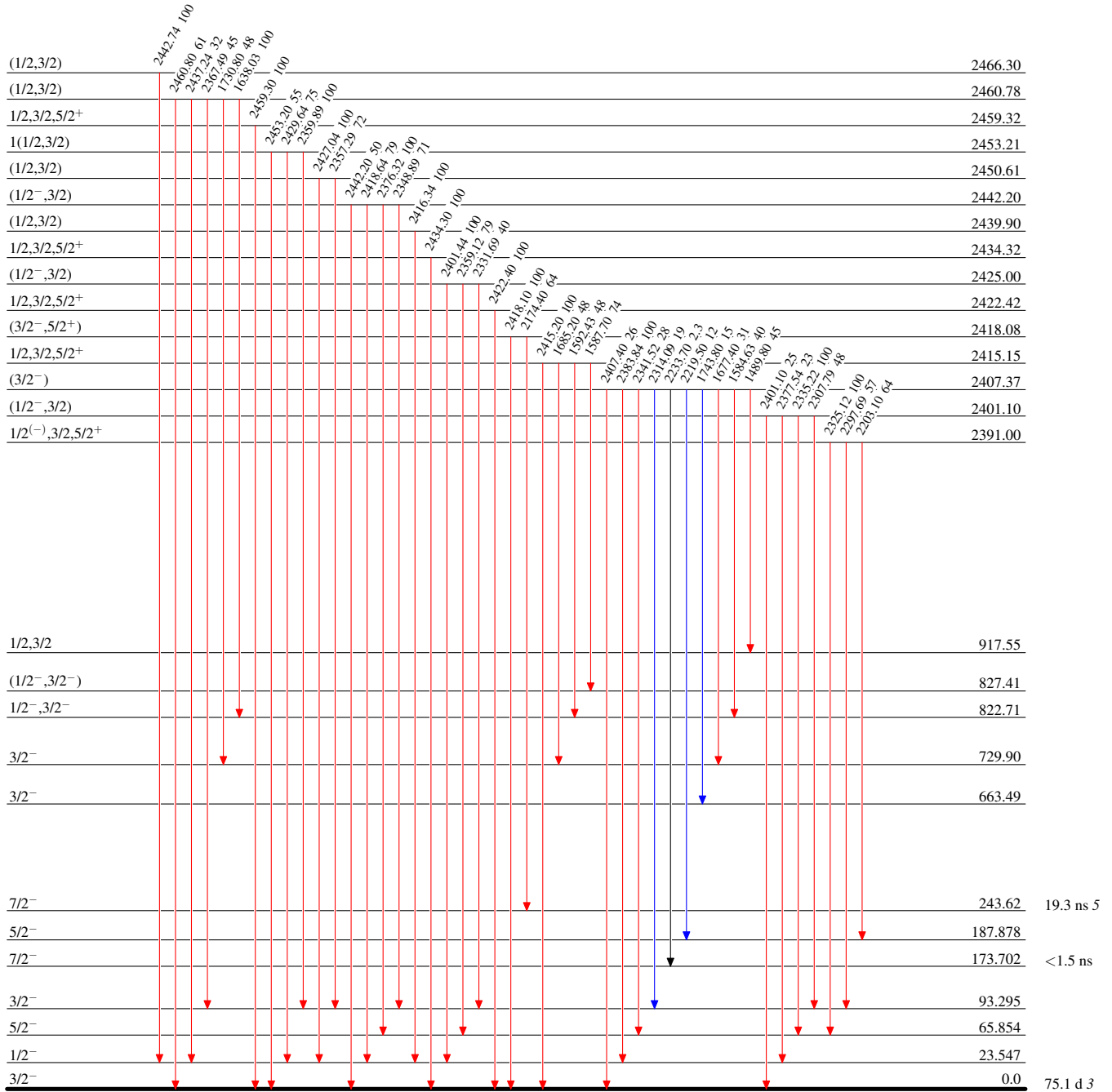
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

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



<sup>185</sup>W<sub>74</sub><sup>111</sup>

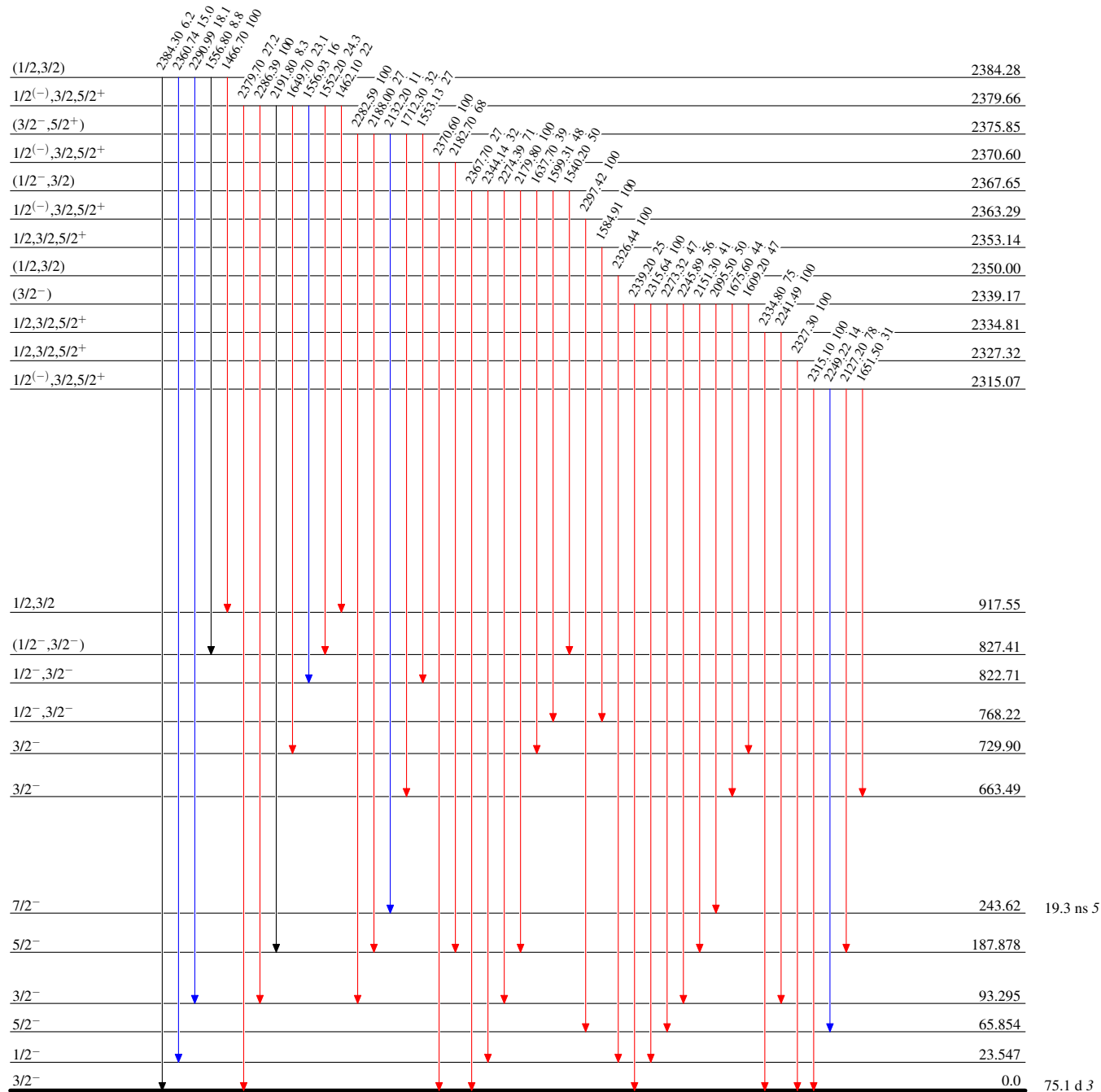
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

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



$^{185}_{74}\text{W}_{111}$

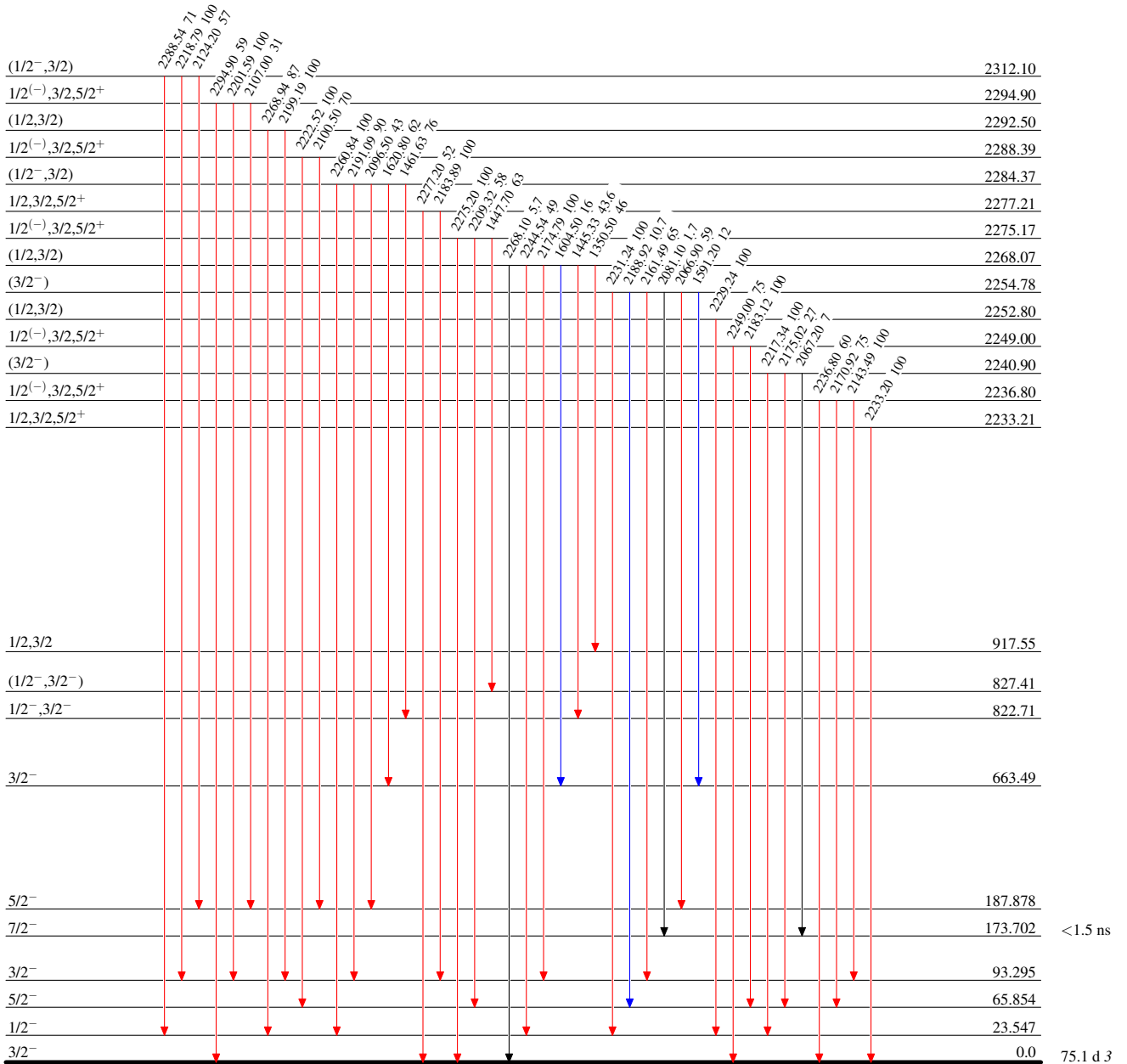
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

Legend

- ▶ I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>



<sup>185</sup>W<sub>74</sub><sup>111</sup>

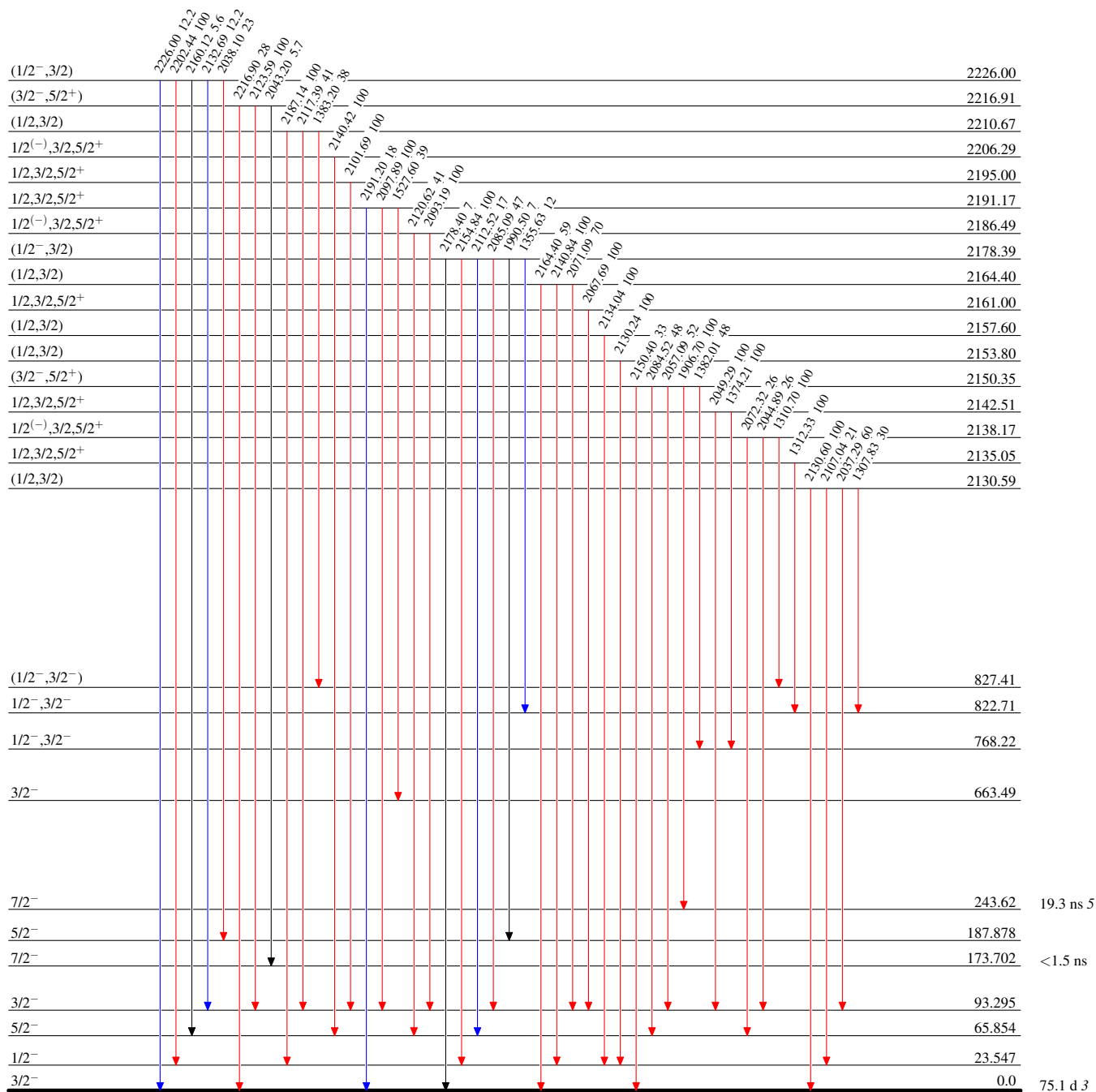
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

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



<sup>185</sup>W<sub>74</sub><sup>111</sup>

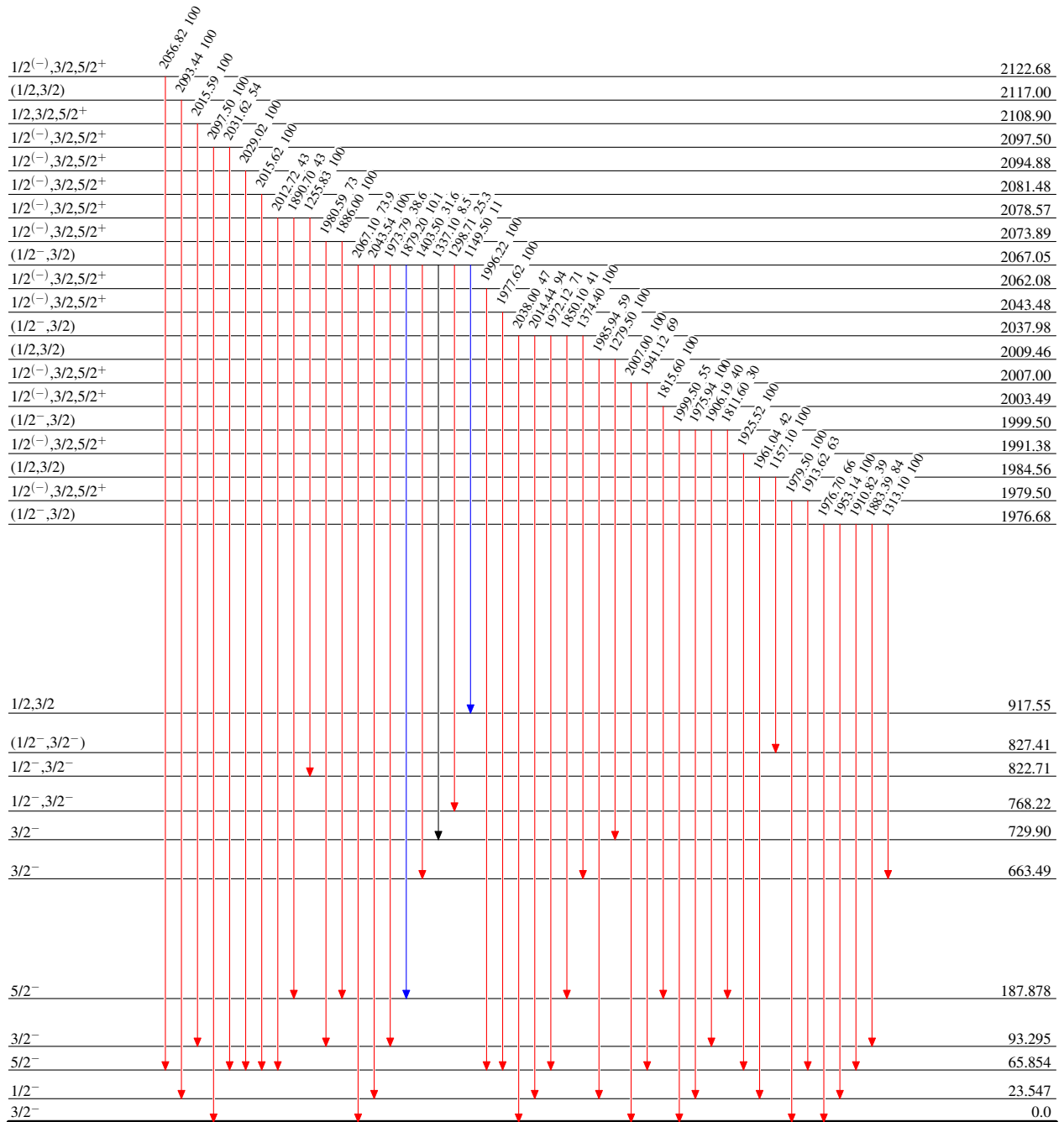
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

- ▶ I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>



75.1 d 3

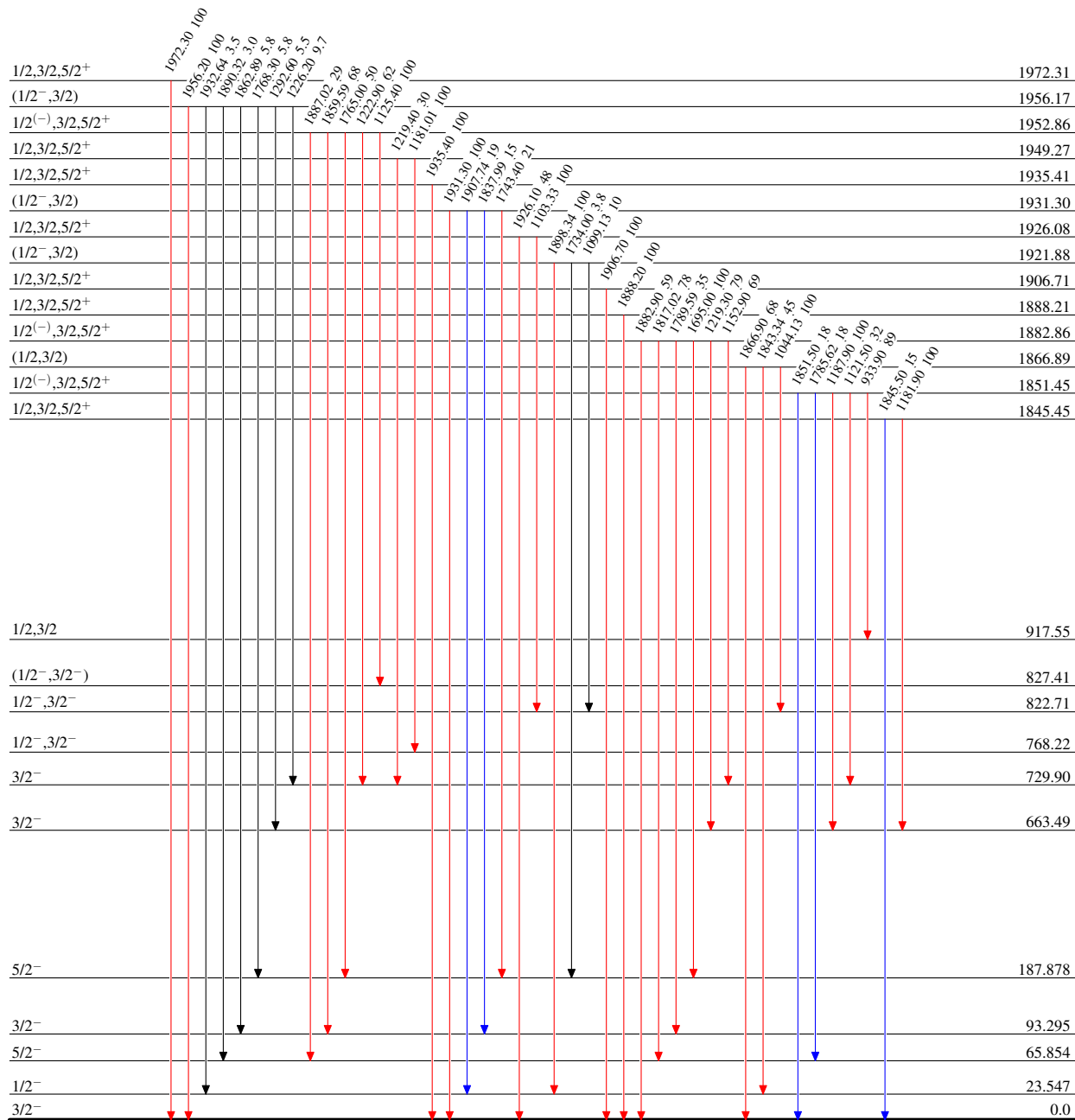
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

- ▶ I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>



75.1 d 3

<sup>185</sup>W<sub>74</sub><sup>111</sup>



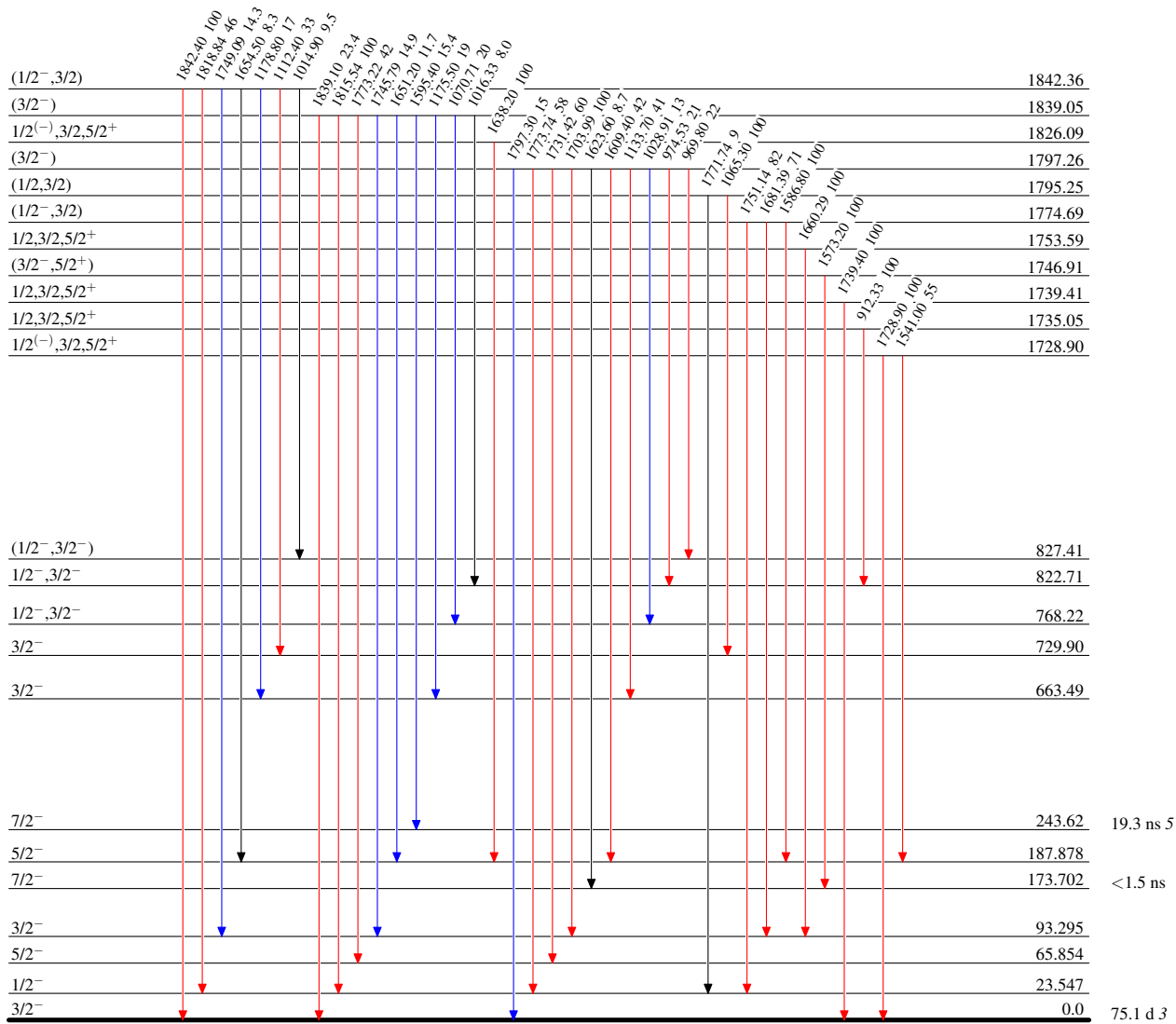
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

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



$^{185}_{74}\text{W}_{111}$

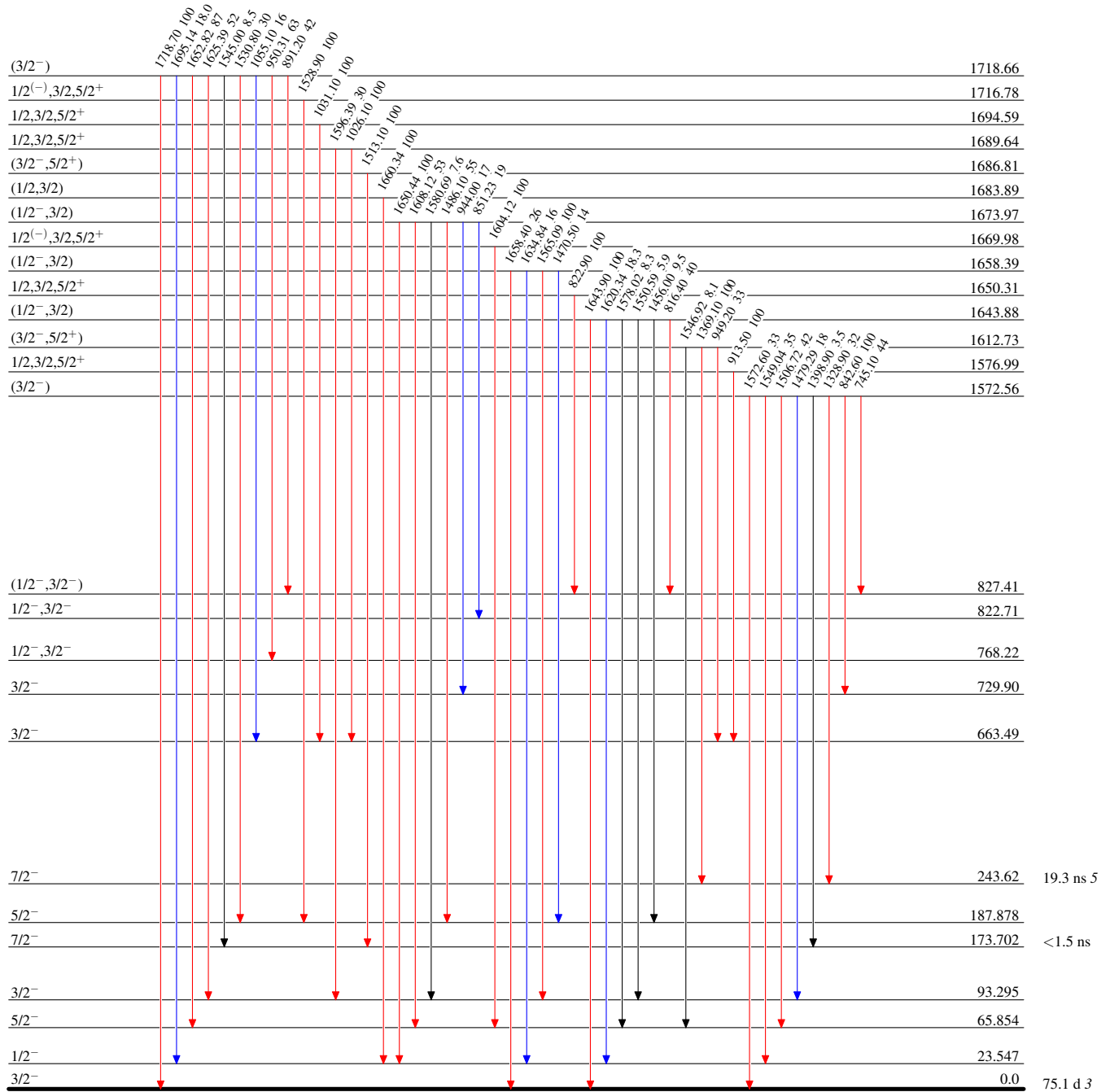
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

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



<sup>185</sup>W<sub>74</sub><sup>111</sup>

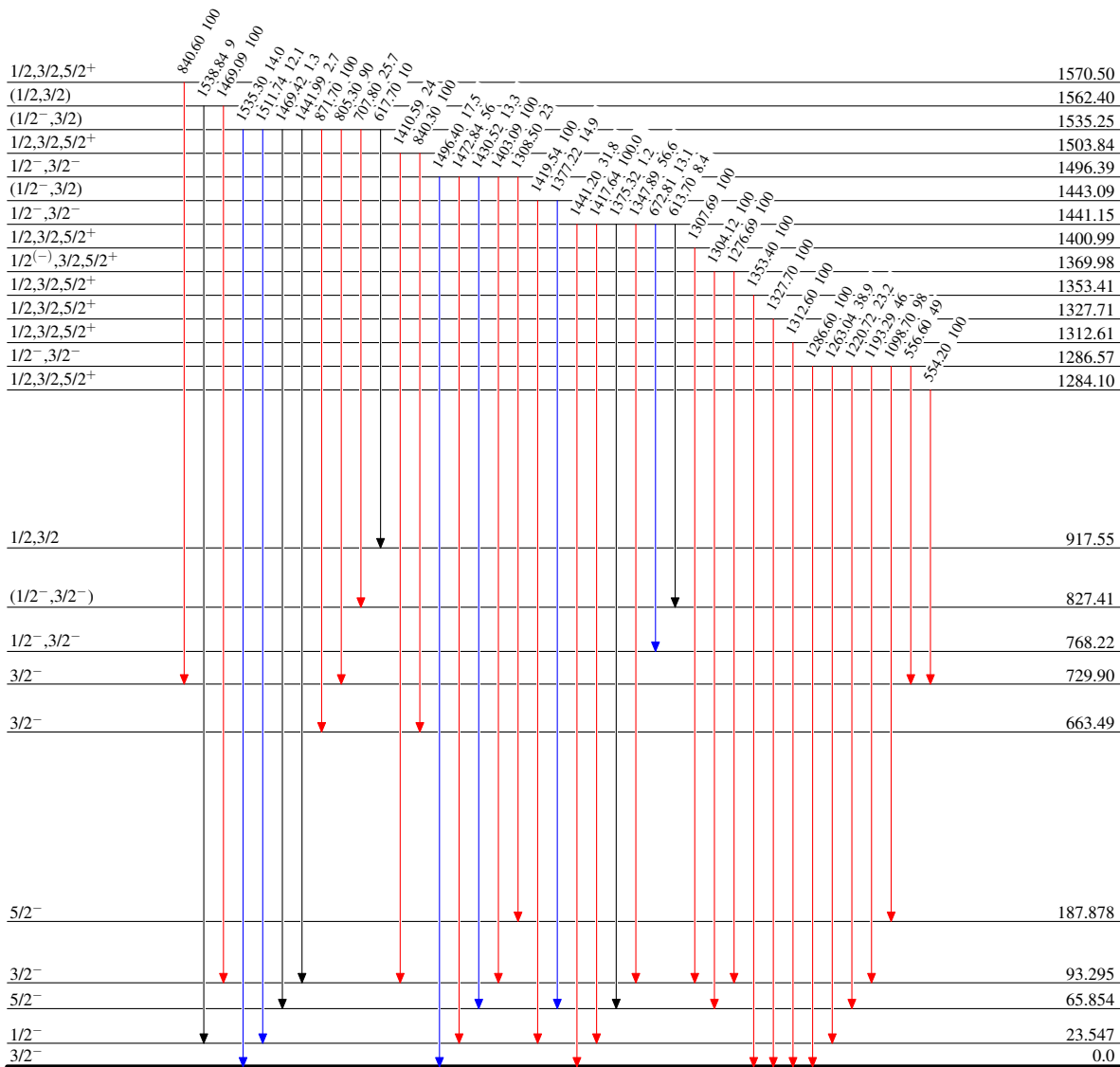
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

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



75.1 d 3

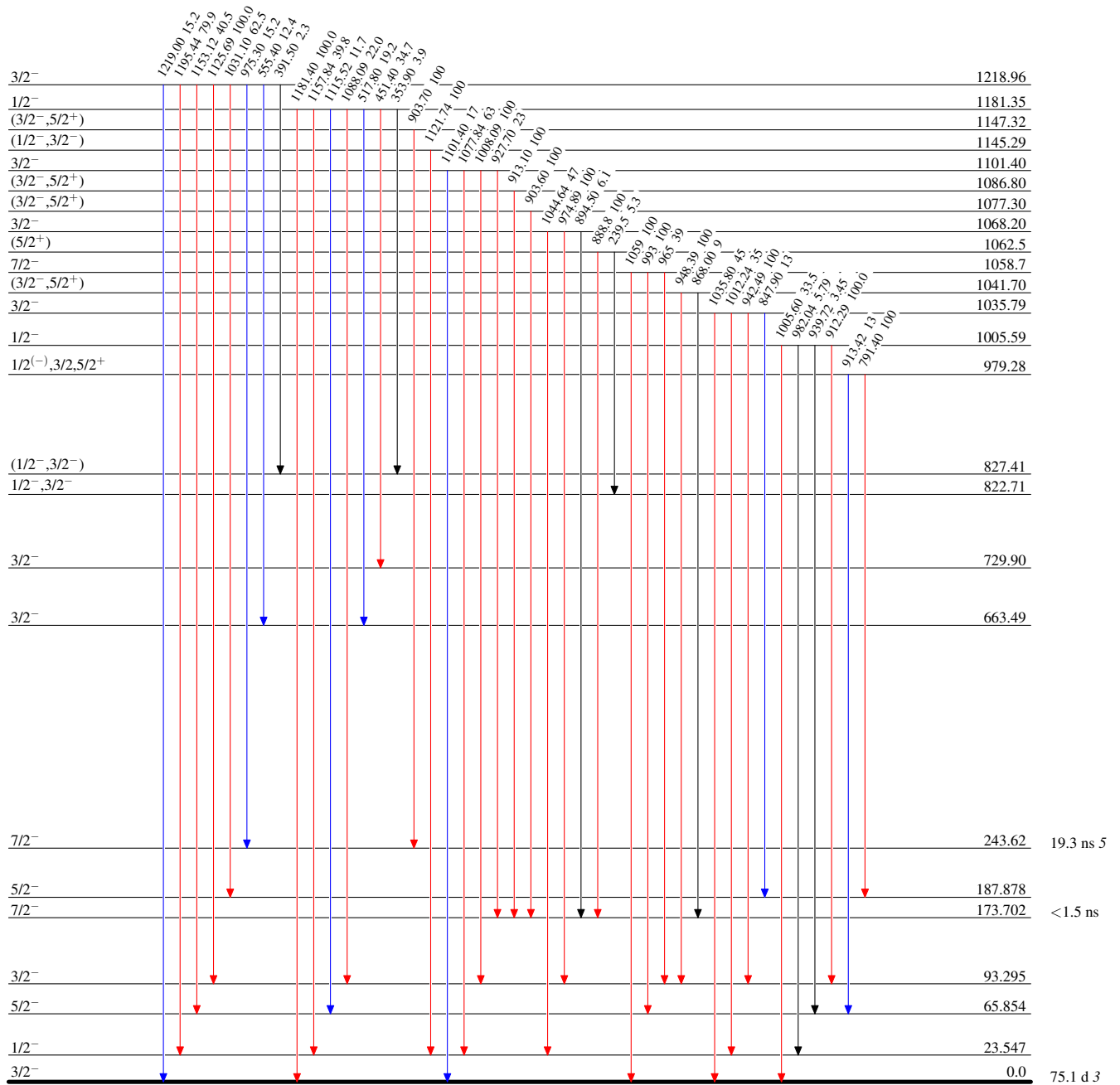
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

- ▶ I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>



<sup>185</sup>W<sub>74</sub><sup>111</sup>

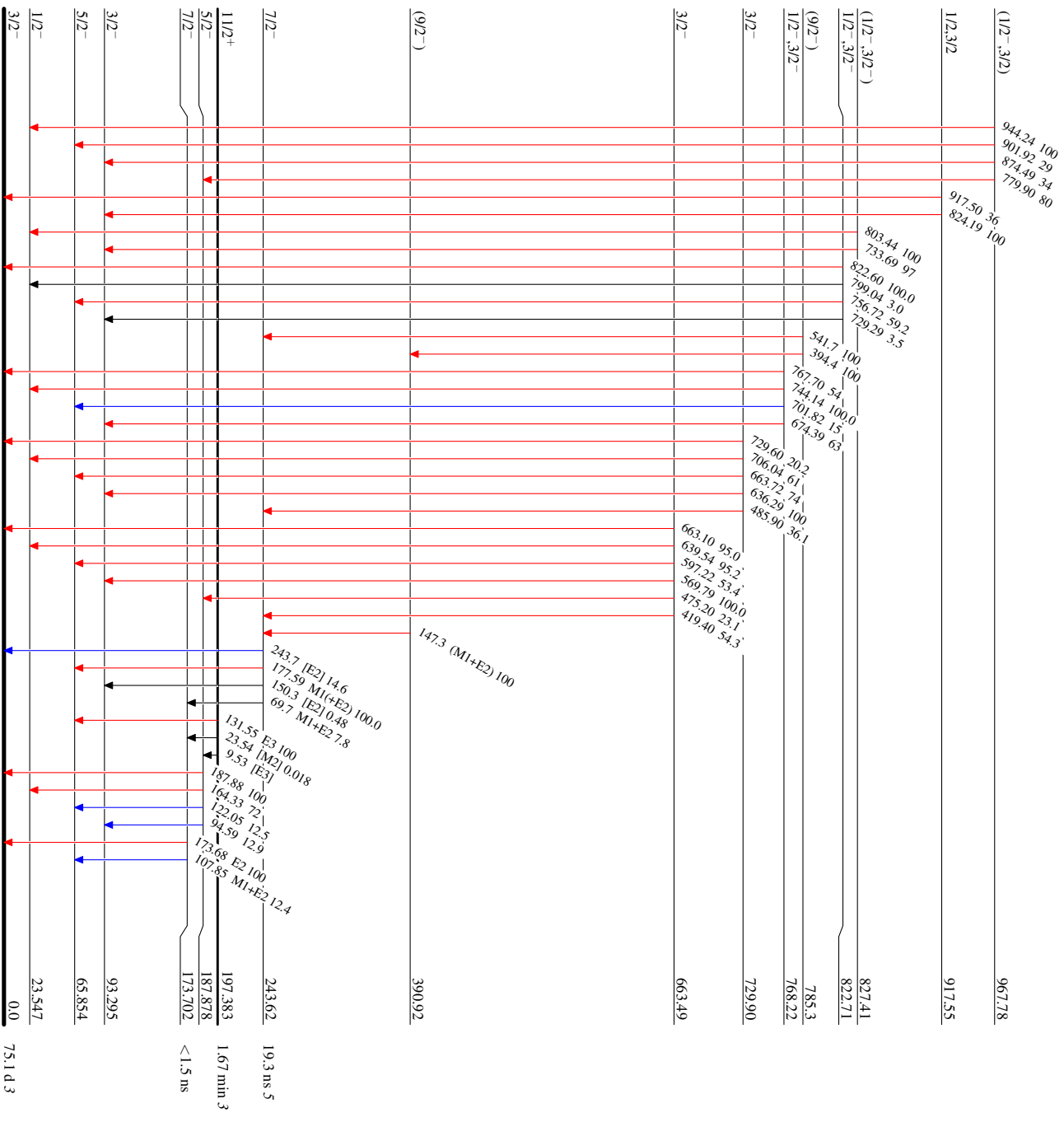
**Adopted Levels, Gammas**

**Level Scheme (continued)**

Intensities: Type not specified

**Legend**

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



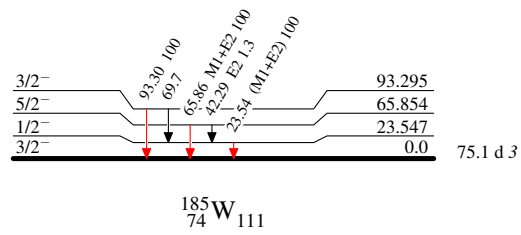
185W 111  
74

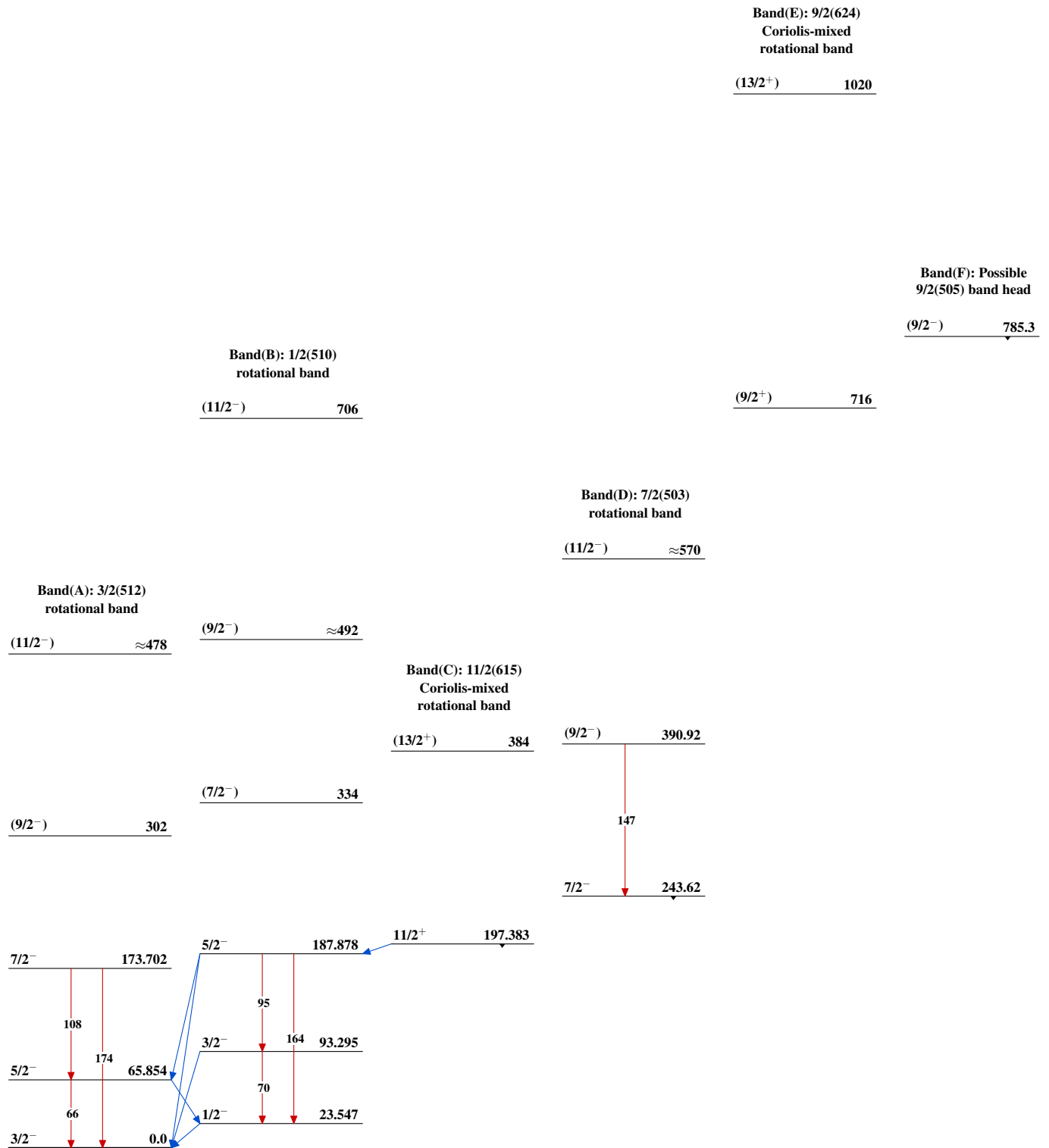
**Adopted Levels, Gammas****Level Scheme (continued)**

Intensities: Type not specified

## Legend

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



Adopted Levels, Gammas

**Adopted Levels, Gammas (continued)**

**Band(H): 1/2(521)**  
rotational band

(9/2<sup>-</sup>)      1361

(7/2<sup>-</sup>)      1335

**Band(I): 7/2(514)**  
rotational band

(9/2<sup>-</sup>)      ≈1219

**Band(J): K=1/2<sup>-</sup> γ band,**  
based on g.s

(7/2<sup>-</sup>)      1154

**Band(G): 5/2(512)**  
rotational band

(9/2<sup>-</sup>)      ≈1118

(5/2<sup>-</sup>)      1118

3/2<sup>-</sup>      1106

(5/2<sup>-</sup>)      1073

7/2<sup>-</sup>      1058.7

3/2<sup>-</sup>      1035.79

1/2<sup>-</sup>      1013

1/2<sup>-</sup>      1005.59

7/2<sup>-</sup>      986

5/2<sup>-</sup>      888.6