### Adopted Levels, Gammas

					History				
	Туре		Auth	or		Citation	Literature Cutoff Date		
	Full Evaluation	S. K. Basu, G	. Mukher	jee, A. A.	Sonzogr	ii NDS 111,2555 (2010)	30-Jun-2009		
$Q(\beta^-)=6089 \ 8;$ Note: Current e $S(2n)=11177 \ 10$ $\alpha$ : Additional in	S(n)=4348 7; S(p) valuation has used 0, S(2p)=25562 6 ( offormation 1.	=13848 7; Q(d) the following (2009AuZZ).	$\alpha$ )=-6573 Q record	6090 <b>2012</b>	2Wa38 7 4350	9 <i>13856</i> 10 -6571 6	2009AuZZ.		
				95	Sr Leve	ls			
			C	Cross Refer	ence (X	REF) Flags			
		A B C	<sup>95</sup> Rb β <sup>96</sup> Rb β <sup>252</sup> Cf S	<sup>−</sup> decay <sup>−</sup> n decay SF decay	D 2 E 2	<sup>54</sup> Cf SF decay <sup>35</sup> U(n,F $\gamma$ ), <sup>239</sup> Pu(n,F $\gamma$ )			
E(level) <sup>†</sup>	Jπ‡	$T_{1/2}$	XREF			Comment	ts		
0.0	1/2+	23.90 s 14	ABCDE	$ \frac{\%\beta^{-}=100}{\mu=-0.53} \\ J^{\pi}: J=1/2 \\ T_{1/2}: We \\ 20 (68) \\ (2717) \\ (1278) \\ s 11 (1) \\ (1973) \\ L and \\ L and \\ L and \\ M = 100 \\ M = 100$	0 7 2 (199 2 from C eighted a $(6\gamma)$ , 24. (1974) (1974) $(\gamma)$ , and 2 $(1278\gamma)$ , a (700), $(300)$	<b>20Bu12</b> ) <b>2FBLS</b> (1987Bu11); $\pi =+ f$ <b>iv</b> of 23.7 s 3 (686 $\gamma$ ) (1980 <b>06</b> s 22 (827 $\gamma$ ), 23.46 s 27 <b>He03</b> . Ge(Li)). Others: 24 <b>23.8</b> s 13 (2247 $\gamma$ ) (1986Ok and 20.47 s 73 (2933 $\gamma$ ) (1 <b>e</b> (Li)). 25.1 s 2 (1979En02 <b>2</b> (1074Gr20) $4\pi \theta$ ; spin mi	From J and $\mu$ . 50k03. Ge(Li)) and 24.17 s 7 (2247 $\gamma$ ), and 23.59 s 46 .0 s 10 (827 $\gamma$ ), 23.9 s 14 .03); 24.69 s 43 (945 $\gamma$ ), 27.2 974He03); and 25.9 s 16 $\beta^{-1}$ s; Si) and 24.8 s 2, 25.5 s		
352.02 6	$(3/2)^+$		ABCDE	$J^{\pi}$ : M1 $\gamma$	$^{50.0}$ s . $^{\prime}$ to $1/2^{+}$	and E2 $\gamma$ from (7/2) <sup>+</sup> ; lo	g $ft \ge 7.6$ from $5/2^-$ .		
556.08 <sup>@</sup> 8	(7/2)+	21.9 ns 5	ABCDE	J <sup>*</sup> : M1 $\gamma$ to 1/2 <sup>+</sup> and E2 $\gamma$ from (//2) <sup>+</sup> ; log <i>ft</i> ≥7.6 from 5/2 <sup>-</sup> . J <sup>π</sup> : log <i>ft</i> =6.0 from 5/2 <sup>-</sup> ; E2 $\gamma$ to (3/2) <sup>+</sup> and no observed $\gamma$ to 1/2 <sup>+</sup> . T <sub>1/2</sub> : Weighted av of 20.9 ns 5 (β-352 $\gamma$ (t) in β <sup>-</sup> decay, 24.0 ns 12 (fragment-204 $\gamma$ (t) in <sup>252</sup> Cf SF decay), 23.1 ns 12 and 22.0 ns 11 (fragment-352 $\gamma$ (t) in <sup>252</sup> Cf SF decay), 21.8 ns 11 and 22.6 ns 12 (fragment-352 $\gamma$ (t)) in (n,F $\gamma$ ), 26 ns 2 (fragment-204 $\gamma$ (t) in <sup>254</sup> Cf SF					
680.70 <i>6</i>	3/2+,5/2+		AB	$J^{\pi}$ : log ft	t=6.0 fro	om $5/2^-$ ; M1 $\gamma$ to $1/2^+$ , $(3/2)$	2) <sup>+</sup> .		
1003.70 10	1/2+,3/2,5/2		AB	$J^{\pi}$ : log ft	t = 6.3 to	6.9 (log $f^{1u}t \ge 8.4$ ) from 5,	$/2^{-}$ and $\gamma$ to $1/2^{+}$ .		
1012.25 8	$1/2^+, 3/2^+, 5/2^+$		AB	J <sup>π</sup> : M1,E	$2^{\circ} \gamma$ to 1	$/2^+, 3/2^+; \gamma$ to $1/2^+$ .	$(2/2^{+})$ $5/2^{+}$ and $(7/2^{+})$		
$1121.01 \ 10$ $1238.80^{\&} \ 13$	$(9/2^+)^{\#}$		AB ABC	$J^{\pi}$ : log $ft$ $J^{\pi}$ : log $ft$ $I^{\pi} = 1/2$	t≥7.6 (lc t≥7.6 (lc 2 <sup>+</sup> to 9/2	$g f^{1u} t \ge 9.8$ ) from 5/2 and $g f^{1u} t \ge 9.8$ ) from 5/2 work	$\gamma$ to (3/2°), 3/2° and (7/2°). ald result in possible		
1247.24 25	1/2,3/2,5/2		A	$J^{\pi}$ : $\gamma$ to	$1/2^+$ .				
1259.66 8	1/2+,3/2,5/2		AB	$J^{\pi}$ : log ft	t=6.3 to	6.9 (log $f^{1u}t \ge 8.4$ ) from 5,	$/2^{-}$ and $\gamma$ to $1/2^{+}$ .		
1439.30 10	1/2+,3/2,5/2		AB	$J^{\pi}$ : log ft	t = 6.3 to	6.9 (log $f^{1u}t \ge 8.4$ ) from 5,	$/2^{-}$ and $\gamma$ to $1/2^{+}$ .		
1665.74 <sup>@</sup> 20	$(11/2^+)^{\#}$		С	-77					
1680.24 20	$(9/2^+,11/2^+)$ $1/2^+$ to $5/2^+$		C AD	$J^{n}: \gamma$ dec	cays to (	$1/2)^{+}, (9/2^{+}).$			
1743.33 11 1750.86 14 1843.70 11	$1/2^{+}$ to $3/2^{-}$ $1/2^{+}$ to $7/2^{-}$		A A AB	$J^{\pi}$ : log <i>ft</i>	t=6.3 <i>1</i> 1	to 7.0 2 (log $f^{1u}t \ge 8.5$ ) from	n $5/2^{-}$ and $\gamma$ to $1/2^{+}, 3/2$ .		
1860.45 <i>16</i> 1864.18 <i>16</i> 1948.5 <i>3</i>	1/2 <sup>+</sup> to 7/2		A A A	$J^{\pi}$ : log $ft$	t=6.3 <i>1</i> 1	to 7.0 2 (log $f^{1u}t \ge 8.5$ ) from	n $5/2^{-}$ and $\gamma$ to $1/2^{+}, 3/2$ .		
1974.95 18	$1/2^{+}$ to $7/2$		A	$J^{\pi}$ : log ft	t=6.3 <i>1</i> t	to 7.0 2 (log $f^{1u}t \ge 8.5$ ) from	n $5/2^{-}$ and $\gamma$ to $1/2^{+}, 3/2$ .		
2013.33 21	1/2+,3/2,5/2		Α	$J^{\pi}$ : log ft	t=6.3 to	6.9 $(\log f^{1u}t \ge 8.4)$ from 5	$/2^{-}$ and $\gamma$ to $1/2^{+}$ .		

Continued on next page (footnotes at end of table)

#### Adopted Levels, Gammas (continued)

# 95Sr Levels (continued)

E(level) <sup>†</sup>	$\mathrm{J}^{\pi \ddagger}$	XREF	Comments
2076.5 3		A	
2098.91 16	$1/2^+.3/2.5/2$	A	$J^{\pi}$ : log ft=6.3 to 6.9 (log $f^{1u}t > 8.4$ ) from $5/2^{-1}$ and $\gamma$ to $1/2^{+1}$ .
2236.0 3	1 )-1 )-1	A	
2246.90 18	$1/2^+.3/2.5/2$	A	$J^{\pi}$ : log ft=6.3 to 6.9 (log $f^{1u}t > 8.4$ ) from $5/2^{-}$ and $\gamma$ to $1/2^{+}$ .
2264.62 19	1 )-1 )-1	A	
2344 35 <mark>&amp;</mark> 25	$(13/2^+)^{\#}$	C	
2368.2? 4	(10/= )	A	
2394.39 19		Α	
2424.4.3	$(13/2^+, 15/2^+)^{\#}$	C	$I^{\pi}$ : $\gamma$ from $(17/2^+)$ and $\gamma$ to $(9/2^+, 11/2^+)$ .
2430.06 19	(10/= ,10/= )	A	(1, 1, 2, 2, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3,
2827.92 23		Α	
2869 1 @ 3	$(15/2^+)^{\#}$	C	
2967.7.3	3/2.5/2.7/2	A	$J^{\pi}$ : log ft=5.8 to 6.4 from 5/2 <sup>-</sup> .
2974.38 18	3/2.5/2.7/2	A	$J^{\pi}$ : log ft=5.8 to 6.4 from 5/2 <sup>-</sup> .
3050.8 10	-1 )-1 )-1	С	
3206.53 18	3/2,5/2,7/2	Α	$J^{\pi}$ : log ft=5.8 to 6.4 from 5/2 <sup>-</sup> .
3366.63 12	3/2-,5/2-,7/2-	Α	$J^{\pi}$ : log ft=5.0 to 5.7 from 5/2 <sup>-</sup> .
3421.0 <sup>&amp;</sup> 3	$(17/2^+)^{\#}$	С	
3449.53 16	3/2-,5/2-,7/2-	Α	$J^{\pi}$ : log ft=5.0 to 5.7 from 5/2 <sup>-</sup> .
3463.66 17	3/2,5/2	Α	$J^{\pi}$ : log ft=5.8 to 6.5 from 5/2 <sup>-</sup> and $\gamma$ to 1/2.
3479.08 12	3/2-,5/2-,7/2-	Α	$J^{\pi}$ : log ft=5.0 to 5.7 from 5/2 <sup>-</sup> .
3532.36 20	3/2 to 7/2	Α	$J^{\pi}$ : log ft=5.8 to 6.4 from 5/2 <sup>-</sup> .
3584.17 13	3/2-,5/2-,7/2-	A	$J^{\pi}$ : log ft=5.0 to 5.7 from 5/2 <sup>-</sup> .
3587.6 3	3/2,5/2	A	$J^{\pi}$ : log ft=5.8 to 6.5 from 5/2 <sup>-</sup> and $\gamma$ to 1/2 <sup>+</sup> .
3591.35 19	3/2 to $7/2$	A	$J^{\pi}$ : log ft=5.8 to 6.4 from 5/2 <sup>-</sup> .
3597.86 19	3/2, $5/2$ , $1/2$	A	$J^*: \log ft = 5.0$ to 5.7 from 5/2.
3003.07 23	3/2, $3/23/2 - 5/2 - 7/2$	A	$J^{*}: \log \pi = 3.5$ from $3/2^{-1}$ and $\gamma = 10^{-1} I/2^{-1}$ .
3624 7 A	3/2 ,3/2 ,1/2 3/2 5/2 7/2	A 4	$J^{*}$ . log $f_{t}=5.0$ to 5.7 from $5/2^{-1}$ .
3635 62 13	$3/2^{-}$ $5/2^{-}$ $7/2^{-}$	A	$I^{\pi} \log f = 5.0 \text{ to } 5.7 \text{ from } 5/2^{-1}$
3605 8 @ 1	$(10/2^+)^{\#}$		<b>7</b> . 10 <u>5</u> <i>f</i> , 5.6 to 5.7 Hold 5 <i>f</i> <sup>2</sup> .
3708 64 24	(19/2)	Δ	$I^{\pi}$ : log ft = 5.8 to 6.5 from $5/2^{-1}$ and $\alpha$ to $1/2^{+1}$
3712.1.4	3/2,5/2 7/2	A	$I^{\pi}$ : log fr=5.8 to 6.4 from 5/2 <sup>-</sup>
3801.79.20	3/2 to $7/2$	A	$I^{\pi}$ : log ft=5.8 to 6.4 from 5/2 <sup>-</sup> .
3940.3 4	$1/2^+$ $3/2$ $5/2$	A	$I^{\pi}$ : log ft=6.3 to 6.9 (log f <sup>1</sup> t>8.4.) from 5/2 <sup>-</sup> and $\gamma$ to 1/2 <sup>+</sup> .
3986.3 4	3/2.5/2.7/2	A	$J^{\pi}$ : log ft=5.8 to 6.4 from 5/2 <sup>-</sup> .
4095 2 <sup>&amp;</sup> 4	$(21/2^+)^{\#}$	C	
4163.6.5	1/2+.3/2 5/2	A	$I^{\pi}$ : log ft=6.3 to 6.9 (log $t^{4u}t > 8.4$ ) from 5/2 <sup>-</sup> and $v$ to 1/2 <sup>+</sup>
4230.5.3	3/2.5/2	A	$I^{\pi}$ : log ft=5.8 to 6.5 from 5/2 <sup>-</sup> and $\gamma$ to 1/2 <sup>+</sup> .
4247.9 4	3/2.5/2.7/2	A	$J^{\pi}$ : log ft=5.8 to 6.4 from 5/2 <sup>-</sup> .
4278.5 6	$1/2^+$ to $7/2$	A	$J^{\pi}$ : log ft=6.3 1 to 7.0 2 (log $f^{1u}t > 8.5$ ) from $5/2^{-1}$ and $\gamma$ to $1/2^{+1}, 3/2^{+1}$ .
4292.4 7	$1/2^+.3/2.5/2$	A	$J^{\pi}$ : log ft=6.3 to 6.9 (log $f^{1u}t > 8.4$ ) from 5/2 <sup>-</sup> and $\gamma$ to 1/2 <sup>+</sup> .
4312.4 4	3/2,5/2,7/2	A	$J^{\pi}$ : log ft=5.8 to 6.4 from 5/2 <sup>-</sup> .
$\approx 4.37 \times 10^3$	3/2-	A	%n=100
			$J^{\pi}$ : $3/2^{-}, 5/2^{-}, 7/2^{-}$ from log $ft \approx 5.7$ in $\beta^{-}$ decay. $1/2^{-}, 3/2^{-}$ from L(n)=1 to ${}^{94}$ Sr 0 <sup>+</sup> .
4525.3 <sup>@</sup> 5	$(23/2^+)^{\#}$	С	
4570.7 7	$1/2^+$ to $7/2$	A	$J^{\pi}$ : log ft=6.3 1 to 7.0 2 (log $t^{4u}t > 8.5$ ) from $5/2^{-1}$ and $\gamma$ to $1/2^{+1}.3/2^{+1}$ .
4661.3? 8	,	A	
4879.8 <sup>&amp;</sup> 5	$(25/2^+)^{\#}$	C	
5421 6 <sup>@</sup> 6	$(27/2^+)^{\#}$	c	
$5 \pm 21.0 0$	$(21/2^+)^{\#}$		
01/0.0 /	$(31/2^{+})^{\prime\prime}$	C	

### Adopted Levels, Gammas (continued)

<sup>95</sup>Sr Levels (continued)

- <sup>†</sup> From least squares fit to  $E\gamma'$ s. <sup>‡</sup> Assignments are tentative, based on known multipolarity of 352.0 keV (M1) and 204.0 keV(E2); for other suggested spins and # Tentative assignment, adopted from 2004Hw04.
  # Tentative assignment, adopted from 2004Hw04.
  @ Band(A): Band based on 7/2<sup>+</sup>.
  & Band(B): Band based on 9/2<sup>+</sup>.

	Adopted Levels, Gammas (continued)								
	$\gamma$ ( <sup>95</sup> Sr)								
E <sub>i</sub> (level)	${ m J}^{\pi}_i$	$E_{\gamma}^{\dagger \ddagger}$	Iγ	$E_f$	$\mathbf{J}_f^{\pi}$	Mult.	α	Comments	
352.02	(3/2)+	352.01 9	100	0.0	1/2+	M1	0.00607 9	$\begin{aligned} &\alpha(\mathbf{K}) = 0.00536 \ 8; \ \alpha(\mathbf{L}) = 0.000591 \ 9; \ \alpha(\mathbf{M}) = 9.94 \times 10^{-5} \ 14; \\ &\alpha(\mathbf{N}) = 1.248 \times 10^{-5} \ 18; \ \alpha(\mathbf{O}) = 8.11 \times 10^{-7} \ 12 \\ &\alpha(\mathbf{N}+) = 1.330 \times 10^{-5} \ 19 \end{aligned}$	
556.08	(7/2)+	204.01 9	100	352.02	(3/2)+	E2	0.0751	Mult.: from $\alpha$ (K)exp. $E_{\gamma}$ : weighted average of 352.0 <i>I</i> ( $^{95}$ Rb $\beta^{-}$ decay), 352.0 <i>3</i> ( $^{252}$ Cf SF decay), 352.1 <i>4</i> ( $^{235}$ U(n,F $\gamma$ ), $^{239}$ Pu(n,F $\gamma$ )). $\alpha$ (K)=0.0653 <i>10</i> ; $\alpha$ (L)=0.00831 <i>12</i> ; $\alpha$ (M)=0.001396 <i>20</i> ; $\alpha$ (N)=0.0001682 <i>24</i> $\alpha$ (O)=8.97×10 <sup>-6</sup> <i>13</i> ; $\alpha$ (N+)=0.0001772 <i>25</i> B(E2)(W.u.)=2.64 <i>6</i> Mult.: E2 from $\alpha$ (K)exp. in $\beta^{-}$ decay. $E_{\gamma}$ : weighted average of 204.0 <i>I</i> ( $^{95}$ Rb $\beta^{-}$ decay), 204.0 <i>3</i>	
680.70	3/2+,5/2+	124.6 <sup>@</sup> 2	1.6 <sup>†</sup> 3	556.08	(7/2)+	[E2]	0.454	$(^{252}Cf SF decay), 204.2 4 (^{235}U(n,F\gamma), ^{239}Pu(n,F\gamma).$ $\alpha(K)=0.387 6; \alpha(L)=0.0567 9; \alpha(M)=0.00955 15;$ $\alpha(N)=0.001119 18; \alpha(O)=5.06\times10^{-5} 8$ $\alpha(N)=0.001170 18$	
		328.7 1	63 <sup>†</sup> 4	352.02	(3/2)+	M1	0.00718 10	$\alpha(\text{N+})=0.001170 \ 10^{\circ}$ $\alpha(\text{K})=0.00634 \ 9; \ \alpha(\text{L})=0.000701 \ 10; \ \alpha(\text{M})=0.0001178 \ 17; \ \alpha(\text{N})=1.479\times10^{-5} \ 21 \ \alpha(\text{O})=9.60\times10^{-7} \ 14; \ \alpha(\text{N+})=1.575\times10^{-5}$	
		680.7 <i>1</i>	100 7	0.0	1/2+	M1,E2	0.00141 12	Mult.: from $\alpha$ (K)exp in $\beta^-$ decay. $\alpha$ (K)=0.00124 <i>10</i> ; $\alpha$ (L)=0.000137 <i>13</i> ; $\alpha$ (M)=2.30×10 <sup>-5</sup> <i>21</i> ; $\alpha$ (N)=2.87×10 <sup>-6</sup> <i>25</i> $\alpha$ (O)=1.85×10 <sup>-7</sup> <i>13</i> ; $\alpha$ (N+)=3.1×10 <sup>-6</sup> <i>3</i> Mult : from $\alpha$ (K)exp in $\beta^-$ decay	
1003.70	1/2+,3/2,5/2	651.6 2 1003.7 2	28 <i>3</i> 100 <i>10</i>	352.02 0.0	$(3/2)^+$ $1/2^+$				
1012.25	1/2+,3/2+,5/2+	331.6 2	38 <sup>†</sup> 5	680.70	3/2+,5/2+	[M1,E2]	0.010 4	$\alpha(K)=0.009 \ 3; \ \alpha(L)=0.0011 \ 4; \ \alpha(M)=0.00018 \ 7; \ \alpha(N)=2.2\times10^{-5} \ 8; \ \alpha(O)=1.3\times10^{-6} \ 4 \ \alpha(N+.)=2.3\times10^{-5} \ 8$	
		660.2 1	100† 7	352.02	(3/2)+	M1,E2	0.00152 14	$\begin{aligned} \alpha(\text{K}) = 0.00134 \ I2; \ \alpha(\text{L}) = 0.000148 \ I5; \ \alpha(\text{M}) = 2.48 \times 10^{-5} \ 25; \\ \alpha(\text{N}) = 3.1 \times 10^{-6} \ 3; \ \alpha(\text{O}) = 1.99 \times 10^{-7} \ I5 \\ \alpha(\text{N}+) = 3.3 \times 10^{-6} \ 3 \end{aligned}$ Mult.: from $\alpha(\text{K})$ exp in $\beta^-$ decay.	
1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>	1012.2 <i>3</i> 440.3 <i>3</i> 565.0 <i>2</i> 769.0 <i>2</i>	$3.6^{\dagger} 7 27^{\dagger} 6 41^{\dagger} 4 100^{\dagger} 8$	0.0 680.70 556.08 352.02	$1/2^+$ $3/2^+, 5/2^+$ $(7/2)^+$ $(3/2)^+$			$E_{\gamma}$ , $I_{\gamma}$ : from <sup>95</sup> Rb $\beta$ -decay; not seen in <sup>96</sup> Rb $\beta^-$ n decay.	

Adopted Levels, Gammas (continued)						s (continued)		
					$\gamma(^{\varsigma})$	<sup>95</sup> Sr) (continu	ued)	
$E_i$ (level)	$J^{\pi}_i$	$E_{\gamma}^{\dagger\ddagger}$	$I_{\gamma}$	$E_f$	$J_f^{\pi}$	Mult.	α	Comments
1238.80	(9/2+)	682.54 24	100 19	556.08	(7/2)+	(M1+E2)	0.00140 12	$         α(K)=0.00124 \ 10; \ α(L)=0.000136 \ 13; \ α(M)=2.28\times10^{-5}          21; \ α(N)=2.85\times10^{-6} \ 25          α(O)=1.84\times10^{-7} \ 13; \ α(N+)=3.0\times10^{-6} \ 3          Mult.: from the J^{\pi} of initial and final levels.Eγ: weighted average of 682.8 4 (95Rb β- decay), 682.43 (252Cf SF decay).L:: from 95Rb β- decay         $
		886.7 <sup>@</sup> 3	10.6 25	352.02	$(3/2)^+$			$E_{\gamma}$ , $I_{\gamma}$ : from <sup>95</sup> Rb $\beta^-$ decay; not seen in <sup>252</sup> Cf SF decay.
1247.24	1/2,3/2,5/2	1247.2 <sup>#</sup> 4	100 <sup>#†</sup>	0.0	1/2+			
1259.66	1/2+,3/2,5/2	256.0 2	2.9 6	1003.70	1/2+,3/2,5/2	[M1,E2]	0.023 10	$\begin{aligned} &\alpha(\text{K}) = 0.021 \ 9; \ \alpha(\text{L}) = 0.0024 \ 12; \ \alpha(\text{M}) = 0.00041 \ 19; \\ &\alpha(\text{N}) = 5.0 \times 10^{-5} \ 23; \ \alpha(\text{O}) = 2.9 \times 10^{-6} \ 12 \\ &\alpha(\text{N}+) = 5.3 \times 10^{-5} \ 24 \\ &\text{E}_{\gamma}, \text{I}_{\gamma}: \text{ from } {}^{95}\text{Rb} \ \beta^{-} \text{ decay; not observed in } {}^{96}\text{Rb} \ \beta^{-}\text{n} \\ &\text{ decay.} \\ &\text{Mult.: from } \alpha(\text{K}) \text{exp in } \beta^{-} \text{ decay.} \end{aligned}$
		578.9 1	80 <sup>†</sup> 7	680.70	3/2+,5/2+			
		703.5 2	11.6 <sup>†</sup> 22	556.08	$(7/2)^+$			
		907.6 2	39† 6	352.02	$(3/2)^+$			
		1259.7 2	100 9	0.0	$1/2^{+}$			
1439.30	1/2+,3/2,5/2	427.2 2	6.8 11	1012.25	1/2+,3/2+,5/2+			
		435.5 2	10.8 16	1003.70	1/2+,3/2,5/2			
		758.9 3	1.6 5	680.70	3/2+,5/2+			
		1087.3 3	6.81 14	352.02	(3/2)+			
1445 54	(11(2+))	1439.2 2	100 8	0.0	$1/2^+$			
1665.74	$(11/2^{+})$	427.13	100+ 5	1238.80	$(9/2^+)$			
1600.04	(0/2+ 11/2+)	1109.5 3	8.9 <sup>+</sup> 13	556.08	$(1/2)^{+}$			
1080.24	$(9/2^{+},11/2^{+})$	441.0 3	$3.9^{+} I_{-}^{-}$	1238.80	$(9/2^{+})$ $(7/2)^{+}$			
1743 53	$1/2^+$ to $5/2^+$	622.3.2	13 3	1121.01	(1/2) $3/2^+$ to $7/2^+$			
17-5.55	1/2 10 5/2	731.3.3	15 3	1012 25	$1/2^+$ $3/2^+$ $5/2^+$			
		1062.8.2	$100^{\dagger} 20$	680.70	$3/2^+$ $5/2^+$			
		1187.2.3	23 5	556.08	$(7/2)^+$			
1750.86	$1/2^+$ to $7/2$	630.3 3	$16^{\dagger} 3$	1121.01	$3/2^+$ to $7/2^+$			
	, , _	747.0 3	8 3	1003.70	$1/2^+, 3/2, 5/2$			
		1069.9 3	100 <sup>†</sup> 14	680.70	3/2+,5/2+			

S

<sup>95</sup><sub>38</sub>Sr<sub>57</sub>-5

$E_i$ (level)	$\mathbf{J}_i^{\pi}$	$E_{\gamma}^{\dagger\ddagger}$	$I_{\gamma}$	$E_f$	$J_f^{\pi}$
1750.86	1/2 <sup>+</sup> to 7/2	1195.0 <i>3</i>	37† 8	556.08	$(7/2)^+$
		1398.6 4	92 <sup>†</sup> 18	352.02	$(3/2)^+$
1843.70		583.8 <i>3</i>	3.2 <sup>†</sup> 16	1259.66	1/2+,3/2,5/2
		604.7 2	53 <sup>†</sup> 6	1238.80	(9/2+)
		722.6 2	37† 8	1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
		831.3 <i>3</i>	100 <sup>†</sup> 16	1012.25	1/2+,3/2+,5/2+
		1163.0 <i>3</i>	27 <sup>†</sup> 5	680.70	3/2+,5/2+
1860.45		739.4 <i>3</i>	25 <sup>†</sup> 7	1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
		1179.8 <i>3</i>	100 <sup>†</sup> 17	680.70	3/2+,5/2+
		1304.6 4	25 <sup>†</sup> 7	556.08	$(7/2)^+$
1864.18	1/2 <sup>+</sup> to 7/2	1308.0 <i>3</i>	28 <sup>†</sup> 8	556.08	$(7/2)^+$
		1512.1 3	100 <sup>†</sup> <i>16</i>	352.02	$(3/2)^+$
1948.5		1267.8 <i>3</i>	100	680.70	3/2+,5/2+
1974.95	1/2 <sup>+</sup> to 7/2	535.7 2	$28^{\dagger} 6$	1439.30	1/2+,3/2,5/2
		1622.8 <i>3</i>	100 <sup>†</sup> 15	352.02	$(3/2)^+$
2013.33	1/2+,3/2,5/2	1661.5 <i>3</i>	100 <sup>†</sup> <i>13</i>	352.02	$(3/2)^+$
		2013.1 3	77 11	0.0	1/2+
2076.5		955.5 <i>4</i>	$\approx 0^{\dagger}$	1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
		1395.7 4	100 <sup>†</sup> 20	680.70	3/2+,5/2+
2098.91	1/2+,3/2,5/2	839.2 <i>3</i>	45 <sup>†</sup> 21	1259.66	1/2+,3/2,5/2
		1418.6 <i>3</i>	100 <sup>†</sup> <i>17</i>	680.70	3/2+,5/2+
		1746.7 <i>3</i>	59 <sup>†</sup> 17	352.02	$(3/2)^+$
		2098.7 <i>3</i>	59 <sup>†</sup> 10	0.0	1/2+
2236.0		976.3 <i>3</i>	100	1259.66	1/2+,3/2,5/2
2246.90	1/2+,3/2,5/2	1895.0 <i>3</i>	91 <sup>†</sup> 15	352.02	$(3/2)^+$
		2247.0 <i>3</i>	100 <sup>†</sup> <i>15</i>	0.0	1/2+
2264.62		1708.5 <i>3</i>	100	556.08	$(7/2)^+$
2344.35	$(13/2^+)$	664.1 <i>3</i>	32 <sup>‡</sup> 4	1680.24	$(9/2^+, 11/2^+)$
		678.6 <i>3</i>	100 <sup>‡</sup> 15	1665.74	$(11/2^+)$
2368.2?		1247.2 <sup>#@</sup> 4	100#†	1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
2394.39		1273.5 <i>3</i>	22 <sup>†</sup> 6	1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
		1381.8 <i>3</i>	39 <sup>†</sup> 8	1012.25	1/2+,3/2+,5/2+

E <sub>i</sub> (level)	$J_i^{\pi}$	$E_{\gamma}^{\dagger\ddagger}$	$I_{\gamma}$	$E_f$	$J_f^\pi$
2394.39		1838.5 <i>3</i>	100 <sup>†</sup> 14	556.08	$(7/2)^+$
2424.4	$(13/2^+, 15/2^+)$	744.2 <i>3</i>	59 <sup>‡</sup> 9	1680.24	$(9/2^+, 11/2^+)$
		758.7 <i>3</i>	100 <sup>‡</sup> <i>16</i>	1665.74	$(11/2^+)$
2430.06		1308.8 <i>3</i>	$1.0 \times 10^{2}$ <sup>†</sup> 3	1121.01	$3/2^+$ to $7/2^+$
		1873.8 <i>3</i>	91 <sup>†</sup> <i>14</i>	556.08	$(7/2)^+$
2827.92		1084.4 <i>3</i>	100 <sup>†</sup> 20	1743.53	$1/2^+$ to $5/2^+$
		2271.8 <i>3</i>	60 <sup>†</sup> 12	556.08	$(7/2)^+$
2869.1	$(15/2^+)$	524.8 <i>3</i>	20 <sup>‡</sup> 3	2344.35	$(13/2^+)$
		1203.4 <i>3</i>	100 <sup>‡</sup> 15	1665.74	$(11/2^+)$
2967.7	3/2,5/2,7/2	1528.5 <i>3</i>	100 <sup>†</sup> <i>13</i>	1439.30	1/2+,3/2,5/2
		1963.8 4	10 <sup>†</sup> 3	1003.70	1/2+,3/2,5/2
2974.38	3/2,5/2,7/2	1110.5 3	22 <sup>†</sup> 5	1864.18	1/2 <sup>+</sup> to 7/2
		1714.5 4	10 <sup>†</sup> 3	1259.66	1/2+,3/2,5/2
		1962.0 <i>3</i>	100 <sup>†</sup> <i>13</i>	1012.25	1/2+,3/2+,5/2+
		2418.2 3	25 <sup>†</sup> 5	556.08	$(7/2)^+$
3050.8		706.5	100‡	2344.35	$(13/2^+)$
3206.53	3/2,5/2,7/2	2203.0 <i>3</i>	30 <sup>†</sup> 6	1003.70	1/2+,3/2,5/2
		2525.7 3	36 <sup>†</sup> 7	680.70	3/2+,5/2+
		2650.3 <i>3</i>	100 <sup>†</sup> 14	556.08	$(7/2)^+$
3366.63	3/2-,5/2-,7/2-	1120.0 3	7.8 16	2246.90	1/2+,3/2,5/2
		1522.7 <i>3</i>	16.0 20	1843.70	
		1623.0 4	2.2 8	1743.53	$1/2^+$ to $5/2^+$
		1927.3 <i>3</i>	100 14	1439.30	1/2+,3/2,5/2
		2106.7 3	≈0 <sup>†</sup>	1259.66	1/2+,3/2,5/2
		2685.9 <i>3</i>	44 8	680.70	3/2+,5/2+
		2810.6 <i>3</i>	62 <sup>†</sup> 10	556.08	$(7/2)^+$
		3014.7 <i>3</i>	50 <sup>†</sup> 8	352.02	$(3/2)^+$
3421.0	$(17/2^+)$	551.8 <i>3</i>	4.0 <sup>‡</sup> 12	2869.1	$(15/2^+)$
		996.5 <i>3</i>	72 <sup>‡</sup> 10	2424.4	$(13/2^+, 15/2^+)$
		1076.6 <i>3</i>	100 7 14	2344.35	$(13/2^+)$
3449.53	3/2-,5/2-,7/2-	2437.3 <i>3</i>	16.6 <sup>†</sup> 25	1012.25	1/2+,3/2+,5/2+
		2768.8 3	22 <sup>†</sup> 3	680.70	$3/2^+, 5/2^+$
		2893.3 <i>3</i>	33.6	556.08	$(1/2)^{+}$



$E_i$ (level)	$J^{\pi}_{i}$	$E_{\gamma}^{\dagger\ddagger}$	$I_{\gamma}$	$\mathbf{E}_{f}$	${ m J}_f^\pi$
3449.53	3/2-,5/2-,7/2-	3097.5 <i>3</i>	100 <sup>†</sup> 16	352.02	(3/2)+
3463.66	3/2,5/2	2342.6 4	43 <sup>†</sup> 8	1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
		2451.2 <i>3</i>	93 <sup>†</sup> 20	1012.25	1/2+,3/2+,5/2+
		2460.0 4	53 <sup>†</sup> 13	1003.70	1/2+,3/2,5/2
		2782.7 4	43 <sup>†</sup> 11	680.70	3/2+,5/2+
		3111.8 4	68 <sup>†</sup> 11	352.02	$(3/2)^+$
		3464.0 5	100 <sup>†</sup> <i>13</i>	0.0	1/2+
3479.08	3/2-,5/2-,7/2-	1048.6 <i>3</i>	$1.1^{\dagger} 4$	2430.06	
		1635.0 <i>3</i>	1.5 <sup>†</sup> 5	1843.70	
		1735.6 <i>3</i>	3.5 <sup>†</sup> 12	1743.53	1/2 <sup>+</sup> to 5/2 <sup>+</sup>
		2219.4 <i>3</i>	42 <sup>†</sup> 5	1259.66	1/2+,3/2,5/2
		2240.1 <i>3</i>	3.577	1238.80	(9/2+)
		2358.0 <sup>#</sup> 3	51 <sup>#†</sup> 6	1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
		2466.8 <i>3</i>	18.6 24	1012.25	1/2+,3/2+,5/2+
		2798.6 <i>3</i>	100 12	680.70	3/2+,5/2+
		3128.1 4	4.7 9	352.02	$(3/2)^+$
3532.36	3/2 to 7/2	2293.6 <i>3</i>	30 6	1238.80	(9/2+)
		2851.6 <i>3</i>	100 16	680.70	3/2+,5/2+
		3180.2 4	100 15	352.02	$(3/2)^+$
3584.17	3/2-,5/2-,7/2-	1319.7 <i>3</i>	22 5	2264.62	
		1719.6 <i>3</i>	33 5	1864.18	1/2 <sup>+</sup> to 7/2
		1723.5 <i>3</i>	44 7	1860.45	
		1740.5 <i>3</i>	9 <sup>†</sup> 3	1843.70	
		1833.4 <i>3</i>	45 <sup>†</sup> 5	1750.86	1/2 <sup>+</sup> to 7/2
		2324.6 3	100 13	1259.66	1/2+,3/2,5/2
		2463.3 4	55 11	1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
		2571.8 <i>3</i>	13 3	1012.25	1/2+,3/2+,5/2+
		2903.6 4	29 4	680.70	3/2+,5/2+
3587.6	3/2,5/2	2340.0 5	34 7	1247.24	1/2,3/2,5/2
		2584.5 5	26 5	1003.70	1/2+,3/2,5/2
		3235.0 5	100 14	352.02	$(3/2)^+$
		3587.8 5	68 10	0.0	$1/2^{+}$

From ENSDF

E <sub>i</sub> (level)	$\mathbf{J}_i^\pi$	$E_{\gamma}^{\dagger\ddagger}$	$I_{\gamma}$	$E_f$	$\mathbf{J}_{f}^{\pi}$
3591.35	3/2 to 7/2	2152.0 3	41 8	1439.30	1/2+,3/2,5/2
		2910.5 3	88 <sup>†</sup> 14	680.70	3/2+,5/2+
		3035.5 4	17 <sup>†</sup> 4	556.08	$(7/2)^+$
		3239.2 5	100 <sup>†</sup> 14	352.02	$(3/2)^+$
3597.86	3/2-,5/2-,7/2-	1854.2 <i>3</i>	11 <sup>†</sup> 3	1743.53	1/2 <sup>+</sup> to 5/2 <sup>+</sup>
		2338.6 4	36 <sup>†</sup> 6	1259.66	1/2+,3/2,5/2
		2593.8 4	22 <sup>†</sup> 3	1003.70	1/2+,3/2,5/2
		3245.9 4	100 <sup>†</sup> 15	352.02	$(3/2)^+$
3605.67	3/2-,5/2-	2358.0 <sup>#</sup> 5	15 <sup>#†</sup> 4	1247.24	1/2,3/2,5/2
		2925.1 4	8.7 <sup>†</sup> 17	680.70	3/2+,5/2+
		3253.6 4	100 <sup>†</sup> <i>13</i>	352.02	$(3/2)^+$
		3605.7 5	6.3 <sup>†</sup> 13	0.0	1/2+
3612.32	3/2-,5/2-,7/2-	1748.0 4	4.6 <sup>†</sup> 23	1864.18	1/2 <sup>+</sup> to 7/2
		1752.6 4	16 <sup>†</sup> 4	1860.45	
		1768.3 <i>3</i>	35 5	1843.70	
		1868.4 <i>3</i>	21 5	1743.53	1/2 <sup>+</sup> to 5/2 <sup>+</sup>
		2373.3 4	100 <sup>†</sup> <i>19</i>	1238.80	(9/2+)
		2492.0 5	7.7 19	1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
		2600.1 3	17 <sup>†</sup> 3	1012.25	1/2+,3/2+,5/2+
		2931.6 4	58 8	680.70	3/2+,5/2+
		3056.0 4	24 <sup>†</sup> 4	556.08	$(7/2)^+$
		3261.0 6	5.4 15	352.02	$(3/2)^+$
3624.7	3/2,5/2,7/2	3272.6 4	100	352.02	$(3/2)^+$
3635.62	3/2-,5/2-,7/2-	1370.8 <i>3</i>	12.5 25	2264.62	
		1775.0 4	44 <sup>†</sup> 6	1860.45	
		1791.7 <i>3</i>	39 <sup>†</sup> 5	1843.70	
		1891.8 <i>3</i>	14.2 25	1743.53	$1/2^+$ to $5/2^+$
		2376.0 4	79 17	1259.66	1/2+,3/2,5/2
		2514.7 3	55 8	1121.01	$3/2^+$ to $7/2^+$
		2623.5 3	2974	1012.25	1/2+,3/2+,5/2+
		2632.3 5	3.8 17	1003.70	1/2+,3/2,5/2
		2955.1 <i>3</i>	100 17	680.70	3/2+,5/2+

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$E_i$ (level)	$\mathbf{J}_i^{\pi}$	$E_{\gamma}^{\dagger\ddagger}$	$I_{\gamma}$	$E_f$	$\mathrm{J}_f^\pi$
3635.62	3/2-,5/2-,7/2-	3079.6 4	50 <sup>†</sup> 6	556.08	(7/2)+
3695.8	$(19/2^+)$	826.6 <i>3</i>	100‡	2869.1	$(15/2^+)$
3708.64	3/2,5/2	2461.8 4	100 <sup>†</sup> 20	1247.24	1/2,3/2,5/2
		2704.5 4	44 <sup>†</sup> 12	1003.70	1/2+,3/2,5/2
		3028.0 5	40 <sup>†</sup> 10	680.70	3/2+,5/2+
		3708.4 5	90 <sup>†</sup> 16	0.0	$1/2^{+}$
3712.1	3/2,5/2,7/2	3031.2 5	28 <sup>†</sup> 9	680.70	3/2+,5/2+
		3360.2 5	100 <sup>†</sup> 15	352.02	$(3/2)^+$
3801.79	3/2 to 7/2	2542.0 <i>3</i>	43 <sup>†</sup> 11	1259.66	1/2+,3/2,5/2
		2681.0 4	25 <sup>†</sup> 6	1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
		3120.9 4	100 <sup>†</sup> 17	680.70	3/2+,5/2+
		3449.8 5	40 <sup>†</sup> 8	352.02	$(3/2)^+$
3940.3	1/2+,3/2,5/2	3588.2 6	$1.0 \times 10^{2}$ <sup>+</sup> 3	352.02	$(3/2)^+$
		3940.2 6	60 <sup>†</sup> 16	0.0	1/2+
3986.3	3/2,5/2,7/2	2982.6 4	100 17	1003.70	1/2+,3/2,5/2
		3634.0 8	16 8	352.02	$(3/2)^+$
4095.2	$(21/2^+)$	674.2 <i>3</i>	100‡	3421.0	$(17/2^+)$
4163.6	1/2+,3/2,5/2	3811.2 6	100 24	352.02	$(3/2)^+$
		4164.0 7	38 14	0.0	$1/2^{+}$
4230.5	3/2,5/2	2970.5 4	35 15	1259.66	1/2+,3/2,5/2
		3878.6 6	100 25	352.02	$(3/2)^+$
		4231.0 7	60 <sup>†</sup> 20	0.0	$1/2^{+}$
4247.9	3/2,5/2,7/2	3567.0 5	100 <sup>†</sup> <i>19</i>	680.70	3/2+,5/2+
		3692.0 8	18 9	556.08	$(7/2)^+$
4278.5	$1/2^+$ to $7/2$	3926.4 6	100	352.02	$(3/2)^+$
4292.4	1/2+,3/2,5/2	4292.3 7	100	0.0	$1/2^{+}$
4312.4	3/2,5/2,7/2	2873.2 4	100 21	1439.30	1/2+,3/2,5/2
		3631.0 8	41 <sup>†</sup> <i>14</i>	680.70	$3/2^+, 5/2^+$
4525.3	$(23/2^+)$	829.5 <i>3</i>	100 <sup>‡</sup>	3695.8	$(19/2^+)$
4570.7	$1/2^+$ to $7/2$	4218.6 7	100	352.02	$(3/2)^+$
4661.3?		4309.2 <sup>@</sup> 8	100	352.02	$(3/2)^+$
4879.8	$(25/2^+)$	784.6 <i>3</i>	100 <sup>‡</sup>	4095.2	$(21/2^+)$

E <sub>i</sub> (level)	$J_i^{\pi}$	$E_{\gamma}^{\dagger\ddagger}$	$I_{\gamma}$	$E_f$	$\mathbf{J}_f^{\pi}$
5421.6	$(27/2^+)$	896.3 <i>3</i>	100 <sup>‡</sup>	4525.3	$(23/2^+)$
6176.0	$(31/2^+)$	754.4 <i>3</i>	100‡	5421.6	$(27/2^+)$

<sup>†</sup> From <sup>95</sup>Rb β<sup>-</sup> decay.
<sup>‡</sup> From <sup>252</sup>Cf SF decay.
<sup>#</sup> Multiply placed with intensity suitably divided.
<sup>@</sup> Placement of transition in the level scheme is uncertain.



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m Sr}_{57}$ 

Level Scheme (continued)

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



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#### Level Scheme (continued)

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



 $^{95}_{38}{
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Level Scheme (continued)

Legend

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

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



<sup>95</sup><sub>38</sub>Sr<sub>57</sub>

Level Scheme (continued) Intensities: Relative photon branching from each level @ Multiply placed: intensity suitably divided



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m Sr}_{57}$ 





