

### Adopted Levels, Gammas

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan and A. A. Sonzogni		NDS 115,135 (2014)	1-Nov-2013

Q( $\beta^-$ )=-3622.6 15; S(n)=11112.64 16; S(p)=10612.5 11; Q( $\alpha$ )=-7906.9 11 2012Wa38  
S(2n)=19540.79 20; S(2p)=19233.6 11 (2012Wa38).  
 $\alpha$ : Additional information 1.

### <sup>88</sup>Sr Levels

#### Cross Reference (XREF) Flags

<b>A</b>	<sup>88</sup> Rb $\beta^-$ decay	<b>I</b>	<sup>88</sup> Sr( $\gamma, \gamma'$ )	<b>Q</b>	<sup>88</sup> Sr(n, n')
<b>B</b>	<sup>88</sup> Y $\beta^+$ decay	<b>J</b>	<sup>88</sup> Sr(d, d'), (pol d, d')	<b>R</b>	<sup>89</sup> Y(d, <sup>3</sup> He)
<b>C</b>	<sup>80</sup> Se( <sup>11</sup> B, p2n $\gamma$ )	<b>K</b>	<sup>88</sup> Sr(e, e')	<b>S</b>	<sup>89</sup> Y( $\mu^-$ , n $\gamma$ )
<b>D</b>	<sup>86</sup> Kr( $\alpha$ , 2n $\gamma$ )	<b>L</b>	<sup>88</sup> Sr(p, p'), (pol p, p')	<b>T</b>	<sup>89</sup> Y( <sup>6</sup> Li, <sup>7</sup> Be)
<b>E</b>	<sup>86</sup> Sr(t, p)	<b>M</b>	<sup>88</sup> Sr(n, n' $\gamma$ )	<b>U</b>	<sup>90</sup> Zr( <sup>6</sup> Li, <sup>8</sup> B)
<b>F</b>	<sup>87</sup> Sr(n, $\gamma$ ) E=thermal	<b>N</b>	Coulomb excitation	<b>V</b>	<sup>92</sup> Zr(d, <sup>6</sup> Li)
<b>G</b>	<sup>87</sup> Rb( <sup>3</sup> He, d)	<b>O</b>	<sup>86</sup> Kr( <sup>3</sup> He, n)	<b>W</b>	<sup>176</sup> Yb( <sup>28</sup> Si, F $\gamma$ ), <sup>173</sup> Yb( <sup>24</sup> Mg, F $\gamma$ )
<b>H</b>	<sup>87</sup> Sr(d, p)	<b>P</b>	<sup>87</sup> Rb(p, n), (p, $\gamma$ ) IAR		

E(level) <sup>†</sup>	J <sup>π</sup>	T <sub>1/2</sub> <sup>‡</sup>	XREF	Comments
0	0 <sup>+</sup>	stable	ABCDEFGHIJKLMNO QRSTUVW	
1836.090 8	2 <sup>+</sup>	0.154 ps 8	ABCDEFGHIJKLMNO QRSTUVW	$\mu$ =+2.44 22 J <sup>π</sup> : E2 1826 $\gamma$ to 0 <sup>+</sup> , L(p,t)=2. T <sub>1/2</sub> : weighted average of 0.155 ps 8 from ( $\gamma, \gamma'$ ) and 0.152 ps 12 from DSAM in Coul. Ex. Others: 0.159 ps 13 from B(E2) in (e, e') and 0.185 ps 14 from DSAM in (n, n' $\gamma$ ). $\mu$ : from transient field technique in Coul. Ex. (2012Ku14).
2734.137 8	3 <sup>-</sup>	0.70 ps 5	ABCDEFGHIH JKLMNO Q S VW	J <sup>π</sup> : L(t,p)=3. T <sub>1/2</sub> : weighted average of 0.78 ps 5 from B(E3) in (e, e') and 0.67 ps 3 from DSAM in Coul. Ex. Other: 0.67 ps +19-13 from DSAM in (n, n' $\gamma$ ).
3156.19 10	0 <sup>+</sup>	1.5 ps +8-4	E G KLM O UV	J <sup>π</sup> : L(t,p)=0.
3218.489 22	2 <sup>+</sup>	0.155 ps 10	AB EFGHIJKLM R T	J <sup>π</sup> : L(t,p)=2. T <sub>1/2</sub> : Other: 0.13 ps 6 from B(E2)=0.0014 7 in (e, e').
3378.2 10	1	22 <sup>@</sup> ps 3	I	J <sup>π</sup> : D 3378 $\gamma$ to 0 <sup>+</sup> .
3486.56 4	1 <sup>+</sup>	2.78 <sup>@</sup> fs 24	A FG I KLM R T	J <sup>π</sup> : M1 3487 $\gamma$ to 0 <sup>+</sup> . T <sub>1/2</sub> : Other: 4.6 fs 39 from DSAM in (n, n' $\gamma$ ).
3522.77 7	(2 <sup>+</sup> )	46 fs 15	A F M	J <sup>π</sup> : 3523 $\gamma$ to 0 <sup>+</sup> , 2167 $\gamma$ from 4 <sup>+</sup> .
3584.784 19	5 <sup>-</sup>	0.14 <sup>#</sup> ns 4	BCD FGH KLM S VW	J <sup>π</sup> : L(p, p')=5, E2 851 $\gamma$ to 3 <sup>-</sup> . T <sub>1/2</sub> : Other: 1.7 ps +6-3 from DSAM in (n, n' $\gamma$ ).
3635.09 4	(3 <sup>+</sup> )	0.76 ps +21-14	A FGH JKLM RST	J <sup>π</sup> : L( <sup>3</sup> He, d)=1 on 3/2 <sup>-</sup> target; primary $\gamma$ from 4 <sup>+</sup> , 5 <sup>+</sup> capture state; $\Delta J$ =1, M1+E2 1779 $\gamma$ to 2 <sup>+</sup> .
3952.636 22	(4 <sup>-</sup> )	0.8 ps +7-3	FG KLM	J <sup>π</sup> : L(p, p')=5, M1+E2 1219 $\gamma$ to 3 <sup>-</sup> .
3990 5			E	J <sup>π</sup> : May be identical to the 3993.8 level if L(t,p)=4,3 is incorrect.
3992.42 7	(0 <sup>+</sup> )	>0.48 ps	KLM	J <sup>π</sup> : L(p, p')=(0), $\gamma(\theta)$ in (n, n' $\gamma$ ).
4019.56 4	(6 <sup>-</sup> )	<10 <sup>#</sup> ps	CD FG J M vW	J <sup>π</sup> : L( <sup>3</sup> He, d)=4 on 3/2 <sup>-</sup> target, M1+E2 434 $\gamma$ to 5 <sup>-</sup> . T <sub>1/2</sub> : Other: >1.9 ps from DSAM in (n, n' $\gamma$ ).
4035.52 7	2 <sup>+</sup>	15 fs 3	A E I K M Uv	J <sup>π</sup> : L(t,p)=2. T <sub>1/2</sub> : weighted average of 21 fs 7 from DSAM in (n, n' $\gamma$ ), 13 fs 3 from ( $\gamma, \gamma'$ ), and 20 fs 11 from

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**Adopted Levels, Gammas (continued)**

$^{88}\text{Sr}$ Levels (continued)				
E(level) <sup>†</sup>	J <sup>π</sup>	T <sub>1/2</sub> <sup>‡</sup>	XREF	Comments
4039.04 3	(3) <sup>+</sup>	83 fs 7	F H LM	B(E2)=0.013 7 in (e,e').
4170.41 3	(3 <sup>-</sup> )	1.6 ps +22-6	F K M	J <sup>π</sup> : L(p,p')=(2), M1(+E2) 842γ from 4 <sup>+</sup> .
4171? 4	(6 <sup>+</sup> ,7 <sup>-</sup> )		L	J <sup>π</sup> : 586γ to 5 <sup>-</sup> , 1436γ to 3 <sup>-</sup> , 4171γ to 0 <sup>+</sup> .
				E(level): possibly identical to 4170.4 level if L(p,p') is incorrect.
4224.10 10			A k M	J <sup>π</sup> : L(p,p')=(6,7).
				T <sub>1/2</sub> : 170 ps 60 based on DSAM in (n,n'γ) of 1006γ which has only a tentative assignment to this level.
4226.98 12	1	0.15 <sup>@</sup> ps 4	I	J <sup>π</sup> : D 4227γ to 0 <sup>+</sup> .
4227.20 4	(3 <sup>-</sup> )	84 fs 26	EF kLM	J <sup>π</sup> : L(p,p')=3; D 2391γ to 2 <sup>+</sup> . L(t,p)=4 is discrepant.
4232 10	4 <sup>+</sup>		E	J <sup>π</sup> : L(t,p)=4.
				Possibly identical to the 4227.2 level if L(t,p) is incorrect.
4262.9 10	(1,2 <sup>+</sup> )		I	J <sup>π</sup> : 4263γ to 0 <sup>+</sup> .
4268.70 4	(3 <sup>-</sup> ,4,5 <sup>-</sup> )	0.37 ps 4	F JKLM	J <sup>π</sup> : 684γ to 5 <sup>-</sup> , 1534γ to 3 <sup>-</sup> . Decay pattern inconsistent with L(p,p')=(2).
4299.52 5	4 <sup>+</sup>	30 fs 5	EF H KLM	J <sup>π</sup> : L(t,p)=4.
4353.95 7	(3 <sup>-</sup> )	0.68 ps +22-14	KLM	J <sup>π</sup> : D 1136γ to 2 <sup>+</sup> , 769γ to 5 <sup>-</sup> .
4367.94 8	(7 <sup>-</sup> )	<10 <sup>#</sup> ps	CD KLM	VW J <sup>π</sup> : L(d, <sup>6</sup> Li)=(7) on 0 <sup>+</sup> target, E2 783γ to 5 <sup>-</sup> .
				T <sub>1/2</sub> : Other: >600 fs from DSAM in (n,n'γ).
4413.96 4	(2) <sup>+</sup>	16 fs 3	A EF H KLM	J <sup>π</sup> : L(d,p)=2(+0) on 9/2 <sup>+</sup> target. 1970Ra10 deduced L(t,p)=2+6 for an unresolved doublet. Also 1987Li02 concluded this level to be a doublet from the large L(d,p)=2 strength.
4440.72 8		367 fs 49	F KLM	
4451.97 3	(4) <sup>+</sup>	222 fs 42	F H LM	J <sup>π</sup> : L(d,p)=2(+0) on 9/2 <sup>+</sup> target; 2616γ to 2 <sup>+</sup> .
4484.83 7	0 <sup>+</sup>	97 fs 7	E KLM	V XREF: V(4470).
				J <sup>π</sup> : L(t,p)=0.
4514.028 17	2 <sup>-</sup>	0.9 ps 3	A k M	J <sup>π</sup> : log ft=5.5 from 2 <sup>-</sup> . J=1,3 rejected by γγ(θ) in <sup>88</sup> Rb β <sup>-</sup> decay.
4514.54 7	+	27 fs 8	F H k M	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target indicates a positive parity level near the 4514-keV level.
4521.43 12	(6) <sup>-</sup>		C LM	W J <sup>π</sup> : L(p,p')=5, M1(+E2) 936γ to 5 <sup>-</sup> .
4556 3	+		H	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
4613.8 6	(3 <sup>-</sup> )		H	V J <sup>π</sup> : L(d, <sup>6</sup> Li)=(3).
4622.19 9	2 <sup>+</sup>	21 fs 5	E KLM	XREF: E(4619)L(4626).
				J <sup>π</sup> : L(t,p)=2.
4632.0 6	+		H	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
4640.40 7		132 fs 14	LM	XREF: L(4645).
4680.19 10		0.15 ps +15-7	M	
4687.38 24	(7)		C K	XREF: K(4695).
				J <sup>π</sup> : D 2153γ from (8).
4742.50 6	1 <sup>-</sup>	2.6 <sup>@</sup> fs 2	A HI LM	V J <sup>π</sup> : E1 γ to 0 <sup>+</sup> g.s.
				E(level): Candidate for 2 <sup>+</sup> x 3 <sup>-</sup> two-phonon state (2002Pi08).
4743?	(6 <sup>-</sup> )		K	T <sub>1/2</sub> : Other: <6 fs from DSAM in (n,n'γ).
				J <sup>π</sup> : from (e,e'). Form factor is significantly different from that expected for a 1 <sup>-</sup> level, suggesting this level is distinct from the 4742.5 level.
4761.8 14	2 <sup>+</sup>	70 fs 40	E H K	J <sup>π</sup> : L(t,p)=2.
				T <sub>1/2</sub> : from B(E2)=0.0016 8 measured in (e,e') if level decays mainly to g.s.

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**Adopted Levels, Gammas (continued)** $^{88}\text{Sr}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup>	T <sub>1/2</sub> <sup>‡</sup>	XREF		Comments
4770.12 5	2 <sup>+</sup>	6.2 fs 27	I	LM	J <sup>π</sup> : L(p,p')=2, 2036γ to 3 <sup>-</sup> , 4771γ to 0 <sup>+</sup> .
4801.3 6	0 <sup>+</sup>	16 fs 5	E h	KLM o	XREF: E(4794)h(4789)L(4804)o(4800). J <sup>π</sup> : L(t,p)=0.
4801.4 10	1	0.13 <sup>@</sup> ps 3	hI	k o	XREF: h(4789)k(4798)o(4800). J <sup>π</sup> : D 4801γ to 0 <sup>+</sup> .
4845.62 3	(3) <sup>-</sup>	19 fs 5	A EF H	K M V	XREF: E(4838)V(4850). J <sup>π</sup> : L(t,p)=(3), log ft=5.5 from 2 <sup>-</sup> .
4853.026 16	1 <sup>-</sup>	0.17 ps 2	A	LM	J <sup>π</sup> : log ft=5.2 from 2 <sup>-</sup> , 1366γ to 1 <sup>+</sup> , 4853γ to 0 <sup>+</sup> . L(p,p')=(2) is discrepant.
4880.57 5	4 <sup>+</sup>	30 fs 3	H	KLM	XREF: H(4873)K(4873)L(4886). J <sup>π</sup> : L(d,p)=0+2 on 9/2 <sup>+</sup> target, 3044γ to 2 <sup>+</sup> .
4914.6 10	1 <sup>&amp;</sup>	56 <sup>@</sup> fs 9	I		
4923.61 6	(2,3,1)	51 fs 10	H	M	J <sup>π</sup> : (D+Q) 3088γ to 2 <sup>+</sup> .
4930.6 5	2 <sup>+</sup> ,3 <sup>+</sup> ,4 <sup>+</sup>	64 fs +80-42		KLM	J <sup>π</sup> : L(p,p')=2.
4988.23 6	2 <sup>+</sup>	12 fs 3	E HI	KLM	J <sup>π</sup> : L(t,p)=2.
5010.59 4	(3,4 <sup>+</sup> )	14 fs 3	F	KLM	J <sup>π</sup> : 558γ to (4) <sup>+</sup> , 1058γ to (4) <sup>-</sup> , 1792γ to 2 <sup>+</sup> .
5076.65 7			EF H		
5085.49 7	(2) <sup>+</sup>	6.3 fs 28		KLM	XREF: L(5091). J <sup>π</sup> : L(p,p')=2, (E2) 5086γ to 0 <sup>+</sup> .
5092.12 6	(4 <sup>+</sup> )	57 fs 8	F H	LM	J <sup>π</sup> : D 1507γ to 5 <sup>-</sup> , D 2358γ to 3 <sup>-</sup> , 3256γ to 2 <sup>+</sup> .
5103.31 19	(7)		C	Kl	W XREF: K(5109)l(5109). J <sup>π</sup> : D 1084γ to (6) <sup>-</sup> .
5113.06 5	(2 <sup>+</sup> ,3)	5.3 fs 35	F	KLM	XREF: K(5119)l(5109). J <sup>π</sup> : fed by primary γ from 4 <sup>+</sup> ,5 <sup>+</sup> capture state, D 3277γ to 2 <sup>+</sup> .
5123.8 3	(1,2 <sup>+</sup> )	0.16 ps +8-5		LM	J <sup>π</sup> : 5124γ to 0 <sup>+</sup> .
5127.40 9	(2)	23 fs 7		LM	J <sup>π</sup> : (Q) 5128γ to 0 <sup>+</sup> .
5136.95 11		33 fs 10	H	M	v
5163.91 14	2 <sup>+</sup>	51 fs 13	E H	k M	v XREF: H(5157). J <sup>π</sup> : L(t,p)=2.
5168.80? 5		23 fs 3		klM	
5170.1 3	(2 <sup>+</sup> )	48 fs 23		klM	J <sup>π</sup> : (E2) 5170γ to 0 <sup>+</sup> . E(level): measured F(τ) of 5169.9 depopulating transition is sufficiently different from F(τ)'s of γ's depopulating the 5168.8 level to suggest that the 5170.1 level is distinct.
5199 8	4 <sup>+</sup>		H		V J <sup>π</sup> : L(d, <sup>6</sup> Li)=4 on 0 <sup>+</sup> target.
5253.92 7	(3 <sup>-</sup> )	33 fs 8	E	KLM	J <sup>π</sup> : L(t,p)=(3), L(p,p')=(3).
5263.06 20		18 fs 4		M	
5275.98 8	(1 <sup>-</sup> ,2 <sup>+</sup> )	17 fs 4		M	J <sup>π</sup> : 1284γ to 0 <sup>+</sup> , 2542γ to 3 <sup>-</sup> .
5307.53 12	(1)	35 fs 6	H	M	J <sup>π</sup> : (D) 1315γ to 0 <sup>+</sup> .
5321.36 3	4 <sup>+</sup>		F	KL	J <sup>π</sup> : L(p,p')=4, 1737γ to 5 <sup>-</sup> , 2103γ to 2 <sup>+</sup> .
5322.39 7	(2,3)	104 fs 28		M	J <sup>π</sup> : 1095γ to 1, 1687γ to (3 <sup>+</sup> ), 2588γ to 3 <sup>-</sup> . Possibly identical to the 5321.36 level, however, depopulating transitions observed by (n,γ), E=thermal and (n,n'γ) are different.
5370.5 3			C		W
5383 5	4 <sup>+</sup>		E	L	V XREF: E(5376)V(5360). J <sup>π</sup> : L(t,p)=4.
5393.25 7	(2 <sup>+</sup> )	32 fs 12		M	J <sup>π</sup> : 941γ to (4) <sup>+</sup> , 5393γ to 0 <sup>+</sup> .
5396.0 3	(2 <sup>+</sup> )	0.18 ps +9-6		M	J <sup>π</sup> : (E2) 5396γ to 0 <sup>+</sup> .
5415.7 28	4 <sup>+</sup> ,5 <sup>+</sup>		H	K	J <sup>π</sup> : L(d,p)=0(+2) on 9/2 <sup>+</sup> target.
5424.61 5	(3 <sup>-</sup> )	83 fs 35	F	LM	XREF: L(5419). J <sup>π</sup> : L(p,p')=(3), 3589γ to 2 <sup>+</sup> .
5427.6 3	(8)		C		W J <sup>π</sup> : D 324γ to (7).

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**Adopted Levels, Gammas (continued)** $^{88}\text{Sr}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup>	T <sub>1/2</sub> <sup>‡</sup>	XREF	Comments
5427.71 4	(4 <sup>-</sup> ,5)		F	J <sup>π</sup> : fed by primary γ from 4 <sup>+</sup> ,5 <sup>+</sup> capture state, 1408γ to (6) <sup>-</sup> .
5465.0 21	4 <sup>+</sup>		E H K	XREF: E(5470). J <sup>π</sup> : L(t,p)=4, L(d,p)=0 on 9/2 <sup>+</sup> target. E(level): from (d,p). XREF: L(5467). L(p,p')=(3). J <sup>π</sup> : D 5486γ to 0 <sup>+</sup> . J <sup>π</sup> : 5499γ to 0 <sup>+</sup> . J <sup>π</sup> : (D) 3681γ to 2 <sup>+</sup> . XREF: V(5490). J <sup>π</sup> : L(d,p)=0 on 9/2 <sup>+</sup> target. 2300γ to 2 <sup>+</sup> . E(level): from (d,p). Possibly identical to 5529 level. J <sup>π</sup> : L(p,p')=3. J <sup>π</sup> : (D) 5542γ to 0 <sup>+</sup> .
5472.88 10	(2 <sup>-</sup> ,3 <sup>-</sup> ,4 <sup>-</sup> )	<0.7 fs	LM	
5485.6 16	1	0.7 ps +30-4	H KLM	
5498.7 11	(1,2 <sup>+</sup> )	>0.7 ps	M	
5517.2 3	(1,2,3)	19 fs +19-15	M	
5518.23 5	4 <sup>+</sup>		F H KL	V
5528.9 6			H K	
5537? 6	2 <sup>-</sup> ,3 <sup>-</sup> ,4 <sup>-</sup>		L	
5542.20 10	(1)	29 fs 10	M	
5583.3 3		>3.3 ps	E LM	
5590.32 14	(1 <sup>-</sup> ,2,3 <sup>+</sup> )	45 fs 15	M	J <sup>π</sup> : 2103γ to 1 <sup>+</sup> , 2856γ to 3 <sup>-</sup> . J <sup>π</sup> : 5600γ to 0 <sup>+</sup> .
5600.6 10	(1,2 <sup>+</sup> )		I	
5614 6			L	
5655.3 3	(8)	<10 <sup>#</sup> ps	CD	W
5656.50 10	(2 <sup>+</sup> ,3,4 <sup>+</sup> )	<12 fs	H LM	
5678.34 14	(4) <sup>+</sup>	23 fs 6	H K M	V
5689.00 4	3 <sup>+</sup> ,4 <sup>+</sup>	0.29 ps 8	EF H LM	J <sup>π</sup> : L(p,p')=4, 2955γ to 3 <sup>-</sup> . J <sup>π</sup> : D 5691γ to 0 <sup>+</sup> . XREF: E(5699). J <sup>π</sup> : 1394γ to 4 <sup>+</sup> , 5693γ to 0 <sup>+</sup> .
5691.3 10	1	38 <sup>@</sup> fs 9	I	
5693.93 9	2 <sup>+</sup>	67 fs 19	E M	
5706.5 7			H	
5710.78 10		<9 fs	M	
5730.18 20	4 <sup>+</sup>	>0.2 ps	E H KLM	XREF: E(5724). J <sup>π</sup> : L(d,p)=0 on 9/2 <sup>+</sup> target, 3894γ to 2 <sup>+</sup> .
5738.3 7			H	
5772.23 12	0 <sup>+</sup>	25 fs 11	E H KLM	XREF: E(5766). J <sup>π</sup> : L(t,p)=0. XREF: K(5806). J <sup>π</sup> : 2314γ to 1 <sup>+</sup> , 3006γ to 3 <sup>-</sup> . XREF: K(5821). J <sup>π</sup> : L(p,p')=3, fed by primary γ from 4 <sup>+</sup> ,5 <sup>+</sup> capture state, 3976γ to 2 <sup>+</sup> . J <sup>π</sup> : 5831γ to 0 <sup>+</sup> . J <sup>π</sup> : 2251γ to 5 <sup>-</sup> , 4000γ to 2 <sup>+</sup> . J <sup>π</sup> : L(p,p')=4, L(d,p)=2(+0) on 9/2 <sup>+</sup> target; L(t,p)=(3) is discrepant. J <sup>π</sup> : 5866γ to 0 <sup>+</sup> .
5800.71 10	(1 <sup>-</sup> ,2,3 <sup>+</sup> )	32 fs 10	KLM	
5812.08 6	3 <sup>-</sup>	7 fs 5	EF H KLM	
5831.5 5	(1,2 <sup>+</sup> )	>1 ps	M	
5835.58 6	(3 <sup>-</sup> ,4 <sup>+</sup> )	33 fs 9	F H LM	
5858.5 6	4 <sup>+</sup> ,5 <sup>+</sup>		E H KL	
5866.0 4	(1,2 <sup>+</sup> )	0.9 ps +9-3	M	
5876? 8			H	
5925 6			KL	E(level): from (p,p'). J <sup>π</sup> : 1723γ to (3 <sup>-</sup> ), 1912γ to (3 <sup>+</sup> ), 1931γ to (6) <sup>-</sup> . J <sup>π</sup> : 5989γ to 0 <sup>+</sup> . J <sup>π</sup> : L(d,p)=0(+2) on 9/2 <sup>+</sup> target, 4160γ to 2 <sup>+</sup> . J <sup>π</sup> : E1 6010γ to 0 <sup>+</sup> . XREF: E(6005). J <sup>π</sup> : L(t,p)=(2). E(level): possibly identical to 6011.15 level, however, depopulating transitions observed in (n,n'γ) are
5951.09 4	(4 <sup>-</sup> )		F KL	
5990.0 3	(1,2 <sup>+</sup> )	0.033 ps 9	I M	
5996.24 6	4 <sup>+</sup>	23 fs 8	F H KLM	
6010.0 10	1 <sup>-</sup>	1.4 <sup>@</sup> fs 1	I L	
6011.15 6	(2 <sup>+</sup> )		EF	
6011.5? 3	(3 <sup>-</sup> )	41 fs +29-22	M	

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**Adopted Levels, Gammas (continued)** $^{88}\text{Sr}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup>	T <sub>1/2</sub> <sup>‡</sup>	XREF		Comments
6021.5 5	+		H		different.
6034? 6				KL	J <sup>π</sup> : 2058γ to 5 <sup>-</sup> , 2856γ to 0 <sup>+</sup> .
6052.2 3	(2 <sup>+</sup> )	>1.1 ps	E H	KL M	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
6053.86 21	(2 <sup>+</sup> )	44 fs 16		LM	Possibly identical to 6021.5 level.
6065.7 4	+		H		XREF: H(6047).
6074.5? 7		61 fs +91-45	H	M	J <sup>π</sup> : L(t,p)=(2).
6099.01 20	(3,4 <sup>+</sup> )	17 fs 8		M	J <sup>π</sup> : L(t,p)=(2); L(d,p)=2(+0) on 9/2 <sup>+</sup> target.
6101.4 3	(1,2 <sup>+</sup> )	>0.8 ps		M	J <sup>π</sup> : L(d,p)=2+0 on 9/2 <sup>+</sup> target.
6106.00 24	(1,2,3)	<0.2 ps		KLM	J <sup>π</sup> : D 2146γ to (4) <sup>-</sup> , 4263γ to 2 <sup>+</sup> .
6125.20 6			eF	kl	J <sup>π</sup> : 6101γ to 0 <sup>+</sup> .
					J <sup>π</sup> : (D) 2070γ to 2 <sup>+</sup> .
					J <sup>π</sup> : L(t,p)=(3).
					E(level): depopulating transitions observed in (n,n'γ) and (n,γ), E=thermal for levels at ≈6125 keV are different, suggesting two closely spaced levels.
6126.6 4		0.26 ps +26-10	e	klM	J <sup>π</sup> : L(t,p)=(3).
					E(level): depopulating transitions observed in (n,n'γ) and (n,γ), E=thermal for levels at ≈6125 keV are different, suggesting two closely spaced levels.
6132.92 17		<29 fs		K M	
6140.4 5	+		H		J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
6153.50 20	(1 <sup>-</sup> )	<0.3 ps	E	LM	J <sup>π</sup> : L(t,p)=(1).
6168.1 6	(1,2,3)	0.13 ps +8-5		M	J <sup>π</sup> : (D) 4332γ to 2 <sup>+</sup> .
6173.06 9	(1,2 <sup>+</sup> )	15 fs 7	H	M	J <sup>π</sup> : 2180γ to 0 <sup>+</sup> .
6188.0 5			H		
6200.63 20	1 <sup>+</sup>	3.5 <sup>@</sup> fs 5		I K M	J <sup>π</sup> : M1 6202γ to 0 <sup>+</sup> .
6213.9 7	1 <sup>-</sup>	0.247 <sup>@</sup> fs 15	E	I LM	T <sub>1/2</sub> : Other: 0.4 ps +43-2 from DSAM in (n,n'γ).
6216 4	4 <sup>+</sup> ,5 <sup>+</sup>		H	l	J <sup>π</sup> : E1 6214γ to 0 <sup>+</sup> .
6233.8 6	( <sup>-</sup> )		H		J <sup>π</sup> : L(d,p)=0 on 9/2 <sup>+</sup> target.
6235.50 17	(7)		C		J <sup>π</sup> : L(d,p)=(1) on 9/2 <sup>+</sup> target.
6241.5 4			H		J <sup>π</sup> : D 1714γ to (6) <sup>-</sup> .
6249.26 7	(2 <sup>-</sup> ,3 <sup>+</sup> )		F H		J <sup>π</sup> : 2297γ to (4) <sup>-</sup> , 2764γ to 1 <sup>+</sup> .
6257.85 9	3 <sup>+</sup>		F H	L	J <sup>π</sup> : L(p,p')=4, 2771γ to 1 <sup>+</sup> .
6270 4	(2 <sup>+</sup> )		E		J <sup>π</sup> : L(t,p)=(2).
6282.8 4	3 <sup>+</sup> ,4 <sup>+</sup> ,5 <sup>+</sup>		H		J <sup>π</sup> : L(p,p')=4.
6292.9? 11			H	L	E(level): from (d,p).
6302.1 4	(2 <sup>+</sup> )		E H		XREF: E(6307).
					J <sup>π</sup> : L(t,p)=(2).
					E(level): from (d,p).
6333.44 10	1 <sup>-</sup>	0.160 <sup>@</sup> fs 10		I	J <sup>π</sup> : E1 6335γ to 0 <sup>+</sup> .
6346.45 20	1 <sup>-</sup>	1.4 <sup>@</sup> fs 1		I	J <sup>π</sup> : E1 6346γ to 0 <sup>+</sup> .
6350.7 5	+		H	K	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
6362 6			E	L	E(level): from (d,p).
6367.0 10	(1,2 <sup>+</sup> )			I	E(level): from (p,p').
6378.1 4	( <sup>+</sup> )		H		J <sup>π</sup> : 6367γ to 0 <sup>+</sup> .
6382.0 10	1 <sup>&amp;</sup>	18 <sup>@</sup> fs 5		I	J <sup>π</sup> : L(d,p)=(2) on 9/2 <sup>+</sup> target.
6397.7 4			H		
6417.3 3	+		H	KL	XREF: K(6411).
					J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
6430.8 4			E H		

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**Adopted Levels, Gammas (continued)** $^{88}\text{Sr}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup>	T <sub>1/2</sub> <sup>‡</sup>	XREF	Comments
6462 3	+		H	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
6471.05 22	( <sup>+</sup> )		H L	J <sup>π</sup> : L(d,p)=(2) on 9/2 <sup>+</sup> target.
6507.74 6	(4 <sup>+</sup> )		F H K	XREF: K(6498).
6518.83 21	(2 <sup>+</sup> )		E H L	J <sup>π</sup> : L(d,p)=(0) on 9/2 <sup>+</sup> target, 3773γ to 3 <sup>-</sup> .
				XREF: E(6512).
				J <sup>π</sup> : L(t,p)=(2).
				E(level): from (d,p).
6542.9 3			H	
6551.5 3	(3,4,5) <sup>+</sup>		H KL	XREF: K(6558).
				J <sup>π</sup> : L(p,p')=4.
6565.94 22			H	v
6575.25 23			H	v
6583.70 5	(1 <sup>-</sup> ,2,3 <sup>+</sup> )		EF	J <sup>π</sup> : 3850γ to 3 <sup>-</sup> , 3097γ to 1 <sup>+</sup> .
6591.7 9	1&	5.2 @ fs 13	I K	
6612.75 6	2 <sup>-</sup> ,3 <sup>-</sup>		EF L	XREF: E(6605).
				J <sup>π</sup> : L(p,p')=3, 3125γ to 1 <sup>+</sup> .
6618.12 23	+		H	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
6622.96 23			H	
6627.24 24			H	
6634.59 20	+		H	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
6640 6	(0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> )		L	J <sup>π</sup> : L(p,p')=(1).
6666.2? 3			H 1	v
6672.17 26			H 1	v
6692.46 7	(3 <sup>+</sup> ,2 <sup>+</sup> )		EF H	J <sup>π</sup> : 2241γ to (4 <sup>+</sup> ), 3205γ to 1 <sup>+</sup> , fed by primary γ from 4 <sup>+</sup> ,5 <sup>+</sup> capture state.
6710.4 7	1&	0.0025 @ ps 13	HI L	XREF: L(6703).
6739 5	+		E H L	XREF: L(6746).
				J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
6770 6			L	
6782.69 19	+		H	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
6798.23 22			H L	
6806.89 6	(4 <sup>+</sup> )		EF H	J <sup>π</sup> : L(t,p)=(4).
6814.7 3			H	
6831.9 4	+		H	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
6840.64 17	(8)		C	J <sup>π</sup> : D 605γ to (7).
6854.6 3	1&	2.1 @ fs 4	HI 1	v
6874 10			E 1	v
6897 5			E L	E(level): from (t,p).
				E(level): weighted average of 6892 10 from (t,p) and 6899 6 from (p,p').
6910.7 4			H	
6916.68 7	(3 <sup>-</sup> ,2 <sup>+</sup> )		F H	J <sup>π</sup> : fed by primary γ from 4 <sup>+</sup> ,5 <sup>+</sup> capture state, weak 6916γ to 0 <sup>+</sup> .
6938.6 5	+		H	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target.
6961.5 5	3 <sup>+</sup> ,4 <sup>+</sup> ,5 <sup>+</sup>		H L	XREF: L(6973).
				J <sup>π</sup> : L(p,p')=4.
				E(level): from (d,p).
6987	1-&	0.81 @ fs 7	I	
7011.2 4			e H K	XREF: K(7000).
7022.6 4	3 <sup>+</sup> ,4 <sup>+</sup> ,5 <sup>+</sup>		e H L	J <sup>π</sup> : L(p,p')=4.
7056 8	2 <sup>-</sup> ,3 <sup>-</sup> ,4 <sup>-</sup>		L	J <sup>π</sup> : L(p,p')=3.
7060.5 5	+		H	J <sup>π</sup> : L(d,p)=(2) on 9/2 <sup>+</sup> target.
7071.64 28			H	
7089.11 10	1-&	0.109 @ fs 7	I	
7103.2 4			H L	
7119.3 3	(10)		C	W J <sup>π</sup> : Q 1464γ to (8).

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**Adopted Levels, Gammas (continued)** $^{88}\text{Sr}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup>	T <sub>1/2</sub> <sup>‡</sup>	XREF	Comments
7129.3 7				W
7138.84 6	(4 <sup>+</sup> )		F H	J <sup>π</sup> : L(d,p)=(2) on 9/2 <sup>+</sup> target, 3554γ to 5 <sup>-</sup> , 5303γ to 2 <sup>+</sup> .
7169.21 20	1 <sup>-</sup> &	2.9@ fs 5	I L	
7194.7 4	+		H L	J <sup>π</sup> : L(d,p)=2 on 9/2 <sup>+</sup> target. E(level): from (d,p).
7207.88 6	(3,4 <sup>+</sup> ,2 <sup>+</sup> )		F	J <sup>π</sup> : fed by primary γ from 4 <sup>+</sup> ,5 <sup>+</sup> capture state, 5372γ to 2 <sup>+</sup> .
7223 5	( <sup>+</sup> )		H	J <sup>π</sup> : L(d,p)=(2) on 9/2 <sup>+</sup> target.
7255 6			H L	E(level): weighted average of 7251 10 in (d,p) and 7257 8 in (p,p').
7281.8 3	1 <sup>-</sup> &	0.55@ fs 5	I	
7299.9 3	(1) <sup>-</sup> &	1.11@ fs 16	I K	
7330.55 19	(9)		C	W J <sup>π</sup> : D 490γ to (8).
7333 6			H L	E(level): weighted average of 7337 10 in (d,p) and 7330 8 in (p,p').
7360 8			L	
7402 8			L	
7427 6	+		H L	J <sup>π</sup> : L(d,p)=4 on 9/2 <sup>+</sup> target. E(level): weighted average of 7426 10 in (d,p) and 7427 8 in (p,p').
7434.2 3	(10)		C	W J <sup>π</sup> : Q 1779γ to (8).
7460 8			L	
7481 8			L	
7492.8 3	1 <sup>-</sup> &	2.5@ fs 7	I	
7526 8			L	
7533.95 20	1 <sup>-</sup> &	0.32@ fs 3	I	
7573.20 6	(3,4 <sup>+</sup> ,2 <sup>+</sup> )		F H L	XREF: H(7561). J <sup>π</sup> : fed by primary γ from 4 <sup>+</sup> ,5 <sup>+</sup> capture state, 5737γ to 2 <sup>+</sup> .
7591.4 3	1 <sup>-</sup> &	0.91@ fs 15	HI	
7623 8			L	
7640 10			H	
7641.86 21	(10)		C	W J <sup>π</sup> : D 311γ to (9).
7679 6			H L	E(level): weighted average of 7674 10 in (d,p) and 7682 8 in (p,p').
7749 6			H KL	E(level): weighted average of 7742 10 in (d,p) and 7753 8 in (p,p').
7774.8 3	(11)		C	W J <sup>π</sup> : D 341γ to (10).
7807.8 3	1 <sup>-</sup> &	0.54@ fs 8	I L	XREF: L(7819).
7838.27 20	1 <sup>-</sup> &	0.221@ fs 22	HI L	XREF: L(7847).
7877.3 3	(1) <sup>-</sup> &	0.65@ fs 11	HI L	XREF: H(7889)L(7874).
7908.76 23	(11)		C	W J <sup>π</sup> : (D) 267γ to (10).
7911 8			L	
7964.19 20	1 <sup>-</sup> &	0.31@ fs 3	HI L	
7987.59 20	1 <sup>-</sup> &	0.52@ fs 7	I	
8003 10			H	
8040.79 10	1 <sup>-</sup> &	0.138@ fs 13	I L	
8069 8	(0 <sup>+</sup> ,1 <sup>+</sup> )		L	J <sup>π</sup> : L(p,p')=(0).
8094.8 4	(12)	<5.1 ps	C	W J <sup>π</sup> : (D) 320γ to (11). T <sub>1/2</sub> : effective half-life from DSAM in <sup>80</sup> Se( <sup>11</sup> B,p2nγ); feeding corrections have not been incorporated.

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**Adopted Levels, Gammas (continued)** $^{88}\text{Sr}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup>	T <sub>1/2</sub> <sup>‡</sup>	XREF		Comments
8109.5 3	1 <sup>-</sup> &	0.54 @ fs 9	HI	L	XREF: H(8103)L(8119).
8142 10			H		
8171 8	(0 <sup>+</sup> ,1 <sup>+</sup> )			L	J <sup>π</sup> : L(p,p')=(0).
8180.7 3	1 <sup>-</sup> &	0.48 @ fs 6	I		
8191.11 20	1 <sup>-</sup> &	0.33 @ fs 4	I	L	XREF: L(8200).
8215.31 20	1 <sup>-</sup> &	0.35 @ fs 4	I		
8228 8				L	
8271.5 3	1 <sup>-</sup> &	0.54 @ fs 9	I	L	XREF: L(8268).
8276.1 5	(13)		C		J <sup>π</sup> : L(p,p')=(0) is discrepant.
8302 8	(0 <sup>+</sup> ,1 <sup>+</sup> )			L	J <sup>π</sup> : D 181γ to (12).
8325.7 3	1 <sup>-</sup> &	0.39 @ fs 6	I		J <sup>π</sup> : L(p,p')=(0).
8336.3 4	(12)	<2.4 ps	C		T <sub>1/2</sub> : effective half-life from DSAM in $^{80}\text{Se}(^{11}\text{B},\text{p}2\text{n}\gamma)$ ; feeding corrections have not been incorporated.
8374.9? 5			C		J <sup>π</sup> : (D) 561γ to (11).
8375.8 6	1&	1.2 @ fs 4	I		
8407.0 4	1&	0.75 @ fs 16	I		
8437.2 4	(12)	0.55 ps 21	C		W T <sub>1/2</sub> : from DSAM in $^{80}\text{Se}(^{11}\text{B},\text{p}2\text{n}\gamma)$ .
8453.4 3	1 <sup>-</sup> &	0.20 @ fs 3	HI	1	J <sup>π</sup> : D 528γ to (11).
8469.0 3	1 <sup>-</sup> &	0.62 @ fs 12	I	1	XREF: l(8470).
8500.8 3	1&	0.35 @ fs 5	HI		XREF: l(8470).
8517.9 8					XREF: H(8493).
8518.8 4	1 <sup>-</sup>	0.67 fs 15	HI		W J <sup>π</sup> : E1 8518γ to 0 <sup>+</sup> .
8553.0? 9		1.7 @ fs 5	I	L	
8561.3? 6		0.83 @ fs 18	I		
8580.6? 5		1.0 @ fs 2	I		
8588.8 4		0.58 @ fs 12	I		
8626.3 10		1.3 @ fs 4	I		
8668.7 6	1&	1.2 @ fs 2	I	L	
8682.0 6	1&	2.5 @ fs 6	I		
8713.7 9	1 <sup>-</sup> &	0.6 @ fs 3	I		
8735.8 9		0.74 @ fs 12	I		
8754.6 8	1&	0.52 @ fs 9	I		
8764.7 5		2.4 @ fs 6	I		
8779.8 6		0.95 @ fs 18	I	L	
8791.9 6	1&	0.97 @ fs 19	I		
8840.1 4		0.61 @ fs 11	I		
8850.6 12		2.9 @ fs 9	I		
8874.4 5	1&	1.5 @ fs 3	I		
8928.5 3	1 <sup>-</sup> &	0.21 @ fs 3	I	L	
8935.9 4	(13)		C		J <sup>π</sup> : D 600γ to (12).
8980.8 6		0.67 @ fs 12	I		
9019.2 6		1.6 @ fs 4	I	1	
9043.6 4	1 <sup>-</sup> &	0.33 @ fs 9	I	1	
9069.7 6	1 <sup>-</sup> &	0.61 @ fs 11	I		

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**Adopted Levels, Gammas (continued)** $^{88}\text{Sr}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup>	T <sub>1/2</sub> <sup>‡</sup>	XREF	Comments
9078.3 3	1 <sup>-</sup> &	0.37@ fs 6	I	
9098.3 7	1&	1.2@ fs 4	I	
9116.3 5		0.52@ fs 8	I	
9125.1 3	1&	0.34@ fs 5	I L	
9148.31 20	1 <sup>-</sup> &	0.183@ fs 22	I	
9191.42 14	1 <sup>-</sup> &	0.123 <sup>a</sup> fs 23	I	
9214.4 7	1&	0.72@ fs 14	I	
9255.2 9	1&	1.6@ fs 6	I L	
9305.7 3	1 <sup>-</sup> &	0.157@ fs 22	I	
9341.1 3	1 <sup>-</sup> &	0.55@ fs 9	I L	
9384.6 7	1&	0.71@ fs 13	I	
9393.3 5	1&	0.42@ fs 7	I	
9402.4 5	1&	0.55@ fs 9	I	
9410.1 6	(13)		C	J <sup>π</sup> : D 973γ to (12).
9431.8 10	1&	0.58@ fs 12	I	
9445.5 4	1 <sup>-</sup> &	0.163@ fs 23	I L	
9470.5 4	(1 <sup>-</sup> )&	0.26@ fs 4	I	
9478.8 4	1 <sup>(-)</sup> &	0.33 <sup>a</sup> fs 9	I	
9497.05 20	1 <sup>-</sup> &	0.104@ eV 12	I	
9528.3 4	(14)	0.28 ps 10	C	T <sub>1/2</sub> : from DSAM in $^{80}\text{Se}(^{11}\text{B}, \text{p}2\text{n}\gamma)$ . J <sup>π</sup> : D 592γ to (13).
9550.8 7		1.1@ fs 4	I	
9568.3 5	1&	0.44@ fs 8	I	
9576.8 11		1.2@ fs 3	I L	
9597.9 11	1&	1.1@ fs 3	I	
9616.3 6	1&	0.54@ fs 10	I	
9646.1 8		1.8@ fs 5	I	
9704.1 5	1 <sup>-</sup> &	0.23@ fs 5	I L	
9728.2 18		2.3@ fs 10	I	
9738.1 16	1&	0.72@ fs 18	I	
9746.0 6	1 <sup>-</sup> &	0.18@ fs 3	I	
9804.7 9	1&	1.1@ fs 3	I	
9816.5 3	1 <sup>-</sup> &	0.39@ fs 7	I	
9881.2 4	1 <sup>(-)</sup> &	0.26@ fs 4	I L	
9944.1 8	1 <sup>-</sup> &	0.46@ fs 8	I	
9953.3 5		0.32@ fs 5	I	
9965.8 6	1 <sup>(-)</sup> &	0.52@ fs 9	I	
9977.9 5	(15)	0.17 ps +10-3	C	T <sub>1/2</sub> : from DSAM in $^{80}\text{Se}(^{11}\text{B}, \text{p}2\text{n}\gamma)$ . J <sup>π</sup> : D 450γ to (14).
10056.3 4	1&	0.61@ fs 10	I	
10089.2 10		1.5@ fs 5	I	
10106.9 8	1&	0.86@ fs 23	I	
10128.2 7		0.93@ fs 21	I L	
10139.5 8		1.06@ fs 24	I	

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**Adopted Levels, Gammas (continued)** $^{88}\text{Sr}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup>	T <sub>1/2</sub> <sup>‡</sup>	XREF	Comments
10150.3 8		0.88 <sup>@</sup> fs 24	I	
10184.0 4		3.5 <sup>@</sup> fs 11	I	
10248.6 4	1 <sup>&amp;</sup>	1.6 <sup>@</sup> fs 4	I	
10288.6 7	1 <sup>(-)&amp;</sup>	0.45 <sup>@</sup> fs 9	I	
10297.7 13		1.1 <sup>@</sup> fs 3	I	
10326.7 6		1.9 <sup>@</sup> fs 6	I	
10341.3 6		1.7 <sup>@</sup> fs 6	I	
10372.5 5		0.5 <sup>@</sup> fs 5	I	
10406.6 14		0.35 <sup>@</sup> fs 24	I	
10421.1 10		0.8 <sup>@</sup> fs 6	I	
10453.2 12		1.3 <sup>@</sup> fs 5	I	
10481.1 9		1.1 <sup>@</sup> fs 3	I	
10512.1 19		0.77 <sup>@</sup> fs 22	I	
10522.7 5	1 <sup>&amp;</sup>	0.18 <sup>@</sup> fs 3	I	
10550.3 5	1 <sup>&amp;</sup>	0.40 <sup>@</sup> fs 7	I	
10600.2 16		0.61 <sup>@</sup> fs 17	I	
10608.7 14		0.41 <sup>@</sup> fs 11	I	
10644.1 8	1 <sup>-&amp;</sup>	0.30 <sup>@</sup> fs 6	I	
10657.8 16	1 <sup>&amp;</sup>	0.38 <sup>@</sup> fs 13	I	
10698.4 8		1.2 <sup>@</sup> fs 4	I	
10726.4 15	1 <sup>&amp;</sup>	0.8 <sup>@</sup> fs 3	I	
10739.4 6	(16)	<4.2 ps	C	T <sub>1/2</sub> : effective half-life from DSAM in $^{80}\text{Se}(^{11}\text{B}, \text{p}2\text{n}\gamma)$ ; feeding corrections have not been incorporated. J <sup>π</sup> : D 762γ to (15).
10744.9 8		0.80 <sup>@</sup> fs 22	I	
10759.7 16		1.0 <sup>@</sup> fs 3	I	
10767.1 15	1 <sup>&amp;</sup>	0.7 <sup>@</sup> fs 3	I	
10783.6 5	1 <sup>&amp;</sup>	0.18 <sup>@</sup> fs 4	I	
10804.8 4		0.27 <sup>a</sup> fs 11	I	
10857.4 4		1.7 <sup>@</sup> fs 4	I	
10888.4 9		0.51 <sup>a</sup> fs 22	I	
10914.6 5	1 <sup>&amp;</sup>	0.35 <sup>@</sup> fs 7	I	
10929.9 7		0.50 <sup>@</sup> fs 12	I	
10950.4 6		0.43 <sup>@</sup> fs 9	I	
10979.7 12		0.9 <sup>@</sup> fs 4	I	
11012.0 5	1 <sup>&amp;</sup>	0.20 <sup>@</sup> fs 3	I	
11059.0 11		0.75 <sup>@</sup> fs 23	I	
11083.1 8		0.46 <sup>a</sup> fs 18	I	
11111.8 16	1 <sup>&amp;</sup>	0.53 <sup>@</sup> fs 17	I	
11125.4 14	1 <sup>&amp;</sup>	0.43 <sup>@</sup> fs 14	I	
11169.6 8		0.46 <sup>a</sup> fs 18	I	
11224.2 13		1.0 <sup>@</sup> fs 5	I	
11251.8 12		0.68 <sup>@</sup> fs 21	I	
11278.9 10	1 <sup>&amp;</sup>	0.30 <sup>@</sup> fs 7	I	

Continued on next page (footnotes at end of table)

**Adopted Levels, Gammas (continued)** $^{88}\text{Sr}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup>	T <sub>1/2</sub> <sup>‡</sup>	XREF	Comments
11313.8 6		0.22 <sup>@</sup> fs 12	I	
11326 3		2.2 <sup>@</sup> fs 8	I	
11335.3 13	1&	0.11 <sup>@</sup> fs 4	I	
11355 3		0.15 <sup>@</sup> fs 7	I	
11356.1? 7	(17)		C	J <sup>π</sup> : D 617γ to (16).
11370 3	1&	0.14 <sup>@</sup> fs 5	I	
11393.6 6	1&	0.75 <sup>@</sup> fs 18	I	
11413.2 15		0.9 <sup>@</sup> fs 4	I	
11548.0 7		2.0 <sup>@</sup> fs 6	I	
11593.7 16		1.7 <sup>@</sup> fs 6	I	
11607.6 12		1.2 <sup>@</sup> fs 4	I	
11633.0 14		1.7 <sup>@</sup> fs 5	I	
11658.0 16		2.2 <sup>@</sup> fs 8	I	
11743.1 14		1.3 <sup>@</sup> fs 4	I	
11782.4 14		1.5 <sup>@</sup> fs 6	I	
11920.6 7		1.2 <sup>@</sup> fs 3	I	
11935.5 10		2.2 <sup>@</sup> fs 7	I	
11958.9 14		4.1 <sup>@</sup> fs 19	I	
12026.5 10		2.0 <sup>@</sup> fs 7	I	
15645 <sup>b</sup>	(2 <sup>-</sup> ) <sup>b</sup>	35 keV 5	P	
15674 <sup>b</sup>	(3 <sup>-</sup> ) <sup>b</sup>	27 keV 5	P	
15918 <sup>b</sup>	(4 <sup>-</sup> ) <sup>b</sup>	31 keV 4	P	
16500 <sup>b</sup>	(2 <sup>-</sup> ) <sup>b</sup>	28 keV 5	P	
17.2×10 <sup>3b</sup>			P	
17.8×10 <sup>3b</sup>			P	
19.2×10 <sup>3b</sup>			P	
20.5×10 <sup>3b</sup>			P	

<sup>†</sup> From least-squares fit to Eγ for levels with γ-ray information.<sup>‡</sup> From Doppler-shift attenuation method in (n,n'γ), except where noted.# From Doppler-shift attenuation method in  $^{86}\text{Kr}(\alpha, 2n\gamma)$ .<sup>@</sup> From (γ,γ') assuming γ branching ratio to g.s. equal to 100%.& From D, M1, or E1 γ to 0<sup>+</sup> g.s.<sup>a</sup> Calculated from  $\Gamma_0^2/\Gamma$  using the adopted branching ratios.<sup>b</sup> Isobaric analog resonance.

## Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$									
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\delta$	$\alpha$	Comments
1836.090	2 <sup>+</sup>	1836.063 12	100	0	0 <sup>+</sup>	E2		$3.93 \times 10^{-4}$	$\alpha(\text{K})=0.0001449$ 21; $\alpha(\text{L})=1.550 \times 10^{-5}$ 22; $\alpha(\text{M})=2.60 \times 10^{-6}$ 4; $\alpha(\text{N})=3.27 \times 10^{-7}$ 5; $\alpha(\text{O})=2.15 \times 10^{-8}$ 3 B(E2)(W.u.)=7.6 4 Mult.: from $\gamma(\theta)$ and $\gamma(\theta)(\text{lin pol})$ in $(\gamma, \gamma')$ ; $\alpha(\text{K})\text{exp}$ in $^{88}\text{Y}$ $\varepsilon$ decay. $E_\gamma$ : from $^{88}\text{Y}$ $\varepsilon$ decay.
2734.137	3 <sup>-</sup>	898.042 3	100.00 17	1836.090	2 <sup>+</sup>	E1		$3.07 \times 10^{-4}$	$\alpha(\text{K})=0.000273$ 4; $\alpha(\text{L})=2.92 \times 10^{-5}$ 4; $\alpha(\text{M})=4.89 \times 10^{-6}$ 7; $\alpha(\text{N})=6.14 \times 10^{-7}$ 9; $\alpha(\text{O})=4.02 \times 10^{-8}$ 6 B(E1)(W.u.)=6.6 $\times 10^{-4}$ 5 Mult.: from $\gamma(\theta)$ and $\alpha(\text{K})\text{exp}$ in $^{88}\text{Y}$ $\varepsilon$ decay. $E_\gamma$ : from $^{88}\text{Y}$ $\varepsilon$ decay.
		2734.086 13	0.69 4	0	0 <sup>+</sup>	(E3)		$5.64 \times 10^{-4}$	$\delta$ : $\delta(\text{M2/E1})=-0.002$ 9 from $^{88}\text{Y}$ $\varepsilon$ decay. $\alpha(\text{K})=0.0001098$ 16; $\alpha(\text{L})=1.176 \times 10^{-5}$ 17; $\alpha(\text{M})=1.97 \times 10^{-6}$ 3; $\alpha(\text{N})=2.48 \times 10^{-7}$ 4 $\alpha(\text{O})=1.639 \times 10^{-8}$ 23 B(E3)(W.u.)=22.6 21 $E_\gamma$ : from $^{88}\text{Rb}$ $\beta^-$ decay. Mult.: from $\alpha(\text{IPF})$ in $^{88}\text{Y}$ $\varepsilon$ decay.
3156.19	0 <sup>+</sup>	1320.1 1	100	1836.090	2 <sup>+</sup>	E2		$3.46 \times 10^{-4}$	$\alpha(\text{K})=0.000278$ 4; $\alpha(\text{L})=3.00 \times 10^{-5}$ 5; $\alpha(\text{M})=5.04 \times 10^{-6}$ 7; $\alpha(\text{N})=6.33 \times 10^{-7}$ 9; $\alpha(\text{O})=4.13 \times 10^{-8}$ 6 B(E2)(W.u.)=4.0 +15-14 Mult.: Q from $\gamma(\theta)$ in $(\text{n}, \text{n}'\gamma)$ , M2 excluded by comparison to RUL.
3218.489	2 <sup>+</sup>	484.44 12	2.3 10	2734.137	3 <sup>-</sup>	[E1]		$1.22 \times 10^{-3}$	$\alpha(\text{K})=0.001078$ 16; $\alpha(\text{L})=0.0001165$ 17; $\alpha(\text{M})=1.95 \times 10^{-5}$ 3; $\alpha(\text{N})=2.44 \times 10^{-6}$ 4 $\alpha(\text{O})=1.575 \times 10^{-7}$ 22 B(E1)(W.u.)=0.00034 15
		1382.41 3	100 4	1836.090	2 <sup>+</sup>	M1+E2	+0.04 2	$3.25 \times 10^{-4}$	$\alpha(\text{K})=0.000255$ 4; $\alpha(\text{L})=2.73 \times 10^{-5}$ 4; $\alpha(\text{M})=4.58 \times 10^{-6}$ 7; $\alpha(\text{N})=5.77 \times 10^{-7}$ 8; $\alpha(\text{O})=3.82 \times 10^{-8}$ 6 B(E2)(W.u.)=0.038 3; B(M1)(W.u.)=0.041 3 Mult.: D+Q from $\gamma\gamma(\theta)$ in $^{88}\text{Rb}$ $\beta^-$ decay, $\Delta\pi=\text{no}$ from level scheme. $\delta$ : from $\gamma\gamma(\theta)$ in $^{88}\text{Rb}$ $\beta^-$ decay. Other: +0.01 3 from $\gamma(\theta)$ in $(\text{n}, \text{n}'\gamma)$ .
		3218.46 6	28.9 16	0	0 <sup>+</sup>	E2		$9.30 \times 10^{-4}$	$\alpha(\text{K})=5.45 \times 10^{-5}$ 8; $\alpha(\text{L})=5.77 \times 10^{-6}$ 8; $\alpha(\text{M})=9.67 \times 10^{-7}$ 14; $\alpha(\text{N})=1.219 \times 10^{-7}$ 17; $\alpha(\text{O})=8.08 \times 10^{-9}$ 12 B(E2)(W.u.)=0.100 10
3378.2	1	3378.1	100	0	0 <sup>+</sup>	D			
3486.56	1 <sup>+</sup>	3486.43 8	100	0	0 <sup>+</sup>	M1		$9.66 \times 10^{-4}$	$\alpha(\text{K})=4.69 \times 10^{-5}$ 7; $\alpha(\text{L})=4.96 \times 10^{-6}$ 7; $\alpha(\text{M})=8.32 \times 10^{-7}$ 12;

Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)									
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\delta$	$\alpha$	Comments
									$\alpha(\text{N})=1.049\times 10^{-7}$ 15; $\alpha(\text{O})=6.97\times 10^{-9}$ 10 B(M1)(W.u.)=0.187 17
3522.77	(2 <sup>+</sup> )	1687.35 19 3523.4 3	100 5 57 4	1836.090 0	2 <sup>+</sup> 0 <sup>+</sup>	(E2)		$1.04\times 10^{-3}$	$\alpha(\text{K})=4.71\times 10^{-5}$ 7; $\alpha(\text{L})=4.98\times 10^{-6}$ 7; $\alpha(\text{M})=8.35\times 10^{-7}$ 12; $\alpha(\text{N})=1.053\times 10^{-7}$ 15; $\alpha(\text{O})=6.98\times 10^{-9}$ 10 B(E2)(W.u.)=0.35 12
3584.784	5 <sup>-</sup>	850.647 24	100	2734.137	3 <sup>-</sup>	E2		$8.53\times 10^{-4}$	$\alpha(\text{K})=0.000754$ 11; $\alpha(\text{L})=8.28\times 10^{-5}$ 12; $\alpha(\text{M})=1.390\times 10^{-5}$ 20; $\alpha(\text{N})=1.739\times 10^{-6}$ 25 $\alpha(\text{O})=1.114\times 10^{-7}$ 16 B(E2)(W.u.)=0.39 12 $E_\gamma$ : from (n, $\gamma$ ), E=thermal. Mult.: Q from $\gamma(\theta)$ in $^{80}\text{Se}(^{11}\text{B},\text{p}2\text{n}\gamma)$ , M2 excluded by comparison to RUL.
3635.09	(3) <sup>+</sup>	416.74 18	3.86 22	3218.489	2 <sup>+</sup>	M1(+E2)		0.0053 13	$\alpha(\text{K})=0.0046$ 11; $\alpha(\text{L})=0.00052$ 14; $\alpha(\text{M})=8.8\times 10^{-5}$ 23; $\alpha(\text{N})=1.1\times 10^{-5}$ 3; $\alpha(\text{O})=6.8\times 10^{-7}$ 15 B(M1)(W.u.)=0.015 3 Mult.: D(+Q) from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme.
		1799.04 12	100.0 2	1836.090	2 <sup>+</sup>	M1+E2 <sup>&amp;</sup>	-0.08 <sup>@</sup> 2	$3.53\times 10^{-4}$	$\alpha(\text{K})=0.0001525$ 22; $\alpha(\text{L})=1.626\times 10^{-5}$ 23; $\alpha(\text{M})=2.73\times 10^{-6}$ 4; $\alpha(\text{N})=3.44\times 10^{-7}$ 5; $\alpha(\text{O})=2.28\times 10^{-8}$ 4 B(E2)(W.u.)=0.010 6; B(M1)(W.u.)=0.0048 +14-9
3952.636	(4) <sup>-</sup>	1218.505 25	100	2734.137	3 <sup>-</sup>	M1+E2 <sup>&amp;</sup>	-0.11 <sup>@</sup> 2	$3.80\times 10^{-4}$	$\alpha(\text{K})=0.000329$ 5; $\alpha(\text{L})=3.53\times 10^{-5}$ 5; $\alpha(\text{M})=5.93\times 10^{-6}$ 9; $\alpha(\text{N})=7.47\times 10^{-7}$ 11; $\alpha(\text{O})=4.93\times 10^{-8}$ 7 B(E2)(W.u.)=0.14 +13-7; B(M1)(W.u.)=0.015 +14-6 $E_\gamma$ : from (n, $\gamma$ ), E=thermal.
3992.42	(0 <sup>+</sup> )	505.9 1	100.0 5	3486.56	1 <sup>+</sup>	M1		0.00255	$\alpha(\text{K})=0.00226$ 4; $\alpha(\text{L})=0.000247$ 4; $\alpha(\text{M})=4.15\times 10^{-5}$ 6; $\alpha(\text{N})=5.21\times 10^{-6}$ 8; $\alpha(\text{O})=3.41\times 10^{-7}$ 5 B(M1)(W.u.)<0.31 Mult.: D from comparison to RUL, $\Delta\pi$ =no from level scheme.
		2156.0 2	15.3 5	1836.090	2 <sup>+</sup>	[E2]		$5.05\times 10^{-4}$	$\alpha(\text{K})=0.0001079$ 16; $\alpha(\text{L})=1.150\times 10^{-5}$ 17; $\alpha(\text{M})=1.93\times 10^{-6}$ 3; $\alpha(\text{N})=2.43\times 10^{-7}$ 4 $\alpha(\text{O})=1.602\times 10^{-8}$ 23 B(E2)(W.u.)<0.14
4019.56	(6) <sup>-</sup>	434.89 6	100	3584.784	5 <sup>-</sup>	M1+E2 <sup>#</sup>	+0.25 3	0.00376	$\alpha(\text{K})=0.00333$ 6; $\alpha(\text{L})=0.000366$ 6; $\alpha(\text{M})=6.16\times 10^{-5}$ 10; $\alpha(\text{N})=7.72\times 10^{-6}$ 13; $\alpha(\text{O})=5.00\times 10^{-7}$ 8 B(E2)(W.u.)>7; B(M1)(W.u.)>0.025

## Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)								
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$	Comments
4035.52	2 <sup>+</sup>	2200.4 4035.5 1	19 4 100	1836.090 0	2 <sup>+</sup> 0 <sup>+</sup>	E2	1.23×10 <sup>-3</sup>	$\alpha(\text{K})=3.81\times10^{-5}$ 6; $\alpha(\text{L})=4.02\times10^{-6}$ 6; $\alpha(\text{M})=6.74\times10^{-7}$ 10; $\alpha(\text{N})=8.50\times10^{-8}$ 12; $\alpha(\text{O})=5.64\times10^{-9}$ 8 B(E2)(W.u.)=1.3 3
4039.04	(3) <sup>+</sup>	1304.90 4	21.1 5	2734.137	3 <sup>-</sup>	E1 @	2.66×10 <sup>-4</sup>	$\alpha(\text{K})=0.0001359$ 19; $\alpha(\text{L})=1.446\times10^{-5}$ 21; $\alpha(\text{M})=2.42\times10^{-6}$ 4; $\alpha(\text{N})=3.05\times10^{-7}$ 5; $\alpha(\text{O})=2.00\times10^{-8}$ 3 B(E1)(W.u.)=0.00032 3 $\delta$ : $\delta(\text{M2/E2})=+0.5$ +5-2 from $\gamma(\theta)$ in (n,n' $\gamma$ ) results in M2 transition strength which exceeds RUL.
		2202.92 7	100.00 24	1836.090	2 <sup>+</sup>	M1+E2 &	5.01×10 <sup>-4</sup> 24	$\alpha(\text{K})=0.0001041$ 15; $\alpha(\text{L})=1.109\times10^{-5}$ 16; $\alpha(\text{M})=1.86\times10^{-6}$ 3; $\alpha(\text{N})=2.34\times10^{-7}$ 4 $\alpha(\text{O})=1.550\times10^{-8}$ 23 $\delta$ : +0.20 10 or +1.5 +3-2 from $\gamma(\theta)$ in (n,n' $\gamma$ ).
4170.41	(3 <sup>-</sup> )	585.626 25	100.0 5	3584.784	5 <sup>-</sup>	[E2]	0.00231	$\alpha(\text{K})=0.00204$ 3; $\alpha(\text{L})=0.000228$ 4; $\alpha(\text{M})=3.83\times10^{-5}$ 6; $\alpha(\text{N})=4.77\times10^{-6}$ 7; $\alpha(\text{O})=2.98\times10^{-7}$ 5 B(E2)(W.u.)=1.9×10 <sup>2</sup> +12-11 $E_\gamma$ : from (n, $\gamma$ ), E=thermal. $E_\gamma$ : from (n, $\gamma$ ), E=thermal. $I_\gamma$ : from (n,n' $\gamma$ ). Other: 31 5 in (n, $\gamma$ ), E=thermal.
		1436.27 4	12.8 5	2734.137	3 <sup>-</sup>			
		4170.71 20	0.71 7	0	0 <sup>+</sup>	[E3]	9.95×10 <sup>-4</sup>	$\alpha(\text{K})=5.08\times10^{-5}$ 8; $\alpha(\text{L})=5.39\times10^{-6}$ 8; $\alpha(\text{M})=9.05\times10^{-7}$ 13; $\alpha(\text{N})=1.140\times10^{-7}$ 16; $\alpha(\text{O})=7.56\times10^{-9}$ 11 B(E3)(W.u.)=0.5 3 $E_\gamma$ : not observed in (n,n' $\gamma$ ).
4224.10		1005.6 <sup>d</sup> 1		3218.489	2 <sup>+</sup>			$E_\gamma$ : tentative placement from (n,n' $\gamma$ ) based solely on level energy differences. $E_\gamma$ : not observed in (n,n' $\gamma$ ).
4226.98	1	2388.0 6		1836.090	2 <sup>+</sup>			
4227.20	(3 <sup>-</sup> )	4226.6 1008.7 1	100 6.4 4	0 3218.489	0 <sup>+</sup> 2 <sup>+</sup>	D [E1]	2.45×10 <sup>-4</sup>	$\alpha(\text{K})=0.000217$ 3; $\alpha(\text{L})=2.32\times10^{-5}$ 4; $\alpha(\text{M})=3.89\times10^{-6}$ 6; $\alpha(\text{N})=4.89\times10^{-7}$ 7; $\alpha(\text{O})=3.20\times10^{-8}$ 5 B(E1)(W.u.)=1.8×10 <sup>-4</sup> 6
		1493.01 4	33.1 4	2734.137	3 <sup>-</sup>			
		2391.0 3	100.0 4	1836.090	2 <sup>+</sup>	(E1)	9.43×10 <sup>-4</sup>	$\alpha(\text{K})=5.23\times10^{-5}$ 8; $\alpha(\text{L})=5.52\times10^{-6}$ 8; $\alpha(\text{M})=9.25\times10^{-7}$ 13; $\alpha(\text{N})=1.165\times10^{-7}$ 17; $\alpha(\text{O})=7.71\times10^{-9}$ 11 B(E1)(W.u.)=2.1×10 <sup>-4</sup> 7 Mult.: D from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme.
4262.9	(1,2 <sup>+</sup> )	4262.8	100	0	0 <sup>+</sup>			
4268.70	(3 <sup>-</sup> ,4,5 <sup>-</sup> )	683.97 5	31.6 11	3584.784	5 <sup>-</sup>			$I_\gamma$ : from (n,n' $\gamma$ ). Other: <17 for multiply placed transition in (n, $\gamma$ ), E=thermal.
		1534.42 7	100.0 11	2734.137	3 <sup>-</sup>			

Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)									
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$	Comments	
4299.52	4 <sup>+</sup>	1565.40 9	86.2 9	2734.137	3 <sup>-</sup>	E1 @	4.10×10 <sup>-4</sup>	$\alpha(\text{K})=0.0001000$ 14; $\alpha(\text{L})=1.062\times 10^{-5}$ 15; $\alpha(\text{M})=1.779\times 10^{-6}$ 25; $\alpha(\text{N})=2.24\times 10^{-7}$ 4 $\alpha(\text{O})=1.475\times 10^{-8}$ 21 B(E1)(W.u.)=0.00137 23 $I_\gamma$ : from (n,n' $\gamma$ ). $\delta$ : $\delta(\text{M2/E1})=+0.05$ 5 from $\gamma(\theta)$ in (n,n' $\gamma$ ).	
		2463.51 19	100.0 9	1836.090	2 <sup>+</sup>	E2 @	6.29×10 <sup>-4</sup>	$\alpha(\text{K})=8.53\times 10^{-5}$ 12; $\alpha(\text{L})=9.07\times 10^{-6}$ 13; $\alpha(\text{M})=1.521\times 10^{-6}$ 22; $\alpha(\text{N})=1.92\times 10^{-7}$ 3; $\alpha(\text{O})=1.266\times 10^{-8}$ 18 B(E2)(W.u.)=4.8 8 $I_\gamma$ : from (n,n' $\gamma$ ).	
4353.95	(3 <sup>-</sup> )	768.8 1	42.9 6	3584.784	5 <sup>-</sup>	[E2]	1.10×10 <sup>-3</sup>	$\alpha(\text{K})=0.000973$ 14; $\alpha(\text{L})=0.0001074$ 15; $\alpha(\text{M})=1.80\times 10^{-5}$ 3; $\alpha(\text{N})=2.25\times 10^{-6}$ 4 $\alpha(\text{O})=1.435\times 10^{-7}$ 20 B(E2)(W.u.)=38 +10-9	
		1135.8 1	100.0 5	3218.489	2 <sup>+</sup>	(E1)	2.11×10 <sup>-4</sup>	$\alpha(\text{K})=0.0001741$ 25; $\alpha(\text{L})=1.86\times 10^{-5}$ 3; $\alpha(\text{M})=3.11\times 10^{-6}$ 5; $\alpha(\text{N})=3.91\times 10^{-7}$ 6; $\alpha(\text{O})=2.57\times 10^{-8}$ 4 B(E1)(W.u.)=2.2×10 <sup>-4</sup> +6-5	
		2518.1 4	8.6 5	1836.090	2 <sup>+</sup>	[E1]	1.02×10 <sup>-3</sup>	Mult.: D from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme. $\alpha(\text{K})=4.85\times 10^{-5}$ 7; $\alpha(\text{L})=5.12\times 10^{-6}$ 8; $\alpha(\text{M})=8.58\times 10^{-7}$ 12; $\alpha(\text{N})=1.082\times 10^{-7}$ 16; $\alpha(\text{O})=7.16\times 10^{-9}$ 10 B(E1)(W.u.)=1.8×10 <sup>-6</sup> +5-4	
4367.94	(7 <sup>-</sup> )	348.42 8	100.0 20	4019.56	(6) <sup>-</sup>	(M1)	0.00622	$\alpha(\text{K})=0.00550$ 8; $\alpha(\text{L})=0.000607$ 9; $\alpha(\text{M})=0.0001020$ 15; $\alpha(\text{N})=1.280\times 10^{-5}$ 18 $\alpha(\text{O})=8.32\times 10^{-7}$ 12 B(M1)(W.u.)>0.046 Mult.: D from $\gamma(\theta)$ in $^{80}\text{Se}(^{11}\text{B},\text{p}2\text{n}\gamma)$ , D(+Q) from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme.	
		782.9 3	11.8 8	3584.784	5 <sup>-</sup>	(E2)	1.05×10 <sup>-3</sup>	$\alpha(\text{K})=0.000929$ 13; $\alpha(\text{L})=0.0001024$ 15; $\alpha(\text{M})=1.719\times 10^{-5}$ 25; $\alpha(\text{N})=2.15\times 10^{-6}$ 3 $\alpha(\text{O})=1.370\times 10^{-7}$ 20 B(E2)(W.u.)>0.87	
4413.96	(2) <sup>+</sup>	891.31 12 1679.65 9	11.9 23 34.9 10	3522.77 2734.137	(2) <sup>+</sup> 3 <sup>-</sup>	[E1]	4.89×10 <sup>-4</sup>	$E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal. $\alpha(\text{K})=8.93\times 10^{-5}$ 13; $\alpha(\text{L})=9.47\times 10^{-6}$ 14; $\alpha(\text{M})=1.586\times 10^{-6}$ 23; $\alpha(\text{N})=2.00\times 10^{-7}$ 3; $\alpha(\text{O})=1.317\times 10^{-8}$ 19 B(E1)(W.u.)=0.00105 20	
		2577.78 5	100.0 4	1836.090	2 <sup>+</sup>	(M1)	6.20×10 <sup>-4</sup>	$\alpha(\text{K})=7.87\times 10^{-5}$ 11; $\alpha(\text{L})=8.36\times 10^{-6}$ 12; $\alpha(\text{M})=1.401\times 10^{-6}$ 20; $\alpha(\text{N})=1.767\times 10^{-7}$ 25 $\alpha(\text{O})=1.172\times 10^{-8}$ 17	

## Adopted Levels, Gammas (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\gamma(^{88}\text{Sr})$ (continued)		Comments
							$\delta$	$\alpha$	
4413.96	(2) <sup>+</sup>	4413.7 <sup>b</sup> 3	<7.0 <sup>b</sup>	0	0 <sup>+</sup>	[E2]		1.34×10 <sup>-3</sup>	B(M1)(W.u.)=0.053 11 Mult.: D from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme. $\alpha(\text{K})=3.32\times 10^{-5}$ 5; $\alpha(\text{L})=3.50\times 10^{-6}$ 5; $\alpha(\text{M})=5.87\times 10^{-7}$ 9; $\alpha(\text{N})=7.40\times 10^{-8}$ 11; $\alpha(\text{O})=4.92\times 10^{-9}$ 7 B(E2)(W.u.)<0.04 $E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
4440.72	(4) <sup>+</sup>	1706.57 12	100	2734.137	3 <sup>-</sup>	Q <sup>@</sup>		3.30×10 <sup>-4</sup>	$\alpha(\text{K})=0.000293$ 4; $\alpha(\text{L})=3.13\times 10^{-5}$ 5; $\alpha(\text{M})=5.25\times 10^{-6}$ 8; $\alpha(\text{N})=6.60\times 10^{-7}$ 10; $\alpha(\text{O})=4.31\times 10^{-8}$ 6 B(E1)(W.u.)=0.00016 5 $E_\gamma$ : not observed in (n,n' $\gamma$ ).
4451.97		867.09 6	7.5 12	3584.784	5 <sup>-</sup>	[E1]			
		1717.71 8	100 15	2734.137	3 <sup>-</sup>	[E1]		5.14×10 <sup>-4</sup>	$\alpha(\text{K})=8.61\times 10^{-5}$ 12; $\alpha(\text{L})=9.13\times 10^{-6}$ 13; $\alpha(\text{M})=1.530\times 10^{-6}$ 22; $\alpha(\text{N})=1.93\times 10^{-7}$ 3; $\alpha(\text{O})=1.271\times 10^{-8}$ 18 B(E1)(W.u.)=0.00028 8
		2615.91 10	1.31 14	1836.090	2 <sup>+</sup>	[E2]		6.90×10 <sup>-4</sup>	$\alpha(\text{K})=7.69\times 10^{-5}$ 11; $\alpha(\text{L})=8.17\times 10^{-6}$ 12; $\alpha(\text{M})=1.370\times 10^{-6}$ 20; $\alpha(\text{N})=1.726\times 10^{-7}$ 25 $\alpha(\text{O})=1.142\times 10^{-8}$ 16 B(E2)(W.u.)=0.011 3 $E_\gamma$ : not observed in (n,n' $\gamma$ ).
4484.83	0 <sup>+</sup>	998.4 1	100.0 3	3486.56	1 <sup>+</sup>	[E2]		7.04×10 <sup>-4</sup>	$\alpha(\text{K})=7.53\times 10^{-5}$ 11; $\alpha(\text{L})=8.00\times 10^{-6}$ 12; $\alpha(\text{M})=1.342\times 10^{-6}$ 19; $\alpha(\text{N})=1.690\times 10^{-7}$ 24 $\alpha(\text{O})=1.118\times 10^{-8}$ 16 B(E2)(W.u.)=0.152 13
		2648.5 1	8.6 3	1836.090	2 <sup>+</sup>				
4514.028	2 <sup>-</sup>	1027.3 3	0.55 22	3486.56	1 <sup>+</sup>	[E1]		2.37×10 <sup>-4</sup>	$\alpha(\text{K})=0.000210$ 3; $\alpha(\text{L})=2.24\times 10^{-5}$ 4; $\alpha(\text{M})=3.76\times 10^{-6}$ 6; $\alpha(\text{N})=4.72\times 10^{-7}$ 7; $\alpha(\text{O})=3.09\times 10^{-8}$ 5 B(E1)(W.u.)=1.7×10 <sup>-6</sup> 9
		1779.870 21	11.0 7	2734.137	3 <sup>-</sup>	E1+M2	+0.073 6	1.10×10 <sup>-3</sup>	$\alpha(\text{K})=4.49\times 10^{-5}$ 7; $\alpha(\text{L})=4.74\times 10^{-6}$ 7; $\alpha(\text{M})=7.94\times 10^{-7}$ 12; $\alpha(\text{N})=1.001\times 10^{-7}$ 15; $\alpha(\text{O})=6.63\times 10^{-9}$ 10 B(E1)(W.u.)=1.8×10 <sup>-5</sup> 6; B(M2)(W.u.)=0.060 23 Mult., $\delta$ : from $\gamma\gamma(\theta)$ measured in $^{88}\text{Rb}$ $\beta^-$ decay. Parity from adopted $\Delta\pi$ . Other: -0.06 +7-6 from $\gamma(\theta)$ in (n,n' $\gamma$ ). Possibly identical to 2677.89 $\gamma$ .
		2677.892 21	100.0 14	1836.090	2 <sup>+</sup>				
4514.54	<sup>+</sup>	2678.38 <sup>d</sup> 9	100	1836.090	2 <sup>+</sup>	M1(+E2)	-0.03 <sup>@</sup> 7	6.44×10 <sup>-4</sup>	$\alpha(\text{K})=0.000571$ 8; $\alpha(\text{L})=6.15\times 10^{-5}$ 9; $\alpha(\text{M})=1.032\times 10^{-5}$ 15; $\alpha(\text{N})=1.300\times 10^{-6}$ 19; $\alpha(\text{O})=8.56\times 10^{-8}$ 12 Mult.: D(+Q) from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme. $\alpha(\text{K})=7.43\times 10^{-5}$ 11; $\alpha(\text{L})=7.87\times 10^{-6}$ 11; $\alpha(\text{M})=1.318\times 10^{-6}$
4521.43	(6) <sup>-</sup>	936.61 13	100	3584.784	5 <sup>-</sup>				
4622.19	2 <sup>+</sup>	1888.0 1	100.0 6	2734.137	3 <sup>-</sup>	E1		6.26×10 <sup>-4</sup>	



Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)									
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\delta$	$\alpha$	Comments
									19; $\alpha(\text{N})=1.660\times 10^{-7}$ 24 $\alpha(\text{O})=1.096\times 10^{-8}$ 16 $\text{B}(\text{E}1)(\text{W.u.})=0.0020$ 5 Mult.: D from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi=\text{yes}$ from level scheme.
4622.19	2 <sup>+</sup>	2786.2 2	20.3 6	1836.090	2 <sup>+</sup>				
4640.40		1906.2 1	100.0 6	2734.137	3 <sup>-</sup>	Q <sup>@</sup>			
		2804.3 1	46.0 6	1836.090	2 <sup>+</sup>	D+Q <sup>@</sup>	-0.18 <sup>@</sup> 5		
4680.19		1095.4 <sup>a</sup> 1	100	3584.784	5 <sup>-</sup>				
4687.38	(7)	319.6 <sup>c</sup> 3	100 <sup>c</sup>	4367.94	(7 <sup>-</sup> )				
4742.50	1 <sup>-</sup>	1524.6	18 5	3218.489	2 <sup>+</sup>	[E1]		$3.83\times 10^{-4}$	$\alpha(\text{K})=0.0001044$ 15; $\alpha(\text{L})=1.109\times 10^{-5}$ 16; $\alpha(\text{M})=1.86\times 10^{-6}$ 3; $\alpha(\text{N})=2.34\times 10^{-7}$ 4 $\alpha(\text{O})=1.541\times 10^{-8}$ 22 $\text{B}(\text{E}1)(\text{W.u.})=0.0055$ 16
		2906.1 1	3.5 14	1836.090	2 <sup>+</sup>	[E1]		$1.22\times 10^{-3}$	$\alpha(\text{K})=3.97\times 10^{-5}$ 6; $\alpha(\text{L})=4.19\times 10^{-6}$ 6; $\alpha(\text{M})=7.02\times 10^{-7}$ 10; $\alpha(\text{N})=8.84\times 10^{-8}$ 13; $\alpha(\text{O})=5.86\times 10^{-9}$ 9 $\text{B}(\text{E}1)(\text{W.u.})=0.00015$ 7 $I_\gamma$ : from ( $\gamma,\gamma'$ ). Other: 12.1 3 from (n,n' $\gamma$ ). $E_\gamma$ : from (n,n' $\gamma$ ).
		4742.52 8	100	0	0 <sup>+</sup>	E1		0.00195	$\alpha(\text{K})=2.10\times 10^{-5}$ 3; $\alpha(\text{L})=2.21\times 10^{-6}$ 3; $\alpha(\text{M})=3.70\times 10^{-7}$ 6; $\alpha(\text{N})=4.66\times 10^{-8}$ 7; $\alpha(\text{O})=3.09\times 10^{-9}$ 5 $\text{B}(\text{E}1)(\text{W.u.})=0.00101$ 9
4770.12	2 <sup>+</sup>	734.7 1	3.7 4	4035.52	2 <sup>+</sup>	M1		$1.09\times 10^{-3}$	$\alpha(\text{K})=0.000968$ 14; $\alpha(\text{L})=0.0001048$ 15; $\alpha(\text{M})=1.759\times 10^{-5}$ 25; $\alpha(\text{N})=2.21\times 10^{-6}$ 3 $\alpha(\text{O})=1.454\times 10^{-7}$ 21 $\text{B}(\text{M}1)(\text{W.u.})=0.27$ 12 Mult.: D from comparison to RUL, $\Delta\pi=\text{no}$ from level scheme.
		1283.6 <sup>a</sup> 1	2.4 4	3486.56	1 <sup>+</sup>				
		2035.7 <sup>a</sup> 1	100.0 4	2734.137	3 <sup>-</sup>	[E1]		$7.24\times 10^{-4}$	$\alpha(\text{K})=6.62\times 10^{-5}$ 10; $\alpha(\text{L})=7.01\times 10^{-6}$ 10; $\alpha(\text{M})=1.174\times 10^{-6}$ 17; $\alpha(\text{N})=1.479\times 10^{-7}$ 21 $\alpha(\text{O})=9.77\times 10^{-9}$ 14 $\text{B}(\text{E}1)(\text{W.u.})=0.0053$ 24
		2933.9 1	16.2 4	1836.090	2 <sup>+</sup>	M1(+E2)		0.00079 4	$\alpha(\text{K})=6.31\times 10^{-5}$ 10; $\alpha(\text{L})=6.69\times 10^{-6}$ 10; $\alpha(\text{M})=1.122\times 10^{-6}$ 17; $\alpha(\text{N})=1.414\times 10^{-7}$ 21 $\alpha(\text{O})=9.38\times 10^{-9}$ 14 Mult.: D(+Q) from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi=\text{no}$ from level scheme.
		4770.7 2	0.7 4	0	0 <sup>+</sup>	E2		$1.45\times 10^{-3}$	$\alpha(\text{K})=2.95\times 10^{-5}$ 5; $\alpha(\text{L})=3.11\times 10^{-6}$ 5; $\alpha(\text{M})=5.22\times 10^{-7}$

Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)									
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\delta$	$\alpha$	Comments
									8; $\alpha(\text{N})=6.58\times 10^{-8}$ 10; $\alpha(\text{O})=4.37\times 10^{-9}$ 7 B(E2)(W.u.)=0.009 7 Mult.: Q from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme.
4801.3	0 <sup>+</sup>	2965.2 6	100	1836.090	2 <sup>+</sup>	[E2]		8.32×10 <sup>-4</sup>	$\alpha(\text{K})=6.23\times 10^{-5}$ 9; $\alpha(\text{L})=6.61\times 10^{-6}$ 10; $\alpha(\text{M})=1.108\times 10^{-6}$ 16; $\alpha(\text{N})=1.396\times 10^{-7}$ 20; $\alpha(\text{O})=9.25\times 10^{-9}$ 13 B(E2)(W.u.)=6.6 21
4801.4 4845.62	1 (3) <sup>-</sup>	4801.3 1627.01 19 2111.47 5 3009.50 4	100 3.7 7 48.1 12 100.0 6	0 3218.489 2734.137 1836.090	0 <sup>+</sup> 2 <sup>+</sup> 3 <sup>-</sup> 2 <sup>+</sup>	D M1+E2 <sup>&amp;</sup> E1+M2	-2.0 +12- $\infty$ +0.075 15	1.27×10 <sup>-3</sup>	$E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal. B(E2)(W.u.)=7.7 20; B(M1)(W.u.)=0.0078 21 $\alpha(\text{K})=3.82\times 10^{-5}$ 6; $\alpha(\text{L})=4.03\times 10^{-6}$ 6; $\alpha(\text{M})=6.75\times 10^{-7}$ 10; $\alpha(\text{N})=8.51\times 10^{-8}$ 13; $\alpha(\text{O})=5.64\times 10^{-9}$ 9 B(E1)(W.u.)=0.00043 12; B(M2)(W.u.)=1.2 6 Mult., $\delta$ : D+Q from $\gamma\gamma(\theta)$ in $^{88}\text{Rb}$ $\beta^-$ decay. $\Delta\pi$ =yes from level scheme.
		4845.19 18	0.60 5	0	0 <sup>+</sup>	[E3]		1.18×10 <sup>-3</sup>	$\alpha(\text{K})=3.93\times 10^{-5}$ 6; $\alpha(\text{L})=4.17\times 10^{-6}$ 6; $\alpha(\text{M})=6.99\times 10^{-7}$ 10; $\alpha(\text{N})=8.81\times 10^{-8}$ 13; $\alpha(\text{O})=5.85\times 10^{-9}$ 9 B(E3)(W.u.)=8.7 24
4853.026	1 <sup>-</sup>	338.95 7	12.8 6	4514.028	2 <sup>-</sup>	M1		0.00666	$\alpha(\text{K})=0.00588$ 9; $\alpha(\text{L})=0.000649$ 9; $\alpha(\text{M})=0.0001092$ 16; $\alpha(\text{N})=1.371\times 10^{-5}$ 20 $\alpha(\text{O})=8.90\times 10^{-7}$ 13 B(M1)(W.u.)=0.26 4 Mult.: D from comparison to RUL, $\Delta\pi$ =no from level scheme. $E_\gamma, I_\gamma$ : from $^{88}\text{Rb}$ $\beta^-$ decay. $I_\gamma$ : Other: 85.9 9 in (n,n' $\gamma$ ).
		439.2 3 1217.97 18 1366.26 12	3.2 9 11.1 9 34 5	4413.96 3635.09 3486.56	(2) <sup>+</sup> (3) <sup>+</sup> 1 <sup>+</sup>	E1+M2	-0.05 2	2.94×10 <sup>-4</sup>	$\alpha(\text{K})=0.0001266$ 21; $\alpha(\text{L})=1.347\times 10^{-5}$ 22; $\alpha(\text{M})=2.26\times 10^{-6}$ 4; $\alpha(\text{N})=2.84\times 10^{-7}$ 5; $\alpha(\text{O})=1.87\times 10^{-8}$ 3 B(E1)(W.u.)=0.00016 4; B(M2)(W.u.)=1.0 9 Mult., $\delta$ : D+Q from $\gamma\gamma(\theta)$ in $^{88}\text{Rb}$ $\beta^-$ decay. $\Delta\pi$ =yes from level scheme.
		2118.867 20	100.0 13	2734.137	3 <sup>-</sup>	(E2)		4.91×10 <sup>-4</sup>	$\alpha(\text{K})=0.0001114$ 16; $\alpha(\text{L})=1.187\times 10^{-5}$ 17; $\alpha(\text{M})=1.99\times 10^{-6}$ 3; $\alpha(\text{N})=2.51\times 10^{-7}$ 4

## Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)								
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$	Comments
4853.026	$1^-$	3017.19 20	1.0 5	1836.090	$2^+$	[E1]	$1.27 \times 10^{-3}$	$\alpha(\text{K})=0.0001114$ 16; $\alpha(\text{L})=1.187 \times 10^{-5}$ 17; $\alpha(\text{M})=1.99 \times 10^{-6}$ 3; $\alpha(\text{N})=2.51 \times 10^{-7}$ 4 $\alpha(\text{O})=1.653 \times 10^{-8}$ 24 B(E2)(W.u.)=2.0 3 $E_\gamma$ : from $^{88}\text{Rb}$ $\beta^-$ decay. Mult.: (Q) from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme.
		4852.882 24	1.6 9	0	$0^+$	(E1)	0.00199	$\alpha(\text{K})=3.77 \times 10^{-5}$ 6; $\alpha(\text{L})=3.98 \times 10^{-6}$ 6; $\alpha(\text{M})=6.67 \times 10^{-7}$ 10; $\alpha(\text{N})=8.40 \times 10^{-8}$ 12; $\alpha(\text{O})=5.56 \times 10^{-9}$ 8 B(E1)(W.u.)=4.5 $\times 10^{-7}$ 23
4880.57	$4^+$	581.2 1	19.2 6	4299.52	$4^+$	M1(+E2)	0.0021 3	$\alpha(\text{K})=2.04 \times 10^{-5}$ 3; $\alpha(\text{L})=2.14 \times 10^{-6}$ 3; $\alpha(\text{M})=3.59 \times 10^{-7}$ 5; $\alpha(\text{N})=4.53 \times 10^{-8}$ 7; $\alpha(\text{O})=3.01 \times 10^{-9}$ 5 B(E1)(W.u.)=1.7 $\times 10^{-7}$ 10 $E_\gamma$ : from $^{88}\text{Rb}$ $\beta^-$ decay. Mult.: (D) from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =yes from level scheme.
		841.6 1	58.3 20	4039.04	(3) $^+$	M1(+E2)	0.00084 4	$\alpha(\text{K})=0.00186$ 23; $\alpha(\text{L})=0.00021$ 3; $\alpha(\text{M})=3.5 \times 10^{-5}$ 5; $\alpha(\text{N})=4.3 \times 10^{-6}$ 6; $\alpha(\text{O})=2.8 \times 10^{-7}$ 3
		1245.5 1	0.6 6	3635.09	(3) $^+$			Mult.: D from comparison to RUL, $\Delta\pi$ =no from level scheme.
		2146.2 1	17.6 6	2734.137	$3^-$	E1(+M2)	$7.91 \times 10^{-4}$ 12	$\alpha(\text{K})=0.00075$ 3; $\alpha(\text{L})=8.1 \times 10^{-5}$ 4; $\alpha(\text{M})=1.37 \times 10^{-5}$ 7; $\alpha(\text{N})=1.71 \times 10^{-6}$ 8; $\alpha(\text{O})=1.11 \times 10^{-7}$ 4
								Mult.: D from comparison to RUL, $\Delta\pi$ =no from level scheme.
		3044.4 1	100.0 16	1836.090	$2^+$	[E2]	$8.63 \times 10^{-4}$	$\alpha(\text{K})=6.26 \times 10^{-5}$ 17; $\alpha(\text{L})=6.62 \times 10^{-6}$ 18; $\alpha(\text{M})=1.11 \times 10^{-6}$ 3; $\alpha(\text{N})=1.40 \times 10^{-7}$ 4; $\alpha(\text{O})=9.23 \times 10^{-9}$ 25 Mult.: D(Q) from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =yes from level scheme.
4914.6	1	4914.5	100	0	$0^+$	D		$\alpha(\text{K})=5.97 \times 10^{-5}$ 9; $\alpha(\text{L})=6.33 \times 10^{-6}$ 9; $\alpha(\text{M})=1.060 \times 10^{-6}$ 15; $\alpha(\text{N})=1.336 \times 10^{-7}$ 19; $\alpha(\text{O})=8.85 \times 10^{-9}$ 13 B(E2)(W.u.)=1.58 17 Mult.: Q from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme.
4923.61	(2,3,1)	1288.5 1	16.7 4	3635.09	(3) $^+$			
		2189.3 1	8.0 4	2734.137	$3^-$			
		3087.6 1	100.0 4	1836.090	$2^+$	(D+Q) <sup>@</sup>		
4930.6	$2^+, 3^+, 4^+$	3094.5 5	100	1836.090	$2^+$			
4988.23	$2^+$	1769.6 1	53.8 8	3218.489	$2^+$			
		2253.9 1	26.4 8	2734.137	$3^-$	[E1]	$8.61 \times 10^{-4}$	$\alpha(\text{K})=5.69 \times 10^{-5}$ 8; $\alpha(\text{L})=6.02 \times 10^{-6}$ 9; $\alpha(\text{M})=1.008 \times 10^{-6}$ 15; $\alpha(\text{N})=1.270 \times 10^{-7}$ 18; $\alpha(\text{O})=8.40 \times 10^{-9}$ 12 B(E1)(W.u.)=0.00031 8
		3152.2 1	100 4	1836.090	$2^+$	M1(+E2)	0.00087 4	$\alpha(\text{K})=5.59 \times 10^{-5}$ 9; $\alpha(\text{L})=5.93 \times 10^{-6}$ 10; $\alpha(\text{M})=9.94 \times 10^{-7}$ 16;

## Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)								
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$	Comments
4988.23	2 <sup>+</sup>	4988.7 2	31 3	0	0 <sup>+</sup>	[E2]	1.51×10 <sup>-3</sup>	$\alpha(\text{N})=1.253\times 10^{-7}$ 20; $\alpha(\text{O})=8.31\times 10^{-9}$ 13 Mult.: D(+Q) from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme. $\alpha(\text{K})=2.76\times 10^{-5}$ 4; $\alpha(\text{L})=2.91\times 10^{-6}$ 4; $\alpha(\text{M})=4.88\times 10^{-7}$ 7; $\alpha(\text{N})=6.16\times 10^{-8}$ 9; $\alpha(\text{O})=4.09\times 10^{-9}$ 6 B(E2)(W.u.)=0.10 3 E $_\gamma$ : from (n,n' $\gamma$ ). Mult.: Q from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme.
5010.59	(3,4 <sup>+</sup> )	558.49 6 1058.06 6 1791.69 19 2276.44 15	19 3 22.7 6 3.1 6 100 1	4451.97 (4) <sup>+</sup> 3952.636 (4) <sup>-</sup> 3218.489 2 <sup>+</sup> 2734.137 3 <sup>-</sup>	(4) <sup>+</sup> (4) <sup>-</sup> 2 <sup>+</sup> 3 <sup>-</sup>	D(+Q)@		
5076.65		1442.06 22 2342.82 22	1.0×10 <sup>2</sup> 3 22 4	3635.09 (3) <sup>+</sup> 2734.137 3 <sup>-</sup>	(3) <sup>+</sup> 3 <sup>-</sup>			
5085.49	(2) <sup>+</sup>	1450.4 1 1866.9 1 3249.5 2 5086.1 5	9.5 4 10.2 6 100.0 7 3.7 4	3635.09 (3) <sup>+</sup> 3218.489 2 <sup>+</sup> 1836.090 2 <sup>+</sup> 0 0 <sup>+</sup>	(3) <sup>+</sup> 2 <sup>+</sup> 2 <sup>+</sup> 0 <sup>+</sup>	(E2)	1.54×10 <sup>-3</sup>	$\alpha(\text{K})=2.68\times 10^{-5}$ 4; $\alpha(\text{L})=2.83\times 10^{-6}$ 4; $\alpha(\text{M})=4.74\times 10^{-7}$ 7; $\alpha(\text{N})=5.98\times 10^{-8}$ 9; $\alpha(\text{O})=3.97\times 10^{-9}$ 6 B(E2)(W.u.)=0.034 16 Mult.: (Q) from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme.
5092.12	(4 <sup>+</sup> )	1052.90 <sup>b</sup> 12 1507.22 9	<71 <sup>b</sup> 49.5 15	4039.04 (3) <sup>+</sup> 3584.784 5 <sup>-</sup>	(3) <sup>+</sup> 5 <sup>-</sup>	(E1)	3.71×10 <sup>-4</sup>	E $_\gamma$ : observed only in (n, $\gamma$ ), E=thermal. $\alpha(\text{K})=0.0001064$ 15; $\alpha(\text{L})=1.130\times 10^{-5}$ 16; $\alpha(\text{M})=1.89\times 10^{-6}$ 3; $\alpha(\text{N})=2.38\times 10^{-7}$ 4 $\alpha(\text{O})=1.570\times 10^{-8}$ 22 B(E1)(W.u.)=0.00037 9 I $_\gamma$ : from (n,n' $\gamma$ ). Other: <60 for multiply placed transition in (n, $\gamma$ ), E=thermal. Mult.: D from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =yes from level scheme.
		1571.2 <sup>b</sup> 7	<23 <sup>b</sup>	3522.77 (2) <sup>+</sup>	(2) <sup>+</sup>	[E2]	3.33×10 <sup>-4</sup>	$\alpha(\text{K})=0.000196$ 3; $\alpha(\text{L})=2.10\times 10^{-5}$ 3; $\alpha(\text{M})=3.52\times 10^{-6}$ 5; $\alpha(\text{N})=4.43\times 10^{-7}$ 7; $\alpha(\text{O})=2.90\times 10^{-8}$ 4 B(E2)(W.u.)<3.5 E $_\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
		1606.2 <sup>bd</sup> 8	<22 <sup>b</sup>	3486.56 1 <sup>+</sup>	1 <sup>+</sup>			E $_\gamma$ : placement is questionable, if $J^\pi=(4^+)$ assignment to 5092 level is correct, as this transition would imply M3 multipolarity. E $_\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
		2358.08 19	100 2	2734.137 3 <sup>-</sup>	3 <sup>-</sup>	(E1)@	9.23×10 <sup>-4</sup>	$\alpha(\text{K})=5.33\times 10^{-5}$ 8; $\alpha(\text{L})=5.63\times 10^{-6}$ 8; $\alpha(\text{M})=9.44\times 10^{-7}$ 14; $\alpha(\text{N})=1.189\times 10^{-7}$ 17; $\alpha(\text{O})=7.86\times 10^{-9}$ 11 B(E1)(W.u.)=0.00020 5 Mult.: D from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =yes from level scheme.

Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)								
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$	Comments
5092.12	(4 <sup>+</sup> )	3256.44 21	24 3	1836.090	2 <sup>+</sup>	[E2]	$9.45 \times 10^{-4}$	$\alpha(\text{K})=5.34 \times 10^{-5}$ 8; $\alpha(\text{L})=5.66 \times 10^{-6}$ 8; $\alpha(\text{M})=9.49 \times 10^{-7}$ 14; $\alpha(\text{N})=1.196 \times 10^{-7}$ 17; $\alpha(\text{O})=7.93 \times 10^{-9}$ 11 B(E2)(W.u.)=0.12 3 $E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
5103.31	(7)	581.8 5	18 6	4521.43	(6) <sup>-</sup>	(D) <sup>#</sup>		
5113.06	(2 <sup>+</sup> ,3)	1083.6 3	100 6	4019.56	(6) <sup>-</sup>	D <sup>#</sup>		
		1074.12 8	50 4	4039.04	(3) <sup>+</sup>			
		1477.99 8	130 22	3635.09	(3) <sup>+</sup>			$E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
		1894.5 3	56 4	3218.489	2 <sup>+</sup>			
5123.8	(1,2 <sup>+</sup> )	2377.9 4	5.4 14	2734.137	3 <sup>-</sup>			$E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
		3276.80 9	100 4	1836.090	2 <sup>+</sup>	D <sup>@</sup>		
		3287.5 5	100.0 8	1836.090	2 <sup>+</sup>			
		5123.7 3	2.8 8	0	0 <sup>+</sup>			
5127.40	(2)	3291.1 1	100.0 8	1836.090	2 <sup>+</sup>			
		5127.8 2	4.1 8	0	0 <sup>+</sup>	(Q) <sup>@</sup>		
5136.95		1501.8 1	100	3635.09	(3) <sup>+</sup>	D(+Q) <sup>@</sup>		
		5137.8 5	<1	0	0 <sup>+</sup>			
5163.91	2 <sup>+</sup>	2007.7 <sup>d</sup> 1	100	3156.19	0 <sup>+</sup>	[E2]	$4.50 \times 10^{-4}$	$\alpha(\text{K})=0.0001228$ 18; $\alpha(\text{L})=1.311 \times 10^{-5}$ 19; $\alpha(\text{M})=2.20 \times 10^{-6}$ 3; $\alpha(\text{N})=2.77 \times 10^{-7}$ 4; $\alpha(\text{O})=1.82 \times 10^{-8}$ 3 B(E2)(W.u.)=15 4
5168.80?		1682.3 1	56 6	3486.56	1 <sup>+</sup>			
		1950.2 1	45 11	3218.489	2 <sup>+</sup>			
		2434.5 1	77 4	2734.137	3 <sup>-</sup>			
		3332.8 1	100 6	1836.090	2 <sup>+</sup>	D(+Q) <sup>@</sup>		
5170.1	(2 <sup>+</sup> )	5169.9 3	100	0	0 <sup>+</sup>	(E2)	$1.56 \times 10^{-3}$	$\alpha(\text{K})=2.62 \times 10^{-5}$ 4; $\alpha(\text{L})=2.76 \times 10^{-6}$ 4; $\alpha(\text{M})=4.63 \times 10^{-7}$ 7; $\alpha(\text{N})=5.84 \times 10^{-8}$ 9; $\alpha(\text{O})=3.88 \times 10^{-9}$ 6 B(E2)(W.u.)=0.14 7 Mult.: (Q) from $\gamma(\theta)$ in (n,n' $\gamma$ ), M2 excluded by comparison to RUL.
5253.92	(3 <sup>-</sup> )	2035.7 <sup>a</sup> 1	100 4	3218.489	2 <sup>+</sup>	[E1]	$7.24 \times 10^{-4}$	$\alpha(\text{K})=6.62 \times 10^{-5}$ 10; $\alpha(\text{L})=7.01 \times 10^{-6}$ 10; $\alpha(\text{M})=1.174 \times 10^{-6}$ 17; $\alpha(\text{N})=1.479 \times 10^{-7}$ 21 $\alpha(\text{O})=9.77 \times 10^{-9}$ 14 B(E1)(W.u.)=0.00087 22
		2519.6 2	22.5 14	2734.137	3 <sup>-</sup>			
		3417.5 1	18 6	1836.090	2 <sup>+</sup>	[E1]	$1.47 \times 10^{-3}$	$\alpha(\text{K})=3.19 \times 10^{-5}$ 5; $\alpha(\text{L})=3.36 \times 10^{-6}$ 5; $\alpha(\text{M})=5.64 \times 10^{-7}$ 8; $\alpha(\text{N})=7.10 \times 10^{-8}$ 10; $\alpha(\text{O})=4.71 \times 10^{-9}$ 7 B(E1)(W.u.)=3.3 $\times 10^{-5}$ 14
5263.06	(1 <sup>-</sup> ,2 <sup>+</sup> )	3426.9 2	100	1836.090	2 <sup>+</sup>			
5275.98		1283.6 <sup>a</sup> 1	18.8 18	3992.42	(0 <sup>+</sup> )			
		2541.8 1	100 7	2734.137	3 <sup>-</sup>			

Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)								
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$	Comments
5275.98	(1 <sup>-</sup> ,2 <sup>+</sup> )	3439.5 3	1.9 19	1836.090	2 <sup>+</sup>			
5307.53	(1)	1315.1 1	100	3992.42	(0 <sup>+</sup> )	(D) <sup>@</sup>		
5321.36	4 <sup>+</sup>	1052.90 <sup>b</sup> 12	<7.6 <sup>b</sup>	4268.70	(3 <sup>-</sup> ,4,5 <sup>-</sup> )			
		1368.67 3	100 15	3952.636	(4) <sup>-</sup>			
		1736.51 <sup>b</sup> 8	<48 <sup>b</sup>	3584.784	5 <sup>-</sup>			
		2103.14 10	4.4 5	3218.489	2 <sup>+</sup>			
5322.39	(2,3)	1095.4 <sup>a</sup> 1	47 6	4227.20	(3 <sup>-</sup> )			
		1687.2 1	100 6	3635.09	(3) <sup>+</sup>			
		2588.3 1	85 5	2734.137	3 <sup>-</sup>			
5370.5		267.1 3	100	5103.31	(7)			
5393.25	(2 <sup>+</sup> )	941.4 1	43 4	4451.97	(4) <sup>+</sup>	[E2]	6.67×10 <sup>-4</sup>	$\alpha(\text{K})=0.000590$ 9; $\alpha(\text{L})=6.45\times 10^{-5}$ 9; $\alpha(\text{M})=1.082\times 10^{-5}$ 16; $\alpha(\text{N})=1.355\times 10^{-6}$ 19; $\alpha(\text{O})=8.73\times 10^{-8}$ 13 B(E2)(W.u.)=2.2×10 <sup>2</sup> 9
		2174.6 1	100 6	3218.489	2 <sup>+</sup>			
		5393.2 <sup>d</sup>	61 8	0	0 <sup>+</sup>	[E2]	1.62×10 <sup>-3</sup>	$\alpha(\text{K})=2.46\times 10^{-5}$ 4; $\alpha(\text{L})=2.60\times 10^{-6}$ 4; $\alpha(\text{M})=4.35\times 10^{-7}$ 6; $\alpha(\text{N})=5.49\times 10^{-8}$ 8; $\alpha(\text{O})=3.65\times 10^{-9}$ 6 B(E2)(W.u.)=0.050 20
5396.0	(2 <sup>+</sup> )	5395.8 3	100	0	0 <sup>+</sup>	(E2)	1.62×10 <sup>-3</sup>	$\alpha(\text{K})=2.46\times 10^{-5}$ 4; $\alpha(\text{L})=2.60\times 10^{-6}$ 4; $\alpha(\text{M})=4.35\times 10^{-7}$ 6; $\alpha(\text{N})=5.48\times 10^{-8}$ 8; $\alpha(\text{O})=3.64\times 10^{-9}$ 6 B(E2)(W.u.)=0.030 +15-10 Mult.: Q from $\gamma(\theta)$ in (n,n' $\gamma$ ); M2 excluded by comparison to RUL.
5424.61	(3 <sup>-</sup> )	1404.98 <sup>d</sup> 5	450 70	4019.56	(6) <sup>-</sup>			$E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal. Tentative placement as transition would imply M3/E4 multipolarity if $J^\pi=(3^-)$ for 5424.61 level is correct. $E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
		1471.76 16	113 21	3952.636	(4) <sup>-</sup>			
		2690.64 14	100 3	2734.137	3 <sup>-</sup>			
		3588.7 2	60.5 22	1836.090	2 <sup>+</sup>	[E1]	1.54×10 <sup>-3</sup>	$\alpha(\text{K})=2.99\times 10^{-5}$ 5; $\alpha(\text{L})=3.15\times 10^{-6}$ 5; $\alpha(\text{M})=5.28\times 10^{-7}$ 8; $\alpha(\text{N})=6.66\times 10^{-8}$ 10; $\alpha(\text{O})=4.41\times 10^{-9}$ 7 B(E1)(W.u.)=7.E-6 4 $E_\gamma$ : observed only in (n,n' $\gamma$ ).
5427.6	(8)	324.3 3	100	5103.31	(7)	D <sup>#</sup>		
5427.71	(4 <sup>-</sup> ,5)	975.64 7	50 8	4451.97	(4) <sup>+</sup>			
		1158.95 11	31 6	4268.70	(3 <sup>-</sup> ,4,5 <sup>-</sup> )			
		1408.23 5	100 16	4019.56	(6) <sup>-</sup>			
		2693.41 <sup>b</sup> 13	<9.5 <sup>b</sup>	2734.137	3 <sup>-</sup>			
5472.88	(2 <sup>-</sup> ,3 <sup>-</sup> ,4 <sup>-</sup> )	2738.7 1	100	2734.137	3 <sup>-</sup>	M1,E2	0.00071 3	$\alpha(\text{K})=7.09\times 10^{-5}$ 11; $\alpha(\text{L})=7.53\times 10^{-6}$ 11; $\alpha(\text{M})=1.263\times 10^{-6}$ 19; $\alpha(\text{N})=1.592\times 10^{-7}$ 23

## Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)								
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$	Comments
$\alpha(\text{O})=1.055\times 10^{-8}$ 15 Mult.: from comparison to RUL.								
5485.6	1	5485.4 16	100	0	0 <sup>+</sup>	D <sup>@</sup>		
5498.7	(1,2 <sup>+</sup> )	5498.5 11	100	0	0 <sup>+</sup>			
5517.2	(1,2,3)	3681.0 3	100	1836.090	2 <sup>+</sup>	(D) <sup>@</sup>		
5518.23	4 <sup>+</sup>	1565.49 <sup>b</sup> 9	<100 <sup>b</sup>	3952.636	(4) <sup>-</sup>			
		2299.78 23	2.3 5	3218.489	2 <sup>+</sup>			
		2784.12 7	16.7 17	2734.137	3 <sup>-</sup>			
5542.20	(1)	3706.0 1	100.0 13	1836.090	2 <sup>+</sup>			
		5542.5 4	5.6 13	0	0 <sup>+</sup>	(D) <sup>@</sup>		
5583.3		3747.1 3	100	1836.090	2 <sup>+</sup>			
5590.32	(1 <sup>-</sup> ,2,3 <sup>+</sup> )	2103.2 2		3486.56	1 <sup>+</sup>			
		2856.0 7		2734.137	3 <sup>-</sup>			
		3754.7 2		1836.090	2 <sup>+</sup>			
5600.6	(1,2 <sup>+</sup> )	5600.4	100	0	0 <sup>+</sup>			
5655.3	(8)	1287.4 3	100	4367.94	(7 <sup>-</sup> )	D <sup>#</sup>		
5656.50	(2 <sup>+</sup> ,3,4 <sup>+</sup> )	1356.7 1	100 6	4299.52	4 <sup>+</sup>			
		3821.4 2	85 6	1836.090	2 <sup>+</sup>			
5678.34	(4) <sup>+</sup>	2944.1 2	35.5 23	2734.137	3 <sup>-</sup>	[E1]	1.24×10 <sup>-3</sup>	$\alpha(\text{K})=3.90\times 10^{-5}$ 6; $\alpha(\text{L})=4.12\times 10^{-6}$ 6; $\alpha(\text{M})=6.89\times 10^{-7}$ 10; $\alpha(\text{N})=8.69\times 10^{-8}$ 13; $\alpha(\text{O})=5.75\times 10^{-9}$ 8 B(E1)(W.u.)=0.00015 5
		3842.2 2	100.0 23	1836.090	2 <sup>+</sup>	[E2]	1.15×10 <sup>-3</sup>	$\alpha(\text{K})=4.11\times 10^{-5}$ 6; $\alpha(\text{L})=4.34\times 10^{-6}$ 6; $\alpha(\text{M})=7.28\times 10^{-7}$ 11; $\alpha(\text{N})=9.18\times 10^{-8}$ 13; $\alpha(\text{O})=6.09\times 10^{-9}$ 9 B(E2)(W.u.)=0.93 25
5689.00	3 <sup>+</sup> ,4 <sup>+</sup>	1669.0 <sup>d</sup> 5	3.5 12	4019.56	(6) <sup>-</sup>			$E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal. Tentative placement as transition would imply M2 or E3 multipolarity. $E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal. $E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
		1736.51 <sup>b</sup> 7	<100 <sup>b</sup>	3952.636	(4) <sup>-</sup>			
		2166.50 21	4.3 6	3522.77	(2 <sup>+</sup> )			
		2954.67 7	53 5	2734.137	3 <sup>-</sup>			
5691.3	1	5691.1	100	0	0 <sup>+</sup>	D		
5693.93	2 <sup>+</sup>	1394.5 1	27 7	4299.52	4 <sup>+</sup>	[E2]	3.31×10 <sup>-4</sup>	$\alpha(\text{K})=0.000248$ 4; $\alpha(\text{L})=2.68\times 10^{-5}$ 4; $\alpha(\text{M})=4.49\times 10^{-6}$ 7; $\alpha(\text{N})=5.64\times 10^{-7}$ 8; $\alpha(\text{O})=3.69\times 10^{-8}$ 6 B(E2)(W.u.)=8 4
		2960.2 2	57 5	2734.137	3 <sup>-</sup>	[E1]	1.25×10 <sup>-3</sup>	$\alpha(\text{K})=3.87\times 10^{-5}$ 6; $\alpha(\text{L})=4.08\times 10^{-6}$ 6; $\alpha(\text{M})=6.84\times 10^{-7}$ 10; $\alpha(\text{N})=8.62\times 10^{-8}$ 12; $\alpha(\text{O})=5.71\times 10^{-9}$ 8 B(E1)(W.u.)=4.9×10 <sup>-5</sup> 15
		3857.2 2	100 9	1836.090	2 <sup>+</sup>			
		5693.1 3	43 7	0	0 <sup>+</sup>	E2	1.69×10 <sup>-3</sup>	$\alpha(\text{K})=2.28\times 10^{-5}$ 4; $\alpha(\text{L})=2.40\times 10^{-6}$ 4; $\alpha(\text{M})=4.02\times 10^{-7}$ 6;

Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$	Comments
								$\alpha(\text{N})=5.07\times 10^{-8}$ 8; $\alpha(\text{O})=3.37\times 10^{-9}$ 5 B(E2)(W.u.)=0.011 4 Mult.: Q from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =no from level scheme.
5710.78 5730.18	4 <sup>+</sup>	3874.6 1 3894.0 2	100 100	1836.090 1836.090	2 <sup>+</sup> 2 <sup>+</sup>	[E2]	1.17 $\times 10^{-3}$	$\alpha(\text{K})=4.02\times 10^{-5}$ 6; $\alpha(\text{L})=4.25\times 10^{-6}$ 6; $\alpha(\text{M})=7.13\times 10^{-7}$ 10; $\alpha(\text{N})=8.99\times 10^{-8}$ 13; $\alpha(\text{O})=5.96\times 10^{-9}$ 9 B(E2)(W.u.)<0.14
5772.23	0 <sup>+</sup>	1736.7 1	100 14	4035.52	2 <sup>+</sup>	[E2]	3.66 $\times 10^{-4}$	$\alpha(\text{K})=0.0001610$ 23; $\alpha(\text{L})=1.724\times 10^{-5}$ 25; $\alpha(\text{M})=2.89\times 10^{-6}$ 4; $\alpha(\text{N})=3.64\times 10^{-7}$ 5; $\alpha(\text{O})=2.39\times 10^{-8}$ 4 B(E2)(W.u.)=36 18
		3935.8 6	69 14	1836.090	2 <sup>+</sup>	[E2]	1.19 $\times 10^{-3}$	$\alpha(\text{K})=3.96\times 10^{-5}$ 6; $\alpha(\text{L})=4.18\times 10^{-6}$ 6; $\alpha(\text{M})=7.01\times 10^{-7}$ 10; $\alpha(\text{N})=8.84\times 10^{-8}$ 13; $\alpha(\text{O})=5.86\times 10^{-9}$ 9 B(E2)(W.u.)=0.42 21
5800.71	(1 <sup>-</sup> ,2,3 <sup>+</sup> )	2314.2 1 3066.2 2		3486.56 2734.137	1 <sup>+</sup> 3 <sup>-</sup>			
5812.08	3 <sup>-</sup>	1513.5 6	26 13	4299.52	4 <sup>+</sup>	[E1]	3.75 $\times 10^{-4}$	$\alpha(\text{K})=0.0001057$ 15; $\alpha(\text{L})=1.123\times 10^{-5}$ 16; $\alpha(\text{M})=1.88\times 10^{-6}$ 3; $\alpha(\text{N})=2.37\times 10^{-7}$ 4 $\alpha(\text{O})=1.559\times 10^{-8}$ 22 B(E1)(W.u.)=0.0012 11 E $\gamma$ : observed only in (n, $\gamma$ ), E=thermal. E $\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
		1643.1 7 2177.22 21	20 10 39 6	4170.41 3635.09	(3 <sup>-</sup> ) (3 <sup>+</sup> )	[E1]	8.14 $\times 10^{-4}$	$\alpha(\text{K})=5.99\times 10^{-5}$ 9; $\alpha(\text{L})=6.34\times 10^{-6}$ 9; $\alpha(\text{M})=1.062\times 10^{-6}$ 15; $\alpha(\text{N})=1.337\times 10^{-7}$ 19; $\alpha(\text{O})=8.84\times 10^{-9}$ 13 B(E1)(W.u.)=0.0006 5 E $\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
		3077.94 9 3975.66 14	88 5 100 10	2734.137 1836.090	3 <sup>-</sup> 2 <sup>+</sup>	[E1]	1.69 $\times 10^{-3}$	$\alpha(\text{K})=2.62\times 10^{-5}$ 4; $\alpha(\text{L})=2.76\times 10^{-6}$ 4; $\alpha(\text{M})=4.62\times 10^{-7}$ 7; $\alpha(\text{N})=5.83\times 10^{-8}$ 9; $\alpha(\text{O})=3.87\times 10^{-9}$ 6 B(E1)(W.u.)=0.00026 19
		5811.79 15	23.5 14	0	0 <sup>+</sup>	[E3]	1.43 $\times 10^{-3}$	$\alpha(\text{K})=2.91\times 10^{-5}$ 4; $\alpha(\text{L})=3.08\times 10^{-6}$ 5; $\alpha(\text{M})=5.17\times 10^{-7}$ 8; $\alpha(\text{N})=6.52\times 10^{-8}$ 10; $\alpha(\text{O})=4.33\times 10^{-9}$ 6 B(E3)(W.u.)=1.3 $\times 10^2$ 10 E $\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
5831.5	(1,2 <sup>+</sup> )	5831.3 5	100	0	0 <sup>+</sup>			
5835.58	(3 <sup>-</sup> ,4 <sup>+</sup> )	1608.2 <sup>b</sup> 8 1665.31 13 2250.72 11 2349.21 <sup>d</sup> 20	<26 <sup>b</sup> 100 17 36 4 13.7 21	4227.20 4170.41 3584.784 3486.56	(3 <sup>-</sup> ) (3 <sup>-</sup> ) 5 <sup>-</sup> 1 <sup>+</sup>			E $\gamma$ : observed only in (n, $\gamma$ ), E=thermal. E $\gamma$ : observed only in (n, $\gamma$ ), E=thermal. E $\gamma$ : observed only in (n, $\gamma$ ), E=thermal. E $\gamma$ : placement is questionable, if $J^\pi=(4^+)$ assignment to 5835.58 level is correct, as this transition would imply M3 multipolarity. E $\gamma$ : observed only in (n, $\gamma$ ), E=thermal.



## Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)								
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$	Comments
5835.58	(3 <sup>-</sup> ,4 <sup>+</sup> )	3999.64 20	26 4	1836.090	2 <sup>+</sup>		1	
5866.0	(1,2 <sup>+</sup> )	5865.8 4	100	0	0 <sup>+</sup>			
5951.09	(4 <sup>-</sup> )	1510.3 3	37 9	4440.72				
		1723.48 15	46 8	4227.20	(3 <sup>-</sup> )			
		1911.94 12	42 7	4039.04	(3) <sup>+</sup>			
		1931.33 16	26 5	4019.56	(6) <sup>-</sup>			
		1998.46 9	80 12	3952.636	(4) <sup>-</sup>			
		2315.7 <sup>b</sup> 3	<23.0 <sup>b</sup>	3635.09	(3) <sup>+</sup>			
		2366.42 7	100 10	3584.784	5 <sup>-</sup>			
5990.0	(1,2 <sup>+</sup> )	4154.0 4	100 3	1836.090	2 <sup>+</sup>			$E_\gamma, I_\gamma$ : from (n,n' $\gamma$ ).
		5989.1 7	71 3	0	0 <sup>+</sup>			$E_\gamma, I_\gamma$ : from (n,n' $\gamma$ ).
5996.24	4 <sup>+</sup>	1150.55 16	109 23	4845.62	(3) <sup>-</sup>	[E1]	$2.11 \times 10^{-4}$	$\alpha(\text{K})=0.0001701$ 24; $\alpha(\text{L})=1.81 \times 10^{-5}$ 3; $\alpha(\text{M})=3.04 \times 10^{-6}$ 5; $\alpha(\text{N})=3.82 \times 10^{-7}$ 6; $\alpha(\text{O})=2.51 \times 10^{-8}$ 4 $\text{B}(\text{E1})(\text{W.u.})=0.0020$ 9 $E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal. $E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal. $E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal. $E_\gamma$ : tentative as placement would require M2+E3 multipolarity for the transition.
		1727.57 24	77 18	4268.70	(3 <sup>-</sup> ,4,5 <sup>-</sup> )			
		1977.17 <sup>d</sup> 20	51 10	4019.56	(6) <sup>-</sup>			
		2043.5	46 1	3952.636	(4) <sup>-</sup>	[E1]	$7.29 \times 10^{-4}$	$\alpha(\text{K})=6.59 \times 10^{-5}$ 10; $\alpha(\text{L})=6.97 \times 10^{-6}$ 10; $\alpha(\text{M})=1.168 \times 10^{-6}$ 17; $\alpha(\text{N})=1.470 \times 10^{-7}$ 21 $\alpha(\text{O})=9.71 \times 10^{-9}$ 14 $\text{B}(\text{E1})(\text{W.u.})=0.00015$ 6 $E_\gamma$ : observed only in (n,n' $\gamma$ ).
		2473.49 15	33 5	3522.77	(2 <sup>+</sup> )	[E2]	$6.33 \times 10^{-4}$	$\alpha(\text{K})=8.47 \times 10^{-5}$ 12; $\alpha(\text{L})=9.01 \times 10^{-6}$ 13; $\alpha(\text{M})=1.510 \times 10^{-6}$ 22; $\alpha(\text{N})=1.90 \times 10^{-7}$ 3; $\alpha(\text{O})=1.257 \times 10^{-8}$ 18 $\text{B}(\text{E2})(\text{W.u.})=0.7$ 3 $E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal.
		2509.49 <sup>d</sup> 17	25 4	3486.56	1 <sup>+</sup>			$E_\gamma$ : observed only in (n, $\gamma$ ), E=thermal. $E_\gamma$ : tentative as placement would require M3+E4 multipolarity for the transition.
		3261.8 2	98 7	2734.137	3 <sup>-</sup>	[E1]	$1.39 \times 10^{-3}$	$\alpha(\text{K})=3.40 \times 10^{-5}$ 5; $\alpha(\text{L})=3.58 \times 10^{-6}$ 5; $\alpha(\text{M})=6.00 \times 10^{-7}$ 9; $\alpha(\text{N})=7.56 \times 10^{-8}$ 11; $\alpha(\text{O})=5.01 \times 10^{-9}$ 7 $\text{B}(\text{E1})(\text{W.u.})=8.\text{E}-5$ 3 $E_\gamma$ : observed only in (n,n' $\gamma$ ).
		4160.05 13	100 5	1836.090	2 <sup>+</sup>	[E2]	$1.26 \times 10^{-3}$	$\alpha(\text{K})=3.63 \times 10^{-5}$ 5; $\alpha(\text{L})=3.84 \times 10^{-6}$ 6; $\alpha(\text{M})=6.43 \times 10^{-7}$ 9; $\alpha(\text{N})=8.11 \times 10^{-8}$ 12; $\alpha(\text{O})=5.38 \times 10^{-9}$ 8 $\text{B}(\text{E2})(\text{W.u.})=0.16$ 6 $\text{B}(\text{E1})(\text{W.u.})=0.00113$ 8
6010.0	1 <sup>-</sup>	6009.8	100	0	0 <sup>+</sup>	E1		
6011.15	(2 <sup>+</sup> )	934.50 3	100 15	5076.65				

## Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)								
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$	Comments
6011.15	(2 <sup>+</sup> )	1595.6 <sup>b</sup> 6 1972.7 5 4174.89 10	<5.4 <sup>b</sup> 1.5 5 18 9	4413.96 4039.04 1836.090	(2) <sup>+</sup> (3) <sup>+</sup> 2 <sup>+</sup>			
6011.5?	(3 <sup>-</sup> )	2058.7 <sup>d</sup> 3 2856.0 <sup>a</sup> 7		3952.636 3156.19	(4) <sup>-</sup> 0 <sup>+</sup>			
6052.2	(2 <sup>+</sup> )	6052.0 3	100	0	0 <sup>+</sup>			
6053.86	(2 <sup>+</sup> )	2567.0 3 3319.9 3 4218.2 19		3486.56 2734.137 1836.090	1 <sup>+</sup> 3 <sup>-</sup> 2 <sup>+</sup>			
6074.5?		2856.0 <sup>a</sup> 7	100	3218.489	2 <sup>+</sup>			
6099.01	(3,4 <sup>+</sup> )	2146.5 4262.8 2		3952.636 1836.090	(4) <sup>-</sup> 2 <sup>+</sup>	D <sup>@</sup>		
6101.4	(1,2 <sup>+</sup> )	6101.2 3	100	0	0 <sup>+</sup>			
6106.00	(1,2,3)	2070.1 4 4270.0 3		4035.52 1836.090	2 <sup>+</sup> 2 <sup>+</sup>	(D)		
6125.20		1857.0 4 2172.51 10 2602.3 3 3391.03 9	22 6 52 6 6.8 14 100 5	4268.70 3952.636 3522.77 2734.137	(3 <sup>-</sup> ,4,5 <sup>-</sup> ) (4) <sup>-</sup> (2 <sup>+</sup> ) 3 <sup>-</sup>			
6126.6		2091.1 4	100	4035.52	2 <sup>+</sup>			
6132.92		2180.3 <sup>a</sup> 2 4296.6 3		3952.636 1836.090	(4) <sup>-</sup> 2 <sup>+</sup>			
6153.50	(1 <sup>-</sup> )	4317.3 2	100	1836.090	2 <sup>+</sup>	(E1) <sup>@</sup>	0.00181	$\alpha(\text{K})=2.36\times 10^{-5}$ 4; $\alpha(\text{L})=2.48\times 10^{-6}$ 4; $\alpha(\text{M})=4.16\times 10^{-7}$ 6; $\alpha(\text{N})=5.24\times 10^{-8}$ 8; $\alpha(\text{O})=3.48\times 10^{-9}$ 5 B(E1)(W.u.)>1.4×10 <sup>-5</sup> Mult.: (D) from $\gamma(\theta)$ in (n,n' $\gamma$ ), $\Delta\pi$ =yes from level scheme.
6168.1	(1,2,3)	4331.9 6	100	1836.090	2 <sup>+</sup>	(D) <sup>@</sup>		
6173.06	(1,2 <sup>+</sup> )	2180.3 <sup>a</sup> 2 2954.6 1		3992.42 3218.489	(0 <sup>+</sup> ) 2 <sup>+</sup>			
6200.63	1 <sup>+</sup>	6200.4 2	100	0	0 <sup>+</sup>	M1		B(M1)(W.u.)=0.026 4 $E_\gamma, I_\gamma$ : from $(\gamma, \gamma')$ .
6213.9	1 <sup>-</sup>	4377.8	2.4 4	1836.090	2 <sup>+</sup>	[E1]	0.00184	$\alpha(\text{K})=2.32\times 10^{-5}$ 4; $\alpha(\text{L})=2.44\times 10^{-6}$ 4; $\alpha(\text{M})=4.09\times 10^{-7}$ 6; $\alpha(\text{N})=5.15\times 10^{-8}$ 8; $\alpha(\text{O})=3.42\times 10^{-9}$ 5 B(E1)(W.u.)=0.00039 7 $E_\gamma, I_\gamma$ : from $(\gamma, \gamma')$ .
		6213.6	100	0	0 <sup>+</sup>	E1		B(E1)(W.u.)=0.0056 4 $E_\gamma, I_\gamma$ : from $(\gamma, \gamma')$ .
6235.50	(7)	1132.1 3 1713.9 3 1867.4 3	88 8 100 17 94 8	5103.31 4521.43 4367.94	(7) (6) <sup>-</sup> (7 <sup>-</sup> )	D		

# Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)							
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	Comments
6249.26	(2 <sup>-</sup> ,3 <sup>+</sup> )	560.9 6	100 24	5689.00	3 <sup>+</sup> ,4 <sup>+</sup>		
		1980.13 19	41 8	4268.70	(3 <sup>-</sup> ,4,5 <sup>-</sup> )		
		2020.6 5	20 8	4227.20	(3 <sup>-</sup> )		
		2079.4 3	22 4	4170.41	(3 <sup>-</sup> )		
		2297.4 6	10 4	3952.636	(4) <sup>-</sup>		
		2763.7 5	6.9 17	3486.56	1 <sup>+</sup>		
		3030.84 21	29 4	3218.489	2 <sup>+</sup>		
6257.85	3 <sup>+</sup>	4413.7 <sup>b</sup> 3	<63 <sup>b</sup>	1836.090	2 <sup>+</sup>		
		1742.74 24	100 21	4514.54	<sup>+</sup>		
		1806.22 25	79 18	4451.97	(4) <sup>+</sup>		
		2238.9 <sup>bd</sup> 3	<75 <sup>b</sup>	4019.56	(6) <sup>-</sup>		E <sub>γ</sub> : tentative placement as transition would imply E3/M4 multipolarity if J <sup>π</sup> =3 <sup>+</sup> for 6257.85 level is correct.
6333.44	1 <sup>-</sup>	2770.9 4	20 5	3486.56	1 <sup>+</sup>		
6346.45	1 <sup>-</sup>	6333.2 1	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0084 6
6367.0	(1,2 <sup>+</sup> )	6346.2 2	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00096 7
6382.0	1	6366.8	100	0	0 <sup>+</sup>		
6507.74	(4 <sup>+</sup> )	6381.8	100	0	0 <sup>+</sup>	D	
		1662.15 16	46 8	4845.62	(3) <sup>-</sup>		
		2055.4 <sup>b</sup> 4	<11.0 <sup>b</sup>	4451.97	(4) <sup>+</sup>		
		2067.5 3	12.3 21	4440.72			
		2093.4 3	30 10	4413.96	(2) <sup>+</sup>		
		2208.41 13	17.4 23	4299.52	4 <sup>+</sup>		
		2238.9 <sup>b</sup> 3	<17.0 <sup>b</sup>	4268.70	(3 <sup>-</sup> ,4,5 <sup>-</sup> )		
		2337.56 19	8.4 13	4170.41	(3 <sup>-</sup> )		
		2469.2 7	100 10	4039.04	(3) <sup>+</sup>		
		3773.38 10	56 3	2734.137	3 <sup>-</sup>		
		1507.30 <sup>b</sup> 21	<100 <sup>b</sup>	5076.65			
		1571.2 <sup>b</sup> 7	<40 <sup>b</sup>	5010.59	(3,4 <sup>+</sup> )		
		2169.62 18	53 7	4413.96	(2) <sup>+</sup>		
6583.70	(1 <sup>-</sup> ,2,3 <sup>+</sup> )	2315.7 <sup>b</sup> 3	<47 <sup>b</sup>	4268.70	(3 <sup>-</sup> ,4,5 <sup>-</sup> )		
		2544.43 19	35 5	4039.04	(3) <sup>+</sup>		
		3097.15 22	21 3	3486.56	1 <sup>+</sup>		
		3849.53 11	48 3	2734.137	3 <sup>-</sup>		
		4747.32 12	46 3	1836.090	2 <sup>+</sup>		
		6591.4 9	100	0	0 <sup>+</sup>		
		6591.7	1			D	
6612.75	2 <sup>-</sup> ,3 <sup>-</sup>	1768.0 4	67 18	4845.62	(3) <sup>-</sup>		
		2573.23 19	55 7	4039.04	(3) <sup>+</sup>		
		2660.22 8	100 11	3952.636	(4) <sup>-</sup>		
		3125.4 3	55 13	3486.56	1 <sup>+</sup>		
6692.46	(3 <sup>+</sup> ,2 <sup>+</sup> )	2241.3 6	22 8	4451.97	(4) <sup>+</sup>		

Adopted Levels, Gammas (continued) $\gamma(^{88}\text{Sr})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	Comments
6692.46	(3 <sup>+</sup> ,2 <sup>+</sup> )	3205.42 21	28 3	3486.56	1 <sup>+</sup>		
		3958.36 11	100 6	2734.137	3 <sup>-</sup>		
6710.4	1	4874.2	42 11	1836.090	2 <sup>+</sup>	D	
		6710.0	100	0	0 <sup>+</sup>	D	
6806.89	(4 <sup>+</sup> )	1694.7 4	30 10	5113.06	(2 <sup>+</sup> ,3)		
		1730.50 17	100 18	5076.65			
		2768.16 17	32 4	4039.04	(3 <sup>+</sup> )		
		3222.14 11	60 4	3584.784	5 <sup>-</sup>		
		4072.41 16	22.2 16	2734.137	3 <sup>-</sup>		
		4970.82 25	10.9 16	1836.090	2 <sup>+</sup>		
6840.64	(8)	605.1 1	100 4	6235.50	(7)	D <sup>#</sup>	
		1470.1 3	23 5	5370.5			
		2153.4 3	30 4	4687.38	(7)	D <sup>#</sup>	
		2473.3 5	11.2 22	4367.94	(7 <sup>-</sup> )		
6854.6	1	6854.3 3	100	0	0 <sup>+</sup>	D	
6916.68	(3 <sup>-</sup> ,2 <sup>+</sup> )	1595.6 <sup>b</sup> 6	<100 <sup>b</sup>	5321.36	4 <sup>+</sup>		
		2070.5 3	46 8	4845.62	(3 <sup>-</sup> )		
		2647.64 13	63 8	4268.70	(3 <sup>-</sup> ,4,5 <sup>-</sup> )		
		4182.52 18	22.5 19	2734.137	3 <sup>-</sup>		
		6915.6 7	6.3 13	0	0 <sup>+</sup>		
6987	1 <sup>-</sup>	6987.6 2	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00124 11
7089.11	1 <sup>-</sup>	7088.8 1	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0088 6
7119.3	(10)	1464.0 1	100	5655.3	(8)	Q <sup>#</sup>	
7129.3		1474.0 6	100	5655.3	(8)		
7138.84	(4 <sup>+</sup> )	1449.77 17	100 22	5689.00	3 <sup>+</sup> ,4 <sup>+</sup>		
		2127.9 3	6.6 16	5010.59	(3,4 <sup>+</sup> )		
		3099.76 20	10.9 14	4039.04	(3 <sup>+</sup> )		
		3554.02 10	24.8 14	3584.784	5 <sup>-</sup>		
		3616.17 17	90 7	3522.77	(2 <sup>+</sup> )		
		4404.62 20	5.2 5	2734.137	3 <sup>-</sup>		
		5302.61 16	35 3	1836.090	2 <sup>+</sup>		
7169.21	1	7168.9 2	100	0	0 <sup>+</sup>	D	
7207.88	(3,4 <sup>+</sup> ,2 <sup>+</sup> )	2094.8 4	1.0×10 <sup>2</sup> 5	5113.06	(2 <sup>+</sup> ,3)		
		2693.41 <sup>b</sup> 13	<84 <sup>b</sup>	4514.54	+		
		2793.96 22	27 5	4413.96	(2 <sup>+</sup> )		
		3989.11 12	84 5	3218.489	2 <sup>+</sup>		
		5371.59 14	63 4	1836.090	2 <sup>+</sup>		
7281.8	1 <sup>-</sup>	7281.5 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00161 15
7299.9	(1) <sup>-</sup>	7299.6 3	100	0	0 <sup>+</sup>	(E1)	B(E1)(W.u.)=0.00079 12
7330.55	(9)	489.9 1	100 4	6840.64	(8)	D <sup>#</sup>	

Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)							Comments
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	
7330.55	(9)	1902.9 3	13.3 18	5427.6	(8)		
7434.2	(10)	1778.9 1	100	5655.3	(8)	Q <sup>#</sup>	
7492.8	1 <sup>-</sup>	7492.5 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00033 10
7533.95	1 <sup>-</sup>	7533.6 2	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00250 24
7573.20	(3,4 <sup>+</sup> ,2 <sup>+</sup> )	1323.95 6	100 16	6249.26	(2 <sup>-</sup> ,3 <sup>+</sup> )		
		1761.6 3	7.1 17	5812.08	3 <sup>-</sup>		
		2055.4 <sup>b</sup> 4	<4.8 <sup>b</sup>	5518.23	4 <sup>+</sup>		
		2145.72 20	12.6 23	5427.71	(4 <sup>-</sup> ,5)		
		2147.6 4	6.5 21	5424.61	(3 <sup>-</sup> )		
		3158.84 13	6.4 5	4413.96	(2) <sup>+</sup>		
		4839.7 5	1.4 3	2734.137	3 <sup>-</sup>		
		5736.55 19	6.3 6	1836.090	2 <sup>+</sup>		
7591.4	1 <sup>-</sup>	7591.0 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00086 15
7641.86	(10)	311.3 1	100 4	7330.55	(9)	D <sup>#</sup>	
		522.7 5	10.9 11	7119.3	(10)	(D) <sup>#</sup>	
7774.8	(11)	340.5 3	100 4	7434.2	(10)	D <sup>#</sup>	
		655.4 3	98 5	7119.3	(10)	D <sup>#</sup>	
7807.8	1 <sup>-</sup>	7807.4 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00133 20
7838.27	1 <sup>-</sup>	7837.9 2	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0032 4
7877.3	(1) <sup>-</sup>	7876.9 3	100	0	0 <sup>+</sup>	(E1)	B(E1)(W.u.)=0.00108 19
7908.76	(11)	266.9 1	100	7641.86	(10)	(D) <sup>#</sup>	
7964.19	1 <sup>-</sup>	7963.8 2	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00218 22
7987.59	1 <sup>-</sup>	7987.2 2	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00129 18
8040.79	1 <sup>-</sup>	8040.4 1	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0048 5
8094.8	(12)	319.6 <sup>c</sup> 1	100 <sup>c</sup> 4	7774.8	(11)	(D) <sup>#</sup>	
		661.3 <sup>d</sup> 6	51 4	7434.2	(10)		E <sub>γ</sub> : seen only in <sup>176</sup> Yb( <sup>28</sup> Si,F <sub>γ</sub> ).
8109.5	1 <sup>-</sup>	8109.1 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00119 20
8180.7	1 <sup>-</sup>	8180.3 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00130 17
8191.11	1 <sup>-</sup>	8190.7 2	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00189 23
8215.31	1 <sup>-</sup>	8214.9 2	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00176 21
8271.5	1 <sup>-</sup>	8271.1 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00112 19
8276.1	(13)	181.4 3	100	8094.8	(12)	D <sup>#</sup>	
8325.7	1 <sup>-</sup>	8325.3 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00152 24
8336.3	(12)	241.6 3	100 9	8094.8	(12)	(D) <sup>#</sup>	
		561.3 3	88 6	7774.8	(11)	(D) <sup>#</sup>	
8374.9?		1255.5 <sup>d</sup> 5	100	7119.3	(10)		
8375.8	1	8375.4 6	100	0	0 <sup>+</sup>	D	
8407.0	1	8406.6 4	100	0	0 <sup>+</sup>	D	

Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)							Comments
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	
8437.2	(12)	528.4 3	100	7908.76	(11)	D <sup>#</sup>	
8453.4	1 <sup>-</sup>	8453.0 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0028 5
8469.0	1 <sup>-</sup>	8468.6 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00091 18
8500.8	1	8500.4 3	100	0	0 <sup>+</sup>	D	
8517.9		241.8 6	100	8276.1	(13)		
8518.8	1 <sup>-</sup>	8518.4 4	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00083 19
8553.0?		8552.6 9	100	0	0 <sup>+</sup>		
8561.3?		8560.9 6	100	0	0 <sup>+</sup>		
8580.6?		8580.2 5	100	0	0 <sup>+</sup>		
8588.8		8588.3 4	100	0	0 <sup>+</sup>		
8626.3		8625.8 10	100	0	0 <sup>+</sup>		
8668.7	1	8668.2 6	100	0	0 <sup>+</sup>	D	
8682.0	1	8681.5 6	100	0	0 <sup>+</sup>	D	
8713.7	1 <sup>-</sup>	8713.2 9	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0009 5
8735.8		8735.3 9	100	0	0 <sup>+</sup>		
8754.6	1	8754.1 8	100	0	0 <sup>+</sup>	D	
8764.7		8764.2 5	100	0	0 <sup>+</sup>		
8779.8		8779.3 6	100	0	0 <sup>+</sup>		
8791.9	1	8791.4 6	100	0	0 <sup>+</sup>	D	
8840.1		8839.6 4	100	0	0 <sup>+</sup>		
8850.6		8850.1 12	100	0	0 <sup>+</sup>		
8874.4	1	8873.9 5	100	0	0 <sup>+</sup>	D	
8928.5	1 <sup>-</sup>	8928.0 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0023 4
8935.9	(13)	560.9 5	≈9.8	8374.9?			
		599.5 3	100 5	8336.3	(12)	D <sup>#</sup>	
		659.8 3	46 3	8276.1	(13)	(D) <sup>#</sup>	
		841.2 3	46 3	8094.8	(12)	(D) <sup>#</sup>	
8980.8		8980.3 6	100	0	0 <sup>+</sup>		
9019.2		9018.7 6	100	0	0 <sup>+</sup>		
9043.6	1 <sup>-</sup>	7207.3 5	29 8	1836.090	2 <sup>+</sup>		
		9043.0 5	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0011 3
9069.7	1 <sup>-</sup>	9069.2 6	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00075 14
9078.3	1 <sup>-</sup>	9077.8 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00124 20
9098.3	1	9097.8 7	100	0	0 <sup>+</sup>	D	
9116.3		9115.8 5	100	0	0 <sup>+</sup>		
9125.1	1	9124.6 3	100	0	0 <sup>+</sup>	D	
9148.31	1 <sup>-</sup>	9147.8 2	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0024 3
9191.42	1 <sup>-</sup>	7355.1 2	16 3	1836.090	2 <sup>+</sup>		
		9190.8 2	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0031 6
9214.4	1	9213.9 7	100	0	0 <sup>+</sup>	D	
9255.2	1	9254.7 9	100	0	0 <sup>+</sup>	D	

Adopted Levels, Gammas (continued) $\gamma(^{88}\text{Sr})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	Comments
9305.7	1 <sup>-</sup>	9305.2 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0027 4
9341.1	1 <sup>-</sup>	9340.6 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00076 13
9384.6	1	9384.1 7	100	0	0 <sup>+</sup>	D	
9393.3	1	9392.8 5	100	0	0 <sup>+</sup>	D	
9402.4	1	9401.9 5	100	0	0 <sup>+</sup>	D	
9410.1	(13)	972.9 5	100	8437.2	(12)	D <sup>#</sup>	
9431.8	1	9431.3 10	100	0	0 <sup>+</sup>	D	
9445.5	1 <sup>-</sup>	9445.0 4	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0025 4
9470.5	(1 <sup>-</sup> )	9470.0 4	100	0	0 <sup>+</sup>	(E1)	B(E1)(W.u.)=0.00155 24
9478.8	1 <sup>(-)</sup>	7642.5 5	14 4	1836.090	2 <sup>+</sup>		
		9478.2 5	100	0	0 <sup>+</sup>	(E1)	B(E1)(W.u.)=0.0011 3
9497.05	1 <sup>-</sup>	9496.5 2	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=9.1×10 <sup>-5</sup> 11
9528.3	(14)	592.4 1	100	8935.9	(13)	D <sup>#</sup>	
9550.8		9550.2 7	100	0	0 <sup>+</sup>		
9568.3	1	9567.7 5	100	0	0 <sup>+</sup>	D	
9576.8		9576.2 11	100	0	0 <sup>+</sup>		
9597.9	1	9597.3 11	100	0	0 <sup>+</sup>	D	
9616.3	1	9615.7 6	100	0	0 <sup>+</sup>	D	
9646.1		9645.5 8	100	0	0 <sup>+</sup>		
9704.1	1 <sup>-</sup>	9703.5 5	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0016 4
9728.2		9727.6 18	100	0	0 <sup>+</sup>		
9738.1	1	9737.5 16	100	0	0 <sup>+</sup>	D	
9746.0	1 <sup>-</sup>	9745.4 6	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.0021 4
9804.7	1	9804.1 9	100	0	0 <sup>+</sup>	D	
9816.5	1 <sup>-</sup>	9815.9 3	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00093 17
9881.2	1 <sup>(-)</sup>	9880.6 4	100	0	0 <sup>+</sup>	(E1)	B(E1)(W.u.)=0.00136 21
9944.1	1 <sup>-</sup>	9943.5 8	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00076 14
9953.3		9952.7 5	100	0	0 <sup>+</sup>		
9965.8	1 <sup>(-)</sup>	9965.2 6	100	0	0 <sup>+</sup>	(E1)	B(E1)(W.u.)=0.00066 12
9977.9	(15)	449.6 3	100	9528.3	(14)	D <sup>#</sup>	
10056.3	1	10055.7 4	100	0	0 <sup>+</sup>	D	
10089.2		10088.6 10	100	0	0 <sup>+</sup>		
10106.9	1	10106.3 8	100	0	0 <sup>+</sup>	D	
10128.2		10127.6 7	100	0	0 <sup>+</sup>		
10139.5		10138.9 8	100	0	0 <sup>+</sup>		
10150.3		10149.7 8	100	0	0 <sup>+</sup>		
10184.0		10183.4 4	100	0	0 <sup>+</sup>		
10248.6	1	10248.0 4	100	0	0 <sup>+</sup>	D	
10288.6	1 <sup>(-)</sup>	10288.0 7	100	0	0 <sup>+</sup>	(E1)	B(E1)(W.u.)=0.00070 14
10297.7		10297.1 13	100	0	0 <sup>+</sup>		

Adopted Levels, Gammas (continued)

$\gamma(^{88}\text{Sr})$ (continued)							Comments
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	
10326.7		10326.0 6	100	0	0 <sup>+</sup>		
10341.3		10340.6 6	100	0	0 <sup>+</sup>		
10372.5		10371.8 5	100	0	0 <sup>+</sup>		
10406.6		10405.9 14	100	0	0 <sup>+</sup>		
10421.1		10420.4 10	100	0	0 <sup>+</sup>		
10453.2		10452.5 12	100	0	0 <sup>+</sup>		
10481.1		10480.4 9	100	0	0 <sup>+</sup>		
10512.1		10511.4 19	100	0	0 <sup>+</sup>		
10522.7	1	10522.0 5	100	0	0 <sup>+</sup>	D	
10550.3	1	10549.6 5	100	0	0 <sup>+</sup>	D	
10600.2		10599.5 16	100	0	0 <sup>+</sup>		
10608.7		10608.0 14	100	0	0 <sup>+</sup>		
10644.1	1 <sup>-</sup>	10643.4 8	100	0	0 <sup>+</sup>	E1	B(E1)(W.u.)=0.00095 19
10657.8	1	10657.1 16	100	0	0 <sup>+</sup>	D	
10698.4		10697.7 8	100	0	0 <sup>+</sup>		
10726.4	1	10725.7 15	100	0	0 <sup>+</sup>	D	
10739.4	(16)	761.5 3	100	9977.9	(15)	D <sup>#</sup>	
10744.9		10744.2 8	100	0	0 <sup>+</sup>		
10759.7		10759.0 16	100	0	0 <sup>+</sup>		
10767.1	1	10766.4 15	100	0	0 <sup>+</sup>	D	
10783.6	1	10782.9 5	100	0	0 <sup>+</sup>	D	
10804.8		8968.3 6	26 11	1836.090	2 <sup>+</sup>		
		10804.0 6	100	0	0 <sup>+</sup>		
10857.4		7370.6 6	52 18	3486.56	1 <sup>+</sup>		
		10856.6 6	100	0	0 <sup>+</sup>		
10888.4		7669.7 13	33 14	3218.489	2 <sup>+</sup>		
		10887.6 13	100	0	0 <sup>+</sup>		
10914.6	1	10913.9 5	100	0	0 <sup>+</sup>	D	
10929.9		10929.2 7	100	0	0 <sup>+</sup>		
10950.4		10949.7 6	100	0	0 <sup>+</sup>		
10979.7		10979.0 12	100	0	0 <sup>+</sup>		
11012.0	1	11011.3 5	100	0	0 <sup>+</sup>	D	
11059.0		11058.3 11	100	0	0 <sup>+</sup>		
11083.1		7864.3 11	26 11	3218.489	2 <sup>+</sup>		
		11082.3 11	100	0	0 <sup>+</sup>		
11111.8	1	11111.0 16	100	0	0 <sup>+</sup>	D	
11125.4	1	11124.6 14	100	0	0 <sup>+</sup>	D	
11169.6		7682.9 12	35 15	3486.56	1 <sup>+</sup>		
		11168.7 12	100	0	0 <sup>+</sup>		
11224.2		11223.4 13	100	0	0 <sup>+</sup>		
11251.8		11251.0 12	100	0	0 <sup>+</sup>		



**Adopted Levels, Gammas (continued)** $\gamma(^{88}\text{Sr})$  (continued)

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$
11278.9	1	11278.1 10	100	0	0 <sup>+</sup>	D	11593.7		11592.9 16	100	0	0 <sup>+</sup>
11313.8		11313.0 6	100	0	0 <sup>+</sup>		11607.6		11606.8 12	100	0	0 <sup>+</sup>
11326		11325 3	100	0	0 <sup>+</sup>		11633.0		11632.2 14	100	0	0 <sup>+</sup>
11335.3	1	11334.5 13	100	0	0 <sup>+</sup>	D	11658.0		11657.2 16	100	0	0 <sup>+</sup>
11355		11354 3	100	0	0 <sup>+</sup>		11743.1		11742.3 14	100	0	0 <sup>+</sup>
11356.1?	(17)	616.7 <sup>d</sup> 3	100	10739.4	(16)	D <sup>#</sup>	11782.4		11781.6 14	100	0	0 <sup>+</sup>
11370	1	11369 3	100	0	0 <sup>+</sup>	D	11920.6		11919.7 7	100	0	0 <sup>+</sup>
11393.6	1	11392.8 6	100	0	0 <sup>+</sup>	D	11935.5		11934.6 10	100	0	0 <sup>+</sup>
11413.2		11412.4 15	100	0	0 <sup>+</sup>		11958.9		11958.0 14	100	0	0 <sup>+</sup>
11548.0		11547.2 7	100	0	0 <sup>+</sup>		12026.5		12025.6 10	100	0	0 <sup>+</sup>

<sup>†</sup> Weighted average of all available measurements, except where noted.

<sup>‡</sup> From  $\gamma(\theta)$ ,  $\gamma(\theta)(\text{lin pol})$  in  $(\gamma, \gamma')$ , except where noted.

<sup>#</sup> From  $\gamma(\theta)$  in  $^{80}\text{Se}(^{11}\text{B}, \text{p}2\text{n}\gamma)$ .

@ From  $\gamma(\theta)$  in  $(\text{n}, \text{n}'\gamma)$ .

& D+Q from  $\gamma(\theta)$  in  $(\text{n}, \text{n}'\gamma)$ ,  $\Delta\pi=\text{no}$  from level scheme.

<sup>a</sup> Multiply placed.

<sup>b</sup> Multiply placed with undivided intensity.

<sup>c</sup> Multiply placed with intensity suitably divided.

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

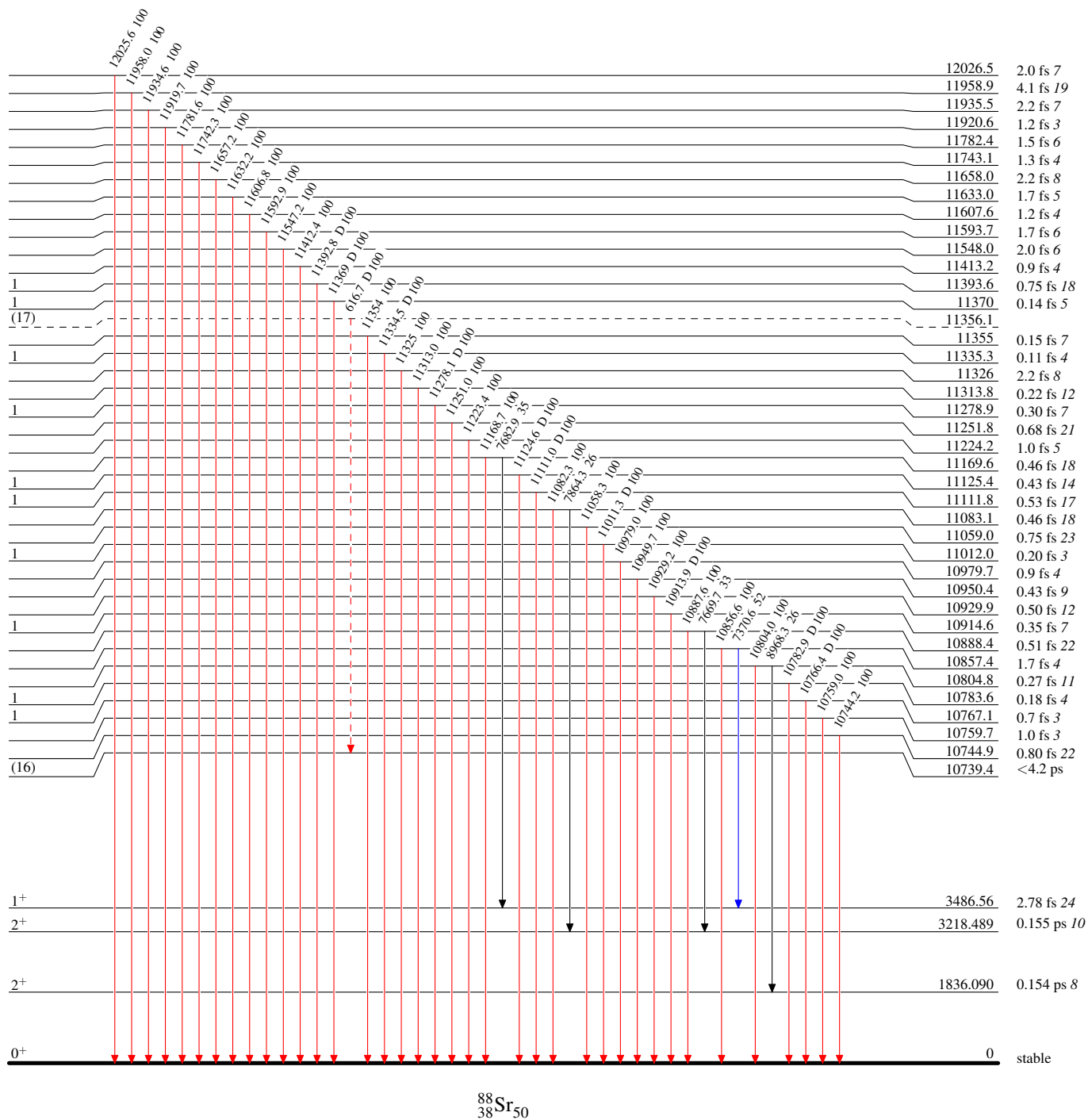
# Adopted Levels, Gammas

## Level Scheme

Intensities: Type not specified

## Legend

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






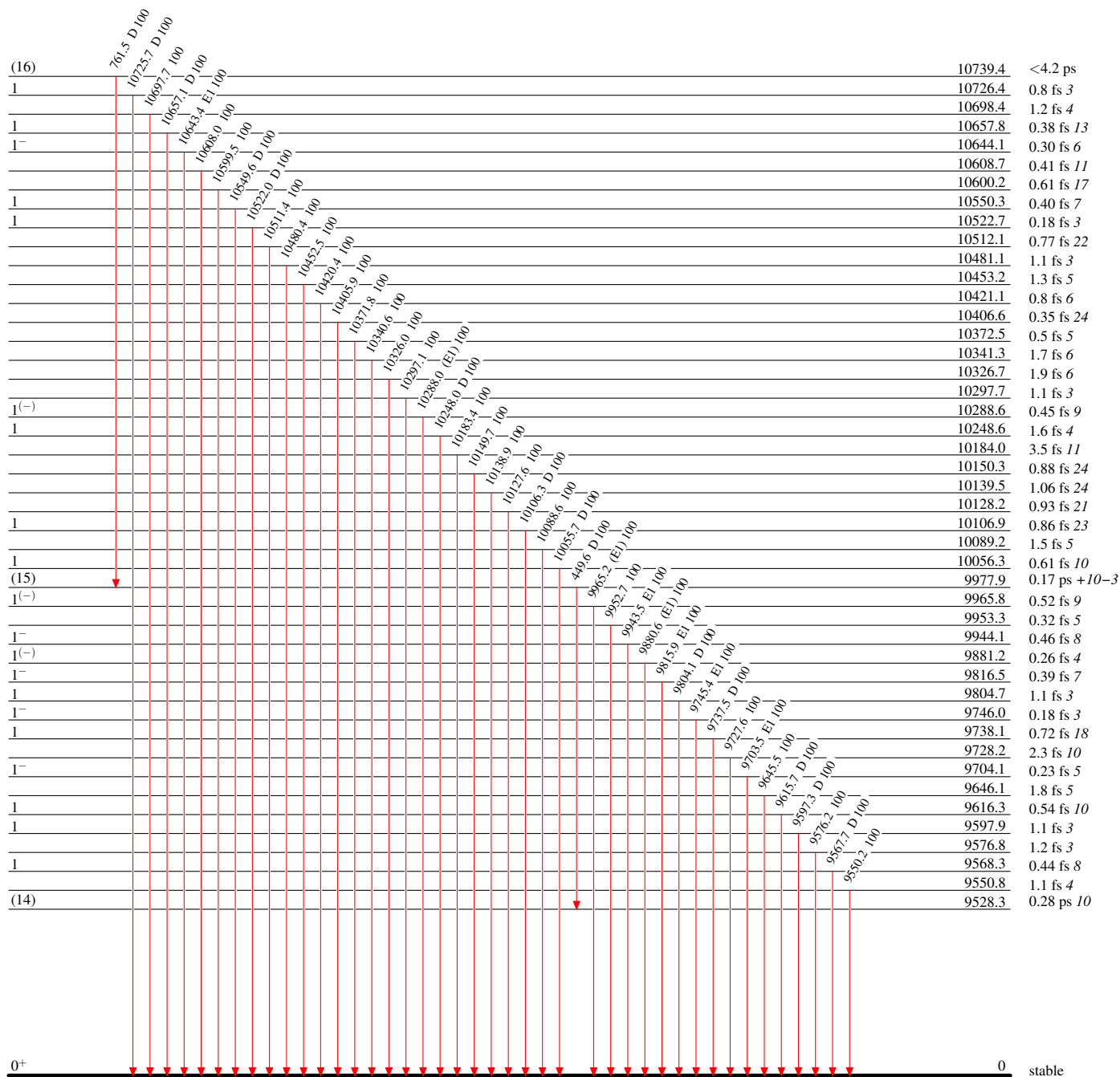
## Adopted Levels, Gammas

## Level Scheme (continued)

Intensities: Type not specified

## Legend

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



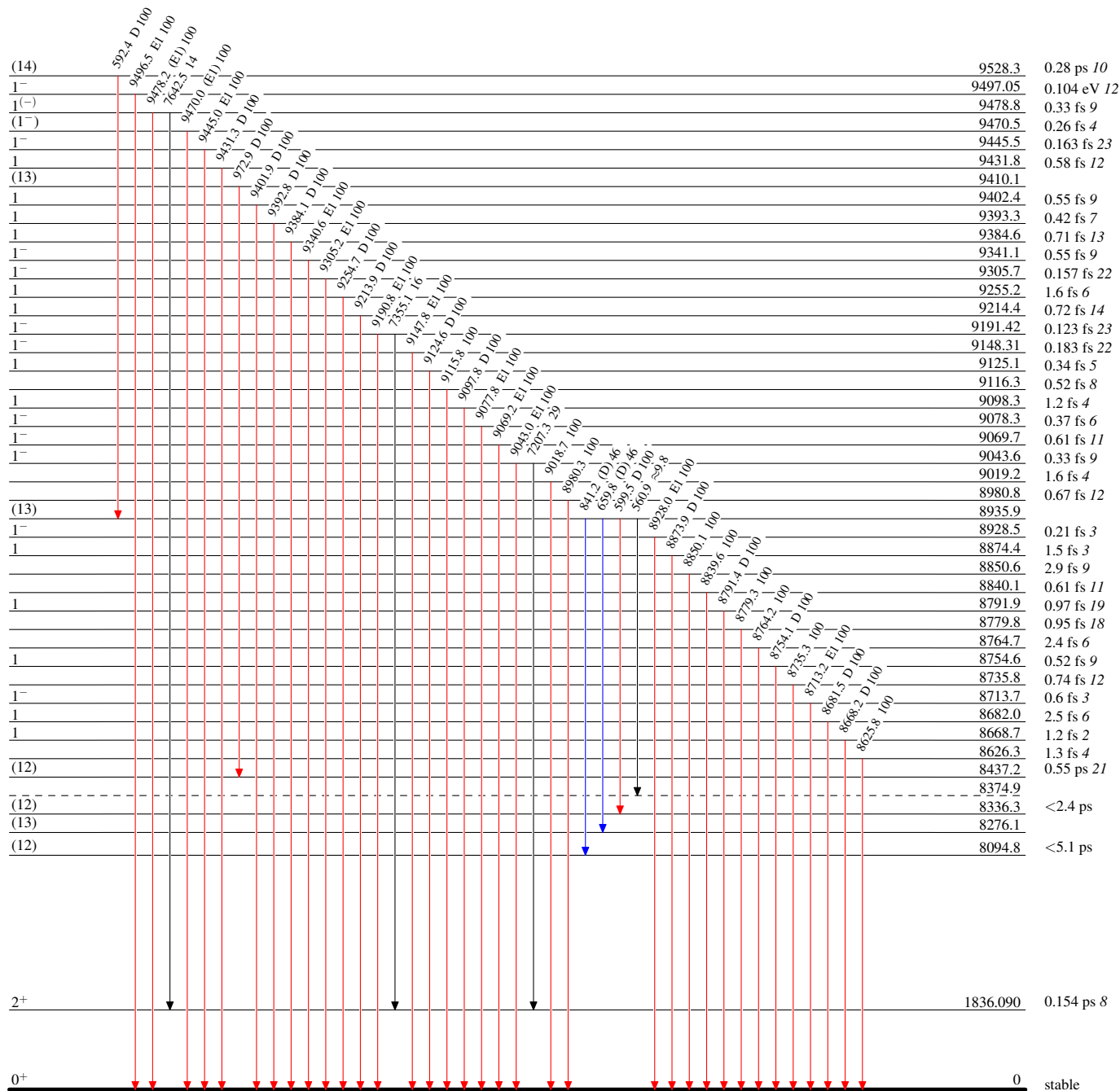
# Adopted Levels, Gammas

## Level Scheme (continued)

Intensities: Type not specified

### Legend

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



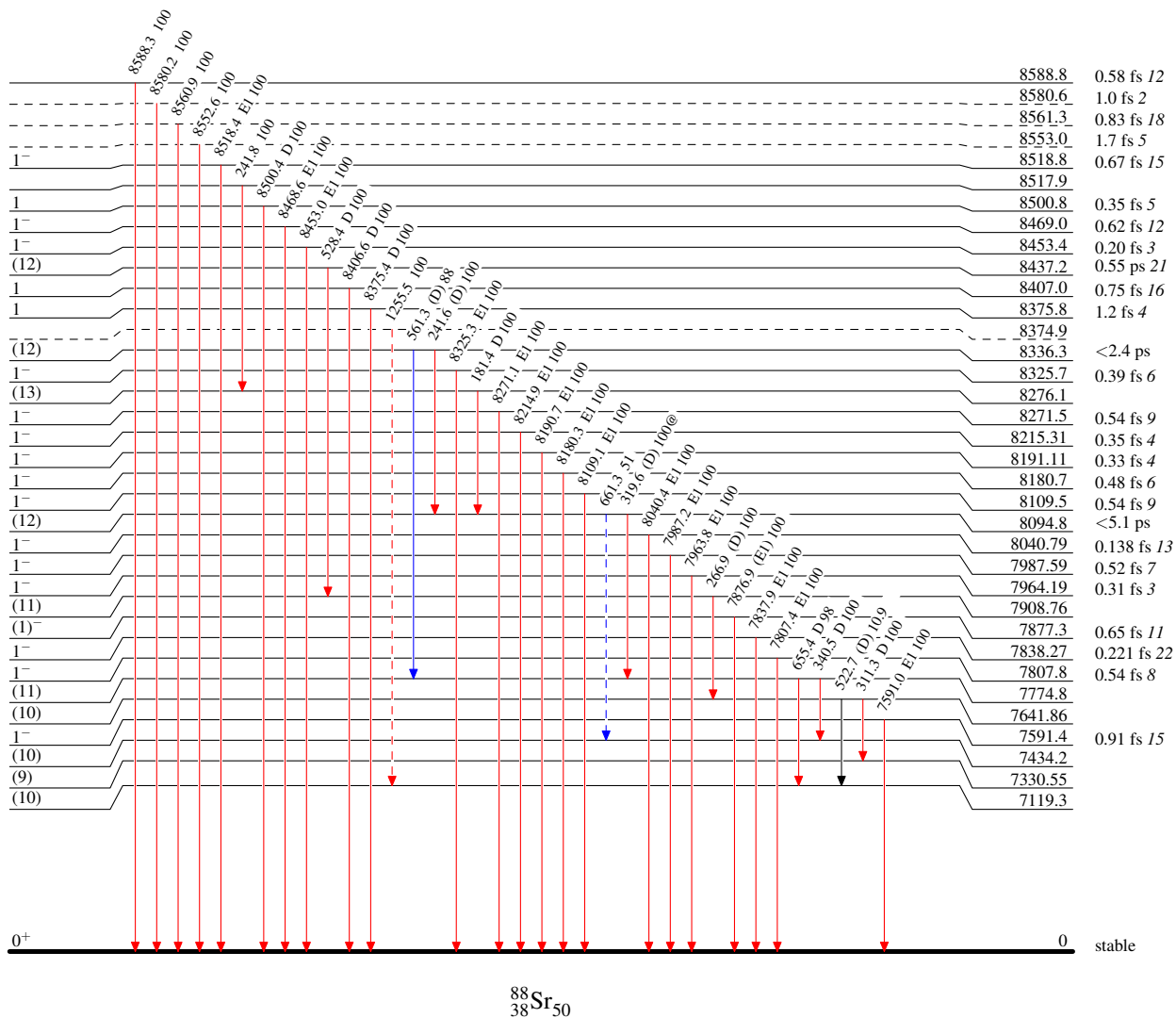
## Adopted Levels, Gammas

## Level Scheme (continued)

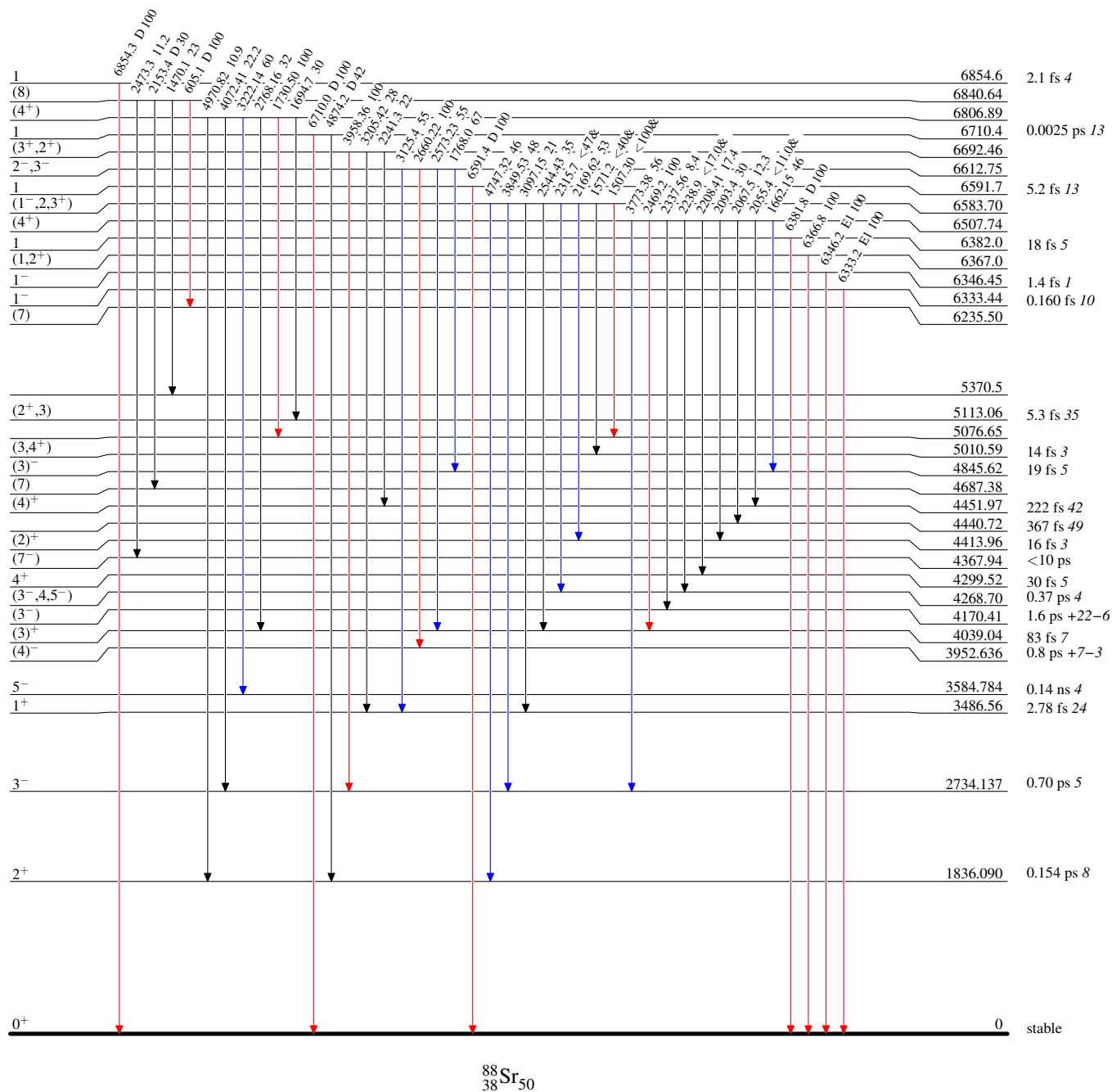
Intensities: Type not specified  
@ Multiply placed: intensity suitably divided

## Legend

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







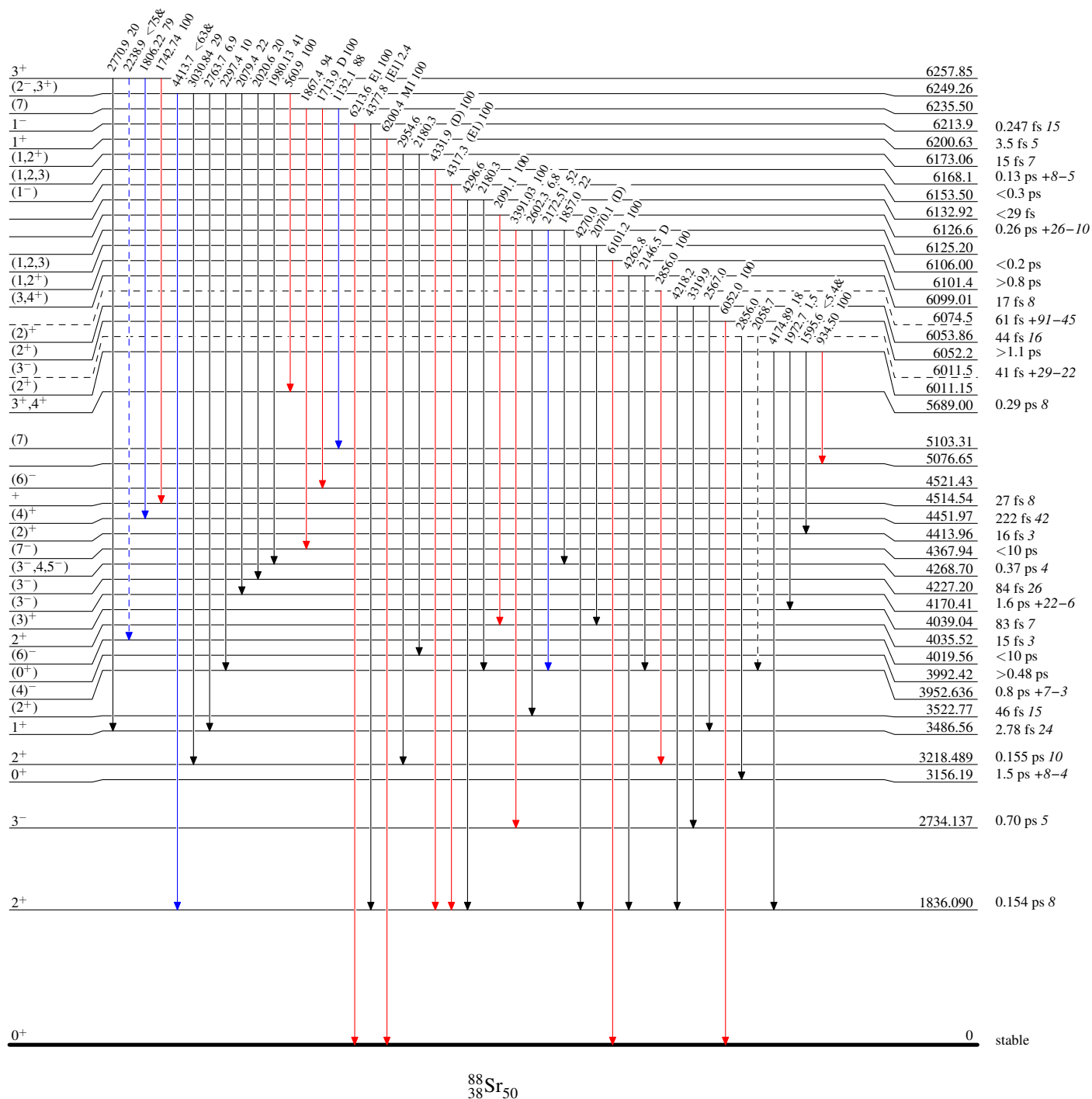
## Adopted Levels, Gammas

## Level Scheme (continued)

Intensities: Type not specified  
& Multiply placed: undivided intensity given  
@ Multiply placed: intensity suitably divided

## 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)





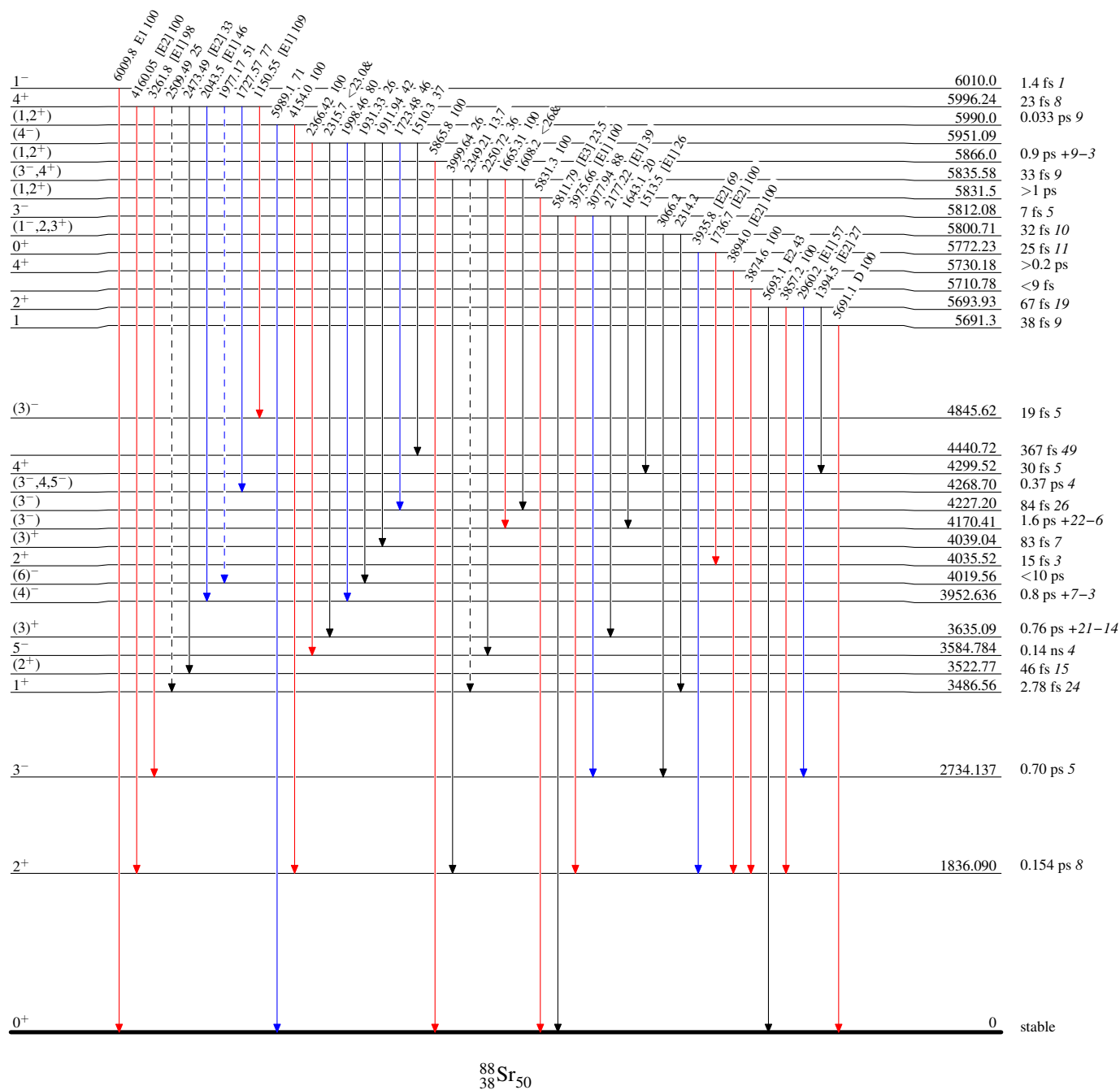
## Adopted Levels, Gammas

## Level Scheme (continued)

Intensities: Type not specified  
 & Multiply placed: undivided intensity given  
 @ Multiply placed: intensity suitably divided

## 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)



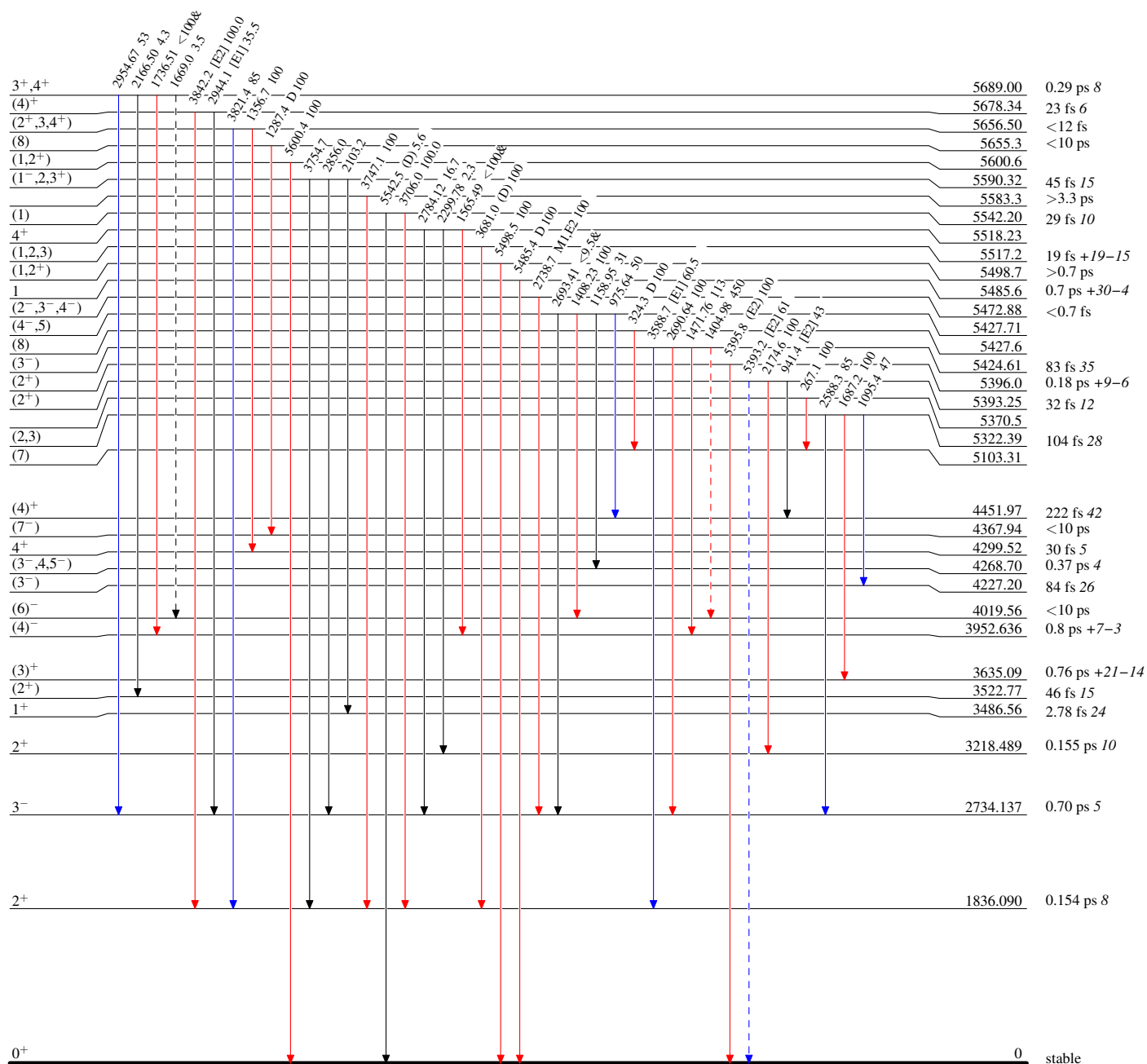
# Adopted Levels, Gammas

## Level Scheme (continued)

Intensities: Type not specified  
& Multiply placed: undivided intensity given  
@ Multiply placed: intensity suitably divided

## 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)

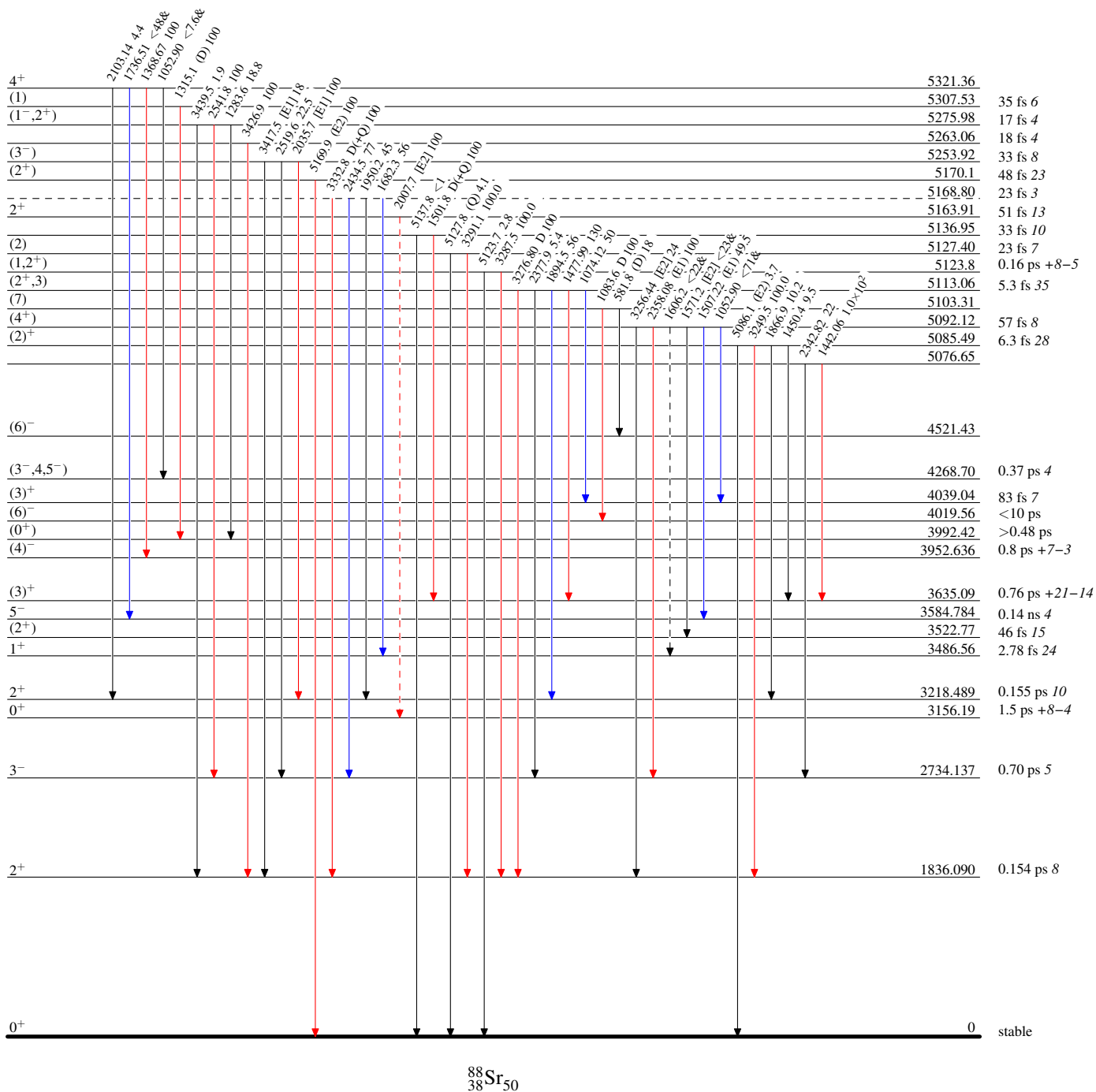


**Adopted Levels, Gammas****Level Scheme (continued)**

Intensities: Type not specified  
& Multiply placed: undivided intensity given  
@ Multiply placed: intensity suitably divided

**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)



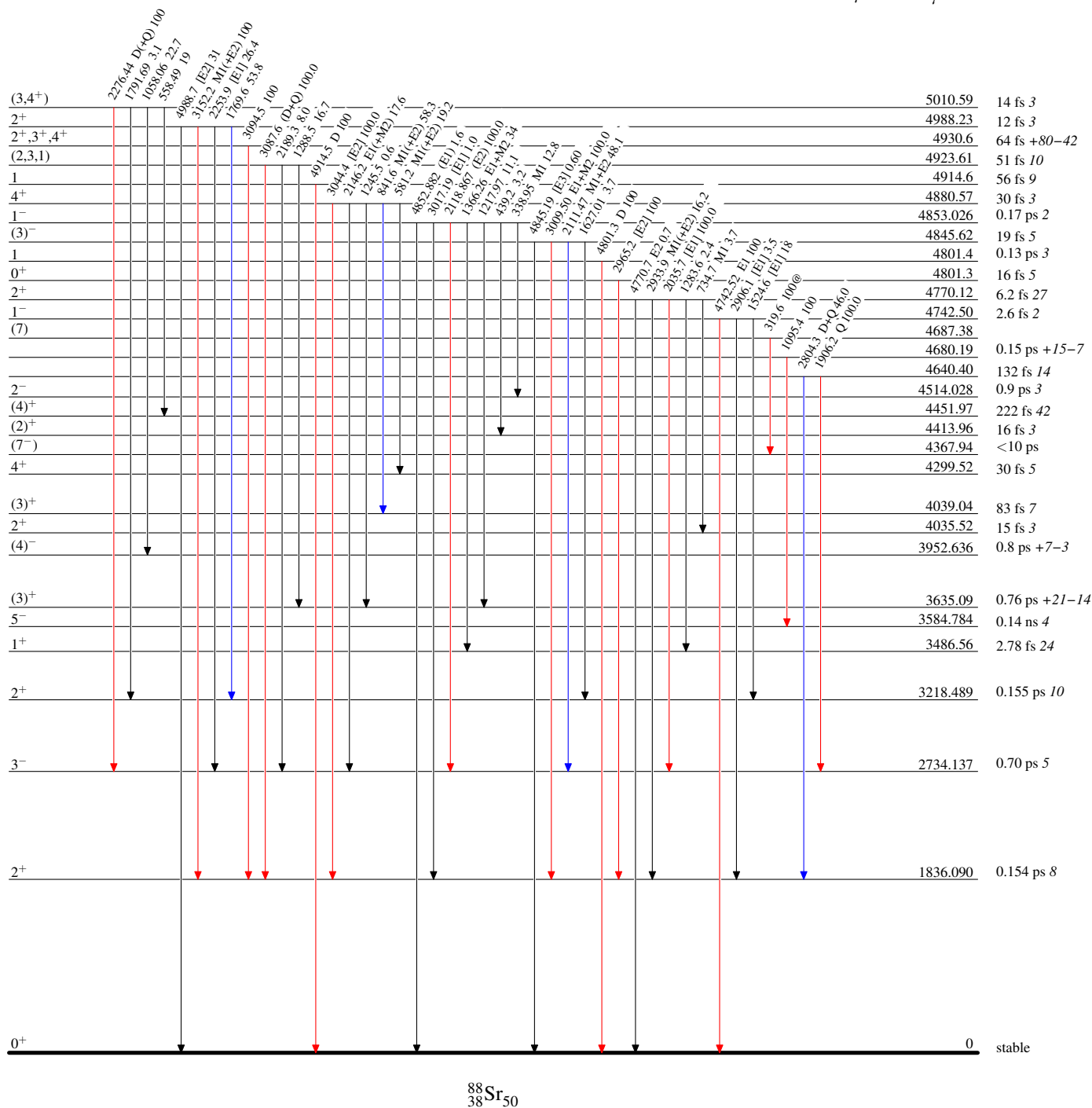
# Adopted Levels, Gammas

## Level Scheme (continued)

Intensities: Type not specified  
& Multiply placed: undivided intensity given  
@ Multiply placed: intensity suitably divided

## Legend

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



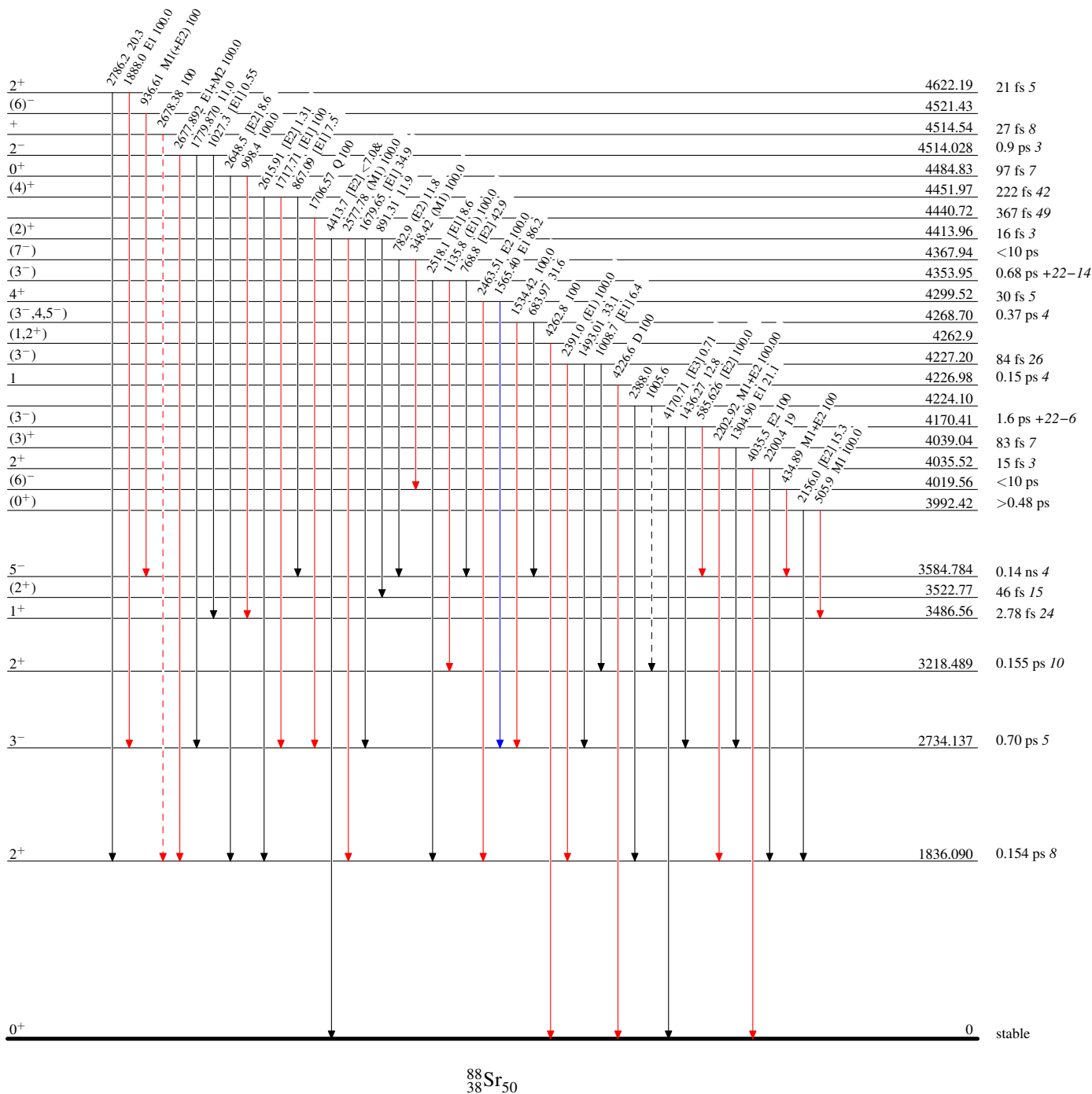
# Adopted Levels, Gammas

## Level Scheme (continued)

Intensities: Type not specified  
& Multiply placed: undivided intensity given  
@ Multiply placed: intensity suitably divided

## 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)



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

Intensities: Type not specified  
 & Multiply placed: undivided intensity given  
 @ Multiply placed: intensity suitably divided

**Legend**

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

