Adopted Levels, Gammas

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, John Cameron and Balraj Singh	NDS 112,2715 (2011)	20-Oct-2011

Q(β^-)=167.32 *3*; S(n)=6985.84 *4*; S(p)=11586.5 *9*; Q(α)=−8322.10 *6* 2012Wa38
Note: Current evaluation has used the following Q record $ 167.33 3 *6985*.84 *5* 11586.5 *8*−8322.06 *6* 2011AuZZ.
S(2n)=18402.96 *4*, S(2p)=22909.8 *7* (2011AuZZ).
Values in 2003Au03: Q(β^-)=167.18 *9*, S(p)=11578 *5*, Q(α)=−8322.27 *11* S(2n)=18403.00 *10*, S(2p)=22932 *16*.
First isotope identification by E. B. Andersen using Cl(n,X) reaction.
Additional information 1.

^{35}S Levels

Cross Reference (XREF) Flags

A	^{35}P β^- decay (47.3 s)	E	^{34}S(d,p)	I	^{37}Cl(d,α),^{37}Cl(d,$\alpha\gamma$)
B	^{2}H(^{34}S,pγ)	F	^{34}S(pol d,p)	J	^{160}Gd(^{37}Cl,Xγ)
C	^{34}S(n,γ) E=thermal	G	^{34}S(d,pγ)		
D	^{34}S(n,n),(n,γ):resonances	H	^{37}Cl(p,^{3}He)		

E(level)†	J$^\pi$‡	T$_{1/2}$#	XREF	Comments
0	3/2$^+$	87.37 d *4*	ABC EFGHIJ	%β^-=100 μ=(+)1.00 *4* (1954Bu05,1989Ra17,2011StZZ) Q=+0.0471 *9* (1990Su19,2011StZZ) μ: +1.00 *4* or −1.07 *4* from 1954Bu05 using Microwave absorption method, negative value is less likely from systematics of odd-A S isotopes. Additional information 2. Q: from multiconfigurational Hartree-Fock calculated efg′s in 1990Su19, also +0.045 *10* (1954Bi40) using Microwave absorption method. J$^\pi$: spin from microwave spectroscopy (1949Co12, 1951We11), parity from L(pol d,p)=2 and L-1/2 from analyzing powers. T$_{1/2}$: weighted average of 87.1 d *12* (1947Hu06), 86.35 d *17* (1959Co56), 87.16 d *10* (1958Se49), 88.8 d *10*(1959Ca12), 89.0 d *5* (1961Wy01), 87.1 d *9* (1961Oz01), 87.9 d *3* (1965Fl02), 87.39 d *10* (1968Wo06), 87.5 d *4* (1969La34), 87.38 d *3* (1999Pa18). Other: 88 d *3* (1941Ka01).
1572.378 *19*	1/2$^+$	2.3 ps *4*	ABC EFGHI	Additional information 3. J$^\pi$: L(pol d,p)=0 and L+1/2 from analyzing powers.
1991.28 *5*	7/2$^-$	1.02 ns *5*	A C EFGHIJ	XREF: A(?). Additional information 4. J$^\pi$: L(pol d,p)=3 and L+1/2 from analyzing powers.
2347.789 *18*	3/2$^-$	0.81 ps *14*	ABC EFG I	XREF: A(?). J$^\pi$: L(pol d,p)=1 and L+1/2 from analyzing powers. T$_{1/2}$: weighted average of 0.90 ps *14* in (^{32}S,nγ) and 0.71 ps *15* in (d,pγ).
2717.00 *3*	5/2$^+$	69 fs *24*	A C EFGHI	XREF: A(?). J$^\pi$: L(pol d,p)=2 and L+1/2 from analyzing powers. See comment with 5841.3 level.
2938.64 *5*	3/2$^+$		A C EFGHI	J$^\pi$: L(pol d,p)=2; γ-feeding and allowed β-decay to this level exclude 5/2$^+$.
3421.1 *3*	5/2$^+$	<70 fs	A EFGHI	XREF: A(?). J$^\pi$: L(pol d,p)=2 and L+1/2 from analyzing powers.
3558.09 *3*	(3/2$^-$,5/2$^+$)		A C EFG I	XREF: A(?). J$^\pi$: γ′s to 1/2$^+$ and 7/2$^-$.

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Adopted Levels, Gammas (continued)

^{35}S Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$[#]	XREF	Comments
3594.8 *4*	(1/2 to 7/2)$^+$		A E GHI	XREF: A(?). Jπ: γ to 3/2$^+$ and L(p,^{3}He)=2+4.
3675 *10*	(1/2$^-$,3/2$^-$)		A E G	XREF: A(?). Additional information 5. Jπ: L(d,p)=(1).
3801.958 *23*	3/2$^-$	25 fs *18*	A C EFG I	XREF: A(?). Additional information 6. Jπ: L(pol d,p)=1 and L+1/2 from analyzing powers.
3818.1 *4*	(3/2 to 9/2)$^-$		FGHI	Additional information 7. Jπ: L(p,^{3}He)=3 and γ to 7/2$^-$.
3866? *10*			E	Additional information 8.
3885.3 *4*	(3/2$^-$,5/2)		G	Additional information 9. Jπ: γ's to 3/2$^+$,3/2$^-$ and 7/2$^-$.
3890.5 *6*	(3/2$^-$,5/2)		E I	Additional information 10. Jπ: γ's to 3/2$^+$,3/2$^-$ and 7/2$^-$.
4022.3 *10*	(3/2$^-$ to 11/2$^-$)		J	Additional information 11. Jπ: γ to 7/2$^-$.
4025.9 *4*	(1/2 to 5/2)$^+$		E GHI	Additional information 12. Jπ: γ's to 1/2$^+$ and L(p,^{3}He)=2.
4106.4 *4*	(1/2,3/2,5/2)$^+$	<55 fs	C E GHI	Additional information 13. Jπ: γ's to 3/2$^+$ and L(p,^{3}He)=0+2.
4180 *3*	(1/2,3/2,5/2$^+$)		GHI	Additional information 14. Jπ: γ to 1/2$^+$.
4189.280 *21*	1/2$^-$	<35 fs	C EFG	Additional information 15. Jπ: L(pol d,p)=1 and L-1/2 from analyzing powers.
4302.6 *7*	(1/2 to 5/2,7/2$^-$)		E GHI	Additional information 16. Jπ: γ's to 3/2$^+$ and 3/2$^-$.
4477.64 *7*	(1/2,3/2,5/2)$^+$	<62 fs	C EFGHI	Additional information 17. Jπ: γ's to 1/2$^+$ and L(p,^{3}He)=2; J^π=7/2$^-$ and L=3 from (pol d,p) presumably erroneous.
4576 *8*	(1/2 to 5/2)$^+$		EF H	Additional information 18. Jπ: L(p,^{3}He)=0+2.
4617 *10*			H	Additional information 19.
4839 *8*	(1/2 to 9/2)$^+$		EF H	Additional information 20. Jπ: L(p,^{3}He)=2.
4903.32 *8*	1/2$^-$		C EF	Additional information 21. Jπ: L(pol d,p)=1 and L-1/2 from analyzing powers.
4963.09 *3*	3/2$^-$		C EF H	Additional information 22. Jπ: L(pol d,p)=1 and L+1/2 from analyzing powers.
4990 *10*	(1/2 to 5/2)$^+$		H	Additional information 23. Jπ: L(p,^{3}He)=0+2.
5058 *8*	7/2$^-$		EF	Additional information 24. Jπ: L(pol d,p)=3 and L+1/2 from analyzing powers.
5127 *10*	(1/2 to 9/2)$^+$		EF H	Additional information 25. Jπ: L(p,^{3}He)=2.
5344 *4*	(1/2 to 11/2)$^-$		E H	Additional information 26. Jπ: L(p,^{3}He)=3.
5475? *10*			E	Additional information 27.
5550 *10*	(1/2 to 11/2)$^{(-)}$		H	Additional information 28. Jπ: L(p,^{3}He)=(3).
5752.5 *8*	(1/2 to 9/2$^-$)		C	Additional information 29. Jπ: γ to 3/2$^+$.
5771 *10*	(1/2 to 9/2)$^+$		H	Additional information 30. Jπ: L(p,^{3}He)=2.

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Adopted Levels, Gammas (continued)

^{35}S Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	XREF	Comments
5841.3 *10*	(1/2 to 7/2$^-$)	C	E(level): level not in 1990En08, but introduced in private communication (S. Raman to P. M. Endt). This level is populated by 1144.6γ from thermal neutron capture state (previously placed from 2717.1 level) and is depopulated by 4268.6γ (previously placed from thermal neutron capture state). J$^{\pi}$: γ to 1/2$^+$.
5915? *10*		H	Additional information 31.
5980 *10*		E	Additional information 32.
6018.8 *6*	(1/2 to 9/2$^-$)	C	Additional information 33. J$^{\pi}$: γ to 3/2$^+$.
6078.48 *4*	1/2$^-$,3/2$^-$	C E	Additional information 34. J$^{\pi}$: L(d,p)=1.
6129 *10*	(1/2,3/2,5/2)$^+$	H	Additional information 35. J$^{\pi}$: L(p,^{3}He)=0+2.
6293.93 *6*	(1/2 to 9/2$^-$)	C E	Additional information 36. J$^{\pi}$: γ to 3/2$^+$.
6334 *8*		E	Additional information 37.
6354.89 *23*	(1/2 to 9/2$^-$)	C H	Additional information 38. J$^{\pi}$: γ to 3/2$^+$.
6419.9 *11*	(1/2 to 9/2$^-$)	C	Additional information 39. J$^{\pi}$: γ to 3/2$^+$.
6446 *8*		E	Additional information 40.
6496 *8*		E	Additional information 41.
6537.7 *14*		E	Additional information 42.
6545.1 *13*		E	Additional information 43.
6584 *10*		E	Additional information 44.
6629.43 *10*	(1/2 to 9/2$^-$)	C	Additional information 45. J$^{\pi}$: γ to 3/2$^+$.
6635.2 *13*		E	Additional information 46.
6654 *10*		H	Additional information 47.
6684 *9*	(1/2 to 9/2)$^+$	E H	Additional information 48. J$^{\pi}$: L(p,^{3}He)=2.
6761.0 *12*	(1/2 to 9/2$^-$)	C	Additional information 49. J$^{\pi}$: γ to 3/2$^+$.
6891.3 *14*		E	Additional information 50.
(6986.10 *3*)	1/2$^+$	C	Additional information 51. J$^{\pi}$: s-wave resonance capture state.
7018.95 *4*		DE	Additional information 52.
7072.73 *5*		D	Additional information 53.
7074.39 *6*		D	Additional information 54.
7097.8 *3*		D	Additional information 55.
7099.91 *20*		D	Additional information 56.
7100.79 *4*	3/2	D	Additional information 57. J$^{\pi}$: R-Matrix analysis of resonances in (n,n).
7143.33 *11*		D H	Additional information 58.
7210.49 *5*		D	Additional information 59.
7218.1 *4*		D	Additional information 60.
7234.0 *5*		D	Additional information 61.
7239.9 *6*		D	Additional information 62.
7253.2 *6*		D	Additional information 63.
7275.99 *5*	1/2$^+$	D	Additional information 64. J$^{\pi}$: L(n,n)=0.
7279		D	Additional information 65.
7289.9 *8*		D	Additional information 66.
7294.26 *7*	3/2$^-$	D	Additional information 67. J$^{\pi}$: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
7331.06 *5*	1/2$^+$	D	Additional information 68.

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Adopted Levels, Gammas (continued)

^{35}S Levels (continued)

E(level)†	Jπ‡	XREF	Comments
			Jπ: L(n,n)=0.
7338.24 *20*		D	Additional information 69.
7343.97 *20*		D	Additional information 70.
7347.3 *5*		D	Additional information 71.
7348.0 *5*		D	Additional information 72.
7353.9 *5*		D	Additional information 73.
7357.6 *5*		D	Additional information 74.
7370.63 *6*	1/2−	D	Additional information 75.
			Jπ: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
7375 *10*		D H	Additional information 76.
7396.0 *6*		D	Additional information 77.
7404.7 *6*		D	Additional information 78.
7408.76 *11*	3/2−	D	Additional information 79.
			Jπ: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
7411.62 *7*		D	Additional information 80.
7416.57 *4*		D	Additional information 81.
7429.1 *6*		D	Additional information 82.
7433.63 *5*		D	Additional information 83.
7436.4 *4*		D	Additional information 84.
7442.21 *5*	1/2+	D	Additional information 85.
			Jπ: L(n,n)=0.
7462.3 *6*		D	Additional information 86.
7481.22 *7*	1/2−	DE	Additional information 87.
			Jπ: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
7494.7 *6*		D	Additional information 88.
7542.4 *6*		D	Additional information 89.
7604.1 *6*		D	Additional information 90.
7609.33 *5*	3/2−	D	Additional information 91.
			Jπ: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
7649.0 *6*		D	Additional information 92.
7655.7 *6*		D	Additional information 93.
7663.98 *11*		D	Additional information 94.
7678.4 *7*		D	Additional information 95.
7712? *10*	(3/2 to 13/2)+	H	Additional information 96.
			Jπ: L(p,^{3}He)=4.
7731.1 *7*		D	Additional information 97.
7749.8 *4*		D	Additional information 98.
7761.53 *7*	3/2−	D	Additional information 99.
			Jπ: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
7776.25 *11*	1/2−	D H	Additional information 100.
			Jπ: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
7798.07 *9*	1/2+	D	Additional information 101.
			Jπ: L(n,n)=0.
7812.32 *7*	3/2+	D	Additional information 102.
			Jπ: L(n,n)=2 and R-Matrix analysis of resonances in (n,n).
7853.33 *7*	3/2−	D	Additional information 103.
			Jπ: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
7861.9 *12*		D	Additional information 104.
7880.8 *12*		D	Additional information 105.
7889.1 *12*		D	Additional information 106.
7894.71 *7*	3/2−	D	Additional information 107.
			Jπ: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
7899.8 *3*		D	Additional information 108.
7934.2 *15*		D	Additional information 109.
7939.6 *15*		D	Additional information 110.
7955.05 *11*	3/2−	D	Additional information 111.

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Adopted Levels, Gammas (continued)

^{35}S Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	XREF		Comments
				J$^{\pi}$: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
7974.27 *11*	3/2^{-}	D		Additional information 112. J$^{\pi}$: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
8019.63 *20*		D		Additional information 113.
8041.29 *20*		D		Additional information 114.
8076.54 *20*		D		Additional information 115.
8078.0 *3*		D		Additional information 116.
8093.0 *5*	1/2^{-}	D	H	Additional information 117. J$^{\pi}$: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
8143.75 *20*		D		Additional information 118.
8160 *10*	(1/2 to 7/2)$^{(-)}$		H	Additional information 119. J$^{\pi}$: L(p,^{3}He)=(1).
8187.2 *3*	1/2^{-}	D		Additional information 120. J$^{\pi}$: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
8211.3 *3*		D		Additional information 121.
8224.3 *4*	1/2^{-}	D		Additional information 122. J$^{\pi}$: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
8228.5 *4*		D		Additional information 123.
8244.1 *3*		D		Additional information 124.
8256.41 *20*	3/2^{-}	D		Additional information 125. J$^{\pi}$: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
8262.5 *4*	5/2^{+}	D		Additional information 126. J$^{\pi}$: L(n,n)=2 and R-Matrix analysis of resonances in (n,n).
8273.4 *4*	1/2	D		Additional information 127. J$^{\pi}$: R-Matrix analysis of resonances in (n,n).
8298.3 *3*		D		Additional information 128.
8333.9 *4*	3/2^{-}	D		Additional information 129. J$^{\pi}$: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
8336.0 *4*		D		Additional information 130.
8391.4 *4*	3/2^{-}	D		Additional information 131. J$^{\pi}$: L(n,n)=1 and R-Matrix analysis of resonances in (n,n).
8393.8 *3*		D		Additional information 132.
8406.6 *3*		D		Additional information 133.
8418.9 *5*	(1/2 to 9/2)$^{+}$	D	H	Additional information 134. J$^{\pi}$: L(p,^{3}He)=2.
9155 *10*	(1/2 to 9/2)$^{+}$		H	T=5/2 Additional information 135. J$^{\pi}$: L(p,^{3}He)=2.

[†] From Eγ data when measured γ-ray energies are available. In other cases weighted averages are taken of values available from different reactions.

[‡] From analyzing power measurement or/and the comparison of the DWBA prediction of cross section with experimental data in particle-transfer reactions or/and from angular distribution measurements of γ-rays. When assigning J^{π} to a level based on γ transitions from this level to a level of known J^{π}, evaluators use the following rules: if Eγ<4 MeV, transitions are only considered to be E1,M1 or E2; if Eγ>4 MeV, M2 and E3 are considered to be possible. In particle transfer reactions, target $J^{\pi}=0^{+}$ for ^{34}S in (d,p) reaction and $J^{\pi}=3/2^{+}$ for ^{37}Cl in (p,^{3}He) and (d,α) reactions.

[#] From (d,pγ) and (^{32}S,nγ) using DSAM (Doppler shift attenuation method). Weighted averages taken when values from both are available.

Adopted Levels, Gammas (continued)

$\gamma(^{35}S)$

E_i(level)	J_i^π	E_γ [†]	I_γ [‡]	E_f	J_f^π	Mult. [@]	δ [@]	Comments
1572.378	$1/2^+$	1572.334	100	0	$3/2^+$	[M1,E2]		Additional information 136. If M1, B(M1)(W.u.)=0.0025 *5*; if E2, B(E2)(W.u.)=3.8 *7*.
1991.28	$7/2^-$	418.96	<2	1572.378	$1/2^+$			
		1991.27 *5*	100	0	$3/2^+$	M2+E3	−0.11 *4*	B(M2)(W.u.)=0.089 *5*; B(E3)(W.u.)=1.6 *12*
2347.789	$3/2^-$	356.66 *9*	0.07 *1*	1991.28	$7/2^-$			
		775.398 *6*	36 *1*	1572.378	$1/2^+$	(E1+M2)	−0.01 *4*	B(E1)(W.u.)=0.00044 *8*; B(M2)(W.u.)=0.3 *+27−3*
		2347.69 *2*	100 *1*	0	$3/2^+$	(E1+M2)	−0.27 *12*	B(E1)(W.u.)=4.1×10^{-5} *8*; B(M2)(W.u.)=2.5 *22*
2717.00	$5/2^+$	368.5 *4*	5	2347.789	$3/2^-$			
		726.8	<5	1991.28	$7/2^-$			
		1144.59 *2*	<5	1572.378	$1/2^+$			
		2716.99 *16*	100	0	$3/2^+$	[M1,E2]		If M1, B(M1)(W.u.)=0.014 *5*; if E2, B(E2)(W.u.)=7 *3*.
2938.64	$3/2^+$	221.65	<2	2717.00	$5/2^+$			
		590.85	<2	2347.789	$3/2^-$			
		947.30	<2	1991.28	$7/2^-$			
		1366.24	<2	1572.378	$1/2^+$			
		2938.56 *11*	100	0	$3/2^+$			
3421.1	$5/2^+$	483	<4	2938.64	$3/2^+$			
		703	<6	2717.00	$5/2^+$			
		1073.5	<7	2347.789	$3/2^-$			
		1429.6	<30	1991.28	$7/2^-$			
		1848.6	<7	1572.378	$1/2^+$			
		3420.8	100	0	$3/2^+$			
3558.09	$(3/2^-,5/2^+)$	619.23 *19*	9 *2*	2938.64	$3/2^+$			
		1210.28 *4*	54 *6*	2347.789	$3/2^-$			
		1566.7 *3*	100 *6*	1991.28	$7/2^-$			
		1985.64	<9	1572.378	$1/2^+$			
		3558.1 *5*	18 *4*	0	$3/2^+$			
3594.8	$(1/2 \text{ to } 7/2)^+$	658	<10	2938.64	$3/2^+$			Additional information 137.
		880	<11	2717.00	$5/2^+$			Additional information 138.
		1250	<15	2347.789	$3/2^-$			Additional information 139.
		1601	<17	1991.28	$7/2^-$			Additional information 140.
		2020	<17	1572.378	$1/2^+$			Additional information 141.
		3592	100	0	$3/2^+$			Additional information 142.
3801.958	$3/2^-$	243.89	<0.6	3558.09	$(3/2^-,5/2^+)$			Additional information 143.
		863.28 *28*	1.0 *4*	2938.64	$3/2^+$			Additional information 144.
		1084.79 *15*	1.7 *4*	2717.00	$5/2^+$			Additional information 145.
		1454.09 *4*	15 *2*	2347.789	$3/2^-$			Additional information 146.
		1811	<1.0	1991.28	$7/2^-$			Additional information 147.
		2229.510 *16*	92 *6*	1572.378	$1/2^+$	[E1]		B(E1)(W.u.)=0.0010 *8* Additional information 148.
		3801.69 *8*	100 *5*	0	$3/2^+$	[E1]		B(E1)(W.u.)=0.00022 *16* Additional information 149.

$^{35}_{16}S_{19}$-6

Adopted Levels, Gammas (continued)

γ(^{35}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Comments
3818.1	(3/2 to 9/2)$^-$	879.4	<2[#]	2938.64	3/2$^+$	
		1101.1	<2[#]	2717.00	5/2$^+$	
		1470.3	<2[#]	2347.789	3/2$^-$	
		1826.7	100	1991.28	7/2$^-$	Additional information 150.
		2245.7	<2[#]	1572.378	1/2$^+$	
		3817.9	<2[#]	0	3/2$^+$	
3885.3	(3/2$^-$,5/2)	464	<30	3421.1	5/2$^+$	Additional information 151.
		950	<12	2938.64	3/2$^+$	Additional information 152.
		1167	<15	2717.00	5/2$^+$	Additional information 153.
		1537.5	<18	2347.789	3/2$^-$	Additional information 154.
		1894	100	1991.28	7/2$^-$	Additional information 155.
		2313	<16	1572.378	1/2$^+$	Additional information 156.
		3886	16 *7*	0	3/2$^+$	Additional information 157.
3890.5	(3/2$^-$,5/2)	1541	89 *9*	2347.789	3/2$^-$	Additional information 158.
		1899	100 *11*	1991.28	7/2$^-$	Additional information 159.
		3892	33 *7*	0	3/2$^+$	Additional information 160.
4022.3	(3/2$^-$ to 11/2$^-$)	2031	100	1991.28	7/2$^-$	Additional information 161.
4025.9	(1/2 to 5/2)$^+$	470	<14	3558.09	(3/2$^-$,5/2$^+$)	Additional information 162.
		604	<28	3421.1	5/2$^+$	Additional information 163.
		1090	94 *24*	2938.64	3/2$^+$	Additional information 164.
		1307	<22	2717.00	5/2$^+$	Additional information 165.
		1677.5	92 *33*	2347.789	3/2$^-$	Additional information 166.
		2034	<28	1991.28	7/2$^-$	Additional information 167.
		2453	100 *33*	1572.378	1/2$^+$	Additional information 168.
		4025	<13	0	3/2$^+$	Additional information 169.
4106.4	(1/2,3/2,5/2)$^+$	547	<5	3558.09	(3/2$^-$,5/2$^+$)	Additional information 170.
		686	<5	3421.1	5/2$^+$	Additional information 171.
		1167	15 *7*	2938.64	3/2$^+$	Additional information 172.
		1389	<11	2717.00	5/2$^+$	Additional information 173.
		1759.5	<6	2347.789	3/2$^-$	Additional information 174.
		2116	<8	1991.28	7/2$^-$	Additional information 175.
		2535	<6	1572.378	1/2$^+$	Additional information 176.
		4105.3 *8*	100 *7*	0	3/2$^+$	Additional information 177.
4180	(1/2,3/2,5/2$^+$)	1835	23 *5*	2347.789	3/2$^-$	Additional information 178.
		2193	9 *5*	1991.28	7/2$^-$	Additional information 179.
		2611	22 *3*	1572.378	1/2$^+$	Additional information 180.
		4186	100 *8*	0	3/2$^+$	Additional information 181.
4189.280	1/2$^-$	387	<8	3801.958	3/2$^-$	Additional information 182.
		597	<8	3594.8	(1/2 to 7/2)$^+$	Additional information 183.
		631.32 *24*	2.2 *3*	3558.09	(3/2$^-$,5/2$^+$)	Additional information 184.

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Adopted Levels, Gammas (continued)

γ(^{35}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Comments
4189.280	1/2$^-$	768	<8	3421.1	5/2$^+$	Additional information 185.
		1250.61 *5*	8 *1*	2938.64	3/2$^+$	Additional information 186.
		1471	<10	2717.00	5/2$^+$	Additional information 187.
		1841.426 *15*	85 *8*	2347.789	3/2$^-$	Additional information 188.
		2198	<15	1991.28	7/2$^-$	Additional information 189.
		2616.87 *3*	9 *3*	1572.378	1/2$^+$	Additional information 190.
		4188.95 *8*	100 *7*	0	3/2$^+$	Additional information 191.
4302.6	(1/2 to 5/2,7/2$^-$)	1953	100 *9*	2347.789	3/2$^-$	Additional information 192.
		4304	69 *9*	0	3/2$^+$	Additional information 193.
4477.64	(1/2,3/2,5/2)$^+$	595	<8	3885.3	(3/2$^-$,5/2)	Additional information 194.
		678	<8	3801.958	3/2$^-$	Additional information 195.
		880	<8	3594.8	(1/2 to 7/2)$^+$	Additional information 196.
		917	<8	3558.09	(3/2$^-$,5/2$^+$)	Additional information 197.
		1059	<16	3421.1	5/2$^+$	Additional information 198.
		1539	<12	2938.64	3/2$^+$	Additional information 199.
		1760.55 *11*	100 *12*	2717.00	5/2$^+$	Additional information 200.
		2130	<13	2347.789	3/2$^-$	Additional information 201.
		2489	38 *10*	1991.28	7/2$^-$	Additional information 202.
		2905.1 *4*	89 *14*	1572.378	1/2$^+$	Additional information 203.
		4480	26 *5*	0	3/2$^+$	Additional information 204.
4903.32	1/2$^-$	1101.37	0.43 *11*	3801.958	3/2$^-$	Additional information 205.
		1345.25	<0.6	3558.09	(3/2$^-$,5/2$^+$)	Additional information 206.
		1964.65	4.9 *13*	2938.64	3/2$^+$	Additional information 207.
		2186.29	52 *7*	2717.00	5/2$^+$	Additional information 208.
		2555.47	41 *4*	2347.789	3/2$^-$	Additional information 209.
		2911.89	<0.6	1991.28	7/2$^-$	Additional information 210.
		3330.81	100 *9*	1572.378	1/2$^+$	Additional information 211.
		4902.98	54 *3*	0	3/2$^+$	Additional information 212.
4963.09	3/2$^-$	1161.05 *20*	0.96 *14*	3801.958	3/2$^-$	Additional information 213.
		1404.967 *24*	10.5 *11*	3558.09	(3/2$^-$,5/2$^+$)	Additional information 214.
		2246.00	<0.6	2717.00	5/2$^+$	Additional information 215.
		2615.2 *2*	19 *2*	2347.789	3/2$^-$	Additional information 216.
		2972.0 *4*	3.2 *11*	1991.28	7/2$^-$	Additional information 217.
		3390.56 *5*	100 *9*	1572.378	1/2$^+$	Additional information 218.
		4962.84 *8*	41 *4*	0	3/2$^+$	Additional information 219.
5752.5	(1/2 to 9/2$^-$)	5752.0 *8*	100	0	3/2$^+$	Additional information 220.
5841.3	(1/2 to 7/2$^-$)	4268.65	100	1572.378	1/2$^+$	
6018.8	(1/2 to 9/2$^-$)	6018.2 *6*	100	0	3/2$^+$	Additional information 221.
6078.48	1/2$^-$,3/2$^-$	3139.9 *5*	22 *7*	2938.64	3/2$^+$	Additional information 222.
		6077.87 *11*	100 *11*	0	3/2$^+$	Additional information 223.
6293.93	(1/2 to 9/2$^-$)	6293.2 *4*	100	0	3/2$^+$	Additional information 224.
6354.89	(1/2 to 9/2$^-$)	6355.0 *6*	100	0	3/2$^+$	Additional information 225.

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Adopted Levels, Gammas (continued)

$\gamma(^{35}S)$ (continued)

E_i(level)	J_i^π	E_γ [†]	I_γ [‡]	E_f	J_f^π	Comments
6419.9	(1/2 to 9/2$^-$)	6419.3 *11*	100	0	3/2$^+$	Additional information 226.
6629.43	(1/2 to 9/2$^-$)	6628.5 *6*	100	0	3/2$^+$	Additional information 227.
6761.0	(1/2 to 9/2$^-$)	6760.3 *12*	100	0	3/2$^+$	Additional information 228.
(6986.10)	1/2$^+$	356.66 *9*	0.07 *1*	6629.43	(1/2 to 9/2$^-$)	Additional information 229.
		631.32 *24*	0.11 *2*	6354.89	(1/2 to 9/2$^-$)	Additional information 230.
		692.16 *5*	0.25 *3*	6293.93	(1/2 to 9/2$^-$)	Additional information 231.
		907.608 *23*	1.1 *2*	6078.48	1/2$^-$,3/2$^-$	Additional information 232.
		2022.954 *9*	18 *1*	4963.09	3/2$^-$	Additional information 233.
		2082.72 *7*	29 *2*	4903.32	1/2$^-$	Additional information 234.
		2508.39 *8*	0.7 *1*	4477.64	(1/2,3/2,5/2)$^+$	Additional information 235.
		2796.73 *4*	9.4 *4*	4189.280	1/2$^-$	Additional information 236.
		3183.84 *9*	11.1 *6*	3801.958	3/2$^-$	Additional information 237.
		4268.64 *14*	0.64 *8*	2717.00	5/2$^+$	Additional information 238.
		4637.87 *8*	100 *4*	2347.789	3/2$^-$	Additional information 239.
		6985.7 *10*	0.07 *2*	0	3/2$^+$	Additional information 240.

† Values with ΔE are primarily from (d,pγ), (d,$\alpha\gamma$) and (n,γ) (E=thermal). Weighted average taken when Eγ's are available from both. Others are deduced from level-energy differences.

‡ Primarily from (d,$\alpha\gamma$), (d,pγ) and (n,γ). Weighted average taken when Iγ's are available from more than one reference, unless otherwise noted.

From 1978En02.

@ From $\gamma(\theta)$ in (δ,pγ). If $T_{1/2}$ is unknown and parity is determined not by polarization measurements, evaluators use D and Q, instead of M1 and E2, or, E1 and M2.

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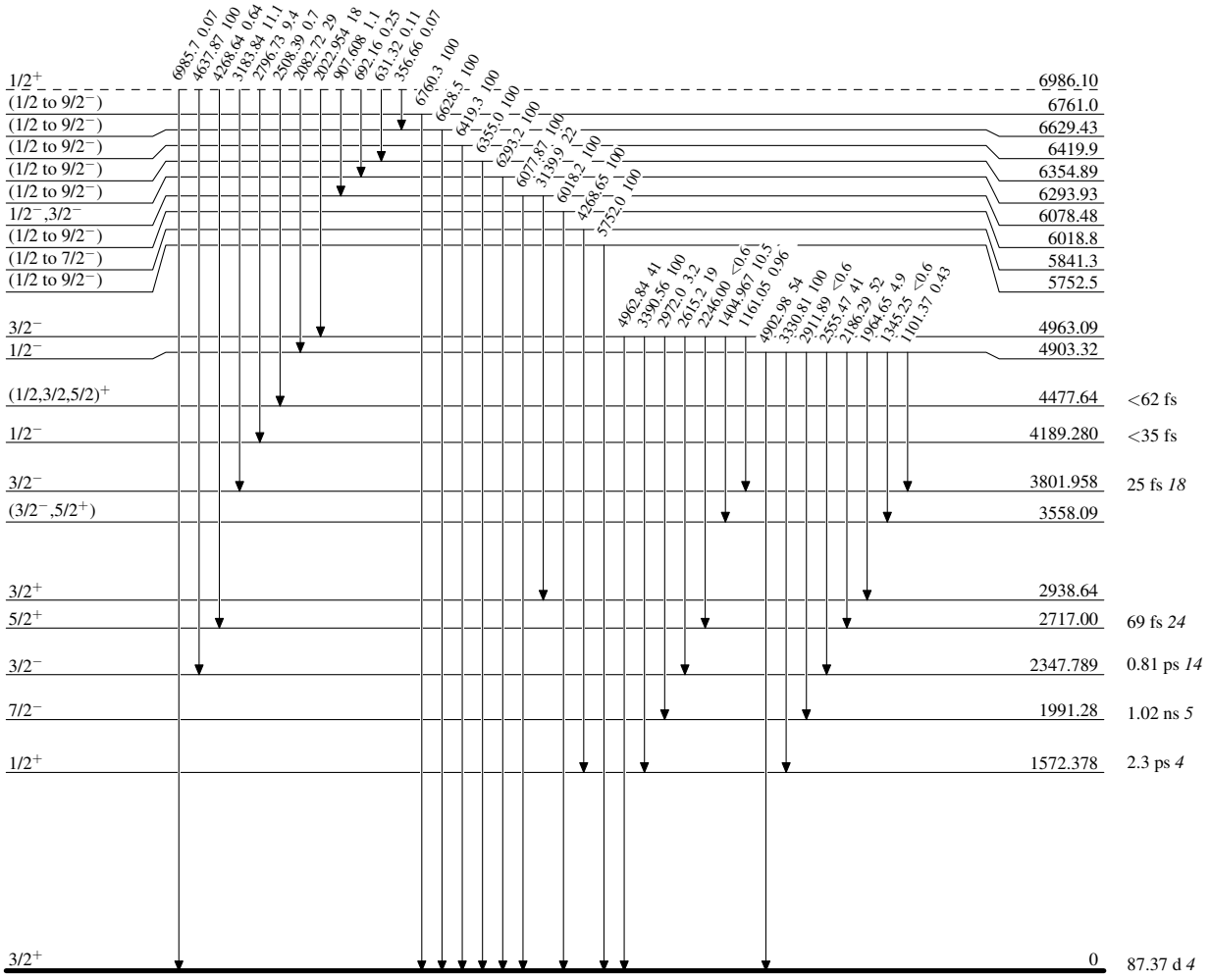
Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level



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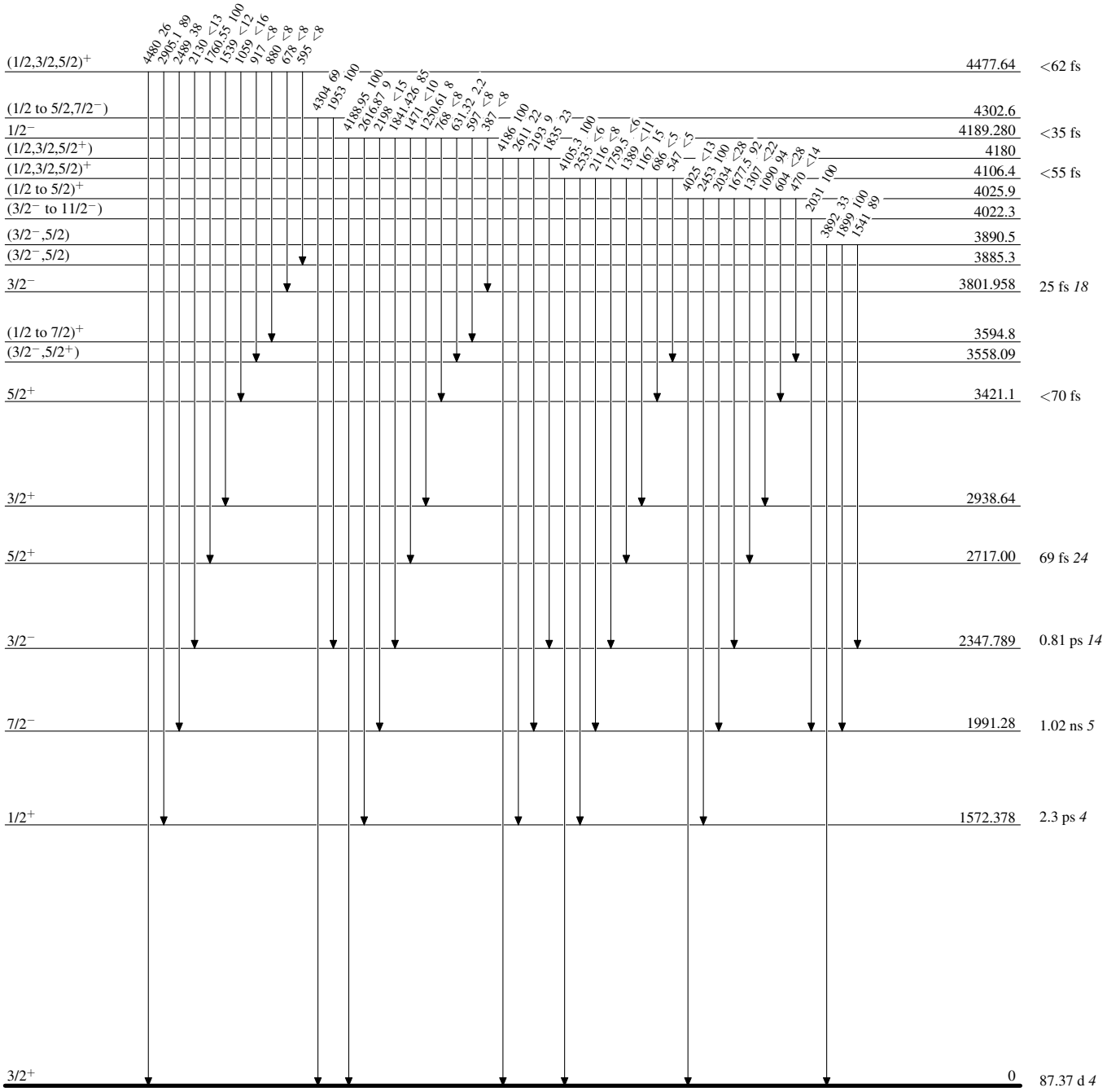
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



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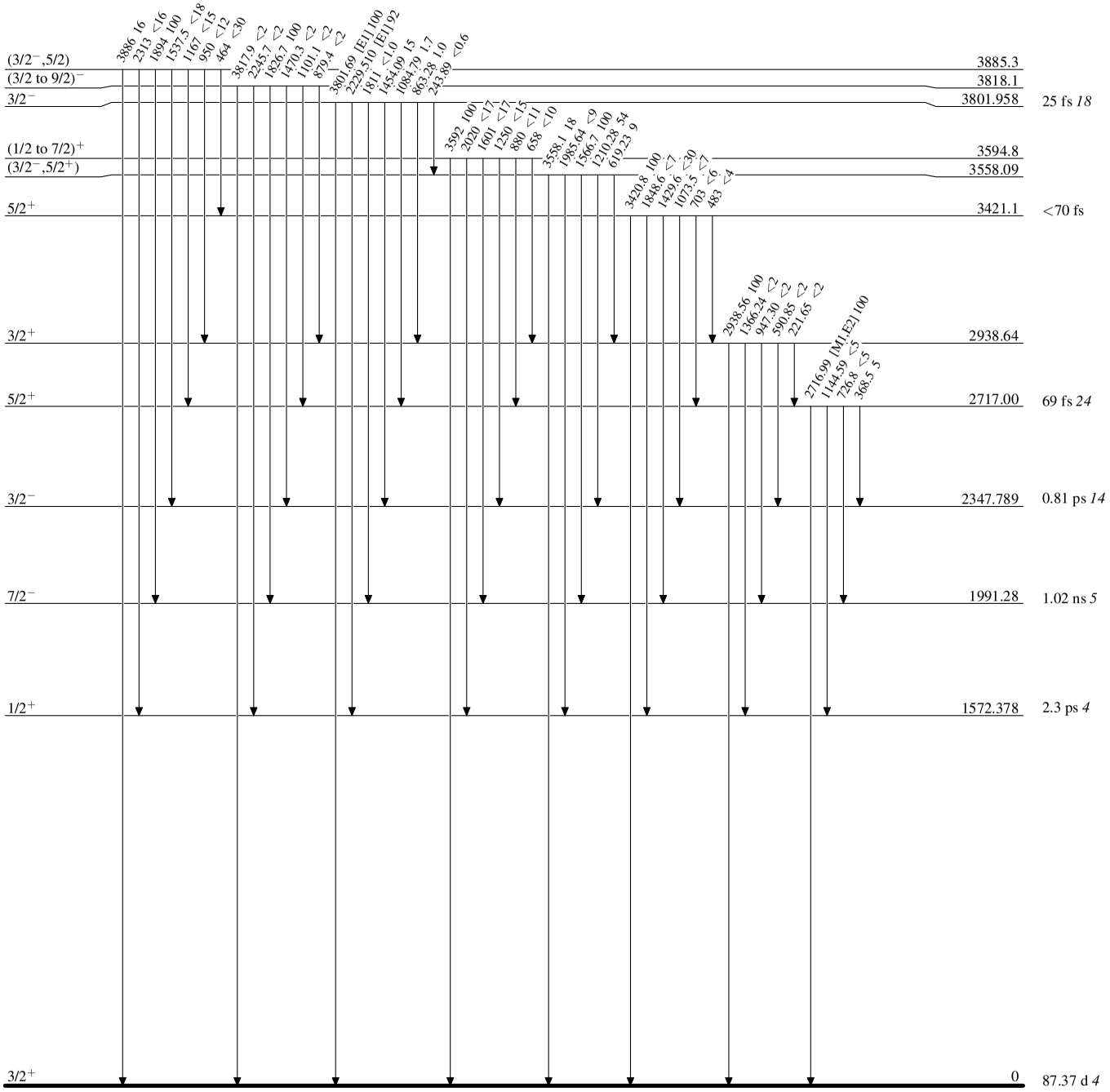
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



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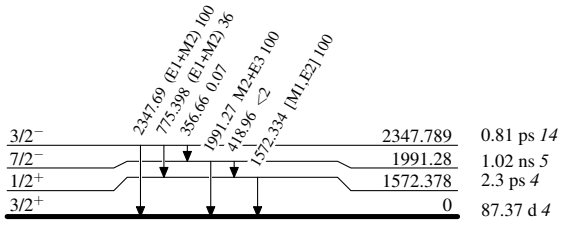
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



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