Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal, E. A. Mccutchan	NDS 136, 1 (2016)	1-Jul-2016

Q(β^-)=−10504 *15*; S(n)=13566.5 *22*; S(p)=6.11×10^3 *3*; Q(α)=−2748 *3* 2012Wa38
S(2n)=23883.1 *17*, S(2p)=9529.0 *25* (2012Wa38).

^{70}Se Levels

Cross Reference (XREF) Flags

A	^{70}Br ε decay (79.1 ms)	E	^{40}Ca(^{36}Ar,α2pγ), ^{58}Ni(^{14}N,pnγ)
B	^{70}Br ε decay (2.2 s)	F	^{58}Ni(^{14}N,pnγ), ^{60}Ni(^{12}C,2nγ)
C	^{9}Be(^{70}Se,^{70}Se$'\gamma$)	G	Coulomb excitation
D	^{40}Ca(^{40}Ca,2α2pγ)		

E(level)[†]	J$^\pi$	T$_{1/2}$[‡]	XREF	Comments
0.0[&]	0$^+$	41.1 min *3*	ABCDEFG	%ε+%β^+=100 T$_{1/2}$: from 1974Te04.
944.52[&] *5*	2$^+$	2.23 ps *14*	BCDEFG	Q=+ (2007Hu03) T$_{1/2}$: from weighted average of 2.27 ps *26* (2014Ni09) and 2.22 ps *14* (2008Lj01) using recoil distance Doppler shift method. Others: 1.0 ps *2* from recoil distance Doppler shift method (1986He17) and 1.1 ps *3* (1975GuYV). J$^\pi$: from 944.51γ E2 to 0$^+$. Q: from nuclear reorientation effect in Coulomb excitation (2007Hu03).
1599.9[a] *3*	2$^+$	3.3[#] ps *9*	BCDEF	T$_{1/2}$: Other: < 5.2 ps effective half-life from recoil distance Doppler shift method (2014Ni09). J$^\pi$: from 1600.1γ E2 to 0$^+$.
2010.3 *3*	(0$^+$)		EF	J$^\pi$: (0$^+$) from 1065.8γ Q to 2$^+$ in 1981Ah03. Authors tentatively assigned (0$^+$) for this level based on isotropic angular distribution. Other: (0$^+$) in 1980Wa19, based on the isotropic angular distribution.
2038.8[&] *5*	4$^+$	0.97 ps *7*	BCDEF	T$_{1/2}$: Others: < 3.3 ps, effective half-life from recoil distance Doppler shift method (2014Ni09) and 1.0 ps (1986He17) using recoil distance Doppler shift method deduced from singles data and 2.3 ps *6* (1975GuYV). J$^\pi$: from 1094.4γ E2 to 2$^+$; assumed E2 cascade member.
2382.5[a] *4*	4$^+$	<12[@] ps	B DEF	J$^\pi$: from 782.6γ E2 to 2$^+$; 1438.1γ E2 to 2$^+$; assumed E2 cascade member.
2518.6 *6*	3$^{(-)}$	<1.7 ps	CDEF	T$_{1/2}$: upper limit from effective half-life of 1.29 ps *40* from recoil distance Doppler shift method (2014Ni09). Other: 4.2 ps *6* using recoil distance Doppler shift method (1986He17) using singles data. J$^\pi$: from 1574.1γ D to 2$^+$; 868.8γ from 5$^-$.
2553.1 *10*			E	J$^\pi$: (4$^+$) proposed in ^{40}Ca(^{36}Ar,α2pγ),^{58}Ni(^{14}N,pnγ).
3003.2[&] *5*	6$^+$	1.32 ps *21*	B DEF	T$_{1/2}$: other: 2.7 ps *6* from recoil distance Doppler shift method, deduced using singles (1986He17). J$^\pi$: from 964.39γ E2 to 4$^+$; assumed E2 cascade member.
3139.6 *3*			F	
3218.4[a] *6*	(6$^+$)		D	J$^\pi$: from 835.9γ to 4$^+$; assumed E2 cascade member.
3356.4 *11*			E	
3387.4 *5*	5$^-$	6.1[#] ps *17*	DEF	J$^\pi$: from 528γ E2 from 7$^-$, 1348.6γ to 4$^+$.
3524.1 *6*	(5$^-$)	<9[@] ps	DEF	J$^\pi$: from 1005.5γ (E2) to 3$^{(-)}$; 1485.2γ (E1) to 4$^+$. Other: (4) in 1981Ah03.
3644 *10*			B DE	J$^\pi$: (6$^+$) proposed in ^{40}Ca(^{36}Ar,α2pγ),^{58}Ni(^{14}N,pnγ).
3788.9 *6*	(6$^-$)		DEF	J$^\pi$: J from D+Q 264.8γ to (5$^-$), π from systematics in 1980Wa19. Other: (5) in 1981Ah03.
3915.4[c] *5*	7$^-$	<15[@] ps	B DEF	J$^\pi$: from 912.2γ E1 to 6$^+$, 691.5γ from 8$^+$.
4037.6[&] *5*	8$^+$	<4[@] ps	B DEF	J$^\pi$: from 1034.4γ E2 to 6$^+$; assumed E2 cascade member.

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Adopted Levels, Gammas (continued)

^{70}Se Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$[‡]	XREF	Comments
4187.4[a] *8*	(8+)		D	Jπ: from 969.0γ to (6+); assumed E2 cascade member.
4324.5 *9*			E	
4410.7 *6*			DE	
4607.0[b] *6*	8+		B DE	Jπ: (8,9+) from R(DCO) in ^{40}Ca(^{36}Ar,α2pγ),^{58}Ni(^{14}N,pnγ), 1603.7γ to 6+.
4896.7[d] *6*	(9−)		DE	Jπ: from 981.3γ to 7−; 468.0γ to (8−); assumed E2 cascade member.
4955.0 *12*			B E	Jπ: (9) from 348.0γ to 8+ suggested in ε decay (2000Pi15) but the placement of the γ transition is uncertain.
5205.8[&] *5*	(10+)		B DE	Jπ: from 1168.12γ to 8+; assumed E2 cascade member.
5209.1[c] *6*	(9−)		DE	Jπ: from 1293.6γ to 7−; assumed E2 cascade member.
5308.1[a] *10*	(10+)		D	Jπ: from 1120γ to (8+); assumed E2 cascade member.
5693.2[b] *6*	(10+)		B DE	Jπ: from 1086.2γ to 8+; assumed E2 cascade member.
5805.5[d] *6*	(11−)		DE	Jπ: from 908.7γ to (9−); assumed E2 cascade member.
6017.0 *15*			B E	
6490.0[c] *6*	(11−)		DE	Jπ: from 1280.9γ to (9−); assumed E2 cascade member.
6510.2[&] *5*	(12+)		DE	Jπ: from 1304.45γ to (10+); assumed E2 cascade member.
6602[a] *5*	(12+)		D	Jπ: from 1294γ to (10+); assumed E2 cascade member.
6873.0[d] *6*	(13−)		DE	Jπ: from 1967.5γ to (11−); assumed E2 cascade member.
6956.9[b] *6*	(12+)		DE	Jπ: from 1263.6γ to (10+); assumed E2 cascade member.
7305.8 *9*	(13−)	1.6 ns *2*	E	$T_{1/2}$: quoted by 1989My01; generalized centroid-shift method. Jπ: from 796.5γ to 12+; 348.0γ to (12+); proposed based on Weisskopf estimates in 1989My01.
7554.0[c] *7*	(13−)		D	Jπ: from 1064.0γ to (11−); assumed E2 cascade member.
7940.8[&] *5*	(14+)		DE	Jπ: from 1430.6γ to 12+; assumed E2 cascade member.
8017.7[d] *7*	(15−)		D	Jπ: from 1144.7γ to (13−); assumed E2 cascade member.
8029[a] *5*	(14+)		D	Jπ: from 1427.2γ to (12+); assumed E2 cascade member.
8316.3[b] *6*	(14+)		D	Jπ: from 1359.4γ to (12+); assumed E2 cascade member.
8349.5 *13*			E	
8771.8[c] *8*	(15−)		D	Jπ: from 1217.8γ to (13−); assumed E2 cascade member.
9430.3[b] *6*	(16+)		D	Jπ: from 1114.0γ to (14+); assumed E2 cascade member.
9496.2[&] *6*	(16+)		DE	Jπ: from 1555.3γ to (14+); assumed E2 cascade member.
9624.1[d] *7*	(17−)		D	Jπ: from 1606.4γ to (15−); assumed E2 cascade member.
10084.1[c] *8*	(17−)		D	Jπ: from 1312.3γ to (15−); assumed E2 cascade member.
10646.2[b] *6*	(18+)		D	Jπ: from 1215.9γ to 16+; assumed E2 cascade member.
11120.5 *9*			D	
11268.5[&] *11*	(18+)		D	Jπ: from 1772.3γ to (16+); assumed E2 cascade member.
11532.2[d] *10*	(19−)		D	Jπ: from 1908.1γ to (17−); assumed E2 cascade member.
11778.5[c] *12*	(19−)		D	Jπ: from 1694.4γ to (17−); assumed E2 cascade member.
12267.7[b] *7*	(20+)		D	Jπ: from 1621.5γ to (18+); assumed E2 cascade member.
13160.5[&] *15*	(20+)		D	Jπ: from 1892γ to (18+); assumed E2 cascade member.
13181.4[d] *11*	(21−)		D	Jπ: from 1649.2γ to (19−); assumed E2 cascade member.
13727.0[c] *14*	(21−)		D	Jπ: from 1948.4γ to (19−); assumed E2 cascade member.
14257.7[b] *11*	(22+)		D	Jπ: from 1990.0γ to (20+); assumed E2 cascade member.
15251[d] *3*	(23−)		D	Jπ: from 2070γ to (21−); assumed E2 cascade member.
15806[c] *7*	(23−)		D	Jπ: from 2079γ to (21−); assumed E2 cascade member.
16490[b] *3*	(24+)		D	Jπ: from 2232γ to (22+); assumed E2 cascade member.
17870[d] *4*	(25−)		D	Jπ: from 2618γ to (23−); assumed E2 cascade member.
17966[c] *7*	(25−)		D	Jπ: from 2160γ to (23−); assumed E2 cascade member.

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Adopted Levels, Gammas (continued)

^{70}Se Levels (continued)

E(level)[†]	J^{π}	XREF	Comments
19218[b] 5	(26^{+})	D	J^{π}: from 2728γ to (24^{+}); assumed E2 cascade member.
20246[c] 8	(27^{-})	D	J^{π}: from 2280γ to (25^{-}); assumed E2 cascade member.

[†] From a least-squares fit to Eγ′s, by evaluators. ΔEγ=1 keV is assumed when no uncertainty is available.
[‡] From recoil distance Doppler shift method (2008Lj01), unless otherwise noted.
[#] From recoil distance Doppler shift method (1986He17), using singles data.
[@] Effective lifetime from recoil distance method, not corrected for the side feedings (1986He17).
[&] Band(A): g.s. yrast band.
[a] Band(B): Band based on 1600, 2^{+}.
[b] Band(C): Band based on 4607, 8^{+}.
[c] Band(D): Band based on 3915, 7^{-}.
[d] Band(E): Band based on 4896, (9^{-}).

Adopted Levels, Gammas (continued)

$\gamma(^{70}Se)$

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[&]	δ[d]	α[e]	Comments
944.52	2^+	944.51 *5*	100	0.0	0^+	E2		4.82×10^{-4}	α(K)=0.000429 *6*; α(L)=4.50×10^{-5} *7*; α(M)=7.00×10^{-6} *10*; α(N)=5.96×10^{-7} *9* B(E2)(W.u.)=19.7 *13*
1599.9	2^+	655.1 *5*	100 *21*	944.52	2^+	M1+E2[a]	−1.0 *+1−2*	0.00109 *4*	α(K)=0.00097 *3*; α(L)=0.000103 *3*; α(M)=1.60×10^{-5} *5*; α(N)=1.36×10^{-6} *4* B(E2)(W.u.)=33 *14*; B(M1)(W.u.)=0.009 *4* δ: Other: 1.4 *+2.3−0.6* (1980Wa19).
		1600.1 *7*	25 *5*	0.0	0^+	E2		2.79×10^{-4}	α(K)=0.0001367 *20*; α(L)=1.414×10^{-5} *20*; α(M)=2.20×10^{-6} *3*; α(N)=1.88×10^{-7} *3* B(E2)(W.u.)=0.19 *8* Mult.: Q from $\gamma(\theta)$ in ^{58}Ni(^{14}N,pnγ),^{60}Ni(^{12}C,2nγ); M2 excluded by comparison to RUL.
2010.3	(0^+)	1065.8[@] *3*	100[@]	944.52	2^+	(E2)		3.63×10^{-4}	α(K)=0.000323 *5*; α(L)=3.38×10^{-5} *5*; α(M)=5.26×10^{-6} *8*; α(N)=4.48×10^{-7} *7*
2038.8	4^+	438.9 *5*	0.8 *7*	1599.9	2^+	[E2]		0.00415	α(K)=0.00368 *6*; α(L)=0.000400 *6*; α(M)=6.21×10^{-5} *9*; α(N)=5.20×10^{-6} *8* B(E2)(W.u.)=17 *15*
		1094.4 *1*	100 *3*	944.52	2^+	E2		3.41×10^{-4}	α(K)=0.000304 *5*; α(L)=3.18×10^{-5} *5*; α(M)=4.94×10^{-6} *7*; α(N)=4.22×10^{-7} *6* B(E2)(W.u.)=21.5 *18*
2382.5	4^+	782.6 *3*	100 *12*	1599.9	2^+	E2[b]		7.71×10^{-4}	α(K)=0.000687 *10*; α(L)=7.25×10^{-5} *11*; α(M)=1.128×10^{-5} *16*; α(N)=9.57×10^{-7} *14* B(E2)(W.u.)>5.2
		1438.1 *7*	$8.\times10^1$ *5*	944.52	2^+	E2[b]		2.54×10^{-4}	α(K)=0.0001692 *24*; α(L)=1.755×10^{-5} *25*; α(M)=2.73×10^{-6} *4*; α(N)=2.33×10^{-7} *4* B(E2)(W.u.)>0.20
2518.6	$3^{(-)}$	1574.1 *9*	100	944.52	2^+	D			δ: δ=−0.26 *15* (1981Ah03); 0.0 (1980Wa19).
2553.1		1608.6[‡]	100[#]	944.52	2^+				
3003.2	6^+	620.7 *9*	3 *1*	2382.5	4^+	[E2]		1.45×10^{-3}	α(K)=0.001291 *19*; α(L)=0.0001376 *21*; α(M)=2.14×10^{-5} *4*; α(N)=1.81×10^{-6} *3* B(E2)(W.u.)=8 *3*
		964.39 *5*	100 *4*	2038.8	4^+	E2		4.58×10^{-4}	α(K)=0.000408 *6*; α(L)=4.28×10^{-5} *6*; α(M)=6.66×10^{-6} *10*; α(N)=5.67×10^{-7} *8* B(E2)(W.u.)=29 *5*
3139.6		2195.0[@] *3*	100[@]	944.52	2^+				
3218.4	(6^+)	215 *5*	11 *7*	3003.2	6^+				
		835.9 *4*	100 *11*	2382.5	4^+				
3356.4		973.9[‡]	100[#]	2382.5	4^+				
3387.4	5^-	868.8 *4*	57 *9*	2518.6	$3^{(-)}$	[E2]		5.91×10^{-4}	α(K)=0.000526 *8*; α(L)=5.54×10^{-5} *8*; α(M)=8.61×10^{-6} *13*; α(N)=7.32×10^{-7} *11* B(E2)(W.u.)=4.0 *14*

$^{70}_{34}Se_{36}$-4

Adopted Levels, Gammas (continued)

γ(^{70}Se) (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[&]	α[e]	Comments
3387.4	5⁻	1348.6 *4*	100 *12*	2038.8	4⁺	E1(+M2)[c]		δ: +0.12 with large error (1981Ah03); 0.0 (1980Wa19).
3524.1	(5⁻)	1005.5 *7*	22 *7*	2518.6	3$^{(-)}$	(E2)[b]	4.15×10^{-4}	α(K)=0.000370 *6*; α(L)=3.87×10^{-5} *6*; α(M)=6.02×10^{-6} *9*; α(N)=5.13×10^{-7} *8* B(E2)(W.u.)>0.64 Mult.,δ: D+Q, −0.06 *+9−2* (1981Ah03).
		1485.2 *5*	100 *13*	2038.8	4⁺	(E1)[c]	3.29×10^{-4}	α(K)=8.00×10^{-5} *12*; α(L)=8.22×10^{-6} *12*; α(M)=1.278×10^{-6} *18*; α(N)=1.095×10^{-7} *16* B(E1)(W.u.)>1.1×10^{-5}
3644		1261 *10*	100	2382.5	4⁺			
3788.9	(6⁻)	264.8 *3*	100	3524.1	(5⁻)	D+Q		Mult.,δ: D+Q, 0.0<δ<3.7 (1980Wa19). Other: Q (1981Ah03).
3915.4	7⁻	126.6 *3*	5.7 *20*	3788.9	(6⁻)			
		528.0 *2*	28.7 *20*	3387.4	5⁻	E2[b]	0.00233	α(K)=0.00207 *3*; α(L)=0.000223 *4*; α(M)=3.46×10^{-5} *5*; α(N)=2.91×10^{-6} *4* B(E2)(W.u.)>11
		912.2 *1*	100 *4*	3003.2	6⁺	E1	2.17×10^{-4}	α(K)=0.000194 *3*; α(L)=2.00×10^{-5} *3*; α(M)=3.12×10^{-6} *5*; α(N)=2.66×10^{-7} *4* B(E1)(W.u.)>2.6×10^{-5} Mult.,δ: E1+M2 with δ=−0.15 *5* (1981Ah03), however, this results in an M2 strength which exceeds the RUL.
4037.6	8⁺	1034.4 *1*	100	3003.2	6⁺	E2	3.89×10^{-4}	α(K)=0.000346 *5*; α(L)=3.62×10^{-5} *5*; α(M)=5.64×10^{-6} *8*; α(N)=4.80×10^{-7} *7* B(E2)(W.u.)>7.0 Mult.: Q from R(DCO) in ^{58}Ni(^{14}N,pnγ),^{60}Ni(^{12}C,2nγ); M2 excluded by comparison to RUL.
4187.4	(8⁺)	969.0 *6*	100	3218.4	(6⁺)			
4324.5		937.0[‡]		3387.4	5⁻			
		1321.3[‡]		3003.2	6⁺			
4410.7		495.3 *3*	100	3915.4	7⁻			
4607.0	8⁺	569 *2*	18 *8*	4037.6	8⁺			
		691.5 *6*	56 *8*	3915.4	7⁻			
		1603.7 *6*	100 *12*	3003.2	6⁺			
4896.7	(9⁻)	486.0 *3*	29 *9*	4410.7				
		981.3 *2*	100 *7*	3915.4	7⁻			
4955.0		348.0[f‡]	100[#]	4607.0	8⁺			
5205.8	(10⁺)	1168.12 *8*	100	4037.6	8⁺			
5209.1	(9⁻)	1293.6 *3*	100	3915.4	7⁻			
5308.1	(10⁺)	1120.7 *6*	100	4187.4	(8⁺)			
5693.2	(10⁺)	1086.2 *2*	100 *7*	4607.0	8⁺			
		1655.4 *9*	41 *6*	4037.6	8⁺			
5805.5	(11⁻)	908.7 *2*	100	4896.7	(9⁻)			
6017.0		1062.0[‡]	100[#]	4955.0				

$^{70}_{34}Se_{36}$-5

$\gamma(^{70}Se)$ (continued)

E_i(level)	J^π_i	E_γ †	I_γ †	E_f	J^π_f	E_i(level)	J^π_i	E_γ †	I_γ †	E_f	J^π_f
6490.0	(11^-)	1280.9 *2*	100	5209.1	(9^-)	9624.1	(17^-)	1606.4 *3*	100	8017.7	(15^-)
6510.2	(12^+)	1304.45 *9*	100	5205.8	(10^+)	10084.1	(17^-)	1312.3 *3*	100	8771.8	(15^-)
6602	(12^+)	1294 *5*	100	5308.1	(10^+)	10646.2	(18^+)	1215.9 *2*	100	9430.3	(16^+)
6873.0	(13^-)	1067.5 *2*	100	5805.5	(11^-)	11120.5		1624.3 *6*	100	9496.2	(16^+)
6956.9	(12^+)	1263.6 *3*	100 *10*	5693.2	(10^+)	11268.5	(18^+)	1772.3 *9*	100	9496.2	(16^+)
		1750.9 *9*	37 *5*	5205.8	(10^+)	11532.2	(19^-)	1908.1 *7*	100	9624.1	(17^-)
7305.8	(13^-)	348.0 f‡		6956.9	(12^+)	11778.5	(19^-)	1694.4 *9*	100	10084.1	(17^-)
		796.5‡		6510.2	(12^+)	12267.7	(20^+)	1621.5 *3*	100	10646.2	(18^+)
7554.0	(13^-)	1064.0 *3*	100	6490.0	(11^-)	13160.5	(20^+)	1892 *1*	100	11268.5	(18^+)
7940.8	(14^+)	1430.6 *1*	100	6510.2	(12^+)	13181.4	(21^-)	1649.2 *4*	100	11532.2	(19^-)
8017.7	(15^-)	1144.7 *2*	100	6873.0	(13^-)	13727.0	(21^-)	1948.4 *6*	100	11778.5	(19^-)
8029	(14^+)	1427.2 *9*	100	6602	(12^+)	14257.7	(22^+)	1990.0 *9*	100	12267.7	(20^+)
8316.3	(14^+)	1359.4 *3*	100 *8*	6956.9	(12^+)	15251	(23^-)	2070 *3*	100	13181.4	(21^-)
		1806.0 *6*	36 *5*	6510.2	(12^+)	15806	(23^-)	2079 *7*	100	13727.0	(21^-)
8349.5		1043.7‡	100#	7305.8	(13^-)	16490	(24^+)	2232 *3*	100	14257.7	(22^+)
8771.8	(15^-)	1217.8 *3*	100	7554.0	(13^-)	17870	(25^-)	2618 *2*	100	15251	(23^-)
9430.3	(16^+)	1114.0 *3*	100 *10*	8316.3	(14^+)	17966	(25^-)	2160 *2*	100	15806	(23^-)
		1489.4 *3*	63 *7*	7940.8	(14^+)	19218	(26^+)	2728 *4*	100	16490	(24^+)
9496.2	(16^+)	1555.3 *3*	100	7940.8	(14^+)	20246	(27^-)	2280 *4*	100	17966	(25^-)

† From ^{40}Ca(^{40}Ca,2α2pγ), unless otherwise noted.

‡ From ^{40}Ca(^{36}Ar,α2pγ).

\# From ^{40}Ca(^{36}Ar,α2pγ).

@ From ^{58}Ni(^{14}N,pnγ), ^{60}Ni(^{12}C,2nγ).

& From γ(θ), R_{DCO} and γ-deexcitation pattern in ^{58}Ni(^{14}N,pnγ), ^{60}Ni(^{12}C,2nγ) (1981Ah03) or γ(θ) and linear polarization measurements in ^{60}Ni(^{12}C,2nγ) (1980Wa19), unless otherwise stated.

a D+Q from γ(θ) in ^{58}Ni(^{14}N,pnγ),^{60}Ni(^{12}C,2nγ); Δπ= no from level scheme.

b Q from γ(θ) in ^{58}Ni(^{14}N,pnγ),^{60}Ni(^{12}C,2nγ); M2 excluded by comparison to RUL.

c D+Q (or D) from γ(θ) in ^{58}Ni(^{14}N,pnγ),^{60}Ni(^{12}C,2nγ); Δπ= yes from level scheme.

d From γ(θ) in ^{58}Ni(^{14}N,pnγ) (1981Ah03).

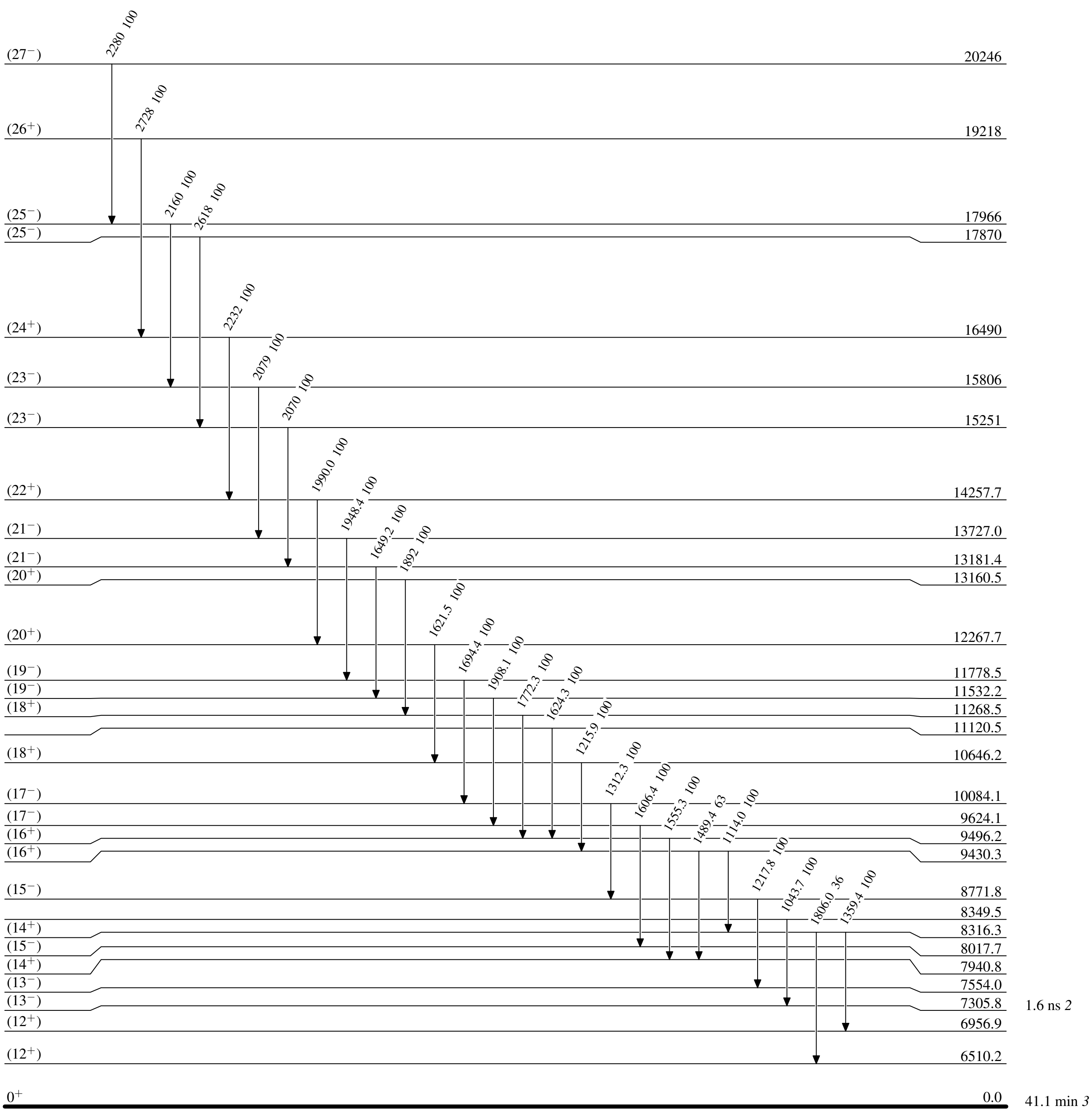
e Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

f Multiply placed.

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

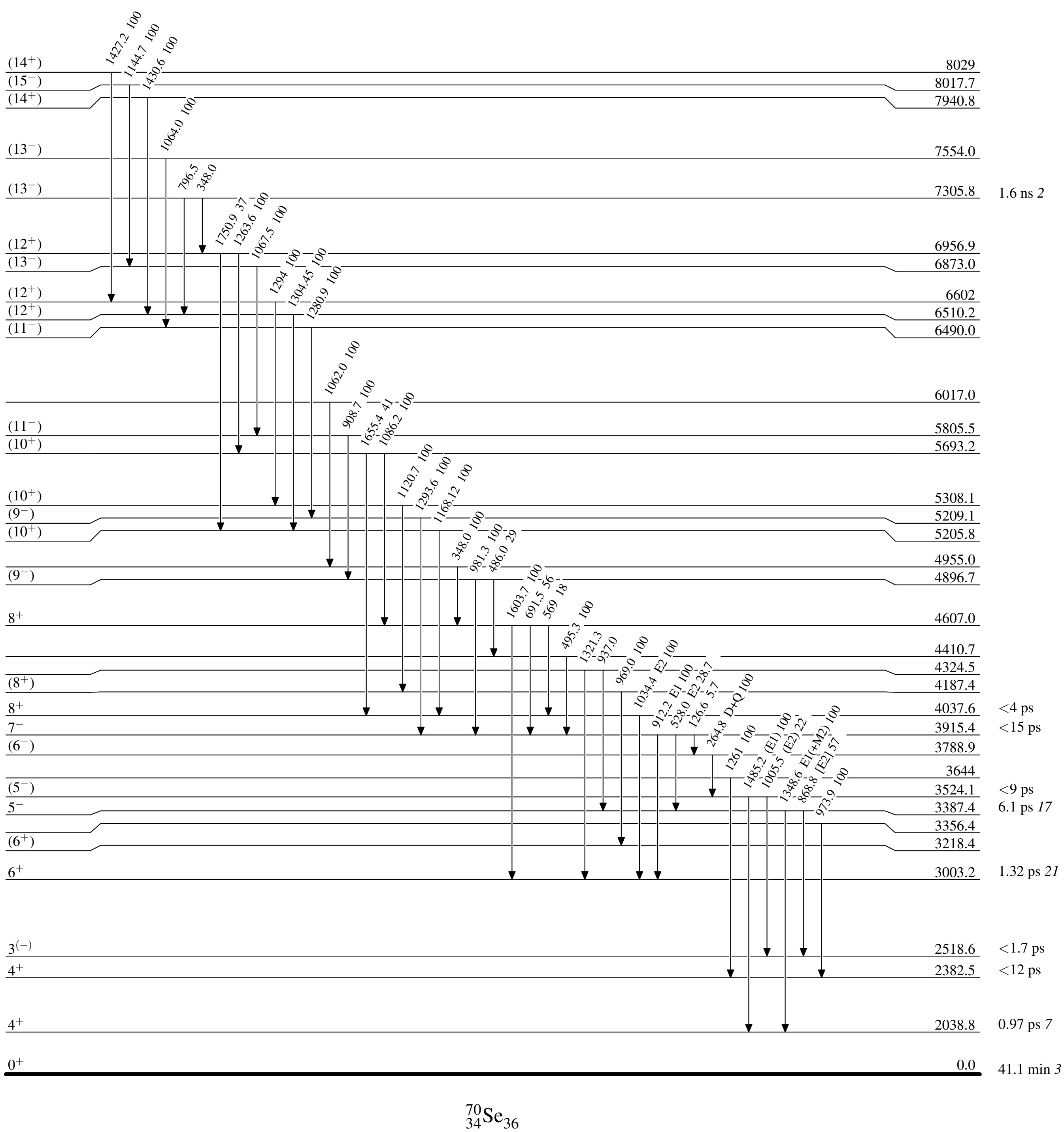


$^{70}_{34}Se_{36}$

Adopted Levels, Gammas

Level Scheme (continued)

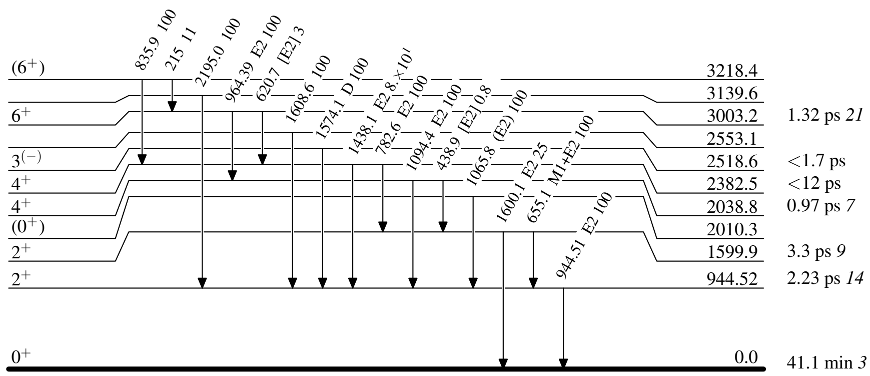
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

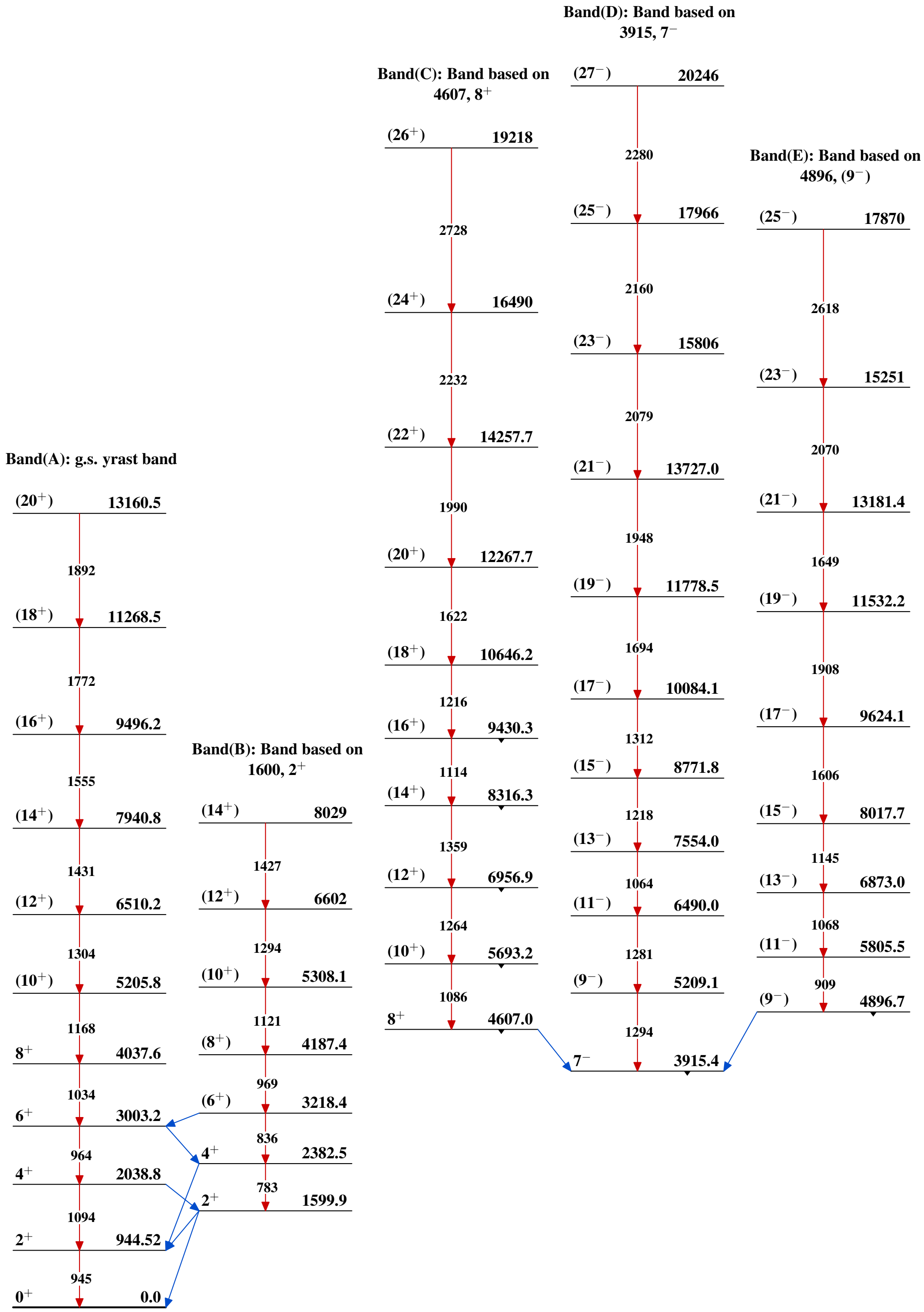
Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{70}_{34}Se_{36}$

Adopted Levels, Gammas



$^{70}_{34}Se_{36}$