Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 135, 193 (2016)	31-May-2016

Q(β^-)=−712×10[1] *45*; S(n)=10374 *11*; S(p)=5830 *9*; Q(α)=−3578 *12* 2012Wa38
S(2n)=23816 *12*, S(2p)=9885 *9*, Q(εp)=1414 *8* (2012Wa38).
Other reactions:
Additional information 1.
Hyperfine structure studies: 1990Li28, 1990Bu12, 1987Ea01, 1987Bu11.
Mass measurement: 1994Ot01.

^{79}Sr Levels

Cross Reference (XREF) Flags

- A ^{79}Y ε decay (14.8 s)
- B ^{24}Mg(^{58}Ni,2pnγ)
- C ^{54}Fe(^{28}Si,2pnγ)
- D ^{58}Ni(^{24}Mg,2pnγ)

E(level)†	Jπ‡	$T_{1/2}$#	XREF	Comments
0.0[b]	3/2(−)	2.25 min *10*	ABCD	%ε+%β^+=100 μ=−0.474 *4* (1990Bu12,2014StZZ) Q=+0.661 *6* (1990Bu12,2013StZZ,2014StZZ) Evaluated rms charge radius=4.2586 fm *39* (2013An02). Evaluated $\delta<r^2>(^{79}Sr,^{88}Sr)$=0.266 fm^2 *6* (2013An02). $T_{1/2}$: weighted av of 1.97 min *12* (1982De36), 2.30 min *10* (1981Li12), 2.31 min *6* (1981FrZY). Others: 1.90 min *15* (1980De13); 2.5 min *2* (1973BoXS); 4.4 min *2* (1972La32); 8.1 min *3* (1971Bi10); 1.9 min *5* (1971Do01). Jπ: from hyperfine structure study (1987Bu11,1990Bu12). Negative parity is supported by agreement of measured μ with that calculated for 3/2[301] neutron state. μ,Q: collinear fast-beam LASER spectroscopy (1990Bu12, 1990Li28,1987Bu11); 2002Ma09 reanalyzed data and Q=+0.73 *6* of 1990Bu12 and obtained 0.708 *6* (4% theoretical uncertainty not included). This result further re-evaluated by 2013StZZ. $\Delta<r^2>(^{88}Sr-^{79}Sr)$=0.261 fm^2 *6* (1990Bu12). $\Delta<r^2>(^{79}Sr-^{84}Sr)$=0.144 fm^2 *6* (1987Ea01). Evaluation of charge radii data: 1992Ne09, 1992Li24.
159.21[c] *6*	(5/2−)	46 ps *6*	BCD	$T_{1/2}$: from RDDS. Weighted average of 49 ps *6* (1990He04) and 43 ps *7* (1990Ca16).
177.29[a] *6*	(5/2+)	21 ns *1*	ABCD	$T_{1/2}$: weighted average of 20 ns *1* (nγ(t),1990Ch07); 23 ns *2* ($\beta\gamma$(t),1992Mu12); 23 ns *2* ($\gamma\gamma$(t) in in-beam,1992Mu12). Other: 23 ns *4* (nγ(t),1973BoXS).
329.81& *8*	(7/2+)	107 ps *6*	ABCD	$T_{1/2}$: from RDDS (1990He04).
374.95[e] *19*	(1/2+)		CD	
381.03[b] *7*	7/2(−)	11.8 ps *21*	BCD	$T_{1/2}$: from RDDS. Weighted average of 12.5 ps *21* (1990He04) and 11.0 ps *21* (1990Ca16).
442.83[d] *15*	(3/2+)		CD	
499.02[a] *9*	(9/2+)	30.5 ps *35*	BCD	$T_{1/2}$: from RDDS (1990He04).
597.16[e] *15*	(5/2+)		CD	
649.08[c] *8*	(9/2−)	3.1 ps *5*	BCD	$T_{1/2}$: from RDDS. Weighted average of 3.0 ps *5* (1990He04) and 4.2 ps *14* (1990Ca16).
750.25[d] *23*	(7/2+)		CD	

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Adopted Levels, Gammas (continued)

^{79}Sr Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$[#]	XREF	Comments
914.35[&] *10*	(11/2$^+$)	1.80 ps *21*	BCD	$T_{1/2}$: from RDDS (1990He04).
982.38[b] *9*	(11/2$^-$)	1.03 ps *14*	BCD	$T_{1/2}$: from RDDS and DSAM. Weighted average of 1.04 ps *14* (1990He04), and 0.87 ps *+40−21* (DSAM,2007Ka13) and 2.8 ps *14* (RDDS,1990Ca16).
1031.9[e] *3*	(9/2$^+$)		CD	
1179.32[a] *11*	(13/2$^+$)	1.20 ps *21*	BCD	$T_{1/2}$: from RDDS and DSAM. Weighted average of 1.18 ps *21* (1990He04) and 1.3 ps *+5−4* (2007Ka13).
1264.6[d] *4*	(11/2$^+$)		CD	
1283.3? *10*			A	
1339.14[c] *10*	(13/2$^-$)	0.81 ps *15*	BCD	$T_{1/2}$: from DSAM and RDDS. Weighted average of 0.83 ps *21* (DSAM,1990He04), 0.91 ps *21* (RDDS,1990He04), 0.69 ps *+17−12* (DSAM), and 2.1 ps *7* (RDDS,1990Ca16).
1675.5[e] *4*	(13/2$^+$)	1.13 ps *+37−22*	CD	
1729.64[&] *17*	(15/2$^+$)	0.32 ps *+18−10*	BCD	$T_{1/2}$: other: <0.7 ps (1990He04).
1773.56[b] *20*	(15/2$^-$)	0.43 ps *+10−8*	BCD	$T_{1/2}$: other: 0.97 ps *14* (RDDS), 0.97 ps *7* (DSAM) (1990He04); effective half-lives, not corrected for feedings.
1980.4[d] *5*	(15/2$^+$)	0.65 ps *+17−10*	CD	
2064.71[a] *22*	(17/2$^+$)	0.33 ps *4*	BCD	$T_{1/2}$: other: 0.48 ps *+5−7* (DSAM,1990He04).
2202.51[c] *20*	(17/2$^-$)	0.284 ps *21*	BCD	$T_{1/2}$: other: 0.62 ps *10* (DSAM,1990He04).
2506.0[e] *5*	(17/2$^+$)	0.27 ps *4*	CD	
2728.6[b] *3*	(19/2$^-$)	0.215 ps *35*	BCD	
2728.7[&] *3*	(19/2$^+$)	0.159 ps *+14−21*	BCD	
2888.1[d] *6*	(19/2$^+$)	0.139 ps *+21−14*	CD	
3129.1[a] *4*	(21/2$^+$)	0.159 ps *21*	BCD	$T_{1/2}$: other: 0.36 ps *7* (DSAM,1990He04).
3215.2[c] *3*	(21/2$^-$)	0.166 ps *14*	BCD	$T_{1/2}$: other: <0.42 PS (DSAM,1990He04), not corrected for feeding.
3507.6[e] *7*	(21/2$^+$)	0.152 ps *28*	CD	
3831.8[b] *4*	(23/2$^-$)	0.118 ps *+14−21*	BCD	
3873.5[&] *4*	(23/2$^+$)	0.125 ps *28*	BCD	
3976.9[d] *8*	(23/2$^+$)	0.076 ps *35*	CD	
4304.3[a] *6*	(25/2$^+$)	0.229[@] ps *21*	BCD	$T_{1/2}$: other: <0.21 PS (DSAM,1990He04).
4367.7[c] *5*	(25/2$^-$)	0.104 ps *21*	BCD	
4666.6[e] *12*	(25/2$^+$)	0.111[@] ps *14*	CD	
5085.6[b] *6*	(27/2$^-$)	0.132[@] ps *28*	BCD	
5120.5[&] *11*	(27/2$^+$)	0.06 ps *+11−4*	CD	
5240.9[d] *13*	(27/2$^+$)	0.083 ps *28*	CD	
5479.6[a] *8*	(29/2$^+$)	0.228[@] ps *21*	BCD	
5670.8[c] *7*	(29/2$^-$)	0.076 ps *28*	BCD	
5974.6[e] *16*	(29/2$^+$)		CD	
6468.5[&] *15*	(31/2$^+$)	0.06 ps *+6−3*	CD	
6499.6[b] *8*	(31/2$^-$)		D	
6676.9[d] *24*	(31/2$^+$)	0.049[@] ps *28*	CD	
6734.5[a] *12*	(33/2$^+$)	0.069 ps *35*	BCD	
7139.1[c] *10*	(33/2$^-$)	0.090[@] ps *28*	BCD	
7433.5[e] *17*	(33/2$^+$)		D	
7993.5[&] *18*	(35/2$^+$)	0.028[@] ps *+28−21*	CD	
8086.8[b] *10*	(35/2$^-$)		D	
8175.1[a] *13*	(37/2$^+$)	0.076[@] ps *28*	BCD	
8257.8[d] *25*	(35/2$^+$)		D	

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Adopted Levels, Gammas (continued)

^{79}Sr Levels (continued)

E(level)†	Jπ‡	XREF	E(level)†	Jπ‡	XREF	E(level)†	Jπ‡	XREF
8738.1[c] *14*	(37/2⁻)	D	10053[d] *3*	(39/2⁺)	D	11679.1[a] *15*	(45/2⁺)	D
9026.3[e] *17*	(37/2⁺)	D	10339.1[c] *17*	(41/2⁻)	D	12106.1[c] *20*	(45/2⁻)	D
9688.5[&] *19*	(39/2⁺)	D	10697.3[e] *20*	(41/2⁺)	D			
9811.8[a] *14*	(41/2⁺)	D	11541.5[&] *20*	(43/2⁺)	D			

† From least-squares fit to Eγ data, assuming 0.5 keV uncertainty when Eγ stated to nearest tenth of a keV, 1 keV otherwise.
‡ From γ(θ), DCO and band assignments. The band assignments indicate an ascending order of spins.
# From DSAM method in ^{54}Fe(^{28}Si,2pnγ) (2007Ka13), unless otherwise stated.
@ Effective half-life, not corrected for side feeding (2007Ka13).
& Band(A): ν5/2[422],α=+1/2.
a Band(a): ν5/2[422],α=−1/2.
b Band(B): ν3/2[301],α=+1/2.
c Band(b): ν3/2[301],α=−1/2.
d Band(C): ν1/2[431],α=+1/2.
e Band(c): ν1/2[431],α=−1/2.

Adopted Levels, Gammas (continued)

γ(^{79}Sr)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	α[#]	Comments
159.21	(5/2$^-$)	159.20 *6*	100	0.0	3/2$^{(-)}$	(M1+E2)	−0.09 *6*	0.0471 *21*	α(K)=0.0415 *18*; α(L)=0.00471 *25*; α(M)=0.00079 *5* α(N)=9.9×10^{-5} *5*; α(O)=6.30×10^{-6} *23* B(M1)(W.u.)=0.112 *15*; B(E2)(W.u.)=5.E+1 *+6−5*
177.29	(5/2$^+$)	177.29 *6*	100	0.0	3/2$^{(-)}$	(E1(+M2))	−0.01 *3*	0.0189 *4*	α(K)=0.0168 *4*; α(L)=0.00183 *5*; α(M)=0.000306 *8* α(N)=3.80×10^{-5} *10*; α(O)=2.35×10^{-6} *6* B(E1)(W.u.)=3.08×10^{-6} *15*; B(M2)(W.u.)=0.04 *+27−4*
329.81	(7/2$^+$)	152.49 *5*	100	177.29	(5/2$^+$)	M1+E2	−0.22 *8*	0.059 *6*	α(K)=0.052 *6*; α(L)=0.0061 *8*; α(M)=0.00102 *13* α(N)=0.000127 *15*; α(O)=7.8×10^{-6} *7* B(M1)(W.u.)=0.052 *4*; B(E2)(W.u.)=1.4×10^2 *10*
374.95	(1/2$^+$)	216.1		159.21	(5/2$^-$)				
		374.8 *3*	100	0.0	3/2$^{(-)}$	D			
381.03	7/2$^{(-)}$	221.76 *7*	100.0 *11*	159.21	(5/2$^-$)	M1+E2	−0.17 *7*	0.0203 *10*	α(K)=0.0179 *9*; α(L)=0.00202 *12*; α(M)=0.000340 *19* α(N)=4.25×10^{-5} *23*; α(O)=2.71×10^{-6} *12* B(M1)(W.u.)=0.136 *25*; B(E2)(W.u.)=1.0×10^2 *9*
		381.08 *10*	20.3 *15*	0.0	3/2$^{(-)}$	E2		0.00864	α(K)=0.00759 *11*; α(L)=0.000883 *13*; α(M)=0.0001482 *21* α(N)=1.83×10^{-5} *3*; α(O)=1.090×10^{-6} *16* B(E2)(W.u.)=49 *10*
442.83	(3/2$^+$)	265.5 *3*	26 *10*	177.29	(5/2$^+$)	D			
		283.6 *2*	100	159.21	(5/2$^-$)	D			
499.02	(9/2$^+$)	169.12 *6*	100.0 *15*	329.81	(7/2$^+$)	M1+E2	−0.26 *6*	0.046 *4*	α(K)=0.040 *3*; α(L)=0.0047 *4*; α(M)=0.00079 *7* α(N)=9.8×10^{-5} *8*; α(O)=6.0×10^{-6} *4* B(M1)(W.u.)=0.109 *14*; B(E2)(W.u.)=3.3×10^2 *15*
		321.89 *12*	23.3 *15*	177.29	(5/2$^+$)	E2		0.01516	α(K)=0.01328 *19*; α(L)=0.001574 *23*; α(M)=0.000264 *4* α(N)=3.24×10^{-5} *5*; α(O)=1.89×10^{-6} *3* B(E2)(W.u.)=48 *7*
597.16	(5/2$^+$)	154.3 *2*	46 *6*	442.83	(3/2$^+$)				
		216.3 *3*	26 *6*	381.03	7/2$^{(-)}$	D			
		222.2 *2*	100 *16*	374.95	(1/2$^+$)	Q			
		419.8 *4*	10 *4*	177.29	(5/2$^+$)				
		437.9 *4*	20 *6*	159.21	(5/2$^-$)				
649.08	(9/2$^-$)	268.02 *6*	100.0 *17*	381.03	7/2$^{(-)}$	M1+E2	−0.13 *6*	0.0122 *4*	α(K)=0.0108 *3*; α(L)=0.00120 *4*; α(M)=0.000202 *7* α(N)=2.53×10^{-5} *8*; α(O)=1.63×10^{-6} *5* B(M1)(W.u.)=0.21 *4*; B(E2)(W.u.)=60 *+67−42*
		489.97 *10*	71.4 *23*	159.21	(5/2$^-$)	E2		0.00391	α(K)=0.00344 *5*; α(L)=0.000391 *6*; α(M)=6.57×10^{-5} *10* α(N)=8.14×10^{-6} *12*; α(O)=5.00×10^{-7} *7* B(E2)(W.u.)=133 *22*
750.25	(7/2$^+$)	153.1 *3*	5.8 *25*	597.16	(5/2$^+$)				
		307.4 *3*	100 *17*	442.83	(3/2$^+$)	Q			
914.35	(11/2$^+$)	415.27 *8*	100.0 *17*	499.02	(9/2$^+$)	M1+E2	−0.37 *16*	0.0044 *3*	α(K)=0.00386 *22*; α(L)=0.00043 *3*; α(M)=7.2×10^{-5} *5* α(N)=9.0×10^{-6} *6*; α(O)=5.8×10^{-7} *3* B(M1)(W.u.)=0.096 *16*; B(E2)(W.u.)=1.0×10^2 *8*

$^{79}_{38}Sr_{41}$-4

Adopted Levels, Gammas (continued)

γ(^{79}Sr) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	α[#]	Comments
914.35	(11/2$^+$)	584.65 *9*	56 *5*	329.81	(7/2$^+$)	E2		0.00232	α(K)=0.00205 *3*; α(L)=0.000230 *4*; α(M)=3.85×10^{-5} *6* α(N)=4.79×10^{-6} *7*; α(O)=2.99×10^{-7} *5* B(E2)(W.u.)=82 *13* I_γ: weighted average (NRM) of branching ratio measurements of 56 *3* in ^{24}Mg(^{58}Ni,2pnγ) (1990Ch07); 66.7 *17* in ^{58}Ni(^{24}Mg,2pnγ) (1990Ch07); and 41 *4* from relative intensity data in ^{54}Fe(^{28}Si,2pnγ) (2007Ka13).
982.38	(11/2$^-$)	333.29 *7*	95 *5*	649.08	(9/2$^-$)	M1+E2	−0.24 *6*	0.00729 *21*	α(K)=0.00644 *19*; α(L)=0.000716 *23*; α(M)=0.000120 *4* α(N)=1.51×10^{-5} *5*; α(O)=9.7×10^{-7} *3* B(M1)(W.u.)=0.26 *4*; B(E2)(W.u.)=1.8×10^2 *9*
		601.31 *10*	100 *4*	381.03	7/2$^{(-)}$	E2		0.00214	α(K)=0.00189 *3*; α(L)=0.000212 *3*; α(M)=3.55×10^{-5} *5* α(N)=4.42×10^{-6} *7*; α(O)=2.77×10^{-7} *4* B(E2)(W.u.)=1.8×10^2 *3*
1031.9	(9/2$^+$)	281.6 *3*	14 *5*	750.25	(7/2$^+$)	D			
		434.7 *3*	100 *25*	597.16	(5/2$^+$)	Q			
1179.32	(13/2$^+$)	264.98 *7*	31.8 *25*	914.35	(11/2$^+$)	M1+E2	−0.18 *9*	0.0128 *7*	α(K)=0.0113 *6*; α(L)=0.00127 *8*; α(M)=0.000213 *13* α(N)=2.67×10^{-5} *15*; α(O)=1.71×10^{-6} *8* B(M1)(W.u.)=0.23 *5*; B(E2)(W.u.)=1.4×10^2 *+16−10*
		680.27 *9*	100.0 *14*	499.02	(9/2$^+$)	E2		1.52×10^{-3}	α(K)=0.001343 *19*; α(L)=0.0001493 *21*; α(M)=2.51×10^{-5} *4* α(N)=3.12×10^{-6} *5*; α(O)=1.97×10^{-7} *3* B(E2)(W.u.)=121 *22*
1264.6	(11/2$^+$)	232.7 *4*	2.0 *10*	1031.9	(9/2$^+$)				
		514.3 *4*	100 *30*	750.25	(7/2$^+$)	Q			
1283.3?		1106[&] *1*	100	177.29	(5/2$^+$)				
1339.14	(13/2$^-$)	356.72 *7*	49 *4*	982.38	(11/2$^-$)	M1+E2	−0.07 *3*	0.00590	α(K)=0.00521 *8*; α(L)=0.000575 *9*; α(M)=9.67×10^{-5} *15* α(N)=1.213×10^{-5} *18*; α(O)=7.88×10^{-7} *12* B(M1)(W.u.)=0.20 *4*; B(E2)(W.u.)=10 *9* I_γ: value of 82 *4* from branching ratio data in ^{58}Ni(^{24}Mg,2pnγ) (1990Ch07) seems discrepant, thus not used in the averaging procedure.
		690.12 *10*	100 *4*	649.08	(9/2$^-$)	E2		1.46×10^{-3}	α(K)=0.001292 *18*; α(L)=0.0001435 *20*; α(M)=2.41×10^{-5} *4* α(N)=3.00×10^{-6} *5*; α(O)=1.90×10^{-7} *3* B(E2)(W.u.)=1.5×10^2 *3*
1675.5	(13/2$^+$)	410.9 *4*	13 *6*	1264.6	(11/2$^+$)				
		643.6 *3*	100 *13*	1031.9	(9/2$^+$)	E2		1.77×10^{-3}	α(K)=0.001562 *22*; α(L)=0.0001742 *25*;

$^{79}_{38}Sr_{41}$-5

Adopted Levels, Gammas (continued)

$\gamma(^{79}Sr)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	α[#]	Comments
									α(M)=2.92×10^{-5} *5* α(N)=3.64×10^{-6} *6*; α(O)=2.29×10^{-7} *4* B(E2)(W.u.)=2.0×10^{2} *+6−8*
1729.64	(15/2$^+$)	550.29 *20*	60 *7*	1179.32	(13/2$^+$)	(M1)		0.00210	α(K)=0.00186 *3*; α(L)=0.000203 *3*; α(M)=3.40×10^{-5} *5* α(N)=4.28×10^{-6} *6*; α(O)=2.80×10^{-7} *4* B(M1)(W.u.)=0.15 *+6−9* B(E2)(W.u.)=1.5×10^{2} *+5−9*
		815.35 *20*	100 *5*	914.35	(11/2$^+$)	E2			
1773.56	(15/2$^-$)	434.54 *27*	31 *4*	1339.14	(13/2$^-$)	M1+E2	−0.15 *5*	0.00370 *7*	α(K)=0.00327 *6*; α(L)=0.000359 *7*; α(M)=6.03×10^{-5} *11* α(N)=7.58×10^{-6} *13*; α(O)=4.93×10^{-7} *8* B(M1)(W.u.)=0.14 *4*; B(E2)(W.u.)=22 *16* E_γ: NRM weighted average of all the three available values. I_γ: value of 89 *9* from branching ratio data in ^{58}Ni(^{24}Mg,2pnγ) (1990Ch07) seems discrepant, thus not used in the averaging procedure.
		791.2 *3*	100 *4*	982.38	(11/2$^-$)	E2		1.02×10^{-3}	α(K)=0.000904 *13*; α(L)=9.97×10^{-5} *14*; α(M)=1.673×10^{-5} *24* α(N)=2.09×10^{-6} *3*; α(O)=1.334×10^{-7} *19* B(E2)(W.u.)=1.6×10^{2} *4* E_γ: NRM weighted average of all the three available values.
1980.4	(15/2$^+$)	304.9 *6*	2.2 *11*	1675.5	(13/2$^+$)				
		715.8 *4*	100 *11*	1264.6	(11/2$^+$)	E2		1.33×10^{-3}	α(K)=0.001172 *17*; α(L)=0.0001299 *19*; α(M)=2.18×10^{-5} *3* α(N)=2.72×10^{-6} *4*; α(O)=1.726×10^{-7} *25* B(E2)(W.u.)=2.2×10^{2} *+5−7*
2064.71	(17/2$^+$)	335.09 *22*	13.5 *24*	1729.64	(15/2$^+$)	(M1)		0.00685	α(K)=0.00605 *9*; α(L)=0.000668 *10*; α(M)=0.0001123 *16* α(N)=1.410×10^{-5} *20*; α(O)=9.16×10^{-7} *13* B(M1)(W.u.)=0.21 *5* Mult.: ΔJ=1, dipole from DCO in ^{54}Fe(^{28}Si,2pnγ). Other: δ(E2/M1)≤1 (1990He04).
		885.3 *3*	100.0 *24*	1179.32	(13/2$^+$)	E2			B(E2)(W.u.)=138 *18*
2202.51	(17/2$^-$)	428.99 *10*	33 *4*	1773.56	(15/2$^-$)	(M1)		0.00377	α(K)=0.00333 *5*; α(L)=0.000365 *6*; α(M)=6.14×10^{-5} *9* α(N)=7.71×10^{-6} *11*; α(O)=5.03×10^{-7} *7* B(M1)(W.u.)=0.24 *4* I_γ: value of 72 *17* from branching ratio in ^{58}Ni(^{24}Mg,2pnγ) (1990Ch07) seems discrepant, thus not used in the averaging procedure. Mult.: ΔJ=1, dipole from DCO in ^{54}Fe(^{28}Si,2pnγ). Other: δ(E2/M1)≤1 (1990He04).
		863.2 *3*	100 *6*	1339.14	(13/2$^-$)	[E2]			B(E2)(W.u.)=155 *17*

$^{79}_{38}Sr_{41}$-6

Adopted Levels, Gammas (continued)

γ(^{79}Sr) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	α[#]	Comments
								Mult.: E2 assigned by 1990Ch07, but no supporting data are supplied.
2506.0	(17/2$^+$)	525.6 *6*	5 *3*	1980.4	(15/2$^+$)			
		830.5 *4*	100 *33*	1675.5	(13/2$^+$)	[E2]		α(N)=1.85×10^{-6} *3*; α(O)=1.182×10^{-7} *17* B(E2)(W.u.)=2.5×10^2 *12*
2728.6	(19/2$^-$)	526.12 *21*	30 *7*	2202.51	(17/2$^-$)	(M1)	0.00233	α(K)=0.00206 *3*; α(L)=0.000225 *4*; α(M)=3.78×10^{-5} *6* α(N)=4.75×10^{-6} *7*; α(O)=3.11×10^{-7} *5* B(M1)(W.u.)=0.16 *5*
		954.9 *3*	100 *5*	1773.56	(15/2$^-$)	E2		B(E2)(W.u.)=127 *24*
2728.7	(19/2$^+$)	663.85 *26*	56 *12*	2064.71	(17/2$^+$)	(M1)	1.37×10^{-3}	α(K)=0.001213 *17*; α(L)=0.0001316 *19*; α(M)=2.21×10^{-5} *4* α(N)=2.78×10^{-6} *4*; α(O)=1.82×10^{-7} *3* B(M1)(W.u.)=0.17 *5* I_γ: from relative intensity data. Value of 84 *9* from branching ratio data in ^{24}Mg(^{58}Ni,2pnγ) (1990Ch07) seems discrepant, thus not used in the averaging procedure.
		999.1 *4*	100 *12*	1729.64	(15/2$^+$)	[E2]		B(E2)(W.u.)=114 *+24−21*
2888.1	(19/2$^+$)	907.7 *4*	100	1980.4	(15/2$^+$)	[E2]		B(E2)(W.u.)=3.3×10^2 *+4−5*
3129.1	(21/2$^+$)	400.39 *23*	16.4 *23*	2728.7	(19/2$^+$)			
		1064.6 *4*	100 *4*	2064.71	(17/2$^+$)	E2		B(E2)(W.u.)=111 *16*
3215.2	(21/2$^-$)	486.53 *23*	15 *5*	2728.6	(19/2$^-$)			
		1012.8 *4*	100 *5*	2202.51	(17/2$^-$)	[E2]		B(E2)(W.u.)=138 *16*
3507.6	(21/2$^+$)	1001.6 *4*	100	2506.0	(17/2$^+$)	[E2]		B(E2)(W.u.)=1.8×10^2 *4*
3831.8	(23/2$^-$)	616.6 *3*	22 *6*	3215.2	(21/2$^-$)			
		1103.1 *4*	100 *6*	2728.6	(19/2$^-$)	[E2]		B(E2)(W.u.)=120 *+24−18*
3873.5	(23/2$^+$)	744.3 *3*	23 *10*	3129.1	(21/2$^+$)			
		1144.8 *5*	100 *8*	2728.7	(19/2$^+$)	[E2]		B(E2)(W.u.)=93 *25*
3976.9	(23/2$^+$)	1088.8 *5*	100	2888.1	(19/2$^+$)	[E2]		B(E2)(W.u.)=2.4×10^2 *12*
4304.3	(25/2$^+$)	1175.2[@] *5*	100	3129.1	(21/2$^+$)	[E2]		B(E2)(W.u.)=55 *5*
4367.7	(25/2$^-$)	535.9 *3*	32 *7*	3831.8	(23/2$^-$)			
		1152.7 *5*	100 *7*	3215.2	(21/2$^-$)	[E2]		B(E2)(W.u.)=101 *23*
4666.6	(25/2$^+$)	1159 *1*	100	3507.6	(21/2$^+$)	[E2]		B(E2)(W.u.)>121 *16*
5085.6	(27/2$^-$)	1253.8 *5*	100	3831.8	(23/2$^-$)	[E2]		B(E2)(W.u.)>69 *15*
5120.5	(27/2$^+$)	1247 *1*	100	3873.5	(23/2$^+$)	[E2]		B(E2)(W.u.)=1.6×10^2 *+32−10*
5240.9	(27/2$^+$)	1264 *1*	100	3976.9	(23/2$^+$)	[E2]		B(E2)(W.u.)=1.0×10^2 *4*
5479.6	(29/2$^+$)	1175.2[@] *5*	100	4304.3	(25/2$^+$)	[E2]		B(E2)(W.u.)>55 *5*
5670.8	(29/2$^-$)	1303.1 *5*	100	4367.7	(25/2$^-$)	[E2]		B(E2)(W.u.)=1.0×10^2 *4*
5974.6	(29/2$^+$)	1308 *1*	100	4666.6	(25/2$^+$)			
6468.5	(31/2$^+$)	1348 *1*	100	5120.5	(27/2$^+$)	[E2]		B(E2)(W.u.)=1.1×10^2 *+11−5*
6499.6	(31/2$^-$)	1414.0		5085.6	(27/2$^-$)			
6676.9	(31/2$^+$)	1436 *2*	100	5240.9	(27/2$^+$)	[E2]		B(E2)(W.u.)=9×10^1 *6*
6734.5	(33/2$^+$)	1254.9 *8*	100	5479.6	(29/2$^+$)	[E2]		B(E2)(W.u.)=1.3×10^2 *+13−4*
7139.1	(33/2$^-$)	1468.2 *7*	100	5670.8	(29/2$^-$)	[E2]		B(E2)(W.u.)>46 *15*
7433.5	(33/2$^+$)	1458.9		5974.6	(29/2$^+$)			

$^{79}_{38}Sr_{41}$-7

Adopted Levels, Gammas (continued)

$\gamma(^{79}Sr)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
7993.5	(35/2$^+$)	1525 *1*	100	6468.5	(31/2$^+$)	[E2]	B(E2)(W.u.)>1.2×10^2 *+36−6* E_γ: unweighted average of 1526.5 and 1523 *2*.
8086.8	(35/2$^-$)	1587.2		6499.6	(31/2$^-$)		
8175.1	(37/2$^+$)	1440.6 *6*	100	6734.5	(33/2$^+$)	[E2]	B(E2)(W.u.)>60 *22*
8257.8	(35/2$^+$)	1580.9		6676.9	(31/2$^+$)		
8738.1	(37/2$^-$)	1599 *1*		7139.1	(33/2$^-$)		
9026.3	(37/2$^+$)	1592.8		7433.5	(33/2$^+$)		
9688.5	(39/2$^+$)	1695.0		7993.5	(35/2$^+$)		
9811.8	(41/2$^+$)	1636.7		8175.1	(37/2$^+$)		
10053	(39/2$^+$)	1795 *1*		8257.8	(35/2$^+$)		
10339.1	(41/2$^-$)	1601 *1*		8738.1	(37/2$^-$)		
10697.3	(41/2$^+$)	1671 *1*		9026.3	(37/2$^+$)		
11541.5	(43/2$^+$)	1853.0		9688.5	(39/2$^+$)		
11679.1	(45/2$^+$)	1867.3		9811.8	(41/2$^+$)		
12106.1	(45/2$^-$)	1767 *1*		10339.1	(41/2$^-$)		

[†] Weighted averages of values from all the four datasets, when possible. Branching ratio determined separately in experiments with γ-gated coincidence spectra are preferred over those determined from relative intensity data. Such branching ratios are also given in comment records in some of the reaction datasets.

[‡] From $\gamma(\theta)$ and DCO data in in-beam reaction data, combined with RUL (for E2 and M2) for transitions from levels of known $T_{1/2}$.

[#] From BrIcc v2.3b (16-Dec-2014) 2008Ki07, "Frozen Orbitals" appr.

[@] Multiply placed.

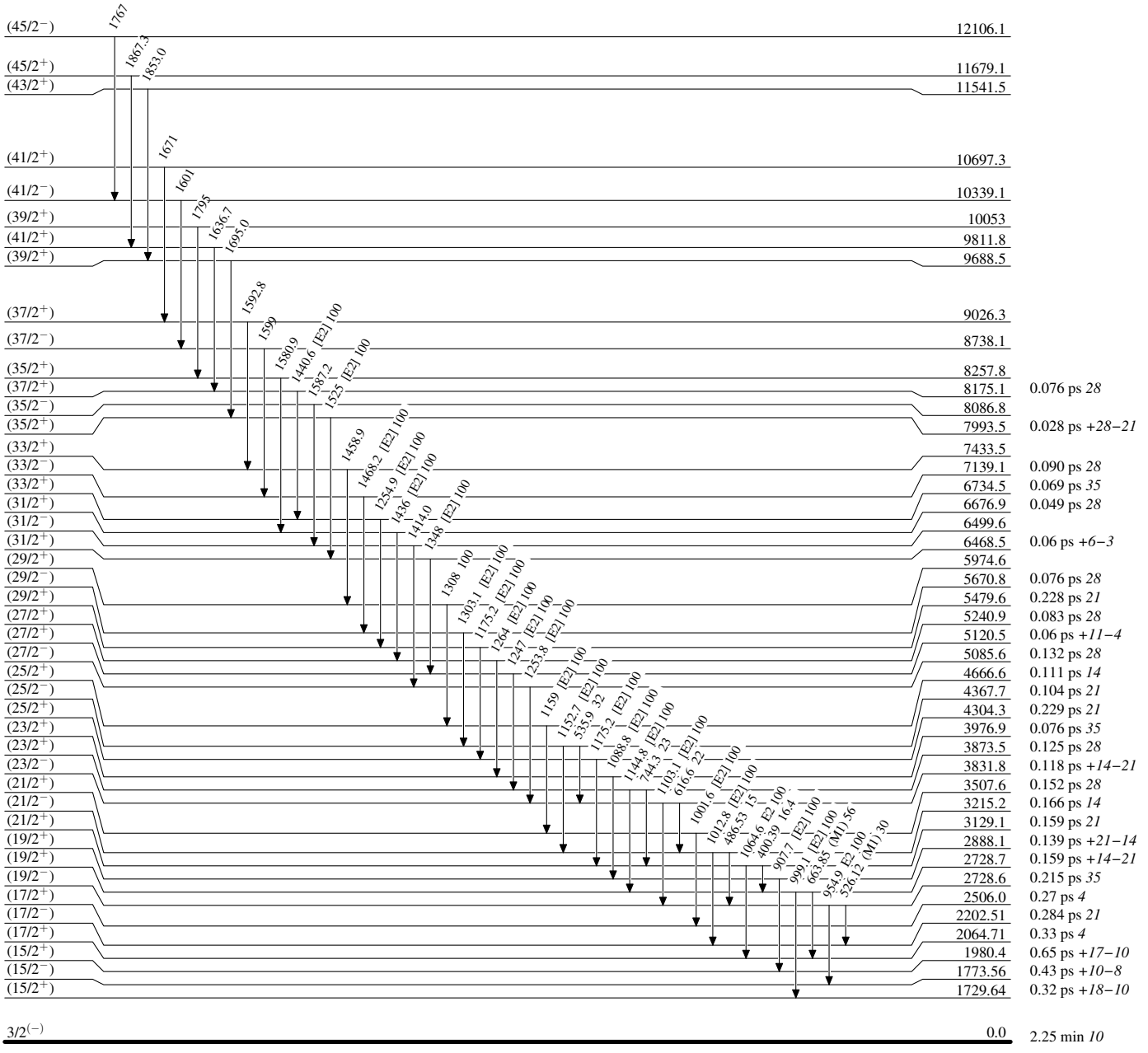
[&] Placement of transition in the level scheme is uncertain.

$^{79}_{38}Sr_{41}$-8

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level



$^{79}_{38}Sr_{41}$

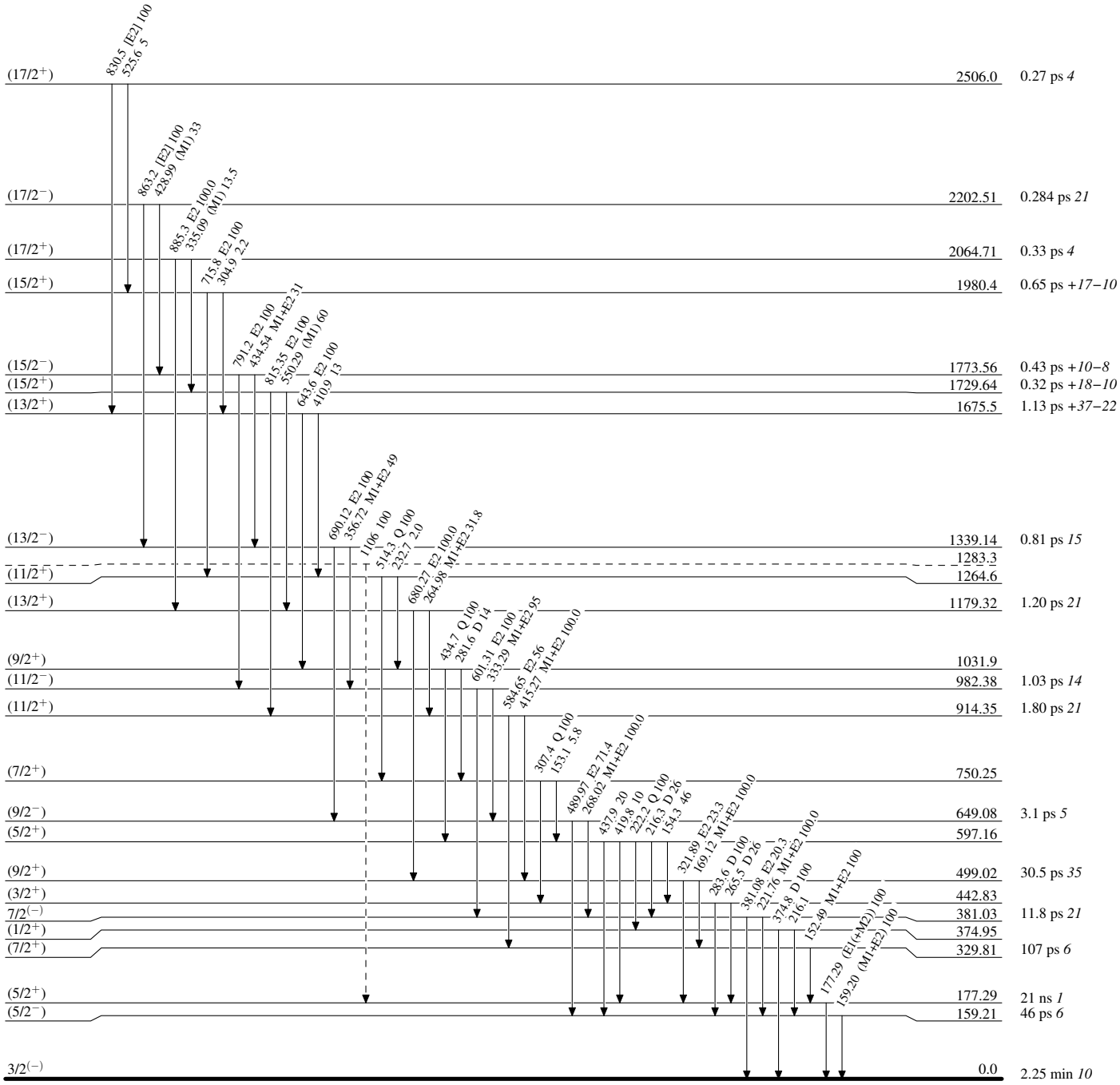
Adopted Levels, Gammas

Legend

Level Scheme (continued)

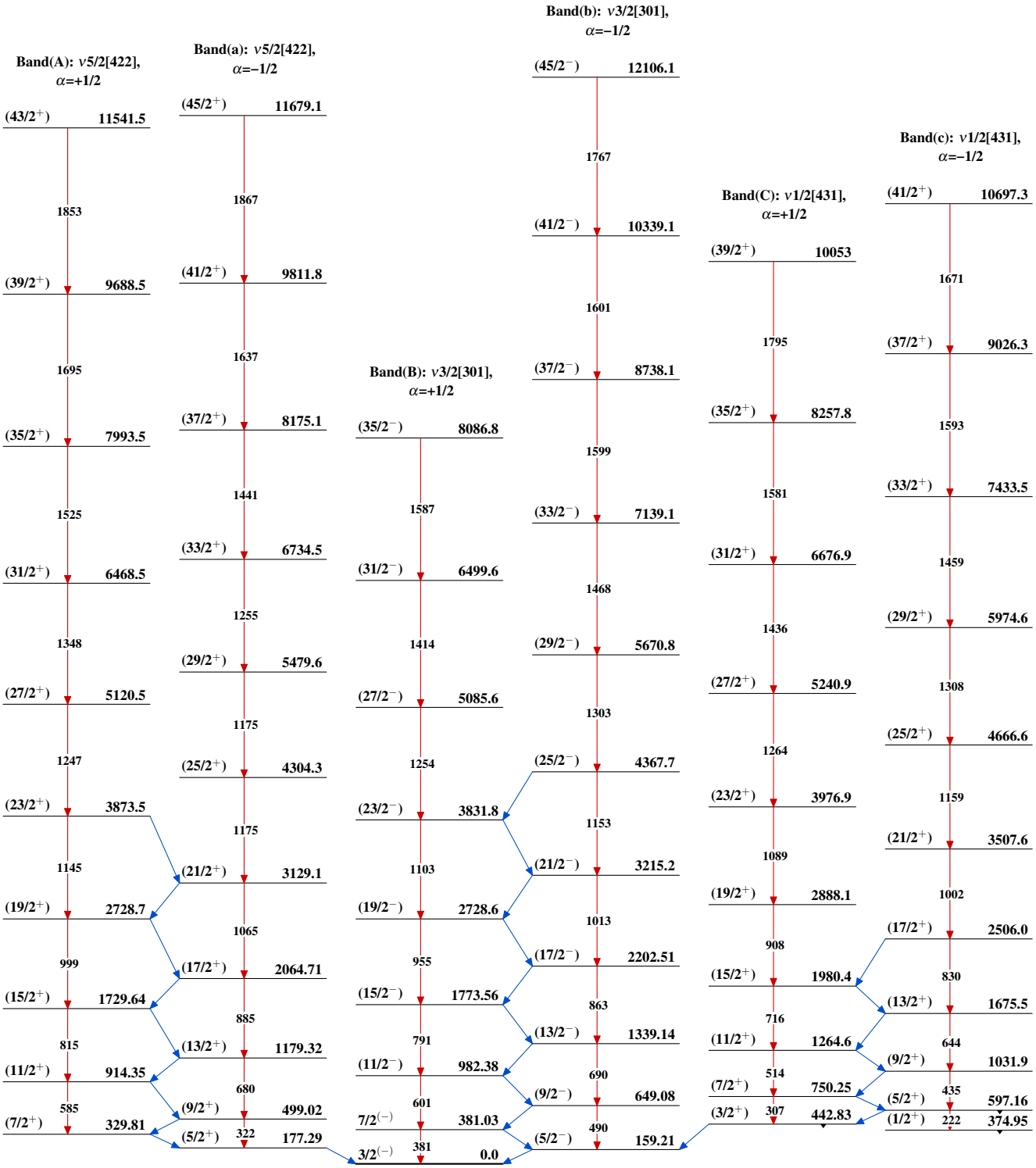
Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{79}_{38}Sr_{41}$

Adopted Levels, Gammas



$^{79}_{38}Sr_{41}$