^{150}Nd(^{6}Li,5nγ) 1993Ve04

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 110, 1 (2009)	20-Nov-2008

1993Ve04: E=47 MeV. Measured γ, $\gamma\gamma$, $\gamma\gamma(\theta)$ (DCO ratios, θ=90°, 35°).

1993Ve04 point out that although strong interband E1 transitions are observed between some of the bands, no strong evidence has been found for reflection-asymmetric band structures.

^{151}Eu Levels

E(level)	Jπ†	E(level)	Jπ†	E(level)	Jπ†	E(level)	Jπ†
0.0[g]	5/2+	1462.7‡ 1	19/2+	2557.5‡ 2	(27/2+)	3498.0@ 1	(35/2)−
21.542‡ 3	7/2+	1503.3@ 1	(23/2)−	2610.9[e] 1	(27/2+)	3509.9 3	
196.2 1	11/2−	1504.7[a] 1	(19/2−)	2636.3[c] 1	(29/2+)	3529.0[b] 2	(35/2+)
243.4[a] 2	7/2−	1507.0[b] 1	19/2+	2734.8[f] 2	(27/2+)	3544.7[d] 2	(37/2+)
307.91 11	(7/2)+	1563.9& 1	21/2−	2773.7[d] 1	(29/2+)	3772.8[c] 2	(37/2+)
307.93# 9	(9/2)+	1719.4# 1	(21/2+)	2782.7& 1	(29/2−)	3807.7‡ 3	(35/2+)
349.8& 1	9/2−	1752.4[f] 1	(19/2+)	2789.8@ 1	(31/2)−	3879.4& 2	(37/2−)
502.3@ 1	15/2−	1764.9[c] 1	(21/2+)	2857.0# 2	(29/2+)	4120.0[e] 2	(39/2+)
504.2 3	9/2+	1948.1[b] 1	(23/2)+	2923.6 2		4126.8@ 2	(39/2)−
511.2‡ 1	(11/2)+	1964.8[d] 2	(21/2+)	2955.4[b] 1	(31/2)+	4140.6[b] 2	(39/2+)
611.5# 1	13/2−	1994.9[a] 1	(23/2−)	2990.5[e] 1	(31/2+)	4186.0[d] 2	(41/2+)
698.1[a] 1	(11/2−)	1996.0‡ 1	(23/2+)	3046.2[d] 1	(33/2)+	4292.3[ah] 2	(39/2−)
752.4# 1	13/2+	2118.1@ 1	(27/2)−	3057.5 2		4404.2 3	(41/2+)
957.3@ 1	19/2−	2151.9& 1	25/2−	3089.4[a] 1	(31/2−)	4460.9& 2	(41/2−)
973.5‡ 1	(15/2)+	2170.5[c] 1	(25/2+)	3092.6 2		4730.8@ 4	(43/2−)
1041.0& 1	17/2−	2224.5[f] 2	(23/2+)	3164.0‡ 2	(31/2+)	4859.4[e] 3	(43/2+)
1057.2[a] 1	(15/2−)	2275.8# 1	(25/2+)	3183.3[c] 1	(33/2+)	4968.4[d] 2	(45/2+)
1114.1[b] 1	15/2+	2438.4[b] 1	(27/2)+	3378.6& 1	(33/2−)	5663.6[e] 3	(47/2+)
1220.8# 1	(17/2+)	2457.1[d] 2	(25/2+)	3479.9[e] 2	(35/2+)	5776.9[d] 5	(49/2+)
1383.3[c] 1	(17/2+)	2520.6[a] 1	(27/2−)	3495.1# 3	(33/2+)		

† From 'Adopted Levels'. For high-spin states the assignments are primarily based on DCO ratios, selected conversion coefficients, and band associations.

‡ Band(A): $\pi g_{7/2}^{-1}$, α=−1/2.

Band(B): $\pi g_{7/2}^{-1}$, α=+1/2.

@ Band(C): $\pi h_{11/2}^{2} \otimes \pi d_{5/2}^{-2}$,$\alpha$=−1/2.

& Band(D): $\pi h_{11/2}^{2} \otimes \pi d_{5/2}^{-2}$,$\alpha$=+1/2.

[a] Band(E): ΔJ=2 band. possibly due to $h_{11/2}$ proton + deformed core. Similar features between the members of this band and the g7/2 band starting at transitions have been observed.

[b] Band(F): ΔJ=2 band (1993Ve04). possibly from coupling of 9/2− (arising from $h_{11/2}$ orbital) with 3− octupole state. 1995Jo18 assign 3480, 4120, 4859 and 5663 levels as the 35/2+, 39/2+, 43/2+ and 47/2+ band members, respectively, of this band.

[c] Band(G): ΔJ=2 band (1993Ve04). 1995Jo18 assign 2170 and 2636 levels to another band.

[d] Band(H): ΔJ=2 band (1993Ve04). possibly from coupling of $h_{11/2}$ state with 3− octupole state. 1995Jo18 assign 21/2+, 25/2+, and 29/2+ members at 1732, 2170, and 2636, respectively.

[e] Band(I): ΔJ=2 band (1993Ve04). 1995Jo18 assign 3529, 4141 and 4808 levels as the 35/2+, 39/2+ and 43/2+ band members, respectively, of this band.

[f] Band(J): ΔJ=2 band (1995Jo18).

[g] $d_{5/2}$ proton hole state.

[h] Band assignment seems questionable since intraband transition is not reported.

^{150}Nd(^{6}Li,5nγ) 1993Ve04 (continued)

$\gamma(^{151}Eu)$

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	$I_{(\gamma+ce)}$	Comments
21.542 *3*		21.542	$7/2^+$	0.0	$5/2^+$			E_γ: from 'adopted gammas'. Transition is not observed by 1993Ve04.
90.9		3046.2	$(33/2)^+$	2955.4	$(31/2)^+$		1.26	$I_{(\gamma+ce)}$: transition is not directly observed by 1993Ve04. Intensity is inferred (1993Ve04) from Iγ of γ rays from 2955 level in coincidence with gammas feeding the 3046 level.
109.1 *1*	2.70 *17*	611.5	$13/2^-$	502.3	$15/2^-$			
153.5 *1*		349.8	$9/2^-$	196.2	$11/2^-$		2.65	$I_{(\gamma+ce)}$: from intensity feeding the 350 level (1993Ve04).
156.8 *2*	0.17 *4*	2151.9	$25/2^-$	1994.9	$(23/2^-)$			
165.6 *1*	0.10 *3*	2955.4	$(31/2)^+$	2789.8	$(31/2)^-$			
172.4 *2*	0.57 *13*	2610.9	$(27/2^+)$	2438.4	$(27/2)^+$			
172.6 *1*	1.09 *22*	2955.4	$(31/2)^+$	2782.7	$(29/2^-)$			
174.7 *1*		196.2	$11/2^-$	21.542	$7/2^+$			E_γ: from 'adopted gammas'.
192.8 *1*	0.17 *4*	3183.3	$(33/2^+)$	2990.5	$(31/2^+)$			
196.2 *4*	0.19 *4*	504.2	$9/2^+$	307.91	$(7/2)^+$			
197.9 *1*	0.44 *9*	2636.3	$(29/2^+)$	2438.4	$(27/2)^+$			
203.3 *1*	1.52 *17*	511.2	$(11/2)^+$	307.93	$(9/2)^+$			
203.7 *2*	0.39 *9*	2151.9	$25/2^-$	1948.1	$(23/2)^+$			
216.8 *1*	0.39 *9*	2990.5	$(31/2^+)$	2773.7	$(29/2^+)$			
221.1 *1*	0.61 *13*	973.5	$(15/2)^+$	752.4	$13/2^+$			
241.3 *1*	1.1 *3*	752.4	$13/2^+$	511.2	$(11/2)^+$			
243.4 *3*	0.07 *2*	243.4	$7/2^-$	0.0	$5/2^+$			
247.2 *2*	0.24 *4*	1220.8	$(17/2^+)$	973.5	$(15/2)^+$			
247.4 *2*	0.30 *9*	4126.8	$(39/2)^-$	3879.4	$(37/2^-)$			
256.4 *1*	1.52 *4*	3046.2	$(33/2)^+$	2789.8	$(31/2)^-$	D		DCO=1.84 *9*.
261.6 *1*	2.44 *13*	611.5	$13/2^-$	349.8	$9/2^-$	Q		DCO=0.94 *6*.
262.0[‡]	0.15 *6*	2782.7	$(29/2^-)$	2520.6	$(27/2^-)$			
272.5 *3*	0.13 *4*	3046.2	$(33/2)^+$	2773.7	$(29/2^+)$			
274.9 *1*	0.13 *4*	3772.8	$(37/2^+)$	3498.0	$(35/2)^-$			
286.4 *1*	6.3 *3*	307.93	$(9/2)^+$	21.542	$7/2^+$	D		DCO=0.86 *5*.
286.5 *1*	5.79 *22*	2438.4	$(27/2)^+$	2151.9	$25/2^-$	D		DCO=1.95 *8*.
289.2 *1*	0.22 *4*	3378.6	$(33/2^-)$	3089.4	$(31/2^-)$			
306.0 *1*		502.3	$15/2^-$	196.2	$11/2^-$	Q	70.9	$I_{(\gamma+ce)}$: from total intensity feeding the 502 level (1993Ve04). DCO=1.009 *13*.
307.6[‡]	0.22 *5*	307.91	$(7/2)^+$	0.0	$5/2^+$			
307.9 *2*	0.27 *3*	307.93	$(9/2)^+$	0.0	$5/2^+$			
316.4 *3*	0.09 *4*	2773.7	$(29/2^+)$	2457.1	$(25/2^+)$			
320.4 *1*	1.05 *6*	2438.4	$(27/2)^+$	2118.1	$(27/2)^-$			
344.4 *2*	0.35 *9*	2782.7	$(29/2^-)$	2438.4	$(27/2)^+$			
348.2 *1*	0.22 *9*	698.1	$(11/2^-)$	349.8	$9/2^-$			
350.2 *2*	0.17 *4*	2520.6	$(27/2^-)$	2170.5	$(25/2^+)$			
359.0 *1*	0.83 *9*	1057.2	$(15/2^-)$	698.1	$(11/2^-)$			
379.5 *1*	1.87 *13*	2990.5	$(31/2^+)$	2610.9	$(27/2^+)$	Q		DCO=0.96 *9*.
381.5 *1*	0.48 *4*	3879.4	$(37/2^-)$	3498.0	$(35/2)^-$			
384.2 *1*	7.66 *13*	1948.1	$(23/2)^+$	1563.9	$21/2^-$	D		DCO=1.96 *5*.
392.9 *1*	0.42 *6*	1507.0	$19/2^+$	1114.1	$15/2^+$			
393.5 *1*	1.35 *4*	3183.3	$(33/2^+)$	2789.8	$(31/2)^-$	D		DCO=1.88 *9*.
409.9 *1*	1.39 *17*	3046.2	$(33/2)^+$	2636.3	$(29/2^+)$	Q		DCO=0.96 *6*.
415.3 *1*	7.6 *5*	611.5	$13/2^-$	196.2	$11/2^-$	D		DCO=2.34 *9*.
417.3 *2*	0.44 *9*	3509.9		3092.6				
421.7 *1*	0.78 *17*	1462.7	$19/2^+$	1041.0	$17/2^-$			
429.5 *1*	14.0 *12*	1041.0	$17/2^-$	611.5	$13/2^-$	Q		DCO=0.97 *3*.

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^{150}Nd(^{6}Li,5nγ) 1993Ve04 (continued)

$\gamma(^{151}Eu)$ (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
431.9 *2*	0.44 *13*	1996.0	$(23/2^+)$	1563.9	$21/2^-$		
440.7 *3*	0.16 *5*	2610.9	$(27/2^+)$	2170.5	$(25/2^+)$		
441.1 *1*	2.4 *3*	1948.1	$(23/2)^+$	1507.0	$19/2^+$	Q	DCO=1.07 *8*.
444.5 *1*	4.7 *3*	752.4	$13/2^+$	307.93	$(9/2)^+$	Q	DCO=1.05 *7*.
444.8 *1*	2.3 *4*	1948.1	$(23/2)^+$	1503.3	$(23/2)^-$	D	Mult.: DCO=0.89 *7* consistent with ΔJ=0, dipole.
445.7 *1*	1.18 *9*	1057.2	$(15/2^-)$	611.5	$13/2^-$		
447.4 *1*	2.2 *4*	1504.7	$(19/2^-)$	1057.2	$(15/2^-)$		
453.1 *2*	0.26 *9*	3089.4	$(31/2^-)$	2636.3	$(29/2^+)$		
454.7 *3*	0.07 *2*	698.1	$(11/2^-)$	243.4	$7/2^-$		
455.1 *1*	57.4 *13*	957.3	$19/2^-$	502.3	$15/2^-$	Q	DCO=0.995 *13*.
458.9 *2*	0.65 *22*	2734.8	$(27/2^+)$	2275.8	$(25/2^+)$		
459.1 *1*	0.87 *4*	2610.9	$(27/2^+)$	2151.9	$25/2^-$		
462.3 *1*	9.0 *14*	973.5	$(15/2)^+$	511.2	$(11/2)^+$	Q	DCO=1.00 *3*.
463.7 *1*	0.91 *17*	1504.7	$(19/2^-)$	1041.0	$17/2^-$		
465.9 *1*	0.91 *9*	2636.3	$(29/2^+)$	2170.5	$(25/2^+)$		
466.0 *1*	3.79 *17*	1507.0	$19/2^+$	1041.0	$17/2^-$	D	DCO=1.72 *11*.
468.3 *1*	3.74 *22*	1220.8	$(17/2^+)$	752.4	$13/2^+$	Q	DCO=0.95 *7*.
472.2 *2*	0.44 *13*	2224.5	$(23/2^+)$	1752.4	$(19/2^+)$		
485.4 *1*	1.52 *22*	1948.1	$(23/2)^+$	1462.7	$19/2^+$	Q	DCO=0.97 *6*.
489.3 *1*	8.1 *24*	1462.7	$19/2^+$	973.5	$(15/2)^+$	Q	DCO(489.3γ+489.7γ)=1.00 *3*.
489.4[‡]	1.5 *3*	3479.9	$(35/2^+)$	2990.5	$(31/2^+)$		
489.7 *1*	10.9 *18*	511.2	$(11/2)^+$	21.542	$7/2^+$	Q	DCO(489.3γ+489.7γ)=1.00 *3*.
490.2[#] *1*	3.18[#] *17*	1994.9	$(23/2^-)$	1504.7	$(19/2^-)$		
490.2[#] *1*	11.5[#] *6*	2438.4	$(27/2)^+$	1948.1	$(23/2)^+$	Q	DCO=1.04 *4*.
492.1 *4*	0.11 *5*	2457.1	$(25/2^+)$	1964.8	$(21/2^+)$		
492.7 *1*	0.48 *9*	2610.9	$(27/2^+)$	2118.1	$(27/2)^-$		
498.5 *1*	1.70 *9*	3544.7	$(37/2^+)$	3046.2	$(33/2)^+$	Q	DCO=1.03 *8*.
498.6 *1*	1.83 *13*	1719.4	$(21/2^+)$	1220.8	$(17/2^+)$	Q	DCO=1.04 *9*.
500.9 *1*	1.39 *17*	3879.4	$(37/2^-)$	3378.6	$(33/2^-)$		
501.8 *1*	0.48 *9*	698.1	$(11/2^-)$	196.2	$11/2^-$		
502.6 *1*	1.6 *3*	1114.1	$15/2^+$	611.5	$13/2^-$		
504.3[‡]	0.17 *4*	504.2	$9/2^+$	0.0	$5/2^+$		
505.0 *2*	1.18 *17*	2224.5	$(23/2^+)$	1719.4	$(21/2^+)$		
510.5 *3*	0.39 *13*	2734.8	$(27/2^+)$	2224.5	$(23/2^+)$		
510.9 *1*	0.91 *9*	2275.8	$(25/2^+)$	1764.9	$(21/2^+)$		
517.0 *1*	9.6 *5*	2955.4	$(31/2)^+$	2438.4	$(27/2)^+$	Q	DCO=0.98 *4*.
518.3 *1*	4.83 *17*	2636.3	$(29/2^+)$	2118.1	$(27/2)^-$	D	DCO=2.02 *16*.
523.0 *1*	15.0 *6*	1563.9	$21/2^-$	1041.0	$17/2^-$	Q	DCO=1.06 *4*.
524.5 *1*	4.35 *17*	3479.9	$(35/2^+)$	2955.4	$(31/2)^+$	Q	DCO=0.95 *10*.
525.7 *1*	2.18 *22*	2520.6	$(27/2^-)$	1994.9	$(23/2^-)$		
531.6 *1*	0.78 *13*	1752.4	$(19/2^+)$	1220.8	$(17/2^+)$	D	DCO=1.8 *5*.
533.4 *1*	5.6 *4*	1996.0	$(23/2^+)$	1462.7	$19/2^+$	Q	DCO=1.04 *6*.
538.5[‡]	0.65 *17*	3529.0	$(35/2^+)$	2990.5	$(31/2^+)$		
538.6 *1*	8.1 *3*	1041.0	$17/2^-$	502.3	$15/2^-$	(D)	DCO=1.14 *4*.
546.0 *1*	40.7 *9*	1503.3	$(23/2)^-$	957.3	$19/2^-$	Q	E_γ: from figure 1 (1993Ve04). Eγ=546.9 in table 1 of 1993Ve04 seems a misprint. DCO=0.993 *15*.
547.1 *2*	0.7 *3*	3183.3	$(33/2^+)$	2636.3	$(29/2^+)$		E_γ: misprinted as 574.1 in table 4.
549.7 *1*	1.35 *17*	1507.0	$19/2^+$	957.3	$19/2^-$		
552.0 *1*	2.96 *13*	2990.5	$(31/2^+)$	2438.4	$(27/2)^+$	Q	DCO=1.04 *8*.
556.3 *1*	2.87 *22*	2275.8	$(25/2^+)$	1719.4	$(21/2^+)$	Q	DCO=0.97 *5*.
561.5 *1*	2.26 *22*	2557.5	$(27/2^+)$	1996.0	$(23/2^+)$	Q	DCO=0.94 *7*.
568.7 *1*	1.87 *22*	3089.4	$(31/2^-)$	2520.6	$(27/2^-)$		
573.6 *1*	1.74 *22*	3529.0	$(35/2^+)$	2955.4	$(31/2)^+$	Q	DCO=1.16 *10*.

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^{150}Nd(^{6}Li,5nγ) 1993Ve04 (continued)

$\gamma(^{151}Eu)$ (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
581.2 *1*	2.09 *17*	2857.0	$(29/2^+)$	2275.8	$(25/2^+)$		
581.5 *2*	0.30 *9*	1964.8	$(21/2^+)$	1383.3	$(17/2^+)$		
581.5 *1*	0.87 *17*	4460.9	$(41/2^-)$	3879.4	$(37/2^-)$		
588.0 *1*	10.7 *6*	2151.9	$25/2^-$	1563.9	$21/2^-$	Q	DCO=1.00 *4*.
588.7[‡]	0.65 *17*	3378.6	$(33/2^-)$	2789.8	$(31/2)^-$		
589.4 *1*	1.31 *22*	3772.8	$(37/2^+)$	3183.3	$(33/2^+)$		
595.9 *1*	1.83 *17*	3378.6	$(33/2^-)$	2782.7	$(29/2^-)$	Q	DCO=1.11 *18*.
604.0 *3*	0.13 *4*	4730.8	$(43/2^-)$	4126.8	$(39/2)^-$		
606.5 *1*	1.09 *17*	3164.0	$(31/2^+)$	2557.5	$(27/2^+)$		
606.6 *1*	4.87 *17*	1563.9	$21/2^-$	957.3	$19/2^-$	D	DCO=0.87 *4*.
611.6 *1*	1.09 *13*	4140.6	$(39/2^+)$	3529.0	$(35/2^+)$		
611.7 *3*	0.48 *17*	1114.1	$15/2^+$	502.3	$15/2^-$		
614.7 *1*	25.7 *6*	2118.1	$(27/2)^-$	1503.3	$(23/2)^-$	Q	DCO=0.989 *15*.
614.9 *1*	1.87 *17*	2610.9	$(27/2^+)$	1996.0	$(23/2^+)$	Q	DCO=0.95 *7*.
628.8 *1*	0.78 *9*	4126.8	$(39/2)^-$	3498.0	$(35/2)^-$	(Q)	DCO=0.83 *11*.
630.8 *1*	3.79 *17*	2782.7	$(29/2^-)$	2151.9	$25/2^-$	Q	DCO=1.10 *8*.
631.4 *2*	0.26 *9*	4404.2	$(41/2^+)$	3772.8	$(37/2^+)$		
638.1 *2*	0.22 *9*	3495.1	$(33/2^+)$	2857.0	$(29/2^+)$		
640.1 *1*	2.44 *17*	4120.0	$(39/2^+)$	3479.9	$(35/2^+)$	Q	DCO=0.96 *9*.
641.3 *1*	1.39 *9*	4186.0	$(41/2^+)$	3544.7	$(37/2^+)$	Q	DCO=1.25 *20*.
643.7 *2*	0.57 *13*	3807.7	$(35/2^+)$	3164.0	$(31/2^+)$		
647.8 *1*	0.83 *17*	2923.6		2275.8	$(25/2^+)$		
648.4 *2*	2.5 *3*	2151.9	$25/2^-$	1503.3	$(23/2)^-$	D	DCO=0.79 *5*.
655.7 *1*	1.22 *9*	2773.7	$(29/2^+)$	2118.1	$(27/2)^-$	D	DCO=2.04 *14*.
662.8 *2*	0.27 *5*	2610.9	$(27/2^+)$	1948.1	$(23/2)^+$		
664.5 *1*	0.78 *9*	2782.7	$(29/2^-)$	2118.1	$(27/2)^-$		
667.3 *1*	3.44 *17*	2170.5	$(25/2^+)$	1503.3	$(23/2)^-$	D	DCO=1.63 *8*.
671.8 *1*	11.1 *3*	2789.8	$(31/2)^-$	2118.1	$(27/2)^-$	Q	DCO=0.96 *3*.
708.2 *1*	3.35 *9*	3498.0	$(35/2)^-$	2789.8	$(31/2)^-$	Q	DCO=0.99 *4*.
718.7 *2*	0.48 *9*	1220.8	$(17/2^+)$	502.3	$15/2^-$		
739.4 *1*	0.48 *9*	4859.4	$(43/2^+)$	4120.0	$(39/2^+)$		
762.1 *1*	3.87 *13*	1719.4	$(21/2^+)$	957.3	$19/2^-$	D	DCO=1.84 *10*.
772.5 *1*	0.73 *5*	2275.8	$(25/2^+)$	1503.3	$(23/2)^-$	D	DCO=2.44 *25*.
782.4 *1*	0.57 *4*	4968.4	$(45/2^+)$	4186.0	$(41/2^+)$		
794.3 *1*	0.41 *3*	4292.3	$(39/2^-)$	3498.0	$(35/2)^-$	Q	DCO=1.18 *22*.
804.2 *2*	0.13 *4*	5663.6	$(47/2^+)$	4859.4	$(43/2^+)$		
807.6 *1*	2.22 *9*	1764.9	$(21/2^+)$	957.3	$19/2^-$	D	DCO=1.77 *11*.
808.5 *4*	0.15 *7*	5776.9	$(49/2^+)$	4968.4	$(45/2^+)$		
860.9 *1*	0.39 *9*	1057.2	$(15/2^-)$	196.2	$11/2^-$		
881.0 *1*	1.13 *13*	1383.3	$(17/2^+)$	502.3	$15/2^-$	D	DCO=2.3 *4*.
939.4 *2*	0.39 *9*	3057.5		2118.1	$(27/2)^-$		
953.8 *2*	0.48 *4*	2457.1	$(25/2^+)$	1503.3	$(23/2)^-$		
974.5 *2*	0.65 *9*	3092.6		2118.1	$(27/2)^-$		
1002.6 *1*	0.65 *9*	1504.7	$(19/2^-)$	502.3	$15/2^-$		
1017.3 *1*	0.70 *9*	2520.6	$(27/2^-)$	1503.3	$(23/2)^-$		
1037.6 *1*	0.57 *17*	1994.9	$(23/2^-)$	957.3	$19/2^-$		

[†] From DCO measurements for the geometry (90° and 45° or 135°) used by 1993Ve04 and gated on known ΔJ=2, quadrupole (E2) transitions which suggest the following probable multipolarity assignments: DCO=1.0 implies probable quadrupole (most likely E2); DCO=1.94 implies dipole or dipole+quadrupole. The evaluator finds that DCO ≈ 0.85 also corresponds to ΔJ=1, dipole or dipole+quadrupole. When mult=D is listed, it may contain small admixture of quadrupole component also.

[‡] From level energy difference.

[#] Multiply placed with intensity suitably divided.

^{150}Nd(^{6}Li,5nγ) 1993Ve04

Level Scheme

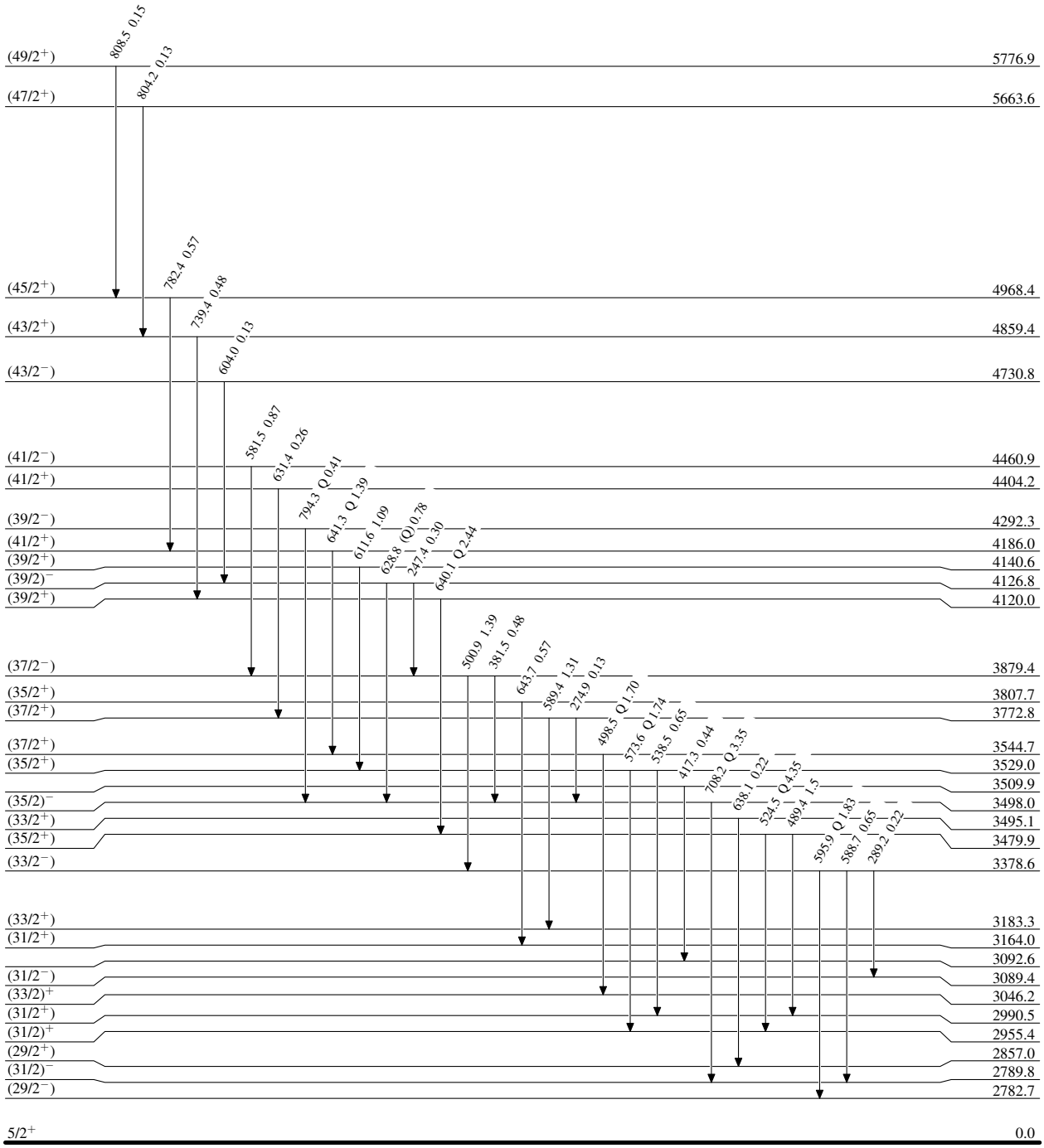
Intensities: Relative I_γ

Legend

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

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

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



$^{151}_{63}Eu_{88}$

^{150}Nd(^{6}Li,5nγ) 1993Ve04

Level Scheme (continued)

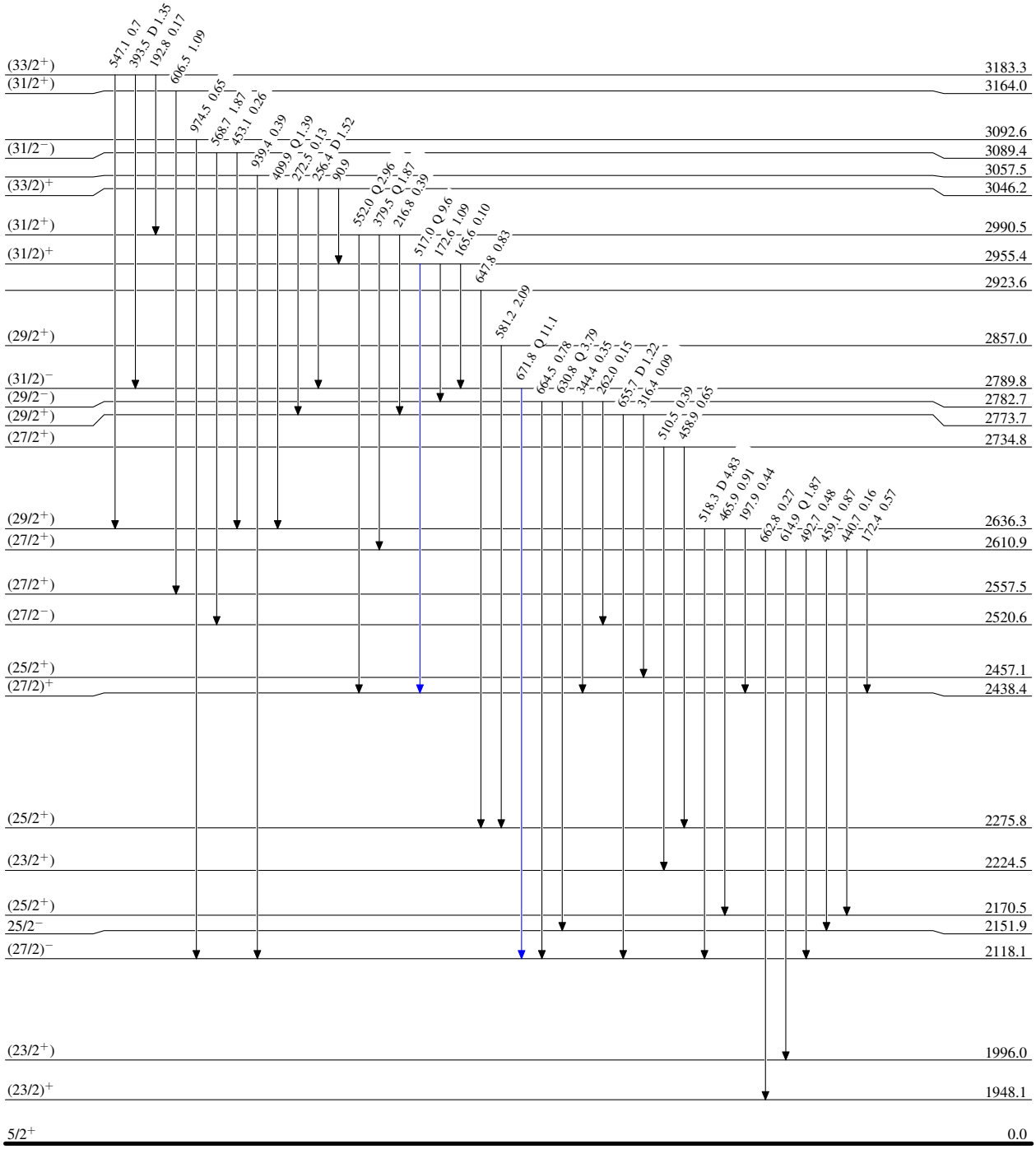
Intensities: Relative I_γ

Legend

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

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

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



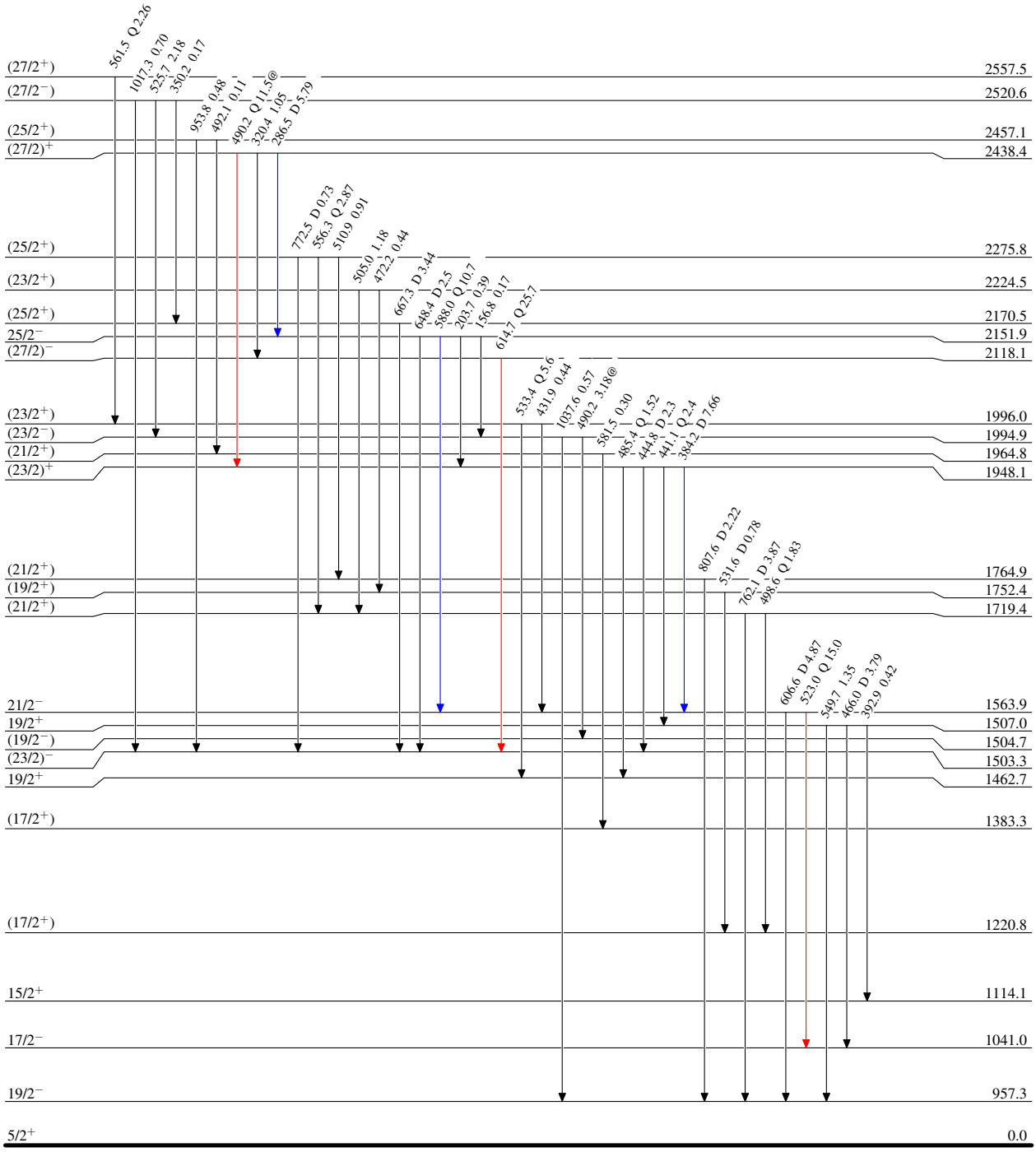
$^{151}_{63}Eu_{88}$

^{150}Nd(^{6}Li,5nγ) 1993Ve04

Level Scheme (continued)

Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided

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



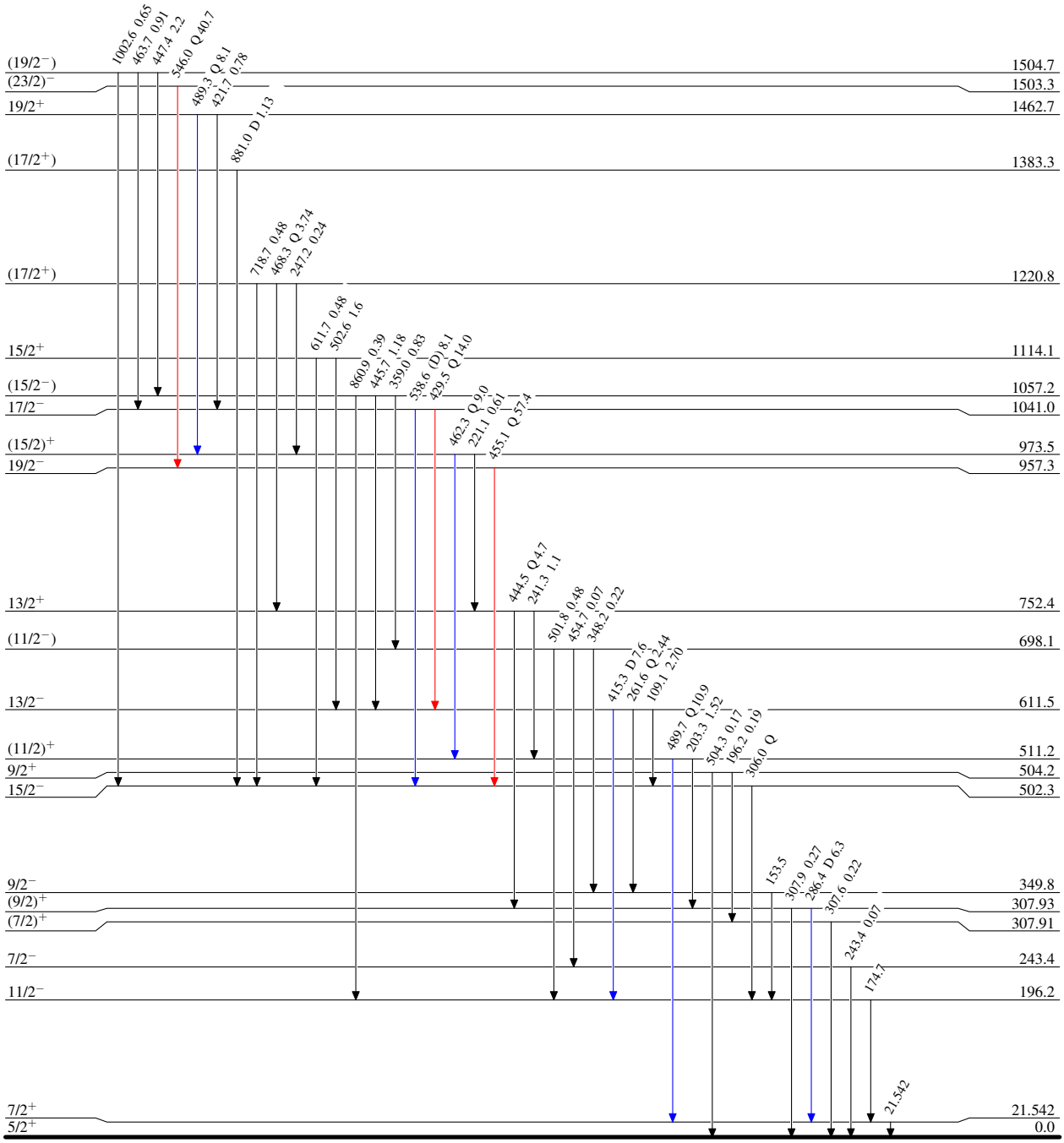
$^{151}_{63}Eu_{88}$

^{150}Nd(^{6}Li,5nγ) 1993Ve04

Level Scheme (continued)

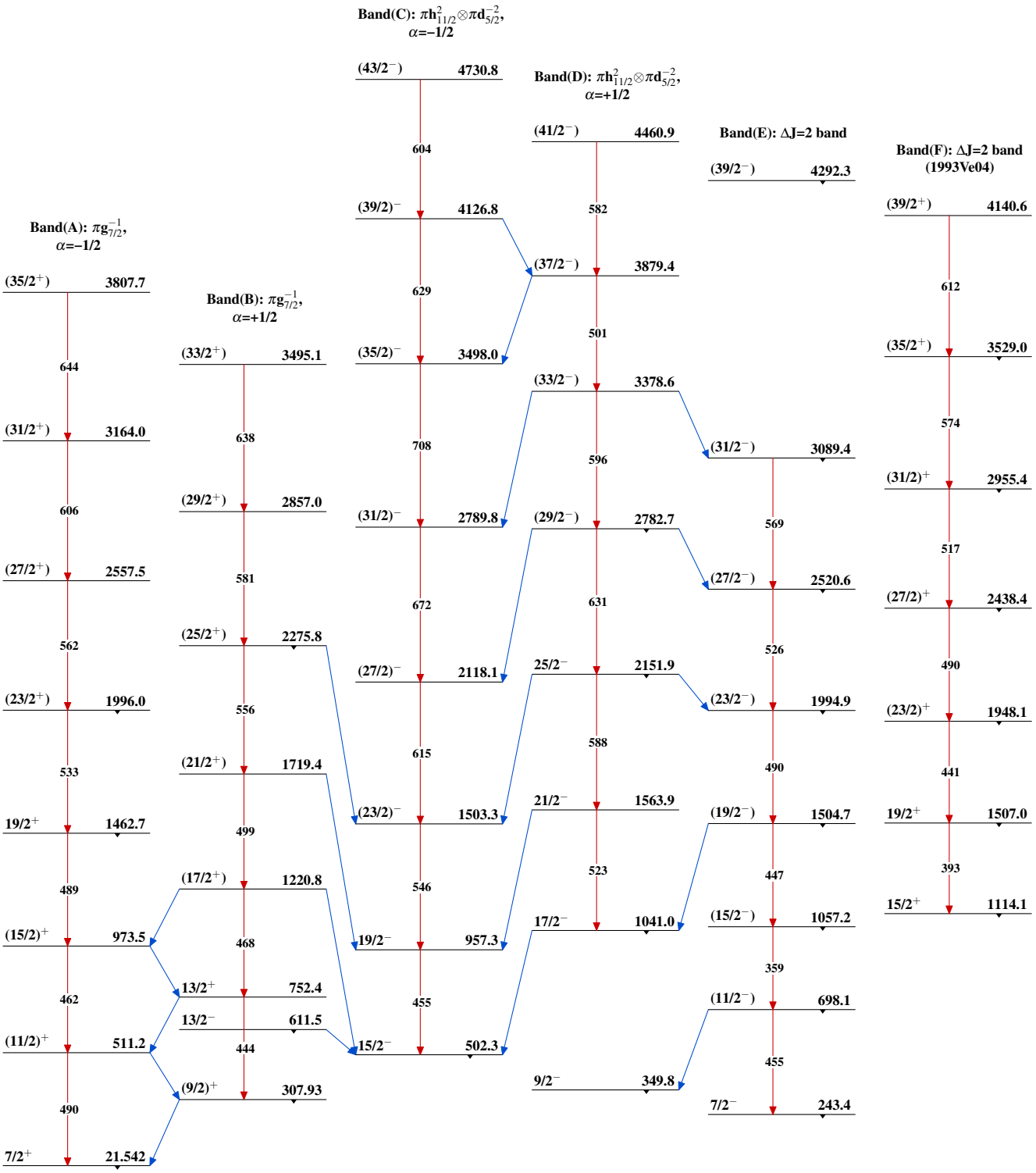
Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided

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



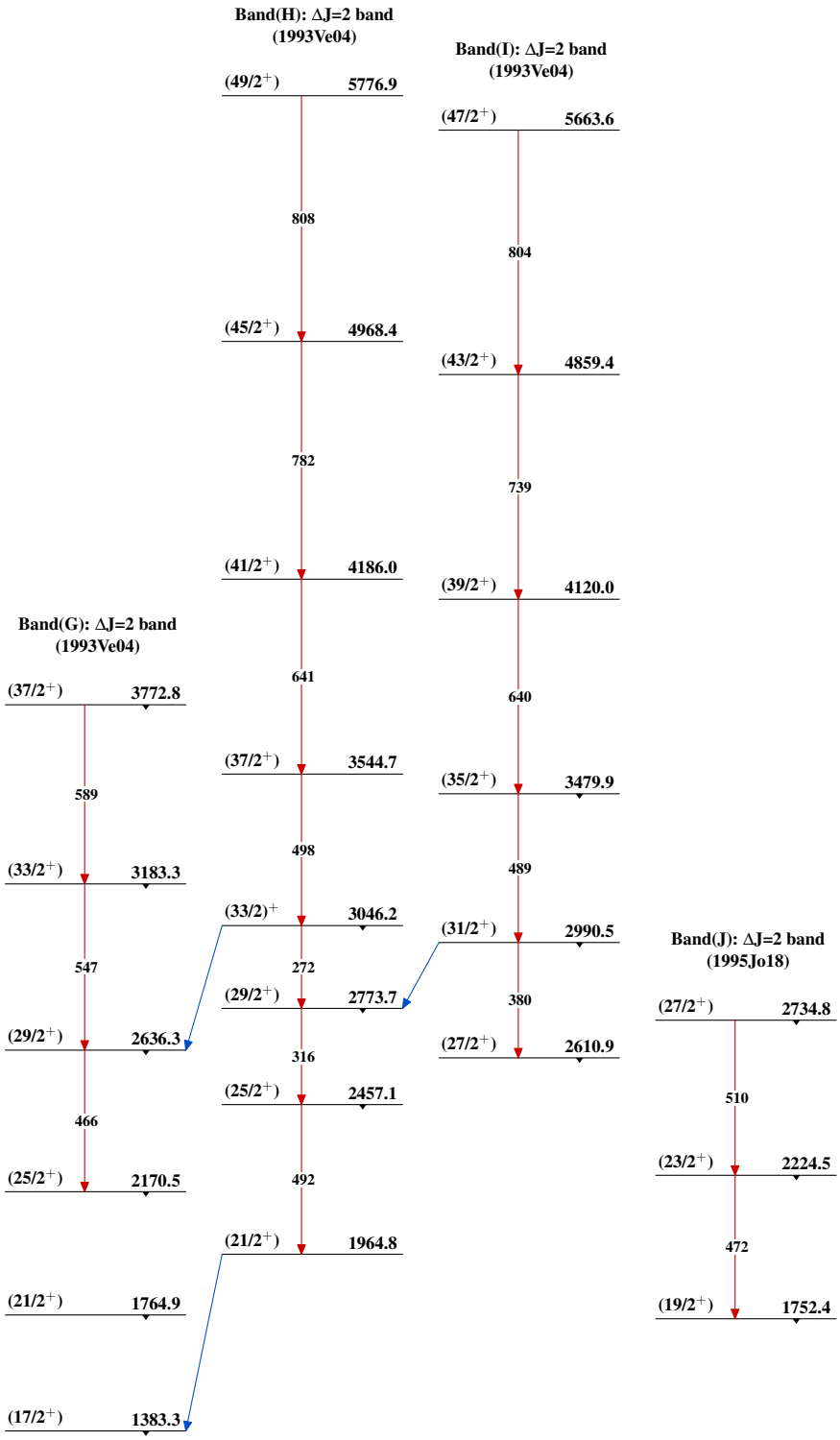
$^{151}_{63}Eu_{88}$

^{150}Nd(^{6}Li,5nγ) 1993Ve04



$^{151}_{63}Eu_{88}$

^{150}Nd(^{6}Li,5nγ) 1993Ve04 (continued)



$^{151}_{63}Eu_{88}$