^{146}Nd(^{30}Si,5nγ) 1994Es01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin, E. A. Mccutchan	NDS 151, 334 (2018)	30-Jun-2018

1994Es01: E=160 MeV; enriched ^{146}Nd targets, two self-supporting and one Au-backed; ESSA30 (20 Compton-suppressed Ge detectors, FWHM≈2.2 keV at 778 keV) and TESSA30 (12 Compton-suppressed Ge detectors, 50-element BGO multiplicity filter); measured Eγ, Iγ, $\gamma\gamma$, DCO ratios (θ=79° (or 101°), 37° (or 143°)).

^{171}W Levels

Band configurations suggested by 1994Es01 are given below; the Nilsson orbitals involved in the band labels are 5/2[642] (A and B), 3/2[651] (C and D), 5/2[523] (E and F) and 1/2[521] (G).

E(level)[†]	J$^\pi$[‡]	E(level)[†]	J$^\pi$[‡]	E(level)[†]	J$^\pi$[‡]	E(level)[†]	J$^\pi$[‡]
0.0[#]	5/2$^-$	1785.22[#] *21*	(25/2$^-$)	3809.6[@] *4*	(39/2$^-$)	5957.0[a] *8*	(51/2$^+$)
101.84[@] *8*	7/2$^-$	2070.0[@] *3*	(27/2$^-$)	3874.7[#] *4*	(41/2$^-$)	5959.4[@] *4*	(51/2$^-$)
182.8[a] *6*	(11/2$^+$)	2083.6[c] *11*	(25/2$^-$)	3954.7[d] *6*	(41/2)	6057.1[#] *4*	(53/2$^-$)
183.1[&] *6*	(13/2$^+$)	2249.82[#] *23*	(29/2$^-$)	3968.1[c] *4*	(41/2$^-$)	6127.8[c] *5*	(53/2$^-$)
233.16[#] *8*	9/2$^-$	2311.4[&] *6*	(33/2$^+$)	4248.5[b] *4*	(43/2$^-$)	6526.8[b] *5*	(55/2$^-$)
389.26[@] *11*	(11/2$^-$)	2343.1[a] *6*	(31/2$^+$)	4250.7[&] *7*	(45/2$^+$)	6657.3[&] *7*	(57/2$^+$)
390.8[a] *6*	(15/2$^+$)	2460.7[c] *11*	(29/2$^-$)	4429.2[a] *6*	(43/2$^+$)	6773.4[@] *7*	(55/2$^-$)
395.4[&] *6*	(17/2$^+$)	2600.5[b] *3*	(31/2$^-$)	4478.8[@] *4*	(43/2$^-$)	6774.0[a] *9*	(55/2$^+$)
548.22[#] *12*	(13/2$^-$)	2616.0[@] *3*	(31/2$^-$)	4542.7[#] *4*	(45/2$^-$)	6894.1[#] *7*	(57/2$^-$)
736.10[@] *14*	(15/2$^-$)	2737.03[#] *25*	(33/2$^-$)	4631.4[c] *5*	(45/2$^-$)	6967.8[c] *5*	(57/2$^-$)
738.9[&] *6*	(21/2$^+$)	2871.7[c] *4*	(33/2$^-$)	4648.7[d] *7*	(45/2)	7412.5[b] *5*	(59/2$^-$)
739.2[a] *6*	(19/2$^+$)	2935.0[&] *6*	(37/2$^+$)	4948.2[b] *4*	(47/2$^-$)	7595.3[&] *8*	(61/2$^+$)
914.82[#] *15*	(17/2$^-$)	2999.2[a] *6*	(35/2$^+$)	4982.8[&] *7*	(49/2$^+$)	7650.4[@] *9*	(59/2$^-$)
1131.01[@] *17*	(19/2$^-$)	3069.4[b] *3*	(35/2$^-$)	5180.8[a] *7*	(47/2$^+$)	7791.6[#] *9*	(61/2$^-$)
1189.5[&] *6*	(25/2$^+$)	3187.6[@] *3*	(35/2$^-$)	5195.5[@] *4*	(47/2$^-$)	7877.3[c] *6*	(61/2$^-$)
1197.0[a] *6*	(23/2$^+$)	3274.2[#] *4*	(37/2$^-$)	5272.9[#] *4*	(49/2$^-$)	8364.5[b] *7*	(63/2$^-$)
1332.12[#] *18*	(21/2$^-$)	3376.2[c] *4*	(37/2$^-$)	5352.3[c] *5*	(49/2$^-$)	8590.4[&] *8*	(65/2$^+$)
1576.9[@] *3*	(23/2$^-$)	3577.1[&] *6*	(41/2$^+$)	5435.7[d] *9*	(49/2)	8754.6[#] *10*	(65/2$^-$)
1721.8[&] *6*	(29/2$^+$)	3617.8[b] *4*	(39/2$^-$)	5707.2[b] *4*	(51/2$^-$)	9776.6[#] *11*	(69/2$^-$)
1738.1[a] *6*	(27/2$^+$)	3698.1[a] *6*	(39/2$^+$)	5785.1[&] *7*	(53/2$^+$)		

[†] From least-squares adjustment of Eγ.
[‡] Authors′ values based on deduced transition multipolarity and band structure.
[#] Band(A): 5/2[523], α=+1/2 g.s. band. E band; becomes EAB band at high J. Low-J member energies almost degenerate with those in 5/2[642], α=−1/2 band and with spin J-1 levels in signature partner band.
[@] Band(a): 5/2[523], α=−1/2 band. F band; becomes EAC or FBC band at J=35/2. See comment on signature partner band.
[&] Band(B): 5/2[642], α=+1/2 band. A band; becomes ABC band.
[a] Band(b): 5/2[642], α=−1/2 band. B band; becomes BAD band. See comment on 5/2[523], α=+1/2 band.
[b] Band(C): FAB, α=−1/2 band. (ν 5/2[523])(ν 5/2[642])(ν 5/2[642]) 3-quasiparticle band.
[c] Band(D): Possible 1/2[521], α=+1/2 band. G band; becomes GAB band. α=−1/2 partner not observed, consistent with large signature splitting expected for Ω=1/2.
[d] Band(E): rotational sequence. Lowest energy member feeds (37/2$^+$) state; weakly populated band.

γ(^{171}W)

Eγ[†]	Iγ	E_i(level)	J^{π}_i	E_f	J^{π}_f	Mult.[‡]	α[&]	$I_{(\gamma+ce)}$	Comments
(4.53 *10*)		395.4	(17/2+)	390.8	(15/2+)	[M1]	1.74×10^3 *13*	6.5[@] *9*	Eγ: from energy difference between 348.42γ and 343.88γ (see fig. 1(b) and table 3 of 1994Es01). Existence of transition established by absence of 212γ from 208γ-γ coin spectrum.
(7.59 *12*)		1197.0	(23/2+)	1189.5	(25/2+)	[M1]	374 *19*	0.25[@] *20*	Eγ: from energy difference between 458.19γ and 450.60γ (see fig. 1(b) and table 3 of 1994Es01).
(16.41 *14*)		1738.1	(27/2+)	1721.8	(29/2+)	[M1]	165 *5*	0.7[@] *4*	Eγ: from energy difference between 548.71γ and 532.29γ (see fig. 1(b) and table 3 of 1994Es01).
(31.79)		2343.1	(31/2+)	2311.4	(33/2+)				Eγ: from fig. 1(b) of 1994Es01; from energy difference between 621.38γ and 589.59γ.
101.9 *1*	<10.5	101.84	7/2−	0.0	5/2−				
131.4 *1*	25.0 *14*	233.16	9/2−	101.84	7/2−				DCO=1.11 *18*.
156.4 *2*	13.8 *7*	389.26	(11/2−)	233.16	9/2−				DCO=1.15 *14*.
159.0 *3*	4.0 *2*	548.22	(13/2−)	389.26	(11/2−)				DCO=1.3 *4*.
179.0 *5*	0.8 *2*	914.82	(17/2−)	736.10	(15/2−)				
187.7 *2*	1.0 *2*	736.10	(15/2−)	548.22	(13/2−)				
201.0 *5*		1332.12	(21/2−)	1131.01	(19/2−)				
207.73[b]		390.8	(15/2+)	183.1	(13/2+)				Eγ: from fig. 1(b) of 1994Es01; Eγ=208.0 *5* is indicated in table 1 for this transition.
208.0[a] *1*	21.9[a] *4*	390.8	(15/2+)	182.8	(11/2+)				Eγ: 208.00 in Fig. 1(b) of 1994Es01. DCO=1.17 *15* for multiply-placed γ; 1994Es01 suggest that an unresolved contribution from the expected ΔJ=1, 207.73γ may account for a ratio that is a little higher than expected for a ΔJ=2 transition.
208.0[a] *5*	[a]	1785.22	(25/2−)	1576.9	(23/2−)				
212.3 *1*	78.5 *12*	395.4	(17/2+)	183.1	(13/2+)	Q			Eγ=212.26 *3* in table 3 of 1994Es01. DCO=0.93 *8*.
233.1 *1*	12.3 *2*	233.16	9/2−	0.0	5/2−	Q			DCO=0.86 *12*.
287.4 *1*	13.5 *2*	389.26	(11/2−)	101.84	7/2−	Q			DCO=1.08 *11*.
315.0 *1*	34.8 *7*	548.22	(13/2−)	233.16	9/2−	Q			DCO=0.93 *7*.
343.5 *1*	100.0 *23*	738.9	(21/2+)	395.4	(17/2+)	Q			Eγ=343.46 *2* in table 3 of 1994Es01. DCO=0.91 *5*.
343.5 *5*	5.7 *16*	739.2	(19/2+)	395.4	(17/2+)	D			Eγ=343.88 *10* in table 3 of 1994Es01. DCO=1.7 *3*.
346.9 *1*	23.0 *5*	736.10	(15/2−)	389.26	(11/2−)	Q			DCO=1.00 *7*.
348.4 *1*	18.1 *4*	739.2	(19/2+)	390.8	(15/2+)	Q			Eγ=348.42 *3* in table 3 of 1994Es01. DCO=1.09 *11*.
365.4 *3*	<4.9	548.22	(13/2−)	182.8	(11/2+)				Transition feeds 182.8 and/or 183.1 level.
366.6 *1*	53.9 *11*	914.82	(17/2−)	548.22	(13/2−)	Q			DCO=1.07 *6*.
377.1 *1*	<11.0	2460.7	(29/2−)	2083.6	(25/2−)	(Q)			DCO=0.82 *19*.
394.9 *1*	26.8 *5*	1131.01	(19/2−)	736.10	(15/2−)	Q			DCO=1.05 *7*.
411.0 *10*	15.0 *10*	2871.7	(33/2−)	2460.7	(29/2−)	(Q)			DCO=1.05 *17*.

γ(^{171}W) (continued)

E$_\gamma$ †	I$_\gamma$	E$_i$(level)	J$^\pi_i$	E$_f$	J$^\pi_f$	Mult. ‡	α &	I$_{(\gamma+ce)}$	Comments
417.3 *1*	55.3 *11*	1332.12	(21/2$^-$)	914.82	(17/2$^-$)	Q			DCO=1.04 *6*.
^{x}433#									
445.9 *2*	25.5 *5*	1576.9	(23/2$^-$)	1131.01	(19/2$^-$)	Q			DCO=0.98 *6*.
450.6 *1*	96.8 *16*	1189.5	(25/2$^+$)	738.9	(21/2$^+$)	Q			DCO=0.93 *5*.
453.1 *1*	54.4 *11*	1785.22	(25/2$^-$)	1332.12	(21/2$^-$)	Q			DCO=0.92 *5*.
453.4 *1*	4.6 *3*	3069.4	(35/2$^-$)	2616.0	(31/2$^-$)	Q			DCO=0.92 *11*.
457.8 *1*	22.6 *5*	1197.0	(23/2$^+$)	739.2	(19/2$^+$)				Eγ=457.77 *9* in table 3 of 1994Es01. I$_\gamma$: for 457.8γ+458.2γ; DCO=1.15 *9* for doublet.
458.2 *2*	22.6 *5*	1197.0	(23/2$^+$)	738.9	(21/2$^+$)				I$_\gamma$: for 457.8γ+458.2γ; DCO=1.15 *9* for doublet.
464.6 *1*	48.3 *13*	2249.82	(29/2$^-$)	1785.22	(25/2$^-$)	Q			DCO=0.94 *5*.
468.9 *1*	9.8 *3*	3069.4	(35/2$^-$)	2600.5	(31/2$^-$)				DCO=1.1 *3*.
^{x}487#									
487.2 *1*	39.8 *7*	2737.03	(33/2$^-$)	2249.82	(29/2$^-$)	Q			DCO=0.96 *6*.
493.1 *1*	26.3 *6*	2070.0	(27/2$^-$)	1576.9	(23/2$^-$)	Q			DCO=0.92 *6*.
504.5 *1*	19.7 *6*	3376.2	(37/2$^-$)	2871.7	(33/2$^-$)	Q			DCO=0.97 *14*.
524.0 *5*	2.1 *5*	914.82	(17/2$^-$)	390.8	(15/2$^+$)				
^{x}525#									
530.7 *3*	14.5 *3*	2600.5	(31/2$^-$)	2070.0	(27/2$^-$)	Q			DCO=0.93 *6*.
532.3 *1*	88.8 *15*	1721.8	(29/2$^+$)	1189.5	(25/2$^+$)	Q			DCO=1.01 *6*.
537.2 *2*	30.4 *6*	3274.2	(37/2$^-$)	2737.03	(33/2$^-$)	Q			DCO=0.92 *7*.
541.1 *1*	21.2 *5*	1738.1	(27/2$^+$)	1197.0	(23/2$^+$)				Eγ=541.11 *5* in table 3 of 1994Es01. DCO=1.11 *11*.
546.0 *1*	8.0 *3*	2616.0	(31/2$^-$)	2070.0	(27/2$^-$)				DCO=1.3 *4*.
548.4 *1*	10.6 *3*	3617.8	(39/2$^-$)	3069.4	(35/2$^-$)	Q			DCO=0.93 *11*.
548.5 *7*		1738.1	(27/2$^+$)	1189.5	(25/2$^+$)	[M1]	0.0444	3.0@ *4*	Eγ=548.71 *13* in table 3 of 1994Es01.
571.5 *1*	4.1 *2*	3187.6	(35/2$^-$)	2616.0	(31/2$^-$)	Q			DCO=0.91 *20*.
587.2 *1*	3.8 *2*	3187.6	(35/2$^-$)	2600.5	(31/2$^-$)				DCO=1.1 *5*.
589.6 *1*	74.8 *13*	2311.4	(33/2$^+$)	1721.8	(29/2$^+$)	Q			DCO=0.97 *6*.
591.8 *2*	25.4 *6*	3968.1	(41/2$^-$)	3376.2	(37/2$^-$)	Q			DCO=0.94 *12*.
600.5 *1*	27.9 *6*	3874.7	(41/2$^-$)	3274.2	(37/2$^-$)	Q			DCO=1.07 *11*.
605.0 *1*	21.0 *6*	2343.1	(31/2$^+$)	1738.1	(27/2$^+$)	Q			Eγ=604.97 *10* in table 3 of 1994Es01. DCO=0.94 *11*.
621.5 *10*		2343.1	(31/2$^+$)	1721.8	(29/2$^+$)				
622.0 *5*	5.0 *5*	2871.7	(33/2$^-$)	2249.82	(29/2$^-$)				
622.0 *1*	5.9 *2*	3809.6	(39/2$^-$)	3187.6	(35/2$^-$)	Q			DCO=0.97 *15*.
623.6 *1*	69.4 *13*	2935.0	(37/2$^+$)	2311.4	(33/2$^+$)	Q			DCO=0.90 *6*.
630.7 *1*	8.6 *3*	4248.5	(43/2$^-$)	3617.8	(39/2$^-$)	Q			DCO=0.92 *15*.
639.0 *5*	5.0 *5*	3376.2	(37/2$^-$)	2737.03	(33/2$^-$)				DCO=1.2 *7*.
642.2 *1*	46.6 *9*	3577.1	(41/2$^+$)	2935.0	(37/2$^+$)				DCO=1.19 *11*.
656.1 *1*	14.5 *5*	2999.2	(35/2$^+$)	2343.1	(31/2$^+$)	Q			DCO=0.91 *11*.
663.3 *1*	15.6 *6*	4631.4	(45/2$^-$)	3968.1	(41/2$^-$)	Q			DCO=0.88 *16*.
668.0 *1*	18.3 *5*	4542.7	(45/2$^-$)	3874.7	(41/2$^-$)	Q			DCO=0.99 *12*.

γ(^{171}W) (continued)

E_γ †	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult. ‡	Comments
669.2 *1*	5.1 *2*	4478.8	(43/2$^-$)	3809.6	(39/2$^-$)	Q	DCO=0.98 *11*.
673.5 *1*	32.1 *7*	4250.7	(45/2$^+$)	3577.1	(41/2$^+$)	Q	DCO=1.03 *10*.
694.0 *5*	<5.5	3968.1	(41/2$^-$)	3274.2	(37/2$^-$)		
694.2 *5*		4648.7	(45/2)	3954.7	(41/2)		
698.9 *1*	10.1 *4*	3698.1	(39/2$^+$)	2999.2	(35/2$^+$)	Q	DCO=1.03 *13*.
699.7 *2*	7.3 *3*	4948.2	(47/2$^-$)	4248.5	(43/2$^-$)	Q	DCO=0.96 *16*.
716.7 *2*	4.3 *2*	5195.5	(47/2$^-$)	4478.8	(43/2$^-$)	Q	DCO=0.86 *15*.
720.9 *1*	14.2 *7*	5352.3	(49/2$^-$)	4631.4	(45/2$^-$)	Q	DCO=1.08 *16*.
730.2 *1*	13.5 *5*	5272.9	(49/2$^-$)	4542.7	(45/2$^-$)	Q	DCO=0.94 *13*.
731.1 *1*	5.7 *3*	4429.2	(43/2$^+$)	3698.1	(39/2$^+$)	Q	DCO=0.91 *22*.
732.1 *1*	23.3 *6*	4982.8	(49/2$^+$)	4250.7	(45/2$^+$)	Q	DCO=1.09 *10*.
751.6 *3*	4.2 *3*	5180.8	(47/2$^+$)	4429.2	(43/2$^+$)	Q	DCO=0.87 *15*.
759.0 *1*	4.3 *2*	5707.2	(51/2$^-$)	4948.2	(47/2$^-$)	Q	DCO=1.04 *12*.
763.9 *1*	2.6 *2*	5959.4	(51/2$^-$)	5195.5	(47/2$^-$)	(Q)	DCO=0.98 *26*.
775.5 *1*	7.7 *6*	6127.8	(53/2$^-$)	5352.3	(49/2$^-$)	Q	DCO=0.91 *18*.
776.2 *3*	1.2 *2*	5957.0	(51/2$^+$)	5180.8	(47/2$^+$)	Q	DCO=0.83 *21*.
784.2 *2*	8.6 *4*	6057.1	(53/2$^-$)	5272.9	(49/2$^-$)		DCO=1.1 *3*.
787.0 *5*		5435.7	(49/2)	4648.7	(45/2)		
802.3 *1*	14.3 *5*	5785.1	(53/2$^+$)	4982.8	(49/2$^+$)	Q	DCO=0.95 *8*.
814.0 *5*	1.4 *2*	6773.4	(55/2$^-$)	5959.4	(51/2$^-$)	(Q)	DCO=0.9 *3*.
817.0 *5*		6774.0	(55/2$^+$)	5957.0	(51/2$^+$)		
819.6 *1*	2.0 *2*	6526.8	(55/2$^-$)	5707.2	(51/2$^-$)	Q	DCO=0.99 *19*.
837.0 *5*	7.6 *6*	6894.1	(57/2$^-$)	6057.1	(53/2$^-$)		DCO=1.20 *22*.
840.0 *2*	5.2 *4*	6967.8	(57/2$^-$)	6127.8	(53/2$^-$)		DCO=1.2 *3*.
872.2 *2*	8.3 *5*	6657.3	(57/2$^+$)	5785.1	(53/2$^+$)	Q	DCO=1.06 *18*.
877.0 *5*		7650.4	(59/2$^-$)	6773.4	(55/2$^-$)		
885.7 *2*	1.0 *2*	7412.5	(59/2$^-$)	6526.8	(55/2$^-$)	Q	DCO=1.0 *3*.
897.5 *5*	5.7 *5*	7791.6	(61/2$^-$)	6894.1	(57/2$^-$)	Q	DCO=1.2 *4*.
909.5 *3*	3.2 *4*	7877.3	(61/2$^-$)	6967.8	(57/2$^-$)		
938.0 *3*	3.5 *4*	7595.3	(61/2$^+$)	6657.3	(57/2$^+$)	Q	DCO=1.3 *4*.
952.0 *5*		8364.5	(63/2$^-$)	7412.5	(59/2$^-$)		
963.0 *5*		8754.6	(65/2$^-$)	7791.6	(61/2$^-$)		
995.1 *2*	1.4 *2*	8590.4	(65/2$^+$)	7595.3	(61/2$^+$)		
1019.7 *1*		3954.7	(41/2)	2935.0	(37/2$^+$)		
1022.0 *5*		9776.6	(69/2$^-$)	8754.6	(65/2$^-$)		
1071.4 *3*		4648.7	(45/2)	3577.1	(41/2$^+$)		

† From table 1 of 1994Es01, except as noted. The authors also give in table 3 and fig. 1(b) a number of transition energies calculated in a fitting procedure based on measured transition energies and quoted relative to the energy of the 391 level; they are given in comments here, but the accuracy of these Eγ values is valid on a relative scale only.

‡ Based on measured DCO ratios; expected ratios are 1.0 for stretched Q (or D, ΔJ=0) transitions and $\approx$ 1.8 for pure stretched D transitions. For D+Q transitions,

$^{171}_{74}$W$_{97}$-4

γ(^{171}W) (continued)

DCO ratios =1.0-1.8 and >1.8 are expected, respectively, for $\delta < 0$ and $\delta > 0$.

[#] Coincident with transitions in 1/2[521] band.

[@] From intensity balance in gated spectra; see table 3 of 1994Es01.

[&] 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.

[a] Multiply placed with intensity suitably divided.

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

[x] γ ray not placed in level scheme.

$^{171}_{74}$W$_{97}$-5

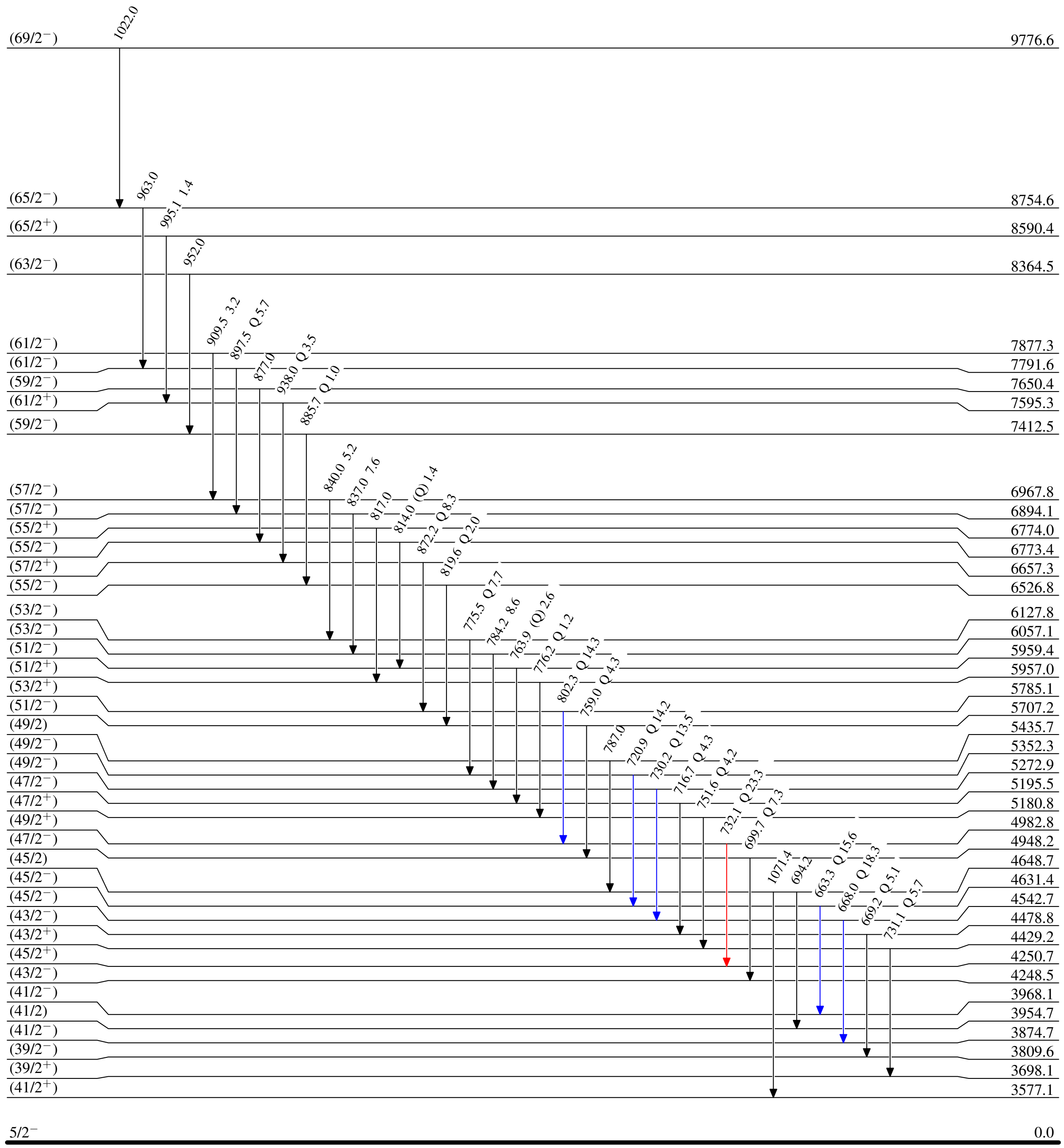
^{146}Nd(^{30}Si,5nγ) 1994Es01

Level Scheme

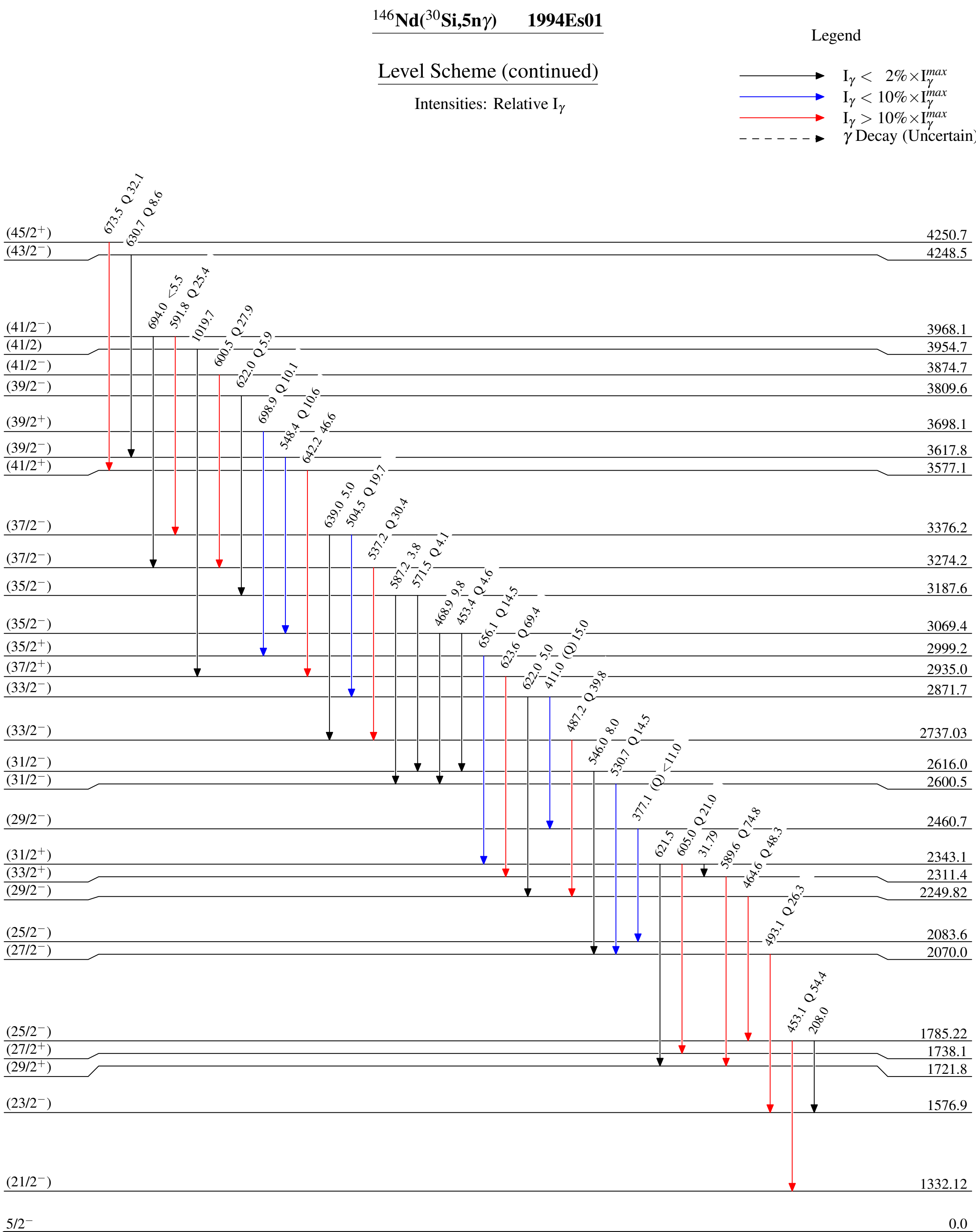
Intensities: Relative I_γ

Legend

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



$^{171}_{74}W_{97}$


^{146}Nd(^{30}Si,5nγ) 1994Es01
Level Scheme (continued)
Intensities: Relative Iγ
Legend
Iγ < 2%×Iγmax
Iγ < 10%×Iγmax
Iγ > 10%×Iγmax
γ Decay (Uncertain)
(45/2+) 4250.7
(43/2−) 4248.5
(41/2−) 3968.1
(41/2) 3954.7
(41/2−) 3874.7
(39/2−) 3809.6
(39/2+) 3698.1
(39/2−) 3617.8
(41/2+) 3577.1
(37/2−) 3376.2
(37/2−) 3274.2
(35/2−) 3187.6
(35/2−) 3069.4
(35/2+) 2999.2
(37/2+) 2935.0
(33/2−) 2871.7
(33/2−) 2737.03
(31/2−) 2616.0
(31/2−) 2600.5
(29/2−) 2460.7
(31/2+) 2343.1
(33/2+) 2311.4
(29/2−) 2249.82
(25/2−) 2083.6
(27/2−) 2070.0
(25/2−) 1785.22
(27/2+) 1738.1
(29/2+) 1721.8
(23/2−) 1576.9
(21/2−) 1332.12
5/2− 0.0
673.5 Q 32.1
630.7 Q 8.6
694.0 <5.5
591.8 Q 25.4
1019.7
600.5 Q 27.9
622.0 Q 5.9
698.9 Q 10.1
548.4 Q 10.6
642.2 46.6
639.0 5.0
504.5 Q 19.7
537.2 Q 30.4
587.2 3.8
571.5 Q 4.1
468.9 9.8
453.4 Q 4.6
656.1 Q 14.5
623.6 Q 69.4
622.0 5.0
411.0 (Q) 15.0
487.2 Q 39.8
546.0 8.0
530.7 Q 14.5
377.1 (Q) <11.0
621.5
605.0 Q 21.0
31.79
589.6 Q 74.8
464.6 Q 48.3
493.1 Q 26.3
453.1 Q 54.4
208.0

$^{171}_{74}W_{97}$

^{146}Nd(^{30}Si,5nγ) 1994Es01

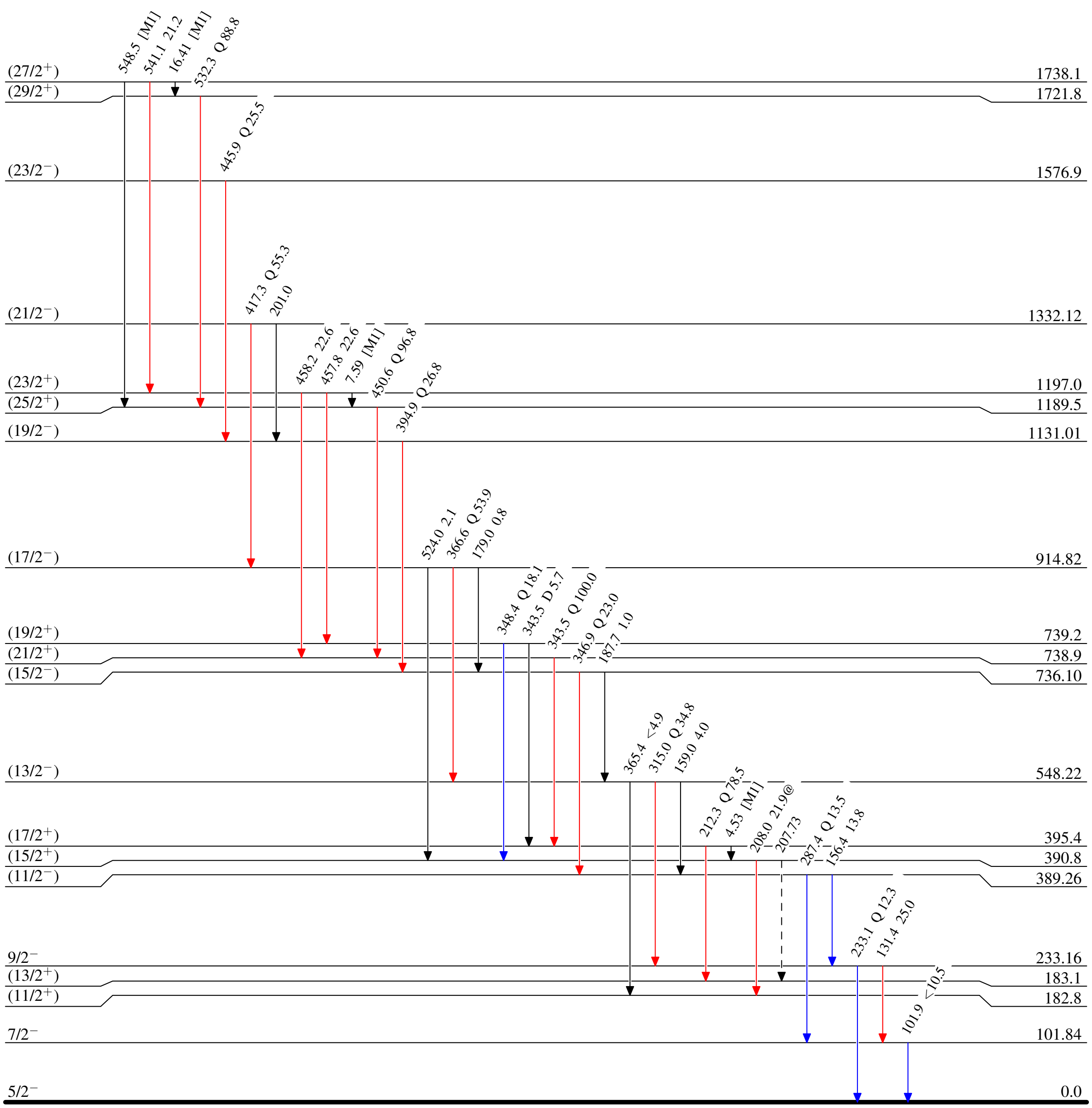
Level Scheme (continued)

Intensities: Relative I_γ

@ Multiply placed: intensity suitably divided

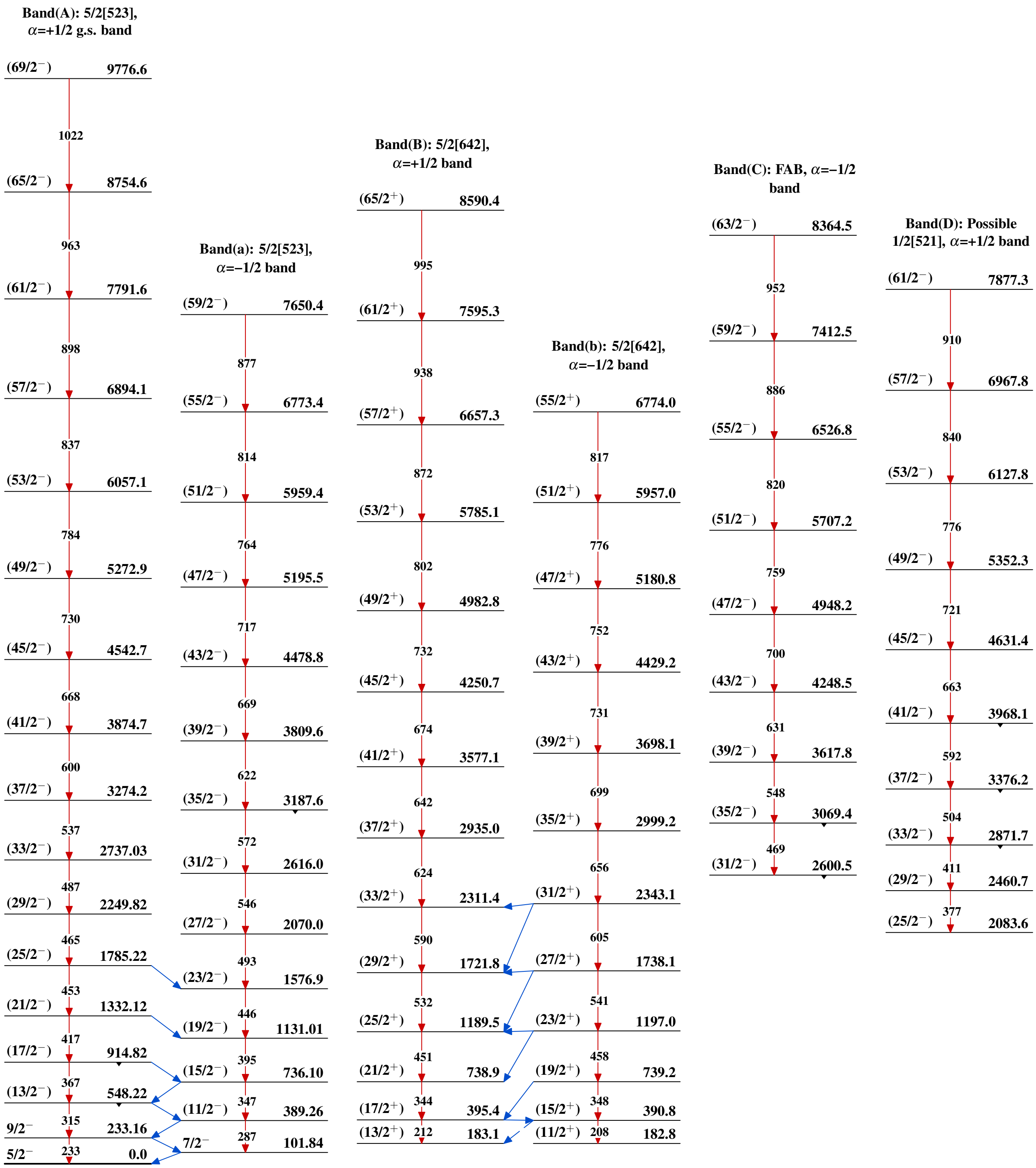
Legend

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



$^{171}_{74}W_{97}$

$^{146}Nd(^{30}Si,5n\gamma)$ 1994Es01



$^{171}_{74}W_{97}$

$^{146}Nd(^{30}Si,5n\gamma)$ 1994Es01 (continued)