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^-)=−2.41×10^3 *5*; S(n)=9.30×10^3 *6*; S(p)=4.53×10^3 *5*; Q(α)=−3.04×10^3 *5* 2012Wa38
S(2n)=2.159×10^4 *50*; S(2p)=1.183×10^4 *50* (2012Wa38).
α: Additional information 1.

^{70}As Levels

Cross Reference (XREF) Flags

A	^{70}Se β^+ decay	D	^{55}Mn(^{18}O,3nγ)
B	^{9}Be(^{78}Rb,^{70}Asγ)	E	^{58}Ni(^{14}N,2pγ), ^{56}Fe(^{16}O,npγ)
C	^{51}V(^{28}Si,2αnγ),^{46}Ti(^{28}Si,3pnγ)	F	^{70}Ge(p,nγ)

E(level)[†]	J$^\pi$	T$_{1/2}$[‡]	XREF	Comments
0.0	4$^+$	52.6 min *3*	ABCDEF	%ε+%β^+=100 Q=0.09 *2*; μ=+2.1061 *2* (1980Ho02,2014StZZ) J$^\pi$: J=4 from atomic-beam resonance method (1976He24); π from shell model agrees with μ. Possible configuration=((πf$_{5/2}$)(νf$_{5/2}$)). T$_{1/2}$: weighted average of 53.0 min *6* (1968De16), 52.5 min *3* (1968Bo40), and 52 min *1* (1952Ve09). μ,Q: from atomic beam resonance method. Values are from 2014StZZ, the original values of μ=+2.1054 *2* and Q=0.094 from 1980Ho02 are uncorrected for diamagnetic shielding.
32.046 *23*	2$^+$	96 μs *3*	ABCDEF	J$^\pi$: from 32.05γ E2 to 4$^+$, 49.5γ from 1$^+$.
81.54 *3*	1$^+$	<3 ns	A F	J$^\pi$: log *ft*=4.76 from 0$^+$ parent.
166.734 *24*	3$^+$	6.0 ns *5*	BCDEF	T$_{1/2}$: from delayed coincidences in ^{58}Ni(^{14}N,2pγ) (1987Ba39, 1991Ba43). J$^\pi$: from 166.83γ M1 to 4$^+$; 134.63γ M1(+E2) to 2$^+$.
167.74 *3*	(2)$^+$	<3 ns	A F	J$^\pi$: no direct β^+/ε feeding from 0$^+$ parent; 160.89γ M1(+E2) from 1$^+$.
234.74 *3*	1$^+$	<1 ns	A F	J$^\pi$: log *ft*=5.53 from 0$^+$ parent; 202.66γ M1 to 2$^+$.
325.66 *3*	2$^+$		A F	J$^\pi$: from 293.66γ M1 to 2$^+$, 244.10γ M1 to 1$^+$; no direct β^+/ε feeding from 0$^+$ parent.
328.65 *3*	1$^+$		A F	J$^\pi$: from 296.64γ M1 to 2$^+$, 247.11γ M1(+E2) to 1$^+$; log *ft*=6.2 from 0$^+$ parent.
344.65 *3*	(0)$^+$	<1 ns	A F	J$^\pi$: from 263.13γ M1 to 1$^+$, excitation function and comparison with Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
383.33 *3*	2$^-$	<1 ns	F	J$^\pi$: from 301.80γ E1 to 1$^+$, $\gamma(\theta)$ in (p,nγ).
390.14 *3*	3$^+$	<1 ns	CDEF	J$^\pi$: from 390.15γ M1 to 4$^+$, 223.42γ M1 to 3$^+$, $\gamma(\theta)$ in (p,nγ).
425.33 *5*	(0)$^+$		F	J$^\pi$: from 343.81γ M1 to 1$^+$; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
458.16 *3*	1$^+$		A F	J$^\pi$: log *ft*=4.29 from 0$^+$ parent.
485.324 *22*	4$^-$	4.1 ns *4*	BCDEF	T$_{1/2}$: weighted average of 4.5 ns *10* from ^{70}Ge(p,nγ) (deduced from off-beam Iγ in 1979Te06) and 4.0 ns *4* from ^{58}Ni(^{14}N,2pγ) (delayed coincidences) (1987Ba39, 1991Ba43). J$^\pi$: J=4 from $\gamma(\theta)$ in (p,nγ); π from 318.60γ E1+M2 to 3$^+$.
508.84 *6*	3$^+$		F	J$^\pi$: from 476.75γ M1 to 2$^+$; 342.24γ M1 to 3$^+$, $\gamma(\theta)$ in (p,nγ).
540.01 *4*	2$^+$		F	J$^\pi$: from 458.48γ M1 to 1$^+$, $\gamma(\theta)$ in (p,nγ).
566.52[b] *4*	5$^{(-)}$	<2 ns	BCDEF	J$^\pi$: from 81.19γ D+Q to 4$^-$; Hauser-Feshbach analysis in ^{70}Ge(p,nγ). T$_{1/2}$: from delayed $\gamma\gamma$ coincidence in ^{58}Ni(^{14}N,2pγ). Other < 3 ns from ^{70}Ge(p,nγ).
571.95 *4*	2$^+$		F	J$^\pi$: from 539.92γ M1+E2 to 2$^+$, 490.35γ to 1$^+$; $\gamma(\theta)$ in (p,nγ).
581.62 *4*	1$^+$		A F	J$^\pi$: log *ft*=5.08 from 0$^+$ parent.
592.52 *4*	1$^+$,2$^+$		F	J$^\pi$: from 424.87γ M1 to 2$^+$.
625.21 *4*	4$^+$		F	J$^\pi$: from 235.10γ M1(+E2) to 3$^+$; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
641.86 *4*	3$^+$		F	J$^\pi$: from 474.12γ M1 to 2$^{(+)}$; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
683.97 *7*	(0)		F	J$^\pi$: from 449.24γ to 1$^+$; 358.32γ to 2$^+$; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).

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Adopted Levels, Gammas (continued)

^{70}As Levels (continued)

E(level)[†]	J^π	$T_{1/2}$[‡]	XREF	Comments
687.59 *4*	$(3^+,4^+)$		F	J^π: from 519.85γ to 2^+, 520.82γ to 3^+; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
698.88 *4*	3^-		F	J^π: 315.53γ M1 to 2^-, $\gamma(\theta)$ in (p,nγ).
721.90 *4*	(3)		F	J^π: from 640.35γ to 1^+; 689.88γ to 2^+; 555.11γ to 3^+; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
772.30 *3*	3^-		F	J^π: from 388.96γ M1 to 2^-; 286.96γ M1 to 4^-.
778.96 *4*	(4^-)		F	J^π: from 293.63γ to 4^-; 80.04γ to 3^-; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
815.48 *5*	(3)		F	J^π: from 783.35γ to 2^+; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
868.90[a] *6*	$6^{(-)}$		BCDEF	J^π: from 302.41γ (M1+E2) to $5^{(-)}$; $\gamma(\theta)$ in (p.nγ).
887.61[c] *20*	$7^{(-)}$	4.5 ns *3*	BCDE	μ=0.75 *5* (1991Ba43) μ: from perturbed angular distribution from an implanted source (1991Ba43). J^π: from 321.1γ E2 to $5^{(-)}$; based on excitation function and linear polarization measurements in ^{58}Ni(^{14}N,2pγ). $T_{1/2}$: from delayed coincidences in ^{58}Ni(^{14}N,2pγ) (1987Ba39, 1991Ba43).
890.47 *4*	1^+	5.5 ns *10*	A F	J^π: from log *ft*=5.64 from 0^+ parent.
898.30 *6*	(5)		BCDEF	J^π: from 331.74γ to 5^-; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
928.14 *5*	(2,1)		F	J^π: from 602.54γ to 2^+; 761.30γ to 3^+; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
933.20 *15*			BC E	
938.96 *5*	4^-		F	J^π: from 372.39γ M1+E2 to 5^-, 555.66γ to 2^-; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
939.28 *5*	(2,1)		F	J^π: from 857.82γ to 1^+, 772.50γ to 3^+; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
950.28 *9*	(0)		F	J^π: from 621.63γ to 1^+; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
966.86 *9*	(5)		F	J^π: from 576.72γ to 3^+; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
987.80 *8*	(0,3)		F	J^π: from 906.32γ to 1^+; 662.10γ to 2^+; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
1003.62 *5*	1,2		F	J^π: from 578.20γ to 0^+; 678.03γ to 2^+; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
1026.33 *4*	$(1^-,2)$		F	J^π: from 944.85γ to 1^+; 254.01γ to 3^-; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
1045.85 *9*	$6^{(-)}$		BCDEF	J^π: from 479.35γ (D+Q) to $5^{(-)}$, (E2) 938γ from $8^{(-)}$.
1046.43 *5*	(1,2)		F	J^π: from 964.86γ to 1^+; 656.20γ to 3^+; Hauser-Feshbach analysis in ^{70}Ge(p,nγ).
1115.08 *7*	(1,2)		F	J^π: from 656.80γ to 1^+,789.43γ to 2^+.
1454.01 *20*	6^+		BCDE	J^π: D 556γ to $7^{(-)}$, 1454γ to 4^+.
1496.01[b] *18*	$7^{(-)}$		D	J^π: E2 930γ to $5^{(-)}$, band assignment.
1651.2 *4*	1^+		A	J^π: log *ft*=4.99 from 0^+ parent.
1675.86[@] *25*	$8^{(+)}$	55 ps *20*	BCDE	J^π: from 788.3γ (E1+M2) to $7^{(-)}$; J=8 from $\gamma(\theta)$ and excitation function in ^{58}Ni(^{14}N,2pγ). $T_{1/2}$: from line-shape analysis in ^{9}Be(^{78}Rb,^{70}Asγ) Other: < 2 ns in ^{58}Ni(^{14}N,2pγ).
1725.8 *4*			D	J^π: $7^{(+)}$ proposed in ^{55}Mn(^{18}O,3nγ).
1752.0[#] *3*	$9^{(+)}$	59 ps *30*	BCDE	J^π: from 76.1γ D(+Q) to $8^{(+)}$; J=9 from $\gamma(\theta)$ and excitation function in ^{58}Ni(^{14}N,2pγ). $T_{1/2}$: from line-shape analysis in ^{9}Be(^{78}Rb,^{70}Asγ). Other: < 2 ns in ^{58}Ni(^{14}N,2pγ). Configuration:$((\pi g_{9/2})(\nu g_{9/2}))$.
1765.5 *3*			D	
1806.8 *4*	$7^{(-)}$		D	J^π: E2 771.5γ from $9^{(-)}$.
1809.2 *3*			E	
1983.2[a] *3*	$8^{(-)}$		D	J^π: E2 1115γ to $6^{(-)}$, band assignment.
2282.1[c] *3*	$9^{(-)}$		D	J^π: E2 1394γ to $7^{(-)}$; band assignment.

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Adopted Levels, Gammas (continued)

^{70}As Levels (continued)

E(level)[†]	J^{π}	$T_{1/2}$[‡]	XREF	Comments
2379.4 *8*	$9^{(+)}$		D	J^{π}: D+Q 703.5γ to $8^{(+)}$.
2467.2 *4*	$9^{(+)}$		BCDE	J^{π}: D+Q 791.5γ to $8^{(+)}$.
2579.0[b] *3*	$9^{(-)}$		D	J^{π}: E2 1082γ to $7^{(-)}$; band assignment.
2579.8[@] *3*	$10^{(+)}$	0.53[&] ps *4*	BCDE	J^{π}: E2 904γ to $8^{(+)}$. Other: J>9 from the slope of the excitation function in ^{58}Ni(^{14}N,2pγ).
2691.0 *4*	$9^{(+)}$		D	J^{π}: D+Q 1015γ to $8^{(+)}$.
2732.7[#] *3*	$11^{(+)}$	0.527 ps *14*	BCDE	$T_{1/2}$: from DSAM in ^{55}Mn(^{18}O,3nγ). Other: 0.76 ps *21* from DSAM in ^{58}Ni(^{14}N,2pγ),^{56}Fe(^{16}O,npγ). J^{π}: E2 981γ to $9^{(+)}$; band assignment.
2873.2 *4*	$10^{(+)}$		D	J^{π}: D+Q 1121γ to $9^{(+)}$.
3272.3 *3*	$11^{(+)}$		CD	J^{π}: $11^{(+)}$ proposed in ^{55}Mn(^{18}O,3nγ).
3300.6[a] *5*	$10^{(-)}$		D	J^{π}: E2 1317γ to $8^{(-)}$, band assignment.
3694.5 *11*	$10^{(+)}$		D	J^{π}: D+Q 1227γ to $9^{(+)}$.
3772.2[b] *3*	$11^{(-)}$		D	J^{π}: E2 1194γ to $9^{(-)}$; band assignment.
3792.2[@] *4*	$12^{(+)}$	<0.31[&] ps	D	J^{π}: E2 1212γ to $10^{(+)}$; band assignment.
4076.0[#] *7*	$13^{(+)}$	0.069[&] ps *7*	BCDE	$T_{1/2}$: other: <0.49 ps from effective lifetime from DSAM in ^{58}Ni(^{14}N,2pγ),^{56}Fe(^{16}O,npγ). J^{π}: E2 1343γ to $11^{(+)}$, band assignment.
4114.3 *5*	(11^{-})		D	J^{π}: 1833γ to $9^{(-)}$.
4206.5[a] *3*	$12^{(-)}$	<0.76[&] ps	CD	J^{π}: E2 906γ to $10^{(-)}$; band assignment.
4604.5 *3*	$13^{(-)}$		D	J^{π}: E2 832γ to $11^{(-)}$.
4818.8 *4*	$14^{(-)}$	<2.2[&] ps	D	J^{π}: E2 612γ to $12^{(-)}$.
5364.9? *6*	$14^{(-)}$		D	J^{π}: D+Q 760γ to $13^{(-)}$, 1159γ to $12^{(-)}$.
5457.9[#] *10*	(15^{+})	<0.18[&] ps	D	J^{π}: 1382γ to $13^{(+)}$; band assignment.
5498.4 *5*	$15^{(-)}$		D	J^{π}: E2 894γ to $13^{(-)}$.
5884.1 *7*	$15^{(-)}$		D	J^{π}: D+Q 1065γ to $14^{(-)}$.
6246.5 *7*	(16^{-})		D	J^{π}: 1428γ to (14^{-}).

† From a least-squares fit to Eγ, by evaluators.
‡ From delayed γ(t) ^{70}Ge(p,nγ), except where noted.
# Band(A): Based on 9^{+}, 1752-keV level. Configuration=$\pi g_{9/2}\otimes\nu g_{9/2}$, α=1.
@ Band(B): Based on 8^{+}, 1676-keV level. Configuration=$\pi g_{9/2}\otimes\nu g_{9/2}$, α=0.
& From DSAM in ^{55}Mn(^{18}O,3nγ).
a Band(C): Negative parity band based on $6^{(-)}$, 869-keV level.
b Band(D): Negative parity band based on $5^{(-)}$, 567-keV level.
c Band(E): Negative parity band based on $7^{(-)}$, 888-keV level.

γ(^{70}As)

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[&]	δ[b]	α	Comments
32.046	2^+	32.05[#] *3*	100[#]	0.0	4^+	E2		50.3	α(K)=36.8 *6*; α(L)=11.65 *17*; α(M)=1.75 *3*; α(N)=0.0962 *14* B(E2)(W.u.)=0.198 *7* Mult.: from comparison with RUL and α(L)exp in β^+ decay in 1974Te04, no direct β^+/EC-feeding observed. Other: Estimated from the transition probabilities deduced from measured halflife in 1979Te06.
81.54	1^+	49.51[#] *3*	100[#]	32.046	2^+	(M1)[a]		0.643	α(K)=0.570 *8*; α(L)=0.0628 *9*; α(M)=0.00959 *14*; α(N)=0.000719 *11* B(M1)(W.u.)>0.037 Mult.: ce data indicate E1 or M1; M1 based on the decay pattern.
166.734	3^+	134.63 *5*	100 *6*	32.046	2^+	M1(+E2)[a]	−0.01 *4*	0.0404 *8*	α(K)=0.0359 *7*; α(L)=0.00386 *8*; α(M)=0.000590 *12*; α(N)=4.46×10^{-5} *9* B(M1)(W.u.)=0.00118 *14*
		166.83 *10*	23.0 *20*	0.0	4^+	M1		0.0230	α(K)=0.0204 *3*; α(L)=0.00218 *3*; α(M)=0.000334 *5*; α(N)=2.53×10^{-5} *4* B(M1)(W.u.)=0.000143 *19*
167.74	$(2)^+$	86.19 *3*	46.0 *24*	81.54	1^+	[M1+E2]		0.8 *7*	α(K)=0.7 *6*; α(L)=0.09 *8*; α(M)=0.014 *12*; α(N)=0.0009 *8*
		135.68 *5*	100 *6*	32.046	2^+				
234.74	1^+	153.18 *3*	12.0 *9*	81.54	1^+	[M1+E2]		0.09 *7*	α(K)=0.08 *6*; α(L)=0.010 *7*; α(M)=0.0015 *11*; α(N)=0.00011 *8*
		202.66 *3*	100 *7*	32.046	2^+	M1		0.01392	α(K)=0.01238 *18*; α(L)=0.001316 *19*; α(M)=0.000201 *3*; α(N)=1.524×10^{-5} *22* B(M1)(W.u.)>0.0023
325.66	2^+	90.96 *8*	3.7 *6*	234.74	1^+				
		158.89 *9*	5.1 *6*	166.734	3^+				
		244.10 *3*	100 *6*	81.54	1^+	M1		0.00869	α(K)=0.00774 *11*; α(L)=0.000819 *12*; α(M)=0.0001250 *18*; α(N)=9.49×10^{-6} *14*
		293.66 *5*	20.3 *15*	32.046	2^+	M1		0.00550	α(K)=0.00490 *7*; α(L)=0.000516 *8*; α(M)=7.87×10^{-5} *11*; α(N)=5.99×10^{-6} *9*
328.65	1^+	93.88 *7*	4.0 *8*	234.74	1^+				
		160.89 *3*	100 *6*	167.74	$(2)^+$	M1(+E2)	+0.05[c] *28*	0.026 *11*	α(K)=0.023 *9*; α(L)=0.0024 *11*; α(M)=0.00037 *17*; α(N)=2.8×10^{-5} *12*
		247.11 *3*	40.0 *25*	81.54	1^+	M1(+E2)	−0.16[c] *40*	0.009 *4*	α(K)=0.008 *4*; α(L)=0.0008 *5*; α(M)=0.00013 *7*; α(N)=1.0×10^{-5} *5*
		296.64 *3*	50 *3*	32.046	2^+	M1		0.00537	α(K)=0.00478 *7*; α(L)=0.000503 *7*; α(M)=7.68×10^{-5} *11*; α(N)=5.84×10^{-6} *9*
344.65	$(0)^+$	109.84 *6*	3.5 *7*	234.74	1^+				
		263.13 *3*	100 *6*	81.54	1^+	M1		0.00721	α(K)=0.00642 *9*; α(L)=0.000678 *10*; α(M)=0.0001035 *15*; α(N)=7.86×10^{-6} *11* B(M1)(W.u.)>0.0011
		312.62 *5*	9.6 *12*	32.046	2^+	[E2]		0.01199	α(K)=0.01064 *15*; α(L)=0.001165 *17*; α(M)=0.0001771 *25*;

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

E_i(level)	J^π_i	E_γ†	I_γ†	E_f	J^π_f	Mult.&	δ[b]	α	Comments
									$\alpha(N)=1.306\times10^{-5}$ *19* B(E2)(W.u.)>0.93
383.33	2^-	148.57 *3*	17.0 *9*	234.74	1^+	[E1+M2]	+0.14 *7*	0.027 *5*	$\alpha(K)=0.024$ *5*; $\alpha(L)=0.0025$ *6*; $\alpha(M)=0.00039$ *9*; $\alpha(N)=2.9\times10^{-5}$ *6* B(E1)(W.u.)>1.5×10^{-5} δ: measured δ results in B(M2) value which exceeds the RUL.
		215.51 *15*	2.0 *4*	167.74	$(2)^+$				
		301.80 *3*	100 *5*	81.54	1^+	E1		0.00290	$\alpha(K)=0.00259$ *4*; $\alpha(L)=0.000268$ *4*; $\alpha(M)=4.07\times10^{-5}$ *6*; $\alpha(N)=3.08\times10^{-6}$ *5* B(E1)(W.u.)>1.1×10^{-5}
		351.29 *4*	10.8 *8*	32.046	2^+				
390.14	3^+	223.42[e] *3*	100[e] *6*	166.734	3^+	M1		0.01086	$\alpha(K)=0.00967$ *14*; $\alpha(L)=0.001025$ *15*; $\alpha(M)=0.0001565$ *22*; $\alpha(N)=1.187\times10^{-5}$ *17* B(M1)(W.u.)>0.0015
		390.15 *4*	33.1 *19*	0.0	4^+	M1		0.00277	$\alpha(K)=0.00247$ *4*; $\alpha(L)=0.000259$ *4*; $\alpha(M)=3.95\times10^{-5}$ *6*; $\alpha(N)=3.01\times10^{-6}$ *5* B(M1)(W.u.)>9.1×10^{-5}
425.33	$(0)^+$	190.52 *6*	10.2 *14*	234.74	1^+				
		343.81 *10*	100 *6*	81.54	1^+	M1		0.00375	$\alpha(K)=0.00334$ *5*; $\alpha(L)=0.000351$ *5*; $\alpha(M)=5.35\times10^{-5}$ *8*; $\alpha(N)=4.07\times10^{-6}$ *6*
458.16	1^+	113.50 *4*	7.0 *9*	344.65	$(0)^+$				
		129.49 *17*	1.0 *2*	328.65	1^+				E_γ,I_γ: from ^{70}Se β^+ decay.
		132.51 *4*	11.3 *13*	325.66	2^+				
		223.38[e] *9*	4[e] *3*	234.74	1^+				
		290.2 *4*	1.5 *4*	167.74	$(2)^+$				E_γ,I_γ: from ^{70}Se β^+ decay.
		376.64 *4*	29.0 *22*	81.54	1^+	M1		0.00302	$\alpha(K)=0.00269$ *4*; $\alpha(L)=0.000281$ *4*; $\alpha(M)=4.29\times10^{-5}$ *6*; $\alpha(N)=3.27\times10^{-6}$ *5*
		426.11 *3*	100 *8*	32.046	2^+	M1		0.00225	$\alpha(K)=0.00201$ *3*; $\alpha(L)=0.000210$ *3*; $\alpha(M)=3.20\times10^{-5}$ *5*; $\alpha(N)=2.44\times10^{-6}$ *4*
485.324	4^-	95.18 *6*	1.1 *5*	390.14	3^+	[E1]		0.0859	$\alpha(K)=0.0766$ *11*; $\alpha(L)=0.00802$ *12*; $\alpha(M)=0.001212$ *18*; $\alpha(N)=8.95\times10^{-5}$ *13* B(E1)(W.u.)=7×10^{-7} *3*
		318.60 *3*	100 *6*	166.734	3^+	E1+M2	−0.041 *20*	0.00252 *5*	$\alpha(K)=0.00225$ *5*; $\alpha(L)=0.000233$ *5*; $\alpha(M)=3.54\times10^{-5}$ *8*; $\alpha(N)=2.68\times10^{-6}$ *6* B(E1)(W.u.)=1.60×10^{-6} *20*; B(M2)(W.u.)=0.12 *11* Mult.: from $\gamma(\theta)$ and γ(lin pol) in $^{58}Ni(^{14}N,2p\gamma)$,
		485.31 *3*	86 *6*	0.0	4^+	E1(+M2)	−0.004 *15*	8.24×10^{-4}	$\alpha(K)=0.000736$ *11*; $\alpha(L)=7.59\times10^{-5}$ *11*; $\alpha(M)=1.155\times10^{-5}$ *17*; $\alpha(N)=8.77\times10^{-7}$ *13* B(E1)(W.u.)=3.9×10^{-7} *5*
508.84	3^+	342.24 *10*	43 *3*	166.734	3^+	M1		0.00379	$\alpha(K)=0.00338$ *5*; $\alpha(L)=0.000354$ *5*; $\alpha(M)=5.41\times10^{-5}$ *8*; $\alpha(N)=4.12\times10^{-6}$ *6*
		476.75 *6*	100 *7*	32.046	2^+	M1		1.74×10^{-3}	$\alpha(K)=0.001549$ *22*; $\alpha(L)=0.0001612$ *23*; $\alpha(M)=2.46\times10^{-5}$

From ENSDF

Adopted Levels, Gammas (continued)

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

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[&]	δ[b]	α	Comments
									4; α(N)=1.88×10^{-6} *3*

$^{70}_{33}$As$_{37}$-6

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

E_i(level)	J^π_i	E_γ†	I_γ†	E_f	J^π_f	Mult.&	δ[b]	α	Comments
540.01	2^+	458.48 3	100	81.54	1^+	M1		0.00190	α(K)=0.001695 24; α(L)=0.0001766 25; α(M)=2.69×10^{-5} 4; α(N)=2.05×10^{-6} 3
566.52	$5^{(-)}$	81.19 3	100	485.324	4^-	D+Q	0.08 4		
571.95	2^+	404.15 8	20 3	167.74	$(2)^+$				
		490.35 10	19.4 20	81.54	1^+				
		539.92 3	100 7	32.046	2^+	M1+E2	+0.11[c] 8	1.32×10^{-3} 3	α(K)=0.001173 22; α(L)=0.0001218 24; α(M)=1.86×10^{-5} 4; α(N)=1.42×10^{-6} 3
581.62	1^+	255.96 4	70 4	325.66	2^+	M1		0.00772	α(K)=0.00688 10; α(L)=0.000726 11; α(M)=0.0001109 16; α(N)=8.42×10^{-6} 12
		413.89 4	100 7	167.74	$(2)^+$	M1		0.00241	α(K)=0.00215 3; α(L)=0.000225 4; α(M)=3.43×10^{-5} 5; α(N)=2.61×10^{-6} 4
		500.10 6	48 4	81.54	1^+				
		549.50 10	16 4	32.046	2^+				
592.52	$1^+,2^+$	263.93 14	9.0 25	328.65	1^+				
		357.81 7	19 5	234.74	1^+				
		424.87 51	31 8	167.74	$(2)^+$	M1		0.00227	α(K)=0.00202 3; α(L)=0.000211 3; α(M)=3.22×10^{-5} 5; α(N)=2.46×10^{-6} 4
		560.46 4	100 8	32.046	2^+				
625.21	4^+	235.10 4	63 5	390.14	3^+	M1(+E2)	<0.35	0.0108 13	α(K)=0.0096 12; α(L)=0.00103 13; α(M)=0.000157 20; α(N)=1.18×10^{-5} 15 δ: from $\alpha(K)_{exp}$ in ^{70}Ge(p,nγ) (1995Po03).
		458.41 8	18 8	166.734	3^+				
		625.17 7	100 11	0.0	4^+				
641.86	3^+	474.12 3	100	167.74	$(2)^+$	M1		1.76×10^{-3}	α(K)=0.001569 22; α(L)=0.0001633 23; α(M)=2.49×10^{-5} 4; α(N)=1.90×10^{-6} 3
683.97	(0)	358.32 9	54 10	325.66	2^+				
		449.24 10	100 10	234.74	1^+				
		516.1 4	<16	167.74	$(2)^+$				
687.59	$(3^+,4^+)$	297.51 6	8.0 25	390.14	3^+				
		519.85 12	26 18	167.74	$(2)^+$				
		520.82 5	100 19	166.734	3^+				
698.88	3^-	315.53 3	100	383.33	2^-	M1		0.00462	α(K)=0.00411 6; α(L)=0.000432 6; α(M)=6.60×10^{-5} 10; α(N)=5.02×10^{-6} 7
721.90	(3)	554.04 15	10 6	167.74	$(2)^+$				
		555.11 8	36 7	166.734	3^+				
		640.35 6	73 8	81.54	1^+				
		689.88 5	100 12	32.046	2^+				
772.30	3^-	286.96 4	36.2 25	485.324	4^-	M1		0.00582	α(K)=0.00518 8; α(L)=0.000546 8; α(M)=8.34×10^{-5} 12; α(N)=6.34×10^{-6} 9
		388.96 4	100 7	383.33	2^-	M1		0.00279	α(K)=0.00249 4; α(L)=0.000260 4; α(M)=3.97×10^{-5} 6; α(N)=3.03×10^{-6} 5

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

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[b]	α	Comments
778.96	(4^-)	80.04 *6*	2.4 *8*	698.88	3^-				
		293.66 *5*	100 *6*	485.324	4^-				
815.48	(3)	275.52 *7*	22 *5*	540.01	2^+				
		647.81 *7*	75 *10*	167.74	$(2)^+$				
		783.35 *6*	100 *10*	32.046	2^+				
868.90	$6^{(-)}$	302.41 *5*	100	566.52	$5^{(-)}$	(M1+E2)[a]	0.044 *23*	0.00513	α(K)=0.00457 *7*; α(L)=0.000481 *7*; α(M)=7.35×10^{-5} *11*; α(N)=5.59×10^{-6} *9*
887.61	$7^{(-)}$	321.1[‡] *3*	100	566.52	$5^{(-)}$	E2		0.01093	α(K)=0.00970 *14*; α(L)=0.001060 *16*; α(M)=0.0001611 *24*; α(N)=1.190×10^{-5} *18* B(E2)(W.u.)=2.13 *15* Mult.: E2 from RUL. E2+M3 with δ = 0.04 *3* in $^{58}Ni(^{14}N,2p\gamma)$, however, this results in an M3 component which exceeds RUL.
890.47	1^+	545.83 *5*	100 *9*	344.65	$(0)^+$				
		561.88 *11*	56 *10*	328.65	1^+				
		564.78 *6*	49 *7*	325.66	2^+				
		858.40 *13*	15 *7*	32.046	2^+				
898.30	(5)	29.8[f] *2*		868.90	$6^{(-)}$				E_γ: from $^{58}Ni(^{14}N,2p\gamma)$, $^{56}Fe(^{16}O,np\gamma)$.
		331.74 *5*	100	566.52	$5^{(-)}$				
928.14	(2,1)	602.54 *9*	100 *10*	325.66	2^+				
		761.30 *9*	24 *5*	166.734	3^+				
		896.10 *6*	28 *5*	32.046	2^+				
933.20		34.7[‡] *2*	100 *33*	898.30	(5)				
		64.5[‡] *2*	100 *33*	868.90	$6^{(-)}$				
938.96	4^-	166.69 *10*	1.0×10^2 *3*	772.30	3^-				
		240.07 *7*	37 *8*	698.88	3^-				
		372.39 *8*	56 *12*	566.52	$5^{(-)}$	M1+E2		0.0048 *18*	α(K)=0.0043 *16*; α(L)=0.00046 *18*; α(M)=7.E−5 *3*; α(N)=5.3×10^{-6} *19*
		555.66 *8*	56 *19*	383.33	2^-				
939.28	(2,1)	549.11 *8*	60 *10*	390.14	3^+				
		704.61 *12*	45 *10*	234.74	1^+				
		772.50 *8*	69 *10*	166.734	3^+				
		857.82 *11*	100 *10*	81.54	1^+				
950.28	(0)	621.63 *9*	100	328.65	1^+				
966.86	(5)	576.72 *9*	100	390.14	3^+				
987.80	(0,3)	662.10 *10*	1.0×10^2 *5*	325.66	2^+				
		906.32 *12*	29 *3*	81.54	1^+				
1003.62	1,2	578.20 *7*	100 *16*	425.33	$(0)^+$				
		659.02 *6*	100 *20*	344.65	$(0)^+$				
		675.02 *25*	88 *24*	328.65	1^+				
		678.03 *13*	56 *24*	325.66	2^+				
1026.33	$(1^-,2)$	254.01 *4*	100 *9*	772.30	3^-				

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

E$_i$(level)	J$^\pi_i$	E$_\gamma$[†]	I$_\gamma$[†]	E$_f$	J$^\pi_f$	Mult.[&]	δ[b]	α	Comments
1026.33	(1$^-$,2)	327.37 *10*	68 *9*	698.88	3$^-$				
		944.85 *6*	76 *12*	81.54	1$^+$				
1045.85	6$^{(-)}$	479.35 *9*	100	566.52	5$^{(-)}$	(D+Q)	−2.9 *3*	0.00516 *13*	α(K)=0.00459 *12*; α(L)=0.000496 *13*; α(M)=7.58×10^{-5} *20*; α(N)=5.75×10^{-6} *15* Mult.,δ: D+Q from R(DCO) in ^{55}Mn(^{18}O,3nγ), in ^{58}Ni(^{14}N,2pγ),^{56}Fe(^{16}O,npγ) multipolarity is given as E1+M2 with δ=−2.9 *3*. Evaluators note that this is a very large, non-zero value of δ for a level with no measured lifetime.
1046.43	(1,2)	656.20 *20*	14 *9*	390.14	3$^+$				
		878.75 *9*	86 *12*	167.74	(2)$^+$				
		964.86 *6*	100 *12*	81.54	1$^+$				
1115.08	(1,2)	656.80 *20*		458.16	1$^+$				
		789.43 *7*		325.66	2$^+$				
1454.01	6$^+$	408.2[@] *3*	18[@] *4*	1045.85	6$^{(-)}$				
		566.4[@] *1*	100[@] *8*	887.61	7$^{(-)}$	D[d]			
		1454.2[@] *8*	13[@] *6*	0.0	4$^+$				
1496.01	7$^{(-)}$	626.9[@] *2*	100[@] *10*	868.90	6$^{(-)}$	D+Q[d]			
		929.6[@] *4*	62[@] *19*	566.52	5$^{(-)}$	E2[d]		4.60×10^{-4}	α(K)=0.000410 *6*; α(L)=4.26×10^{-5} *6*; α(M)=6.50×10^{-6} *10*; α(N)=4.94×10^{-7} *7*
1651.2	1$^+$	1323.7[#] *12*	100[#] *25*	328.65	1$^+$				
		1570.5[#] *9*	83[#] *8*	81.54	1$^+$				
		1618.8[#] *4*	50[#] *8*	32.046	2$^+$				
1675.86	8$^{(+)}$	221.8[@] *4*	1.4[@] *5*	1454.01	6$^+$				
		743.0[f] *2*	13.0 *20*	933.20					E$_\gamma$,I$_\gamma$: from ^{58}Ni(^{14}N,2pγ), ^{56}Fe(^{16}O,npγ). Multipolarity for this transition was given D+Q in 1978Fi09 but this transition was not observed in 1991Ba43 or 2015Ha25 and thus, marked questionable by the evaluators.
		788.3[@] *2*	100.0[@] *5*	887.61	7$^{(-)}$	(E1+M2)[a]	0.017 *13*	2.70×10^{-4}	α(K)=0.000241 *4*; α(L)=2.47×10^{-5} *4*; α(M)=3.76×10^{-6} *6*; α(N)=2.87×10^{-7} *4* B(E1)(W.u.)=1.5×10^{-5} *6*; B(M2)(W.u.)=0.03 *+5−2*
1725.8		271.8[@] *3*	100[@]	1454.01	6$^+$	D+Q[d]			
1752.0	9$^{(+)}$	76.1[‡] *1*	100[‡]	1675.86	8$^{(+)}$	(M1(+E2))	0.01 *3*	0.191 *4*	α(K)=0.170 *4*; α(L)=0.0185 *5*; α(M)=0.00283 *8*; α(N)=0.000213 *5* B(M1)(W.u.)=0.7 *4* Mult.: D(+Q) from $\gamma(\theta)$ in ^{58}Ni(^{14}N,2pγ),^{56}Fe(^{16}O,npγ), M1(+E2) from assumed member of rotational band.
1765.5		312.0[@] *6*	25[@] *8*	1454.01	6$^+$				

$^{70}_{33}$As$_{37}$-9

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

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[&]	α	Comments
1765.5		719.5[@] *5*	23[@] *10*	1045.85	$6^{(-)}$			
		896.4 *6*	100 *19*	868.90	$6^{(-)}$			
1806.8	$7^{(-)}$	919.0[@] *4*	100	887.61	$7^{(-)}$	D+Q[d]		
1809.2		57.2[‡] *2*	100	1752.0	$9^{(+)}$			
1983.2	$8^{(-)}$	938.4[@] *6*	30[@] *9*	1045.85	$6^{(-)}$	(E2)	4.50×10^{-4}	α(K)=0.000401 *6*; α(L)=4.17×10^{-5} *6*; α(M)=6.35×10^{-6} *9*; α(N)=4.82×10^{-7} *7* Mult.: Q from R(DCO) in ^{55}Mn(^{18}O,3nγ), $\Delta\pi$=no from level scheme.
		1114.7[@] *4*	100[@] *10*	868.90	$6^{(-)}$	E2[d]	3.02×10^{-4}	α(K)=0.000268 *4*; α(L)=2.77×10^{-5} *4*; α(M)=4.22×10^{-6} *6*; α(N)=3.22×10^{-7} *5*
2282.1	$9^{(-)}$	1394.4[@] *3*	100	887.61	$7^{(-)}$	E2[d]	2.37×10^{-4}	α(K)=0.0001655 *24*; α(L)=1.701×10^{-5} *24*; α(M)=2.59×10^{-6} *4*; α(N)=1.98×10^{-7} *3*
2379.4	$9^{(+)}$	703.5[@] *8*	100	1675.86	$8^{(+)}$	D+Q[d]		
2467.2	$9^{(+)}$	741.5[@] *98*	31[@] *14*	1725.8				
		791.5[@] *9*	100[@] *30*	1675.86	$8^{(+)}$	D+Q[d]		
2579.0	$9^{(-)}$	596.3 *3*	100 *30*	1983.2	$8^{(-)}$	M1+E2	0.00127 *23*	α(K)=0.00114 *21*; α(L)=0.000119 *23*; α(M)=1.8×10^{-5} *4*; α(N)=1.37×10^{-6} *25* Mult.: D+Q from R(DCO) in ^{55}Mn(^{18}O,3nγ), $\Delta\pi$=no from level scheme.
		771.5[@] *8*	9[@] *3*	1806.8	$7^{(-)}$	E2[d]	7.37×10^{-4}	α(K)=0.000657 *10*; α(L)=6.87×10^{-5} *10*; α(M)=1.046×10^{-5} *15*; α(N)=7.93×10^{-7} *12*
		1081.9[@] *5*	53[@] *15*	1496.01	$7^{(-)}$	E2[d]	3.22×10^{-4}	α(K)=0.000287 *4*; α(L)=2.97×10^{-5} *5*; α(M)=4.52×10^{-6} *7*; α(N)=3.45×10^{-7} *5*
2579.8	$10^{(+)}$	827.9[@] *3*	61[@] *12*	1752.0	$9^{(+)}$	M1+E2	0.00056 *6*	α(K)=0.00050 *5*; α(L)=5.2×10^{-5} *5*; α(M)=7.9×10^{-6} *8*; α(N)=6.0×10^{-7} *6* Mult.: D+Q from R(DCO) in ^{55}Mn(^{18}O,3nγ), $\Delta\pi$=no from level scheme.
		904.0[@] *4*	100[@] *12*	1675.86	$8^{(+)}$	E2[d]	4.93×10^{-4}	α(K)=0.000439 *7*; α(L)=4.57×10^{-5} *7*; α(M)=6.96×10^{-6} *10*; α(N)=5.29×10^{-7} *8* B(E2)(W.u.)=64 *12*
2691.0	$9^{(+)}$	1015.1[@] *3*	100	1675.86	$8^{(+)}$	D+Q[d]		
2732.7	$11^{(+)}$	153.0[@] *3*	4.3[@] *8*	2579.8	$10^{(+)}$			
		980.7[@] *3*	100[@] *1*	1752.0	$9^{(+)}$	E2	4.04×10^{-4}	α(K)=0.000361 *5*; α(L)=3.74×10^{-5} *6*; α(M)=5.70×10^{-6} *8*; α(N)=4.34×10^{-7} *6* B(E2)(W.u.)=66.2 *21* Mult.: E2 from RUL. E2+M3 with δ = −0.06 *3* in ^{58}Ni(^{14}N,2pγ), however, this results in an M3 component which exceeds RUL.
2873.2	$10^{(+)}$	406.1[@] *4*	10[@] *7*	2467.2	$9^{(+)}$			

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

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[&]	α	Comments
2873.2	$10^{(+)}$	1121.1[@] 4	100[@] 25	1752.0	$9^{(+)}$	D+Q[d]		
3272.3	$11^{(+)}$	693.2[@] 3	100[@] 22	2579.8	$10^{(+)}$	D+Q[d]		
		805.1[@] 4	39[@] 11	2467.2	$9^{(+)}$			
		1521.3 8	33 6	1752.0	$9^{(+)}$			
3300.6	$10^{(-)}$	1317.0[@] 7	100	1983.2	$8^{(-)}$	E2[d]	2.41×10^{-4}	α(K)=0.000186 3; α(L)=1.92×10^{-5} 3; α(M)=2.92×10^{-6} 5; α(N)=2.23×10^{-7} 4
3694.5	$10^{(+)}$	1227.3[@] 10	100	2467.2	$9^{(+)}$	D+Q[d]		
3772.2	$11^{(-)}$	1194.0[@] 8	44[@] 11	2579.0	$9^{(-)}$	E2[d]	2.66×10^{-4}	α(K)=0.000230 4; α(L)=2.38×10^{-5} 4; α(M)=3.62×10^{-6} 5; α(N)=2.76×10^{-7} 4
		1490.0[@] 3	100[@] 17	2282.1	$9^{(-)}$	E2[d]	2.44×10^{-4}	α(K)=0.0001445 21; α(L)=1.483×10^{-5} 21; α(M)=2.26×10^{-6} 4; α(N)=1.727×10^{-7} 25
3792.2	$12^{(+)}$	1058.9[@] 6	39[@] 14	2732.7	$11^{(+)}$	D+Q[d]		
		1212.0[@] 6	100[@] 14	2579.8	$10^{(+)}$	E2[d]	2.60×10^{-4}	α(K)=0.000223 4; α(L)=2.30×10^{-5} 4; α(M)=3.50×10^{-6} 5; α(N)=2.67×10^{-7} 4 B(E2)(W.u.)>29
4076.0	$13^{(+)}$	1343.3[@] 6	100	2732.7	$11^{(+)}$	E2[d]	2.39×10^{-4}	α(K)=0.000179 3; α(L)=1.84×10^{-5} 3; α(M)=2.80×10^{-6} 4; α(N)=2.14×10^{-7} 3 B(E2)(W.u.)=109 12
4114.3	(11^-)	1832.8[@] 10	100	2282.1	$9^{(-)}$			
4206.5	$12^{(-)}$	905.7[@] 6	100[@] 14	3300.6	$10^{(-)}$	E2	4.90×10^{-4}	α(K)=0.000437 7; α(L)=4.55×10^{-5} 7; α(M)=6.93×10^{-6} 10; α(N)=5.26×10^{-7} 8 B(E2)(W.u.)>37 Mult.: Q from R(DCO) in ^{55}Mn(^{18}O,3nγ); M2 excluded by comparison to RUL.
		934.1[@] 8	8[@] 4	3272.3	$11^{(+)}$	[E1]	1.91×10^{-4}	α(K)=0.0001703 24; α(L)=1.742×10^{-5} 25; α(M)=2.65×10^{-6} 4; α(N)=2.03×10^{-7} 3 B(E1)(W.u.)>2.7×10^{-5}
		1474.0[@] 3	85[@] 14	2732.7	$11^{(+)}$	E1	3.15×10^{-4}	α(K)=7.46×10^{-5} 11; α(L)=7.60×10^{-6} 11; α(M)=1.157×10^{-6} 17; α(N)=8.85×10^{-8} 13 Mult.: D from R(DCO) in ^{55}Mn(^{18}O,3nγ); $\Delta\pi$=yes from level scheme.
4604.5	$13^{(-)}$	398.0[@] 1	25[@] 3	4206.5	$12^{(-)}$	D+Q[d]		
		490.3[@] 4	22[@] 8	4114.3	(11^-)			
		812.1[@] 3	12[@] 3	3792.2	$12^{(+)}$	D		
		832.4[@] 3	100[@] 23	3772.2	$11^{(-)}$	E2	6.05×10^{-4}	α(K)=0.000540 8; α(L)=5.63×10^{-5} 8; α(M)=8.58×10^{-6} 12; α(N)=6.51×10^{-7} 10
4818.8	$14^{(-)}$	612.3[@] 3	100 11	4206.5	$12^{(-)}$			Mult.: Q from R(DCO) in ^{55}Mn(^{18}O,3nγ); M2 excluded by comparison to RUL.
		743.2[@] 2	72[@] 11	4076.0	$13^{(+)}$	(E1)[d]	3.06×10^{-4}	α(K)=0.000273 4; α(L)=2.80×10^{-5} 4; α(M)=4.26×10^{-6} 6; α(N)=3.25×10^{-7} 5 B(E1)(W.u.)>0.00018 Mult.: D from R(DCO) in ^{55}Mn(^{18}O,3nγ); $\Delta\pi$=no from level scheme. E_γ: placement from ^{55}Mn(^{18}O,3nγ). A 743γ is placed from the 1676-keV level in ^{51}V(^{28}Si,2αnγ),^{46}Ti(^{28}Si,3pnγ) and ^{58}Ni(^{14}N,2pγ),^{56}Fe(^{16}O,npγ).
5364.9?	$14^{(-)}$	759.9[@f] 6	100[@] 40	4604.5	$13^{(-)}$	D+Q[d]		

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

E_i(level)	J^{π}_i	E_{γ}[†]	I_{γ}[†]	E_f	J^{π}_f	Mult.[&]	α	Comments
5364.9?	$14^{(-)}$	1159.2[@][f] *8*	80[@] *40*	4206.5	$12^{(-)}$	[d]		
5457.9	(15^{+})	1381.8[@] *8*	100	4076.0	$13^{(+)}$	[E2]	2.37×10^{-4}	α(K)=0.0001686 *24*; α(L)=1.733×10^{-5} *25*; α(M)=2.64×10^{-6} *4*; α(N)=2.02×10^{-7} *3* B(E2)(W.u.)>36
5498.4	$15^{(-)}$	893.9[@] *4*	100	4604.5	$13^{(-)}$	E2[d]	5.06×10^{-4}	α(K)=0.000452 *7*; α(L)=4.70×10^{-5} *7*; α(M)=7.16×10^{-6} *10*; α(N)=5.44×10^{-7} *8*
5884.1	$15^{(-)}$	1065.3[@] *5*	100	4818.8	$14^{(-)}$	D+Q[d]		
6246.5	(16^{-})	1427.7[@] *6*	100	4818.8	$14^{(-)}$			

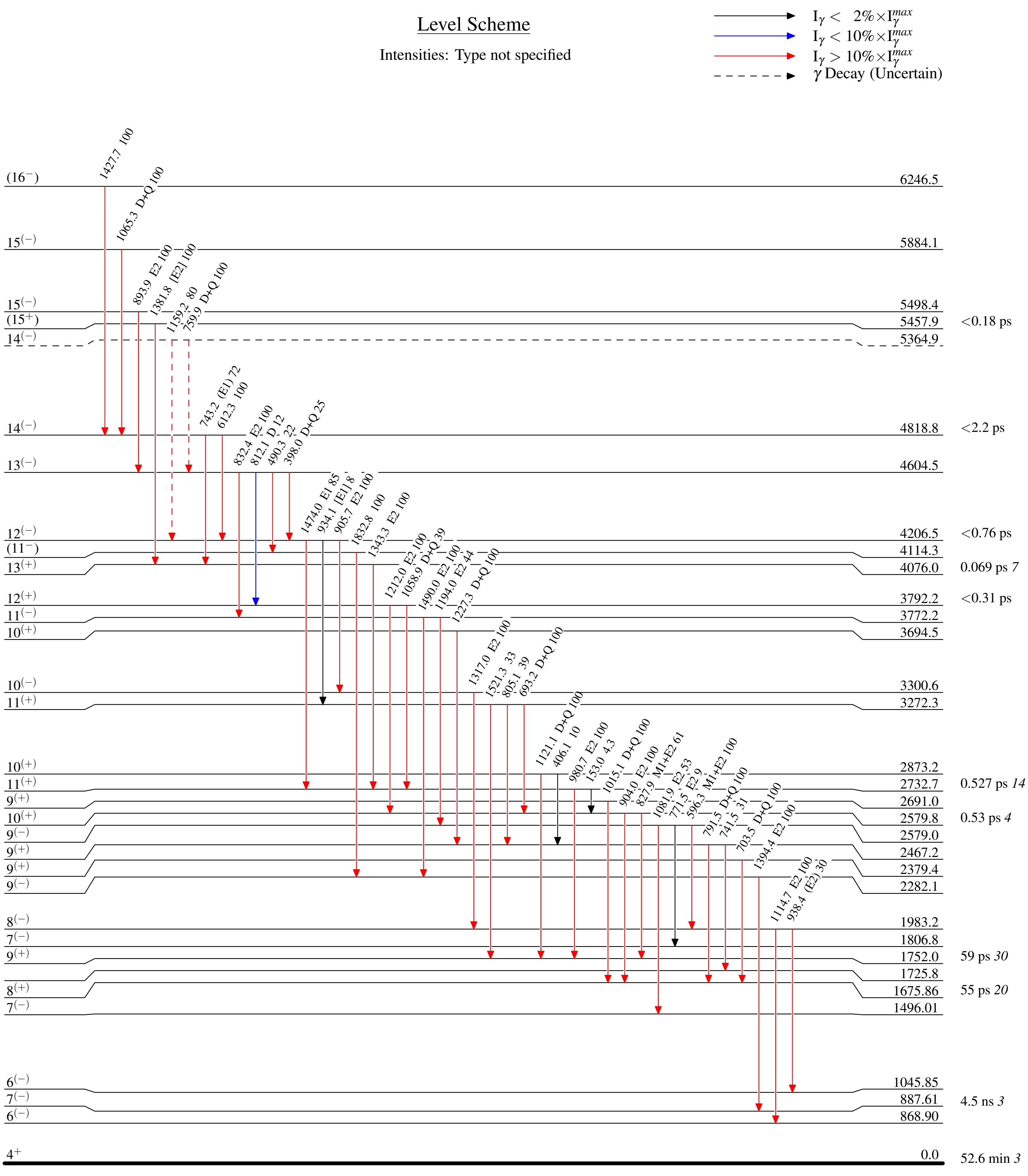
† From ^{70}Ge(p,nγ), except where noted.
‡ From ^{58}Ni(^{14}N,2pγ), ^{56}Fe(^{16}O,npγ).
# From ^{70}Se β^{+} decay.
@ From ^{55}Mn(^{18}O,3nγ).
& From ^{70}Ge(p,nγ), based on α(K)exp and/or $\gamma(\theta)$, except where noted.
a From $\gamma(\theta)$ and linear polarization in ^{58}Ni(^{14}N,2pγ),^{56}Fe(^{16}O,npγ).
b From $\gamma(\theta)$ in ^{58}Ni(^{14}N,2pγ),^{56}Fe(^{16}O,npγ), except where noted.
c From ^{70}Ge(p,nγ), based on $\gamma(\theta)$.
d From R(DCO) in ^{55}Mn(^{18}O,3nγ). Stretched Q transitions are taken as E2 in character.
e Multiply placed with intensity suitably divided.
f Placement of transition in the level scheme is uncertain.

$^{70}_{33}As_{37}$-12

Adopted Levels, Gammas

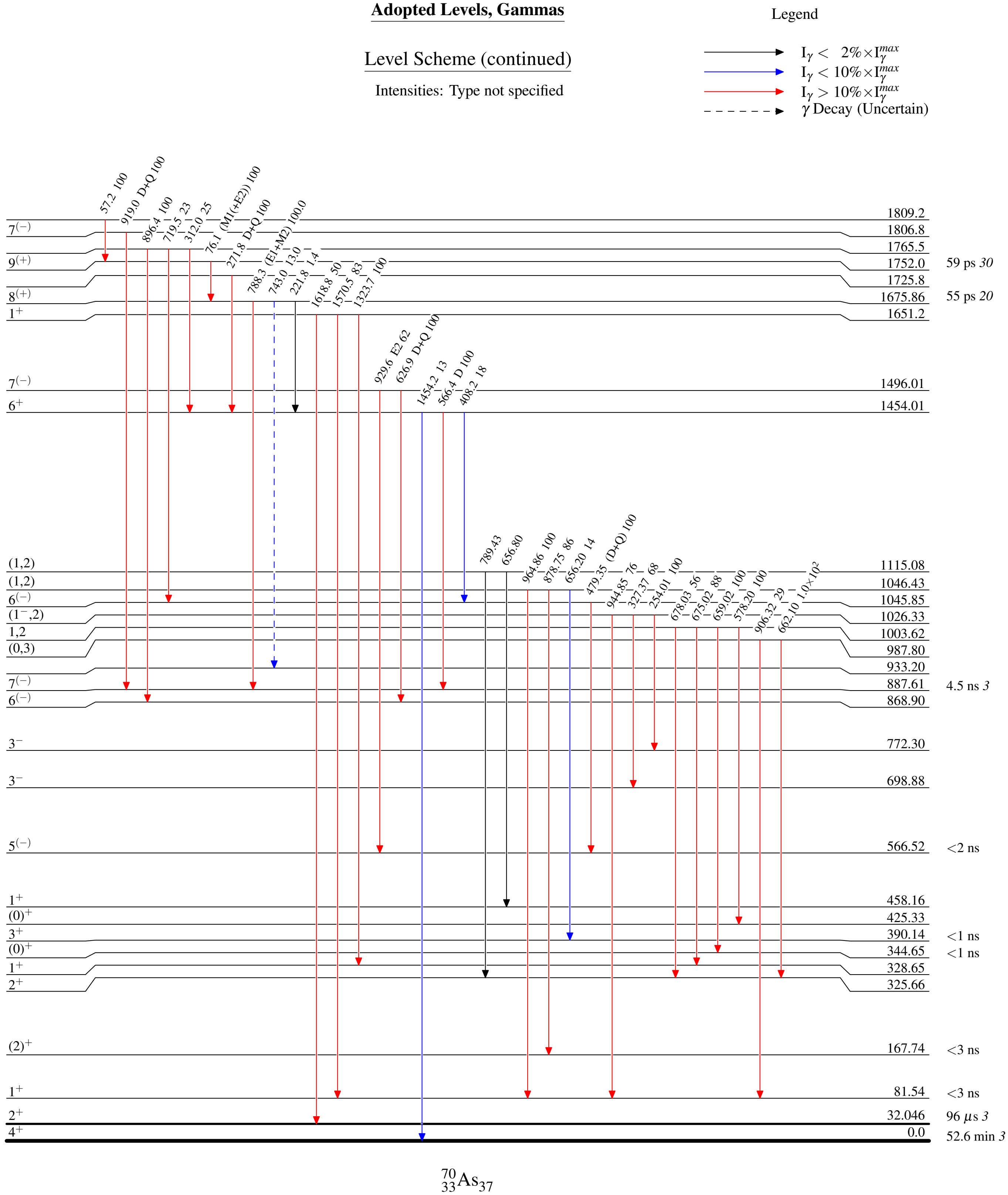
Level Scheme

Intensities: Type not specified



$^{70}_{33}As_{37}$

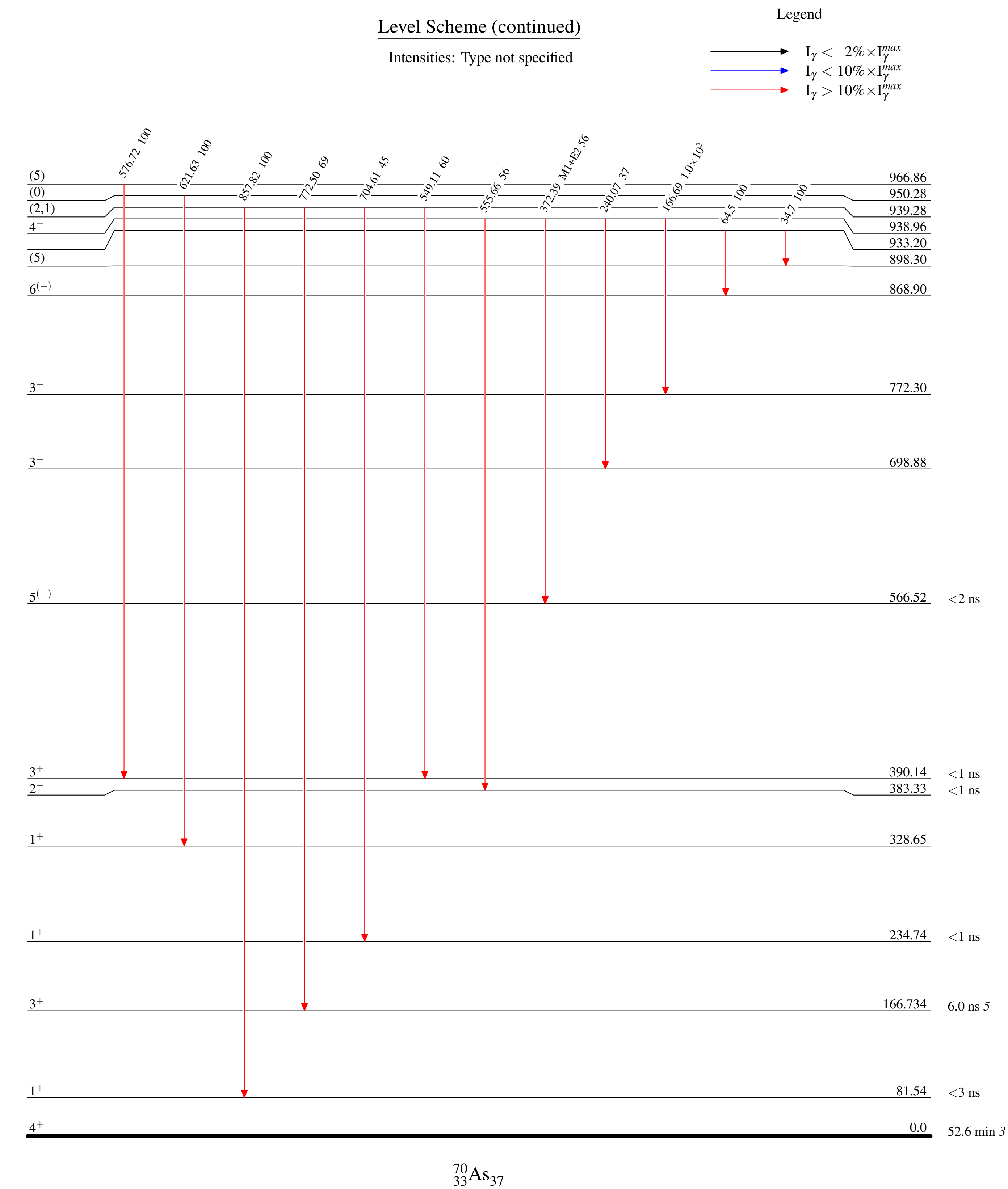
Adopted Levels, Gammas



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

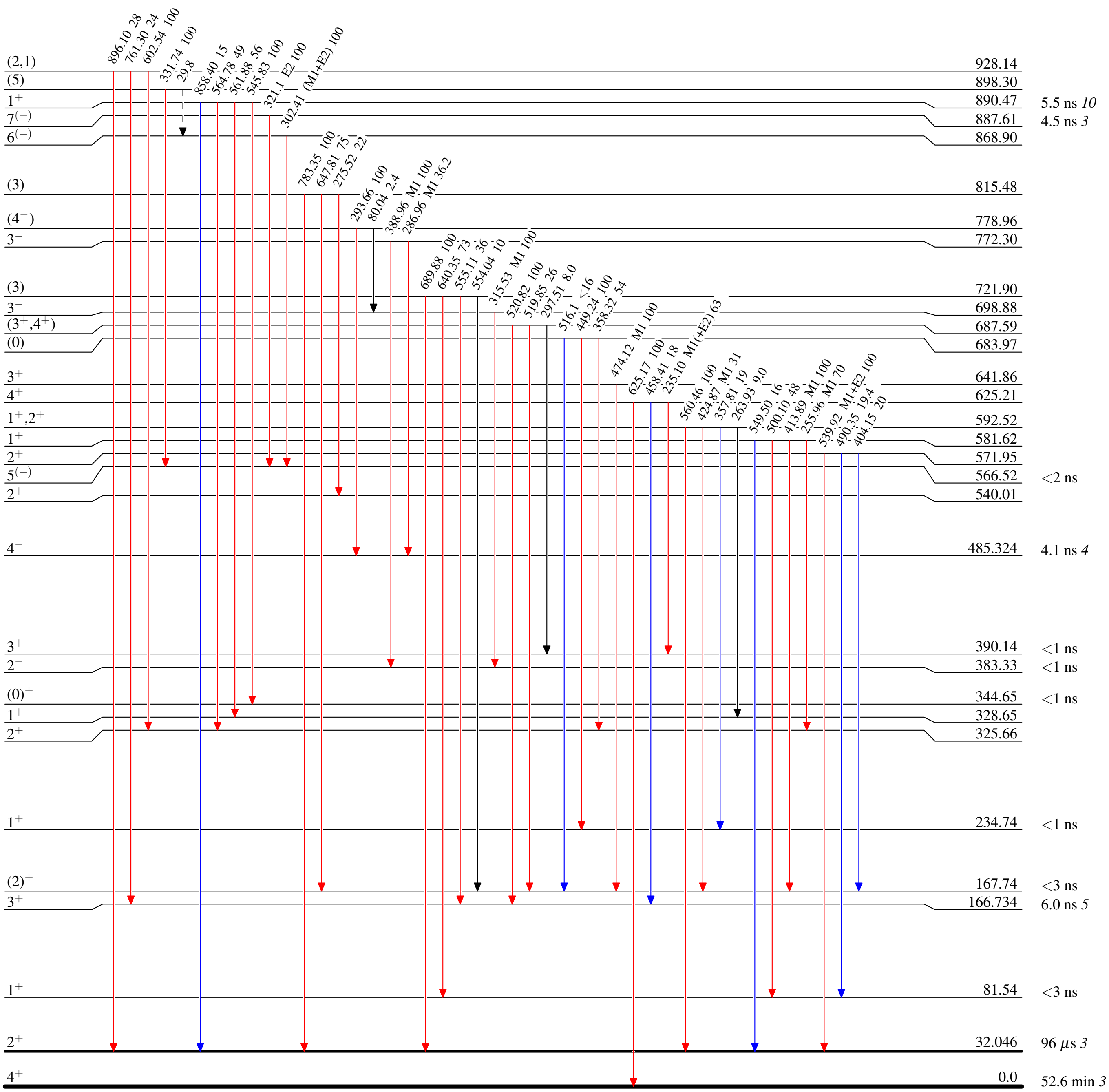
Legend

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

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

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

γ Decay (Uncertain)



$^{70}_{33}As_{37}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

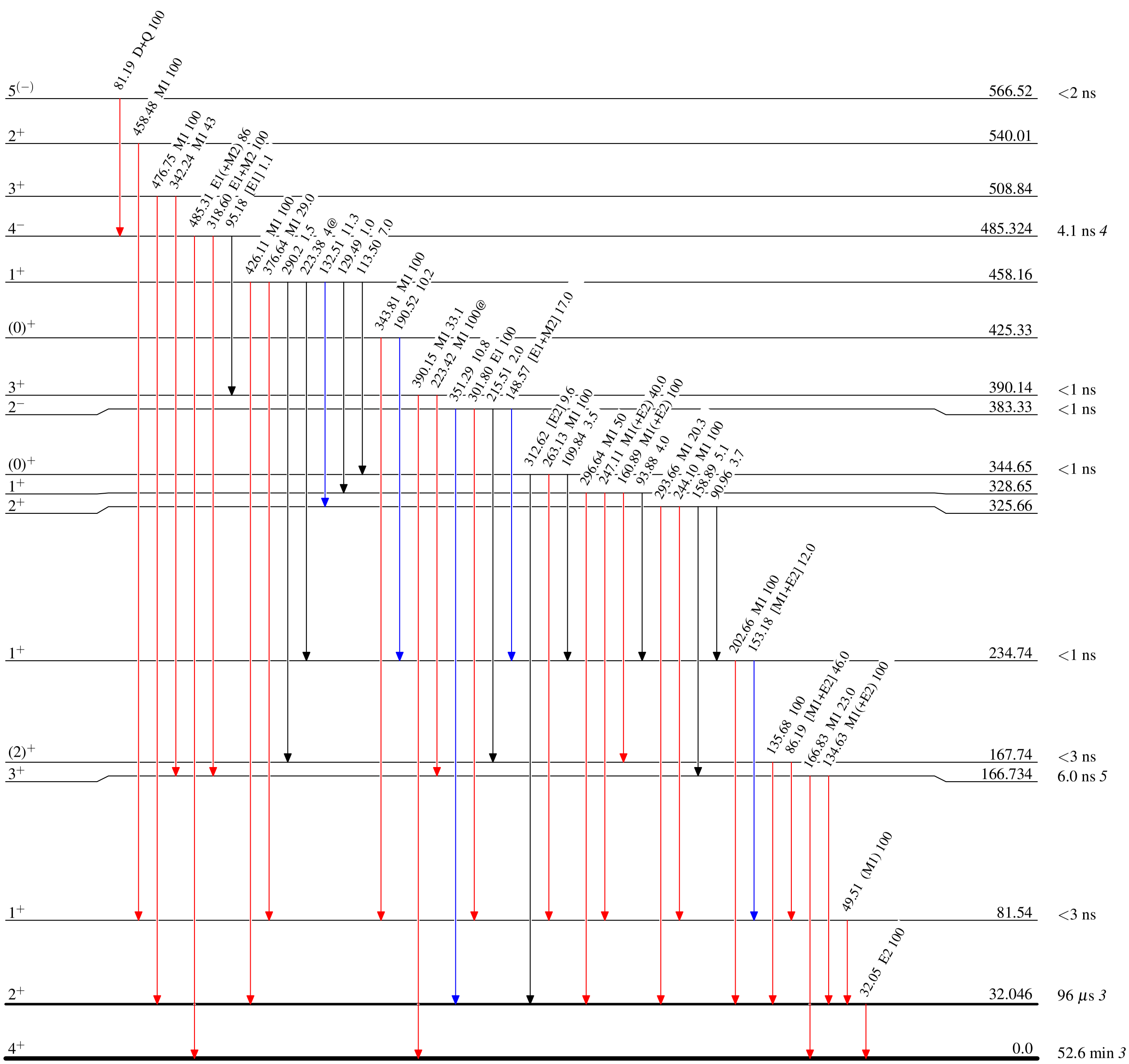
@ Multiply placed: intensity suitably divided

Legend

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

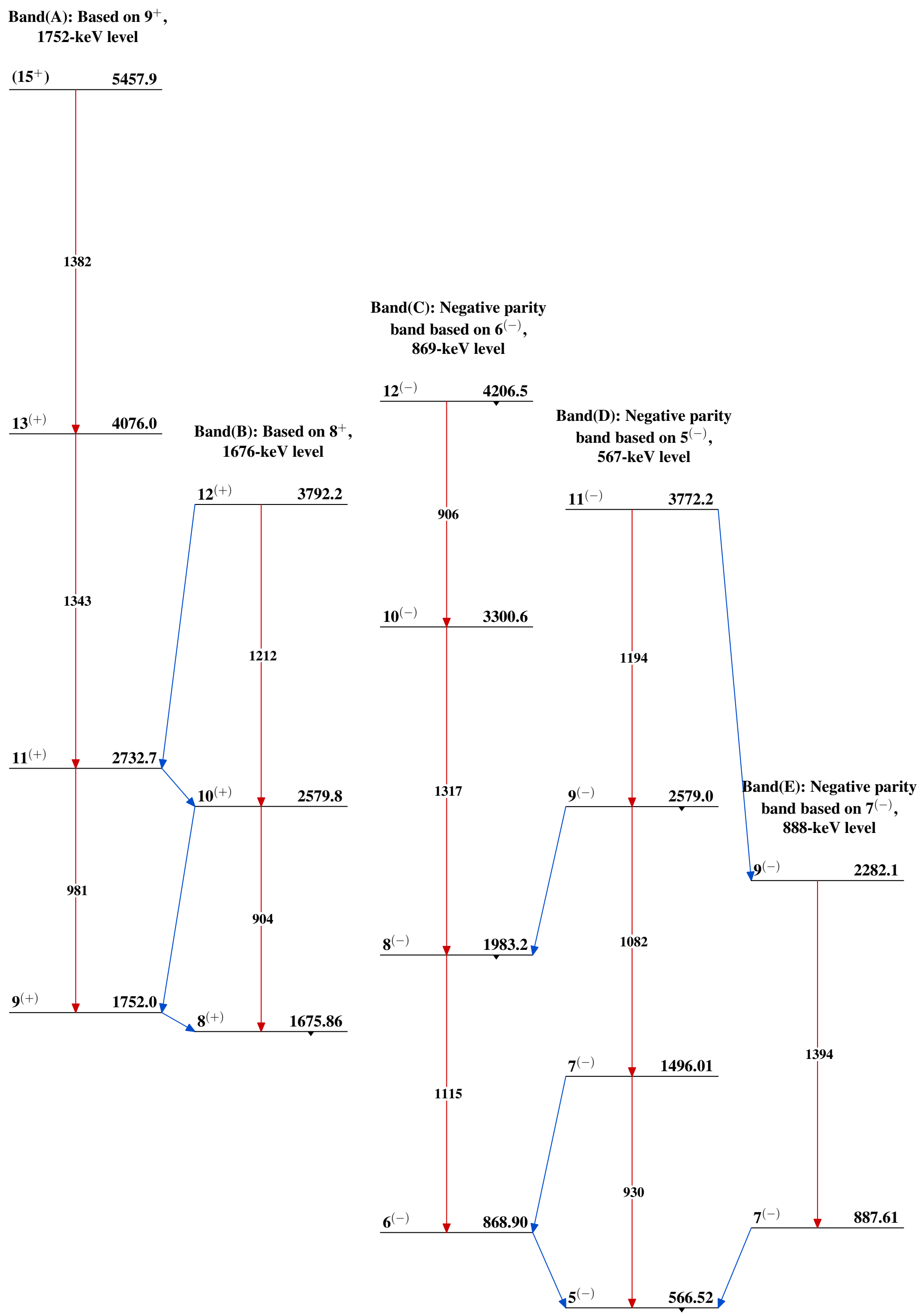
$I_\gamma < 10\% \times I_\gamma^{max}$

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



$^{70}_{33}As_{37}$

Adopted Levels, Gammas



$^{70}_{33}As_{37}$