^{75}As(n,γ) E=thermal 1990Ho10

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Jun Chen and Ameenah R. Farhan	NDS 194,3 (2024)	8-Jan-2024

Measured Eγ, Iγ, γγ-coin, ce. Curved-crystal spectrometer used for low-energy γ rays, and BILL magnetic spectrometer for conversion electrons.

Others:

1968Jo11: measured Eγ, Iγ, γγ-coin. Deduced detailed level scheme.

1974Co23: statistical description of spectra.

1969Gr09, 1968Mo01, 1968Cr11, 1967Si10, 1966Be20, 1965Cr08, 1953Ba76: measured γ spectra.

1968He15: measured $T_{1/2}$.

1965Wh01: measured Eγ with a bent-crystal spectrometer.

Additional information 1.

^{76}As Levels

E(level)†	Jπ‡	$T_{1/2}$	Comments
0.0	2⁻		
44.4254 *7*	(1)⁺	1.93 μs *6*	$T_{1/2}$: from γγ(t) (1968He15).
86.7875 *7*	1⁺		
120.2581 *7*	1⁺		
122.2479 *9*	(1)⁻		
165.0484 *7*	(3)⁻		
203.5420 *12*	(0,1)⁺		Jπ: 0⁺ (1990Ho10).
211.1462 *10*	(4)⁻		
264.8065 *9*	1⁺		
280.3021 *11*	(1,2)⁺		
286.0181 *13*	(3,4)⁻		
292.5580 *18*	(2,3,4)⁻		
300.4601 *8*	(2,3⁺)		Jπ: 2⁻ (1990Ho10).
308.3197 *7*	(2)⁺		
328.4784 *14*	(3,4)⁻		
352.3617 *20*	(3)⁻		
363.9060 *10*	(2⁻)		Jπ: 2⁻ (1990Ho10).
366.2291 *13*	(2⁻ to 5⁻)		Jπ: 3⁻,4,5⁻ (1990Ho10).
377.3841 *15*	(2)⁻		Jπ: 3⁻,4⁻,5⁻ (1990Ho10).
401.8324 *12*	(1,2)⁺		
436.8029 *12*	(1,2,3)⁻		
447.1702 *17*	(1,2)⁺		
457.3496 *19*	(2⁻,3⁺)		
471.0004 *9*	(2)⁻		
479.2961 *19*	(2,3,4)⁻		Jπ: 2⁻,3⁻,4⁻ (1990Ho10).
499.5801 *20*	(1⁺,2⁺)		
505.2046 *19*	(2,3)⁺		
508.6881 *13*	(2,3,4)⁻		Jπ: 3⁻,4⁻,5⁻ (1990Ho10).
517.5784 *12*	(1⁺,2⁺)		
519.6077 *16*	(1⁻,2,3⁺)		
544.0231 *23*	(2)⁻		Jπ: 1⁻,2⁻,3⁺ (1990Ho10).
550.4350 *23*	(1⁻,2⁻)		
600.2 *3*	(≤3)		
609.970 *4*	(3⁺)		Jπ: 3⁺ (1990Ho10).
628.7452 *13*	(1⁺,2⁺)		Jπ: 1⁺,2⁺ (1990Ho10).
637.248 *3*	(1⁺,2⁺)		
640.121 *10*	(1⁻,2⁻)		
669.114 *4*	(1⁺,2⁺)		
686.128 *4*	(1⁻ to 4)		Jπ: 2⁻,3 (1990Ho10).
703.249 *5*	(1⁻,2⁻,3⁺)		Jπ: 2⁻,3 (1990Ho10).

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$^{75}As(n,\gamma)$ E=thermal 1990Ho10 (continued)

^{76}As Levels (continued)

E(level)†	Jπ‡	Comments
707.88 *8*	(≤3)	
715.8 *9*	$(1,2,3)^+$	
727.76 *5*	(≤3)	
734.3902 *16*	$(1,2)^-$	Jπ: $3^-,4^-$ (1990Ho10).
741.464 *9*	(≤3)	Jπ: $1^-,2^-,3$ (1990Ho10).
744.945 *4*	$(1^+,2^+)$	
756.5743 *15*	$(0^+,3^+)$	
774.408 *7*	$(3)^+$	Jπ: $0^+,3^+$ (1990Ho10).
785.833 *5*	$(\le3^+)$	Jπ: $1,2^+$ (1990Ho10).
793.570 *3*	$(1,2,3)^+$	
802.452 *10*	$(1^-,2^-,3^+)$	
863.36 *13*	1^+	
893.811 *8*	$(1^-,2^-,3^+)$	
909.169 *11*	$(1,2)^+$	
924.754 *8*	$(\le3^-)$	Jπ: $1^-,2^-$ (1990Ho10).
935.384 *8*	1^+	Jπ: 1^- (1990Ho10).
939.750 *5*	(1,2,3)	
947.84 *24*	(≤3)	
958.394 *4*	(≤3)	Jπ: $2^-,3$ (1990Ho10).
964.1 *3*	(≤3)	
970.93 *8*	(≤3)	
985.545 *12*	$(1,2,3)^+$	
1013.8? *6*	$(\le3^+)$	
1023.12 *4*	$(1^+,2^+)$	
1026.2? *6*	$(1^+,2^+)$	
1034.263 *10*	1^+	Jπ: $1^+,2^+$ (1990Ho10).
1064.492 *7*	1^+	
1089.9 *5*	(≤3)	
1097.24 *5*	1^+	
1105.43 *4*	(≤3)	
1124.92 *6*	(≤3)	
1148.34 *6*	(≤3)	
1156.50 *14*	1^+	
1185.70 *4*	(≤3)	
1201.91 *20*	(≤3)	
1244.64 *19*	(≤3)	
1260.04 *23*	(≤3)	
1269.01 *3*	$(\le3^-)$	
1300.97 *3*	(≤3)	
1309.32 *17*	(≤3)	
1314.50 *12*	(≤3)	
1322.15 *7*	(≤3)	
1341.84 *4*	(≤3)	
1352.31 *8*	1^+	
1358.37 *7*	(≤3)	
1369.3 *4*	(≤3)	
1385.53 *14*	(≤3)	
1397.28 *14*	(≤3)	
1404.0 *3*	(≤3)	
1422.25 *13*	(≤3)	
1443.78 *5*	(≤3)	
1450.83 *9*	(≤3)	
1458.85 *9*	(≤3)	
1473.59 *20*	1^+	
1477.7 *4*	$(1^-,2^-)$	
1494.30 *10*	(≤3)	

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^{75}As(n,γ) E=thermal 1990Ho10 (continued)

^{76}As Levels (continued)

E(level)[†]	J^{π}[‡]	Comments
1498.9 *11*	(≤3)	
1512.12 *7*	(≤3)	
1520.2 *3*	(≤3)	
1524.8 *3*	(≤3)	
1541.70 *4*	(≤3)	
1550.39 *5*	(≤3)	
1571.30 *4*	(2^-)	
1584.0 *3*	(≤3)	
1597.6 *6*	(≤3)	
1605.13 *10*	(≤3)	
1630.46 *5*	1^+	
1637.97 *5*	(≤3)	
1644.31 *6*	(≤3)	
1652.63 *4*	(≤3)	
1664.71 *4*	(≤3)	
1673.30 *9*	(≤3)	
1682.77 *12*	(≤3)	
1694.6 *5*	1^+	
1698.98 *11*	(≤3)	
1704.26 *19*	(≤3)	
1713.53 *20*	(1^-,2^-)	
1715.6 *7*	1^+	
1727.15 *10*	(≤3)	
1748.30 *5*	(≤3)	
1759.53 *7*	(≤3)	
1782.47 *13*	(≤3)	
1787.96 *23*	(≤3)	
1794.58 *4*	1^+	
1801.50 *18*	(≤3)	
(7328.494 *11*)	1^-,2^-[#]	E(level): systematic uncertainty of 0.08 keV is added in quadrature to the uncertainty of 0.07 keV from least squares fit. This value can be compared with S(n)=7328.50 keV *7* (2021Wa16).

[†] From least-squares fit to recoil-corrected Eγ values, by omitting 13 poorly fitted primary γ rays as indicated. Reduced χ^2=2.5 is somewhat greater than critical χ^2=1.3, with only two γ rays deviating by 3-4 σ. A systematic uncertainty of 0.001% in Eγ is quoted by 1990Ho10.

[‡] From Adopted Levels. Assignments from 1990Ho10 are given under comments when a disagreement is noted. For levels populated only by the primary transitions from 1^-,2^- capture states suggests J=0,1,2,3.

[#] From s-wave capture on ^{75}As (g.s. J^{π}=3/2$^-$).

γ(^{76}As)

$E_γ$[†]	$I_γ$[‡]	E_i(level)	$J^π_i$	E_f	$J^π_f$	Mult.[#]	δ[#]	α[i]	Comments
^{x}43.391[e@] 8	[g@]								
44.425 1	20.9[g] 23	44.4254	(1)$^+$	0.0	2$^-$	(E1)		0.821	α(K)=0.729 11; α(L)=0.0788 11; α(M)=0.01182 17; α(N)=0.000844 12 α(K)exp=0.731 8; α(L1)exp=0.052 6; α(L2)exp=0.013 2 Mult.: α(K)exp and α(L1)exp agree with E1 somewhat better than with M1. Measured L1/L2 ratio disagrees with both E1 and M1.
46.098 1	6.4[g] 3	211.1462	(4)$^-$	165.0484	(3)$^-$	(M1+E2)	0.065 25	0.84 5	α(K)=0.74 4; α(L)=0.087 9; α(M)=0.0132 13 α(N)=0.00097 8 α(K)exp=0.71 4; α(L1)exp=0.083 5 δ(M2/E1)=0.095 10, δ(E2/M1)=0.065 25. 1990Ho10 give mult=M1. Adopted level parities give Δπ=no.
^{x}70.903 1	0.14[g] 1								
74.873 1	1.73[g] 16	286.0181	(3,4)$^-$	211.1462	(4)$^-$	M1+E2	0.15 3	0.25 2	α(K)=0.217 18; α(L)=0.025 3; α(M)=0.0039 4; α(N)=0.00028 3 α(K)exp=0.216 20
75.836 2	0.23[g] 3	120.2581	1$^+$	44.4254	(1)$^+$	M1+E2	0.28 6	0.34 7	α(K)=0.30 6; α(L)=0.038 9; α(M)=0.0057 13 α(N)=0.00040 8 α(K)exp=0.30 6
80.214 3	0.14[g] 1	366.2291	(2$^-$ to 5$^-$)	286.0181	(3,4)$^-$				
81.411 2	0.20[g] 2	292.5580	(2,3,4)$^-$	211.1462	(4)$^-$				
^{x}82.52[e@] 3	[g@]								
^{x}83.153 1	0.22[g] 2								
83.280 3	0.13[g] 1	203.5420	(0,1)$^+$	120.2581	1$^+$				
^{x}83.91[e@] 3	4.4[g@]								
86.788 1	16.1[g] 6	86.7875	1$^+$	0.0	2$^-$	(E1+M2)	0.090 17	0.125 6	α(K)=0.111 5; α(L)=0.0120 6; α(M)=0.00181 10; α(N)=0.000133 7 α(K)exp=0.111 5; α(L1)exp=0.012 6 Mult.: ce data also agree with M1.
91.367 1	0.58[g] 1	377.3841	(2)$^-$	286.0181	(3,4)$^-$	M1+E2	0.16 6	0.14 2	α(K)=0.123 19; α(L)=0.014 3; α(M)=0.0022 4; α(N)=0.00016 3 α(K)exp=0.124 17
^{x}93.39[b] 8	[g]								
^{x}96.69[b] 2	[g]								
101.916 2	0.08[g] 1	479.2961	(2,3,4)$^-$	377.3841	(2)$^-$				
^{x}104.357 2	0.12[g] 1								
116.755 1	1.82[g] 11	203.5420	(0,1)$^+$	86.7875	1$^+$	M1(+E2)	<0.15	0.063 5	α(K)=0.056 4; α(L)=0.0061 5; α(M)=0.00094 8 α(N)=7.0×10^{-5} 5 α(K)exp=0.056 5

γ(^{76}As) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[#]	δ[#]	α[i]	Comments
117.332 1	2.75[g] 17	328.4784	(3,4)$^-$	211.1462	(4)$^-$	M1(+E2)	<0.15	0.062 5	α(K)=0.055 4; α(L)=0.0061 5; α(M)=0.00093 8 α(N)=6.9×10^{-5} 5 α(K)exp=0.054 4
^{x}118.211 2	0.07[g] 1								
118.680 3	0.34[g] 2	669.114	(1$^+$,2$^+$)	550.4350	(1$^-$,2$^-$)				
120.258 1	10.7[g] 7	120.2581	1$^+$	0.0	2$^-$	E1		0.0426	α(K)=0.0380 6; α(L)=0.00396 6; α(M)=0.000600 9 α(N)=4.46×10^{-5} 7 α(K)exp=0.037 3 δ(M2/E1)<0.08.
122.247 1	5.92[g] 24	122.2479	(1)$^-$	0.0	2$^-$	M1+E2	0.15 3	0.059 4	α(K)=0.053 3; α(L)=0.0058 4; α(M)=0.00088 6 α(N)=6.6×10^{-5} 4 α(K)exp=0.053 3
125.094[j] 8	0.08[jg] 1	669.114	(1$^+$,2$^+$)	544.0231	(2)$^-$				
125.094[j] 8	0.08[jg] 1	1034.263	1$^+$	909.169	(1,2)$^+$				
127.513 6	2.48[g] 25	292.5580	(2,3,4)$^-$	165.0484	(3)$^-$	M1+E2	0.17 5	0.054 5	α(K)=0.048 5; α(L)=0.0053 6; α(M)=0.00081 9; α(N)=6.0×10^{-5} 6 α(K)exp=0.048 5
^{x}128.861 2	0.11[g] 1								
131.304 5	0.06[g] 1	508.6881	(2,3,4)$^-$	377.3841	(2)$^-$				
135.411 1	3.87[g] 20	300.4601	(2,3$^+$)	165.0484	(3)$^-$	D			α(K)exp=0.0298 22 δ(M2/E1)=0.11 5, δ(E2/M1)=0.
136.343 1	0.75[g] 7	436.8029	(1,2,3)$^-$	300.4601	(2,3$^+$)				
137.012 6	0.53[g] 3	401.8324	(1,2)$^+$	264.8065	1$^+$				
^{x}139.229 2	0.23[g] 8								
141.216 7	1.12[g] 16	352.3617	(3)$^-$	211.1462	(4)$^-$	M1+E2	0.25 7	0.046 7	α(K)=0.041 6; α(L)=0.0046 7; α(M)=0.00069 11; α(N)=5.1×10^{-5} 7 α(K)exp=0.041 6
142.102 3	0.20[g] 1	686.128	(1$^-$ to 4)	544.0231	(2)$^-$				
142.458 3	0.30[g] 2	508.6881	(2,3,4)$^-$	366.2291	(2$^-$ to 5$^-$)				
143.267 4	0.09 1	308.3197	(2)$^+$	165.0484	(3)$^-$				
144.549 1	2.16[g] 15	264.8065	1$^+$	120.2581	1$^+$	M1+E2	0.25 5	0.043 4	α(K)=0.038 4; α(L)=0.0042 5; α(M)=0.00065 7; α(N)=4.8×10^{-5} 5 α(K)exp=0.038 4
^{x}145.233 3	0.09[g] 1								
152.844 4	0.30[g] 2	505.2046	(2,3)$^+$	352.3617	(3)$^-$				
155.082 1	1.04[g] 9	366.2291	(2$^-$ to 5$^-$)	211.1462	(4)$^-$				
156.891 3	0.33[g] 4	457.3496	(2$^-$,3$^+$)	300.4601	(2,3$^+$)				
157.745 1	2.97[g] 24	628.7452	(1$^+$,2$^+$)	471.0004	(2)$^-$	D			α(K)exp=0.022 3

γ(^{76}As) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[#]	α[i]	Comments
									δ(M2/E1)=0.18 *6*, δ(E2/M1)<0.1. 1990Ho10 give mult=E1.
159.116 *8*	0.08[g] *1*	203.5420	$(0,1)^+$	44.4254	$(1)^+$				
159.226 *6*	0.15[g] *2*	703.249	$(1^-,2^-,3^+)$	544.0231	$(2)^-$				
^{x}161.924 *2*	0.27[g] *7*								
162.684 *2*	0.59[g] *6*	471.0004	$(2)^-$	308.3197	$(2)^+$				
165.047 *1*	24.3[g] *7*	165.0484	$(3)^-$	0.0	2^-	M1(+E2)	<0.15	0.0247 *12*	α(K)=0.0220 *10*; α(L)=0.00236 *12*; α(M)=0.000360 *18* α(N)=2.72×10^{-5} *13* α(K)exp=0.0215 *15*; α(L1)exp=0.0023 *3*
166.862 *6*	0.10[g] *1*	447.1702	$(1,2)^+$	280.3021	$(1,2)^+$				
170.544 *12*	0.10[g] *1*	471.0004	$(2)^-$	300.4601	$(2,3^+)$				
178.018 *2*	1.48[g] *6*	264.8065	1^+	86.7875	1^+	M1(+E2)	<0.25	0.0215 *22*	α(K)=0.0191 *19*; α(L)=0.00207 *23*; α(M)=0.00031 *4*; α(N)=2.37×10^{-5} *24* α(K)exp=0.017 *3*
178.442 *4*	0.18[g] *1*	471.0004	$(2)^-$	292.5580	$(2,3,4)^-$				
178.829 *7*	0.41[g] *2*	479.2961	$(2,3,4)^-$	300.4601	$(2,3^+)$				
180.104 *5*	0.33[g] *1*	544.0231	$(2)^-$	363.9060	(2^-)				
180.206 *4*	0.38[g] *1*	508.6881	$(2,3,4)^-$	328.4784	$(3,4)^-$	E2(+M1)	>1.2	0.074 *15*	α(K)=0.065 *13*; α(L)=0.0075 *15*; α(M)=0.00114 *23* α(N)=8.2×10^{-5} *16* α(K)exp=0.066 *14*
186.072 *3*	0.38[g] *2*	308.3197	$(2)^+$	122.2479	$(1)^-$				
186.732 *4*	0.25[g] *1*	479.2961	$(2,3,4)^-$	292.5580	$(2,3,4)^-$				
187.312 *3*	0.37[g] *1*	352.3617	$(3)^-$	165.0484	$(3)^-$				
188.062 *1*	1.54[g] *3*	308.3197	$(2)^+$	120.2581	1^+	M1(+E2)	<0.35	0.020 *4*	α(K)=0.018 *3*; α(L)=0.0019 *4*; α(M)=0.00029 *5* α(N)=2.2×10^{-5} *4* α(K)exp=0.017 *3*
190.721 *14*	0.08[g] *2*	471.0004	$(2)^-$	280.3021	$(1,2)^+$				
191.130 *7*	0.10[g] *1*	519.6077	$(1^-,2,3^+)$	328.4784	$(3,4)^-$				
191.267 *11*	0.08[g] *1*	499.5801	$(1^+,2^+)$	308.3197	$(2)^+$				
191.664 *5*	0.12[g] *2*	544.0231	$(2)^-$	352.3617	$(3)^-$				
193.270 *5*	0.27[g] *1*	479.2961	$(2,3,4)^-$	286.0181	$(3,4)^-$				
194.790 *11*	0.040[g] *15*	939.750	(1,2,3)	744.945	$(1^+,2^+)$				
198.046 *8*	0.10[g] *1*	703.249	$(1^-,2^-,3^+)$	505.2046	$(2,3)^+$				
198.855 *2*	1.09[g] *1*	363.9060	(2^-)	165.0484	$(3)^-$				
^{x}198.977 *7*	0.15[g] *1*								
200.449 *6*	0.26[g] *7*	637.248	$(1^+,2^+)$	436.8029	$(1,2,3)^-$				
201.187 *4*	0.30[g] *1*	366.2291	$(2^-$ to $5^-)$	165.0484	$(3)^-$				
203.334 *20*	0.06[g] *1*	640.121	$(1^-,2^-)$	436.8029	$(1,2,3)^-$				
204.747 *16*	0.09[g] *1*	505.2046	$(2,3)^+$	300.4601	$(2,3^+)$				

$^{76}_{33}$As$_{43}$-6

γ(^{76}As) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[#]	α[i]	Comments
211.146 *2*	2.21[g] *7*	211.1462	(4)$^-$	0.0	2$^-$	(E2)		0.0489	α(K)=0.0432 *6*; α(L)=0.00491 *7*; α(M)=0.000745 *11* α(N)=5.39×10^{-5} *8* α(K)exp=0.057 *5* Mult.: α(K)exp agrees with M2 also.
^{x}213.778 *4*	0.28[g] *1*								
^{x}215.494 *14*	0.11[g] *1*								
220.380 *1*	0.81[g] *2*	264.8065	1$^+$	44.4254	(1)$^+$				
221.532 *1*	1.12[g] *2*	308.3197	(2)$^+$	86.7875	1$^+$				
222.674 *14*	0.09[g] *1*	508.6881	(2,3,4)$^-$	286.0181	(3,4)$^-$				
224.003 *4*	0.30[g] *1*	958.394	(≤3)	734.3902	(1,2)$^-$				
225.702 *1*	1.66[g] *5*	734.3902	(1,2)$^-$	508.6881	(2,3,4)$^-$	M1+E2	0.8 *2*	0.021 *4*	α(K)=0.019 *3*; α(L)=0.0021 *4*; α(M)=0.00032 *6* α(N)=2.3×10^{-5} *4* α(K)exp=0.019 *3*
^{x}234.208 *4*	0.18[g] *1*								
234.768 *4*	0.22[g] *2*	499.5801	(1$^+$,2$^+$)	264.8065	1$^+$				
235.877 *1*	3.63[g] *4*	280.3021	(1,2)$^+$	44.4254	(1)$^+$	M1+E2	0.77 *14*	0.0181 *21*	α(K)=0.0160 *19*; α(L)=0.00177 *21*; α(M)=0.00027 *4*; α(N)=1.98×10^{-5} *23* α(K)exp=0.0161 *19*
237.281 *3*	0.25[g] *1*	517.5784	(1$^+$,2$^+$)	280.3021	(1,2)$^+$				
238.996 *1*	0.55[g] *25*	756.5743	(0$^+$,3$^+$)	517.5784	(1$^+$,2$^+$)				
239.309 *4*	0.17[g] *1*	519.6077	(1$^-$,2,3$^+$)	280.3021	(1,2)$^+$				
241.657 *1*	0.54[g] *2*	363.9060	(2$^-$)	122.2479	(1)$^-$				
243.566 *8*	0.11[g] *1*	544.0231	(2)$^-$	300.4601	(2,3$^+$)				
246.203 *2*	0.49[g] *1*	457.3496	(2$^-$,3$^+$)	211.1462	(4)$^-$				
^{x}249.794 *2*	0.33[g] *7*								
^{x}252.074 *9*	0.12[g] *1*								
256.036 *3*	0.91[g] *1*	300.4601	(2,3$^+$)	44.4254	(1)$^+$				
259.849 *15*	0.14[g] *2*	471.0004	(2)$^-$	211.1462	(4)$^-$				
262.178 *10*	0.24[g] *2*	741.464	(≤3)	479.2961	(2,3,4)$^-$				
263.400 *13*	0.21[g] *2*	734.3902	(1,2)$^-$	471.0004	(2)$^-$				
263.894 *1*	3.46[g] *4*	308.3197	(2)$^+$	44.4254	(1)$^+$				
264.420 *6*	0.21[g] *3*	550.4350	(1$^-$,2$^-$)	286.0181	(3,4)$^-$				
268.162 *7*	0.16[g] *1*	479.2961	(2,3,4)$^-$	211.1462	(4)$^-$				
270.128 *4*	0.24[g] *1*	550.4350	(1$^-$,2$^-$)	280.3021	(1,2)$^+$				
271.754 *4*	0.30[g] *2*	436.8029	(1,2,3)$^-$	165.0484	(3)$^-$				
273.952 *5*	0.20[g] *2*	793.570	(1,2,3)$^+$	519.6077	(1$^-$,2,3$^+$)				
277.117 *4*	0.15[g] *1*	363.9060	(2$^-$)	86.7875	1$^+$				
^{x}279.68[b] *3*	1.4[g]								

$^{76}_{33}$As$_{43}$-7

γ(^{76}As) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J^π_i	E_f	J^π_f
281.575 1	1.79[g] 7	401.8324	(1,2)$^+$	120.2581	1$^+$
294.265 21	0.12[g] 2	741.464	(≤3)	447.1702	(1,2)$^+$
296.039 4	0.32[g] 1	499.5801	(1$^+$,2$^+$)	203.5420	(0,1)$^+$
297.248 10	0.24[g] 10	802.452	(1$^-$,2$^-$,3$^+$)	505.2046	(2,3)$^+$
297.542 1	1.24[g] 4	508.6881	(2,3,4)$^-$	211.1462	(4)$^-$
300.461 1	1.18[g] 6	300.4601	(2,3$^+$)	0.0	2$^-$
301.636 6	0.21[g] 2	609.970	(3$^+$)	308.3197	(2)$^+$
306.645 9	0.25[g] 1	935.384	1$^+$	628.7452	(1$^+$,2$^+$)
307.98 4	0.08[g] 1	1064.492	1$^+$	756.5743	(0$^+$,3$^+$)
308.327 4	0.31[g] 2	308.3197	(2)$^+$	0.0	2$^-$
311.005 5	0.33[g] 2	939.750	(1,2,3)	628.7452	(1$^+$,2$^+$)
314.240 5	0.51[g] 4	479.2961	(2,3,4)$^-$	165.0484	(3)$^-$
315.041 5	0.20[g] 1	401.8324	(1,2)$^+$	86.7875	1$^+$
[x]319.033 2	0.54[g] 5				
319.485 7	0.14[g] 1	363.9060	(2$^-$)	44.4254	(1)$^+$
322.573 3	0.31[g] 10	793.570	(1,2,3)$^+$	471.0004	(2)$^-$
326.906 7	0.32[g] 3	447.1702	(1,2)$^+$	120.2581	1$^+$
[x]328.451 7	0.20[g] 6				
329.653 8	0.17[g] 2	958.394	(≤3)	628.7452	(1$^+$,2$^+$)
330.100 7	0.31[g] 4	1064.492	1$^+$	734.3902	(1,2)$^-$
[x]332.703 8	0.31[g] 2				
339.332 13	0.13[g] 3	703.249	(1$^-$,2$^-$,3$^+$)	363.9060	(2$^-$)
340.156 2	0.73[g] 7	505.2046	(2,3)$^+$	165.0484	(3)$^-$
343.105 6	0.20[g] 1	744.945	(1$^+$,2$^+$)	401.8324	(1,2)$^+$
352.367 4	1.08[g] 16	352.3617	(3)$^-$	0.0	2$^-$
354.558 4	0.23[g] 2	519.6077	(1$^-$,2,3$^+$)	165.0484	(3)$^-$
354.78 4	0.07[g] 2	756.5743	(0$^+$,3$^+$)	401.8324	(1,2)$^+$
357.401 4	1.38[g] 8	401.8324	(1,2)$^+$	44.4254	(1)$^+$
360.383 2	0.55[g] 6	447.1702	(1,2)$^+$	86.7875	1$^+$
363.911 2	1.30[g] 9	363.9060	(2$^-$)	0.0	2$^-$
[x]366.36 3	0.17[g] 2				
[x]371.111 4	0.22[g] 4				
374.778 21	0.11[g] 3	703.249	(1$^-$,2$^-$,3$^+$)	328.4784	(3,4)$^-$
378.975 4	0.72[g] 6	544.0231	(2)$^-$	165.0484	(3)$^-$
379.322 5	0.56[g] 4	499.5801	(1$^+$,2$^+$)	120.2581	1$^+$
[x]382.876 12	0.16[g] 1				
384.001 5	0.23[g] 2	785.833	(≤3$^+$)	401.8324	(1,2)$^+$
393.581 6	0.24[g] 3	686.128	(1$^-$ to 4)	292.5580	(2,3,4)$^-$
394.236 11	0.14[g] 2	893.811	(1$^-$,2$^-$,3$^+$)	499.5801	(1$^+$,2$^+$)
395.328 19	0.12[g] 1	517.5784	(1$^+$,2$^+$)	122.2479	(1)$^-$
399.347 2	0.71[g] 7	519.6077	(1$^-$,2,3$^+$)	120.2581	1$^+$
402.746 3	1.08[g] 8	447.1702	(1,2)$^+$	44.4254	(1)$^+$
412.795 3	0.31[g] 3	499.5801	(1$^+$,2$^+$)	86.7875	1$^+$
418.418 14	0.14[g] 1	505.2046	(2,3)$^+$	86.7875	1$^+$
426.580 4	1.95[g] 10	471.0004	(2)$^-$	44.4254	(1)$^+$
428.195 5	0.30[g] 2	550.4350	(1$^-$,2$^-$)	122.2479	(1)$^-$
430.802 5	0.24[g] 4	517.5784	(1$^+$,2$^+$)	86.7875	1$^+$
432.839 12	0.17[g] 2	519.6077	(1$^-$,2,3$^+$)	86.7875	1$^+$
436.803 8	0.21[g] 3	436.8029	(1,2,3)$^-$	0.0	2$^-$
438.57 4	0.13[g] 1	802.452	(1$^-$,2$^-$,3$^+$)	363.9060	(2$^-$)
440.19 6	0.15[g] 1	939.750	(1,2,3)	499.5801	(1$^+$,2$^+$)
453.755 9	0.21[g] 2	924.754	(≤3$^-$)	471.0004	(2)$^-$
457.29 3	0.17[g] 1	457.3496	(2$^-$,3$^+$)	0.0	2$^-$
460.777 17	0.27[g] 2	505.2046	(2,3)$^+$	44.4254	(1)$^+$
461.13 3	0.18[g] 1	741.464	(≤3)	280.3021	(1,2)$^+$
[x]463.244 8	0.34[g] 3				
463.647 4	0.40[g] 2	550.4350	(1$^-$,2$^-$)	86.7875	1$^+$
466.072 19	0.14[g] 2	774.408	(3)$^+$	308.3197	(2)$^+$
467.963 12	0.22[g] 1	985.545	(1,2,3)$^+$	517.5784	(1$^+$,2$^+$)
468.775 15	0.18[g] 1	939.750	(1,2,3)	471.0004	(2)$^-$
471.000 1	4.06[g] 8	471.0004	(2)$^-$	0.0	2$^-$
473.152 1	3.53[g] 14	517.5784	(1$^+$,2$^+$)	44.4254	(1)$^+$
477.577 25	0.27[g] 3	924.754	(≤3$^-$)	447.1702	(1,2)$^+$
479.095 15	0.28[g] 4	958.394	(≤3)	479.2961	(2,3,4)$^-$
480.125 9	0.36[g] 2	744.945	(1$^+$,2$^+$)	264.8065	1$^+$
487.396 12	0.25[g] 4	958.394	(≤3)	471.0004	(2)$^-$
[x]490.3[e@]	[g@]				
494.106 7	0.22[g] 2	774.408	(3)$^+$	280.3021	(1,2)$^+$
506.493 11	0.23[g] 5	628.7452	(1$^+$,2$^+$)	122.2479	(1)$^-$
[x]513.230 8	0.42[g] 8				
517.025 18	0.15[g] 3	637.248	(1$^+$,2$^+$)	120.2581	1$^+$
517.869 12	0.59[g] 7	640.121	(1$^-$,2$^-$)	122.2479	(1)$^-$
[x]520.644 6	0.6[g] 4				
521.090 24	0.15[g] 2	686.128	(1$^-$ to 4)	165.0484	(3)$^-$
529.905 11	0.20[g] 3	893.811	(1$^-$,2$^-$,3$^+$)	363.9060	(2$^-$)
[x]540.643 10	0.33[g] 2				

From ENSDF

$^{76}_{33}$As$_{43}$-8

γ(^{76}As) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J^π_i	E_f	J^π_f
544.041 17	0.16[g] 2	544.0231	$(2)^-$	0.0	2^-
550.459 3	1.64[g] 11	637.248	$(1^+,2^+)$	86.7875	1^+
[x]554.044 8	0.34[g] 3				
554.968[c] 14	0.21[g] 2	1034.263	1^+	479.2961	$(2,3,4)^-$
565.552 4	1.26[g] 7	609.970	(3^+)	44.4254	$(1)^+$
582.299 12	0.36[g] 1	785.833	$(\le 3^+)$	203.5420	$(0,1)^+$
[x]584.65 6	0.29[g] 1				
585.43 4	0.20[g] 3	893.811	$(1^-,2^-,3^+)$	308.3197	$(2)^+$
[x]588.304 11	0.36[g] 2				
[x]596.094 14	0.29[g] 1				
600.83 3	0.18[g] 5	909.169	$(1,2)^+$	308.3197	$(2)^+$
607.06 8	0.16[g] 3	1064.492	1^+	457.3496	$(2^-,3^+)$
609.959 23	0.24[g] 5	609.970	(3^+)	0.0	2^-
624.697 6	0.67[g] 4	744.945	$(1^+,2^+)$	120.2581	1^+
628.66 5	0.25[g] 2	628.7452	$(1^+,2^+)$	0.0	2^-
632.45 3	0.41[g] 7	1034.263	1^+	401.8324	$(1,2)^+$
[x]634.000 13	0.45[g] 11				
640.11 3	0.34[g] 7	640.121	$(1^-,2^-)$	0.0	2^-
[x]643.014 9	0.77[g] 12				
644.43[d] 3	0.37[g] 7	909.169	$(1,2)^+$	264.8065	1^+
[x]648.557 17	0.37[g] 13				
669.062 22	0.65 10	669.114	$(1^+,2^+)$	0.0	2^-
687.13 6	0.25[g] 13	1064.492	1^+	377.3841	$(2)^-$
687.67 3	0.38[g] 12	774.408	$(3)^+$	86.7875	1^+
[x]696.947 6	1.08[g] 14				
[x]700.77 7	0.31[g] 3				
[x]706.44 6	0.82[g] 13				
706.90 6	0.82[g] 13	793.570	$(1,2,3)^+$	86.7875	1^+
725.935 23	0.33[g] 7	1034.263	1^+	308.3197	$(2)^+$
731.81 3	0.36[g] 7	935.384	1^+	203.5420	$(0,1)^+$
[x]736.0[b] 6	0.28[g]				
[x]743.4[b] 6	0.20[g]				
774.9[&k] 6	0.13[g&]	863.36	1^+	86.7875	1^+
[x]786.8[b] 6	0.31[g]				
[x]790.00 5	0.23[g] 2				
[x]799.4[b] 6	0.37[g]				
822.35 7	0.6[g] 3	909.169	$(1,2)^+$	86.7875	1^+
848.577 22	0.67[g] 12	935.384	1^+	86.7875	1^+
861.2[&] 6	0.40[g&]	1026.2?	$(1^+,2^+)$	165.0484	$(3)^-$
880.38 3	0.58[g] 18	924.754	$(\le 3^-)$	44.4254	$(1)^+$
[x]900.34 4	0.52[g] 16				
927.0[&] 6	0.11[g&]	1013.8?	$(\le 3^+)$	86.7875	1^+
[x]936.115 25	0.82[g] 8				
941.21 6	0.47[g] 4	985.545	$(1,2,3)^+$	44.4254	$(1)^+$
942.27 9	0.39[g] 1	1064.492	1^+	122.2479	$(1)^-$
[x]943.29 8	0.32[g] 3				
[x]962.8[&] 6	0.16[g&]				
971.7[&] 6	0.16[g&]	970.93	(≤ 3)	0.0	2^-
989.2[&] 6	0.22[g&]	1034.263	1^+	44.4254	$(1)^+$
[x]1002.3[&] 6	0.22[g&]				
[x]1018.5[&] 6	0.27[g&]				
[x]1038.1[&] 6	0.51[g&]				
[x]1059.6[&] 6	0.11[g&]				
[x]1088.4[&] 6	0.22[g&]				
[x]4018[&] 3	0.07[g&]				
[x]4041[&] 3	0.06[g&]				
[x]4072[&] 3	0.10[g&]				
[x]4084[&] 3	0.07[g&]				
[x]4097[&] 3	0.07[g&]				
[x]4120[&] 3	0.05[g&]				
[x]4136[&] 3	0.07[g&]				
[x]4159[&] 3	0.20[g&]				
[x]4176[&] 3	0.10[g&]				
[x]4217[&] 3	0.05[g&]				
[x]4247[&] 3	0.10[g&]				
[x]4257[&] 3	0.10[g&]				
[x]4272[&] 3	0.14[g&]				
[x]4286[&] 3	0.11[g&]				

$^{76}_{33}$As$_{43}$-9

^{75}As(n,γ) E=thermal 1990Ho10 (continued)

γ(^{76}As) (continued)

E$_\gamma$[†]	I$_\gamma$[‡]	E$_i$(level)	E$_\gamma$[†]	I$_\gamma$[‡]	E$_i$(level)
[x]4304[&] 3	0.11[g&]		[x]4877[&] 3	0.15[g&]	
[x]4318[&] 3	0.15[g&]		[x]4891[&] 3	0.13[g&]	
[x]4329[&] 3	0.15[g&]		[x]4918[&] 3	0.22[g&]	
[x]4337[&] 3	0.05[g&]		[x]4935[&] 3	0.27[g&]	
[x]4347[&] 3	0.22[g&]		[x]4946[&] 3	0.32[g&]	
[x]4369[&] 3	0.12[g&]		[x]4960[&] 3	0.45[g&]	
[x]4392[&] 3	0.05[g&]		[x]4978[&] 3	0.16[g&]	
[x]4406[&] 3	0.08[g&]		[x]4986[&] 3	0.18[g&]	
[x]4417[&] 3	0.06[g&]		[x]4996[&] 3	0.51[g&]	
[x]4429[&] 3	0.16[g&]		[x]5013[&] 3	0.17[g&]	
[x]4466[&] 3	0.11[g&]		[x]5024[&] 3	0.18[g&]	
[x]4483[&] 3	0.11[g&]		[x]5038[&] 3	0.06[g&]	
[x]4493[&] 3	0.06[g&]		[x]5057[&] 3	0.09[g&]	
[x]4503[&] 3	0.37[g&]		[x]5068[&] 3	0.29[g&]	
[x]4515[&] 3	0.14[g&]		[x]5082[&] 3	0.69[g&]	
[x]4532[&] 3	0.11[g&]		[x]5093[&] 3	0.15[g&]	
[x]4544[&] 3	0.14[g&]		[x]5119[&] 3	0.13[g&]	
[x]4568[&] 3	0.18[g&]		[x]5149[&] 3	0.19[g&]	
[x]4587[&] 3	0.07[g&]		[x]5156[&] 3	0.31[g&]	
[x]4599[&] 3	0.05[g&]		[x]5178[&] 3	0.14[g&]	
[x]4619[&] 3	0.13[g&]		[x]5195[&] 3	0.07[g&]	
[x]4649[&] 3	0.22[g&]		[x]5208[&] 3	0.13[g&]	
[x]4660[&] 3	0.09[g&]		[x]5233[&] 3	0.08[g&]	
[x]4694[&] 3	0.11[g&]		[x]5270[&] 3	0.12[g&]	
[x]4734[&] 3	0.20[g&]		[x]5285[&] 3	0.16[g&]	
[x]4763[&] 3	0.11[g&]		[x]5294[&] 3	0.23[g&]	
[x]4775[&] 3	0.12[g&]		[x]5303[&] 3	0.27[g&]	
[x]4783[&] 3	0.71[g&]		[x]5325[&] 3	0.05[g&]	
[x]4810[&] 3	0.14[g&]		[x]5345[&] 3	0.07[g&]	
[x]4828[&] 3	0.22[g&]		[x]5360[&] 3	0.13[g&]	
[x]4844[&] 3	0.29[g&]		[x]5375[&] 3	0.51[g&]	
[x]4860[&] 3	0.05[g&]		[x]5399[&] 3	0.12[g&]	

$^{76}_{33}$As$_{43}$-10

γ(^{76}As) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J^π_i	E_f	J^π_f
[x]5417[&] *3*	0.66[g&]				
[x]5443[&] *3*	0.15[g&]				
[x]5452[&] *3*	0.14[g&]				
[x]5468[&] *3*	0.29[g&]				
[x]5494[&] *3*	0.11[g&]				
[x]5509[&] *3*	0.17[g&]				
5526.99 *18*	11.0[h] *5*	(7328.494)	$1^-,2^-$	1801.50	($\le$3)
5533.91 *4*	148.4[h] *15*	(7328.494)	$1^-,2^-$	1794.58	1^+
5540.53 *23*	12.9[h] *6*	(7328.494)	$1^-,2^-$	1787.96	($\le$3)
5546.02 *13*	17.8[h] *7*	(7328.494)	$1^-,2^-$	1782.47	($\le$3)
5568.96 *7*	34.8[h] *7*	(7328.494)	$1^-,2^-$	1759.53	($\le$3)
5580.19 *5*	66.5[h] *7*	(7328.494)	$1^-,2^-$	1748.30	($\le$3)
5601.34 *10*	13.6[h] *5*	(7328.494)	$1^-,2^-$	1727.15	($\le$3)
5612.9 *7*	10.3[h] *22*	(7328.494)	$1^-,2^-$	1715.6	1^+
5614.96 *20*	14.6[h] *24*	(7328.494)	$1^-,2^-$	1713.53	($1^-,2^-$)
5624.23 *19*	6.9[h] *5*	(7328.494)	$1^-,2^-$	1704.26	($\le$3)
5629.51 *11*	17.8[h] *7*	(7328.494)	$1^-,2^-$	1698.98	($\le$3)
5633.9 *5*	5.3[h] *6*	(7328.494)	$1^-,2^-$	1694.6	1^+
5645.72 *12*	11.7[h] *5*	(7328.494)	$1^-,2^-$	1682.77	($\le$3)
5655.19 *9*	16.9[h] *5*	(7328.494)	$1^-,2^-$	1673.30	($\le$3)
5663.78 *4*	68.6[h] *7*	(7328.494)	$1^-,2^-$	1664.71	($\le$3)
5675.86 *4*	104.0[h] *10*	(7328.494)	$1^-,2^-$	1652.63	($\le$3)
5684.18 *6*	40.7[h] *4*	(7328.494)	$1^-,2^-$	1644.31	($\le$3)
5690.52 *5*	65.3[h] *7*	(7328.494)	$1^-,2^-$	1637.97	($\le$3)
5698.03 *5*	47.1[h] *5*	(7328.494)	$1^-,2^-$	1630.46	1^+
5723.36 *10*	15.7[h] *5*	(7328.494)	$1^-,2^-$	1605.13	($\le$3)
5730.9 *6*	2.4[h] *4*	(7328.494)	$1^-,2^-$	1597.6	($\le$3)
5744.5 *3*	4.2[h] *4*	(7328.494)	$1^-,2^-$	1584.0	($\le$3)
5757.19 *4*	57.2[h] *6*	(7328.494)	$1^-,2^-$	1571.30	(2^-)
5778.10 *5*	47.4[h] *5*	(7328.494)	$1^-,2^-$	1550.39	($\le$3)
5786.79 *4*	67.5[h] *7*	(7328.494)	$1^-,2^-$	1541.70	($\le$3)
5803.7 *3*	8.6[h] *6*	(7328.494)	$1^-,2^-$	1524.8	($\le$3)

$^{76}_{33}$As$_{43}$-11

γ(^{76}As) (continued)

E_γ [†]	I_γ [‡]	E_i(level)	J^π_i	E_f	J^π_f	Mult. [#]	Comments
5808.3 *3*	7.4[h] *7*	(7328.494)	$1^-,2^-$	1520.2	(≤3)		
5816.37 *7*	24.3[h] *3*	(7328.494)	$1^-,2^-$	1512.12	(≤3)		
5829.6 *11*	1.9[h] *6*	(7328.494)	$1^-,2^-$	1498.9	(≤3)		
5834.19 *10*	20.6[h] *6*	(7328.494)	$1^-,2^-$	1494.30	(≤3)		
5850.8 *4*	9.3[h] *14*	(7328.494)	$1^-,2^-$	1477.7	$(1^-,2^-)$		
5854.90 *20*	21.6[h] *11*	(7328.494)	$1^-,2^-$	1473.59	1^+		
5869.64 *9*	74.3[h] *22*	(7328.494)	$1^-,2^-$	1458.85	(≤3)		
5877.66 *9*	27.1[h] *6*	(7328.494)	$1^-,2^-$	1450.83	(≤3)		
5884.71 *5*	49.5[h] *5*	(7328.494)	$1^-,2^-$	1443.78	(≤3)		
5906.24 *13*	12.6[h] *5*	(7328.494)	$1^-,2^-$	1422.25	(≤3)		
5924.5 *3*	7.4[h] *5*	(7328.494)	$1^-,2^-$	1404.0	(≤3)		
5931.21 *14*	14.0[h] *6*	(7328.494)	$1^-,2^-$	1397.28	(≤3)		
5942.96 *14*	11.7[h] *5*	(7328.494)	$1^-,2^-$	1385.53	(≤3)		
5959.2 *4*	3.0[h] *4*	(7328.494)	$1^-,2^-$	1369.3	(≤3)		
5970.12 *7*	20.7[h] *4*	(7328.494)	$1^-,2^-$	1358.37	(≤3)		
5976.18 *8*	19.6[h] *4*	(7328.494)	$1^-,2^-$	1352.31	1^+		
5986.65 *4*	40.2[h] *4*	(7328.494)	$1^-,2^-$	1341.84	(≤3)		
6006.34 *7*	29.2[h] *6*	(7328.494)	$1^-,2^-$	1322.15	(≤3)		
6013.99 *12*	22.0[h] *7*	(7328.494)	$1^-,2^-$	1314.50	(≤3)		
6019.17 *17*	15.8[h] *6*	(7328.494)	$1^-,2^-$	1309.32	(≤3)		
6027.52 *3*	84.1[h] *9*	(7328.494)	$1^-,2^-$	1300.97	(≤3)		
6059.48 *3*	99.7[h] *10*	(7328.494)	$1^-,2^-$	1269.01	$(\leq3^-)$	(E1)	
6068.45 *23*	8.6[h] *5*	(7328.494)	$1^-,2^-$	1260.04	(≤3)		
6083.85 *19*	8.5[h] *4*	(7328.494)	$1^-,2^-$	1244.64	(≤3)		
[x]6098[ea] *3*	40[h]						I_γ: from Iγ(per 100 neutrons)=0.32 (1968Jo11).
[x]6114[ea] *3*	20[h]						I_γ: from Iγ(per 100 neutrons)=0.16 (1968Jo11).
6126.58 *20*	8.2[h] *5*	(7328.494)	$1^-,2^-$	1201.91	(≤3)		
6142.79 *4*	50.4[h] *5*	(7328.494)	$1^-,2^-$	1185.70	(≤3)		
6171.99 *14*	10.3[h] *4*	(7328.494)	$1^-,2^-$	1156.50	1^+	(E1)	
6180.15 *6*	25.9[h] *5*	(7328.494)	$1^-,2^-$	1148.34	(≤3)		
6203.57 *6*	44.5[h] *5*	(7328.494)	$1^-,2^-$	1124.92	(≤3)		
6223.06 *4*	47.6[h] *5*	(7328.494)	$1^-,2^-$	1105.43	(≤3)		

$^{76}_{33}$As$_{43}$-12

γ(^{76}As) (continued)

E_γ †	I_γ ‡	E_i(level)	J^π_i	E_f	J^π_f	Mult.#	Comments
6231.25 *5*	40.6[h] *4*	(7328.494)	$1^-,2^-$	1097.24	1^+		
6238.6 *5*	3.1[h] *4*	(7328.494)	$1^-,2^-$	1089.9	(≤3)		
[x]6255[ea] *3*	10[h]						I_γ: from Iγ(per 100 neutrons)=0.08 (1968Jo11).
6266.38[f] *15*	9.7[h] *5*	(7328.494)	$1^-,2^-$	1064.492	1^+		E_γ: level-energy difference=6264.00.
6294.88[f] *2*	203.7[h] *21*	(7328.494)	$1^-,2^-$	1034.263	1^+	(E1)	E_γ: level-energy difference=6294.23.
6305.37 *4*	83.1[h] *8*	(7328.494)	$1^-,2^-$	1023.12	$(1^+,2^+)$		
6343.37[f] *5*	39.1[h] *4*	(7328.494)	$1^-,2^-$	985.545	$(1,2,3)^+$		E_γ: level-energy difference=6342.95.
6357.58 *8*	20.1[h] *4*	(7328.494)	$1^-,2^-$	970.93	(≤3)		
6364.4 *3*	5.8[h] *5*	(7328.494)	$1^-,2^-$	964.1	(≤3)		
6370.04 *7*	26.9[h] *5*	(7328.494)	$1^-,2^-$	958.394	(≤3)		
6380.65 *24*	5.6[h] *5*	(7328.494)	$1^-,2^-$	947.84	(≤3)		
6388.96 *9*	32.3[h] *10*	(7328.494)	$1^-,2^-$	939.750	(1,2,3)		
6393.37[f] *4*	85.4[h] *9*	(7328.494)	$1^-,2^-$	935.384	1^+		E_γ: level-energy difference=6393.11.
6403.80 *3*	79.3[h] *8*	(7328.494)	$1^-,2^-$	924.754	$(\le3^-)$	(E1)	
6419.41 *4*	69.0[h] *7*	(7328.494)	$1^-,2^-$	909.169	$(1,2)^+$		
6433.9 *11*	2.3[h] *11*	(7328.494)	$1^-,2^-$	893.811	$(1^-,2^-,3^+)$	(E1)	
6465.13 *13*	34.9[h] *14*	(7328.494)	$1^-,2^-$	863.36	1^+		
6526.21 *10*	12.1[h] *4*	(7328.494)	$1^-,2^-$	802.452	$(1^-,2^-,3^+)$		
6535.03 *5*	31.1[h] *3*	(7328.494)	$1^-,2^-$	793.570	$(1,2,3)^+$		
6542.76 *4*	40.1[h] *4*	(7328.494)	$1^-,2^-$	785.833	$(\le3^+)$		
6554.09 *21*	5.4[h] *4*	(7328.494)	$1^-,2^-$	774.408	$(3)^+$		
6572.6 *4*	3.7[h] *4*	(7328.494)	$1^-,2^-$	756.5743	$(0^+,3^+)$		
6584.23[f] *13*	46.0[h] *23*	(7328.494)	$1^-,2^-$	744.945	$(1^+,2^+)$	(E1)	E_γ: level-energy difference=6583.55.
6588.12[f] *13*	44.1[h] *22*	(7328.494)	$1^-,2^-$	741.464	(≤3)		E_γ: level-energy difference=6587.03.
6600.73 *5*	36.6[h] *4*	(7328.494)	$1^-,2^-$	727.76	(≤3)		
6612.7 *9*	2.4[h] *5*	(7328.494)	$1^-,2^-$	715.8	$(1,2,3)^+$		
6620.61 *8*	29.9[h] *6*	(7328.494)	$1^-,2^-$	707.88	(≤3)		
6640.9[f] *3*	4.9[h] *4*	(7328.494)	$1^-,2^-$	686.128	$(1^-$ to 4)		E_γ: level-energy difference=6642.4.
6659.45 *7*	22.3[h] *4*	(7328.494)	$1^-,2^-$	669.114	$(1^+,2^+)$		
6690.83[f] *8*	24.2[h] *5*	(7328.494)	$1^-,2^-$	637.248	$(1^+,2^+)$		E_γ: level-energy difference=6691.25.
6699.48 *17*	10.7[h] *4*	(7328.494)	$1^-,2^-$	628.7452	$(1^+,2^+)$		
6719.72[f] *17*	9.9[h] *4*	(7328.494)	$1^-,2^-$	609.970	(3^+)		E_γ: level-energy difference=6718.52.
6728.31 *25*	8.3[h] *4*	(7328.494)	$1^-,2^-$	600.2	(≤3)		

γ(^{76}As) (continued)

E_γ [†]	I_γ [‡]	E_i(level)	J^π_i	E_f	J^π_f	Mult. [#]	Comments
6777.91 *13*	14.1[h] *6*	(7328.494)	$1^-,2^-$	550.4350	$(1^-,2^-)$		
6784.42 *6*	35.1[h] *7*	(7328.494)	$1^-,2^-$	544.0231	$(2)^-$		
6810.55[f] *1*	553[h] *6*	(7328.494)	$1^-,2^-$	517.5784	$(1^+,2^+)$	(E1)	E_γ: level-energy difference=6810.92.
6822.13[f] *17*	13.1[h] *5*	(7328.494)	$1^-,2^-$	505.2046	$(2,3)^+$		E_γ: level-energy difference=6823.29.
6828.67 *13*	15.8[h] *5*	(7328.494)	$1^-,2^-$	499.5801	$(1^+,2^+)$		
6857.62 *14*	16.5[h] *7*	(7328.494)	$1^-,2^-$	471.0004	$(2)^-$		
6881.38 *9*	15.9[h] *5*	(7328.494)	$1^-,2^-$	447.1702	$(1,2)^+$		
6892.8 *5*	2.4[h] *4*	(7328.494)	$1^-,2^-$	436.8029	$(1,2,3)^-$		
6926.64 *2*	183[h] *2*	(7328.494)	$1^-,2^-$	401.8324	$(1,2)^+$	(E1)	
6952[ak] *3*	5[h]	(7328.494)	$1^-,2^-$	377.3841	$(2)^-$		I_γ: from Iγ(per 100 neutrons)=0.04 (1968Jo11).
6965.35[f] *20*	4.7[h] *5*	(7328.494)	$1^-,2^-$	363.9060	(2^-)		E_γ: level-energy difference=6964.59.
6976.16 *4*	47.0[h] *5*	(7328.494)	$1^-,2^-$	352.3617	$(3)^-$		
6999.8 *6*	2.2[h] *4*	(7328.494)	$1^-,2^-$	328.4784	$(3,4)^-$		
7020.15 *1*	373[h] *4*	(7328.494)	$1^-,2^-$	308.3197	$(2)^+$	(E1)	
7028.19 *4*	52.5[h] *5*	(7328.494)	$1^-,2^-$	300.4601	$(2,3^+)$		
7048[ak] *3*	10[h]	(7328.494)	$1^-,2^-$	280.3021	$(1,2)^+$		I_γ: from Iγ(per 100 neutrons)=0.08 (1968Jo11).
7063.67 *2*	145[h] *2*	(7328.494)	$1^-,2^-$	264.8065	1^+	(E1)	
7129[ak] *3*	3.7[h]	(7328.494)	$1^-,2^-$	203.5420	$(0,1)^+$		I_γ: from Iγ(per 100 neutrons)=0.03 (1968Jo11).
7163.49 *8*	17.8[h] *4*	(7328.494)	$1^-,2^-$	165.0484	$(3)^-$		
[x]7179[ea] *3*	5[h]						I_γ: from Iγ(per 100 neutrons)=0.04 (1968Jo11).
7207.56[f] *11*	12.5[h] *4*	(7328.494)	$1^-,2^-$	120.2581	1^+		E_γ: level-energy difference=7208.24.
7241.60 *3*	61.4[h] *6*	(7328.494)	$1^-,2^-$	86.7875	1^+	(E1)	
7284.10 *2*	100[h] *1*	(7328.494)	$1^-,2^-$	44.4254	$(1)^+$	(E1)	
7328.6 *3*	4.2[h] *4*	(7328.494)	$1^-,2^-$	0.0	2^-		

[†] From 1990Ho10, unless otherwise stated. The values are transition energies, corrected for recoil, and with statistical uncertainties. Authors mention calibration uncertainty of 10 parts per million, which amounts to ≈0.08 keV at Eγ=7 MeV, and ≈1 eV at Eγ=100 keV.

[‡] From 1990Ho10, unless otherwise stated. For primary γ rays, values are relative intensities and for secondary γ rays, values are per 100 neutron captures. Quoted uncertainties are statistical only. Below 5510, all the unplaced transitions are included in the category of secondary γ rays. The intensities for primary transitions given by 1968Jo11 are per 100 neutron captures. The relative values given by 1990Ho10, when divided by a factor of ≈125 give values close to those given by 1968Jo11.

[#] For secondary transitions, assignments are deduced from ce data (1990Ho10). The transition is assumed as M1+E2 rather than E1+M2 when CE data give δ(M2/E1)>0.1. For primary transition the assignment is from: Iγ(thermal)/Iγ(epithermal) and Iγ(epithermal)/$E\gamma^3$ (1969Gr09).

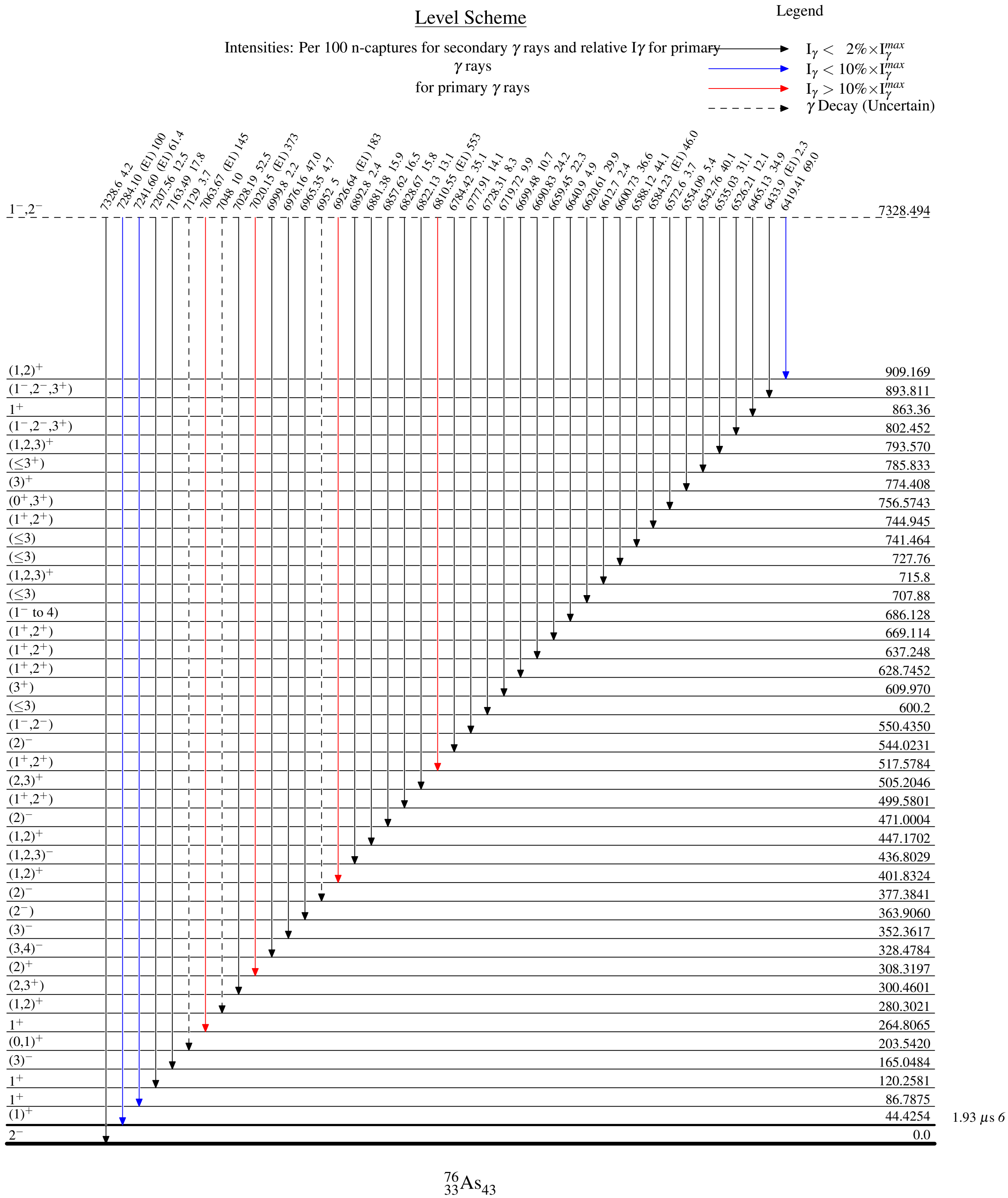
$^{76}_{33}As_{43}$-14

γ(^{76}As) (continued)

[@] From 1965Wh01.
[&] From 1968Jo11.
[a] From 1968Jo11 only. Treated as questionable (by evaluators) since the deduced relative intensities seems too large to have missed detection by 1990Ho10.
[b] γ ray is reported only by 1968Jo11. It is treated as uncertain since it is not confirmed in the later studies.
[c] Fitted value deviates by 0.057 keV.
[d] Fitted value deviates by 0.11 keV.
[e] Uncertain γ ray assignment.
[f] Poor fit in the level scheme.
[g] For secondary γ ray, intensity is per 100 n-captures.
[h] For primary γ ray, intensity is relative to 100 for 7284γ.
[i] 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.
[j] Multiply placed with undivided intensity.
[k] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

$^{76}_{33}$As$_{43}$-15

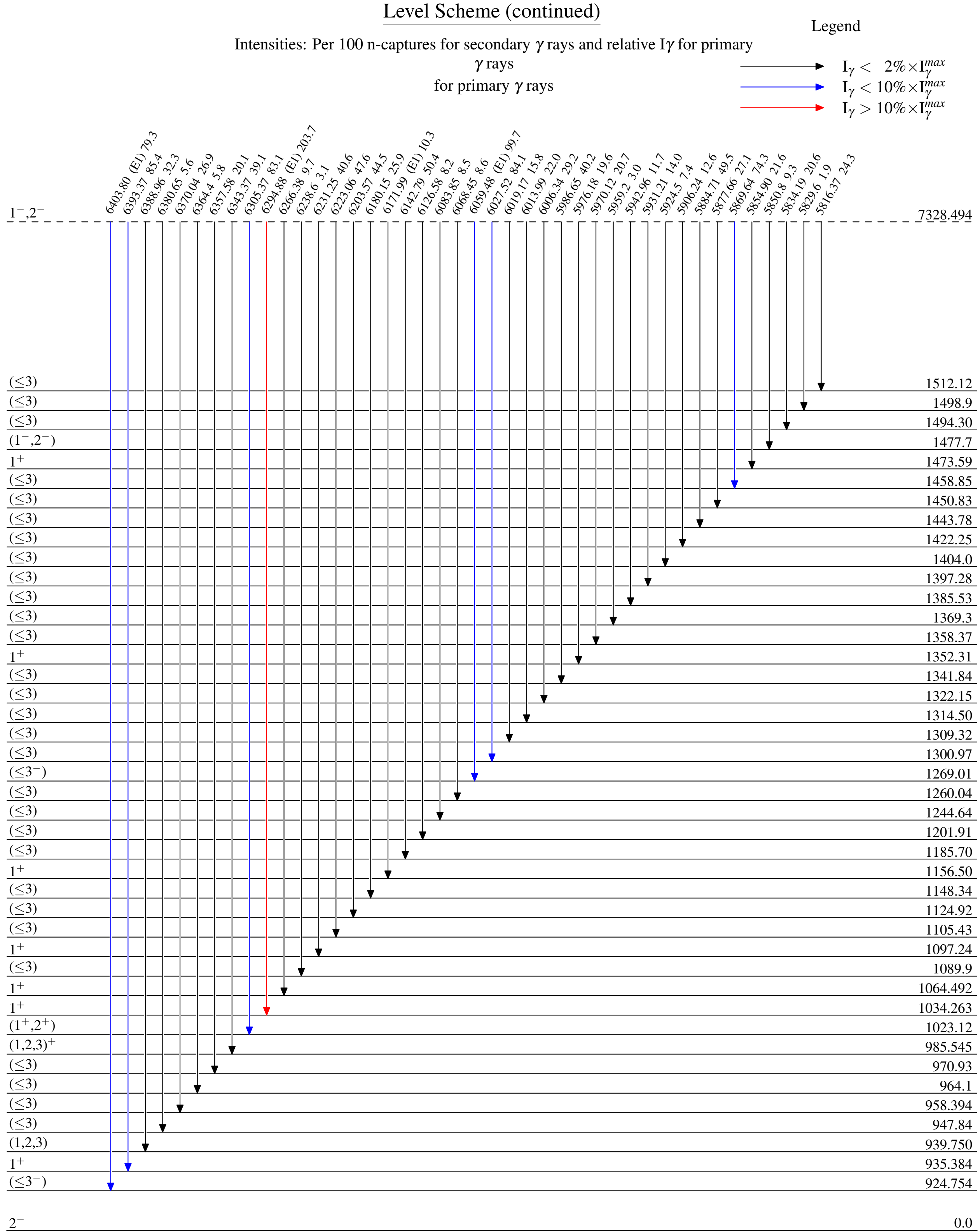
^{75}As(n,γ) E=thermal 1990Ho10



^{75}As(n,γ) E=thermal 1990Ho10

Level Scheme (continued)

Intensities: Per 100 n-captures for secondary γ rays and relative Iγ for primary γ rays for primary γ rays

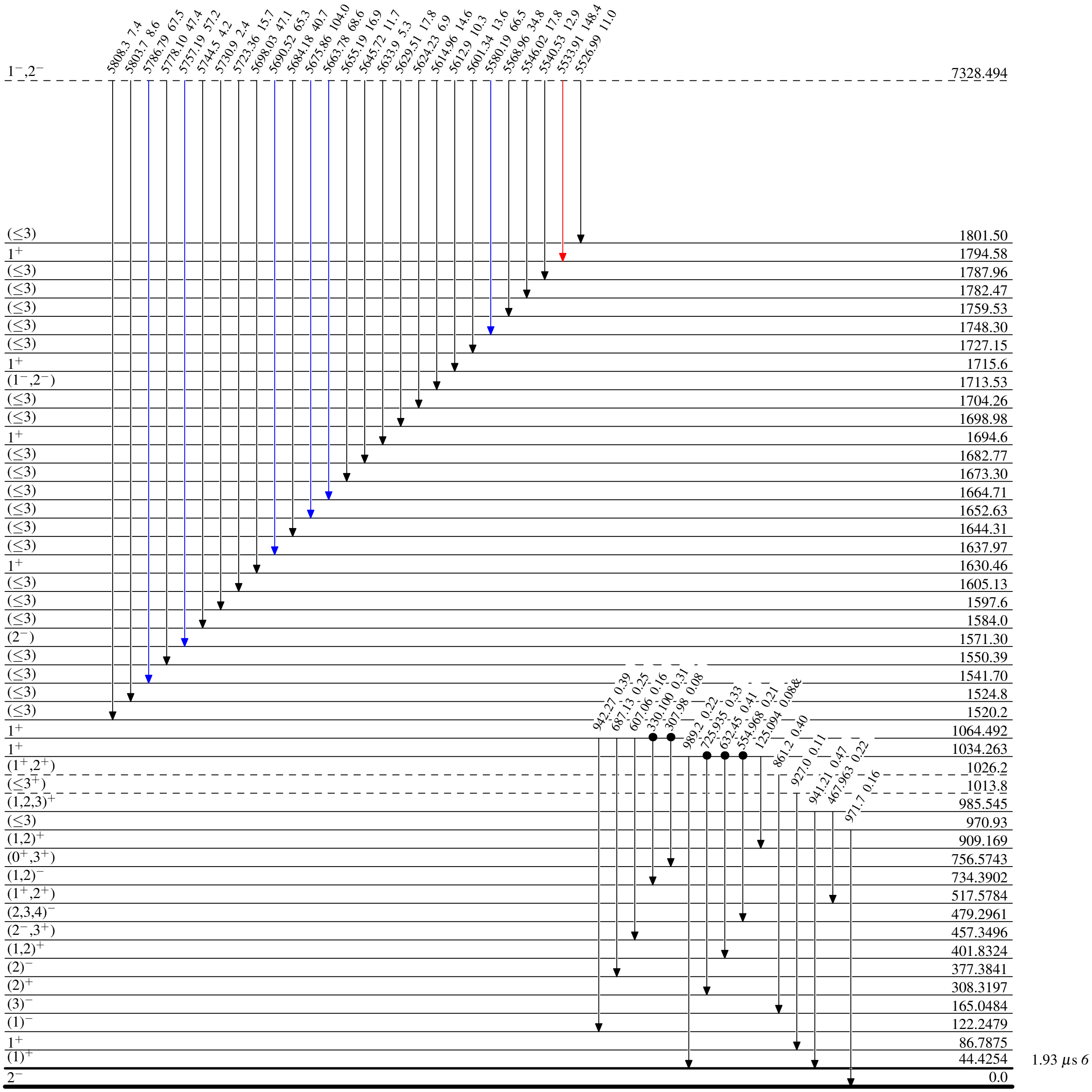


$^{76}_{33}As_{43}$

^{75}As(n,γ) E=thermal 1990Ho10

Level Scheme (continued)

Intensities: Per 100 n-captures for secondary γ rays and relative Iγ for primary γ rays
for primary γ rays
& Multiply placed: undivided intensity given



$^{76}_{33}As_{43}$

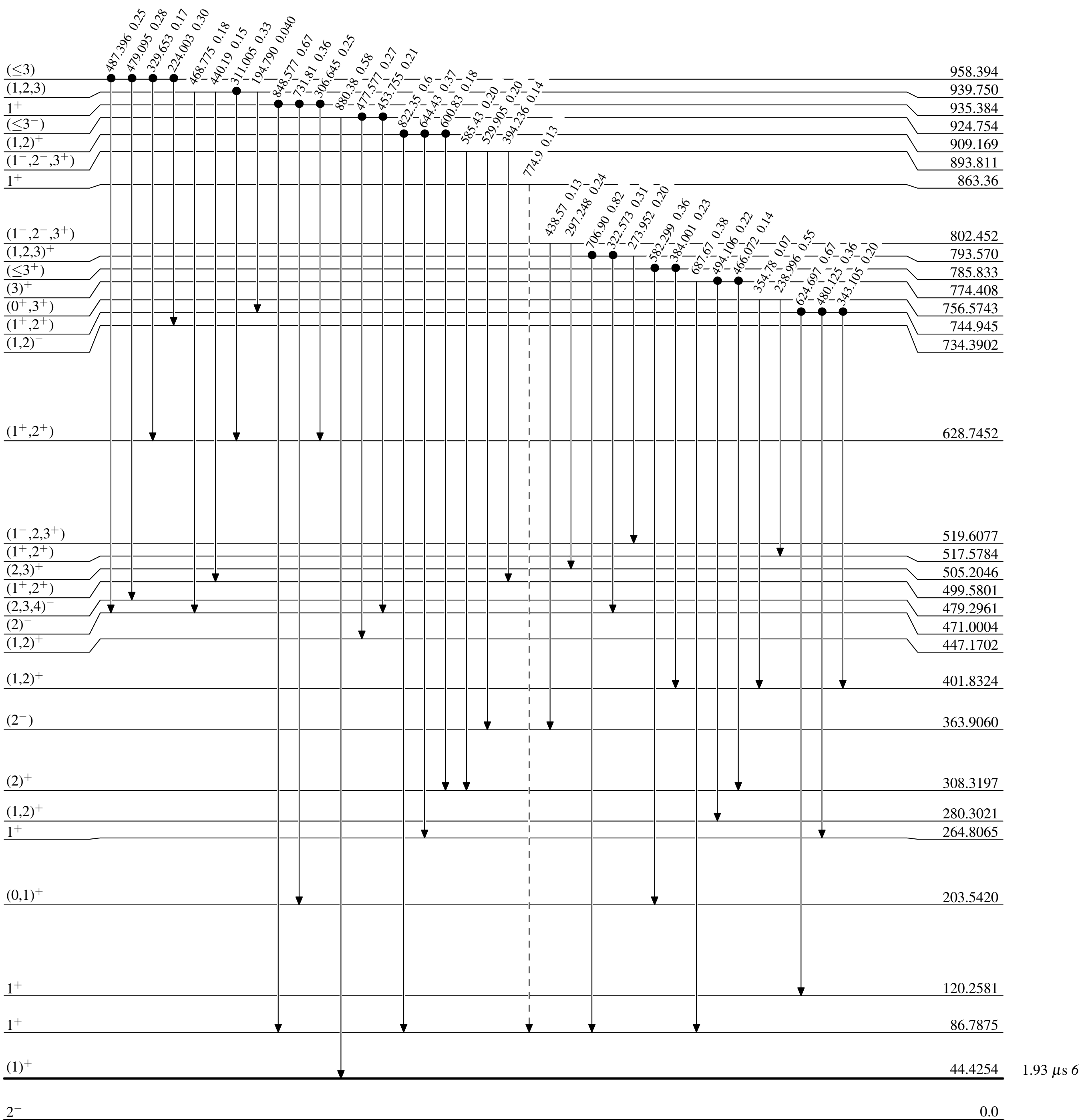
^{75}As(n,γ) E=thermal 1990Ho10

Level Scheme (continued)

Intensities: Per 100 n-captures for secondary γ rays and relative Iγ for primary γ rays
for primary γ rays
& Multiply placed: undivided intensity given

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)
- Coincidence



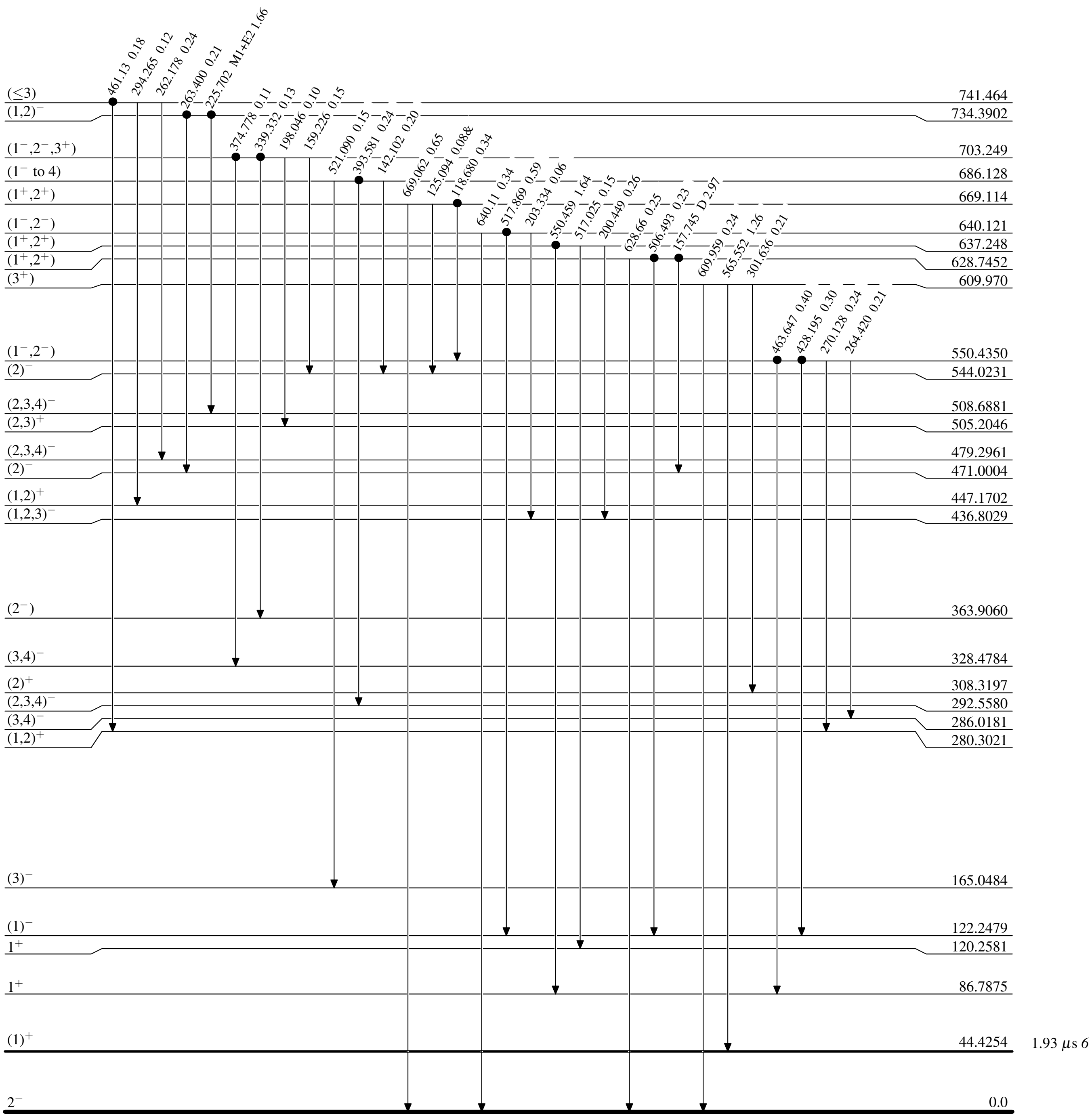
$^{76}_{33}As_{43}$

$^{75}As(n,\gamma)$ E=thermal 1990Ho10

Level Scheme (continued)

Intensities: Per 100 n-captures for secondary γ rays and relative Iγ for primary γ rays
for primary γ rays
& Multiply placed: undivided intensity given

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



$^{76}_{33}As_{43}$

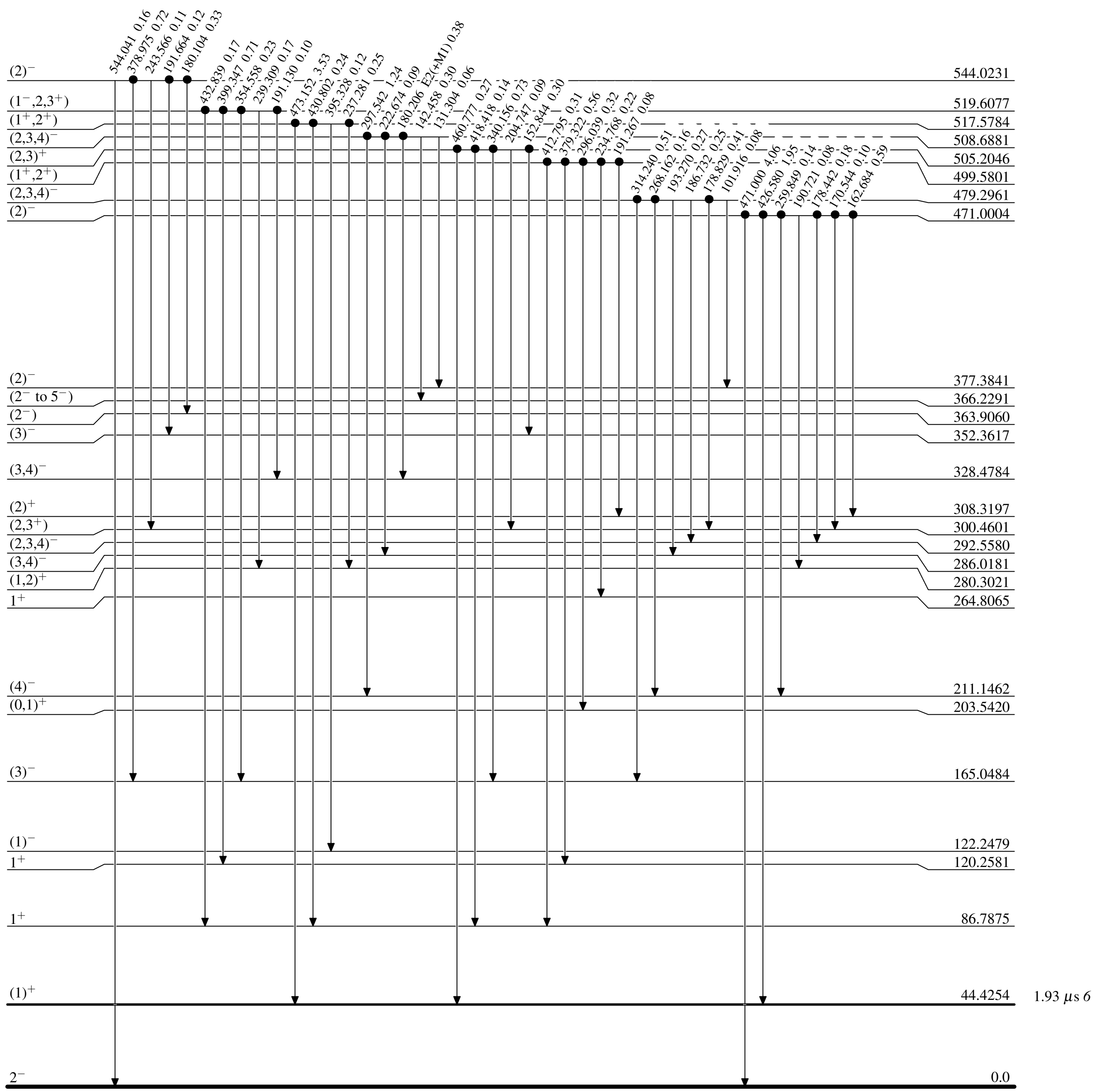
^{75}As(n,γ) E=thermal 1990Ho10

Level Scheme (continued)

Intensities: Per 100 n-captures for secondary γ rays and relative Iγ for primary γ rays
for primary γ rays
& Multiply placed: undivided intensity given

Legend

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

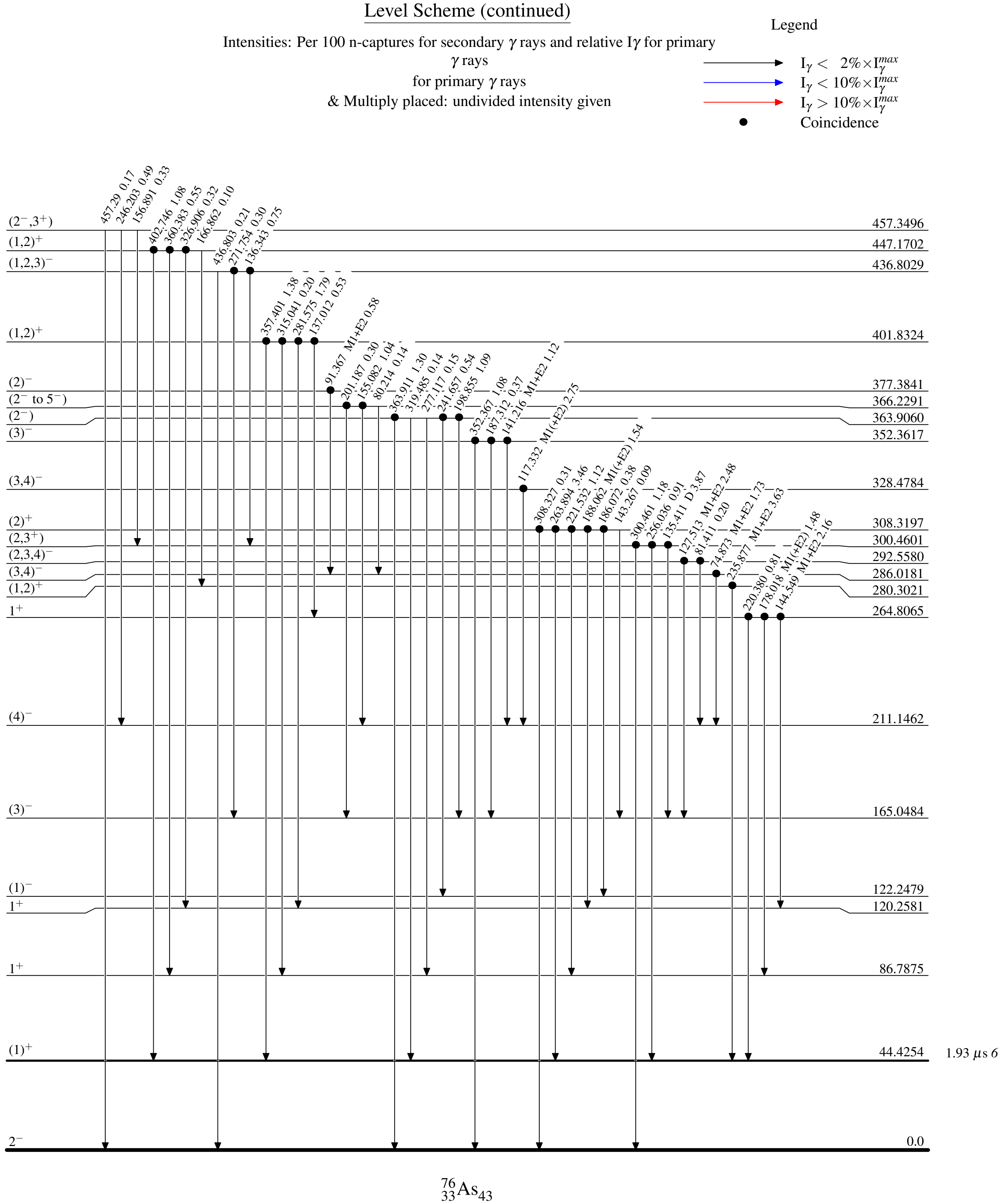


$^{76}_{33}As_{43}$

^{75}As(n,γ) E=thermal 1990Ho10

Level Scheme (continued)

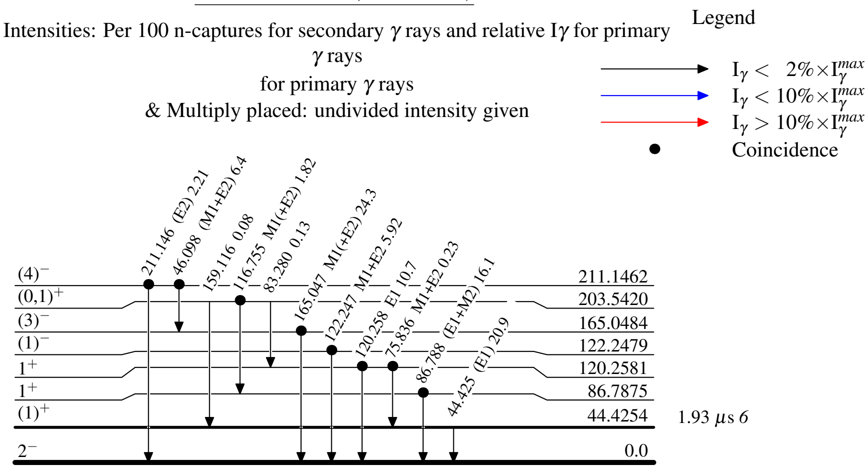
Intensities: Per 100 n-captures for secondary γ rays and relative Iγ for primary γ rays
for primary γ rays
& Multiply placed: undivided intensity given



^{75}As(n,γ) E=thermal 1990Ho10

Level Scheme (continued)

Intensities: Per 100 n-captures for secondary γ rays and relative Iγ for primary γ rays
for primary γ rays
& Multiply placed: undivided intensity given



$^{76}_{33}As_{43}$