

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ [1972Ho40,1974Jo02](#)

Type	Author	History	Citation	Literature Cutoff Date
Errata	Ninel Nica, John Cameron and Balraj Singh		NDS 113, 1 (2012)	31-Dec-2011

^{35}Cl target J^π : $3/2^+$.

Data from [2002Ro24](#), [1994Il01](#), [1978Pa03](#), [1976Ma40](#), [1976Hu01](#), [1976Hu01](#), [1976Gr05](#), [1975Sa03](#), [1974Jo02](#), [1972Ho40](#), [1973Ho33](#), [1972Ho40](#), [1971BrXT](#), [1970Th04](#), [1970Th03](#), [1968Bo06](#), [1966Er06](#), [1966En04](#), [1965Er06](#), [1961Ku01](#), [1961He19](#).
Others: [1995Ro22](#), [1978Va23](#), [1972Ho26](#), [1970Ke10](#), [1966Ka18](#), [1965Er07](#), [1965Si15](#), [1964Si25](#), [1960Li15](#), [1960Cl02](#), [1957To32](#).

 ^{36}Ar Levels

Unless noted otherwise, the resonance strengths $S(\text{p},\gamma)=(2J+1)\Gamma_{\text{p}}\Gamma_{\gamma}/\Gamma$, $S(\text{P},\text{P}_1)=(2J+1)\Gamma_{\text{p}}\Gamma_{\text{P}_1}/\Gamma$, and

$S(\text{P},\alpha_0)=(2J+1)\Gamma_{\text{p}}\Gamma_{\alpha_0}/\Gamma$ (In eV) are from [1974Jo02](#) (uncertainties $\approx 30\%$) for (p,γ) and (P,P_1) resonances, and from [1968Bo06](#) for (P,α_0) resonances.

[1974Jo02](#) In the table denotes the context of (p,γ) reaction (while [1974Jo02](#), (p,p_1)) denotes the context of (p,p_1) reaction).

Most of the Γ values were rejected by the Recommended Upper Limits for γ -ray Strengths (RUL) reason for which they were not adopted here.

E(level) ^{†‡#}	J^π	$T_{1/2}$ @&	Comments
0.0	0^+		
1970.38 5	2^+	319 fs 28	E(level): 1970.39 5 (1972Ho40), 1970.2 3 (1974Jo02). $T_{1/2}$: mean lifetime τ In fs: 400 100 (1970Th04); 350 120 (1972Ho40); 340 110 (1974Jo02).
4178.32 11	3^-	2.3 ps 3	E(level): 4178.33 11 (1972Ho40), 4178.1 7 (1974Jo02). $T_{1/2}$: mean lifetime τ In fs: >2000 (1970Th03); >1800 (1972Ho40); >1500 (1974Jo02).
4329.1 7	$(0,1,2)^+$	>485 fs	$T_{1/2}$: mean lifetime τ In fs: >700 (1974Jo02). E(level): 4329.7 8 (1972Ho40), 4327.6 12 (1974Jo02).
4414.40 16	4^+	76 fs 10	E(level): 4414.36 17 (1972Ho40), 4414.7 5 (1974Jo02). $T_{1/2}$: mean lifetime τ In fs: 125 20 (1970Th03); 86 18 (1972Ho40); 90 40 (1974Jo02); 129 8 (1975Sa03).
4440.11 19	2^+	76 fs 14	E(level): 4440.1 2 (1972Ho40), 4440.2 5 (1974Jo02). J^π : π from 2699.4, M1+E2 γ from 3^+ , 7140. $T_{1/2}$: mean lifetime τ In fs: 94 30 (1970Th03); 100 40 (1972Ho40); 100 40 (1974Jo02); 153 6 (1975Sa03).
4951.4 4	2^+	<35 fs	E(level): 4951.9 5 (1972Ho40), 4950.9 5 (1974Jo02). J^π : $\pi=+$ based on RUL. $T_{1/2}$: mean lifetime τ In fs: <70 (1972Ho40); <50 (1974Jo02).
4974.05 18	2^-	10 ps 3	E(level): 4974.05 19 (1972Ho40), 4974.1 7 (1974Jo02). $T_{1/2}$: mean lifetime τ In fs: >1000 (1970Th03); >1000 (1972Ho40); >1600 (1974Jo02).
5171.13 16	5^-	88 ps 3	E(level): 5171.14 16 (1972Ho40), 5170.9 7 (1974Jo02). $T_{1/2}$: mean lifetime τ In fs: >1000 (1970Th03); >850 (1972Ho40); >450 (1974Jo02).
5194.4 8	$(0^+,1^+,2^+,3^-)$	69 fs 21	E(level): 5194.4 0.8 (1974Jo02). $T_{1/2}$: mean lifetime τ In fs: 100 30 (1974Jo02).
5836.0 4	1^-	6.2 fs 21	E(level): 5835.9 8 (1972Ho40), 5836.0 5 (1974Jo02). $T_{1/2}$: mean lifetime τ In fs: 6 4 (1970Th03); 8 3 (1972Ho40); 14 5 (1974Jo02).
5856.65 19	3^-	312 fs 104	E(level): 5856.7 2 (1972Ho40), 5856.0 7 (1974Jo02). $T_{1/2}$: mean lifetime τ In fs: 840 300 (1970Th03); 340 170 (1972Ho40); 260 110 (1974Jo02).
5895.92 19	4^-	347 fs 139	E(level): 5895.9 2 (1972Ho40), 5896.1 7 (1974Jo02). $T_{1/2}$: mean lifetime τ In fs: >600 (1970Th03); 800 350 (1973Ho33 , superseding 400 +1400-200 (1972Ho40)) 300+650-140 (1974Jo02).
6136.5 15	4^+		E(level): 6136.5 15 (1974Jo02). J^π : E1 γ from 5^- , 9927.

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$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ **1972Ho40,1974Jo02 (continued)** ^{36}Ar Levels (continued)

E(level) ^{†‡#}	J ^π ^a	T _{1/2} ^{@&}	Comments
6217.3 3	5 ⁻	201 fs 35	E(level): 6217.1 3 (1972Ho40), 6217.8 5 (1974Jo02). T _{1/2} : mean lifetime τ In fs: 280 90 (1972Ho40); 230 60 (1974Jo02).
6356.0 6	4 ⁺	305 fs 104	E(level): 6356.1 9 (1972Ho40), 6355.8 9 (1974Jo02). T _{1/2} : mean lifetime τ In fs: 440 150 (1973Ho33).
6611.0 3		15 fs 6	E(level): 6610.8 3 (1972Ho40), 6611.4 5 (1974Jo02). T _{1/2} : mean lifetime τ In fs: 23 19 (1972Ho40); 22 10 (1974Jo02).
6645.6 15	(2 ⁺ ,3 ⁺ ,4 ⁺)		E(level): 6645.6 15 (1974Jo02).
6724 2	NOT 1 ⁺		E(level): 6724 2 (1974Jo02).
6835.16 19	4 ⁻	555 fs 173	E(level): 6835.2 2 (1972Ho40), 6834.9 5 (1974Jo02). T _{1/2} : mean lifetime τ In fs: 800 250 (1973Ho33, superseding>800 (1972Ho40));>350 (1974Jo02).
6836.50 18	3 ⁻	166 fs 42	E(level): 6836.5 2 (1972Ho40), 6836.5 4 (1974Jo02). T _{1/2} : mean lifetime τ In fs: 330 140 (1970Th03); 230 80 (1972Ho40); 200 80 (1974Jo02).
6866.9 7	(1,2 ⁺)		E(level): 6868.5 10 (1972Ho40), 6865.2 10 (1974Jo02).
7136.5 9	(1 ⁻ ,2 ⁺)	9 fs 3	E(level): 7136.3 18 (1972Ho40), 7136.6 10 (1974Jo02). T _{1/2} : mean lifetime τ In fs:<27 (1972Ho40); 13 5 (1974Jo02).
7139.6 4	3 ⁺	69 fs 35	E(level): 7139.5 4 (1972Ho40), 7140.5 10 (1974Jo02). T _{1/2} : mean lifetime τ In fs: 100 30 (1972Ho40).
7178.9 4	(1,2 ⁺)		E(level): 7178.7 9 (1972Ho40), 7179.0 5 (1974Jo02).
7247.4 6	NOT 0 ⁻	<21 fs	E(level): 7247.3 7 (1972Ho40), 7247.5 10 (1974Jo02). T _{1/2} : mean lifetime τ In fs:<30 (1972Ho40).
7258.6 8	3 ⁻	<14 fs	E(level): 7258.5 10 (1972Ho40), 7258.8 15 (1974Jo02). T _{1/2} : mean lifetime τ In fs:<19 (1972Ho40).
7336.6 6	3 ⁺	10 fs 5	E(level): 7335.6 7 (1972Ho40), 7338.5 10 (1974Jo02). T _{1/2} : mean lifetime τ In fs: 15 7 (1972Ho40).
7353.9 3	6 ⁻	125 fs 28	E(level): 7354.0 3 (1972Ho40), 7353.6 7 (1974Jo02). T _{1/2} : mean lifetime τ In fs: 190 90 (1972Ho40); 140 30 (1974Jo02).
7432.3 7		<69 fs	E(level): 7432.9 9 (1972Ho40), 7431.6 10 (1974Jo02). T _{1/2} : mean lifetime τ In fs: 50 +60-40 (1972Ho40).
7573.1 3	4 ⁻	159 fs 49	E(level): 7573.1 3 (1972Ho40), 7573.0 7 (1974Jo02). T _{1/2} : mean lifetime τ In fs: 300 100 (1972Ho40); 160 80 (1974Jo02).
7672.1 6	NOT (1,2) ⁻		E(level): 7671.9 7 (1972Ho40), 7672.5 10 (1974Jo02).
7710.3 5	1		E(level): 7710.7 18 (1972Ho40), 7711.1 15 (1974Jo02).
7749.7 5	NOT 0 ⁻		E(level): 7749.9 6 (1972Ho40), 7749.2 10 (1974Jo02).
7879 2	NOT (0,3) ⁻		E(level): 7879 2 (1974Jo02).
8015.9 10	(3,4) ⁻		E(level): 8015.9 10 (1974Jo02).
8131.9 6	1,(2 ⁺)		E(level): 8132 2 (1974Jo02).
8332.5 15	NOT (0 to 2) ⁻		E(level): 8332.5 15 (1974Jo02).
8472.0 10	(3 ⁻ ,4 ⁻ ,5 ⁻)	30 fs 7	E(level): 8472.0 10 (1974Jo02). T _{1/2} : mean lifetime τ In fs: 44 10 (1974Jo02).
8806.4 18			E(p)(lab)=308.0 18 (1994II01, deduced from E(level)).
8938.8 5	(2 ⁺ ,3,4 ⁻)		E(p)(lab)=444.3 5. 444.1 5 (1961He19); 445.9 15 (1961Ku01); 444.0 3 (1965Er06); 442.4 8 (1994II01, deduced from E(level)).
9014.9 10	(3 ⁻ ,4,5 ⁻)		S(p, γ)=0.09. E(p)(lab)=522.5 10. 522.2 8 (1965Er06); 519.8 17 (1994II01, deduced from E(level)).
9025.3 6	2		S(p, γ)=0.012. E(p)(lab)=533.2 6. 532.9 6 (1961He19); 533.8 15 (1961Ku01); 533.0 8 (1965Er06); 531.9 13 (1994II01 deduced from E(level)).
9066.4 6	3 ⁻		J ^π : from 1976Gr05. S(p, γ)=0.18. E(p)(lab)=575.5 6.

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$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ **1972Ho40,1974Jo02** (continued) ^{36}Ar Levels (continued)

E(level) ^{†‡#}	J ^{πa}	Comments
		575.2 6 (1961He19); 575.9 15 (1961Ku01); 575.4 9 (1965Er06); 572.7 15 (1994II01 deduced from E(level)). S(p,γ)=0.17.
9116.3 16		E(p)(lab)=626.9 16 (1994II01 deduced from E(level)).
9132.5 7	3 ⁻	E(p)(lab)=643.5 7. 643.2 7 (1961He19); 644.2 15 (1961Ku01); 643.1 10 (1965Er06); 643.4 14 (1994II01 deduced from E(level)). S(p,γ)=0.17.
9144.9 7	(2 ⁺ ,3 ⁻)	E(p)(lab)=656.3 7. 656.0 7 (1961He19); 656.8 15 (1961Ku01); 656.0 10 (1965Er06); 653.9 15 (1994II01 deduced from E(level)). S(p,γ)=0.11.
9192.1 11	(3 ⁻ ,4 ⁺)	E(p)(lab)=704.9 11. 704.5 11 (1965Er06). S(p,γ)=0.05.
9220.2 11	1 ⁺	E(p)(lab)=733.8 11. 734.6 15 (1961Ku01); 733.4 11 (1965Er06); 733.8 13 (1994II01 deduced from E(level)). S(p,γ)=0.7.
9240.5 11	(1 ⁻ ,2 ⁻ ,3 ⁻)	E(p)(lab)=754.7 11. 755.4 15 (1961Ku01); 754.3 11 (1965Er06). S(p,γ)=0.13.
9248.4 11	(1 ⁻ ,2 ⁻ ,3 ⁻)	E(p)(lab)=762.8 11. 762.4 11 (1965Er06). S(p,γ)=0.13.
9258.3 12	3 ⁻	E(p)(lab)=773.0 12. 772.6 12 (1965Er06). S(p,γ)=0.12.
9300.1 4	4 ⁻	E(p)(lab)=816.0 4. 818.2 15 (1961Ku01); 817.0 12 (1965Er06); 816.0 4 (1972Ho40). S(p,γ)=0.6.
9342.5 4	3 ⁻	E(p)(lab)=859.6 4. 861.4 15 (1961Ku01); 859.7 13 (1965Er06); 859.9 4 (1972Ho40); 859.2 7 (1994II01 deduced from E(level)). Γ=12 eV (1971BrXT). S(p,γ)=4.9 7 (1966En04), S(p,γ)=5.5 13 (1978Pa03).
9356.0 8	1 ⁻ ,2 ⁺	E(p)(lab)=873.6 8. 873.3 13 (1965Er06); 873.2 11 (1968Bo06). S(p,γ)=0.3, S(P,α ₀)=1.2.
9365.9 8	1 ⁻	E(p)(lab)=883.7 8. 885.7 15 (1961Ku01); 883.5 13 (1965Er06); 883.4 11 (1968Bo06). S(p,γ)=0.7, S(P,α ₀)=8.
9374.1 13	(1 ⁻ ,2 ⁻ ,3 ⁻)	E(p)(lab)=892.1 13. 893.0 15 (1961Ku01); 891.6 13 (1965Er06). S(p,γ)=0.9.
9379.9 13	(2 ⁺ ,3 ⁺ ,4 ⁺)	E(p)(lab)=898.1 13. 899.2 15 (1961Ku01); 897.6 13 (1965Er06). S(p,γ)=1.5.
9393.4 10	(2 ⁺ ,3 ⁺ ,4 ⁺)	E(p)(lab)=912.0 10 (1974Jo02). S(p,γ)=0.3.
9413.9 29		E(p)(lab)=933 3.
9439.2 14	(2 ⁺ ,3 ⁺ ,4 ⁺)	E(p)(lab)=959.1 14. 958.6 2 (1965Er06). S(p,γ)=0.01.
9448.1 9	1 ⁻ ,2 ⁺ ,3 ⁻	E(p)(lab)=968.2 9. 968.0 5 (1965Er06); 968.0 12 (1968Bo06). S(p,γ)=0.14, S(P,α ₀)=1.8.

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$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ [1972Ho40,1974Jo02](#) (continued) ^{36}Ar Levels (continued)

E(level) ^{†‡#}	J ^{πa}	Comments
9465.9 5	1 ⁻ ,2 ⁺	E(p)(lab)=986.5 5. 985.9 25 (1965Er06); 986.5 5 (1974Jo02); 985.5 12 (1968Bo06). S(p,γ)=0.6, S(P,α ₀)=0.5.
9474.0 8	(1,2)	E(p)(lab)=994.9 8 (1974Jo02). S(p,γ)=0.04.
9494.3 12		E(p)(lab)=1015.8 12 (1968Bo06). S(P,α ₀)=0.19.
9502.8 5	(2,3)	E(p)(lab)=1024.5 5. 1023 2 (1965Er06); 1023.1 13 (1972Ho40); 1024.5 5 (1974Jo02). S(p,γ)=0.3.
9509.6 6	(2 ⁺ ,3 ⁺ ,4 ⁺)	E(p)(lab)=1031.5 6. 1029 2 (1965Er06); 1031.5 6 (1974Jo02). S(p,γ)=0.10.
9542.0 11	(1,2,3) ⁻	E(p)(lab)=1064.8 11. 1064 2 (1965Er06); 1064.8 11 (1974Jo02). S(p,γ)=0.14.
9550.3 5	(0 ⁺ to 4 ⁺)	E(p)(lab)=1073.4 5. 1073 2 (1965Er06); 1073.0 3 (1972Ho40); 1073.4 5 (1974Jo02). S(p,γ)=0.9.
9574.3 4	4 ⁻	E(p)(lab)=1098.1 4. 1097 2 (1965Er06); 1098.1 3 (1972Ho40); 1098.1 4 (1974Jo02). S(p,γ)=2.4.
9595.4 7	2 ⁺	E(p)(lab)=1119.8 7. 1116 2 (1965Er06); 1119.8 7 (1974Jo02); 1119.4 13 (1968Bo06). S(p,γ)=0.4, S(P,α ₀)=12.
9606.8 5	(0,1,2) ⁻	E(p)(lab)=1131.5 5. 1129 2 (1965Er06); 1128.3 17 (1972Ho40); 1131.5 3 (1974Jo02). S(p,γ)=0.2.
9667.1 10	3 ⁻	E(p)(lab)=1193.5 10. 1191 2 (1965Er06); 1193.5 10 (1974Jo02); 1192.6 13 (1968Bo06). S(p,γ)=0.3, S(P,α ₀)=7.
9681.9 5	4 ⁺ ,6 ⁺	E(p)(lab)=1208.8 5. 1207 2 (1965Er06); 1208.8 5 (1974Jo02). J ^π : ΔJ=2 E2, or ΔJ=0, M1+E2 γ to 4 ⁺ , 4414. S(p,γ)=0.12.
9703.2 14	0 ⁺ ,1 ⁻ ,2 ⁺	E(p)(lab)=1230.7 14 (1968Bo06). S(P,α ₀)=2.0.
9734.3 5	1 ⁻ ,3 ⁻ ,4 ⁺	E(p)(lab)=1262.7 5. 1264 2 (1965Er06); 1262.7 5 (1974Jo02); 1264.0 14 (1968Bo06). S(P,α ₀)=3.1.
9737.5 8	3 ⁻	E(p)(lab)=1266.0 8. 1267 2 (1965Er06); 1264.0 9 (1972Ho40); 1266.0 18 (1974Jo02). Γ=400 eV (1971BrXT). S(p,γ)=1.9.
9764.5 5	(3 ⁻ ,4 ⁻ ,5 ⁻)	E(p)(lab)=1293.8 5 (1974Jo02). S(p,γ)=0.09.
9812.2 5	(1,2,3) ⁻	E(p)(lab)=1342.8 5 (1974Jo02). S(p,γ)=0.3.
9862.6 5	3 ⁺	E(p)(lab)=1394.7 5. 1396 2 (1965Er06); 1393.0 9 (1972Ho40); 1394.7 5 (1974Jo02). S(p,γ)=0.5.
9878.6 5	(2 ⁺ ,3 ⁺ ,4 ⁺)	E(p)(lab)=1411.1 5. 1412 2 (1965Er06); 1409.1 11 (1972Ho40); 1411.1 5 (1974Jo02). S(p,γ)=0.2.
9889.3 5		E(p)(lab)=1422.1 5.

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$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ **1972Ho40,1974Jo02** (continued) ^{36}Ar Levels (continued)

E(level) ^{†‡#}	J ^π ^a	Comments
		1422 2 (1965Er06); 1422.1 5 (1974Jo02); 1423.4 15 (1968Bo06). J ^π : 1 ⁻ , 2 ⁺ (1974Jo02, $\gamma(\theta)$) and (2 ⁻ , 3 ⁻) (γ decay) are contradictory and May indicate a doublet. S(p, γ)=0.5, S(P, α_0)=14.
9902.1 5	4 ⁺	E(p)(lab)=1435.3 5. 1436 2 (1965Er06); 1435.3 5 (1974Jo02); 1436.3 15 (1968Bo06). S(p, γ)=0.4, S(P, α_0)=2.8.
9927.4 5	5 ⁻	E(p)(lab)=1461.3 5. 1462 2 (1965Er06); 1461.3 5 (1974Jo02). J ^π : from 2002Ro24 based on measured γ multiplicities. S(p, γ)=0.3.
9942.5 5	(2,3 ⁻)	E(p)(lab)=1476.9 5. 1477 2 (1965Er06); 1475.6 12 (1972Ho40); 1476.9 5 (1974Jo02). S(p, γ)=0.6.
9956.9 5	(1,2 ⁺)	E(p)(lab)=1491.7 5. 1493 2 (1965Er06); 1491.7 5 (1974Jo02). S(p, γ)=3.2.
9982.6 16	(1,3 ⁻)	E(p)(lab)=1518.1 16. 1517 2 (1965Er06), 1518.1 16 (1968Bo06). S(P, α_0)=22.
9983.2 5	1 ⁺ , (2 ⁺)	E(p)(lab)=1518.8 5. 1517 2 (1965Er06); 1518.8 5 (1974Jo02); 1518.1 16 (1968Bo06). S(p, γ)=18.
9991.9 16	1 ⁻ , 2 ⁺	E(p)(lab)=1527.7 16. 1528 2 (1965Er06); 1527.7 16 (1968Bo06). S(p, γ)=0.5 (sum of strengths of 9991.9 and 9992.9), S(P, α_0)=60.
9992.9 9		E(p)(lab)=1528.7 9. 1528 2 (1965Er06); 1528.6 9 (1972Ho40); 1528.7 9 (1974Jo02). S(p, γ)=0.5 (sum of strengths of 9991.9 and 9992.9).
10002.4 10	(1 ⁻ , 2,3)	E(p)(lab)=1538.5 10 (1974Jo02). S(p, γ)=0.16, S(P,P ₁)=0.01.
10044.4 12	1 ⁻	E(p)(lab)=1581.7 12. 1578 2 (1965Er06); 1581.7 12 (1974Jo02); 1581.5 20 (1968Bo06). T _{1/2} : 2.1 5 keV (1968Bo06), 900 eV (1971BrXT). Γ =1.5 3 keV (1965Er06); Γ =2.1 5 keV (1968Bo06). S(p, γ)=8.4, S(P, α_0)=24.
10050.6 15	2 ⁺	E(p)(lab)=1588.1 15. 1588.1 15 (1974Jo02); 1588.3 20 (1968Bo06). Γ =0.9 5 keV (1968Bo06), Γ =400 eV (1968Bo06). S(p, γ)=0.8, S(P,P ₁)=0.03, S(P, α_0)=240.
10076.7 5	(1 ⁻ , 2,3)	E(p)(lab)=1615.0 5. 1614 2 (1965Er06); 1615.0 5 (1974Jo02). S(p, γ)=0.9.
10092.3 29		E(p)(lab)=1631 3.
10094.9 15	2 ⁺	E(p)(lab)=1633.7 15. 1633 2 (1965Er06); 1633.7 15 (1974Jo02); 1634.3 20 (1968Bo06). S(p, γ)=0.3, S(P,P ₁)<0.01, S(P, α_0)=6.
10099.4 6	1 ⁻	E(p)(lab)=1638.3 6. 1637 2 (1965Er06); 1638.3 6 (1974Jo02); 1637.0 18 (1968Bo06). Γ =400 eV (1971BrXT). S(p, γ)=1.6, S(P, α_0)=180.
10139.5 9	(2 ⁺ , 3 ⁻)	E(p)(lab)=1679.6 9. 1678 3 (1965Er06); 1679.6 9 (1974Jo02). S(p, γ)=0.4.
10143.0 6	(1 ⁻ , 2)	E(p)(lab)=1683.2 6 (1974Jo02). S(p, γ)=1.4.
10149.6 5	(3 ⁻ , 4)	E(p)(lab)=1683.2 6. E(p)(lab)=1690.0 5 (1974Jo02).

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$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ [1972Ho40,1974Jo02](#) (continued) ^{36}Ar Levels (continued)

E(level) ^{†‡#}	J ^π _a	Comments
10167.4 5	3 ⁻	S(p,γ)=0.7. E(p)(lab)=1708.3 5. 1705 3 (1965Er06); 1708.3 5 (1974Jo02); 1708.8 20 (1968Bo06).
10173.4 5	(1 ⁻ ,2 ⁺)	S(p,γ)=3.0, S(P,α ₀)=15. E(p)(lab)=1714.4 5. 1714 3 (1965Er06); 1714.4 5 (1974Jo02); 1714.9 20 (1968Bo06).
10193.6 10	(3 ⁻ ,4,5,6 ⁺)	Γ=0.9 5 keV (1968Bo06). S(p,γ)=5.0, S(P,α ₀)=150. E(p)(lab)=1735.2 10 (1974Jo02).
10201.3 18		S(p,γ)=0.3. E(p)(lab)=1743.1 18 (1968Bo06). S(P,α ₀)=80.
10220.3 5	4 ⁽⁻⁾	E(p)(lab)=1762.7 5. 1761 3 (1965Er06); 1759.9 8 (1972Ho40); 1762.7 5 (1974Jo02).
10256.0 10	(3 ⁻ ,4)	S(p,γ)=2.9. E(p)(lab)=1761.9 9. E(p)(lab)=1799.4 10. 1797 3 (1965Er06); 1799 3 (1965Er06); 1799.4 10 (1974Jo02).
10257.5 10	(3 ⁻ ,4 ⁺)	S(p,γ)=0.8. E(p)(lab)=1801.0 10 (1974Jo02).
10260.5 19		S(p,γ)=1.2. E(p)(lab)=1804.1 21 (1968Bo06). S(P,α ₀)=8.
10267.3 5	1 ⁻	E(p)(lab)=1811.0 5. 1811 3 (1965Er06); 1811.0 5 (1974Jo02); 1812.6 21 (1968Bo06).
10271.7 6	(3 ⁻ ,4 ⁻ ,5 ⁻)	Γ=400 eV (1971BrXT). S(p,γ)=1.2, S(P,α ₀)=13. E(p)(lab)=1815.6 6. 1815 3 (1965Er06); 1813.3 6 (1972Ho40); 1815.6 6 (1974Jo02).
10281.1 10	3 ⁻	S(p,γ)=1.8, S(P,P ₁)=0.03. E(p)(lab)=1825.2 10. 1825.2 10 (1974Jo02); 1827.4 21 (1968Bo06).
10301.5 9	4 ⁺	S(p,γ)=0.3, S(P,P ₁)=0.01, S(P,α ₀)=2.6. E(p)(lab)=1846.2 9. 1845 3 (1965Er06); 1846.2 9 (1974Jo02); 1847.3 19 (1968Bo06).
10308.7 8	(2,3) ⁻	S(p,γ)=1.9, S(P,P ₁)=0.01, S(P,α ₀)=13. E(p)(lab)=1853.6 8 (1974Jo02).
10319.5 15	2 ⁺	S(p,γ)=0.7, S(P,P ₁)=0.6. E(p)(lab)=1864.7 15 (1974Jo02).
10329.0 15	(3 ⁻ ,4 ⁻ ,5 ⁻)	1864.7 15 (1974Jo02); 1867.1 19 (1968Bo06). S(p,γ)=0.6, S(P,P ₁)=0.02, S(P,α ₀)=80. E(p)(lab)=1874.5 15 (1974Jo02).
10377.1 19		S(p,γ)=0.3, S(P,P ₁)=0.01. E(p)(lab)=1924 2. 1923.6 21 (1968Bo06). S(P,α ₀)=6.
10420.8 10	3 ⁻	E(p)(lab)=1969.0 10. 1969 3 (1965Er06); 1967 3 (1972Ho40); 1969.0 10 (1974Jo02); 1969.1 19 (1974Jo02 , (p,p ₁)). Γ=7 2 keV (1965Er06).
10435.0 14		S(p,γ)=13, S(P,P ₁)=29. E(p)(lab)=1983.6 14. 1984 3 (1965Er06); 1983 3 (1972Ho40); 1983.6 14 (1974Jo02); 1984.2 6 (1974Jo02 , (p,p ₁)). J ^π : (1,2,3) ⁻ (1971BrXT , (p,p ₀)) and (2 ⁺) from γ decay May indicate a doublet.
10439.4 19	2 ⁺	Γ=15 5 keV (1965Er06). S(p,γ)=6.1, S(P,P ₁)=2.6. E(p)(lab)=1988.1 20.

Continued on next page (footnotes at end of table)

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ [1972Ho40,1974Jo02](#) (continued) ^{36}Ar Levels (continued)

E(level) ^{†‡#}	J ^{πa}	Comments
		1988.1 20 (1968Bo06).
10462.2 9	2 ⁻	S(P,α ₀)=250. E(p)(lab)=2011.6 9 (1974Jo02 , (p,p ₁)). Γ=5.1 keV (1971BrXT). S(P,P ₁)=3.9.
10475.3 21		E(p)(lab)=2025.0 22 (1968Bo06).
10488.1 20	(3 ⁻ ,4 ⁺)	S(P,α ₀)=4.7. E(p)(lab)=2038.2 21 (1968Bo06).
10500.2 5	(1,2,3) ⁻	S(P,α ₀)=60. E(p)(lab)=2050.7 5. 2051.3 7 (1974Jo02); 2050.7 5 (1974Jo02 , (p,p ₁)). Γ=2.5 keV (1971BrXT). S(p,γ)=1.3, S(P,P ₁)=33.
10524 3		E(p)(lab)=2075 3 (1968Bo06). Γ=7.1 20 keV (1968Bo06). S(P,α ₀)=50.
10539.6 12	3 ⁻	E(p)(lab)=2091.2 12. 2091 3 (1965Er06); 2091.6 16 (1974Jo02); 2091.2 12 (1974Jo02 , (p,p ₁)). S(p,γ)=7.0, S(P,P ₁)=29.
10558.5 20	2 ⁺	E(p)(lab)=2110.6 21. 2110.6 21 (1968Bo06).
10562.1 9	3 ⁻	E(p)(lab)=2114.3 9. 2113 3 (1965Er06); 2114.1 10 (1974Jo02); 2114.3 9 (1974Jo02 , (p,p ₁)). S(p,γ)=2.1, S(P,P ₁)=1.4, S(P,α ₀)=140.
10568.3 21		E(p)(lab)=2120.7 22 (1968Bo06). S(P,α ₀)=3.4.
10582.9 6	5 ⁻	E(p)(lab)=2135.7 6. 2135 3 (1965Er06); 2135.7 13 (1972Ho40); 2135.9 10 (1974Jo02); 2135.7 6 (1974Jo02 , (p,p ₁)). S(p,γ)=2.7, S(P,P ₁)=1.1.
10593.3 21	2 ⁺	E(p)(lab)=2146.4 22 (1968Bo06). S(P,α ₀)=220.
10615.6 7	4 ⁻	E(p)(lab)=2169.4 7. 2168 3 (1965Er06); 2166.9 5 (1972Ho40); 2169.5 10 (1974Jo02); 2169.4 7 (1974Jo02 , (p,p ₁)); 2168 3 (1968Bo06). Γ=2.9 5 keV (1968Bo06). S(p,γ)=10, S(P,P ₁)=5.9, S(P,α ₀)=60.
10617.9 21	3 ⁻	E(p)(lab)=2171.7 22 (1968Bo06). S(P,α ₀)=60.
10635.7 5	1 ⁻	E(p)(lab)=2190.1 5. 2191 3 (1965Er06); 2190 3 (1972Ho40); 2189.4 10 (1974Jo02); 2190.1 5 (1974Jo02 , (p,p ₁)). Γ=4.1 keV (1971BrXT), Γ=7 2 keV (1965Er06). S(p,γ)=5.3, S(P,P ₁)=3.0.
10646.7 10		E(p)(lab)=2201.4 10 (1974Jo02 , (p,p ₁)). S(P,P ₁)=8.2.
10650.6 11	1 ⁻	E(p)(lab)=2205.4 11. 2205.4 11 (1974Jo02 , (p,p ₁)); 2207 3 (1968Bo06). Γ=2.0 5 keV (1968Bo06), Γ=1.5 keV (1971BrXT). S(P,P ₁)=26, S(P,α ₀)=1000.
10664.1 21	(0 ⁺ ,1 ⁻ ,2 ⁺)	E(p)(lab)=2219.3 22 (1968Bo06). S(P,α ₀)=40.
10674.3 22	(3 ⁻ ,4 ⁺)	E(p)(lab)=2229.8 23 (1968Bo06). S(P,α ₀)=19.
10675.9 10	5	E(p)(lab)=2231.4 10. 2231 3 (1965Er06); 2230.4 7 (1972Ho40); 2231.4 10 (1974Jo02); 2231.5 10 (1974Jo02 , (p,p ₁)). S(p,γ)=9.7, S(P,P ₁)=7.0.
10683.9 10	1 ⁻	E(p)(lab)=2239.6 10 (1974Jo02 , (p,p ₁)).

Continued on next page (footnotes at end of table)

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ [1972Ho40,1974Jo02](#) (continued) ^{36}Ar Levels (continued)

E(level) ^{†‡#}	J ^{πa}	T _{1/2} ^{@&}	Comments
10700.4 15	2 ⁺		Γ=6.2 keV (1971BrXT). S(P,P ₁)=54. E(p)(lab)=2256.6 15. 2256.3 (1965Er06); 2256.6 15 (1974Jo02); 2258.4 23 (1968Bo06). Γ=300 eV (1971BrXT). S(p,γ)=5.4, S(P,P ₁)=4.7, S(P,α ₀)=80.
10701.7 12	(0 ⁺ ,1 ⁻ ,2 ⁺)		E(p)(lab)=2258.0 12. 2256.7 9 (1972Ho40); 2258.0 12 (1974Jo02 , (p,p ₁)); 2260.1 25 (1968Bo06). S(P,α ₀)=190.
10738.7 97			E(p)(lab)=2296 10 (1968Bo06). Γ=45 15 keV (1968Bo06). S(P,α ₀)=340.
10751.6 15			E(p)(lab)=2309.3 15 (1974Jo02 , (p,p ₁)). S(P,P ₁)=1.5.
10759.1 19	4 ⁺		E(p)(lab)=2317 2.
10760.9 15	(2,3) ⁻		E(p)(lab)=2318.9 15. 2318.9 15 (1974Jo02 , (p,p ₁)); 2318.0 23 (1968Bo06). S(P,P ₁)=1.5, S(P,α ₀)=160.
10763.8 22	4 ⁺		E(p)(lab)=2321.9 23 (1968Bo06). S(P,α ₀)=26.
10780.0 22	4 ⁺		E(p)(lab)=2338.5 23 (1968Bo06). S(P,α ₀)=60.
10790.1 15	(0 ⁺ ,1 ⁻ ,2 ⁺)		E(p)(lab)=2348.9 15. 2348.9 15 (1974Jo02 , (p,p ₁)); 2348.0 25 (1968Bo06). S(P,P ₁)=1.5, S(P,α ₀)=13.
10808.9 12			E(p)(lab)=2368.3 12. 2368.3 12 (1974Jo02); 2367.5 15 (1974Jo02 , (p,p ₁)); 2368.2 15 (1976Hu01). S(p,γ)=4.0, S(P,P ₁)=1.6.
10816.0 29			E(p)(lab)=2375.6 25. 2375.6 25 (1968Bo06). S(P,α ₀)=3.7.
10823.4 15			E(p)(lab)=2383.2 15 (1976Hu01).
10832.3 15	(1 ⁻ ,3 ⁻ ,4 ⁺)		E(p)(lab)=2392.3 15. 2390.1 15 (1974Jo02 , (p,p ₁)); 2392.3 15 (1976Hu01); 2392.5 24 (1968Bo06). S(P,P ₁)=1.3, S(P,α ₀)=31.
10845.7 15			E(p)(lab)=2406.1 15. 2403.8 15 (1974Jo02 , (p,p ₁)); 2406.1 15 (1976Hu01). S(P,P ₁)=0.7.
10852.0 15	2 ⁺		E(p)(lab)=2412.6 15. 2410.0 15 (1974Jo02 , (p,p ₁)); 2412.6 15 (1976Hu01). S(P,P ₁)=1.4.
10853.8 15	0 ⁺	<4 fs	E(p)(lab)=2414.4 15. 2414.4 15 (1976Hu01); 2410 4 (1976Ma40); 2413.1 24 (1968Bo06). S(p,γ)=0.10 (1976Hu01), S(P,α ₀)=290.
10865 7	(1 ⁻ ,3 ⁻),4 ⁺		Γ _γ =80 5 meV (1976Ma40). E(p)(lab)=2426 7 (1968Bo06). Γ=18 5 keV (1968Bo06). S(P,α ₀)=190.
10898.6 15			E(p)(lab)=2460.5 15 (1974Jo02 , (p,p ₁)). S(P,P ₁)=180.
10902 3	1 ⁻		E(p)(lab)=2464 3 (1968Bo06). Γ=1.2 5 keV (1968Bo06). S(P,α ₀)=390.
10906.0 10			E(p)(lab)=2468.1 10. 2468.1 10 (1974Jo02); 2468.5 15 (1974Jo02 , (p,p ₁)). S(P,P ₁)=14.
10917 3			E(p)(lab)=2480 3 (1968Bo06).

Continued on next page (footnotes at end of table)

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ [1972Ho40,1974Jo02](#) (continued) ^{36}Ar Levels (continued)

E(level) ^{†‡#}	$J\pi^a$	Comments
10934 3		S(P, α_0)=7. E(p)(lab)=2497 3 (1968Bo06).
10939 3		S(P, α_0)=7. E(p)(lab)=2502 3 (1968Bo06).
10955.7 12		S(P, α_0)=5. E(p)(lab)=2519.3 12 (1974Jo02).
10960.3 24	2 ⁺	E(p)(lab)=2524.0 25 (1968Bo06).
10968.1 15		S(P, α_0)=830. E(p)(lab)=2532.0 15. 2532.0 15 (1974Jo02); 2533.3 15 (1974Jo02 , (p,p ₁)).
10976.2 24	4 ⁺	S(P,P ₁)=1400. E(p)(lab)=2540.4 25 (1968Bo06).
10986.0 15		S(P, α_0)=150. E(p)(lab)=2550.5 15 (1974Jo02 , (p,p ₁)).
10993.5 24	0 ⁺ , 1 ⁻ , 2 ⁺	S(P,P ₁)=380. E(p)(lab)=2558.2 25 (1968Bo06).
11014.3 15		S(P, α_0)=70. E(p)(lab)=2579.6 15 (1974Jo02 , (p,p ₁)).
11027.7 15		S(P,P ₁)=5.8. E(p)(lab)=2593.4 15. 2595 4 (1965Er06); 2593.4 15 (1974Jo02); 2594.8 15 (1974Jo02 , (p,p ₁)); 2595 3 (1968Bo06).
11043.4 15	4 ⁺	$\Gamma=1.0$ 5 keV (1968Bo06). S(P,P ₁)=23, S(P, α_0)=800. E(p)(lab)=2609.5 15. 2609.5 15 (1974Jo02 , (p,p ₁)); 2610 3 (1968Bo06).
11050 3	0 ⁺ , 1 ⁻ , 2 ⁺	S(P,P ₁)=190, S(P, α_0)=160. E(p)(lab)=2616 3 (1968Bo06).
11059.7 15	1 ⁻ , 3 ⁻	$\Gamma=0.9$ 5 keV (1968Bo06). S(P, α_0)=500. E(p)(lab)=2626.3 15. 2626.3 15 (1974Jo02 , (p,p ₁)); 2630 3 (1968Bo06).
11086.1 15		$\Gamma=1.3$ 5 keV (1968Bo06). S(P,P ₁)=4.0, S(P, α_0)=410. E(p)(lab)=2653.4 15 (1974Jo02 , (p,p ₁)).
11091 3	4 ⁺ , (5 ⁻)	S(P,P ₁)=220. E(p)(lab)=2658 3 (1968Bo06).
11110 3	0 ⁺ , 1 ⁻ , 2 ⁺ , 3 ⁻	S(P, α_0)=24. E(p)(lab)=2678 3 (1968Bo06).
11118.8 15		S(P, α_0)=25. E(p)(lab)=2687.1 15. 2687.1 15 (1974Jo02 , (p,p ₁)); 2688 4 (1968Bo06).
11123.2 25	3 ⁻	$\Gamma=5.5$ 15 keV (1968Bo06). S(P,P ₁)=140, S(P, α_0)=110. E(p)(lab)=2691.6 26 (1968Bo06).
11131.4 15	1 ⁻ , 3 ⁻	S(P, α_0)=260. E(p)(lab)=2700.0 15 (1974Jo02 , (p,p ₁)). 2700.0 15 (1974Jo02 , (p,p ₁)); 2704 3 (1968Bo06).
11149.4 15		S(P,P ₁)=10, S(P, α_0)=430. E(p)(lab)=2718.6 15.
11155.9 15	2 ⁺	2720 4 (1965Er06); 2718.6 15 (1974Jo02). E(p)(lab)=2725.3 15 (1974Jo02 , (p,p ₁)). 2725.3 15 (1974Jo02 , (p,p ₁)); 2729 3 (1968Bo06).
11167.8 15		$\Gamma=1.1$ 5 keV (1968Bo06). S(P,P ₁)=770, S(P, α_0)=420. E(p)(lab)=2737.5 15 (1974Jo02 , (p,p ₁)).
11182.3 15		S(P,P ₁)=870. E(p)(lab)=2752.4 15 (1974Jo02 , (p,p ₁)).

Continued on next page (footnotes at end of table)

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ [1972Ho40,1974Jo02](#) (continued) ^{36}Ar Levels (continued)

E(level) ^{†‡#}	J π^a	Comments
		2751.7 15 (1974Jo02); 2752.4 15 (1974Jo02 , (p,p ₁)). S(P,P ₁)=6.4.
11206.7 15		E(p)(lab)=2777.5 15. 2777.5 15 (1974Jo02 , (p,p ₁)); 2777 3 (1968Bo06). S(P,P ₁)=64, S(P, α_0)=13.
11210 3		E(p)(lab)=2781 3 (1968Bo06). S(P, α_0)=900.
11215.7 15		E(p)(lab)=2786.8 15 (1974Jo02 , (p,p ₁)). S(P,P ₁)=43.
11224 3	1 ⁻ ,2 ⁻	E(p)(lab)=2795 3 (1968Bo06). $\Gamma=1.0$ 5 keV (1968Bo06). S(P, α_0)=460.
11237.6 15		E(p)(lab)=2809.3 15 (1974Jo02 , (p,p ₁)). S(P,P ₁)=870.
11243 3	(1 ⁻)	E(p)(lab)=2814 3 (1968Bo06). $\Gamma=1.6$ 5 keV (1968Bo06). S(P, α_0)=4000.
11248 3		E(p)(lab)=2820 3 (1968Bo06). S(P, α_0)=290.
11269.7 15		E(p)(lab)=2842.3 15 (1974Jo02 , (p,p ₁)). S(P,P ₁)=400.
11278 3	3 ⁻	E(p)(lab)=2851 3 (1968Bo06). S(P, α_0)=220.
11303 3		E(p)(lab)=2877 3 (1968Bo06). S(P, α_0)=11.
11312 3	4 ⁺ ,5 ⁻	E(p)(lab)=2886 3 (1968Bo06). S(P, α_0)=150.
11321.9 19		E(p)(lab)=2896 2 (1974Jo02 , (p,p ₁)). S(P,P ₁)=130.
11336.4 19	2 ⁺	E(p)(lab)=2911 2. 2911 4 (1965Er06); 2909 2 (1974Jo02); 2911 2 (1974Jo02 , (p,p ₁)); 2913 3 (1968Bo06). $\Gamma=0.8$ 5 keV (1968Bo06). S(P,P ₁)=320, S(P, α_0)=90.
11344 3	1 ⁻	E(p)(lab)=2919 3 (1968Bo06). S(P, α_0)=140.
11358.8 19		E(p)(lab)=2934 2 (1974Jo02 , (p,p ₁)). S(P,P ₁)=2400.
11419.1 19		E(p)(lab)=2996 2 (1974Jo02 , (p,p ₁)). S(P,P ₁)=2500.

[†] Energies of the bound levels are weighted averages of values listed in comments.

[‡] For resonance level energies the following formula was used by the evaluators: $E_x = S(\text{p}) + E(\text{p})(\text{lab}) \times \text{AM}(^{35}\text{Cl}) / [\text{AM}(^{35}\text{Cl}) + \text{AM}(\text{P})]$, with $S(\text{p})(^{36}\text{Ar})=8506.99$ 5 and the atomic masses (AM) of ^{35}Cl and proton from [2011AuZZ](#).

[#] E(p)(lab) from [1974Jo02](#) ((p, γ) reaction), unless stated otherwise.

[@] Except when noted otherwise, half lives are from [1990En08](#).

[&] For all resonances measured by [1968Bo06](#) which do not have a measured Γ value listed in the table [1968Bo06](#) give an upper limit $\Gamma < 0.5$ keV.

^a From resonance analysis ([1968Bo06](#)—(P, α_0) and [1971BrXT](#)—(P,P₀)), $\gamma(\theta)$, $\gamma\gamma(\theta)$ and polarization measurements ([1972Ho40,1966Er06](#)), and RUL ([1974Jo02](#)), except when noted otherwise.

$\gamma(^{36}\text{Ar})$								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\ddagger$	E_f	J_f^π	Mult. [#]	$\delta^\#$	Comments
1970.38	2 ⁺	1970.3	100	0.0	0 ⁺	E2 ^{&}		
4178.32	3 ⁻	2207.9	93.2 9	1970.38	2 ⁺	E1(+M2) ^{&}	-0.04 ^{&} 2	
		4178.1	6.8 9	0.0	0 ⁺			
4329.1	(0,1,2) ⁺	2358.6	100	1970.38	2 ⁺			
		4328.8	<10	0.0	0 ⁺			
4414.40	4 ⁺	2443.9	100	1970.38	2 ⁺	E2(+M3) ^{&}	+0.05 ^{&} 3	Mult.: also A ₂ =+0.40 2, A ₄ =-0.18 3 (2002Ro24).
		4414.1	<2	0.0	0 ⁺			
4440.11	2 ⁺	2469.6	36 2	1970.38	2 ⁺			
		4439.8	64 2	0.0	0 ⁺			
4951.4	2 ⁺	537.0	<6	4414.40	4 ⁺			
		773.1	<2	4178.32	3 ⁻			
		2980.9	15 4	1970.38	2 ⁺			
		4951.0	85 4	0.0	0 ⁺			
4974.05	2 ⁻	533.9	<0.3	4440.11	2 ⁺			
		559.6	<0.4	4414.40	4 ⁺			
		795.7	78 2	4178.32	3 ⁻	M1+E2 ^{&}	-0.21 ^{&} 7	
		3003.5	4 1	1970.38	2 ⁺			
		4973.7	18 2	0.0	0 ⁺			
5171.13	5 ⁻	197.1	<4	4974.05	2 ⁻			
		219.7	<3	4951.4	2 ⁺			
		731.0	<0.3	4440.11	2 ⁺			
		756.7	12 2	4414.40	4 ⁺			
		992.8	82 3	4178.32	3 ⁻	E2(+M3) ^{&}	-0.04 ^{&} 2	
		3200.6	6 1	1970.38	2 ⁺			
		5170.7	<1	0.0	0 ⁺			
5194.4	(0 ⁺ ,1 ⁺ ,2 ⁺ ,3 ⁻)	754.3	<3	4440.11	2 ⁺			
		780.0	<3	4414.40	4 ⁺			
		3223.9	100	1970.38	2 ⁺			
		5194.4	<10	0.0	0 ⁺			
5836.0	1 ⁻	664.9	<1	5171.13	5 ⁻			
		861.9	<1	4974.05	2 ⁻			
		884.6	<1	4951.4	2 ⁺			
		1395.9	<1	4440.11	2 ⁺			
		1421.6	<1	4414.40	4 ⁺			
		1506.9	<1	4329.1	(0,1,2) ⁺			
		1657.6	1 1	4178.32	3 ⁻			
		3865.4	4 2	1970.38	2 ⁺			
		5835.5	95 2	0.0	0 ⁺	E1		
5856.65	3 ⁻	x [@]	8					
		685.5	<1	5171.13	5 ⁻			
		882.6	<2	4974.05	2 ⁻			

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40](#),[1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Mult. #	δ [#]	Comments
5856.65	3 ⁻	905.2	<2	4951.4	2 ⁺			
		1416.5	<5	4440.11	2 ⁺			
		1442.2	<4	4414.40	4 ⁺			
		1527.5	<3	4329.1	(0,1,2) ⁺			
		1678.3	13.0 10	4178.32	3 ⁻	M1+E2	-0.46 17	δ: or +2.9 9.
		3886.0	76 2	1970.38	2 ⁺	E1(+M2)	+0.02 2	
		5856.7	3.0 10	0.0	0 ⁺			
5895.92	4 ⁻	724.8	<1	5171.13	5 ⁻			
		921.9	<1	4974.05	2 ⁻			
		1481.5	<3	4414.40	4 ⁺			
		1566.8	<2	4329.1	(0,1,2) ⁺			
		1717.6	94 2	4178.32	3 ⁻	M1+E2	+0.16 2	I _γ : from 1974Jo02 ; 100 (1972Ho40).
		3925.3	6 2	1970.38	2 ⁺			I _γ : from 1974Jo02 marked As uncertain;<3 (1972Ho40).
		5895.4	<3	0.0	0 ⁺			
6136.5	4 ⁺	4165.9	100	1970.38	2 ⁺			
6217.3	5 ⁻	x [@]	12					
		360.7	<3	5856.65	3 ⁻			
		381.3	<3	5836.0	1 ⁻			
		1046.2	2.0 5	5171.13	5 ⁻			I _γ : from 1974Jo02 marked As uncertain;<2 (1972Ho40).
		1243.2	<1	4974.05	2 ⁻			
		1265.9	<2	4951.4	2 ⁺			
		1777.1	<1	4440.11	2 ⁺			
		1802.9	9 3	4414.40	4 ⁺	E1(+M2)	+0.03 7	
		1888.1	<2	4329.1	(0,1,2) ⁺			
		2038.9	77 4	4178.32	3 ⁻	E2(+M3)	+0.01 2	
		4246.7	<2	1970.38	2 ⁺			
		6216.7	<2	0.0	0 ⁺			
		1404.6	<6	4951.4	2 ⁺			
		1915.8	15 2	4440.11	2 ⁺			
6356.0	4 ⁺	1941.5	37 2	4414.40	4 ⁺			
		4385.3	48 2	1970.38	2 ⁺	E2		
		6355.4	<7	0.0	0 ⁺			
		754.3	<2	5856.65	3 ⁻			
6611.0		775.0	<1	5836.0	1 ⁻			
		1439.8	<5	5171.13	5 ⁻			
		1660	<5	4951.4	2 ⁺			
		2170.8	<6	4440.11	2 ⁺			
		2196.5	<5	4414.40	4 ⁺			
		2281.8	<6	4329.1	(0,1,2) ⁺			
		2432.6	82 3	4178.32	3 ⁻			
		4640.3	<5	1970.38	2 ⁺			
		6610.3	18 3	0.0	0 ⁺			
		2205.4	100	4440.11	2 ⁺			
6645.6	(2 ⁺ ,3 ⁺ ,4 ⁺)	2205.4	100	4440.11	2 ⁺			

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40](#),[1974Jo02](#) (continued)γ(³⁶Ar) (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Mult. [#]	δ [#]	Comments
6724	NOT 1 ⁺	x [@]	30					
		6723	70 10	0.0	0 ⁺			
6835.16	4 ⁻	978.5	4.5 10	5856.65	3 ⁻			
		1664.0	36 3	5171.13	5 ⁻	M1+E2	+0.7 3	δ: or +1.5 +40-4.
		1861.1	37 3	4974.05	2 ⁻			
		1883.7	<2	4951.4	2 ⁺			
		2395.0	4.5 10	4440.11	2 ⁺			
		2506.0	<2	4329.1	(0,1,2) ⁺			
		2656.7	18 2	4178.32	3 ⁻	M1+E2	+0.32 8	δ: or >+4.
		4864.4	<2	1970.38	2 ⁺			
		6834.5	<1	0.0	0 ⁺			
6836.50	3 ⁻	1665.3	26 2	5171.13	5 ⁻	E2(+M3)	+0.07 9	
		1862.4	11 4	4974.05	2 ⁻			
		1885.1	3.5 5	4951.4	2 ⁺			
		2396.3	2.5 10	4440.11	2 ⁺			I _γ : from 1974Jo02 marked As uncertain;<2 (1972Ho40).
		2425	<2	4414.40	4 ⁺			
		2658.7	57 4	4178.32	3 ⁻	M1+E2	-1.9 5	δ: or +1.5 +40-4.
		4865.8	<5	1970.38	2 ⁺			
		6835.8	<1	0.0	0 ⁺			
6866.9	(1,2 ⁺)	4896.2	75 5	1970.38	2 ⁺			
		6866.2	25 5	0.0	0 ⁺			
7136.5	(1 ⁻ ,2 ⁺)	1300.5	<1	5836.0	1 ⁻			
		2162.4	<2	4974.05	2 ⁻			
		2696.3	<3	4440.11	2 ⁺			
		2722.0	<2	4414.40	4 ⁺			
		2958.0	<4	4178.32	3 ⁻			
		5165.7	21 2	1970.38	2 ⁺			
		7135.7	79 2	0.0	0 ⁺			
7139.6	3 ⁺	1282.9	<2	5856.65	3 ⁻			
		1303.6	<2	5836.0	1 ⁻			
		2699.4	53 5	4440.11	2 ⁺	M1+E2 ^{&}	-0.28 3	δ: or -1.5 2 (1973Ho33).
		2725.1	<3	4414.40	4 ⁺			
		2961.1	<3	4178.32	3 ⁻			
		5168.8	47 5	1970.38	2 ⁺			
		7138.8	<2	0.0	0 ⁺			
7178.9	(1,2 ⁺)	5208.1	33 10	1970.38	2 ⁺			
		7178.1	67 10	0.0	0 ⁺			
7247.4	NOT 0 ⁻	3068.9	<5	4178.32	3 ⁻			
		5276.6	100	1970.38	2 ⁺			
		7246.6	<6	0.0	0 ⁺			
7258.6	3 ⁻	x [@]	10					
		3080.1	<12	4178.32	3 ⁻			

³⁵Cl(p,γ),(p,p'),(p,α):res **1972Ho40,1974Jo02** (continued)

 $\gamma(^{36}\text{Ar})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\ddagger$	E_f	J_f^π	Mult. #	$\delta^\#$	Comments
7258.6	3 ⁻	5287.8	90 5	1970.38	2 ⁺	E1(+M2)	-0.14 +19-9	δ : or -3.2 8.
		7257.8	<15	0.0	0 ⁺			
7336.6	3 ⁺	1479.9	<4	5856.65	3 ⁻			
		2362.5	<3	4974.05	2 ⁻			
		2385.1	<5	4951.4	2 ⁺			
		2896.4	54 2	4440.11	2 ⁺			
		2922.1	11 2	4414.40	4 ⁺	M1(+E2)	+0.02 7	δ : or -4.0 9.
		3007.4	<7	4329.1	(0,1,2) ⁺			
		3158.1	9 2	4178.32	3 ⁻			
		5365.8	26 3	1970.38	2 ⁺	M1+E2	+0.31 10	δ : or +7>.
		7335.8	<3	0.0	0 ⁺			
7353.9	6 ⁻	1497.2	<6	5856.65	3 ⁻			
		1517.9	<4	5836.0	1 ⁻			
		2182.7	100	5171.13	5 ⁻	M1+E2	-6.0 9	
		2379.8	<4	4974.05	2 ⁻			
		2402.4	<4	4951.4	2 ⁺			
		2913.7	<3	4440.11	2 ⁺			
		2939.4	<4	4414.40	4 ⁺			
		3024.7	<8	4329.1	(0,1,2) ⁺			
		3175.4	<7	4178.32	3 ⁻			
		5383.1	<5	1970.38	2 ⁺			
		7353.1	<3	0.0	0 ⁺			
7432.3		5461.5	35 15	1970.38	2 ⁺			
		7431.5	65 15	0.0	0 ⁺			
7573.1	4 ⁻	1677.1	5 1	5895.92	4 ⁻			
		1737.1	<2	5836.0	1 ⁻			
		2401.9	47 2	5171.13	5 ⁻	M1+E2	-0.49 4	δ : or -1.68 12.
		2598.9	8 1	4974.05	2 ⁻	E2		
		2621.6	<1	4951.4	2 ⁺			
		3132.8	<2	4440.11	2 ⁺			
		3158.6	5 2	4414.40	4 ⁺			
		3243.8	<2	4329.1	(0,1,2) ⁺			
		3394.6	33 3	4178.32	3 ⁻	M1+E2	-0.07 4	δ : or -3.2 5.
		5602.3	2.0 4	1970.38	2 ⁺			
		7572.2	<1	0.0	0 ⁺			
7672.1	NOT (1,2) ⁻	2697.9	20 7	4974.05	2 ⁻			
		5701.2	80 7	1970.38	2 ⁺			
7710.3	1	5739.4	63 7	1970.38	2 ⁺			
		7709.4	37 7	0.0	0 ⁺			
7749.7	NOT 0 ⁻	5778.8	100	1970.38	2 ⁺			
7879	NOT (0,3) ⁻	2043	60 6	5836.0	1 ⁻			
		2905	40 6	4974.05	2 ⁻			
8015.9	(3,4) ⁻	2159.2	23 3	5856.65	3 ⁻			

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40,1974Jo02](#) (continued)

<u>$\gamma(^{36}\text{Ar})$ (continued)</u>									
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\ddagger$	E_f	J_f^π	Comments			
8015.9	(3,4) ⁻	2844.6	18 2	5171.13	5 ⁻	I_γ : 2.0 0 In 197402 is replaced by 2.0 10 by evaluators.			
		3041.7	45 4	4974.05	2 ⁻				
		3575.6	<2	4440.11	2 ⁺				
		3601.3	2.0 10	4414.40	4 ⁺				
		3837.4	12 2	4178.32	3 ⁻				
		6045.0	<3	1970.38	2 ⁺				
		8014.9	<1	0.0	0 ⁺				
8131.9	1,(2 ⁺)	6161.0	40 7	1970.38	2 ⁺				
		8130.9	60 7	0.0	0 ⁺				
8332.5	NOT (0 to 2) ⁻	x @	70						
8472.0	(3 ⁻ ,4 ⁻ ,5 ⁻)	4153.9	30 5	4178.32	3 ⁻				
		2254.6	4.0 10	6217.3	5 ⁻				
		2576.0	13 2	5895.92	4 ⁻				
		2615.2	21 2	5856.65	3 ⁻				
		2635.9	<2	5836.0	1 ⁻				
		3300.7	32 2	5171.13	5 ⁻				
		3497.8	<2	4974.05	2 ⁻				
		3520.4	<2	4951.4	2 ⁺				
		4057.4	28 2	4414.40	4 ⁺				
		4293.4	2.0 6	4178.32	3 ⁻				
		6501.0	<1	1970.38	2 ⁺				
		8470.9	<1	0.0	0 ⁺				
		8806.4	(2 ⁺ ,3,4 ⁻)	6835.3	100		1970.38	2 ⁺	I_γ : from 1994H01 .
		8938.8		1266.7	3.6 19		7672.1	NOT (1,2) ⁻	I_γ : from 1994H01 .
		2102.2		7.3 23	6836.50		3 ⁻	I_γ : from 1994H01 .	
3082.0	27.1 39	5856.65		3 ⁻	I_γ : from 1994H01 .				
3964.5	2.8 12	4974.05		2 ⁻	I_γ : from 1994H01 .				
4524.1	9.6 26	4414.40		4 ⁺	I_γ : from 1994H01 .				
4609.4	<1	4329.1		(0,1,2) ⁺					
4760.1	47.2 45	4178.32		3 ⁻	I_γ : from 1994H01 .				
9014.9	(3 ⁻ ,4,5 ⁻)	6967.7	2.4 10	1970.38	2 ⁺	I_γ : from 1994H01 .			
		8937.6	<0.2	0.0	0 ⁺				
		3843.5	100	5171.13	5 ⁻				
		4600.2	<5	4414.40	4 ⁺				
		4685.5	<8	4329.1	(0,1,2) ⁺				
		4836.2	<3	4178.32	3 ⁻				
		7043.8	<6	1970.38	2 ⁺				
9025.3	2	9013.7	<1.4	0.0	0 ⁺				
		2158.3	1	6866.9	(1,2 ⁺)				
		4051.6	1	4974.05	2 ⁻				
		4610.6	<1	4414.40	4 ⁺				
		4695.9	<1	4329.1	(0,1,2) ⁺				
		4846.6	7	4178.32	3 ⁻	I_γ : 6.4 16 (1994H01).			

$\gamma(^{36}\text{Ar})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\ddagger$	E_f	J_f^π	Comments
9025.3	2	7054.2	90	1970.38	2 ⁺	I_γ : 93.6 81 (1994II01).
		9024.1	1	0.0	0 ⁺	
9066.4	3 ⁻	1729.8	3	7336.6	3 ⁺	I_γ : 5.1 22 (1994II01).
		2229.8	12	6836.50	3 ⁻	I_γ : 18.3 27 (1994II01).
		3170.3	3	5895.92	4 ⁻	
		3209.6	28	5856.65	3 ⁻	I_γ : 27.4 45 (1994II01).
		3895.0	1	5171.13	5 ⁻	
		4092.1	5	4974.05	2 ⁻	I_γ : 6.5 24 (1994II01).
		4114.7	3	4951.4	2 ⁺	
		4626.0	8	4440.11	2 ⁺	I_γ : 12.4 31 (1994II01).
		4651.7	5.7 19	4414.40	4 ⁺	
		4737.0	<1	4329.1	(0,1,2) ⁺	
		4887.7	23	4178.32	3 ⁻	I_γ : 24.6 23 (1994II01).
		7095.3	<1	1970.38	2 ⁺	
		9065.2	<0.3	0.0	0 ⁺	
9116.3		9115.1	100	0.0	0 ⁺	
9132.5	3 ⁻	2295.9	7	6836.50	3 ⁻	I_γ : 7.1 16 (1994II01).
		2521.4	2	6611.0		
		3236.4	4	5895.92	4 ⁻	I_γ : 2.4 10 (1994II01).
		3275.5	9	5856.65	3 ⁻	I_γ : 11.2 38 (1994II01).
		3296.3	1	5836.0	1 ⁻	I_γ : 1.2 9 (1994II01).
		4158.2	5	4974.05	2 ⁻	I_γ : 6.0 16 (1994II01).
		4717.8	2	4414.40	4 ⁺	I_γ : 2.0 12 (1994II01).
		4803.1	<1	4329.1	(0,1,2) ⁺	
		4953.8	15	4178.32	3 ⁻	I_γ : 12.5 24 (1994II01).
		7161.4	54	1970.38	2 ⁺	I_γ : 57.6 60 (1994II01).
		9131.3	1	0.0	0 ⁺	
9144.9	(2 ⁺ ,3 ⁻)	2308.3	2	6836.50	3 ⁻	
		3308.7	7	5836.0	1 ⁻	I_γ : 5.8 22 (1994II01).
		4170.6	1	4974.05	2 ⁻	
		4704.5	31	4440.11	2 ⁺	I_γ : 34.6 55 (1994II01).
		4730.2	2	4414.40	4 ⁺	
		4815.5	<1	4329.1	(0,1,2) ⁺	
		4966.2	24	4178.32	3 ⁻	I_γ : 29.4 50 (1994II01).
		7173.8	32	1970.38	2 ⁺	I_γ : 30.2 47 (1994II01).
		9143.7	1	0.0	0 ⁺	
9192.1	(3 ⁻ ,4 ⁺)	1520.0	2	7672.1	NOT (1,2) ⁻	
		1855.4	19	7336.6	3 ⁺	
		2355.5	10	6836.50	3 ⁻	
		2468.0	5	6724	NOT 1 ⁺	
		2836.0	2	6356.0	4 ⁺	
		2974.7	4	6217.3	5 ⁻	
		3055.5	2	6136.5	4 ⁺	

³⁵Cl(p,γ),(p,p′),(p,α):res [1972Ho40,1974Jo02](#) (continued)

 $\gamma(^{36}\text{Ar})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\ddagger$	E_f	J_f^π	Comments
9192.1	(3 ⁻ ,4 ⁺)	3296.0	5	5895.92	4 ⁻	
		3335.3	4	5856.65	3 ⁻	
		4020.7	9	5171.13	5 ⁻	
		4240.4	8	4951.4	2 ⁺	
		4751.5	3	4440.11	2 ⁺	
		4777.4	19	4414.40	4 ⁺	
		4862.6	<1	4329.1	(0,1,2) ⁺	
		5013.4	8	4178.32	3 ⁻	
		7220.9	<2	1970.38	2 ⁺	
		9190.8	<3	0.0	0 ⁺	
9220.2	1 ⁺	3384.0	0.8	5836.0	1 ⁻	I_γ : 0.8 4 (1994H01).
		4245.9	3	4974.05	2 ⁻	I_γ : 3.1 6 (1994H01).
		4268.5	0.8	4951.4	2 ⁺	
		4779.7	11	4440.11	2 ⁺	I_γ : 11.7 12 (1994H01).
		4805.5	<1	4414.40	4 ⁺	
		4890.7	0.4	4329.1	(0,1,2) ⁺	
		5041.5	<1	4178.32	3 ⁻	
		7249.0	50	1970.38	2 ⁺	I_γ : 47.3 33 (1994H01).
		9218.9	34	0.0	0 ⁺	I_γ : 37.1 27 (1994H01).
		9240.5				
9240.5	(1 ⁻ ,2 ⁻ ,3 ⁻)	1993.0	7	7247.4	NOT 0 ⁻	
		2103.9	6	7136.5	(1 ⁻ ,2 ⁺)	
		2373.5	3	6866.9	(1,2 ⁺)	
		3404.3	8	5836.0	1 ⁻	
		4266.2	6	4974.05	2 ⁻	
		4288.8	8	4951.4	2 ⁺	
		4825.8	<1	4414.40	4 ⁺	
		4911.0	4	4329.1	(0,1,2) ⁺	
		5061.8	2	4178.32	3 ⁻	
		7269.3	56	1970.38	2 ⁺	
9248.4	(1 ⁻ ,2 ⁻ ,3 ⁻)	9239.2	<0.4	0.0	0 ⁺	
		2411.8	16	6836.50	3 ⁻	
		3391.6	4	5856.65	3 ⁻	
		3412.2	3	5836.0	1 ⁻	
		4274.1	3	4974.05	2 ⁻	
		4807.9	33	4440.11	2 ⁺	
		4833.7	<1	4414.40	4 ⁺	
		4918.9	<2	4329.1	(0,1,2) ⁺	
		5069.7	11	4178.32	3 ⁻	
		7277.2	29	1970.38	2 ⁺	
9258.3	3 ⁻	9247.1	1	0.0	0 ⁺	
		2423.1	4	6835.16	4 ⁻	
		2902.2	3	6356.0	4 ⁺	
		3362.2	7	5895.92	4 ⁻	

³⁵Cl(p,γ),(p,p'),(p,α):res 1972Ho40,1974Jo02 (continued)γ(³⁶Ar) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ[‡]</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[#]</u>	<u>δ[#]</u>	<u>Comments</u>
9258.3	3 ⁻	3401.5	3	5856.65	3 ⁻			
		3422.1	2	5836.0	1 ⁻			
		4284.0	3	4974.05	2 ⁻			
		4306.6	2	4951.4	2 ⁺			
		4817.8	22	4440.11	2 ⁺			
		4843.6	12	4414.40	4 ⁺			
		4928.8	<1	4329.1	(0,1,2) ⁺			
		5079.6	36	4178.32	3 ⁻			
		7287.1	6	1970.38	2 ⁺			
		9257.0	<1	0.0	0 ⁺			
9300.1	4 ⁻	1628.0	0.6	7672.1	NOT (1,2) ⁻			
		2041.4	3	7258.6	3 ⁻			
		2464.8	47	6835.16	4 ⁻	M1(+E2)	0.0 2	Mult.,δ: A ₂ =+0.29 2, A ₄ =0.00 2 (1973Ho33).
		3082.7	4	6217.3	5 ⁻			
		3404.0	13	5895.92	4 ⁻	M1(+E2)	-0.12 17	Mult.,δ: A ₂ =+0.23 3, A ₄ =-0.04 3 (1973Ho33).
		3443.3	5	5856.65	3 ⁻	M1(+E2)	-0.01 7	Mult.,δ: A ₂ =-0.29 7, A ₄ =+0.19 7 (1973Ho33).
		4128.7	14	5171.13	5 ⁻	M1(+E2)	+0.05 +8-3	Mult.,δ: A ₂ =-0.13 5, A ₄ =-0.04 5 (1973Ho33).
		4885.3	6	4414.40	4 ⁺	E1(+M2)	-0.1 2	Mult.,δ: A ₂ =+0.23 5, A ₄ =+0.02 5(1973Ho33).
		5121.4	7	4178.32	3 ⁻	M1(+E2)	+0.02 6	Mult.,δ: A ₂ =-0.15 4, A ₄ =-0.04 4 (1973Ho33).
		7328.9	0.4	1970.38	2 ⁺			
9342.5	3 ⁻	1769.4	1	7573.1	4 ⁻			I _γ : 2.4 10 (1994II01).
		2505.9	12	6836.50	3 ⁻	M1+E2	+0.09 4	Mult.,δ: A ₂ =+0.27 3, A ₄ =0.00 3 (1973Ho33).
								I _γ : 13.0 40 (1994II01).
		3446.4	5	5895.92	4 ⁻	M1(+E2)	-0.02 3	Mult.,δ: A ₂ =-0.06 4, A ₄ =-0.02 4 (1973Ho33).
								I _γ : 4.9 12 (1994II01).
		3485	6	5856.65	3 ⁻	M1+E2	+0.10 7	Mult.,δ: A ₂ =+0.31 3, A ₄ =-0.05 3 (1973Ho33).
								I _γ : 5.8 12 (1994II01).
		4368.2	11	4974.05	2 ⁻	M1+E2	-0.10 2	Mult.,δ: A ₂ =-0.28 2, A ₄ =-0.02 2 (1973Ho33).
								I _γ : 13.7 19 (1994II01).
		4927.7	1	4414.40	4 ⁺			
		5013.0	<3	4329.1	(0,1,2) ⁺			
		5163.8	59	4178.32	3 ⁻	M1(+E2)&	+0.017 17	I _γ : 55.3 60 (1994II01).
								Mult.: A ₂ =+0.26 1, A ₄ =-0.03 2 (1973Ho33).
								δ: weighted average of: +0.02 2 (1973Ho33), +0.01 3 (1966Er06).
		7371.3	5	1970.38	2 ⁺	E1+M2	+0.11 3	I _γ : 4.9 8 (1994II01).
		9341.2	<0.3	0.0	0 ⁺			
9356.0	1 ⁻ ,2 ⁺	2019.3	6	7336.6	3 ⁺			
		4381.7	5	4974.05	2 ⁻			
		4404.3	7	4951.4	2 ⁺			
		4941.2	<2	4414.40	4 ⁺			
		5026.5	<2	4329.1	(0,1,2) ⁺			
		5177.3	6	4178.32	3 ⁻			
		7384.8	8	1970.38	2 ⁺			

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40](#),[1974Jo02](#) (continued)

 $\gamma(^{36}\text{Ar})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\ddagger$	E_f	J_f^π	Comments
9356.0	1 ⁻ ,2 ⁺	9354.7	68	0.0	0 ⁺	
9365.9	1 ⁻	1486.9	1.5	7879	NOT (0,3) ⁻	
		2108.5	6	7258.6	3 ⁻	
		2229.3	11	7136.5	(1 ⁻ ,2 ⁺)	
		2754.8	3	6611.0		
		3529.7	13	5836.0	1 ⁻	
		4171.2	0.5	5194.4	(0 ⁺ ,1 ⁺ ,2 ⁺ ,3 ⁻)	I_γ : from 1974Jo02 marked As uncertain.
		4414.2	1	4951.4	2 ⁺	
		4925.4	4	4440.11	2 ⁺	
		5036.4	1	4329.1	(0,1,2) ⁺	
		5187.2	<1	4178.32	3 ⁻	
		7394.7	52	1970.38	2 ⁺	
		9364.6	7	0.0	0 ⁺	
9374.1	(1 ⁻ ,2 ⁻ ,3 ⁻)	2538.8	2	6835.16	4 ⁻	
		3537.9	3	5836.0	1 ⁻	
		4399.8	1	4974.05	2 ⁻	
		4933.6	1	4440.11	2 ⁺	I_γ : from 1974Jo02 marked As uncertain.
		4959.3	<1	4414.40	4 ⁺	
		5044.6	<1	4329.1	(0,1,2) ⁺	
		5195.4	5	4178.32	3 ⁻	
		7402.9	87	1970.38	2 ⁺	
		9372.8	1	0.0	0 ⁺	
9379.9	(2 ⁺ ,3 ⁺ ,4 ⁺)	2240.2	2	7139.6	3 ⁺	
		2543.3	1	6836.50	3 ⁻	I_γ : from 1974Jo02 marked As uncertain.
		4939.4	20	4440.11	2 ⁺	
		4965.1	10	4414.40	4 ⁺	
		5050.4	<1	4329.1	(0,1,2) ⁺	
		5201.2	2	4178.32	3 ⁻	
		7408.7	65	1970.38	2 ⁺	
		9378.6	<0.1	0.0	0 ⁺	
9393.4	(2 ⁺ ,3 ⁺ ,4 ⁺)	4441.7	3	4951.4	2 ⁺	
		4952.9	3	4440.11	2 ⁺	
		4978.6	4	4414.40	4 ⁺	
		5063.9	<1	4329.1	(0,1,2) ⁺	
		5214.7	3	4178.32	3 ⁻	
		7422.2	87	1970.38	2 ⁺	
		9392.1	<1	0.0	0 ⁺	
9439.2	(2 ⁺ ,3 ⁺ ,4 ⁺)	4998.7	19	4440.11	2 ⁺	
		5024.4	14	4414.40	4 ⁺	
		5109.7	<3	4329.1	(0,1,2) ⁺	
		5260.5	<4	4178.32	3 ⁻	
		7468.0	67	1970.38	2 ⁺	
		9437.9	<1	0.0	0 ⁺	

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40,1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ[‡]</u>	<u>E_f</u>	<u>J_f^π</u>
9448.1	1 ⁻ ,2 ⁺ ,3 ⁻	2611.5	7	6836.50	3 ⁻
		4473.8	6	4974.05	2 ⁻
		5033.3	3	4414.40	4 ⁺
		5118.6	<2	4329.1	(0,1,2) ⁺
		5269.4	31	4178.32	3 ⁻
		7476.9	53	1970.38	2 ⁺
		9446.8	<1	0.0	0 ⁺
9465.9	1 ⁻ ,2 ⁺	1755.6	1	7710.3	1
		5025.4	2	4440.11	2 ⁺
		5051.1	1	4414.40	4 ⁺
		5136.4	3	4329.1	(0,1,2) ⁺
		5287.2	2	4178.32	3 ⁻
		7494.7	49	1970.38	2 ⁺
		9464.6	42	0.0	0 ⁺
9474.0	(1,2)	1342.1	8	8131.9	1,(2 ⁺)
		1763.7	10	7710.3	1
		4522.3	6	4951.4	2 ⁺
		5033.5	30	4440.11	2 ⁺
		5059.2	<2	4414.40	4 ⁺
		5144.5	<4	4329.1	(0,1,2) ⁺
		5295.3	<3	4178.32	3 ⁻
		7502.8	9	1970.38	2 ⁺
		9472.7	37	0.0	0 ⁺
9502.8	(2,3)	2166.1	8	7336.6	3 ⁺
		2891.7	16	6611.0	
		5062.3	14	4440.11	2 ⁺
		5088.0	4	4414.40	4 ⁺
		5173.3	<1	4329.1	(0,1,2) ⁺
		5324.1	<1	4178.32	3 ⁻
		7531.6	57	1970.38	2 ⁺
		9501.5	1	0.0	0 ⁺
9509.6	(2 ⁺ ,3 ⁺ ,4 ⁺)	5069.1	3	4440.11	2 ⁺
		5094.8	5	4414.40	4 ⁺
		5180.1	<2	4329.1	(0,1,2) ⁺
		5330.9	<3	4178.32	3 ⁻
		7538.4	92	1970.38	2 ⁺
		9508.3	<0.5	0.0	0 ⁺
9542.0	(1,2,3) ⁻	2705.4	20	6836.50	3 ⁻
		3705.8	7	5836.0	1 ⁻
		4590.3	7	4951.4	2 ⁺
		5101.5	10	4440.11	2 ⁺
		5127.2	<1	4414.40	4 ⁺
		5212.5	<2	4329.1	(0,1,2) ⁺

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40,1974Jo02](#) (continued)γ(³⁶Ar) (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Mult.#	δ [#]	Comments
9542.0	(1,2,3) ⁻	5363.3	11	4178.32	3 ⁻			
		7570.8	45	1970.38	2 ⁺			
		9540.6	<0.6	0.0	0 ⁺			
9550.3	(0 ⁺ to 4 ⁺)	4575.9	1	4974.05	2 ⁻			I _γ : from 1974Jo02 marked As uncertain.
		5109.8	17	4440.11	2 ⁺			
		5135.5	<0.3	4414.40	4 ⁺			
		5220.8	<0.3	4329.1	(0,1,2) ⁺			
		5371.5	<1	4178.32	3 ⁻			
		7579.1	82	1970.38	2 ⁺			
		9548.9	<0.1	0.0	0 ⁺			
9574.3	4 ⁻	1558.4	1	8015.9	(3,4) ⁻			
		2001.1	18	7573.1	4 ⁻	M1+E2	-0.08 3	Mult.,δ: A ₂ =+0.31 4, A ₄ =-0.01 5 (1973Ho33).
		3356.8	2	6217.3	5 ⁻	M1+E2	+0.03 6	Mult.,δ: A ₂ =-0.18 16, A ₄ =+0.03 18 (1973Ho33).
		3678	14	5895.92	4 ⁻	M1+E2	-0.06 4	Mult.,δ: A ₂ =+0.34 5, A ₄ =-0.02 4 (1973Ho33).
		3717.4	3	5856.65	3 ⁻	M1+E2	+0.05 3	Mult.,δ: A ₂ =-0.17 7, A ₄ =-0.02 8 (1973Ho33).
		4402.9	50	5171.13	5 ⁻	M1+E2	+0.05 1	Mult.,δ: A ₂ =-0.17 2, A ₄ =-0.02 2 (1973Ho33).
		5159.6	<1	4414.40	4 ⁺			
		5244.8	<1	4329.1	(0,1,2) ⁺			
		5395.5	12	4178.32	3 ⁻	M1+E2	-0.03 1	Mult.,δ: A ₂ =-0.26 2, A ₄ =-0.07 3 (1973Ho33).
		7603.1	<1	1970.38	2 ⁺			
		9572.9	<0.1	0.0	0 ⁺			
9595.4	2 ⁺	2347.9	2	7247.4	NOT 0 ⁻			
		2458.8	9	7136.5	(1 ⁻ ,2 ⁺)			
		3759.2	8	5836.0	1 ⁻			
		4400.7	2	5194.4	(0 ⁺ ,1 ⁺ ,2 ⁺ ,3 ⁻)			
		5154.9	4	4440.11	2 ⁺			
		5180.6	<1	4414.40	4 ⁺			
		5265.9	<1	4329.1	(0,1,2) ⁺			
		5416.6	<2	4178.32	3 ⁻			
		7624.2	56	1970.38	2 ⁺			
		9594.0	19	0.0	0 ⁺			
9606.8	(0,1,2) ⁻	1896.4	6	7710.3	1			
		3770.6	94	5836.0	1 ⁻			
		5192.0	<3	4414.40	4 ⁺			
		5277.3	<2	4329.1	(0,1,2) ⁺			
		5428.0	<2	4178.32	3 ⁻			
		7635.6	<2	1970.38	2 ⁺			
		9605.4	<0.5	0.0	0 ⁺			
9667.1	3 ⁻	3771.0	5	5895.92	4 ⁻			
		4495.7	3	5171.13	5 ⁻			
		5226.6	8	4440.11	2 ⁺			
		5252.3	10	4414.40	4 ⁺			
		5337.6	<2	4329.1	(0,1,2) ⁺			

³⁵Cl(p,γ),(p,p'),(p,α):res **1972Ho40,1974Jo02** (continued)

γ(³⁶Ar) (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Mult. [#]	δ [#]	Comments
9667.1	3 ⁻	5488.3	11	4178.32	3 ⁻			
		7695.8	63	1970.38	2 ⁺			
		9665.7	<1	0.0	0 ⁺			
9681.9	4 ⁺ ,6 ⁺	5267.1	100	4414.40	4 ⁺	E2,M1+E2		Mult.,δ: A ₂ =+0.39 5, A ₄ =-0.19 7, ΔJ=2 E2 γ, or ΔJ=0 M1+E2 γ with δ=+1.1 4 (2002Ro24).
		5352.4	<2	4329.1	(0,1,2) ⁺			
		5503.1	<3	4178.32	3 ⁻			
		7710.6	<1	1970.38	2 ⁺			
9734.3	1 ⁻ ,3 ⁻ ,4 ⁺	3123.2		6611.0				
		5555.5		4178.32	3 ⁻			
9737.5	3 ⁻	1987.7	1	7749.7	NOT 0 ⁻			
		2065.3	3	7672.1	NOT (1,2) ⁻			
		2490.0	9	7247.4	NOT 0 ⁻			
		2600.9	8	7136.5	(1 ⁻ ,2 ⁺)			
		2870.5	1	6866.9	(1,2 ⁺)			
		2900.9	19	6836.50	3 ⁻			
		3126.4	4	6611.0				
		3880.6	8	5856.65	3 ⁻			
		3901.3	10	5836.0	1 ⁻			
		4763.1	5	4974.05	2 ⁻			
		4785.8	0.8	4951.4	2 ⁺			
		5297.0	16	4440.11	2 ⁺			
		5322.7	<1	4414.40	4 ⁺			
		5408.0	<1	4329.1	(0,1,2) ⁺			
		5558.7	2	4178.32	3 ⁻			
		7766.2	13	1970.38	2 ⁺			
		9736.1	0.2	0.0	0 ⁺			
9764.5	(3 ⁻ ,4 ⁻ ,5 ⁻)	2505.8	2	7258.6	3 ⁻			
		2927.9	18	6836.50	3 ⁻			
		3907.6	4	5856.65	3 ⁻			
		4593.1	37	5171.13	5 ⁻			
		5349.7	35	4414.40	4 ⁺			
		5435.0	<2	4329.1	(0,1,2) ⁺			
		5585.7	8	4178.32	3 ⁻			
		7793.2	<1	1970.38	2 ⁺			
9812.2	(1,2,3 ⁻)	5371.7	34	4440.11	2 ⁺			
		5397.4	<2	4414.40	4 ⁺			
		5482.7	16	4329.1	(0,1,2) ⁺			
		5633.4	8	4178.32	3 ⁻			
		7840.9	27	1970.38	2 ⁺			
		9810.8	15	0.0	0 ⁺			
9862.6	3 ⁺	2525.9	33	7336.6	3 ⁺	M1(+E2)	-0.07 10	Mult.,δ: A ₂ =+0.32 3, A ₄ =-0.01 3 (1973Ho33).
		3251.4	8	6611.0				

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40,1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Mult. [#]	δ [#]	Comments
9862.6	3 ⁺	5422.1	31	4440.11	2 ⁺	(M1+)E2		Mult.,δ: A ₂ =+0.11 4, A ₄ =+0.29 4 (1973Ho33).
		5447.8	<3	4414.40	4 ⁺			
		5533.0	<3	4329.1	(0,1,2) ⁺			
		5683.8	8	4178.32	3 ⁻	E1(+M2)	+1.0 +16-7	Mult.,δ: A ₂ =+0.52 15, A ₄ =-0.17 14 (1973Ho33).
		7891.3	19	1970.38	2 ⁺	M1+E2	>+8	
		9861.1	1	0.0	0 ⁺			Mult.,δ: A ₂ =+0.21 4, A ₄ =+0.27 4 (1973Ho33).
		9878.6	(2 ⁺ ,3 ⁺ ,4 ⁺)	2541.9	20	7336.6	3 ⁺	
		3267.4	36	6611.0				
9878.6	(2 ⁺ ,3 ⁺ ,4 ⁺)	4021.9	3	5856.65	3 ⁻			
		5438.0	27	4440.11	2 ⁺			
		5463.8	11	4414.40	4 ⁺			
		5549.0	<1	4329.1	(0,1,2) ⁺			
		5699.8	3	4178.32	3 ⁻			
		7907.3	<1	1970.38	2 ⁺			
		9877.1	<0.5	0.0	0 ⁺			
		9889.3		2641.8	1	7247.4	NOT 0 ⁻	
		3278.1	1	6611.0				
		3993.1	2	5895.92	4 ⁻			
		4032.4	2	5856.65	3 ⁻			
		4053.1	3	5836.0	1 ⁻			
		4937.5	3	4951.4	2 ⁺			
		5448.7	11	4440.11	2 ⁺			
		5474.5	<1	4414.40	4 ⁺			
		5559.7	<1	4329.1	(0,1,2) ⁺			
9902.1	4 ⁺	5710.5	11	4178.32	3 ⁻			
		7918.0	65	1970.38	2 ⁺			
		9887.8	1	0.0	0 ⁺			
		2229.9	3	7672.1	NOT (1,2) ⁻			
		2565.4	5	7336.6	3 ⁺			
		3065.5	11	6836.50	3 ⁻			
		3684.6	2	6217.3	5 ⁻			
		4730.6	6	5171.13	5 ⁻			
		4950.3	9	4951.4	2 ⁺			
		5461.5	7	4440.11	2 ⁺			
		5487.3	3	4414.40	4 ⁺			
		5572.5	<1	4329.1	(0,1,2) ⁺			
		5723.3	17	4178.32	3 ⁻			
		7930.8	37	1970.38	2 ⁺			
		9927.4	5 ⁻	2668.7	5	7258.6	3 ⁻	
				3090.8	6	6836.50	3 ⁻	
9927.4	5 ⁻			3709.9	1	6217.3	5 ⁻	
				3790.7	3	6136.5	4 ⁺	
				4031.2	2	5895.92	4 ⁻	
						E1		Mult.,δ: A ₂ =-0.17 5, A ₄ =+0.05 5, δ=+0.06 3 (2002Ro24).

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40](#),[1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

E _i (level)	J ^π _i	E [†] _γ	I [‡] _γ	E _f	J ^π _f	Mult.#	Comments			
9927.4	5 ⁻	4070.5	10	5856.65	3 ⁻	E2	Mult.,δ: A ₂ =+0.42 7, A ₄ =-0.44 10 (2002Ro24).			
		4755.9	9	5171.13	5 ⁻					
		5511.5	62	4414.40	4 ⁺	E1				
		5597.8	<1	4329.1	(0,1,2) ⁺					
		5748.6	2	4178.32	3 ⁻					
9942.5	(2,3 ⁻)	7956.1	<1	1970.38	2 ⁺		Mult.,δ: A ₂ =-0.33 4, A ₄ =+0.03 5, δ=-0.2 5 (2002Ro24).			
		2605.8	3	7336.6	3 ⁺					
		2695.0	4	7247.4	NOT 0 ⁻					
		2805.9	2	7136.5	(1 ⁻ ,2 ⁺)					
		3105.9	1	6836.50	3 ⁻					
		3331.3	20	6611.0						
		4106.2	3	5836.0	1 ⁻					
		4968.1	6	4974.05	2 ⁻					
		4990.7	1	4951.4	2 ⁺					
		5501.9	3	4440.11	2 ⁺					
		5527.6	<1	4414.40	4 ⁺					
		5612.9	<1	4329.1	(0,1,2) ⁺					
		5763.7	1	4178.32	3 ⁻					
		7971.5	55	1970.38	2 ⁺					
		9941.5	1	0.0	0 ⁺					
9956.9	(1,2 ⁺)	2709.4	0.3	7247.4	NOT 0 ⁻		I _γ : from 1974Jo02 marked As uncertain.			
		4120.6	2	5836.0	1 ⁻					
		4762.2	1.5	5194.4	(0 ⁺ ,1 ⁺ ,2 ⁺ ,3 ⁻)					
		4982.5	3	4974.05	2 ⁻					
		5516.3	4	4440.11	2 ⁺					
		5542.0	<0.2	4414.40	4 ⁺					
		5627.3	0.2	4329.1	(0,1,2) ⁺					
		5778.1	<0.4	4178.32	3 ⁻					
		7985.6	1	1970.38	2 ⁺					
		9955.4	88	0.0	0 ⁺					
		9983.2	1 ⁺ ,(2 ⁺)	2735.7	0.5	7247.4		NOT 0 ⁻		I _γ : from 1974Jo02 marked As uncertain.
				4146.9	1	5836.0		1 ⁻		
4788.5	2			5194.4	(0 ⁺ ,1 ⁺ ,2 ⁺ ,3 ⁻)					
5008.8	2			4974.05	2 ⁻					
5542.6	5			4440.11	2 ⁺					
5568.3	<0.1			4414.40	4 ⁺					
5653.6	0.5			4329.1	(0,1,2) ⁺					
8011.9	3			1970.38	2 ⁺					
9992.9		9981.7	86	0.0	0 ⁺		I _γ : from 1974Jo02 marked As uncertain.			
		1860.9	3	8131.9	1,(2 ⁺)					
		2419.7	2	7573.1	4 ⁻					
		3157.6	3	6835.16	4 ⁻					
		3775.4	4	6217.3	5 ⁻					

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40](#),[1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Comments
9992.9		4096.7	10	5895.92	4 ⁻	
		4136.0	1	5856.65	3 ⁻	
		4821.4	21	5171.13	5 ⁻	
		5018.5	2	4974.05	2 ⁻	
		5578.0	9	4414.40	4 ⁺	
		5663.3	<2	4329.1	(0,1,2) ⁺	
		5814.1	39	4178.32	3 ⁻	
		8021.6	6	1970.38	2 ⁺	
10002.4	(1 ⁻ ,2,3)	3391.2	8	6611.0		
		5028.0	19	4974.05	2 ⁻	
		5561.8	13	4440.11	2 ⁺	
		5587.5	<4	4414.40	4 ⁺	
		5672.8	<4	4329.1	(0,1,2) ⁺	
		5823.6	51	4178.32	3 ⁻	
		8031.6	<5	1970.38	2 ⁺	
		10000.9	9	0.0	0 ⁺	
10044.4	1 ⁻	5629.5	<1	4414.40	4 ⁺	
		5714.8	<1	4329.1	(0,1,2) ⁺	
		5865.6	<1	4178.32	3 ⁻	
		8073.1	<1	1970.38	2 ⁺	
		10042.9	100	0.0	0 ⁺	
10050.6	2 ⁺	5610.0	6	4440.11	2 ⁺	
		5635.7	6	4414.40	4 ⁺	
		5871.8	34	4178.32	3 ⁻	
		8079.3	<4	1970.38	2 ⁺	
		10049.1	54	0.0	0 ⁺	
10076.7	(1 ⁻ ,2,3)	5102.3	7	4974.05	2 ⁻	
		5636.1	10	4440.11	2 ⁺	
		5661.8	<2	4414.40	4 ⁺	
		5747.1	<2	4329.1	(0,1,2) ⁺	
		5897.9	52	4178.32	3 ⁻	
		8105.3	29	1970.38	2 ⁺	
		10075.2	2	0.0	0 ⁺	
10094.9	2 ⁺	2384.5	10	7710.3	1	
		2758.2	10	7336.6	3 ⁺	
		4900.1	4	5194.4	(0 ⁺ ,1 ⁺ ,2 ⁺ ,3 ⁻)	I _γ : from 1974Jo02 marked As uncertain.
		5120.5	3	4974.05	2 ⁻	
		5654.3	4	4440.11	2 ⁺	
		5680.0	<2	4414.40	4 ⁺	
		5765.3	1	4329.1	(0,1,2) ⁺	
		5916.1	12	4178.32	3 ⁻	
		8123.5	6	1970.38	2 ⁺	
		10093.4	50	0.0	0 ⁺	

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40](#),[1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Comments
10099.4	1 ⁻	3488.2	7	6611.0		
		5124.0	1	4974.05	2 ⁻	
		5658.8	6	4440.11	2 ⁺	
		5684.5	<1	4414.40	4 ⁺	
		5769.8	1	4329.1	(0,1,2) ⁺	I _γ : from 1974Jo02 marked As uncertain.
		5920.6	<2	4178.32	3 ⁻	
		8128.0	3	1970.38	2 ⁺	
		10097.9	82	0.0	0 ⁺	
10139.5	(2 ⁺ ,3 ⁻)	2802.8	3	7336.6	3 ⁺	
		5187.7	9	4951.4	2 ⁺	
		5724.6	32	4414.40	4 ⁺	
		5809.9	<2	4329.1	(0,1,2) ⁺	
		5960.7	52	4178.32	3 ⁻	
		8168.1	2	1970.38	2 ⁺	
		10138.0	2	0.0	0 ⁺	
		3006.4	3	7136.5	(1 ⁻ ,2 ⁺)	I _γ : from 1974Jo02 marked As uncertain.
10143.0	(1 ⁻ ,2)	5168.6	10	4974.05	2 ⁻	
		5191.2	2	4951.4	2 ⁺	I _γ : from 1974Jo02 marked As uncertain.
		5702.4	2	4440.11	2 ⁺	I _γ : from 1974Jo02 marked As uncertain.
		5728.1	1	4414.40	4 ⁺	
		5813.4	<1	4329.1	(0,1,2) ⁺	
		5964.2	3	4178.32	3 ⁻	
		8171.6	37	1970.38	2 ⁺	
		10141.5	42	0.0	0 ⁺	
10149.6	(3 ⁻ ,4)	2477.4	2	7672.1	NOT (1,2) ⁻	I _γ : from 1974Jo02 marked As uncertain.
		2576.4	2	7573.1	4 ⁻	I _γ : from 1974Jo02 marked As uncertain.
		2890.9	3	7258.6	3 ⁻	I _γ : from 1974Jo02 marked As uncertain.
		3009.7	8	7139.6	3 ⁺	
		3313.0	6	6836.50	3 ⁻	
		3314.3	13	6835.16	4 ⁻	
		3932.1	17	6217.3	5 ⁻	
		4253.4	1	5895.92	4 ⁻	I _γ : from 1974Jo02 marked As uncertain.
		4978.1	18	5171.13	5 ⁻	
		5734.7	12	4414.40	4 ⁺	
		5820.0	<2	4329.1	(0,1,2) ⁺	
		5970.8	16	4178.32	3 ⁻	
		8178.2	<2	1970.38	2 ⁺	
		10148.1	2	0.0	0 ⁺	
10167.4	3 ⁻	2495.2	7	7672.1	NOT (1,2) ⁻	
		4310.5	12	5856.65	3 ⁻	
		5193.0	3	4974.05	2 ⁻	
		5726.8	10	4440.11	2 ⁺	
		5752.5	40	4414.40	4 ⁺	

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40](#),[1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Mult.#	δ [#]	Comments
10167.4	3 ⁻	5837.8	<2	4329.1	(0,1,2) ⁺			
		5988.6	13	4178.32	3 ⁻			
		8196.0	10	1970.38	2 ⁺			
		10165.9	5	0.0	0 ⁺			
10173.4	(1 ⁻ ,2 ⁺)	2294.3	1	7879	NOT (0,3) ⁻			
		3562.2	1	6611.0				
		5732.8	2	4440.11	2 ⁺			
		5758.5	<1	4414.40	4 ⁺			
		5843.8	1	4329.1	(0,1,2) ⁺			
		5994.5	<1	4178.32	3 ⁻			
		8202.0	9	1970.38	2 ⁺			
		10171.9	86	0.0	0 ⁺			
10193.6	(3 ⁻ ,4,5,6 ⁺)	5022.1	13	5171.13	5 ⁻			
		5778.7	87	4414.40	4 ⁺			
		5864.0	<6	4329.1	(0,1,2) ⁺			
		6014.7	<4	4178.32	3 ⁻			
10220.3	4 ⁽⁻⁾	3080.6	15	7139.6	3 ⁺	(E1(+M2)) ^{&}	+0.03 2	Mult.,δ: A ₂ =-0.18 3, A ₄ =-0.02 3 (1973Ho33). δ: from 1973Ho33 ; other: +0.03 14 (1966Er06).
		3574.5	3	6645.6	(2 ⁺ ,3 ⁺ ,4 ⁺)			
		3864.1	5	6356.0	4 ⁺			
		5805.4	74	4414.40	4 ⁺			δ: +0.09 5 (1966Er06).
		5890.7	<1	4329.1	(0,1,2) ⁺			
		6041.4	2	4178.32	3 ⁻			
		8248.9	1	1970.38	2 ⁺			
		10218.7	<0.1	0.0	0 ⁺			
10256.0	(3 ⁻ ,4)	2240.0	4	8015.9	(3,4) ⁻			
		2583.8	4	7672.1	NOT (1,2) ⁻			
		2682.8	2	7573.1	4 ⁻			
		2902.0	2	7353.9	6 ⁻			I _γ : from 1974Jo02 marked As uncertain.
		2919.3	4	7336.6	3 ⁺			
		3420.7	17	6835.16	4 ⁻			
		3531.8	2	6724	NOT 1 ⁺			I _γ : from 1974Jo02 marked As uncertain.
		4038.5	15	6217.3	5 ⁻			
		5084.5	27	5171.13	5 ⁻			
		5841.1	9	4414.40	4 ⁺			
		5926.4	<2	4329.1	(0,1,2) ⁺			
		6077.1	14	4178.32	3 ⁻			
		8284.6	<2	1970.38	2 ⁺			
		10254.4	<1	0.0	0 ⁺			
10257.5	(3 ⁻ ,4 ⁺)	5086.0	6	5171.13	5 ⁻			
		5842.6	91	4414.40	4 ⁺			
		5927.9	<3	4329.1	(0,1,2) ⁺			
		6078.6	<5	4178.32	3 ⁻			

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40,1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Comments
10257.5	(3 ⁻ ,4 ⁺)	8286.1	3	1970.38	2 ⁺	
		10255.9	<1	0.0	0 ⁺	
10267.3	1 ⁻	3400.2	2	6866.9	(1,2 ⁺)	I _γ : from 1974Jo02 marked As uncertain.
		4410.4	1	5856.65	3 ⁻	I _γ : from 1974Jo02 marked As uncertain.
		5072.5	2	5194.4	(0 ⁺ ,1 ⁺ ,2 ⁺ ,3 ⁻)	
		5826	4	4440.11	2 ⁺	
		5852.4	<1	4414.40	4 ⁺	
		5937.7	4	4329.1	(0,1,2) ⁺	
		6088.4	<2	4178.32	3 ⁻	
		8295.9	53	1970.38	2 ⁺	
		10265.7	34	0.0	0 ⁺	
10271.7	(3 ⁻ ,4 ⁻ ,5 ⁻)	2254.7	7	8015.9	(3,4) ⁻	
		2599.5	5	7672.1	NOT (1,2) ⁻	
		3436.4	22	6835.16	4 ⁻	
		4054.2	13	6217.3	5 ⁻	
		4414.8	6	5856.65	3 ⁻	
		5100.2	24	5171.13	5 ⁻	
		5856.8	3	4414.40	4 ⁺	
		5942.1	<1	4329.1	(0,1,2) ⁺	
		6092.8	20	4178.32	3 ⁻	
10281.1	3 ⁻	2944.4	9	7336.6	3 ⁺	
		3669.9	22	6611.0		
		5109.6	11	5171.13	5 ⁻	
		5306.6	17	4974.05	2 ⁻	
		5329.3	21	4951.4	2 ⁺	
		5840.5	11	4440.11	2 ⁺	
		5866.2	5	4414.40	4 ⁺	
		5951.5	<3	4329.1	(0,1,2) ⁺	
		6102.2	4	4178.32	3 ⁻	
		8309.7	<2	1970.38	2 ⁺	
		10279.5	<1	0.0	0 ⁺	
10301.5	4 ⁺	2964.8	2.5	7336.6	3 ⁺	
		3464.8	1.0	6836.50	3 ⁻	
		4164.7	0.5	6136.5	4 ⁺	I _γ : from 1974Jo02 marked As uncertain.
		5860.9	10	4440.11	2 ⁺	
		5886.6	9	4414.40	4 ⁺	
		5971.9	<1	4329.1	(0,1,2) ⁺	
		6122.6	5	4178.32	3 ⁻	
		8330.1	72	1970.38	2 ⁺	
		10299.9	<0.3	0.0	0 ⁺	
10308.7	(2,3) ⁻	2972.0	9	7336.6	3 ⁺	
		3050.0	4	7258.6	3 ⁻	
		4412.5	7	5895.92	4 ⁻	

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40](#),[1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

E _i (level)	J ^π _i	E _γ [†]	I _γ [‡]	E _f	J ^π _f	Comments
10308.7	(2,3) ⁻	5868.1	39	4440.11	2 ⁺	
		5893.8	<6	4414.40	4 ⁺	
		5979.1	<8	4329.1	(0,1,2) ⁺	
		6129.8	33	4178.32	3 ⁻	
		8337.3	81	1970.38	2 ⁺	
10319.5	2 ⁺	4462.6	4	5856.65	3 ⁻	
		5345.0	4	4974.05	2 ⁻	
		5878.9	2	4440.11	2 ⁺	
		5904.6	<1	4414.40	4 ⁺	
		5989.9	<1	4329.1	(0,1,2) ⁺	
		6140.6	1	4178.32	3 ⁻	
		8348.1	19	1970.38	2 ⁺	
		10317.9	70	0.0	0 ⁺	
		3070.3	12	7258.6	3 ⁻	
		3492.3	20	6836.50	3 ⁻	
10329.0	(3 ⁻ ,4 ⁻ ,5 ⁻)	4432.8	10	5895.92	4 ⁻	
		5157.5	5	5171.13	5 ⁻	
		5914.1	53	4414.40	4 ⁺	
		5999.4	<2	4329.1	(0,1,2) ⁺	
		6150.1	<3	4178.32	3 ⁻	
		8357.6	<2	1970.38	2 ⁺	
		2671.0	2	7749.7	NOT 0 ⁻	
		3162.1	4	7258.6	3 ⁻	
		3173.3	2	7247.4	NOT 0 ⁻	
		3584.1	6	6836.50	3 ⁻	
10420.8	3 ⁻	4525.6	3	5895.92	4 ⁻	
		4563.8	14	5856.65	3 ⁻	
		5446.3	1	4974.05	2 ⁻	
		5980.2	1	4440.11	2 ⁺	
		6005.9	8	4414.40	4 ⁺	
		6091.2	<1	4329.1	(0,1,2) ⁺	
		6241.9	44	4178.32	3 ⁻	
		8449.4	15	1970.38	2 ⁺	
		3098.3	8	7336.6	3 ⁺	
		4598.7	4	5836.0	1 ⁻	
10435.0		5994.4	8	4440.11	2 ⁺	
		6020.1	<1	4414.40	4 ⁺	
		6256.1	8	4178.32	3 ⁻	
		8463.6	24	1970.38	2 ⁺	
		10433.4	48	0.0	0 ⁺	
		3241.4	8	7258.6	3 ⁻	
		3252.6	8	7247.4	NOT 0 ⁻	
10500.2	(1,2,3) ⁻	3663.5	5	6836.50	3 ⁻	I _γ : from 1974Jo02 marked As uncertain.

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40,1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ[‡]</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[#]</u>	<u>δ[#]</u>	<u>Comments</u>
10500.2	(1,2,3) ⁻	3889.0	8	6611.0				
		4663.9	12	5836.0	1 ⁻			
		5525.7	11	4974.05	2 ⁻			
		6085.3	<2	4414.40	4 ⁺			
		6170.5	<3	4329.1	(0,1,2) ⁺			
		6321.3	26	4178.32	3 ⁻			
		8528.7	20	1970.38	2 ⁺			
		10498.6	2	0.0	0 ⁺			
10539.6	3 ⁻	4703.3	2	5836.0	1 ⁻			
		5565.1	3	4974.05	2 ⁻			
		6098.9	12	4440.11	2 ⁺			
		6210.0	<2	4329.1	(0,1,2) ⁺			
		6360.7	<3	4178.32	3 ⁻			
		8568.1	78	1970.38	2 ⁺			
		10537.9	5	0.0	0 ⁺			
		2988.9	9	7573.1	4 ⁻			
10562.1	3 ⁻	3225.3	6	7336.6	3 ⁺			
		3303.3	3	7258.6	3 ⁻			
		3314.5	3	7247.4	NOT 0 ⁻			
		3726.7	10	6835.16	4 ⁻			
		3950.9	4	6611.0				
		4344.5	5	6217.3	5 ⁻			
		4705.1	3	5856.65	3 ⁻			
		5587.6	26	4974.05	2 ⁻			
		6232.4	<2	4329.1	(0,1,2) ⁺			
		6383.2	10	4178.32	3 ⁻			
		8590.6	20	1970.38	2 ⁺			
		10560.4	1	0.0	0 ⁺			
10582.9	5 ⁻	2566.9	3	8015.9	(3,4) ⁻			
		2910.7	2	7672.1	NOT (1,2) ⁻			
		3228.8	20	7353.9	6 ⁻			
		3324.1	1	7258.6	3 ⁻			
		4365.3	57	6217.3	5 ⁻			
		4686.7	3	5895.92	4 ⁻			
		5411.3	7	5171.13	5 ⁻			
		5608.4	0.5	4974.05	2 ⁻			
		6167.9	<1	4414.40	4 ⁺			
		6253.2	<1	4329.1	(0,1,2) ⁺			
		6404.0	6	4178.32	3 ⁻			
		8611.4	0.5	1970.38	2 ⁺			
10615.6	4 ⁻	3042.4	16	7573.1	4 ⁻	M1+E2	+0.18 +12-44	Mult.,δ: A ₂ =+0.27 2, A ₄ =+0.01 3 (1973Ho33).
		3278.8	2	7336.6	3 ⁺			
		3356.8	3	7258.6	3 ⁻	M1(+E2)	+0.04 8	Mult.,δ: A ₂ =-0.11 7, A ₄ =-0.03 7 (1973Ho33).

³⁵Cl(p,γ),(p,p'),(p,α):res 1972Ho40,1974Jo02 (continued)

$\gamma(^{36}\text{Ar})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\ddagger$	E_f	J_f^π	Mult. [#]	$\delta^\#$	Comments
10615.6	4 ⁻	3780.2	32	6835.16	4 ⁻	M1(+E2)	0.00 +6-28	Mult., δ : $A_2=+0.22$ 1, $A_4=+0.02$ 2 (1973Ho33).
		4398.0	14	6217.3	5 ⁻	M1+E2	-0.19 6	Mult., δ : $A_2=+0.08$ 3, $A_4=-0.05$ 3 (1973Ho33).
		4719.4	12	5895.92	4 ⁻	M1(+E2)	+0.11 +10-38	Mult., δ : $A_2=+0.25$ 3, $A_4=+0.02$ 3 (1973Ho33).
		4758.5	11	5856.65	3 ⁻	M1(+E2)	-0.01 +10-2	Mult., δ : $A_2=-0.14$ 3, $A_4=-0.06$ 3 (1973Ho33).
		6200.6	8	4414.40	4 ⁺			
		6285.9	<1	4329.1	(0,1,2) ⁺			
		6436.7	<1	4178.32	3 ⁻			
		8644.1	2	1970.38	2 ⁺			could Be overflow from E(p)(lab)=2190.1 resonance (1974Jo02).
		10613.9	<0.2	0.0	0 ⁺			
		10635.7	1 ⁻					
10635.7	1 ⁻	3376.9	5	7258.6	3 ⁻			
		4799.4	3	5836.0	1 ⁻			
		5661.2	3	4974.05	2 ⁻			
		6195.0	8	4440.11	2 ⁺			
		6220.7	<1	4414.40	4 ⁺			
		6306.0	<1	4329.1	(0,1,2) ⁺			
		6456.8	2.5	4178.32	3 ⁻			
		8664.2	78	1970.38	2 ⁺			
		10634.0	0.5	0.0	0 ⁺			
		10675.9	5					
10675.9	5	3321.8	18	7353.9	6 ⁻	D(+Q)	+0.04 4	Mult., δ : $A_2=-0.19$ 3, $A_4=0.00$ 3 (1973Ho33).
		4319.6	8	6356.0	4 ⁺	D+Q	-0.07 4	Mult., δ : $A_2=-0.29$ 6, $A_4=-0.10$ 6 (1973Ho33).
		4458.3	60	6217.3	5 ⁻	D(+Q)	-0.04 8	Mult., δ : $A_2=+0.34$ 2, $A_4=+0.08$ 2 (1973Ho33).
		4779.6	9	5895.92	4 ⁻			
		5504.3	5	5171.13	5 ⁻	D(+Q)	-0.03 17	Mult., δ : $A_2=+0.32$ 9, $A_4=+0.09$ 9 (1973Ho33).
		6260.9	<4	4414.40	4 ⁺			
		6346.2	<3	4329.1	(0,1,2) ⁺			
		6497.0	<3	4178.32	3 ⁻			
		10674.2	<1	0.0	0 ⁺			
		10700.4	2 ⁺					
10700.4	2 ⁺	3267.9	3	7432.3				
		3452.8	2	7247.4	NOT 0 ⁻			
		3521.3	3	7178.9	(1,2 ⁺)			Mult., δ : $A_2=-0.22$ 19, $A_4=-0.03$ 20 (1973Ho33).
		3833.3	2	6866.9	(1,2 ⁺)			
		4089.2	0.5	6611.0				
		4864.1	3	5836.0	1 ⁻			
		5725.9	3	4974.05	2 ⁻			
		5748.5	16	4951.4	2 ⁺			Mult., δ : $A_2=-0.06$ 10, $A_4=-0.01$ 10 (1973Ho33).
		6259.7	5	4440.11	2 ⁺			
		6285.4	<0.5	4414.40	4 ⁺			
10700.4	2 ⁺	6370.7	0.5	4329.1	(0,1,2) ⁺			
		6521.5	44	4178.32	3 ⁻	E1(+M2)	+0.06 17	Mult., δ : $A_2=-0.02$ 3, $A_4=-0.02$ 3 (1973Ho33).
		8728.9	12	1970.38	2 ⁺	M1+E2	+0.18 11	Mult., δ : $A_2=+0.15$ 4, $A_4=-0.08$ 4 (1973Ho33).
		10698.7	6	0.0	0 ⁺	E2		Mult., δ : $A_2=-0.22$ 6, $A_4=+0.03$ 6 (1973Ho33).
		10808.9						
		2676.9	3	8131.9	1,(2 ⁺)			
		3235.6	4	7573.1	4 ⁻			

γ(³⁶Ar) (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Comments
10808.9		3454.8	4	7353.9	6 ⁻	
		3550.1	3	7258.6	3 ⁻	
		3972.2	2	6836.50	3 ⁻	
		4452.6	1	6356.0	4 ⁺	I _γ : from 1974Jo02 marked As uncertain.
		4591.3	2	6217.3	5 ⁻	
		4912.6	2	5895.92	4 ⁻	
		4951.9	2	5856.65	3 ⁻	
		5637.3	1	5171.13	5 ⁻	
		5834.3	8	4974.05	2 ⁻	
		6393.9	60	4414.40	4 ⁺	
		6479.2	<1	4329.1	(0,1,2) ⁺	
		6629.9	2	4178.32	3 ⁻	
		8837.4	2	1970.38	2 ⁺	
		10807.2	4	0.0	0 ⁺	
10823.4		4605.8	100	6217.3	5 ⁻	I _γ : from 1976Hu01 .
10832.3	(1 ⁻ ,3 ⁻ ,4 ⁺)	8860.8	100	1970.38	2 ⁺	I _γ : from 1976Hu01 .
10845.7		4489.4	58	6356.0	4 ⁺	I _γ : from 1976Hu01 .
		4628.1	42	6217.3	5 ⁻	I _γ : from 1976Hu01 .
10852.0	2 ⁺	8880.4	100	1970.38	2 ⁺	I _γ : from 1976Hu01 .
10853.8	0 ⁺	2721.8	65 15	8131.9	1,(2 ⁺)	
		3143.4	35 15	7710.3	1	
10906.0		2890.0	21	8015.9	(3,4) ⁻	
		3233.7	5	7672.1	NOT (1,2) ⁻	
		3332.7	17	7573.1	4 ⁻	
		3647.2	5	7258.6	3 ⁻	
		3658.4	1	7247.4	NOT 0 ⁻	I _γ : from 1974Jo02 marked As uncertain.
		4069.3	3	6835.16	4 ⁻	
		4688.4	21	6217.3	5 ⁻	
		5009.7	12	5895.92	4 ⁻	
		5049.0	8	5856.65	3 ⁻	
		5734.4	3	5171.13	5 ⁻	
		6491.0	<1	4414.40	4 ⁺	
		6576.3	<1	4329.1	(0,1,2) ⁺	
		6727.0	3	4178.32	3 ⁻	
		8934.4	1	1970.38	2 ⁺	
		10904.2	<0.3	0.0	0 ⁺	
10955.7		2939.7		8015.9	(3,4) ⁻	
		3696.9	4	7258.6	3 ⁻	
		3708.1 ^a	4 ^a	7247.4	NOT 0 ⁻	
		4119.0	7	6836.50	3 ⁻	
		4344.2	9	6611.0		
		5059.4	3	5895.92	4 ⁻	
		5784.1	4	5171.13	5 ⁻	

³⁵Cl(p,γ),(p,p'),(p,α):res [1972Ho40](#),[1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Comments
10955.7		6515.0	15	4440.11	2 ⁺	
		6540.7	9	4414.40	4 ⁺	
		6776.7	42	4178.32	3 ⁻	
		8984.1	4	1970.38	2 ⁺	
10968.1		5993.5	9	4974.05	2 ⁻	
		6553.1	<1	4414.40	4 ⁺	
		6789.1	3	4178.32	3 ⁻	
		8996.5	17	1970.38	2 ⁺	
		10966.3	71	0.0	0 ⁺	
11027.7		4671.4	5	6356.0	4 ⁺	
		6586.9	3	4440.11	2 ⁺	
		6612.7	45	4414.40	4 ⁺	
		6697.9	<2	4329.1	(0,1,2) ⁺	
		6848.7	<2	4178.32	3 ⁻	
		9056.1	47	1970.38	2 ⁺	
		11025.9	<0.3	0.0	0 ⁺	
11149.4		5313.0	0.7	5836.0	1 ⁻	
		5954.5	5	5194.4	(0 ⁺ ,1 ⁺ ,2 ⁺ ,3 ⁻)	
		6708.6	2	4440.11	2 ⁺	
		6734.3	<1	4414.40	4 ⁺	
		6819.6	1	4329.1	(0,1,2) ⁺	
		6970.4	0.3	4178.32	3 ⁻	I _γ : from 1974Jo02 marked As uncertain.
		9177.8	8	1970.38	2 ⁺	
		11147.5	83	0.0	0 ⁺	
11182.3		2710.2	43	8472.0	(3 ⁻ ,4 ⁻ ,5 ⁻)	
		2849.7	9	8332.5	NOT (0 to 2) ⁻	
		3828.2	14	7353.9	6 ⁻	
		4346.9	14	6836.50	3 ⁻	
		4964.6	6	6217.3	5 ⁻	
		6010.6	1	5171.13	5 ⁻	
		6767.2	13	4414.40	4 ⁺	
		6852.5	<1	4329.1	(0,1,2) ⁺	
		7003.3	<1	4178.32	3 ⁻	
11336.4	2 ⁺	3982.3	10	7353.9	6 ⁻	
		4199.6	5	7136.5	(1 ⁻ ,2 ⁺)	
		4499.6	4	6836.50	3 ⁻	
		5118.7	4	6217.3	5 ⁻	
		5440.0	22	5895.92	4 ⁻	
		6164.7	1	5171.13	5 ⁻	
		6361.8	3	4974.05	2 ⁻	
		6384.4	4	4951.4	2 ⁺	
		6895.6	5	4440.11	2 ⁺	
		6921.3	23	4414.40	4 ⁺	

³⁵Cl(p,γ),(p,p′),(p,α):res [1972Ho40](#),[1974Jo02](#) (continued)

γ(³⁶Ar) (continued)

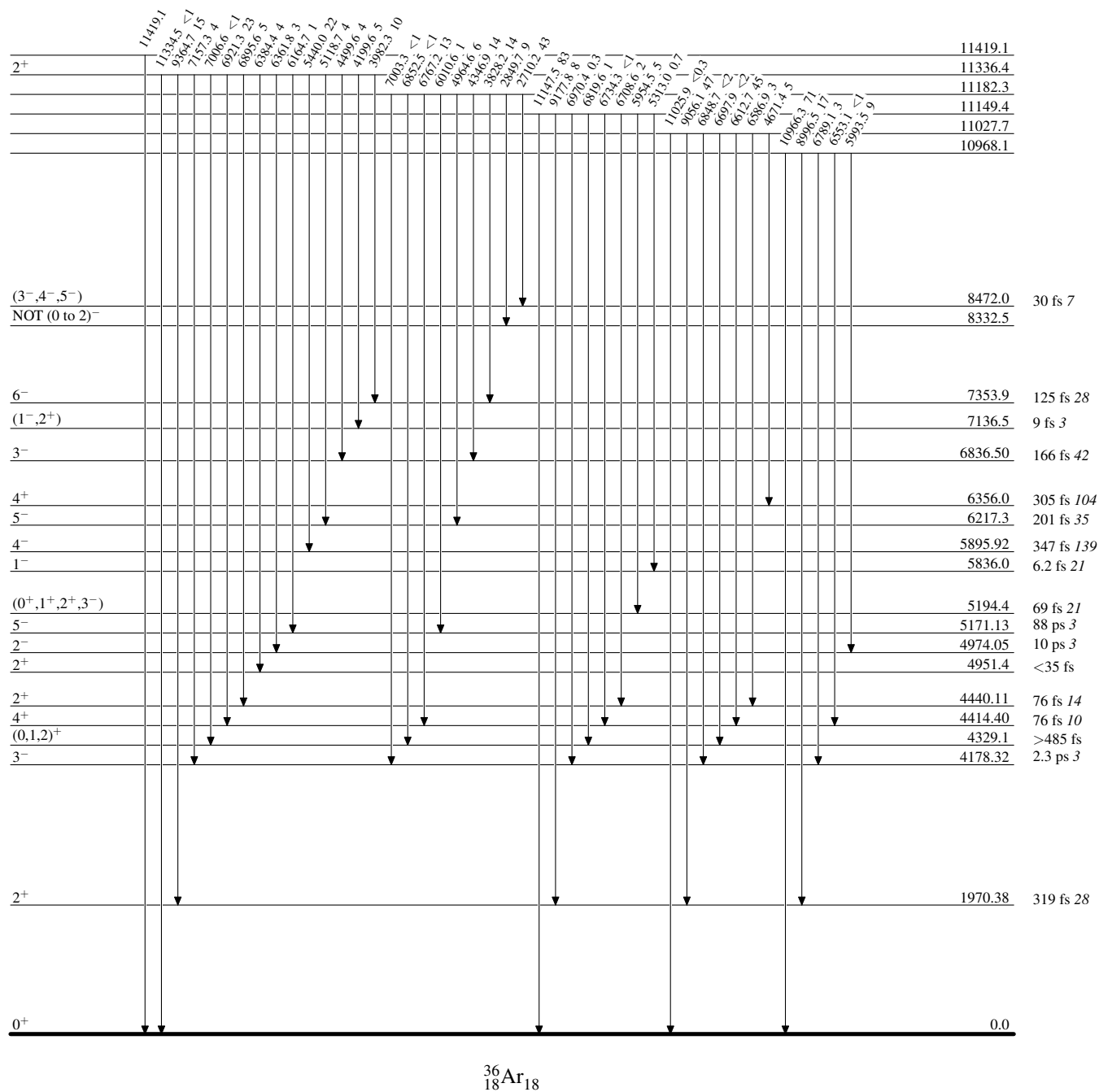
<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ[‡]</u>	<u>E_f</u>	<u>J_f^π</u>
11336.4	2 ⁺	7006.6	<1	4329.1	(0,1,2) ⁺
		7157.3	4	4178.32	3 ⁻
		9364.7	15	1970.38	2 ⁺
		11334.5	<1	0.0	0 ⁺
11419.1		11419.1		0.0	0 ⁺

[†] Deduced by evaluators from levels.
[‡] Weighted average of values from [1974Jo02](#) and [1972Ho40](#), or values from [1974Jo02](#) only, except when noted otherwise.
[#] Except when noted otherwise, from [1973Ho33](#) based on γ(θ) (the electric or magnetic characters are deduced by evaluators from the parity of levels).
[@] γ branching not observed ([1974Jo02](#)).
[&] From [1966Er06](#) by angular correlations and polarization measurements.
^a Multiply placed with undivided intensity.

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme

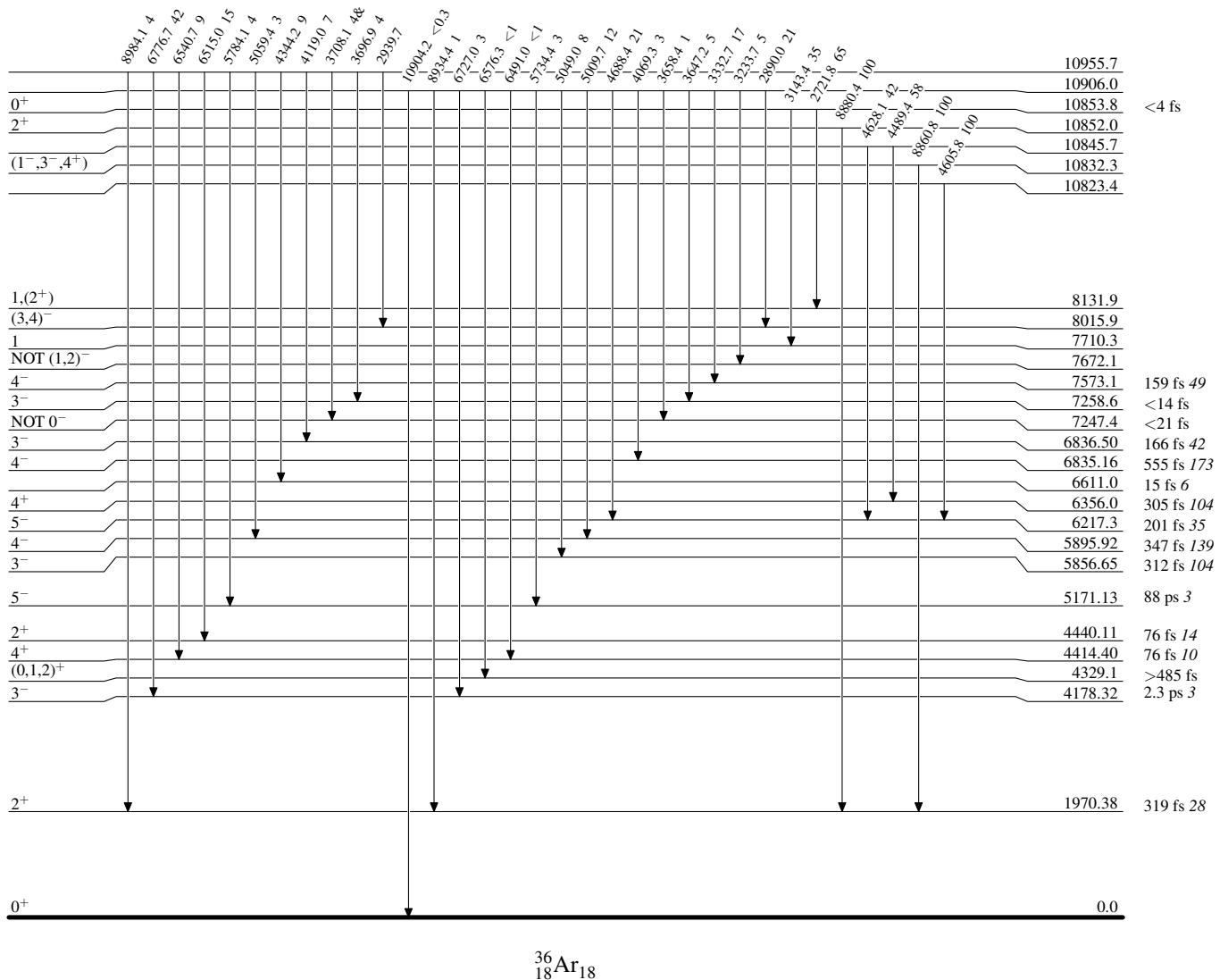
Intensities: % photon branching from each level



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

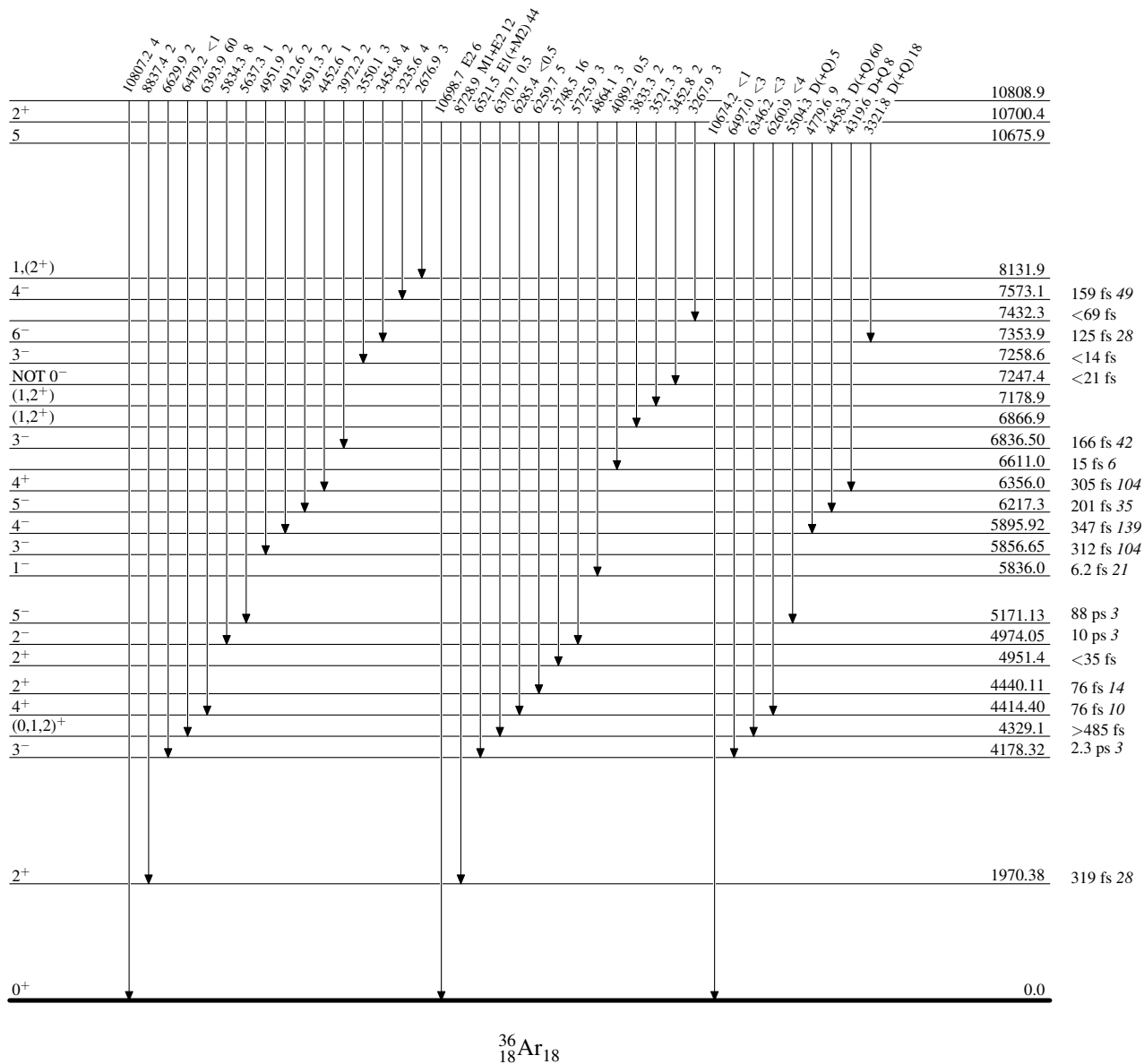
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

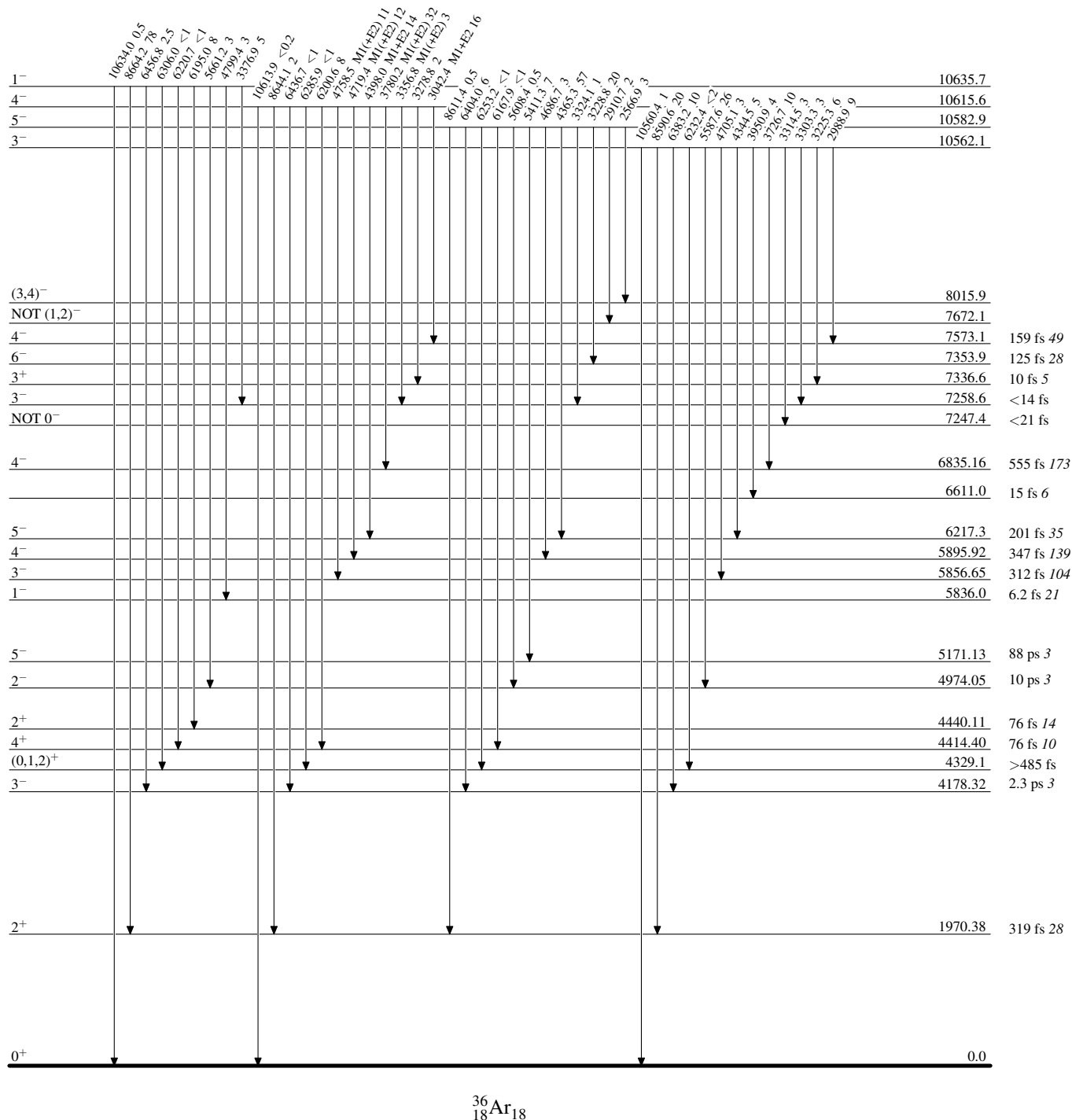
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given

 $^{36}_{18}\text{Ar}_{18}$

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

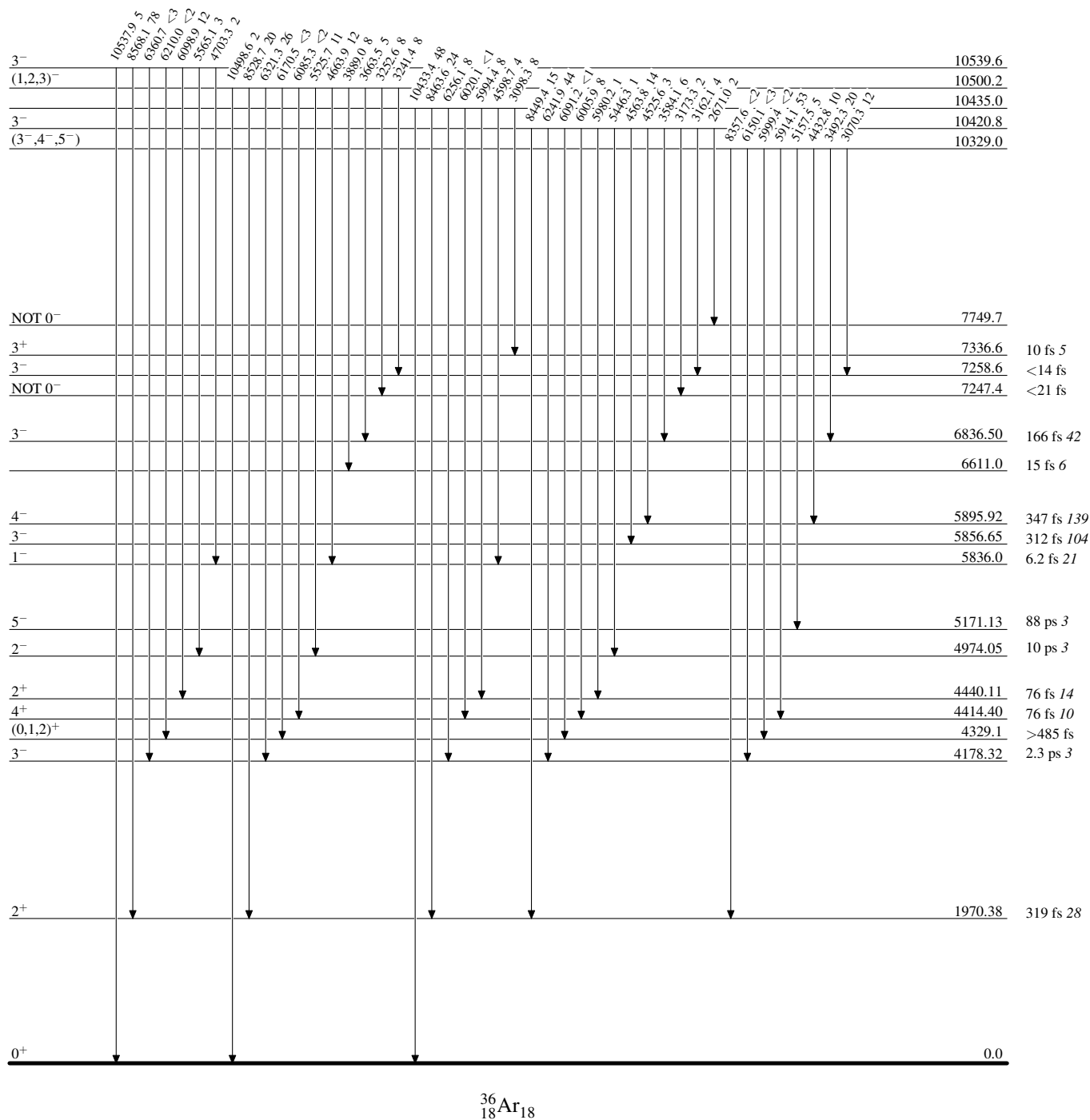
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given

 $^{36}_{18}\text{Ar}_{18}$

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

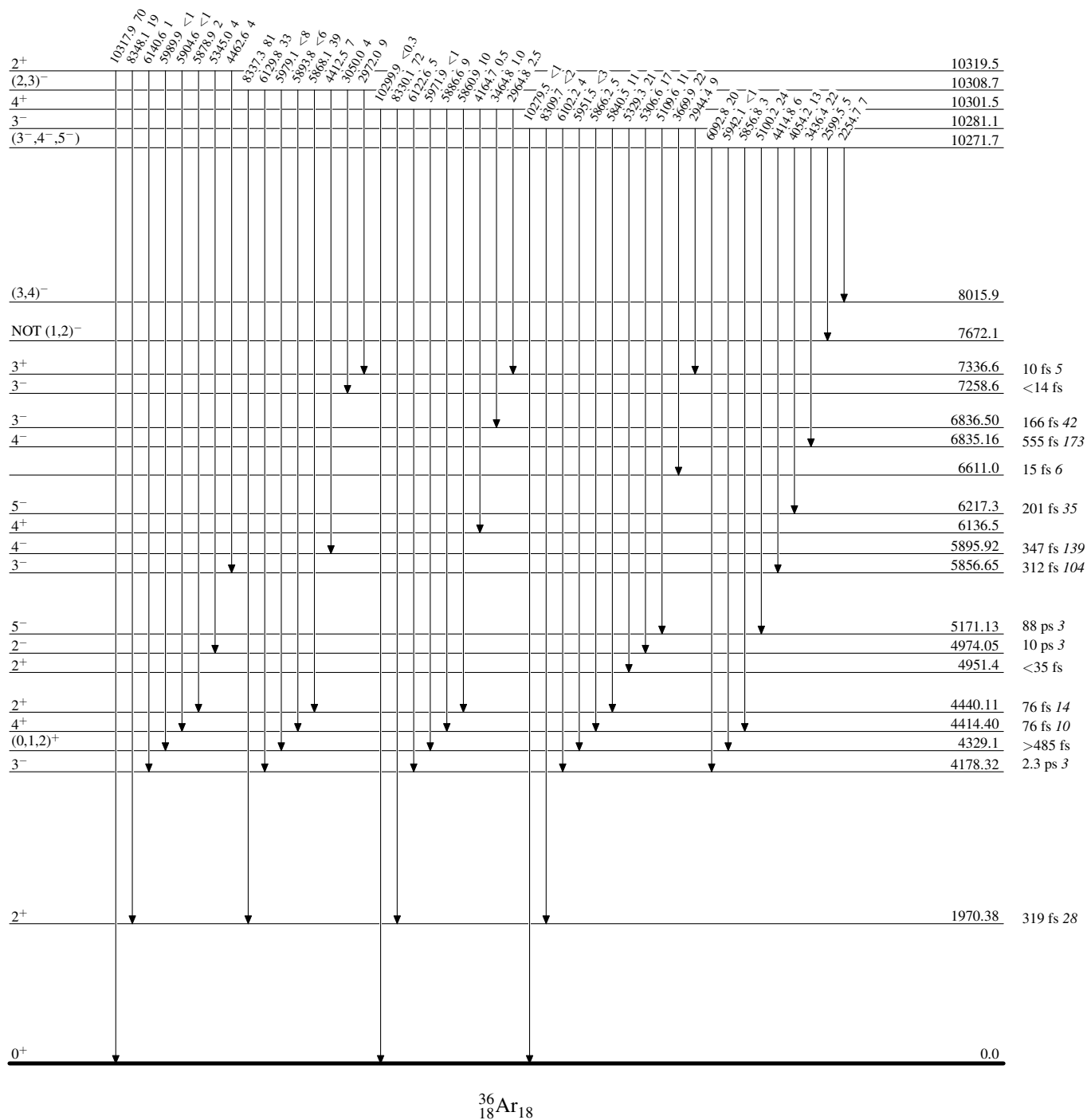
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

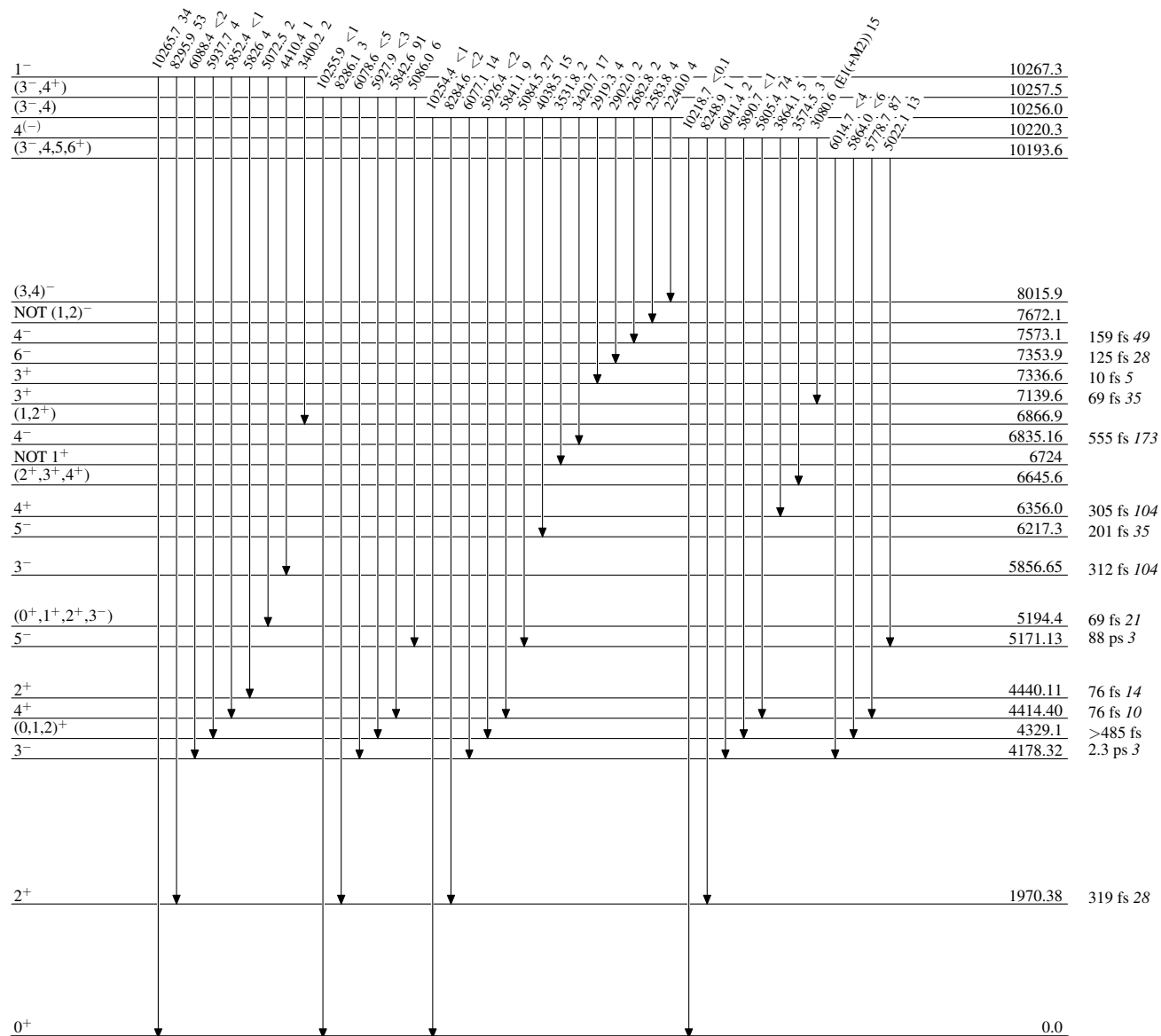
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given

 $^{36}_{18}\text{Ar}_{18}$

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

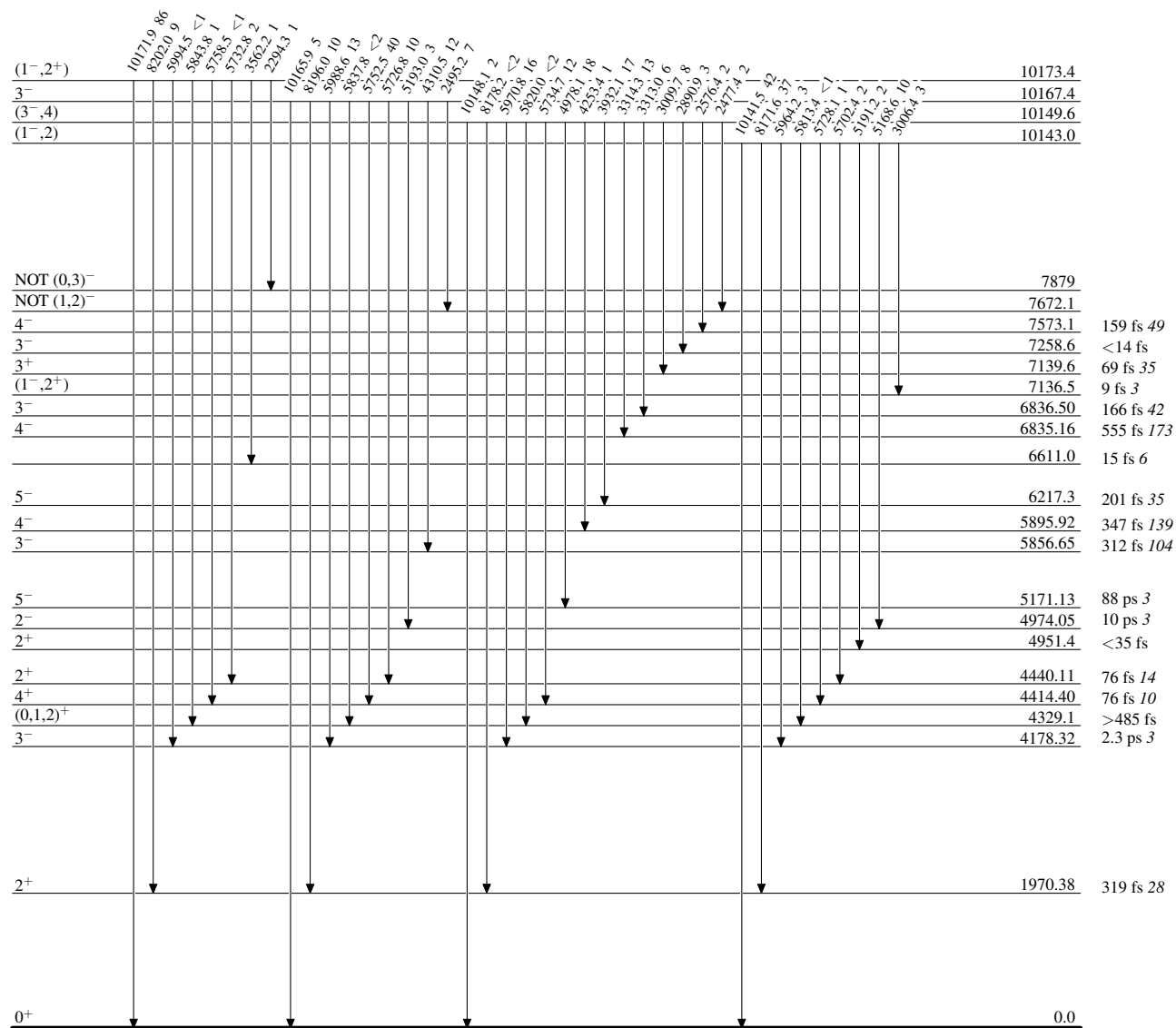
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given

 $^{36}_{18}\text{Ar}_{18}$

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

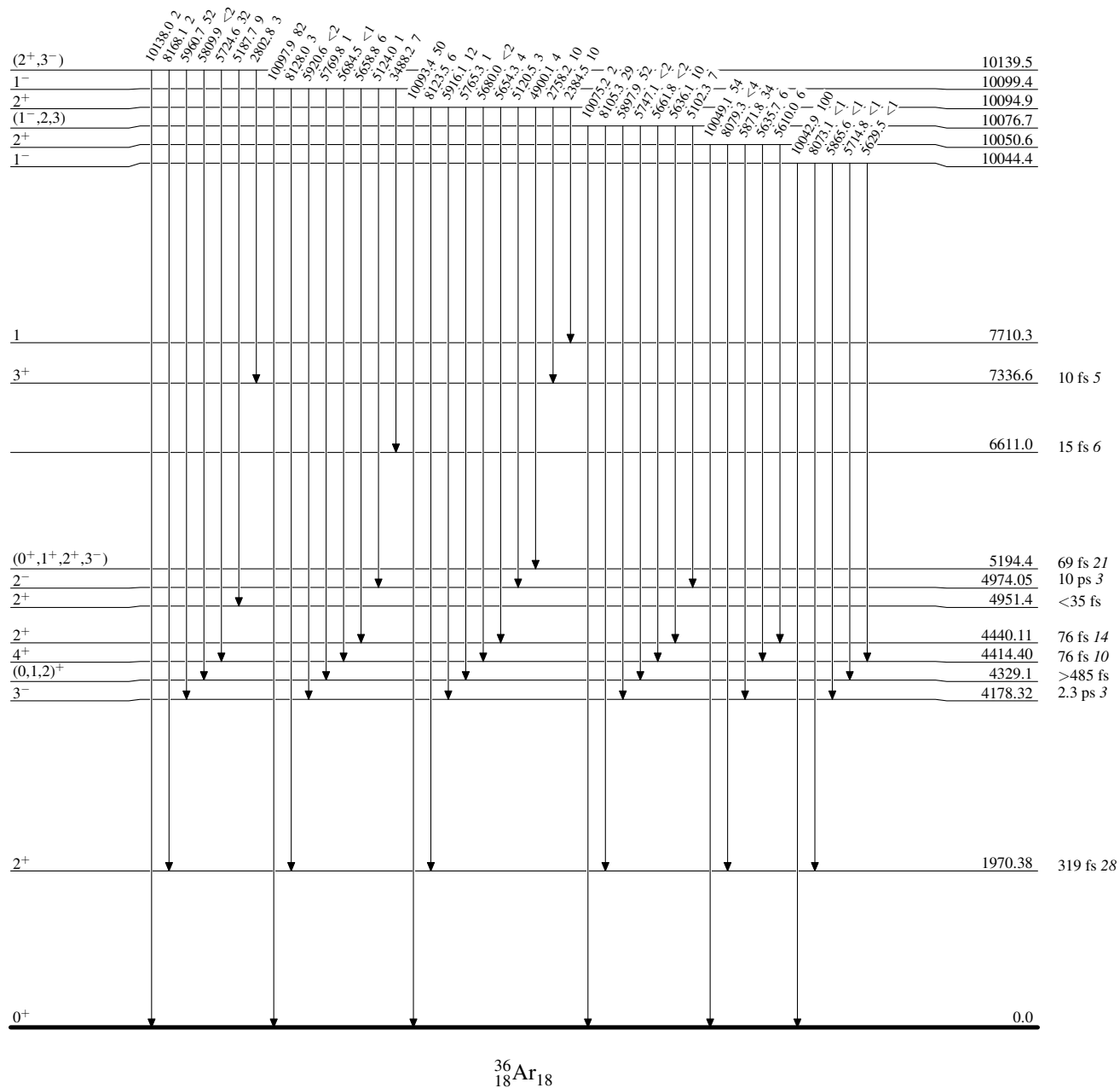
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given

 $^{36}_{18}\text{Ar}_{18}$

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

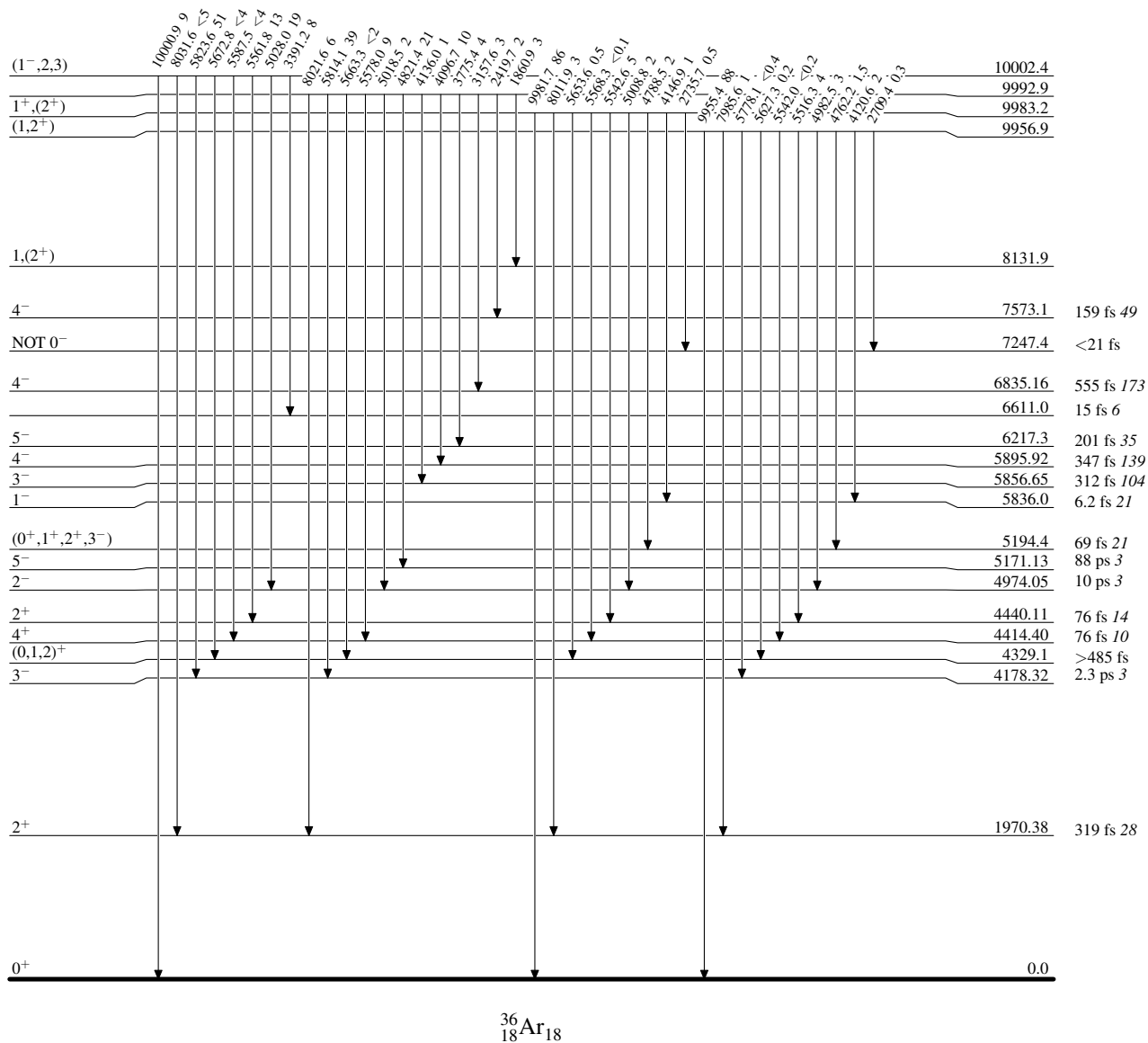
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

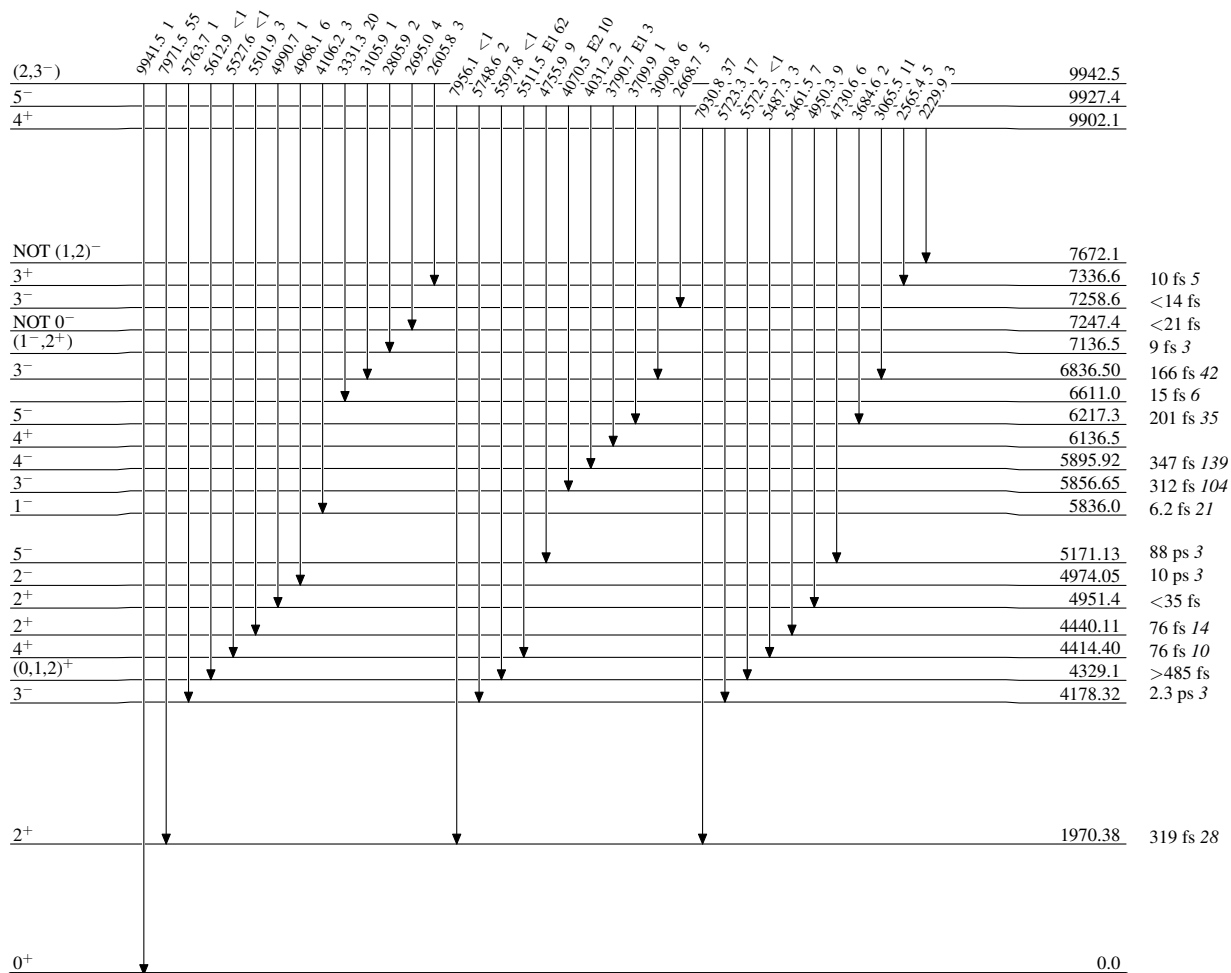
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given

 $^{36}_{18}\text{Ar}_{18}$

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

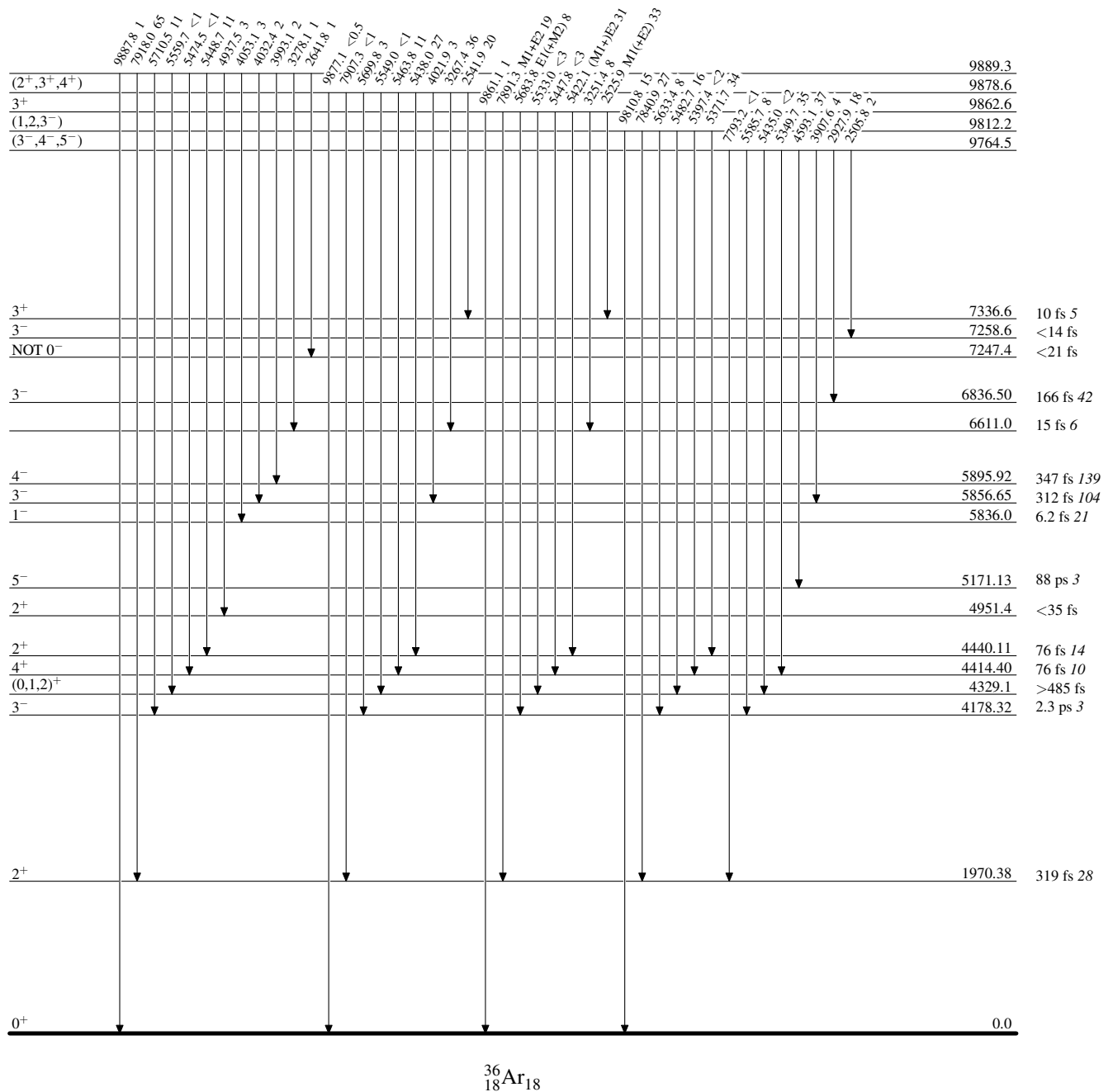
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given

 $^{36}_{18}\text{Ar}_{18}$

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

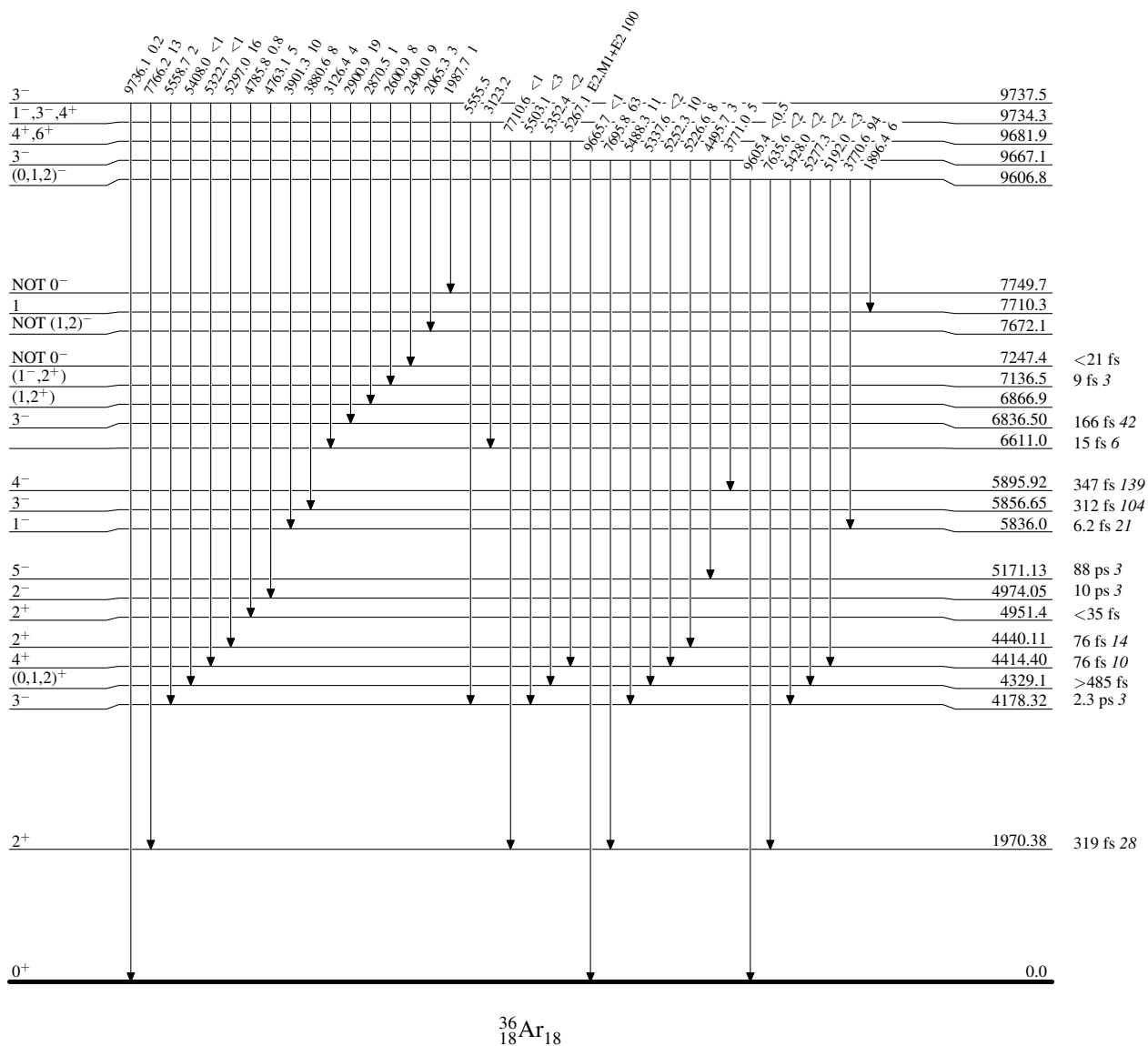
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

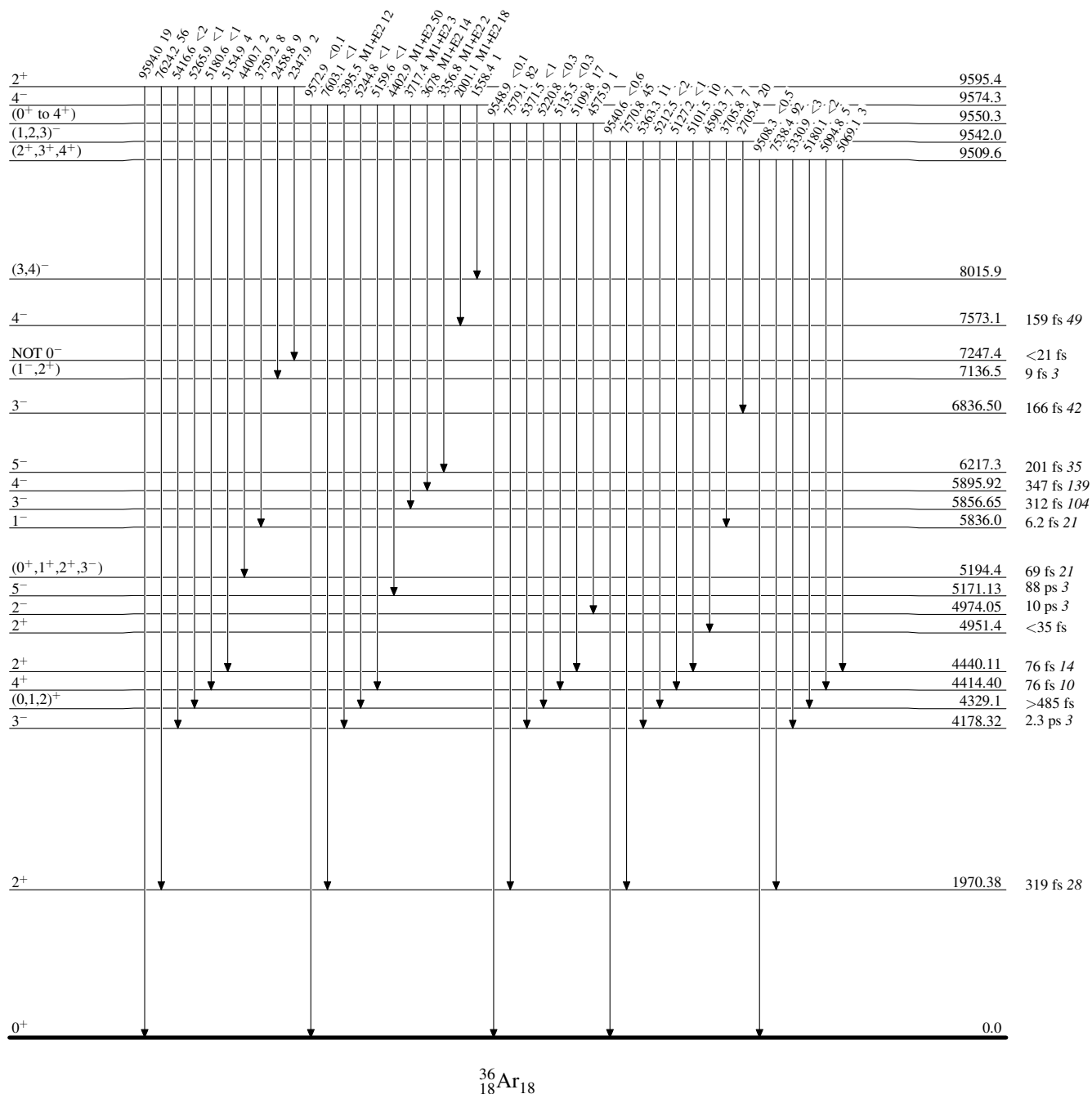
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

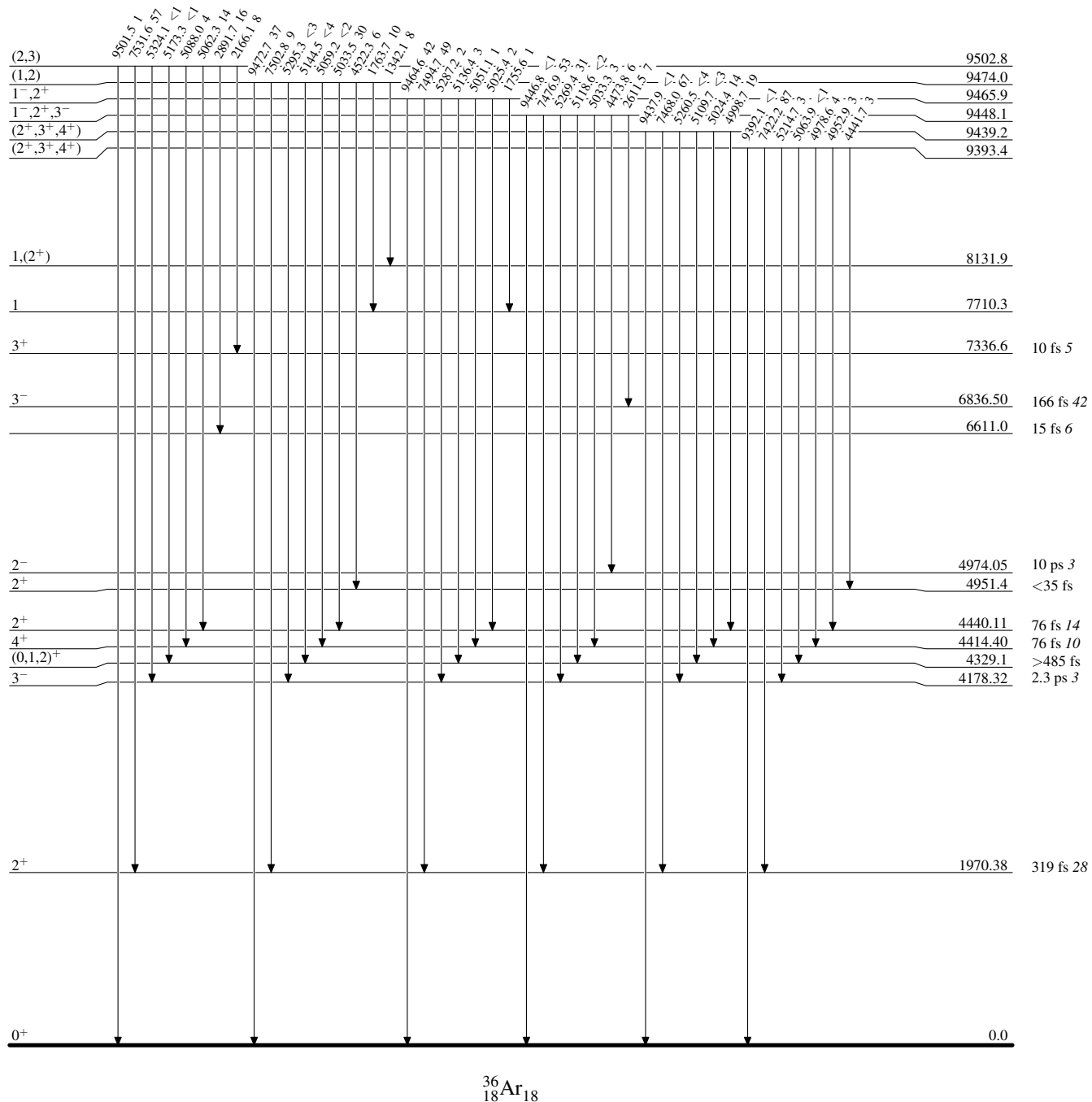
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

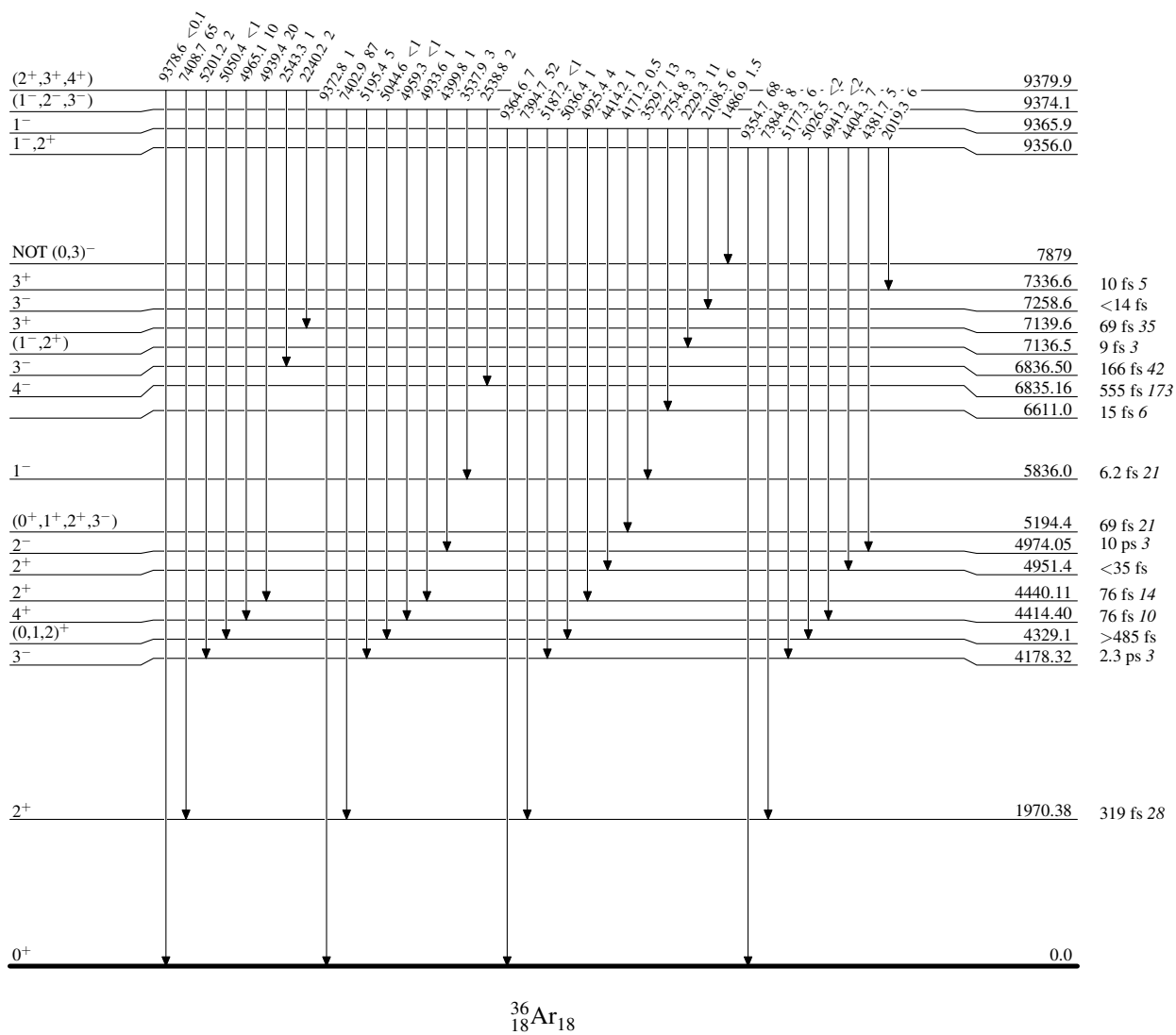
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given

 $^{36}_{18}\text{Ar}_{18}$

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

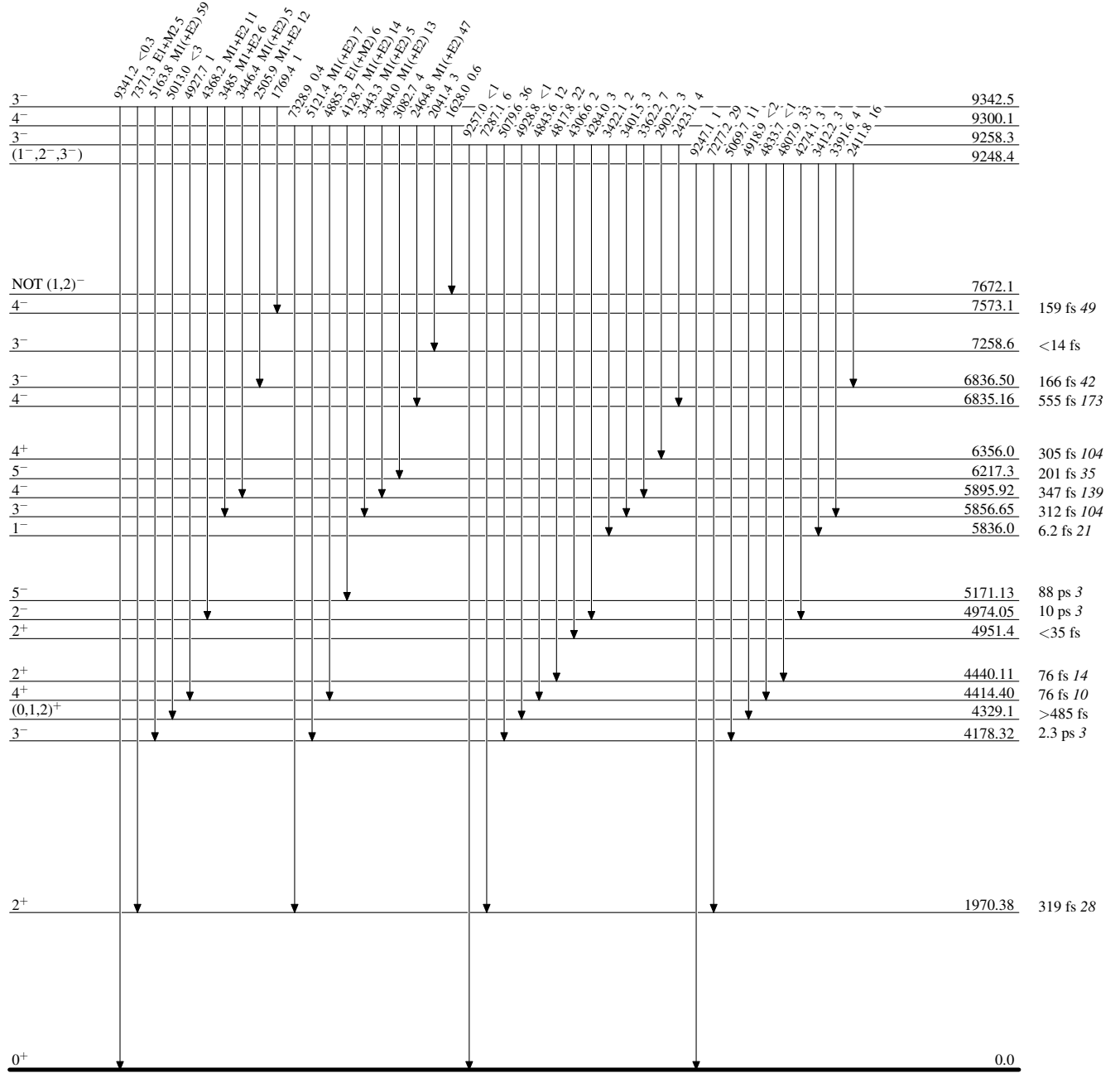
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

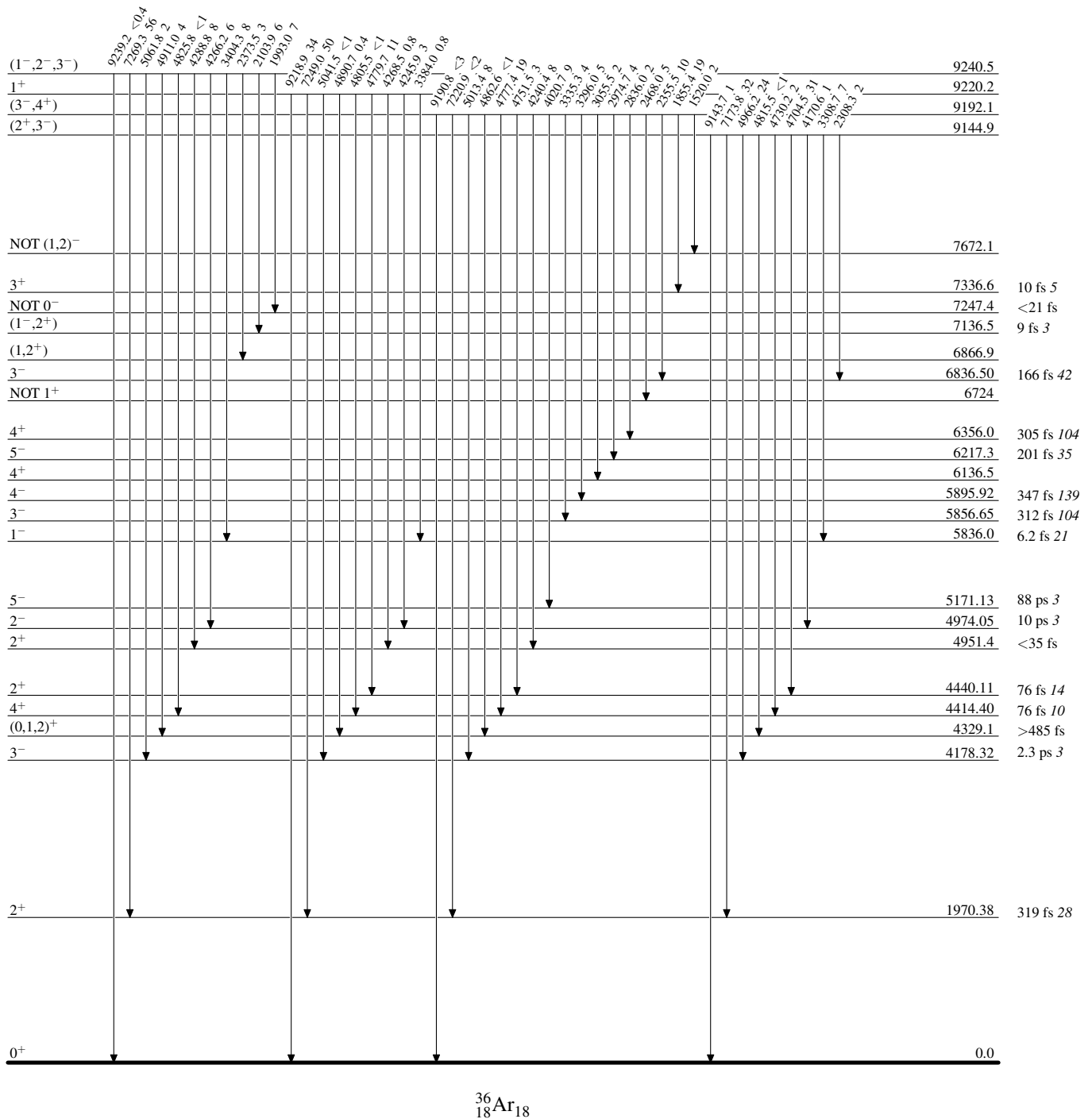
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given

 $^{36}\text{Ar}_{18}$

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

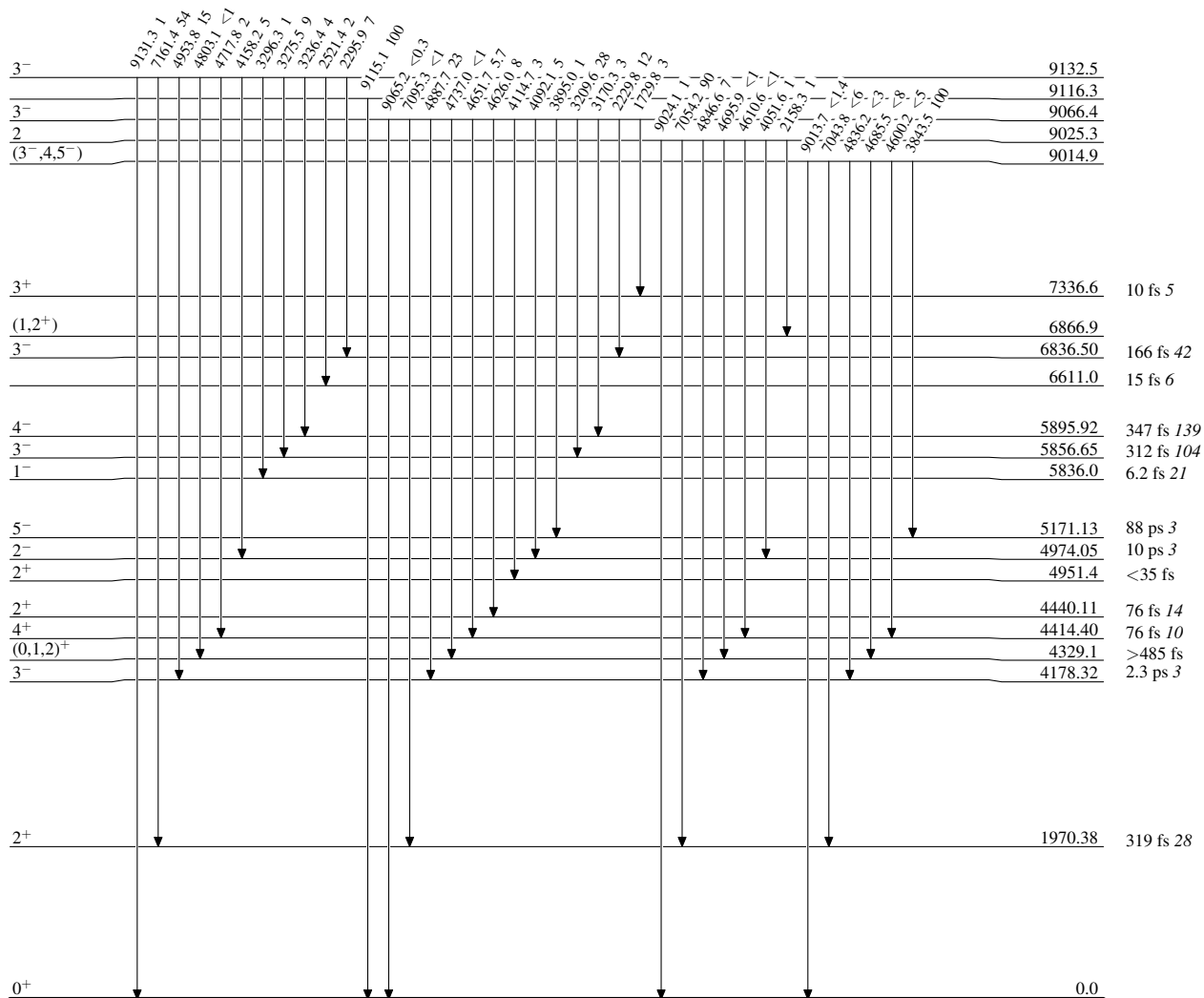
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

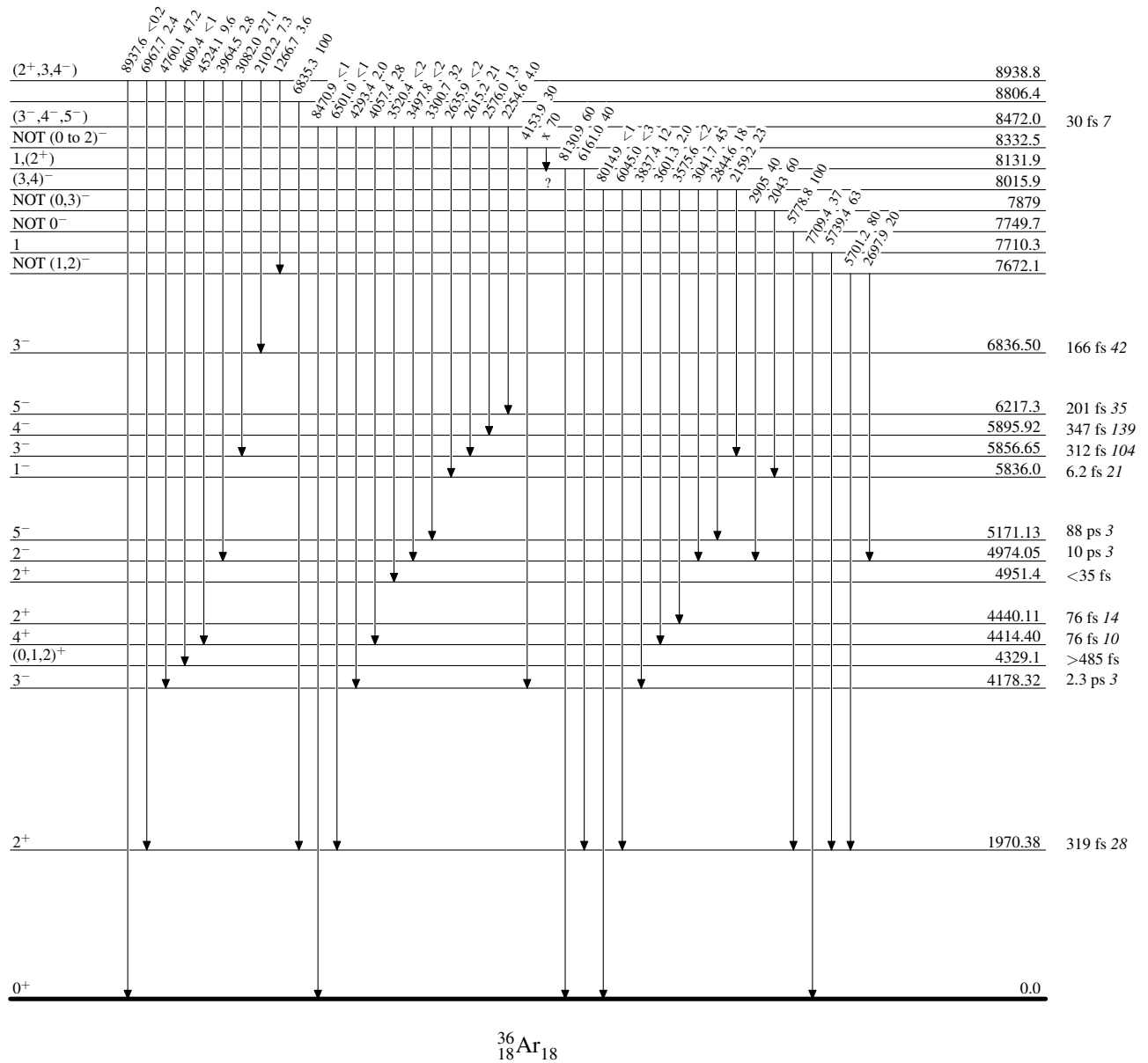
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given

 $^{36}_{18}\text{Ar}_{18}$

$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

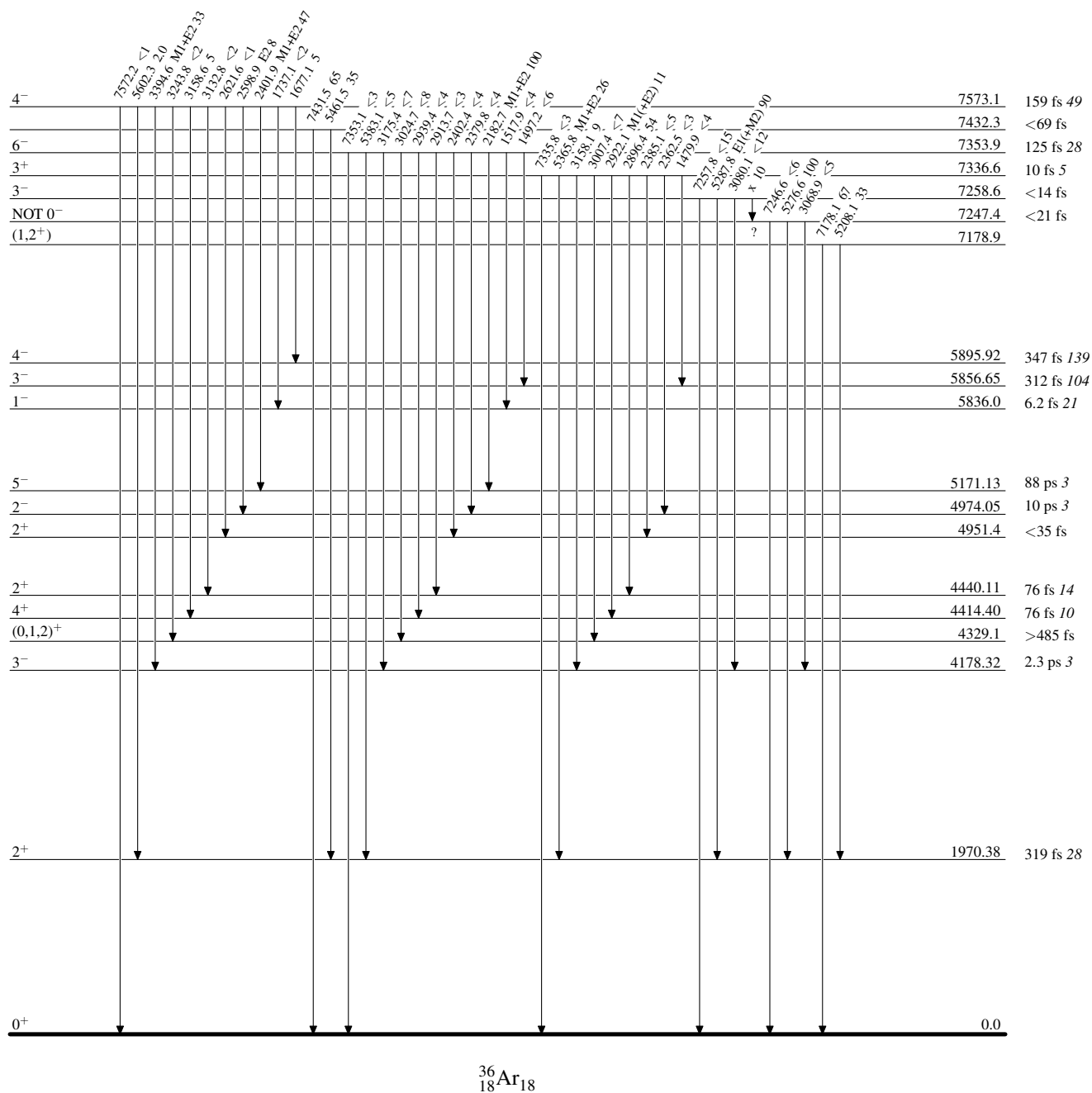
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

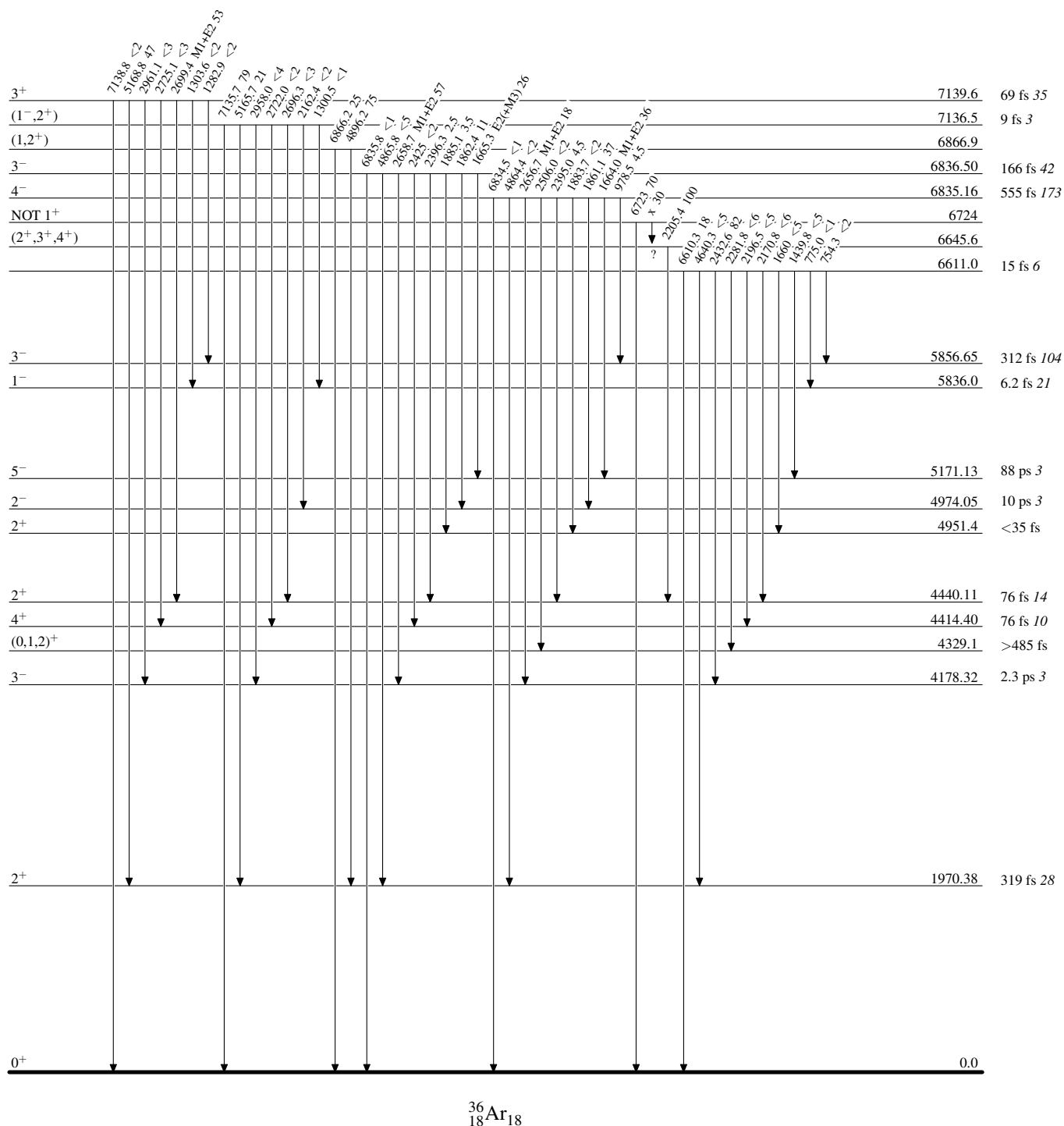
Intensities: % photon branching from each level
& Multiply placed: undivided intensity given



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

Intensities: % photon branching from each level
& Multiply placed: undivided intensity given



$^{35}\text{Cl}(\text{p},\gamma),(\text{p},\text{p}'),(\text{p},\alpha):\text{res}$ 1972Ho40,1974Jo02

Level Scheme (continued)

Intensities: % photon branching from each level
& Multiply placed: undivided intensity given

