^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Compiled (unevaluated) dataset from 2018Lv01: Phys Rev C 98, 044304 (2018).
Compiled by E.A. McCutchan (NNDC,BNL) January 10, 2019 Updated to include 2020Pe07 : Phys.Rev. C 102, 014311 (2020).
Updated by E.A. McCutchan (NNDC,BNL) July 14, 2021.
Updated to include 2018Pe07 : Phys. Rev. C 97, 041304(R) (2018).
Updated by E.A. McCutchan (NNDC,BNL) December 14, 2021.
2018Lv01: E(^{40}Ar)=152 MeV. Measured Eγ, Iγ, $\gamma\gamma$, $\gamma\gamma(\theta)$ using the JUROGAM II array consisting of 24 Clover detectors and 15 coaxial tapered detectors.
2018Pe07 and 2020Pe07 are shorter articles discussing data presented in detail in 2018Lv01.

^{136}Nd Levels

E(level)[†]	J$^\pi$[‡]	Comments
0.0[#]	0$^+$	
373.70[#] *23*	2$^+$	
862.20[@] *23*	2$^+$	
976.2[#] *3*	4$^+$	
1230.9[@] *3*	3$^+$	
1541.7[@] *3*	4$^+$	
1746.4[#] *3*	6$^+$	
2035.9[&] *3*	5$^-$	
2045.1[@] *3*	5$^+$	
2227.8 *3*	6$^+$	
2345.5[a] *4*	6$^-$	
2352.7[@] *4*	6$^+$	
2439.5[&] *3*	7$^-$	D$_o$=0.048 efm *6* (2020Pe07).
2483.4[&] *3*	6$^-$	
2593.7[a] *3*	7$^-$	
2632.8[#] *4*	8$^+$	
2757.3[&] *3*	8$^-$	
2909.9[a] *4*	8$^-$	
2940.5[&] *4*	9$^-$	D$_o$=0.036 efm *15* (2020Pe07).
3167.7[@] *4*	8$^+$	
3172.0 *4*	9$^-$	
3243.3[&] *4*	10$^-$	
3246.9[a] *4*	9$^-$	
3277.8[h] *4*	10$^+$	
3295.7[b] *4*	10$^+$	
3552.9[#] *4*	10$^+$	
3601.4[&] *4*	11$^-$	
3685.6[b] *4*	12$^+$	
3712.2[a] *4*	10$^-$	
3768.1[@] *4*	10$^+$	
3966.7 *4*	11$^+$	
3996.1[h] *4*	12$^+$	
4015.1[&] *4*	12$^-$	
4027.9 *4*	11$^-$	
4116.0[a] *4*	11$^-$	
4319.8[@] *4*	12$^+$	
4337.1[e] *4*	12$^+$	
4346.6[b] *4*	14$^+$	
4347.1 *4*	12$^-$	

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^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

^{136}Nd Levels (continued)

E(level)[†]	Jπ[‡]	Comments
4386.1 *4*	12⁻	
4425.8[&] *4*	13⁻	
4446.1[j] *4*	11⁺	
4453.9[d] *4*	13⁺	
4616.5[a] *4*	12⁻	
4666.0[j] *4*	12⁺	
4829.1 *4*	12⁻	
4837.1[i] *4*	13⁺	
4847.6[h] *4*	14⁺	
4855.6[e] *4*	14⁺	
4920.1[j] *4*	13⁺	
4938.1 *5*	13⁺	
5021.1[&] *4*	14⁻	
5022.1[c] *4*	14⁺	
5031.6[@] *4*	14⁺	
5057.1 *4*	12⁻	
5104.9[a] *4*	13⁻	
5131.9[d] *4*	15⁺	
5177.1 *4*	13⁻	
5191.5[b] *4*	16⁺	
5213.9[j] *4*	14⁺	
5308.9 *4*	14⁻	
5349.1 *4*	13⁻	
5371.9 *4*	14⁻	
5415.2[&] *4*	15⁻	
5417.9[p] *4*	14⁻	
5425.4[v] *5*	15⁻	
5439.5 *4*	16⁺	
5532.2 *4*	14⁻	
5559.2[j] *4*	15⁺	
5570.2[e] *4*	16⁺	
5598.5 *4*	14⁻	
5636.5[k] *5*	15⁺	
5647.6[p] *4*	15⁻	
5684.5[a] *5*	14⁻	
5695.1[c] *4*	16⁺	
5696.7 *5*	18⁻	
5726.7[i] *4*	15⁺	
5732.4[n] *4*	15⁻	
5734.1 *5*	14⁻	
5757.4[@] *4*	16⁺	
5826.2[r] *4*	15⁺	
5842.8[h] *4*	16⁺	
5942.3[d] *4*	17⁺	
5956.5[p] *4*	16⁻	
5970.3[j] *4*	16⁺	
5981.0[n] *4*	16⁻	
6006.4[r] *4*	16⁺	
6039.1[g] *4*	16⁻	D_o=0.104 efm *10* (2020Pe07).
6053.8[k] *5*	16⁺	

Continued on next page (footnotes at end of table)

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

^{136}Nd Levels (continued)

E(level)[†]	Jπ[‡]	Comments
6100.4[&] 5	16⁻	
6184.9[v] 6	17⁻	
6191.3[b] 4	18⁺	
6230.1[l] 4	15⁺	
6238.2[r] 4	17⁺	
6313.3[p] 4	17⁻	
6326.4[n] 4	17⁻	
6348.0[l] 5	16⁺	
6360.3[f] 4	17⁻	D_o=0.069 efm *9* (2020Pe07).
6424.1[j] 4	17⁺	
6472.0[e] 4	18⁺	
6485.5[k] 5	17⁺	
6492.1[&] 5	17⁻	
6522.0[r] 4	18⁺	
6546.9[c] 4	18⁺	
6579.1[l] 4	17⁺	
6586.4[i] 4	17⁺	
6602.2[@] 4	18⁺	
6674.3[g] 4	18⁻	
6715.1[p] 4	18⁻	
6754.9 5	18⁺	
6760.6[n] 5	18⁻	
6844.2[&] 5	18⁻	
6866.6[r] 4	19⁺	
6884.5[l] 4	18⁺	
6902.1[&] 6	19⁻	
6909.1[j] 5	18⁺	
6929.1 5	18⁺	
6931.5[d] 4	19⁺	
6989.4[k] 5	18⁺	
7010.9[v] 6	19⁻	
7141.7[f] 4	19⁻	D_o=0.073 efm *14* (2020Pe07).
7151.2[p] 5	19⁻	
7213.1[s] 4	19⁺	
7226.3[n] 5	19⁻	
7254.7[r] 4	20⁺	
7258.3[q] 5	19⁻	
7271.5[o] 5	19⁻	
7293.7[l] 5	19⁺	
7330.9[u] 5	20⁺	
7355.1[b] 5	20⁺	
7469.3[k] 5	19⁺	
7473.3[e] 5	20⁺	
7503.2[j] 5	19⁺	
7531.7[g] 4	20⁻	
7543.1[s] 4	20⁺	
7577.8[p] 5	20⁻	
7591.6[c] 5	20⁺	
7619.9[@] 5	20⁺	

Continued on next page (footnotes at end of table)

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

^{136}Nd Levels (continued)

E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡
7670.1[l] 5	20+	8561.7 6	22+	9696.0[m] 6	24+	11492.2[x] 6	28−
7676.3[&] 5	(20−)	8623.8[b] 5	22+	9744.5[r] 5	25+	11494.3[b] 7	(26+)
7684.4[r] 4	21+	8628.1[q] 6	22−	9787.3[n] 7	24−	11650.2[r] 6	28+
7721.2[n] 5	20−	8651.1[r] 5	23+	9877.2[v] 8	25−	11784.7[w] 7	29−
7722.7[o] 5	20−	8690.2[n] 6	22−	9893.7[w] 5	25−	11824.3[t] 6	29−
7732.3 5	20+	8751.8[o] 6	22−	9911.2[s] 5	25+	12148.1[v] 9	29−
7737.1[q] 5	20−	8753.5[t] 5	23−	10002.0[b] 6	(24+)	12334.4[r] 7	29+
7901.2[v] 7	21−	8794.6 5	22+	10091.5[l] 7	25+	12418.6[u] 8	30+
7927.2[s] 4	21+	8828.2[s] 4	23+	10108.9[t] 5	26−	12484.4[t] 6	30−
8023.1[p] 5	21−	8840.1[m] 5	22+	10191.8[u] 7	26+	12554.9[x] 7	30−
8049.8[f] 5	21−	8849.8[v] 8	23−	10201.3[p] 6	25−	12884.1[w] 7	31−
8050.7[l] 5	21+	8948.2[l] 6	23+	10206.2[m] 6	25+	13439.0[v] 10	31−
8063.8[t] 5	21−	9020.7[p] 5	23−	10344.1[r] 5	26+	13605.9[u] 7	32+
8100.3[d] 5	21+	9048.7[f] 5	23−	10500.6[x] 6	26−	13700.0[x] 8	32−
8116.2[j] 6	20+	9061.4[t] 5	24−	10504.1[s] 5	26+	14072.5[w] 8	33−
8147.1[r] 4	22+	9092.3[q] 6	23−	10532.3 6	26−	14841.6[v] 10	33−
8170.0[n] 5	21−	9163.8[t] 5	24−	10639.3[t] 6	27−	14926.3[x] 8	(34−)
8211.1[q] 5	21−	9173.0[u] 6	24+	10659.3[m] 6	26+	15358.6[w] 9	(35−)
8215.2[o] 6	21−	9177.4[r] 5	24+	10763.3[l] 7	26+	16227.4[x] 9	(36−)
8224.1[u] 5	22+	9232.2[n] 7	23−	10786.1[w] 6	27−	16355.6[v] 11	(35−)
8266.1[e] 6	22+	9248.8[m] 5	23+	10961.2[v] 9	27−	16749.3[w] 9	(37−)
8355.2[s] 4	22+	9347.3[s] 4	24+	10966.1[r] 6	27+	17550.7[x] 9	(38−)
8379.5[t] 5	22−	9491.5[l] 6	24+	11116.1[s] 6	27+	17980.0[v] 11	(37−)
8414.1[m] 5	21+	9558.7[x] 5	24−	11220.5[t] 6	28−	19695.3[v] 11	(39−)
8467.0[l] 5	22+	9570.5[p] 5	24−	11258.7[m] 7	27+		
8510.7[p] 5	22−	9617.5[t] 5	25−	11278.6[u] 8	28+		
8536.3[g] 5	22−	9683.1[q] 6	24−	11392.4 7	(28−)		

† From a least-squares fit to Eγ, by compiler.
‡ As proposed by 2018Lv01 based on γγ(θ) measurements and band assignments.
# Band(A): Ground state band.
@ Band(B): γ-vibrational band.
& Band(C): Band N1.
a Band(D): Band N2.
b Band(E): Band L1.
c Band(F): Band L2.
d Band(G): Band L3.
e Band(H): Band L4.
f Band(I): Band L5.
g Band(J): Band L6.
h Band(K): Band L7.
i Band(L): Band L8.
j Band(M): Band D1.
k Band(N): Band d-chiral.
l Band(O): Band D2.
m Band(P): Band D2-chiral.
n Band(Q): Band D3.

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^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

^{136}Nd Levels (continued)

[o] Band(R): Band D3-chiral.
[p] Band(S): Band D4.
[q] Band(T): Band D4-chiral.
[r] Band(U): Band D5-chiral.
[s] Band(V): Band D6.
[t] Band(W): Band T1.
[u] Band(X): Band T2.
[v] Band(Y): Band T3.
[w] Band(a): Band T4.
[x] Band(b): Band T5.

$\gamma(^{136}Nd)$

R_{ac} is defined as $R_{ac}=I\gamma(133.6°+157.6°)/I\gamma(75.5°+104.5°)$, with typical values of 0.8 and 1.4 for stretched dipole and quadrupole transitions, respectively. R(DCO) is defined as R(DCO)=Iγ(157.6° gated by 90°)/Iγ(90° gated by 157.6°). Typical values are 0.46 and 1 for stretched dipole and quadrupole transitions, respectively when gating on a Q transition and 1 and 2.1 for stretched dipole and quadrupole transitions, respectively, when gating on a stretched dipole transition.

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
117.9 *3*	0.25 *10*	6348.0	16^+	6230.1	15^+	M1+E2[#]	R(DCO)=0.72 *37*.
123.7 *3*	0.5 *1*	3295.7	10^+	3172.0	9^-	E1[‡]	R(DCO)=0.47 *12*.
134.2 *3*	0.13 *1*	5732.4	15^-	5598.5	14^-	M1	R_{ac}=0.76 *13*.
154.1 *3*	0.21 *2*	2593.7	7^-	2439.5	7^-	M1	R_{ac}=0.7 *2*.
163.6 *3*	0.05 *1*	2757.3	8^-	2593.7	7^-	M1+E2	
180.2 *3*	0.17 *3*	6006.4	16^+	5826.2	15^+	M1+E2	R_{ac}=1.51 *36*.
182.7 *3*	0.25 *2*	2227.8	6^+	2045.1	5^+	M1	R_{ac}=0.73 *21*.
183.1 *3*	0.65 *8*	2940.5	9^-	2757.3	8^-	M1	R_{ac}=0.86 *15*.
183.1 *3*	1.64 *7*	5532.2	14^-	5349.1	13^-	M1	R_{ac}=0.75 *8*.
191.9 *3*	0.12 *2*	2227.8	6^+	2035.9	5^-	E1	
200.1 *3*	1.53 *15*	5732.4	15^-	5532.2	14^-	M1+E2[#]	R(DCO)=1.02 *15*.
219.9 *3*	0.82 *6*	4666.0	12^+	4446.1	11^+	M1[#]	R(DCO)=0.95 *9*.
224.2 *3*	0.07 *2*	5956.5	16^-	5732.4	15^-	M1+E2	
229.7 *3*	1.29 *10*	5647.6	15^-	5417.9	14^-	M1+E2[#]	R(DCO)=0.75 *10*.
231.1 *3*	0.89 *6*	6579.1	17^+	6348.0	16^+	M1	R_{ac}=0.78 *7*.
231.8 *3*	1.8 *2*	6238.2	17^+	6006.4	16^+	M1+E2[#]	R(DCO)=0.71 *12*.
248.2 *3*	2.6 *2*	2593.7	7^-	2345.5	6^-	M1	R_{ac}=0.68 *12*.
248.7 *3*	1.33 *10*	5981.0	16^-	5732.4	15^-	M1[#]	R(DCO)=1.05 *17*.
254.1 *3*	1.72 *15*	4920.1	13^+	4666.0	12^+	M1[‡]	R(DCO)=0.48 *11*.
255.6 *3*	0.65 *5*	2483.4	6^-	2227.8	6^+	E1	R_{ac}=0.73 *13*.
273.9 *3*	4.1 *4*	2757.3	8^-	2483.4	6^-	E2[‡]	R(DCO)=1.02 *15*.
275.1 *3*	0.11 *1*	7141.7	19^-	6866.6	19^+	E1[‡]	R(DCO)=0.47 *9*.
275.7 *3*	0.54 *3*	5647.6	15^-	5371.9	14^-	M1+E2[#]	R(DCO)=0.77 *5*.
281.4 *3*	0.3 *1*	7213.1	19^+	6931.5	19^+	M1+E2	R_{ac}=1.17 *22*.
283.8 *3*	2.5 *4*	6522.0	18^+	6238.2	17^+	M1+E2[#]	R(DCO)=0.84 *15*.
292.0 *3*	1.71 *5*	5349.1	13^-	5057.1	12^-	M1	R_{ac}=0.79 *5*.
293.8 *3*	1.42 *8*	5213.9	14^+	4920.1	13^+	M1[#]	R(DCO)=0.71 *7*.
298.1 *3*	0.11 *1*	6884.5	18^+	6586.4	17^+	M1	R_{ac}=0.86 *15*.
300.4 *3*	4.7 *3*	2345.5	6^-	2045.1	5^+	E1	R_{ac}=0.81 *7*.
302.8 *3*	0.9 *1*	3243.3	10^-	2940.5	9^-	M1[‡]	R(DCO)=0.42 *8*.
305.4 *3*	1.41 *15*	6884.5	18^+	6579.1	17^+	M1+E2	R_{ac}=1.06 *20*.

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^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

$\gamma(^{136}Nd)$ (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
307.7 *3*	1.1 *3*	2940.5	9^-	2632.8	8^+	E1[‡]	R(DCO)=0.45 *15*.
308.9 *3*	2.3 *2*	5956.5	16^-	5647.6	15^-	M1[‡]	R(DCO)=0.48 *8*.
315.7 *3*	0.60 *5*	8379.5	22^-	8063.8	21^-	M1+E2[‡]	R(DCO)=0.35 *5*.
316.2 *3*	0.41 *2*	2909.9	8^-	2593.7	7^-	M1+E2[#]	R(DCO)=0.87 *17*.
317.7 *3*	4.7 *4*	2757.3	8^-	2439.5	7^-	M1[‡]	R(DCO)=0.54 *7*.
318.3 *3*	0.21 *2*	8050.7	21^+	7732.3	20^+	M1+E2	R_{ac}=1.10 *14*.
319.7 *3*	1.05 *10*	6866.6	19^+	6546.9	18^+	M1+E2[‡]	R(DCO)=0.39 *8*.
328.9 *3*	0.30 *3*	4666.0	12^+	4337.1	12^+	M1+E2[#]	R(DCO)=1.24 *29*.
329.7 *3*	0.60 *4*	8379.5	22^-	8049.8	21^-	M1+E2[‡]	R(DCO)=0.68 *12*.
330.0 *3*	0.42 *9*	7543.1	20^+	7213.1	19^+	M1	R_{ac}=0.69 *15*.
332.3 *3*	0.77 *5*	6313.3	17^-	5981.0	16^-	M1	R_{ac}=0.84 *8*.
333.4 *3*	0.07 *1*	5981.0	16^-	5647.6	15^-	M1+E2	
337.0 *3*	0.71 *2*	3246.9	9^-	2909.9	8^-	M1+E2[#]	R(DCO)=0.63 *7*.
338.7 *3*	0.82 *7*	5647.6	15^-	5308.9	14^-	M1+E2[#]	R(DCO)=0.83 *11*.
342.7 *3*	0.11 *1*	6929.1	18^+	6586.4	17^+	M1	R_{ac}=0.71 *22*.
344.6 *3*	5.9 *4*	6866.6	19^+	6522.0	18^+	M1	R_{ac}=0.81 *9*.
345.3 *3*	1.1 *1*	5559.2	15^+	5213.9	14^+	M1+E2[#]	R(DCO)=0.66 *9*.
345.4 *3*	1.7 *2*	6326.4	17^-	5981.0	16^-	M1	R_{ac}=0.74 *11*.
350.0 *3*	0.45 *4*	6929.1	18^+	6579.1	17^+	M1+E2[#]	R(DCO)=0.72 *15*.
355.1 *3*	0.3 *1*	5532.2	14^-	5177.1	13^-	M1[#]	R(DCO)=1.14 *43*.
355.3 *3*	9.7 *3*	3295.7	10^+	2940.5	9^-	E1[‡]	R(DCO)=0.58 *8*.
356.8 *3*	1.7 *2*	6313.3	17^-	5956.5	16^-	M1[#]	R(DCO)=0.93 *24*.
358.1 *3*	0.72 *8*	3601.4	11^-	3243.3	10^-	M1+E2	R_{ac}=1.21 *15*.
364.6 *3*	0.50 *4*	7293.7	19^+	6929.1	18^+	M1[#]	R(DCO)=1.17 *18*.
365.9 *3*	0.73 *3*	2593.7	7^-	2227.8	6^+	E1	R_{ac}=0.71 *13*.
368.7 *3*	0.8 *2*	1230.9	3^+	862.20	2^+	M1+E2	R_{ac}=1.10 *25*.
369.9 *3*	0.23 *1*	6326.4	17^-	5956.5	16^-	M1+E2	
373.7 *3*	100.0	373.70	2^+	0.0	0^+	E2[‡]	R(DCO)=1.01 *5*.
374.0 *3*	0.82 *7*	8753.5	23^-	8379.5	22^-	M1+E2	
376.4 *3*	1.9 *3*	7670.1	20^+	7293.7	19^+	M1+E2[#]	R(DCO)=1.54 *60*.
380.6 *3*	1.4 *2*	8050.7	21^+	7670.1	20^+	M1	R_{ac}=0.85 *12*.
382.4 *3*	1.03 *7*	5981.0	16^-	5598.5	14^-	E2[#]	R(DCO)=1.94 *29*.
383.2 *3*	0.15 *3*	5732.4	15^-	5349.1	13^-	E2[#]	R(DCO)=1.9 *4*.
384.1 *3*	0.6 *1*	7927.2	21^+	7543.1	20^+	M1+E2	R_{ac}=0.71 *13*.
384.6 *3*	0.12 *2*	7293.7	19^+	6909.1	18^+	M1[#]	R(DCO)=1.02 *17*.
388.2 *3*	5 *1*	7254.7	20^+	6866.6	19^+	M1+E2	
388.7 *3*	0.61 *18*	6715.1	18^-	6326.4	17^-	M1+E2	
389.9 *3*	34 *2*	3685.6	12^+	3295.7	10^+	E2[‡]	R(DCO)=1.01 *20*.
390.1 *3*	0.10 *5*	7531.7	20^-	7141.7	19^-	M1+E2	
401.6 *3*	0.35 *2*	4855.6	14^+	4453.9	13^+	M1+E2	R_{ac}=1.05 *23*.
401.8 *3*	1.9 *2*	6715.1	18^-	6313.3	17^-	M1[#]	R(DCO)=1.09 *19*.
403.7 *3*	6.4 *3*	2439.5	7^-	2035.9	5^-	E2[‡]	R(DCO)=0.99 *8*.
408.7 *3*	0.10 *3*	9248.8	23^+	8840.1	22^+	M1+E2	R_{ac}=1.25 *40*.
409.2 *3*	1.72 *9*	7293.7	19^+	6884.5	18^+	M1+E2[#]	R(DCO)=0.84 *8*.
410.0 *3*	0.18 *4*	6902.1	19^-	6492.1	17^-	E2	
410.3 *3*	0.91 *8*	9061.4	24^-	8651.1	23^+	M1[‡]	R(DCO)=0.51 *6*.
410.3 *3*	0.91 *8*	9163.8	24^-	8753.5	23^-	M1[‡]	R(DCO)=0.51 *6*.
410.7 *3*	0.16 *4*	4425.8	13^-	4015.1	12^-	M1[‡]	R(DCO)=0.42 *11*.
411.1 *3*	0.75 *4*	5970.3	16^+	5559.2	15^+	M1[#]	R(DCO)=0.98 *10*.

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^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

γ(^{136}Nd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
411.8 *3*	0.7 *1*	2757.3	8^-	2345.5	6^-	E2	R_{ac}=1.45 *35*.
412.0 *3*	0.15 *5*	6238.2	17^+	5826.2	15^+	E2	R_{ac}=1.3 *3*.
413.7 *3*	0.10 *2*	4015.1	12^-	3601.4	11^-	M1+E2	
414.7 *3*	0.63 *5*	3172.0	9^-	2757.3	8^-	M1	R(DCO)=0.45 *12*.
416.3 *3*	1.15 *3*	8467.0	22^+	8050.7	21^+	M1[#]	R(DCO)=0.98 *9*.
421.5 *3*	0.31 *1*	5598.5	14^-	5177.1	13^-	M1	R_{ac}=0.79 *11*.
426.0 *3*	<0.01	8840.1	22^+	8414.1	21^+	M1+E2	
426.6 *3*	1.1 *1*	7577.8	20^-	7151.2	19^-	M1[#]	R(DCO)=0.97 *13*.
427.2 *3*	0.05 *1*	5532.2	14^-	5104.9	13^-	M1+E2	
428.0 *3*	1.5 *5*	8355.2	22^+	7927.2	21^+	M1[#]	R(DCO)=1.10 *37*.
429.7 *3*	2.8 *2*	7684.4	21^+	7254.7	20^+	M1+E2[#]	R(DCO)=0.86 *13*.
431.7 *3*	0.15 *5*	6485.5	17^+	6053.8	16^+	M1+E2	R_{ac}=0.93 *50*.
434.2 *3*	1.23 *9*	6760.6	18^-	6326.4	17^-	M1[#]	R(DCO)=1.1 *2*.
436.1 *3*	1.82 *20*	7151.2	19^-	6715.1	18^-	M1[‡]	R(DCO)=0.45 *6*.
438.3 *3*	1.24 *7*	2483.4	6^-	2045.1	5^+	E1	R_{ac}=0.86 *6*.
438.4 *3*	0.42 *3*	5570.2	16^+	5131.9	15^+	M1	R_{ac}=0.77 *14*.
438.7 *3*	0.13 *5*	7732.3	20^+	7293.7	19^+	M1+E2	
445.3 *3*	0.88 *10*	8023.1	21^-	7577.8	20^-	M1[#]	R(DCO)=0.95 *27*.
447.2 *3*	<0.02	9696.0	24^+	9248.8	23^+	M1+E2	
447.3 *3*	0.41 *3*	6760.6	18^-	6313.3	17^-	M1	R_{ac}=0.8 *1*.
447.5 *3*	1.6 *2*	2483.4	6^-	2035.9	5^-	M1	R_{ac}=0.84 *12*.
448.8 *3*	0.27 *12*	5981.0	16^-	5532.2	14^-	E2	
448.8 *3*	0.36 *1*	8170.0	21^-	7721.2	20^-	M1[#]	R(DCO)=1.07 *17*.
453.1 *3*	0.04 *1*	10659.3	26^+	10206.2	25^+	M1+E2	
453.7 *3*	0.49 *4*	9617.5	25^-	9163.8	24^-	M1[‡]	R(DCO)=0.45 *7*.
453.8 *3*	0.37 *9*	6424.1	17^+	5970.3	16^+	M1+E2[#]	R(DCO)=0.81 *25*.
460.4 *3*	0.21 *1*	6884.5	18^+	6424.1	17^+	M1+E2	R_{ac}=1.16 *13*.
462.7 *3*	1.5 *1*	8147.1	22^+	7684.4	21^+	M1[#]	R(DCO)=0.96 *14*.
465.3 *3*	0.29 *2*	3712.2	10^-	3246.9	9^-	M1+E2[#]	R(DCO)=0.61 *5*.
465.7 *3*	0.74 *5*	7226.3	19^-	6760.6	18^-	M1[#]	R(DCO)=1.19 *18*.
467.4 *3*	0.03 *1*	7141.7	19^-	6674.3	18^-	M1+E2	
473.0 *3*	0.5 *1*	8828.2	23^+	8355.2	22^+	M1+E2	R_{ac}=1.13 *24*.
479.3 *3*	0.13 *2*	4446.1	11^+	3966.7	11^+	M1	R_{ac}=0.83 *17*.
481.2 *3*	0.89 *4*	8948.2	23^+	8467.0	22^+	M1+E2[#]	R(DCO)=0.88 *9*.
485.0 *3*	0.23 *3*	6909.1	18^+	6424.1	17^+	M1+E2[#]	R(DCO)=0.94 *20*.
485.9 *3*	3.6 *4*	3243.3	10^-	2757.3	8^-	E2	R_{ac}=1.31 *15*.
487.3 *3*	0.10 *5*	4453.9	13^+	3966.7	11^+	E2	
487.6 *3*	0.61 *6*	8510.7	22^-	8023.1	21^-	M1+E2[#]	R(DCO)=1.17 *29*.
488.5 *3*	1.7 *3*	862.20	2^+	373.70	2^+	E2	R_{ac}=1.43 *31*.
490.3 *3*	0.32 *4*	3768.1	10^+	3277.8	10^+	M1+E2[‡]	R(DCO)=0.71 *9*.
491.4 *3*	0.38 *3*	10108.9	26^-	9617.5	25^-	M1+E2[‡]	R(DCO)=0.28 *9*.
493.6 *3*	0.42 *3*	5598.5	14^-	5104.9	13^-	M1+E2	R_{ac}=1.01 *13*.
494.9 *3*	0.57 *7*	7721.2	20^-	7226.3	19^-	M1[#]	R(DCO)=0.92 *12*.
501.3 *3*	20 *1*	2940.5	9^-	2439.5	7^-	E2[‡]	R(DCO)=1.06 *8*.
503.9 *3*	<0.01	6989.4	18^+	6485.5	17^+	M1+E2	
504.0 *3*	1.1 *1*	8651.1	23^+	8147.1	22^+	M1[#]	R(DCO)=0.97 *11*.
510.0 *3*	0.30 *5*	9020.7	23^-	8510.7	22^-	M1	R_{ac}=0.73 *21*.
510.2 *3*	0.05 *2*	10206.2	25^+	9696.0	24^+	M1+E2	
515.2 *3*	0.11 *3*	6485.5	17^+	5970.3	16^+	M1	R_{ac}=0.73 *28*.
515.6 *3*	0.35 *10*	6522.0	18^+	6006.4	16^+	E2[‡]	R(DCO)=0.92 *33*.

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^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

γ(^{136}Nd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
518.1 *3*	<0.01	8049.8	21^-	7531.7	20^-	M1+E2	
518.6 *3*	0.41 *2*	4855.6	14^+	4337.1	12^+	E2	
519.1 *3*	0.31 *10*	9347.3	24^+	8828.2	23^+	M1+E2	
520.0 *3*	0.35 *4*	5349.1	13^-	4829.1	12^-	M1+E2	R_{ac}=1.11 *28*.
520.2 *3*	0.25 *4*	8690.2	22^-	8170.0	21^-	M1+E2[#]	R(DCO)=1.28 *27*.
526.3 *3*	0.47 *5*	9177.4	24^+	8651.1	23^+	M1+E2	R_{ac}=0.99 *15*.
530.4 *3*	0.18 *2*	10639.3	27^-	10108.9	26^-	M1	R_{ac}=0.77 *17*.
538.6 *3*	0.33 *6*	5956.5	16^-	5417.9	14^-	E2	R_{ac}=1.39 *42*.
541.3 *3*	0.24 *1*	5956.5	16^-	5415.2	15^-	M1+E2	R_{ac}=1.16 *18*.
542.0 *3*	0.15 *1*	9232.2	23^-	8690.2	22^-	M1+E2[#]	R(DCO)=1.6 *3*.
543.1 *3*	0.72 *3*	6238.2	17^+	5695.1	16^+	M1+E2[‡]	R(DCO)=0.74 *8*.
543.3 *3*	0.52 *1*	9491.5	24^+	8948.2	23^+	M1[#]	R(DCO)=1.15 *15*.
549.8 *3*	0.21 *2*	9570.5	24^-	9020.7	23^-	M1+E2	R_{ac}=1.13 *25*.
551.7 *3*	2.7 *2*	4319.8	12^+	3768.1	10^+	E2[‡]	R(DCO)=1.13 *14*.
555.1 *3*	0.04 *1*	9787.3	24^-	9232.2	23^-	M1+E2	
557.0 *3*	0.12 *1*	5734.1	14^-	5177.1	13^-	M1+E2	R_{ac}=1.1 *1*.
560.6 *3*	<0.01	5177.1	13^-	4616.5	12^-	M1+E2	
563.9 *3*	0.10 *3*	9911.2	25^+	9347.3	24^+	M1+E2	
564.4 *3*	1.1 *1*	2909.9	8^-	2345.5	6^-	E2	R_{ac}=1.40 *18*.
565.5 *3*	1.3 *4*	1541.7	4^+	976.2	4^+	M1+E2	R_{ac}=1.07 *45*.
567.1 *3*	0.31 *2*	9744.5	25^+	9177.4	24^+	M1	R_{ac}=0.74 *16*.
579.8 *3*	1.01 *8*	6522.0	18^+	5942.3	17^+	M1+E2[#]	R(DCO)=1.22 *18*.
581.2 *3*	0.07 *2*	11220.5	28^-	10639.3	27^-	M1+E2	
583.0 *3*	0.11 *1*	4920.1	13^+	4337.1	12^+	M1+E2	
594.1 *3*	0.27 *2*	6326.4	17^-	5732.4	15^-	E2	R_{ac}=1.3 *2*.
594.1 *3*	0.14 *2*	7503.2	19^+	6909.1	18^+	M1+E2	R_{ac}=1.09 *19*.
599.4 *3*	0.05 *2*	11258.7	27^+	10659.3	26^+	M1+E2	
599.6 *3*	0.2 *1*	10344.1	26^+	9744.5	25^+	M1+E2	
600.0 *3*	0.37 *10*	10091.5	25^+	9491.5	24^+	M1+E2	
600.4 *3*	0.7 *2*	3768.1	10^+	3167.7	8^+	E2[‡]	R(DCO)=1.1 *4*.
602.5 *3*	91 *5*	976.2	4^+	373.70	2^+	E2[‡]	R(DCO)=1.06 *11*.
603.8 *3*	0.03 *1*	11824.3	29^-	11220.5	28^-	M1+E2	
606.9 *3*	0.03 *1*	10500.6	26^-	9893.7	25^-	M1+E2	
611.4 *3*	0.21 *10*	7543.1	20^+	6931.5	19^+	E2	
613.0 *3*	0.05 *2*	8116.2	20^+	7503.2	19^+	M1+E2	
618.7 *3*	0.10 *1*	7503.2	19^+	6884.5	18^+	M1+E2	
628.4 *3*	1.3 *2*	6866.6	19^+	6238.2	17^+	E2[‡]	R(DCO)=1.02 *19*.
630.8 *3*	0.05 *2*	10201.3	25^-	9570.5	24^-	M1+E2	
635.2 *3*	1.3 *1*	6674.3	18^-	6039.1	16^-	E2[‡]	R(DCO)=1.03 *15*.
639.1 *3*	0.04 *2*	5559.2	15^+	4920.1	13^+	E2	
645.0 *3*	7.5 *6*	3277.8	10^+	2632.8	8^+	E2[‡]	R(DCO)=1.04 *12*.
653.2 *3*	3.7 *2*	3246.9	9^-	2593.7	7^-	E2	R_{ac}=1.40 *8*.
660.1 *3*	0.02 *1*	12484.4	30^-	11824.3	29^-	M1+E2	
660.8 *3*	23 *2*	4346.6	14^+	3685.6	12^+	E2[‡]	R(DCO)=1.1 *1*.
660.9 *3*	8 *1*	3601.4	11^-	2940.5	9^-	E2[‡]	R(DCO)=1.0 *1*.
663.0 *3*	30 *3*	3295.7	10^+	2632.8	8^+	E2[‡]	R(DCO)=1.12 *24*.
663.4 *3*	1.9 *2*	5695.1	16^+	5031.6	14^+	E2[‡]	R(DCO)=1.12 *16*.
665.7 *3*	0.23 *6*	6313.3	17^-	5647.6	15^-	E2	R_{ac}=1.32 *33*.
670.8 *3*	0.65 *6*	8355.2	22^+	7684.4	21^+	M1+E2[‡]	R(DCO)=0.93 *18*.
671.0 *3*	0.8 *1*	3966.7	11^+	3295.7	10^+	M1+E2[#]	R(DCO)=1.21 *18*.
671.8 *3*	0.27 *4*	10763.3	26^+	10091.5	25^+	M1+E2[#]	R(DCO)=0.85 *22*.

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^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

γ(^{136}Nd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
672.5 *3*	0.5 *2*	7927.2	21^+	7254.7	20^+	M1+E2[#]	R(DCO)=1.45 *48*.
672.9 *3*	3.3 *2*	5695.1	16^+	5022.1	14^+	E2[‡]	R(DCO)=1.04 *20*.
678.5 *3*	0.63 *7*	5131.9	15^+	4453.9	13^+	E2	R_{ac}=1.33 *23*.
679.5 *3*	1.8 *3*	1541.7	4^+	862.20	2^+	E2[‡]	R(DCO)=1.05 *25*.
686.1 *3*	0.71 *6*	2227.8	6^+	1541.7	4^+	E2	R_{ac}=1.3 *2*.
689.7 *3*	0.10 *1*	8753.5	23^-	8063.8	21^-	E2	
693.2 *3*	21 *2*	2439.5	7^-	1746.4	6^+	E1[‡]	R(DCO)=0.61 *13*.
699.2 *3*	0.49 *3*	4666.0	12^+	3966.7	11^+	M1+E2[#]	R(DCO)=1.1 *3*.
702.3 *3*	6.1 *3*	5022.1	14^+	4319.8	12^+	E2[‡]	R(DCO)=1.13 *17*.
703.7 *3*	0.41 *3*	8753.5	23^-	8049.8	21^-	E2[‡]	R(DCO)=0.85 *16*.
707.9 *3*	0.25 *3*	7254.7	20^+	6546.9	18^+	E2	R_{ac}=1.41 *26*.
711.8 *3*	4.0 *3*	5031.6	14^+	4319.8	12^+	E2[‡]	R(DCO)=1.08 *17*.
714.1 *3*	0.18 *4*	7927.2	21^+	7213.1	19^+	E2	R_{ac}=1.33 *40*.
714.4 *3*	1.43 *7*	5570.2	16^+	4855.6	14^+	E2[‡]	R(DCO)=0.97 *13*.
716.4 *3*	0.03 *2*	5636.5	15^+	4920.1	13^+	E2	
718.3 *3*	4.6 *3*	3996.1	12^+	3277.8	10^+	E2[‡]	R(DCO)=1.05 *20*.
725.7 *3*	2.1 *2*	5757.4	16^+	5031.6	14^+	E2	
732.4 *3*	0.55 *2*	3172.0	9^-	2439.5	7^-	E2	R(DCO)=1.08 *13*.
732.6 *3*	0.09 *1*	5349.1	13^-	4616.5	12^-	E2	
732.8 *3*	0.8 *2*	7254.7	20^+	6522.0	18^+	E2	R_{ac}=1.4 *3*.
735.2 *3*	2.7 *2*	5757.4	16^+	5022.1	14^+	E2[‡]	R(DCO)=1.1 *2*.
736.2 *3*	0.55 *4*	6579.1	17^+	5842.8	16^+	M1+E2	R_{ac}=1.13 *18*.
737.0 *3*	2.3 *3*	2483.4	6^-	1746.4	6^+	E1	R_{ac}=1.07 *20*.
739.9 *3*	0.52 *4*	6931.5	19^+	6191.3	18^+	M1	R_{ac}=0.63 *12*.
743.5 *3*	0.34 *2*	6586.4	17^+	5842.8	16^+	M1	R_{ac}=0.64 *16*.
743.8 *3*	0.15 *1*	6844.2	18^-	6100.4	16^-	E2	
743.9 *3*	0.05 *1*	8794.6	22^+	8050.7	21^+	M1+E2	
745.7 *3*	0.58 *3*	4347.1	12^-	3601.4	11^-	M1[‡]	R(DCO)=0.51 *11*.
750.1 *3*	2.36 *20*	4027.9	11^-	3277.8	10^+	E1	R_{ac}=0.74 *10*.
750.7 *3*	1.75 *6*	5942.3	17^+	5191.5	16^+	M1[‡]	R(DCO)=0.46 *6*.
750.9 *3*	0.58 *3*	5598.5	14^-	4847.6	14^+	M1[#]	R(DCO)=1.02 *15*.
756.4 *3*	0.06 *3*	5970.3	16^+	5213.9	14^+	E2	
758.6 *3*	0.3 *1*	5696.7	18^-	4938.1	13^+	E2[#]	R(DCO)=1.94 *26*.
759.5 *3*	0.58 *5*	6184.9	17^-	5425.4	15^-	E2	R_{ac}=1.51 *27*.
764.6 *3*	1.9 *2*	6522.0	18^+	5757.4	16^+	E2[#]	R(DCO)=2.16 *29*.
766.9 *3*	7.7 *7*	4319.8	12^+	3552.9	10^+	E2[‡]	R(DCO)=1.0 *2*.
768.4 *3*	1.8 *3*	4453.9	13^+	3685.6	12^+	M1+E2	R_{ac}=1.54 *50*.
770.2 *3*	80 *7*	1746.4	6^+	976.2	4^+	E2[‡]	R(DCO)=0.97 *9*.
771.8 *3*	3.3 *3*	4015.1	12^-	3243.3	10^-	E2	R_{ac}=1.4 *2*.
781.4 *3*	1.5 *1*	7141.7	19^-	6360.3	17^-	E2[‡]	R(DCO)=1.03 *19*.
784.2 *3*	0.38 *2*	4337.1	12^+	3552.9	10^+	E2	R_{ac}=1.33 *25*.
784.3 *3*	0.22 *2*	9163.8	24^-	8379.5	22^-	E2[‡]	R(DCO)=0.95 *14*.
784.7 *3*	2.9 *2*	4386.1	12^-	3601.4	11^-	M1+E2[#]	R(DCO)=0.51 *7*.
785.2 *3*	1.9 *1*	5131.9	15^+	4346.6	14^+	M1+E2[‡]	R(DCO)=0.58 *12*.
785.6 *3*	0.08 *2*	7670.1	20^+	6884.5	18^+	E2	
789.5 *3*	0.31 *2*	6546.9	18^+	5757.4	16^+	E2	R_{ac}=1.46 *29*.
798.7 *3*	0.81 *7*	6238.2	17^+	5439.5	16^+	M1+E2[‡]	R(DCO)=1.34 *16*.
801.2 *3*	0.41 *2*	4829.1	12^-	4027.9	11^-	M1	R_{ac}=0.77 *14*.
802.3 *3*	0.63 *3*	3712.2	10^-	2909.9	8^-	E2[#]	R(DCO)=1.97 *11*.
810.4 *3*	1.35 *8*	5942.3	17^+	5131.9	15^+	E2[‡]	R(DCO)=0.98 *9*.

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^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

γ(^{136}Nd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
811.0 *3*	1.3 *2*	2352.7	6^+	1541.7	4^+	E2	R_{ac}=1.38 *23*.
812.1 *3*	0.62 *20*	8355.2	22^+	7543.1	20^+	E2	R_{ac}=1.4 *3*.
814.2 *3*	6.5 *6*	2045.1	5^+	1230.9	3^+	E2	R_{ac}=1.31 *20*.
814.9 *3*	0.92 *8*	3167.7	8^+	2352.7	6^+	E2[‡]	R(DCO)=1.05 *15*.
817.9 *3*	1.6 *2*	7684.4	21^+	6866.6	19^+	E2[#]	R(DCO)=2.39 *35*.
824.4 *3*	2.7 *3*	4425.8	13^-	3601.4	11^-	E2[‡]	R(DCO)=1.03 *15*.
826.0 *3*	0.70 *7*	7010.9	19^-	6184.9	17^-	E2	R_{ac}=1.46 *21*.
826.9 *3*	2.7 *3*	6522.0	18^+	5695.1	16^+	E2[#]	R(DCO)=2.15 *30*.
832.0 *3*	0.09 *2*	7676.3	(20^-)	6844.2	18^-	E2	
837.9 *3*	0.21 *4*	7151.2	19^-	6313.3	17^-	E2[#]	R(DCO)=1.83 *38*.
839.9 *3*	0.22 *4*	6053.8	16^+	5213.9	14^+	E2	R_{ac}=1.4 *3*.
841.0 *3*	0.48 *3*	4837.1	13^+	3996.1	12^+	M1	R_{ac}=0.68 *9*.
844.7 *3*	0.09 *1*	4446.1	11^+	3601.4	11^-	(E1)	
844.8 *3*	1.8 *2*	6602.2	18^+	5757.4	16^+	E2[‡]	R(DCO)=0.98 *25*.
844.9 *3*	12.2 *7*	5191.5	16^+	4346.6	14^+	E2[‡]	R(DCO)=1.10 *16*.
845.1 *3*	0.6 *1*	9893.7	25^-	9048.7	23^-	E2[‡]	R(DCO)=1.0 *2*.
847.3 *3*	0.94 *5*	2593.7	7^-	1746.4	6^+	E1	R_{ac}=0.86 *6*.
847.6 *3*	0.31 *1*	6039.1	16^-	5191.5	16^+	E1[‡]	R(DCO)=0.47 *12*.
851.6 *3*	2.9 *2*	4847.6	14^+	3996.1	12^+	E2[‡]	R(DCO)=1.02 *15*.
851.8 *3*	1.5 *3*	6546.9	18^+	5695.1	16^+	E2[‡]	R(DCO)=1.03 *30*.
852.4 *3*	0.5 *2*	6579.1	17^+	5726.7	15^+	E2	R_{ac}=1.3 *4*.
857.2 *3*	6.1 *6*	1230.9	3^+	373.70	2^+	M1+E2	R_{ac}=1.16 *15*.
857.3 *3*	1.23 *14*	7531.7	20^-	6674.3	18^-	E2[‡]	R(DCO)=0.98 *22*.
858.9 *3*	1.73 *16*	7330.9	20^+	6472.0	18^+	E2[‡]	R(DCO)=1.09 *19*.
859.7 *3*	0.19 *4*	6586.4	17^+	5726.7	15^+	E2	R_{ac}=1.58 *45*.
860.0 *3*	0.05 *1*	8536.3	22^-	7676.3	(20^-)	E2	
860.0 *3*	0.10 *2*	11392.4	(28^-)	10532.3	26^-	E2	
862.2 *3*	1.5 *3*	862.20	2^+	0.0	0^+	E2[‡]	R(DCO)=1.1 *3*.
862.7 *3*	0.17 *4*	7577.8	20^-	6715.1	18^-	E2[#]	R(DCO)=1.98 *27*.
864.0 *3*	0.30 *3*	9617.5	25^-	8753.5	23^-	E2[‡]	R(DCO)=1.10 *22*.
864.9 *3*	0.25 *10*	6424.1	17^+	5559.2	15^+	E2	
869.1 *3*	3.0 *2*	4116.0	11^-	3246.9	9^-	E2[#]	R(DCO)=2.13 *23*.
871.9 *3*	0.15 *3*	8023.1	21^-	7151.2	19^-	E2	R_{ac}=1.42 *36*.
874.6 *3*	0.16 *4*	6006.4	16^+	5131.9	15^+	M1+E2	R_{ac}=1.11 *25*.
879.0 *3*	0.58 *2*	5726.7	15^+	4847.6	14^+	M1+E2	R_{ac}=1.21 *25*.
883.1 *3*	0.24 *3*	5308.9	14^-	4425.8	13^-	M1[#]	R(DCO)=1.13 *16*.
883.1 *3*	0.41 *5*	7355.1	20^+	6472.0	18^+	E2	R_{ac}=1.5 *2*.
886.3 *3*	56 *4*	2632.8	8^+	1746.4	6^+	E2[‡]	R(DCO)=1.01 *15*.
889.6 *3*	0.19 *2*	5726.7	15^+	4837.1	13^+	E2	R_{ac}=1.5 *3*.
890.3 *3*	0.73 *8*	7901.2	21^-	7010.9	19^-	E2	R_{ac}=1.42 *30*.
892.4 *3*	0.94 *5*	8147.1	22^+	7254.7	20^+	E2[#]	R(DCO)=2.28 *22*.
892.4 *3*	0.42 *3*	10786.1	27^-	9893.7	25^-	E2[‡]	R(DCO)=0.96 *10*.
893.2 *3*	2.9 *3*	8224.1	22^+	7330.9	20^+	E2	R_{ac}=1.35 *20*.
901.0 *3*	0.3 *1*	8828.2	23^+	7927.2	21^+	E2	
901.8 *3*	3.1 *2*	6472.0	18^+	5570.2	16^+	E2[‡]	R(DCO)=1.05 *18*.
904.2 *3*	0.41 *8*	4616.5	12^-	3712.2	10^-	E2[#]	R(DCO)=2.17 *45*.
905.0 *3*	0.15 *2*	4920.1	13^+	4015.1	12^-	(E1)	
907.1 *3*	0.12 *1*	6602.2	18^+	5695.1	16^+	E2	
908.0 *3*	1.35 *11*	8049.8	21^-	7141.7	19^-	E2[‡]	R(DCO)=0.94 *12*.
912.1 *3*	0.74 *3*	6754.9	18^+	5842.8	16^+	E2	R_{ac}=1.49 *23*.

Continued on next page (footnotes at end of table)

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

γ(^{136}Nd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
914.2 *3*	0.15 *2*	6884.5	18^+	5970.3	16^+	E2	
920.1 *3*	14 *2*	3552.9	10^+	2632.8	8^+	E2[‡]	R(DCO)=0.99 *16*.
922.2 *3*	1.15 *6*	8063.8	21^-	7141.7	19^-	E2[‡]	R(DCO)=0.98 *15*.
922.8 *3*	0.61 *5*	5308.9	14^-	4386.1	12^-	E2[#]	R(DCO)=1.9 *2*.
932.9 *3*	0.15 *3*	8510.7	22^-	7577.8	20^-	E2	R_{ac}=1.33 *31*.
941.8 *3*	0.27 *2*	10500.6	26^-	9558.7	24^-	E2[‡]	R(DCO)=0.98 *19*.
942.0 *3*	0.35 *5*	4938.1	13^+	3996.1	12^+	M1	R_{ac}=0.8 *2*.
943.7 *3*	0.07 *2*	8170.0	21^-	7226.3	19^-	E2	
945.0 *3*	1.15 *9*	6360.3	17^-	5415.2	15^-	E2[‡]	R(DCO)=1.07 *24*.
945.0 *3*	0.10 *3*	7258.3	19^-	6313.3	17^-	E2	R_{ac}=1.36 *45*.
945.1 *3*	0.21 *5*	7271.5	19^-	6326.4	17^-	E2	R_{ac}=1.44 *55*.
945.1 *3*	0.52 *3*	10108.9	26^-	9163.8	24^-	E2[‡]	R(DCO)=1.08 *13*.
948.6 *3*	0.7 *1*	8849.8	23^-	7901.2	21^-	E2	R_{ac}=1.46 *27*.
948.9 *3*	2.1 *1*	9173.0	24^+	8224.1	22^+	E2	R_{ac}=1.43 *15*.
950.4 *3*	1.11 *7*	7141.7	19^-	6191.3	18^+	E1[‡]	R(DCO)=0.53 *10*.
951.8 *3*	0.16 *2*	6522.0	18^+	5570.2	16^+	E2	R_{ac}=1.31 *22*.
960.6 *3*	0.08 *3*	7721.2	20^-	6760.6	18^-	E2	
961.8 *3*	0.25 *2*	5308.9	14^-	4347.1	12^-	E2[#]	R(DCO)=1.97 *24*.
962.1 *3*	0.11 *5*	7722.7	20^-	6760.6	18^-	E2	R_{ac}=1.5 *4*.
966.7 *3*	0.78 *7*	8651.1	23^+	7684.4	21^+	E2[#]	R(DCO)=2.13 *27*.
973.6 *3*	0.16 *1*	10532.3	26^-	9558.7	24^-	E2	R_{ac}=1.44 *33*.
975.0 *3*	0.3 *1*	7213.1	19^+	6238.2	17^+	E2	R_{ac}=1.33 *35*.
976.7 *3*	<0.01	6546.9	18^+	5570.2	16^+	E2	
977.4 *3*	0.20 *1*	7732.3	20^+	6754.9	18^+	E2	R_{ac}=1.43 *25*.
980.3 *3*	0.16 *3*	4666.0	12^+	3685.6	12^+	M1+E2[#]	R(DCO)=1.60 *45*.
984.9 *3*	0.30 *2*	9048.7	23^-	8063.8	21^-	E2	R_{ac}=1.37 *21*.
985.8 *3*	0.81 *4*	5371.9	14^-	4386.1	12^-	E2[#]	R(DCO)=2.01 *19*.
988.9 *3*	1.47 *6*	5104.9	13^-	4116.0	11^-	E2[#]	R(DCO)=2.21 *14*.
988.9 *3*	0.07 *2*	8215.2	21^-	7226.3	19^-	E2	R_{ac}=1.39 *32*.
989.0 *3*	1.5 *1*	6931.5	19^+	5942.3	17^+	E2[‡]	R(DCO)=1.01 *15*.
989.4 *3*	2.2 *2*	5415.2	15^-	4425.8	13^-	E2[‡]	R(DCO)=1.06 *14*.
991.6 *3*	0.23 *3*	11492.2	28^-	10500.6	26^-	E2[‡]	R(DCO)=0.99 *16*.
992.1 *3*	0.25 *10*	9347.3	24^+	8355.2	22^+	E2	
995.2 *3*	1.63 *17*	5842.8	16^+	4847.6	14^+	E2	R_{ac}=1.52 *26*.
997.6 *3*	0.15 *5*	9020.7	23^-	8023.1	21^-	E2	
998.6 *3*	0.31 *4*	11784.7	29^-	10786.1	27^-	E2	R_{ac}=1.4 *2*.
998.9 *3*	0.40 *4*	9048.7	23^-	8049.8	21^-	E2[‡]	R(DCO)=1.0 *2*.
999.8 *3*	5.7 *4*	6191.3	18^+	5191.5	16^+	E2[‡]	R(DCO)=1.07 *15*.
1001.3 *3*	0.57 *4*	7473.3	20^+	6472.0	18^+	E2	R(DCO)=1.09 *19*.
1004.6 *3*	1.1 *1*	8536.3	22^-	7531.7	20^-	E2[‡]	R(DCO)=1.01 *18*.
1005.9 *3*	2.5 *3*	5021.1	14^-	4015.1	12^-	E2[‡]	R(DCO)=0.97 *15*.
1017.7 *3*	0.83 *5*	7619.9	20^+	6602.2	18^+	E2[‡]	R(DCO)=1.02 *18*.
1018.0 *3*	1.1 *2*	6039.1	16^-	5021.1	14^-	E2[‡]	R(DCO)=1.03 *37*.
1018.8 *3*	1.5 *2*	10191.8	26^+	9173.0	24^+	E2	R_{ac}=1.42 *22*.
1019.1 *3*	0.10 *3*	6989.4	18^+	5970.3	16^+	E2	R_{ac}=1.43 *32*.
1021.2 *3*	0.6 *1*	7543.1	20^+	6522.0	18^+	E2	R_{ac}=1.42 *21*.
1021.8 *3*	0.32 *3*	10639.3	27^-	9617.5	25^-	E2	R_{ac}=1.30 *21*.
1022.0 *3*	0.25 *4*	7737.1	20^-	6715.1	18^-	E2	R_{ac}=1.41 *27*.
1022.4 *3*	0.66 *6*	9558.7	24^-	8536.3	22^-	E2[‡]	R(DCO)=1.11 *15*.
1027.4 *3*	0.67 *6*	9877.2	25^-	8849.8	23^-	E2	R_{ac}=1.4 *2*.

Continued on next page (footnotes at end of table)

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

γ(^{136}Nd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
1029.2 *3*	1.95 *4*	5057.1	12^-	4027.9	11^-	M1+E2	R_{ac}=1.08 *15*.
1030.3 *3*	0.38 *5*	9177.4	24^+	8147.1	22^+	E2	R_{ac}=1.49 *34*.
1030.6 *3*	0.16 *3*	8751.8	22^-	7721.2	20^-	E2	R_{ac}=1.35 *26*.
1031.8 *3*	1.4 *1*	5417.9	14^-	4386.1	12^-	E2[#]	R(DCO)=1.91 *20*.
1041.3 *3*	0.7 *2*	4337.1	12^+	3295.7	10^+	E2[‡]	R(DCO)=1.12 *27*.
1044.7 *3*	0.43 *2*	7591.6	20^+	6546.9	18^+	E2	R_{ac}=1.44 *25*.
1045.2 *3*	0.12 *2*	7469.3	19^+	6424.1	17^+	E2	R_{ac}=1.31 *29*.
1046.7 *3*	1.04 *7*	6238.2	17^+	5191.5	16^+	M1[‡]	R(DCO)=0.46 *7*.
1050.3 *3*	0.14 *4*	8628.1	22^-	7577.8	20^-	E2	R_{ac}=1.26 *37*.
1059.7 *3*	9.3 *8*	2035.9	5^-	976.2	4^+	E1[‡]	R(DCO)=0.64 *11*.
1059.8 *3*	0.12 *4*	9570.5	24^-	8510.7	22^-	E2	R_{ac}=1.4 *3*.
1059.9 *3*	0.6 *3*	8211.1	21^-	7151.2	19^-	(E2)	
1060.7 *3*	0.8 *4*	7927.2	21^+	6866.6	19^+	E2	
1061.0 *3*	1.2 *3*	5177.1	13^-	4116.0	11^-	M1+E2	R_{ac}=1.1 *3*.
1062.3 *3*	0.10 *1*	8794.6	22^+	7732.3	20^+	E2	R_{ac}=1.44 *22*.
1062.7 *3*	0.18 *3*	12554.9	30^-	11492.2	28^-	E2[‡]	R(DCO)=0.95 *18*.
1064.6 *3*	0.26 *4*	4666.0	12^+	3601.4	11^-	E1[#]	R(DCO)=1.16 *36*.
1068.0 *3*	0.22 *1*	5684.5	14^-	4616.5	12^-	E2[#]	R(DCO)=2.0 *3*.
1069.2 *3*	0.10 *2*	9092.3	23^-	8023.1	21^-	E2	R_{ac}=1.45 *30*.
1070.8 *3*	0.33 *2*	5417.9	14^-	4347.1	12^-	E2	R_{ac}=1.41 *21*.
1076.9 *3*	0.47 *4*	6492.1	17^-	5415.2	15^-	E2[‡]	R(DCO)=1.04 *22*.
1078.8 *3*	0.65 *15*	5425.4	15^-	4346.6	14^+	E1	R_{ac}=0.99 *29*.
1079.3 *3*	0.31 *2*	6100.4	16^-	5021.1	14^-	E2	R_{ac}=1.32 *30*.
1083.0 *3*	0.10 *2*	9911.2	25^+	8828.2	23^+	E2	
1084.0 *3*	0.6 *1*	10961.2	27^-	9877.2	25^-	E2	R_{ac}=1.41 *25*.
1086.8 *3*	0.92 *9*	11278.6	28^+	10191.8	26^+	E2	R_{ac}=1.54 *20*.
1088.4 *3*	0.21 *2*	8561.7	22^+	7473.3	20^+	E2	R_{ac}=1.49 *29*.
1092.9 *3*	1.5 *1*	5439.5	16^+	4346.6	14^+	M1[‡]	R(DCO)=0.92 *14*.
1093.4 *3*	0.5 *1*	9744.5	25^+	8651.1	23^+	E2	R_{ac}=1.27 *23*.
1097.1 *3*	0.02 *1*	9787.3	24^-	8690.2	22^-	E2	
1099.4 *3*	0.20 *3*	12884.1	31^-	11784.7	29^-	E2[‡]	R(DCO)=1.08 *21*.
1100.5 *3*	0.1 *1*	8355.2	22^+	7254.7	20^+	E2[#]	R(DCO)=2.1 *6*.
1106.4 *3*	0.5 *1*	6238.2	17^+	5131.9	15^+	E2[‡]	R(DCO)=0.93 *21*.
1111.6 *3*	0.17 *2*	11220.5	28^-	10108.9	26^-	E2	R_{ac}=1.53 *28*.
1120.4 *3*	0.14 *3*	8414.1	21^+	7293.7	19^+	E2	R_{ac}=1.31 *42*.
1121.5 *3*	0.28 *2*	13605.9	32^+	12484.4	30^-	E2	R_{ac}=1.39 *21*.
1135.3 *3*	1.9 *3*	3768.1	10^+	2632.8	8^+	E2[‡]	R(DCO)=0.98 *25*.
1139.6 *3*	2.0 *3*	7330.9	20^+	6191.3	18^+	E2	R_{ac}=1.56 *30*.
1140.0 *3*	0.60 *10*	12418.6	30^+	11278.6	28^+	E2	R_{ac}=1.56 *30*.
1143.8 *3*	0.15 *5*	8828.2	23^+	7684.4	21^+	E2[‡]	R(DCO)=1.06 *21*.
1145.1 *3*	0.11 *1*	13700.0	32^-	12554.9	30^-	E2	R_{ac}=1.38 *20*.
1150.3 *3*	0.62 *6*	4446.1	11^+	3295.7	10^+	M1	R_{ac}=0.81 *8*.
1156.8 *3*	<0.01	10504.1	26^+	9347.3	24^+	E2	
1162.7 *3*	0.21 *2*	6602.2	18^+	5439.5	16^+	E2	
1163.8 *3*	1.13 *9*	7355.1	20^+	6191.3	18^+	E2	R_{ac}=1.47 *24*.
1166.7 *3*	0.52 *5*	10344.1	26^+	9177.4	24^+	E2	R_{ac}=1.51 *22*.
1167.2 *3*	0.10 *3*	11258.7	27^+	10091.5	25^+	E2	R_{ac}=1.42 *60*.
1167.8 *3*	0.03 *2*	10659.3	26^+	9491.5	24^+	E2	
1168.8 *3*	0.53 *5*	6360.3	17^-	5191.5	16^+	E1[‡]	R(DCO)=0.49 *8*.
1168.8 *3*	0.34 *3*	8100.3	21^+	6931.5	19^+	E2	R_{ac}=1.37 *24*.
1170.0 *3*	1.23 *6*	4855.6	14^+	3685.6	12^+	E2[‡]	R(DCO)=1.11 *19*.
1170.0 *3*	0.18 *4*	8840.1	22^+	7670.1	20^+	E2	R_{ac}=1.4 *3*.

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^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)

γ(^{136}Nd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
1172.4 *3*	<0.01	9683.1	24^-	8510.7	22^-	E2	
1180.6 *3*	0.07 *2*	10201.3	25^-	9020.7	23^-	E2	
1185.0 *3*	0.10 *1*	11824.3	29^-	10639.3	27^-	E2	R_{ac}=1.37 *36*.
1185.7 *3*	0.26 *2*	5532.2	14^-	4346.6	14^+	E1	R_{ac}=0.92 *25*.
1186.9 *3*	0.44 *4*	12148.1	29^-	10961.2	27^-	E2	R_{ac}=1.45 *20*.
1188.4 *3*	0.11 *2*	14072.5	33^-	12884.1	31^-	E2[‡]	R(DCO)=0.93 *25*.
1198.1 *3*	0.15 *3*	9248.8	23^+	8050.7	21^+	E2	R_{ac}=1.37 *50*.
1200.2 *3*	0.4 *1*	9347.3	24^+	8147.1	22^+	E2	R_{ac}=1.37 *28*.
1202.8 *3*	0.05 *1*	4446.1	11^+	3243.3	10^-	(E1)	
1221.6 *3*	0.12 *4*	10966.1	27^+	9744.5	25^+	E2	
1221.8 *3*	0.20 *2*	5647.6	15^-	4425.8	13^-	E2	R_{ac}=1.38 *18*.
1223.6 *3*	2.5 *2*	5570.2	16^+	4346.6	14^+	E2[‡]	R(DCO)=0.97 *13*.
1226.3 *3*	0.09 *2*	14926.3	(34^-)	13700.0	32^-	E2	
1229.0 *3*	0.10 *3*	9696.0	24^+	8467.0	22^+	E2	R_{ac}=1.40 *45*.
1234.4 *3*	0.12 *3*	4920.1	13^+	3685.6	12^+	M1+E2	
1251.6 *3*	0.31 *3*	2227.8	6^+	976.2	4^+	E2	R_{ac}=1.41 *26*.
1258.0 *3*	0.05 *1*	10206.2	25^+	8948.2	23^+	E2	
1260.1 *3*	0.19 *4*	9911.2	25^+	8651.1	23^+	E2	R_{ac}=1.50 *36*.
1263.9 *3*	0.08 *2*	12484.4	30^-	11220.5	28^-	E2	
1268.7 *3*	0.65 *4*	8623.8	22^+	7355.1	20^+	E2	R_{ac}=1.53 *21*.
1276.7 *3*	0.17 *2*	8266.1	22^+	6989.4	18^+	E2	R_{ac}=1.5 *2*.
1280.4 *3*	0.58 *5*	6472.0	18^+	5191.5	16^+	E2[‡]	R(DCO)=1.10 *20*.
1286.1 *3*	0.05 *1*	15358.6	(35^-)	14072.5	33^-	E2	
1290.9 *3*	0.36 *3*	13439.0	31^-	12148.1	29^-	E2	R_{ac}=1.36 *34*.
1292.0 *3*	0.17 *3*	6230.1	15^+	4938.1	13^+	E2	R_{ac}=1.41 *42*.
1301.1 *3*	0.05 *1*	16227.4	(36^-)	14926.3	(34^-)	E2	
1306.1 *3*	<0.01	11650.2	28^+	10344.1	26^+	E2	
1323.3 *3*	<0.01	17550.7	(38^-)	16227.4	(36^-)	E2	
1326.7 *3*	0.02 *1*	10504.1	26^+	9177.4	24^+	E2	
1330.5 *3*	<0.01	6522.0	18^+	5191.5	16^+	E2	
1353.0 *3*	0.4 *1*	5349.1	13^-	3996.1	12^+	E1	R_{ac}=0.89 *30*.
1368.3 *3*	<0.01	12334.4	29^+	10966.1	27^+	E2	
1371.6 *3*	<0.01	11116.1	27^+	9744.5	25^+	E2	
1378.2 *3*	0.10 *1*	10002.0	(24^+)	8623.8	22^+	E2	
1382.4 *3*	0.14 *2*	6230.1	15^+	4847.6	14^+	M1+E2	R_{ac}=1.0 *3*.
1390.6 *3*	<0.01	16749.3	(37^-)	15358.6	(35^-)	E2	
1393.0 *3*	0.10 *2*	6230.1	15^+	4837.1	13^+	E2	
1402.6 *3*	0.22 *3*	14841.6	33^-	13439.0	31^-	E2	R_{ac}=1.33 *27*.
1410.7 *3*	0.12 *3*	6602.2	18^+	5191.5	16^+	E2	
1410.8 *3*	0.11 *2*	5757.4	16^+	4346.6	14^+	E2	
1428.6 *3*	0.15 *2*	7619.9	20^+	6191.3	18^+	E2	
1479.6 *3*	0.31 *2*	5826.2	15^+	4346.6	14^+	M1+E2	R_{ac}=1.11 *26*.
1492.3 *3*	0.05 *1*	11494.3	(26^+)	10002.0	(24^+)	E2	
1514.0 *3*	0.09 *2*	16355.6	(35^-)	14841.6	33^-	E2	
1624.4 *3*	0.07 *2*	17980.0	(37^-)	16355.6	(35^-)	E2	
1659.8 *3*	0.23 *2*	6006.4	16^+	4346.6	14^+	E2	R_{ac}=1.34 *28*.
1715.3 *3*	0.03 *1*	19695.3	(39^-)	17980.0	(37^-)	E2	

[†] From R(DCO), R_{ac} and ΔJ^π, as given in 2019Lv01.
[‡] R(DCO) from spectrum gated on a stretched quadrupole transition.
[#] R(DCO) from spectrum gated on a stretched dipole transition.

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Level Scheme

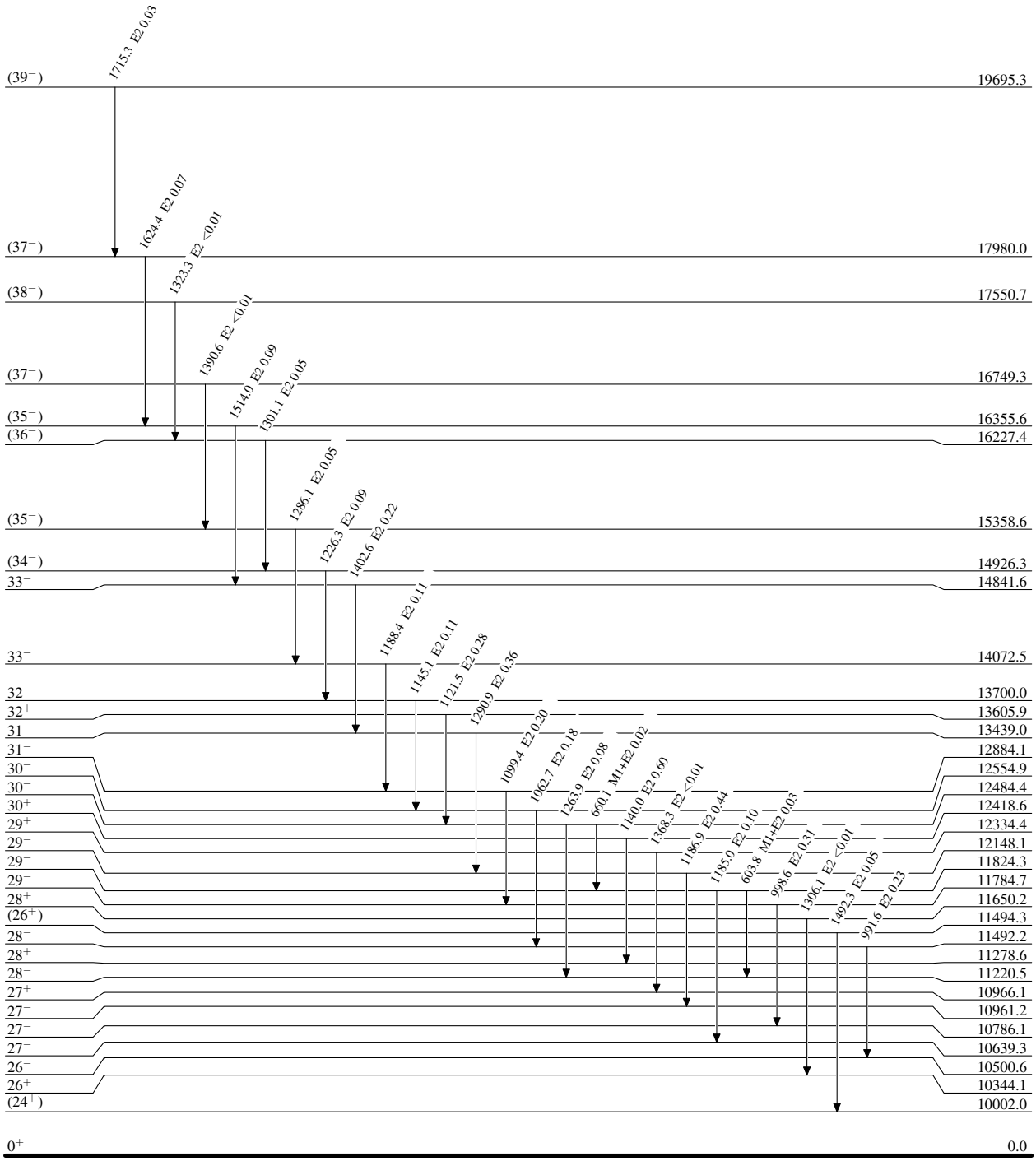
Intensities: Type not specified

Legend

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

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

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



$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Level Scheme (continued)

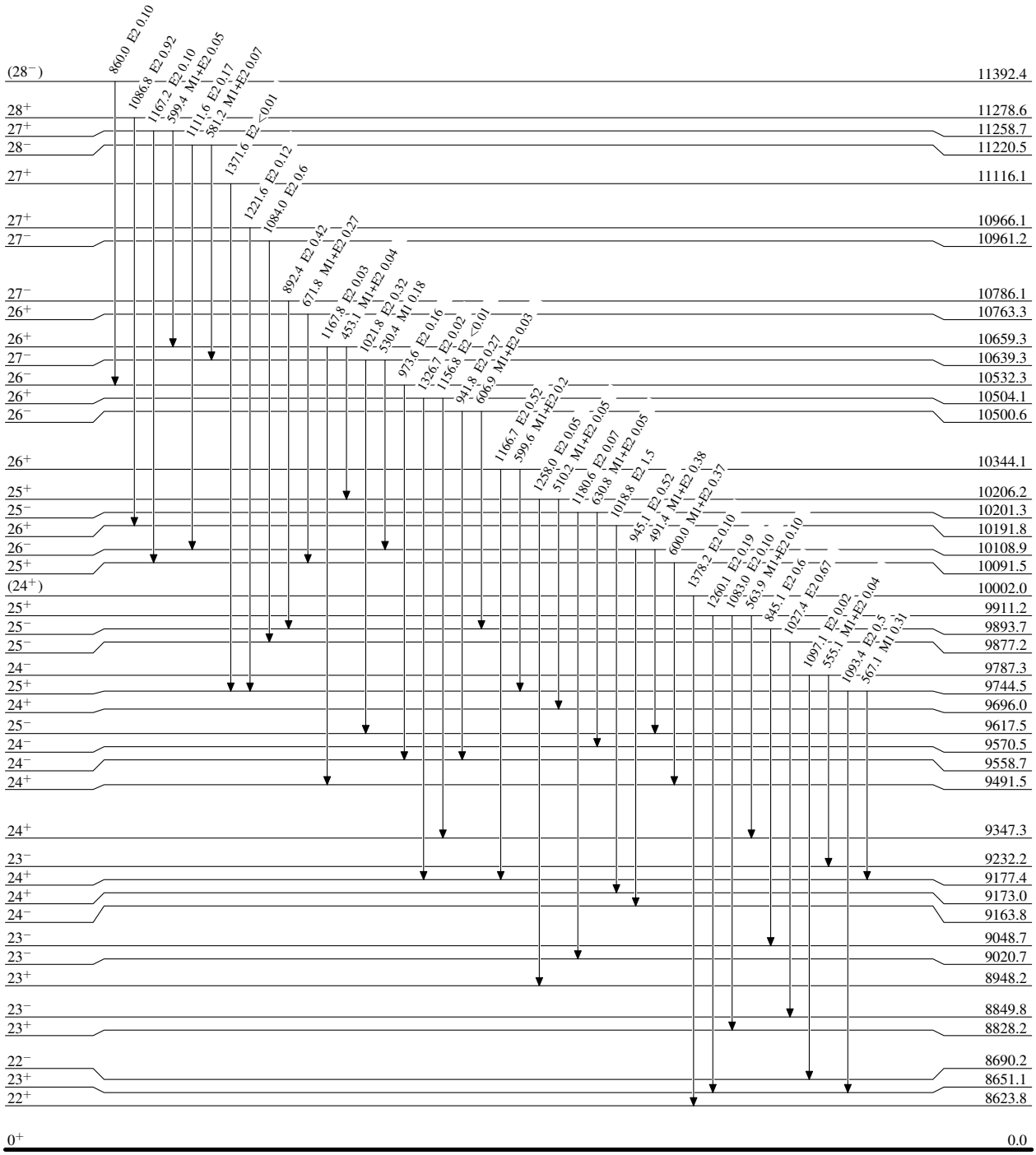
Intensities: Type not specified

Legend

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

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

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



$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Level Scheme (continued)

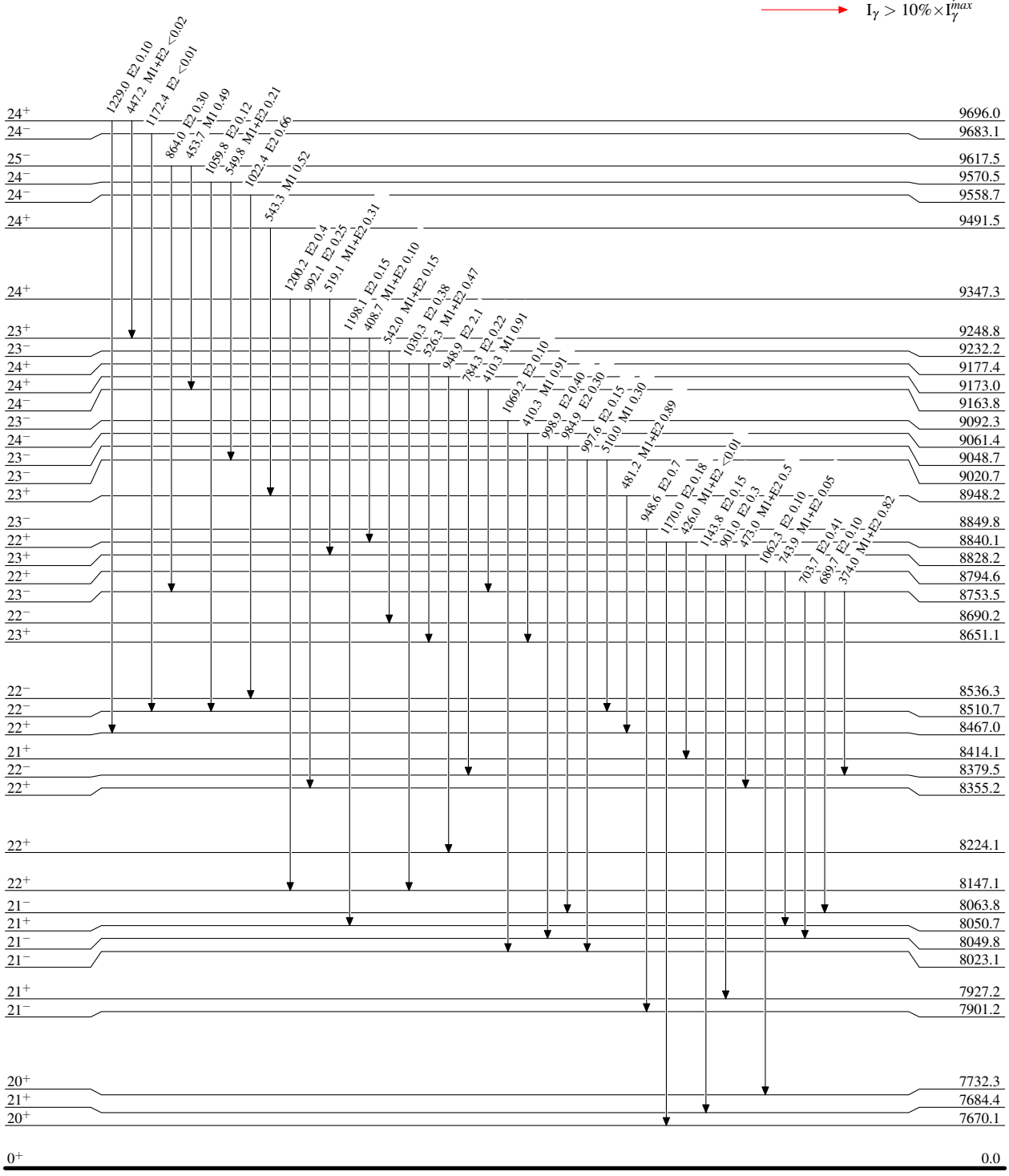
Intensities: Type not specified

Legend

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

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

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



$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Level Scheme (continued)

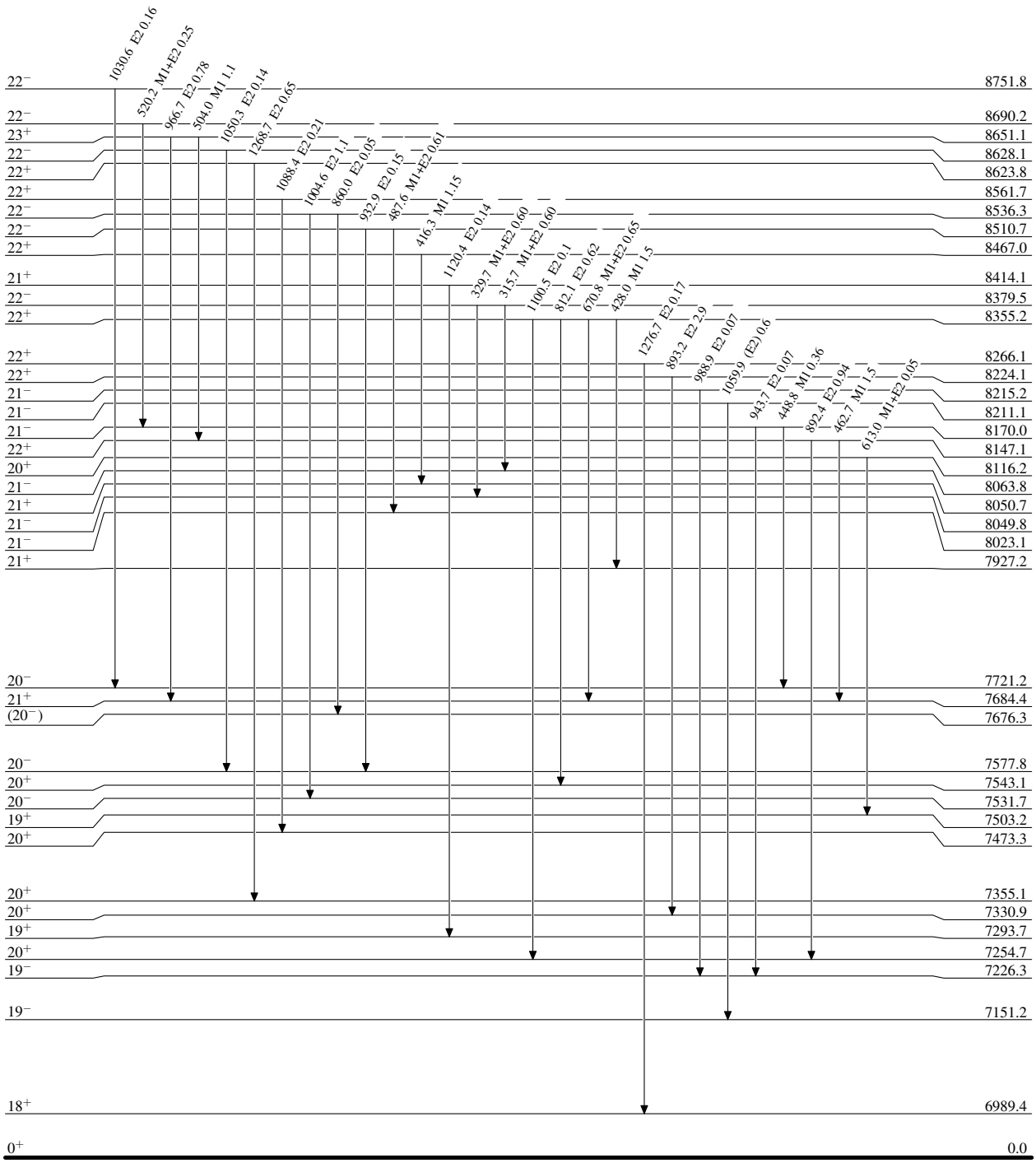
Intensities: Type not specified

Legend

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

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

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



$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Level Scheme (continued)

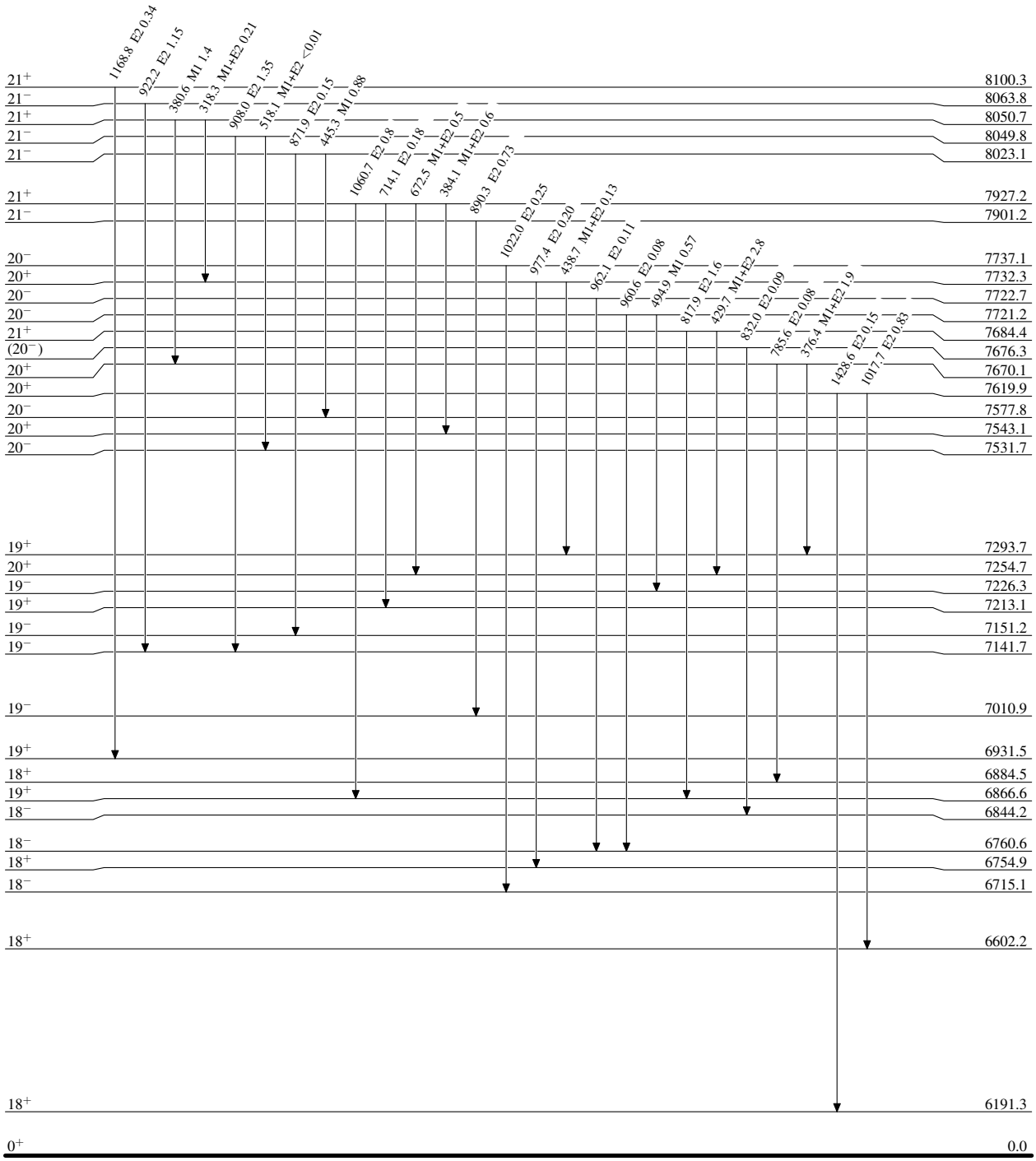
Intensities: Type not specified

Legend

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

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

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



$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Level Scheme (continued)

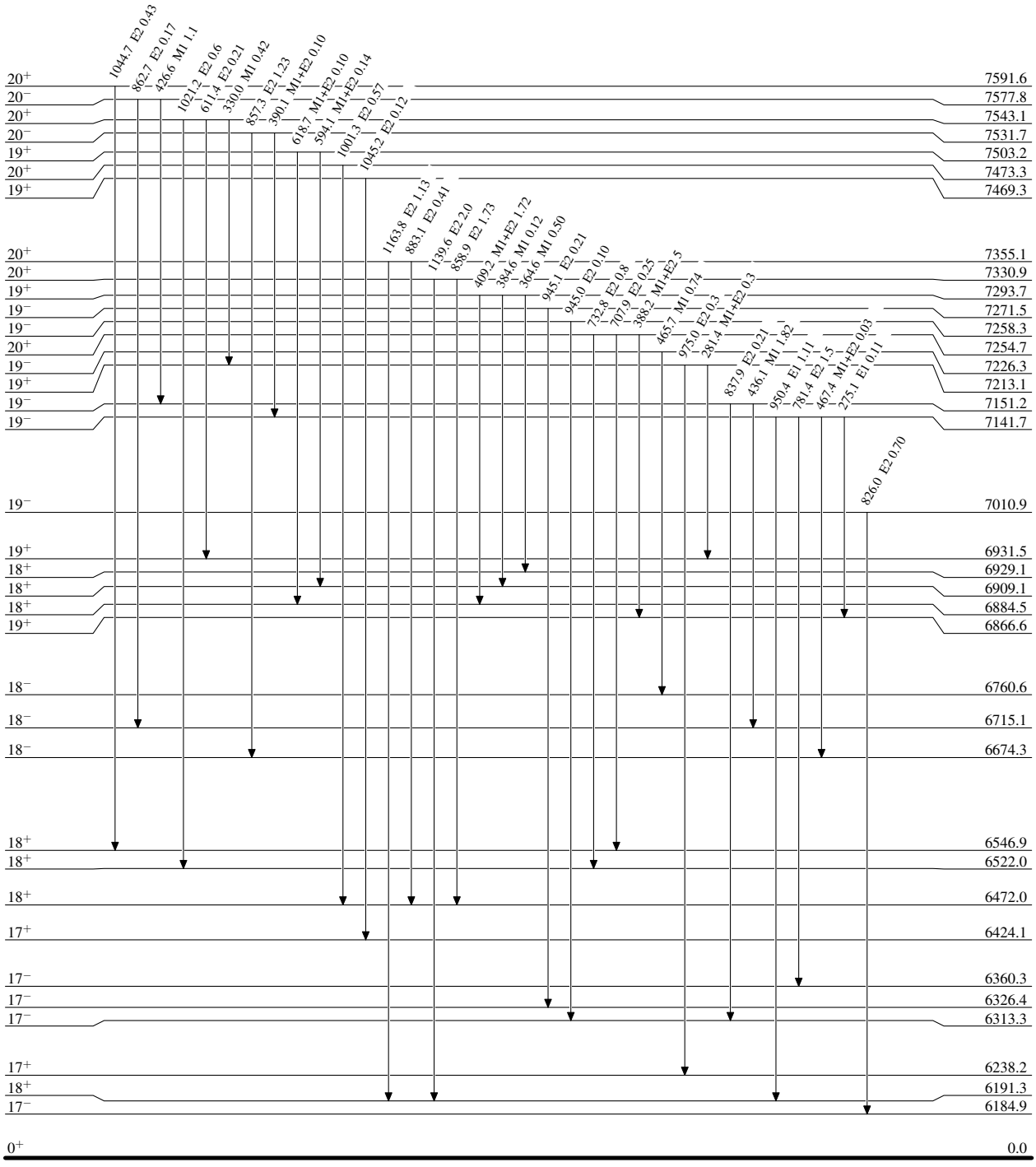
Intensities: Type not specified

Legend

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

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

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



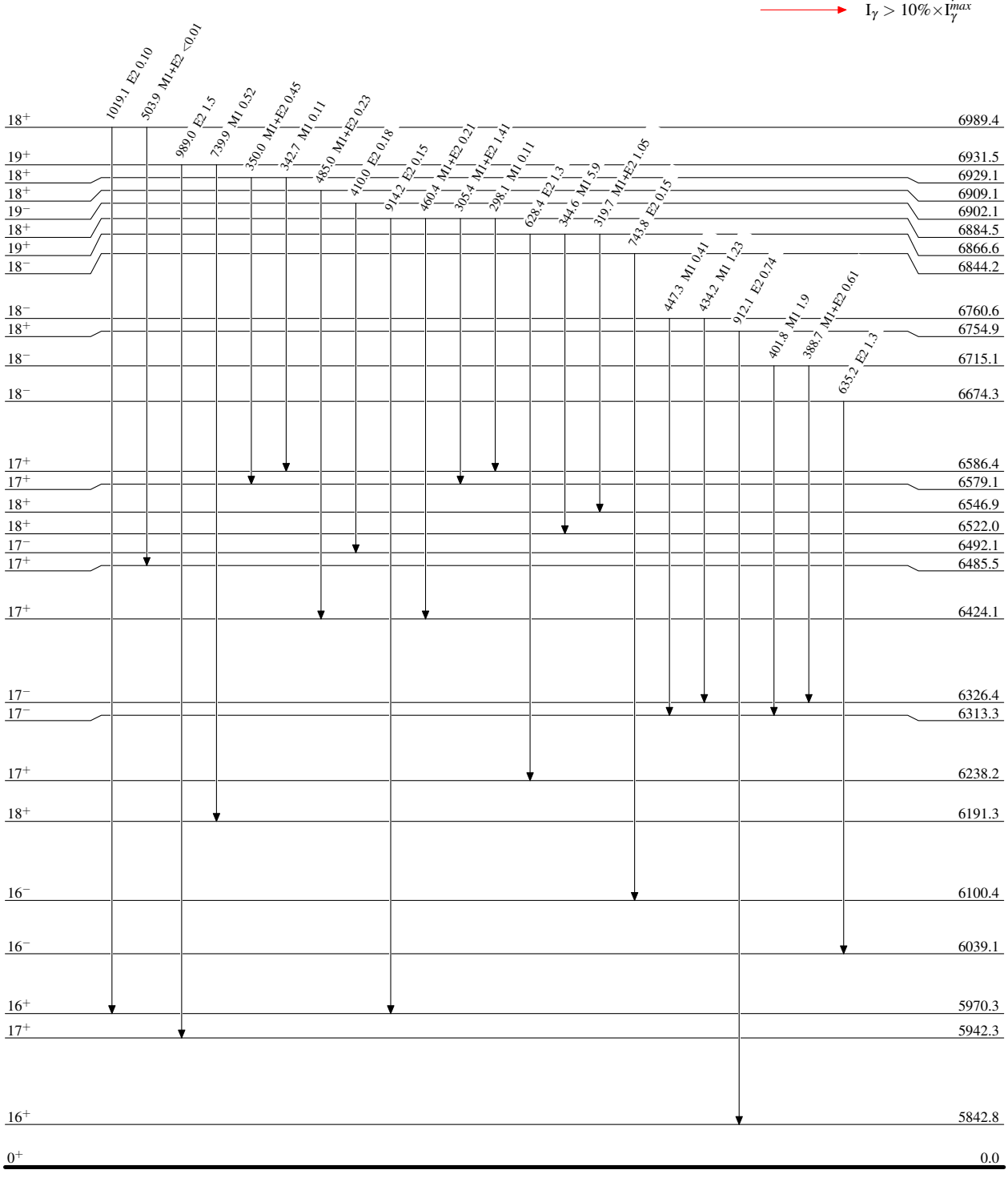
$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Level Scheme (continued)

Intensities: Type not specified

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

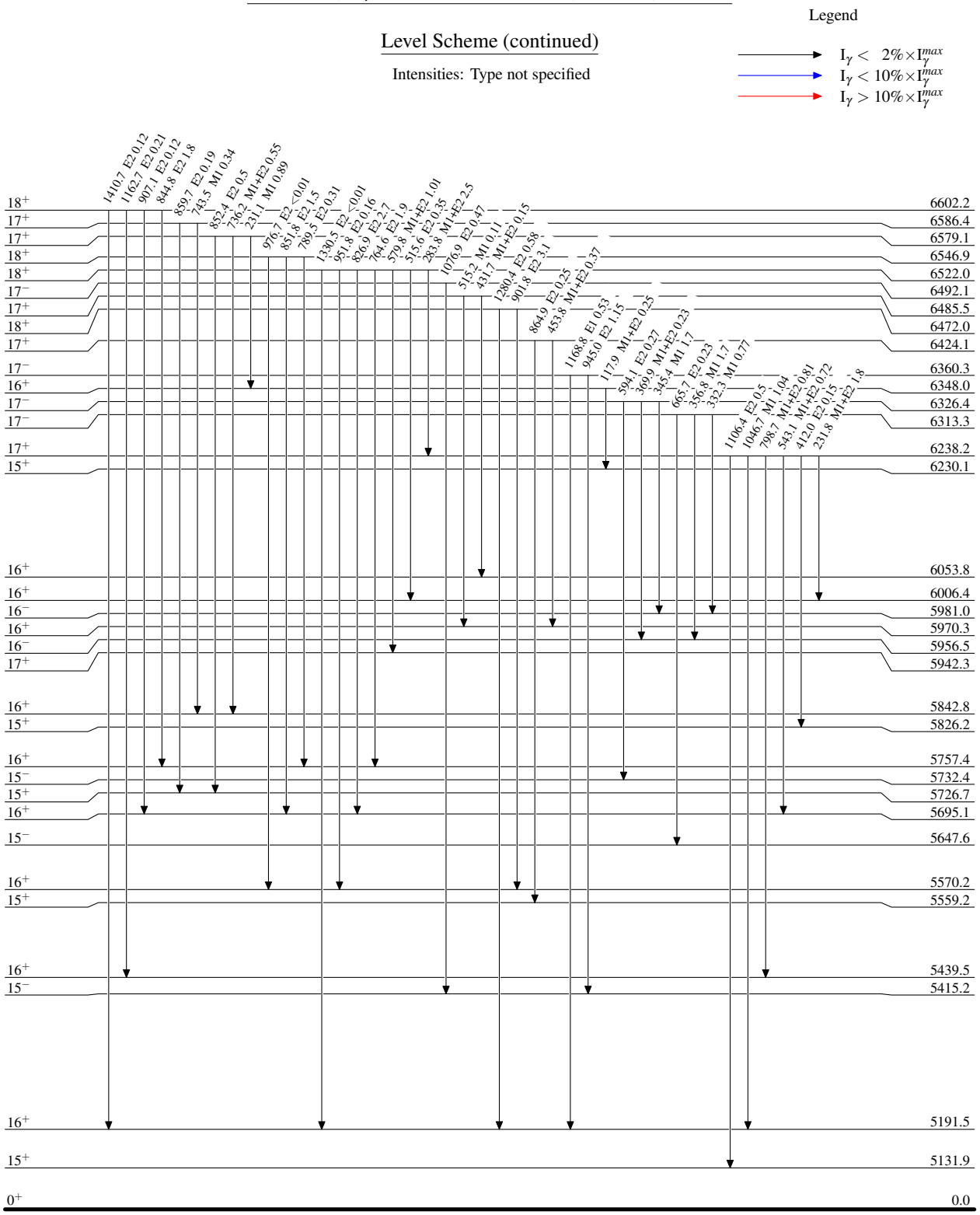


$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Level Scheme (continued)

Intensities: Type not specified



$^{136}_{60}Nd_{76}$

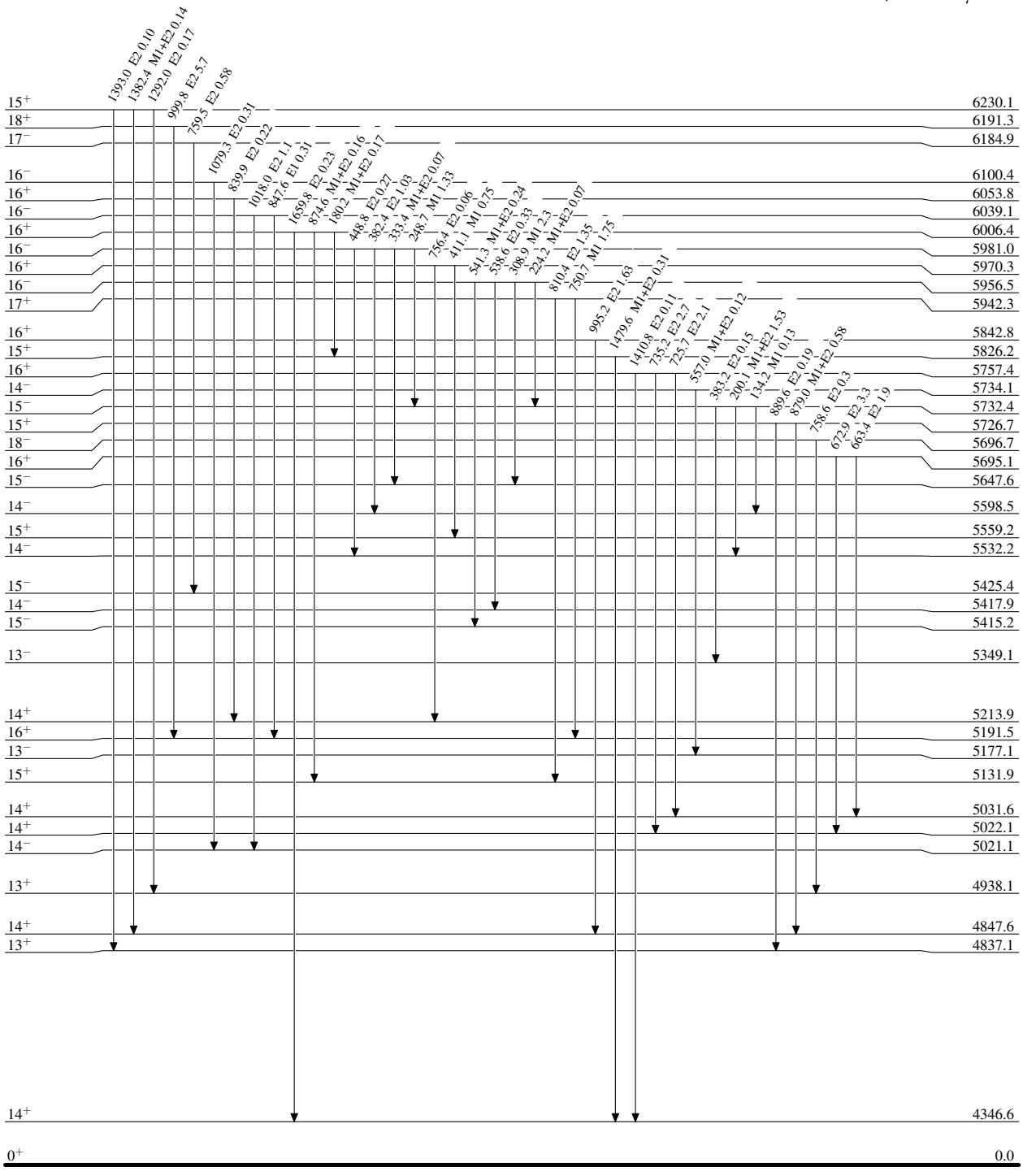
^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Legend

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

Level Scheme (continued)

Intensities: Type not specified



$^{136}_{60}Nd_{76}$

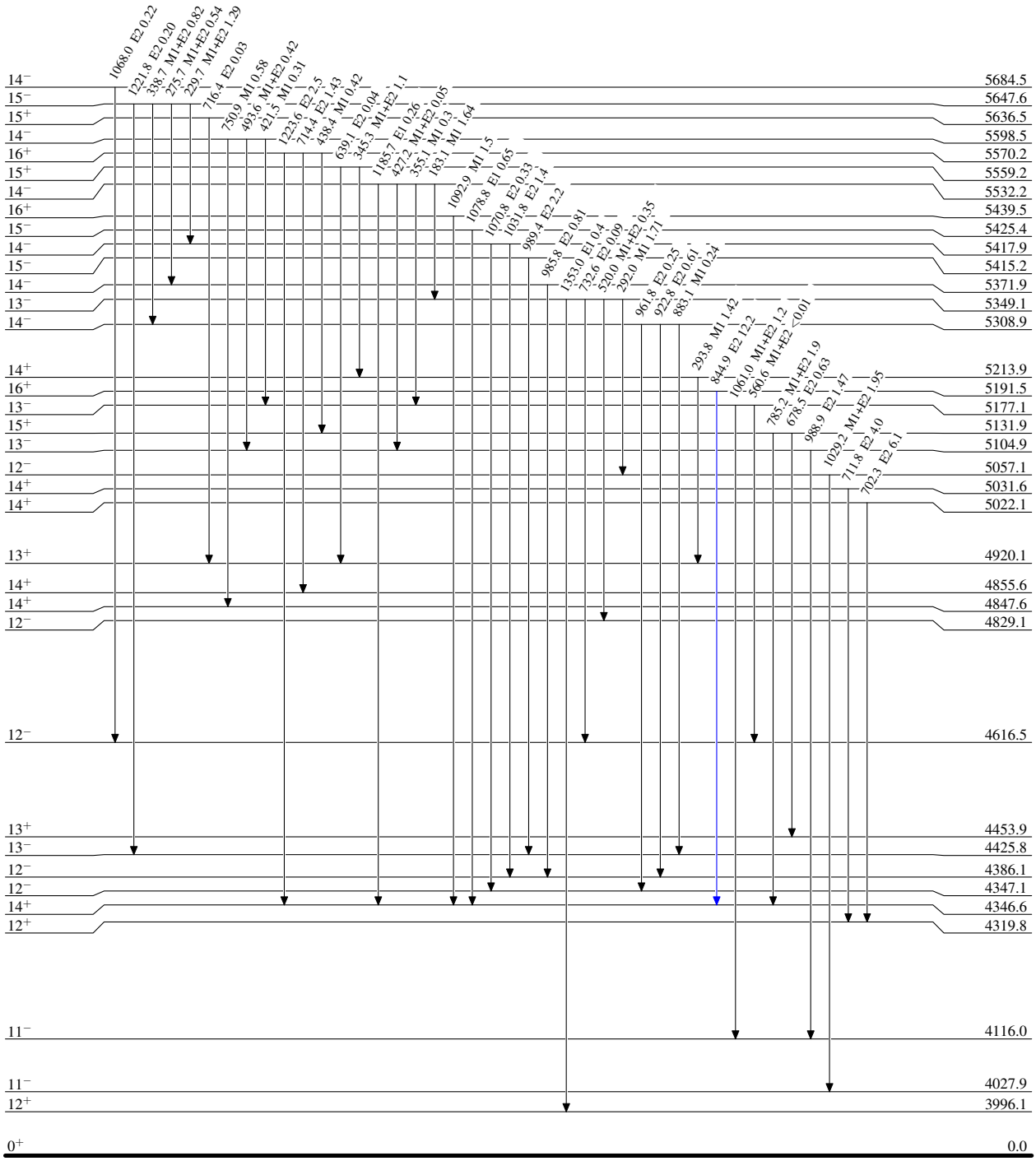
^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Legend

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

Level Scheme (continued)

Intensities: Type not specified



$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Level Scheme (continued)

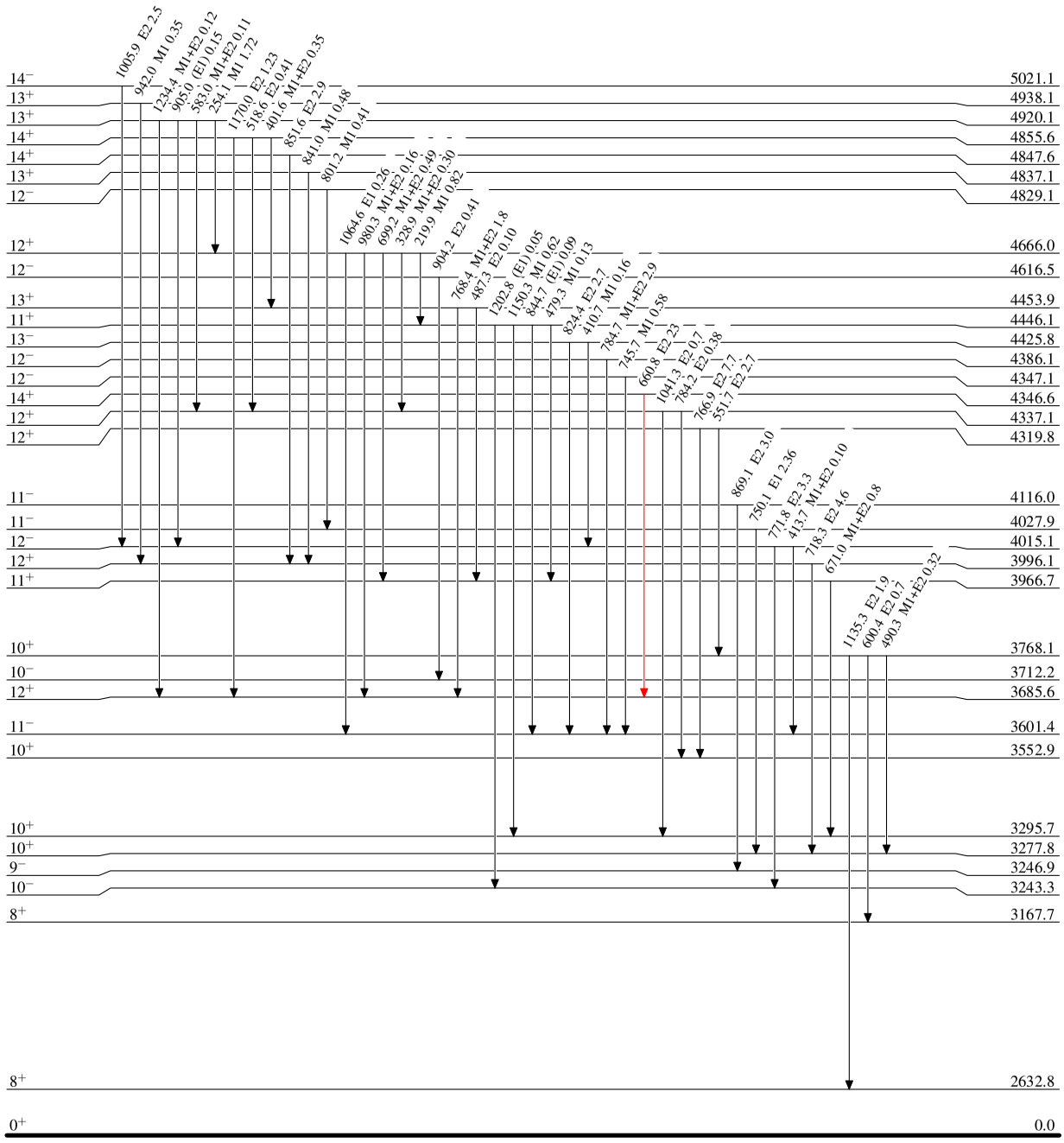
Intensities: Type not specified

Legend

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

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

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



$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

Level Scheme (continued)

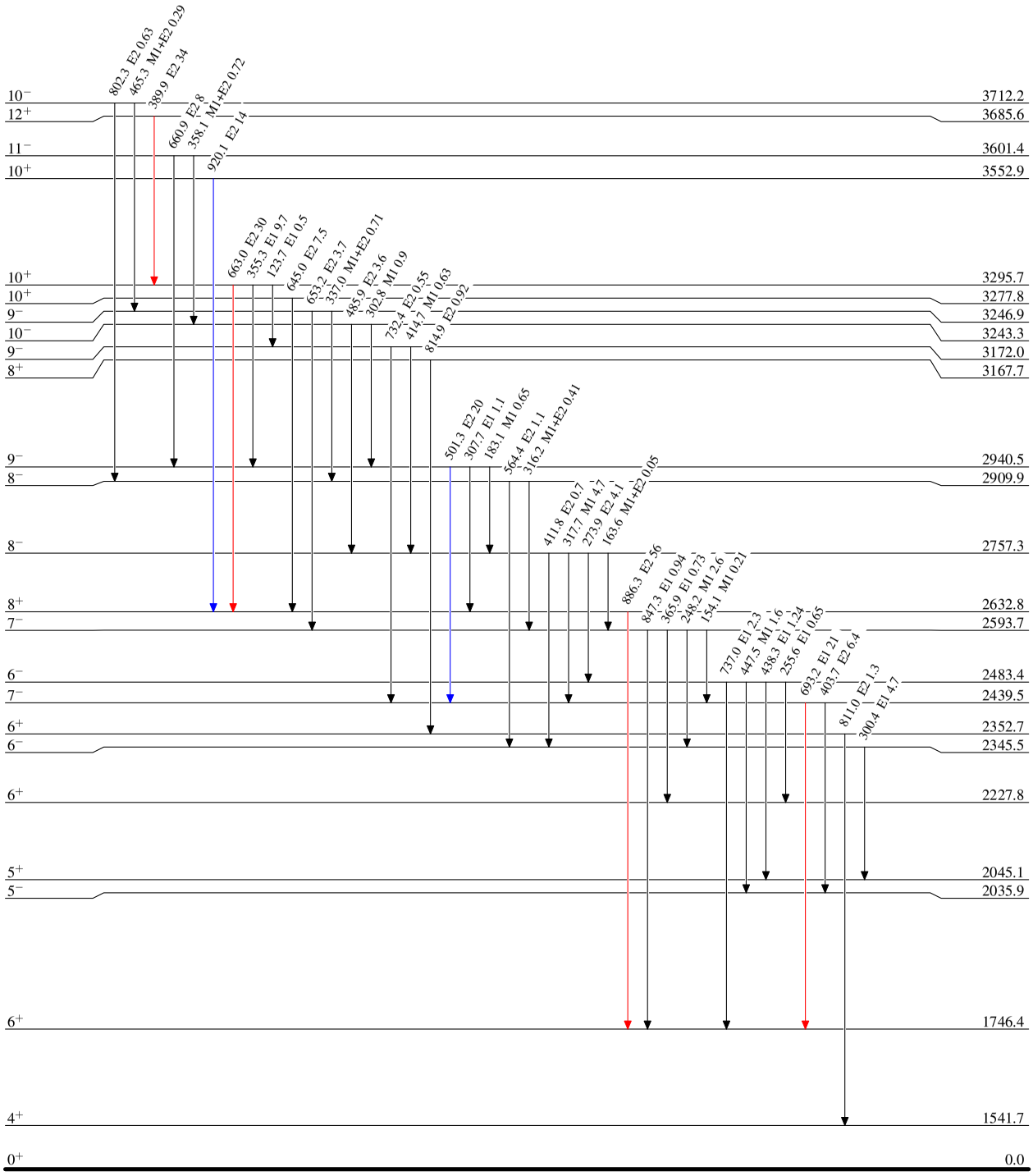
Intensities: Type not specified

Legend

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

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

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

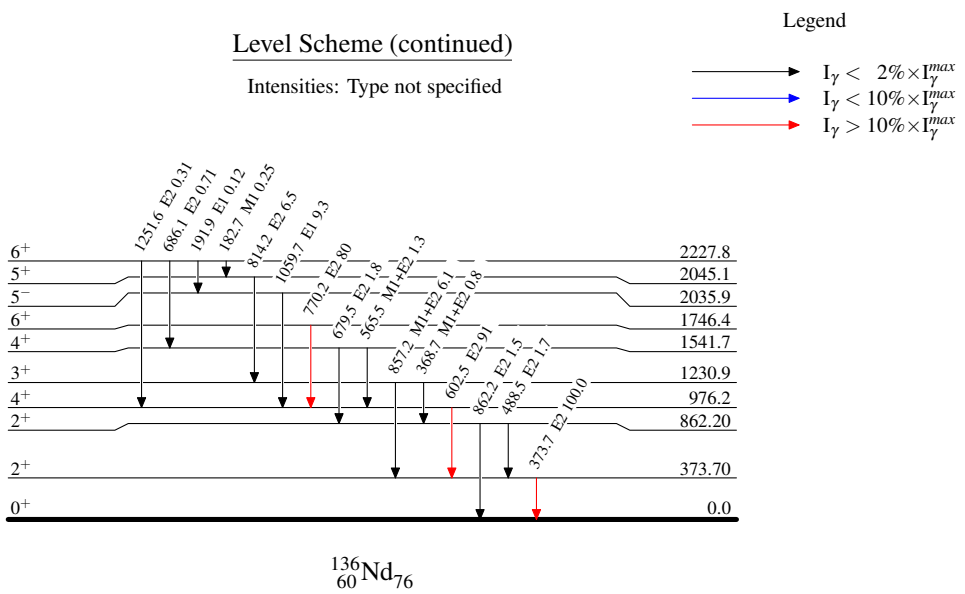


$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07

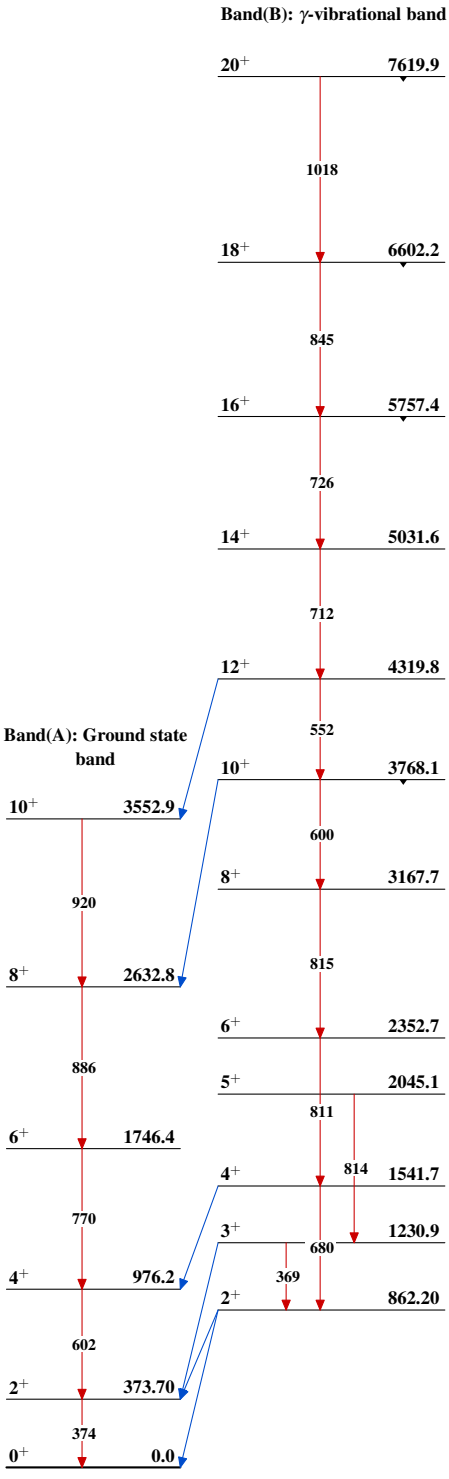
Level Scheme (continued)

Intensities: Type not specified



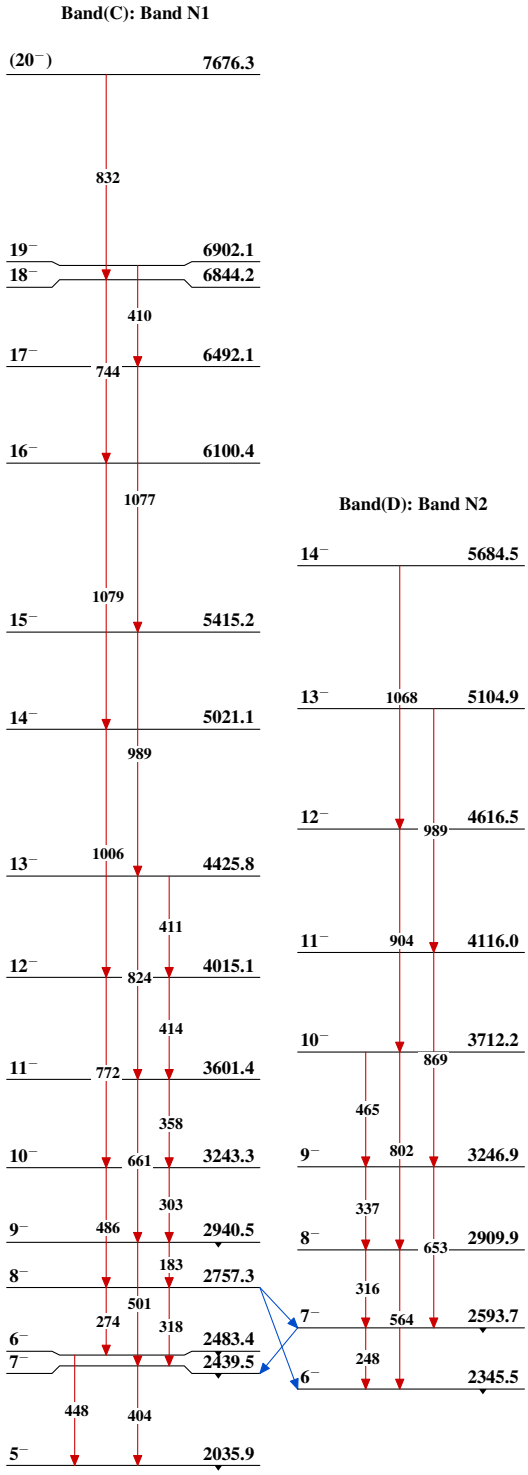
$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07



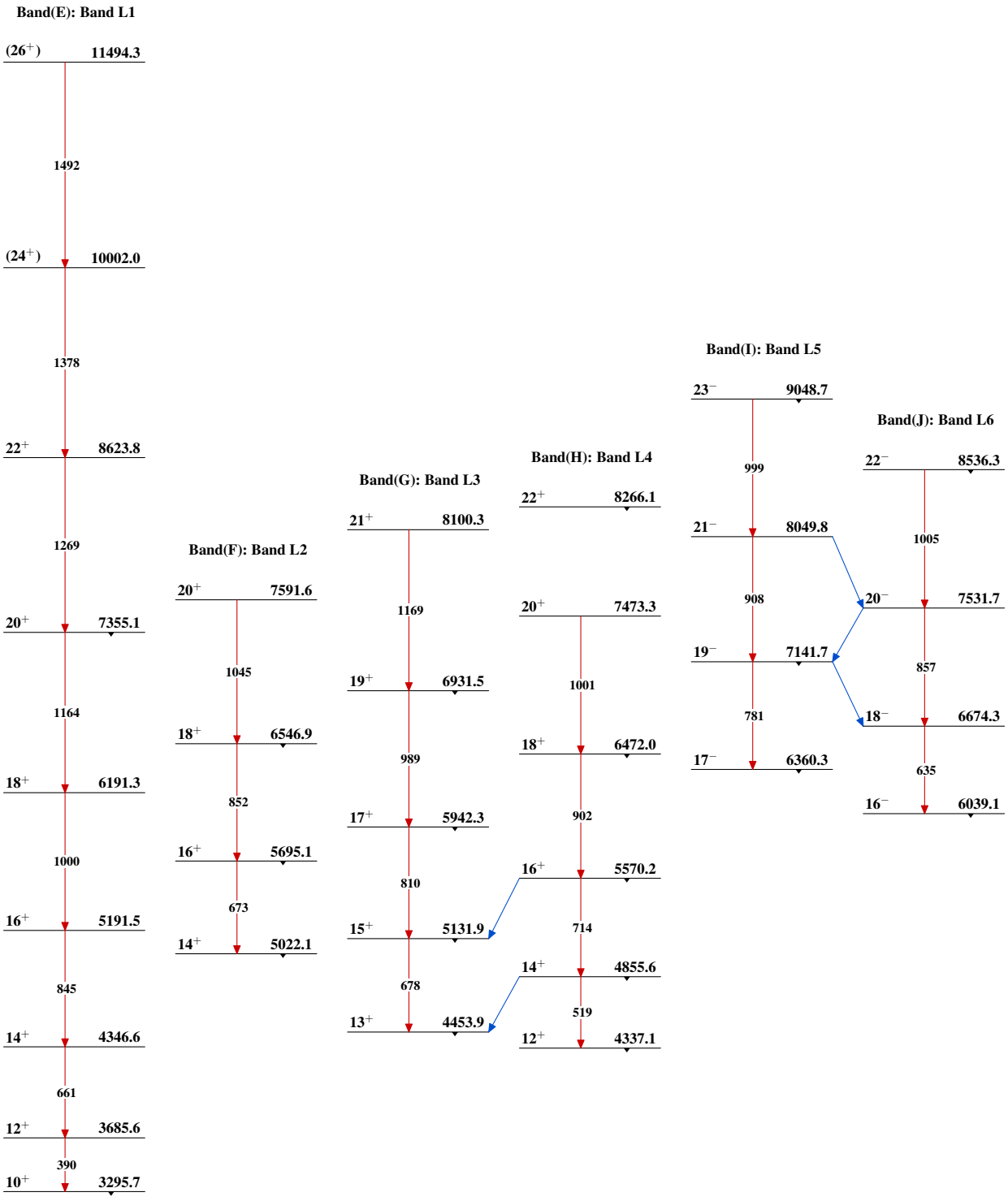
$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)



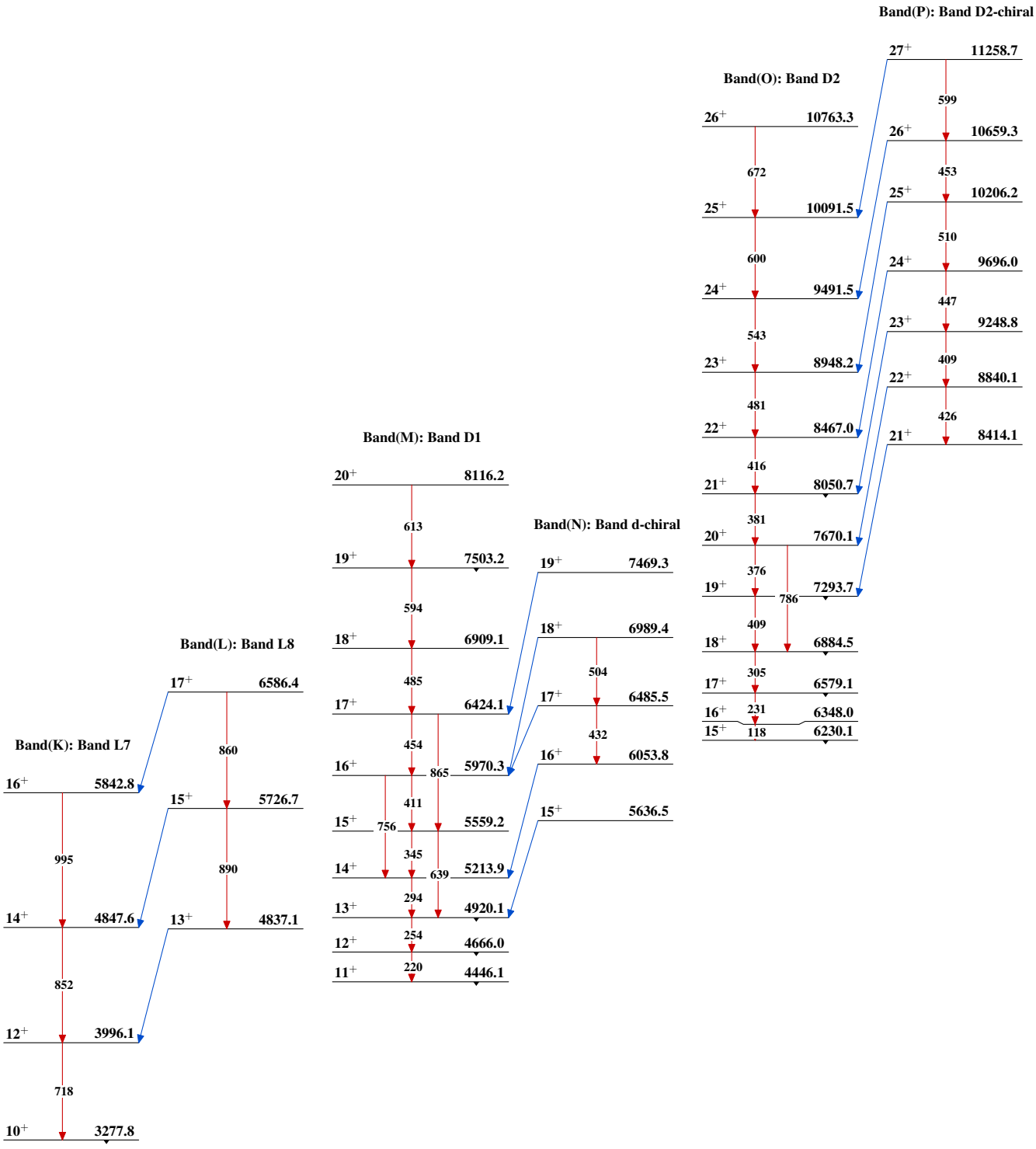
$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)



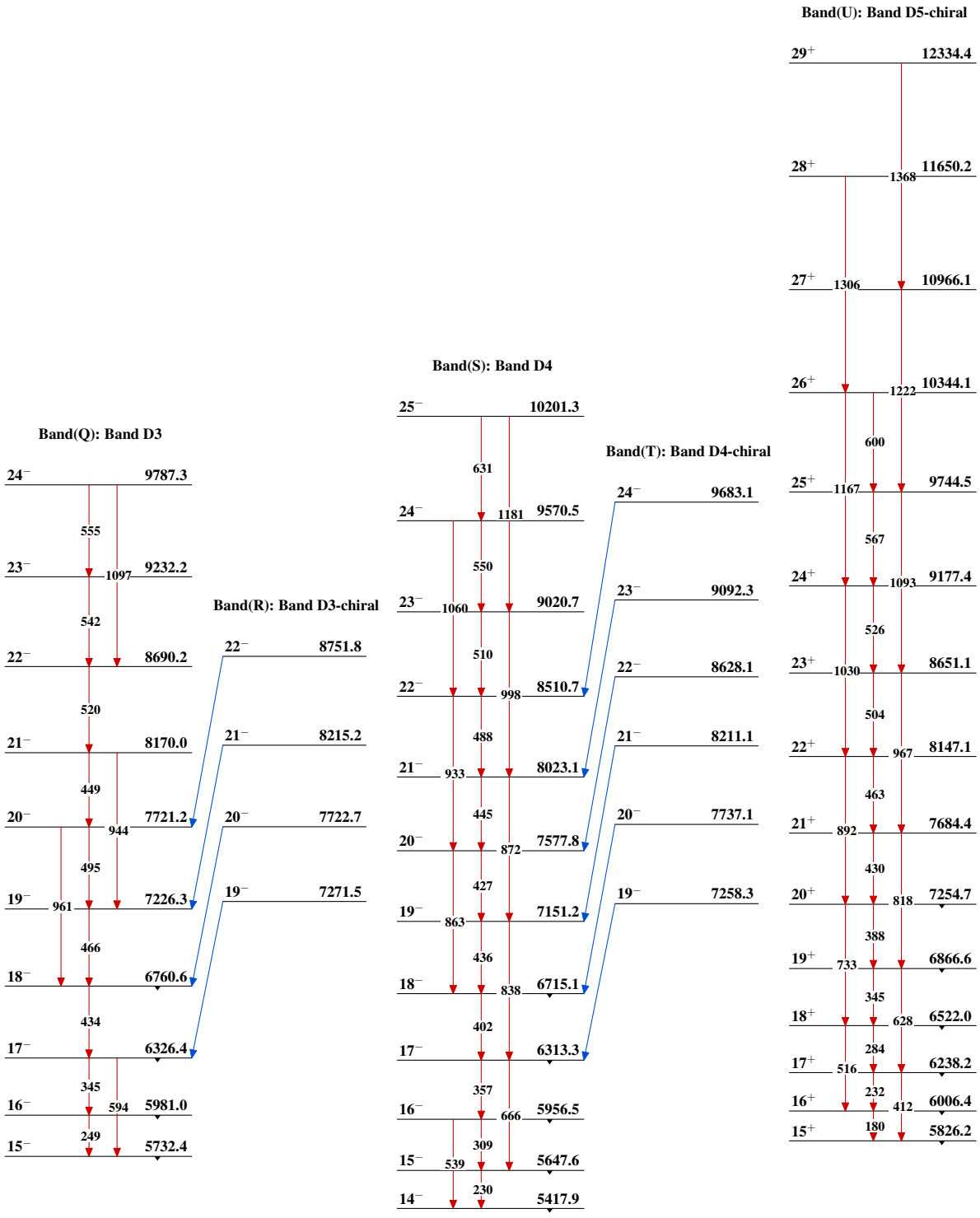
$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)



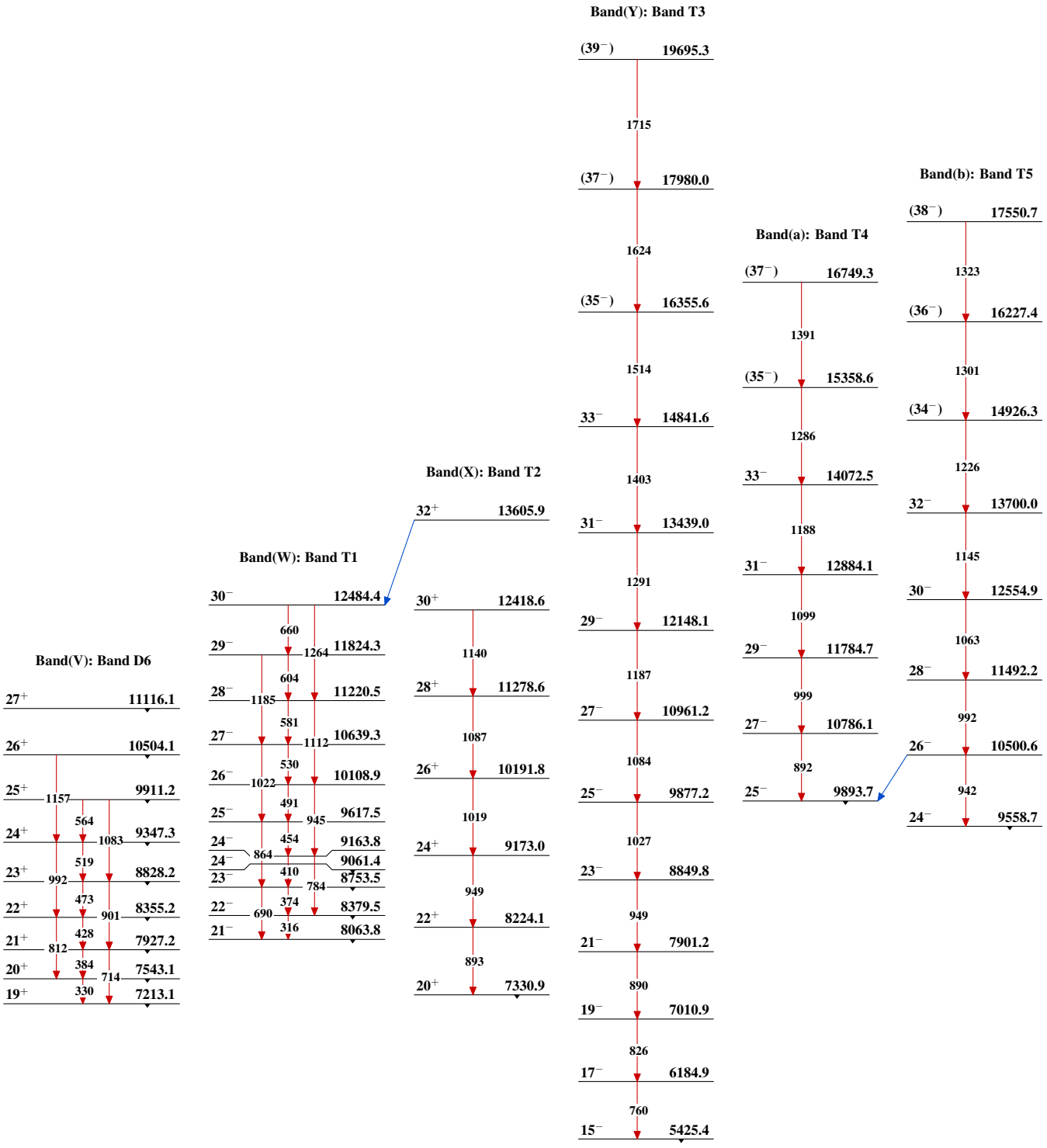
$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)



$^{136}_{60}Nd_{76}$

^{100}Mo(^{40}Ar,4nγ):XUNDL-3 2018Lv01,2020Pe07,2018Pe07 (continued)



$^{136}_{60}Nd_{76}$

^{120}Sn(^{20}Ne,4nγ):XUNDL-4 2019Tu09

Compiled (unevaluated) dataset from 2019Tu09.

Phys. Rev. C 100, 014330 (2019).

Compiled by E.A. McCutchan (NNDC,BNL), October 14, 2020.

E(^{20}Ne)=85 MeV from the U-200P cyclotron at the Heavy Ion Laboratory in Warsaw. Target was 0.5 mg/cm^2 ^{120}Sn on a 5 mg/cm^2 Au supporting foil. Measured Eγ, Iγ, $\gamma\gamma$ using the EAGLE array consisting of 16 HPGe detectors. Deduced $T_{1/2}$ using the Recoil Distance Doppler Shift (RDDS) method and a plunger device.

2019Tu09 present only a partial level scheme of ^{136}Nd relevant to the half-lives measured in the experiment.

^{136}Nd Levels

E(level)†	J$^\pi$†	$T_{1/2}$‡	Comments
0	0^+		
374	2^+	26.5 ps *14*	
976	4^+		
1746	6^+		
2633	8^+		
3279	10^+	1.63 ns *9*	
3296	10^+		
3686	12^+	22.5 ps *10*	
3997	12^+	<14 ps	$T_{1/2}$: effective half-life. Note that <20 ps is given in Figure 1, and <14 ps in Table 1, which differ by ln(2). Compiler assumes the latter corresponds to $T_{1/2}$ and the former to the mean lifetime.
4028	11^-	<14 ps	$T_{1/2}$: effective half-life. Note that <20 ps is given in Figure 1, and <14 ps in Table 1, which differ by ln(2). Compiler assumes the latter corresponds to $T_{1/2}$ and the former to the mean lifetime.

† From Figure 1 of 2019Tu09.

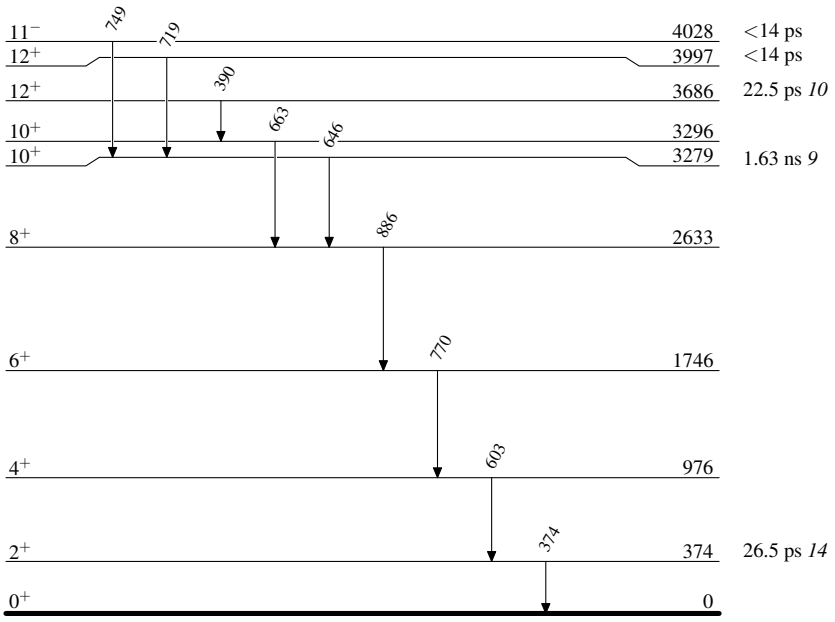
‡ From Recoil Distance Doppler Shift (RDDS) measurements (2019Tu09).

γ(^{136}Nd)

E_γ	E_i(level)	J^π_i	E_f	J^π_f
374	374	2^+	0	0^+
390	3686	12^+	3296	10^+
603	976	4^+	374	2^+
646	3279	10^+	2633	8^+
663	3296	10^+	2633	8^+
719	3997	12^+	3279	10^+
749	4028	11^-	3279	10^+
770	1746	6^+	976	4^+
886	2633	8^+	1746	6^+

^{120}Sn(^{20}Ne,4nγ):XUNDL-4 2019Tu09

Level Scheme



$^{136}_{60}Nd_{76}$