^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, Balraj Singh	NDS 164, 1 (2020)	15-Feb-2020

2006RuZW,2008RuZW,2008Ru04: bremsstrahlung γ-rays produced when 13.2 MeV electrons bombarded a Nb target at the bremsstrahlung facility of the Forschungszentrum Dresden-Rossendorf. Measured Eγ, $\gamma(\theta)$ using four HPGe detectors with BGO Compton-suppression. Enriched target. See also 2006Ru06 and 2005Ru14 from the same group where selected data were presented up to 3704 level. Experiments were carried out.

Others:

2010Er01: E=4-13 MeV bremsstrahlung beam from radiation source ELBE at Forschungszentrum Dresden-Rossendorf (FZD). Measured γ spectra, $\gamma(\theta)$, photon yields. Deduced dipole strengths, and photon strength functions. Other papers from the same group: 2009Ru05, 2008Wa07, 2007Sc39, 2006Ru11, 2005Wa31, 2005RuZZ.

Other: 2008Wa07.

Additional information 1.

All data are from thesis (2006RuZW) by Dr. Rusev (reference 30 in 2008Ru04) and e-mail reply (2008RuZW) from Dr. Rusev on July 21, 2008.

^{98}Mo Levels

E(level)[†]	J$^\pi$[‡]	Γ_0^2/Γ[#]	I$_s$(eVb)[#]	Comments
0.0	0^+			
734.8	0^+			
3257.8 *1*	1	30×10^{-3} eV *2*	32 *3*	Γ=0.0041 eV *3*, I$_s$=4.5 eVb *4*. B(E1)(↑)=0.34×10^{-5} *3*, B(M1)(↑)=0.031 *3*.
3405.0 *1*	1	67×10^{-3} eV *4*	67 *4*	Γ=0.044 eV *3*, I$_s$=44 eVb *3*. B(E1)(↑)=3.2×10^{-5} *2*, B(M1)(↑)=0.289 *19*.
3457.0 *1*	1	59×10^{-3} eV *4*	57 *4*	Γ=0.035 eV *2*, I$_s$=34 eVb *2*. B(E1)(↑)=2.45×10^{-5} *16*, B(M1)(↑)=0.222 *15*.
3551.2 *1*	1	46×10^{-3} eV *3*	42 *3*	J$^\pi$: 1^+ in 2005Ru14. Γ=0.035 eV *3*, I$_s$=28 eVb *2*. E(level): this state decays to g.s. and the first excited 0^+ state, indicative of two coexisting configurations are mixed in the 0^+ states (2006Ru06). B(M1)(2817γ, to excited 0^+)/B(M1)(3551γ, to g.s.)=0.28 *5* (2006Ru06).
3703.9 *2*	1	21.7×10^{-3} eV *19*	18.2 *16*	Γ=0.0042 eV *6*, I$_s$=3.5 eVb *5*. B(E1)(↑)=0.23×10^{-3} *16*, B(M1)(↑)=0.021 *3*.
3806.1 *2*	1	25×10^{-3} eV *2*	20.2 *16*	
3837.0 *1*	1	40×10^{-3} eV *3*	31 *2*	
3857.7 *1*	1	57×10^{-3} eV *3*	44 *3*	
3937.1 *1*	1	118×10^{-3} eV *6*	88 *4*	
3944.1 *1*	(1)	39×10^{-3} eV *3*	29.2 *19*	
4020.6 *5*	(2)	11.9×10^{-3} eV *16*	14.1 *19*	
4041.6 *9*	(1)	9.1×10^{-3} eV *19*	6.4 *14*	
4079.8 *4*	1	22×10^{-3} eV *2*	15.2 *16*	
4102.3 *5*	(2)	12.7×10^{-3} eV *16*	14.6 *18*	
4170.8 *8*	1	9.0×10^{-3} eV *19*	6.0 *12*	
4179.9 *2*	(1)	28×10^{-3} eV *2*	18.7 *16*	
4231.1 *4*	1	23×10^{-3} eV *3*	14.6 *16*	
4252.6 *12*	(1)	9×10^{-3} eV *3*	6.0 *18*	
4258.8 *5*	1	24×10^{-3} eV *3*	15.2 *19*	
4267.90 *20*	1	32×10^{-3} eV *3*	20.5 *17*	
4295.4 *1*	(1)	42×10^{-3} eV *3*	26.4 *19*	
4361.8 *1*	(1)	111×10^{-3} eV *6*	67 *3*	
4391.2 *1*	(1)	48×10^{-3} eV *3*	28.8 *18*	

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^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04 (continued)

^{98}Mo Levels (continued)

E(level)†	Jπ‡	Γ_0^2/Γ#	I_s(eVb)#	E(level)†	Jπ‡	Γ_0^2/Γ#	I_s(eVb)#
4410.2 *1*	1	57×10^{-3} eV *3*	34 *2*	5654.4 *2*	1	76×10^{-3} eV *5*	27.4 *19*
4543.3 *2*	1	46×10^{-3} eV *4*	25 *2*	5664.6 *3*	1	48×10^{-3} eV *4*	17.1 *15*
4581.6 *7*	(1)	9.0×10^{-3} eV *19*	5.1 *11*	5678.8 *14*	(2)	11×10^{-3} eV *3*	6.4 *19*
4590.6 *1*	1	57×10^{-3} eV *4*	31 *2*	5686.9 *2*	1	73×10^{-3} eV *6*	26 *2*
4599.3 *5*	1	12×10^{-3} eV *2*	6.8 *11*	5708.2 *6*	1	32×10^{-3} eV *5*	11.3 *16*
4616.2 *5*	1	17×10^{-3} eV *3*	9.4 *13*	5716.1 *4*	1	64×10^{-3} eV *6*	22.6 *19*
4654.3 *4*	(1)	23×10^{-3} eV *3*	12.2 *15*	5725.6 *5*	1	50×10^{-3} eV *5*	17.7 *19*
4812.7 *2*	1	55×10^{-3} eV *4*	27.5 *19*	5732.9 *6*	1	47×10^{-3} eV *6*	16.6 *19*
4837.5 *1*	1	57×10^{-3} eV *4*	28 *18*	5741.5 *1*	1	147×10^{-3} eV *9*	51 *3*
4902.8 *1*	1	50×10^{-3} eV *4*	23.9 *17*	5754.1 *9*	1	19×10^{-3} eV *4*	6.6 *12*
5008.6 *3*	1	31×10^{-3} eV *3*	14.4 *14*	5764.7 *3*	1	48×10^{-3} eV *4*	16.5 *15*
5028.6 *2*	1	32×10^{-3} eV *3*	14.7 *13*	5776.0 *2*	1	77×10^{-3} eV *5*	26.7 *18*
5050.3 *1*	1	88×10^{-3} eV *5*	40 *2*	5791.8 *5*	1	34×10^{-3} eV *4*	11.7 *14*
5081.7 *2*	1	39×10^{-3} eV *3*	17.5 *14*	5801.4 *3*	1	51×10^{-3} eV *5*	17.4 *15*
5121.4 *3*	1	52×10^{-3} eV *4*	22.9 *19*	5811.4 *2*	1	80×10^{-3} eV *6*	27.2 *18*
5134.1 *11*	(1)	14×10^{-3} eV *3*	6.1 *13*	5828.6 *2*	1	57×10^{-3} eV *5*	19.2 *15*
5147.6 *3*	1	48×10^{-3} eV *4*	20.7 *17*	5856.9 *3*	1	86×10^{-3} eV *8*	29 *3*
5165.2 *2*	1	69×10^{-3} eV *5*	30 *2*	5889.4 *6*	1	24×10^{-3} eV *4*	7.9 *12*
5174.6 *12*	(2)	10×10^{-3} eV *2*	7 *2*	5906.6 *7*	1	23×10^{-3} eV *4*	7.7 *12*
5195.5 *4*	1	22×10^{-3} eV *3*	9.5 *12*	5917.0 *2*	1	62×10^{-3} eV *5*	20.5 *16*
5215.0 *5*	(2)	16×10^{-3} eV *2*	11.4 *15*	5959.8 *2*	1	104×10^{-3} eV *7*	34 *2*
5225.5 *7*	(1)	17×10^{-3} eV *3*	7.0 *11*	5972.8 *2*	1	77×10^{-3} eV *6*	24.8 *18*
5236.1 *9*	1	12×10^{-3} eV *3*	5.1 *11*	5984.1 *2*	1	95×10^{-3} eV *7*	31 *2*
5244.6 *2*	(1)	48×10^{-3} eV *4*	20.1 *16*	5993.0 *8*	(1)	52×10^{-3} eV *8*	17 *3*
5267.7 *6*	(2)	12×10^{-3} eV *2*	8.3 *14*	5999.7 *8*	(1)	53×10^{-3} eV *8*	17 *3*
5312.6 *3*	1	24.4×10^{-3} eV *3*	10.0 *11*	6022.1 *2*	1	75×10^{-3} eV *6*	24.0 *17*
5324.0 *5*	(1)	17×10^{-3} eV *3*	6.9 *11*	6031.9 *1*	1	169×10^{-3} eV *9*	54 *3*
5346.7 *2*	1	53×10^{-3} eV *4*	21.3 *16*	6046.3 *4*	1	42×10^{-3} eV *4*	13.3 *14*
5354.7 *2*	1	46×10^{-3} eV *4*	18.5 *14*	6065.7 *1*	1	150×10^{-3} eV *9*	47 *3*
5362.7 *8*	(1)	11×10^{-3} eV *3*	4.5 *10*	6076.7 *7*	(1)	46×10^{-3} eV *7*	14 *2*
5386.3 *2*	1	43×10^{-3} eV *4*	16.9 *14*	6101.6 *4*	1	64×10^{-3} eV *6*	19.8 *18*
5397.5 *1*	1	9×10^{-3} eV *3*	3.7 *10*	6110.2 *1*	(1)	210×10^{-3} eV *11*	65 *3*
5412.6 *4*	1	23×10^{-3} eV *3*	9.1 *11*	6120.5 *2*	(1)	113×10^{-3} eV *7*	35 *2*
5432.9 *6*	1	17×10^{-3} eV *3*	6.6 *11*	6145.1 *18*	1	20×10^{-3} eV *5*	6.1 *16*
5442.2 *6*	1	16×10^{-3} eV *3*	6.3 *11*	6172 *3*	1	25×10^{-3} eV *10*	8 *3*
5450.5 *4*	1	25×10^{-3} eV *3*	9.8 *12*	6183.2 *8*	(1)	90×10^{-3} eV *13*	27 *4*
5458.2 *5*	1	22×10^{-3} eV *3*	8.7 *12*	6220.1 *11*	(1)	33×10^{-3} eV *6*	9.7 *17*
5482.4 *1*	1	86×10^{-3} eV *5*	33 *2*	6234.5 *10*	(1)	42×10^{-3} eV *7*	12.4 *19*
5492.4 *3*	(1)	32×10^{-3} eV *3*	12.3 *13*	6247.1 *3*	(1)	129×10^{-3} eV *11*	38 *3*
5508.9 *3*	1	32×10^{-3} eV *3*	12.2 *12*	6266.0 *7*	(1)	47×10^{-3} eV *6*	13.7 *18*
5519.1 *7*	1	13×10^{-3} eV *3*	5.1 *10*	6315.9 *3*	1	96×10^{-3} eV *7*	28 *2*
5528.2 *4*	1	25×10^{-3} eV *3*	9.3 *11*	6330.3 *2*	1	143×10^{-3} eV *9*	41 *3*
5544.1 *18*	(1)	10×10^{-3} eV *4*	3.7 *13*	6367.4 *4*	1	64×10^{-3} eV *6*	18.2 *17*
5552.7 *8*	(1)	23×10^{-3} eV *4*	8.5 *14*	6379.2 *8*	1	49×10^{-3} eV *7*	13.9 *19*
5563.3 *2*	1	56×10^{-3} eV *5*	21.0 *16*	6388.3 *7*	1	69×10^{-3} eV *7*	19 *2*
5579.2 *4*	1	48×10^{-3} eV *5*	17.7 *16*	6397.9 *5*	1	65×10^{-3} eV *7*	18 *2*
5588.4 *15*	(1)	20×10^{-3} eV *5*	7.4 *19*	6419.9 *11*	1	39×10^{-3} eV *9*	11 *2*
5595.6 *10*	1	29×10^{-3} eV *5*	11 *2*	6438.7 *10*	1	33×10^{-3} eV *6*	9.1 *16*
5615.3 *12*	1	13×10^{-3} eV *3*	4.8 *12*	6451.2 *2*	(1)	123×10^{-3} eV *8*	34 *2*
5626.1 *4*	1	37×10^{-3} eV *4*	13.5 *14*	6465.8 *6*	1	71×10^{-3} eV *10*	20 *3*
5638.1 *1*	1	91×10^{-3} eV *6*	33 *2*	6473.4 *3*	1	133×10^{-3} eV *12*	37 *3*

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^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04 (continued)

^{98}Mo Levels (continued)

E(level)[†]	Jπ[‡]	Γ_0^2/Γ[#]	I_s(eVb)[#]	E(level)[†]	Jπ[‡]	Γ_0^2/Γ[#]	I_s(eVb)[#]
6491.8 *6*	1	68×10^{-3} eV *9*	19 *3*	7353.0 *8*	(1)	30×10^{-3} eV *6*	6.4 *12*
6511.6 *11*	(1)	42×10^{-3} eV *8*	12 *2*	7376.2 *11*	(1)	30×10^{-3} eV *7*	6.4 *14*
6522.3 *10*	(1)	46×10^{-3} eV *8*	13 *2*	7387.4 *8*	1	46×10^{-3} eV *7*	9.7 *15*
6530.6 *6*	1	56×10^{-3} eV *7*	15.1 *18*	7396.1 *3*	1	120×10^{-3} eV *9*	25.2 *19*
6543.4 *2*	1	152×10^{-3} eV *11*	41 *3*	7428.3 *4*	1	69×10^{-3} eV *7*	14.4 *15*
6566.7 *10*	(1)	32×10^{-3} eV *6*	8.6 *15*	7447.0 *9*	1	29×10^{-3} eV *6*	6.1 *13*
6577.3 *10*	1	57×10^{-3} eV *9*	15 *2*	7461.3 *7*	1	38×10^{-3} eV *6*	7.9 *13*
6586.2 *3*	1	184×10^{-3} eV *13*	49 *3*	7473.7 *3*	1	84×10^{-3} eV *8*	17.3 *16*
6596.4 *3*	1	107×10^{-3} eV *8*	28 *2*	7498.0 *13*	(2)	21×10^{-3} eV *5*	7.1 *18*
6614.9 *8*	1	81×10^{-3} eV *19*	21 *5*	7513.2 *5*	(2)	52×10^{-3} eV *5*	17.5 *18*
6631.3 *12*	(1)	42×10^{-3} eV *7*	11.0 *19*	7543.3 *20*	(1)	36×10^{-3} eV *16*	7 *3*
6636.7 *18*	(1)	41×10^{-3} eV *13*	11 *3*	7551.7 *17*	(2)	30×10^{-3} eV *8*	10 *3*
6648.1 *8*	(1)	95×10^{-3} eV *16*	25 *4*	7562.3 *7*	1	80×10^{-3} eV *11*	16 *2*
6680.2 *20*	(1)	37×10^{-3} eV *21*	10 *6*	7583.1 *4*	1	166×10^{-3} eV *14*	33 *3*
6698.7 *7*	1	44×10^{-3} eV *6*	11.3 *15*	7609.1 *6*	1	73×10^{-3} eV *9*	14.6 *17*
6756.4 *2*	1	238×10^{-3} eV *15*	60 *4*	7692.0 *6*	1	83×10^{-3} eV *9*	16.2 *18*
6765.7 *7*	1	107×10^{-3} eV *11*	27 *3*	7711.3 *6*	1	139×10^{-3} eV *14*	27 *3*
6815.9 *13*	(1)	28×10^{-3} eV *8*	7.1 *18*	7737.3 *20*	(1)	35×10^{-3} eV *10*	6.7 *19*
6824.2 *6*	1	70×10^{-3} eV *9*	17 *2*	7752.5 *8*	1	109×10^{-3} eV *12*	21 *2*
6836.6 *6*	(1)	57×10^{-3} eV *6*	14.0 *15*	7764.5 *4*	1	205×10^{-3} eV *15*	39 *3*
6847.4 *6*	1	80×10^{-3} eV *10*	20 *2*	7781.1 *4*	1	126×10^{-3} eV *11*	24 *2*
6853.7 *4*	2	71×10^{-3} eV *6*	29 *3*	7803.4 *5*	1	109×10^{-3} eV *10*	20.7 *19*
6866.0 *4*	(2)	53×10^{-3} eV *5*	21.7 *19*	7820.5 *9*	1	70×10^{-3} eV *10*	13.3 *18*
6888.6 *5*	1	57×10^{-3} eV *7*	13.9 *16*	7834.9 *13*	(1)	63×10^{-3} eV *10*	11.8 *19*
6900.3 *3*	(1)	154×10^{-3} eV *11*	37 *3*	7847.1 *6*	1	113×10^{-3} eV *12*	21 *2*
6950.8 *8*	1	36×10^{-3} eV *6*	8.5 *13*	7877.3 *6*	1	91×10^{-3} eV *10*	16.8 *18*
6959.3 *6*	(2)	31×10^{-3} eV *4*	12.4 *16*	7889.9 *7*	1	97×10^{-3} eV *11*	18 *2*
6972.0 *8*	(1)	49×10^{-3} eV *8*	11.6 *18*	7900.8 *15*	(2)	26×10^{-3} eV *6*	7.9 *18*
6979.6 *8*	1	42×10^{-3} eV *8*	9.9 *18*	7927.3 *20*	1	24×10^{-3} eV *8*	4.4 *15*
6995.1 *5*	1	44×10^{-3} eV *6*	10.5 *13*	7943.6 *8*	1	53×10^{-3} eV *8*	9.7 *14*
7008.8 *2*	1	100×10^{-3} eV *8*	23.5 *18*	7965.3 *20*	(1)	33×10^{-3} eV *15*	6 *3*
7035.4 *3*	1	104×10^{-3} eV *8*	24.2 *19*	7986.3 *20*	(2)	25×10^{-3} eV *8*	8 *2*
7050.8 *6*	1	65×10^{-3} eV *8*	15.0 *17*	7996.1 *7*	1	60×10^{-3} eV *9*	10.9 *15*
7061.8 *4*	1	113×10^{-3} eV *9*	26 *2*	8011.6 *7*	1	60×10^{-3} eV *8*	10.8 *15*
7073.5 *6*	1	58×10^{-3} eV *7*	13.4 *16*	8023.6 *5*	1	115×10^{-3} eV *11*	20.7 *19*
7087.3 *11*	1	29×10^{-3} eV *6*	6.7 *13*	8033.8 *9*	1	70×10^{-3} eV *10*	12.6 *18*
7105.1 *13*	(1)	27×10^{-3} eV *7*	6.1 *15*	8045.2 *18*	(1)	36×10^{-3} eV *10*	6.4 *17*
7117.2 *4*	1	95×10^{-3} eV *9*	22 *2*	8054.6 *8*	1	68×10^{-3} eV *11*	12.1 *19*
7128.0 *7*	1	52×10^{-3} eV *7*	11.7 *16*	8068.0 *11*	(1)	40×10^{-3} eV *8*	7.2 *14*
7142.4 *2*	1	144×10^{-3} eV *10*	33 *2*	8073 *4*	(2)	24×10^{-3} eV *11*	7 *3*
7156.8 *3*	1	120×10^{-3} eV *9*	27 *2*	8081.1 *6*	(1)	69×10^{-3} eV *9*	12.1 *16*
7169.6 *5*	1	77×10^{-3} eV *8*	17.4 *17*	8096.3 *2*	(1)	163×10^{-3} eV *12*	29 *2*
7182.1 *3*	1	139×10^{-3} eV *10*	31 *2*	8112.8 *8*	1	50×10^{-3} eV *8*	8.8 *14*
7192.3 *8*	1	56×10^{-3} eV *8*	12.5 *18*	8124.5 *6*	1	80×10^{-3} eV *9*	13.9 *15*
7204.6 *5*	1	120×10^{-3} eV *12*	27 *3*	8137.5 *10*	1	76×10^{-3} eV *13*	13 *2*
7258.4 *7*	1	37×10^{-3} eV *6*	8.2 *13*	8158.4 *6*	1	96×10^{-3} eV *12*	17 *2*
7274.4 *4*	1	99×10^{-3} eV *10*	22 *2*	8168.8 *4*	1	152×10^{-3} eV *14*	26 *2*
7295.7 *7*	1	35×10^{-3} eV *6*	7.6 *13*	8182.8 *4*	1	109×10^{-3} eV *10*	18.8 *17*
7309.0 *9*	(1)	28×10^{-3} eV *6*	6.1 *12*	8213.3 *10*	(2)	29×10^{-3} eV *5*	8.3 *15*
7327.3 *5*	1	61×10^{-3} eV *7*	13.1 *15*	8244.6 *10*	1	72×10^{-3} eV *12*	12 *2*
7336.5 *2*	1	129×10^{-3} eV *9*	28 *2*	8255.5 *11*	(1)	78×10^{-3} eV *12*	13 *2*

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^{98}Mo(γ,γ′) 2006RuZW,2008RuZW,2008Ru04 (continued)

^{98}Mo Levels (continued)

E(level)†	Jπ‡	Γ_0^2/Γ#	I_s(eVb)#	E(level)†	Jπ‡	Γ_0^2/Γ#	I_s(eVb)#
8266.2 *19*	(1)	49×10^{-3} eV *14*	8 *2*	8513.1 *11*	1	68×10^{-3} eV *13*	11 *2*
8277.0 *4*	1	214×10^{-3} eV *18*	36 *3*	8527.3 *10*	1	55×10^{-3} eV *10*	8.7 *15*
8289.5 *21*	1	53×10^{-3} eV *15*	9 *3*	8537.5 *7*	1	84×10^{-3} eV *11*	13.2 *17*
8298.4 *13*	(1)	77×10^{-3} eV *14*	13 *2*	8562.8 *9*	1	68×10^{-3} eV *11*	10.7 *17*
8310.1 *9*	1	70×10^{-3} eV *11*	11.6 *17*	8580.2 *15*	(2)	25×10^{-3} eV *6*	6.6 *16*
8331.2 *9*	(1)	50×10^{-3} eV *8*	8.2 *14*	8590.1 *9*	1	43×10^{-3} eV *8*	6.7 *13*
8357.5 *11*	(2)	28×10^{-3} eV *5*	7.6 *15*	8602.3 *6*	1	76×10^{-3} eV *10*	11.9 *15*
8370.5 *5*	1	127×10^{-3} eV *13*	21 *2*	8613.1 *5*	1	136×10^{-3} eV *17*	21 *3*
8393.4 *20*	1	56×10^{-3} eV *17*	9 *3*	8620.2 *7*	1	120×10^{-3} eV *17*	19 *3*
8429.5 *9*	(2)	31×10^{-3} eV *5*	8.4 *14*	8627.8 *7*	1	110×10^{-3} eV *12*	17.0 *19*
8444.4 *7*	1	66×10^{-3} eV *9*	10.6 *14*	8636.5 *5*	1	94×10^{-3} eV *11*	14.6 *17*
8459.6 *7*	1	67×10^{-3} eV *9*	10.8 *14*	8650.3 *6*	1	48×10^{-3} eV *7*	7.3 *11*
8472.1 *4*	1	133×10^{-3} eV *12*	21.4 *18*	8662.7 *5*	1	73×10^{-3} eV *8*	11.3 *12*
8491.7 *9*	1	59×10^{-3} eV *10*	9.4 *16*	8674.3 *10*	1	37×10^{-3} eV *8*	5.6 *11*
8503.9 *5*	1	165×10^{-3} eV *16*	26 *3*				

† From a least-squares fit to γ-ray energies.
‡ From 2006RuZW based on $\gamma(\theta)$.
# Quoted values are from those for the ground γ transition, which is the only branch from the deexciting level. Value of I_s(eVb) is for integrated cross section in units of eV*b.

γ(^{98}Mo)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.‡	Comments
734.8	0^+	734.8		0.0	0^+	E0	E_γ,Mult.: from Adopted Gammas, energy is rounded value.
3257.8	1	3257.8† *1*	100	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.71 *8*.
3405.0	1	3405.0† *1*	100	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.68 *3*.
3457.0	1	3457.0† *1*	100	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.70 *3*.
3551.2	1	2816.9† *2*	12.3 *14*	734.8	0^+	D	I_s(eVb)=14.5 *18*. Γ_0^2/Γ(meV)=10.0 *13* (2008Ru04). B(E1)(↓)=0.18×10^{-5} *4*, B(M1)(↓)=0.017 *3*. Iγ(90°)/Iγ(127°)=0.71 *19*.
		3551.2† *1*	87.7 *14*	0.0	0^+	D	B(E1)(↑)=0.65×10^{-5} *6*, B(M1)(↑)=0.058 *6*. Iγ(90°)/Iγ(127°)=0.78 *8*.
3703.9	1	3703.9† *2*	100	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.72 *18*.
3806.1	1	3806.0 *2*		0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.99 *15*.
3837.0	1	3836.9 *1*		0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.83 *9*.
3857.7	1	3857.6 *1*		0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.89 *7*.
3937.1	1	3937.0 *1*		0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.81 *4*.
3944.1	(1)	3944.0 *1*		0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.07 *11*.
4020.6	(2)	4020.5 *5*		0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=1.5 *4*.
4041.6	(1)	4041.5 *9*		0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.2 *6*.
4079.8	1	4079.7 *4*		0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.2 *2*.
4102.3	(2)	4102.2 *5*		0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=2.7 *7*.
4170.8	1	4170.7 *8*		0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.7 *4*.
4179.9	(1)	4179.8 *2*		0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.2 *2*.
4231.1	1	4231.0 *4*		0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *3*.
4252.6	(1)	4252.5 *12*		0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.0 *7*.
4258.8	1	4258.7 *5*		0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *2*.

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^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04 (continued)

$\gamma(^{98}Mo)$ (continued)

E_i(level)	J_i^π	E_γ	E_f	J_f^π	Mult.‡	Comments
4267.90	1	4267.8 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.00 *16*.
4295.4	(1)	4295.3 *1*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.12 *14*.
4361.8	(1)	4361.7 *1*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=0.92 *5*.
4391.2	(1)	4391.1 *1*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.01 *10*.
4410.2	1	4410.1 *1*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.76 *7*.
4543.3	1	4543.2 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.81 *14*.
4581.6	(1)	4581.5 *7*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.0 *5*.
4590.6	1	4590.5 *1*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.75 *9*.
4599.3	1	4599.2 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.7 *4*.
4616.2	1	4616.1 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *3*.
4654.3	(1)	4654.2 *4*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.5 *3*.
4812.7	1	4812.6 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.88 *10*.
4837.5	1	4837.4 *1*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.90 *10*.
4902.8	1	4902.7 *1*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.91 *12*.
5008.6	1	5008.5 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.76 *18*.
5028.6	1	5028.5 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.80 *16*.
5050.3	1	5050.2 *1*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.81 *6*.
5081.7	1	5081.6 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.85 *13*.
5121.4	1	5121.3 *3*	0.0	0^+		Iγ(90°)/Iγ(127°)=0.80 *13*.
5134.1	(1)	5134.0 *11*	0.0	0^+	(D)	
5147.6	1	5147.5 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.67 *15*.
5165.2	1	5165.0 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.96 *13*.
5174.6	(2)	5174.5 *12*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=1.5 *8*.
5195.5	1	5195.4 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *3*.
5215.0	(2)	5214.9 *5*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=1.8 *5*.
5225.5	(1)	5225.4 *7*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.1 *4*.
5236.1	1	5235.9 *9*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.5 *5*.
5244.6	(1)	5244.4 *2*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.24 *18*.
5267.7	(2)	5267.5 *6*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=2.0 *7*.
5312.6	1	5312.4 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *2*.
5324.0	(1)	5323.8 *5*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.3 *4*.
5346.7	1	5346.5 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.75 *11*.
5354.7	1	5354.5 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.89 *13*.
5362.7	(1)	5362.5 *8*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.3 *6*.
5386.3	1	5386.1 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.91 *14*.
5397.5	1	5397.3 *1*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.5 *5*.
5412.6	1	5412.4 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.7 *2*.
5432.9	1	5432.7 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *3*.
5442.2	1	5442.0 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.3 *3*.
5450.5	1	5450.3 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.2 *3*.
5458.2	1	5458.0 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.1 *3*.
5482.4	1	5482.2 *1*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.76 *7*.
5492.4	(1)	5492.2 *3*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.2 *2*.
5508.9	1	5508.7 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.98 *19*.
5519.1	1	5518.9 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.7 *4*.
5528.2	1	5528.0 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *2*.
5544.1	(1)	5543.9 *18*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.4 *10*.
5552.7	(1)	5552.5 *8*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.1 *4*.
5563.3	1	5563.1 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.87 *13*.
5579.2	1	5579.0 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.95 *17*.
5588.4	(1)	5588.2 *15*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.4 *7*.
5595.6	1	5595.4 *10*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *4*.
5615.3	1	5615.1 *12*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.4 *4*.
5626.1	1	5625.9 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.93 *19*.
5638.1	1	5637.9 *1*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.89 *9*.
5654.4	1	5654.2 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.74 *9*.

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^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04 (continued)

$\gamma(^{98}Mo)$ (continued)

E_i(level)	J_i^π	E_γ	E_f	J_f^π	Mult.‡	Comments
5664.6	1	5664.4 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.67 *14*.
5678.8	(2)	5678.6 *14*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=1.6 *11*.
5686.9	1	5686.7 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.76 *15*.
5708.2	1	5708.0 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *2*.
5716.1	1	5715.9 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.02 *15*.
5725.6	1	5725.4 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.84 *17*.
5732.9	1	5732.7 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *2*.
5741.5	1	5741.3 *1*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.72 *6*.
5754.1	1	5753.9 *9*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *4*.
5764.7	1	5764.5 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.83 *15*.
5776.0	1	5775.8 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.86 *10*.
5791.8	1	5791.6 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.54 *18*.
5801.4	1	5801.2 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.92 *15*.
5811.4	1	5811.2 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.81 *9*.
5828.6	1	5828.4 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.80 *12*.
5856.9	1	5856.7 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.54 *16*.
5889.4	1	5889.2 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.7 *3*.
5906.6	1	5906.4 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *4*.
5917.0	1	5916.8 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.87 *13*.
5959.8	1	5959.6 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.75 *7*.
5972.8	1	5972.6 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.79 *10*.
5984.1	1	5983.9 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.88 *10*.
5993.0	(1)	5992.8 *8*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.0 *6*.
5999.7	(1)	5999.5 *8*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=0.6 *6*.
6022.1	1	6021.9 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.95 *12*.
6031.9	1	6031.7 *1*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.76 *5*.
6046.3	1	6046.1 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.59 *15*.
6065.7	1	6065.5 *1*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.78 *6*.
6076.7	(1)	6076.5 *7*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.3 *5*.
6101.6	1	6101.4 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.80 *15*.
6110.2	(1)	6110.0 *1*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=0.87 *6*.
6120.5	(1)	6120.3 *2*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=0.93 *9*.
6145.1	1	6144.9 *18*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *5*.
6172	1	6172 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *4*.
6183.2	(1)	6183.0 *8*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.2 *4*.
6220.1	(1)	6219.9 *11*	0.0	0^+	(D)	
6234.5	(1)	6234.3 *10*	0.0	0^+	(D)	
6247.1	(1)	6246.9 *3*	0.0	0^+	(D)	
6266.0	(1)	6265.8 *7*	0.0	0^+	(D)	
6315.9	1	6315.7 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.85 *10*.
6330.3	1	6330.1 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.89 *8*.
6367.4	1	6367.2 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.02 *18*.
6379.2	1	6379.0 *8*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *3*.
6388.3	1	6388.1 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.75 *17*.
6397.9	1	6397.7 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.1 *2*.
6419.9	1	6419.7 *11*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.4 *4*.
6438.7	1	6438.5 *10*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *4*.
6451.2	(1)	6451.0 *2*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=0.98 *10*.
6465.8	1	6465.6 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *3*.
6473.4	1	6473.2 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.77 *13*.
6491.8	1	6491.6 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *3*.
6511.6	(1)	6511.4 *11*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.1 *4*.
6522.3	(1)	6522.1 *10*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.3 *5*.
6530.6	1	6530.4 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *3*.
6543.4	1	6543.2 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.79 *13*.
6566.7	(1)	6566.5 *10*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.4 *5*.

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^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04 (continued)

$\gamma(^{98}Mo)$ (continued)

E_i(level)	J_i^π	E_γ	E_f	J_f^π	Mult.‡	Comments
6577.3	1	6577.1 *10*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *3*.
6586.2	1	6586.0 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.83 *9*.
6596.4	1	6596.2 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.73 *11*.
6614.9	1	6614.7 *8*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.4 *3*.
6631.3	(1)	6631.1 *12*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.1 *5*.
6636.7	(1)	6636.5 *18*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.1 *9*.
6648.1	(1)	6647.9 *8*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.2 *5*.
6680.2	(1)	6680 *2*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.4 *18*.
6698.7	1	6698.5 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.7 *2*.
6756.4	1	6756.1 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.88 *8*.
6765.7	1	6765.4 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.86 *16*.
6815.9	(1)	6815.6 *13*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.3 *8*.
6824.2	1	6823.9 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.1 *3*.
6836.6	(1)	6836.3 *6*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.4 *3*.
6847.4	1	6847.1 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.66 *16*.
6853.7	2	6853.4 *4*	0.0	0^+	Q	Iγ(90°)/Iγ(127°)=1.8 *3*.
6866.0	(2)	6865.7 *4*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=1.5 *2*.
6888.6	1	6888.3 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *3*.
6900.3	(1)	6900.0 *3*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.06 *13*.
6950.8	1	6950.5 *8*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *3*.
6959.3	(2)	6959.0 *6*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=1.6 *4*.
6972.0	(1)	6971.7 *8*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.4 *4*.
6979.6	1	6979.3 *8*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *3*.
6995.1	1	6994.8 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.7 *2*.
7008.8	1	7008.5 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.68 *10*.
7035.4	1	7035.1 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.66 *10*.
7050.8	1	7050.5 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *2*.
7061.8	1	7061.5 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.82 *11*.
7073.5	1	7073.2 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *2*.
7087.3	1	7087.0 *11*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *3*.
7105.1	(1)	7104.8 *13*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=0.6 *6*.
7117.2	1	7116.9 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.66 *16*.
7128.0	1	7127.7 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *3*.
7142.4	1	7142.1 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.78 *8*.
7156.8	1	7156.5 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.76 *10*.
7169.6	1	7169.3 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.63 *13*.
7182.1	1	7181.8 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.69 *9*.
7192.3	1	7192.0 *8*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *2*.
7204.6	1	7204.3 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.92 *17*.
7258.4	1	7258.1 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *3*.
7274.4	1	7274.1 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.1 *2*.
7295.7	1	7295.4 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *3*.
7309.0	(1)	7308.7 *9*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.0 *4*.
7327.3	1	7327.0 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *2*.
7336.5	1	7336.2 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.93 *11*.
7353.0	(1)	7352.7 *8*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.1 *4*.
7376.2	(1)	7375.9 *11*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.1 *5*.
7387.4	1	7387.1 *8*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.7 *2*.
7396.1	1	7395.8 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.88 *11*.
7428.3	1	7428.0 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.84 *17*.
7447.0	1	7446.7 *9*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *4*.
7461.3	1	7461.0 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *3*.
7473.7	1	7473.4 *3*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.84 *14*.
7498.0	(2)	7497.7 *13*	0.0	0^+	(Q)	
7513.2	(2)	7512.9 *5*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=1.6 *3*.
7543.3	(1)	7543 *2*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=0.7 *6*.

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^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04 (continued)

$\gamma(^{98}Mo)$ (continued)

E_i(level)	J_i^π	E_γ	E_f	J_f^π	Mult.‡	Comments
7551.7	(2)	7551.4 *17*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=1.7 *11*.
7562.3	1	7562.0 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.75 *19*.
7583.1	1	7582.8 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.79 *11*.
7609.1	1	7608.8 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.68 *16*.
7692.0	1	7691.7 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.90 *19*.
7711.3	1	7711.0 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.58 *12*.
7737.3	(1)	7737 *2*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.0 *6*.
7752.5	1	7752.2 *8*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.95 *18*.
7764.5	1	7764.2 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.78 *9*.
7781.1	1	7780.8 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.62 *10*.
7803.4	1	7803.1 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.63 *12*.
7820.5	1	7820.2 *9*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.54 *17*.
7834.9	(1)	7834.6 *13*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.2 *4*.
7847.1	1	7846.8 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.95 *18*.
7877.3	1	7877.0 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.70 *15*.
7889.9	1	7889.6 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.70 *16*.
7900.8	(2)	7900.5 *15*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=1.8 *9*.
7927.3	1	7927 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.3 *4*.
7943.6	1	7943.3 *8*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *3*.
7965.3	(1)	7965 *2*	0.0	0^+	(D)	
7986.3	(2)	7986 *2*	0.0	0^+	(Q)	
7996.1	1	7995.7 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.7 *3*.
8011.6	1	8011.2 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *2*.
8023.6	1	8023.2 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.06 *18*.
8033.8	1	8033.4 *9*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *3*.
8045.2	(1)	8044.8 *18*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.1 *8*.
8054.6	1	8054.2 *8*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *4*.
8068.0	(1)	8067.6 *11*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=0.9 *6*.
8073	(2)	8073 *4*	0.0	0^+	(Q)	
8081.1	(1)	8080.7 *6*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=0.32 *19*.
8096.3	(1)	8095.9 *2*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.02 *12*.
8112.8	1	8112.4 *8*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.5 *2*.
8124.5	1	8124.1 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.1 *2*.
8137.5	1	8137.1 *10*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *3*.
8158.4	1	8158.0 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *3*.
8168.8	1	8168.4 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.7 *2*.
8182.8	1	8182.4 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.69 *12*.
8213.3	(2)	8212.9 *10*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=1.7 *6*.
8244.6	1	8244.2 *10*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *3*.
8255.5	(1)	8255.1 *11*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.2 *4*.
8266.2	(1)	8265.8 *19*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.2 *8*.
8277.0	1	8276.6 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.78 *15*.
8289.5	1	8289.1 *21*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.7 *5*.
8298.4	(1)	8298.0 *13*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.2 *4*.
8310.1	1	8309.7 *9*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.1 *3*.
8331.2	(1)	8330.8 *9*	0.0	0^+	(D)	Iγ(90°)/Iγ(127°)=1.4 *4*.
8357.5	(2)	8357.1 *11*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=2.7 *16*.
8370.5	1	8370.1 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.65 *12*.
8393.4	1	8393 *2*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.5 *3*.
8429.5	(2)	8429.1 *9*	0.0	0^+	(Q)	Iγ(90°)/Iγ(127°)=1.6 *5*.
8444.4	1	8444.0 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *3*.
8459.6	1	8459.2 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *2*.
8472.1	1	8471.7 *4*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.79 *12*.
8491.7	1	8491.3 *9*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *3*.
8503.9	1	8503.5 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.99 *17*.
8513.1	1	8512.7 *11*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.9 *4*.

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^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04 (continued)

$\gamma(^{98}Mo)$ (continued)

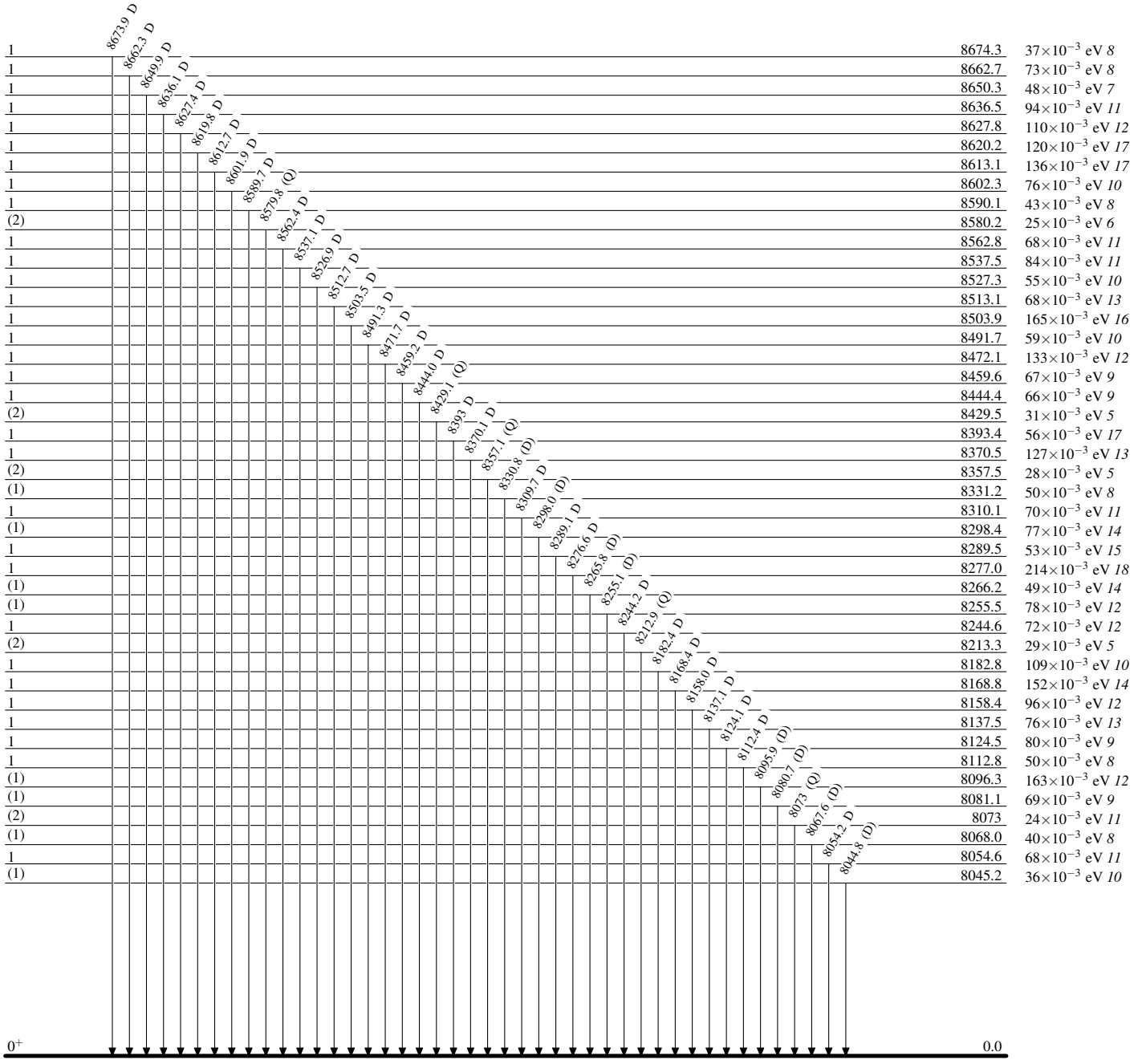
E_i(level)	J_i^π	E_γ	E_f	J_f^π	Mult.‡	Comments
8527.3	1	8526.9 *10*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *3*.
8537.5	1	8537.1 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.0 *3*.
8562.8	1	8562.4 *9*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *3*.
8580.2	(2)	8579.8 *15*	0.0	0^+	(Q)	
8590.1	1	8589.7 *9*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *3*.
8602.3	1	8601.9 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.70 *17*.
8613.1	1	8612.7 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.2 *4*.
8620.2	1	8619.8 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.8 *2*.
8627.8	1	8627.4 *7*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.58 *13*.
8636.5	1	8636.1 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.1 *2*.
8650.3	1	8649.9 *6*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=1.1 *3*.
8662.7	1	8662.3 *5*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.75 *16*.
8674.3	1	8673.9 *10*	0.0	0^+	D	Iγ(90°)/Iγ(127°)=0.6 *3*.

† This γ also reported in 2006Ru06 and 2005Ru14.
‡ From multipole order L extracted from $\gamma(\theta)$. L=1 and 2 imply dipole and quadrupole multipolarity, respectively.
^{x} γ ray not placed in level scheme.

^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04

Level Scheme

Intensities: % photon branching from each level

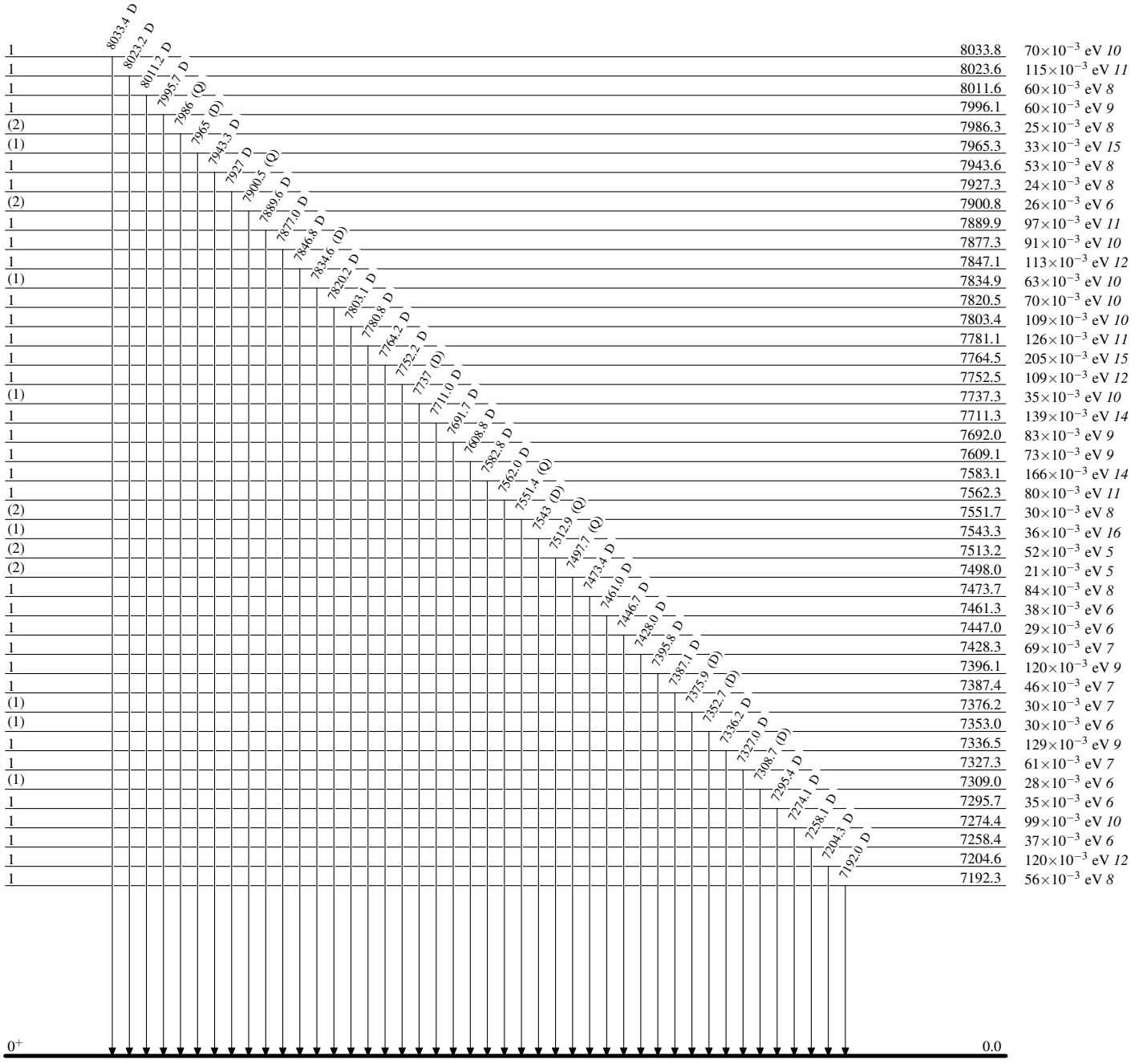


$^{98}_{42}Mo_{56}$

^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04

Level Scheme (continued)

Intensities: % photon branching from each level

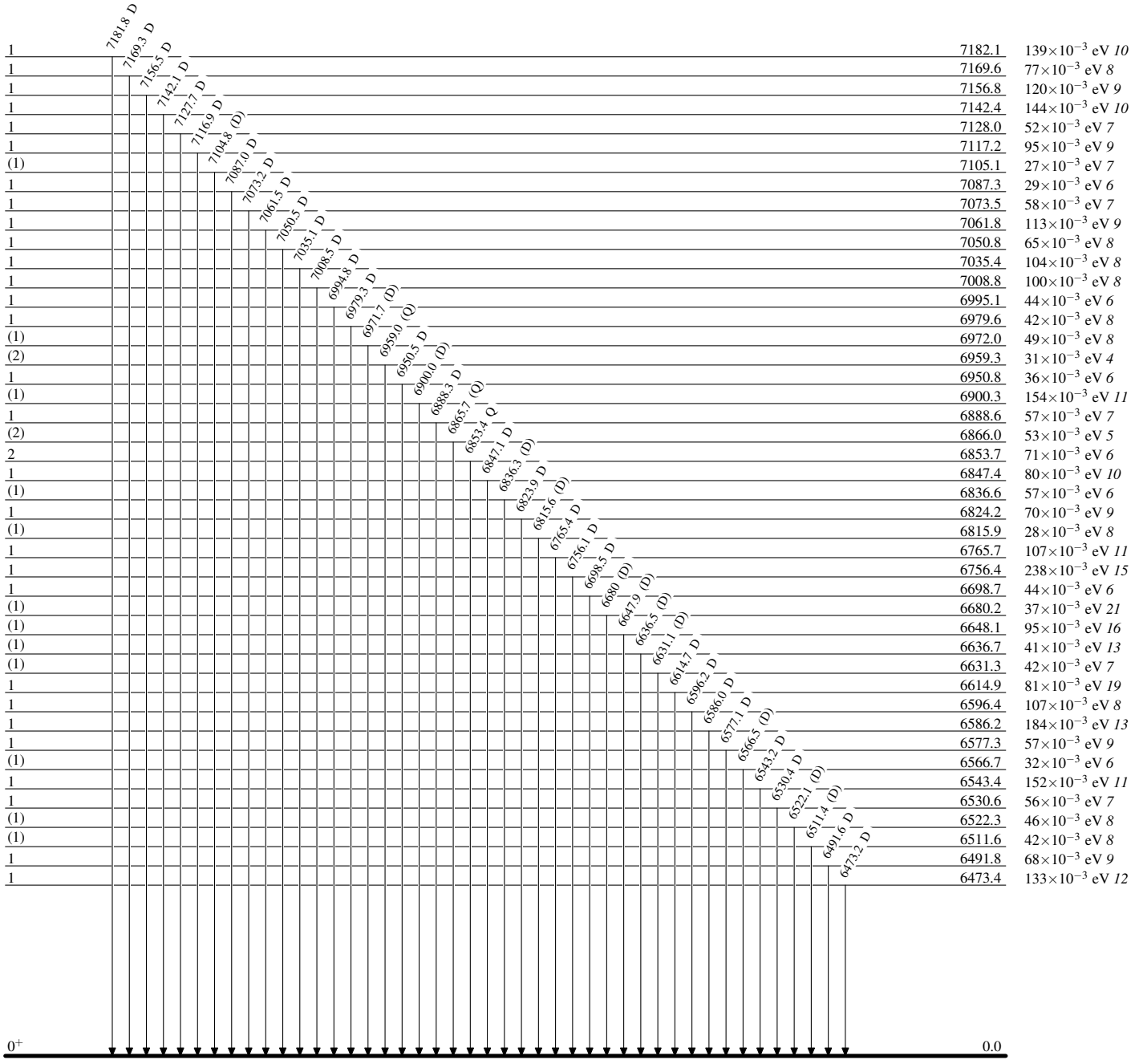


$^{98}_{42}Mo_{56}$

^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04

Level Scheme (continued)

Intensities: % photon branching from each level

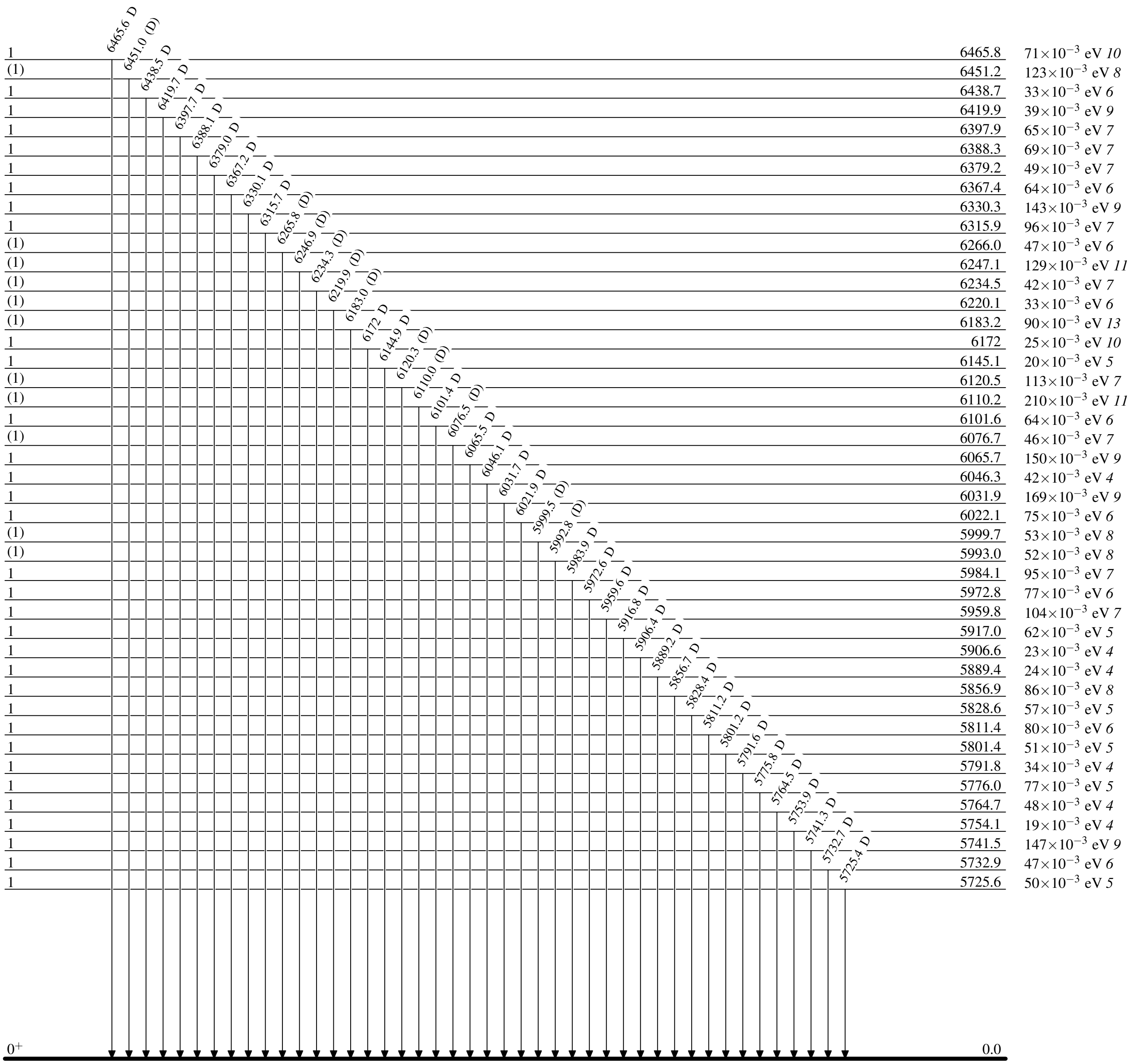


$^{98}_{42}Mo_{56}$

$^{98}Mo(\gamma,\gamma')$ 2006RuZW,2008RuZW,2008Ru04

Level Scheme (continued)

Intensities: % photon branching from each level

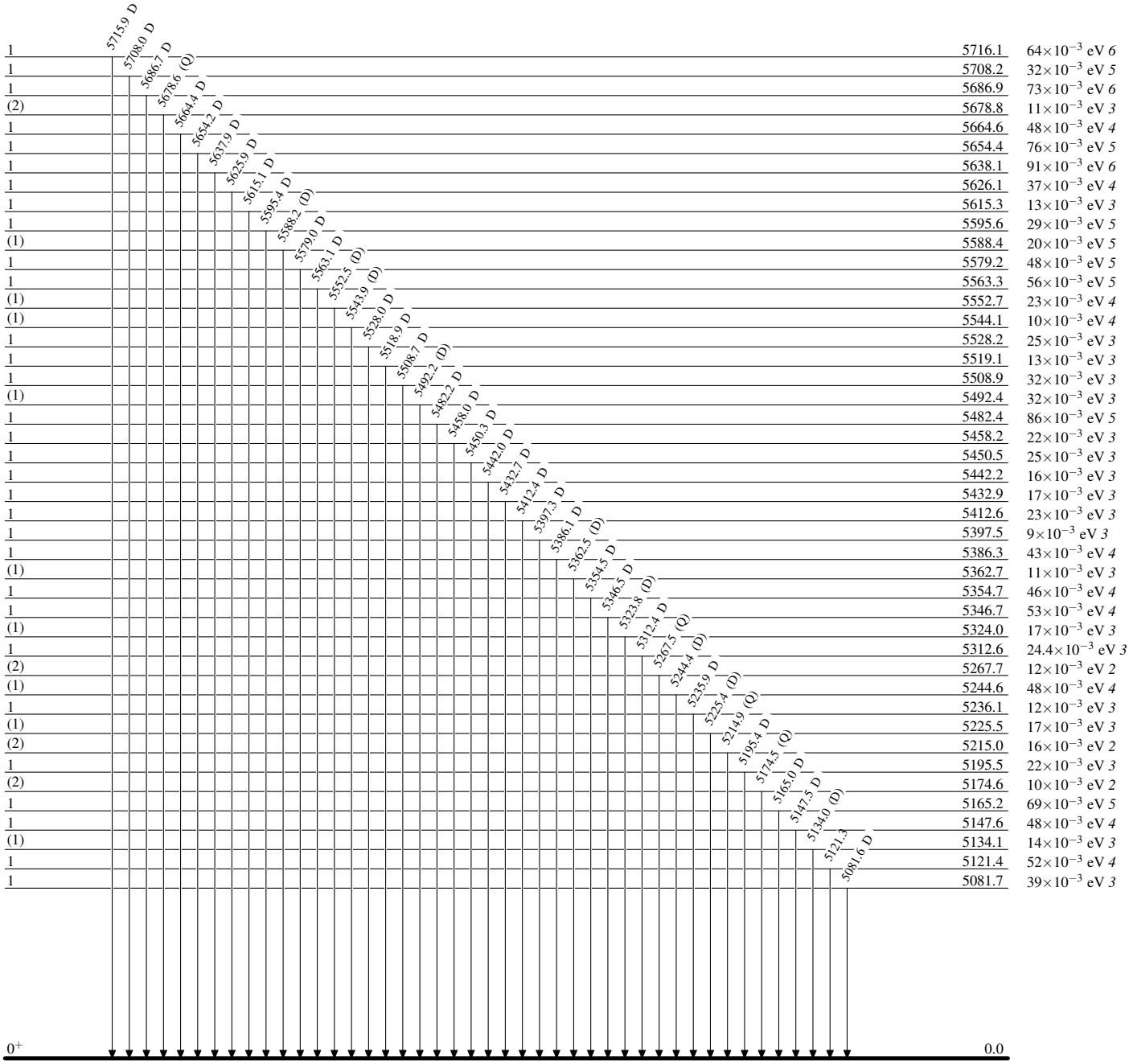


$^{98}_{42}Mo_{56}$

^{98}Mo(γ,γ′) 2006RuZW,2008RuZW,2008Ru04

Level Scheme (continued)

Intensities: % photon branching from each level

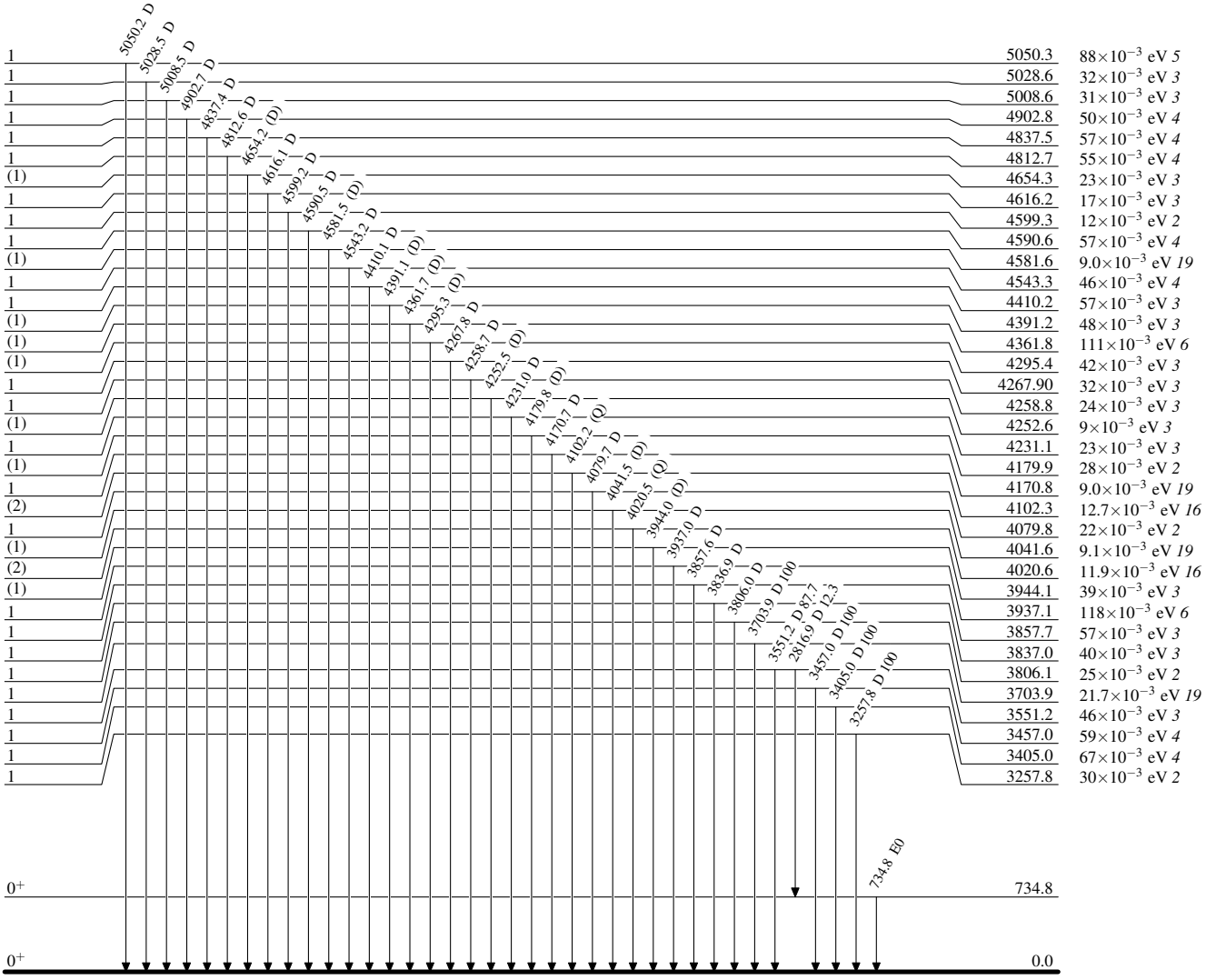


$^{98}_{42}Mo_{56}$

^{98}Mo(γ,γ') 2006RuZW,2008RuZW,2008Ru04

Level Scheme (continued)

Intensities: % photon branching from each level



$^{98}_{42}Mo_{56}$