

$^{109}\text{Ag}(\text{n},\gamma)$  E=thermal    **1979Bo41,1968El03,1988Ko31**

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal and F. G. Kondev	NDS 113, 1315 (2012)	1-Aug-2011

**1979Bo41:**  $\gamma$ -rays were measured using bent-crystal spectrometer RITA at Risø.

**1968El03:** ICE were measured using the beta spectrometer at the research reactor near Munich. Deduced:  $\alpha(\text{K})\exp$  and  $\alpha(\text{L})\exp$ .

**1988Ko31:** The  $^{109}\text{Ag}$  target (mixed with iron) was radiated through a neutron guide set up in a horizontal channel in the VVR-M reactor at Leningrad Nuclear Physics Research Institute. Coincidences between prompt and delayed  $\gamma$ -rays were measured.

Deduced:  $T_{1/2}$ .

Others: [1970Ka05](#), [1967Bo06](#), [1967Es03](#), [1963Be51](#).

 $^{110}\text{Ag}$  Levels

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	T <sub>1/2</sub> <sup>#</sup>	Comments
0.0	1 <sup>+</sup>	24.56 s 11	T <sub>1/2</sub> : From Adopted Levels.
1.112 16	2 <sup>-</sup>		<a href="#">Additional information 1</a> .
			E(level): Deduced by the evaluators using $E\gamma$ pairs that populate this level and g.s.. $\Delta E\gamma$ were estimated from <a href="#">1975Cl03</a> . Others: 1.28 keV 10 ( <a href="#">1970Ka05</a> ), 1.113 ( <a href="#">1979Bo41</a> ) and 3.18 ( <a href="#">1968El03</a> ).
118.718 10	3 <sup>+</sup>	36.6 ns 6	T <sub>1/2</sub> : From Adopted Levels.
191.622 12	3 <sup>+</sup>		
198.690 10	2 <sup>+</sup>	<0.08 ns	
236.859 12	≤3 <sup>-</sup>	<0.24 ns	
237.069 11	≤3	0.43 ns 8	
267.230 9	≤2 <sup>+</sup>	<0.08 ns	
271.470 13	≤2 <sup>+</sup>		
304.525 10	1,2,3 <sup>+</sup>	<0.16 ns	
338.960 14	2 <sup>-</sup> ,3 <sup>-</sup>	<0.08 ns	
360.618 10	≤2 <sup>+</sup>	<0.04 ns	
381.207 10	≤3 <sup>-</sup>	<0.42 ns	
411.973@ 24			
424.721 16	≤3	<0.13 ns	
432.376 15	≤3 <sup>-</sup>	<0.08 ns	
446.6&		0.86 ns 6	
456.53@ 3			
466.885@ 21			
468.850 12	≤3	0.22 ns 5	
471.240 19	1,2,3 <sup>+</sup>		
485.741 13	≤3 <sup>+</sup>	<0.1 ns	
496.886 12		<0.08 ns	
525.677 17		<0.08 ns	
527.428 16		<0.4 ns	
536.209 13		<0.16 ns	
539.6&		<0.1 ns	
549.397 13		<0.08 ns	
557.1&		<0.34 ns	
589.8&		<0.14 ns	
592.9&		<0.34 ns	
595.05 4		<0.16 ns	
613.058 25		<0.07 ns	
615.137 23		<0.06 ns	
633.443 18		<0.14 ns	
653.930 17		<0.36 ns	
663.461 15		<0.22 ns	
664.935 22		<0.5 ns	

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$^{109}\text{Ag}(n,\gamma)$  E=thermal    **1979Bo41,1968El03,1988Ko31 (continued)** $^{110}\text{Ag}$  Levels (continued)

E(level) <sup>†</sup>	J <sup>‡</sup>	T <sub>1/2</sub> <sup>#</sup>	Comments
683.152 19		<0.46 ns	
689.47 <sup>@</sup> 4		<0.46 ns	
698.561 15		<0.16 ns	
706.214 16			
724.67 4			
725.807 22		<0.8 ns	
748.598 <sup>&amp;</sup> 22		<0.8 ns	
750.837 25		<0.12 ns	
753.0 <sup>&amp;</sup>		<0.25 ns	
759.6 <sup>&amp;</sup>		<0.21 ns	
767.01 4		<1.3 ns	
773.697 23		<0.46 ns	
785.683 19		<0.5 ns	
789.7 <sup>&amp;</sup>		<0.54 ns	
802.73 4			
811.420 24		<0.22 ns	
819.017 22		<0.72 ns	
820.7 <sup>&amp;</sup>		<1.1 ns	
854.4 <sup>&amp;</sup>		<0.1 ns	
881.5 <sup>&amp;</sup>		<0.6 ns	
910.9 <sup>&amp;</sup>		<0.42 ns	
953.2 <sup>&amp;</sup>		<2.0 ns	
954.4 <sup>&amp;</sup>		<0.3 ns	
985.7 <sup>&amp;</sup>		<0.7 ns	
995.1 <sup>&amp;</sup>		<0.4 ns	
1013.0 <sup>&amp;</sup>		<0.84 ns	
1106.7 <sup>&amp;</sup>		<1.2 ns	
6809.20 10	0 <sup>-</sup> ,1 <sup>-</sup>		E(level): From neutron separation energy ( <a href="#">2003Au03</a> ). Other: 6810 keV <i>I</i> ( <a href="#">1967Bo06</a> ). J <sup>π</sup> : From s-wave capture by $^{109}\text{Ag}$ g.s ( $J^\pi=1/2^-$ ).

<sup>†</sup> From least-squares fit to secondary Eγ's, unless otherwise stated.<sup>‡</sup> From [1979Bo41](#), unless otherwise stated.<sup>#</sup> From [1988Ko31](#), unless otherwise stated.@ From [1978BoZD](#) and [1980BoZW](#).& From [1988Ko31](#). $\gamma(^{110}\text{Ag})$ Unplaced  $\gamma$ -transitions are either from [1971Gu05](#) or from [1968El03](#).

E <sub>i</sub> (level)	J <sub>i</sub> <sup>π</sup>	E <sub>γ</sub> <sup>‡</sup>	I <sub>γ</sub> <sup>#</sup>	E <sub>f</sub>	J <sub>f</sub> <sup>π</sup>	Mult.	α <sup>†</sup>	Comments
118.718	3 <sup>+</sup>	117.607 17	100 10	1.112	2 <sup>-</sup>	E1	0.1005	B(E1)(W.u.)= $4.5 \times 10^{-6}$ 7 α(K)=0.0875 13; α(L)=0.01062 16; α(M)=0.00200 3; α(N+..)=0.000355 6 α(N)=0.000341 5; α(O)= $1.401 \times 10^{-5}$ 21 Mult.: α(K)exp=0.088, α(L1)exp=0.0073.
118.716 17			0.0	1 <sup>+</sup>				

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 **$^{109}\text{Ag}(\text{n},\gamma)$  E=thermal    1979Bo41,1968El03,1988Ko31 (continued)**


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 $\gamma(^{110}\text{Ag})$  (continued)

E <sub>i</sub> (level)	J <sub>i</sub> <sup>π</sup>	E <sub>γ</sub> <sup>†</sup>	I <sub>γ</sub> <sup>#</sup>	E <sub>f</sub>	J <sub>f</sub> <sup>π</sup>	Mult.&	α <sup>†</sup>	Comments
191.622	3 <sup>+</sup>	72.903 11	22 2	118.718	3 <sup>+</sup>	M1	1.031 17	α(K)=0.894 15; α(L)=0.1117 18; α(M)=0.0213 4; α(N+..)=0.00384 7 α(N)=0.00368 6; α(O)=0.000169 3 Mult.: α(K)exp=0.86 17, α(L1)exp=0.11 7.
198.690	2 <sup>+</sup>	197.58 3 198.69 3	185 19	1.112 0.0	2 <sup>-</sup> 1 <sup>+</sup>	M1	0.0637	B(M1)(W.u.)>0.032 α(K)=0.0554 8; α(L)=0.00677 10; α(M)=0.001287 19; α(N+..)=0.000233 4 α(N)=0.000223 4; α(O)=1.039×10 <sup>-5</sup> 15 Mult.: α(K)exp=0.048 3, α(L1)exp=0.0055 8.
236.859	≤3 <sup>-</sup>	235.75 3	105 11	1.112	2 <sup>-</sup>	M1	0.0405	B(M1)(W.u.)>0.0066 α(K)=0.0353 5; α(L)=0.00429 6; α(M)=0.000815 12; α(N+..)=0.0001477 21 α(N)=0.0001411 20; α(O)=6.60×10 <sup>-6</sup> 10 Mult.: α(K)exp=0.027 1, α(L1)exp=0.0016 7 (includes L236.62γ in 1968El03).
237.069	≤3	235.94 4 237.05 4	30 3	1.112 0.0	2 <sup>-</sup> 1 <sup>+</sup>	(E1)		Mult.: From α(K)exp=0.00639 6 calculated by the evaluators using I <sub>γ</sub> and I <sub>e</sub> in 1968El03. Note that I <sub>γ</sub> quoted by the authors are same for both 235.75γ and 237.05γ.
267.230	≤2 <sup>+</sup>	68.552 10	7.4 15	198.690 198.690	2 <sup>+</sup> 2 <sup>-</sup>	M1(+E2)	3.4 22	α(K)=2.4 14; α(L)=0.8 7; α(M)=0.16 14; α(N+..)=0.026 21 α(N)=0.025 21; α(O)=0.00035 16 Mult.: α(K)exp=1.04 21, α(L1)exp=0.23 19.
		266.11 4 267.22 4	57 6 14.0 14	1.112 0.0	2 <sup>-</sup> 1 <sup>+</sup>	(M1)	0.0292	α(K)=0.0255 4; α(L)=0.00308 5; α(M)=0.000586 9; α(N+..)=0.0001062 15 α(N)=0.0001015 15; α(O)=4.76×10 <sup>-6</sup> 7 B(M1)(W.u.)>0.0051 E <sub>γ</sub> ,I <sub>γ</sub> : 266.95 10 (I <sub>γ</sub> (266.95)=57) and 268.77 20 (I <sub>γ</sub> (268.77)=14) were reported in 1971Gu05 but depopulating state(s) were not specified by the authors. Evaluators adopted I <sub>γ</sub> (268.77) (assuming that this transition in 1971Gu05 corresponded 267.22 keV transition in 1979Bo41). See 1970Ka05 for different intensities. Mult.: α(K)exp=0.017 1. α(K)exp was measured for 266.95 keV transition in 1968El03. The authors did not observe any close γ-ray transition and placed it depopulating 270.2 keV level. Evaluators assigned (M1) mult for 267.22γ based on the decay pattern.
271.470	≤2 <sup>+</sup>	79.847 12	23.8 24	191.622 191.622	3 <sup>+</sup> 3 <sup>+</sup>	M1(+E2)	2.0 13	α(K)=1.5 9; α(L)=0.4 4; α(M)=0.08 7; α(N+..)=0.013 11 α(N)=0.013 11; α(O)=0.00023 10 α(N)=0.00283 4; α(O)=0.0001299 19 Mult.: α(K)exp=0.82 16, α(L1)exp=0.08 3. α(K)=0.19 8; α(L)=0.031 18; α(M)=0.006
		152.755 22	6.2 12	118.718	3 <sup>+</sup>	M1(+E2)	0.22 10	

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$^{109}\text{Ag}(\text{n},\gamma)$  E=thermal    **1979Bo41,1968El03,1988Ko31 (continued)** $\gamma(^{110}\text{Ag})$  (continued)

$E_i$ (level)	$J^\pi_i$	$E_\gamma^{\dagger}$	$I_\gamma^{\#}$	$E_f$	$J^\pi_f$	Mult.&	$\alpha^{\dagger}$	Comments
304.525	1,2,3 <sup>+</sup>	105.824 15	27 3	198.690	2 <sup>+</sup>	M1	0.358	$\alpha(N+..)=0.0010$ 6 $\alpha(N)=0.0010$ 6; $\alpha(O)=3.1\times 10^{-5}$ 10 Mult.: $\alpha(K)\exp=0.15$ 2. B(M1)(W.u.)>0.083 $\alpha(K)=0.311$ 5; $\alpha(L)=0.0385$ 6; $\alpha(M)=0.00734$ 11; $\alpha(N+..)=0.001327$ 20 $\alpha(N)=0.001269$ 19; $\alpha(O)=5.85\times 10^{-5}$ 9 $I_\gamma$ : Other: 33 ( <a href="#">1970Ka05</a> ). Mult.: $\alpha(K)\exp=0.25$ 4, $\alpha(L1)\exp=0.037$ 7.
338.960	2 <sup>-</sup> ,3 <sup>-</sup>	304.538 15 101.856 15 337.80 5 338.92 5		0.0 237.069 1.112 0.0	1 <sup>+</sup> $\leq 3$ 2 <sup>-</sup> 1 <sup>+</sup>			$I_\gamma$ : Other: 1.58 ( <a href="#">1970Ka05</a> ).
360.618	$\leq 2^+$	93.402 14	12.5 13	267.230	$\leq 2^+$	M1(+E2)	1.2 7	$\alpha(K)=0.9$ 5; $\alpha(L)=0.22$ 16; $\alpha(M)=0.04$ 4; $\alpha(N+..)=0.007$ 5 $\alpha(N)=0.007$ 5; $\alpha(O)=0.00014$ 6 $I_\gamma$ : Other: 18.90 ( <a href="#">1970Ka05</a> ). Mult.: $\alpha(K)\exp=0.50$ 10, $\alpha(L1)\exp=0.078$ 24.
		123.571 18 123.766 18 161.920 24		237.069 236.859 198.690	$\leq 3$ $\leq 3^-$ 2 <sup>+</sup>			$\alpha(K)=0.15$ 6; $\alpha(L)=0.025$ 14; $\alpha(M)=0.005$ 3; $\alpha(N+..)=0.0008$ 5 $\alpha(N)=0.0008$ 5; $\alpha(O)=2.6\times 10^{-5}$ 8 $I_\gamma$ : Other: 5.51 ( <a href="#">1970Ka05</a> ). Mult.: $\alpha(K)\exp=0.12$ 4.
381.207	$\leq 3^-$	359.51 5 360.62 5 113.976 17 144.148 21		1.112 0.0 267.230 237.069	2 <sup>-</sup> 1 <sup>+</sup> $\leq 2^+$ $\leq 3$			$I_\gamma$ : Other: <18.90 ( <a href="#">1970Ka05</a> ). $I_\gamma$ : Other: <18.90 ( <a href="#">1970Ka05</a> ). $I_\gamma$ : $I_\gamma \leq 2.0$ 4 for the 144.148 + 144.342. Only 144.04 $\gamma$ was observed by <a href="#">1971Gu05</a> . $I_\gamma$ : $I_\gamma \leq 2.0$ 4 for the 144.148 + 144.342. Only 144.04 $\gamma$ was observed by <a href="#">1971Gu05</a> .
411.973		380.09 6 381.20 6 220.35 <sup>@</sup> 3 293.26 <sup>@</sup> 4		3.94 16.5 191.622 118.718	2 <sup>-</sup> 1 <sup>+</sup> 3 <sup>+</sup> 3 <sup>+</sup>			$I_\gamma$ : From <a href="#">1970Ka05</a> . $I_\gamma$ : From <a href="#">1970Ka05</a> .
424.721	$\leq 3$	411.96 <sup>@</sup> 6 157.488 <sup>d</sup> 23 187.65 3 423.60 6		0.0 267.230 237.069 1.112	1 <sup>+</sup> $\leq 2^+$ $\leq 3$ 2 <sup>-</sup>			
432.376	$\leq 3^-$	424.71 6 165.138 24 195.52 3		267.230 236.859	$\leq 2^+$ $\leq 3^-$			$I_\gamma$ : $\leq 10$ for 194.610 $\gamma$ + 195.515 $\gamma$ . Only 195.515 $\gamma$ was observed by <a href="#">1971Gu05</a> . Other: 9.5 ( <a href="#">1970Ka05</a> ).
456.53		233.67 3 240.76 4 313.64 5 431.38 6 185.07 <sup>@</sup> 3 337.80 <sup>@</sup> 5		198.690 191.622 118.718 1.112 271.470 118.718	2 <sup>+</sup> 3 <sup>+</sup> 3 <sup>+</sup> 2 <sup>-</sup> $\leq 2^+$ 3 <sup>+</sup>			$I_\gamma=3.15$ ( <a href="#">1970Ka05</a> ).

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$^{109}\text{Ag}(\text{n},\gamma)$  E=thermal    **1979Bo41,1968El03,1988Ko31 (continued)** $\gamma(^{110}\text{Ag})$  (continued)

$E_i$ (level)	$J^\pi_i$	$E_\gamma^\ddagger$	$I_\gamma^\#$	$E_f$	$J^\pi_f$	Mult.&	$\alpha^\dagger$	Comments
466.885		162.371 <sup>a</sup> 24		304.525	1,2,3 <sup>+</sup>			
		275.23 <sup>a</sup> 4		191.622	3 <sup>+</sup>			
		348.17 <sup>a</sup> 5		118.718	3 <sup>+</sup>			
468.850	$\leq 3$	108.229 16		360.618	$\leq 2^+$			
		164.316 24		304.525	1,2,3 <sup>+</sup>			
		197.38 3		271.470	$\leq 2^+$			
		231.77 3		237.069	$\leq 3$			
		270.15 4		198.690	$2^+$			
		350.12 5		118.718	3 <sup>+</sup>			
471.240	1,2,3 <sup>+</sup>	166.710 24	5.3 11	304.525	1,2,3 <sup>+</sup>			
		234.18 3		237.069	$\leq 3$			
		272.54 4		198.690	$2^+$			
485.741	$\leq 3^+$	125.155 18	3.5 7	360.618	$\leq 2^+$	M1+E2	0.44 22	$\alpha(K)=0.35$ 16; $\alpha(L)=0.07$ 5; $\alpha(M)=0.013$ 9; $\alpha(N+..)=0.0022$ 14 $\alpha(N)=0.0021$ 14; $\alpha(O)=5.7\times 10^{-5}$ 21 Mult.: $\alpha(K)\exp=0.29$ 4.
		181.27 3		304.525	1,2,3 <sup>+</sup>			
		218.57 3		267.230	$\leq 2^+$			
		248.92 4		236.859	$\leq 3^-$			
		287.08 4		198.690	$2^+$			
		294.14 4		191.622	3 <sup>+</sup>			
		367.05 5		118.718	3 <sup>+</sup>			
496.886		115.685 17		381.207	$\leq 3^-$			
		229.66 3		267.230	$\leq 2^+$			
		259.82 4		237.069	$\leq 3$			
		260.02 <sup>a</sup> 4		236.859	$\leq 3^-$			
		298.18 <sup>a</sup> 4		198.690	$2^+$			
		495.76 7		1.112	$2^-$			
525.677		496.87 7		0.0	$1^+$			
		186.76 3		338.960	$2^-, 3^-$			
		288.62 4		237.069	$\leq 3$			
		288.82 <sup>a</sup> 4		236.859	$\leq 3^-$			
		326.97 5		198.690	$2^+$			
		524.54 8		1.112	$2^-$			
527.428		166.891 24		360.618	$\leq 2^+$			
		188.17 3		338.960	$2^-, 3^-$			
		256.03 4		271.470	$\leq 2^+$			
		328.80 5		198.690	$2^+$			
		335.91 5		191.622	3 <sup>+</sup>			
		408.79 6		118.718	3 <sup>+</sup>			
		526.39 8		1.112	$2^-$			
536.209		175.56 3		360.618	$\leq 2^+$			
		231.66 3		304.525	1,2,3 <sup>+</sup>			
		268.96 4	14 1	267.230	$\leq 2^+$			
		299.33 4		236.859	$\leq 3^-$			
		536.16 8		0.0	$1^+$			
549.397		188.77 3		360.618	$\leq 2^+$			
		244.85 4		304.525	1,2,3 <sup>+</sup>			
		277.88 4		271.470	$\leq 2^+$			
		282.16 4		267.230	$\leq 2^+$			
		312.53 5		236.859	$\leq 3^-$			
		549.38 8		0.0	$1^+$			
595.05		358.00 5		237.069	$\leq 3$			
		358.17 5		236.859	$\leq 3^-$			
		593.91 9		1.112	$2^-$			

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$^{109}\text{Ag}(\text{n},\gamma)$  E=thermal    **1979Bo41,1968El03,1988Ko31 (continued)** $\gamma(^{110}\text{Ag})$  (continued)

E <sub>i</sub> (level)	J <sub>i</sub> <sup>π</sup>	E <sub>γ</sub> <sup>‡</sup>	I <sub>γ</sub> <sup>#</sup>	E <sub>f</sub>	J <sub>f</sub> <sup>π</sup>	Comments
595.05		595.07 9		0.0	1 <sup>+</sup>	
613.058		231.84 3		381.207	≤3 <sup>-</sup>	
		274.12 4		338.960	2 <sup>-</sup> ,3 <sup>-</sup>	
		494.33 7		118.718	3 <sup>+</sup>	
615.137		182.76 3		432.376	≤3 <sup>-</sup>	
		254.51 4		360.618	≤2 <sup>+</sup>	
		378.08 6		237.069	≤3	
		378.28 6		236.859	≤3 <sup>-</sup>	
		614.04 9		1.112	2 <sup>-</sup>	
633.443		136.555 20	1.2 2	496.886		
		252.24 4		381.207	≤3 <sup>-</sup>	
		272.82 4		360.618	≤2 <sup>+</sup>	
		366.21 5		267.230	≤2 <sup>+</sup>	
		396.39 6		237.069	≤3	
653.930		157.043 23		496.886		
		185.07 3		468.850	≤3	
		315.05 5		338.960	2 <sup>-</sup> ,3 <sup>-</sup>	
		417.06 6		236.859	≤3 <sup>-</sup>	
		462.29 7		191.622	3 <sup>+</sup>	
		652.76 10		1.112	2 <sup>-</sup>	
663.461		114.082 17		549.397		
		177.69 3		485.741	≤3 <sup>+</sup>	
		194.61 3	≤10	468.850	≤3	I <sub>γ</sub> : ≤10 for 194.610γ + 195.515γ. Only 195.515γ was observed by <b>1971Gu05</b> .
		302.84 4		360.618	≤2 <sup>+</sup>	
		358.93 5		304.525	1,2,3 <sup>+</sup>	
		464.78 7		198.690	2 <sup>+</sup>	
		662.27 10		1.112	2 <sup>-</sup>	
664.935		283.73 4		381.207	≤3 <sup>-</sup>	
		304.30 5		360.618	≤2 <sup>+</sup>	
		326.01 5		338.960	2 <sup>-</sup> ,3 <sup>-</sup>	
		393.49 6		271.470	≤2 <sup>+</sup>	
		427.87 6		237.069	≤3	
		428.06 6		236.859	≤3 <sup>-</sup>	
		466.22 7		198.690	2 <sup>+</sup>	
		663.75 10		1.112	2 <sup>-</sup>	
683.152		157.488 <sup>a</sup> 23		525.677		
		214.29 3		468.850	≤3	
		322.52 5		360.618	≤2 <sup>+</sup>	
		378.62 6		304.525	1,2,3 <sup>+</sup>	
		415.91 6		267.230	≤2 <sup>+</sup>	
		484.45 7		198.690	2 <sup>+</sup>	
689.47		232.94 <sup>@</sup> 3		456.53		
		422.23 <sup>@</sup> 6		267.230	≤2 <sup>+</sup>	
		570.76 <sup>@</sup> 8		118.718	3 <sup>+</sup>	
698.561		149.168 22		549.397		
		162.371 24		536.209		
		201.68 3		496.886		
		212.77 3		485.741	≤3 <sup>+</sup>	
		273.85 4		424.721	≤3	
		317.34 5		381.207	≤3 <sup>-</sup>	
		337.95 5		360.618	≤2 <sup>+</sup>	
		461.51 7		237.069	≤3	
		698.58 10		0.0	1 <sup>+</sup>	
706.214		156.754 23		549.397		

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 $^{109}\text{Ag}(n,\gamma)$  E=thermal    **1979Bo41,1968El03,1988Ko31 (continued)**


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 $\gamma(^{110}\text{Ag})$  (continued)

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$E_i$ (level)	$E_\gamma^{\dagger}$	$E_f$	$J_f^\pi$	$E_i$ (level)	$E_\gamma^{\ddagger}$	$E_f$	$J_f^\pi$
706.214	169.923 25	536.209	$J^\pi$	773.697	237.49 4	536.209	
	220.85 3	485.741	$\leq 3^+$		276.80 4	496.886	
	237.28 4	468.850	$\leq 3$		348.98 5	424.721	$\leq 3$
	345.50 5	360.618	$\leq 2^+$		469.14 7	304.525	$1,2,3^+$
	434.65 6	271.470	$\leq 2^+$		536.72 8	237.069	$\leq 3$
	507.41 7	198.690	$2^+$		574.98 8	198.690	$2^+$
	514.45 <sup>a</sup> 8	191.622	$3^+$		654.99 10	118.718	$3^+$
	587.46 9	118.718	$3^+$		773.67 11	0.0	$1^+$
724.67	253.43 4	471.240	$1,2,3^+$	785.683	236.27 4	549.397	
	605.95 9	118.718	$3^+$		249.47 4	536.209	
	723.57 11	1.112	$2^-$		260.02 <sup>a</sup> 4	525.677	
	724.69 11	0.0	$1^+$		288.82 <sup>a</sup> 4	496.886	
725.807	228.92 3	496.886			316.82 5	468.850	$\leq 3$
	301.06 4	424.721	$\leq 3$		481.21 7	304.525	$1,2,3^+$
	344.60 5	381.207	$\leq 3^-$		586.97 7	198.690	$2^+$
	386.90 6	338.960	$2^-, 3^-$		666.84 10	118.718	$3^+$
	488.75 7	237.069	$\leq 3$		785.66 12	0.0	$1^+$
748.598	212.39 3	536.209		802.73	277.07 4	525.677	
	323.86 5	424.721	$\leq 3$		611.04 9	191.622	$3^+$
	367.38 5	381.207	$\leq 3^-$		683.98 10	118.718	$3^+$
	387.97 6	360.618	$\leq 2^+$	811.420	275.23 4	536.209	
	409.69 6	338.960	$2^-, 3^-$		325.64 5	485.741	$\leq 3^+$
	549.87 8	198.690	$2^+$		342.62 5	468.850	$\leq 3$
	748.63 11	0.0	$1^+$		450.78 7	360.618	$\leq 2^+$
750.837	223.37 3	527.428			506.83 7	304.525	$1,2,3^+$
	390.25 6	360.618	$\leq 2^+$		544.20 8	267.230	$\leq 2^+$
	446.34 7	304.525	$1,2,3^+$		612.71 9	198.690	$2^+$
	483.68 7	267.230	$\leq 2^+$	819.017	165.093 24	653.930	
	632.19 9	118.718	$3^+$		282.80 4	536.209	
	750.89 11	0.0	$1^+$		386.64 6	432.376	$\leq 3^-$
767.01	298.18 <sup>a</sup> 4	468.850	$\leq 3$		514.45 <sup>a</sup> 8	304.525	$1,2,3^+$
	406.44 6	360.618	$\leq 2^+$		581.96 9	237.069	$\leq 3$
	648.04 10	118.718	$3^+$		620.32 10	198.690	$2^+$
	765.93 11	1.112	$2^-$				

<sup>†</sup> Additional information 2.

<sup>‡</sup> From 1979Bo41, unless otherwise stated.  $\Delta E_{\gamma S}$  were estimated using 1975Cl03.

<sup>#</sup> From 1971Gu05, unless otherwise stated. Values are normalized to  $I_\gamma(117.6)=100$ .  $\Delta I_\gamma=10\%$  for  $I_\gamma \geq 10$  and 20% for  $I_\gamma < 10$  stated by the authors.

<sup>@</sup> From 1978BoZD.

<sup>&</sup> Deduced from  $\alpha(K)\exp$  and  $\alpha(L1)\exp$  in 1968El03, unless otherwise stated.  $\alpha$  were normalized to  $\alpha_{\exp}(117.607\gamma) = 0.088$  by the authors of 1968El03, assuming that the multipolarity of this transition is E1.  $\Delta\alpha(K)\exp$  and  $\Delta\alpha(L1)\exp$  were calculated using  $\delta I_e/I_e$  by the evaluators.

<sup>a</sup> Multiply placed.

<sup>x</sup>  $\gamma$  ray not placed in level scheme.

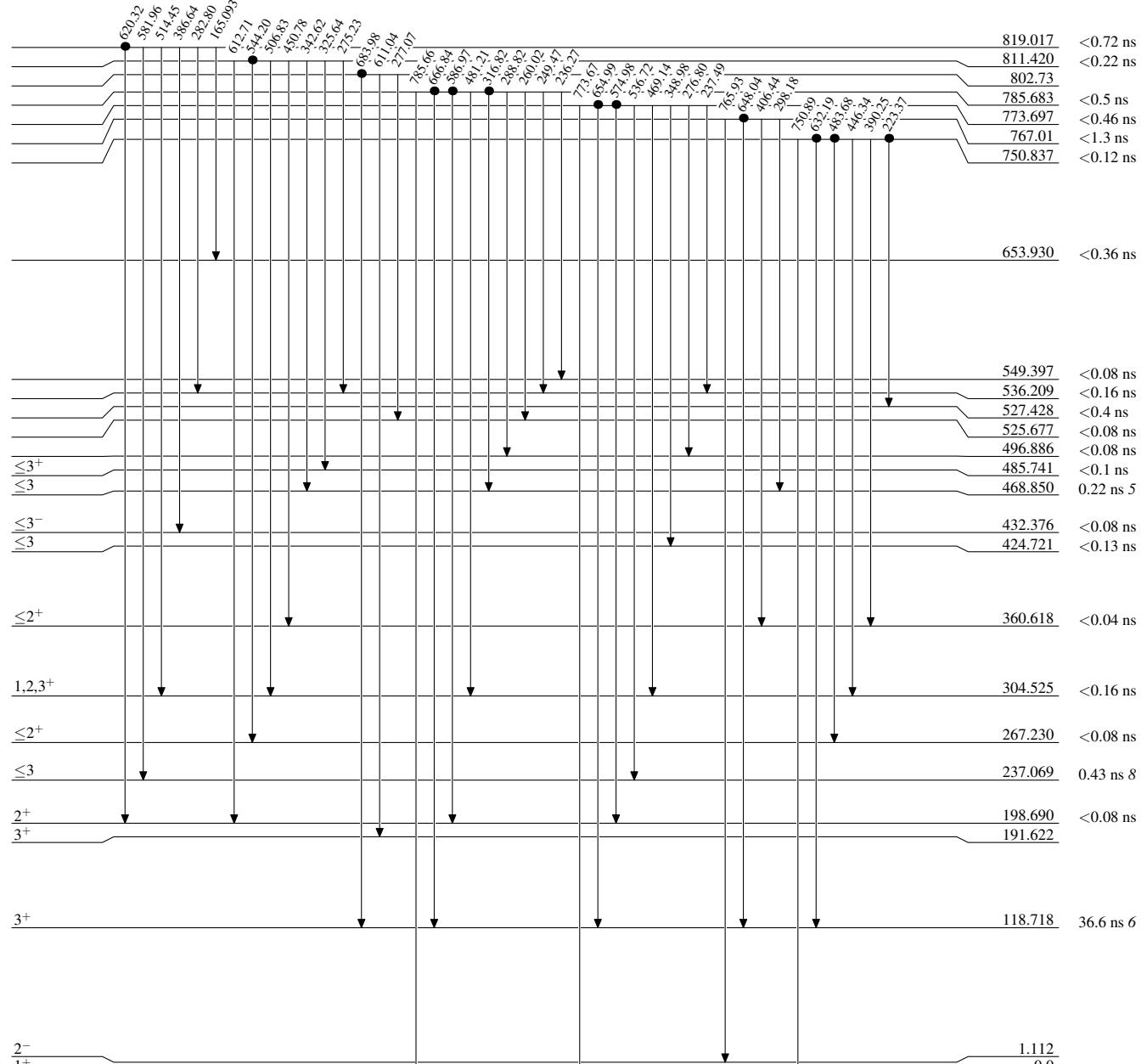
$^{109}\text{Ag}(\text{n},\gamma)$  E=thermal    1979Bo41,1968El03,1988Ko31

Legend

## Level Scheme

Intensities: Relative photon branching from each level

● Coincidence



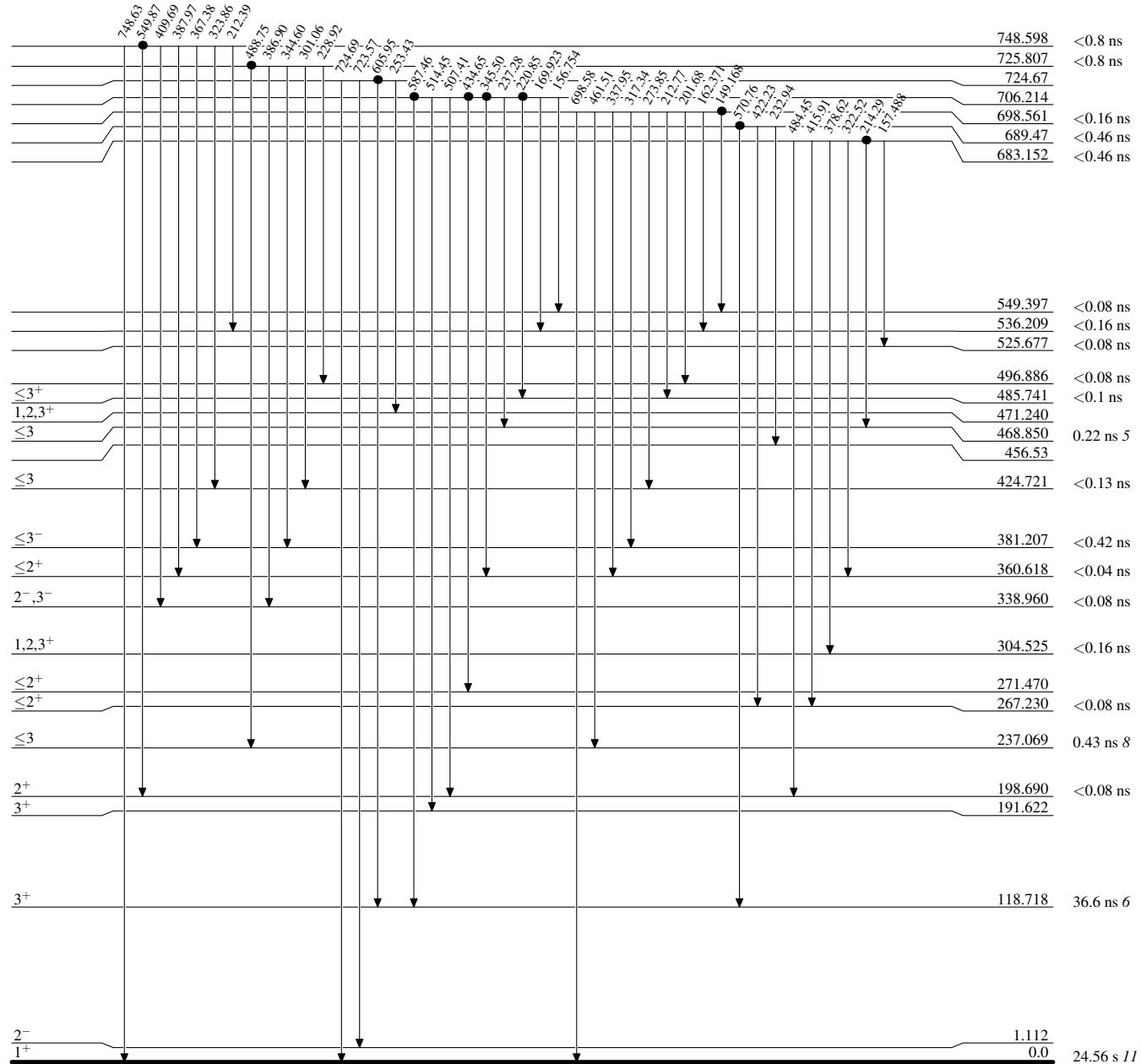
$^{109}\text{Ag}(\text{n},\gamma)$  E=thermal    1979Bo41,1968El03,1988Ko31

Legend

## Level Scheme (continued)

Intensities: Relative photon branching from each level

● Coincidence



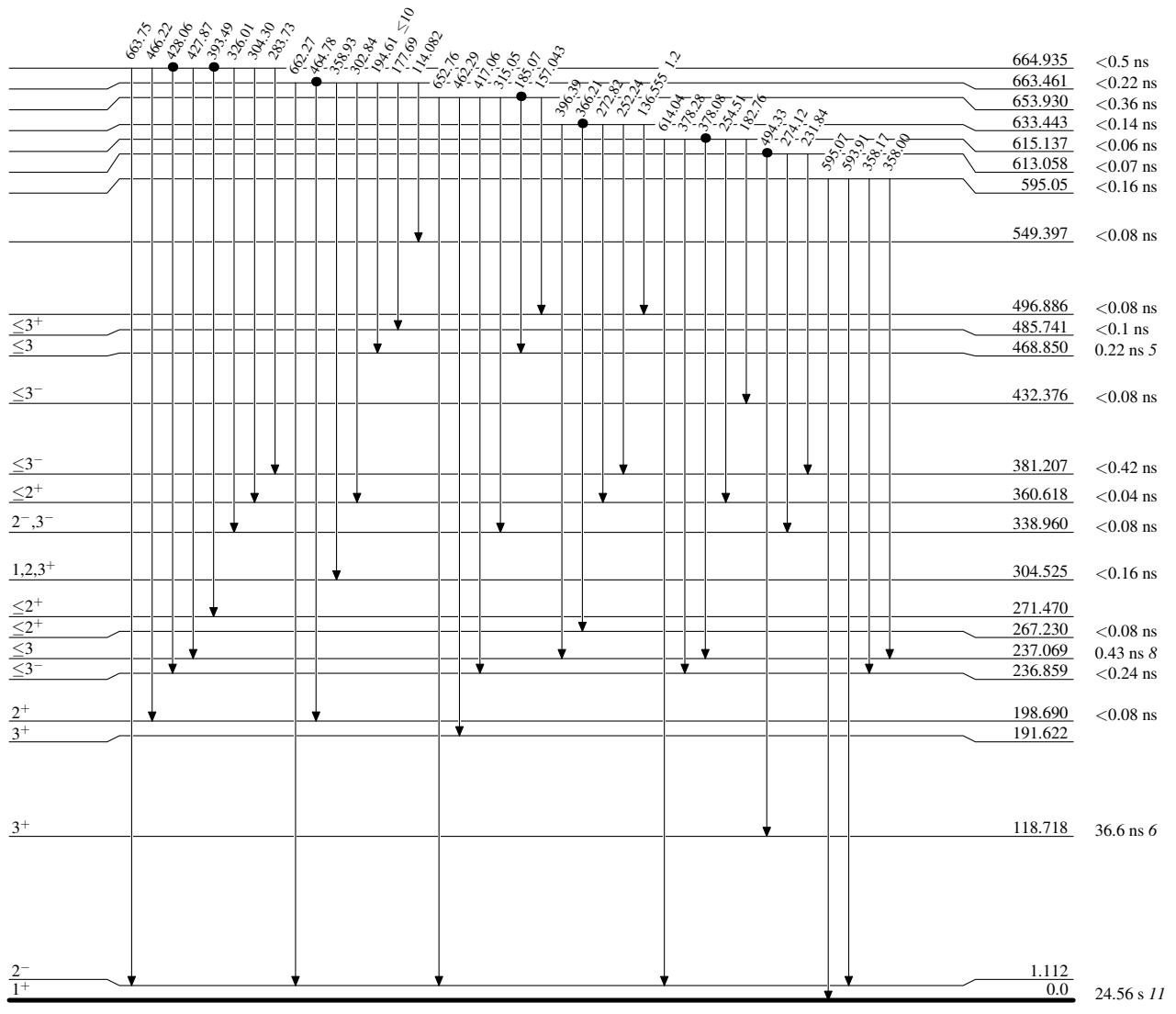
$^{109}\text{Ag}(\text{n},\gamma)$  E=thermal    1979Bo41,1968El03,1988Ko31

Legend

## Level Scheme (continued)

Intensities: Relative photon branching from each level

● Coincidence



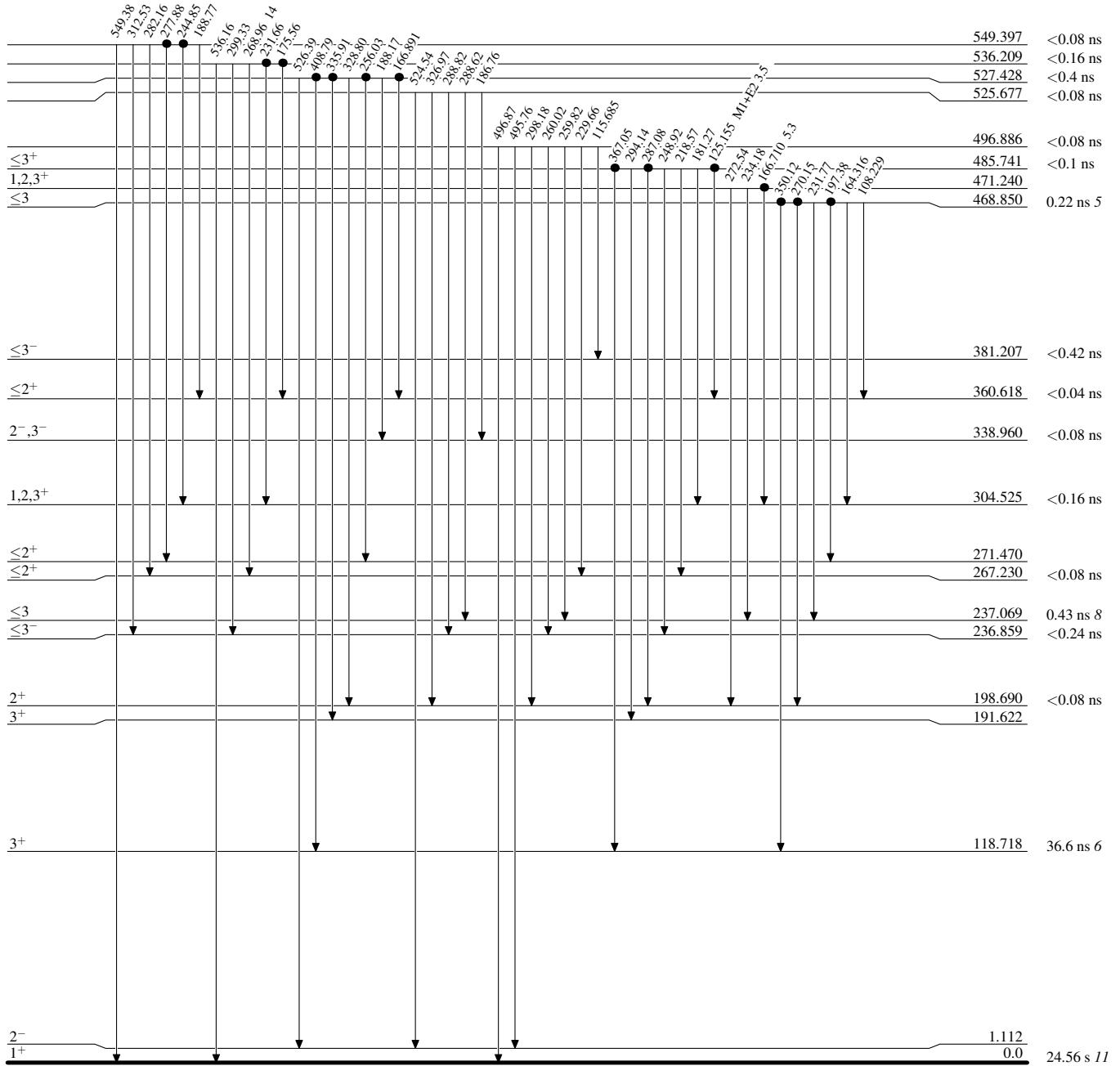
$^{109}\text{Ag}(\text{n},\gamma)$  E=thermal 1979Bo41,1968El03,1988Ko31

Legend

## Level Scheme (continued)

Intensities: Relative photon branching from each level

● Coincidence



<sup>109</sup>Ag(n, $\gamma$ ) E=thermal      1979Bo41,1968El03,1988Ko31

## Legend

## Level Scheme (continued)

Intensities: Relative photon branching from each level

Coincidence

