

Adopted Levels, Gammas

Type	Author	Citation	History	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen	NDS 172, 1 (2021)		31-Jan-2021

$Q(\beta^-)=-3943\ 5$; $S(n)=9497\ 8$; $S(p)=3244\ 7$; $Q(\alpha)=-875\ 11$
 $S(2n)=21210\ 30$, $S(2p)=9541\ 13$, $Q(ep)=154\ 8$ ([2017Wa10](#)).

Mass measurements: [2019An10](#), [2009El08](#).

Additional information 1.

Theory references: consult the NSR database (www.nndc.bnl.gov/nsr/) for four primary references, three dealing with nuclear structure calculations and one with decay modes and half-lives.

^{101}In with g.s. half-life of 15.1 s is a potential delayed proton emitter with $Q(ep)=2240\ 200$ (syst, [2017Wa10](#)), which could populate levels in ^{100}Ag , but no proton measurements have yet been reported.

 ^{100}Ag Levels

See [1996A116](#) for proposed neutron-proton (multiparticle) configuration assignments to several high-spin ($J \geq 5$) levels based on comparisons with shell-model calculations.

No level populations are known from ^{101}In ϵp decay (15.1 s).

Cross Reference (XREF) Flags

- A** ^{100}Cd ϵ decay (49.1 s)
- B** $^{46}\text{Ti}(^{58}\text{Ni},3\text{p}n\gamma)$,

E(level) [†]	J^π [‡]	$T_{1/2}$	XREF	Comments
0.0	(5) ⁺	2.01 min 10	AB	$\%_{\epsilon} + \%_{\beta^+} = 100$ $\mu = 4.37\ 3$ (2014Fe01,2019StZV) J^π : log $ft=6.1$ to 6^+ , log $ft=6.5$ to levels that deexcite to 2^+ and systematics ($J^\pi(^{102}\text{Ag}$ g.s., ^{104}Ag g.s.)= 5^+) give $J=(5)$. Parity from M1(+E2)-M1(+E2) cascade from $(3)^+$. See also J^π comments for 236.1 or 303.6 level. Proposed configuration= $\pi(g_{9/2}^{-3})_{9/2+} \otimes \nu(d_{5/2})_{5/2-}$, consistent with measured magnetic moment (2014Fe01). $T_{1/2}$: weighted average of 2.00 min 10 (1980Ha20) and 2.06 min 25 (1983Ra10). 1983Ra10 cannot distinguish the g.s. and the isomer on the basis of half-life. Others: 2.00 min 3 (total γ absorption, 1995Ba25). 2.3 min 1 ($\gamma(t)$, 1970Hn03), 1.9 min 3 ($\gamma(t)$, 1971In03). 7.5 min 1 from 1967Do06 , 8 min 1 from 1967Ba26 and 9 min from 1966Bu05 can not be confirmed in later studies. rms charge radius: $\delta < r^2 > (^{100}\text{Ag}, ^{109}\text{Ag}) = 0.83\ \text{fm}^2$ 10(stat) 6(syst) (2014Fe01). Isotope shift: $\delta\nu(^{100}\text{Ag}, ^{109}\text{Ag}) = -2.95\ \text{GHz}$ 22(stat) 11(syst) (2014Fe01). μ , rms charge radius and isotope shifts: measured by hyperfine structure study (2014Fe01) using in-gas-cell laser ionization spectroscopy at LISOL facility of cyclotron center in Leuven. $\%_{\epsilon} + \%_{\beta^+} = ?$; $\%IT = ?$ J^π : 936.6 γ from 1^+ ; M1,E2(368.7 γ)-M1,E2(567.9 γ) cascade from 1^+ ; and systematics ($J^\pi=2^+$ for 9-keV isomer in ^{102}Ag and 6-keV isomer in ^{104}Ag). Configuration= $\pi(g_{9/2}^{-3})_{9/2+} \otimes \nu(d_{5/2}, g_{7/2})_{5/2+}$ and/or $\pi(g_{9/2}^{-3})_{7/2+} \otimes \nu(d_{5/2}, g_{7/2})_{5/2+}$, as proposed for ^{102}Ag by 2010Go08 . $T_{1/2}$: weighted average of 2.30 min 15 (1980Ha20) and 2.06 min 25 (1983Ra10). 1983Ra10 cannot distinguish the g.s. and the isomer on the basis of half-life. RUL=10 for B(M3)(W.u.) gives $\%IT=100$, however from a maximum of B(M3)(W.u.) value of 2.9 in A=80-100 mass range (data for about ten M3 transitions available in Nudat 2), $\%IT$ probably does not exceed $\approx 30\%$. J^π : 69.8 γ $\Delta J=1$, D to $(5)^+$; parity change would require E2 or E1 for 69.8 γ and hence isomeric lifetimes, which is less likely.
15.52 16	(2) ⁺	2.24 min 15	A	
69.8 2	(6 ⁺)		B	

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Adopted Levels, Gammas (continued) **^{100}Ag Levels (continued)**

E(level) [†]	J ^{π‡}	XREF	Comments
118.4 2	(7 ⁺)	B	J^π : 146.5 γ D, ΔJ=0 from (7 ⁺), 118.4 γ to (5) ⁺ .
124.70 10	(4) ⁺	A	J^π : see J^π comment for 236.1 or 303.6 level.
155.23 18	(1,2,3) ⁺	A	J^π : 139.7 γ M1(+E2) to (2) ⁺ .
236.15 17	(3) ⁺	A	J^π : M1(+E2) 220.7 γ to (2) ⁺ gives (1,2,3) ⁺ ; M1(+E2)(111.4 γ)-M1(+E2)(124.7 γ) cascade to g.s. J=(5) gives (3) ⁺ for 236.1 level, (4) ⁺ for 124.7 level and positive parity for g.s.
265.0 2	(7 ⁺)	B	J^π : 195.3 γ D, ΔJ=1 to (6 ⁺); parity change would require E2 or E1 for 195.3 γ and hence isomeric lifetimes, which is less likely.
303.65 14	(3) ⁺	A	J^π : M1(+E2) 288.1 γ to (2) ⁺ gives (1,2,3) ⁺ ; M1(+E2)(179.0 γ)-M1(+E2)(124.7 γ) cascade to g.s. J=(5) gives (3) ⁺ for 303.6 level, (4) ⁺ for 124.7 level and positive parity for g.s.
583.39 17	(1,2,3) ⁺	A	J^π : M1,E2 567.9 γ to (2) ⁺ .
835.3 2	(8 ⁺)	B	J^π : 287.9 γ D,ΔJ=1 from (9 ⁺), 765.6 γ to (6 ⁺).
886.04 18	(1,2,3) ⁺	A	J^π : M1,E2 270.4 γ and 507.3 γ from 1 ⁺ .
952.06 19	1 ⁺	A	J^π : log ft =3.6 from 0 ⁺ .
973.3 2	(8 ⁺)	B	J^π : 708.3 γ D,ΔJ=1 to (7 ⁺).
1002.1 2	(9 ⁺)	B	J^π : 883.9 γ Q,ΔJ=2 to (7 ⁺).
1039.46 21	(1,2) ⁻	A	J^π : 173.2 γ E1 from 1 ⁺ and 1024.1 γ to (2) ⁺ .
1123.2 2	(9 ⁺)	B	J^π : 858.1 γ (Q),ΔJ=2 to (7 ⁺), 150.0 γ to (8 ⁺).
1156.40 20	1 ⁺	A	J^π : log ft =4.9 from 0 ⁺ .
1212.70 19	1 ⁺	A	J^π : log ft =4.6 from 0 ⁺ .
1393.16 19	1 ⁺	A	J^π : log ft =3.9 from 0 ⁺ .
1530.4 3	(10 ⁺)	B	J^π : 695.4 γ (Q),ΔJ=2 to (8 ⁺).
1574.31 22	1 ⁺	A	J^π : log ft =4.2 from 0 ⁺ .
1607.0 3	(10 ⁺)	B	J^π : 483.8 γ D,ΔJ=1 to (9 ⁺).
1634.7 3	(8 ⁻)	B	J^π : 1369.4 γ D,ΔJ=1 to (7 ⁺); negative parity is proposed by 1996Al16 based on the fact that there is no competitive E2 or low-energy M1 connecting γ -ray branches to positive-parity states.
1723.1 2	(11 ⁺)	B	J^π : 721.1 γ Q,ΔJ=2 to (9 ⁺), 116.1 γ D,ΔJ=1 to (10 ⁺).
1892.96 25	1 ⁺	A	J^π : log ft =4.5 from 0 ⁺ .
1960.2 3	1 ⁺	A	J^π : log ft =4.9 from 0 ⁺ .
2047.1 3	(11)	B	J^π : 516.5 γ D,ΔJ=1 to (10 ⁺).
2082.1 3	(9 ⁻)	B	J^π : 447.4 γ (M1),ΔJ=1 to (8 ⁻).
2120.7 3		B	
2242.5 3	(10 ⁻)	B	J^π : 614.2 γ D,ΔJ=1 from (11 ⁻); Doppler-broadening of 614.2 γ indicates M1 transition. Intensity imbalance suggests that in addition to the 195.2 γ , other low-energy γ rays might deexcite the 2242 level (1996Al16).
2249.8 3	(9 ⁻)	B	J^π : 228.9 γ (M1),ΔJ=1 from (10 ⁻). Intensity imbalance suggests that in addition to the 128.9 γ , a cascade of at least two low-energy γ rays might deexcite the 2250 level (1996Al16).
2478.8 3	(10 ⁻)	B	J^π : 844.0 γ (Q),ΔJ=2 to (8 ⁻), 396.7 γ (M1),ΔJ=1 to (9 ⁻).
2549.7 3	(12 ⁺)	B	J^π : 826.6 γ D+Q,ΔJ=1 to (11 ⁺).
2653.0 3	(13 ⁺)	B	J^π : 930.0 γ (Q),ΔJ=2 to (11 ⁺).
2856.7 3	(11 ⁻)	B	J^π : 378.1 γ (M1),ΔJ=1 to (10 ⁻), 774.4 γ (Q),ΔJ=2 to (9 ⁻).
2894.0 3	(13 ⁺)	B	J^π : 344.4 γ (M1),ΔJ=1 to (12 ⁺), 241.4 γ to (13 ⁺).
3227.0 3	(12 ⁻)	B	J^π : 370.3 γ (M1),ΔJ=1 to (11 ⁻), 748.1 γ (Q),ΔJ=2 to (10 ⁻).
3435.4 3	(13 ⁻)	B	J^π : 208.4 γ (M1),ΔJ=1 to (12 ⁻).
3595.9 3	(14 ⁺)	B	J^π : 702.0 γ D,ΔJ=1 to (13 ⁺); Doppler broadening of 942.8 γ indicates M1 to (13 ⁺).
3739.8 3	(15 ⁺)	B	J^π : 143.9 γ (M1),ΔJ=1 to (14 ⁺), 845.9 γ Q,ΔJ=2 to (13 ⁺).
3986.9 4	(14 ⁻)	B	J^π : 551.5 γ (M1),ΔJ=1 to (13 ⁻).
4005.8 4	(14 ⁻)	B	J^π : 1352.9 γ D,ΔJ=1 to (13 ⁺), 570.3 γ to (13 ⁻); negative parity is proposed by 1996Al16 .
4115.3 5		B	
4134.8 5		B	
4612.7 4	(15 ⁻)	B	J^π : 625.7 γ (M1),ΔJ=1 to (14 ⁻), 1177.3 γ (Q),ΔJ=2 to (13 ⁻).
4630.6? 5	(16 ⁺)	B	J^π : 890.6 γ to (15 ⁺). E(level): ordering of 961-891 cascade is uncertain. Reverse ordering gives E(level)=4701.
5173.9 4	(16 ⁻)	B	J^π : 561.2 γ (M1),ΔJ=1 to (15 ⁻), 1186.8 γ (Q),ΔJ=2 to (14 ⁻).
5329.7 4	(16 ⁻)	B	J^π : 716.9 γ D+Q,ΔJ=1 to (15 ⁻).

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Adopted Levels, Gammas (continued) ^{100}Ag Levels (continued)

E(level) [†]	J [‡]	XREF	Comments
5591.7 5	(17 ⁺)	B	J ^π : 961.1 γ D, $\Delta J=1$ to (16 ⁺); Doppler-broadening of 961.1 γ indicates M1.
6016.3 6	(18 ⁺)	B	J ^π : 424.6 γ (M1), $\Delta J=1$ to (17 ⁺).
6067.5 4	(17 ⁻)	B	J ^π : 1455.0 γ (Q), $\Delta J=2$ to (15 ⁻), 893.4 γ to (16 ⁻).
6227.1 4	(18 ⁻)	B	J ^π : 159.4 γ (M1), $\Delta J=2$ to (17 ⁻), 1053.3 γ (Q), $\Delta J=2$ to (16 ⁻).
6325.9? 5	(18 ⁻)	B	J ^π : 1152.0 γ (Q), $\Delta J=2$ to (16 ⁻). E(level): ordering of 1297-1152 cascade is uncertain. Reverse ordering gives E(level)=6471.
7623.2 5	(19 ⁻)	B	J ^π : proposed by 1996A116 ; 1556.0 γ to (17 ⁻), 1297.3 γ to (18 ⁻).
7784.1 7	(19 ⁺)	B	J ^π : proposed by 1996A116 .
8699.0 6	(20 ⁻)	B	J ^π : proposed by 1996A116 .

[†] From least-squares fit to E γ values.[‡] For high-spin states ($J>5$) the assignments are from [1996A116](#) in (⁵⁸Ni,3pny),(⁴⁰Ca,3pny) with the parentheses added by the evaluators. These are based on ΔJ and multipolarity assignments deduced from $\gamma(\theta)$ and Doppler-broadening data. $\gamma(^{100}\text{Ag})$

E _i (level)	J ^π _i	E _γ [†]	I _γ [†]	E _f	J ^π _f	Mult. [‡]	$\delta^{\text{@}}$	$\alpha^{\&}$	Comments
69.8	(6 ⁺)	69.8 2	100	0.0	(5) ⁺	D			
118.4	(7 ⁺)	48.5 2		69.8	(6 ⁺)				
		118.4 2		0.0	(5) ⁺				
124.70	(4) ⁺	124.70 10	100	0.0	(5) ⁺	M1(+E2)	<0.1	0.228	$\alpha(K)=0.198\ 4$; $\alpha(L)=0.0247\ 6$; $\alpha(M)=0.00471\ 11$ $\alpha(N)=0.000814\ 18$; $\alpha(O)=3.72\times10^{-5}\ 6$
155.23	(1,2,3) ⁺	139.71 10	100	15.52	(2) ⁺	M1(+E2)	<0.3	0.177 12	$\alpha(K)=0.152\ 9$; $\alpha(L)=0.0199\ 22$; $\alpha(M)=0.0038\ 5$ $\alpha(N)=0.00065\ 7$; $\alpha(O)=2.81\times10^{-5}\ 12$
236.15	(3) ⁺	111.4 2	5.8 7	124.70	(4) ⁺	M1(+E2)	<0.4	0.36 5	$\alpha(K)=0.30\ 4$; $\alpha(L)=0.043\ 10$; $\alpha(M)=0.0083\ 20$ $\alpha(N)=0.0014\ 4$; $\alpha(O)=5.5\times10^{-5}\ 5$
		220.65 10	100 7	15.52	(2) ⁺	M1(+E2)	<0.8	0.056 8	$\alpha(K)=0.048\ 7$; $\alpha(L)=0.0064\ 13$; $\alpha(M)=0.00122\ 25$ $\alpha(N)=0.00021\ 4$; $\alpha(O)=8.7\times10^{-6}\ 8$
265.0	(7 ⁺)	146.5 2	23	118.4	(7 ⁺)	D			$\Delta J=0$ transition from $\gamma(\theta)$.
303.65	(3) ⁺	195.3 2	100 2	69.8	(6 ⁺)	D			
		148.5 3	3.0 6	155.23	(1,2,3) ⁺				$\alpha(K)=0.079\ 6$; $\alpha(L)=0.0101\ 12$; $\alpha(M)=0.00194\ 23$ $\alpha(N)=0.00033\ 4$; $\alpha(O)=1.45\times10^{-5}\ 8$
		178.95 10	100 7	124.70	(4) ⁺	M1(+E2)	<0.4	0.091 7	
		288.13 15	46 4	15.52	(2) ⁺	M1(+E2)	<1.1	0.028 4	$\alpha(K)=0.024\ 3$; $\alpha(L)=0.0031\ 6$; $\alpha(M)=0.00060\ 12$ $\alpha(N)=0.000102\ 19$; $\alpha(O)=4.3\times10^{-6}\ 4$
583.39	(1,2,3) ⁺	347.23 15	41 4	236.15	(3) ⁺	M1,E2		0.0171 22	$\alpha(K)=0.0148\ 18$; $\alpha(L)=0.0019\ 4$; $\alpha(M)=0.00037\ 7$ $\alpha(N)=6.3\times10^{-5}\ 11$; $\alpha(O)=2.62\times10^{-6}\ 20$
		428.20 15	87 6	155.23	(1,2,3) ⁺	M1(+E2)	<1.3	0.0092 4	$\alpha(K)=0.0080\ 3$; $\alpha(L)=0.00099\ 7$;

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Adopted Levels, Gammas (continued)

 $\gamma(^{100}\text{Ag})$ (continued)

E_i (level)	J_i^π	E_γ^\dagger	I_γ^\dagger	E_f	J_f^π	Mult. ‡	$\alpha^&$	Comments
583.39	(1,2,3) ⁺	567.90 15	100 6	15.52 (2) ⁺		M1,E2		$\alpha(M)=0.000188$ 13 $\alpha(N)=3.24\times10^{-5}$ 20; $\alpha(O)=1.46\times10^{-6}$ 3 $\alpha(K)=0.00387$ 8; $\alpha(L)=0.000473$ 12; $\alpha(M)=8.99\times10^{-5}$ 23 $\alpha(N)=1.55\times10^{-5}$ 4; $\alpha(O)=7.0\times10^{-7}$ 3
835.3	(8 ⁺)	570.4 3 716.9 765.6 3	100 65 3 302.8 3	265.0 (7 ⁺) 118.4 (7 ⁺) 69.8 (6 ⁺) 1.8 6				
886.04	(1,2,3) ⁺	582.5 3 650.0 3 730.77 25 870.4 3	100 6 10.8 11 27 2 8.9 8	583.39 (1,2,3) ⁺ 303.65 (3) ⁺ 236.15 (3) ⁺ 155.23 (1,2,3) ⁺ 15.52 (2) ⁺		M1,E2		
952.06	1 ⁺	368.70 15	7.0 5	583.39 (1,2,3) ⁺	M1,E2	0.0144 16		$\alpha(K)=0.0124$ 12; $\alpha(L)=0.0016$ 3; $\alpha(M)=0.00031$ 5 $\alpha(N)=5.2\times10^{-5}$ 8; $\alpha(O)=2.22\times10^{-6}$ 13
973.3	(8 ⁺)	796.6 4 936.55 15	0.11 3 100 6	155.23 (1,2,3) ⁺ 15.52 (2) ⁺				
1002.1	(9 ⁺)	708.3 3 854.8 4	100 6 12 6	265.0 (7 ⁺) 118.4 (7 ⁺)	D			
1039.46	(1,2) ⁻	737.1 3	27 1	265.0 (7 ⁺)	(Q)			
1123.2	(9 ⁺)	883.9 3	100	118.4 (7 ⁺)	Q			
1156.40	1 ⁺	1024.1 3 150.0 2	100 7.2	15.52 (2) ⁺ 973.3 (8 ⁺)				$\alpha(K)=0.0888$ 14; $\alpha(L)=0.01078$ 16; $\alpha(M)=0.00203$ 3
		287.9 3 858.1 3	28 2 100	835.3 (8 ⁺) 265.0 (7 ⁺)	D (Q)			$\alpha(N)=0.000346$ 6; $\alpha(O)=1.421\times10^{-5}$ 21 $\alpha(K)=0.031$ 7; $\alpha(L)=0.0042$ 13; $\alpha(M)=0.00081$ 25
		1004.6 3	80	118.4 (7 ⁺)				$\alpha(N)=0.00014$ 4; $\alpha(O)=5.4\times10^{-6}$ 8
1212.70	1 ⁺	117.0 2 573.1 4 852.0 4 1140.79 20	5.6 12 16 3 6.0 16 100 8	1039.46 (1,2) ⁻ 583.39 (1,2,3) ⁺ 303.65 (3) ⁺ 15.52 (2) ⁺	[E1]	0.1020		$\alpha(K)=0.0291$ 5; $\alpha(L)=0.00348$ 5; $\alpha(M)=0.000657$ 10
		173.2 2	26.2 21	1039.46 (1,2) ⁻	E1	0.0334		$\alpha(N)=0.0001124$ 17; $\alpha(O)=4.83\times10^{-6}$ 7
1393.16	1 ⁺	629.4 3 909.2 4 1057.5 3 1197.12 20	25.9 24 11.7 21 52 7 100 7	583.39 (1,2,3) ⁺ 303.65 (3) ⁺ 155.23 (1,2,3) ⁺ 15.52 (2) ⁺				
1530.4	(10 ⁺)	441.10 15 507.25 25 809.83 20 1156.8 5 1377.52 20	13.7 13 100 19 85 6 3.6 8 85 6	952.06 1 ⁺ 886.04 (1,2,3) ⁺ 583.39 (1,2,3) ⁺ 236.15 (3) ⁺ 15.52 (2) ⁺	M1,E2 M1,E2			
1574.31	1 ⁺	695.4 4 361.4 3 535.0 3 688.3 3 990.9 3 1338.2 4	100 6.2 21 5.8 10 100 10 40 4 5.5 19	835.3 (8 ⁺) 1212.70 1 ⁺ 1039.46 (1,2) ⁻ 886.04 (1,2,3) ⁺ 583.39 (1,2,3) ⁺ 236.15 (3) ⁺	(Q)			
1607.0	(10 ⁺)	483.8 2	100.0 16	1123.2 (9 ⁺)	D			

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Adopted Levels, Gammas (continued) $\gamma(^{100}\text{Ag})$ (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [†]	E _f	J _f ^π	Mult. [‡]	α ^{&}	Comments
1607.0	(10 ⁺)	771.9 4	8.1	835.3	(8 ⁺)			
1634.7	(8 ⁻)	1369.4 4	100	265.0	(7 ⁺)	D		
1723.1	(11 ⁺)	116.1 2	29	1607.0	(10 ⁺)	D		
		192.7 2	5.7	1530.4	(10 ⁺)			
		599.7 3	15	1123.2	(9 ⁺)	(Q)		
		721.1 2	100 2	1002.1	(9 ⁺)	Q		
1892.96	1 ⁺	500.0 5	7.6 24	1393.16	1 ⁺			
		680.6 4	19 6	1212.70	1 ⁺			
		940.9 3	100 18	952.06	1 ⁺			
		1309.3 3	42 3	583.39	(1,2,3) ⁺			
1960.2	1 ⁺	1074.2 5	20 7	886.04	(1,2,3) ⁺			
		1944.7 3	100 7	15.52	(2) ⁺			
2047.1	(11)	516.5 3	65 6	1530.4	(10 ⁺)	D		
		1045.1 2	100 6	1002.1	(9 ⁺)			
2082.1	(9 ⁻)	447.4 2	100	1634.7	(8 ⁻)	(M1) [#]		
2120.7		1118.6 4	82 9	1002.1	(9 ⁺)			
		1147.3 3	100 9	973.3	(8 ⁺)			
2242.5	(10 ⁻)	195.2 3		2047.1	(11)			
2249.8	(9 ⁻)	128.9 3	100	2120.7				
2478.8	(10 ⁻)	228.9 2	76 5	2249.8	(9 ⁻)	(M1) [#]	0.0438	$\alpha(K)=0.0381\ 6; \alpha(L)=0.00464\ 7;$ $\alpha(M)=0.000881\ 13$
		396.7 2	100 5	2082.1	(9 ⁻)	(M1) [#]	0.01074	$\alpha(N)=0.0001526\ 22; \alpha(O)=7.14\times 10^{-6}\ 11$ $\alpha(K)=0.00937\ 14; \alpha(L)=0.001120\ 16;$ $\alpha(M)=0.000213\ 3$ $\alpha(N)=3.69\times 10^{-5}\ 6; \alpha(O)=1.743\times 10^{-6}\ 25$
		844.0 4	52 5	1634.7	(8 ⁻)	(Q)		
		948.6 2	19 5	1530.4	(10 ⁺)			
2549.7	(12 ⁺)	826.6 3	100	1723.1	(11 ⁺)	D+Q		
2653.0	(13 ⁺)	103.3 2	15 1	2549.7	(12 ⁺)	D		
		930.0 2	100 1	1723.1	(11 ⁺)	(Q)		
2856.7	(11 ⁻)	378.1 2	100 3	2478.8	(10 ⁻)	(M1) [#]	0.0121	$\alpha(K)=0.01056\ 15; \alpha(L)=0.001263\ 18;$ $\alpha(M)=0.000240\ 4$ $\alpha(N)=4.16\times 10^{-5}\ 6; \alpha(O)=1.96\times 10^{-6}\ 3$
		614.2 2	45 3	2242.5	(10 ⁻)	D		
		774.4 4	18	2082.1	(9 ⁻)	(Q)		
2894.0	(13 ⁺)	1326.3 3	8 3	1530.4	(10 ⁺)			
		241.4 3	35 3	2653.0	(13 ⁺)			
		344.4 2	56 3	2549.7	(12 ⁺)	(M1) [#]	0.0153	$\alpha(K)=0.01334\ 19; \alpha(L)=0.001601\ 23;$ $\alpha(M)=0.000304\ 5$ $\alpha(N)=5.27\times 10^{-5}\ 8; \alpha(O)=2.48\times 10^{-6}\ 4$
		1170.7 3	100	1723.1	(11 ⁺)			
3227.0	(12 ⁻)	370.3 2	100.0 17	2856.7	(11 ⁻)	(M1) [#]	0.01275	$\alpha(K)=0.01112\ 16; \alpha(L)=0.001332\ 19;$ $\alpha(M)=0.000253\ 4$ $\alpha(N)=4.38\times 10^{-5}\ 7; \alpha(O)=2.07\times 10^{-6}\ 3$
		748.1 4	23.3 17	2478.8	(10 ⁻)	(Q)		
3435.4	(13 ⁻)	208.4 2	100	3227.0	(12 ⁻)	(M1) [#]	0.0561	$\alpha(K)=0.0488\ 7; \alpha(L)=0.00595\ 9;$ $\alpha(M)=0.001132\ 17$ $\alpha(N)=0.000196\ 3; \alpha(O)=9.15\times 10^{-6}\ 13$
		702.0 3	57 5	2894.0	(13 ⁺)	D		
		942.8 3	100	2653.0	(13 ⁺)	D		
3595.9	(14 ⁺)	143.9 2	25	3595.9	(14 ⁺)	(M1) [#]	0.1525	$\alpha(K)=0.1325\ 20; \alpha(L)=0.01632\ 24;$ $\alpha(M)=0.00311\ 5$ $\alpha(N)=0.000537\ 8; \alpha(O)=2.49\times 10^{-5}\ 4$

Continued on next page (footnotes at end of table)

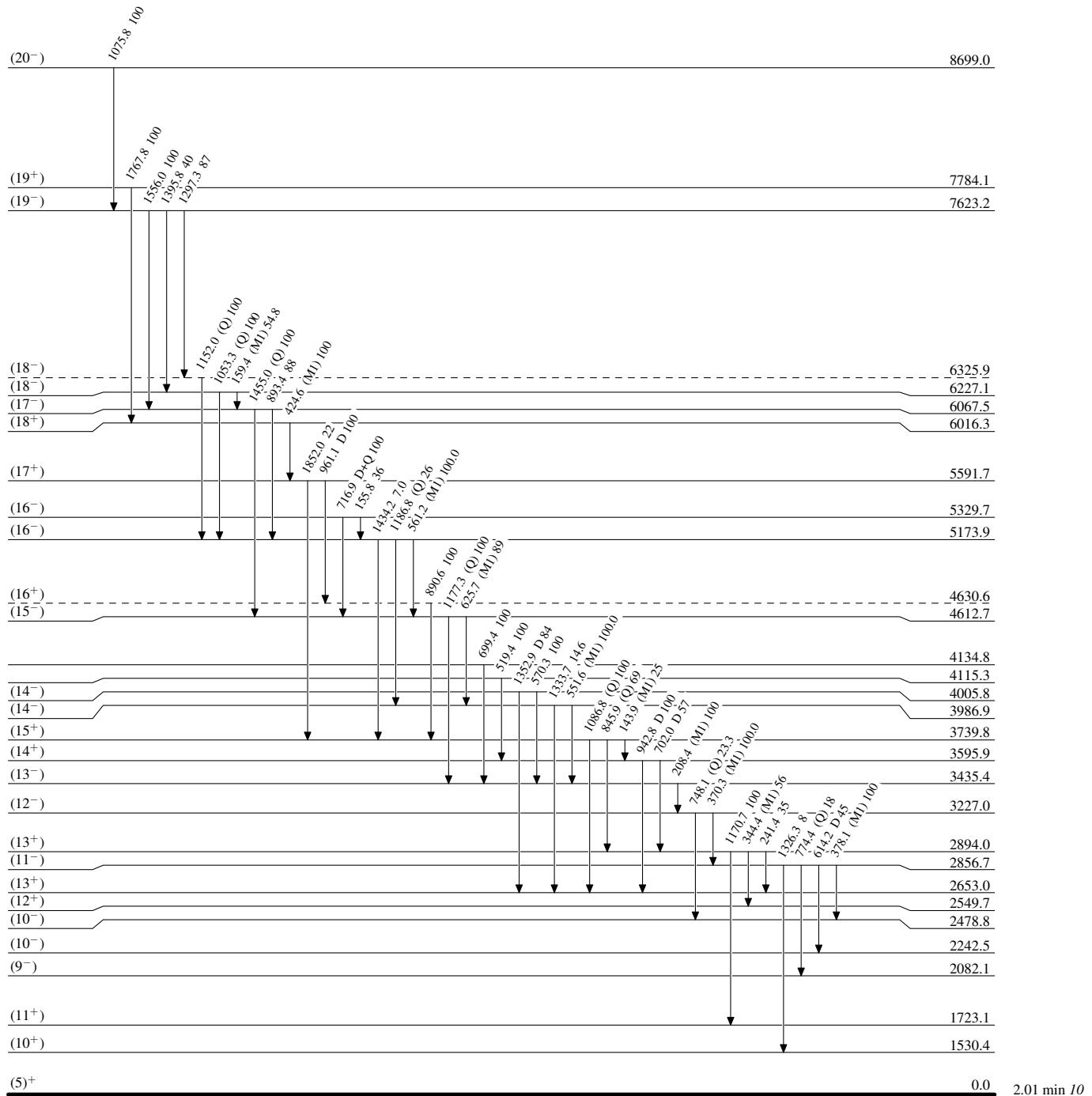
Adopted Levels, Gammas (continued) $\gamma(^{100}\text{Ag})$ (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [†]	E _f	J _f ^π	Mult. [‡]	α ^{&}	Comments
3739.8	(15 ⁺)	845.9 3 1086.8 2	69 3 100 3	2894.0 2653.0	(13 ⁺) (13 ⁺)	(Q) (Q)		
3986.9	(14 ⁻)	551.6 2 1333.7 3	100.0 21 14.6 21	3435.4 2653.0	(13 ⁻) (13 ⁺)	(M1) [#]		
4005.8	(14 ⁻)	570.3 3 1352.9 4	100 84	3435.4 2653.0	(13 ⁻) (13 ⁺)	D		
4115.3		519.4 3	100	3595.9	(14 ⁺)			
4134.8		699.4 3	100	3435.4	(13 ⁻)			
4612.7	(15 ⁻)	625.7 2 1177.3 3	89 100 4	3986.9 3435.4	(14 ⁻) (13 ⁻)	(M1) [#] (Q)		
4630.6?	(16 ⁺)	890.6 4	100	3739.8	(15 ⁺)			
5173.9	(16 ⁻)	561.2 2 1186.8 5 1434.2 3	100.0 23 26 7.0 23	4612.7 3986.9 3739.8	(15 ⁻) (14 ⁻) (15 ⁺)	(M1) [#]		
5329.7	(16 ⁻)	155.8 3 716.9 3	36 100 4	5173.9 4612.7	(16 ⁻) (15 ⁻)	D+Q		
5591.7	(17 ⁺)	961.1 2 1852.0 4	100 6 22 6	4630.6? 3739.8	(16 ⁺) (15 ⁺)	D		
6016.3	(18 ⁺)	424.6 3	100	5591.7	(17 ⁺)	(M1) [#]		
6067.5	(17 ⁻)	893.4 3 1455.0 4	88 100 6	5173.9 4612.7	(16 ⁻) (15 ⁻)	(Q)		
6227.1	(18 ⁻)	159.4 2	54.8 24	6067.5	(17 ⁻)	(M1) [#]	0.1153 4	$\alpha(K)=0.1002\ 15; \alpha(L)=0.01232\ 18; \alpha(M)=0.00234$ $\alpha(N)=0.000406\ 6; \alpha(O)=1.88\times 10^{-5}\ 3$
6325.9?	(18 ⁻)	1053.3 3 1152.0 3	100 100	5173.9 5173.9	(16 ⁻) (16 ⁻)	(Q) (Q)		
7623.2	(19 ⁻)	1297.3 3 1395.8 4 1556.0 4	87 40 100 7	6325.9? 6227.1 6067.5	(18 ⁻) (18 ⁻) (17 ⁻)			
7784.1	(19 ⁺)	1767.8 4	100	6016.3	(18 ⁺)			
8699.0	(20 ⁻)	1075.8 3	100	7623.2	(19 ⁻)			

[†] From ^{100}Cd ε decay.[‡] From $\gamma(\theta)$ in ($^{58}\text{Ni},3\text{p}n\gamma$),($^{40}\text{Ca},3\text{p}n\gamma$) for transitions from high-spin ($J \geq 5$) states with $\Delta J=1$ for D or D+Q and $\Delta J=2$ for Q, and from ce data in ^{100}Cd ε decay for transitions from low-spin ($J < 5$) states, unless otherwise noted.[#] From Doppler broadened γ ray in ($^{58}\text{Ni},3\text{p}n\gamma$),($^{40}\text{Ca},3\text{p}n\gamma$) indicates M1 from lifetime estimates. $\gamma(\theta)$ also indicates $\Delta J=1$, dipole.[&] From ce data in ^{100}Cd ε decay.& Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

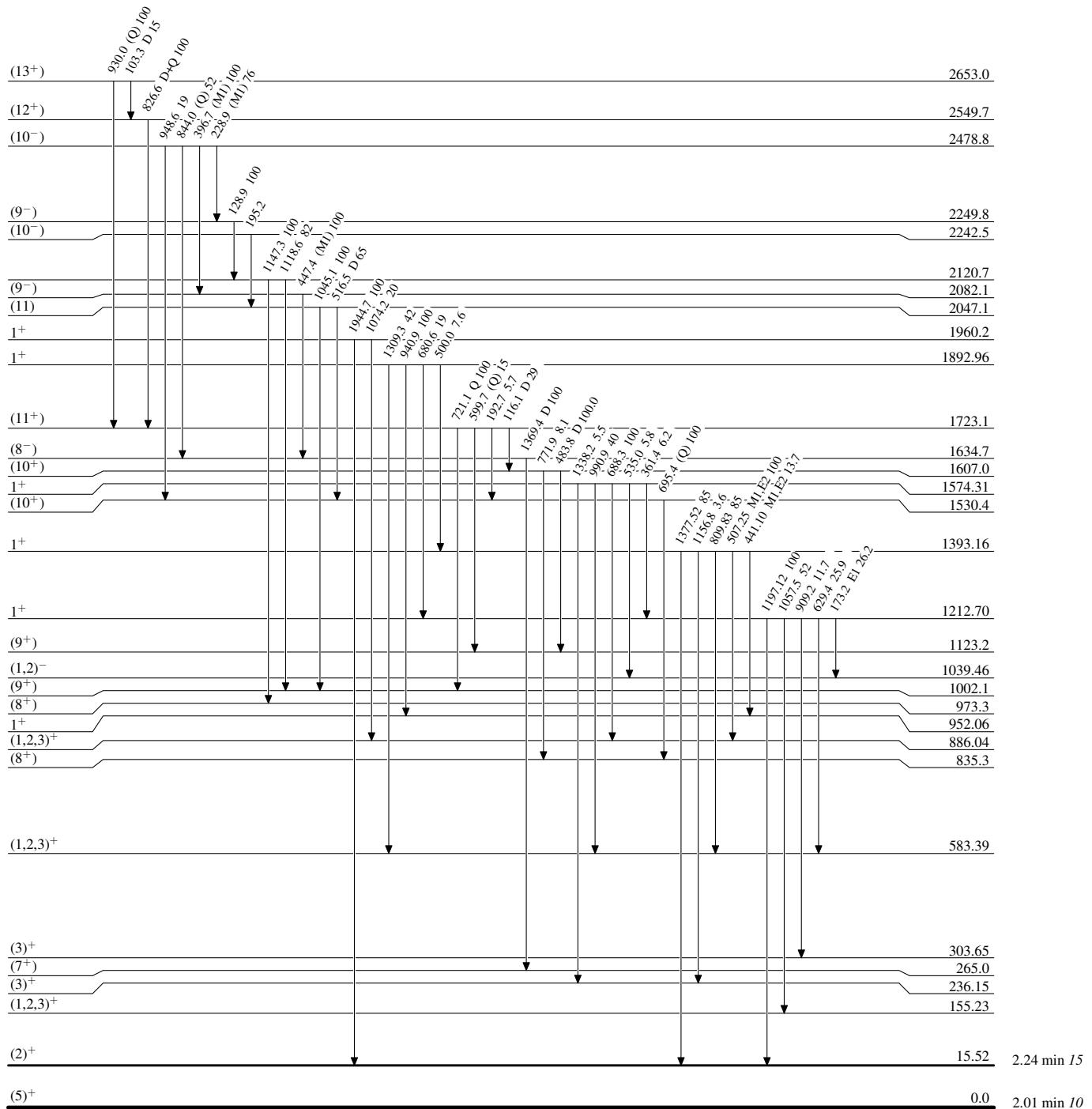
Adopted Levels, GammasLevel Scheme

Intensities: Relative photon branching from each level



Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

