Energy levels and branching ratios [94Se10].

$^{131}_{55}$Cs

E^* [keV]	$2J^\pi$	L (p,t)	$T_{1/2}$ or Γ_{cm}	Ref.	E_f^*: $2J_f^\pi$:	Branching ratios in percentage 0.0 5^+	78.7 7^+	124 1^+	134 5^+	216 3^+
0.0	5^+		9.69(2) d							
78.731(3)	7^+	0	9.4(2) ns	77PaZD		100				
123.804(3)	1^+		3.75(5) ns			100				
133.615(4)	5^+	2	8.7(6) ns	77PaZD		95(1)	4.6(1)			
216.086(4)	3^+	2	≤0.2 ns	77PaZD		97(1)	0.18(1)	2.9(1)	0.07(2)	
373.241(5)	3^+	2	≤0.25 ns	77PaZD		72(1)	0.85(2)	14.4(1)	12.3(1)	0.90(3)
496.2(3)	9^+					100				
585.041(10)	3^+					91(1)	0.15(4)	4.3(7)	3.12(7)	1.0(3)
596.44(21)						53(16)	47(2)			
615.4(3)	11^+	2		77PaZD			100			
620.128(6)	1^+		<0.15 ns			2.75(3)		90	3.99(3)	2.51(2)
657.61(14)	$\langle 7^+ \rangle$	0		77PaZD		71(11)		29(10)		
696.492(9)	3^+	2		77PaZD		23(1)		24.7(3)	0.6(1)	51.8(5)
750	$X^{\langle + \rangle}$	$\langle 2 \rangle$		77PaZD						
764	$X^{\langle + \rangle}$	2		77PaZD						
775.3(5)	$\langle 11^- \rangle$									
919.57(4)	$\langle 3^+,5^+ \rangle$	2		77PaZD		38(2)	8(4)	3.0(4)	10(3)	27(2)
1044	$\langle 7^+ \rangle$	0		77PaZD						
1047.682(9)	3^+					48(1)	1.3(1)	26.3(3)	1.69(3)	8.33(7)
1147.3(5)	13^+									
1170.68(3)	$\langle 3 \rangle^+$	2		77PaZD		1.0(2)		54(4)	0.28(9)	19.8(3)
1257.9	$\langle 7^+ \rangle$	0		03Sa62						
1308.9(6)	$\langle 15^- \rangle$									
1314	$\langle 7^+ \rangle$	0		77PaZD						
1323.1(5)	15^+									
1342.03(7)	1,3					14(2)		6(2)	22(2)	34(6)
1355	$X^{\langle + \rangle}$	2		77PaZD						
1404.6(6)	$\langle 13^- \rangle$									
1587	$X^{\langle + \rangle}$	2		77PaZD						
1671	$\langle 7^+ \rangle$	0		77PaZD						
1927.3(6)	17^+									
1948.5(6)	$\langle 15^- \rangle$									
1972.1(6)	$\langle 19^- \rangle$									
2153.1(11)	$\langle 19^+ \rangle$									
2732.3	$\langle 21^+ \rangle$									
2815.1	$\langle 23^- \rangle$									
2872.4	$\langle 23 \rangle$									
3039.4	$\langle 25 \rangle$									

Additional data on this isotope can be found in [03Sa62, 00De13].
8 bands of levels with spins up to $2J$=37 are given in [05Ku10].
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [94Se10]. Part 2 **$^{131}_{55}$Cs**

E^*	$2J^\pi$		Branching ratios in percentage									
		E_f^*:	373	496	585.041	596.44	615.4	620.128	657.61	696.492	775.3	919.57
[keV]		$2J_f^\pi$:	3^+	9^+	3^+		11^+	1^+	$\langle 7^+ \rangle$	3^+	$\langle 11^- \rangle$	$\langle 3^+,5^+ \rangle$
620.128(6)	1^+		1.21(2)									
775.3(5)	$\langle 11^- \rangle$			100								
919.57(4)	$\langle 3^+,5^+ \rangle$		15(2)									
1047.682(9)	3^+		4.82(5)		1.7(3)			3.49(3)	0.07(2)	3.33(12)		0.51(3)
1147.3(5)	13^+			100								
1170.68(3)	$\langle 3 \rangle^+$		21.7(6)					1.3(3)		1.4(4)		
1308.9(6)	$\langle 15^- \rangle$										100	
1323.1(5)	15^+						100					
1342.03(7)	1,3				6(2)	18(4)						
1404.6(6)	$\langle 13^- \rangle$										100	

Energy levels and branching ratios [94Se10]. Part 3 **$^{131}_{55}$Cs**

E^*	$2J^\pi$		Branching ratios in percentage								
		E_f^*:	1147.3	1308.9	1323.1	1404.6	1927.3	1972.1	2732.3	2872.4	
[keV]		$2J_f^\pi$:	13^+	$\langle 15^- \rangle$	15^+	$\langle 13^- \rangle$	17^+	$\langle 19^- \rangle$	$\langle 21^+ \rangle$	$\langle 23 \rangle$	
1927.3(6)	17^+		100								
1948.5(6)	$\langle 15^- \rangle$					100					
1972.1(6)	$\langle 19^- \rangle$			100							
2153.1(11)	$\langle 19^+ \rangle$				100						
2732.3	$\langle 21^+ \rangle$						100				
2815.1	$\langle 23^- \rangle$							100			
2872.4	$\langle 23 \rangle$								100		
3039.4	$\langle 25 \rangle$									100	

Energy levels [92Se04]. **$^{132}_{55}$Cs**

E^*	J^π	L	$T_{1/2}$ or	Ref.
[keV]		(d,t)	Γ_{cm}	
0.0	2^+	2	6.480(6) d	80SuZZ
86	$3^+,4^+$	0+2		80SuZZ
109	$3^+,4^+$	0+2		80SuZZ
136	$3^+,4^+$	2+0		80SuZZ
153	X^-	5		80SuZZ
186	$3^+,4^+$	0+2		80SuZZ
213				
248				
270				

(continued) **$^{132}_{55}$Cs**

E^* [keV]	J^π	L (d,t)	$T_{1/2}$ or Γ_{cm}	Ref.
291				
312	7^-			
327				
352				
379	8^-			
400				
426				
505				
521				
538	8^-			
788	9^-			
1131	9^+			
1282	10^+			
1683	11^+			
1729**	10^+			
1835	11^+			
1891**	11^+			
1982	12^+			
1988*	12^+			
2202**	12^+			
2369	13^+			
2396*	14^+			
2410	13^+			
2515**	13^+			
2865	14^+			
2894**	14^+			
2910	14^+			
3029	15^+			
3311	15^+			
3390*	16^+			
3759	$\langle 17^+ \rangle$			
3789	16^+			
4241	17^+			
4386*	18^+			
4665	18^+			
5074	19^+			
5212				
5697*	20^+			

Additional data on this isotope can be found in [03Ra28, 03Ko23].

* Levels of the band built on 12^+ state with E^*=1988 keV (band No 1) [03Ra28].

** Levels of the band built on 11^+ state with E^*=1683 keV (band No 3) [03Ra28].

Energy levels and branching ratios [95Ra12]. **$^{133}_{55}$Cs**

E^*	$2J^\pi$	I_s	$g\Gamma_\circ$	$g\Gamma_\circ^{red}$	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
							E_f^*: 0.0	81	161	384	632
[keV]		[eVb]	[meV]	[meV]	Γ_{cm}		$2J_f^\pi$: 7^+	5^+	5^+	3^+	11^+
0.0	7^+				Stable						
80.9974(13)	5^+				6.28(2) ns		100				
160.613(2)	5^+				172(4) ps		19.0(6)	81(4)			
383.851(2)	3^+				21(3) ps		32.2(3)	66.2(7)	1.61(7)		
437.012(2)	1^+				≤150 ps			87(1)	10.0(1)	3.1(1)	
632.56(10)	11^+				5.4(2) ps		100				
640.39(7)	3^+				0.76(14) ps		2(1)	48(4)	50		
705.54(8)	9^+						22(2)	78			
728.3(5)							100				
767.71(10)	9^+				2.0(4) ps		92		8(1)		
788.78(20)							100				
819.06(7)	$\langle 5\text{–}9\rangle^+$				1.0(3) ps		49(8)	21(4)	30(4)		
871.82(10)	7^+				1.2(3) ps		85		15		
916.09(7)					2.3(+10-5) ps		39(7)	15(2)	46(7)		
941.6(6)							28(7)	72(9)			
1071.46(12)	$\langle 11^-\rangle$										
1089.25(9)							4(1)	5(2)	14(2)	77(15)	
1172.69(20)							58			42	
1219.30(22)							47(13)				
1429.9(4)	15^+										100
1442.25(14)											
1604.3(4)	$\langle 15^-\rangle$										
1674.62(21)							30(14)				
1692.4(11)							63(26)	37(18)			
1745.2(4)	$\langle 15^-\rangle$										
1880.6(3)							36(17)			64(21)	
1919.5(11)							18(10)				
1923.4(5)	$\langle 19\rangle$										
1951.9(5)	$\langle 17\rangle$										
2000.5(17)							40(20)				
2035.3(8)							13(6)			54(25)	
2156		1.11(19)	1.34(22)	0.13(2)		97Be43					
2295.1(5)	19^+										
2321		0.60(13)	0.84(19)	0.07(2)		97Be43					
2415		1.79(23)	2.72(35)	0.19(3)		97Be43					
2438		0.96(17)	1.48(26)	0.10(2)		97Be43					
2462		0.70(14)	1.10(22)	0.07(2)		97Be43					
2528.3(6)	$\langle 21\rangle$										
2643.4(6)	$\langle 23\rangle$										
2645		2.81(22)	5.12(40)	0.28(2)		97Be43					
2672		1.27(16)	2.37(30)	0.12(2)		97Be43					
2722		0.82(18)	2.38(45)	0.12(2)		97Be43					
2744		1.77(26)	3.46(52)	0.17(3)		97Be43					
2759		0.65(14)	3.07(38)	0.15(2)		97Be43					
2815		0.48(13)	0.99(27)	0.04(1)		97Be43					

(continued) **$^{133}_{55}$Cs**

E^*	$2J^\pi$	I_s	$g\Gamma_\circ$	$g\Gamma_\circ^{red}$	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
							E_f^*:	0.0	81	161	384	632
[keV]		[eVb]	[meV]	[meV]	Γ_{cm}		$2J_f^\pi$:	7^+	5^+	5^+	3^+	11^+
2834.2(7)	⟨25⟩											
2858		0.57(14)	2.81(48)	0.12(2)		97Be43						
2873		1.22(16)	2.62(33)	0.11(1)		97Be43						
2909		1.39(21)	4.90(63)	0.20(3)		97Be43						
2944		0.90(13)	2.03(29)	0.08(1)		97Be43						
3039		0.40(10)	0.97(24)	0.04(1)		97Be43						
3296		0.62(21)	1.76(59)	0.05(2)		97Be43						
3322		0.47(12)	1.35(35)	0.04(1)		97Be43						
3422		0.56(20)	1.72(60)	0.04(2)		97Be43						
3517		0.42(15)	1.37(47)	0.03(1)		97Be43						
3526		1.03(17)	3.34(54)	0.08(1)		97Be43						
3672		0.91(19)	3.19(65)	0.06(1)		97Be43						
		97Be43	97Be43	97Be43		Ref.						

Additional data on this isotope can be found in [03Ge06, 01Ch87, 91De24, 70Da02].
Abundance: 100 %.
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [95Ra12]. Part 2 **$^{133}_{55}$Cs**

E^*	$2J^\pi$	Branching ratios in percentage												
		E_f^*:	640	705.5	728.3	767.71	788.78	871.82	1071.46	1429.9	1604.3	2295.1	2528.3	2643.4
[keV]		$2J_f^\pi$:	3^+	9^+		9^+		7^+	⟨11^-⟩	15^+	⟨15^-⟩	19^+	⟨21⟩	⟨23⟩
1071.46(12)	⟨11^-⟩			100		≤19								
1219.30(22)								53(8)						
1442.25(14)						100								
1604.3(4)	⟨15^-⟩								100					
1674.62(21)			9(5)	61(5)										
1745.2(4)	⟨15^-⟩								100					
1919.5(11)							18(8)	64(13)						
1923.4(5)	⟨19⟩										100			
1951.9(5)	⟨17⟩										100			
2000.5(17)					60(28)									
2035.3(8)					33(16)									
2295.1(5)	19^+									100				
2528.3(6)	⟨21⟩											100		
2643.4(6)	⟨23⟩												100	
2834.2(7)	⟨25⟩													100

Energy levels and branching ratios [94Se07, 81Se18, 03Ko23].

$^{134}_{55}$Cs

E^*	J^π	L	$d\sigma/d\Omega$	C^2S	L	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
								E_f^*:	0.0	11.2	60	139	174
[keV]		(d,p)	μb/sr	(d,p)	(t,α)	Γ_{cm}		J_f^π:	4^+	5^+	$\langle 3\rangle^+$	8^-	$\langle 2,3\rangle^+$
0.0	4^+	2	154(9)	0.53(3)	4	2.065(1) yr	87Bo24						
11.244(2)	5^+	2	180(10)	0.61(4)	4	46.6(8) ns	87Bo24		100				
60.030(1)	$\langle 3\rangle^+$	2	176(10)	0.59(4)	4		87Bo24		100				
138.744(3)	8^-	5	15.6(12)	0.256(20)		2.903(8) h	87Bo24		0.03(1)	100			
173.794(2)	$\langle 2,3\rangle^+$	2	69(10)	0.223(32)	4		87Bo24		1.01(10)		99(13)		
176.404(2)	3^-,4^-		16(8)	$\leq$0.26		49.7(8) ns	87Bo24		32(3)		68(10)		
176.640(3)	$\langle 1\rangle^+$		incl	$\leq$0.05			87Bo24				100		
190.261(2)	$\langle 3\rangle^+$	0	142(13)	0.086(8)	2		87Bo24		0.64(10)	10(1)	89(11)		
193.616(2)	4^-		55(14)	0.91(23)			87Bo24			2.6(6)	18(2)		
197.782(2)	$\langle 2\rangle^+$		14(7)	0.044(22)			87Bo24		29(5)		24(3)		20(1)
209.546(2)	$\langle 4,5\rangle^+$	2	12.2(12)	0.039(4)	2		87Bo24		6.5(17)	90(15)	3.9(4)		
234.334(2)	$\langle 3\rangle^+$	0	212(11)	0.128(7)	2		87Bo24		70(9)	0.4(1)	29(3)		
257.107(3)	6^-	5	11.1(11)	0.187(19)		12.3(11) ns	87Bo24			58(2)		41(5)	
267.662(3)	4^-,5^-	5	8.6(10)	0.144(17)			87Bo24						
271.349(2)	$\langle 2,3\rangle^+$		$\leq$0.8	$\leq$0.0005			87Bo24		25.9(8)		48(10)		7(1)
290.967(2)	$\langle 2\rangle^+$		$\leq$0.4	$\leq$0.0012			87Bo24						25(4)
344.359(3)	7^-	5	3.5(11)	0.058(18)			87Bo24					81(12)	
377.102(2)	4^+	0	522(27)	0.304(18)			87Bo24			<17	25.6(5)		
382.983(2)	6^-		$\leq$8	$\leq$0.14			87Bo24			41(5)			
434.175(3)	6^-,7^-	5	$\leq$3	$\leq$0.04			87Bo24					91(3)	
450.238(2)	5^-		$\leq$4	$\leq$0.06			87Bo24		14(2)	11.8(3)			
451.425(2)	$\langle 3\rangle^+$	0	incl				87Bo24		14.9(6)		9.1(2)		8.4(3)
454.088(2)	3^+,4^+		14(4)	0.008(2)	2		82LeZQ		9.2(5)	29.9(6)			
483.657(3)	$\langle 3,4\rangle^-$		2.4(5)	0.046(10)			87Bo24						
502.841(3)	$\langle 3,4\rangle^+$	2	9.0(7)	0.027(2)			87Bo24		44.3(9)	5.1(7)			
519.322(3)	$\langle 3,4\rangle^+$		5.6(5)	0.017(2)	2		82LeZQ		28(1)	18.9(8)			
539.657(6)	$\langle 3–5\rangle^+$		1.4(5)	0.004(1)			87Bo24			94(11)	6.2(18)		<53
570.827(3)	4^-		$\leq$0.5	$\leq$0.009			87Bo24		10(2)		17(2)		
579.131(4)	$\langle 2,3\rangle^+$		3.6(5)	0.011(2)			87Bo24		11.0(10)		44(1)		
584.180(3)	$\langle 2,3\rangle^+$		3.4(5)	0.010(1)	2		82LeZQ		16(2)		55(9)		3.0(9)
613.021(5)	$\langle 4,5\rangle^-$		$\leq$0.6	$\leq$0.01			87Bo24		15.6(10)	47(4)			
621.997(5)	$\langle 2–5\rangle^+$		6(3)	0.016(8)			87Bo24				64(10)		
624.007(3)	$\langle 5\rangle^-$	5	6(3)	0.10(5)			87Bo24						
643.964(3)	4^-		4.8(16)				87Bo24						
653.3(15)			4.0(16)				87Bo24						
665.0(15)			4.8(16)				87Bo24						
676(3)			4.0(16)				87Bo24						
684.504(5)	$\langle 2,3\rangle^-$		$\leq$1.6	$\leq$0.03			87Bo24						
688.626(4)	$\langle 4\rangle^+$	2	17.6(18)	0.051(5)			87Bo24		21(4)		35(4)		7(2)
693.838(5)	$\langle 2–4^+\rangle$		9.6(17)	0.028(5)			87Bo24				56(9)		8.9(8)
702.000(3)	3^-,4^-		4.8(16)	0.09(3)			87Bo24				1.8(5)		
715.823(4)	$\langle 2,3\rangle^-$		2.1(9)	0.038(14)			87Bo24						
720.4(4)	X^+	2	4.8(16)	0.014(5)			87Bo24						
741.277(4)	$\langle 3^+,4\rangle$		8.0(16)	0.023(5)			87Bo24		22(3)	19(2)	33(3)		9(2)
752.703(3)	4^-		6.4(16)	0.116(29)			87Bo24				<19		

(continued) **$^{134}_{55}$Cs**

E^*	J^π	L	$d\sigma/d\Omega$	C^2S	L	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
								E_f^*:	0.0	11.2	60	139	174
[keV]		(d,p)	μb/sr	(d,p)	(t,α)	Γ_{cm}		J_f^π:	4^+	5^+	$\langle 3\rangle^+$	8^-	$\langle 2,3\rangle^+$
783.8(5)	$\langle \geq 6^- \rangle$	5	8.0(16)	0.145(29)			87Bo24						
801.253(6)	$\langle 1^+–4^+ \rangle$		2.7(10)	0.008(3)			87Bo24						
802.8(4)													
819.2(3)			5.1(10)				87Bo24						
821.605(8)	$\langle 2–4^+ \rangle$										24(1)		
831.684(4)	$4^-,5^-$	5	8.1(11)	0.149(21)			87Bo24				<9		
835.714(5)	$\langle 2^+–5^+ \rangle$		1.1(6)	0.003(2)			87Bo24		12(2)				7.1(8)
839.813(4)	$3^-,4^-$		≤0.6	≤0.01			87Bo24						12(1)
841.9(5)													
845.4(9)													
850.8(4)			3.4(10)				87Bo24						
862													
880.349(4)	$\langle 3^+,4^+ \rangle$		2.9(10)				87Bo24		23(2)	44(7)			
912.608(4)	$3^+,4^+$	0		0.038(12)	2		87Bo24			14(1)	12(2)		6.0(2)
916.175(4)	$3^-,4^-$												
932.41(13)													
937.630(5)	$\langle 4 \rangle^-$	5		0.24(10)			87Bo24						
941.343(15)	$\langle 4^- \rangle$									77(5)	18.9(18)		
948.138(5)	$2^-–4^-$												
976.310(4)	$3^-,4^-$												
982.1(4)													
991.882(5)	$4^-,5^-$												
1003.61(27)													
1014.54(14)													
1032.71(10)													
1043.523(8)	$\langle 4 \rangle^+$												
1067.6(3)													
1088.423(5)	$\langle 3,4 \rangle^-$										7(1)		
1094.553(4)	$\langle 2 \rangle^-$										18(2)		
1100.334(5)	$\langle 2,3 \rangle^-$												
1114.8(8)													
1120.0(3)													
1133.05(20)													
1142.861(5)	$\langle 2–4 \rangle^-$												
1157.54(25)													
1162.508(5)	$\langle 3^-,4 \rangle$										16(7)		
1171.36(10)													
1181.6(7)													
1188.3(3)													
1210.24(20)													
1215.1(5)													
1218.85(16)													
1232.83(17)													
1238.872(7)	5^-												
1250.75(11)													

(continued) **$^{134}_{55}$Cs**

E^*	J^π	L	$d\sigma/d\Omega$	C^2S	L	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
								E_f^*:	0.0	11.2	60	139	174
[keV]		(d,p)	μb/sr	(d,p)	(t,α)	Γ_{cm}		J_f^π:	4^+	5^+	$\langle 3\rangle^+$	8^-	$\langle 2,3\rangle^+$
1254.198(5)	3^-,4^-												
1263.2(8)													
1266.168(6)	$\langle 3^-,4\rangle$												
1271.52(22)													
1276.05(13)													
1279.60(12)													
1288.2(6)													
1294.4(9)													
1312.9(4)													
1319.31(8)													
1323.41(8)													
1325.59(9)													
1338.5(3)													
1359.5(6)													
1371.3(3)													
1381.62(13)													
1385.80(8)													
1393.4(5)													
1397.93(8)													
1403.9(4)													
1406.9(3)													
1418.0(6)													
			87Bo24	87Bo24	82LeZQ		Ref.						

Additional data on this isotope can be found in [04So32].
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [94Se07, 81Se18, 03Ko23]. Part 2 **$^{134}_{55}$Cs**

E^*	J^π										
		E_f^*:	176.4	176.6	190.3	193.6	197.8	209.5	234.3	257.1	267.7
[keV]		J_f^π:	3^-,4^-	$\langle 1\rangle^+$	$\langle 3\rangle^+$	4^-	$\langle 2\rangle^+$	$\langle 4,5\rangle^+$	$\langle 3\rangle^+$	6^-	4^-,5^-
193.616(2)	4^-		80(3)								
197.782(2)	$\langle 2\rangle^+$			27(2)	x						
234.334(2)	$\langle 3\rangle^+$				0.81(7)						
257.107(3)	6^-					1.1(3)					
267.662(3)	4^-,5^-					100					
271.349(2)	$\langle 2,3\rangle^+$		2.3(7)		2.5(7)		12(2)		2.2(2)		
290.967(2)	$\langle 2\rangle^+$			30(4)			45(12)				
344.359(3)	7^-									19(4)	
377.102(2)	4^+				50(7)			2.1(3)	22(3)		
382.983(2)	6^-										5.7(8)
434.175(3)	6^-,7^-									9.4(19)	

(continued) **$^{134}_{55}$Cs**

E^*	J^π	Branching ratios in percentage								
	E_f^*:	176.4	176.6	190.3	193.6	197.8	209.5	234.3	257.1	267.7
[keV]	J_f^π:	3^-,4^-	$\langle 1\rangle^+$	$\langle 3\rangle^+$	4^-	$\langle 2\rangle^+$	$\langle 4,5\rangle^+$	$\langle 3\rangle^+$	6^-	4^-,5^-
450.238(2)	5^-				19.5(6)		1.8(1)			
451.425(2)	$\langle 3\rangle^+$	1.4(2)	0.6(2)	48(1)	2.2(2)	3.2(2)		0.9(4)		
454.088(2)	3^+,4^+			9.8(4)			3.8(3)	46(7)		
483.657(3)	$\langle 3,4\rangle^-$	100								
502.841(3)	$\langle 3,4\rangle^+$			1.6(3)		14(1)	32(1)			
519.322(3)	$\langle 3,4\rangle^+$			9.1(4)			35.4(7)	7.2(2)		
570.827(3)	4^-			<0.37			<1.0	1.56(8)		7.3(2)
579.131(4)	$\langle 2,3\rangle^+$		17.3(7)	2.9(4)				5.8(5)		
584.180(3)	$\langle 2,3\rangle^+$		7.2(9)			<2.8		10(2)		
613.021(5)	$\langle 4,5\rangle^-$									38(1)
621.997(5)	$\langle 2–5\rangle^+$						30(2)			
624.007(3)	$\langle 5\rangle^-$									69(10)
643.964(3)	4^-	2.6(4)			71(1)				18(4)	4.7(7)
688.626(4)	$\langle 4\rangle^+$					3.0(5)	2.4(3)			
693.838(5)	$\langle 2–4^+\rangle$			21.4(11)						
702.000(3)	3^-,4^-	34(4)			13.7(7)	<2.0				8.4(3)
715.823(4)	$\langle 2,3\rangle^-$	65(7)			6.3(7)	3.2(6)				
741.277(4)	$\langle 3^+,4\rangle$						11(2)			
752.703(3)	4^-	19(3)			21(4)				15.4(5)	15(1)
801.253(6)	$\langle 1^+–4^+\rangle$					50(6)		8(2)		
821.605(8)	$\langle 2–4^+\rangle$		<21			33(3)		12(1)		
831.684(4)	4^-,5^-								28(3)	18.3(5)
835.714(5)	$\langle 2^+–5^+\rangle$		<7	40(6)				8(2)		
839.813(4)	3^-,4^-	19(2)			17(1)					
880.349(4)	$\langle 3^+,4^+\rangle$					10.8(9)				
912.608(4)	3^+,4^+			19(1)		5(1)		11(4)		<10
916.175(4)	3^-,4^-	4.5(10)						4.9(12)	<6.2	69(2)
937.630(5)	$\langle 4\rangle^-$							10.5(8)		
948.138(5)	2^-–4^-	<4.7								
976.310(4)	3^-,4^-	12.8(6)			4.7(6)			5.4(8)		46(1)
991.882(5)	4^-,5^-								7.8(11)	
1088.423(5)	$\langle 3,4\rangle^-$	29(1)			<27					21.0(5)
1094.553(4)	$\langle 2\rangle^-$		9(2)	11(2)				9(1)		
1100.334(5)	$\langle 2,3\rangle^-$					4.2(9)				
1142.861(5)	$\langle 2–4\rangle^-$	66.4(13)			8(3)					
1162.508(5)	$\langle 3^-,4\rangle$	15(2)			12(2)					<29
1238.872(7)	5^-				25(5)					
1254.198(5)	3^-,4^-	40(1)								
1266.168(6)	$\langle 3^-,4\rangle$				14(2)					44(2)

Energy levels and branching ratios [94Se07, 81Se18, 03Ko23]. Part 3

$^{134}_{55}$Cs

E^*	J^π		Branching ratios in percentage								
		E_f^*:	271.3	291.0	344.4	377.1	383.0	434.2	450.2	451.4	454.1
[keV]		J_f^π:	$\langle 2,3\rangle^+$	$\langle 2\rangle^+$	7^-	4^+	6^-	$6^-,7^-$	5^-	$\langle 3\rangle^+$	$3^+,4^+$
382.983(2)	6^-				54(2)						
450.238(2)	5^-						53(9)				
451.425(2)	$\langle 3\rangle^+$		11(1)								
454.088(2)	$3^+,4^+$					1.7(6)					
502.841(3)	$\langle 3,4\rangle^+$					2.6(4)					
519.322(3)	$\langle 3,4\rangle^+$					1.1(2)					
570.827(3)	4^-								64(8)		
579.131(4)	$\langle 2,3\rangle^+$		7(2)							12(2)	
584.180(3)	$\langle 2,3\rangle^+$									8(2)	
621.997(5)	$\langle 2–5\rangle^+$					5.8(15)					
624.007(3)	$\langle 5\rangle^-$				15.6(7)			15(3)			
643.964(3)	4^-								3.4(5)		
684.504(5)	$\langle 2,3\rangle^-$			10.2(10)							
688.626(4)	$\langle 4\rangle^+$		26(2)							2.7(5)	
693.838(5)	$\langle 2–4^+\rangle$		9(2)	5.0(6)							
702.000(3)	$3^-,4^-$		0.8(1)								
741.277(4)	$\langle 3^+,4\rangle$					4.3(7)				<3.9	
752.703(3)	4^-								23(1)		
801.253(6)	$\langle 1^+–4^+\rangle$		42(15)								<38
821.605(8)	$\langle 2–4^+\rangle$			27(4)							
831.684(4)	$4^-,5^-$									<3	
835.714(5)	$\langle 2^+–5^+\rangle$		8(3)							10(2)	5(1)
839.813(4)	$3^-,4^-$					1.2(2)					
880.349(4)	$\langle 3^+,4^+\rangle$										11(1)
912.608(4)	$3^+,4^+$									25(2)	
916.175(4)	$3^-,4^-$								3.2(3)		
937.630(5)	$\langle 4\rangle^-$						53(8)		26.7(8)		
941.343(15)	$\langle 4^-\rangle$						4.5(18)				
976.310(4)	$3^-,4^-$								14(3)		
991.882(5)	$4^-,5^-$					11.1(5)			13(3)		
1043.523(8)	$\langle 4\rangle^+$			11.7(8)					6.0(17)		
1094.553(4)	$\langle 2\rangle^-$		8(2)								
1100.334(5)	$\langle 2,3\rangle^-$			5.3(8)							
1142.861(5)	$\langle 2–4\rangle^-$								<26		
1162.508(5)	$\langle 3^-,4\rangle$								32(4)		11(4)
1238.872(7)	5^-				48(2)	27(5)					
1266.168(6)	$\langle 3^-,4\rangle$								13.1(10)		

Energy levels and branching ratios [94Se07, 81Se18, 03Ko23]. Part 4 **$^{134}_{55}$Cs**

E^*	J^π	Branching ratios in percentage								
	E_f^*:	483.7	502.8	519.3	539.7	570.8	579.1	584.2	622.0	624.0
[keV]	J_f^π:	$\langle 3,4\rangle^-$	$\langle 3,4\rangle^+$	$\langle 3,4\rangle^+$		4^-	$\langle 2,3\rangle^+$	$\langle 2,3\rangle^+$		$\langle 5\rangle^-$
684.504(5)	$\langle 2,3\rangle^-$	90(22)								
688.626(4)	$\langle 4\rangle^+$									2(1)
702.000(3)	$3^-,4^-$	39(7)				1.9(2)				
715.823(4)	$\langle 2,3\rangle^-$	26(5)								
741.277(4)	$\langle 3^+,4\rangle$			1.5(3)						
821.605(8)	$\langle 2–4^+\rangle$						4.5(6)			
831.684(4)	$4^-,5^-$									34(7)
835.714(5)	$\langle 2^+–5^+\rangle$			8.9(5)						
839.813(4)	$3^-,4^-$	26(3)				26(1)				
880.349(4)	$\langle 3^+,4^+\rangle$							5.5(4)		
912.608(4)	$3^+,4^+$								5.9(4)	
937.630(5)	$\langle 4\rangle^-$					4.0(7)				
948.138(5)	$2^–4^-$	26(2)			2.9(7)	71(6)				
976.310(4)	$3^-,4^-$					12.0(5)				
991.882(5)	$4^-,5^-$					19(2)				49(7)
1043.523(8)	$\langle 4\rangle^+$	9.8(17)	73(13)							
1088.423(5)	$\langle 3,4\rangle^-$					14(3)		<3.9		
1094.553(4)	$\langle 2\rangle^-$	22(2)								
1100.334(5)	$\langle 2,3\rangle^-$					83(13)				
1162.508(5)	$\langle 3^-,4\rangle$					12(2)				
1254.198(5)	$3^-,4^-$	23.3(3)				10(2)				
1266.168(6)	$\langle 3^-,4\rangle$				7(2)	15(1)				

Energy levels and branching ratios [94Se07, 81Se18, 03Ko23]. Part 5 **$^{134}_{55}$Cs**

E^*	J^π	Branching ratios in percentage								
	E_f^*:	644.0	684.5	688.6	702.0	715.8	741.3	752.7	801.3	821.6
[keV]	J_f^π:	4^-	$\langle 2,3\rangle^-$	$\langle 4\rangle^+$	$3^-,4^-$	$\langle 2,3\rangle^-$	$\langle 3^+,4\rangle$	4^-	$\langle 1^+–4^+\rangle$	
752.703(3)	4^-	2.1(5)			5(1)					
831.684(4)	$4^-,5^-$	<3.0						19(7)		
880.349(4)	$\langle 3^+,4^+\rangle$				5.8(9)					
912.608(4)	$3^+,4^+$			1.2(3)					<1.6	
916.175(4)	$3^-,4^-$	18.8(8)								
937.630(5)	$\langle 4\rangle^-$	5.8(4)								
976.310(4)	$3^-,4^-$						2.2(6)			
1088.423(5)	$\langle 3,4\rangle^-$	28.3(6)			<2		<16			
1100.334(5)	$\langle 2,3\rangle^-$	2.64(19)								
1142.861(5)	$\langle 2–4\rangle^-$		9.9(5)			1.9(3)				
1162.508(5)	$\langle 3^-,4\rangle$								<4.4	
1254.198(5)	$3^-,4^-$					8(1)				3.9(3)
1266.168(6)	$\langle 3^-,4\rangle$					7(1)				

Energy levels and branching ratios [94Se07, 81Se18, 03Ko23]. Part 6

$^{134}_{55}$Cs

E^*	J^π		Branching ratios in percentage							
		E_f^*:	839.8	912.6	916.2	937.6	948.1	976.3	1094.5	1142.9
[keV]		J_f^π:	3^-,4^-	3^+,4^+	3^-,4^-	$\langle 4\rangle^-$		3^-,4^-	$\langle 2\rangle^-$	
976.310(4)	3^-,4^-		2.6(3)							
1094.553(4)	$\langle 2\rangle^-$		18(1)				5(1)			
1100.334(5)	$\langle 2,3\rangle^-$		3.5(5)	<1.20				1.2(6)		
1142.861(5)	$\langle 2–4\rangle^-$						13.8(15)			
1162.508(5)	$\langle 3^-,4\rangle$		<7			2.2(4)				
1238.872(7)	5^-				<12					
1254.198(5)	3^-,4^-			3.3(2)	7.4(4)		3.4(6)		0.7(2)	<1.2
1266.168(6)	$\langle 3^-,4\rangle$							<4.3		

Energy levels and branching ratios [98Se07].

$^{135}_{55}$Cs

E^*	$2J^\pi$	$T_{1/2}$ or		Branching ratios in percentage				
			E_f^*:	0.0	249.767	408.026	608.153	786.838
[keV]		Γ_{cm}	$2J_f^\pi$:	7^+	5^+		5^+	11^+
0.0	7^+	$2.3(3)\cdot10^6$ yr						
249.767(4)	5^+	0.28(8) ns		100				
408.026(5)				55(2)	45(2)			
608.153(8)	5^+			93(3)	7.0(3)	0.37(15)		
786.838(13)	11^+			100				
981.396(19)					73(4)	6.4(10)	20(4)	
1062.385(13)				3.3(7)	57(2)	37(2)	2.9(6)	
1133				100				
1192				100				
1358				100				
1632.9	19^-	53(2) m						100

Data for this isotope are considered in vol. LB I/18B.

Energy levels [02So05].

$^{136}_{55}$Cs

E^*	J^π	$T_{1/2}$ or
[keV]		Γ_{cm}
0.0	5^+	13.04(3) d
0+X	8^-	19(2) s

Energy levels and branching ratios [94Tu02, 99Br17]. **$^{137}_{55}$Cs**

E^*	$2J^\pi$	L	$S_{\tau d}$	$S_{\tau d}$	L	$S_{d\tau}$	$S_{d\tau}$	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
										E_f^*: 0.0	455	849	1185	1273
[keV]		(τ,d)	*mod.*	*stand*	(d,τ)	*mod.*	*stand*	Γ_{cm}		$2J_f^\pi$: 7^+	5^+		$\langle 11^+\rangle$	
0.0	7^+	4	0.60	0.75	4	3.91	3.57	30.03(5) yr	71Wi04					
455.491(3)	5^+	2	1.02	0.99	2	1.01	0.71	≤0.1 ns	71Wi04	100				
848.88(4)										82(4)	18(1)			
1184.69(4)	$\langle 11^+\rangle$									100				
1273.20(6)										100				
1490(12)	1^+	0	0.07	0.07					71Wi04					
1564.11(6)										15(2)	75(7)	10(2)		
1569.83(4)										48(4)	52(4)			
1574.83(6)										40(5)	60(4)			
1651.23(6)										7.8(11)	85(5)	7(3)		
1671.69(11)	$\langle 15^+\rangle$												100	
1783.46(5)										93(5)	6.6(6)			
1867.86(4)	9^-	5	1.01	0.87					71Wi04	6.8(6)			8.5(9)	35(4)
1893.99(15)	$\langle 17^+\rangle$													
1916.27(5)										59(8)	10.5(14)	30(6)		
2068.02(6)	$\langle 3^+,5^+\rangle$	2	0.79	0.92					71Wi04	7.5(7)	90(7)	2.1(5)		
2099.41(9)										64(6)	4(3)	31(4)		
2150(17)	1^+	0	0.86	0.89					71Wi04					
2216.78(22)										29(11)	71(19)			
2367.83(11)										78(11)		22(8)		
2784.19(18)	$\langle 21^+\rangle$													
2795.92(20)												63(8)		
2849.10(12)											82(7)	18.0(19)		
2850.04(4)										25(1)			7.2(4)	14(1)
2945.17(17)											28(3)	72(9)		
3037.30(7)										12(2)	65(6)	23(3)		
3104.15(25)												42(5)		
3159.45(20)										91(10)			9(3)	
3377.46(13)										7.4(9)	66(6)	5.4(13)		
3465.3(3)	$\langle 23^+\rangle$													
3496.39(21)	$\langle 23^-\rangle$													
3584.10(20)										35(5)		24(5)		17(5)
3694.1(3)										100				
3736.7(5)										31(9)				69(27)
3786.92(18)														
3823.96(20)													15(5)	
3907.2(4)										74(12)	26(12)			
3937.7(7)														
3938.8(4)										15(8)				
3952.40(8)														
3955.7(6)										38(14)				
3976.5(8)										100				
4351.6(4)														
4408.29(23)	$\langle 27^-\rangle$													
4776.6(4)														

(continued) **$^{137}_{55}$Cs**

E^*	$2J^\pi$	L	$S_{\tau\mathrm{d}}$	$S_{\tau\mathrm{d}}$	L	$S_{\mathrm{d}\tau}$	$S_{\mathrm{d}\tau}$	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
										E^*_f:	0.0	455	849	1185	1273
[keV]		(τ,d)	*mod.*	*stand*	(d,τ)	*mod.*	*stand*	Γ_cm		$2J^\pi_\mathrm{f}$:	7^+	5^+		$\langle 11^+\rangle$	
5023.0(3)	$\langle 29^-\rangle$														
5494.2(5)	$\langle 31^-\rangle$														
10195(20)	$\langle 7^-\rangle$														
10794(20)	$\langle 3^-\rangle$														
11173(20)	$\langle 1^-\rangle$														
11421(20)	$\langle 9^-\rangle$														
11498(20)	$\langle 5^-\rangle$														
11724(20)	$\langle 7^-\rangle$														
11940(20)	$\langle 5^-\rangle$														
12050(20)	$\langle 3^-\rangle$														
12140(20)	$\langle 1^-\rangle$														
12209(20)	$\langle 5^-\rangle$														
12399(20)	$\langle 1^-\rangle$														
12479(20)	$\langle 5^-\rangle$														
12698(20)	$\langle 3^-\rangle$														
12788(20)	$\langle 1^-\rangle$														
			71Wi04	71Wi04		71Wi0	71Wi04		Ref.						

Two pairs of proton-transfer parameters $S_{\tau\mathrm{d}}$=$d\sigma/d\Omega_\mathrm{exp}$/N($\tau$,d)(2J+1/2I+1)$d\sigma/d\Omega_{DWBA}$ and $S_{\mathrm{d}\tau}$=$d\sigma/d\Omega_\mathrm{exp}$/N(d,$\tau$)$d\sigma/d\Omega_{DWBA}$ were given in [71Wi04] as "the standard" (*stand*, the second) and "the modified" (*mod.* values, see definitions therein).
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [94Tu02, 99Br17]. Part 2 **$^{137}_{55}$Cs**

E^*	$2J^\pi$	Branching ratios in percentage										
		E^*_f:	1564.1	1569.8	1574.8	1651.23	1671.69	1783.46	1867.86	1893.99	1916.27	2099.41
[keV]		$2J^\pi_\mathrm{f}$:					$\langle 15^+\rangle$		9^-	$\langle 17^+\rangle$		
1867.86(4)	9^-			50(4)								
1893.99(15)	$\langle 17^+\rangle$						100					
2784.19(18)	$\langle 21^+\rangle$									100		
2795.92(20)			37(15)									
2850.04(4)				1.3(1)				7(1)	28(2)		11(1)	2.8(3)
3104.15(25)									58(10)			
3377.46(13)						8.9(15)		12(3)				
3584.10(20)						24(7)						
3786.92(18)					38(6)			62(12)				
3823.96(20)											85(10)	
3938.8(4)						85(15)						
3952.40(8)									45(3)			
3955.7(6)						62(27)						

Energy levels and branching ratios [94Tu02, 99Br17]. Part 3 **$^{137}_{55}$Cs**

E^*	$2J^\pi$				Branching ratios in percentage					
		E_f^*:	2216.78	2367.83	2784.19	2850.04	3496.39	4351.6	4408.29	5023.0
[keV]		$2J_f^\pi$:			$\langle 21^+ \rangle$		$\langle 23^- \rangle$		$\langle 27^- \rangle$	$\langle 29^- \rangle$
2850.04(4)			0.3(2)	2.0(4)						
3465.3(3)	$\langle 23^+ \rangle$				100					
3496.39(21)	$\langle 23^- \rangle$				100					
3937.7(7)			100							
3952.40(8)						55(5)				
4351.6(4)					100					
4408.29(23)	$\langle 27^- \rangle$						100			
4776.6(4)								100		
5023.0(3)	$\langle 29^- \rangle$								100	
5494.2(5)	$\langle 31^- \rangle$									100