		H	History					
	Туре	Author	_	Citation		Literature Cutoff Date		
	Full Evaluation	G. Gürdal and F. G. Konde	v NDS 1	13,1315	(2012)	1-Aug-2011		
$Q(\beta^{-}) = -1.177 \times 10^4 5$	; S(n)=12586 8; S(	(p)=3268 9; Q(α)=2699 8	2012Wa38					
Note: Current evaluati	on has used the fo	llowing Q record –11766	5112586	83268	8 2699	8	2011AuZZ.	

<sup>110</sup>Te Levels

STB stands for "Smooth Terminating Band".

### Cross Reference (XREF) Flags

 $^{54}$ Fe( $^{58}$ Ni,2p $\gamma$ )  $^{58}$ Ni( $^{58}$ Ni, $\alpha$ 2p $\gamma$ )  $^{114}$ Cs  $\varepsilon \alpha$  decay A

В

С

E(level) <sup>†</sup>	$J^{\pi \ddagger}$	T <sub>1/2</sub> #	XREF	Comments
0.0	$0^{+}$	18.6 s 8	ABC	$\frac{1}{\%\epsilon+\%\beta^+\approx100}$
				2.0×10 <sup>-3</sup> <% $\alpha$ <2.0×10 <sup>-6</sup> (2000De11); % $\alpha$ ≈7.6×10 <sup>-4</sup> estimated from $\alpha$ transmission calculations (1981Sc17). T <sub>1/2</sub> : Weighted average of 18.4 s 8 (using K <sub><math>\alpha</math></sub> X(t)) and 21 s 3 (using 219.1 $\gamma$ (t) and 605.9 $\gamma$ (t)) in 1977Ki11.
657.2 <sup>@</sup> 3	2+		ABC	$J^{\pi}$ : 657.2 $\gamma$ E2 to 0 <sup>+</sup> ; band member.
1401.8 <sup>@</sup> 4	4+		AB	$J^{\pi}$ : 744.3 $\gamma$ E2 to 2 <sup>+</sup> ; band member.
1578.3 <sup>h</sup> 4	$(2^{+})$		В	$J^{\pi}$ : 921.0 $\gamma$ to 2 <sup>+</sup> ; band assignment.
1915.0 <sup>e</sup> 4	4+		В	$J^{\pi}$ : 1258.2 $\gamma$ E2 to 2 <sup>+</sup> ; band member.
2191.4 <sup><i>h</i></sup> 4	(4 <sup>+</sup> )		В	$J^{\pi}$ : 613.0 $\gamma$ E2 to (2 <sup>+</sup> ); 789.5 $\gamma$ M1+E2 to 4 <sup>+</sup> ; band member.
2225.9 <sup>@</sup> 4	6+		AB	$J^{\pi}$ : 824.0 $\gamma$ E2 to 4 <sup>+</sup> ; band member.
2439.9 <sup>e</sup> 4	6+		В	$J^{\pi}$ : 214.2 $\gamma$ M1+E2 to 6 <sup>+</sup> ; 524.7 $\gamma$ to 4 <sup>+</sup> ; band member.
2519.7 <sup>1</sup> 4	6+		AB	$J^{\pi}$ : 1118.0 $\gamma$ E2 to 4 <sup>+</sup> ; 293.4 $\gamma$ M1+E2 to 6 <sup>+</sup> ; band member.
2797.7 <sup>h</sup> 5	$(6^{+})$		В	$J^{\pi}$ : 606.5 $\gamma$ E2 to (4 <sup>+</sup> ); band member.
3088.1 <sup>e</sup> 5	8+		В	$J^{\pi}$ : 648.8 $\gamma$ E2 to 6 <sup>+</sup> ; band member.
3093.4 <sup>1</sup> 5	7+		В	$J^{\pi}$ : 573.3 $\gamma$ M1+E2 to 6 <sup>+</sup> ; band member.
3219.7? 5	$(7,8^{+})$		Α	$J^{\pi}$ : 993.8 $\gamma$ to 6 <sup>+</sup> .
3287.7 <sup>@</sup> 5	8+		AB	$J^{\pi}$ : 1061.8 $\gamma$ E2 to 6 <sup>+</sup> ; band member.
3346.3 <sup>1</sup> 5	$8^{+}$		AB	$J^{\pi}$ : 826.4 $\gamma$ E2 to 6 <sup>+</sup> ; 252.8 $\gamma$ M1+E2 to 7 <sup>+</sup> ; band member.
3507.0 <sup>b</sup> 5	7-		В	$J^{\pi}$ : 1281.1 $\gamma$ E1 to 6 <sup>+</sup> ; band member.
3612.5 <sup>°</sup> 5	8-		В	$J^{\pi}$ : 519.0 $\gamma$ E1 to 7 <sup>+</sup> ; 265.7 $\gamma$ E1 to 8 <sup>+</sup> ; band member.
3735.0 <sup>b</sup> 5	9-		AB	$J^{\pi}$ : 228.0 $\gamma$ E2 to 7 <sup>-</sup> ; 447.4 $\gamma$ E1 to 8 <sup>+</sup> ; band member.
3781.2 <sup>e</sup> 5	$10^{+}$		В	$J^{\pi}$ : 693.2 $\gamma$ to 8 <sup>+</sup> ; band member.
4165.9 <sup>°</sup> 5	10-		В	$J^{\pi}$ : 552.8 $\gamma$ E2 to 8 <sup>-</sup> ; band member.
4352.7 <sup>b</sup> 5	11-		AB	$J^{\pi}$ : 617.7 $\gamma$ E2 to 9 <sup>-</sup> ; band member.
4504.1 <sup>e</sup> 5	12+		В	$J^{n}$ : 723.0 $\gamma$ to 10 <sup>+</sup> ; band member.
4655.7 <sup><b>x</b></sup> 5	$10^{+}$		В	$J^{\pi}$ : 1368.0 $\gamma$ to 8 <sup>+</sup> ; 921.0 $\gamma$ to 9 <sup>-</sup> ; band member.
4836.9 <sup>c</sup> 5	12-		В	$J^{\pi}$ : 670.9 $\gamma$ E2 to 10 <sup>-</sup> ; 483.7 $\gamma$ M1+E2 to 11 <sup>-</sup> ; band member.
5080.4 <sup>0</sup> 5	13-		AB	$J^{\pi}$ : 727.8 $\gamma$ E2 to 11 <sup>-</sup> ; 242.9 $\gamma$ M1+E2 to 12 <sup>-</sup> ; band member.
5188.3 <sup>&amp;</sup> 5	12+		В	$J^{\pi}$ : 835.5 $\gamma$ E1 to 11 <sup>-</sup> ; 533.0 $\gamma$ to 10 <sup>+</sup> ; band member.
5281.1 <sup>e</sup> 5	14+		В	$J^{\pi}$ : 777.1 $\gamma$ to 12 <sup>+</sup> ; band member.
5558.7° 5	14-		В	$J^{n}$ : 722.0 $\gamma$ E2 to 12 <sup>-</sup> ; 478.6 $\gamma$ M1+E2 to 13 <sup>-</sup> ; band member.
5866.2 <sup>0</sup> 5	15-		В	$J^{\pi}$ : 785.8 $\gamma$ E2 to 13 <sup>-</sup> ; 307.2 $\gamma$ M1+E2 to 14 <sup>-</sup> ; band member.

## <sup>110</sup>Te Levels (continued)

E(level) <sup>†</sup>	$J^{\pi \ddagger}$	T <sub>1/2</sub> #	XREF	Comments			
5875.5 <sup>&amp;</sup> 5	14+		В	$J^{\pi}$ : 687.5 $\gamma$ E2 to 12 <sup>+</sup> ; 794.3 $\gamma$ E1 to 13 <sup>-</sup> ; band member.			
6128.1 <sup>e</sup> 12	$(16^{+})$		В	$J^{\pi}$ : 847 $\gamma$ to 14 <sup>+</sup> ; band member.			
6541.2 <sup>c</sup> 5	16-		В	$J^{\pi}$ : 983.4 $\gamma$ E2 to 14 <sup>-</sup> ; band member.			
6638.7 <mark>&amp;</mark> 5	$16^{+}$		В	$J^{\pi}$ : 762.8 $\gamma$ E2 to 14 <sup>+</sup> ; 772.5 $\gamma$ E1 to 15 <sup>-</sup> ; band member.			
6859.6 <sup>b</sup> 5	$17^{-}$		В	$J^{\pi}$ : 993.3 $\gamma$ E2 to 15 <sup>-</sup> ; 318.8 $\gamma$ M1+E2 to 16 <sup>-</sup> ; band member.			
6901.4 <sup>a</sup> 6	16 <sup>(+)</sup>		В	$J^{\pi}$ : 1035.5 $\gamma$ E1 to 15 <sup>-</sup> ; band member. Authors state that a definitive $\pi$ assignment could not be made due to the insensitivity of linear polarization measurements.			
6949.8 <mark>8</mark> 6	$16^{+}$		В	$J^{\pi}$ : 311.0 $\gamma$ to 16 <sup>+</sup> ; 1074.2 $\gamma$ to 14 <sup>+</sup> ; band member.			
7209.9 <sup>d</sup> 6	$17^{(-)}$		В	$J^{\pi}$ : 668.5 $\gamma$ (M1+E2) to 16 <sup>-</sup> ; 308.9 $\gamma$ to 16 <sup>(+)</sup> ; band member.			
7582.4 <mark>&amp;</mark> 6	$18^{+}$		В	$J^{\pi}$ : 943.3 $\gamma$ E2 to 16 <sup>+</sup> ; band member.			
7584.8 <sup>C</sup> 6	18-		В	$J^{\pi}$ : 1043.9 $\gamma$ E2 to 16 <sup>-</sup> ; band member.			
7626.6 <sup><i>a</i></sup> 6	$18^{(+)}$		В	$J^{\pi}$ : 725.1 $\gamma$ E2 to 16 <sup>(+)</sup> ; 766.9 $\gamma$ E1 to 17 <sup>-</sup> ; band member.			
7725.1 <mark>J</mark> 6	16-		В	$J^{\pi}$ : 1858.4 $\gamma$ to 15 <sup>-</sup> ; band member.			
7820.0 <sup>8</sup> 6	$18^{+}$		В	$J^{\pi}$ : 870.0 $\gamma$ to 16 <sup>+</sup> ; 238.0 $\gamma$ to 18 <sup>+</sup> ; band member.			
7846.5 <sup>0</sup> 6	19-		В	$J^{\pi}$ : 986.9 $\gamma$ E2 to 17 <sup>-</sup> ; 262.0 $\gamma$ M1+E2 to 18 <sup>-</sup> ; band member.			
8110.0 <sup>k</sup> 6	$17^{-}$		В	$J^{\pi}$ : 384.6 $\gamma$ to 16 <sup>-</sup> ; band member.			
8133.9 <sup>d</sup> 6	$19^{(-)}$		В	$J^{\pi}$ : 924.0 $\gamma$ E2 to 17 <sup>(-)</sup> ; band member.			
8344.8 <sup>f</sup> 6	$20^{+}$		В	$J^{\pi}$ : 525.0 $\gamma$ E2 to 18 <sup>+</sup> ; band member.			
8439.2 <sup><i>a</i></sup> 6	$20^{(+)}$		В	$J^{\pi}$ : 812.5 $\gamma$ E2 to 18 <sup>(+)</sup> ; 592.8 $\gamma$ E1 to 19 <sup>-</sup> ; band member.			
8445.2 <sup>j</sup> 6	$18^{-}$		В	$J^{\pi}$ : 335.3 $\gamma$ M1+E2 to 17 <sup>-</sup> ; 719.9 $\gamma$ to 16 <sup>-</sup> ; band member.			
8590.4 <mark>&amp;</mark> 6	$20^{+}$		В	$J^{\pi}$ : 1007.7 $\gamma$ E2 to 18 <sup>+</sup> ; band member.			
8699.9 <sup>°</sup> 9	$20^{-}$		В	$J^{\pi}$ : 1116 $\gamma$ to 18 <sup>-</sup> ; band member.			
8787.0 <sup>k</sup> 6 8791.6 6	19 <sup>-</sup> (19) <sup>-</sup>		B B	$J^{\pi}$ : 341.8 $\gamma$ to 18 <sup>-</sup> ; 677.0 $\gamma$ to 17 <sup>-</sup> ; band member. $J^{\pi}$ : 346.1 $\gamma$ to 18 <sup>-</sup> ; 372.3 $\gamma$ M1+E2 from 20 <sup>-</sup> .			
8943.0 <sup>b</sup> 6	21-		В	$J^{\pi}$ : 1096.4 $\gamma$ E2 to 19 <sup>-</sup> ; band member.			
9164.1 <sup>j</sup> 6	$20^{-}$		В	$J^{\pi}$ : 377.3 $\gamma$ M1+E2 to 19 <sup>-</sup> : 719.1 $\gamma$ to 18 <sup>-</sup> : band member.			
9189.9 <sup>d</sup> 7	$(21^{-})$		В	$J^{\pi}$ : 1056.0 $\gamma$ to 19 <sup>(-)</sup> ; band member.			
9228.8 <sup>f</sup> 7	22+		В	$J^{\pi}$ : 884.07 E2 to 20 <sup>+</sup> : band member.			
9409.7 <sup>a</sup> 6	$22^{(+)}$		В	$J^{\pi}$ : 970.6 $\gamma$ E2 to 20 <sup>(+)</sup> ; 466.6 $\gamma$ E1 to 21 <sup>-</sup> ; band member.			
9560.5 <sup>k</sup> 6	21-	0.37 ps +17-14	В	$J^{\pi}$ : 396.4 $\gamma$ (M1) to 20 <sup>-</sup> ; 773.4 $\gamma$ to 19 <sup>-</sup> ; band member.			
9622.4 12			В	Q[-2,7,7,7,5]			
9684.8 <mark>&amp;</mark> 7	$22^{+}$		В	$J^{\pi}$ : 1094.4 $\gamma$ E2 to 20 <sup>+</sup> : band member.			
9992.5 <sup>j</sup> 6	22-	0.24 ps +9-10	В	$J^{\pi}$ : 432.0 $\gamma$ (M1) to 21 <sup>-</sup> ; 828.5 $\gamma$ to 20 <sup>-</sup> ; band member.			
$10046 0^{b} 7$	$(23^{-})$		R	$R_1 = 2.5 + 6 + 7$ . $I^{\pi}$ : 1103 0v to 21 <sup>-</sup> : hand member			
$10202 \ 8^{f} \ 12$	(25)		R				
$10202.0^{-12}$	$(23^{-})$		B	$I^{\pi}$ : 1112 30/ to (21 <sup>-</sup> ): hand member			
$10455 7^{k} 7$	(25)	0.17 m 6	D	$I^{\pi}$ : 463 Ag (M1) to 22 <sup>-</sup> : 805 (b) to 21 <sup>-</sup> : hand member			
10455.7 7	2.5	0.17 ps 0	D	$Q_{t} = 2.8 + 6 - 4.$			
10471.84 7	24(+)		В	$J^{n}$ : 1062.1 $\gamma$ E2 to 22 <sup>(+)</sup> ; band member.			
10725.8 12			Б R				
10790 8 7	24+		R	$I^{\pi}$ 1106.0 E2 to 22 <sup>+</sup> band member			
10943 9 i 7	24-		R	$I^{\pi}$ : 488 4 $\gamma$ M1+F2 to 23 <sup>-</sup> : hand member			
$11369.6^{a}$ 7	$26^{(+)}$		B	$I^{\pi}$ : 897.5v to 24 <sup>(+)</sup> : band member.			
$11483.8^{k}$ 7	25-		B	$J^{\pi}$ : 539.7 $\gamma$ M1+E2 to 24 <sup>-</sup> : 1027.8 $\gamma$ to 23 <sup>-</sup> : band member.			

## <sup>110</sup>Te Levels (continued)

E(level) <sup>†</sup>	Jπ‡	XREF	Comments						
11543.1 7	26 <sup>(+)</sup>	В	$J^{\pi}$ : 1071.5 $\gamma$ E2 to 24 <sup>(+)</sup> .						
11839.8 10	2/-	В							
12025.95 /	26	В	$J^{*}$ : 542.0 $\gamma$ M1+E2 to 25 ; 1082.5 $\gamma$ to 24 ; band member.						
12083.9 8	$(26^{+})$	В	$J^{n}$ : 1293.1 $\gamma$ to 24 <sup>+</sup> ; band member.						
12368.64 8	$28^{(+)}$	В	$J^{\pi}$ : 999.0 $\gamma$ to 26 <sup>(+)</sup> ; band member.						
12417.8 8	28(+)	В	$J^{*}$ : 8/5.0 $\gamma$ E2 to 26 <sup>(+)</sup> . Feeds 26 <sup>(+)</sup> member of the band based on 6901, 16 <sup>(+)</sup> .						
$12603.6^{k}$ 7	$27^{-}$	В	$J^{\pi}$ : 577.6y to 26 <sup>-</sup> : 1119.5y to 25 <sup>-</sup> : band member.						
13214.9 <b>j</b> 7	28-	В	$J^{\pi}$ : 611.1 $\gamma$ to 27 <sup>-</sup> : 1189.4 $\gamma$ to 26 <sup>-</sup> : band member.						
$13843 4^{k} 7$	29-	B	$I^{\pi}$ : 628 7 $\gamma$ to 28 <sup>-</sup> : 1239 5 $\gamma$ to 27 <sup>-</sup> : hand member						
14517.2 <i>j</i> 7	30-	R	$I^{\pi}$ : 673 52 to 20 <sup>-</sup> ; 1202 for to 28 <sup>-</sup> ; band member						
$15210.2^{k}$ 8	21-	D D	$\pi$ : 602 Sec to 20 <sup>-</sup> ; 1267 Oc to 20 <sup>-</sup> ; hand member						
$15210.2^{\circ}8$	20-	D	$J^{\pi}$ . 092.87 to 50°, 1507.07 to 29°, band member.						
15980.0 <sup>5</sup> 8	32	В	$J^{T}$ : 7/0.4 $\gamma$ to 31 ; 1409.5 $\gamma$ to 30 ; band member.						
16778.2 8	33	В	$J^{n}$ : 791.6 $\gamma$ to 32; 1567.8 $\gamma$ to 31; band member.						
17625.3 8	34-	В	$J^{n}$ : 847.0 $\gamma$ to 33 <sup>-</sup> ; 1638.7 $\gamma$ to 32 <sup>-</sup> ; band member.						
18475.3 <sup><i>k</i></sup> 8	35-	В	$J^{\pi}$ : 850.0 $\gamma$ to 34 <sup>-</sup> ; 1697.2 $\gamma$ to 33 <sup>-</sup> ; band member.						
19545.3 <sup>J</sup> 9	36-	В	$J^{\pi}$ : 1070.0 $\gamma$ to 35 <sup>-</sup> ; 1920.0 $\gamma$ to 34 <sup>-</sup> ; band member.						
20637.3 <sup>k</sup> 9	37-	В	$J^{\pi}$ : 2162.0 $\gamma$ to 35 <sup>-</sup> ; band member.						
x <sup>l</sup>	(25 <sup>+</sup> )	В	Additional information 1. $I^{\pi}$ . From configuration assignments based on theoretical calculations						
461.24+x <sup>m</sup> 24	$(26^{+})$	В	$J^{\pi}$ : 461.2 $\gamma$ to (25 <sup>+</sup> ): band member.						
985 26+ $x^{l}$ 24	$(27^{+})$	в	$I^{\pi}$ : 524 1 $\gamma$ to (26 <sup>+</sup> ): 985 3 $\gamma$ to (25 <sup>+</sup> ): hand member						
$1505.2 + x^m 3$	$(28^+)$	B	$J^{\pi}$ : 519.9 $\gamma$ to (27 <sup>+</sup> ): 1043.8 $\gamma$ to (26 <sup>+</sup> ): band member.						
$2065.7 + x^{l}$ 3	$(29^+)$	R	$I^{\pi}$ : 560 5 $\gamma$ to (28 <sup>+</sup> ); 1080 6 $\gamma$ to (27 <sup>+</sup> ); hand member						
$2647.7 + x^m 4$	$(30^+)$	B	$J^{\pi}$ : 582.1 $\gamma$ to (29 <sup>+</sup> ); 1142.5 $\gamma$ to (28 <sup>+</sup> ); band member.						
$3257 4 + x^{l} 4$	$(31^+)$	в	$I^{\pi}$ : 609 7 $\gamma$ to (30 <sup>+</sup> ): 1191 5 $\gamma$ to (29 <sup>+</sup> ): hand member						
$3907.5 + x^m 4$	$(31^{+})$ $(32^{+})$	B	$J^{\pi}$ : 649.8 $\gamma$ to (31 <sup>+</sup> ); 1259.8 $\gamma$ to (30 <sup>+</sup> ); band member.						
$4579.5 + x^{l}.5$	(33+)	В	$J^{\pi}$ : 671.6y to (32 <sup>+</sup> ): 1322.4y to (31 <sup>+</sup> ): hand member.						
$5301.7 + x^m 5$	$(34^+)$	B	$J^{\pi}$ : 721.9 $\gamma$ to (33 <sup>+</sup> ); 1394.4 $\gamma$ to (32 <sup>+</sup> ); band member.						
$6076.8 \pm x^{l}$ 5	$(35^{+})$	В	$J^{\pi}$ : 775.2y to (34 <sup>+</sup> ): 1497.4y to (33 <sup>+</sup> ): hand member.						
$6900.6 + x^m 5$	$(36^+)$	B	$J^{\pi}$ : 824.2 $\gamma$ to (35 <sup>+</sup> ); 1598.6 $\gamma$ to (34 <sup>+</sup> ); band member.						
$7745.0+x^{l}5$	$(37^{+})$	В	$J^{\pi}$ : 844.5y to (36 <sup>+</sup> ): 1668.1y to (35 <sup>+</sup> ): band member.						
8639.1+x <sup>m</sup> 6	$(38^+)$	В	$J^{\pi}$ : 894.2 $\gamma$ to (37 <sup>+</sup> ); 1738.4 $\gamma$ to (36 <sup>+</sup> ); band member.						
$9656.5 + x^{l} 6$	$(39^{+})$	В	$J^{\pi}$ : 1911.5y to (37 <sup>+</sup> ); band member.						
10737.1+x? <sup>m</sup> 6	$(40^{+})$	В	$J^{\pi}$ : 2098.0 $\gamma$ to (38 <sup>+</sup> ); band member.						
y <sup>n</sup>	$(26^{+})$	В	Additional information 2.						
			$J^{\pi}$ : From configuration assignments based on theoretical calculations.						
1109.0+y <sup>n</sup> 3	$(28^+)$	В	$J^{\pi}$ : 1109.0 $\gamma$ to (26 <sup>+</sup> ); band member.						
2325.6+y <sup>n</sup> 5	$(30^+)$	В	$J^{\pi}$ : 1216.6 $\gamma$ to (28 <sup>+</sup> ); band member.						
3636.3 + y'' 6	$(32^{+})$	В	J <sup>*</sup> : 1330. $/\gamma$ to (30 <sup>+</sup> ); band member.						
$5119.7 + y^{*} = 0$ $6745.2 + y^{*} = 7$	$(34^{+})$	B	J: 1403.47 10 (32); Dand member. $I^{\pi}$ : 1625 50 to (34 <sup>+</sup> ); hand member						
$85507 \pm v^{n} 8$	$(30^{-})$	D R	J. 1023.3 y to $(3^+)$ , band member						
$10560.7 + v^n 8$	$(40^+)$	B	$J^{\pi}$ : 2010.0v to (38 <sup>+</sup> ): band member.						
$12802.8 + v^n 9$	$(42^+)$	B	$J^{\pi}$ : 2242.1 $\gamma$ to (40 <sup>+</sup> ); band member.						
15271.0+y <sup>n</sup> 9	(44 <sup>+</sup> )	В	$J^{\pi}$ : 2468.2 $\gamma$ to (42 <sup>+</sup> ); band member.						
z <sup>o</sup>	(27-)	В	Additional information 3.						

4

#### Adopted Levels, Gammas (continued)

### <sup>110</sup>Te Levels (continued)

E(level)	$J^{\pi}$ +	XREF	Comments
			$J^{\pi}$ : From configuration assignments based on theoretical calculations and from the observed decay-out intensity below 1533 $\gamma$ transition. However, no discrete transitions were observed carrying this intensity.
1177.7+z <sup>0</sup> 3	$(29^{-})$	В	$J^{\pi}$ : 1177.7 $\gamma$ to (27 <sup>-</sup> ); band member.
2494.1+z <sup>0</sup> 5	$(31^{-})$	В	$J^{\pi}$ : 1316.4 $\gamma$ to (29 <sup>-</sup> ); band member.
3939.1+z <sup>0</sup> 6	(33-)	В	$J^{\pi}$ : 1445.0 $\gamma$ to (31 <sup>-</sup> ); band member.
5472.1+z <sup>0</sup> 6	(35-)	В	$J^{\pi}$ : 1533.0 $\gamma$ (33 <sup>-</sup> ); band member.
7005.1+z <sup>o</sup> 7	(37-)	В	$J^{\pi}$ : 1533.0 $\gamma$ to (35 <sup>-</sup> ); band member.
8663.8+z <sup>0</sup> 8	(39 <sup>-</sup> )	В	$J^{\pi}$ : 1658.6 $\gamma$ to (37 <sup>-</sup> ); band member.
10501.1+z <sup>0</sup> 8	$(41^{-})$	В	$J^{\pi}$ : 1837.3 $\gamma$ to (39 <sup>-</sup> ); band member.
12542.2+z <sup>0</sup> 9	$(43^{-})$	В	$J^{\pi}$ : 2041.1 $\gamma$ to (41 <sup>-</sup> ); band member.
14813.3+z <sup>o</sup> 9	$(45^{-})$	В	$J^{\pi}$ : 2271.1 $\gamma$ to (43 <sup>-</sup> ); band member.
u <sup>p</sup>	$(30^{-})$	В	Additional information 4.
			$J^{\pi}$ : From configuration assignments based on theoretical calculations and from the observed decay-out intensity below $1654\gamma$ transition. However, no discrete transitions were observed to link this band to low-spin level scheme.
1372.0+u <sup>p</sup> 3	$(32^{-})$	В	$J^{\pi}$ : 1372.0v to (30 <sup>-</sup> ): hand member.
$2824.0+u^{p}5$	$(34^{-})$	В	$J^{\pi}$ : 1452.0v to (32 <sup>-</sup> ); band member.
$4364.0+u^{p}6$	$(36^{-})$	В	$J^{\pi}$ : 1540.0v to (34 <sup>-</sup> ); band member.
$6018.0 + u^p 6$	$(38^{-})$	В	$J^{\pi}$ : 1654.0 $\gamma$ to (36 <sup>-</sup> ); band member.
7817.1+u <sup>p</sup> 7	$(40^{-})$	В	$J^{\pi}$ : 1799.0 $\gamma$ to (38 <sup>-</sup> ); band member.
9819.1+u <sup>p</sup> 8	$(42^{-})$	В	$J^{\pi}$ : 2002.0 $\gamma$ to (40 <sup>-</sup> ); band member.
12086.1+u <sup><i>p</i></sup> 8	(44 <sup>-</sup> )	В	$J^{\pi}$ : 2267.0 $\gamma$ to (42 <sup>-</sup> ); band member.
$v^{\boldsymbol{q}}$	$(29^+)$	В	Additional information 5.
			$J^{\pi}$ : From configuration assignments based on theoretical calculations. This band strongly feeds the positive parity band starts at 4655.7 keV through bands at 8344.8 keV ( $J^{\pi}$ =(20 <sup>+</sup> )) and 6949.8 KeV ( $J^{\pi}$ =16 <sup>+</sup> ). However, no discrete transitions were observed to link these bands.
1125.6+v <sup><b>q</b></sup> 3	$(31^{+})$	В	$J^{\pi}$ : 1125.6 $\gamma$ to (29 <sup>+</sup> ); band member.
2427.7+v <sup>q</sup> 5	$(33^{+})$	В	$J^{\pi}$ : 1302.1 $\gamma$ to (31 <sup>+</sup> ); band member.
3916.7+v <b>9</b> 6	$(35^{+})$	В	$J^{\pi}$ : 1489.0 $\gamma$ to (33 <sup>+</sup> ); band member.
5566.0+v <sup>q</sup> 6	(37 <sup>+</sup> )	В	$J^{\pi}$ : 1649.3 $\gamma$ to (35 <sup>+</sup> ); band member.
7435.9+v <sup>q</sup> 7	(39 <sup>+</sup> )	В	$J^{\pi}$ : 1869.8 $\gamma$ to (37 <sup>+</sup> ); band member.
9517.9+v <sup>q</sup> 8	$(41^{+})$	В	$J^{\pi}$ : 2082.0 $\gamma$ to (39 <sup>+</sup> ); band member.

<sup>†</sup> From least-squares fit to  $E\gamma's$ .

<sup>‡</sup> From the deduced  $\gamma$ -ray transition multipolarities and the observed band structures in 2007Pa34 an 1994Fa12, unless otherwise stated. <sup>#</sup> From DSAM in  ${}^{58}$ Ni( ${}^{58}$ Ni, $\alpha 2p\gamma$ ) (2006Ev01), unless otherwise stated.

- <sup>(a)</sup> Band(A): g.s. band. <sup>(b)</sup> Band(B):  $\nu h_{11/2}^2$  band.
- <sup>a</sup> Band(C): Band based on 16<sup>(+)</sup> level at 6901.4 keV.
- <sup>b</sup> Band(D):  $vg_{7/2} \otimes vh_{11/2}$ ,  $\alpha = 1$  band.
- <sup>c</sup> Band(d):  $\nu g_{7/2} \otimes \nu h_{11/2}$ ,  $\alpha = 0$  band.
- <sup>d</sup> Band(E): Band based on  $17^{(-)}$  level at 7209.9 keV.
- <sup>*e*</sup> Band(F):  $vh_{11/2}^2$  band.
- <sup>f</sup> Band(G): Band based on 20<sup>+</sup> level at 8344.8 keV.
- <sup>g</sup> Band(H): Band based on 16<sup>+</sup> level at 6949.8 keV.
- <sup>h</sup> Band(I): Band based on 2<sup>+</sup> level at 1578.3 keV.
- <sup>*i*</sup> Band(J): Band based on 6<sup>+</sup> level at 2519.7 keV. <sup>*j*</sup> Band(K): STB-1 band,  $\alpha = 0$ . Configuration= $\pi g_{9/2}^{-1} \otimes \pi h_{11/2}^1 \otimes \nu h_{11/2}^2$ . Terminating state= $\pi [(g_{9/2})^{-1} (h_{11/2})^1 (g_{7/2} d_{5/2})^2]$

#### <sup>110</sup>Te Levels (continued)

 $\otimes \nu[(\mathbf{h}_{11/2})^2(\mathbf{g}_{7/2}\mathbf{d}_{5/2})^6]; \; J^{\pi}{=}38^-.$ 

- <sup>*k*</sup> Band(k): STB-1 band,  $\alpha = 1$ . Configuration= $\pi g_{9/2}^{-1} \otimes \pi h_{11/2}^1 \otimes \nu h_{11/2}^2$ . Terminating state= $\pi [(g_{9/2})^{-1} (h_{11/2})^1 (g_{7/2} d_{5/2})^2] \otimes \nu [(h_{11/2})^2 (g_{7/2} d_{5/2})^6]; J^{\pi} = 37^-$ .
- <sup>*l*</sup> Band(1): STB-2 band,  $\alpha$ =1. Configuration= $\pi g_{9/2}^{-1} \otimes \pi h_{11/2}^1 \otimes \nu h_{11/2}^3$ . Terminating state= $\pi [(g_{9/2})^{-1} (h_{11/2})^1 (g_{7/2} d_{5/2})^2] \otimes \nu [(h_{11/2})^3 (g_{7/2} d_{5/2})^5]; J^{\pi} = 41^+.$
- <sup>*m*</sup> Band(L): STB-2 band,  $\alpha = 0$ . Configuration= $\pi g_{9/2}^{-1} \otimes \pi h_{11/2}^1 \otimes \nu h_{11/2}^3$ . Terminating state= $\pi [(g_{9/2})^{-1} (h_{11/2})^1 (g_{7/2} d_{5/2})^2] \otimes \nu [(h_{11/2})^3 (g_{7/2} d_{5/2})^5]; J^{\pi} = 40^+.$
- <sup>*n*</sup> Band(M): STB-3 band. Configuration= $\pi g_{9/2}^{-2} \otimes \pi h_{11/2}^2 \otimes \nu h_{11/2}^2$ . Terminating state= $\pi [(g_{9/2})^{-2} (h_{11/2})^2 (g_{7/2} d_{5/2})^2] \otimes \nu [(h_{11/2})^2 (g_{7/2} d_{5/2})^6]; J^{\pi} = 46^+.$
- <sup>o</sup> Band(N): STB-4 band. Configuration= $\pi g_{9/2}^{-2} \otimes \pi h_{11/2}^2 \otimes \nu h_{11/2}^3$ . Terminating state= $\pi [(g_{9/2})^{-2} (h_{11/2})^2 (g_{7/2} d_{5/2})^2] \otimes \nu [(h_{11/2})^3 (g_{7/2} d_{5/2})^5]; J^{\pi} = 49^-.$
- <sup>*p*</sup> Band(O): STB-5 band. Configuration= $\pi g_{9/2}^{-2} \otimes \pi h_{11/2}^2 \otimes \nu h_{11/2}^3$ . Terminating state= $\pi [(g_{9/2})^{-2} (h_{11/2})^2 (g_{7/2} d_{5/2})^2] \otimes \nu [(h_{11/2})^3 (g_{7/2} d_{5/2})^5]; J^{\pi} = 49^-.$
- <sup>*q*</sup> Band(P): STB-6 band. Configuration= $\pi g_{9/2}^{-2} \otimes \pi h_{11/2}^1 \otimes \nu h_{11/2}^3$ .

### $\gamma(^{110}\text{Te})$

E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	$E_{\gamma}$ ‡	$I_{\gamma}^{\ddagger}$	$\mathbf{E}_f = \mathbf{J}_f^{\pi}$	Mult. <sup>a</sup>	$\alpha^{\dagger}$	Comments
657.2	2+	657.2 3	100	0.0 0+	E2	0.00391 6	$\alpha(K)=0.00336\ 5;\ \alpha(L)=0.000446\ 7;\ \alpha(M)=8.91\times10^{-5}\ 13;\ \alpha(N+)=1.94\times10^{-5}\ 3$ $\alpha(N)=1.750\times10^{-5}\ 25;\ \alpha(O)=1.85\times10^{-6}\ 3$ R(Angular)=0.86\ 2. POI =+0.01\ 12.
1401.8	4+	744.3 3	100	657.2 2+	E2	0.00287 4	$\alpha(K)=0.00247 \ 4; \ \alpha(L)=0.000321 \ 5;$ $\alpha(M)=6.41\times10^{-5} \ 9; \ \alpha(N+)=1.396\times10^{-5} \ 20$ $\alpha(N)=1.261\times10^{-5} \ 18; \ \alpha(O)=1.342\times10^{-6} \ 19$ R(Angular)=0.86 2. POL=+0.39 \ 13.
1578.3	$(2^{+})$	921.0 <i>3</i>	100	657.2 2+			
1915.0	4+	512.7 3	100 11	1401.8 4+	M1+E2	0.0082 7	$\alpha(K)=0.0071 \ 6; \ \alpha(L)=0.00093 \ 3;$ $\alpha(M)=0.000185 \ 5; \ \alpha(N+)=4.03\times10^{-5} \ 14$ $\alpha(N)=3.64\times10^{-5} \ 12; \ \alpha(O)=3.88\times10^{-6} \ 22$ R(Angular)=0.51 3. Mult : $\Delta I=0$ transition
		1258.2 3	74 8	657.2 2+	E2	0.000903 13	$\alpha(K) = 0.000771 \ 11; \ \alpha(L) = 9.47 \times 10^{-5} \ 14; \\ \alpha(M) = 1.88 \times 10^{-5} \ 3; \ \alpha(N+) = 1.92 \times 10^{-5} \ 3 \\ \alpha(N) = 3.72 \times 10^{-6} \ 6; \ \alpha(O) = 4.03 \times 10^{-7} \ 6; \\ \alpha(IPF) = 1.508 \times 10^{-5} \ 22 \\ R(Angular) = 0.92 \ 3. \end{cases}$
2191.4	(4+)	613.0 <i>3</i>	55 6	1578.3 (2+)	E2	0.00469 7	$\alpha(K)=0.00402 \ 6; \ \alpha(L)=0.000540 \ 8; \\ \alpha(M)=0.0001080 \ 16; \ \alpha(N+)=2.34\times10^{-5} \ 4 \\ \alpha(N)=2.12\times10^{-5} \ 3; \ \alpha(O)=2.23\times10^{-6} \ 4 \\ R(Angular)=0.96 \ 3.$
		789.5 3	100 9	1401.8 4+	M1+E2	0.0028 4	$\alpha(K)=0.0024 3; \alpha(L)=0.00031 3;$ $\alpha(M)=6.1\times10^{-5} 6; \alpha(N+)=1.33\times10^{-5} 13$ $\alpha(N)=1.20\times10^{-5} 12; \alpha(O)=1.30\times10^{-6} 15$ R(Angular)=0.53 7. Mult : $\Delta I=0$ transition
2225.9	6+	824.0 <i>3</i>	100	1401.8 4+	E2	0.00225 4	$\alpha(K)=0.00194 \ 3; \ \alpha(L)=0.000249 \ 4; \\ \alpha(M)=4.96\times10^{-5} \ 7; \ \alpha(N+)=1.081\times10^{-5} \ 16 \\ \alpha(N)=9.76\times10^{-6} \ 14; \ \alpha(O)=1.044\times10^{-6} \ 15 \\ R(Angular)=0.96 \ 2. \\ POL=+0.34 \ 8.$

# $\gamma$ <sup>(110</sup>Te) (continued)

E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	$E_{\gamma}^{\ddagger}$	$I_{\gamma}^{\ddagger}$	$\mathbf{E}_{f}$	$\mathbf{J}_{f}^{\pi}$	Mult. <sup>a</sup>	$\alpha^{\dagger}$	Comments
2439.9	6+	214.2 3	31 3	2225.9	6+	M1+E2	0.101 18	$\alpha(K)=0.084 \ 13; \ \alpha(L)=0.014 \ 5; \ \alpha(M)=0.0028 \ 10; \ \alpha(N+)=0.00059 \ 19 \ \alpha(N)=0.00053 \ 18; \ \alpha(O)=5.3\times10^{-5} \ 14 \ R(Angular)=0.56 \ 4. \ Mult : Al=0 \ transition$
		524.7 3	100 11	1915.0	4+	(E2)		Mult.: $R(Angular)=0.88 \ 3 \ and POL=+0.21 \ 17 \ are obtained from a composite peak.$
2519.7	6+	1038.4 <i>3</i> 293.4 <i>3</i>	35 <i>3</i> 64 <i>7</i>	1401.8 2225.9	4+ 6+	M1+E2	0.039 3	$\alpha$ (K)=0.0329 <i>17</i> ; $\alpha$ (L)=0.0048 <i>9</i> ; $\alpha$ (M)=0.00096 <i>18</i> ; $\alpha$ (N+)=0.00021 <i>4</i>
		328.0 <i>3</i>	42 4	2191.4	(4+)	E2	0.0290	$\alpha$ (N)=0.00019 4; $\alpha$ (O)=1.93×10 <sup>-5</sup> 24 R(Angular)=0.84 2. POL=-0.02 10. Mult.: $\Delta$ J=0 transition. $\alpha$ (K)=0.0242 4; $\alpha$ (L)=0.00380 6;
								$\alpha(M)=0.000/69\ 11;\ \alpha(N+)=0.0001640$ 24 $\alpha(N)=0.0001491\ 22;\ \alpha(O)=1.488\times10^{-5}\ 22$
		1118.0 <i>3</i>	100 10	1401.8	4+	E2	0.001137 <i>16</i>	R(Angular)=0.93 2. $\alpha$ (K)=0.000985 14; $\alpha$ (L)=0.0001222 18; $\alpha$ (M)=2.43×10 <sup>-5</sup> 4; $\alpha$ (N+)=6.16×10 <sup>-6</sup> $\alpha$ (N)=4.80×10 <sup>-6</sup> 7; $\alpha$ (O)=5.19×10 <sup>-7</sup> 8;
2797.7	(6+)	606.5 <i>3</i>	100	2191.4	(4+)	E2	0.00482 7	$\alpha$ (IPF)=8.43×10 <sup>-7</sup> 15 R(Angular)=0.99 3. $\alpha$ (K)=0.00413 6; $\alpha$ (L)=0.000556 8; $\alpha$ (M)=0.0001112 16; $\alpha$ (N+)=2.41×10 <sup>-5</sup> 4
3088.1	8+	648.8 <i>3</i>	100 11	2439.9	6+	E2	0.00404 6	$\begin{array}{l} \alpha(\mathrm{N}) = 2.18 \times 10^{-5} \ 3; \ \alpha(\mathrm{O}) = 2.29 \times 10^{-6} \ 4 \\ \mathrm{R}(\mathrm{Angular}) = 1.03 \ 3. \\ \alpha(\mathrm{K}) = 0.00347 \ 5; \ \alpha(\mathrm{L}) = 0.000462 \ 7; \\ \alpha(\mathrm{M}) = 9.23 \times 10^{-5} \ 13; \ \alpha(\mathrm{N}+) = 2.00 \times 10^{-5} \\ 3 \end{array}$
		862.1 <i>3</i>	19.2 <i>19</i>	2225.9	6+	E2	0.00202 3	$\alpha$ (N)=1.81×10 <sup>-5</sup> 3; $\alpha$ (O)=1.91×10 <sup>-6</sup> 3 R(Angular)=0.89 3. POL=+0.22 17. $\alpha$ (K)=0.001745 25; $\alpha$ (L)=0.000223 4; $\alpha$ (M)=4.44×10 <sup>-5</sup> 7; $\alpha$ (N+)=9.68×10 <sup>-6</sup>
3093.4	7+	295.8 <i>3</i>	13.0 <i>13</i>	2797.7	(6 <sup>+</sup> )	M1+E2	0.038 <i>3</i>	$\alpha$ (N)=8.74×10 <sup>-6</sup> 13; $\alpha$ (O)=9.36×10 <sup>-7</sup> 14 R(Angular)=0.73 6. $\alpha$ (K)=0.0321 16; $\alpha$ (L)=0.0047 8; $\alpha$ (M)=0.00094 17; $\alpha$ (N+)=0.00020 4
		573.3 <i>3</i>	100 10	2519.7	6+	M1+E2	0.0062 6	$\begin{array}{l} \alpha(N)=0.00018 \ 3; \ \alpha(O)=1.89\times10^{-5} \ 23\\ R(Angular)=0.40 \ 4.\\ \alpha(K)=0.0053 \ 6; \ \alpha(L)=0.00069 \ 4;\\ \alpha(M)=0.000137 \ 7; \ \alpha(N+)=2.99\times10^{-5} \\ 17 \end{array}$
3219.7? 3287.7	(7,8 <sup>+</sup> ) 8 <sup>+</sup>	993.8 <sup>#</sup> 2 1061.8 <i>3</i>	100 <sup>#</sup> 100	2225.9 2225.9	6 <sup>+</sup> 6 <sup>+</sup>	E2	0.001269 18	$\alpha(N)=2.70\times10^{-5} \ 15; \ \alpha(O)=2.89\times10^{-6} \ 22$ R(Angular)=0.39 2. $\alpha(K)=0.001099 \ 16; \ \alpha(L)=0.0001370 \ 20; \\ \alpha(M)=2.73\times10^{-5} \ 4; \ \alpha(N+)=5.96\times10^{-6} \\ \alpha(N)=5.38\times10^{-6} \ 8; \ \alpha(O)=5.81\times10^{-7} \ 9$

# $\gamma(^{110}\text{Te})$ (continued)

$E_i$ (level)	$\mathbf{J}_i^{\pi}$	$E_{\gamma}^{\ddagger}$	$I_{\gamma}$ ‡	$E_f  J_f^{\pi}$	Mult. <sup>a</sup>	$\alpha^{\dagger}$	Comments
							R(Angular)=0.95 2.
3346.3	8+	252.8 3	10 10	3093.4 7+	M1+E2	0.061 8	POL=+0.28 8. $\alpha(K)=0.051 5; \alpha(L)=0.0078 19; \alpha(M)=0.0016 4;$ $\alpha(N+_{\star})=0.00034 8$
							$\alpha(N)=0.00030 \ 8; \ \alpha(O)=3.1\times10^{-5} \ 6$
		826.4 <i>3</i>	100 10	2519.7 6+	E2	0.00223 4	$\alpha(K)=0.00192$ 3; $\alpha(L)=0.000247$ 4;
							$\alpha(M) = 4.92 \times 10^{-5}$ 7; $\alpha(N+) = 1.073 \times 10^{-5}$ 15
							$\alpha(N)=9.69\times10^{-6}$ 14; $\alpha(O)=1.036\times10^{-6}$ 15 Mult : From $\gamma\gamma(\theta)$ in 1994Pa21
3507.0	7-	1281.1 <i>3</i>	100	2225.9 6+	E1	0.000465 7	$\alpha(K)=0.000340 5; \alpha(L)=4.02\times10^{-5} 6;$
							$\alpha(M) = 7.95 \times 10^{-6} \ 12; \ \alpha(N+) = 7.70 \times 10^{-5} \ 11$
							$\alpha(N)=1.572\times10^{-6}\ 22;\ \alpha(O)=1.719\times10^{-7}\ 24;$ $\alpha(IPE)=7\ 52\times10^{-5}\ 11$
							R(Angular)=0.50 2.
3612.5	8-	265.7 3	20.5 21	3346.3 8+	E1	0.01304	$\alpha(K)=0.01130 \ 17; \ \alpha(L)=0.001400 \ 20;$
							$\alpha(M)=0.000278 4; \alpha(N+)=6.03\times10^{-5} 9$
							$\alpha(N)=5.45\times10^{-5} 8; \alpha(O)=5.80\times10^{-6} 9$ P(Angular)=1.10.5
							Mult.: $\Delta J=0$ transition.
		324.6 <i>3</i>	12.1 12	3287.7 8+	E1	0.00770 11	$\alpha(K)=0.00668 \ 10; \ \alpha(L)=0.000823 \ 12;$
							$\alpha$ (M)=0.0001632 24; $\alpha$ (N+)=3.55×10 <sup>-5</sup>
							$\alpha(N)=3.21\times10^{-5} 5; \alpha(O)=3.43\times10^{-6} 5$
							R(Angular)=0.84 4.
		519.0.3	100 10	3093.4 7+	E1	0.00243 4	$\alpha(K) = 0.00211 \ 3: \ \alpha(L) = 0.000257 \ 4:$
		01910 0	100 10	007011 7	21	01002101	$\alpha(M) = 5.09 \times 10^{-5} 8; \alpha(N+) = 1.113 \times 10^{-5} 16$
							$\alpha(N)=1.004\times10^{-5}$ 15; $\alpha(O)=1.084\times10^{-6}$ 16
							R(Angular)=0.59 2.
		525.0 <i>3</i>	87 8	3088.1 8+	E1	0.00237 4	$\alpha(K) = 0.00206 \ 3; \ \alpha(L) = 0.000250 \ 4;$
							$\alpha(M) = 4.96 \times 10^{-5} /; \alpha(N+) = 1.083 \times 10^{-5} 10^{-5}$
							$\alpha(N) = 9.78 \times 10^{-5} 14; \ \alpha(O) = 1.050 \times 10^{-5} 15$ R(Angular)=0.88.3
							POL=+0.21 17.
							Mult.: $\Delta J=0$ transition.
3735.0	9-	122.9 3	3.3 3	3612.5 8-	M1+E2	0.60 22	$\alpha(K)=0.47 \ 14; \ \alpha(L)=0.11 \ 7; \ \alpha(M)=0.022 \ 14;$
							$\alpha(N+)=0.005\ 3$ $\alpha(N)=0.0042\ 25;\ \alpha(O)=0.00038\ 20$
							R(Angular)=0.33 4.
		228.0 <i>3</i>	12.4 12	3507.0 7-	E2	0.0959	$\alpha(K)=0.0782 \ 12; \ \alpha(L)=0.01421 \ 22;$
							$\alpha(M)=0.00290\ 5;\ \alpha(N+)=0.000610\ 9$
							$\alpha(N)=0.000556\ 9;\ \alpha(O)=5.32\times10^{-5}\ 8$
		388.8.3	5576	3346.3 8+	F1	0 00487 7	$\alpha(K)=0.00423.6: \alpha(L)=0.000518.8:$
		500.0 5	55.1 0	5510.5 0	121	0.00107 7	$\alpha(M) = 0.0001028 \ l_{2}^{-5} \ \alpha(M+) = 2.24 \times 10^{-5} \ 4$
							$\alpha(N)=2.02\times10^{-5}$ 3; $\alpha(O)=2.17\times10^{-6}$ 3
							R(Angular)=0.64 2.
		447 4 2	100 10	2207 7 0+	<b>F</b> 1	0.00246.5	POL=+0.39 11.
		447.4 3	100 10	3287.7 81	EI	0.00346 5	$\alpha(K)=0.00300 \text{ 5}; \alpha(L)=0.000366 \text{ 6};$
							$\alpha(N) = 1.20 \times 10^{-5} 21; \ \alpha(N) = 1.585 \times 10^{-5} 23$ $\alpha(N) = 1.431 \times 10^{-5} 21; \ \alpha(\Omega) = 1.540 \times 10^{-6} 22$
							R(Angular)=0.64 2.
							POL=+0.02 9.
		646.5 <i>3</i>	27 3	3088.1 8+	E1	0.001486 21	$\alpha$ (K)=0.001293 <i>19</i> ; $\alpha$ (L)=0.0001560 <i>22</i> ;

# $\gamma$ <sup>(110</sup>Te) (continued)

E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	$E_{\gamma}^{\ddagger}$	$I_{\gamma}$ ‡	$E_f$	$\mathbf{J}_f^{\pi}$	Mult. <sup>a</sup>	$\alpha^{\dagger}$	Comments
	_							$\alpha(M)=3.09\times10^{-5} 5; \alpha(N+)=6.76\times10^{-6}$ $\alpha(N)=6.10\times10^{-6} 9; \alpha(O)=6.61\times10^{-7} 10$ R(Angular)=0.89 3. POI =+0.22 17
3781.2	$10^{+}$	494 693 2-3	100	3287.7 3088_1	$\frac{8^{+}}{8^{+}}$			10L-+0.22 I/.
4165.9	10-	385	100	3781.2	$10^{+}$			
		430.9 3	20.0 21	3735.0	9-	M1+E2	0.0131 6	$\alpha$ (K)=0.0112 6; $\alpha$ (L)=0.00150 5; $\alpha$ (M)=0.000301 10; $\alpha$ (N+)=6.54×10 <sup>-5</sup> 16 $\alpha$ (N)=5.91×10 <sup>-5</sup> 16; $\alpha$ (O)=6.25×10 <sup>-6</sup> 11 R(Angular)=0.75 3; POL =+0 20 19
		552.8 <i>3</i>	100 10	3612.5	8-	E2	0.00618 9	$\alpha(K)=0.00528 \ 8; \ \alpha(L)=0.000723 \ 11; \\ \alpha(M)=0.0001449 \ 21; \ \alpha(N+)=3.14\times10^{-5} \ 5 \\ \alpha(N)=2.84\times10^{-5} \ 4; \ \alpha(O)=2.97\times10^{-6} \ 5 \\ R(Angular)=1.09 \ 3.$
4352.7	11-	186.4 <i>3</i>	<1.27	4165.9	10-			
		571.6 <i>3</i> 617.7 <i>3</i>	1.52 <i>15</i> 100 <i>10</i>	3781.2 3735.0	10° 9-	E2	0.00459 7	$\alpha$ (K)=0.00394 6; $\alpha$ (L)=0.000528 8; $\alpha$ (M)=0.0001057 15; $\alpha$ (N+)=2.29×10 <sup>-5</sup> 4 $\alpha$ (N)=2.07×10 <sup>-5</sup> 3; $\alpha$ (O)=2.18×10 <sup>-6</sup> 3 R(Angular)=1.04 2. POI =+0.55 9
4504.1	$12^{+}$	723.0 <i>3</i>	100	3781.2	$10^{+}$			101-10.55 7.
4655.7	$10^{+}$	921.0 <i>3</i> 1368 0 <i>3</i>	<100 <100	3735.0	9- 8+			
4836.9	12-	332.8 3	<10.53	4504.1	$12^{+}$			
		483.7 <i>3</i>	15.8 <i>16</i>	4352.7	11-	M1+E2	0.0096 7	$\alpha(K)=0.0082 \ 7; \ \alpha(L)=0.001086 \ 19;$ $\alpha(M)=0.000217 \ 4; \ \alpha(N+)=4.73\times10^{-5} \ 10$ $\alpha(N)=4.27\times10^{-5} \ 8; \ \alpha(O)=4.54\times10^{-6} \ 20$ R(Angular)=0.16 2.
		670.9 <i>3</i>	100 11	4165.9	10-	E2	0.00371 6	$\begin{aligned} &\alpha(\mathbf{K}) = 0.00319 \ 5; \ \alpha(\mathbf{L}) = 0.000422 \ 6; \\ &\alpha(\mathbf{M}) = 8.43 \times 10^{-5} \ 12; \ \alpha(\mathbf{N}+) = 1.83 \times 10^{-5} \ 3 \\ &\alpha(\mathbf{N}) = 1.656 \times 10^{-5} \ 24; \ \alpha(\mathbf{O}) = 1.752 \times 10^{-6} \ 25 \\ &\mathbf{R}(\mathbf{Angular}) = 0.91 \ 3. \end{aligned}$
5080.4	13-	242.9 3	2.9 3	4836.9	12-	M1+E2	0.068 9	$\alpha(K)=0.057\ 7;\ \alpha(L)=0.0089\ 24;$ $\alpha(M)=0.0018\ 5;\ \alpha(N+)=0.00038\ 10$ $\alpha(N)=0.00035\ 10;\ \alpha(O)=3.5\times10^{-5}\ 8$ R(Angular)=0.47\ 2.
		576.1 <i>3</i> 727.8 <i>3</i>	<1.47 100 <i>10</i>	4504.1 4352.7	12 <sup>+</sup> 11 <sup>-</sup>	E2	0.00303 5	$\alpha$ (K)=0.00261 4; $\alpha$ (L)=0.000340 5; $\alpha$ (M)=6.80×10 <sup>-5</sup> 10; $\alpha$ (N+)=1.478×10 <sup>-5</sup> 21
5100.0	124	500.0.0	22.01		10+			$\alpha$ (N)=1.336×10 <sup>-5</sup> <i>19</i> ; $\alpha$ (O)=1.420×10 <sup>-6</sup> <i>20</i> R(Angular)=1.09 <i>2</i> . POL=+0.65 <i>11</i> .
5188.3	12+	533.0 3 835.5 3	<23.81 100 <i>10</i>	4655.7 4352.7	10 <sup>+</sup> 11 <sup>-</sup>	E1	0.000870 <i>13</i>	$\alpha(K)=0.000757 \ 11; \ \alpha(L)=9.07\times10^{-5} \ 13; \ \alpha(M)=1.80\times10^{-5} \ 3; \ \alpha(N+)=3.93\times10^{-6} \ 6 \ \alpha(N)=3.55\times10^{-6} \ 5; \ \alpha(O)=3.86\times10^{-7} \ 6 \ R(Angular)=0.59 \ 2$
5281.1 5558.7	14+ 14 <sup>-</sup>	777.1 <i>3</i> 278.0 <i>3</i> 478.6 <i>3</i>	100 <6.25	4504.1 5281.1 5080.4	12 <sup>+</sup> 14 <sup>+</sup> 13 <sup>-</sup>	M1. E2	0.0000.7	$\alpha(\mathbf{K}) = 0.0085.7; \alpha(\mathbf{I}) = 0.001110.78;$
		-70.0J	15.02 10	5000.4	15	1911 7152	0.00777	u(1) = 0.00057, u(1) = 0.00111710,

# $\gamma$ <sup>(110</sup>Te) (continued)

$E_i$ (level)	$\mathbf{J}_i^{\pi}$	Eγ‡	Ι <sub>γ</sub> ‡	$E_f$	$\mathbf{J}_f^{\pi}$	Mult. <sup>a</sup>	$\alpha^{\dagger}$	Comments
5558.7	14-	722.0 3	100 10	4836.9	12-	E2	0.00309 5	$\begin{array}{c} \alpha(\mathrm{M}) = 0.000224 \ 4; \ \alpha(\mathrm{N}+) = 4.87 \times 10^{-5} \ 10 \\ \alpha(\mathrm{N}) = 4.40 \times 10^{-5} \ 8; \ \alpha(\mathrm{O}) = 4.68 \times 10^{-6} \ 19 \\ \mathrm{R}(\mathrm{Angular}) = 0.33 \ 4. \\ \alpha(\mathrm{K}) = 0.00266 \ 4; \ \alpha(\mathrm{L}) = 0.000348 \ 5; \\ \alpha(\mathrm{M}) = 6.94 \times 10^{-5} \ 10; \ \alpha(\mathrm{N}+) = 1.509 \times 10^{-5} \\ 22 \end{array}$
5866.2	15-	307.2 3	2.22 22	5558.7	14-	M1+E2	0.0339 19	$\alpha(N)=1.364\times10^{-5} \ 20; \ \alpha(O)=1.449\times10^{-6} \ 21$ R(Angular)=1.02 6. $\alpha(K)=0.0288 \ 11; \ \alpha(L)=0.0041 \ 7;$ $\alpha(M)=0.00083 \ 14; \ \alpha(N+)=0.00018 \ 3$ $\alpha(N)=0.000163 \ 25; \ \alpha(O)=1.68\times10^{-5} \ 18$ R(Angular)=0.56 4.
		584.9 <i>3</i> 785.8 <i>3</i>	<1.59 100 <i>10</i>	5281.1 5080.4	14 <sup>+</sup> 13 <sup>-</sup>	E2	0.00251 4	$\alpha(K)=0.00217 \ 3; \ \alpha(L)=0.000280 \ 4;$ $\alpha(M)=5.58\times10^{-5} \ 8; \ \alpha(N+)=1.216\times10^{-5}$
5875.5	14+	687.5 <i>3</i>	100 10	5188.3	12+	E2	0.00349 5	$\alpha(N)=1.099\times10^{-5} \ 16; \ \alpha(O)=1.172\times10^{-6} \ 17$ R(Angular)=1.00 2. $\alpha(K)=0.00300 \ 5; \ \alpha(L)=0.000395 \ 6;$ $\alpha(M)=7.90\times10^{-5} \ 11; \ \alpha(N+)=1.716\times10^{-5} \ 25$
		794.3 <i>3</i>	57 6	5080.4	13-	E1	0.000964 14	$\alpha(N)=1.552\times10^{-5} 22; \ \alpha(O)=1.643\times10^{-6} 23$ R(Angular)=0.99 2. POL=+0.6 3. $\alpha(K)=0.000839 \ 12; \ \alpha(L)=0.0001006 \ 14; \\ \alpha(M)=1.99\times10^{-5} \ 3; \ \alpha(N+)=4.36\times10^{-6} \\ \alpha(N)=3.93\times10^{-6} \ 6; \ \alpha(O)=4.28\times10^{-7} \ 6 \\ R(Angular)=0.65 \ 3.$
6128.1 6541.2	(16 <sup>+</sup> ) 16 <sup>-</sup>	(847) 675.0 <i>3</i> 983 <i>4 3</i>	<8.40	5281.1 5866.2 5558 7	14 <sup>+</sup> 15 <sup>-</sup> 14 <sup>-</sup>	F2	0.001501.27	$\alpha(\mathbf{K}) = 0.001208.19; \alpha(\mathbf{L}) = 0.0001631.23;$
6638.7	16 <sup>+</sup>	762.8 3	100 10	5875.5	14+	E2	0.00270 4	$\begin{aligned} \alpha(M) &= 3.25 \times 10^{-5} \ 5; \ \alpha(N+) &= 7.09 \times 10^{-6} \\ \alpha(N) &= 6.40 \times 10^{-6} \ 9; \ \alpha(O) &= 6.90 \times 10^{-7} \ 10 \\ R(\text{Angular}) &= 0.99 \ 2. \\ \alpha(K) &= 0.00233 \ 4; \ \alpha(L) &= 0.000302 \ 5; \\ \alpha(M) &= 6.02 \times 10^{-5} \ 9; \ \alpha(N+) &= 1.311 \times 10^{-5} \end{aligned}$
		772.5 3	31 <i>3</i>	5866.2	15-	E1	0.001020 15	<i>I</i> 9 $\alpha$ (N)=1.185×10 <sup>-5</sup> <i>I</i> 7; $\alpha$ (O)=1.262×10 <sup>-6</sup> <i>I</i> 8 R(Angular)=1.29 6. $\alpha$ (K)=0.000888 <i>I</i> 3; $\alpha$ (L)=0.0001065 <i>I</i> 5; $\alpha$ (M)=2.11×10 <sup>-5</sup> 3; $\alpha$ (N+)=4.62×10 <sup>-6</sup> $\alpha$ (N)=4.17×10 <sup>-6</sup> 6; $\alpha$ (Q)=4.53×10 <sup>-7</sup> 7
6859.6	17-	318.8 3	3.1 3	6541.2	16-	M1+E2	0.0305 14	$\begin{array}{l} \alpha(N) = -1.7 \times 10^{-5} & \alpha(N) = -1.5 \times 10^{-5} & \gamma \\ R(\text{Angular}) = 0.63 & 4. \\ \alpha(\text{K}) = 0.0259 & 8; & \alpha(\text{L}) = 0.0037 & 6; \\ \alpha(\text{M}) = 0.00074 & 11; & \alpha(\text{N}+) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & 20; & \alpha(\text{O}) = 1.50 \times 10^{-5} & 14 \\ \alpha(\text{N}) = 0.000145 & 20; & \alpha(\text{O}) = 1.50 \times 10^{-5} & 14 \\ \alpha(\text{N}) = 0.000145 & 20; & \alpha(\text{O}) = 1.50 \times 10^{-5} & 14 \\ \alpha(\text{N}) = 0.000145 & 20; & \alpha(\text{O}) = 1.50 \times 10^{-5} & 14 \\ \alpha(\text{N}) = 0.000145 & 20; & \alpha(\text{O}) = 1.50 \times 10^{-5} & 14 \\ \alpha(\text{N}) = 0.000145 & 20; & \alpha(\text{O}) = 1.50 \times 10^{-5} & 14 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & 22 \\ \alpha(\text{N}) = 0.000145 & \alpha(\text{N}) = 0.000160 & \alpha(\text{N}) = 0.000160 & \alpha(\text{N}) = 0.000160 & \alpha(\text{N}) $
		993.3 <i>3</i>	100 10	5866.2	15-	E2	0.001468 21	$\begin{array}{l} \alpha(N)=0.000145\ 20;\ \alpha(O)=1.50\times10^{-7}\ 14\\ R(Angular)=0.74\ 4.\\ \alpha(K)=0.001270\ 18;\ \alpha(L)=0.0001594\ 23;\\ \alpha(M)=3.17\times10^{-5}\ 5;\ \alpha(N+)=6.93\times10^{-6}\\ \alpha(N)=6.26\times10^{-6}\ 9;\ \alpha(O)=6.74\times10^{-7}\ 10\\ P(Angular)=1.05\ 2.\\ \end{array}$
6901.4	16 <sup>(+)</sup>	1035.5 3	100	5866.2	15-	(E1)	0.000574 8	R(Angular)=1.05 2. POL=+0.55 11. $\alpha(K)=0.000500 7; \alpha(L)=5.94\times10^{-5} 9;$ $\alpha(M)=1.177\times10^{-5} 17; \alpha(N+)=2.58\times10^{-6}$

# $\gamma$ <sup>(110</sup>Te) (continued)

E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	Eγ‡	$I_{\gamma}$ ‡	$E_f$	$\mathbf{J}_{f}^{\pi}$	Mult. <sup>a</sup>	$\alpha^{\dagger}$	Comments
6040 8	16+	211.0.2	100 //	6629 7	16+			$\begin{aligned} &\alpha(\mathrm{K}) = 0.000500 \ 7; \ \alpha(\mathrm{L}) = 5.94 \times 10^{-5} \ 9; \\ &\alpha(\mathrm{M}) = 1.177 \times 10^{-5} \ 17; \\ &\alpha(\mathrm{N}+) = 2.58 \times 10^{-6} \ 4 \\ &\alpha(\mathrm{N}) = 2.33 \times 10^{-6} \ 4; \ \alpha(\mathrm{O}) = 2.54 \times 10^{-7} \ 4 \\ &\mathrm{R}(\mathrm{Angular}) = 0.63 \ 2. \end{aligned}$
7200.0	10 17 <sup>(-)</sup>	1074.2 <i>3</i>	71 7	5875.5 6901 4	$10^{10}$ $14^{+}$ $16^{(+)}$			
1209.9	1/**	668.5 <i>3</i>	100 10	6541.2	16-	(M1+E2)	0.0042 5	$ α(K)=0.0036 5; α(L)=0.00046 4; $ $α(M)=9.2×10^{-5} 7; α(N+)=2.01×10^{-5}$ <i>17</i> $α(N)=1.81×10^{-5} 15; α(O)=1.95×10^{-6} 19$ Mult.: Authors of 2007Pa34 adopted mult=M1+E2 for 668.6γ but did not quote any linear polarization measurements therefore π is unknown.
7592 4	10+	702.0.2	.0	(950 (	17-			$R(Angular)=0.91 \ 3.$
7582.4	18	723.0 3 943.3 3	<8 100 <i>10</i>	6638.7	17 16 <sup>+</sup>	E2	0.001647 23	$\alpha(K)=0.001423 \ 20; \ \alpha(L)=0.000180 \ 3; \\ \alpha(M)=3.58\times10^{-5} \ 5; \ \alpha(N+)=7.81\times10^{-6} \\ 11 \\ \alpha(N)=7.06\times10^{-6} \ 10; \ \alpha(O)=7.58\times10^{-7} \ 11 \\ R(Angular)=1.26 \ 2.$
7584.8	18-	725.0 3	<12.35	6859.6 6541.2	17- 16-	F2	0.001317.70	$\alpha(\mathbf{K}) = 0.001140.16$ ; $\alpha(\mathbf{L}) = 0.0001424.20$ ;
		10+3.9 5	100 10	0341.2	10	L2	0.001517 19	$\alpha(M)=2.83\times10^{-5} 4; \ \alpha(N+)=6.19\times10^{-6} \\ \alpha(N)=5.59\times10^{-6} 8; \ \alpha(O)=6.03\times10^{-7} 9 \\ R(Angular)=1.14 6.$
7626.6	18(+)	725.1 3	59 6	6901.4	16(+)	E2	0.00306 5	$\alpha(\mathbf{K})=0.00263 \ 4; \ \alpha(\mathbf{L})=0.000344 \ 5; \\ \alpha(\mathbf{M})=6.86\times10^{-5} \ 10; \\ \alpha(\mathbf{N}+)=1.493\times10^{-5} \ 21 \\ \alpha(\mathbf{N})=1.349\times10^{-5} \ 19; \ \alpha(\mathbf{O})=1.433\times10^{-6} \\ 21 $
								$R(\text{Angular})=1.09 \ 2.$
		766.9 <i>3</i>	100 10	6859.6	17-	E1	0.001036 15	$\begin{aligned} \alpha(\mathbf{K}) &= 0.00901 \ 13; \ \alpha(\mathbf{L}) &= 0.0001082 \ 16; \\ \alpha(\mathbf{M}) &= 2.14 \times 10^{-5} \ 3; \ \alpha(\mathbf{N}+) &= 4.69 \times 10^{-6} \\ \alpha(\mathbf{N}) &= 4.23 \times 10^{-6} \ 6; \ \alpha(\mathbf{O}) &= 4.60 \times 10^{-7} \ 7 \end{aligned}$
7725.1	16-	1858.4 <i>3</i>	100	5866.2	15-			R(Aliguia) = 0.30 2.
7820.0	$18^{+}$	238.0 <i>3</i>	56 5	7582.4	$18^{+}$			
	10-	870.0 <i>3</i>	100 10	6949.8	16+		0.0 <b>7</b> 1.4	
7846.5	19-	262.0 3	10.2 10	7584.8	18-	M1+E2	0.054 6	$\alpha(K)=0.046 \ 4; \ \alpha(L)=0.0069 \ 16; \\ \alpha(M)=0.0014 \ 4; \ \alpha(N+)=0.00030 \ 7 \\ \alpha(N)=0.00027 \ 6; \ \alpha(O)=2.8\times10^{-5} \ 5 \\ R(Angular)=0.81 \ 15.$
		986.9 <i>3</i>	100 10	6859.6	17-	E2	0.001489 21	$\alpha(K)=0.001288 \ 18; \ \alpha(L)=0.0001618 \ 23; \ \alpha(M)=3.22\times10^{-5} \ 5; \ \alpha(N+)=7.04\times10^{-6} \ \alpha(N)=6.35\times10^{-6} \ 9; \ \alpha(O)=6.84\times10^{-7} \ 10 \ R(Angular)=0.98 \ 2.$
8110.0	$17^{-}$	384.6 <i>3</i>	100 10	7725.1	16-			
		1569.2 <i>3</i>	40 <sup>@</sup> 7	6541.2	16-			
8133.9	19 <sup>(-)</sup>	549.0 <i>3</i>	<25.64	7584.8	18-			

# $\gamma$ <sup>(110</sup>Te) (continued)

E <sub>i</sub> (level)	$\mathbf{J}_i^\pi$	$E_{\gamma}^{\ddagger}$	$I_{\gamma}$ ‡	$E_f$	$\mathbf{J}_f^{\pi}$	Mult. <sup>a</sup>	$\alpha^{\dagger}$	Comments
8133.9	19 <sup>(-)</sup>	924.0 3	100 10	7209.9	17 <sup>(-)</sup>	E2	0.001725 25	$\alpha$ (K)=0.001491 21; $\alpha$ (L)=0.000189 3; $\alpha$ (M)=3.76×10 <sup>-5</sup> 6; $\alpha$ (N+)=8.20×10 <sup>-6</sup> 12
8344.8	20 <sup>+</sup>	525.0 <i>3</i>	100 <i>10</i>	7820.0	18+	E2	0.00712 10	$\begin{array}{l} \alpha(\mathrm{N}) = 7.41 \times 10^{-6} \ 11; \ \alpha(\mathrm{O}) = 7.96 \times 10^{-7} \ 12 \\ \mathrm{R}(\mathrm{Angular}) = 1.12 \ 4. \\ \alpha(\mathrm{K}) = 0.00607 \ 9; \ \alpha(\mathrm{L}) = 0.000841 \ 12; \\ \alpha(\mathrm{M}) = 0.0001686 \ 24; \ \alpha(\mathrm{N}+) = 3.64 \times 10^{-5} \\ 6 \end{array}$
		762.2 3	71 7	7582.4	18+	E2	0.00271 4	$\alpha(N)=3.30\times10^{-5} 5; \ \alpha(O)=3.43\times10^{-6} 5$ R(Angular)=0.88 3. POL=+0.21 17. $\alpha(K)=0.00233 4; \ \alpha(L)=0.000302 5;$ $\alpha(M)=6.03\times10^{-5} 9; \ \alpha(N+)=1.313\times10^{-5}$
8439.2	20 <sup>(+)</sup>	592.8 <i>3</i>	63.6 6	7846.5	19-	E1	0.00180 <i>3</i>	$\alpha$ (N)=1.187×10 <sup>-5</sup> <i>17</i> ; $\alpha$ (O)=1.264×10 <sup>-6</sup> <i>18</i> R(Angular)=1.29 <i>6</i> . $\alpha$ (K)=0.001564 <i>22</i> ; $\alpha$ (L)=0.000189 <i>3</i> ; $\alpha$ (M)=3.75×10 <sup>-5</sup> <i>6</i> ; $\alpha$ (N+)=8.20×10 <sup>-6</sup> <i>12</i>
		812.5 3	100 <i>10</i>	7626.6	18(+)	E2	0.00232 4	$\begin{aligned} &\alpha(\mathrm{N}) = 7.40 \times 10^{-6} \ II; \ \alpha(\mathrm{O}) = 8.01 \times 10^{-7} \ I2 \\ &\mathrm{R(Angular)} = 0.58 \ 2. \\ &\alpha(\mathrm{K}) = 0.00200 \ 3; \ \alpha(\mathrm{L}) = 0.000258 \ 4; \\ &\alpha(\mathrm{M}) = 5.13 \times 10^{-5} \ 8; \ \alpha(\mathrm{N}+) = 1.119 \times 10^{-5} \\ &I6 \end{aligned}$
8445.2	18-	335.3 <i>3</i>	70 5	8110.0	17-	M1+E2	0.0263 8	$\alpha(N)=1.011\times10^{-5}$ 15; $\alpha(O)=1.080\times10^{-6}$ 16 R(Angular)=1.03 2. POL=+0.46 12. $\alpha(K)=0.0224$ 4; $\alpha(L)=0.0032$ 4; $\alpha(M)=0.00063$ 8; $\alpha(N+)=0.000137$ 16 $\alpha(N)=0.000124$ 15; $\alpha(O)=1.29\times10^{-5}$ 10 R(Angular)=0.93 5.
8590.4	20+	719.9 <i>3</i> 1904.1 <i>3</i> 744.2 <i>3</i> 1007.7 <i>3</i>	100 <sup>&amp;</sup> 6 3.0 <i>15</i> <9.09 100 <i>10</i>	7725.1 6541.2 7846.5 7582.4	16 <sup>-</sup> 16 <sup>-</sup> 19 <sup>-</sup> 18 <sup>+</sup>	E2	0.001422 20	$\alpha(K)=0.001231 \ 18; \ \alpha(L)=0.0001543 \ 22; \\ \alpha(M)=3.07\times10^{-5} \ 5; \ \alpha(N+)=6.71\times10^{-6} \\ \alpha(N)=6.06\times10^{-6} \ 9; \ \alpha(O)=6.53\times10^{-7} \ 10 $
8699.9 8787.0 8791.6	20 <sup>-</sup> 19 <sup>-</sup> (19) <sup>-</sup>	1116 341.8 <i>3</i> 677.0 <i>3</i> 346.1 <i>3</i>	100 100 <i>9</i> 74 <i>9</i> 100	7584.8 8445.2 8110.0 8445.2	18 <sup>-</sup> 18 <sup>-</sup> 17 <sup>-</sup> 18 <sup>-</sup>			R(Angular)=0.97 <i>3</i> .
8943.0	21-	244 1096.4 <i>3</i>	100	8699.9 7846.5	20 <sup>-</sup> 19 <sup>-</sup>	E2	0.001185 <i>17</i>	$\alpha$ (K)=0.001026 <i>15</i> ; $\alpha$ (L)=0.0001276 <i>18</i> ; $\alpha$ (M)=2.54×10 <sup>-5</sup> <i>4</i> ; $\alpha$ (N+)=5.55×10 <sup>-6</sup> $\alpha$ (N)=5.01×10 <sup>-6</sup> <i>7</i> ; $\alpha$ (O)=5.41×10 <sup>-7</sup> <i>8</i>
9164.1	20-	372.3 3	68 4	8791.6	(19)-	M1+E2	0.0196	R(Angular)=0.98 4. $\alpha$ (K)=0.0167 4; $\alpha$ (L)=0.00230 18; $\alpha$ (M)=0.00046 4; $\alpha$ (N+)=0.000100 7 $\alpha$ (N)=9.0×10 <sup>-5</sup> 7; $\alpha$ (O)=9.5×10 <sup>-6</sup> 4
		377.3 3	100 4	8787.0	19-	M1+E2	0.0188	R(Angular)=0./1 3. $\alpha$ (K)=0.0161 4; $\alpha$ (L)=0.00221 16; $\alpha$ (M)=0.00044 4; $\alpha$ (N+)=9.6×10 <sup>-5</sup> 7

# $\gamma$ <sup>(110</sup>Te) (continued)

E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	$E_{\gamma}^{\ddagger}$	$I_{\gamma}^{\ddagger}$	$\mathbf{E}_{f}$	$\mathbf{J}_f^\pi$	Mult. <sup>a</sup>	$\alpha^{\dagger}$	Comments
								$\alpha$ (N)=8.7×10 <sup>-5</sup> 6; $\alpha$ (O)=9.1×10 <sup>-6</sup> 3 R(Angular)=0.67 3.
9164.1	$20^{-}$	719.1 <i>3</i>	89 <sup>&amp;</sup> 5	8445.2	18-			
9189.9	(21 <sup>-</sup> )	1056.0 3	100	8133.9	19 <sup>(-)</sup>			
9228.8	22+	884.0 3	100	8344.8	20+	E2	0.00191 3	$\alpha(\mathbf{K})=0.001648\ 24;\ \alpha(\mathbf{L})=0.000210\ 3;\alpha(\mathbf{M})=4.18\times10^{-5}\ 6;\ \alpha(\mathbf{N}+)=9.11\times10^{-6}$ 13
								$\alpha(N) = 8.23 \times 10^{-6} \ 12; \ \alpha(O) = 8.82 \times 10^{-7} \ 13$ R(Angular)=1.26 8.
9409.7	22(+)	466.6 <i>3</i>	20.2 19	8943.0	21-	E1	0.00312 5	$\begin{array}{l} \alpha(\text{K}) = 0.00271 \ 4; \ \alpha(\text{L}) = 0.000331 \ 5; \\ \alpha(\text{M}) = 6.56 \times 10^{-5} \ 10; \ \alpha(\text{N}+) = 1.432 \times 10^{-5} \\ 21 \end{array}$
								$\alpha$ (N)=1.293×10 <sup>-5</sup> <i>19</i> ; $\alpha$ (O)=1.393×10 <sup>-6</sup> <i>20</i> R(Angular)=0.59 <i>2</i> .
		970.6 <i>3</i>	100 10	8439.2	20 <sup>(+)</sup>	E2	0.001545 22	$\alpha(K)=0.001336 \ 19; \ \alpha(L)=0.0001682 \ 24; \ \alpha(M)=3.35\times10^{-5} \ 5; \ \alpha(N+)=7.31\times10^{-6} \ \alpha(N)=6.60\times10^{-6} \ 10; \ \alpha(O)=7.10\times10^{-7} \ 10 \ R(Angular)=1.05 \ 2.$
9560.5	21-	396.4 <i>3</i>	100	9164.1	20-	(M1)	0.0164 4	POL=+0.41 <i>16.</i> $\alpha(K)=0.0140 5; \alpha(L)=0.00191 11;$ $\alpha(M)=0.000383 23; \alpha(N+)=8.3\times10^{-5} 4$ $\alpha(N)=7.5\times10^{-5} 4; \alpha(O)=7.91\times10^{-6} 17$ B(M1)(W.u.)=0.8 4 Write: B(Appender) 0.70 2 (2007Dr24)
		773 4 3	14 3	8787 0	19-	[F2]		Mult.: $R(Angular)=0.70.5 (2007Pa34).$
9622.4		1032	100	8590.4	$20^{+}$	[122]		
9684.8	22+	1094.4 <i>3</i>	100	8590.4	20+	E2	0.001189 <i>17</i>	$\alpha$ (K)=0.001030 <i>15</i> ; $\alpha$ (L)=0.0001281 <i>18</i> ; $\alpha$ (M)=2.55×10 <sup>-5</sup> <i>4</i> ; $\alpha$ (N+)=5.57×10 <sup>-6</sup> $\alpha$ (N)=5.03×10 <sup>-6</sup> <i>7</i> ; $\alpha$ (O)=5.43×10 <sup>-7</sup> 8
								R(Angular)=1.00 4.
9992.5	22-	432.0 3	100 4	9560.5	21-	(M1)	0.0130 6	$\alpha$ (K)=0.0111 6; $\alpha$ (L)=0.00149 4; $\alpha$ (M)=0.000299 10; $\alpha$ (N+)=6.49×10 <sup>-5</sup> 15
								$\alpha(N) = 5.87 \times 10^{-5} \ 15; \ \alpha(O) = 6.20 \times 10^{-6} \ 11$
								B(M1)(W.u.)=0.73 Mult: from $P(Angular)=0.72.3(2007Pa24)$
		828.5 <i>3</i>	68 <sup>@</sup> 8	9164.1	$20^{-}$	[E2]	0.00222 4	$\alpha(K)=0.00191 \ 3; \ \alpha(L)=0.000245 \ 4; \\ \alpha(M)=4.89\times10^{-5} \ 7; \ \alpha(N+)=1.066\times10^{-5}$
								15 $\alpha(N)=9.63\times10^{-6}$ 14; $\alpha(O)=1.030\times10^{-6}$ 15
10046.0	$(22^{-})$	1102 0 2	100	8042.0	21-			B(E2)(W.u.)=8.E+1+4-3
10040.0	(23)	(974)	100	9228 8	$21 \\ 22^+$			
10202.0	$(23^{-})$	1112.3 3	100	9189.9	$(21^{-})$			
10455.7	23-	463.4 3	100 5	9992.5	22-	(M1)	0.0107 7	$\alpha(\mathbf{K})=0.0092\ 7;\ \alpha(\mathbf{L})=0.001224\ I8;$ $\alpha(\mathbf{M})=0.000245\ 4;\ \alpha(\mathbf{N}+)=5.32\times10^{-5}\ 8$ $\alpha(\mathbf{N})=4.81\times10^{-5}\ 7;\ \alpha(\mathbf{O})=5.11\times10^{-6}\ 17$ $\mathbf{R}(\mathbf{M})(\mathbf{W}_{\mathbf{N}})=0.9\ 4$
		895.0 <i>3</i>	41 5	9560.5	21-	[E2]	0.00185 3	Mult.: from R(Angular)=0.72 3 (2007Pa34). $\alpha(K)=0.001602 23; \alpha(L)=0.000204 3;$ $\alpha(M)=4.05\times10^{-5} 6; \alpha(N+)=8.85\times10^{-6}$ 13 $\alpha(N)=7.99\times10^{-6} 12; \alpha(O)=8.57\times10^{-7} 12$ B(E2)(W.u.)=53 21

# $\gamma$ <sup>(110</sup>Te) (continued)

E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	${\rm E_{\gamma}}^{\ddagger}$	$I_{\gamma}^{\ddagger}$	$\mathbf{E}_{f}$	$\mathbf{J}_f^{\pi}$	Mult. <sup>a</sup>	$\alpha^{\dagger}$	Comments
10471.8	24 <sup>(+)</sup>	1062.1 3	100	9409.7	22 <sup>(+)</sup>	E2	0.001268 18	$\alpha(K)=0.001098 \ 16; \ \alpha(L)=0.0001369 \ 20; \\ \alpha(M)=2.72\times10^{-5} \ 4; \ \alpha(N+)=5.96\times10^{-6} \\ \alpha(N)=5.38\times10^{-6} \ 8; \ \alpha(O)=5.80\times10^{-7} \ 9 \\ R(Angular)=1.15 \ 5.$
10723.8		1039	100	9684.8	$22^{+}$			
10745.4		1123	100	9622.4				
10790.8	24+	1106.0 3	100	9684.8	22+	E2	0.001163 17	$\begin{aligned} &\alpha(\mathbf{K}) = 0.001007 \ 15; \ \alpha(\mathbf{L}) = 0.0001251 \ 18; \\ &\alpha(\mathbf{M}) = 2.49 \times 10^{-5} \ 4; \ \alpha(\mathbf{N}+) = 6.00 \times 10^{-6} \\ &\alpha(\mathbf{N}) = 4.91 \times 10^{-6} \ 7; \ \alpha(\mathbf{O}) = 5.31 \times 10^{-7} \ 8; \\ &\alpha(\mathbf{IPF}) = 5.57 \times 10^{-7} \ 10 \\ \mathbf{R}(\mathbf{Angular}) = 1.04 \ 5. \end{aligned}$
10943.9	24-	488.4 <i>3</i>	100 7	10455.7	23-	M1+E2	0.0093 7	$\alpha$ (K)=0.0080 7; $\alpha$ (L)=0.001058 21; $\alpha$ (M)=0.000211 4; $\alpha$ (N+)=4.60×10 <sup>-5</sup> 11
		951 4 3	63.7	9992 5	22-			$\alpha$ (N)=4.16×10 <sup>-5</sup> 9; $\alpha$ (O)=4.42×10 <sup>-6</sup> 20 R(Angular)=0.73 3.
11369.6	$26^{(+)}$	897 5 3	100	10471.8	$24^{(+)}$			
11483.8	25-	539.7 3	100 12	10943.9	24-	M1+E2	0.0072 7	$\alpha$ (K)=0.0062 6; $\alpha$ (L)=0.00081 4; $\alpha$ (M)=0.000161 6; $\alpha$ (N+)=3.51×10 <sup>-5</sup> 16
		1007.0.2	00.12	10455 7	22-			$\alpha$ (N)=3.17×10 <sup>-5</sup> <i>14</i> ; $\alpha$ (O)=3.39×10 <sup>-6</sup> <i>22</i> R(Angular)=0.85 <i>6</i> .
11542 1	O(+)	1027.8 3	80 12	10455./	23	<b>F</b> 2	0.001245.10	
11545.1	20(*)	1071.5 5	100	10471.8	24(*)	E2	0.001245 18	$\begin{aligned} \alpha(\text{K}) &= 0.00107876; \ \alpha(\text{L}) = 0.000134379; \\ \alpha(\text{M}) &= 2.67 \times 10^{-5} 4; \ \alpha(\text{N}+) = 5.84 \times 10^{-6} \\ \alpha(\text{N}) &= 5.27 \times 10^{-6} 8; \ \alpha(\text{O}) = 5.69 \times 10^{-7} 8 \\ \text{R}(\text{Angular}) = 1.225. \end{aligned}$
11839.8		1116	100	10723.8				
12025.9	26-	542.0 3	33 7	11483.8	25-	M1+E2	0.0071 6	$\alpha(K)=0.0061 \ 6; \ \alpha(L)=0.00080 \ 4;$ $\alpha(M)=0.000159 \ 6; \ \alpha(N+)=3.47\times10^{-5}$ 16 $\alpha(N)=3.13\times10^{-5} \ 14; \ \alpha(O)=3.35\times10^{-6} \ 22$ $R(Angular)=0.85 \ 6$
		1082.5 3	100 7	10943.9	$24^{-}$			r(ingulai) oloo ol
12083.9	$(26^+)$	1293.1 <i>3</i>	100	10790.8	24+			
12368.6	$28^{(+)}$	999.0 <i>3</i>	100	11369.6	$26^{(+)}$			
12417.8	28 <sup>(+)</sup>	875.0 <i>3</i>	30.0 25	11543.1	26 <sup>(+)</sup>	E2	0.00195 3	$\alpha(K)=0.001687\ 24;\ \alpha(L)=0.000215\ 3;\alpha(M)=4.28\times10^{-5}\ 6;\ \alpha(N+)=9.34\times10^{-6}\ 13$
		1040.0.0			<b>a</b> <i>c</i> (+)			$\alpha$ (N)=8.43×10 <sup>-6</sup> 12; $\alpha$ (O)=9.04×10 <sup>-7</sup> 13 R(Angular)=1.07 6.
12603.6	27-	1048.0 3 577.6 3 1119.5 3	100 <i>10</i> 89 <i>9</i> 100 <i>9</i>	11369.6 12025.9 11483.8	26 <sup>(+)</sup> 26 <sup>-</sup> 25 <sup>-</sup>			
13214.9	28-	611.1 <i>3</i> 1189.4 <i>3</i>	100 9 75 9	12603.6 12025.9	27 <sup>-</sup> 26 <sup>-</sup>			
13843.4	29-	628.7 <i>3</i> 1239.5 <i>3</i>	70 <i>15</i> 100 <i>10</i>	13214.9 12603.6	28 <sup>-</sup> 27 <sup>-</sup>			
14517.2	30-	673.5 <i>3</i> 1302.4 <i>3</i>	100 <sup>&amp;</sup> 8 45 8	13843.4 13214.9	29 <sup>-</sup> 28 <sup>-</sup>			
15210.2	31-	692.8 <i>3</i> 1367.0 <i>3</i>	100 <sup>@</sup> 19 62.8	14517.2 13843.4	30 <sup>-</sup> 29 <sup>-</sup>			

				7(	ic) (contin
E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	$E_{\gamma}^{\ddagger}$	$I_{\gamma}$ ‡	$E_f$	$\mathbf{J}_f^{\pi}$
15986.6	32-	776.4 3	93 <sup>@</sup> 29	15210.2	31-
		1469.5 3	100 15	14517.2	30-
16778 2	33-	791.6.3	$100^{@} 25$	15986.6	32-
10770.2	55	1567.0.2	75@12	15210.2	21-
17605 2	24-	1307.8 3	/5° 12 99 25	15210.2	31 22-
17023.5	34	047.0 J 1638 7 3	00 23 100 25	10778.2	33- 32-
18475 3	35-	850.0.3	<14 29	17625 3	34-
10+75.5	55	1697.2.3	100.29	16778 2	33-
19545 3	36-	$1070.0^{\circ}$ 3	<100 27	18475 3	35-
190 10.0	50	1920.0.3	<100	17625.3	34-
20637.3	37-	2162.0 3	100	18475.3	35-
461.24+x	$(26^{+})$	461.2 3	100	X	$(25^{+})$
985.26+x	$(27^{+})$	524.1 <i>3</i>	100 5	461.24+x	$(26^+)$
		985.3 <i>3</i>	17 <i>3</i>	х	(25+)
1505.2 + x	$(28^{+})$	519.9.3	$100^{@} 6$	985.26+x	$(27^{+})$
1000.21 K	(20)	1043.8 3	37.3	461.24 + x	$(26^+)$
2065.7 + x	$(29^{+})$	560.5 3	100	1505.2 + x	$(28^+)$
20001711	(_> )	1080.6 3	37 5	985.26+x	$(27^+)$
2647.7+x	$(30^{+})$	582.1 3	100 7	2065.7+x	$(29^+)$
	. /	1142.5 <i>3</i>	35 <i>3</i>	1505.2+x	(28+)
3257.4+x	$(31^{+})$	609.7 <i>3</i>	100 6	2647.7+x	$(30^{+})$
		1191.5 <i>3</i>	15.9 23	2065.7+x	(29 <sup>+</sup> )
3907.5+x	$(32^{+})$	649.8 <i>3</i>	$100.0^{\textcircled{0}}{25}$	3257.4+x	$(31^{+})$
	(- )	1259.8 3	21.3 16	2647.7+x	$(30^{+})$
4579 5+x	$(33^{+})$	671.6.3	$100^{@} 4$	3907.5 + x	$(32^+)$
10191011	(55)	1322.4.3	8.7.11	3257.4 + x	$(31^+)$
5301 7±x	$(34^{+})$	721.0.3	100& 5	4579 5±x	$(33^+)$
JJ01./+X	(54)	1394.4.3	64.9	$39075 \pm x$	$(33^{+})$
6076 8+x	$(35^{+})$	775 2 3	100.11	5301.7 + x	$(32^{+})$
0070.01X	(55)	1497.4 3	36.4	4579.5 + x	$(33^+)$
6000 6 L v	$(36^{+})$	824.2.3	100 % 5	6076 8 L x	$(35^+)$
0900.0+x	(30)	1598.6.3	529	$5301.7 \pm x$	$(33^{+})$
7745.0+x	$(37^{+})$	844 5 3	100.23	6900.6+x	$(34^{+})$
7715.01X	(37)	1668.1.3	62.15	6076.8 + x	$(35^+)$
8639.1+x	$(38^{+})$	894.2 3	<16.67	7745.0+x	$(37^+)$
	()	1738.4 3	100 33	6900.6+x	$(36^{+})$
9656.5+x	$(39^{+})$	1911.5 <i>3</i>	100	7745.0+x	(37+)
10737.1+x?	$(40^{+})$	2098.0 <sup>C</sup> 3	100	8639.1+x	(38+)
1109.0+y	$(28^+)$	1109.0 <i>3</i>	100	У	$(26^{+})$
2325.6+y	$(30^{+})$	1216.6 3	100	1109.0+y	$(28^+)$
3656.3+y	$(32^{+})$	1330.7 <i>3</i>	100	2325.6+y	$(30^{+})$
5119.7+y	(34+)	1463.4 <i>3</i>	100	3656.3+y	$(32^{+})$
6745.2+y	(36+)	1625.5 <i>3</i>	100	5119.7+y	(34+)
8550.7+y	$(38^+)$	1805.4 3	100	6745.2+y	$(36^+)$
10560.7+y	$(40^+)$	2010.0 3	100	8550.7+y	$(38^{+})$
12802.8+y	$(42^+)$	2242.1 3	100	10560.7+y	$(40^{+})$
152/1.0+y	(44 <sup>+</sup> )	2468.2 3	100	12802.8+y	(42')
11//./+Z	(29)	11//./ 3	100	Z	(27)
2494.1+Z	(31)	1310.4 3	100	11//./+Z 2404.1+z	(29)
5757.1+Z	(35)	1445.05	100	2494.1+Z	(31)
54/2.1+z	(35)	1535.0° 3	100	3939.1+z	(33)
7005.1+z	(37 <sup>-</sup> )	1533.0 <sup>0</sup> 3	1000	5472.1+z	(35 <sup>-</sup> )

# $\gamma(^{110}\text{Te})$ (continued)

### $\gamma(^{110}\text{Te})$ (continued)

E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	E <sub>γ</sub> ‡	$I_{\gamma}$	$\mathbf{E}_f \qquad \mathbf{J}_f^{\pi}$	E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	Eγ‡	Ι <sub>γ</sub> ‡	$\mathbf{E}_f \qquad \mathbf{J}_f^{\pi}$
8663.8+z	(39 <sup>-</sup> )	1658.6 <i>3</i>	100	7005.1+z (37 <sup>-</sup> )	9819.1+u	(42 <sup>-</sup> )	2002.0 3	100	7817.1+u (40 <sup>-</sup> )
10501.1+z	$(41^{-})$	1837.3 <i>3</i>	100	8663.8+z (39 <sup>-</sup> )	12086.1+u	$(44^{-})$	2267.0 <i>3</i>	100	9819.1+u (42 <sup>-</sup> )
12542.2+z	(43 <sup>-</sup> )	2041.1 3	100	10501.1+z (41 <sup>-</sup> )	1125.6+v	$(31^{+})$	1125.6 <i>3</i>	100	v (29 <sup>+</sup> )
14813.3+z	$(45^{-})$	2271.1 <i>3</i>	100	12542.2+z (43 <sup>-</sup> )	2427.7+v	$(33^{+})$	1302.1 <i>3</i>	100	1125.6+v (31 <sup>+</sup> )
1372.0+u	$(32^{-})$	1372.0 <i>3</i>	100	u (30 <sup>-</sup> )	3916.7+v	$(35^{+})$	1489.0 <i>3</i>	100	2427.7+v (33 <sup>+</sup> )
2824.0+u	(34-)	1452.0 <i>3</i>	100	1372.0+u (32 <sup>-</sup> )	5566.0+v	$(37^{+})$	1649.3 <i>3</i>	100	3916.7+v (35 <sup>+</sup> )
4364.0+u	(36 <sup>-</sup> )	1540.0 <i>3</i>	100	2824.0+u (34 <sup>-</sup> )	7435.9+v	$(39^{+})$	1869.8 <i>3</i>	100	5566.0+v (37 <sup>+</sup> )
6018.0+u	(38-)	1654.0 <i>3</i>	100	4364.0+u (36 <sup>-</sup> )	9517.9+v	$(41^{+})$	2082.0 <i>3</i>	100	7435.9+v (39 <sup>+</sup> )
7817.1+u	$(40^{-})$	1799.0 <i>3</i>	100	6018.0+u (38 <sup>-</sup> )					

<sup>†</sup> Additional information 6. <sup>‡</sup> From <sup>58</sup>Ni(<sup>58</sup>Ni, $\alpha$ 2p $\gamma$ ) (2007Pa34 and 2007Pa35), unless otherwise stated. <sup>#</sup> From <sup>54</sup>Fe(<sup>58</sup>Ni,2p $\gamma$ ) (1994Fa12).

<sup>@</sup> Doublet  $\gamma$  ray, composite intensity is given.

<sup>&</sup> Triplet  $\gamma$  ray, composite intensity is given.

<sup>*a*</sup> From  $\gamma\gamma(\theta)$ (DCO) and POL measurements in 2007Pa34, unless otherwise stated. Angular correlation asymmetry ratios were determined by DCO method at angles of  $\approx 90^{\circ}$  and  $\approx 50^{\circ}$  (or 130°) with gates on  $\Delta J=2$ , quadrupole transitions (mainly the  $657.2\gamma$  and  $744.3\gamma$  but some gates on  $553\gamma$  and  $618\gamma$ ). This ratio here is designated as R(Angular). Expected values of this ratio are  $\approx$ 1.0 for  $\Delta$ J=2, quadrupole and  $\Delta$ J=0, dipole transitions; and  $\approx$ 0.63 for  $\Delta$ J=1, dipole transitions.

<sup>b</sup> Multiply placed with undivided intensity.

<sup>c</sup> Placement of transition in the level scheme is uncertain.

	Legend
Level Scheme Intensities: Type not specified & Multiply placed: undivided intensity given	$ \begin{array}{c c} & I_{\gamma} < 2\% \times I_{\gamma}^{max} \\ \hline & I_{\gamma} < 10\% \times I_{\gamma}^{max} \\ \hline & I_{\gamma} > 10\% \times I_{\gamma}^{max} \\ \hline & \gamma \text{ Decay (Uncertain)} \end{array} $



18.6 s 8

 $^{110}_{52}{
m Te}_{58}$ 

	Legend
Level Scheme (continued)	$\longrightarrow$ Ly < $2\% \times I^{max}$
Intensities: Type not specified	$I_{\gamma} < 10\% \times I_{\gamma}^{max}$
& Multiply placed: undivided intensity given	$I_{\gamma} > 10\% \times I_{\gamma}^{max}$
	$ \rightarrow \gamma$ Decay (Uncertain)



 $^{110}_{52}{
m Te}_{58}$ 



<sup>110</sup><sub>52</sub>Te<sub>58</sub>

	Legend
Level Scheme (continued) Intensities: Type not specified & Multiply placed: undivided intensity given	$\begin{array}{c c} & I_{\gamma} < 2\% \times I_{\gamma}^{max} \\ \hline & I_{\gamma} < 10\% \times I_{\gamma}^{max} \\ \hline & I_{\gamma} > 10\% \times I_{\gamma}^{max} \\ \hline & \gamma \text{ Decay (Uncertain)} \end{array}$
Level Scheme (continued) Intensities: Type not specified & Multiply placed: undivided intensity given	$I_{\gamma} < 2\% \times I_{\gamma}^{max}$ $I_{\gamma} < 10\% \times I_{\gamma}^{max}$ $I_{\gamma} > 10\% \times I_{\gamma}^{max}$ $\gamma \text{ Decay (Uncerta)}$



 $^{110}_{52}{
m Te}_{58}$ 





20

 $^{110}_{52}$ Te<sub>58</sub>-20

From ENSDF





 $^{110}_{52}{
m Te}_{58}$ 





<sup>110</sup><sub>52</sub>Te<sub>58</sub>

Band(N).	STR-4	hand
Danu(IN):	51D-4	Danu

(45-)	14813.3+z
(43-)	2271 12542.2+z
(41-)	<sup>2041</sup> 10501.1+z
(39-)	<sup>1837</sup> 8663.8+z
(37-)	<sup>1659</sup> 7005.1+z
(35-)	<sup>1533</sup> 5472.1+z
(33-)	<sup>1533</sup> 3939.1+z
(31-)	<sup>1445</sup> 2494.1+z
(29-)	<sup>1316</sup> 1177.7+z
(27 <sup>-</sup> )	1178 z

Band(M): STB-3 band

(44+)	1527	'1.0+y
(42+)	<sup>2468</sup> 1280	2.8+y
(40+)	<sup>2242</sup> 1056	0.7+y
(38+)	<sup>2010</sup> 855	0.7+y
(36+)	<sup>1805</sup> 674	5.2+y
(34+)	<sup>1626</sup> 511	9.7+y
(32+)	1463 365	6.3+y
<b>(30</b> <sup>+</sup> )	1331 232	5.6+y
( <b>28</b> <sup>+</sup> )	1217 110	9.0+y
(26+)	1109	у

	Band(I	L): STB-2 band,
Band(l): STB-2 band,		α=0
<i>α</i> =1	(40+)	10737.1+x
(39 <sup>+</sup> ) 9656.5+x		2009
1012	(38+)	8639.1+x
(37 <sup>+</sup> ) 7745.0+x	(36+)	<sup>1738</sup> 6900.6+x
(35 <sup>+</sup> ) <sup>1008</sup> 6076.8+x	(34+)	<sup>1599</sup> 5301.7+x
$\frac{(33^+)}{(31^+)} \frac{1457}{1322} 2257 4 + 7$	(32+)	<sup>1394</sup> 3907.5+x
$(31^{+})$ $102^{-} 3257.4+X$	(30+)	<sup>1260</sup> 2647.7+x
$(27^+)$ 1081 085 26 m	(28+)	1142 1505.2+x
$\frac{(27^{+})}{(25^{+})}$ 985 x	(26 <sup>+</sup> )	1044 461.24+x

Band(K): S'	ГB-1 band,		$\alpha = 1$
α=	=0		
		37-	20637.3
36-	19545.3		2162
1920		35-	18475.3
34-	17625.3	· .	697
1639		33- 1	16778.2
32- 1055	15986.6	. 1	568
20- 1470	14517.2	31	15210.2
30	14517.2	29- 1	<sup>1367</sup> 13843.4
28- 1302	13214.9	27- 1	240 12603.6
26- 1189	12025.9	25-	11492.9
24- 1082	_ 10943.9 🔪	23 1	120 11465.6
22-	9992.5	23-	10455.7
20- 951	0164 1	21-	<u>9560.5</u>
20 828	- 9104.1	19- \	8787.0
10 719	77251	17-	677 8110.0
10 720	//25.1		•

Band(k): STB-1 band,

<sup>110</sup><sub>52</sub>Te<sub>58</sub>



<sup>110</sup><sub>52</sub>Te<sub>58</sub>