Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 111,1471 (2010)	1-May-2009

Q(β^-)=−7.23×10^3 *3*; S(n)=8.85×10^3 *3*; S(p)=4.04×10^3 *4*; Q(α)=1.86×10^3 *3* 2012Wa38
Note: Current evaluation has used the following Q record −7230 308850 304040 301870 30 2003Au03,2009AuZZ.
Production and identification: ^{112}Sn(^{3}He,2n) E=25 MeV. Mass and chemical separation (1976Wi11).

^{113}Te Levels

Cross Reference (XREF) Flags

A ^{113}I ε decay
B (HI,xnγ)

E(level)†	J$^\pi$‡	T$_{1/2}$	XREF	Comments
0	(7/2$^+$)	1.7 min *2*	AB	%ε+%β^+=100 J$^\pi$: 7/2$^+$ probable from log *ft*≈5.7 to 5/2$^+$ level and log *ft*≈5.9 to (9/2$^+$) level. T$_{1/2}$: av of 2.0 min *2* (1974Ch17), 1.4 min *2* (1975BuYW), 1.6 min *2* (1976Wi11).
0+x#	(11/2$^-$)		B	
587.2+x# *5*	(15/2$^-$)		B	
1311.4+x# *7*	(19/2$^-$)		B	
1994.4+x# *9*	(23/2$^-$)		B	
2506.0+x *10*			B	
2786.6+x *10*			B	
2798.3+x@ *10*	(25/2)		B	
2891.2+x *10*			B	
3001.3+x# *10*	(27/2$^-$)		B	
3244.4+x *11*			B	
3430.7+x *11*			B	
3573.5+x *11*	(29/2$^+$)		B	
3806.0+x& *10*	(29/2)		B	
3917.5+x@ *10*			B	
3927.3+x *11*			B	
3975.1+x *11*			B	
4034.6+x# *11*	(31/2$^-$)		B	
4184.7+x *11*			B	
4264.7+x *12*			B	
4273.4+x@ *11*			B	
4377.9+x *11*			B	
4558.2+x *11*			B	
4616.5+x& *11*			B	
4906.3+x *12*			B	
5018.8+x@ *12*			B	
5071.2+x# *12*			B	
5163.1+x& *11*			B	
5188.7+x *11*			B	
5196.2+x *13*			B	
5389.9+x *11*			B	
5551.2+x *12*			B	
5553.6+x *13*			B	

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Adopted Levels, Gammas (continued)

^{113}Te Levels (continued)

E(level)†	XREF	E(level)†	XREF	E(level)†	XREF	E(level)†	XREF
5819.9+x@ *13*	B	6523.2+x *13*	B	7153.0+x# *14*	B	8061.5+x& *14*	B
6149.9+x# *13*	B	6621.8+x& *13*	B	7212.3+x *14*	B	8764.3+x *14*	B
6155.9+x *13*	B	6786.8+x *14*	B	7360.6+x *13*	B		
6204.4+x& *11*	B	6908.4+x@ *14*	B	7689.7+x& *14*	B		

† From least-squares fit to γ energies.
‡ From gammas, DCO ratios, decay patterns and systematics.
# Band(A): Ground-state band.
@ Band(B): γ cascade, on 25/2 (2798.3+x keV).
& Band(C): γ cascade, on 29/2 (3806+x keV).

$\gamma(^{113}Te)$

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.†
587.2+x	(15/2$^-$)	587.2 *5*	100	0+x	(11/2$^-$)	(E2)
1311.4+x	(19/2$^-$)	724.2 *5*	100	587.2+x	(15/2$^-$)	(E2)
1994.4+x	(23/2$^-$)	683.0 *5*	100	1311.4+x	(19/2$^-$)	(E2)
2506.0+x		511.6 *5*	100	1994.4+x	(23/2$^-$)	
2786.6+x		792.2 *5*	100	1994.4+x	(23/2$^-$)	
2798.3+x	(25/2)	803.6 *5*	100	1994.4+x	(23/2$^-$)	D
2891.2+x		896.8 *5*	100	1994.4+x	(23/2$^-$)	
3001.3+x	(27/2$^-$)	1007.2 *5*	100	1994.4+x	(23/2$^-$)	(E2)
3244.4+x		446.2 *5*	100	2798.3+x	(25/2)	
3430.7+x		429.4 *5*	100	3001.3+x	(27/2$^-$)	
3573.5+x	(29/2$^+$)	572.6 *5*	100	3001.3+x	(27/2$^-$)	(E1)
3806.0+x	(29/2)	804.9 *5*	100	3001.3+x	(27/2$^-$)	D
3917.5+x		1118.8 *5*	100	2798.3+x	(25/2)	
3927.3+x		926.1 *5*	100	3001.3+x	(27/2$^-$)	
3975.1+x		973.8 *5*	100	3001.3+x	(27/2$^-$)	
4034.6+x	(31/2$^-$)	1033.0 *5*	100	3001.3+x	(27/2$^-$)	(E2)
4184.7+x		1183.0 *5*	100	3001.3+x	(27/2$^-$)	
4264.7+x		834.0 *5*	100	3430.7+x		
4273.4+x		355.6 *5*	100 *5*	3917.5+x		
		467.7 *5*	50 *4*	3806.0+x	(29/2)	
		1029.2 *5*	46 *4*	3244.4+x		
4377.9+x		572.0 *5*	100	3806.0+x	(29/2)	
4558.2+x		523.2 *5*	42 *3*	4034.6+x	(31/2$^-$)	
		984.8 *5*	100 *4*	3573.5+x	(29/2$^+$)	
4616.5+x		238.6 *5*	10.1 *11*	4377.9+x		
		699.0 *5*	100 *5*	3917.5+x		
		810.6 *5*	97 *5*	3806.0+x	(29/2)	
		1043.9 *5*	66 *3*	3573.5+x	(29/2$^+$)	
4906.3+x		931.2 *5*	100	3975.1+x		
5018.8+x		745.4 *5*	100	4273.4+x		
5071.2+x		1036.6 *5*	100	4034.6+x	(31/2$^-$)	
5163.1+x		546.8 *5*	100 *4*	4616.5+x		
		604.3 *5*	40.4 *21*	4558.2+x		
5188.7+x		1003.7 *5*	39 *11*	4184.7+x		
		1154.3 *5*	86 *11*	4034.6+x	(31/2$^-$)	
		1261.6 *5*	100 *11*	3927.3+x		
5196.2+x		931.5 *5*	100	4264.7+x		
5389.9+x		226.7 *5*	55 *4*	5163.1+x		

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Adopted Levels, Gammas (continued)

$\gamma(^{113}Te)$ (continued)

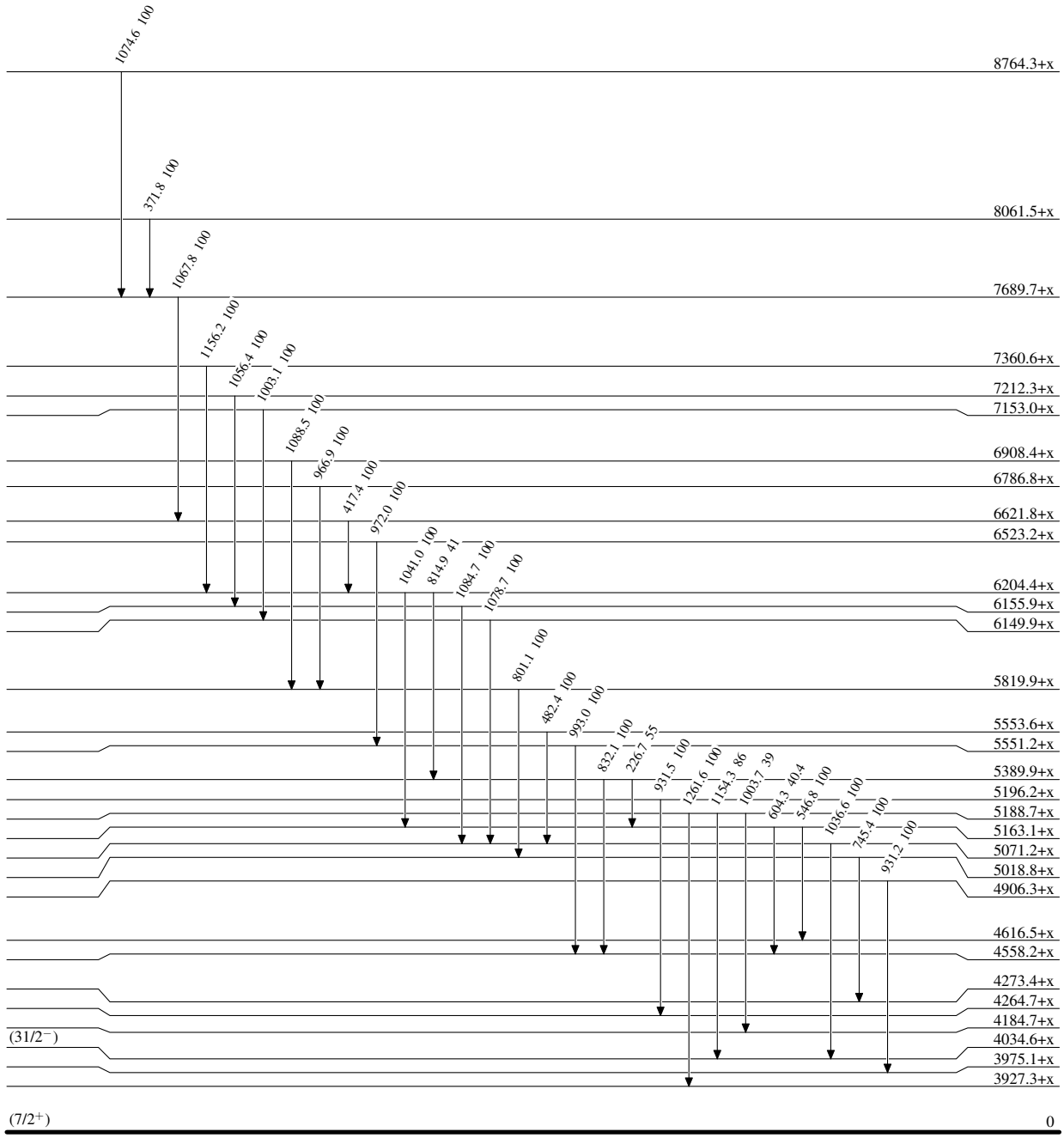
E_i(level)	E_γ	I_γ	E_f	E_i(level)	E_γ	I_γ	E_f
5389.9+x	832.1 *5*	100 *7*	4558.2+x	6621.8+x	417.4 *5*	100	6204.4+x
5551.2+x	993.0 *5*	100	4558.2+x	6786.8+x	966.9 *5*	100	5819.9+x
5553.6+x	482.4 *5*	100	5071.2+x	6908.4+x	1088.5 *5*	100	5819.9+x
5819.9+x	801.1 *5*	100	5018.8+x	7153.0+x	1003.1 *5*	100	6149.9+x
6149.9+x	1078.7 *5*	100	5071.2+x	7212.3+x	1056.4 *5*	100	6155.9+x
6155.9+x	1084.7 *5*	100	5071.2+x	7360.6+x	1156.2 *5*	100	6204.4+x
6204.4+x	814.9 *5*	41 *3*	5389.9+x	7689.7+x	1067.8 *5*	100	6621.8+x
	1041.0 *5*	100 *5*	5163.1+x	8061.5+x	371.8 *5*	100	7689.7+x
6523.2+x	972.0 *5*	100	5551.2+x	8764.3+x	1074.6 *5*	100	7689.7+x

† From DCO ratios.

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

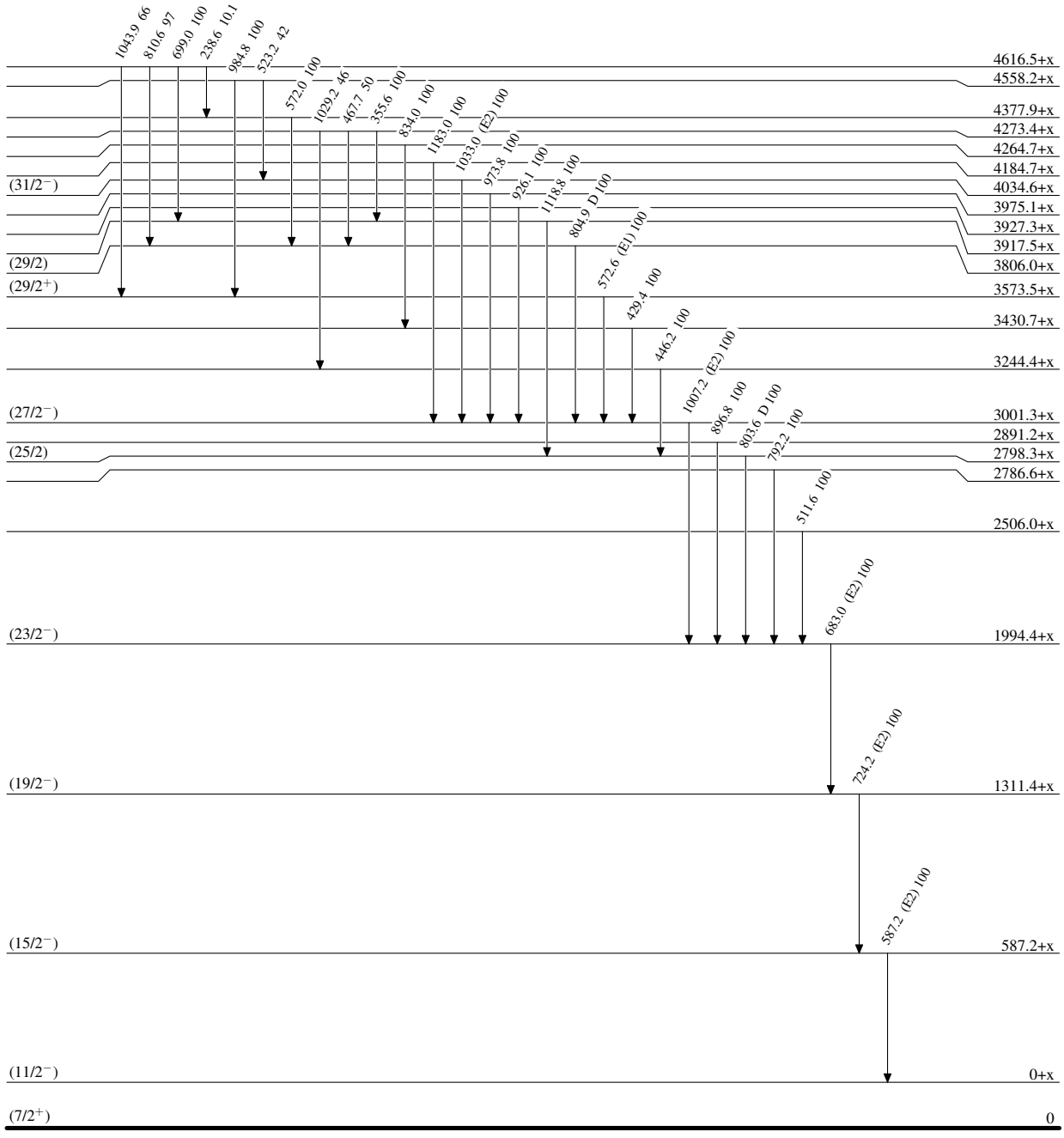


$^{113}_{52}Te_{61}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



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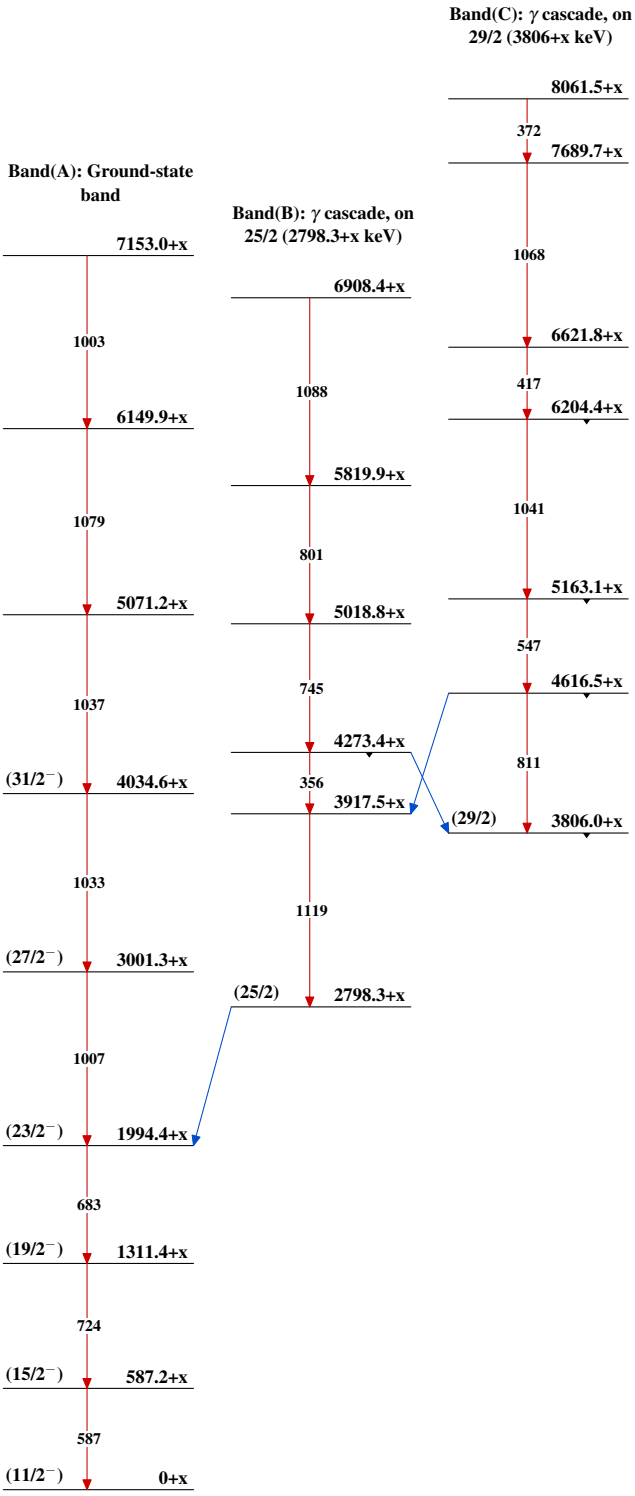
Adopted Levels, Gammas



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