^{176}Yb(^{31}P,Xγ) 2005Po03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. Ohya	NDS 111, 1619 (2010)	20-Jan-2009

^{121}Sb isotope is formed as fission fragment after fusion reaction.

E=152 MeV. Measured Eγ, Iγ, γγ with the EUROBALL IV spectrometer which consisted of 15 Cluster Ge detectors placed in the backward hemisphere with respect to the beam, 26 Clover Ge detectors located around 90°, and 30 tapered single-crystal Ge detectors located at forward angles. Each Cluster detector consisted of seven closely packed large-volume Ge crystals and each Clover detector consisted of four smaller Ge crystals. The detector array also was composed of an inner ball of 210 BGO crystals.

^{121}Sb Levels

E(level)‡	Jπ†	E(level)‡	Jπ†	E(level)‡	Jπ†	E(level)‡	Jπ†
0.0	5/2+	1139.2 *5*	9/2+,11/2+	1650.5# *5*	(13/2+)	2434.7& *7*	(19/2)−
37.4 *4*	7/2+	1144.9 *3*	9/2+	1998.7@ *6*	(15/2+)	2680.8@ *6*	(19/2+)
947.9# *4*	9/2+	1322.7@ *5*	(11/2+)	2142.5& *5*	(15/2)−	2721.2 *8*	(21/2)+
1035.7 *5*	9/2+	1427.1& *4*	(11/2)−	2357.7# *6*	(17/2+)		

† From Adopted Levels.
‡ From least-squares fit to Eγ′s.
# Band(A): 9/2[404], α=+1/2.
@ Band(a): 9/2[404], α=−1/2.
& Band(B): Based on (11/2−).

γ(^{121}Sb)

Eγ	Iγ	Ei(level)	Jiπ	Ef	Jfπ	Comments
37.14		37.4	7/2+	0.0	5/2+	Eγ: rounded-off value from adopted gammas.
282.0 *4*	13 *4*	1427.1	(11/2)−	1144.9	9/2+	
286.5 *4*	23 *6*	2721.2	(21/2)+	2434.7	(19/2)−	
288.0 *5*	2.5 *10*	1427.1	(11/2)−	1139.2	9/2+,11/2+	
292.2 *4*	30 *6*	2434.7	(19/2)−	2142.5	(15/2)−	
323.0 *4*	27 *7*	2680.8	(19/2+)	2357.7	(17/2+)	
327.9 *3*	60 *6*	1650.5	(13/2+)	1322.7	(11/2+)	
348.1 *3*	50 *7*	1998.7	(15/2+)	1650.5	(13/2+)	
359.0 *3*	34 *7*	2357.7	(17/2+)	1998.7	(15/2+)	
374.9 *3*	100 *10*	1322.7	(11/2+)	947.9	9/2+	
391.4 *3*	34 *6*	1427.1	(11/2)−	1035.7	9/2+	
676.1 *4*	15 *5*	1998.7	(15/2+)	1322.7	(11/2+)	
682.3 *4*	12 *4*	2680.8	(19/2+)	1998.7	(15/2+)	
702.5 *4*	10 *3*	1650.5	(13/2+)	947.9	9/2+	
707.0 *4*	13 *4*	2357.7	(17/2+)	1650.5	(13/2+)	
715.4 *3*	50 *7*	2142.5	(15/2)−	1427.1	(11/2)−	
910.0 *5*	93 *10*	947.9	9/2+	37.4	7/2+	
948.3 *5*	17 *4*	947.9	9/2+	0.0	5/2+	
998.3 *3*	34 *6*	1035.7	9/2+	37.4	7/2+	
1102.0 *5*	2.5 *10*	1139.2	9/2+,11/2+	37.4	7/2+	
1107.5 *4*	3.5 *10*	1144.9	9/2+	37.4	7/2+	
1144.7 *3*	10 *2*	1144.9	9/2+	0.0	5/2+	

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Level Scheme

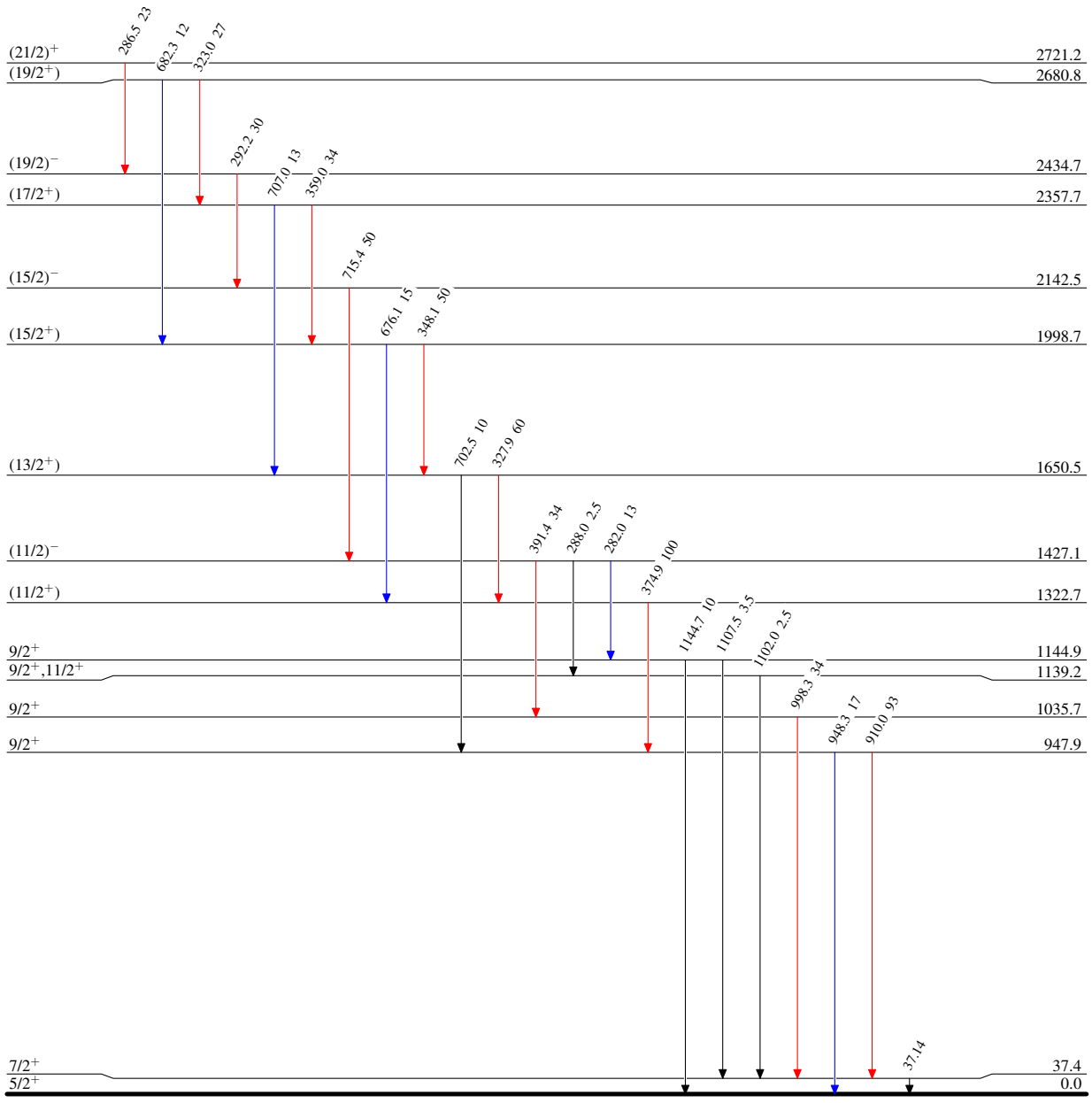
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{121}_{51}Sb_{70}$

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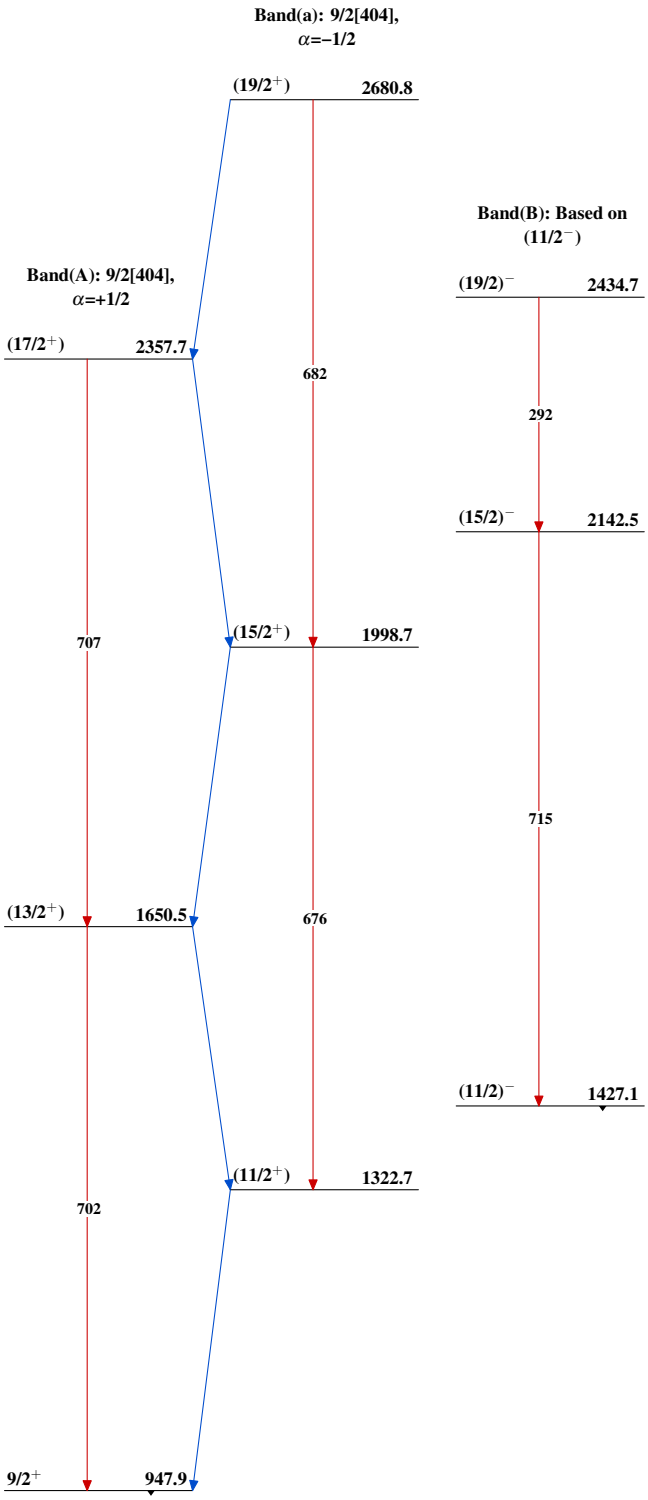

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