^{123}Sb(n,γ) E=21.4 eV 1970Bh01,1972LoZK

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. Katakura, Z. D. Wu	NDS 109, 1655 (2008)	1-Apr-2008

1970Bh01: E(n)=21.6 eV.
1972LoZK: E(n)=21.4 eV.

^{124}Sb Levels

E(level)†	Jπ&	E(level)†	Jπ&	E(level)†	E(level)†	Jπ&
0.0	3^-	593# *2*		1237.3 *5*	1746.0‡ *20*	
10.9 *1*	5^+	856.0 *1*	4^-,5	1242.5 *3*	1832.8‡ *20*	
40.8 *1*	3^+,4^+	863.0 *1*	3,4	1285.6 *4*	1882.2‡ *20*	
87.6 *1*	4^-	1031.2 *6*		1301.8@ *20*	1952.7‡ *20*	$(^+)$
131.7 *1*	$(5)^-$	1053.1 *1*		1566# *2*	2038.6‡ *20*	
214.6 *1*	3^+,4^+,5^+	1059.6 *1*		1586# *2*	2050.1‡ *20*	
221.5‡ *20*		1075.1‡ *20*		1596# *2*	2165.1‡ *20*	
231.5‡ *20*		1129.2 *3*		1605.2@ *20*	2179.2‡ *20*	
287.1 *1*	3^+,4^+	1143.3 *5*		1616.8@ *20*	2220.6‡ *20*	
402.9 *1*	3^+,4^+	1159.6 *6*		1689# *2*	S(n)+0.0214	4^+
439.2 *1*	4^-,5^-	1180.7 *6*		1716.6@ *20*		

† Rounded values from ^{123}Sb(n,γ) E=th, unless otherwise noted.
‡ Calculated by evaluators from S(n) given in 2003Au03 and energies of primary γ's given in 1970Bh01.
# Only observed by 1972LoZK. E(levels) are calculated by evaluators from S(n) given in 2003Au03 and energies of primary γ's given in 1972LoZK.
@ Calculated by evaluators from S(n) given in 2003Au03 and energies of primary γ's given in 1970Bh01. This level was also observed by 1972LoZK.
& From Adopted Levels.

γ(^{124}Sb)

E_γ†	I_γ†	E_i(level)	J_i^π	Comments
4246.9 *20*	7.2 *12*	S(n)+0.0214	4^+	
4288.3 *20*	5 *2*	S(n)+0.0214	4^+	
4302.4 *20*	21 *3*	S(n)+0.0214	4^+	
4417.4 *20*	16 *3*	S(n)+0.0214	4^+	
4428.9 *20*	17 *3*	S(n)+0.0214	4^+	
4514.8 *20*	13 *3*	S(n)+0.0214	4^+	
4585.3 *20*	11 *3*	S(n)+0.0214	4^+	
4634.7 *20*	16 *3*	S(n)+0.0214	4^+	
4721.5 *20*	11 *2*	S(n)+0.0214	4^+	
4750.9 *20*	12 *2*	S(n)+0.0214	4^+	I_γ: 8.5 *10* (1972LoZK).
4778‡ *2*	6.2‡ *10*	S(n)+0.0214	4^+	
4850.7 *20*	29 *3*	S(n)+0.0214	4^+	I_γ: 20.9 *10* (1972LoZK).
4862.3 *20*	16 *3*	S(n)+0.0214	4^+	I_γ: 12.4 *10* (1972LoZK).
4871‡ *2*	4.7‡ *10*	S(n)+0.0214	4^+	
4881‡ *2*	5.4‡ *10*	S(n)+0.0214	4^+	
4901‡ *2*	5.4‡ *10*	S(n)+0.0214	4^+	
5165.7 *20*	10.7 *17*	S(n)+0.0214	4^+	I_γ: 7.0 *10* (1972LoZK).
5180.6 *20*	14 *2*	S(n)+0.0214	4^+	I_γ: 9.3 *10* (1972LoZK).
5224.6 *20*	21 *2*	S(n)+0.0214	4^+	I_γ: 8.5 *10* (1972LoZK).

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^{123}Sb(n,γ) E=21.4 eV 1970Bh01,1972LoZK (continued)

$\gamma(^{124}Sb)$ (continued)

E_γ[†]	I_γ[†]	E_i(level)	J_i^π	Comments
5233[‡] *2*	3.1[‡] *10*	S(n)+0.0214	4^+	
5283.8 *20*	7.8 *14*	S(n)+0.0214	4^+	I_γ: 7.8 *10* (1972LoZK).
5307.1 *20*	6.4 *12*	S(n)+0.0214	4^+	
5321.0 *20*	4.0 *9*	S(n)+0.0214	4^+	
5338.1 *20*	12 *3*	S(n)+0.0214	4^+	I_γ: 7.8 *10* (1972LoZK).
5392.4 *20*	3.5 *12*	S(n)+0.0214	4^+	
5406.6 *20*	9.8 *17*	S(n)+0.0214	4^+	I_γ: 4.7 *10* (1972LoZK).
5413[‡] *2*	4.7[‡] *10*	S(n)+0.0214	4^+	
5435.4 *20*	7.2 *17*	S(n)+0.0214	4^+	I_γ: 7.0 *10* (1972LoZK).
5604.2 *20*	14 *3*	S(n)+0.0214	4^+	I_γ: 20.9 *10* (1972LoZK).
5612.6 *20*	5 *3*	S(n)+0.0214	4^+	
5874[‡] *2*	5.4[‡] *10*	S(n)+0.0214	4^+	
6027.5 *20*	15.0 *12*	S(n)+0.0214	4^+	I_γ: 12.4 *10* (1972LoZK).
6065.0 *20*	5.2 *17*	S(n)+0.0214	4^+	
6179 *2*	6.1 *12*	S(n)+0.0214	4^+	
6236.0 *20*	3.2 *6*	S(n)+0.0214	4^+	
6246.0 *20*	4.3 *17*	S(n)+0.0214	4^+	
6254.7 *20*	15.9 *12*	S(n)+0.0214	4^+	I_γ: 12.4 *10* (1972LoZK).
6336.0 *20*	40 *3*	S(n)+0.0214	4^+	I_γ: 38.0 *10* (1972LoZK).
6380.2 *20*	100	S(n)+0.0214	4^+	
6426.0 *20*	9 *2*	S(n)+0.0214	4^+	
6457.6 *20*	18 *2*	S(n)+0.0214	4^+	I_γ: 16.3 *10* (1972LoZK).
6468.1 *20*	51 *3*	S(n)+0.0214	4^+	I_γ: 48.1 *10* (1972LoZK).

[†] From 1970Bh01. Iγ are relative to I(6380.2γ)=100. Iγ's are also reported by 1972LoZK.
[‡] Eγ and Iγ from 1972LoZK.