^{123}Sb(d,p) 1967Hj04

History

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

$J^{\pi}(^{123}Sb)=7/2^{+}$.

1967Hj04: E(d)=15 MeV; enriched metallic target, magnetic spectrograph, p(θ), FWHM≈50 keV.

^{124}Sb Levels

The level energies have large uncertainties mainly because of uncertain energy calibration. In addition, uncertainty is provided by the subtraction of a large background from a relatively thick Au target backing.

L and S′ values were obtained from comparison of experimental angular distributions with those obtained from the ^{124}Sn(d,p) results by 1967Sc12. 1967Hj04 consider many of the L values uncertain because of poor energy resolution, poor statistics, and interference from strong sulfur contaminant peaks.

E(level)†	L	C^2S'	E(level)†	L	C^2S'	E(level)†	L	C^2S'
15 *15*	2+(5)	0.35+1.3	1286 *40*	(2+4)	0.28+0.82	2465 *40*		
70 *15*	0+2	0.22+0.15	1379? *40*			2555 *40*	2	0.27
126 *15*	(5)	2.8	1446? *40*	(0+2)	0.01+0.01	2615 *40*	3	0.31
205 *15*	0+2	0.46+0.23	1585 *40*	(2)	0.059	2685? *40*	(1)	0.18
285 *15*	0+2	0.11+0.34	1711 *40*			2735 *40*	(1)	0.17
389? *15*			1851? *40*			2795 *40*	3	0.52
839? *30*			1925 *40*	(0+2)	0.02+0.02	2875 *40*	3	0.41
1065? *40*			2305 *40*			2935 *40*	3	0.35
1176 *40*			2375 *40*	(4,3)	0.98,0.16			

† E(levels) from 1967Hj04 with the addition of 36 keV to the authors′ data to compensate for the systematic deviation from other E(level) data (evaluators).