

^{117}Sb $Z = 51$ $N = 66$ adopted link ENSDF link

Based on ENSDF from Oct 2022, and mass evaluation from 2020

BE = 993.084 (0.008) MeV

Qbeta+ = 1.758 (0.008) MeV

	Energy T	J+	J-	J-other	T1/2
117SB	1 0.000	5/2+			1 2.80 H 1
117SB	2 0.527	7/2+			2
117SB	3 0.720	1/2+			3
117SB	4 0.924	3/2+			4 118 FS +70-35
117SB	5 1.089	7/2+			5 1.5E+2 FS +15-6
117SB	6 1.160	9/2+			6 2 PS GT
117SB	7 1.311	9/2+			7 50 FS GT
117SB	8		1.323 11/2-		8 3.8 NS 2
117SB	9			1.354 (1/2,3/2)	9
117SB	10			1.379 7/2	10 1.5E+2 FS +15-6
117SB	11			1.380 3/2+,5/2+	11
117SB	12			1.396	12
117SB	13			1.454 1/2+,3/2+,5/2+	13
117SB	14			1.472 7/2	14 367 FS GE
117SB	15 1.488	9/2+			15 0.8 PS 3
117SB	16 1.535	11/2+			16
117SB	17			1.537 (9/2+)	17 243 FS GE
117SB	18			1.624 3/2	18 132 FS GE
S-alpha=	1.697 (0.008)				
117SB	19 1.711	11/2+			19 1.4 PS +4-3
117SB	20			1.716 1/2+,3/2+	20 32 FS +7-6
117SB	21			1.752	21 2.4E+2 FS +31-9
117SB	22 1.761	9/2+			22
117SB	23			1.811 1/2+,3/2+	23
117SB	24 1.871	13/2+			24
117SB	25			2.033 (11/2+)	25
117SB	26 2.040	11/2+			26 1.4 PS +14-3
117SB	27			2.085	27 66 FS +30-18
117SB	28 2.187	13/2+			28 0.7 PS +4-2
117SB	29			2.213 3/2+,5/2+	29
117SB	30			2.228	30 0.5 PS AP
117SB	31 2.237	15/2+			31
117SB	32			2.242 (13/2+)	32
117SB	33 2.285	1/2+			33
117SB	34			2.300 1/2+,3/2+	34 14 FS +10-8
117SB	35		2.323 15/2-		35 2 PS GT
117SB	36 2.356	13/2+			36

117SB 37		2.410	1/2+							37	
117SB 38					2.413	15/2-				38	
117SB 39								2.520		39	
117SB 40					2.525	17/2-				40	

117SB 41		2.527	15/2+							41	
117SB 42								2.610		42	
117SB 43		2.625	17/2+							43 1 PS AP	
117SB 44								2.760	+	44	
117SB 45		2.779	17/2+							45 1.4 PS GT	
117SB 46					2.780	19/2-				46 0.50 NS 15	
117SB 47					2.842	17/2-				47 1.1 PS +4-3	
117SB 48					2.845	19/2-				48	
117SB 49					2.875	19/2-				49 0.2 NS LT	
117SB 50		3.058	19/2+							50	

117SB 51								3.060		51	
117SB 52								3.073	(21/2)-	52 0.1 NS LT	
117SB 53								3.098		53	
117SB 54								3.131	(25/2)+	54 355 US 17	
117SB 55								3.174		55	
117SB 56					3.214	19/2-				56 1.4 PS GT	
117SB 57		3.230	19/2+							57	
117SB 58								3.231	(23/2-)	58 290 NS 5	
117SB 59								3.416	(23/2-)	59 1.1 PS 3	
117SB 60								3.438	(25/2-)	60	

117SB 61								3.486	(21/2+)	61	
117SB 62								3.495		62	
117SB 63								3.502		63	
117SB 64								3.523	(21/2+)	64	
117SB 65								3.741	(27/2-)	65	
117SB 66								3.837		66	
117SB 67								4.001	(23/2+)	67	
117SB 68		4.030	23/2+							68	
117SB 69								4.077		69	
117SB 70								4.107	(29/2-)	70	

117SB 71								4.116	(27/2-)	71	
117SB 72								4.297	(25/2+)	72	
S-p	=	4.403	(0.008)	-----							
117SB 73								4.425	(25/2+)	73	
117SB 74								4.509	(31/2-)	74	
117SB 75								4.555	(25/2+)	75	
117SB 76								4.679		76	
117SB 77								4.749		77	
117SB 78		4.759	27/2+							78	
117SB 79		4.902	27/2+							79	
117SB 80								4.929	(31/2-)	80	

117SB 81				4.937	(33/2-)	81
117SB 82				5.028	(27/2+)	82
117SB 83				5.170		83
117SB 84				5.172	(29/2+)	84
117SB 85				5.183	(29/2+)	85
117SB 86				5.394	(35/2-)	86
117SB 87				5.572	(31/2+)	87
117SB 88				5.824	(31/2+)	88
117SB 89				5.837	(35/2-)	89
117SB 90				5.883	(37/2-)	90

117SB 91				6.009	(33/2+)	91
117SB 92				6.121	(33/2+)	92
117SB 93				6.404	(39/2-)	93
117SB 94				6.762	(35/2+)	94
117SB 95				6.829	(39/2-)	95
117SB 96				6.951	(41/2-)	96
117SB 97				7.117	(37/2+)	97
117SB 98				7.906	(43/2-)	98
117SB 99				8.185	(41/2+)	99

S-p = 4.403 (0.008)-----
S-n = 9.889 (0.010)-----
S-2p = 13.681 (0.008)-----
S-2n = 17.779 (0.018)-----
S-alpha= 1.697 (0.008)-----

S+p = -6.340 (0.020)
S+n = -7.428 (0.009)
S+2p = -9.716 (0.023)
S+2n = -16.979 (0.011)
S+alpha = -0.031 (0.010)

gap p = -1.938 (0.022)
gap n = 2.461 (0.013)
gap 2p = 3.965 (0.025)
gap 2n = 0.800 (0.021)
gap alpha = 1.666 (0.013)