

^{122}Ba $Z = 56$ $N = 66$ adopted link ENSDF link

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

BE = 1015.498 (0.028) MeV

Qbeta+ = 3.536 (0.044) MeV

	Energy T	J+	J-	J-other	T1/2

S-alpha=	-1.045	(0.030)	-----		
122BA 1	0.000	0+			1 1.95 M 15
122BA 2	0.196	2+			2 297 PS 27
122BA 3				0.569 (4+)	3
122BA 4				0.618 (2+)	4
122BA 5				0.939	5
122BA 6				1.082 (6+)	6
122BA 7				1.168 (3+)	7
122BA 8				1.205 (4+)	8
122BA 9				1.272	9
122BA 10				1.604 (5+)	10

122BA 11				1.702 (8+)	11
122BA 12				1.883 (5-)	12
122BA 13				2.142 (7+)	13
122BA 14				2.205 (7-)	14
122BA 15				2.298 (6-)	15
122BA 16				2.396 (10+)	16
122BA 17				2.640 (9-)	17
122BA 18				2.664 (8-)	18
122BA 19				2.694 (6-)	19
122BA 20				2.705 (6-)	20

122BA 21				2.714 (7-)	21
122BA 22				2.766 (9+)	22
122BA 23				2.805 (7-)	23
122BA 24				2.956 (8-)	24
122BA 25				3.118 (10-)	25
122BA 26				3.122 (12+)	26
122BA 27				3.155 (9-)	27
122BA 28				3.181 (11-)	28
122BA 29				3.393 (10-)	29
122BA 30				3.452 (11+)	30

122BA 31				3.669 (11-)	31
122BA 32				3.701 (12-)	32
122BA 33				3.827 (13-)	33
122BA 34				3.836 (14+)	34
122BA 35				3.981 (12-)	35
122BA 36				4.325 (13-)	36

122BA	37				4.397	(14-)	37
122BA	38				4.572	(16+)	38
122BA	39				4.572	(15-)	39
122BA	40				4.697	(14-)	40

S-p = 4.796 (0.031)-----

122BA	41				5.097	(15-)	41
122BA	42				5.181	(16-)	42
122BA	43				5.380	(18+)	43
122BA	44				5.397	(17-)	44
122BA	45				5.517	(16-)	45
122BA	46				5.963	(17-)	46
122BA	47				6.035	(18-)	47
122BA	48				6.269	(20+)	48
122BA	49				6.285	(19-)	49
122BA	50				6.424	(18-)	50

122BA	51				6.910	(19-)	51
122BA	52				6.964	(20-)	52

S-2p = 7.014 (0.030)-----

122BA	53				7.237	(21-)	53
122BA	54				7.252	(22+)	54
122BA	55				7.408	(20-)	55
122BA	56				7.930	(21-)	56
122BA	57				7.984	(22-)	57
122BA	58				8.259	(23-)	58
122BA	59				8.328	(24+)	59
122BA	60				8.467	(22-)	60

122BA	61				9.033	(23-)	61
122BA	62				9.084	(24-)	62
122BA	63				9.362	(25-)	63
122BA	64				9.496	(26+)	64
122BA	65				9.612	(24-)	65

S-p = 4.796 (0.031)-----

S-n = 11.935 (0.145)-----

S-2p = 7.014 (0.030)-----

S-2n = 21.863 (0.301)-----

S-alpha= -1.045 (0.030)-----

S+p = -1.343 (0.248)

S+n = -9.117 (0.030)

S+2p = -4.898 (0.250)

S+2n = -20.624 (0.031)

S+alpha = 1.363 (0.040)

gap p = 3.453 (0.250)

gap n = 2.818 (0.148)

gap 2p = 2.117 (0.251)
gap 2n = 1.239 (0.303)
gap alpha = 0.318 (0.050)