

^{135}Ba $Z = 56$ $N = 79$ adopted link ENSDF link

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

BE = 1133.667 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
135BA 1	0.000	3/2+			1 STABLE
135BA 2	0.221	1/2+			2 0.64 NS 27
135BA 3			0.268 11/2-		3 28.7 H 2
135BA 4	0.481	5/2+			4 13 PS 2
135BA 5	0.588	3/2+			5
135BA 6				0.714 (7/2-)	6
135BA 7	0.855	3/2+			7
135BA 8	0.875	7/2+			8 1.32 PS 5
135BA 9	0.910	1/2+			9
135BA 10				0.951 (15/2-)	10
135BA 11				0.980 3/2+,5/2+	11
135BA 12				1.008	12
135BA 13				1.130	13
135BA 14				1.165	14
135BA 15				1.200	15
135BA 16				1.214 (3/2)	16
135BA 17				1.226 (3/2)	17
135BA 18				1.238 (5/2)	18
135BA 19				1.299 (1/2+,3/2+)	19
135BA 20			1.446 7/2-		20
135BA 21				1.557 (5/2,7/2+)	21
135BA 22				1.585 (3/2)-	22
135BA 23				1.609 (1/2+,3/2+)	23
135BA 24				1.671 (3/2-)	24
135BA 25				1.720 (1/2+,3/2+)	25
135BA 26				1.787 (5/2-)	26
135BA 27				1.794 (1/2,3/2)	27
135BA 28				1.831 (1/2,3/2)	28
S-alpha=	1.862 (0.000)				
135BA 29				1.871 (3/2+,5/2)	29
135BA 30				1.879 (1/2,3/2)	30
135BA 31				1.941 (3/2+,5/2+)	31
135BA 32				1.955 (11/2+)	32
135BA 33				1.965 (1/2+,3/2+)	33
135BA 34				1.972 (3/2,5/2)	34
135BA 35				1.991 (3/2,5/2)	35
135BA 36				1.998 (1/2)-	36
135BA 37				2.003 (19/2-)	37

135BA 38				2.075	(3/2,5/2+)	38
135BA 39				2.077	(1/2-,3/2-)	39
135BA 40				2.118	(1/2,3/2)	40

135BA 41				2.134	(19/2-)	41
135BA 42				2.151	(1/2,3/2)	42
135BA 43				2.283		43
135BA 44				2.334		44
135BA 45				2.388		45
135BA 46				2.394	(21/2-)	46
135BA 47				2.397	(1/2+,3/2)	47
135BA 48				2.420		48
135BA 49				2.440		49
135BA 50				2.448	1/2-,3/2-	50

135BA 51				2.478	(5/2-)	51
135BA 52				2.485		52
135BA 53				2.496		53
135BA 54				2.579	(1/2+,3/2)	54
135BA 55				2.602		55
135BA 56				2.621		56
135BA 57				2.638		57
135BA 58				2.651		58
135BA 59				2.658	(1/2,3/2)	59
135BA 60				2.667		60

135BA 61				2.688	(1/2,3/2)	61
135BA 62				2.708		62
135BA 63				2.711	1/2,3/2	63
135BA 64				2.730	1/2,3/2	64
135BA 65				2.740	(23/2-)	65
135BA 66				2.781	(1/2-,3/2-)	66
135BA 67				2.825	(23/2+)	67
135BA 68				2.850	(5/2-,7/2-)	68
135BA 69				2.873	(1/2,3/2)	69
135BA 70				2.888	(1/2,3/2)	70

135BA 71				2.897	(1/2+,3/2)	71
135BA 72				2.947	(5/2-)	72
135BA 73				3.084	(21/2+)	73
135BA 74				3.086	1/2,3/2	74
135BA 75				3.093	(1/2,3/2)	75
135BA 76				3.111		76
135BA 77				3.122		77
135BA 78				3.126		78
135BA 79				3.148		79
135BA 80				3.154	(1/2-,3/2-)	80

135BA 81				3.163		81
135BA 82				3.169	(1/2,3/2)	82

135BA 83			3.182		83
135BA 84			3.190		84
135BA 85			3.196		85
135BA 86			3.210	(27/2-)	86
135BA 87			3.212	(23/2+)	87
135BA 88			3.272		88
135BA 89			3.294	(1/2,3/2)	89
135BA 90			3.324		90

135BA 91			3.410		91
135BA 92			3.415		92
135BA 93			3.416	(25/2+)	93
135BA 94			3.422		94
135BA 95			3.454		95
135BA 96			3.510	(1/2,3/2)	96
135BA 97			3.587		97
135BA 98			3.633	(1/2,3/2)	98
135BA 99			3.648	(29/2-)	99
135BA 100			3.656		100

135BA 101			3.670		101
135BA 102			3.696		102
135BA 103			3.708		103
135BA 104			3.720		104
135BA 105			3.753		105
135BA 106			3.758	(27/2+)	106
135BA 107			3.779		107
135BA 108			3.786	(1/2,3/2)	108
135BA 109			3.805	(29/2-)	109
135BA 110			3.813		110

135BA 111			3.881		111
135BA 112			3.930		112
135BA 113			4.072		113
135BA 114			4.181	(29/2+)	114
135BA 115			4.254	(31/2+)	115
135BA 116			4.269		116
135BA 117			4.696	(31/2+)	117
135BA 118			4.713	(35/2+)	118
135BA 119			4.729		119
135BA 120			4.817	(33/2-)	120

135BA 121			4.890		121
135BA 122			4.940		122
135BA 123			5.023	(33/2+)	123
135BA 124			5.236	(33/2+)	124
135BA 125			5.850	(35/2+)	125

S-p = 8.248 (0.000)-----

S-n = 6.972 (0.000)-----
S-2p = 14.785 (0.002)-----
S-2n = 16.440 (0.001)-----
S-alpha= 1.862 (0.000)-----

S+p = -5.476 (0.053)
S+n = -9.108 (0.000)
S+2p = -12.646 (0.000)
S+2n = -16.014 (0.000)
S+alpha = -1.532 (0.002)

gap p = 2.773 (0.053)
gap n = -2.136 (0.000)
gap 2p = 2.139 (0.002)
gap 2n = 0.426 (0.001)
gap alpha = 0.330 (0.002)