

^{136}La $Z = 57$ $N = 79$ adopted link ENSDF link

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

BE = 1139.143 (0.053) MeV
 Qbeta- = 0.471 (0.053) MeV
 Qbeta+ = 2.850 (0.053) MeV

	Energy T	J+	J-	J-other	T1/2
136LA 1	0.000	1+			1 9.87 M 3
136LA 2				0.022 (2)+	2
136LA 3				0.044 (3)+	3
136LA 4				0.140 (4)+	4
136LA 5				0.158 (5)+	5
136LA 6				0.172 (3)+	6
136LA 7				0.212 (2)	7
136LA 8				0.241	8
136LA 9				0.257 +	9
136LA 10				0.259 (7-)	10 114 MS 5
136LA 11				0.270 (3)	11 17 NS 4
136LA 12				0.275	12
136LA 13				0.290 (7+,8)	13
136LA 14				0.304	14
136LA 15				0.332 (2,3,4)	15
136LA 16				0.342 (8-)	16
136LA 17				0.343	17
136LA 18				0.346	18
136LA 19				0.382 (4)	19
136LA 20				0.393	20
136LA 21				0.403	21
136LA 22				0.414 (3)	22
136LA 23				0.437 (2,3,4)	23
136LA 24				0.484	24
136LA 25				0.540 (8-)	25
136LA 26				0.548	26
136LA 27				0.555	27
136LA 28				0.563 (3)	28
136LA 29				0.571	29
136LA 30				0.594	30
136LA 31				0.599	31
136LA 32				0.617	32
136LA 33				0.629	33
136LA 34				0.659	34
136LA 35				0.666	35
136LA 36				0.704	36

136LA 37				0.711		37
136LA 38				0.726		38
136LA 39				0.749	(3)	39
136LA 40				0.753		40

136LA 41				0.798		41
136LA 42				0.801	(9)	42
136LA 43				0.829		43
136LA 44				0.840		44
136LA 45				0.861		45
136LA 46				0.945		46
136LA 47				0.961		47
136LA 48				0.972		48
136LA 49				0.984	(4)	49
136LA 50				0.988		50

136LA 51				0.999		51
136LA 52				1.006		52
136LA 53				1.024	(10-)	53
136LA 54				1.028		54
136LA 55				1.060		55
136LA 56				1.076		56
136LA 57				1.114		57
136LA 58				1.125	(9+)	58
136LA 59				1.155		59
136LA 60				1.180		60

136LA 61				1.211		61
136LA 62				1.247		62
136LA 63				1.257		63
136LA 64				1.281	(10+)	64
136LA 65				1.283		65

S-alpha=	1.310	(0.053)	-----		
136LA 66				1.311		66
136LA 67				1.336		67
136LA 68				1.522	(10-)	68
136LA 69				1.688	(11+)	69
136LA 70				1.729	(5)	70

136LA 71				1.875	(10+)	71
136LA 72				2.113	(12+)	72
136LA 73				2.114	(12-)	73
136LA 74				2.371	(13+)	74
136LA 75				2.372	(13-)	75
136LA 76				2.466		76
136LA 77				2.521	(14+)	77
136LA 78				2.548	(14-)	78
136LA 79				2.580	(12-)	79
136LA 80				2.614	(13-)	80

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136LA 81				2.692		81
136LA 82				2.768	(6)	82
136LA 83				2.791	(13-)	83
136LA 84				2.811	(12,13,14)	84
136LA 85				2.892	(7)	85
136LA 86				2.920		86
136LA 87				2.970	(14-)	87
136LA 88				2.986		88
136LA 89				2.991	(8)	89
136LA 90				3.071	(14-)	90

136LA 91				3.117	(15+)	91
136LA 92				3.124		92
136LA 93				3.162		93
136LA 94				3.226	(9)	94
136LA 95				3.314	(14+)	95
136LA 96				3.392	(14,15-)	96
136LA 97				3.406	(15-)	97
136LA 98				3.686	(15+)	98
136LA 99				3.735	(16+)	99
136LA 100				3.822	(15-,16-)	100

136LA 101				3.844	(16-)	101
136LA 102				3.862	(16+)	102
136LA 103				4.147	(17+)	103
136LA 104				4.294		104
136LA 105				4.394	(17-)	105
136LA 106				4.401	(17+)	106
136LA 107				4.631	(18+)	107
136LA 108				4.869	(19+)	108
136LA 109				4.937		109
136LA 110				5.029		110

136LA 111				5.075	(18-)	111
136LA 112				5.082		112
136LA 113				5.200		113
136LA 114				5.467		114
S-p = 5.476 (0.053)	-----					
136LA 115				5.910	(19-)	115

S-p = 5.476 (0.053)-----
S-n = 7.465 (0.054)-----
S-2p = 13.724 (0.053)-----
S-2n = 16.961 (0.057)-----
S-alpha= 1.310 (0.053)-----

S+p = -7.170 (0.053)
S+n = -9.175 (0.053)
S+2p = -11.670 (0.054)

S+2n = -16.619 (0.053)
S+alpha = -1.074 (0.054)

gap p = -1.695 (0.075)
gap n = -1.710 (0.076)
gap 2p = 2.055 (0.076)
gap 2n = 0.343 (0.078)
gap alpha = 0.236 (0.075)