

^{130}Ba $Z = 56$ $N = 74$ [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 1092.721 (0.003) MeV

	Energy T	J+	J-	J-other	T1/2
130BA 1	0.000	0+			1 STABLE
130BA 2	0.357	2+			2 41.8 PS 12
S-alpha= 0.540 (0.004)					
130BA 3				0.889	3
130BA 4	0.902	4+			4 3.83 PS 6
130BA 5	0.908	2+			5
130BA 6	1.179	0+			6
130BA 7				1.361	7 3(+)
130BA 8				1.478	8 (4+)
130BA 9				1.544	9
130BA 10	1.558	2+			10
130BA 11	1.593	6+			11 0.98 PS 6
130BA 12	1.845	4+			12
130BA 13	1.883	2+			13
130BA 14				1.919	14 3
130BA 15				1.948	15 (3-)
130BA 16	2.013	5+			16
130BA 17				2.054	17 (3,4+)
130BA 18				2.079	18 3(+)
130BA 19				2.101	19 (6+)
130BA 20				2.168	20 (5-)
130BA 21				2.183	21
130BA 22				2.230	22
130BA 23				2.248	23 (3,4+)
130BA 24				2.269	24
130BA 25				2.280	25
130BA 26				2.318	26 (3,4+)
130BA 27				2.347	27 3(+)
130BA 28	2.395	8+			28 0.49 PS 14
130BA 29				2.408	29
130BA 30				2.434	30
130BA 31			2.475	8-	31 9.4 MS 4
130BA 32				2.557	32
130BA 33				2.568	33 (7-)
130BA 34				2.602	34
130BA 35				2.646	35 3(+)
130BA 36				2.734	36 (1,2+)
130BA 37				2.784	37 (3,4+)

130BA 38				2.800	(8+)	38
130BA 39				2.891	(1 TO 4)	39
130BA 40				2.928		40

130BA 41				2.929	(8-)	41
130BA 42				2.935		42
130BA 43				3.067	(9-)	43 5.27 PS 14
130BA 44		3.260	10+			44 0.55 PS 7
130BA 45				3.265		45
130BA 46				3.290		46
130BA 47				3.423	(10+)	47
130BA 48				3.435	(10-)	48
130BA 49				3.603	(10+)	49
130BA 50				3.659	(11-)	50 2.10 PS 9

130BA 51				3.660	(2+,3,4+)	51
130BA 52				3.676		52
130BA 53				3.705	(2+,3,4+)	53
130BA 54				3.712		54
130BA 55				3.790	(10+)	55
130BA 56				3.799		56
130BA 57				3.963		57
130BA 58				3.990	(12)+	58 2.15 PS 21
130BA 59				4.007		59
130BA 60				4.078	(12-)	60

130BA 61				4.222	(12+)	61
130BA 62				4.256	(12+)	62 1.52 PS 14
130BA 63				4.354	(13-)	63
130BA 64				4.404		64
130BA 65				4.783	(14+)	65 0.41 PS 4
130BA 66				4.879	(14-)	66
130BA 67				4.885	(14+)	67 3.4 PS 6
130BA 68				5.155	(15-)	68
130BA 69				5.680	(16+)	69
130BA 70				5.730	(16+)	70

130BA 71				5.767	(16-)	71
130BA 72				6.037	(17-)	72
130BA 73				6.757	(18+)	73
130BA 74				6.973		74
S-p =	7.051	(0.005)	-----		
130BA 75				8.023		75

S-p = 7.051 (0.005)-----
S-n = 10.270 (0.011)-----
S-2p = 11.979 (0.003)-----
S-2n = 18.026 (0.006)-----
S-alpha= 0.540 (0.004)-----

S+p = -3.797 (0.028)
S+n = -7.493 (0.004)
S+2p = -9.787 (0.021)
S+2n = -17.316 (0.003)
S+alpha = 0.004 (0.021)

gap p = 3.255 (0.029)
gap n = 2.776 (0.012)
gap 2p = 2.192 (0.021)
gap 2n = 0.710 (0.006)
gap alpha = 0.543 (0.021)