

^{126}Ce $Z = 58$ $N = 68$ adopted link ENSDF link

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

BE = 1042.431 (0.028) MeV

Qbeta+ = 4.153 (0.095) MeV

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

S-alpha=	-1.363	(0.040)	-----		
126CE 1	0.000	0+			1 51.0 S 4
126CE 2	0.170	2+			2 0.55 NS 9
126CE 3	0.519	4+			3 15.0 PS 14
126CE 4				0.954 (2+)	4
126CE 5	1.015	6+			5 6 PS 2
126CE 6				1.155 (3+)	6
126CE 7				1.337 (4+)	7
126CE 8	1.625	8+			8 2 PS 1
126CE 9				1.877 4(-)	9
126CE 10				1.882 5(-)	10

126CE 11				2.032 5(-)	11
126CE 12				2.200 7(-)	12 8 PS 3
126CE 13				2.209 6(-)	13
126CE 14	2.313	10+			14
126CE 15				2.413 (6-)	15
126CE 16				2.432 7(-)	16
126CE 17				2.612 (7-)	17
126CE 18				2.629 9(-)	18 4 PS 2
126CE 19				2.658 8(-)	19
126CE 20				2.841 (8-)	20

126CE 21				2.949 9(-)	21
126CE 22	2.991	12+			22
126CE 23				3.095 (9-)	23
126CE 24				3.148 11(-)	24
126CE 25				3.200 10(-)	25
126CE 26	3.284	12+			26
126CE 27				3.355 (10-)	27
126CE 28	3.598	14+			28
126CE 29				3.650 (11-)	29
126CE 30				3.752 13(-)	30

126CE 31				3.838 12(-)	31
126CE 32				3.974 (12-)	32
126CE 33	4.035	14+			33
126CE 34	4.286	16+			34
126CE 35				4.317 (13-)	35
S-p	= 4.350	(0.038)	-----		

126CE 36						4.401	14(-)	36
126CE 37						4.441	15(-)	37
126CE 38						4.688	(14-)	38
126CE 39		4.893	16+					39
126CE 40						5.067	16(-)	40

126CE 41		5.095	18+					41
126CE 42						5.207	17(-)	42
126CE 43		5.365	18+					43
126CE 44						5.488	(16-)	44
126CE 45		5.765	18+					45
126CE 46						5.765	18(-)	46
126CE 47						5.851		47
126CE 48		6.009	20+					48
126CE 49						6.042	19(-)	49
S-2p	=	6.309	(0.031)	-----	-----	-----	-----	-----
126CE 50						6.556	20(-)	50

126CE 51						6.937	21(-)	51
126CE 52		6.991	22+					52
126CE 53						7.461	22(-)	53
126CE 54						7.916	23(-)	54
126CE 55		8.026	24+					55
126CE 56						8.486	(24-)	56
126CE 57						8.993	25(-)	57
126CE 58		9.137	26+					58
126CE 59						9.628	(26-)	59

S-p = 4.350 (0.038)-----
S-n = 12.181 (0.252)-----
S-2p = 6.309 (0.031)-----
S-2n = 22.035 (0.250)-----
S-alpha= -1.363 (0.040)-----

S+p = -1.001 (0.256)
S+n = -9.230 (0.040)
S+2p = -4.225 (0.258)
S+2n = -20.856 (0.040)
S+alpha = 1.799 (0.040)

gap p = 3.349 (0.258)
gap n = 2.950 (0.255)
gap 2p = 2.083 (0.259)
gap 2n = 1.179 (0.253)
gap alpha = 0.436 (0.056)