

^{130}Ce $Z = 58$ $N = 72$ adopted link ENSDF link

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

BE = 1083.318 (0.028) MeV

Qbeta+ = 2.205 (0.038) MeV

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

S-alpha=	-0.822 (0.031)				
130CE 1	0.000	0+			1 22.9 M 5
130CE 2	0.254	2+			2 143 PS 6
130CE 3	0.710	4+			3 4.3 PS +5-3
130CE 4				0.835 (2+)	4
130CE 5	1.026	0+			5
130CE 6				1.177 (2+,3,4+)	6
130CE 7				1.323 (4+)	7
130CE 8	1.324	6+			8 0.87 PS 7
130CE 9				1.672 (2+,3,4+)	9
130CE 10				1.755	10

130CE 11				1.898 (6+)	11
130CE 12				1.955 (5-)	12
130CE 13	2.053	8+			13 0.24 PS 7
130CE 14				2.116 (2+,3,4+)	14
130CE 15				2.313 (7-)	15 23 PS 3
130CE 16				2.333	16
130CE 17				2.381 (6-)	17
130CE 18				2.454 (7-)	18 100 NS 8
130CE 19				2.561 (8+)	19
130CE 20				2.624	20

130CE 21				2.642 (8-)	21
130CE 22				2.645 (8-)	22
130CE 23				2.761 (9-)	23 2.8 PS 14
130CE 24	2.809	10+			24 0.42 PS 10
130CE 25				2.959 (9-)	25
130CE 26				3.072 (10-)	26 5.2 PS 10
130CE 27				3.296 (10+)	27
130CE 28	3.312	12+			28 2.84 PS 17
130CE 29				3.317 (10-)	29
130CE 30				3.320 (11-)	30 1.4 PS LT

130CE 31				3.681 (12-)	31 1.0 PS LT
130CE 32				3.700 (11-)	32
130CE 33	3.861	14+			33 1.24 PS 7
130CE 34				3.985 (12+)	34
130CE 35				4.027 (13-)	35
130CE 36				4.120 (12-)	36

130CE	37				4.449	(14-)	37		
130CE	38				4.536	(13-)	38		
130CE	39		4.553	16+			39	0.28 PS	7
130CE	40				4.755	(14+)	40		

130CE	41				4.862	(15-)	41		
130CE	42				4.973	(14-)	42		
130CE	43				5.305	(15-)	43		
130CE	44				5.344	(16-)	44		
130CE	45		5.384	18+			45	0.21 PS	5
S-p	=	5.388 (0.035)		-----					
130CE	46				5.586	(16-)	46		
130CE	47				5.608	(16+)	47		
130CE	48				5.758	(17-)	48		
130CE	49				5.881	(17-)	49		
130CE	50				5.885		50		

130CE	51				6.212	(18-)	51		
130CE	52				6.320	(18-)	52		
130CE	53		6.342	20+			53	173 FS	35
130CE	54				6.396	(20+)	54		
130CE	55				6.533	(18+)	55		
130CE	56				6.576	(19-)	56		
130CE	57				6.642	(19-)	57		
130CE	58				6.978	(20-)	58		
130CE	59				7.388	(20-)	59		
130CE	60		7.409	22+			60	75 FS	14

130CE	61				7.412	(21-)	61		
130CE	62				7.513	(20+)	62		
130CE	63				7.583	(21-)	63		
130CE	64				7.885	(22-)	64		
130CE	65				8.380	(23-)	65		
130CE	66				8.511	(22-)	66		
130CE	67				8.554	(22+)	67		
130CE	68		8.570	24+			68	52 FS	10
130CE	69				8.605	(23-)	69		
130CE	70				8.606	(24+)	70		

S-2p	=	8.632 (0.028)		-----					
130CE	71				8.912	(24-)	71		
130CE	72				9.465	(25-)	72		
130CE	73				9.664	(24+)	73		
130CE	74				9.703	(26+)	74		
130CE	75				9.703	(25-)	75		
130CE	76				9.748	(26+)	76		
130CE	77				9.816	(26+)	77	31 FS	9

S-p	=	5.388 (0.035)		-----					

S-n = 11.207 (0.040)-----
S-2p = 8.632 (0.028)-----
S-2n = 20.032 (0.040)-----
S-alpha= -0.822 (0.031)-----

S+p = -2.167 (0.055)
S+n = -8.357 (0.043)
S+2p = -6.581 (0.037)
S+2n = -19.188 (0.035)
S+alpha = 1.352 (0.030)

gap p = 3.222 (0.065)
gap n = 2.850 (0.058)
gap 2p = 2.051 (0.046)
gap 2n = 0.843 (0.053)
gap alpha = 0.530 (0.043)