

^{146}Ce $Z = 58$ $N = 88$ [link to full NNDC output](#)

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

BE = 1208.672 (0.016) MeV

Qbeta- = 1.045 (0.038) MeV

	Energy T	J+	J-	J-other	T1/2
146CE 1	0.000	0+			1 13.49 M 16
S-alpha= 0.218 (0.017)					
146CE 2	0.258	2+			2 0.231 NS 26
146CE 3	0.668	4+			3
146CE 4			0.925	1-	4
146CE 5			0.961	3-	5
146CE 6	1.043	0+			6
146CE 7	1.171	6+			7
146CE 8			1.183	5-	8
146CE 9	1.274	2+			9
146CE 10	1.382	2+			10
146CE 11			1.551	7-	11
146CE 12			1.551	5-	12
146CE 13	1.577	3+			13
146CE 14	1.627	4+			14
146CE 15	1.658	0+			15
146CE 16				1.712 (4+)	16
146CE 17	1.737	8+			17
146CE 18				1.754 (1-,2,3-)	18
146CE 19				1.757 (1,2+)	19
146CE 20				1.769 (4+,5-)	20
146CE 21				1.797	21
146CE 22				1.802 (4+)	22
146CE 23				1.808	23
146CE 24	1.810	5+			24
146CE 25				1.832 (1,2+)	25
146CE 26				1.876 (4,5-)	26
146CE 27				1.892 (3-,4,5-)	27
146CE 28				1.916 (4,5-)	28
146CE 29				1.956 (4+,5,6+)	29
146CE 30				1.989	30
146CE 31				2.019 (9-)	31
146CE 32				2.023 (4+)	32
146CE 33				2.031 (4+)	33
146CE 34				2.052	34
146CE 35				2.072 (2+)	35
146CE 36				2.090 (4+)	36

146CE	37				2.126	(1+,2+)	37
146CE	38				2.129		38
146CE	39				2.140	(4+,5+)	39
146CE	40				2.156	(1-,2+)	40

146CE	41				2.177	(5-,4+)	41
146CE	42				2.179	(1,2+)	42
146CE	43				2.183		43
146CE	44				2.194		44
146CE	45				2.210		45
146CE	46				2.223	(3,4+)	46
146CE	47				2.234	(1,2+)	47
146CE	48				2.257	(4+,5,6+)	48
146CE	49				2.261		49
146CE	50				2.262		50

146CE	51				2.270	(6+)	51
146CE	52				2.274		52
146CE	53				2.311	(1-,2+)	53
146CE	54				2.319	(1,2+)	54
146CE	55				2.338		55
146CE	56				2.352	(10+)	56
146CE	57				2.368	(1-,2+)	57
146CE	58				2.373		58
146CE	59				2.398	(2+)	59
146CE	60				2.399		60

146CE	61				2.415	(4+)	61
146CE	62				2.442		62
146CE	63				2.447	(3-)	63
146CE	64				2.469		64
146CE	65				2.512		65
146CE	66				2.519		66
146CE	67				2.544		67
146CE	68				2.552		68
146CE	69				2.563	(11-)	69
146CE	70				2.570		70

146CE	71				2.588		71
146CE	72				2.639		72
146CE	73				2.713		73
146CE	74				2.780	(1,2+)	74
146CE	75				2.797		75
146CE	76				2.809		76
146CE	77				2.841		77
146CE	78				2.862	(1,2+)	78
146CE	79				2.869		79
146CE	80				2.914		80

146CE	81				2.953	(2,3-)	81

146CE 82			2.996	(1,2+)	82
146CE 83			3.064		83
146CE 84			3.163	(13-)	84
146CE 85			3.165	(1,2+)	85
146CE 86			3.167	(1,2+)	86
146CE 87			3.243		87
146CE 88			3.255	(2,3+)	88
146CE 89			3.274		89
146CE 90			3.283	(1-,2+)	90

146CE 91			3.330	(2+)	91
146CE 92			3.342		92
146CE 93			3.390		93
146CE 94			3.400	(1,2+)	94
146CE 95			3.403		95
146CE 96			3.451		96
146CE 97			3.458		97
146CE 98			3.495		98
146CE 99			3.502		99
146CE 100			3.533		100

146CE 101			3.535		101
146CE 102			3.654	(2+)	102
146CE 103			3.730		103
146CE 104			3.826	(15-)	104
146CE 105			3.859		105
146CE 106			3.918		106
146CE 107			3.957		107
146CE 108			3.978	(3-,4+)	108
146CE 109			4.090		109
146CE 110			4.190		110

146CE 111			4.210		111
146CE 112			4.255		112
146CE 113			4.269		113
146CE 114			4.411		114
146CE 115			4.497		115
146CE 116			4.522		116
146CE 117			4.690	(1,2+)	117

S-p = 10.089 (0.020)-----
S-n = 6.640 (0.038)-----
S-2p = 18.446 (0.018)-----
S-2n = 11.346 (0.017)-----
S-alpha= 0.218 (0.017)-----

S+p = -7.098 (0.023)
S+n = -4.450 (0.018)
S+2p = -16.350 (0.016)

S+2n = -10.906 (0.020)
S+alpha = -0.469 (0.016)

gap p = 2.992 (0.031)
gap n = 2.190 (0.042)
gap 2p = 2.096 (0.024)
gap 2n = 0.441 (0.026)
gap alpha = -0.251 (0.024)