

^{133}I $Z = 53$ $N = 80$ adopted link ENSDF link

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

BE = 1117.878 (0.006) MeV

Qbeta- = 1.786 (0.006) MeV

	Energy T	J+	J-	J-other	T1/2
133I	1 0.000	7/2+			1 20.83 H 8
133I	2			0.312 (5/2+)	2
133I	3			0.720 (3/2+)	3
133I	4			0.787 (5/2+)	4
133I	5 0.913	11/2+			5
133I	6			0.915 (9/2+)	6
133I	7			1.240 (7/2+)	7
133I	8			1.307 (7/2+)	8
133I	9			1.313 (3/2+,5/2)	9
133I	10			1.333 (5/2+)	10
133I	11			1.374 (1/2+,3/2-)	11
133I	12			1.455 (7/2+)	12
133I	13			1.516 (9/2+)	13
133I	14 1.560	15/2+			14
133I	15			1.564 (1/2+,3/2-)	15
133I	16			1.609	16
133I	17			1.634 (19/2-)	17 9 S 2
133I	18 1.647	11/2+			18
133I	19			1.671 (3/2+)	19
133I	20			1.704 (9/2+)	20
133I	21			1.707	21
133I	22			1.718 (5/2+)	22
133I	23			1.729 (15/2-)	23 170 NS AP
133I	24			1.777 (11/2-,13/2)	24
133I	25			1.797 (11/2+)	25
133I	26			1.799 (15/2-,17/2)	26
133I	27			1.817 (15/2,17/2-)	27
133I	28			1.886 (11/2+)	28
133I	29			1.893 (11/2+)	29
133I	30			1.943 (11/2-,13/2)	30
133I	31			1.946	31
133I	32 1.975	11/2+			32
133I	33			1.991 (11/2-,13/2-)	33
133I	34			2.005 (9/2+)	34
133I	35			2.025 (3/2+)	35
133I	36			2.040 (1/2+)	36
133I	37			2.050 (9/2,11/2+)	37

133I	38				2.053	(3/2+)	38		
133I	39				2.081	(15/2+)	39		
133I	40				2.136	(5/2+)	40		

133I	41				2.142	(9/2-, 11/2)	41		
133I	42				2.194	(3/2+, 5/2)	42		
133I	43				2.205		43		
133I	44				2.210	(3/2+, 5/2+)	44		
133I	45				2.212	(13/2)	45		
133I	46				2.225	(5/2+)	46		
133I	47				2.249	(11/2, 13/2)	47		
133I	48				2.250		48		
133I	49				2.255	(3/2+)	49		
133I	50				2.262	(13/2)	50		

133I	51				2.266	(3/2+)	51		
133I	52				2.284	(1/2+, 3/2)	52		
133I	53				2.364	(3/2+, 5/2)	53		
133I	54				2.372	(11/2-, 13/2+)	54		
133I	55				2.373	(9/2, 11/2, 13/2)	55		
133I	56				2.393	(3/2+, 5/2)	56		
133I	57				2.417	(5/2+)	57		
133I	58				2.419	(11/2+, 13/2+)	58		
133I	59				2.427		59		
133I	60				2.435	(19/2+)	60	0.78 US	16

133I	61				2.446	(13/2)	61		
133I	62				2.467	(9/2, 11/2, 13/2)	62		
133I	63				2.467	(3/2+, 5/2)	63		
133I	64				2.483	(9/2, 11/2+)	64		
133I	65				2.493	(1/2+)	65		
133I	66				2.494	(23/2+)	66	469 NS	15
133I	67				2.500	(9/2, 11/2, 13/2+)	67		
133I	68				2.506	(11/2+, 13/2)	68		
133I	69				2.516	(9/2, 11/2, 13/2)	69		
133I	70				2.526	(3/2+, 5/2)	70		

133I	71				2.542	(3/2+, 5/2+)	71		
133I	72				2.552		72		
133I	73				2.556	(13/2)	73		
133I	74				2.596	(11/2-)	74		
133I	75				2.597	(5/2+)	75		
133I	76				2.661	(3/2+, 5/2+)	76		
133I	77				2.686	(9/2, 11/2, 13/2)	77		
133I	78				2.768	(1/2+, 3/2, 5/2)	78		
133I	79				2.784	(9/2, 11/2, 13/2)	79		
133I	80				2.796		80		

133I	81				2.808	(9/2, 11/2, 13/2)	81		
133I	82				2.808	(1/2+, 3/2, 5/2+)	82		

133I	83				2.825	(3/2+,5/2)	83
133I	84				2.826	(9/2,11/2)	84
133I	85				2.866	(1/2+,3/2,5/2+	85)
133I	86				2.881	(9/2,11/2,13/2)	86
133I	87				2.936	(1/2+,3/2,5/2+)	87
133I	88				2.968	(9/2,11/2,13/2)	88
133I	89				2.975	(9/2,11/2,13/2)	89)
133I	90				3.028	(9/2,11/2,13/2)	90

133I	91				3.051	(9/2,11/2+)	91
133I	92				3.108		92
S-alpha=	3.653	(0.022)	-----			
133I	93				3.822		93
133I	94				3.894		94
133I	95				4.047		95

S-p = 7.958 (0.007)-----
S-n = 8.225 (0.007)-----
S-2p = 18.454 (0.006)-----
S-2n = 14.557 (0.006)-----
S-alpha= 3.653 (0.022)-----

S+p = -9.557 (0.006)
S+n = -6.257 (0.008)
S+2p = -16.302 (0.006)
S+2n = -14.064 (0.006)
S+alpha = -3.113 (0.006)

gap p = -1.599 (0.009)
gap n = 1.968 (0.010)
gap 2p = 2.151 (0.009)
gap 2n = 0.493 (0.009)
gap alpha = 0.540 (0.023)