

$^{127}\text{I}$        $Z = 53$        $N = 74$       adopted link      ENSDF link

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

BE = 1072.576 ( 0.004) MeV

	Energy T	J+	J-	J-other	T1/2
127I	1	0.000	5/2+		1 STABLE
127I	2	0.058	7/2+		2 1.95 NS 1
127I	3	0.203	3/2+		3 0.387 NS 9
127I	4			0.295	4
127I	5	0.375	1/2+		5 31 PS 8
127I	6	0.418	5/2+		6 3.3 PS 3
127I	7			0.473	7
127I	8	0.618	3/2+		8 2.1 PS LT
127I	9	0.629	7/2+		9 1.9 PS 6
127I	10			0.651 9/2(+)	10 3.9 PS 4
127I	11			0.716 (11/2+)	11 3.0 PS 6
127I	12			0.745 9/2(+)	12 2.79 PS 18
127I	13			0.831	13
127I	14			0.883	14
127I	15			0.991 3/2+,5/2+	15
127I	16	1.044	7/2+		16 0.21 PS 7
127I	17			1.094 3/2+,5/2+	17 0.21 PS 7
127I	18	1.123	1/2+		18
127I	19			1.181 (9/2+)	19
127I	20			1.218 (7/2+)	20
127I	21			1.229	21
127I	22			1.235 (11/2)-	22
127I	23			1.267 (13/2+)	23
127I	24			1.275 (7/2)+	24
127I	25			1.319 (7/2+,9/2+)	25
127I	26			1.342 (7/2+,9/2+)	26
127I	27			1.350 (9/2+)	27
127I	28			1.364	28
127I	29			1.375	29
127I	30			1.402 3/2+,5/2+	30
127I	31			1.413 (9/2+)	31 0.64 PS LT
127I	32			1.443 1/2+,3/2+,5/2+	32
127I	33			1.480 (15/2+)	33
127I	34			1.507 3/2+,5/2+	34
127I	35			1.517	35
127I	36			1.556 (1/2+,3/2+,5/2+)	36
127I	37			1.569 7/2+,9/2+	37
127I	38			1.654	38

127I	39				1.659	5/2+,3/2+	39
127I	40				1.676	(11/2+)	40
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127I	41				1.696		41
127I	42				1.719		42
127I	43				1.776		43
127I	44				1.792	(1/2+)	44
127I	45				1.836		45
127I	46				1.860		46
127I	47				1.870	(3/2+,5/2+)	47
127I	48				1.873		48
127I	49				1.877	(17/2+)	49
127I	50				1.886	3/2+,5/2+	50
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127I	51				1.894	(15/2)-	51
127I	52				1.909	5/2+,7/2,9/2+	52
127I	53				1.913	(1/2+)	53
127I	54				1.978		54
127I	55				2.060		55
127I	56				2.072	(13/2+)	56
127I	57				2.075		57
127I	58				2.136	(3/2+,5/2+)	58
127I	59				2.168	(3/2+,5/2+)	59
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S-alpha= 2.185 ( 0.004)-----							
127I	60				2.237		60
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127I	61				2.264		61
127I	62				2.314		62
127I	63				2.355		63
127I	64				2.360	(19/2+)	64
127I	65				2.399		65
127I	66				2.412	(15/2+)	66
127I	67				2.431		67
127I	68				2.456		68
127I	69				2.496		69
127I	70				2.524		70
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127I	71				2.546	(19/2)-	71
127I	72				2.611		72
127I	73				2.641		73
127I	74				2.689		74
127I	75				2.735		75
127I	76				2.752		76
127I	77				2.792		77
127I	78				2.810	(21/2+)	78
127I	79				2.816		79
127I	80				2.849		80
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127I	81				2.894		81
127I	82				2.947		82

127I	83				2.976	(23/2)-	83
127I	84				2.997		84
127I	85				3.010		85
127I	86				3.102		86
127I	87				3.126		87
127I	88				3.218		88
127I	89				3.283		89
127I	90				3.335		90
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127I	91				3.350		91
127I	92				3.372		92
127I	93				3.404		93
S-p	=	6.208	(	0.004)	-----		
127I	94		7.727	3/2+			94
127I	95		7.798	1/2+			95
127I	96				8.507	(5/2+)	96
127I	97				8.870	(5/2+)	97
127I	98				9.100		98
S-n	=	9.144	(	0.005)	-----		
127I	99				9.292		99
127I	100				9.410		100
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127I	101				9.545		101
127I	102		9.632	7/2-			102
127I	103				9.705		103
127I	104		9.740	7/2-			104
127I	105		9.847	7/2-			105
127I	106				9.903		106
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S-p	=	6.208	(	0.004)	-----		
S-n	=	9.144	(	0.005)	-----		
S-2p	=	15.306	(	0.004)	-----		
S-2n	=	16.290	(	0.004)	-----		
S-alpha	=	2.185	(	0.004)	-----		
S+p	=	-8.166	(	0.004)			
S+n	=	-6.826	(	0.005)			
S+2p	=	-13.094	(	0.006)			
S+2n	=	-15.667	(	0.005)			
S+alpha	=	-1.497	(	0.004)			
gap p	=	-1.958	(	0.005)			
gap n	=	2.318	(	0.007)			
gap 2p	=	2.212	(	0.007)			
gap 2n	=	0.623	(	0.006)			
gap alpha	=	0.688	(	0.005)			