

$^{153}\text{Dy}$        $Z = 66$        $N = 87$       adopted link      ENSDF link

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

BE = 1252.420 ( 0.004) MeV

Qbeta+ = 2.170 ( 0.006) MeV

	Energy T	J+	J-	J-other	T1/2	
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S-alpha=	-3.559	( 0.005)	-----			
153DY 1				0.000	7/2(-)	1 6.4 H 1
153DY 2				0.109	(3/2-)	2 1.35 NS 10
153DY 3				0.270	(3/2-,5/2-)	3 0.25 NS LE
153DY 4				0.296	(9/2-)	4
153DY 5				0.366	(5/2-,7/2-,9/2-)	5)
153DY 6				0.501	(-)	6 0.2 NS LE
153DY 7				0.566	(3/2-,5/2-)	7
153DY 8				0.577	(3/2-,5/2,7/2-)	8
153DY 9				0.637	11/2(-)	9
153DY 10				0.688	(5/2-,7/2-)	10
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153DY 11				0.712	(13/2+)	11
153DY 12				0.830	(13/2+)	12
153DY 13				0.830	(7/2-)	13
153DY 14				0.837	(13/2-)	14
153DY 15				1.041	(13/2-)	15
153DY 16				1.041	(11/2+)	16
153DY 17				1.068	(11/2-)	17
153DY 18				1.092	(9/2,11/2-)	18
153DY 19				1.160	(17/2+)	19 11.6 PS 12
153DY 20				1.189	(7/2-,9/2,11/2-)	20)
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153DY 21				1.273	(15/2-)	21
153DY 22				1.276	(9/2-)	22
153DY 23				1.304	(15/2+)	23
153DY 24				1.322	(13/2-)	24
153DY 25				1.381	(5/2-,7/2,9/2-)	25
153DY 26				1.455	(17/2-)	26
153DY 27				1.501	(9/2-)	27
153DY 28				1.522	(15/2+)	28
153DY 29				1.581	(9/2+,11/2-)	29
153DY 30				1.584	(15/2-)	30
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153DY 31				1.601	(17/2-)	31
153DY 32				1.648	(21/2+)	32 7.1 PS 6
153DY 33				1.754	(19/2-,17/2-)	33
153DY 34				1.822	(19/2+)	34
153DY 35				1.862	(17/2-)	35
153DY 36				1.892	(19/2+)	36

153DY 37				1.963	(19/2+)	37		
153DY 38				2.042	(21/2-)	38		
153DY 39				2.152	(19/2-)	39		
153DY 40				2.158		40		
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153DY 41				2.181	(25/2+)	41	2.1 PS	4
153DY 42				2.195	(21/2-,19/2-)	42		
153DY 43				2.231	(21/2-)	43		
153DY 44				2.285	(23/2+)	44		
153DY 45				2.454	(21/2-)	45		
153DY 46				2.523	(25/2-)	46		
153DY 47				2.524	(23/2+)	47		
153DY 48				2.686	(27/2+)	48		
153DY 49				2.746		49		
153DY 50				2.762	(29/2+)	50		
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153DY 51				2.764	(23/2-)	51		
153DY 52				3.075	(29/2-)	52		
153DY 53				3.080	(25/2-)	53		
153DY 54				3.169	(29/2-)	54		
153DY 55				3.389	(33/2+)	55		
153DY 56				3.416		56		
153DY 57				3.743	(33/2-)	57		
153DY 58				3.829	(33/2-)	58		
153DY 59				4.063	(37/2+)	59		
153DY 60				4.134		60		
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153DY 61				4.461	(37/2-)	61		
153DY 62				4.487	(37/2-)	62		
153DY 63				4.782	(41/2+)	63		
153DY 64				5.141	(41/2-)	64		
153DY 65				5.207	(41/2-)	65		
153DY 66				5.244	(41/2-)	66		
153DY 67				5.377	(43/2-)	67		
153DY 68				5.541	(45/2+)	68		
153DY 69				5.591	(47/2-)	69	2.3 NS	
S-p = 5.715 ( 0.040)	-----							
153DY 70				5.760	(49/2)	70		
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153DY 71				6.109	(49/2+)	71		
153DY 72				6.227	(51/2)	72		
153DY 73				6.341	(49/2+)	73		
153DY 74				6.718	(51/2)	74		
153DY 75				6.741		75		
153DY 76				6.946	(53/2+)	76		
153DY 77				6.999	(53/2)	77		
153DY 78				7.065	(55/2)	78		
S-n = 7.097 ( 0.006)	-----							
153DY 79				7.181	(53/2+)	79		
153DY 80				7.534		80		

153DY 81			7.582		81
153DY 82			7.764		82
153DY 83			7.884		83
153DY 84			7.934	(59/2)	84
153DY 85			8.029	(57/2)	85
153DY 86			8.068	(57/2+)	86
153DY 87			8.131		87
153DY 88			8.452	(61/2)	88
153DY 89			8.462		89
153DY 90			8.605		90
153DY 91			8.636		91
153DY 92			8.638	(61/2)	92
153DY 93			8.665		93
153DY 94			8.824		94
153DY 95			9.006	(61/2+)	95
153DY 96			9.019		96
153DY 97			9.170		97
153DY 98			9.213		98
153DY 99			9.273		99
S-2p	=	9.532 ( 0.005)	-----		
153DY 100			9.620		100
153DY 101			9.806		101
153DY 102			9.854		102
153DY 103			9.882		103
153DY 104			9.927		104
153DY 105			9.966		105
153DY 106			9.999	(65/2+)	106
S-p	=	5.715 ( 0.040)	-----		
S-n	=	7.097 ( 0.006)	-----		
S-2p	=	9.532 ( 0.005)	-----		
S-2n	=	16.534 ( 0.005)	-----		
S-alpha	=	-3.559 ( 0.005)	-----		
S+p	=	-2.785 ( 0.009)			
S+n	=	-9.322 ( 0.008)			
S+2p	=	-7.644 ( 0.007)			
S+2n	=	-16.155 ( 0.010)			
S+alpha	=	3.305 ( 0.027)			
gap p	=	2.930 ( 0.041)			
gap n	=	-2.225 ( 0.010)			
gap 2p	=	1.889 ( 0.009)			
gap 2n	=	0.378 ( 0.012)			
gap alpha	=	-0.254 ( 0.027)			