

$^{151}\text{Dy}$        $Z = 66$        $N = 85$       adopted link      ENSDF link

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

BE = 1235.886 ( 0.003) MeV

Qbeta+ = 2.871 ( 0.005) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-4.180	( 0.004)	-----		
151DY 1				0.000	7/2(-) 1 17.9 M 3
151DY 2				0.210	(5/2-) 2
151DY 3				0.366	(3/2-) 3
151DY 4				0.527	(9/2-) 4
151DY 5				0.776	(11/2-) 5
151DY 6				0.880	(3/2,5/2,7/2) 6
151DY 7				0.952	(3/2,5/2,7/2) 7
151DY 8				0.969	(13/2+) 8
151DY 9				0.985	9
151DY 10				0.986	(13/2-) 10
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151DY 11				1.046	(5/2,7/2) 11
151DY 12				1.081	(3/2) 12
151DY 13				1.130	(3/2) 13
151DY 14				1.144	(3/2) 14
151DY 15				1.169	(3/2) 15
151DY 16				1.182	(1/2,3/2) 16
151DY 17				1.186	(3/2) 17
151DY 18				1.222	(9/2) 18
151DY 19				1.262	(3/2,5/2,7/2) 19
151DY 20				1.311	(1/2,3/2+) 20
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151DY 21				1.335	21
151DY 22				1.349	(13/2-) 22
151DY 23				1.511	(15/2-) 23
151DY 24				1.549	(11/2,13/2) 24
151DY 25				1.550	(9/2,11/2-) 25
151DY 26				1.551	(1/2,3/2+) 26
151DY 27				1.734	(17/2+) 27
151DY 28				1.781	(3/2+) 28
151DY 29				1.857	29
151DY 30				1.919	(17/2-) 30
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151DY 31				1.922	(3/2+) 31
151DY 32				1.924	(11/2) 32
151DY 33				1.962	33
151DY 34				2.027	(3/2+) 34
151DY 35				2.220	(9/2:13/2) 35
151DY 36				2.263	(21/2-) 36

151DY 37				2.366	(1/2,3/2+)	37		
151DY 38				2.377	(3/2+)	38		
151DY 39				2.378	(9/2:13/2)	39		
151DY 40				2.378	(1/2,3/2+)	40		
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151DY 41				2.402	(21/2+)	41		
151DY 42				2.408	(9/2:13/2)	42		
151DY 43				2.409	(9/2:13/2)	43		
151DY 44				2.457	(9/2:13/2)	44		
151DY 45				2.487	(9/2:13/2)	45		
151DY 46				2.555		46		
151DY 47				2.573	(3/2+)	47		
151DY 48				2.574	(9/2:13/2)	48		
151DY 49				2.575	(3/2+)	49		
151DY 50				2.583		50		
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151DY 51				2.722	(9/2:13/2)	51		
151DY 52				2.788	(1/2,3/2+)	52		
151DY 53				2.790	(1/2,3/2+)	53		
151DY 54				2.812	(3/2+)	54		
151DY 55				2.828	(1/2,3/2+)	55		
151DY 56				2.851	(9/2:13/2)	56		
151DY 57				2.866		57		
151DY 58				2.912	(25/2-)	58		
151DY 59				2.915	(1/2,3/2+)	59		
151DY 60				2.919	(3/2+)	60		
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151DY 61				2.939	(9/2:13/2)	61		
151DY 62				2.942	(1/2,3/2+)	62		
151DY 63				2.959	(27/2-)	63	1.3 NS	6
151DY 64				3.032	(1/2,3/2+)	64		
151DY 65				3.049	(9/2:13/2)	65		
151DY 66				3.078	(25/2+)	66		
151DY 67				3.428	(29/2)	67		
151DY 68				3.734	(31/2-)	68		
151DY 69				4.306	(33/2)	69		
151DY 70				4.387	(35/2-)	70		
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151DY 71				4.741	(37/2)	71		
151DY 72				4.904	(41/2)	72	5.9 NS	7
S-p	=	4.935	( 0.008)	-----				
151DY 73				5.743	(43/2)	73		
151DY 74				6.007	(47/2)	74		
151DY 75				6.032	(49/2+)	75	11.9 NS	8
151DY 76				7.037	(51/2-)	76	1.2 PS	6
151DY 77				7.220	(53/2-)	77	13.7 PS	6
S-n	=	7.514	( 0.005)	-----				
151DY 78				8.178	(55/2-)	78	4.5 PS	15
S-2p	=	8.203	( 0.005)	-----				
151DY 79				8.303	(57/2-)	79	20.8 PS	12

151DY 80				8.680	(59/2-)	80 2.0 PS	3
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151DY 81				8.892	(61/2-)	81 19.8 PS	20
151DY 82				9.813		82	

S-p = 4.935 ( 0.008)-----  
 S-n = 7.514 ( 0.005)-----  
 S-2p = 8.203 ( 0.005)-----  
 S-2n = 17.201 ( 0.010)-----  
 S-alpha= -4.180 ( 0.004)-----

S+p = -2.141 ( 0.013)  
 S+n = -9.437 ( 0.006)  
 S+2p = -6.292 ( 0.010)  
 S+2n = -16.534 ( 0.005)  
 S+alpha = 4.118 ( 0.007)

gap p = 2.794 ( 0.015)  
 gap n = -1.923 ( 0.008)  
 gap 2p = 1.911 ( 0.011)  
 gap 2n = 0.667 ( 0.011)  
 gap alpha = -0.061 ( 0.008)