

$^{154}\text{Dy}$        $Z = 66$        $N = 88$       adopted link      ENSDF link

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

BE = 1261.742 ( 0.007) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-2.945	( 0.010)	-----		
154DY 1	0.000	0+			1 3.0E+6 Y 15
154DY 2	0.334	2+			2 27.5 PS 20
154DY 3	0.661	0+			3
154DY 4	0.747	4+			4 6.9 PS 5
154DY 5	0.905	2+			5
154DY 6	1.027	2+			6
154DY 7	1.058	0+			7
154DY 8			1.208	3-	8
154DY 9	1.224	6+			9 2.4 PS 4
154DY 10	1.252	4+			10
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154DY 11	1.334	3+			11
154DY 12	1.390	2+			12
154DY 13			1.420	1-	13
154DY 14	1.442	4+			14
154DY 15	1.507	2+			15
154DY 16			1.546	5-	16
154DY 17			1.635	2-	17
154DY 18	1.658	6+			18
154DY 19	1.740	5+			19
154DY 20	1.747	8+			20 1.5 PS 3
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154DY 21				1.782 (3+)	21
154DY 22				1.819 (4-)	22
154DY 23				1.833	23
154DY 24				1.845	24
154DY 25				1.877	25
154DY 26				1.885 (6+)	26
154DY 27				1.904 (3-)	27
154DY 28				1.958	28
154DY 29			1.964	7-	29
154DY 30				1.991	30
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154DY 31				2.038	31
154DY 32				2.148	32
154DY 33	2.163	8+			33
154DY 34				2.168	34
154DY 35				2.178	35
154DY 36	2.183	7+			36
154DY 37				2.184	37

154DY 38						2.192	(7,8)		38
154DY 39						2.249			39
154DY 40						2.272			40
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154DY 41		2.304	10+						41 1.1 PS 3
154DY 42							2.345		42
154DY 43					2.421	9-			43
154DY 44		2.472	7+						44
154DY 45					2.567	7-			45
154DY 46					2.664	8-			46
154DY 47		2.758	10+						47
154DY 48					2.866	8-			48
154DY 49					2.882	11-			49 4.5 PS +2-3
154DY 50		2.893	12+						50 0.94 PS 19
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154DY 51					3.012	9-			51
154DY 52					3.048	10-			52
154DY 53					3.159	10-			53
154DY 54		3.289	12+						54
154DY 55					3.314	11-			55
154DY 56					3.390	13-			56 1.7 PS
154DY 57					3.484	12-			57
154DY 58					3.504	12-			58
154DY 59		3.509	14+						59 0.55 PS 10
154DY 60		3.679	14+						60
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154DY 61					3.720	13-			61
154DY 62					3.964	14-			62
154DY 63					3.982	15-			63 3.0 PS
154DY 64					4.006	14-			64
154DY 65		4.090	16+						65 1.3 PS 5
154DY 66		4.173	16+						66
154DY 67					4.230	15-			67
154DY 68					4.519	16-			68
154DY 69					4.588	16-			69
154DY 70		4.637	18+						70 0.76 PS 17
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154DY 71					4.642	17-			71 1.3 PS +10-6
154DY 72					4.826	17-			72
154DY 73		4.869	18+						73
154DY 74					5.151	18-			74
154DY 75					5.206	18-			75
154DY 76		5.249	20+						76 0.62 PS 9
154DY 77					5.338	19-			77
154DY 78					5.489	19-			78
154DY 79		5.564	20+						79
154DY 80					5.841	20-			80
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154DY 81					5.866	20-			81
154DY 82		5.934	22+						82 0.38 PS

154DY 83				6.035	21-				83
154DY 84				6.181	21-				84
154DY 85				6.201	21-				85
154DY 86		6.285	22+						86
S-p	=	6.369 ( 0.008)-----							
154DY 87				6.560	22-				87
154DY 88				6.573	22-				88
154DY 89		6.690	24+					0.2 PS	89
154DY 90				6.754	23-				90
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154DY 91				6.805	23-				91
154DY 92				6.952	23-				92
154DY 93		7.045	24+						93
154DY 94				7.288	24-				94
154DY 95				7.343	24-				95
154DY 96		7.375	24+						96
154DY 97		7.513	26+					0.2 PS +4-2	97
154DY 98				7.519	25-				98
154DY 99				7.741	25-				99
154DY 100				7.772	25-				100
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154DY 101		7.856	26+						101
154DY 102				8.061	26-				102
154DY 103		8.139	26+						103
154DY 104				8.151	26-				104
154DY 105				8.280	27-				105
154DY 106				8.335	27-				106
154DY 107		8.400	28+					0.15 PS	107
154DY 108				8.570	27-				108
154DY 109		8.723	28+						109
154DY 110				8.885	28-				110
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154DY 111		8.917	28+						111
154DY 112				9.002	28-				112
154DY 113							9.119 (28-)		113
154DY 114				9.188	29-				114
154DY 115				9.217	29-				115
S-n	=	9.322 ( 0.008)-----							
154DY 116		9.350	30+						116
154DY 117				9.445	29-				117
154DY 118		9.567	30+						118
154DY 119		9.646	30+						119
154DY 120		9.668	30+						120
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154DY 121				9.765	30-				121
154DY 122							9.894 (30-)		122
154DY 123				9.898	30-				123
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S-p	=	6.369 ( 0.008)-----							

S-n = 9.322 ( 0.008)-----  
S-2p = 10.265 ( 0.008)-----  
S-2n = 16.419 ( 0.009)-----  
S-alpha= -2.945 ( 0.010)-----

S+p = -2.935 ( 0.019)  
S+n = -6.833 ( 0.012)  
S+2p = -8.396 ( 0.026)  
S+2n = -16.278 ( 0.008)  
S+alpha = 2.665 ( 0.026)

gap p = 3.434 ( 0.021)  
gap n = 2.489 ( 0.015)  
gap 2p = 1.869 ( 0.027)  
gap 2n = 0.141 ( 0.012)  
gap alpha = -0.280 ( 0.028)