

^{160}Dy $Z = 66$ $N = 94$ [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 1309.449 (0.001) MeV

	Energy T	J+	J-	J-other	T1/2

S-alpha=	-0.437	(0.001)	-----		
160DY 1	0.000	0+			1 STABLE
160DY 2	0.087	2+			2 2.02 NS 1
160DY 3	0.284	4+			3 104 PS 4
160DY 4	0.581	6+			4 18.6 PS 10
160DY 5	0.966	2+			5 1.31 PS 9
160DY 6	0.967	8+			6 3.8 PS 3
160DY 7	1.049	3+			7
160DY 8	1.156	4+			8
160DY 9			1.265	2-	9 10 PS LE
160DY 10	1.280	0+			10

160DY 11			1.286	1-	11
160DY 12			1.287	3-	12 0.22 PS 6
160DY 13	1.289	5+			13
160DY 14	1.350	2+			14 1.20 PS 11
160DY 15			1.359	2-	15 2.70 NS 14
160DY 16			1.386	4-	16
160DY 17			1.399	3-	17
160DY 18			1.408	5-	18
160DY 19	1.428	10+			19 1.56 PS 7
160DY 20	1.439	6+			20

160DY 21	1.457	0+			21
160DY 22			1.489	1-	22 6.8 FS 8
160DY 23	1.518	2+			23
160DY 24	1.522	4+			24
160DY 25			1.535	4-	25
160DY 26				1.557 1+,2+	26
160DY 27			1.587	5-	27
160DY 28			1.594	6-	28
160DY 29	1.604	4+			29
160DY 30	1.607	6+			30

160DY 31	1.608	4+			31
160DY 32			1.614	7-	32
160DY 33	1.617	7+			33
160DY 34			1.643	3-	34
160DY 35				1.651 4-,5-	35
160DY 36				1.652 4+,5,6+	36
160DY 37				1.654	37

160DY 38						1.655	3+,4+	38
160DY 39						1.676		39
160DY 40		1.694	4+					40 180 PS 35

160DY 41		1.708	0+					41
160DY 42		1.721	6+					42
160DY 43		1.757	2+					43
160DY 44					1.785	4-		44
160DY 45					1.788	6-		45
160DY 46		1.800	8+					46
160DY 47		1.802	5+					47
160DY 48		1.805	1+					48
160DY 49					1.860	5-		49
160DY 50		1.870	2+					50

160DY 51					1.882	8-		51
160DY 52					1.898	7-		52
160DY 53					1.901	9-		53
160DY 54		1.903	3+					54
160DY 55		1.929	6+					55
160DY 56							1.932	56
160DY 57		1.950	12+					57 0.89 PS 4
160DY 58		1.952	0+					58
160DY 59							1.954 (6)-	59
160DY 60							1.978 (8)+	60

160DY 61							2.010 1-,2-	61
160DY 62		2.013	2+					62
160DY 63		2.022	9+					63
160DY 64							2.044 (7-)	64
160DY 65							2.046	65
160DY 66							2.049 2+,3	66
160DY 67					2.068	1-		67
160DY 68		2.074	7+					68
160DY 69					2.077	3-		69
160DY 70							2.085 1+,2+	70

160DY 71							2.089 1-,2-,3-	71
160DY 72							2.091 2-,3-	72
160DY 73		2.097	4+					73
160DY 74					2.112	8-		74
160DY 75							2.114	75
160DY 76					2.126	3-		76
160DY 77					2.131	3-		77
160DY 78		2.138	2+					78
160DY 79							2.140 (3)	79
160DY 80							2.142 2+,3,4+	80

160DY 81					2.144	4-		81
160DY 82							2.145	82

160DY 83						2.150	1,2	83
160DY 84						2.155		84
160DY 85						2.165		85
160DY 86						2.175		86
160DY 87						2.187	4+,5+,6+	87
160DY 88						2.191		88
160DY 89		2.194	5+					89
160DY 90						2.201	2+,3,4+	90

160DY 91		2.208	4+					91
160DY 92						2.209	(2)-	92
160DY 93						2.214		93
160DY 94		2.222	10+					94
160DY 95		2.231	2+					95
160DY 96				2.242	10-			96
160DY 97						2.245	2+,3,4+	97
160DY 98						2.256	1+,2+	98
160DY 99				2.263	9-			99
160DY 100				2.264	11-			100

160DY 101						2.265	(10+)	101
160DY 102				2.267	3-			102
160DY 103				2.271	2-			103
160DY 104						2.279		104
160DY 105				2.288	8-			105
160DY 106		2.297	2+					106
160DY 107						2.310	2+,3,4+	107
160DY 108						2.321		108
160DY 109						2.323	1+,2+	109
160DY 110						2.325	1+,2+	110

160DY 111		2.328	2+					111
160DY 112						2.347		112
160DY 113		2.355	2+					113
160DY 114						2.359		114
160DY 115						2.367	2+,3+,4+	115
160DY 116				2.372	6-			116
160DY 117						2.375		117
160DY 118						2.380		118
160DY 119				2.384	6-			119
160DY 120						2.387	2+,3+	120

160DY 121						2.394	2,3-	121
160DY 122						2.397	1,2	122
160DY 123						2.405		123
160DY 124						2.444		124
160DY 125				2.450	1-			125
160DY 126				2.470	3-			126
160DY 127						2.475	2+,3,4+	127
160DY 128		2.486	11+					128

160DY 129				2.504		1+,2+,3+	129
160DY 130	2.514	14+					130 0.62 PS +7-14

160DY 131				2.514			131
160DY 132			2.520	10-			132
160DY 133	2.524	3+					133
160DY 134						2.553	134
160DY 135			2.557	5-			135
160DY 136						2.560	2+,3,4+
160DY 137						2.572	3+,4+,5+
160DY 138						2.574	1-,2-,3-
160DY 139	2.577	3+ TO 9+					139
160DY 140	2.593	12+					140

160DY 141						2.603	1-,2-
160DY 142						2.606	2+,3+,4+
160DY 143	2.610	2+					143
160DY 144						2.630	(1,2)+
160DY 145			2.631	1-			145
160DY 146						2.635	
160DY 147			2.646	3-			147
160DY 148						2.647	(3)-
160DY 149			2.662	2-			149
160DY 150						2.666	2+,3+,4+

160DY 151			2.666	12-			151
160DY 152			2.675	1-			152
160DY 153	2.682	5+					153
160DY 154			2.696	11-			154
160DY 155						2.696	2-,3-
160DY 156			2.697	13-			156
160DY 157	2.698	2+					157
160DY 158			2.701	1-			158
160DY 159						2.704	2-,3-
160DY 160	2.708	12+					160

160DY 161	2.717	2+					161
160DY 162			2.719	2-			162
160DY 163			2.721	3-			163
160DY 164						2.727	(4)
160DY 165			2.730	2-			165
160DY 166			2.735	1-			166
160DY 167						2.755	(4-)
160DY 168						2.756	(2-)
160DY 169						2.757	
160DY 170						2.760	1+,2+

160DY 171						2.763	
160DY 172			2.768	1-			172
160DY 173						2.772	

160DY 174					2.778	2+,3+,4+	174
160DY 175	2.822	1+					175
160DY 176					2.834	2,3,4	176
160DY 177			2.852	1-			177
160DY 178					2.854		178
160DY 179					2.858		179
160DY 180	2.861	1+					180

160DY 181			2.877	1-			181
160DY 182					2.879	2	182
160DY 183					2.886		183
160DY 184	2.896	2+					184
160DY 185					2.904	2,3,4	185
160DY 186					2.932		186
160DY 187					2.942	4,5,6	187
160DY 188					2.959		188
160DY 189					2.969	1,2	189
160DY 190					2.970		190

160DY 191					2.978		191
160DY 192			2.985	12-			192
160DY 193	2.989	13+					193
160DY 194					2.995	2,3,4	194
160DY 195					3.004	1,2	195
160DY 196	3.008	14+					196
160DY 197					3.025	1,2	197
160DY 198					3.034		198
160DY 199					3.060		199
160DY 200	3.062	1+					200

160DY 201					3.081		201
160DY 202	3.090	16+					202
160DY 203	3.099	6+					203
160DY 204					3.112		204
160DY 205			3.148	14-			205
160DY 206			3.188	13-			206
160DY 207			3.193	15-			207
160DY 208	3.220	14+					208
160DY 209					3.452		209
160DY 210					3.453		210

160DY 211	3.509	15+					211
160DY 212			3.510	14-			212
160DY 213	3.527	16+					213
160DY 214	3.670	18+					214
160DY 215			3.681	16-			215
160DY 216			3.730	15-			216
160DY 217			3.745	17-			217
160DY 218	3.768	16+					218
160DY 219	4.044	17+					219

160DY 220			4.078	16-	220

160DY 221	4.161	18+			221
160DY 222			4.257	18-	222
160DY 223	4.279	20+			223
160DY 224			4.317	17-	224
160DY 225			4.348	19-	225
160DY 226	4.350	18+			226
160DY 227	4.619	19+			227
160DY 228			4.873	20-	228
160DY 229	4.875	20+			229
160DY 230	4.936	22+			230

160DY 231			4.937	19-	231
160DY 232	4.975	20+			232
160DY 233			5.002	21-	233
160DY 234	5.241	21+			234
160DY 235			5.528	22-	235
160DY 236	5.602	22+			236
160DY 237	5.648	24+			237
160DY 238			5.705	23-	238
160DY 239	5.917	23+			239
160DY 240			6.220	24-	240

160DY 241	6.413	26+			241
160DY 242			6.458	25-	242
160DY 243	6.643	25+			243
160DY 244			6.966	26-	244
160DY 245	7.231	28+			245

S-p = 7.429 (0.002)-----
S-n = 8.577 (0.002)-----
S-2p = 13.561 (0.001)-----
S-2n = 15.408 (0.003)-----
S-alpha= -0.437 (0.001)-----

S+p = -4.813 (0.002)
S+n = -6.454 (0.001)
S+2p = -11.240 (0.001)
S+2n = -14.651 (0.001)
S+alpha = 1.305 (0.001)

gap p = 2.616 (0.003)
gap n = 2.123 (0.002)
gap 2p = 2.322 (0.002)
gap 2n = 0.757 (0.003)
gap alpha = 0.868 (0.002)