

^{162}Dy $Z = 66$ $N = 96$ [link to full NNDC output](#)

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

BE = 1324.100 (0.001) MeV

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

S-alpha=	-0.083	(0.002)	-----		
162DY 1	0.000	0+			1 STABLE
162DY 2	0.081	2+			2 2.19 NS 2
162DY 3	0.266	4+			3 0.132 NS 5
162DY 4	0.549	6+			4 18.4 PS 10
162DY 5	0.888	2+			5 1.97 PS 9
162DY 6	0.921	8+			6 4.2 PS 2
162DY 7	0.963	3+			7
162DY 8	1.061	4+			8
162DY 9			1.148	2-	9 0.21 NS 4
162DY 10	1.183	5+			10

162DY 11			1.210	3-	11
162DY 12			1.276	1-	12 20 FS 4
162DY 13			1.297	4-	13
162DY 14	1.324	6+			14
162DY 15			1.358	3-	15
162DY 16	1.375	10+			16 1.57 PS 10
162DY 17			1.391	5-	17
162DY 18	1.400	0+			18
162DY 19	1.453	2+			19
162DY 20			1.486	5-	20 1.92 NS 11

162DY 21	1.490	7+			21
162DY 22			1.518	5-	22
162DY 23			1.530	6-	23
162DY 24	1.536	4+			24
162DY 25			1.571	3-	25
162DY 26	1.574	4+			26
162DY 27			1.576	6-	27
162DY 28	1.634	5+			28
162DY 29			1.637	1-	29
162DY 30			1.638	7-	30

162DY 31	1.666	0+			31
162DY 32			1.669	4-	32
162DY 33	1.671	8+			33
162DY 34			1.683	7-	34
162DY 35			1.691	2-	35
162DY 36	1.728	2+			36
162DY 37			1.739	3-	37

162DY 38		1.746	1+						38
162DY 39		1.752	6+						39
162DY 40							1.755	(7)-	40

162DY 41					1.767	3-			41
162DY 42		1.767	6+						42
162DY 43		1.783	2+						43
162DY 44					1.808	8-			44
162DY 45					1.827	4-			45
162DY 46							1.833	(5-)	46
162DY 47		1.840	3+						47
162DY 48					1.846	8-			48
162DY 49					1.852	4-			49
162DY 50					1.863	4-			50

162DY 51					1.864	2-			51
162DY 52		1.878	9+						52
162DY 53		1.887	4+						53
162DY 54		1.888	7+						54
162DY 55		1.895	2+						55
162DY 56		1.901	12+						56
162DY 57							1.904		57
162DY 58					1.910	3-			58
162DY 59					1.914	5-			59
162DY 60					1.940	9-			60

162DY 61							1.951	3+,4+	61
162DY 62					1.959	9-			62
162DY 63					1.964	5-			63
162DY 64					1.974	4-			64
162DY 65		1.982	2+						65
162DY 66		1.986	8+						66
162DY 67		1.999	2+						67
162DY 68							2.001		68
162DY 69							2.010		69
162DY 70		2.041	8+						70

162DY 71							2.041		71
162DY 72							2.047		72
162DY 73					2.054	5-			73
162DY 74							2.066		74
162DY 75							2.072	(4)	75
162DY 76							2.079	(6+)	76
162DY 77							2.080	(2,3)	77
162DY 78		2.087	10+						78
162DY 79					2.101	9-			79
162DY 80					2.103	3-			80

162DY 81							2.103	(2+)	81
162DY 82					2.111	10-			82

162DY 83						2.113		83
162DY 84						2.121	(4-)	84
162DY 85		2.125	0+					85
162DY 86					2.129	1-		86
162DY 87						2.129	(2+)	87
162DY 88						2.138		88
162DY 89						2.149	(2)	89
162DY 90						2.163	1,2,3	90

162DY 91						2.175		91
162DY 92		2.181	4+					92
162DY 93						2.185		93
162DY 94						2.190	(2+)	94
162DY 95						2.199		95
162DY 96						2.203	(8+)	96
162DY 97						2.207		97
162DY 98		2.212	9+					98
162DY 99						2.216		99
162DY 100						2.231		100

162DY 101					2.234	10-		101
162DY 102						2.239		102
162DY 103						2.246		103
162DY 104		2.262	10+					104
162DY 105						2.270		105
162DY 106						2.276		106
162DY 107						2.280		107
162DY 108					2.281	11-		108
162DY 109						2.283	(5+)	109
162DY 110						2.291		110

162DY 111						2.292		111
162DY 112		2.292	5+					112
162DY 113						2.299		113
162DY 114						2.311		114
162DY 115						2.314		115
162DY 116						2.318	(3-)	116
162DY 117						2.325		117
162DY 118					2.331	11-		118
162DY 119		2.337	11+					119
162DY 120						2.339		120

162DY 121						2.344		121
162DY 122						2.349		122
162DY 123						2.351		123
162DY 124						2.356		124
162DY 125						2.363		125
162DY 126						2.369		126
162DY 127						2.371	1-,2,3	127
162DY 128						2.374	(6+)	128

162DY 129				2.376		129
162DY 130				2.381		130

162DY 131				2.386		131
162DY 132	2.395	1+				132 11.1 FS 7
162DY 133	2.398	10+				133
162DY 134				2.403		134
162DY 135				2.413		135
162DY 136	2.421	6+				136
162DY 137				2.428		137
162DY 138				2.437		138
162DY 139				2.452		139
162DY 140				2.455		140

162DY 141				2.457		141
162DY 142				2.459		142
162DY 143				2.470		143
162DY 144				2.480		144
162DY 145			2.482	12-		145
162DY 146				2.484		146
162DY 147				2.488		147
162DY 148	2.492	14+				148 0.45 PS 5
162DY 149	2.494	0+				149
162DY 150			2.504	11-		150

162DY 151				2.506	(7+)	151
162DY 152				2.510		152
162DY 153				2.514		153
162DY 154			2.520	1-		154 7.5 FS 6
162DY 155				2.524		155
162DY 156				2.529		156
162DY 157	2.535	12+				157
162DY 158				2.537	1	158 98 FS 21
162DY 159				2.551		159
162DY 160				2.554		160

162DY 161				2.562	(7+)	161
162DY 162				2.565		162
162DY 163	2.569	1+				163 39 FS 4
162DY 164				2.580	(2+)	164
162DY 165				2.584		165
162DY 166	2.601	11+				166
162DY 167				2.615		167
162DY 168				2.617		168
162DY 169	2.623	12+				169
162DY 170				2.623	(6+)	170

162DY 171				2.631		171
162DY 172				2.642		172
162DY 173				2.647		173

162DY 174					2.648				174
162DY 175	2.663	0+							175
162DY 176			2.671	12-					176
162DY 177					2.681				177
162DY 178			2.683	13-					178
162DY 179					2.688				179
162DY 180					2.697				180

162DY 181					2.704				181
162DY 182					2.709				182
162DY 183					2.718				183
162DY 184					2.726				184
162DY 185					2.731				185
162DY 186					2.742				186
162DY 187					2.751				187
162DY 188					2.755	(8+)			188
162DY 189					2.769				189
162DY 190			2.778	13-					190

162DY 191					2.780				191
162DY 192					2.785				192
162DY 193					2.789				193
162DY 194					2.800				194
162DY 195	2.803	0+							195
162DY 196					2.812				196
162DY 197					2.815	1		197	39 FS 13
162DY 198	2.817	12+						198	
162DY 199					2.818			199	
162DY 200					2.847	(7+)		200	

162DY 201					2.848			201	
162DY 202	2.860	13+						202	
162DY 203					2.862			203	
162DY 204					2.880			204	
162DY 205	2.900	1+						205	2.05 FS 13
162DY 206					2.909	1		206	22 FS 7
162DY 207			2.920	14-				207	
162DY 208			2.929	1-				208	20.0 FS 21
162DY 209					2.930	(9+)		209	
162DY 210	2.935	14+						210	

162DY 211					2.940			211	
162DY 212					2.950			212	
162DY 213					2.960			213	
162DY 214			2.964	13-				214	
162DY 215	2.965	1+						215	33 FS 5
162DY 216					2.972			216	
162DY 217					2.989			217	
162DY 218					2.997			218	
162DY 219					3.012			219	

162DY 220					3.019			220

162DY 221					3.029			221
162DY 222					3.040			222
162DY 223	3.053	13+						223
162DY 224	3.061	1+						224 3.9 FS 4
162DY 225					3.071			225
162DY 226					3.086			226
162DY 227					3.106			227
162DY 228					3.116			228
162DY 229				3.123	14-			229
162DY 230					3.127			230

162DY 231	3.139	16+						231
162DY 232					3.139			232
162DY 233				3.146	15-			233
162DY 234	3.146	14+						234
162DY 235					3.152			235
162DY 236					3.171			236
162DY 237					3.188			237
162DY 238					3.241			238
162DY 239	3.269	14+						239
162DY 240				3.293	15-			240

162DY 241					3.303			241
162DY 242	3.374	16+						242
162DY 243				3.416	16-			243
162DY 244	3.434	15+						244
162DY 245				3.475	15-			245
162DY 246	3.564	15+						246
162DY 247						3.577	1	247
162DY 248				3.627	16-			248
162DY 249				3.667	17-			249
162DY 250	3.734	16+						250

162DY 251	3.831	18+						251
162DY 252	3.835	16+						252
162DY 253				3.874	17-			253
162DY 254	3.878	18+						254
162DY 255				3.967	18-			255
162DY 256				4.037	17-			256
162DY 257	4.040	17+						257
162DY 258				4.196	18-			258
162DY 259				4.244	19-			259
162DY 260	4.343	18+						260

162DY 261	4.435	20+						261
162DY 262				4.516	19-			262
162DY 263				4.569	20-			263
162DY 264	4.578	20+						264

162DY 265				4.651	19-		265
162DY 266				4.873	21-		266
162DY 267		5.062	22+				267
162DY 268				5.221	22-		268
162DY 269		5.352	22+				269
162DY 270				5.554	23-		270

162DY 271		5.747	24+				271
162DY 272				5.921	24-		272
162DY 273		6.153	24+				273
162DY 274		6.489	26+				274
162DY 275		7.276	28+				275

S-p = 8.009 (0.002)-----
 S-n = 8.197 (0.001)-----
 S-2p = 14.818 (0.002)-----
 S-2n = 14.651 (0.001)-----
 S-alpha= -0.083 (0.002)-----

S+p = -5.486 (0.001)
 S+n = -6.271 (0.001)
 S+2p = -12.339 (0.001)
 S+2n = -13.929 (0.001)
 S+alpha = 0.830 (0.001)

gap p = 2.523 (0.002)
 gap n = 1.926 (0.002)
 gap 2p = 2.479 (0.002)
 gap 2n = 0.722 (0.002)
 gap alpha = 0.747 (0.002)