

$^{158}\text{Er}$        $Z = 68$        $N = 90$       [link to full NNDC output](#)

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

BE = 1287.372 ( 0.025) MeV

Qbeta+ = 0.884 ( 0.037) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-2.665	( 0.026)	-----		
158ER 1	0.000	0+			1 2.29 H 6
158ER 2	0.192	2+			2 257 PS 18
158ER 3	0.527	4+			3 13.5 PS 4
158ER 4	0.806	0+			4
158ER 5	0.820	2+			5
158ER 6	0.970	6+			6 2.59 PS 8
158ER 7	0.989	2+			7
158ER 8	1.043	3+			8
158ER 9	1.184	4+			9
158ER 10				1.211 +	10
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158ER 11	1.257	4+			11
158ER 12				1.305 2+,3,4+	12
158ER 13			1.342 3-		13
158ER 14	1.387	0+			14
158ER 15	1.418	2+			15
158ER 16				1.418 (1-)	16
158ER 17				1.427 2+,3,4+	17
158ER 18	1.438	5+			18
158ER 19				1.489 2+,3+	19
158ER 20	1.493	8+			20 0.94 PS 3
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158ER 21				1.526 (2,3)-	21
158ER 22				1.570 (2+)	22
158ER 23				1.589 (6+)	23
158ER 24	1.589	6+			24
158ER 25				1.614 (2-)	25
158ER 26				1.630 (1,2+)	26
158ER 27				1.641 (2+)	27
158ER 28				1.674 (2+,3)	28
158ER 29				1.687 (1,2+)	29
158ER 30				1.698 (1-,2,3)	30
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158ER 31				1.700	31
158ER 32				1.743 (2,3,4)	32
158ER 33				1.770	33
158ER 34				1.809 (2+,3,4+)	34
158ER 35				1.835	35
158ER 36				1.853 (7-,8+)	36

158ER 37						1.913	(7+)		37
158ER 38						1.977	(1,2+)		38
158ER 39						2.019	(8+)		39
158ER 40		2.019	8+						40
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158ER 41						2.029			41
158ER 42						2.060	(1,2+)		42
158ER 43		2.073	10+					0.68 PS	9
158ER 44						2.144	(1,2+)		44
158ER 45						2.229	(2+,3+)		45
158ER 46				2.273	9-				46
158ER 47						2.305	(2+,3,4+)		47
158ER 48				2.333	8-				48
158ER 49						2.368	(1,2+)		49
158ER 50						2.390	(1,2+)		50
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158ER 51				2.432	9-				51
158ER 52						2.487	(10+)		52
158ER 53		2.488	10+						53
158ER 54				2.570	10-			56 PS	5
158ER 55						2.674	(1,2+)		55
158ER 56		2.681	12+					0.51 PS	6
158ER 57				2.731	11-			12.4 PS	+9-11
158ER 58				2.761	11-				58
158ER 59		2.881	12+						59
158ER 60				2.955	12-			7.7 PS	+1-5
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158ER 61						3.018	(1,2+)		61
158ER 62		3.109	12+						62
158ER 63				3.155	13-			4.7 PS	3
158ER 64		3.191	14+					2.9 PS	3
158ER 65						3.305	(13-)		65
158ER 66		3.374	14+						66
158ER 67				3.475	14-				67
158ER 68		3.663	16+					2.32 PS	14
158ER 69		3.668	14+						69
158ER 70				3.695	15-			1.1 PS	+2-3
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158ER 71						3.907	(15-)		71
158ER 72						4.026	(16+)		72
158ER 73						4.104	(16-)	0.83 PS	+21-28
158ER 74		4.230	18+					0.95 PS	6
158ER 75		4.272	16+						75
158ER 76						4.330	(17-)	0.97 PS	+14-21
158ER 77						4.680	(18+)		77
158ER 78						4.813	(18-)	0.89 PS	+12-17
158ER 79		4.888	20+					0.55 PS	8
158ER 80		4.949	18+						80
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158ER 81						5.022	(19-)		81

158ER 82				5.327	(20+)	82
158ER 83				5.538	(20-)	83
158ER 84		5.629	22+			84 0.24 PS +21-12
158ER 85				5.739	(21-)	85
S-p = 5.760 ( 0.034)-----						
158ER 86				6.027	(22+)	86
158ER 87				6.220	(22-)	87
158ER 88		6.435	24+			88
158ER 89				6.476	(23-)	89
158ER 90				7.000	(24-)	90
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158ER 91				7.249	(25-)	91
158ER 92		7.280	26+			92
158ER 93				7.800	(26-)	93
158ER 94				8.070	(27-)	94
158ER 95		8.139	28+			95
158ER 96				8.602	(28-)	96
158ER 97				8.934	(29-)	97
158ER 98		9.014	30+			98
S-2p = 9.353 ( 0.025)-----						
158ER 99				9.456	(30-)	99
158ER 100				9.474	(30+)	100
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158ER 101				9.820	(31-)	101
158ER 102		9.920	32+			102
S-n = 9.961 ( 0.037)-----						
158ER 103				10.281	(32+)	103
158ER 104				10.336	(32-)	104
158ER 105				10.717	(33-)	105
158ER 106		10.880	34+			106
158ER 107				11.216	(34+)	107
158ER 108				11.234	(34-)	108
158ER 109				11.637	(35-)	109
158ER 110		11.899	36+			110
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158ER 111				12.172	(36-)	111
158ER 112				12.232	(36+)	112
158ER 113				12.601	(37-)	113
158ER 114		12.958	38+			114
158ER 115				13.157	(38-)	115
158ER 116				13.169	(38+)	116
158ER 117				13.622	(39-)	117
158ER 118				13.785	(40+)	118
158ER 119				14.153	(40+)	119
158ER 120				14.183	(40-)	120
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158ER 121				14.695	(41-)	121
158ER 122				15.059	(42+)	122
158ER 123				15.194	(42-)	123
158ER 124				15.363	(42+)	124

158ER 125				15.684	(43-)	125
158ER 126				15.873	(43-)	126
158ER 127				16.090	(44+)	127
158ER 128				16.357	(44-)	128
158ER 129				16.507	(44+)	129
158ER 130				17.013	(45-)	130
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158ER 131				17.061	(46+)	131
158ER 132				17.121	(45-)	132
S-2n	=	17.235	(	0.035)		
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158ER 133				17.367	(46-)	133
158ER 134				17.659	(46+)	134
158ER 135				18.001	(47-)	135
158ER 136				18.131	(48-)	136
158ER 137				18.345	(47-)	137
158ER 138				18.810	(49-)	138
158ER 139				18.869	(48+)	139
158ER 140				X		140
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158ER 141				724.3+X		141
158ER 142				1490.9+X		142
158ER 143				2293.2+X		143
158ER 144				3134.9+X		144
158ER 145				4009.9+X		145
158ER 146				4911.4+X		146
158ER 147				5844.0+X		147
158ER 148				6816.7+X		148
158ER 149				7834.3+X		149
158ER 150				8898.6+X		150
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158ER 151				10008.7+X		151
158ER 152				11165.0+X		152
158ER 153				12369.9+X		153
158ER 154				13625.8+X		154
158ER 155				14936.1+X		155
158ER 156				16305.1+X		156
158ER 157				17735.3+X		157
158ER 158				19226.3+X		158
158ER 159				20788.3+X		159
158ER 160				22413+X		160
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158ER 161				24115+X		161
158ER 162				Y		162
158ER 163				959.0+Y		163
158ER 164				1966.0+Y		164
158ER 165				3012.0+Y		165
158ER 166				4095.0+Y		166
158ER 167				5219.0+Y		167
158ER 168				6386.0+Y		168
158ER 169				7598+Y		169

158ER 170		8858+Y	170
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158ER 171		10167+Y	171
158ER 172		11527+Y	172
158ER 173		12943+Y	173

S-p = 5.760 ( 0.034)-----  
 S-n = 9.961 ( 0.037)-----  
 S-2p = 9.353 ( 0.025)-----  
 S-2n = 17.235 ( 0.035)-----  
 S-alpha= -2.665 ( 0.026)-----

S+p = -2.556 ( 0.038)  
 S+n = -7.329 ( 0.026)  
 S+2p = -7.437 ( 0.026)  
 S+2n = -16.903 ( 0.035)  
 S+alpha = 3.052 ( 0.030)

gap p = 3.204 ( 0.051)  
 gap n = 2.633 ( 0.045)  
 gap 2p = 1.916 ( 0.036)  
 gap 2n = 0.331 ( 0.050)  
 gap alpha = 0.387 ( 0.040)