

^{154}Er $Z = 68$ $N = 86$ [link to full NNDC output](#)

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

BE = 1252.388 (0.005) MeV

Qbeta+ = 2.034 (0.010) MeV

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

S-alpha=	-4.280	(0.007)						
154ER 1	0.000	0+					1 3.73 M 9	
154ER 2	0.561	2+					2	
154ER 3	1.162	4+					3	
154ER 4	1.788	6+					4	
154ER 5			1.896	5-			5	
154ER 6	2.329	8+					6	
154ER 7			2.461	7-			7	
154ER 8	2.584	8+					8	
154ER 9			3.014	9-			9	
154ER 10	3.016	10+					10	

154ER 11			3.025	11-			11 39 NS 4	
154ER 12	3.655	12+					12	
154ER 13			3.830	13-			13	
154ER 14	4.274	14+					14	
154ER 15			4.499	15-			15	
154ER 16					4.531	(15+)	16	
154ER 17	4.678	16+					17	

S-p	= 4.882	(0.007)						
154ER 18			5.006	17-			18	
154ER 19	5.328	18+					19	
154ER 20			5.462	19-			20	

154ER 21	6.063	20+					21	
154ER 22					6.087	(20-)	22	
154ER 23			6.289	21-			23	
154ER 24					6.575	(21-)	24	
154ER 25	6.745	22+					25	
154ER 26			7.015	23-			26	

S-2p	= 7.065	(0.007)						
154ER 27			7.334	25-			27	
154ER 28					8.009	(26)-	28	
154ER 29			8.106	27-			29	
154ER 30					8.310	(26+)	30	

154ER 31					8.658	(27+)	31	
154ER 32					8.669	(28)+	32	
154ER 33					9.294	(29+)	33	
154ER 34			9.475	29-			34	

154ER 35	|		|	9.480	(29+)	35
154ER 36	|		|	9.589	(30)+	36
154ER 37	|		|	9.843	(30+)	37
154ER 38	|	10.108	31-			38
154ER 39	|		|	10.150	(32)+	39
S-n = 10.208 (0.011)-----						
154ER 40	|	10.429	33-			40

154ER 41	|		|	11.354	(34)	41
154ER 42	|		|	11.504	(35)	42
154ER 43	|		|	11.621	(34+)	43
154ER 44	|		|	11.660	(34+)	44
154ER 45	|		|	11.889	(35)	45
154ER 46	|		|	11.897	(36+)	46
154ER 47	|		|	13.209	(37)	47
154ER 48	|		|	13.500	(38)	48
154ER 49	|		|	13.950	(40)	49
154ER 50	|		|	14.000	(38)	50

154ER 51	|		|	14.269	(39)	51
154ER 52	|		|	14.382	(39)	52
154ER 53	|		|	14.676	(39)	53
154ER 54	|		|	14.921	(41)	54
154ER 55	|		|	16.030	(42)	55
154ER 56	|		|	X		56
154ER 57	|		|	696.37+X		57
154ER 58	|		|	1430.72+X		58
154ER 59	|		|	2207.93+X		59
154ER 60	|		|	3032.37+X		60

154ER 61	|		|	3907.13+X		61
154ER 62	|		|	4834.58+X		62
154ER 63	|		|	5814.46+X		63
154ER 64	|		|	6847.0+X		64
154ER 65	|		|	7932.7+X		65
154ER 66	|		|	9070.6+X		66
154ER 67	|		|	10261.6+X		67
154ER 68	|		|	11504.5+X		68
154ER 69	|		|	12804.9+X		69
154ER 70	|		|	14154.4+X		70

154ER 71	|		|	Y		71
154ER 72	|		|	744.73+Y		72
154ER 73	|		|	1533.57+Y		73
154ER 74	|		|	2367.0+Y		74
154ER 75	|		|	3246.1+Y		75
154ER 76	|		|	4171.6+Y		76
154ER 77	|		|	5143.8+Y		77
154ER 78	|		|	6162.1+Y		78
154ER 79	|		|	7227.6+Y		79

154ER	80	|		|	8340.2+Y		80

154ER	81	|		|	9499.0+Y		81
154ER	82	|		|	10706.2+Y		82
154ER	83	|		|	11959.6+Y		83
154ER	84	|		|	13260.2+Y		84

S-p	=	4.882	(	0.007)	-----
S-n	=	10.208	(	0.011)	-----
S-2p	=	7.065	(	0.007)	-----
S-2n	=	18.247	(	0.010)	-----
S-alpha	=	-4.280	(	0.007)	-----

S+p	=	-1.310	(	0.011)
S+n	=	-7.675	(	0.008)
S+2p	=	-5.238	(	0.011)
S+2n	=	-17.749	(	0.025)
S+alpha	=	4.170	(	0.009)

gap p	=	3.572	(	0.013)
gap n	=	2.533	(	0.013)
gap 2p	=	1.827	(	0.013)
gap 2n	=	0.498	(	0.027)
gap alpha	=	-0.110	(	0.012)