

^{172}Er $Z = 68$ $N = 104$ adopted link ENSDF link

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

BE = 1391.550 (0.004) MeV

Qbeta- = 0.891 (0.007) MeV

	Energy T	J+	J-	J-other	T1/2
172ER 1	0.000	0+			1 49.3 H 5
172ER 2				0.077 (2+)	2
172ER 3				0.255 (4+)	3
S-alpha= 0.349 (0.140)					
172ER 4				0.530 (6+)	4
172ER 5				0.834	5
172ER 6				0.898 (8+)	6
172ER 7				0.961 (1,2+)	7
172ER 8				1.034 (3+)	8
172ER 9				1.125	9
172ER 10				1.131 (4+)	10
172ER 11				1.252 (5+)	11
172ER 12				1.263 (4-)	12 39.5 NS 21
172ER 13				1.280	13
172ER 14	1.322	0+			14
172ER 15				1.352 (10+)	15
172ER 16				1.367 (5-)	16
172ER 17				1.390	17
172ER 18				1.397 (3+,4+,5+)	18
172ER 19	1.470	0+			19
172ER 20				1.491 (6-)	20
172ER 21				1.495	21
172ER 22				1.501 (6+)	22 0.57 US 6
172ER 23				1.635 (7-)	23
172ER 24				1.654 (7+)	24
172ER 25				1.713	25
172ER 26				1.729	26
172ER 27				1.792 (7-)	27
172ER 28				1.799 (8-)	28
172ER 29				1.820	29
172ER 30				1.829 (8+)	30
172ER 31				1.843	31
172ER 32				1.885 (12+)	32
172ER 33				1.906	33
172ER 34				1.926	34
172ER 35				1.945 (8-)	35
172ER 36				1.950	36

172ER 37				1.981	(9-)	37
172ER 38				1.983		38
172ER 39				2.004		39
172ER 40				2.022	(9+)	40

172ER 41				2.111	(9-)	41
172ER 42				2.234		42
172ER 43				2.253		43
172ER 44				2.286		44
172ER 45				2.295	(10-)	45
172ER 46				2.308		46
172ER 47				2.382		47
172ER 48		2.403	0+			48
172ER 49				2.474		49
172ER 50				2.490	(14+)	50

172ER 51				2.499	(11-)	51
172ER 52				2.502		52
172ER 53				2.545		53
172ER 54				2.635		54
172ER 55				2.657		55
172ER 56				2.679		56
172ER 57				2.697		57
172ER 58				2.741		58
172ER 59				2.768		59
172ER 60				2.789		60

172ER 61				2.807		61
172ER 62				2.827		62
172ER 63				2.856		63
172ER 64				3.164	(16+)	64
172ER 65				3.898	(18+)	65
172ER 66				4.686	(20+)	66
172ER 67				5.528	(22+)	67
172ER 68				0.000		68

0

S-p = 9.254 (0.600)-----
S-n = 6.836 (0.004)-----
S-2p = 17.270 (0.170)-----
S-2n = 12.518 (0.004)-----
S-alpha= 0.349 (0.140)-----

S+p = -7.062 (0.006)
S+n = -5.252 (0.173)
S+2p = -15.040 (0.004)
S+2n = -11.586 (0.348)
S+alpha = 0.566 (0.004)

gap p = 2.191 (0.600)

gap n = 1.584 (0.173)
gap 2p = 2.230 (0.170)
gap 2n = 0.932 (0.348)
gap alpha = 0.916 (0.140)