

^{223}Fr $Z = 87$ $N = 136$ adopted link ENSDF link

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

BE = 1713.457 (0.002) MeV

Qbeta- = 1.149 (0.003) MeV

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

S-alpha=	-5.561 (0.004)				
223FR	1			0.000 3/2(-)	1 22.00 M 7
223FR	2			0.013 (5/2-)	2
223FR	3			0.055 1/2(-)	3
223FR	4			0.082 (7/2-)	4
223FR	5			0.100 (3/2-)	5
223FR	6			0.101 (5/2-)	6
223FR	7			0.134 (3/2+)	7
223FR	8			0.160 (3/2+)	8
223FR	9			0.172 (5/2+)	9
223FR	10			0.187 (5/2-)	10

223FR	11			0.189 (7/2-)	11
223FR	12			0.220 (7/2+)	12
223FR	13			0.223 (7/2+)	13
223FR	14			0.242 (5/2)	14
223FR	15			0.244 (5/2)	15
223FR	16			0.245 (7/2-)	16
223FR	17			0.299 (9/2-)	17
223FR	18			0.366	18
223FR	19			0.371	19
223FR	20			0.379	20

223FR	21			0.449	21
223FR	22			0.503	22
223FR	23		0.515 3/2-		23
223FR	24			0.541 (5/2+)	24
223FR	25			0.605 (5/2-)	25
223FR	26			0.648 (5/2-, 7/2-)	26
223FR	27			0.650 (5/2-)	27
223FR	28			0.685 (7/2+)	28
223FR	29			0.699	29
223FR	30			0.737 (7/2-)	30

223FR	31			0.763	31
223FR	32			0.783 (3/2+, 5/2+)	32
223FR	33			0.835	33
223FR	34			0.839	34
223FR	35			0.893	35
223FR	36			0.922	36

223FR 37				0.988	37
223FR 38				0.996	38
223FR 39				0.999	39
223FR 40				1.002	40

223FR 41				1.035	41
223FR 42				1.042	42
223FR 43				1.070	43
223FR 44				1.103	44
223FR 45				1.120	45
223FR 46				1.221	46
223FR 47				1.322	47
223FR 48				1.359	48
223FR 49				1.398	49
223FR 50				1.399	50

223FR 51				1.512	51
223FR 52				1.541	52
223FR 53				1.552	53
223FR 54				1.567	54
223FR 55				1.574	55
223FR 56				1.590	56
223FR 57				1.595	57
223FR 58				1.629	58
223FR 59				1.695	59

S-p = 5.279 (0.003)-----
S-n = 6.067 (0.008)-----
S-2p = 12.978 (0.014)-----
S-2n = 11.037 (0.005)-----
S-alpha= -5.561 (0.004)-----

S+p = -6.846 (0.003)
S+n = -4.705 (0.011)
S+2p = -11.323 (0.005)
S+2n = -10.704 (0.012)
S+alpha = 5.042 (0.003)

gap p = -1.567 (0.004)
gap n = 1.362 (0.014)
gap 2p = 1.655 (0.015)
gap 2n = 0.333 (0.013)
gap alpha = -0.519 (0.005)