

^{225}Fr $Z = 87$ $N = 138$ adopted link ENSDF link

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

BE = 1724.162 (0.012) MeV

Qbeta- = 1.828 (0.012) MeV

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

S-alpha=	-4.613 (0.018)				
225FR 1			0.000 3/2-		1 3.95 M 14
225FR 2			0.029 5/2-		2
225FR 3			0.083 7/2-		3
225FR 4			0.128 9/2-		4
225FR 5				0.143 (3/2)+	5
225FR 6	0.152	5/2+			6
225FR 7				0.181 (1/2+)	7
225FR 8				0.182 (9/2)+	8
225FR 9				0.198 (7/2)+	9
225FR 10				0.203 (9/2)-	10

225FR 11				0.205 (3/2+)	11
225FR 12				0.207 (5/2)-	12
225FR 13				0.228 (7/2,9/2)-	13
225FR 14				0.241 (5/2)+	14
225FR 15				0.293 (7/2)+	15
225FR 16				0.303 7/2+,9/2+,11/2+	16
225FR 17				0.330 (5/2,7/2)-	17
225FR 18				0.346 (9/2)+	18
225FR 19				0.401	19
225FR 20				0.409 (5/2)+	20

225FR 21				0.425 (5/2-,7/2-)	21
225FR 22				0.448	22
225FR 23				0.480 (5/2,7/2,9/2)+	23
225FR 24				0.503 (5/2)-	24
225FR 25			0.560 7/2-		25
225FR 26				0.572 (7/2)-	26
225FR 27				0.591	27
225FR 28				0.619 (5/2,7/2,9/2)+	28
225FR 29				0.630	29
225FR 30				0.636 (3/2,5/2,7/2)+	30

225FR 31				0.655	31
225FR 32				0.665 (7/2)+	32
225FR 33				0.676	33
225FR 34				0.721 (5/2)-	34
225FR 35				0.744 (5/2,7/2)+	35
225FR 36				0.755	36

225FR 37			0.779	7/2-		37
225FR 38					0.799	38
225FR 39					0.832	(5/2+,7/2,9/2+) 39
225FR 40					0.839	(5/2,7/2,9/2)+ 40

225FR 41					0.845	41
225FR 42					0.866	(7/2)- 42
225FR 43					0.886	(3/2,5/2)+ 43
225FR 44					0.936	(5/2-,7/2,9/2+) 44
225FR 45					0.974	45
225FR 46					0.980	(3/2-,5/2) 46
225FR 47					1.028	47
225FR 48					1.047	48
225FR 49					1.063	49
225FR 50					1.102	(7/2,9/2,11/2)+ 50

225FR 51					1.127	51
225FR 52					1.185	(5/2-,7/2) 52
225FR 53					1.226	53
225FR 54					1.247	54
225FR 55					1.321	55
225FR 56					1.351	56
225FR 57					1.392	(5/2,7/2-) 57
225FR 58					1.398	58
225FR 59					1.480	(7/2) 59
225FR 60					1.519	60

225FR 61					1.526	61
225FR 62					1.535	62
225FR 63					1.578	(5/2+,7/2) 63
225FR 64					1.614	(5/2,7/2+) 64
225FR 65					1.655	(5/2,7/2+) 65
225FR 66					1.750	(5/2,7/2+) 66

S-p = 5.913 (0.015)-----
S-n = 5.999 (0.016)-----
S-2p = 14.186 (0.018)-----
S-2n = 10.704 (0.012)-----
S-alpha= -4.613 (0.018)-----

S+p = -7.442 (0.012)
S+n = -4.371 (0.013)
S+2p = -12.549 (0.012)
S+2n = -10.281 (0.013)
S+alpha = 4.445 (0.017)

gap p = -1.528 (0.020)
gap n = 1.628 (0.021)
gap 2p = 1.637 (0.022)

gap 2n = 0.424 (0.018)
gap alpha = -0.168 (0.025)