

^{221}Fr $Z = 87$ $N = 134$ adopted link ENSDF link

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

BE = 1702.420 (0.005) MeV

Qbeta- = 0.313 (0.007) MeV

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

S-alpha=	-6.458	(0.007)	-----		
221FR 1			0.000	5/2-	1 4.9 M 2
221FR 2				0.026 (1/2)-	2
221FR 3				0.037 (3/2)-	3 1.5 NS 2
221FR 4				0.039 (9/2)-	4
221FR 5				0.100 (3/2)-	5 80 PS 30
221FR 6				0.100 (3/2)+	6 160 PS 30
221FR 7				0.101 (5/2)-	7
221FR 8				0.108 (7/2)-	8 280 PS AP
221FR 9				0.146 (1/2)+	9
221FR 10				0.150 (7/2)+	10 80 PS 20

221FR 11				0.196 (7/2)-	11 20 PS 5
221FR 12				0.225 (3/2)+	12 35 PS 10
221FR 13				0.235 (5/2)+	13
221FR 14				0.254 (5/2)+	14 35 PS 15
221FR 15				0.273 (7/2-,9/2-)	15
221FR 16				0.279 (7/2)+	16
221FR 17				0.288 (9/2)-	17
221FR 18				0.295 (9/2)+	18
221FR 19				0.393 (5/2,7/2)+	19
221FR 20				0.401 (7/2-)	20

221FR 21				0.410	21
221FR 22				0.497	22
221FR 23				0.518 (5/2+)	23
221FR 24				0.552 (3/2)-	24
221FR 25				0.571 (5/2+,7/2+)	25
221FR 26				0.602 (5/2-)	26
221FR 27				0.631 (5/2+)	27
221FR 28				0.638	28
221FR 29				0.712	29
221FR 30				0.714	30

221FR 31				0.749	31
221FR 32				0.780	32
221FR 33				0.824	33

S-p = 4.624 (0.005)-----

S-n = 6.276 (0.006)-----
S-2p = 11.697 (0.006)-----
S-2n = 11.482 (0.008)-----
S-alpha= -6.458 (0.007)-----

S+p = -6.246 (0.007)
S+n = -4.970 (0.009)
S+2p = -10.030 (0.009)
S+2n = -11.037 (0.005)
S+alpha = 5.935 (0.007)

gap p = -1.622 (0.008)
gap n = 1.306 (0.011)
gap 2p = 1.667 (0.010)
gap 2n = 0.445 (0.010)
gap alpha = -0.522 (0.010)