

^{212}Fr $Z = 87$ $N = 125$ adopted link ENSDF link

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

BE = 1646.571 (0.009) MeV

Qbeta+ = 5.143 (0.009) MeV

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

S-alpha=	-6.529	(0.013)	-----		
212FR 1	0.000	5+			1 20.0 M 6
212FR 2				0.082 (4+)	2
212FR 3				0.501	3
212FR 4				0.536	4
212FR 5	0.542	7+			5 0.4 NS LT
212FR 6				0.575	6
212FR 7				0.606	7
212FR 8				0.611	8
212FR 9				0.777	9
212FR 10				0.854 (4+,5+,6+)	10

212FR 11				0.937 (4+,5+,6+)	11
212FR 12				1.009	12
212FR 13				1.130	13
212FR 14				1.209	14
212FR 15				1.240	15
212FR 16				1.287	16
212FR 17				1.356	17
212FR 18				1.375	18
212FR 19	1.389	9+			19 2 NS LT
212FR 20	1.551	11+			20 31.9 US 7

212FR 21	1.880	12+			21 2 NS LT
S-p	= 2.050	(0.011)	-----		
212FR 22				2.338 (13+)	22 2 NS LT
212FR 23			2.492 15-		23 603 NS 28
212FR 24				2.496 (14-)	24 2 NS LT
212FR 25				2.612 (14+)	25 1.4 NS LT
212FR 26				2.952 (16+)	26 2 NS LT
212FR 27			2.964 16-		27 1.4 NS LT
212FR 28			3.241 17-		28 1.4 NS LT
212FR 29				3.256	29 1.4 NS LT
212FR 30			3.583 19-		30 1.4 NS LT

212FR 31				3.751	31 1.4 NS LT
212FR 32			4.025 20-		32 2 NS LT
212FR 33				4.082	33 1.4 NS LT
212FR 34			4.137 20-		34 2 NS LT
212FR 35				4.447	35 1.4 NS LT

212FR 36				4.499		36	2 NS	LT
212FR 37			4.547	21-		37	2 NS	LT
212FR 38				4.632		38		
212FR 39				4.634		39		
212FR 40				4.765		40		

212FR 41		4.834	22+			41	4.23 NS	35
212FR 42				4.908		42		
212FR 43				5.056	(23+)	43	2.4 NS	LT
212FR 44				5.161		44		
212FR 45				5.266	(24+)	45	2 NS	LT
212FR 46				5.803	(25+)	46	2 NS	LT
212FR 47				5.854	(27-)	47	312 NS	21
212FR 48				6.056	(28)	48		
S-2p	=	6.122	(0.012)	-----				
212FR 49				6.345	(28-)	49	1.4 NS	LT
212FR 50				6.671		50		

212FR 51				6.977	(29)	51	1.4 NS	LT
212FR 52				7.054		52		
212FR 53				7.254		53		
S-n	=	7.447	(0.015)	-----				
212FR 54				7.661	(29+)	54	2 NS	LT
212FR 55				8.256		55		
212FR 56				8.407		56		
212FR 57				8.533		57	23.6 US	21

S-p = 2.050 (0.011)-----
S-n = 7.447 (0.015)-----
S-2p = 6.122 (0.012)-----
S-2n = 16.315 (0.016)-----
S-alpha= -6.529 (0.013)-----

S+p = -3.427 (0.013)
S+n = -8.109 (0.010)
S+2p = -4.629 (0.016)
S+2n = -13.585 (0.012)
S+alpha = 9.241 (0.013)

gap p = -1.378 (0.017)
gap n = -0.662 (0.018)
gap 2p = 1.493 (0.020)
gap 2n = 2.730 (0.020)
gap alpha = 2.712 (0.018)