

^{18}F $Z = 9$ $N = 9$ adopted link ENSDF link

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

BE = 137.369 (0.000) MeV

Qbeta+ = 1.656 (0.000) MeV

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

18F	1	0.000 0 X 1+			1 109.77 M 5
18F	2	0.937 0 3+			2 46.9 PS 17
18F	3	1.042 1 % 0+			3 1.77 FS 31
18F	4		1.081 0 % 0-		4 19.1 PS 13
18F	5	1.121 0 % 5+			5 162 NS 7
18F	6	1.701 0 % 1+			6 662 FS 19
18F	7		2.101 0 % 2-		7 3.5 PS 3
18F	8	2.523 0 % 2+			8 408 FS 17
18F	9	3.062 1 % 2+			9 0.83 FS LT
18F	10		3.134 0 % 1-		10 0.27 PS 1

18F	11	3.358 0 % 3+			11 0.30 PS 2
18F	12	3.724 0 % 1+			12 1.9 FS 28
18F	13		3.791 0 % 3-		13 1.32 PS 9
18F	14	3.839 0 % 2+			14 13.2 FS 19
18F	15	4.116 0 % 3+			15 63 FS 15
18F	16		4.226 0 % 2-		16 76 FS 10
18F	17	4.360 0 % 1+			17 19 FS 7
18F	18		4.398 0 % 4-		18 40 FS 8

S-alpha=	4.415 (0.000)				
18F	19	4.652 1 % 4+			19 7 FS LT
18F	20	4.753 1 % 0+			20

18F	21		4.848 0 % 5-		21 3.6 PS 6
18F	22		4.860 0 % 1-		22 46 FS 12
18F	23	4.964 1 % 2+			23 3 FS LT
18F	24	5.298 0 % 4+			24 21 FS 3
18F	25			5.502 0 % 3(-)	25 44 FS 17
18F	26	5.603 1+			26 43.3 EV 16
18F	27		5.605 0,1 1-		27 1.2 KEV LT

S-p	= 5.607 (0.000)				
18F	28		5.673 0,1 1-		28 0.8 KEV LT
18F	29		5.786 0 % 2-		29 10 FS 7
18F	30		6.096 0 % 4-		30 0.24 KEV 3

18F	31			6.108 0 % (1+)	31 0.034 KEV 3
18F	32	6.136 1 % 0+			32 1 KEV LT
18F	33	6.163 1 % 3+			33 14.0 KEV 5
18F	34		6.240 0,1 3-		34 0.19 KEV 3
18F	35		6.242 0,1 3-		35 0.18 KEV 4

18F	36		6.262	0 %	1+							36	0.60 KEV	12
18F	37		6.283	1 %	2+							37	10.0 KEV	5
18F	38		6.311	0 %	3+							38	0.95 KEV	14
18F	39		6.385	0,1	2+							39	0.49 KEV	9
18F	40		6.485	0 %	3+							40	0.40 KEV	10

18F	41		6.567	0 %	5+							41	0.56 KEV	13
18F	42								6.633	1 %	1	42	80 KEV	2
18F	43						6.644	1 %	2-			43	0.60 KEV	7
18F	44						6.647	0	1-			44	91 KEV	4
18F	45		6.777	0	4+							45	9.2 KEV	10
18F	46								6.803	0 %	1+,2,3+	46	2 KEV	LT
18F	47						6.809		2-			47	88 KEV	2
18F	48								6.811		(2+)	48	3.0 KEV	5
18F	49								6.857	0 %	(3-)	49	5.0 KEV	10
18F	50								6.877	0 %	3,4-	50	2 KEV	LT

18F	51								7.201	0 %	(4+)	51	6.5 KEV	
18F	52								7.247	0 %	(1+)	52	46.5 KEV	
18F	53						7.291	0 %	3-			53	38 KEV	
18F	54								7.315	1 %	(3-)	54	52 KEV	
18F	55						7.336	1 %	1-			55	16 KEV	2
18F	56		7.406		1+							56	14.6 KEV	14
18F	57								7.447			57	140 KEV	
18F	58						7.454		1-			58	6 KEV	
18F	59								7.478		(2)	59	12 KEV	3
18F	60								7.485		(1-)	60	32 KEV	

18F	61						7.506		4-			61	12 KEV	2
18F	62								7.513			62	4 KEV	LT
18F	63						7.528	1 %	2-			63	16.5 KEV	30
18F	64								7.532			64	75 KEV	
18F	65								7.555		(1-)	65	30 KEV	
18F	66								7.584			66	9 KEV	2
18F	67								7.685		3+,4+	67	36 KEV	4
18F	68								7.729		GE 1	68	66 KEV	5
18F	69								7.763			69	70 KEV	
18F	70								7.878		GE 2	70	20 KEV	

18F	71								7.899		(2-)	71	38 KEV	
18F	72								7.941		(1+)	72	112 KEV	
18F	73								8.064		GE 4	73	60 KEV	
18F	74								8.115			74	96 KEV	
18F	75						8.209		2-			75	52 KEV	
18F	76		8.238	1 X	4+							76	20 KEV	
18F	77								9.020	0 %	(5-)	77		

S-n	=		9.150	(0.001)	-----								
18F	78								9.207	0 %	3,4-	78		
18F	79								9.500	0 %	2,3+	79		
18F	80		9.580		6+							80		

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S-p    =  5.607 ( 0.000)-----
S-n    =  9.150 ( 0.001)-----
S-2p   = 19.389 ( 0.002)-----
S-2n   = 25.945 ( 0.005)-----
S-alpha=  4.415 ( 0.000)-----

S+p    =  -6.410 ( 0.000)
S+n    = -10.432 ( 0.000)
S+2p   =  -8.601 ( 0.001)
S+2n   = -17.033 ( 0.000)
S+alpha =  -8.479 ( 0.000)

gap p   =  -0.803 ( 0.001)
gap n   =  -1.282 ( 0.001)
gap 2p  =  10.788 ( 0.003)
gap 2n  =   8.911 ( 0.005)
gap alpha = -4.064 ( 0.001)

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